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Atlas of Giant Dipole Resonances

Parameters and Graphs of Photonuclear Reaction Cross Sections

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Abstract

Parameters of giant dipole resonances (GDR) observed in photonuclear reaction cross sections using various beams of incident photons are presented. Data, given for 200 stable isotopes from ^{2}H to ^{243}Am including their natural compositions, were collected from papers published over the years 1951-1996. GDR parameters, such as energy positions, amplitudes and widths, are included into the table and organized by element, isotope and reaction.

Graphs of the majority of the photonuclear reaction cross sections, included in the international nuclear data library EXFOR by the end of 1998, are presented. The graphs are provided for 182 stable isotopes and natural compositions.

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CONTENTS

1. Introduction

The purpose of this work is to survey the considerable body of photonuclear reaction cross section data acquired with various photon beams, to delineate the main giant dipole resonance features for many nuclei.

Photonuclear data are widely used both in basic and applied research.

Photonuclear data are of great importance for basic research, both experimental and theoretical, because the theory of the interaction of electromagnetic radiation with nuclei is perhaps the best understood in nuclear physics: if the interaction in the entrance channel is understood, then the effects of the purely nuclear forces can be studied directly by measuring either the photon absorption cross sections or the nuclear photodisintegration products characteristics.

Among the variety of photonuclear data applications the following can be listed as the most important:

- shielding design, accelerator head/target construction;
- medical and biological applications (radiation protection and dosimetry of photoneutrons; calculations of absorption dose in human body during radiotherapy);
- activation analysis, safeguards and inspection technologies;
- physics and technology of fission reactors (influence of photoreactions on neutron balance);
- plasma diagnostics in fusion reactors; and
- nuclear waste transmutation.

Therefore, many studies /1 - 5/ of photonuclear reactions have been made for various nuclei throughout the periodical table of elements over the past 50 years in an attempt to investigate main features of the electric giant dipole resonance and of photon absorption by nuclei in general.

It is well known that the clear maximum named "Giant Dipole Resonance (GDR)" exists in the absolute majority of the photoabsorption and other photonuclear reaction cross sections. It corresponds to the fundamental frequency for absorption of electric dipole radiation by the nucleus acting as a whole, and is most simply understood as the oscillation of all neutrons against all protons in the nucleus. At the same time the GDR can be described in the frame of multiparticle shell model using collective effects for particle-hole excitations.

The GDR is placed in the region of 13 - 15 MeV for heavy nuclei and in the region of 20 - 24 MeV for light ones. The GDR width as a rule changes from about 3 - 4 MeV for magic nuclei till about 6 - 10 MeV for "soft" spherical nuclei being smaller for near closed-shell nuclei and larger for nonspherical nuclei. The GDR in general have for spherical nuclei a one-hump and for deformed nuclei two-hump shapes, with a gross and/or intermediate and/or fine structure features in both cases.

The most probable result of absorption of photons by heavy nucleus in the GDR energy region ($E_\gamma \approx$ 8 - 30 MeV) is the emission of a single neutron. However, other processes such as emission of more than one neutron or various charge particles, first of all one proton, also must be considered. This applies to medium and especially to light nuclei, where photoproton cross section can be larger than photoneutron cross section.

2. Experimental methods for the GDR investigation

Majority of experiments has been carried out and the most important information about nature and main features of the GDR has been obtained by using beams of the following types of incident γ-quanta:

- bremsstrahlung photons;
- quasimonoenergetic photons obtained by relativistic positron annihilation in flight; and
- bremsstrahlung tagged photons.

2.1. Bremsstrahlung photons

The bremsstrahlung with intensity varying smoothly (mostly as $1/k = 1/E_\gamma$) in the energy range from 0 to $E_j \approx E_{e^-}$ is produced when electrons, accelerated to the energy E_{e^-}, are passing through a special converter target. The photonuclear reaction yield Y measured in bremsstrahlung experiments is the folding of the cross section σ and the effective photon spectrum W over the photon energy k:

$$Y(E_j) = a \int_{E_{th}}^{E_j} W(E_j, k)\sigma(k)dk \quad , \tag{1}$$

where E_{th} is the reaction threshold,
E_j is the bremsstrahlung spectrum end-point energy, and
α is the normalisation constant.

To extract the information on the cross section energy dependence $\sigma(k)$ from the measured yield $Y(E_j)$ one adopts certain assumptions about photon spectrum W (as a rule, ***L.I. Shiff's*** angle-integrated spectrum /6/ is used to describe $W(E_j, k)$) and proceeds in two ways. The first approach is to solve the inverse problem (1) of unfolding unknown reaction cross section $\sigma(k)$ from the measured reaction yield. The second approach is to recalculate the reaction yield $Y(E_j)$ to the representation corresponding to a more monoenergetic experiment than that using bremsstrahlung . To this end, in both cases many specific mathematical methods /7 - 11/ are applied.

Majority of such data has been obtained at the Moscow State University (Russia), the University of Melbourne (Australia), and several other laboratories in various countries /4, 5, 12/.

2.2. Quasimonoenergetic photons obtained by relativistic positron annihilation in flight

The method of relativistic positron annihilation in flight was proposed /13/ to escape the necessity to solve the ill-posed inverse problem (1), claiming that cross section $\sigma(k)$ can be measured approximately directly.

The accelerated positrons, annihilating in converter-target, produce γ-quanta the energy spectrum of which has the shape of the sufficiently narrow line with maximum near the positron energy E_{e^+}. Since the annihilation is competing with bremsstrahlung, one has to reach the conditions of effective quasimonoenergetic photon spectrum. For this purpose, the yield (1) caused by electron bremsstrahlung Y_e^- (measured separately and supposed to be equal to positron bremsstrahlung) should be subtracted from the positron induced yield Y_e^+. The result of this subtraction,

$$\sigma(k) = \beta\, [Y_e^+(E_j) - Y_e^-(E_j)] \approx \beta\, Y(E_j), \qquad (2)$$

where β is normalisation constant, is interpreted as a cross section measured with the energy resolution corresponding to the FWHM of annihilation photon spectrum line.

Majority of such data has been obtained at the Lawrence Livermore Laboratory (USA), Saclay Laboratory (France), and at several other laboratories in various countries /4, 5, 12, 14 - 16/.

2.3. Bremsstrahlung tagged photons

The method of tagged photons /17/ represents further development of the instrumental approach to the problem of obtaining information on cross section energy dependence, i.e. the approach associated with the creation of experimental measurement method with really monoenergetic photon spectrum. The measurement of the electron energy E_1 after bremsstrahlung in coincidence with the event of photonuclear reaction makes it possible to determine the reaction cross section $\sigma(E_\gamma)$ exactly at the photon effective energy E_γ:

$$\sigma(E_\gamma) = \sigma(E_0 - E_1), \qquad (3)$$

where E_0 is the initial energy of electron.

Thus, photons with energy E_γ (3) are being cut out of the continuous bremsstrahlung spectrum. Till the electron left the bremsstrahlung target, all energies are fixed with high precision. Energy resolution of tagged photons is completely defined by the construction of electron spectrometer and particularly by the size of electron detectors and their density in focal plane of the magnetic spectrometer.

Some very interesting and important data of this type have been obtained at the University of Illinois (USA).

More detailed description of all three main types of photonuclear experiments and the methods of extraction of cross section data from measurable can be found in /11/.

3. Previous compilations

Many data for various photoneutron (with small addition of photoproton and photofission) cross sections measured by using the quasimonoenergetic positron annihilation photon beams have been presented in form of plots in several publications, for example in /14 - 16/. The GDR integrated cross sections and their moments, derived directly from the data, have been presented in the relevant tables. They constitute about half of them and the parameters of Lorentz curves fitted to the GDR data the other half.

Until now, there were no analogous comprehensive publications for photonuclear reaction cross section data obtained using bremsstrahlung photons. But a number of various reaction cross sections and also such quantities as photonuclear reaction products, angular distributions, energy spectra and other, obtained using both bremsstrahlung and quasimonoenergetic have been presented in /18/. These data were in the forms of tables and graphs taken from the original papers (the quasimonoenergetic photon data /14, 15/ have been used).

The graphs of experimental and evaluated photoneutron reaction cross section data for selected nuclides have been published /19/ using the international nuclear data library EXFOR.

4. Description of presented data

4.1. Table of giant dipole resonance parameters

The Table given in the present work is the updated (corrected and extended) version of the table "PARAMETERS OF GIANT DIPOLE RESONANCE" published in /5/.

The Table includes parameters of the GDR observed in various photonuclear reactions measured by bremsstrahlung, quasimonoemergetic and tagged photons (several selected evaluated cross sections are presented also).

Data for the whole GDR region observed in cross sections are presented. Data relevant to narrow part of the resonance, for example for the photofission reaction cross sections near threshold, are not included.

The GDR parameters were deduced from the cross sections for various photonuclear reactions, such as photoabsorption, neutron yield, total neutron production, single, double and triple neutron production, charged particle (proton, deuteron, triton, ^{3}He, α) emission and fission.

The numerical data for the reaction cross section resonance energy position and amplitude were taken from 2 sources. First, directly from the EXFOR library relevant SUBENTry (data set). Second, estimated (together with the data for the resonance width) using the graphs published in the original papers (reference and 1-st author are given in the first line of each entry in the Table) or in the Photonuclear Data - Abstract Sheets /4/ .

Numerical data for integrated cross section and its first moment were obtained (with priorities) by the following manner:

- reading from the original papers;
- deducing from the EXFOR data sets ;
- reading from the appropriate tables published in /16/; and
- calculating using equations (4) and (5) (see “Quantities and notation”).

Data sources were :

- the international nuclear data library EXFOR;
- the USA National Institute of Standards and Technology (NIST, former NBS) photonuclear data collection for 1955 - 1982 /4/;
- the MSU INP CDFE photonuclear data collection for 1976 - 1996 /5/.

The Table entries are organized by element, isotope and reaction (ordered by product from neutron to α).

The Table contains information on the GDR parameters derived from the data for 82 elements (220 isotopes and natural compositions) with Z between 1 and 95.

The entries for almost all 600 photoneutron cross sections obtained with quasimonoenergetic photons /16/ are included also.

There are altogether 1317 entries.

4.2. Graphs of photonuclear reaction cross sections

The graphs of the majority of various photonuclear reaction cross sections, compiled into the international nuclear data library EXFOR by the end of 1998, are presented. As was pointed out in the previous paragraph, the data entries relevant to narrow part of the resonance, for example for the photofission reaction cross sections near threshold, are not included in the Table and correspondingly they are not presented in the Atlas.

The graphs are organized by element, isotope and reaction (in accordance with the Table entries ordered by product from neutron to α). As a rule, this is done in accordance with the seguence of the Table entries (there are a few exceptions for several isotopes, for example ^{16}O, for which the (γ,Xn), (γ,Sn) and (γ,n) reaction cross sections are identical in energy regions studied).

The graphs are ordered from left to right from top to bottom on each page.

The information, describing reaction and γ source, EXFOR data set number, original publication reference and its 1-st author, is given under each graph.

The information on isotope abundance and on thresholds of the most important photonuclear reactions is presented on the first page for the each isotope. (Threshold energies are rounded values from /20/, where (-) means that data do not exist, (*) - means that data are not available).

There were altogether 846 EXFOR data sets used.

5. Availability of data

The data included in the present Table of the GDR parameters and all relevant EXFOR data sets (both in numerical and graphical forms) are available through the Web site of the Moscow State University, Institute of Nuclear Physics, Centre for Photonuclear Experiments Data (Centr Dannykh Fotoyadernykh Eksperimentov - CDFE):

http://depni.npi.msu.su/cdfe

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The authors would be very much obliged to all scientists and specialists interested in this document and in photonuclear data on the whole for any remark, comment and recommendation, and also for new contributions of nuclear data which could be included into the international data libraries and future comprehensive MSU INP CDFE publications.

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T A B L E

Parameters of the giant dipole resonances observed in the photonuclear reaction cross sections

Quantities and notations

The parameters included were deduced from the cross sections of the following reactions:

G,ABS	total photoabsorption	[(γ,n) + (γ,p) + (γ,np) + (γ,2n) + (γ, d) + (γ,t) +...+ (γ,F)]
G,XN	neutron yield	[(γ,n) + (γ,np) + 2(γ,2n) + 3(γ,3n) + ... + ν (γ,F)]
G,SN	total neutron production	[(γ,n) + (γ,np) + (γ,2n) + (γ,3n) + ... + (γ,F)]
G,N	single neutron	[(γ,n) +(γ,np)]
G,NP	neutron-proton	(γ,np)
G,1N	pure one-neutron	(γ,n)
G,2N	double neutron	[(γ,2n) + γ,2np)]
G,3N	triple neutron	[(γ,3n) + (γ,3np)]
G,P	single proton	[(γ,p) + (γ,np)]
G,1P	pure one-proton	(γ,p)
G,D	deutron	(γ,d)
G,T	triton	(γ,t)
G,HE-3	He-3 nucleus	(γ,^{3}He)
G,A	alpha	(γ,α)
G,F	fission/neutron for actinides	[(γ,f) + ν(γ,nf) + ...]

The descriptions of notations used as heads of the Table columns are the following:

EXFOR	the relevant EXFOR SUBENTry (data set) number
NUCL	nucleus investigated (symbol)
A	nucleus investigated (mass number)
REACT	reaction
E-MAX	cross section maximum energy in MeV
SIG	maximum cross section value in mb
FWHM	cross section resonance full width at half maximum in MeV
E-INT	integration energy limit in MeV
SIG-INT	integrated cross section in MeV*mb
SIG-INT-1	first moment of the integrated cross section in mb
REFERENCE	original paper reference
AUTHOR	original paper 1 -st author 's name ((+) means that other authors exist),

Integrated cross section and its first moment are:

$$\text{SIG-INT} = \int_{E_{th}}^{E-INT} \sigma(k)dk \quad (4)$$

and

$$\text{SIG-INT-1} = \int_{E_{th}}^{E-INT} 1/k\sigma(k)dk \ , \quad (5)$$

where E_{th} is reaction threshold and
k is photon energy.

Each entry is represented by 1 line as a rule but in the cases when there are more than one clear maxima with comparable amplitudes in the reaction cross section, their parameters are shown in the additional shortened lines.

The analogous additional lines are presented also for cases of several integrated cross section values for the different integration energy limits.

EXFOR	NUCL A	REACT	E-MAX MEV	SIG MB	FWHM MEV	E-INT MEV	SIG-INT MEV*MB	SIG-INT-1 MB	REFERENCE	AUTHOR
	1-H 2	G,ABS	4.48	2.5	18.1	30.00	29.	3.6	ANN.PHYS.,27,79(1964)	E.G.FULLER+
						140.00	40.	3.7		
10052004	1-H 3	G,XN	17.211	2.66	>15.	23.40	32.3		PHYS.REV.,C24,849(1981)	D.D.FAUL+
	1-H 3	G,SN	17.21	1.7		23.40	22.	1.48	PHYS.REV.,C24,849(1981)	D.D.FAUL+
10052002	1-H 3	G,N	12.555	.96	>15.	23.40	11.7		PHYS.REV.,C24,849(1981)	D.D.FAUL+
10052002			17.211	.9						
10052002			21.373	.89						
10052003	1-H 3	G,2N	16.43	.95	17.	23.40	10.2		PHYS.REV.,C24,849(1981)	D.D.FAUL+
10052003			21.934	.8						
m0472002	1-H 3	G,D	15.5	.78	13.	36.00	9.5	.4	PHYS.REV.,C24,1791(1981)	D.M.SKOPIK
	1-H 3	G,D	12.	.72	12.	33.00	12.	.78	Z.PHYSIK,208,129(1968)	R.PFEIFER
10052005	2-HE 3	G,XN	18.182	1.12	14.	25.80	14.1		PHYS.REV.,C24,849(1981)	D.D.FAUL+
	2-HE 3	G,XN	14.09	.97	14.	30.20	13.		PHYS.REV.,C10,2221(1974)	B.L.BERMAN+
10052005	2-HE 3	G,SN	18.182	1.12	14.	25.80	14.1	.83	PHYS.REV.,C24,849(1981)	D.D.FAUL+
	2-HE 3	G,SN	14.09	.97	14.	30.20	13.	.77	PHYS.REV.,C10,2221(1974)	B.L.BERMAN+
10052005	2-HE 3	G,N	18.182	1.12	14.	23.40	12.3		PHYS.REV.,C24,849(1981)	D.D.FAUL+
	2-HE 3	G,N	14.09	.97	14.	30.20	13.		PHYS.REV.,C10,2221(1974)	B.L.BERMAN+
10018002	2-HE 3	G,N	14.092	.966	13.	30.00	13.	.77	PHYS.REV.LETT.,24,1494(1970)	B.L.BERMAN+
	2-HE 3	G,N	16.5	.96	15.	28.00	12.1	.68	PHYS.REV.,144,B834(1966)	H.M.GERSTENBERG+
m0479005	2-HE 3	G,NP	17.	1.2	17.	120.00	43.6	1.42	PHYS.LETT.,11,137(1964)	A.N.GORBUNOV+
	2-HE 3	G,N2P	19.5	.85	13.	30.00	13.4	.7	NUOV.CIM.,A103,721(1990)	P.BELLI+
						60.00	20.4	.9		
						100.00	23.8	1.		
						140.00	25.4	1.		
						170.00	26.1	1.		
m0479002	2-HE 3	G,P	11.	1.07	15.	117.00	26.1	1.3	PHYS.LETT.,11,137(1964)	A.N.GORBUNOV+
	2-HE 3	G,D	12.	1.05	19.				PHYS.LETT.,46B,369(1973)	G.TICCIONI+
	2-HE 3	G,D	12.5	1.06	18.	40.00	16.5	1.07	PHYS.REV.,138,B372(1965)	J.R.STEWART+
	2-HE 3	G,D	12.0	1.0	19.	170.00	26.5		ZHETF,47,30(1964)	A.T.VARFOLOMEEV+
	2-HE 3	G,PD	10.5	.8	15.	30.00	12.4	.9	NUOV.CIM.,A103,721(1990)	P.BELLI+
						60.00	16.7			
						100.00	18.8			
						140.00	19.9			
						170.00	20.5			
m0040002	2-HE 4	G,ABS	22.7	3.42	>20.	143.00	102.	2.9	YAD.FIZ.,31,1400(1980)	YU.M.ARKATOV+
m0019002	2-HE 4	G,ABS	26.2	3.45	>20.	143.00	100.	2.5	YAD.KONST.,4,55(1979)	YU.M.ARKATOV+
	2-HE 4	G,XN	33.31	1.2	20.	47.30	23.5		PHYS,REV.,C22,2273(1980)	B.L.BERMAN+
10023002	2-HE 4	G,XN	24.553	1.034	8.	31.40	7.9		PHYS.REV.,C4,723(1971)	B.L.BERMAN+
10023002			27.443	1.021						
	2-HE 4	G,SN	33.31	1.2	20.	47.30	23.5	.73	PHYS,REV.,C22,2273(1980)	B.L.BERMAN+
10023002	2-HE 4	G,SN	24.553	1.034	8.	31.40	7.9	.3	PHYS.REV.,C4,723(1971)	B.L.BERMAN+
10023002			27.443	1.021						
10051002	2-HE 4	G,N	33.311	1.2	20.	47.30	23.1		PHYS,REV.,C22,2273(1980)	B.L.BERMAN+
10051002			24.302	1.09						
	2-HE 4	G,N	28.	1.45	16.				NUOV.CIM.,38A,145(1977)	F.BALESTRA+
10023002	2-HE 4	G,N	24.553	1.034	8.	31.40	7.9		PHYS.REV.,C4,723(1971)	B.L.BERMAN+
10023002			27.443	1.09						
m0489002	2-HE 4	G,N	24.5	1.96	14.	170.00	42.	1.1	PHYS.LETT.,27B,436(1968)	A.N.GORBUNOV
	2-HE 4	G,P	25.	1.7	15.				NUOV.CIM.,38A,145(1977)	F.BALESTRA+
m0489003	2-HE 4	G,P	26.5	1.86	14.	170.00	40.	1.1	PHYS.LETT.,27B,436(1968)	A.N.GORBUNOV
m0012002	2-HE 4	G,P	26.5	1.66	>15.	115.00	41.	1.2	UKR.FIZ.ZH.,23,1818(1978)	YU.M.ARKATOV+
m0011002	2-HE 4	G,D	32.	.00511	>10.	65.00	.07	.002	UKR.FIZ.ZH.,23,919(1978)	YU.M.ARKATOV+
m0034005	2-HE 4	G,D	32.2	.0052	>10.	65.00	.07	.002	YAD.FIZ.,31,297(1980)	YU.M.ARKATOV+
m0140016	3-LI 6	G,ABS	23.5	4.58	11.5	50.00	68.	3.4	CDFE/LI2,,86	V.V.VARLAMOV+
m0140016			1.5	1.71						
m0140016			41.	1.11						
10008002	3-LI 6	G,XN	11.63	1.681	13.	32.00	28.2		PHYS.REV.LETT.,15,727(1965)	B.L.BERMAN+
10008002			30.21	1.043						
m0107002	3-LI 6	G,XN	13.5	1.79	23.	60.00	53.	2.7	NUCL.PHYS.,68,191(1965)	E.B.BAZHANOV+
m0107002			29.8	1.6						
m0107002			38.6	1.2						
m0235002	3-LI 6	G,XN	16.27	1.79	>13.	20.00	17.7	1.5	NUCL.PHYS.,A430,214(1984)	N.DYTLEWSKI+
m0235002			11.81	1.72						
m0251002	3-LI 6	G,XN	16.26	2.3	>15.	29.00	36.1	2.4	NUCL.PHYS.,69,241(1969)	E.HAYWARD+
m0251002			13.52	2.17						
m0251002			26.53	4.1						
	3-LI 6	G,SN	14.	2.6		96.00	130.	3.8	NUOV.CIM.,42B,382(1966)	S.COSTA+
			11.	2.25						
m0140002	3-LI 6	G,XN	11.5	1.71	37.	50.00	5.3	2.7	CDFE/LI2,,86	V.V.VARLAMOV+
m0140002			15.5	1.71						
m0140002			27.5	1.55						

EXFOR	NUCL A	REACT	E-MAX MEV	SIG MB	FWHM MEV	E-INT MEV	SIG-INT MEV*MB	SIG-INT-1 MB	REFERENCE	AUTHOR
m0140002			39.	1.12						
10008005	3-LI 6	G,SN	11.63	1.681	11.	32.00	27.8	1.91	PHYS.REV.LETT.,15,727(1965)	B.L.BERMAN+
10008005			16.21	1.48						
10008005			30.21	.98						
10008003	3-LI 6	G,N	11.63	1.681	11.	32.00	27.4		PHYS.REV.LETT.,15,727(1965)	B.L.BERMAN+
10008003			16.21	1.48						
10008003			30.22	.917						
	3-LI 6	G,N	12.	.6	10.	20.00	3.2		NUCL.PHYS.,68,191(1965)	E.B.BAZHANOV+
m0252002	3-LI 6	G,N	14.	2.55		96.00	130.	3.8	NUOV.CIM.,B42,382(1966)	S.COSTA+
m0140008	3-LI 6	G,NP	8.	.4	12.	35.00	4.3	.4	CDFE/LI2,,86	V.V.VARLAMOV+
m0140008			17.5	.26						
m0104003	3-LI 6	G,P	6.73	33.14	2.	11.00	32.2	4.6	IZV.AN SSSR,28,60(1964)	A.KH.SHARDANOV+
m0140009	3-LI 6	G,PD	23.5	2.57	1.5	50.00	9.6	.3	CDFE/LI2,,86	V.V.VARLAMOV+
10008004	3-LI 6	G,2N	31.12	.136	>4.	32.00	.4		PHYS.REV.LETT.,15,727(1965)	B.L.BERMAN+
10008004			27.43	.087						
10008004			29.72	.093						
m0107008	3-LI 6	G,T	19.9	7.8	4.	24.00	28.3	1.3	NUCL.PHYS.,68,191(1965)	E.B.BAZHANOV+
m0107008			21.9	7.7						
m0140013	3-LI 6	G,T	20.	1.21	7.5	50.00	11.6	.5	CDFE/LI2,,86	V.V.VARLAMOV+
m0230002	3-LI 7	G,ABS	22.	3.1	>25.	217.00	187.5	4.4	PHYS.LETT.,B52,43(1974)	J.AHRENS+
m0372002	3-LI 7	G,ABS	18.8	4.	25.	100.00	143.	4.64	NUCL.PHYS.,A251,479(1975)	J.AHRENS+
m0372002						140.00	161.	4.79		
m0372002						210.00	206.	5.03		
m0214002	3-LI 7	G,XN	19.5	3.21	>20.	56.00	101.	3.9	PHYS.REV.,118,535(1960)	R.W.FAST+
m0214002			47.5	2.13						
m0211003	3-LI 7	G,XN	16.8	2.3	9.3	23.60	18.	1.3	PHYS.REV.,110,1123(1958)	T.W.RYBKA+
m0276002	3-LI 7	G,XN	16.9	2.64	>10.	19.50	16.	1.	NUCL.PHYS.,A458,387(1986)	S.A.SIDDIQUI+
10030002	3-LI 7	G,XN	18.42	2.338	10.	30.50	30.2		PHYS.REV.,129,2723(1963)	R.L.BRAMBLETT+
m0251004	3-LI 7	G,XN	22.75	4.06	13.	30.00	50.	2.6	NUCL.PHYS.,69,241(1965)	E.HAYWARD+
m0251004			17.5	3.72						
m0109002	3-LI 7	G,XN	35.	4.87	35.	50.00	85.	3.4	DOKL.AN.SSSR,171,549(1966)	E.B.BAZHANOV+
m0109002			22.	3.39						
m0109002			24.	4.42						
m0109002			41.	2.79						
m0140017	3-LI 7	G,XN	17.	3.29	25.	50.00	87.8	3.7	CDFE/LI2,,86	V.V.VARLAMOV+
m0140017			22.5	2.81						
m0140017			30.5	2.55						
m0140017			35.	2.48						
10030005	3-LI 7	G,SN	14.75	1.565	13.	30.50	20.1	1.15	73PACIFI,1,175,73,P.175	R.L.BRAMBLETT+
10030003	3-LI 7	G,N	14.75	.932	8.	30.50	10.		73PACIFI,1,175,73	R.L.BRAMBLETT+
10030004	3-LI 7	G,2N	19.06	.88	12.	30.50	10.1		73PACIFI,1,175,73	R.L.BRAMBLETT+
m0247003	3-LI 7	G,P	18.	1.35	20.	30.50	14.6	.8	NUCL.PHYS.,32,543(1962)	A.G.GREGORY+
m0247003			27.	1.11						
m0102003	3-LI 7	G,P	18.2	1.51	20.	30.00	13.9	.8	IZV.AN SSSR,27,1412(1963)	L.A.KUL'CHITSKIY+
m0102003			14.1	1.27						
m0102003			16.2	1.51						
m0102003			21.7	1.52						
m0102003			25.2	.71						
m0113002	3-LI 7	G,PT	24.5	.47	6.	27.00	1.	.03	YAD.FIZ.,18,245(1973)	E.A.KOTIKOV+
m0101007	3-LI 7	G,T	19.4	.681	20.	25.80	7.5	.4	ZHETF,44,1153(1963)	L.A.KUL'CHITSKIY+
m0102004	3-LI 7	G,T	22.3	.771	20.	26.50	8.2	.4	IZV.AN SSSR,27,1412(1963)	L.A.KUL'CHITSKIY+
m0102004			19.6	.718						
	3-LI 7	G,T	17.	.2	20.	35.00	4.9		NUCL.PHYS.,69,241(1965)	E.HAYWARD+
m0372003	4-BE 9	G,ABS	24.5	5.43	30.	100.00	173.	5.19	NUCL.PHYS.,A251,479(1975)	J.AHRENS+
m0372003						140.00	189.	5.33		
m0372003						210.00	236.	5.58		
m0230003	4-BE 9	G,ABS	27.	5.19	30.	217.00	261.1	5.9	PHYS.LETT.,B52,43(1974)	J.AHRENS+
m0451002	4-BE 9	G,ABS	20.5	9.	>20.	26.50	54.3	2.5	NUCL.PHYS..,31,570(1962)	U.MIKLAVZIC+
m0451002			21.7	8.						
m0451002			25.5	8.5						
10040004	4-BE 9	G,XN	28.241	5.44	>20.	37.00	83.7		NUCL.PHYS.,A247,91(1975)	U.KNEISSL+
	4-BE 9	G,XN	26.	4.7	26.	70.00	220.	7.8	NUOV.CIM.,42B,306,(1966)	S.COSTA+
	4-BE 9	G,SN	28.24	3.67	>15.	37.00	58.1	2.52	NUCL.PHYS.,A247,91(1975)	U.KNEISSL+
10040002	4-BE 9	G,N	21.207	2.96	8.	37.00	32.5		NUCL.PHYS.,A247,91(1975)	U.KNEISSL+
10040003	4-BE 9	G,2N	36.495	2.38	>12.	37.00	25.6		NUCL.PHYS.,A247,91(1975)	U.KNEISSL+
10040003			27.503	2.26						
m0440002	4-BE 9	G,P	21.	1.79	8.	31.00	15.6	.67	NUCL.PHYS.,65,662(1964)	A.P.KOMAR+
10044004	5-B 10	G,XN	22.001	5.73	19.	35.00	83.1		NUCL.PHYS.,A264,30(1976)	U.KNEISSL+
m0498002	5-B 10	G,XN	22.9	6.75	10.	27.10	51.5	2.7	NUCL.PHYS.,A215,147(1973)	R.J.HUGHES+
m0498002			20.2	5.6						
	5-B 10	G,XN	24.	6.5	10.5	29.00	67.		NUCL.PHYS.,69,241(1965)	E.HAYWARD+

EXFOR	NUCL A	REACT	E-MAX MEV	SIG MB	FWHM MEV	E-INT MEV	SIG-INT MEV*MB	SIG-INT-1 MB	REFERENCE	AUTHOR
m0207002	5-B 10	G,SN	23.81	5.93	>7.	25.30	44.6	2.4	NUCL.PHYS.,A469,381(1987)	M.H.AHSAN+
m0207002			21.21	5.015						
	5-B 10	G,SN	22.	5.73	17.	35.00	80.8	3.7	NUCL.PHYS.,A264,30(1976)	U.KNEISSL+
10044002	5-B 10	G,N	22.001	5.55	17.	35.00	80.4		NUCL.PHYS.,A264,30(1976)	U.KNEISSL+
10044003	5-B 10	G,2N	28.057	.68	>20.	35.00	1.9		NUCL.PHYS.,A264,30(1976)	U.KNEISSL+
10044007	5-B 11	G,XN	26.081	6.88	15.	35.10	84.1		NUCL.PHYS.,A264,30(1976)	U.KNEISSL+
10044007			19.749	4.06						
m0498003	5-B 11	G,XN	25.5	8.95	>10.	27.50	58.8	2.8	NUCL.PHYS.,A215,147(1973)	R.J.HUGHES+
	5-B 11	G,XN	26.	7.5	11.	29.00	69.		NUCL.PHYS.,69,241(1965)	E.HAYWARD+
	5-B 11	G,SN	26.08	5.28	15.	35.10	69.2	2.93	NUCL.PHYS.,A264,30(1976)	U.KNEISSL+
			19.75	3.95						
10044005	5-B 11	G,N	19.491	3.99	15.	35.10	54.3		NUCL.PHYS.,A264,30(1976)	U.KNEISSL+
10044005			21.503	3.66						
10044005			26.58	3.79						
10044006	5-B 11	G,2N	26.081	1.92	11.	35.10	14.9		NUCL.PHYS.,A264,30(1976)	U.KNEISSL+
	5-B 11	G,P	25.	15.	10.	31.00	98.		YAD.FIZ.,9,254(1969)	YU.I.SOROKIN+
m0372004	6-C 12	G,ABS	22.7	21.36	6.	100.00	291.	8.81	NUCL.PHYS.,A251,479(1975)	J.AHRENS+
m0372004						140.00	334.	9.18		
m0160002	6-C 12	G,ABS	22.57	17.8	3.2	28.00	84.	3.8	ZHETF,45,1694(1963)	N.A.BURGOV+
m0160002			17.61	8.7						
m0160002			18.87	7.3						
m0160002			25.61	9.2						
10041002	6-C 12	G,XN	23.367	8.73	6.	32.10	51.6	2.08	NUCL.INSTR. & METH.,127,1(1975)	U.KNEISSL+
10041002			25.472	5.48						
10041002			30.069	3.56						
	6-C 12	G,XN	23.1	8.	>5.	27.00	36.	1.47	PHYS.REV.,141,1002(1966)	W.A.LOCHSTET+
	6-C 12	G,XN	23.3	7.2	>4.	25.50	29.4		J.PHISIQUE,27,8(1966)	J.MILLER+
10010002	6-C 12	G,XN	22.798	7.22	6.	37.40	46.8	1.83	PHYS.REV.,143,790(1966)	S.C.FULTZ+
10010002			25.353	4.2						
m0238002	6-C 12	G,XN	22.972	12.12	>4.	24.20	24.8	1.1	YAD.FIZ.,14,253(1971)	B.S.ISHKHANOV+
m0238002			21.925	8.91						
m0238002			22.542	10.14						
m0238002			23.401	10.03						
m0238002			23.757	9.56						
10041002	6-C 12	G,SN	23.367	8.73	6.	32.10	51.6	2.08	NUCL.INSTR. & METH.,127,1(1975)	U.KNEISSL+
10041002			25.472	5.48						
10041002			30.069	3.56						
10038002	6-C 12	G,SN	22.24	8.14	6.	27.00	36.	1.47	PHYS.REV.,141,1002(1966)	W.A.LOCHSTET+
10038002			23.07	8.04						
10038002			25.6	5.9						
	6-C 12	G,SN	23.	7.	4.8	30.00	36.		PHYS.REV.,143,790(1966)	S.C.FULTZ+
10010002	6-C 12	G,SN	22.179	6.8	6.	37.40	46.8	1.83	PHYS.REV.,143,790(1966)	S.C.FULTZ+
10010002			25.353	4.2						
10041002	6-C 12	G,N	23.367	8.73	6.	32.10	51.6	2.08	NUCL.INSTR. & METH.,127,1(1975)	U.KNEISSL+
10041002			25.472	5.48						
10041002			30.069	3.56						
10038002	6-C 12	G,N	22.24	8.14	6.	27.00	36.	1.47	PHYS.REV.,141,1002(1966)	W.A.LOCHSTET+
10038002			23.07	8.04						
10038002			25.6	5.9						
10010002	6-C 12	G,N	22.179	6.8	6.	37.40	46.8	1.83	PHYS.REV.,143,790(1966)	S.C.FULTZ+
10010002			25.353	4.2						
m0319002	6-C 12	G,N	23.5	11.5	>4.	26.30	28.7	1.2	NUCL.INSTR.,A127,1(1975)	U.KNEISSL+
m0319002			21.	3.3						
m0319002			22.	8.1						
m0319002			25.	8.7						
m0273002	6-C 12	G,N	23.	13.1	4.	27.00	43.6	1.9	CAN.J.PHYS.,29,518(1951)	L.KATZ+
m0241002	6-C 12	G,1N	22.19	8.1	>5.	27.00	36.	1.5	PHYS.REV.,141,1002(1966)	W.A.LOCHSTET+
m0241002			23.13	8.						
m0241002			25.6	5.8						
m0033006	6-C 12	G,NP	41.	.65	20.	143.00	25.8	.4	YAD.FIZ.,32,881(1980)	A.F.KHODYACHIKH+
m0071003	6-C 12	G,NA	38.8	.446	10.	110.00	6.8	.2	YAD.FIZ.,29,572(1979)	V.V.KIRICHENKO+
m0013002	6-C 12	G,P	22.75	13.85	5.	120.00	189.	6.5	YAD.FIZ.,27,588(1978)	V.V.KIRICHENKO+
	6-C 12	G,P	22.4	13.5	3.5				PHYS.REV.,C14,456(1976)	R.CARCHON+
	6-C 12	G,PT	37.5	.25	22.	150.00	8.1		YAD.FIZ.,49,790(1989)	V.I.VOLOSHCHUK+
			55.	.22						
m0071002	6-C 12	G,PA	29.8	.657	10.	110.00	9.7	.3	YAD.FIZ.,29,572(1979)	V.V.KIRICHENKO+
m0065002	6-C 12	G,NPA	54.	.245	35.	140.00	11.8	.1	UKR.FIZ.ZH.,10,1465(1989)	I.V.DOGYUST+
	6-C 12	G,3A	19.	.23	3.5				NUCL.PHYS.,50,561(1964)	M.E.TOMS+
10048004	6-C 13	G,XN	24.431	9.73		41.80	126.1	5.72	PHYS.REV.,C19,1684(1979)	J.W.JURY+
10048004			13.817	3.94						
10048004			20.976	6.6						
10048004	6-C 13	G,SN	24.431	9.73		41.80	126.1	5.72	PHYS.REV.,C19,1684(1979)	J.W.JURY+

EXFOR	NUCL A	REACT	E-MAX MEV	SIG MB	FWHM MEV	E-INT MEV	SIG-INT MEV*MB	SIG-INT-1 MB	REFERENCE	AUTHOR
10048004			13.817	3.94						
10048004			20.976	6.6						
10048002	6-C 13	G,N	24.431	9.71		41.80	121.3		PHYS.REV.,C19,1684(1979)	J.W.JURY+
10048002			13.817	3.94						
10048002			20.976	6.6						
m0363002	6-C 13	G,N	23.77	8.11	>25.	25.00	41.	2.2	NUCL.PHYS.,A272,296(1976)	R.KOCH+
m0363002			15.07	1.93						
m0363002			20.58	4.25						
10048003	6-C 13	G,2N	35.065	.56	12.	41.80	4.7		PHYS.REV.,C19,1684(1979)	J.W.JURY+
	6-C 13	G,P	19.75	3.4	7.	28.00	36.		PHYS.REV.,C27,1957(1983)	D.ZUBANOV+
10056004	6-C 14	G,XN	26.078	13.568		36.20	163.		PHYS.REV.,C32,384(1985)	R.E.PYWELL+
10056004			15.417	9.531						
	6-C 14	G,SN	15.42	9.53		36.20	126.	6.09	PHYS.REV.,C32,384(1985)	R.E.PYWELL+
			26.08	7.57						
10056002	6-C 14	G,N	15.417	8.956	10.	36.20	89.7		PHYS.REV.,C32,384(1985)	R.E.PYWELL+
10056002			22.493	5.267						
10056002			28.892	3.779						
10056003	6-C 14	G,2N	26.078	5.737	5.	36.20	36.6		PHYS.REV.,C32,384(1985)	R.E.PYWELL+
	6-C 14	G,P	5.6	2.5	1.	29.10	17.9		PHYS.REV.,C44,1137(1991)	D.J.MCLEAN+
			22.5	1.6						
	7-N 14	G,ABS	22.5	27.	7.	30.00	195.	8.4	NUCL.PHYS.,A128,426(1969)	N.BEZIC+
m0214003	7-N 14	G,XN	22.5	13.45	3.8	50.00	113.5	4.3	PHYS.REV.,118,535(1960)	R.W.FAST+
10019002	7-N 14	G,XN	23.343	14.65	7.	29.50	98.	4.36	PHYS.REV.,C2,2318(1970)	B.L.BERMAN+
10019002	7-N 14	G,SN	23.343	14.65	7.	29.50	98.	4.36	PHYS.REV.,C2,2318(1970)	B.L.BERMAN+
10019002	7-N 14	G,N	23.343	14.65	7.	29.50	98.	4.36	PHYS.REV.,C2,2318(1970)	B.L.BERMAN+
	7-N 14	G,NP	41.	.83	7.	45.00	54.2		UKR.FIZ.ZH.,34,511(1989)	V.I.VOLOSHCHUK+
m0264003	7-N 15	G,ABS	25.43	22.49	7.2	27.00	129.7	6.2	PHYS.REV.,C40,506(1989)	A.D.BATES+
m0264003			19.85	11.76						
m0264003			21.75	12.52						
m0264002	7-N 15	G,XN	25.89	14.86	3.9	26.50	78.9	2.8	PHYS.REV.,C40,506(1989)	A.D.BATES+
10053004	7-N 15	G,XN	22.964	11.78	7.	38.00	114.	4.65	PHYS.REV.,C26,777(1982)	J.W.JURY+
10053004			25.106	10.58						
	7-N 15	G,SN	22.96	11.78	7.	38.00	105.9	4.7	PHYS.REV.,C26,777(1982)	J.W.JURY+
m0264002	7-N 15	G,SN	25.89	14.86	3.9	26.50	78.9	2.8	PHYS.REV.,C40,506(1989)	A.D.BATES+
10053002	7-N 15	G,N	22.964	11.68	7.	38.00	98.8		PHYS.REV.,C26,777(1982)	J.W.JURY+
10053003	7-N 15	G,2N	30.818	1.01	7.	38.00	7.6		PHYS.REV.,C26,777(1982)	J.W.JURY+
10053003			27.724	.94						
m0480002	7-N 15	G,2N	26.1	1.7	1.8	27.00	3.6	.1	PHYS.REV.,C37,1403(1988)	K.G.MCNEILL+
m0480002			22.9	.33						
m0372005	8-O 16	G,ABS	22.35	30.91	6.	100.00	432.	14.5	NUCL.PHYS.,A251,479(1975)	J.AHRENS+
m0372005						140.00	508.	15.1		
m0345002	8-O 16	G,XN	22.2	10.81	6.5	28.00	46.8	2.	YAD.KONST.,1,52(1993)	V.V.VARLAMOV+
m0345002			17.22	2.925						
m0345002			19.44	2.078						
m0345002			24.12	9.658						
10054002	8-O 16	G,XN	22.107	10.514	7.5	33.10	61.5	2.51	PHYS.REV.,C27,1(1983)	B.L.BERMAN+
10054002			24.202	8.916						
10041003	8-O 16	G,XN	22.204	8.73	6.	37.00	62.9	2.4	NUCL.INSTR. & METH.,127,1(1975)	U.KNEISSL+
10041003			24.05	8.1						
10039005	8-O 16	G,XN	22.15	10.3	5.	37.10	80.1		NUCL.PHYS.,A227,513(1974)	A.VEYSSIERE+
10039005			24.05	9.7						
m0396002	8-O 16	G,XN	22.46	14.79	>4.	25.00	32.12	1.6	YAD.FIZ.,12,892(1970)	B.S.ISHKHANOV+
m0396002			17.28	4.298						
m0396002			18.93	3.075						
m0396002			21.26	4.21						
m0396002			24.19	12.94						
	8-O 16	G,XN	22.	10.5		26.50	41.5		J.PHISIQUE,27,8(1966)	J.MILLER+
			24.2	9.						
10036002	8-O 16	G,XN	22.372	8.91		28.00	41.5	1.76	PHYS.REV.LETT.,15,976(1965)	J.T.CALDWELL+
10036002			24.223	8.11						
	8-O 16	G,XN	22.2	42.	4.5	26.60	150.		ZHETF,43,70(1962)	N.A.BURGOV+
10051004	8-O 16	G,XN	22.3	8.3	6.	33.10	61.5		PHYS.REV.,C22,2273(1980)	B.L.BERMAN+
10051004			24.1	8.						
10054002	8-O 16	G,SN	22.107	10.514	7.5	33.10	61.5	2.51	PHYS.REV.,C27,1(1983)	B.L.BERMAN+
10054002			24.202	8.916						
10040005	8-O 16	G,SN	22.2	8.73	6.	37.00	62.	2.4	NUCL.PHYS,A247,91(1975)	U.KNEISSL+
10040005			24.05	8.1						
10041003	8-O 16	G,SN	22.204	8.73	6.	37.00	62.9	2.4	NUCL.INSTR. & METH.,127,1(1975)	U.KNEISSL+
10041003			24.05	8.1						
	8-O 16	G,SN	22.15	10.3	5.	37.10	79.6	3.04	NUCL.PHYS.,A227,513(1974)	A.VEYSSIERE+
			24.1	9.7						

EXFOR	NUCL	A	REACT	E-MAX MEV	SIG MB	FWHM MEV	E-INT MEV	SIG-INT MEV*MB	SIG-INT-1 MB	REFERENCE	AUTHOR
	8-0	16	G,SN	22.37	8.91		28.00	41.5	1.8	PHYS.REV.LETT.,15,976(1965)	J.T.CALDWELL+
				24.22	8.11						
10036002	8-0	16	G,SN	22.372	8.91		28.00	41.5	1.76	PHYS.REV.LETT.,15,976(1965)	J.T.CALDWELL+
10036002				24.223	8.11						
10051004	8-0	16	G,SN	22.3	8.3	6.	30.00	53.8	2.51	PHYS.REV.,C22,2273(1980)	B.L.BERMAN+
10051004				24.1	8.						
10005002	8-0	16	G,N	17.301	1.85	2.7				PHYS.REV.,B133,869(1964)	R.L.BRAMBLETT+
10005002				19.646	1.6						
10054002	8-0	16	G,N	22.107	10.514	7.5	33.10	61.5		PHYS.REV.,C27,1(1983)	B.L.BERMAN+
10054002				24.202	8.916						
10041003	8-0	16	G,N	22.204	8.73	6.	37.00	62.9	2.4	NUCL.INSTR. & METH.,127,1(1975)	U.KNEISSL+
10041003				24.05	8.1						
10036002	8-0	16	G,N	22.372	8.91		28.00	41.5	1.76	PHYS.REV.LETT.,15,976(1965)	J.T.CALDWELL+
10036002				24.223	8.11						
10039002	8-0	16	G,N	22.15	10.3	5.	37.10	78.9		NUCL.PHYS.,A227,513(1974)	A.VEYSSIERE+
10039002				24.05	9.7						
	8-0	16	G,N	22.37	8.91		28.00	41.5		PHYS.REV.LETT.,15,976(1965)	J.T.CALDWELL+
				24.22	8.11						
10051004	8-0	16	G,N	22.3	8.3	6.	33.10	61.5		PHYS.REV.,C22,2273(1980)	B.L.BERMAN+
10051004				24.1	8.						
10039004	8-0	16	G,NP	30.82	1.7	8.5	37.10	11.		NUCL.PHYS.,A227,513(1974)	A.VEYSSIERE+
10039003	8-0	16	G,2N	32.72	.23		37.10	.6		NUCL.PHYS.,A227,513(1974)	A.VEYSSIERE+
m0039002	8-0	16	G,P	21.	7.28	10.	120.00	139.	5.6	UKR.FIZ.ZH.,25,229(1980)	A.F.KHODYACHIKH+
	8-0	16	G,A	13.	.02					NUCL.PHYS.,54,625(1964)	M.E.TOMS+
				16.8	.013						
	8-0	16	G,4A	20.5	.08	2.	21.50	.124		NUCL.PHYS.,54,625(1964)	M.E.TOMS+
	8-0	17	G,XN	23.19	13.28	6.	39.70	128.		PHYS.REV.,C21,503(1980)	J.W.JURY+
10049002	8-0	17	G,SN	23.19	13.28	6.	40.00	120.	5.22	PHYS.REV.,C21,503(1980)	J.W.JURY+
10049003	8-0	17	G,N	22.822	12.46	6.	39.70	111.		PHYS.REV.,C21,503(1980)	J.W.JURY+
10049004	8-0	17	G,2N	34.915	1.03	16.	39.70	9.3		PHYS.REV.,C21,503(1980)	J.W.JURY+
10049004				24.549	.74						
10049004				31.213	.82						
10047004	8-0	18	G,XN	23.673	17.74	17.	41.80	275.		PHYS.REV.,C19,1667(1979)	J.E.WOODWORTH+
10047004				11.453	9.01						
10047004				14.813	13.13						
10045004	8-0	18	G,XN	23.33	16.83	18.	33.00	191.		NUCL.PHYS.,A272,125(1976)	U.KNEISSL+
10045004				11.315	6.25						
10045004				14.507	10.84						
	8-0	18	G,SN	23.43	12.54	18.	41.80	198.3	9.08	PHYS.REV.,C19,1667(1979)	J.E.WOODWORTH+
				11.45	9.						
				14.81	11.53						
	8-0	18	G,SN	23.33	10.57	>18.	35.00	142.	6.9	NUCL.PHYS.,A272,125(1976)	U.KNEISSL+
				14.51	9.						
10047002	8-0	18	G,N	11.453	9.	23.	41.80	121.5		PHYS.REV.,C19,1667(1979)	J.E.WOODWORTH+
10047002				14.813	8.65						
10047002				23.673	6.87						
10047002				26.987	6.93						
10045002	8-0	18	G,N	30.752	8.07	>23.	35.00	93.		NUCL.PHYS.,A272,125(1976)	U.KNEISSL+
10045002				11.315	6.25						
10045002				14.507	8.02						
10045002				23.33	6.39						
	8-0	18	G,NP	27.5	1.2	8.	30.00	5.6	.21	PHYS.REV.,C43,489(1991)	K.G.MCNEIL+
							43.00	11.8	.39		
10047003	8-0	18	G,2N	23.426	5.59	15.	41.80	76.7		PHYS.REV.,C19,1667(1979)	J.E.WOODWORTH+
10047003				15.796	4.01						
10045003	8-0	18	G,2N	23.164	5.35	11.	35.00	49.		NUCL.PHYS.,A272,125(1976)	U.KNEISSL+
m0242002	8-0	18	G,P	22.57	5.055	6.5	32.00	33.6	1.5	NUCL.PHYS.,A376,15(1982)	K.BANGERT+
m0242002				23.57	4.994						
10047005	8-0	18	G,P	23.673	6.14	7.	41.80	44.		PHYS.REV.,C19,1667(1979)	J.E.WOODWORTH+
10047005				17.517	1.22						
10047005				19.938	1.81						
10047005				26.754	3.39						
	8-0	18	G,P	23.1	5.5	8.	30.60	29.8		PHYS.REV.LETT.,36,1441(1976)	B.L.BERMAN+
				25.2	3.3						
	9-F	19	G,ABS	24.	18.	14.	30.00	271.		NUCL.PHYS.,A128,426(1969)	N.BEZIC+
10039008	9-F	19	G,XN	25.13	12.1	>10.	27.80	109.		NUCL.PHYS.,A227,513(1974)	A.VEYSSIERE+
10039008				12.26	3.7						
	9-F	19	G,SN	24.86	11.1	>10.	27.80	104.	4.95	NUCL.PHYS.,A227,513(1974)	A.VEYSSIERE+
10039006	9-F	19	G,N	23.77	10.4	>10.	27.80	99.		NUCL.PHYS.,A227,513(1974)	A.VEYSSIERE+
10039006				12.26	3.7						
	9-F	19	G,2N	24.7	.48	>40.	60.00	9.1		NUCL.PHYS.,A262,91(1976)	D.W.ANDERSON+
				40.5	.25						

EXFOR	NUCL A	REACT	E-MAX MEV	SIG MB	FWHM MEV	E-INT MEV	SIG-INT MEV*MB	SIG-INT-1 MB	REFERENCE	AUTHOR
			56.6	.26						
10039007	9-F 19	G,2N	27.03	1.7	>7.	27.80	5.2		NUCL.PHYS.,A227,513(1974)	A.VEYSSIERE+
10039007			25.13	1.2						
10039011	10-NE	G,XN	20.52	8.3	8.	25.90	46.		NUCL.PHYS.,A227,513(1974)	A.VEYSSIERE+
10039011			17.81	3.6						
10039011			25.13	5.9						
	10-NE	G,SN	19.17	6.6	8.	25.90	43.	1.98	NUCL.PHYS.,A227,513(1974)	A.VEYSSIERE+
10039009	10-NE	G,N	19.17	6.6	8.	25.90	40.		NUCL.PHYS.,A227,513(1974)	A.VEYSSIERE+
10039009			17.81	3.6						
10039009			20.25	6.6						
10039009			22.15	5.2						
10039009			25.4	5.8						
10039010	10-NE	G,2N	20.52	1.1	3.	25.90	3.1		NUCL.PHYS.,A227,513(1974)	A.VEYSSIERE+
m0369002	10-NE 20	G,N	19.	12.14	5.	28.40	58.2	2.6	NUCL.PHYS.,A357,171(1981)	P.D.ALLEN+
m0369002			17.7	5.14						
m0369002			19.9	10.71						
	10-NE 22	G,2N	20.7	13.	3.				NUCL.PHYS.,A227,513(1974)	A.VEYSSIERE+
	11-NA 23	G,ABS	21.1	21.1	>13.	29.50	330.		YAD.FIZ.,33,581(1981)	B.S.ISHKHANOV+
			28.6	19.						
	11-NA 23	G,ABS	23.	15.	16.	30.00	200.	11.	PHYS.REV.,137,B576(1965)	J.M.WYCKOF
10039014	11-NA 23	G,XN	26.62	12.7	14.	30.10	139.		NUCL.PHYS.,A227,513(1974)	A.VEYSSIERE+
10022002	11-NA 23	G,XN	26.143	14.38	>15.	27.10	120.		PHYS.REV.,C4,1673(1971)	R.A.ALVAREZ+
	11-NA 23	G,SN	26.76	12.5	14.	30.10	136.	6.18	NUCL.PHYS.,A227,513(1974)	A.VEYSSIERE+
10022008	11-NA 23	G,SN	26.143	13.91	>15.	27.10	119.	5.74	PHYS.REV.,C4,1673(1971)	R.A.ALVAREZ+
10039012	11-NA 23	G,N	24.18	12.5	14.	30.10	133.		NUCL.PHYS.,A227,513(1974)	A.VEYSSIERE+
10022003	11-NA 23	G,N	26.143	13.25	>15.	27.10	118.		PHYS.REV.,C4,1673(1971)	R.A.ALVAREZ+
10039013	11-NA 23	G,2N	29.19	1.6	>5.	30.10	2.7		NUCL.PHYS.,A227,513(1974)	A.VEYSSIERE+
10022004	11-NA 23	G,2N	26.561	.56	>3.	27.10	.6		PHYS.REV.,C4,1673(1971)	R.A.ALVAREZ+
	11-NA 23	G,P	20.6	30.1	>13.				YAD.FIZ.,33,581(1981)	B.S.ISHKHANOV+
			27.6	22.8						
	12-MG	G,ABS	19.	24.	13.	30.00	225.	12.	PHYS.REV.,137,B576(1965)	J.M.WYCKOFF
	12-MG	G,P	22.5	18.	11.	32.00	180.		PHYS.LETT.,9,162(1964)	B.S.ISHKHANOV+
	12-MG	G,P	20.	13.5	6.	23.00	70.		J.PHYS.SOC.JAP.,17,735(1962)	K.SHODA+
10026002	12-MG 24	G,XN	19.16	9.9	8.	28.30	51.9	2.37	PHYS.REV.,C4,149(1971)	S.C.FULTZ+
10026002			20.011	9.03						
10026002	12-MG 24	G,SN	19.16	9.9		28.30	51.9	2.37	PHYS.REV.,C4,149(1971)	S.C.FULTZ+
10026002			20.011	9.03						
	12-MG 24	G,N	20.	12.					NUCL.PHYS.,A186,438(1972)	B.S.ISHKHANOV+
			19.3	11.						
			24.6	8.						
10026002	12-MG 24	G,N	19.16	9.9	8.	28.30	51.9	2.37	PHYS.REV.,C4,149(1971)	S.C.FULTZ+
10026002			20.011	9.03						
m0001027	12-MG 24	G,P	19.3	25.29	7.	29.50	183.	8.4	YAD.FIZ.,30,1185(1979)	V.V.VARLAMOV+
m0001027			24.9	20.6						
10022005	12-MG 25	G,XN	23.185	27.7	>11.	28.90	248.	12.	PHYS.REV.,C4,1673(1971)	R.A.ALVAREZ+
10022009	12-MG 25	G,SN	23.185	27.7	9.	28.90	247.	11.5	PHYS.REV.,C4,1673(1971)	R.A.ALVAREZ+
10022006	12-MG 25	G,N	23.185	27.7	9.	28.90	245.	11.	PHYS.REV.,C4,1673(1971)	R.A.ALVAREZ+
10022007	12-MG 25	G,2N	28.099	0.8	>5.	28.90	1.5		PHYS.REV.,C4,1673(1971)	R.A.ALVAREZ+
	12-MG 26	G,XN	22.25	12.					NUCL.PHYS.,A186,438(1972)	B.S.ISHKHANOV+
			17.5	17.						
			24.5	15.5						
10026003	12-MG 26	G,XN	22.14	35.87	>10.	28.60	308.		PHYS.REV.,C4,149(1971)	S.C.FULTZ+
10026003			17.646	22.84						
10026006	12-MG 26	G,SN	22.14	25.12	>10.	28.60	236.	11.5	PHYS.REV.,C4,149(1971)	S.C.FULTZ+
10026006			17.646	22.84						
10026004	12-MG 26	G,N	17.646	22.84	>10.	28.60	164.		PHYS.REV.,C4,149(1971)	S.C.FULTZ+
10026005	12-MG 26	G,2N	21.931	13.89	>8.	28.60	72.		PHYS.REV.,C4,149(1971)	S.C.FULTZ+
10026005			24.858	12.23						
m0002013	12-MG 26	G,P	24.1	19.68	10.	27.00	101.3	4.6	NUCL.PHYS.,A313,317(1979)	B.S.ISHKHANOV+
m0002013			17.8	5.07						
m0002013			20.7	10.05						
m0002013			21.8	15.1						
m0002013			23.4	18.97						
	12-MG 26	G,P	23.	20.	10.	29.00	140.		NUCL.PHYS.,A222,548(1974)	V.V.VARLAMOV+
						20.10	10.5			
						26.00	18.			
m0372006	13-AL 27	G,ABS	20.8	41.6	9.	100.00	739.	25.7	NUCL.PHYS.,A251,479(1975)	J.AHRENS+
m0372006						140.00	807.	26.3		
10039017	13-AL 27	G,XN	21.2	15.8	13.	30.30	152.	6.77	NUCL.PHYS.,A227,513(1974)	A.VEYSSIERE+
	13-AL 27	G,XN	22.	14.51	6.				IZV.AN SSSR,33,1742(1969)	B.S.ISHKHANOV+

EXFOR	NUCL A	REACT	E-MAX MEV	SIG MB	FWHM MEV	E-INT MEV	SIG-INT MEV*MB	SIG-INT-1 MB	REFERENCE	AUTHOR
			19.	6.7						
			24.	5.83						
	13-AL 27	G,XN	21.4	19.1	10.				LETT.NUOV.CIM.,2,318(1969)	S.COSTA+
10010004	13-AL 27	G,XN	21.25	14.54	14.	36.70	175.		PHYS.REV.,143,790(1966)	S.C.FULTZ+
	13-AL 27	G,XN	22.	14.51	6.				IZV.AN SSSR,31,336(1967)	G.P.ANTROPOV+
			19.	6.7						
			20.5	9.1						
			22.5	10.08						
10039017	13-AL 27	G,SN	21.2	15.8	13.	30.30	152.	6.77	NUCL.PHYS.,A227,513(1974)	A.VEYSSIERE+
10010007	13-AL 27	G,SN	21.404	14.89	14.	36.70	167.	7.17	PHYS.REV.,143,790(1966)	S.C.FULTZ+
10039015	13-AL 27	G,N	21.2	15.8	13.	30.30	150.		NUCL.PHYS.,A227,513(1974)	A.VEYSSIERE+
10039015			19.84	14.3						
10010005	13-AL 27	G,N	21.404	14.89	11.	36.70	159.		PHYS.REV.,143,790(1966)	S.C.FULTZ+
m0267002	13-AL 27	G,1N	20.62	5.52	6.5	24.60	31.5	1.6	PHYS.REV.,141,1002(1966)	W.A.LOCHSTET+
m0267002			18.54	4.97						
m0267002			19.62	5.31						
m0267002			21.38	5.46						
	13-AL 27	G,P	19.9	17.5	>8.	23.00	110.		J.PHYS.SOC.JAP.,17,735(1962)	K.SHODA+
10039016	13-AL 27	G,2N	29.74	.6		30.30	.6		NUCL.PHYS.,A227,513(1974)	A.VEYSSIERE+
10010006	13-AL 27	G,2N	34.567	1.43	>8.	36.70	7.6		PHYS.REV.,143,790(1966)	S.C.FULTZ+
	13-AL 27	G,2P	30.5	.29	10.	63.00	28.		PHYS.REV.,110,1113(1958)	L.B.AULL+
m0372007	14-SI	G,ABS	20.24	58.73	5.	29.80	392.8	18.7	NUCL.PHYS.,A251,479(1975)	J.AHRENS+
m0372007			18.28	43.47						
m0372007			19.	48.31						
m0372007			21.42	58.09						
10039018	14-SI	G,XN	19.84	16.	4.	30.00	95.	4.25	NUCL.PHYS.,A227,513(1974)	A.VEYSSIERE+
10039018			18.9	11.2						
10039018			20.79	15.8						
	14-SI	G,XN	21.3	16.	5.				LETT.NUOV.CIM.,2,318(1969)	S.COSTA+
	14-SI	G,XN	20.8	18.	4.				YAD.FIZ.,7,1168(1968)	B.I.GORYACHEV+
10039018	14-SI	G,SN	19.84	16.	4.	30.00	95.	4.25	NUCL.PHYS.,A227,513(1974)	A.VEYSSIERE+
10039018			18.9	11.2						
10039018			20.79	15.8						
10039018	14-SI	G,N	19.84	16.	4.	30.00	95.	4.25	NUCL.PHYS.,A227,513(1974)	A.VEYSSIERE+
10039018			18.9	11.2						
10039018			20.79	15.8						
10055002	14-SI 28	G,XN	20.774	14.487	4.	33.10	105.	4.46	PHYS.REV.,C27,960(1983)	R.E.PYWELL+
10055002			18.87	11.269						
10055002			19.822	13.212						
	14-SI 28	G,SN	21.	15.	5.	31.00	93.		NUCL.PHYS.,A171,324(1971)	D.V.WEBB+
10055002	14-SI 28	G,SN	20.774	14.487	4.	33.10	105.	4.46	PHYS.REV.,C27,960(1983)	R.E.PYWELL+
10055002			18.87	11.269						
10055002			19.822	13.212						
10055002	14-SI 28	G,N	20.774	14.487	4.	33.10	105.	4.46	PHYS.REV.,C27,960(1983)	R.E.PYWELL+
10055002			18.87	11.269						
10055002			19.822	13.212						
10004002	14-SI 28	G,N	19.86	11.05	4.5	33.00	68.	3.	PHYS.LETT.,6,213(1963)	J.T.CALDWELL+
10004002			20.77	10.64					PHYS.LETT.,6,213(1963)	J.T.CALDWELL+
m0397002	14-SI 28	G,N	20.78	18.95	4.5	29.50	102.9	4.6	YAD.FIZ.,2,1168(1968)	B.I.GORYACHEV+
m0397002			18.74	13.03						
m0397002			19.75	17.66						
m0397002			27.26	17.73						
m0345003	14-SI 28	G,N	19.78	16.49	4.5	30.00	94.6	4.3	YAD.KONST.,1,52(1993)	V.V.VARLAMOV+
m0345003			18.18	7.468						
m0345003			18.74	11.5						
m0345003			20.78	15.73						
	14-SI 28	G,P	21.	40.	5.	22.50	128.		PHYS.REV.,C27,470(1983)	R.L.GULBRANSON+
			19.	42.						
m0003025	14-SI 28	G,P	20.1	45.75	4.5	28.00	265.7	12.4	IZV.AN SSSR,43,186(1979)	V.V.VARLAMOV+
	14-SI 28	G,P	18.7	31.4	4.	23.00	140.		J.PHYS.SOC.JAP.,17,735(1962)	K.SHODA+
10055003	14-SI 29	G,XN	21.346	18.87	4.	33.10	194.5	8.65	PHYS.REV.,C27,960(1983)	R.E.PYWELL+
10055003	14-SI 29	G,SN	21.346	18.87	4.	33.10	194.5	8.65	PHYS.REV.,C27,960(1983)	R.E.PYWELL+
	14-SI 29	G,SN	21.2	18.5	10.				NUCL.PHYS.,A369,141(1981)	R.E.PYWELL+
			26.	13.5						
10055003	14-SI 29	G,N	21.346	18.87	4.	33.10	194.5	8.65	PHYS.REV.,C27,960(1983)	R.E.PYWELL+
	14-SI 30	G,XN	20.2	23.65	13.	33.10	316.		PHYS.REV.,C27,960(1983)	R.E.PYWELL+
	14-SI 30	G,XN	22.5	30.	11.	28.00	264.		NUCL.PHYS.,A388,445(1982)	G.ODGERS+
10055006	14-SI 30	G,XN	21.917	23.752	4.	33.10	316.		PHYS.REV.,C27,960(1983)	R.E.PYWELL+
10055006	14-SI 30	G,XN	15.634	13.866	4.	33.10	316.		PHYS.REV.,C27,960(1983)	R.E.PYWELL+
10055006	14-SI 30	G,XN	18.68	22.936	4.	33.10	316.		PHYS.REV.,C27,960(1983)	R.E.PYWELL+
10055006	14-SI 30	G,XN	20.203	23.648	4.	33.10	316.		PHYS.REV.,C27,960(1983)	R.E.PYWELL+
10055006	14-SI 30	G,XN	26.058	21.273	4.	33.10	316.		PHYS.REV.,C27,960(1983)	R.E.PYWELL+

EXFOR	NUCL	A	REACT	E-MAX MEV	SIG MB	FWHM MEV	E-INT MEV	SIG-INT MEV*MB	SIG-INT-1 MB	REFERENCE	AUTHOR
	14-SI	30	G,SN	20.2	23.65	12.	33.10	249.	12.1	PHYS.REV.,C27,960(1983)	R.E.PYWELL+
10055004	14-SI	30	G,N	18.68	22.806	8.	33.10	181.		PHYS.REV.,C27,960(1983)	R.E.PYWELL+
10055004				30.818	8.78						
10055005	14-SI	30	G,2N	23.059	10.146	7.	33.10	67.5		PHYS.REV.,C27,960(1983)	R.E.PYWELL+
	15-P	31	G,XN	23.6	22.53	9.	30.00	211.		IZV.AN SSSR,33,1742(1969)	B.S.ISHKHANOV+
				19.4	18.66						
				21.3	21.12						
	15-P	31	G,XN	22.	13.	11.5	28.00	127.		PHYS.REV.,132,2251(1963)	L.N.BOLE
10039022	15-P	31	G,XN	21.2	19.8	12.	28.60	179.	8.34	NUCL.PHYS.,A227,513(1974)	A.VEYSSIERE+
10039019	15-P	31	G,N	21.2	19.8	12.	28.60	178.	8.34	NUCL.PHYS.,A227,513(1974)	A.VEYSSIERE+
m0273003	15-P	31	G,N	19.	16.6	7.	25.00	115.3	6.	CAN.J.PHYS.,29,518(1951)	L.KATZ+
	15-P	31	G,1N	19.5	19.	7.5				CAN.J.PHYS.,41,180(1963)	W.J.MCDONALD+
10039020	15-P	31	G,NP	25.13	7.8	>10.	28.60	44.		NUCL.PHYS.,A227,513(1974)	A.VEYSSIERE+
10039021	15-P	31	G,2N	28.11	.7	1.	28.60	1.1		NUCL.PHYS.,A227,513(1974)	A.VEYSSIERE+
	15-P	31	G,P	21.	43.	10.	32.00	350.		PHYS.LETT.,9,162(1964)	B.S.ISHKHANOV+
	15-P	31	G,2P	32.	.28	15.				NUCL.PHYS.,A150,625(1970)	D.W.ANDERSON+
	15-P	31	G,2PN	49.	.36	>15.				NUCL.PHYS.,A150,625(1970)	D.W.ANDERSON+
	16-S		G,ABS	20.	50.	7.	30.00	400.	22.	PHYS.REV.,137,B576(1965)	J.M.WYCKOFF
	16-S		G,XN	21.5	15.3		30.00	749.		YAD.FIZ.,7,1168(1968)	B.I.GORYACHEV+
				19.	14.4						
	16-S		G,XN	21.	15.19	5.				IZV.AN SSSR,31,336(1967)	G.P.ANTROPOV+
				19.	8.36						
				22.5	12.15						
				24.5	6.49						
	16-S		G,P	21.	50.	9.	32.00	370.		PHYS.LETT.,9,162(1964)	B.S.ISHKHANOV+
	16-S	32	G,XN	21.	16.	11.	32.00	137.		NUCL.PHYS.,A156,74(1970)	D.W.ANDERSON+
10039026	16-S	32	G,XN	19.71	10.5	13.	32.20	98.	4.24	NUCL.PHYS.,A227,513(1974)	A.VEYSSIERE+
10039026				25.4	6.6						
10039023	16-S	32	G,N	19.71	10.5	13.	32.20	98.	4.24	NUCL.PHYS.,A227,513(1974)	A.VEYSSIERE+
10039023				25.4	6.6						
10039025	16-S	32	G,NP	28.92	2.7	>10.	30.00	14.		NUCL.PHYS.,A227,513(1974)	A.VEYSSIERE+
10039024	16-S	32	G,2N	30.	.1		29.47	.1		NUCL.PHYS.,A227,513(1974)	A.VEYSSIERE+
m0510006	16-S	34	G,ABS	22.	66.34	7.5	26.00	446.5	22.8	NUCL.PHYS.,A460,455(1986)	Y.I.ASSAFIRI+
m0510006				17.	39.51						
m0506002	16-S	34	G,SN	17.6	36.88	8.	27.00	247.	13.1	NUCL.PHYS.,A413,416(1984)	Y.I.ASSAFIRI+
m0506002				12.8	11.03						
m0506002				21.	31.16						
m0510003	16-S	34	G,NP	25.46	10.73	>5.	26.00	28.	1.	NUCL.PHYS.,A460,455(1986)	Y.I.ASSAFIRI+
m0506003	16-S	34	G,2N	25.8	11.36	6.	27.00	35.	1.5	NUCL.PHYS.,A413,416(1984)	Y.I.ASSAFIRI+
m0506003				22.	7.83						
m0510002	16-S	34	G,P	23.06	36.24	6.	26.00	213.	10.4	NUCL.PHYS.,A460,455(1986)	Y.I.ASSAFIRI+
m0510002				16.91	13.76						
10039029	17-CL		G,XN	22.96	30.3	12.	27.60	292.		NUCL.PHYS.,A227,513(1974)	A.VEYSSIERE+
	17-CL		G,SN	22.96	26.3	12.	27.60	273.	13.3	NUCL.PHYS.,A227,513(1974)	A.VEYSSIERE+
10039027	17-CL		G,N	20.79	25.5	12.	27.60	254.		NUCL.PHYS.,A227,513(1974)	A.VEYSSIERE+
10039028	17-CL		G,2N	23.23	4.	4.	27.60	19.		NUCL.PHYS.,A227,513(1974)	A.VEYSSIERE+
	17-CL	35	G,N	20.	14.	6.5	27.00	93.		J.PHYS.SOC.JAP.,17,1681(1962)	K.KURIYAMA
	17-CL	37	G,2N	23.	14.	>5.				NUCL.PHYS.,A227,513(1974)	A.VEYSSIERE+
m0214004	18-AR		G,XN	21.5	41.51	10.	25.00	392.		PHYS.REV.,118,535(1960)	R.W.FAST+
m0214004							50.00	598.	25.		
	18-AR	40	G,ABS	20.9	50.	10.	26.00	434.		NUCL.PHYS.,A398,415(1983)	R.A.SUTTON+
				16.	42.						
	18-AR	40	G,ABS	19.	42.	10.	32.00	450.		Z.PHYSIK,187,210(1965)	D.EHHALT+
10039032	18-AR	40	G,XN	21.88	52.	10.	26.80	538.		NUCL.PHYS.,A227,513(1974)	A.VEYSSIERE+
10039032				18.63	47.1						
m0346010	18-AR	40	G,XN	18.97	33.14	>10.	21.00	178.8	10.3	CAN.J.PHYS.,51,1176(1973)	J.W.JURY+
	18-AR	40	G,SN	17.4	40.	11.	27.00	382.		NUCL.PHYS.,A398,415(1983)	R.A.SUTTON+
				20.9	40.						
	18-AR	40	G,SN	16.73	39.6	10.	26.80	390.	21.	NUCL.PHYS.,A227,513(1974)	A.VEYSSIERE+
	18-AR	40	G,N	16.	38.	5.	27.00	232.		NUCL.PHYS.,A398,415(1983)	R.A.SUTTON+
				20.9	15.						
10039030	18-AR	40	G,N	16.73	33.7	6.	26.80	242.		NUCL.PHYS.,A227,513(1974)	A.VEYSSIERE+
	18-AR	40	G,N	19.	37.	5.	32.00	200.		Z.PHYSIK,187,210(1965)	D.EHHALT+
	18-AR	40	G,2N	20.9	25.	7.	27.00	148.		NUCL.PHYS.,A398,415(1983)	R.A.SUTTON+
10039031	18-AR	40	G,2N	21.34	21.9	8.	26.80	148.		NUCL.PHYS.,A227,513(1974)	A.VEYSSIERE+
	18-AR	40	G,P	23.4	21.4	3.	26.00	61.		NUCL.PHYS.,A398,415(1983)	R.A.SUTTON+
				21.04	10.9						
10039036	19-K		G,XN	20.93	24.4	8.	31.60	218.	9.7	NUCL.PHYS.,A227,513(1974)	A.VEYSSIERE+
10039036	19-K		G,SN	20.93	24.4	8.	31.60	217.	9.7	NUCL.PHYS.,A227,513(1974)	A.VEYSSIERE+

EXFOR	NUCL	A	REACT	E-MAX MEV	SIG MB	FWHM MEV	E-INT MEV	SIG-INT MEV*MB	SIG-INT-1 MB	REFERENCE	AUTHOR
10039033	19-K		G,N	20.93	24.4	8.	31.60	216.		NUCL.PHYS.,A227,513(1974)	A.VEYSSIERE+
10039035	19-K		G,NP	25.4	7.	4.	27.80	39.		NUCL.PHYS.,A227,513(1974)	A.VEYSSIERE+
10039035				21.34	6.7						
10039034	19-K		G,2N	31.09	.5	1.	31.60	1.1		NUCL.PHYS.,A227,513(1974)	A.VEYSSIERE+
	19-K	39	G,N	20.	16.	7.	30.00	102.		NUCL.PHYS.,A171,324(1971)	D.V.WEBB+
m0372008	20-CA		G,ABS	19.77	97.06	5.	100.00	1120.	45.5	NUCL.PHYS.,A251,479(1975)	J.AHRENS+
m0372008							140.00	1290.	46.8		
	20-CA	40	G,ABS	20.2	110.		28.50	920.	49.6	PHYS.LETT.,17,49(1965)	B.S.DOLBILKIN+
	20-CA	40	G,ABS	20.	105.	4.5				PHYS.REV.,137,B576(1965)	J.M.WYCKOFF
10039037	20-CA	40	G,XN	19.98	16.8	4.5	29.50	100.	4.55	NUCL.PHYS.,A227,513(1974)	A.VEYSSIERE+
	20-CA	40	G,XN	20.2	16.5	5.5				YAD.FIZ.,5,1138(1967)	B.I.GORYACHEV+
	20-CA	40	G,XN	20.	14.9	3.5	26.00	73.		J.PHISIQUE,27,8(1966)	J.MILLER+
10039037	20-CA	40	G,SN	19.98	16.8	4.5	29.50	100.	4.55	NUCL.PHYS.,A227,513(1974)	A.VEYSSIERE+
10039037	20-CA	40	G,N	19.98	16.8	4.5	29.50	100.	4.55	NUCL.PHYS.,A227,513(1974)	A.VEYSSIERE+
m0397004	20-CA	40	G,N	20.26	20.41	5.	29.10	86.3	4.1	YAD.FIZ.,2,1168(1968)	B.I.GORYACHEV+
m0397004				19.24	14.86						
m0397004				21.25	13.97						
m0397004				23.34	12.34						
	20-CA	40	G,P	20.2	85.	4.	30.00	510.		PIS'MA ZHETF,5,225(1967)	B.I.GORYACHEV+
				18.6	80.5						
	20-CA	42	G,P	19.7	50.5	7.5	27.00	256.		NUCL.PHYS.,A357,429(1981)	Y.I.ASSAFIRI+
				20.2	40.5						
	20-CA	44	G,SN	17.2	46.8	10.5				AUSTR.J.PHYS.,34,505(1981)	P.D.HARTY+
	20-CA	44	G,P	22.	14.	>12.				NUCL.PHYS.,A277,301(1977)	S.OIKAWA+
	20-CA	48	G,N	18.8	114.5	7.				NUCL.PHYS.,A469,239(1987)	G.J.O'KEEFE+
	20-CA	48	G,2N	22.6	50.	2.				NUCL.PHYS.,A469,239(1987)	G.J.O'KEEFE+
	20-CA	48	G,P	24.9	19.5					NUCL.PHYS.,A469,239(1987)	G.J.O'KEEFE+
				19.2	9.5						
				24.9	19.5						
10039040	21-SC	45	G,XN	19.44	39.4	8.	28.10	399.		NUCL.PHYS.,A227,513(1974)	A.VEYSSIERE+
	21-SC	45	G,XN	19.5	21.5	7.5	25.00	158.	8.4	NUCL.PHYS.,A205,139(1973)	R.H.SAMBELL+
	21-SC	45	G,SN	19.44	39.4	8.	28.10	382.	19.6	NUCL.PHYS.,A227,513(1974)	A.VEYSSIERE+
10039038	21-SC	45	G,N	19.44	39.4	8.	28.10	365.		NUCL.PHYS.,A227,513(1974)	A.VEYSSIERE+
10039039	21-SC	45	G,2N	25.4	3.9	>8.	28.10	17.		NUCL.PHYS.,A227,513(1974)	A.VEYSSIERE+
	21-SC	45	G,P	2.2	47.	>12.				NUCL.PHYS.,A277,301(1977)	S.OIKAWA+
	22-TI		G,XN	17.	60.	7.				NUOV.CIM.,48B,461(1967)	S.COSTA+
	22-TI	46	G,SN	20.5	31.	8.5	31.00	269.		NUCL.PHYS.,29,292(1962)	T.R.SHERWOOD+
m0370002	22-TI	46	G,1N	15.8	24.13	8.5	25.00	194.	9.9	NUCL.PHYS.,A318,461(1979)	R.E.PYWELL+
m0370002				18.	23.87						
	22-TI	46	G,P	2.2	37.	9.				NUCL.PHYS.,A277,301(1977)	S.OIKAWA+
m0532002	22-TI	48	G,SN	16.1	48.55	7.5	27.00	398.	20.8	NUCL.PHYS.,A339,125(1980)	R.SUTTON+
m0532002				17.5	46.36						
m0532002				19.5	43.64						
	22-TI	50	G,XN	18.1	81.	8.5				NUCL.PHYS.,A318,461(1979)	R.E.PYWELL+
				21.5	60.						
	22-TI	50	G,SN	18.1	81.	5.2				NUCL.PHYS.,A318,461(1979)	R.E.PYWELL+
m0326002	22-TI	50	G,SN	18.27	82.	5.5	26.30	472.6	26.	NUCL.PHYS.,A325,116(1979)	R.E.PYWELL+
m0326002				21.56	41.8						
10039043	23-V	51	G,XN	18.08	76.7	11.	27.80	689.		NUCL.PHYS.,A227,513(1974)	A.VEYSSIERE+
	23-V	51	G,XN	20.2	78.	8.	30.00	820.		IZV.AN SSSR,33,1736(1969)	B.I.GORYACHEV+
	23-V	51	G,XN	18.25	69.85	7.5	27.80	654.		PHYS.REV.,128,2345(1962)	S.C.FULTZ+
	23-V	51	G,SN	18.08	76.7	10.	27.80	610.	31.2	NUCL.PHYS.,A227,513(1974)	A.VEYSSIERE+
	23-V	51	G,SN	20.2	78.	6.	30.00	600.		IZV.AN SSSR,33,1736(1969)	B.I.GORYACHEV+
10001002	23-V	51	G,SN	18.251	69.85	6.5	27.80	552.	28.9	PHYS.REV.,128,2345(1962)	S.C.FULTZ+
10039041	23-V	51	G,N	18.08	76.7	10.	27.80	531.		NUCL.PHYS.,A227,513(1974)	A.VEYSSIERE+
10001003	23-V	51	G,N	18.251	69.85	6.5	27.80	450.		PHYS.REV.,128,2345(1962)	S.C.FULTZ+
10039042	23-V	51	G,2N	24.59	15.9	4.	27.80	79.		NUCL.PHYS.,A227,513(1974)	A.VEYSSIERE+
10001004	23-V	51	G,2N	25.319	22.16	5.	27.80	102.		PHYS.REV.,128,2345(1962)	S.C.FULTZ+
	23-V	51	G,P	21.5	23.	>12.	29.00	205.		NUCL.PHYS.,A303,333(1978)	H.TSUBOTA+
	24-CR		G,XN	17.8	88.	6.5				AUSTR.J.PHYS.,30,401(1977)	J.WEISE+
m0093003	24-CR	52	G,XN	18.25	113.	6.5	31.80	734.6	36.6	IZV.AN SSSR,33,1736(1969)	B.I.GORYACHEV+
m0093003				16.75	82.						
m0093003				19.25	104.						
m0067002	24-CR	52	G,P	20.2	32.8	4.	28.00	217.5	10.	YAD.PHYS.,11,485(1970)	B.S.ISHKHANOV+
m0067002				15.9	8.2						
m0067002				18.7	14.3						
m0067002				26.2	22.4						
	25-MN	55	G,ABS	17.5	100.	7.5	29.00	816.		PIS'MA ZHETF,10,365(1969)	B.S.DOLBILKIN+

EXFOR	NUCL A	REACT	E-MAX MEV	SIG MB	FWHM MEV	E-INT MEV	SIG-INT MEV*MB	SIG-INT-1 MB	REFERENCE	AUTHOR
10028002	25-MN 55	G,XN	20.64	71.87	12.5	36.50	902.		PHYS.REV.,C20,128(1979)	R.A.ALVAREZ+
10028002			17.379	70.24						
	25-MN 55	G,XN	16.4	71.	11.	29.50	780.		IZV.AN SSSR,34,2228(1970)	B.S.ISHKHANOV+
	25-MN 55	G,XN	16.8	90.	7.5	25.00	627.		PHYS.REV.,120,1424(1960)	P.A.FLOURNOY+
			19.75	77.						
10028011	25-MN 55	G,SN	19.192	69.37	8.	36.50	733.	36.4	PHYS.REV.,C20,128(1979)	R.A.ALVAREZ+
10028011			17.377	67.54						
10028011			24.155	54.78						
	25-MN 55	G,SN	16.4	71.	11.	29.50	620.		IZV.AN SSSR,34,2228(1970)	B.S.ISHKHANOV+
10028003	25-MN 55	G,N	17.379	70.24	8.	36.50	567.		PHYS.REV.,C20,128(1979)	R.A.ALVAREZ+
10028003			19.193	69.39						
10028004	25-MN 55	G,2N	22.699	22.81	7.	36.50	163.		PHYS.REV.,C20,128(1979)	R.A.ALVAREZ+
10028005	25-MN 55	G,3N	34.322	3.26		36.50	3.		PHYS.REV.,C20,128(1979)	R.A.ALVAREZ+
	25-MN 55	G,P	20.2	31.	7.				J.PHYS.SOC.JAP.,25,664(1968)	K.SHODA+
	26-FE	G,ABS	18.5	87.02	9.	26.50	735.		YAD.FIZ.,9,675(1969)	B.S.DOLBILKIN+
			12.2	79.						
	26-FE	G,XN	17.2	63.	7.				NUOV.CIM.,51B,199(1967)	S.COSTA+
m0507004	26-FE 54	G,ABS	19.5	147.69	5.5	23.00	787.3	41.3	AUSTR.J.PHYS.,31,471(1978)	J.W.NORBURY+
	26-FE 54	G,N	19.2	38.	6.9	31.00	290.		AUSTR.J.PHYS.,10,312(1957)	J.H.CARVER+
m0273004	26-FE 54	G,1N	19.	67.	7.	24.00	401.3	20.9	CAN.J.PHYS.,29,518(1951)	L.KATZ+
m0024002	26-FE 54	G,N	19.25	31.9	7.	26.50	215.8	10.6	NUCL.PHYS.,A285,71(1977)	B.S.RATNER+
m0507002	26-FE 54	G,1N	17.85	67.03	5.5	23.00	301.1	16.3	AUSTR.J.PHYS.,31,471(1978)	J.W.NORBURY+
m0507002			19.64	55.17						
m0507003	26-FE 54	G,P	19.5	95.34	6.	23.00	487.3	25.2	AUSTR.J.PHYS.,31,471(1978)	J.W.NORBURY+
	26-FE 56	G,P	20.	45.	5.				J.PHYS.SOC.JAP.,25,664(1968)	K.SHODA+
	27-CO 59	G,ABS	18.6	92.	9.3	35.00	1030.	50.	PHYS.REV.,137,B576(1965)	J.M.WYCKOFF
10028006	27-CO 59	G,XN	16.52	75.67	14.	36.50	965.		PHYS.REV.,C20,128(1979)	R.A.ALVAREZ+
10028006			18.825	73.						
	27-CO 59	G,XN	16.5	86.	7.5	30.00	1030.		IZV.AN SSSR,33,1736(1969)	B.I.GORYACHEV+
			18.5	81.						
			20.5	76.						
	27-CO 59	G,XN	17.5	69.	11.				PHYS.REV.,128,2345(1962)	S.C.FULTZ+
	27-CO 59	G,XN	16.75	109.	6.	25.00	709.		PHYS.REV.,120,1424(1960)	P.A.FLOURNOY+
			18.75	92.						
	27-CO 59	G,XN	16.5	72.	6.	28.00	657.		NUCL.PHYS.,67,178(1965)	G.BACIU+
			19.	74.						
	27-CO 59	G,SN	16.52	75.67	7.	36.50	807.	40.1	PHYS.REV.,C20,128(1979)	R.A.ALVAREZ+
	27-CO 59	G,SN	16.5	86.	7.5	30.00	740.		IZV.AN SSSR,33,1736(1969)	B.I.GORYACHEV+
			18.5	81.						
			20.5	55.						
	27-CO 59	G,SN	17.6	69.	7.5	28.00	586.		PHYS.REV.,128,2345(1962)	S.C.FULTZ+
10028008	27-CO 59	G,N	16.52	75.67	7.	36.50	653.		PHYS.REV.,C20,128(1979)	R.A.ALVAREZ+
10028008			18.825	73.04						
10001006	27-CO 59	G,N	17.64	68.5	6.	28.00	447.		PHYS.REV.,128,2345(1962)	S.C.FULTZ+
10028009	27-CO 59	G,2N	22.209	19.16	7.	36.50	150.		PHYS.REV.,C20,128(1979)	R.A.ALVAREZ+
10028009			26.574	13.31						
10001007	27-CO 59	G,2N	25.93	24.2	7.	28.00	139.		PHYS.REV.,128,2345(1962)	S.C.FULTZ+
10001007			22.86	22.						
	27-CO 59	G,2N	20.5	19.5.	7.5				NUCL.PHYS.,67,178(1965)	G.BACIU+
			25.5	19.						
10028010	27-CO 59	G,3N	36.136	4.52	>2.	36.50	4.		PHYS.REV.,C20,128(1979)	R.A.ALVAREZ+
	27-CO 59	G,P	20.5	26.	>12.	29.00	353.		NUCL.PHYS.,A303,333(1978)	H.TSUBOTA+
	28-NI	G,ABS	18.7	89.	7.5	35.00	920.	44.	PHYS.REV.,137,B576(1965)	J.M.WYCKOFF
	28-NI	G,XN	16.8	42.5	6.5	24.00	283.		PHYS.REV.LETT.,21,1200(1968)	K.MIN+
	28-NI	G,XN	17.8	43.	6.5				NUOV.CIM.,54B,344(1968)	S.COSTA+
	28-NI	G,XN	16.5	46.	5.	24.00	276.		NUCL.PHYS.,67,178(1965)	G.BACIU+
						28.00	313.			
	28-NI	G,2N	23.	5.6	5.				NUCL.PHYS.,67,178(1965)	G.BACIU+
	28-NI 58	G,XN	17.3	26.7	8.	33.50	294.		PHYS.REV.,C10,608(1974)	S.C.FULTZ+
	28-NI 58	G,XN	20.3	31.	7.	30.00	310.		YAD.FIZ.,10,252(1969)	B.S.ISHKHANOV+
			17.8	23.5						
	28-NI 58	G,XN	16.7	26.	6.	24.00	185.		PHYS.REV.LETT.,21,1200(1968)	K.MIN+
10034002	28-NI 58	G,SN	17.298	26.7	8.	33.50	286.	13.8	PHYS.REV.,C10,608(1974)	S.C.FULTZ+
10034002			22.623	23.16						
10034003	28-NI 58	G,N	17.29	26.7	8.	33.50	278.		PHYS.REV.,C10,608(1974)	S.C.FULTZ+
10034003			22.623	23.3						
m0273005	28-NI 58	G,N	19.	54.	6.	22.00	316.	18.	CAN.J.PHYS.,29,518(1951)	L.KATZ+
	28-NI 58	G,NP	19.5	125.	4.8	32.00	840.		PROC.PHYS.SOC.,73,585(1959)	J.H.CARVER+
10034004	28-NI 58	G,2N	24.56	1.9	8.	33.50	7.7		PHYS.REV.,C10,608(1974)	S.C.FULTZ+
10034004			29.522	1.51						
	28-NI 58	G,P	18.5	60.	9.5	30.00	570.		YAD.FIZ.,11,485(1970)	B.S.ISHKHANOV+

EXFOR	NUCL A	REACT	E-MAX MEV	SIG MB	FWHM MEV	E-INT MEV	SIG-INT MEV*MB	SIG-INT-1 MB	REFERENCE	AUTHOR
			16.6	48.5						
			23.3	46.5						
10034005	28-NI 60	G,XN	16.33	74.94	11.	33.20	772.		PHYS.REV.,C10,608(1974)	S.C.FULTZ+
	28-NI 60	G,XN	19.1	91.	6.5	30.00	620.		YAD.FIZ.,10,252(1969)	B.S.ISHKHANOV+
			16.3	73.5						
			17.5	80.5						
			20.6	63.5						
	28-NI 60	G,XN	16.8	82.	5.5	24.00	482.		PHYS.REV.LETT.,21,1200(1968)	K.MIN+
10034008	28-NI 60	G,SN	16.33	74.95	7.	33.20	700.	35.4	PHYS.REV.,C10,608(1974)	S.C.FULTZ+
10034006	28-NI 60	G,N	16.33	74.95	7.	33.20	628.		PHYS.REV.,C10,608(1974)	S.C.FULTZ+
	28-NI 60	G,NP	19.	90.	5.5	30.00	940.		YAD.FIZ.,11,485(1970)	B.S.ISHKHANOV+
10034007	28-NI 60	G,2N	24.318	10.88	7.	33.20	72.		PHYS.REV.,C10,608(1974)	S.C.FULTZ+
10034007			28.312	8.71						
10034007			31.338	5.49						
	28-NI 60	G,P	18.4	34.	8.5	30.00	320.		YAD.FIZ.,11,485(1970)	B.S.ISHKHANOV+
			16.4	26.						
			20.3	31.5						
			23.3	30.						
	29-CU	G,ABS	17.5	94.	11.5	35.00	1036.	51.	PHYS.REV.,137,B576(1965)	J.M.WYCKOFF
	29-CU	G,XN	17.8	116.79	13.5	30.00	1200.		VESTN.MOSK.UNIV.,6,606(1970)	B.S.ISHKHANOV+
			16.1	114.72						
			21.4	109.51						
			23.8	105.07						
			25.2	102.15						
			27.4	78.14						
	29-CU	G,XN	17.7	86.	7.5	20.00	451.		NUCL.PHYS.,67,178(1965)	G.BACIU+
						28.00	733.			
	29-CU	G,XN	17.2	78.	8.	24.00	587.		J.PHYS.SOC.JAP.,25,655(1968)	T.TOMIMASU+
10006002	29-CU	G,XN	17.022	71.4	11.	27.80	710.		PHYS.REV.,B133,1149(1964)	S.C.FULTZ+
	29-CU	G,XN	16.1	90.3	>7.	19.60	450.		NUCL.PHYS.,32,236(1962)	J.MILLER+
10006011	29-CU	G,SN	17.022	71.4	8.	27.80	604.	33.8	PHYS.REV.,B133,1149(1964)	S.C.FULTZ+
	29-CU	G,SN	17.8	116.79	8.5				VESTN.MOSK.UNIV.,6,606(1970)	B.S.ISHKHANOV+
			16.1	114.72						
			18.8	105.39						
			24.	53.49						
10006003	29-CU	G,N	17.022	71.4	7.	27.80	498.		PHYS.REV.,B133,1149(1964)	S.C.FULTZ+
	29-CU	G,N	16.1	114.72	6.5	30.00	624.		VESTN.MOSK.UNIV.,6,606(1970)	B.S.ISHKHANOV+
			21.	59.						
			23.5	12.						
	29-CU	G,2N	25.5	44.57	8.5	30.00	288.		VESTN.MOSK.UNIV.,6,606(1970)	B.S.ISHKHANOV+
	29-CU	G,2N	23.	15.5	7.5				NUCL.PHYS.,67,178(1965)	G.BACIU+
10006004	29-CU	G,2N	23.168	16.6	8.	27.80	106.		PHYS.REV.,B133,1149(1964)	S.C.FULTZ+
	29-CU	G,P	18.2	23.	>9.				PHYS.REV.,119,748(1960)	R.E.CHRIEN+
10006005	29-CU 63	G,XN	16.407	69.6	10.5	27.80	680.		PHYS.REV.,B133,1149(1964)	S.C.FULTZ+
10006005			22.86	54.3						
	29-CU 63	G,SN	16.6	78.6					YAD.FIZ.,58,387(1995)	V.V.VARLAMOV+
			23.3	34.						
	29-CU 63	G,SN	16.5	63.	5.	28.00	764.	38.	PHYS.REV.,B133,1149(1964)	S.C.FULTZ+
10006012	29-CU 63	G,SN	16.407	69.6	10.	27.80	604.	33.4	PHYS.REV.,B133,1149(1964)	S.C.FULTZ+
10006012			22.86	41.5						
m0385002	29-CU 63	G,N	16.6	78.6	6.	25.00	510.3	30.	YAD.FIZ.,58,387(1995)	V.V.VARLAMOV+
10006006	29-CU 63	G,N	16.407	68.5	8.	27.80	528.		PHYS.REV.,B133,1149(1964)	S.C.FULTZ+
10006006			22.246	30.4						
10006006			26.241	14.6						
m0273006	29-CU 63	G,N	18.	104.	6.	21.00	618.5	36.7	CAN.J.PHYS.,29,518(1951)	L.KATZ+
m0239004	29-CU 63	G,N	17.8	70.3	5.5	24.20	482.4	27.8	YAD.PHYS.,30,294(1979)	L.Z.DZHILAVYAN+
m0385003	29-CU 63	G,NP	23.5	17.5	5.	25.00	75.9	3.5	YAD.FIZ.,58,387(1995)	V.V.VARLAMOV+
m0026002	29-CU 63	G,1N	17.77	69.15	6.5	24.30	484.5	27.9	YAD.FIZ.,30,294(1979)	L.Z.DZHILAVYAN+
	29-CU 63	G,1N	16.7	92.	6.5				NUCL.PHYS.,A181,477(1972)	F.DREYER+
10013002	29-CU 63	G,1N	16.79	78.	6.5	25.10	498.		PHYS.REV.,176,1366(1968)	R.E.SUND+
10006007	29-CU 63	G,2N	25.011	13.6	6.5	27.80	76.		PHYS.REV.,B133,1149(1964)	S.C.FULTZ+
10013003	29-CU 63	G,2N	23.7	10.	6.5	25.10	43.		PHYS.REV.,176,1366(1968)	R.E.SUND+
m0385004	29-CU 63	G,P	20.	34.2	6.	25.00	224.2	12.1	YAD.FIZ.,58,387(1995)	V.V.VARLAMOV+
10006008	29-CU 65	G,XN	16.714	77.4	10.	27.80	817.		PHYS.REV.,B133,1149(1964)	S.C.FULTZ+
10006008			19.787	76.3						
	29-CU 65	G,SN	16.8	88.	5.	28.00	766.	53.	PHYS.REV.,B133,1149(1964)	S.C.FULTZ+
10006013	29-CU 65	G,SN	16.714	77.4	8.	27.80	619.	36.	PHYS.REV.,B133,1149(1964)	S.C.FULTZ+
10006009	29-CU 65	G,N	16.714	77.5	5.	27.80	421.		PHYS.REV.,B133,1149(1964)	S.C.FULTZ+
m0273007	29-CU 65	G,N	18.	150.	6.5	22.00	1045.	61.9	CAN.J.PHYS.,29,518(1951)	L.KATZ+
m0450002	29-CU 65	G,N	17.	96.	5.	30.00	530.	30.	PHYS.REV.,96,83(1954)	A.I.BERMAN+
m0374006	29-CU 65	G,NP	21.2	10.6	3.	24.40	26.5	1.3	IZV.RAN,54,222(1995)	V.V.VARLAMOV+
10006010	29-CU 65	G,2N	22.246	30.4	7.	27.80	198.		PHYS.REV.,B133,1149(1964)	S.C.FULTZ+

EXFOR	NUCL A	REACT	E-MAX MEV	SIG MB	FWHM MEV	E-INT MEV	SIG-INT MEV*MB	SIG-INT-1 MB	REFERENCE	AUTHOR
10006010			20.095	29.1						
m0450003	29-CU 65	G,2N	25.	12.2	4.5	35.00	81.	3.1	PHYS.REV.,96,83(1954)	A.I.BERMAN+
m0374008	29-CU 65	G,P	25.	16.4	7.	28.00	126.6	5.8	IZV.RAN,54,222(1995)	V.V.VARLAMOV+
m0374008			20.	11.4						
m0374008			22.2	12.3						
m0037408			27.6	10.8						
	29-CU 65	G,P	19.8	30.5	7.				ZHETF,38,780(1960)	N.V.LIN'KOVA+
	30-ZN	G,SN	16.7	91.	4.6	80.00	1607.	66.	NUOV.CIM.,48B,461(1967)	S.COSTA+
10043004	30-ZN 64	G,XN	16.73	71.8	14.	29.50	791.		NUCL.PHYS.,A258,365(1976)	P.CARLOS+
10043004			18.9	71.3						
	30-ZN 64	G,XN	16.2	52.	9.5				IZV.AN SSSR,39,134(1975)	A.M.GORYACHEV+
			19.	49.						
	30-ZN 64	G,XN	15.9	90.5	8.5.	27.00	800.		YAD.FIZ.,20,433(1974)	B.S.ISHKHANOV+
			18.	90.						
			20.2	76.						
	30-ZN 64	G,SN	16.73	71.8	13.	29.50	750.	38.1	NUCL.PHYS.,A258,365(1976)	P.CARLOS+
10043002	30-ZN 64	G,N	16.73	71.8	13.	29.50	703.		NUCL.PHYS.,A258,365(1976)	P.CARLOS+
10043002			18.9	70.7						
	30-ZN 64	G,N	17.2	48.	7.	23.00	330.		CAN.J.PHYS.,38,320(1960)	J.P.ROALSVIG+
m0273008	30-ZN 64	G,N	18.	123.	8.	23.00	93.	53.9	CAN.J.PHYS.,29,518(1951)	L.KATZ+
m0070002	30-ZN 64	G,N	16.42	49.5	8.5	24.20	381.2	21.4	VOPR.TEOR.YAD.FIZ.,8,121(1982)	A.M.GORYACHEV+
m0070002			19.02	44.2						
m0070002			22.42	33.1						
10043003	30-ZN 64	G,2N	24.86	7.2	10.	29.50	44.		NUCL.PHYS.,A258,365(1976)	P.CARLOS+
10043003			22.96	6.5						
10043003			28.11	6.4						
	30-ZN 66	G,XN	16.2	80.	9.5				IZV.AN SSSR,39,134(1975)	A.M.GORYACHEV+
			18.	61.						
m0070003	30-ZN 66	G,N	16.42	76.6	7.	24.20	573.3	33.	VOPR.TEOR.YAD.FIZ.,8,121(1982)	A.M.GORYACHEV+
m0042002	30-ZN 67	G,N	16.62	93.9	7.	24.20	755.8	44.1	IZV.KAZSSR,6,16(1980)	A.M.GORYACHEV+
m0070004	30-ZN 67	G,N	17.02	93.7	6.5	24.40	755.8	44.1	VOPR.TEOR.YAD.FIZ.,8,121(1982)	A.M.GORYACHEV+
	30-ZN 67	G,P	22.	18.	8.	28.00	118.		PIS'MA ZHETF,11,452(1966)	V.G.IVANCHENKO+
	30-ZN 68	G,XN	16.2	92.	9.5				IZV.AN SSSR,39,134(1975)	A.M.GORYACHEV+
	30-ZN 68	G,XN	16.	150.	9.	27.00	1630.		YAD.FIZ.,20,433(1974)	B.S.ISHKHANOV+
			18.	117.						
			20.2	107.						
m0070005	30-ZN 68	G,N	17.22	91.2	7.5	24.20	732.	42.6	VOPR.TEOR.YAD.FIZ.,8,121(1982)	A.M.GORYACHEV+
m0042003	30-ZN 70	G,N	17.25	97.7	7.	24.40	828.5	48.6	IZV.KAZSSR,6,16(1980)	A.M.GORYACHEV+
m0070006	30-ZN 70	G,N	17.25	97.7	7.	24.40	828.5	48.6	VOPR.TEOR.YAD.FIZ.,8,121(1982)	A.M.GORYACHEV+
10043007	31-GA	G,XN	16.97	113.4	11.	26.50	1108.		NUCL.PHYS.,A258,365(1976)	P.CARLOS+
	31-GA	G,XN	16.5	115.	8.	28.00	947.		NUCL.PHYS.,67,178(1965)	G.BACIU+
	31-GA	G,SN	16.97	115.4	8.	26.50	910.	52.	NUCL.PHYS.,A258,365(1976)	P.CARLOS+
10043005	31-GA	G,N	16.97	115.1	5.5	26.50	716.		NUCL.PHYS.,A258,365(1976)	P.CARLOS+
10043006	31-GA	G,2N	20.49	33.1	7.5	26.50	196.		NUCL.PHYS.,A258,365(1976)	P.CARLOS+
	32-GE	G,XN	17.5	158.		80.00	2495.	102.	PHYS.LETT.,10,324(1964)	S.COSTA+
10043010	32-GE 70	G,XN	15.89	91.6	10.	26.50	856.		NUCL.PHYS.,A258,365(1976)	P.CARLOS+
	32-GE 70	G,XN	16.	92.	9.5				IZV.AN SSSR,39,134(1975)	A.M.GORYACHEV+
	32-GE 70	G,SN	15.89	91.6	8.	26.50	780.	43.2	NUCL.PHYS.,A258,365(1976)	P.CARLOS+
10043008	32-GE 70	G,N	15.89	91.6	7.5	26.50	687.		NUCL.PHYS.,A258,365(1976)	P.CARLOS+
	32-GE 70	G,N	17.5	158.	8.6				NUCL.PHYS.,15,436(1960)	F.FERRERO+
m0070007	32-GE 70	G,N	15.82	90.1	7.5	24.20	717.8	41.4	VOPR.TEOR.YAD.FIZ.,8,121(1982)	A.M.GORYACHEV+
m0070007			20.02	72.						
m0497003	32-GE 70	G,NP	29.	7.	6.	42.00	46.9	1.6	NUCL.PHYS.,A213,371(1973)	J.J.MCCARTHY+
m0497002	32-GE 70	G,P	24.	8.3	6.	40.00	92.	3.9	NUCL.PHYS.,A213,371(1973)	J.J.MCCARTHY+
10043009	32-GE 70	G,2N	22.66	21.3	6.5	26.50	84.		NUCL.PHYS.,A258,365(1976)	P.CARLOS+
10043009			24.02	18.8						
10043009			25.64	15.4						
10043013	32-GE 72	G,XN	16.16	111.3	13.	26.50	1133.		NUCL.PHYS.,A258,365(1976)	P.CARLOS+
10043013			19.41	97.7						
10043013			21.58	97.6						
	32-GE 72	G,XN	16.6	90.	9.5				IZV.AN SSSR,39,134(1975)	A.M.GORYACHEV+
	32-GE 72	G,SN	16.16	111.3	10.	26.50	940.	53.5	NUCL.PHYS.,A258,365(1976)	P.CARLOS+
10043011	32-GE 72	G,N	16.16	111.3	7.5	26.50	737.		NUCL.PHYS.,A258,365(1976)	P.CARLOS+
10043011			21.85	32.4						
m0070008	32-GE 72	G,N	16.2	89.8	8.	24.20	732.5	43.9	VOPR.TEOR.YAD.FIZ.,8,121(1982)	A.M.GORYACHEV+
m0070008			22.22	58.						
m0497004	32-GE 72	G,NP	22.	5.6	5.5	40.00	38.9	1.6	NUCL.PHYS.,A213,371(1973)	J.J.MCCARTHY+
10043012	32-GE 72	G,2N	21.04	36.7	7.	26.50	198.		NUCL.PHYS.,A258,365(1976)	P.CARLOS+
m0042004	32-GE 73	G,N	17.02	92.3	8.	24.40	785.9	46.3	IZV.KAZSSR,6,16(1980)	A.M.GORYACHEV+
m0070009	32-GE 73	G,N	17.02	92.3	8.	24.40	785.9	46.3	VOPR.TEOR.YAD.FIZ.,8,121(1982)	A.M.GORYACHEV+
10043016	32-GE 74	G,XN	19.41	128.1	13.	26.50	1322.		NUCL.PHYS.,A258,365(1976)	P.CARLOS+

EXFOR	NUCL A	REACT	E-MAX MEV	SIG MB	FWHM MEV	E-INT MEV	SIG-INT MEV*MB	SIG-INT-1 MB	REFERENCE	AUTHOR
	32-GE 74	G,XN	16.2	115.	9.5				IZV.AN SSSR,39,134(1975)	A.M.GORYACHEV+
	32-GE 74	G,SN	16.7	109.8	8.5	26.50	1020.	58.8	NUCL.PHYS.,A258,365(1976)	P.CARLOS+
10043014	32-GE 74	G,N	16.7	109.8	6.	26.50	704.		NUCL.PHYS.,A258,365(1976)	P.CARLOS+
m0070010	32-GE 74	G,N	16.02	101.4	9.	24.20	899.8	53.	VOPR.TEOR.YAD.FIZ.,8,121(1982)	A.M.GORYACHEV+
m0070010			22.62	72.3						
10043015	32-GE 74	G,2N	20.49	49.	7.5	26.50	309.		NUCL.PHYS.,A258,365(1976)	P.CARLOS+
10043019	32-GE 76	G,XN	18.33	146.1	11	26.50	1487.		NUCL.PHYS.,A258,365(1976)	P.CARLOS+
	32-GE 76	G,SN	15.34	110.3	10.	26.50	1120.	63.8	NUCL.PHYS.,A258,365(1976)	P.CARLOS+
10043017	32-GE 76	G,N	15.34	110.3	5.	26.50	733.		NUCL.PHYS.,A258,365(1976)	P.CARLOS+
10043017			25.64	25.4						
m0070011	32-GE 76	G,N	16.02	109.1	7.5	24.20	934.8	55.2	VOPR.TEOR.YAD.FIZ.,8,121(1982)	A.M.GORYACHEV+
m0070011			22.42	74.9						
m0497005	32-GE 76	G,NP	34.	2.2	8.5	39.00	20.	.6	NUCL.PHYS.,A213,371(1973)	J.J.MCCARTHY+
10043018	32-GE 76	G,2N	19.95	52.9	8.	26.50	377.		NUCL.PHYS.,A258,365(1976)	P.CARLOS+
10043022	33-AS 75	G,XN	16.16	119.9	13.	26.20	1306.		NUCL.PHYS.,A258,365(1976)	P.CARLOS+
10043022			19.41	115.						
10014002	33-AS 75	G,XN	16.22	97.27	11.	29.50	1130.		PHYS.REV.,177,1745(1969)	B.L.BERMAN+
10014002			19.937	87.21						
	33-AS 75	G,XN	17.3	90.3	9.	23.00	800.		PHYS.REV.,104,1334(1956)	P.F.YERGIN+
	33-AS 75	G,SN	16.16	119.9	10.	26.20	1090.	62.7	NUCL.PHYS.,A258,365(1976)	P.CARLOS+
10014012	33-AS 75	G,SN	16.22	97.27	8.	29.50	909.	51.4	PHYS.REV.,177,1745(1969)	B.L.BERMAN+
10043020	33-AS 75	G,N	16.16	119.9	6.5	26.20	872.		NUCL.PHYS.,A258,365(1976)	P.CARLOS+
10014003	33-AS 75	G,N	16.22	97.18	6.5	29.50	688.		PHYS.REV.,177,1745(1969)	B.L.BERMAN+
10014003			27.989	17.38						
10043021	33-AS 75	G,2N	21.58	40.6	7.	26.20	217.		NUCL.PHYS.,A258,365(1976)	P.CARLOS+
10043021			25.37	27.2						
10014004	33-AS 75	G,2N	21.485	32.65	7.5	29.50	221.		PHYS.REV.,177,1745(1969)	B.L.BERMAN+
10014004			21.556	31.39						
10014004			26.44	19.32						
	34-SE	G,XN	15.5	118.	5.2				NUOV.CIM.,51B,199(1967)	S.COSTA+
m0042005	34-SE 74	G,N	15.71	89.	6.	24.20	639.2	37.	IZV.KAZSSR,6,16(1980)	A.M.GORYACHEV+
m0070012	34-SE 74	G,N	15.71	89.	6.5	24.40	639.2	37.	VOPR.TEOR.YAD.FIZ.,8,121(1982)	A.M.GORYACHEV+
m0023002	34-SE 76	G,ABS	16.05	164.	5.9	19.70	922.1	60.8	PROBL.YAD.FIZ.,8,106(1978)	G.M.GUREVICH+
m0023002			12.5	75.5						
m0023002			15.1	155.5						
10043025	34-SE 76	G,XN	15.34	108.2	12.5	26.50	1177.		NUCL.PHYS.,A258,365(1976)	P.CARLOS+
10043025			20.76	96.4						
	34-SE 76	G,XN	15.9	109.	9.				IZV.AN SSSR,39,134(1975)	A.M.GORYACHEV+
	34-SE 76	G,SN	15.34	108.2	10.5	26.50	1010.	57.	NUCL.PHYS.,A258,365(1976)	P.CARLOS+
10043023	34-SE 76	G,N	15.34	108.2	7.5	26.50	815.		NUCL.PHYS.,A258,365(1976)	P.CARLOS+
10043023			17.51	105.8						
m0070013	34-SE 76	G,N	15.42	108.1	8.5	24.2	938.4	54.9	VOPR.TEOR.YAD.FIZ.,8,121(1982)	A.M.GORYACHEV+
m0070013			21.82	68.						
10043024	34-SE 76	G,2N	21.58	35.7	6.5	26.50	181.		NUCL.PHYS.,A258,365(1976)	P.CARLOS+
10043024			24.56	31.2						
m0042006	34-SE 77	G,N	15.82	105.3	8.5	24.40	944.9	56.3	IZV.KAZSSR,6,16(1980)	A.M.GORYACHEV+
m0070014	34-SE 77	G,N	15.82	105.3	8.5	24.40	944.7	56.3	VOPR.TEOR.YAD.FIZ.,8,121(1982)	A.M.GORYACHEV+
10043028	34-SE 78	G,XN	15.62	126.3	10.	26.50	1322.		NUCL.PHYS.,A258,365(1976)	P.CARLOS+
10043028			19.41	125.5						
	34-SE 78	G,XN	16.2	132.	9.				IZV.AN SSSR,39,134(1975)	A.M.GORYACHEV+
	34-SE 78	G,SN	15.62	126.3	8.	26.50	1060.	61.4	NUCL.PHYS.,A258,365(1976)	P.CARLOS+
10043026	34-SE 78	G,N	15.62	126.3	5.5	26.50	778.		NUCL.PHYS.,A258,365(1976)	P.CARLOS+
m0070015	34-SE 78	G,N	15.82	126.	8.5	24.20	1033.4	61.	VOPR.TEOR.YAD.FIZ.,8,121(1982)	A.M.GORYACHEV+
10043027	34-SE 78	G,2N	21.58	47.5	7.5	26.50	272.		NUCL.PHYS.,A258,365(1976)	P.CARLOS+
10043031	34-SE 80	G,XN	18.6	155.11	11.	28.10	1527.		NUCL.PHYS.,A258,365(1976)	P.CARLOS+
10043031			16.43	140.8						
	34-SE 80	G,XN	16.7	142.	9.				IZV.AN SSSR,39,134(1975)	A.M.GORYACHEV+
	34-SE 80	G,SN	15.89	137.	7.5	28.10	1110.	65.9	NUCL.PHYS.,A258,365(1976)	P.CARLOS+
10043029	34-SE 80	G,N	15.89	137.	6.	28.10	749.		NUCL.PHYS.,A258,365(1976)	P.CARLOS+
m0070016	34-SE 80	G,N	17.02	138.1	8.	24.20	1045.9	61.9	VOPR.TEOR.YAD.FIZ.,8,121(1982)	A.M.GORYACHEV+
m0070016			15.62	132.9						
10043030	34-SE 80	G,2N	20.22	60.6	5.5	28.10	389.		NUCL.PHYS.,A258,365(1976)	P.CARLOS+
10043030	34-SE 80	G,2N	19.14	54.3	5.5	28.10	389.		NUCL.PHYS.,A258,365(1976)	P.CARLOS+
10043030			21.04	52.8						
m0023003	34-SE 82	G,ABS	15.9	195.	5.1	19.90	1049.2	68.5	PROBL.YAD.FIZ.,8,106(1978)	G.M.GUREVICH+
m0023003			12.	66.5						
10043034	34-SE 82	G,XN	18.05	190.9	7.	26.50	1521.		NUCL.PHYS.,A258,365(1976)	P.CARLOS+
	34-SE 82	G,XN	16.	152.	9.				IZV.AN SSSR,39,134(1975)	A.M.GORYACHEV+
	34-SE 82	G,SN	15.89	142.7	6.5	26.50	1130.	66.4	NUCL.PHYS.,A258,365(1976)	P.CARLOS+
10043032	34-SE 82	G,N	15.89	142.7	4.	26.50	727.		NUCL.PHYS.,A258,365(1976)	P.CARLOS+
10043032			23.47	17.8						

EXFOR	NUCL	A	REACT	E-MAX MEV	SIG MB	FWHM MEV	E-INT MEV	SIG-INT MEV*MB	SIG-INT-1 MB	REFERENCE	AUTHOR
m0070017	34-SE	82	G,N	16.22	151.8	8.	24.20	1087.7	64.7	VOPR.TEOR.YAD.FIZ.,8,121(1982)	A.M.GORYACHEV+
m0070017				22.62	67.						
10043033	34-SE	82	G,2N	18.87	62.6	6.	26.50	397.		NUCL.PHYS.,A258,365(1976)	P.CARLOS+
10027002	37-RB		G,XN	16.805	194.	4.5	24.30	1242.		NUCL.PHYS.,A175,609(1971)	A.LEPRETRE+
10027017	37-RB		G,SN	16.805	194.	4.5	24.30	1147.	67.1	NUCL.PHYS.,A175,609(1971)	A.LEPRETRE+
10027003	37-RB		G,N	16.805	194.	4.5	24.30	1052.		NUCL.PHYS.,A175,609(1971)	A.LEPRETRE+
10027004	37-RB		G,2N	22.117	26.	>5.	24.30	95.		NUCL.PHYS.,A175,609(1971)	A.LEPRETRE+
	38-SR		G,XN	16.8	170.	9.				NUCL.PHYS.,A159,265(1970)	R.S.HICKS+
10027005	38-SR		G,XN	16.669	210.	7.	27.00	1553.		NUCL.PHYS.,A175,609(1971)	A.LEPRETRE+
10027018	38-SR		G,SN	16.669	210.	5.5	27.00	1432.	80.3	NUCL.PHYS.,A175,609(1971)	A.LEPRETRE+
10027006	38-SR		G,N	16.669	210.	5.5	27.00	1311.		NUCL.PHYS.,A175,609(1971)	A.LEPRETRE+
10027007	38-SR		G,2N	25.113	24.	5.5	27.00	121.		NUCL.PHYS.,A175,609(1971)	A.LEPRETRE+
10027007				22.525	21.						
m0070018	38-SR	84	G,N	16.71	156.8	7.	24.40	1010.3	58.	VOPR.TEOR.YAD.FIZ.,8,121(1982)	A.M.GORYACHEV+
	38-SR	86	G,XN	15.9	160.	5.	23.00	920.		PHYS.REV.,104,1334(1956)	P.F.YERGIN+
m0070019	38-SR	86	G,N	16.56	179.4	6.	24.40	1038.3	60.3	VOPR.TEOR.YAD.FIZ.,8,121(1982)	A.M.GORYACHEV+
	38-SR	87	G,XN	15.8	146.	5.3	23.00	1000.		PHYS.REV.,104,1334(1956)	P.F.YERGIN+
m0070020	38-SR	87	G,N	16.75	195.8	4.5	24.40	1114.2	65.6	VOPR.TEOR.YAD.FIZ.,8,121(1982)	A.M.GORYACHEV+
	38-SR	88	G,XN	16.3	201.	4.	23.00	1050.		PHYS.REV.,104,1334(1956)	P.F.YERGIN+
m0070021	38-SR	88	G,N	16.85	207.	5.	24.40	1112.8	64.7	VOPR.TEOR.YAD.FIZ.,8,121(1982)	A.M.GORYACHEV+
10027008	39-Y	89	G,XN	16.669	225.	4.5	27.00	1427.		NUCL.PHYS.,A175,609(1971)	A.LEPRETRE+
m0164002	39-Y	89	G,XN	16.4	271.	3.7	30.00	1504.7	83.5	IZV.AN SSSR,34,2232(1970)	B.S.ISHKHANOV+
m0164002				15.6	239.						
m0164002				17.	215.						
10011002	39-Y	89	G,XN	16.685	184.5	4.5	28.00	1158.		PHYS.REV.,162,1098(1967)	B.L.BERMAN+
	39-Y	89	G,XN	16.3	191.	4.	23.00	870.		PHYS.REV.,104,1334(1956)	P.F.YERGIN+
10027019	39-Y	89	G,SN	16.669	225.	4.5	27.00	1360.	76.5	NUCL.PHYS.,A175,609(1971)	A.LEPRETRE+
	39-Y	89	G,SN	16.	270.	3.7	29.00	1360.		IZV.AN SSSR,34,2232(1970)	B.S.ISHKHANOV+
10011018	39-Y	89	G,SN	16.69	184.4	4.5	28.00	1059.	59.8	PHYS.REV.,162,1098(1967)	B.L.BERMAN+
10027009	39-Y	89	G,N	16.669	225.	4.5	27.00	1279.		NUCL.PHYS.,A175,609(1971)	A.LEPRETRE+
10011003	39-Y	89	G,N	16.685	184.3	4.5	28.00	960.		PHYS.REV.,162,1098(1967)	B.L.BERMAN+
10059002	39-Y	89	G,1N	17.118	211.31	4.	18.10	641.	40.	T,YOUNG,72	L.M.YOUNG
10027010	39-Y	89	G,2N	25.386	18.3	>8.	27.00	74.		NUCL.PHYS.,A175,609(1971)	A.LEPRETRE+
10011004	39-Y	89	G,2N	23.344	19.38		28.00	99.		PHYS.REV.,162,1098(1967)	B.L.BERMAN+
10011004				25.821	19.68						
	40-ZR		G,XN	16.851	190.29	4.4	19.70	1079.		PHYS.REV.,C36,1286(1987)	B.L.BERMAN+
10057004	40-ZR		G,SN	16.851	190.29	4.4	19.70	991.	68.	PHYS.REV.,C36,1286(1987)	B.L.BERMAN+
10057002	40-ZR		G,N	16.373	158.92	>4.	19.70	903.		PHYS.REV.,C36,1286(1987)	B.L.BERMAN+
10057003	40-ZR		G,2N	17.329	26.92	>5.	19.70	88.		PHYS.REV.,C36,1286(1987)	B.L.BERMAN+
	40-ZR	90	G,XN	16.5	205.	4.5				NUCL.PHYS.,A204,209(1973)	H.J.ASKIN+
	40-ZR	90	G,XN	16.	200.	3.7	28.00	950.		YAD.FIZ.,14,27(1971)	B.S.ISHKHANOV+
10027011	40-ZR	90	G,XN	16.669	215.	4.5	25.90	1309.		NUCL.PHYS.,A175,609(1971)	A.LEPRETRE+
	40-ZR	90	G,XN	16.5	175.	4.	22.50	1270.		IZV.AN SSSR,33,700(1969)	G.P.ANTROPOV+
10011005	40-ZR	90	G,XN	16.724	180.	4.5	27.60	1158.		PHYS.REV.,162,1098(1967)	B.L.BERMAN+
	40-ZR	90	G,XN	15.8	199.	4.5	23.00	980.		PHYS.REV.,104,1334(1956)	P.F.YERGIN+
	40-ZR	90	G,SN	16.	200.	3.7	28.00	930.		YAD.FIZ.,14,27(1971)	B.S.ISHKHANOV+
	40-ZR	90	G,SN	16.67	215.	4.5	25.90	1260.	70.8	NUCL.PHYS.,A175,609(1971)	A.LEPRETRE+
10011019	40-ZR	90	G,SN	16.724	180.	4.5	27.60	1060.	59.1	PHYS.REV.,162,1098(1967)	B.L.BERMAN+
10027012	40-ZR	90	G,N	16.669	215.	4.5	25.90	1211.		NUCL.PHYS.,A175,609(1971)	A.LEPRETRE+
10011006	40-ZR	90	G,N	16.724	180.	4.5	27.60	962.		PHYS.REV.,162,1098(1967)	B.L.BERMAN+
	40-ZR	90	G,2N	25.5	17.5	>8.				PHYS.REV.,C13,1852(1976)	D.BRAJNIK+
10027013	40-ZR	90	G,2N	24.568	19.	>8.	25.90	49.		NUCL.PHYS.,A175,609(1971)	A.LEPRETRE+
10027013				23.751	18.						
10011007	40-ZR	90	G,2N	25.124	22.6	>8.	27.60	98.		PHYS.REV.,162,1098(1967)	B.L.BERMAN+
m0125002	40-ZR	90	G,P	21.5	30.	6.	30.50	159.1	7.2	PHYS.LETT.,10,310(1964)	I.I.DUSHKOV+
	40-ZR	90	G,P	16.3	35.5	7.5				PHYS.REV.,C13,1852(1976)	D.BRAJNIK+
				20.3	33.3						
	40-ZR	91	G,XN	16.	200.	4.2	22.50	1420.		IZV.AN SSSR,33,700(1969)	G.P.ANTROPOV+
10011008	40-ZR	91	G,XN	16.84	188.29	4.5	30.00	1303.		PHYS.REV.,162,1098(1967)	B.L.BERMAN+
10011008				21.021	85.31						
	40-ZR	91	G,XN	16.5	200.	5.	23.00	1220.		PHYS.REV.,104,1334(1956)	P.F.YERGIN+
10011020	40-ZR	91	G,SN	16.84	188.25	4.5	30.00	1103.	65.4	PHYS.REV.,162,1098(1967)	B.L.BERMAN+
10011009	40-ZR	91	G,N	16.84	188.21	4.5	30.00	903.		PHYS.REV.,162,1098(1967)	B.L.BERMAN+
10011010	40-ZR	91	G,2N	21.65	30.4	9.	30.00	200.		PHYS.REV.,162,1098(1967)	B.L.BERMAN+
10011010				23.37	25.75						
10011010				24.88	24.3						
10011011	40-ZR	92	G,XN	17.459	207.5	6.5	27.80	1543.		PHYS.REV.,162,1098(1967)	B.L.BERMAN+
	40-ZR	92	G,XN	16.9	193.	5.5	23.00	1240.		PHYS.REV.,104,1334(1956)	P.F.YERGIN+
10011021	40-ZR	92	G,SN	154.911	177.24	6.5	27.80	1091.	64.2	PHYS.REV.,162,1098(1967)	B.L.BERMAN+
10011012	40-ZR	92	G,N	15.911	169.	4.	27.80	639.		PHYS.REV.,162,1098(1967)	B.L.BERMAN+

EXFOR	NUCL	A	REACT	E-MAX MEV	SIG MB	FWHM MEV	E-INT MEV	SIG-INT MEV*MB	SIG-INT-1 MB	REFERENCE	AUTHOR
10011013	40-ZR	92	G,2N	17.924	69.74	6.	27.80	452.		PHYS.REV.,162,1098(1967)	B.L.BERMAN+
10011013				21.021	58.11						
10011013				23.576	28.14						
10011014	40-ZR	94	G,XN	16.99	244.5	5.	31.10	1767.		PHYS.REV.,162,1098(1967)	8.L.BERMAN+
10011022	40-ZR	94	G,SN	16.69	167.	5.	31.10	1121.	68.5	PHYS.REV.,162,1098(1967)	B.L.BERMAN+
10011015	40-ZR	94	G,N	15.15	135.9	3.5	31.10	508.		PHYS.REV.,162,1098(1967)	B.L.BERMAN+
10011016	40-ZR	94	G,2N	17.775	101.75	5.	31.10	578.1	29.7	PHYS.REV.,162,1098(1967)	B.L.BERMAN+
10011016				23.04	40.5						
10011016				25.6	32.7						
10011017	40-ZR	94	G,3N	28.3	12.9	4.5	31.10	33.		PHYS.REV.,162,1098(1967)	B.L.BERMAN+
10027014	41-NB	93	G,XN	17.622	207.	8.	24.30	1610.		NUCL.PHYS.,A175,609(1971)	A.LEPRETRE+
	41-NB	93	G,XN	17.	195.	6.5	23.00	1460.		PHYS.REV.,104,1334(1956)	P.F.YERGIN+
	41-NB	93	G,SN	16.26	200.	6.5	24.30	1331.	78.5	NUCL.PHYS.,A175,609(1971)	A.LEPRETRE+
10027015	41-NB	93	G,N	16.26	200.	4.	24.30	1052.		NUCL.PHYS.,A175,609(1971)	A.LEPRETRE+
10027016	41-NB	93	G,2N	20.21	52.	6.5	24.30	279.		NUCL.PHYS.,A175,609(1971)	A.LEPRETRE+
m0126002				23.03	26.						
m0126002				19.65	24.56						
m0126002				21.42	20.48						
m0126002				26.59	12.48						
10032002	42-MO	92	G,XN	16.73	163.8	6.	29.50	1109.		NUCL.PHYS.,A227,427(1974)	H.BEIL+
	42-MO	92	G,XN	16.4	170.	5.	30.00	1290.		YAD.FIZ.,11,702(1970)	B.S.ISHKHANOV+
10032020	42-MO	92	G,SN	16.73	163.8	6.	29.50	1079.	57.4	NUCL.PHYS.,A227,427(1974)	H.BEIL+
10032003	42-MO	92	G,N	16.73	163.8	6.	29.50	1049.		NUCL.PHYS.,A227,427(1974)	H.BEIL+
10032004	42-MO	92	G,2N	25.67	8.2	>9.	29.50	30.		NUCL.PHYS.,A227,427(1974)	H.BEIL+
10032021	42-MO	94	G,XN	16.19	187.2	8.	28.40	1665.		NUCL.PHYS.,A227,427(1974)	H.BEIL+
10032005	42-MO	94	G,SN	16.19	189.5	6.5	28.40	1352.	78.3	NUCL.PHYS.,A227,427(1974)	H.BEIL+
10032006	42-MO	94	G,N	16.19	184.9	6.5	28.40	1039.		NUCL.PHYS.,A227,427(1974)	H.BEIL+
10032007	42-MO	94	G,2N	19.98	49.9	10.	28.40	313.		NUCL.PHYS.,A227,427(1974)	H.BEIL+
10032008	42-MO	96	G,XN	16.46	193.7	10.	27.80	1921.		NUCL.PHYS.,A227,427(1974)	H.BEIL+
10032022	42-MO	96	G,SN	16.46	192.1	6.5	27.80	1483.	87.6	NUCL.PHYS.,A227,427(1974)	H.BEIL+
10032009	42-MO	96	G,N	16.46	190.6	5.	27.80	1045.		NUCL.PHYS.,A227,427(1974)	H.BEIL+
10032010	42-MO	96	G,2N	19.17	67.9	6.5	27.80	438.		NUCL.PHYS.,A227,427(1974)	H.BEIL+
10032011	42-MO	96	G,3N	29.19	12.9		29.20	3.4		NUCL.PHYS.,A227,427(1974)	H.BEIL+
10032012	42-MO	98	G,XN	17.	235.4	8.	26.80	2100.		NUCL.PHYS.,A227,427(1974)	H.BEIL+
	42-MO	98	G,XN	16.8	280.	5.	30.00	2000.		YAD.FIZ.,11,702(1970)	B.S.ISHKHANOV+
10032023	42-MO	98	G,SN	15.37	195.8	7.	26.80	1518.	92.1	NUCL.PHYS.,A227,427(1974)	H.BEIL+
10032013	42-MO	98	G,N	15.37	194.7	5.	26.80	940.		NUCL.PHYS.,A227,427(1974)	H.BEIL+
10032014	42-MO	98	G,2N	19.17	86.	8.	26.80	574.		NUCL.PHYS.,A227,427(1974)	H.BEIL+
10032015	42-MO	98	G,3N	28.11	13.3	>5.	26.80	4.		NUCL.PHYS.,A227,427(1974)	H.BEIL+
10032015							28.90	22.			
10032016	42-MO	100	G,XN	16.19	261.	8.	27.00	2270.		NUCL.PHYS.,A227,427(1974)	H.BEIL+
	42-MO	100	G,SN	15.7	171.	7.5	27.00	1528.	93.6	NUCL.PHYS.,A227,427(1974)	H.BEIL+
10032017	42-MO	100	G,N	14.29	163.4	4.	27.00	811.		NUCL.PHYS.,A227,427(1974)	H.BEIL+
	42-MO	100	G,NP	15.	180.	5.6	20.00	1110.		NUCL.PHYS.,60,343(1964)	R.W.GELLIE+
10032018	42-MO	100	G,2N	18.08	104.8	6.5	27.00	692.		NUCL.PHYS.,A227,427(1974)	H.BEIL+
10032019	42-MO	100	G,3N	28.38	22.5	>7.	27.00	25.		NUCL.PHYS.,A227,427(1974)	H.BEIL+
10032019				25.94	13.16						
10032019				27.3	20.3						
10035002	45-RH	103	G,XN	18.08	199.3	10.	25.80	1948.		NUCL.PHYS.,A219,39(1974)	A.LEPRETRE+
10035002				15.64	190.						
	45-RH	103	G,XN	16.5	205.	9.	23.00	1940.		PHYS.REV.,104,1334(1956)	P.F.YERGIN+
10035041	45-RH	103	G,SN	15.64	190.9	8.	30.10	1568.	94.7	NUCL.PHYS.,A219,39(1974)	A.LEPRETRE+
	45-RH	103	G,SN	17.5	280.	6.	22.00	2130.	123.	ZHETF,42,1502(1962)	O.V.BOGDANKEVICH+
				14.8	200.						
10035003	45-RH	103	G,N	15.64	190.	5.5	25.80	1188.		NUCL.PHYS.,A219,39(1974)	A.LEPRETRE+
10035004	45-RH	103	G,2N	19.44	66.	8.	25.80	380.		NUCL.PHYS.,A219,39(1974)	A.LEPRETRE+
	45-RH	103	G,P	19.	8.	5.5	32.00	85.		ZHETF,45,38(1963)	B.S.ISHKHANOV+
m0166003	45-RH	103	G,P	19.	8.	5.5	32.00	85.	3.9	PHYS.LETT.,10,310(1964)	B.S.ISHKHANOV+
m0166003				29.	5.3						
10035005	46-PD		G,XN	17.81	218.6	8.	21.30	1651.		NUCL.PHYS.,A219,39(1974)	A.LEPRETRE+
10035005				15.92	208.5						
10035042	46-PD		G,SN	15.92	204.8	7.	21.30	1381.	88.5	NUCL.PHYS.,A219,39(1974)	A.LEPRETRE+
10035006	46-PD		G,N	15.92	201.1	5.	21.30	1111.		NUCL.PHYS.,A219,39(1974)	A.LEPRETRE+
10035007	46-PD		G,2N	18.9	73.5	>7.	21.30	270.		NUCL.PHYS.,A219,39(1974)	A.LEPRETRE+
	46-PD	108	G,SN	15.7	210.	5.	25.00	1725.	104.	YAD.FIZ.,9,241(1969)	S.V.DEMENTIJ+
	46-PD	108	G,SN	15.7	215.	8.				NUCL.PHYS.,A139,501(1969)	T.K.DEAGUE+
	46-PD	108	G,P	23.	10.	12.				NUCL.PHYS.,A139,501(1969)	T.K.DEAGUE+
	46-PD	110	G,N	15.5	16.	7.				NUCL.PHYS.,A139,501(1969)	T.K.DEAGUE+

EXFOR	NUCL	A	REACT	E-MAX MEV	SIG MB	FWHM MEV	E-INT MEV	SIG-INT MEV*MB	SIG-INT-1 MB	REFERENCE	AUTHOR
	47-AG		G,ABS	15.8	218.	7.5	35.00	2568.	130.	PHYS.REV.,137,B576(1965)	J.M.WYCKOFF
10035008	47-AG		G,XN	15.92	198.2	10.	24.90	1922.		NUCL.PHYS.,A219,39(1974)	A.LEPRETRE+
10035008				18.35	189.3						
10035043	47-AG		G,SN	15.92	198.2	7.5	29.50	1643.	98.8	NUCL.PHYS.,A219,39(1974)	A.LEPRETRE+
10035009	47-AG		G,N	15.92	198.4	7.	24.90	1364.		NUCL.PHYS.,A219,39(1974)	A.LEPRETRE+
10035010	47-AG		G,2N	20.25	50.7	7.	24.90	279.		NUCL.PHYS.,A219,39(1974)	A.LEPRETRE+
10014005	47-AG	107	G,XN	16.066	159.59	9.5	29.50	1619.		PHYS.REV.,177,1745(1969)	B.L.BERMAN+
	47-AG	107	G,XN	16.	250.	6.5				ZHETF,42,1502(1962)	O.V.BOGDANKEVICH+
10014013	47-AG	107	G,SN	16.066	159.59	7.	29.50	1356.	78.7	PHYS.REV.,177,1745(1969)	B.L.BERMAN+
m0524002	47-AG	107	G,SN	16.1	195.98	7.5	30.00	1620.	95.3	IZV.AN SSSR,33,2074(1969)	B.S.ISHKHANOV+
m0524002				17.7	189.35						
m0524002				24.1	65.33						
	47-AG	107	G,XN	16.	245.	5.				ZHETF,42,1502(1962)	O.V.BOGDANKEVICH+
10014006	47-AG	107	G,N	16.066	160.	5.5	29.50	1093.		PHYS.REV.,177,1745(1969)	B.L.BERMAN+
10014006				24.892	41.87						
10014007	47-AG	107	G,2N	21.176	46.36	5.	29.50	263.		PHYS.REV.,177,1745(1969)	B.L.BERMAN+
10014007				26.131	20.36						
m0524003	47-AG	109	G,SN	15.9	175.62	5.5	29.00	1210.	72.6	IZV.AN SSSR,33,2074(1969)	B.S.ISHKHANOV+
m0524003				13.8	138.39						
m0524003				17.3	138.39						
m0524003				19.6	86.93						
m0524003				24.3	48.61						
10035011	48-CD		G,XN	16.46	231.		24.60	2046.		NUCL.PHYS.,A219,39(1974)	A.LEPRETRE+
	48-CD		G,XN	15.6	263.	5.1	27.00	1760.	111.	ZHETF,30,85591956)	B.I.GAVRILOV+
10035044	48-CD		G,SN	15.37	225.3	7.	26.20	1685.	106.	NUCL.PHYS.,A219,39(1974)	A.LEPRETRE+
10035012	48-CD		G,N	15.37	225.7	5.	24.60	1324.		NUCL.PHYS.,A219,39(1974)	A.LEPRETRE+
10035013	48-CD		G,2N	19.17	65.3	7.5	24.60	361.		NUCL.PHYS.,A219,39(1974)	A.LEPRETRE+
10035014	49-IN	115	G,XN	15.92	244.4	7.5	24.10	2026.		NUCL.PHYS.,A219,39(1974)	A.LEPRETRE+
10017002	49-IN	115	G,XN	15.601	265.49	7.5	31.10	2409.		PHYS.REV.,186,1255(1969)	S.C.FULTZ+
10035045	49-IN	115	G,SN	15.92	244.4	6.	29.50	1748.	108.	NUCL.PHYS.,A219,39(1974)	A.LEPRETRE+
10017029	49-IN	115	G,SN	15.601	264.77	4.5	31.10	1875.	113.	PHYS.REV.,186,1255(1969)	S.C.FULTZ+
	49-IN	115	G,SN	16.	310.	5.	23.00	2210.	119.	ZHETF,42,1502(1962)	O.V.BOGDANKEVICH+
10035015	49-IN	115	G,N	15.92	245.3	5.	24.10	1470.		NUCL.PHYS.,A219,39(1974)	A.LEPRETRE+
10017003	49-IN	115	G,N	15.291	264.7	4.	31.10	1354.		PHYS.REV.,186,1255(1969)	S.C.FULTZ+
10035016	49-IN	115	G,2N	19.44	52.4	7.5	24.10	278.		NUCL.PHYS.,A219,39(1974)	A.LEPRETRE+
10017004	49-IN	115	G,2N	20.556	66.6	8.	31.10	508.		PHYS.REV.,186,1255(1969)	S.C.FULTZ+
10017005	49-IN	115	G,3N	31.086	13.49		31.10	13.		PHYS.REV.,186,1255(1969)	S.C.FULTZ+
	50-SN		G,XN	16.	300.	5.	40.00	1640.	134.	PHYS.REV.,112,554(1958)	E.G.FULLER+
	50-SN	112	G,XN	15.8	295.	5.5	27.00	2230.		YAD.FIZ.,20,233(1974)	YU.I.SOROKIN+
	50-SN	112	G,SN	15.8	295.	5.5	27.00	1900.		YAD.FIZ.,20,233(1974)	YU.I.SOROKIN+
	50-SN	112	G,N	16.	340.	5.	21.00	1820.	152.	ZHETF,40,85(1961)	KUO CHI-DI+
	50-SN	114	G,XN	15.7	265.	7.5	27.00	2260.		IZV.AN SSSR,39,114(1975)	YU.I.SOROKIN+
	50-SN	114	G,SN	15.7	265.	7.	27.00	1860.	108.	IZV.AN SSSR,39,114(1975)	JU.I.SOROKIN+
	50-SN	116	G,XN	15.6	260.	9.	27.00	2400.		IZV.AN SSSR,39,114(1975)	YU.I.SOROKIN+
10035017	50-SN	116	G,XN	15.44	277.3	7.5	22.10	1823.		NUCL.PHYS.,A219,39(1974)	A.LEPRETRE+
10017006	50-SN	116	G,XN	15.362	272.	6.	29.60	2083.		PHYS.REV.,186,1255(1969)	S.C.FULTZ+
10017006				18.769	168.9						
10017006				27.131	76.						
	50-SN	116	G,SN	15.6	260.	6.	27.00	2850.	110.	IZV.AN SSSR,39,114(1975)	YU.I.SOROKIN+
10035046	50-SN	116	G,SN	15.44	277.3	7.5	29.50	1630.	104.	NUCL.PHYS.,A219,39(1974)	A.LEPRETRE+
10017030	50-SN	116	G,SN	15.982	262.	4.	29.60	1669.	99.	PHYS.REV.,186,1255(1969)	S.C.FULTZ+
10017030				27.131	55.						
10035018	50-SN	116	G,N	15.44	277.3	7.5	22.10	1437.		NUCL.PHYS.,A219,39(1974)	A.LEPRETRE+
10017007	50-SN	116	G,N	15.362	272.	3.5	29.60	1255.		PHYS.REV.,186,1255(1969)	S.C.FULTZ+
10017007				28.37	36.						
10035019	50-SN	116	G,2N	20.07	51.4	>7.	22.10	193.		NUCL.PHYS.,A219,39(1974)	A.LEPRETRE+
10017008	50-SN	116	G,2N	20.008	60.	7.5	29.60	414.		PHYS.REV.,186,1255(1969)	S.C.FULTZ+
	50-SN	117	G,XN	15.4	260.	8.	27.00	2520.		IZV.AN SSSR,39,114(1975)	YU.I.SOROKIN+
10035020	50-SN	117	G,XN	15.37	266.5	9.	21.10	1774.		NUCL.PHYS.,A219,39(1974)	A.LEPRETRE+
10017009	50-SN	117	G,XN	15.601	262.55	8.	31.10	2446.		PHYS.REV.,186,1255(1969)	S.C.FULTZ+
	50-SN	117	G,SN	15.4	260.	5.5	27.00	1390.	110.	IZV.AN SSSR,39,114(1975)	YU.I.SOROKIN+
10035047	50-SN	117	G,SN	15.37	266.5	5.	21.10	1554.	102.	NUCL.PHYS.,A219,39(1974)	A.LEPRETRE+
10017031	50-SN	117	G,SN	15.601	262.67	5.	31.10	1894.	114.	PHYS.REV.,186,1255(1969)	S.C.FULTZ+
10035021	50-SN	117	G,N	15.37	267.	4.	21.10	1334.		NUCL.PHYS.,A219,39(1974)	A.LEPRETRE+
10017010	50-SN	117	G,N	15.601	262.69	4.	31.10	1380.		PHYS.REV.,186,1255(1969)	S.C.FULTZ+
10035022	50-SN	117	G,2N	19.17	70.1	5.	21.10	220.		NUCL.PHYS.,A219,39(1974)	A.LEPRETRE+
10017011	50-SN	117	G,2N	19.317	71.83	7.	31.10	476.		PHYS.REV.,186,1255(1969)	S.C.FULTZ+
10017012	50-SN	117	G,3N	28.608	28.42		31.10	38.		PHYS.REV.,186,1255(1969)	S.C.FULTZ+
10035023	50-SN	118	G,XN	15.31	286.4	7.5	21.60	1893.		NUCL.PHYS.,A219,39(1974)	A.LEPRETRE+
	50-SN	118	G,XN	15.5	290.	5.5	27.00	2460.		YAD.FIZ.,20,233(1974)	YU.I.SOROKIN+
10017013	50-SN	118	G,XN	15.601	254.75	7.5	30.80	2424.		PHYS.REV.,186,1255(1969)	S.C.FULTZ+

EXFOR	NUCL	A	REACT	E-MAX MEV	SIG MB	FWHM MEV	E-INT MEV	SIG-INT MEV*MB	SIG-INT-1 MB	REFERENCE	AUTHOR
10017013				17.769	225.3						
10035048	50-SN	118	G,SN	15.31	286.4	5.	21.60	1635.	106.	NUCL.PHYS.,A219,39(1974)	A.LEPRETRE+
	50-SN	118	G,SN	15.8	295.	5.5	27.00	1920.		YAD.FIZ.,20,233(1974)	YU.I.SOROKIN+
10017032	50-SN	118	G,SN	15.601	254.75	5.5	30.80	1853.	110.	PHYS.REV.,186,1255(1969)	S.C.FULTZ+
10035024	50-SN	118	G,N	15.31	286.4	4.	21.60	1377.		NUCL.PHYS.,A219,39(1974)	A.LEPRETRE+
10017014	50-SN	118	G,N	15.601	254.4	4.	30.80	1302.		PHYS.REV.,186,1255(1969)	S.C.FULTZ+
10035025	50-SN	118	G,2N	19.39	68.5	4.5	21.60	258.		NUCL.PHYS.,A219,39(1974)	A.LEPRETRE+
10017015	50-SN	118	G,2N	19.008	77.75	8.	30.80	531.		PHYS.REV.,186,1255(1969)	S.C.FULTZ+
10017016	50-SN	118	G,3N	30.157	19.57		30.80	20.		PHYS.REV.,186,1255(1969)	S.C.FULTZ+
	50-SN	119	G,XN	17.	270.	9.	27.00	2630.		IZV.AN SSSR,39,114(1975)	YU.I.SOROKIN+
10017017	50-SN	119	G,XN	15.369	259.49	8.	31.10	2728.		PHYS.REV.,186,1255(1969)	S.C.FULTZ+
	50-SN	119	G,SN	15.4	270.	6.	27.00	1420.	111.	IZV.AN SSSR,39,114(1975)	YU.I.SOROKIN+
10017033	50-SN	119	G,SN	15.369	259.97	5.	31.10	1993.	118.	PHYS.REV.,186,1255(1969)	S.C.FULTZ+
10017018	50-SN	119	G,N	15.369	260.24	3.5	31.10	1326.		PHYS.REV.,186,1255(1969)	S.C.FULTZ+
10017019	50-SN	119	G,2N	17.769	94.41	6.	31.10	597.		PHYS.REV.,186,1255(1969)	S.C.FULTZ+
10017020	50-SN	119	G,3N	29.538	22.57	3.5	31.10	69.		PHYS.REV.,186,1255(1969)	S.C.FULTZ+
10017020				25.357	10.75						
10035026	50-SN	120	G,XN	16.26	288.9	6.5	22.40	2169.		NUCL.PHYS.,A219,39(1974)	A.LEPRETRE+
	50-SN	120	G,XN	15.3	295.	5.5	27.00	2690.		YAD.FIZ.,20,233(1974)	YU.I.SOROKIN+
10017021	50-SN	120	G,XN	16.84	297.3	7.5	29.90	2771.		PHYS.REV.,186,1255(1969)	S.C.FULTZ+
10035049	50-SN	120	G,SN	15.44	284.5	5.	29.50	1770.	113.	NUCL.PHYS.,A219,39(1974)	A.LEPRETRE+
	50-SN	120	G,SN	15.3	295.	5.	27.00	2070.		YAD.FIZ.,20,233(1974)	YU.I.SOROKIN+
10017034	50-SN	120	G,SN	15.291	281.54	4.5	29.90	2074.	124.	PHYS.REV.,186,1255(1969)	S.C.FULTZ+
10035027	50-SN	120	G,N	14.9	289.1	4.	22.40	1371.		NUCL.PHYS.,A219,39(1974)	A.LEPRETRE+
10017022	50-SN	120	G,N	15.291	280.35	3.5	29.90	1389.		PHYS.REV.,186,1255(1969)	S.C.FULTZ+
10035028	50-SN	120	G,2N	18.44	82.9	5.5	22.40	399.		NUCL.PHYS.,A219,39(1974)	A.LEPRETRE+
10017023	50-SN	120	G,2N	17.924	99.97	6.	29.90	673.		PHYS.REV.,186,1255(1969)	S.C.FULTZ+
10017023				19.24	94.72						
10017023				28.299	48.04						
10017024	50-SN	120	G,3N	29.692	19.27		29.90	12.		PHYS.REV.,186,1255(1969)	S.C.FULTZ+
	50-SN	122	G,XN	16.3	320.	7.5	27.00	2940.		IZV.AN SSSR,39,114(1975)	YU.I.SOROKIN+
	50-SN	122	G,SN	15.6	270.	5.	27.00	1510.	119.	IZV.AN SSSR,39,114(1975)	YU.I.SOROKIN+
	50-SN	124	G,XN	16.2	340.	9.	27.00	2900.		IZV.AN SSSR,39,114(1975)	YU.I.SOROKIN+
10035029	50-SN	124	G,XN	15.92	344.9	5.5	21.60	2060.		NUCL.PHYS.,A219,39(1974)	A.LEPRETRE+
10017025	50-SN	124	G,XN	15.601	351.48	5.5	31.10	2790.		PHYS.REV.,186,1255(1969)	S.C.FULTZ+
	50-SN	124	G,SN	15.2	270.	5.5	27.00	1440.	114.	IZV.AN SSSR,39,114(1975)	YU.I.SOROKIN+
10035050	50-SN	124	G,SN	15.1	278.8.	5.	22.70	1558.	101.	NUCL.PHYS.,A219,39(1974)	A.LEPRETRE+
10017035	50-SN	124	G,SN	14.827	290.09	4.5	31.10	2010.	123.	PHYS.REV.,186,1255(1969)	S.C.FULTZ+
10035030	50-SN	124	G,N	14.83	257.6	3.5	21.60	1056.		NUCL.PHYS.,A219,39(1974)	A.LEPRETRE+
10017026	50-SN	124	G,N	14.672	272.52	3.5	31.10	1285.		PHYS.REV.,186,1255(1969)	S.C.FULTZ+
10035031	50-SN	124	G,2N	17.27	110.	5.	21.60	502.		NUCL.PHYS.,A219,39(1974)	A.LEPRETRE+
10017027	50-SN	124	G,2N	16.53	115.75	5.5	31.10	670.		PHYS.REV.,186,1255(1969)	S.C.FULTZ+
10017028	50-SN	124	G,3N	30.157	19.36	>7.	31.10	55.		PHYS.REV.,186,1255(1969)	S.C.FULTZ+
10035032	51-SB		G,XN	15.37	276.	7.5	25.70	2315.		NUCL.PHYS.,A219,39(1974)	A.LEPRETRE+
10035051	51-SB		G,SN	15.37	276.	5.5	29.50	1927.	119.	NUCL.PHYS.,A219,39(1974)	A.LEPRETRE+
10035033	51-SB		G,N	15.37	275.5.	4.5	25.70	1539.		NUCL.PHYS.,A219,39(1974)	A.LEPRETRE+
10035034	51-SB		G,2N	19.17	61.4	6.5	25.70	388.		NUCL.PHYS.,A219,39(1974)	A.LEPRETRE+
	51-SB		G,XN	15.	270.	4.8				NUCL.PHYS.,A430,99(1984)	R.P.RASSOOL+
	51-SB		G,2N	18.	80.	>6.				NUCL.PHYS.,A430,99(1984)	R.P.RASSOOL+
	51-SB	121	G,XN	15.8	275.	4.8	21.00	1473.		NUCL.PHYS.,A430,99(1984)	R.P.RASSOOL+
m0273009	51-SB	121	G,N	15.	665.	5.	18.00	3287.	229.	CAN.J.PHYS.,29,518(1951)	L.KATZ+
	51-SB	121	G,1N	15.9	280.	5.				NUCL.PHYS.,A430,99(1984)	R.P.RASSOOL+
	51-SB	121	G,2N	18.5	96.	>6.				NUCL.PHYS.,A430,99(1984)	R.P.RASSOOL+
	51-SB	123	G,XN	15.3	275.	4.8	23.50	1350.		NUCL.PHYS.,A430,99(1984)	R.P.RASSOOL+
	51-SB	123	G,N	15.	270.	4.				NUCL.PHYS.,A430,99(1984)	R.P.RASSOOL+
m0273010	51-SB	123	G,N	15.	362.	5.	18.00	1750.	121.9	CAN.J.PHYS.,29,518(1951)	L.KATZ+
	51-SB	123	G,2N	18.2	90.	6.				NUCL.PHYS.,A430,99(1984)	R.P.RASSOOL+
10035035	52-TE		G,XN	15.64	313.5	8.	25.70	2636.		NUCL.PHYS.,A219,39(1974)	A.LEPRETRE+
10035052	52-TE		G,SN	15.1	293.9	6.	25.70	2112.	134.	NUCL.PHYS.,A219,39(1974)	A.LEPRETRE+
10035036	52-TE		G,N	15.1	290.1	4.5	25.70	1588.		NUCL.PHYS.,A219,39(1974)	A.LEPRETRE+
10035037	52-TE		G,2N	18.08	79.2	4.5	25.70	524.		NUCL.PHYS.,A219,39(1974)	A.LEPRETRE+
10042004	52-TE	124	G,XN	14.8	287.7	7.5	26.50	2498.		NUCL.PHYS.,A258,350(1976)	A.LEPRETRE+
	52-TE	124	G,SN	14.8	287.7	7.	26.50	2022.	127.	NUCL.PHYS.,A258,350(1976)	A.LEPRETRE+
10042002	52-TE	124	G,N	14.8	287.7	4.5	26.50	1546.		NUCL.PHYS.,A258,350(1976)	A.LEPRETRE+
10042003	52-TE	124	G,2N	18.87	80.1	7.5	26.50	476.		NUCL.PHYS.,A258,350(1976)	A.LEPRETRE+
10042007	52-TE	126	G,XN	16.16	294.6	8.	24.80	2533.		NUCL.PHYS.,A258,350(1976)	A.LEPRETRE+
	52-TE	126	G,SN	15.07	288.9	6.	24.80	2023.	129.	NUCL.PHYS.,A258,350(1976)	A.LEPRETRE+
10042005	52-TE	126	G,N	15.07	288.09	4.5	24.80	1513.		NUCL.PHYS.,A258,350(1976)	A.LEPRETRE+
10042006	52-TE	126	G,2N	18.05	95.9	4.	24.80	510.		NUCL.PHYS.,A258,350(1976)	A.LEPRETRE+
10042010	52-TE	128	G,XN	16.16	336.1	7.	26.20	2732.		NUCL.PHYS.,A258,350(1976)	A.LEPRETRE+
	52-TE	128	G,SN	14.8	315.4	4.	26.20	2093.	134.	NUCL.PHYS.,A258,350(1976)	A.LEPRETRE+

EXFOR	NUCL	A	REACT	E-MAX MEV	SIG MB	FWHM MEV	E-INT MEV	SIG-INT MEV*MB	SIG-INT-1 MB	REFERENCE	AUTHOR
10042008	52-TE	128	G,N	14.8	315.4	4.	26.20	1454.		NUCL.PHYS.,A258,350(1976)	A.LEPRETRE+
10042009	52-TE	128	G,2N	18.05	115.	7.	26.20	639.		NUCL.PHYS.,A258,350(1976)	A.LEPRETRE+
10042013	52-TE	130	G,XN	15.62	384.	7.	25.90	2893.		NUCL.PHYS.,A258,350(1976)	A.LEPRETRE+
	52-TE	130	G,SN	14.53	316.9	6.	25.90	2180.	139.	NUCL.PHYS.,A258,350(1976)	A.LEPRETRE+
10042011	52-TE	130	G,N	14.53	316.9	4.5	25.90	1467.		NUCL.PHYS.,A258,350(1976)	A.LEPRETRE+
10042012	52-TE	130	G,2N	16.7	119.9	5.5	25.90	713.		NUCL.PHYS.,A258,350(1976)	A.LEPRETRE+
	53-I	127	G,XN	14.94	252.26		16.90	1043.		BULL.AM.PHYS.SOC.,31,855(1986)	B.L.BERMAN+
	53-I	127	G,XN	14.88	309.1	6.	24.90	2380.		NUCL.PHYS.,A133,417(1969)	R.BERGERE+
10009002	53-I	127	G,XN	14.982	222.61	7.5	29.50	2171.		PHYS.REV.,148,1198(1966)	R.L.BRAMBLETT+
10009002				17.15	203.						
10057007	53-I	127	G,XN	14.938	252.26	>5.	16.90	1043.		PHYS.REV.,C36,1286(1987)	B.L.BERMAN+
m0511002	53-I	127	G,SN	15.2	289.53	5.9	22.40	1532.3	107.5	PHYS.REV.,C39,1631(1989)	R.P.RASSOOL+
	53-I	127	G,SN	15.	254.	6.4				PHYS.REV.,C36,1286(1987)	B.L.BERMAN+
	53-I	127	G,SN	14.94	252.26		16.90	1036.	74.	PHYS.REV.,C36,1286(1987)	B.L.BERMAN+
10015022	53-I	127	G,SN	14.88	309.	6.	24.90	1989.	128.	NUCL.PHYS.,A133,417(1969)	R.BERGERE+
10009009	53-I	127	G,SN	14.982	221.48	5.5	29.50	1728.	105.	PHYS.REV.,148,1198(1966)	R.L.BRAMBLETT+
	53-I	127	G,N	252.26	14.94		16.90	1030.		BULL.AM.PHYS.SOC.,31,855(1986)	B.L.BERMAN+
10015003	53-I	127	G,N	14.88	309.1	5.	24.90	1601.		NUCL.PHYS.,A133,417(1969)	R.BERGERE+
10009003	53-I	127	G,N	15.601	225.55	4.5	29.50	1285.		PHYS.REV.,148,1198(1966)	R.L.BRAMBLETT+
10057005	53-I	127	G,N	14.938	252.26		16.90	1030.		PHYS.REV.,C36,1286(1987)	B.L.BERMAN+
m0511003	53-I	127	G,2N	18.2	73.26	4.5	23.00	274.1	14.4	PHYS.REV.,C39,1631(1989)	R.P.RASSOOL+
	53-I	127	G,2N	21.35	16.85		16.90	6.		BULL.AM.PHYS.SOC.,31,855(1986)	B.L.BERMAN+
10015004	53-I	127	G,2N	18.68	69.9	7.5	23.00	390.		NUCL.PHYS.,A133,417(1969)	R.BERGERE+
10015004				26.57	34.4						
10009004	53-I	127	G,2N	19.317	67.08	7.	29.50	443.		PHYS.REV.,148,1198(1966)	R.L.BRAMBLETT+
10057006	53-I	127	G,2N	16.851	21.35		16.90	6.		PHYS.REV.,C36,1286(1987)	B.L.BERMAN+
10015005	53-I	127	G,3N	30.65	12.2	>10.	31.20	31.		NUCL.PHYS.,A133,417(1969)	R.BERGERE+
	53-I	127	G,3N	30.7	12.2	>10.	29.50	<20.		PHYS.REV.,148,1198(1966)	R.L.BRAMBLETT+
10035038	55-CS	133	G,XN	15.31	321.2	7.5	24.20	2484.		NUCL.PHYS.,A219,39(1974)	A.LEPRETRE+
10014008	55-CS	133	G,XN	15.291	296.01	8.	29.50	2505.		PHYS.REV.,177,1745(1969)	B.L.BERMAN+
10035053	55-CS	133	G,SN	15.31	321.2	6.	24.20	2156.	137.	NUCL.PHYS.,A219,39(1974)	A.LEPRETRE+
10014014	55-CS	133	G,SN	15.291	296.01	6.	29.50	1986.	124.	PHYS.REV.,177,1745(1969)	B.L.BERMAN+
10035039	55-CS	133	G,N	15.31	321.2	4.5	24.20	1828.		NUCL.PHYS.,A219,39(1974)	A.LEPRETRE+
10014009	55-CS	133	G,N	15.291	296.18	4.5	29.50	1475.		PHYS.REV.,177,1745(1969)	B.L.BERMAN+
10035040	55-CS	133	G,2N	18.71	61.6	6.5	24.20	328.		NUCL.PHYS.,A219,39(1974)	A.LEPRETRE+
10014010	55-CS	133	G,2N	18.698	75.	6.	29.50	503.		PHYS.REV.,177,1745(1969)	B.L.BERMAN+
10014010				19.937	68.85						
10014010				25.511	31.55						
10014011	55-CS	133	G,3N	29.228	8.		29.50	8.		PHYS.REV.,177,1745(1969)	B.L.BERMAN+
10024002	56-BA		G,XN	15.307	364.	6.	24.30	2619.		NUCL.PHYS.,A172,426(1971)	H.BEIL+
10024016	56-BA		G,SN	15.307	364.	4.	24.30	2248.	146.	NUCL.PHYS.,A172,426(1971)	H.BEIL+
10024003	56-BA		G,N	15.307	364.	4.	24.30	1877.		NUCL.PHYS.,A172,426(1971)	H.BEIL+
10024004	56-BA		G,2N	18.031	63.	6.5	24.30	371.		NUCL.PHYS.,A172,426(1971)	H.BEIL+
10019004	56-BA	138	G,XN	15.291	337.69	7.	27.10	2536.		PHYS.REV.,C2,2318(1970)	B.L.BERMAN+
10019008	56-BA	138	G,SN	15.291	337.27	4.5	27.10	2040.	130.	PHYS.REV.,C2,2318(1970)	B.L.BERMAN+
10019005	56-BA	138	G,N	15.291	336.44	4.	27.10	1547.		PHYS.REV.,C2,2318(1970)	B.L.BERMAN+
m0367003	56-BA	138	G,N	15.33	353.86	4.5	21.20	1870.5	124.6	IZV.AN SSSR,55,953(1991)	S.N.BELJAEV+
10019006	56-BA	138	G,2N	18.698	76.83	7.	27.10	490.		PHYS.REV.,C2,2318(1970)	B.L.BERMAN+
10019007	56-BA	138	G,3N	28.608	11.3		27.10	3.		PHYS.REV.,C2,2318(1970)	B.L.BERMAN+
10019007							28.60	13.			
m0398004	57-LA	139	G,XN	15.37	420.	4.5	24.00	2510.	158.	NUCL.PHYS.,A191,305(1972)	T.K.DEAQUE+
10024005	57-LA	139	G,XN	15.307	340.	5.5	24.30	2269.		NUCL.PHYS.,A172,426(1971)	H.BEIL+
	57-LA	139	G,XN	14.8	325.	4.	30.00	1760.		PHYS.REV.,134,B557(1964)	L.B.RICE+
	57-LA	139	G,XN	15.5	358.	6.5	21.20	1910.		NUCL.PHYS.,32,236(1962)	J.MILLER+
10024017	57-LA	139	G,SN	15.307	340.	4.	24.30	1978.	128.	NUCL.PHYS.,A172,426(1971)	H.BEIL+
	57-LA	139	G,SN	14.5	305.	3.5	30.00	1360.		PHYS.REV.,134,B557(1964)	L.B.RICE+
10012003	57-LA	139	G,N	14.88	363.7	4.	25.50	1873.4	125.1	NUCL.PHYS.,A121,463(1968)	R.BERGERE+
10024018	57-LA	139	G,N	15.307	340.	4.	24.30	1687.		NUCL.PHYS.,A172,426(1971)	H.BEIL+
m0367004	57-LA	139	G,N	15.09	364.84	4.5	22.60	1981.5	129.8	IZV.AN SSSR,55,953(1991)	S.N.BELJAEV+
10024007	57-LA	139	G,2N	18.848	53.0	8.	29.00	291.		NUCL.PHYS.,A172,426(1971)	H.BEIL+
10012004	57-LA	139	G,2N	18.41	53.9	8.	24.30	291.		NUCL.PHYS.,A121,463(1968)	R.BERGERE+
	57-LA	139	G,3N	30.38	12.5	>10.	28.60	13.		NUCL.PHYS.,A172,426(1971)	H.BEIL+
10012005	57-LA	139	G,3N	30.38	12.5	>10.	28.60	13.		NUCL.PHYS.,A121,463(1968)	R.BERGERE+
10024008	58-CE		G,XN	15.307	383.16	>5.	16.90	1561.9	111.7	NUCL.PHYS.,A172,426(1971)	H.BEIL+
10015023	58-CE		G,XN	14.88	369.1	5.5	30.00	2300.	140.	NUCL.PHYS.,A133,417(1969)	R.BERGERE+
	58-CE		G,XN	15.9	381.5	5.5	21.20	1880.		NUCL.PHYS.,32,236(1962)	J.MILLER+
10015023	58-CE		G,SN	14.88	369.1	5.5	30.00	2300.	140.	NUCL.PHYS.,A133,417(1969)	R.BERGERE+
10024019	58-CE		G,SN	15.307	359.16	>5.	16.90	1495.1	107.3	NUCL.PHYS.,A172,426(1971)	H.BEIL+
10015007	58-CE		G,N	14.88	348.8	4.	23.30	1761.8	121.7	NUCL.PHYS.,A133,417(1969)	R.BERGERE+

EXFOR	NUCL	A	REACT	E-MAX MEV	SIG MB	FWHM MEV	E-INT MEV	SIG-INT MEV*MB	SIG-INT-1 MB	REFERENCE	AUTHOR
10024009	58-CE		G,N	15.034	338.93	>5	16.90	1428.3	103.	NUCL.PHYS.,A172,426(1971)	H.BEIL+
10015008	58-CE		G,2N	20.56	52.4	7.5	29.60	472.6	23.5	NUCL.PHYS.,A133,417(1969)	R.BERGERE+
10015008				15.69	27.1						
10015008				18.96	51.4						
10024010	58-CE		G,2N	15.852	27.	>7.	16.90	66.6	4.3	NUCL.PHYS.,A172,426(1971)	H.BEIL+
10015009	58-CE		G,3N	29.02	7.7	>6.	29.60	19.8	.7	NUCL.PHYS.,A133,417(1969)	R.BERGERE+
10042016	58-CE	140	G,XN	15.07	390.9	7.	26.50	2855.		NUCL.PHYS.,A258,350(1976)	A.LEPRETRE+
	58-CE	140	G,SN	15.07	390.9	4.	26.50	2398.	153.	NUCL.PHYS.,A258,350(1976)	A.LEPRETRE+
10042014	58-CE	140	G,N	15.07	390.9	3.5	26.50	1941.		NUCL.PHYS.,A258,350(1976)	A.LEPRETRE+
m0367005	58-CE	140	G,N	15.33	361.78	4.5	21.70	1825.5	120.7	IZV.AN SSSR,55,953(1991)	S.N.BELJAEV+
m0367005				9.69	37.1						
10042015	58-CE	140	G,2N	20.49	65.5	8.	26.50	457.		NUCL.PHYS.,A258,350(1976)	A.LEPRETRE+
10042019	58-CE	142	G,XN	15.34	553.4	5.	23.50	3394.		NUCL.PHYS.,A258,350(1976)	A.LEPRETRE+
	58-CE	142	G,SN	15.34	332.	6.	23.50	2208.	150.	NUCL.PHYS.,A258,350(1976)	A.LEPRETRE+
10042017	58-CE	142	G,N	12.91	186.1	4.	23.50	1022.		NUCL.PHYS.,A258,350(1976)	A.LEPRETRE+
10042018	58-CE	142	G,2N	15.07	239.1	4.	23.50	1186.		NUCL.PHYS.,A258,350(1976)	A.LEPRETRE+
m0398002	59-PR	141	G,XN	15.49	404.3	4.	24.00	1840.	121.	NUCL.PHYS.,A191,305(1972)	T.K.DEAQUE+
10024012	59-PR	141	G,XN	15.034	359.27	4.5	16.90	1422.	101.	NUCL.PHYS.,A172,426(1971)	H.BEIL+
10009005	59-PR	141	G,XN	14.982	332.66	4.5	29.80	2412.		PHYS.REV.,148,1198(1966)	R.L.BRAMBLETT+
10057008	59-PR	141	G,XN	15.416	338.43	4.5	16.90	1143.6	77.3	PHYS.REV.,C36,1286(1987)	B.L.BERMAN+
	59-PR	141	G,XN	14.8	315.	9.	30.00	1760.		PHYS.REV.,134,B557(1964)	L.B.RICE+
				20.	175.						
10057008	59-PR	141	G,SN	15.416	338.43	4.5	16.90	1143.6	77.3	PHYS.REV.,C36,1286(1987)	B.L.BERMAN+
	59-PR	141	G,SN	14.9	450.	4.5				NUCL.PHYS.,A406,257(1983)	T.J.BOAL+
	59-PR	141	G,SN	15.03	359.27	4.5	16.90	1422.	101.	NUCL.PHYS.,A172,426(1971)	H.BEIL+
10009010	59-PR	141	G,SN	14.982	332.66	4.	29.80	2062.	128.	PHYS.REV.,148,1198(1966)	R.L.BRAMBLETT+
	59-PR	141	G,SN	14.8	305.	8.	30.00	1470.		PHYS.REV.,134,B557(1964)	L.B.RICE+
				20.	170.						
10057008	59-PR	141	G,N	15.416	338.43	4.5	16.90	1143.6	77.3	PHYS.REV.,C36,1286(1987)	B.L.BERMAN+
10024012	59-PR	141	G,N	15.034	359.27	4.5	16.90	1422.	101.	NUCL.PHYS.,A172,426(1971)	H.BEIL+
10009006	59-PR	141	G,N	14.982	335.56	4.	29.80	1717.		PHYS.REV.,148,1198(1966)	R.L.BRAMBLETT+
	59-PR	141	G,N	15.	380.	4.5	30.00	1790.		PHYS.REV.,143,B730(1966)	B.C.COOK+
m0367006	59-PR	141	G,N	15.09	355.97	4.5	23.50	1854.1	121.1	IZV.AN SSSR,55,953(1991)	S.N.BELJAEV+
m0367006				9.81	35.57						
10059003	59-PR	141	G,N	15.358	351.68	4.5	18.10	1395.	94.	T,YOUNG,72	L.M.YOUNG
m0345004	59-PR	141	G,N	15.52	359.5	4.5	17.60	1427.1	98.4	YAD.KONST.,1,52(1993)	V.V.VARLAMOV+
m0345004				14.61	326.7						
m0345004				14.94	344.9						
m0345004				16.06	308.7						
10020002	59-PR	141	G,1N	15.39	352.	4.5	23.70	1713.		PHYS.REV.C2,1129(1970)	R.E.SUND+
10009007	59-PR	141	G,2N	19.937	59.34	5.	29.80	340.		PHYS.REV.,148,1198(1966)	R.L.BRAMBLETT+
10009008	59-PR	141	G,3N	32.65	16.5	>4.	29.80	5.		PHYS.REV.,148,1198(1966)	R.L.BRAMBLETT+
10009008							33.00	36.			
10024013	60-ND		G,XN	15.307	402.33	4.5	18.00	1882.		NUCL.PHYS.,A172,426(1971)	H.BEIL+
10024020	60-ND		G,SN	15.307	319.9	4.5	18.00	1559.	112.	NUCL.PHYS.,A172,426(1971)	H.BEIL+
10024014	60-ND		G,N	14.626	252.19	4.	18.00	1236.		NUCL.PHYS.,A172,426(1971)	H.BEIL+
10024015	60-ND		G,2N	16.805	100.09	3.	18.00	323.		NUCL.PHYS.,A172,426(1971)	H.BEIL+
10025002	60-ND	142	G,XN	14.898	364.41	5.	20.20	1918.		NUCL.PHYS.,A172,437(1971)	P.CARLOS+
10025023	60-ND	142	G,SN	14.898	364.41	4.	20.20	1873.	126.	NUCL.PHYS.,A172,437(1971)	P.CARLOS+
10025003	60-ND	142	G,N	14.898	364.41	4.	20.20	1828.		NUCL.PHYS.,A172,437(1971)	P.CARLOS+
m0367007	60-ND	142	G,N	15.03	377.02	4.5	22.60	1948.7	126.7	IZV.AN SSSR,55,953(1991)	S.N.BELJAEV+
m0367007				19.62	115.75						
10025004	60-ND	142	G,2N	19.938	30.7	>4.	20.20	45.		NUCL.PHYS.,A172,437(1971)	P.CARLOS+
10025005	60-ND	143	G,XN	15.443	369.22	6.	19.80	2054.		NUCL.PHYS.,A172,437(1971)	P.CARLOS+
10025024	60-ND	143	G,SN	15.443	346.92	4.5	19.80	1875.	130.	NUCL.PHYS.,A172,437(1971)	P.CARLOS+
10025006	60-ND	143	G,N	14.898	337.63	3.5	19.80	1696.		NUCL.PHYS.,A172,437(1971)	P.CARLOS+
10025007	60-ND	143	G,2N	17.622	65.05	9.	19.80	179.		NUCL.PHYS.,A172,437(1971)	P.CARLOS+
10025007				15.443	22.3						
10025007				19.257	52.66						
10025008	60-ND	144	G,XN	15.307	434.43	5.	20.20	2445.		NUCL.PHYS.,A172,437(1971)	P.CARLOS+
10025025	60-ND	144	G,SN	15.307	326.63	5.	20.20	1882.	128.	NUCL.PHYS.,A172,437(1971)	P.CARLOS+
10025009	60-ND	144	G,N	14.081	273.81	4.5	20.20	1319.		NUCL.PHYS.,A172,437(1971)	P.CARLOS+
10025010	60-ND	144	G,2N	16.396	139.06	4.5	20.20	563.		NUCL.PHYS.,A172,437(1971)	P.CARLOS+
10025011	60-ND	145	G,XN	15.579	476.73	4.5	20.20	2694.		NUCL.PHYS.,A172,437(1971)	P.CARLOS+
10025026	60-ND	145	G,SN	15.579	325.46	6.	20.20	2037.	147.	NUCL.PHYS.,A172,437(1971)	P.CARLOS+
10025012	60-ND	145	G,N	13.672	250.97	5.	20.20	1380.		NUCL.PHYS.,A172,437(1971)	P.CARLOS+
10025013	60-ND	145	G,2N	15.852	154.71	4.	20.20	657.		NUCL.PHYS.,A172,437(1971)	P.CARLOS+
10025014	60-ND	146	G,XN	15.034	457.88	5.	20.20	2587.		NUCL.PHYS.,A172,437(1971)	P.CARLOS+
10025027	60-ND	146	G,SN	15.307	311.63	4.5.	20.20	1920.	133.	NUCL.PHYS.,A172,437(1971)	P.CARLOS+
	60-ND	146	G,SN	13.8	332.	4.1	23.00	2120.		YAD.FIZ.,13,463(1971)	O.V.VASIL'EV+
10025015	60-ND	146	G,N	13.809	254.25	3.5	20.20	1253.		NUCL.PHYS.,A172,437(1971)	P.CARLOS+

EXFOR	NUCL	A	REACT	E-MAX MEV	SIG MB	FWHM MEV	E-INT MEV	SIG-INT MEV*MB	SIG-INT-1 MB	REFERENCE	AUTHOR
10025016	60-ND	146	G,2N	16.124	177.75	3.5	20.20	667.		NUCL.PHYS.,A172,437(1971)	P.CARLOS+
10025017	60-ND	148	G,XN	15.715	467.8	5.5	18.80	2537.		NUCL.PHYS.,A172,437(1971)	P.CARLOS+
	60-ND	148	G,XN	14.2	600.	4.5				YAD.FIZ.,10,460(1969)	O.V.VASIL'EV+
				15.9	545.						
10025028	60-ND	148	G,SN	14.762	270.	7.	18.80	1702.	122.	NUCL.PHYS.,A172,437(1971)	P.CARLOS+
	60-ND	148	G,SN	13.5	440.	5.	22.00	2406.		YAD.FIZ.,10,460(1969)	O.V.VASIL'EV+
				15.9	275.						
10025018	60-ND	148	G,N	12.583	192.6	3.	18.80	867.		NUCL.PHYS.,A172,437(1971)	P.CARLOS+
10025019	60-ND	148	G,2N	15.715	214.8	3.5	18.80	835.		NUCL.PHYS.,A172,437(1971)	P.CARLOS+
10025020	60-ND	150	G,XN	15.579	456.33	7.	20.20	3185.		NUCL.PHYS.,A172,437(1971)	P.CARLOS+
	60-ND	150	G,XN	15.9	605.	4.5				YAD.FIZ.,10,460(1969)	O.V.VASIL'EV+
				14.7	545.						
10025029	60-ND	150	G,SN	15.579	270.84	8.	20.20	2011.	142.	NUCL.PHYS.,A172,437(1971)	P.CARLOS+
10025029				12.855	236.7						
	60-ND	150	G,SN	13.3	340.	5.5	22.00	2213.		YAD.FIZ.,10,460(1969)	O.V.VASIL'EV+
				15.9	335.						
10025021	60-ND	150	G,N	12.31	236.7	3.	20.20	1174.		NUCL.PHYS.,A172,437(1971)	P.CARLOS+
10025022	60-ND	150	G,2N	15.579	185.49	5.	20.20	837.		NUCL.PHYS.,A172,437(1971)	P.CARLOS+
	62-SM		G,XN	14.88	438.3	7.	25.20	3247.		NUCL.PHYS.,A133,417(1969)	R.BERGERE+
10015024	62-SM		G,SN	14.88	338.3	6.	25.20	2425.	164.	NUCL.PHYS.,A133,417(1969)	R.BERGERE+
10015011	62-SM		G,N	14.33	293.7	5.	25.20	1628.		NUCL.PHYS.,A133,417(1969)	R.BERGERE+
10015012	62-SM		G,2N	16.24	149.	5.	25.20	772.		NUCL.PHYS.,A133,417(1969)	R.BERGERE+
10015013	62-SM		G,3N	27.39	20.8	>10.	25.20	25.		NUCL.PHYS.,A133,417(1969)	R.BERGERE+
10015013							27.40	59.			
10033002	62-SM	144	G,XN	15.37	403.	4.5	20.80	1970.		NUCL.PHYS.,A225,171(1974)	P.CARLOS+
10033017	62-SM	144	G,SN	15.37	391.5	4.5	20.80	1935.	126.	NUCL.PHYS.,A225,171(1974)	P.CARLOS+
10033003	62-SM	144	G,N	15.37	380.	4.	20.80	1900.		NUCL.PHYS.,A225,171(1974)	P.CARLOS+
10033004	62-SM	144	G,2N	20.79	31.7		20.80	35.		NUCL.PHYS.,A225,171(1974)	P.CARLOS+
10033004				16.19	20.5						
10033005	62-SM	148	G,XN	15.64	408.5	6.	20.00	2498.		NUCL.PHYS.,A225,171(1974)	P.CARLOS+
	62-SM	148	G,SN	14.1	335.	4.	22.00	2080.	137.	YAD.FIZ.,13,463(1971)	O.V.VASIL'EV+
10033018	62-SM	148	G,SN	14.56	337.8	5.5	20.00	1942.	134.	NUCL.PHYS.,A225,171(1974)	P.CARLOS+
10033006	62-SM	148	G,N	14.56	331.1	5.5	20.00	1386.		NUCL.PHYS.,A225,171(1974)	P.CARLOS+
10033007	62-SM	148	G,2N	16.73	149.9	6.	20.00	556.		NUCL.PHYS.,A225,171(1974)	P.CARLOS+
10033008	62-SM	150	G,XN	15.92	449.2	6.	19.80	2687.		NUCL.PHYS.,A225,171(1974)	P.CARLOS+
	62-SM	150	G,XN	15.9	500.	5.5				YAD.FIZ.,10,460(1969)	O.V.VASIL'EV+
	62-SM	150	G,SN	13.6	360.	5.5	23.00	2213.	203.	YAD.FIZ.,10,460(1969)	O.V.VASIL'EV+
10033019	62-SM	150	G,SN	14.7	322.2	6.5	19.80	1991.	141.	NUCL.PHYS.,A225,171(1974)	P.CARLOS+
10033009	62-SM	150	G,N	14.15	302.3	4.	19.80	1295.		NUCL.PHYS.,A225,171(1974)	P.CARLOS+
10033010	62-SM	150	G,2N	16.32	179.	4.	19.80	696.		NUCL.PHYS.,A225,171(1974)	P.CARLOS+
10033010				19.03	114.9						
10033011	62-SM	152	G,XN	16.32	432.1	7.5	20.00	2707.		NUCL.PHYS.,A225,171(1974)	P.CARLOS+
10033011				13.21	259.3						
	62-SM	152	G,XN	14.6	560.	5.5				YAD.FIZ.,10,460(1969)	O.V.VASIL'EV+
				11.2	507.						
	62-SM	152	G,SN	11.2	507.	2.4	25.00	3079.	264.	YAD.FIZ.,10,460(1969)	O.V.VASIL'EV+
				14.7	502.						
10033020	62-SM	152	G,SN	15.64	281.3	7.5	20.00	2026.	143.	NUCL.PHYS.,A225,171(1974)	P.CARLOS+
10033020				12.21	258.1						
10033012	62-SM	152	G,N	12.53	257.3	4.5	20.00	1345.		NUCL.PHYS.,A225,171(1974)	P.CARLOS+
10033013	62-SM	152	G,2N	16.86	178.5	4.	20.00	681.		NUCL.PHYS.,A225,171(1974)	P.CARLOS+
m0073002	62-SM	154	G,ABS	12.35	277.	7.5	20.00	1940.	286.	NUCL.PHYS.,A351,257(1981)	G.M.GUREVICH+
m0073002				15.53	255.						
10033014	62-SM	154	G,XN	16.19	420.3	8.5	21.10	2841.		NUCL.PHYS.,A225,171(1974)	P.CARLOS+
10033014				12.39	252.1						
	62-SM	154	G,XN	16.6	460.	5.5				YAD.FIZ.,10,460(1969)	O.V.VASIL'EV+
				11.	254.						
	62-SM	154	G,SN	15.3	400.	3.	23.00	2478.	202.	YAD.FIZ.,10,460(1969)	O.V.VASIL'EV+
				11.	254.						
10033021	62-SM	154	G,SN	12.39	252.1	8.	21.10	2059.	144.	NUCL.PHYS.,A225,171(1974)	P.CARLOS+
10033021				15.92	248.8						
10033015	62-SM	154	G,N	12.39	252.1	4.5	21.10	1277.		NUCL.PHYS.,A225,171(1974)	P.CARLOS+
10033016	62-SM	154	G,2N	16.73	178.9	4.	21.10	782.		NUCL.PHYS.,A225,171(1974)	P.CARLOS+
	63-EU	151	G,XN	16.	400.	6.				NUCL.PHYS.,A406,257(1983)	T.J.BOAL+
	63-EU	151	G,SN	14.36	303.	5.1	24.50	1970.	133.	NUCL.PHYS.,A406,257(1983)	T.J.BOAL+
	63-EU	151	G,SN	14.	285.	4.5	22.00	2020.	131.	YAD.FIZ.,13,463(1971)	O.V.VASIL'EV+
	63-EU	153	G,XN	16.5	340.	9.				NUCL.PHYS.,A406,257(1983)	T.J.BOAL+
				12.8	230.						
10016002	63-EU	153	G,XN	16.84	316.04	9.	28.90	3017.		PHYS.REV.,185,1576(1969)	B.L.BERMAN+
10016002				12.814	239.22						
	63-EU	153	G,SN	12.8	240.	7.5	24.50	2000.	134.	NUCL.PHYS.,A406,257(1983)	T.J.BOAL+

EXFOR	NUCL	A	REACT	E-MAX MEV	SIG MB	FWHM MEV	E-INT MEV	SIG-INT MEV*MB	SIG-INT-1 MB	REFERENCE	AUTHOR
				15.	225.						
10016018	63-EU	153	G,SN	15.601	259.78	8.	28.90	2273.	148.	PHYS.REV.,185,1576(1969)	B.L.BERMAN+
10016018				12.814	239.22						
10016003	63-EU	153	G,N	14.67	244.55	7.	28.90	1566.		PHYS.REV.,185,1576(1969)	B.L.BERMAN+
10016003				12.814	239.31						
10016004	63-EU	153	G,2N	16.84	98.55	7.	28.90	670.		PHYS.REV.,185,1576(1969)	B.L.BERMAN+
10016005	63-EU	153	G,3N	27.679	17.68	3.	28.90	37.		PHYS.REV.,185,1576(1969)	B.L.BERMAN+
	64-GD	152	G,SN	15.	259.	3.	22.00	1990.	135.	YAD.FIZ.,13,463(1971)	O.V.VASIL'EV+
				12.	147.						
	64-GD	154	G,SN	15.	250.	2.4	22.00	2000.	133.	YAD.FIZ.,13,463(1971)	O.V.VASIL'EV+
				11.9	161.						
m0073003	64-GD	156	G,ABS	12.23	296.	7.5	20.00	2070.	295.	NUCL.PHYS.,A351,257(1981)	G.M.GUREVICH+
m0073003				15.33	296.						
	64-GD	156	G,XN	16.5	400.	7.5				NUCL.PHYS.,A406,257(1983)	T.J.BOAL+
				13.	275.						
	64-GD	156	G,SN	15.	295.	7.5	24.50	2130.	144.	NUCL.PHYS.,A406,257(1983)	T.J.BOAL+
				13.	275.						
	64-GD	156	G,SN	15.2	243.	2.6	22.00	2110.	142.	YAD.FIZ.,13,463(1971)	O.V.VASIL'EV+
				11.9	180.						
	64-GD	158	G,SN	14.9	249.	2.6	22.00	2160.	146.	YAD.FIZ.,13,463(1971)	O.V.VASIL'EV+
				11.7	165.						
10016006	64-GD	160	G,XN	16.066	457.15	8.5	29.50	3748.		PHYS.REV.,185,1576(1969)	B.L.BERMAN+
10016006				12.194	278.09						
10016019	64-GD	160	G,SN	16.066	285.82	8.5	29.50	2533.	169.	PHYS.REV.,185,1576(1969)	B.L.BERMAN+
10016019				12.194	278.09						
10016007	64-GD	160	G,N	12.194	279.96	4.	29.50	1398.		PHYS.REV.,185,1576(1969)	B.L.BERMAN+
10016008	64-GD	160	G,2N	16.84	192.78	4.	29.50	1055.		PHYS.REV.,185,1576(1969)	B.L.BERMAN+
10016009	64-GD	160	G,3N	27.37	18.86	>7.	29.50	80.		PHYS.REV.,185,1576(1969)	B.L.BERMAN+
	65-TB	159	G,ABS	17.	400.	5.5	19.00	3111.		ZHETF,42,1502(1962)	O.V.BOGDANKEVICH+
				12.3	330.						
m0057003	65-TB	159	G,XN	16.8	459.	8.	23.00	3390.	213.7	YAD.FIZ.,23,1145(1976)	B.I.GORYACHEV+
m0057003				12.8	294.						
10012006	65-TB	159	G,XN	16.24	344.9	8.5	27.40	3194.		NUCL.PHYS.,A121,463(1968)	R.BERGERE+
10012006				12.16	260.1						
	65-TB	159	G,XN	16.69	331.	7.	28.00	3187.		PHYS.REV.,B133,869(1964)	R.L.BRAMBLETT+
				12.35	259.						
m0057002	65-TB	159	G,SN	15.2	358.	7.	20.80	2475.7	170.1	YAD.FIZ.,23,1145(1976)	B.I.GORYACHEV+
m0057002				12.55	296.						
10012019	65-TB	159	G,SN	15.69	285.8	8.	27.40	2557.	170.	NUCL.PHYS.,A121,463(1968)	R.BERGERE+
10012019				12.16	262.8						
10005003	65-TB	159	G,SN	16.685	331.	6.5	28.00	2300.	151.	PHYS.REV.,B133,869(1964)	R.L.BRAMBLETT+
10005003				12.349	259.						
10012007	65-TB	159	G,N	12.16	265.5	7.	27.40	1936.		NUCL.PHYS.,A121,463(1968)	R.BERGERE+
10012007				15.42	262.1						
10005004	65-TB	159	G,N	12.349	259.	5.	28.00	1413.		PHYS.REV.,B133,869(1964)	R.L.BRAMBLETT+
10005004				15.136	251.						
10012008	65-TB	159	G,2N	17.05	101.	5.	27.40	605.		NUCL.PHYS.,A121,463(1968)	R.BERGERE+
10012008				24.67	38.4						
10005005	65-TB	159	G,2N	17.304	145.	5.	28.00	BB7.		PHYS.REV.,B133,869(1964)	R.L.BRAMBLETT+
10005005				26.75	57.						
10012009	65-TB	159	G,3N	29.29	18.4	>10.	27.40	16.		NUCL.PHYS.,A121,463(1968)	R.BERGERE+
m0073004	67-HO	165	G,ABS	12.4	302.	6.	20.00	1860.	253.	NUCL.PHYS.,A351,257(1981)	G.M.GUREVICH+
m0073004				15.66	282.						
	67-HO	165	G,ABS	12.2	300.	6.				PIS'MA ZHETF,23,411(1976)	G.M.GUREVICH+
				15.7	300.						
m0057004	67-HO	165	G,XN	16.7	508.	10.	22.00	3360.	218.	YAD.FIZ.,23,1145(1976)	B.I.GORYACHEV+
m0057004				12.5	310.						
10016010	67-HO	165	G,XN	16.84	369.66	8.5	28.90	3355.		PHYS.REV.,185,1576(1969)	B.L.BERMAN+
10016010				12.504	290.79						
10012010	67-HO	165	G,XN	16.24	416.8	7.5	26.80	3667.		NUCL.PHYS.,A121,463(1968)	R.BERGERE+
10012010				12.16	322.4						
	67-HO	165	G,XN	16.3	395.	7.5				J.PHYS.ET RAD.,27,262(1966)	P.AXEL+
				12.1	305.						
	67-HO	165	G,XN	15.8	365.	8.5				PHYS.REV.,129,2723(1963)	R.L.BRAMBLETT+
				12.1	275.						
10016020	67-HO	165	G,SN	12.5	290.79	8.	28.90	2523.	166.	PHYS.REV.,185,1576(1969)	B.L.BERMAN+
10016020				16.53	254.36						
10012020	67-HO	165	G,SN	15.42	324.7	2.5	26.80	2871.	194.	NUCL.PHYS.,A121,463(1968)	R.BERGERE+
10012020				12.16	323.2						
	67-HO	165	G,SN	15.4	335.	7.5				J.PHYS.ET RAD.,27,262(1966)	P.AXEL+
				12.1	305.						

EXFOR	NUCL	A	REACT	E-MAX MEV	SIG MB	FWHM MEV	E-INT MEV	SIG-INT MEV*MB	SIG-INT-1 MB	REFERENCE	AUTHOR
	67-HO	165	G,SN	15.8	335.	8.5	28.00	2370.		PHYS.REV.,129,2723(1963)	R.L.BRAMBLETT+
				12.1	295.						
m0057006	67-HO	165	G,SN	16.7	348.	8.	20.00	3000.	218.	YAD.FIZ.,23,1145(1976)	B.I.GORYACHEV+
m0057006				12.5	308.						
10016011	67-HO	165	G,N	12.504	290.91	6.	28.90	1735.		PHYS.REV.,185,1576(1969)	B.L.BERMAN+
10016011				14.982	265.41						
10012011	67-HO	165	G,N	12.16	323.9	6.	26.80	2090.		NUCL.PHYS.,A121,463(1968)	R.BERGERE+
10012011				14.88	301.9						
	67-HO	165	G,N	12.	275.	5.5				PHYS.REV.,129,2723(1963)	R.L.BRAMBLETT+
				15.2	275.						
m0057005	67-HO	165	G,2N	17.3	181.	5.	20.70	675.7	37.8	YAD.FIZ.,23,1145(1976)	B.I.GORYACHEV+
10016012	67-HO	165	G,2N	16.84	128.07	5.5	28.90	744.		PHYS.REV.,185,1576(1969)	B.L.BERMAN+
10012012	67-HO	165	G,2N	17.32	130.9	6.	26.80	766.		NUCL.PHYS.,A121,463(1968)	R.BERGERE+
	67-HO	165	G,2N	17.4	105.	4.5				J.PHYS. ET RAD.,27,262(1966)	P.AXEL+
	67-HO	165	G,2N	17.5	150.	5.5				PHYS.REV.,129,2723(1963)	R.L.BRAMBLETT+
10016013	67-HO	165	G,3N	28.299	21.21	>5.	28.90	44.		PHYS.REV.,185,1576(1969)	B.L.BERMAN+
10012013	67-HO	165	G,3N	28.48	21.7	>10.	26.80	15.		NUCL.PHYS.,A121,463(1968)	R.BERGERE+
10012013							28.50	45.			
	68-ER		G,XN	15.15	405.3	5.5	21.10	2973.		NUCL.PHYS.,A133,417(1969)	R.BERGERE+
				12.16	308.6						
10015025	68-ER		G,SN	12.16	308.6	2.8	21.10	2387.	172.	NUCL.PHYS.,A133,417(1969)	R.BERGERE+
				15.15	305.3						
10015015	68-ER		G,N	12.16	308.6	5.5	21.10	1801.		NUCL.PHYS.,A133,417(1969)	R.BERGERE+
10015015				14.88	259.3						
10015016	68-ER		G,2N	16.78	126.1	5.5	21.10	586.		NUCL.PHYS.,A133,417(1969)	R.BERGERE+
10015016							27.40	768.			
10015017	68-ER		G,3N	27.66	18.7	>15.	27.70	52.		NUCL.PHYS.,A133,417(1969)	R.BERGERE+
m0057007	68-ER	166	G,XN	16.8	451.	8.5	22.00	3560.	216.	YAD.FIZ.,23,1145(1976)	B.I.GORYACHEV+
m0057007				12.6	297.						
m0057009	68-ER	166	G,SN	16.	358.	7.5	20.00	3360.	216.	YAD.FIZ.,23,1145(1976)	B.I.GORYACHEV+
m0057009				12.6	297.						
m0057008	68-ER	166	G,2N	18.1	182.	4.5	20.50	590.5	32.8	YAD.FIZ.,23,1145(1976)	B.I.GORYACHEV+
m0057008				17.4	155.						
m0057008				19.1	152.						
m0073005	68-ER	168	G,ABS	15.25	342.	7.5	20.00	2240.	307.	NUCL.PHYS.,A351,257(1981)	G.M.GUREVICH+
m0073005				12.01	311.						
m0318002	70-YB	170	G,XN	15.82	379.	7.	20.20	2492.7	175.7	VOPR.TEOR.YAD.FIZ.,5,42(1976)	A.M.GORYACHEV+
m0318002				12.62	351.						
m0318003	70-YB	171	G,XN	15.42	389.	6.5	20.20	2450.3	174.7	VOPR.TEOR.YAD.FIZ.,5,42(1976)	A.M.GORYACHEV+
m0318003				12.42	364.						
m0318004	70-YB	172	G,XN	12.42	365.	6.	20.20	2423.7	173.2	VOPR.TEOR.YAD.FIZ.,5,42(1976)	A.M.GORYACHEV+
m0318004				15.62	360.						
m0318005	70-YB	173	G,XN	15.62	405.	6.5	20.20	2494.9	178.	VOPR.TEOR.YAD.FIZ.,5,42(1976)	A.M.GORYACHEV+
m0318005				12.22	372.						
m0073006	70-YB	174	G,ABS	15.19	403.	7.5	20.00	2690.	382.	NUCL.PHYS.,A351,257(1981)	G.M.GUREVICH+
m0073006				12.18	400.						
m0318006	70-YB	174	G,XN	15.22	382.	6.	20.20	2517.8	180.7	VOPR.TEOR.YAD.FIZ.,5,42(1976)	A.M.GORYACHEV+
m0318006				12.42	345.						
m0318007	70-YB	176	G,XN	15.62	370.	7.	20.20	2529.7	182.1	VOPR.TEOR.YAD.FIZ.,5,42(1976)	A.M.GORYACHEV+
m0318007				12.42	369.						
	71-LU	175	G,XN	15.15	431.4	8.	23.00	3142.		NUCL.PHYS.,A133,417(1969)	R.BERGERE+
				12.43	315.4						
10015026	71-LU	175	G,SN	15.15	330.6	7.	23.00	2507.	173.	NUCL.PHYS.,A133,417(1969)	R.BERGERE+
10015026				12.43	315.2						
10015019	71-LU	175	G,N	12.43	315.4	6.	23.00	1872.		NUCL.PHYS.,A133,417(1969)	R.BERGERE+
10015019				14.6	302.4						
10015020	71-LU	175	G,2N	16.78	132.3	5.5	23.00	635.		NUCL.PHYS.,A133,417(1969)	R.BERGERE+
10015020							28.50	742.			
10015021	71-LU	175	G,3N	27.39	25.4	>8.	28.50	65.		NUCL.PHYS.,A133,417(1969)	R.BERGERE+
	71-LU	175	G,SN	12.4	270.	2.6	25.00	2900.	206.	NUCL.PHYS.,A121,463(1968)	R.BERGERE+
	72-HF	176	G,XN	16.7	445.	7.5				YAD.FIZ.,26,465(1977)	A.M.GORYACHEV+
				12.2	385.						
m0007002	72-HF	176	G,SN	12.42	374.7	6.5	20.00	2571.	184.	YAD.FIZ.,26,465(1977)	A.M.GORYACHEV+
m0007002				15.04	356.9						
m0073007	72-HF	178	G,ABS	12.37	415.	7.5	20.00	2850.	399.	NUCL.PHYS.,A351,257(1981)	G.M.GUREVICH+
m0073007				14.58	406.						
	72-HF	178	G,ABS	12.2	410.	7.5				PIS'MA ZHETF,23,411(1976)	G.M.GUREVICH+
				14.7	400.						
	72-HF	178	G,XN	16.	525.	9.				YAD.FIZ.,26,465(1977)	A.M.GORYACHEV+
				12.	395.						

EXFOR	NUCL	A	REACT	E-MAX MEV	SIG MB	FWHM MEV	E-INT MEV	SIG-INT MEV*MB	SIG-INT-1 MB	REFERENCE	AUTHOR
m0057010	72-HF	178	G,XN	16.	561.	7.	22.00	3080.	196.	YAD.FIZ.,23,1145(1976)	B.I.GORYACHEV+
m0057010				12.7	344.						
m0007003	72-HF	178	G,SN	12.54	387.5	6.5	20.00	2580.	185.	YAD.FIZ.,26,465(1977)	A.M.GORYACHEV+
m0007003				15.79	355.3						
m0057012	72-HF	178	G,SN	14.5	379.	6.	20.00	3080.	196.	YAD.FIZ.,23,1145(1976)	B.I.GORYACHEV+
m0057012				12.5	298.						
m0057012				16.	318.						
m0057011	72-HF	178	G,2N	16.	246.	4.5	20.00	887.2	52.3	YAD.FIZ.,23,1145(1976)	B.I.GORYACHEV+
m0073008	72-HF	180	G,ABS	12.28	430.	7.5	20.00	2720.	403.	NUCL.PHYS.,A351,257(1981)	G.M.GUREVICH+
m0073008				15.77	409.						
	72-HF	180	G,ABS	12.2	440.	7.5				PIS'MA ZHETF,23,411(1976)	G.M.GUREVICH+
				15.6	400.						
	72-HF	180	G,XN	15.9	575.	9.				YAD.FIZ.,26,465(1977)	A.M.GORYACHEV+
				12.5	375.						
m0007004	72-HF	180	G,SN	12.54	372.4	7.	20.00	2535.	182.	YAD.FIZ.,26,465(1977)	A.M.GORYACHEV+
m0007004				15.29	353.7						
m0073009	73-TA	181	G,ABS	14.54	409.	7.5	20.00	2840.	381.	NUCL.PHYS.,A351,257(1981)	G.M.GUREVICH+
	73-TA	181	G,ABS	12.5	410.	7.5				PIS'MA ZHETF,23,411(1976)	G.M.GUREVICH+
				15.	410.						
	73-TA	181	G,XN	15.8	446.	7.5				AUSTR.J.PHYS.,26,585(1973)	R.S.HICKS+
				12.4	380.						
	73-TA	181	G,XN	15.4	516.	7.5				PIS'MA ZHETF,10,80(1969)	B.S.ISHKHANOV+
				12.6	370.						
10012014	73-TA	181	G,XN	15.42	510.2	8.	25.20	3799.		NUCL.PHYS.,A121,463(1968)	R.BERGERE+
10012014				12.43	371.						
	73-TA	181	G,XN	15.5	558.2	6.5				IZV.AN SSSR,31,336(1967)	G.P.ANTROPOV+
				12.	354.						
	73-TA	181	G,XN	15.91	476.	8.	24.60	3062.		PHYS.REV.,129,2723(1963)	R.L.BRAMBLETT+
				12.84	300.						
	73-TA	181	G,XN	15.5	506.	7.	23.00	3700.		ZHETF,42,1502(1962)	O.V.BOGDANKEVICH+
				12.4	420.						
	73-TA	181	G,XN	17.	388.9	8.	22.00	2970.		NUCL.PHYS.,32,236(1962)	J.MILLER+
				13.	293.8						
	73-TA	181	G,XN	12.45	415.	6.5				PHYS.REV.,112,560(1958)	E.G.FULLER+
				15.45	410.						
10012021	73-TA	181	G,SN	15.42	384.9	6.5	25.20	2983.	205.	NUCL.PHYS.,A121,463(1968)	R.BERGERE+
10012021				12.7	368.2						
10003002	73-TA	181	G,SN	15.91	446.	5.5	24.60	2181.	149.	PHYS.REV.,129,2723(1963)	R.L.BRAMBLETT+
10003002				12.814	300.						
	73-TA	181	G,SN	15.0	342.1	7.5	20.00	2300.		IZV.AN SSSR,31,336(1967)	G.P.ANTROPOV+
				12.	316.						
10012015	73-TA	181	G,N	12.7	367.1	5.	25.20	2180.		NUCL.PHYS.,A121,463(1968)	R.BERGERE+
10012015				14.06	356.2						
10003003	73-TA	181	G,N	12.814	300.	4.	24.61	1300.		PHYS.REV.,129,2723(1963)	R.L.BRAMBLETT+
m0273011	73-TA	181	G,N	14.	80.	5.	18.00	396.5	29.3	CAN.J.PHYS.,29,518(1951)	L.KATZ+
10012016	73-TA	181	G,2N	16.5	158.7	4.5	25.20	790.		NUCL.PHYS.,A121,463(1968)	R.BERGERE+
10003004	73-TA	181	G,2N	15.91	196.	4.	24.61	881.		PHYS.REV.,129,2723(1963)	R.L.BRAMBLETT+
	73-TA	181	G,2N	16.	252.8	4.5	20.00	1100.		IZV.AN SSSR,31,336(1967)	G.P.ANTROPOV+
10012017	73-TA	181	G,3N	25.48	20.2	7.5	25.20	13.		NUCL.PHYS.,A121,463(1968)	R.BERGERE+
10012017							36.40	137.			
	74-W		G,SN	15.2.	328.	2.7	21.30	2854.	203.	J.PHYSIQUE,36,L-267(1975)	A.VEYSSIERE+
				12.6	268.						
	74-W		G,P	23.	4.3	>15	33.00	50.		ZHETF,17,547(1962)	V.G.SHEVCHENKO+
				20.6	2.2						
	74-W	182	G,ABS	12.5	420.	7.5				PIS'MA ZHETF,23,411(1976)	G.M.GUREVICH+
				15.	390.						
m0073010	74-W	182	G,ABS	12.83	401.	7.5	20.00	2860.	401.	NUCL.PHYS.,A351,257(1981)	G.M.GUREVICH+
	74-W	182	G,XN	14.9	412.	6.5	27.40	3680.		YAD.FIZ.,17,3(1973)	YU.I.SOROKIN+
				12.7	290.						
	74-W	182	G,SN	14.9	390.	5.5	27.40	2780.		YAD.FIZ.,17,3(1973)	YU.I.SOROKIN+
				12.7	290.						
m0025002	74-W	182	G,SN	15.02	427.5	6.	20.80	2885.9	202.3	IZV.AN KAZSSR,6,8(1978)	A.M.GORYACHEV+
m0025002				13.02	420.9						
m0073011	74-W	184	G,ABS	12.02	416.	7.5	20.00	2780.	380.	NUCL.PHYS.,A351,257(1981)	G.M.GUREVICH+
m0073011				14.44	407.						
	74-W	184	G,XN	15.2	525.	6.5	27.40	4880.		YAD.FIZ.,17,3(1973)	YU.I.SOROKIN+
				12.7	300.						
	74-W	184	G,XN	15.6	640.	7.5				YAD.FIZ.,17,463(1973)	A.M.GORYACHEV+
				12.7	390.						
	74-W	184	G,SN	14.3	400.	5.5	27.40	2950.		YAD.FIZ.,17,3(1973)	YU.I.SOROKIN+
				12.7	300.						

EXFOR	NUCL	A	REACT	E-MAX MEV	SIG MB	FWHM MEV	E-INT MEV	SIG-INT MEV*MB	SIG-INT-1 MB	REFERENCE	AUTHOR
	74-W	184	G,SN	15.6	412.	7.				YAD.FIZ.,17,463(1973)	A.M.GORYACHEV+
				12.7	390.						
m0025003	74-W	184	G,SN	13.42	432.1	7.	20.80	2954.8	208.4	IZV.AN KAZSSR,6,8(1978)	A.M.GORYACHEV+
m0025003				15.02	426.2						
m0073012	74-W	186	G,ABS	13.47	449.	7.5	20.00	2900.	395.	NUCL.PHYS.,A351,257(1981)	G.M.GUREVICH+
	74-W	186	G,XN	15.6	645.	6.5				YAD.FIZ.,17,463(1973)	A.M.GORYACHEV+
				12.7	400.						
10016014	74-W	186	G,XN	14.982	612.222	6.	28.60	4502.		PHYS.REV.,185,1576(1969)	B.L.BERMAN+
	74-W	186	G,SN	12.7	400.	7.				YAD.FIZ.,17,463(1973)	A.M.GORYACHEV+
				14.9	385.						
10016021	74-W	186	G,SN	14.672	391.13	6.	28.60	3004.	203.	PHYS.REV.,185,1576(1969)	B.L.BERMAN+
m0025004	74-W	186	G,SN	14.42	448.3	6.5	20.80	2974.2	210.4	IZV.AN KAZSSR,6,8(1978)	A.M.GORYACHEV+
m0025004				12.82	428.1						
10016015	74-W	186	G,N	12.814	390.87	3.5	28.60	1655.		PHYS.REV.,185,1576(1969)	B.L.BERMAN+
10016016	74-W	186	G,2N	15.756	256.28	4.	28.60	1200.		PHYS.REV.,185,1576(1969)	B.L.BERMAN+
10016017	74-W	186	G,3N	28.299	38.03	>8.	28.60	149.		PHYS.REV.,185,1576(1969)	B.L.BERMAN+
	75-RE		G,SN	15.2	375.	2.8	21.60	3226.	227.	J.PHYSIQUE,36,L-267(1975)	A.VEYSSIERE+
				12.6	279.						
	75-RE	185	G,XN	15.9	520.	7.				YAD.FIZ.,17,463(1973)	A.M.GORYACHEV+
				12.7	420.						
	75-RE	185	G,SN	12.7	420.	6.				YAD.FIZ.,17,463(1973)	A.M.GORYACHEV+
				14.9	395.						
	75-RE	187	G,XN	15.2	600.	7.				YAD.FIZ.,17,463(1973)	A.M.GORYACHEV+
				12.7	385.						
	75-RE	187	G,SN	12.7	385.	6.				YAD.FIZ.,17,463(1973)	A.M.GORYACHEV+
				14.8	385.						
	76-OS		G,XN	13.3	430.	5.	27.00	2700.		AUSTR.J.PHYS.,30,677(1977)	S.SU+
10046004	76-OS	186	G,XN	15.88	450.96	7.	19.70	2964.		PHYS.REV.,C19,1205(1979)	B.L.BERMAN+
	76-OS	186	G,SN	15.88	450.96	6.	19.70	2508.	179.	PHYS.REV.,C19,1205(1979)	B.L.BERMAN+
10046002	76-OS	186	G,N	14.291	436.79	4.5	19.70	2040.		PHYS.REV.,C19,1205(1979)	B.L.BERMAN+
10046003	76-OS	186	G,2N	16.613	145.44	4.	19.70	460.		PHYS.REV.,C19,1205(1979)	B.L.BERMAN+
10046008	76-OS	188	G,XN	15.513	561.	6.5	30.40	4731.		PHYS.REV.,C19,1205(1979)	B.L.BERMAN+
10046008				22.356	184.91						
	76-OS	188	G,SN	14.05	490.11	5.5	30.40	3613.	239.	PHYS.REV.,C19,1205(1979)	B.L.BERMAN+
				23.	130.						
10046005	76-OS	188	G,N	14.047	490.11	4.	30.40	2620.		PHYS.REV.,C19,1205(1979)	B.L.BERMAN+
10046005				22.112	93.73						
10046006	76-OS	188	G,2N	16.246	180.82	4.5	30.40	880.		PHYS.REV.,C19,1205(1979)	B.L.BERMAN+
10046007	76-OS	188	G,3N	28.466	24.59	>8.	30.40	120.		PHYS.REV.,C19,1205(1979)	B.L.BERMAN+
10046012	76-OS	189	G,XN	15.269	615.68	5.5	29.90	4722.		PHYS.REV.,C19,1205(1979)	B.L.BERMAN+
	76-OS	189	G,SN	14.05	492.2.	4.5	29.90	3353.	228.	PHYS.REV.,C19,1205(1979)	B.L.BERMAN+
10046009	76-OS	189	G,N	14.047	492.2	3.	29.90	2130.		PHYS.REV.,C19,1205(1979)	B.L.BERMAN+
10046009				22.112	64.6						
10046010	76-OS	189	G,2N	16.002	227.96	4.	29.90	1000.		PHYS.REV.,C19,1205(1979)	B.L.BERMAN+
10046011	76-OS	189	G,3N	26.022	37.14	7.5	29.90	210.		PHYS.REV.,C19,1205(1979)	B.L.BERMAN+
10046016	76-OS	190	G,XN	15.024	589.05	4.	30.40	4602.		PHYS.REV.,C19,1205(1979)	B.L.BERMAN+
	76-OS	190	G,XN	15.6	535.	8.				YAD.FIZ.,17,463(1973)	A.M.GORYACHEV+
				12.8	420.						
	76-OS	190	G,SN	13.8	490.75	4.	30.40	3229.	220.	PHYS.REV.,C19,1205(1979)	B.L.BERMAN+
	76-OS	190	G,SN	12.8	420.	6.				YAD.FIZ.,17,463(1973)	A.M.GORYACHEV+
				15.6	360.						
10046013	76-OS	190	G,N	13.802	490.75	4.	30.40	2010.		PHYS.REV.,C19,1205(1979)	B.L.BERMAN+
10046014	76-OS	190	G,2N	16.124	224.	4.	30.40	1080.		PHYS.REV.,C19,1205(1979)	B.L.BERMAN+
10046015	76-OS	190	G,3N	27.	30.35	5.5	30.40	140.		PHYS.REV.,C19,1205(1979)	B.L.BERMAN+
10046020	76-OS	192	G,XN	14.78	643.62	5.5	29.90	4900.		PHYS.REV.,C19,1205(1979)	B.L.BERMAN+
10046020				24.067	199.18						
	76-OS	192	G,SN	13.31	480.29	5.	29.90	3306.	224.	PHYS.REV.,C19,1205(1979)	B.L.BERMAN+
10046017	76-OS	192	G,N	13.314	480.29	3.5	29.90	1920.		PHYS.REV.,C19,1205(1979)	B.L.BERMAN+
10046017				24.067	57.99						
10046018	76-OS	192	G,2N	15.513	256.33	4.	29.90	1200.		PHYS.REV.,C19,1205(1979)	B.L.BERMAN+
10046019	76-OS	192	G,3N	27.489	35.01	7.	29.90	190.		PHYS.REV.,C19,1205(1979)	B.L.BERMAN+
	77-IR		G,SN	13.8	487.	5.1	21.90	2965.	211.	J.PHYSIQUE,36,L-267(1975)	A.VEYSSIERE+
m0049002	77-IR	191	G,XN	13.3	497.	7.5	20.30	3475.5	240.8	YAD.FIZ.,27,1479(1978)	A.M.GORYACHEV+
m0049002				15.9	480.						
m0049003	77-IR	191	G,SN	13.3	497.	5.	20.00	2757.	199.	YAD.FIZ.,27,1479(1978)	A.M.GORYACHEV+
m0008002	77-IR	191	G,SN	13.22	495.	5.	20.20	2580.4	205.9	PISMA ZHETF,26,107(1978)	A.M.GORYACHEV+
m0049004	77-IR	193	G,XN	13.	551.	7.	20.20	3602.4	251.5	YAD.FIZ.,27,1479(1978)	A.M.GORYACHEV+
m0049004				15.6	539.						
m0049005	77-IR	193	G,SN	13.02	543.	5.	20.00	2835.	205.	YAD.FIZ.,27,1479(1978)	A.M.GORYACHEV+
m0008003	77-IR	193	G,SN	13.02	543.	4.5	20.20	2860.2	207.1	PISMA ZHETF,26,107(1978)	A.M.GORYACHEV+

EXFOR	NUCL	A	REACT	E-MAX MEV	SIG MB	FWHM MEV	E-INT MEV	SIG-INT MEV*MB	SIG-INT-1 MB	REFERENCE	AUTHOR
	78-PT		G,SN	13.7	512.	5.	20.30	3056.	228.	J.PHYSIQUE,36,L-267(1975)	A.VEYSSIERE+
m0049006	78-PT	194	G,XN	13.8	523.	7.	20.70	3457.4	239.4	YAD.FIZ.,27,1479(1978)	A.M.GORYACHEV+
m0049006				15.8	458.						
m0049007	78-PT	194	G,SN	13.8	523.	5.	20.00	2861.	210.	YAD.FIZ.,27,1479(1978)	A.M.GORYACHEV+
m0008004	78-PT	194	G,SN	13.82	511.1	5.	20.80	2867.4	204.5	PISMA ZHETF,26,107(1978)	A.M.GORYACHEV+
m0049008	78-PT	195	G,XN	13.5	537.	7.	20.20	3392.9	238.2	YAD.FIZ.,27,1479(1978)	A.M.GORYACHEV+
m0049008				15.3	487.						
m0049009	78-PT	195	G,SN	13.5	537.	5.5	20.00	2797.	204.	YAD.FIZ.,27,1479(1978)	A.M.GORYACHEV+
m0008005	78-PT	195	G,SN	13.42	528.	5.	20.20	2835.3	206.1	PISMA ZHETF,26,107(1978)	A.M.GORYACHEV+
m0049010	78-PT	196	G,XN	13.8	529.	6.5	20.80	3553.2	245.4	YAD.FIZ.,27,1479(1978)	A.M.GORYACHEV+
m0049010				15.6	504.						
m0049011	78-PT	196	G,SN	13.8	529.	4.5	20.00	2944.	213.	YAD.FIZ.,27,1479(1978)	A.M.GORYACHEV+
m0008006	78-PT	196	G,SN	13.82	522.5	5.	20.80	2864.3	205.3	PISMA ZHETF,26,107(1978)	A.M.GORYACHEV+
m0049012	78-PT	198	G,XN	14.3	649.	6.	20.80	3990.1	277.3	YAD.FIZ.,27,1479(1978)	A.M.GORYACHEV+
m0049013	78-PT	198	G,SN	13.7	575.	5.	20.00	2813.	236.	YAD.FIZ.,27,1479(1978)	A.M.GORYACHEV+
m0008007	78-PT	198	G,SN	13.62	566.2	5.	20.80	3097.4	224.1	PISMA ZHETF,26,107(1978)	A.M.GORYACHEV+
m0073013	79-AU	197	G,ABS	12.88	616.	5.5	20.00	3100.	437.	NUCL.PHYS.,A351,257(1981)	G.M.GUREVICH+
m0073013				10.65	296.						
	79-AU	197	G,ABS	13.5	540.	5.5				PIS'MA ZHETF,23,411(1976)	G.M.GUREVICH+
	79-AU	197	G,XN	13.5	494.15		16.90	2606.		BULL.AM.PHYS.SOC.,31,855(1986)	B.L.BERMAN+
	79-AU	197	G,XN	13.6	590.	7.	27.00	4200.		IZV.AN SSSR,37,1891(1973)	YU.I.SOROKIN+
	79-AU	197	G,XN	13.79	528.7.	7.	21.70	3546.		NUCL.PHYS.,A159,561(1970)	A.VEYSSIERE+
	79-AU	197	G,XN	13.64	549.	7.	24.70	3744.		PHYS.REV.,127,1273(1962)	S.C.FULTZ+
	79-AU	197	G,XN	14.	491.8	6.	22.00	3000.		NUCL.PHYS.,32,236(1962)	J.MILLER+
	79-AU	197	G,XN	13.6	590.	5.				PHYS.REV.,112,560(1958)	E.G.FULLER+
10057011	79-AU	197	G,XN	13.504	494.15	>6.	16.90	2606.		PHYS.REV.,C36,1286(1987)	B.L.BERMAN+
	79-AU	197	G,SN	13.73	502.	4.76				PHYS.REV.,C36,1286(1987)	B.L.BERMAN+
	79-AU	197	G,SN	13.5	494.15		16.90	2491.	194.	BULL.AM.PHYS.SOC.,31,855(1986)	B.L.BERMAN+
	79-AU	197	G,SN	13.6	590.	4.5	27.00	3150.		IZV.AN SSSR,37,1891(1973)	YU.I.SOROKIN+
10021010	79-AU	197	G,SN	13.52	532.1	5.	21.70	3067.	217.	NUCL.PHYS.,A159,561(1970)	A.VEYSSIERE+
10002002	79-AU	197	G,SN	13.64	549.	4.	24.70	2967.	205.	PHYS.REV.,127,1273(1962)	S.C.FULTZ+
10057009	79-AU	197	G,N	13.504	494.15	>5.	16.90	1738.3	124.	PHYS.REV.,C36,1286(1987)	B.L.BERMAN+
	79-AU	197	G,N	16.85	104.78		16.90	2376.		BULL.AM.PHYS.SOC.,31,855(1986)	B.L.BERMAN+
10021003	79-AU	197	G,N	13.52	529.2	4.5	21.70	2588.		NUCL.PHYS.,A159,561(1970)	A.VEYSSIERE+
10002003	79-AU	197	G,N	13.641	549.	4.5	24.70	2190.		PHYS.REV.,127,1273(1962)	S.C.FULTZ+
10057010	79-AU	197	G,2N	16.851	104.78	>6.	16.90	115.3	7.1	PHYS.REV.,C36,1286(1987)	B.L.BERMAN+
10021004	79-AU	197	G,2N	16.78	106.7	7.	27.10	671.		NUCL.PHYS.,A159,561(1970)	A.VEYSSIERE+
10002004	79-AU	197	G,2N	17.329	136.	6.	24.7	777.		PHYS.REV.,127,1273(1979)	S.C.FULTZ+
	79-AU	197	G,2N	17.	105.	>5.	26.90	671.		BULL.AM.PHYS.SOC.,31,855(1986)	B.L.BERMAN+
10021005	79-AU	197	G,3N	27.12	13.6	>6.	27.10	24.		NUCL.PHYS.,A159,561(1970)	A.VEYSSIERE+
	80-HG		G,SN	13.7	582.	4.4	21.10	3133.	227.	J.PHYSIQUE,36,L-267(1975)	A.VEYSSIERE+
	80-HG	201	G,P	26.	4.3	11.	32.00	40.		PHYS.REV.,127,2198(1962)	J.H.CARVER+
	81-TL		G,ABS	14.	648.	4.6	27.00	3770.	266.	ZHETF,30,85591956)	B.I.GAVRILOV+
	81-TL	203	G,SN	14.2	490.	3.7	20.00	2610.	185.	IZV.AN SSSR,34,116(1969)	G.P.ANTROPOV+
	81-TL	205	G,SN	14.1	490.	3.7	20.00	2780.	187.	IZV.AN SSSR,34,116(1969)	G.P.ANTROPOV+
	82-PB		G,XN	14.1	660.	5.5	24.00	3910.		J.PHYS.SOC.JAP.,25,655(1968)	T.TOMIMASU+
	82-PB		G,XN	13.7	657.5	5.5	27.00	4100.		NUCL.PHYS.,32,236(1962)	J.MILLER+
	82-PB		G,XN	13.4	670.	6.				J.PHYS.RADIUM,22,529(1961)	J.MILLER+
10057014	82-PB		G,XN	13.504	613.02	>5.	16.90	3192.		PHYS.REV.,C36,1286(1987)	B.L.BERMAN+
	82-PB		G,SN	13.5	613.		16.90	3047.	249.	PHYS.REV.,C36,1286(1987)	B.L.BERMAN+
10057012	82-PB		G,N	13.504	613.28	4.2	16.90	2902.	137.9	PHYS.REV.,C36,1286(1987)	B.L.BERMAN+
10057013	82-PB		G,2N	16.851	93.56	>5.	16.90	145.		PHYS.REV.,C36,1286(1987)	B.L.BERMAN+
	82-PB	206	G,XN	13.4	460.	6.	27.00	3930.		IZV.AN SSSR,37,156(1973)	YU.I.SOROKIN+
10007002	82-PB	206	G,XN	13.743	530.	5.	26.40	3441.		PHYS.REV.,B136,126(1964)	R.R.HARVEY+
	82-PB	206	G,SN	13.4	460.	4.5	27.00	3210.		IZV.AN SSSR,37,156(1973)	YU.I.SOROKIN+
10007014	82-PB	206	G,SN	13.743	530.	4.	26.40	2909.	203.	PHYS.REV.,B136,126(1964)	R.R.HARVEY+
10007003	82-PB	206	G,N	13.743	529.	4.	28.00	2220.		PHYS.REV.,B136,126(1964)	R.R.HARVEY+
10007004	82-PB	206	G,2N	18.233	82.	8.	28.00	560.		PHYS.REV.,B136,126(1964)	R.R.HARVEY+
10007004				16.685	75.						
10007004				17.304	81.						
10007004				20.247	57.						
10007005	82-PB	207	G,XN	13.743	500.	4.5	26.40	3267.		PHYS.REV.,B136,126(1964)	R.R.HARVEY+
10007005				25.511	163.						
10007015	82-PB	207	G,SN	13.743	500.	4.	26.40	2718.	191.	PHYS.REV.,B136,126(1964)	R.R.HARVEY+
10007015				25.202	160.						
10007006	82-PB	207	G,N	13.743	500.	4.	28.00	2050.		PHYS.REV.,B136,126(1964)	R.R.HARVEY+
10007007	82-PB	207	G,2N	17.459	94.	8.	28.00	600.		PHYS.REV.,B136,126(1964)	R.R.HARVEY+
m0345005	82-PB	208	G,XN	13.71	666.6	>5.	14.80	2096.5	167.9	YAD.KONST.,1,52(1993)	V.V.VARLAMOV+
	82-PB	208	G,XN	13.	510.	6.	27.00	4320.		IZV.AN SSSR,37,156(1973)	YU.I.SOROKIN+
m0400002	82-PB	208	G,XN	13.355	884.367	4.5	17.20	3260.	242.8	YAD.FIZ.,12,682(1970)	B.S.ISHKHANOV+

EXFOR	NUCL	A	REACT	E-MAX MEV	SIG MB	FWHM MEV	E-INT MEV	SIG-INT MEV*MB	SIG-INT-1 MB	REFERENCE	AUTHOR
m0400002				9.775	246.32						
m0400002				10.195	335.148						
m0400002				11.235	511.042						
m0400002				11.655	645.379						
m0400002				12.295	680.685						
m0400002				12.815	812.486						
m0400002				16.035	633.47						
	82-PB	208	G,XN	13.77	645.	4.	18.90	3387.		NUCL.PHYS.,A159,561(1970)	A.VEYSSIERE+
m0399004				13.04	820.						
m0399004				12.46	650.						
m0399004				14.52	800.						
m0399004				15.39	710.						
10007008	82-PB	208	G,XN	13.433	518.	4.	26.40	3496.		PHYS.REV.,B136,126(1964)	R.R.HARVEY+
m0399002	82-PB	208	G,XN	12.86	760.	4.5	22.00	4813.1	348.	PISMA ZHETF,7,210(1968)	B.I.GORYACHEV+
m0399002				15.1	690.						
m0399002				16.48	470.						
m0399002				17.81	420.						
m0399002				20.85	280.						
m0345005	82-PB	208	G,SN	13.32	641.	>5.	14.80	2096.5	167.9	YAD.KONST.,1,52(1993)	V.V.VARLAMOV+
m0345005				9.99	158.2						
m0345005				11.31	354.8						
m0345005				13.32	641.						
	82-PB	208	G,SN	13.	510.	4.5	27.00	3280.		IZV.AN SSSR,37,156(1973)	YU.I.SOROKIN+
10021011	82-PB	208	G,SN	13.37	642.	4.	18.90	3059.	229.	NUCL.PHYS.,A159,561(1970)	A.VEYSSIERE+
10007016	82-PB	208	G,SN	13.433	518.	4.	26.40	2636.	189.	PHYS.REV.,B136,B26(1964)	R.R.HARVEY+
m0345005	82-PB	208	G,N	13.32	641.	>5.	14.80	2096.5	167.9	YAD.KONST.,1,52(1993)	V.V.VARLAMOV+
m0345005				9.99	158.2						
m0345005				11.31	354.8						
m0345005				13.32	641.						
10021007	82-PB	208	G,N	13.5	645.	3.5	18.90	2731.		NUCL.PHYS.,A159,561(1970)	A.VEYSSIERE+
10007009	82-PB	208	G,N	13.433	518.	3.5	26.40	1776.		PHYS.REV.,B136,126(1964)	R.R.HARVEY+
10007009							28.00	1960.			
m0367008	82-PB	208	G,N	13.56	618.89	4.5	21.20	2909.8	215.4	IZV.AN SSSR,55,953(1991)	S.N.BELJAEV+
m0367008				7.58	58.23						
m0367008				10.05	147.68						
10059004	82-PB	208	G,N	13.34	651.96	4.	14.90	2090.	165.	T,YOUNG,72	L.M.YOUNG
10059004				10.005	133.41						
10059004				11.305	320.35						
10021008	82-PB	208	G,2N	16.53	92.	8.	18.90	328.		NUCL.PHYS.,A159,561(1970)	A.VEYSSIERE+
10021008							21.67	52.			
10007010	82-PB	208	G,2N	16.995	127.	9.	26.40	860.		PHYS.REV.,B136,126(1964)	R.R.HARVEY+
10021009	82-PB	208	G,3N	29.95	23.	11.	37.80	197.		NUCL.PHYS.,A159,561(1970)	A.VEYSSIERE+
	82-PB	208	G,P	24.8	3.1					NUCL.PHYS.,A246,365(1975)	K.SHODA+
	83-BI	209	G,ABS	13.5	630.	4.5				PIS'MA ZHETF,23,411(1976)	G.M.GUREVICH+
	83-BI	209	G,XN	14.	625.	5.5	27.00	4600.		IZV.AN SSSR,37,1891(1973)	YU.I.SOROKIN+
10007011	83-BI	209	G,XN	13.588	544.	5.5	26.40	3772.		PHYS.REV.,B136,126(1964)	R.R.HARVEY+
	83-BI	209	G,XN	13.9	537.	5.9	27.00	3960.		ZHETF,30,855(1957)	B.I.GAVRILOV+
	83-BI	209	G,XN	14.5	743.8	5.				IZV.AN SSSR,31,336(1967)	G.P.ANTROPOV+
	83-BI	209	G,XN	13.9	656.9	6.	22.00	3730.		NUCL.PHYS.,32,236(1962)	J.MILLER+
	83-BI	209	G,SN	13.6	625.	4.5	27.00	3470.		IZV.AN SSSR,37,1891(1973)	YU.I.SOROKIN+
10007017	83-BI	209	G,SN	13.588	544.	4.	26.40	3058.	214.	PHYS.REV.,B136,126(1964)	R.R.HARVEY+
	83-BI	209	G,SN	13.8	537.	4.8	27.00	3120.		ZHETF,30,855(1957)	B.I.GAVRILOV+
	83-BI	209	G,SN	14.5	682.3	5.	20.00	3400.		IZV.AN SSSR,31,336(1967)	G.P.ANTROPOV+
10007012	83-BI	209	G,N	13.588	544.	3.5	26.40	2344.		PHYS.REV.,B136,126(1964)	R.R.HARVEY+
10059005	83-BI	209	G,N	13.115	658.82	4.5	14.80	2129.	170.	T,YOUNG,72	L.M.YOUNG
10059005				11.757	362.82						
10007013	83-BI	209	G,2N	17.614	121.	8.	26.40	714.		PHYS.REV.,B136,126(1964)	R.R.HARVEY+
m0195002	88-RA	226	G,F	15.	.95	5.5	20.00	5.2	.4	YAD.FIZ.,13,934(1971)	E.A.ZHAGROV+
m0015002	89-AC	227	G,F	14.	3.02	>6.	15.50	13.3	1.1	YAD.FIZ.,27,301(1978)	V.E.ZHUCHKO+
m0090002	90-TH	232	G,ABS	13.5	469.	6.	18.00	2920.	231.	NUCL.PHYS.,A273,326(1976)	G.M.GUREVICH+
m0090002				11.7	401.						
	90-TH	232	G,ABS	13.5	480.	6.				PIS'MA ZHETF,20,741(1974)	G.M.GUREVICH+
				10.9	190.						
10050005	90-TH	232	G,XN	14.34	969.84	6.	18.30	5606.		PHYS.REV.,C21,1215(1980)	J.T.CALDWELL+
10031002	90-TH	232	G,XN	14.43	747.	7.	16.30	3888.		NUCL.PHYS.,A199,45(1973)	A.VEYSSIERE+
10031002				11.18	429.						
	90-TH	232	G,SN	14.34	549.	4.8	18.30	3483.	276.	PHYS.REV.,C21,1215(1980)	J.T.CALDWELL+
				11.27	443.41						
10031014	90-TH	232	G,SN	13.89	436.	7.5	16.30	2705.	228.	NUCL.PHYS.,A199,45(1973)	A.VEYSSIERE+
10031014				11.72	394.						

EXFOR	NUCL	A	REACT	E-MAX MEV	SIG MB	FWHM MEV	E-INT MEV	SIG-INT MEV*MB	SIG-INT-1 MB	REFERENCE	AUTHOR
10050002	90-TH	232	G,N	11.27	443.41	5.	18.30	1660.		PHYS.REV.,C21,1215(1980)	J.T.CALDWELL+
10031003	90-TH	232	G,N	11.45	373.	5.5	16.30	1730.		NUCL.PHYS.,A199,45(1973)	A.VEYSSIERE+
10031003		232		13.89	183.						
10031003		232		15.79	81.						
10050003	90-TH	232	G,2N	14.34	348.52	4.5	18.30	1450.		PHYS.REV.,C21,1215(1980)	J.T.CALDWELL+
10031004	90-TH	232	G,2N	14.97	243.	4.5	16.30	787.		NUCL.PHYS.,A199,45(1973)	A.VEYSSIERE+
m0491002	90-TH	232	G,F	14.2	54.		102.00	1024.7	28.8	NUCL.PHYS.,A472,533(1987)	A.LEPRETRE+
m0449002	90-TH	232	G,F	11.5	33.5		11.90	98.	10.4	PHYS.REV.,C34,1397(1986)	H.X.ZHANG+
m0449002				6.2	15.5						
10050004	90-TH	232	G,F	14.34	63.93	7.	18.30	370.		PHYS.REV.,C21,1215(1980)	J.T.CALDWELL+
10050004				6.39	12.44						
10031005	90-TH	232	G,F	14.16	46.	7.	16.30	188.		NUCL.PHYS.,A199,45(1973)	A.VEYSSIERE+
10031005				10.94	23.						
	90-TH	232	G,F	14.5	48.	6.	19.00	320.		YAD.FIZ.,13,934(1971)	E.A.ZHAGROV+
10058004	92-U	233	G,XN	13.85	1528.	7.	17.80	9000.		PHYS.REV.,C34,2201(1986)	B.L.BERMAN+
	92-U	233	G,SN	13.85	483.	7.	17.80	3024.	239.	PHYS.REV.,C34,2201(1986)	B.L.BERMAN+
				11.4	421.						
10058003	92-U	233	G,N	11.4	134.	3.	17.80	580.		PHYS.REV.,C34,2201(1986)	B.L.BERMAN+
10058003				16.79	63.						
10058002	92-U	233	G,F	13.85	419.	6.	17.80	2444.		PHYS.REV.,C34,2201(1986)	B.L.BERMAN+
10058007	92-U	234	G,XN	14.33	1421.	7.	18.30	8676.		PHYS.REV.,C34,2201(1986)	B.L.BERMAN+
10058007				11.39	998.						
	92-U	234	G,SN	11.88	482.	6.	18.30	3317.	270.	PHYS.REV.,C34,2201(1986)	B.L.BERMAN+
				13.84	464.						
10058006	92-U	234	G,N	11.88	249.	5.	18.30	1060.		PHYS.REV.,C34,2201(1986)	B.L.BERMAN+
10058005	92-U	234	G,F	14.33	384.	6.5	18.30	2260.		PHYS.REV.,C34,2201(1986)	B.L.BERMAN+
10058005				11.39	250.						
m0090003	92-U	235	G,ABS	13.4	487.	7.	18.00	2990.	238.	NUCL.PHYS.,A273,326(1976)	G.M.GUREVICH+
m0090003				11.2	450.						
	92-U	235	G,ABS	13.6	460.	7.				PIS'MA ZHETF,20,741(1974)	G.M.GUREVICH+
				11.	430.						
10050009	92-U	235	G,XN	13.84	1486.9	7.	18.30	8889.		PHYS.REV.,C21,1215(1980)	J.T.CALDWELL+
	92-U	235	G,SNF	10.9	364.	2.5	19.00	3560.	303.	J.PHYSIQUE,24,974(1964)	P.BOUNIN+
	92-U	235	G,SN	14.34	520.	6.	18.30	3497.	277.	PHYS.REV.,C21,1215(1980)	J.T.CALDWELL+
				10.9	488.						
10050006	92-U	235	G,N	10.9	264.8	3.5	18.30	1140.		PHYS.REV.,C21,1215(1980)	J.T.CALDWELL+
10050007	92-U	235	G,2N	14.83	63.4	5.	18.30	202.		PHYS.REV.,C21,1215(1980)	J.T.CALDWELL+
10050007				17.28	52.5						
m0503002	92-U	235	G,F	13.5	336.33	4.	20.00	1791.	116.7	PHYS.REV.,C29,2346(1984)	H.RIES+
10050008	92-U	235	G,F	13.84	390.1	5.5	18.30	2160.		PHYS.REV.,C21,1215(1980)	J.T.CALDWELL+
m0300002	92-U	235	G,F	13.9	331.04	7.5	104.40	3706.9	191.7	CDFE/FIS2,,87	V.V.VARLAMOV+
10050013	92-U	236	G,XN	14.338	1205.5	6.5	18.30	7168.		PHYS.REV.,C21,1215(1980)	J.T.CALDWELL+
10050013				11.886	778.7						
	92-U	236	G,SN	14.34	455.	6.	18.30	3156.	252.	PHYS.REV.,C21,1215(1980)	J.T.CALDWELL+
				11.4	441.						
10050010	92-U	236	G,N	11.395	290.9	4.	18.30	1256.		PHYS.REV.,C21,1215(1980)	J.T.CALDWELL+
10050011	92-U	236	G,2N	14.828	125.6	3.	18.30	450.		PHYS.REV.,C21,1215(1980)	J.T.CALDWELL+
10050011				13.847	122.5						
10050012	92-U	236	G,F	14.338	252.5	7.	18.30	1450.		PHYS.REV.,C21,1215(1980)	J.T.CALDWELL+
10050012				11.886	156.2						
m0090004	92-U	238	G,ABS	13.6	441.	6.5	18.00	2950.	229.	NUCL.PHYS.,A273,326(1976)	G.M.GUREVICH+
m0090004				11.1	399.						
m0090004				22.7	149.						
	92-U	238	G,ABS	13.5	450.	6.5				PIS'MA ZHETF,20,741(1974)	G.M.GUREVICH+
				10.9	400.						
10050017	92-U	238	G,XN	14.338	1221.81	7.	18.30	7465.		PHYS.REV.,C21,1215(1980)	J.T.CALDWELL+
10050017				11.395	750.76						
	92-U	238	G,XN	14.02	1100.	6.5	18.30	6351.		NUCL.PHYS.,A199,45(1973)	A.VEYSSIERE+
				11.31	600.						
	92-U	238	G,SN	13.48	519.	7.	18.30	3575.	286.	PHYS.REV.,C21,1215(1980)	J.T.CALDWELL+
				11.4	481.						
10031015	92-U	238	G,SN	14.02	435.	6.5	18.30	3017.	242.	NUCL.PHYS.,A199,45(1973)	A.VEYSSIERE+
10031015				11.31	416.						
10050014	92-U	238	G,N	11.395	374.71	3.	18.30	1358.		PHYS.REV.,C21,1215(1980)	J.T.CALDWELL+
10031011	92-U	238	G,N	11.31	317.	3.	18.30	1199.		NUCL.PHYS.,A199,45(1973)	A.VEYSSIERE+
10050015	92-U	238	G,2N	13.479	280.79	3.	18.30	1132.		PHYS.REV.,C21,1215(1980)	J.T.CALDWELL+
10031012	92-U	238	G,2N	14.29	207.	4.5	18.30	899.		NUCL.PHYS.,A199,45(1973)	A.VEYSSIERE+
m0491004	92-U	238	G,F	25.	35.2		104.00	1421.7	28.9	NUCL.PHYS.,A472,533(1987)	A.LEPRETRE+
m0503003	92-U	238	G,F	15.	149.22	5.	30.00	943.7	59.3	PHYS.REV.,C29,2346(1984)	H.RIES+
m0503003				12.	86.53						
10050016	92-U	238	G,F	14.338	175.58	8.5	18.30	1085.		PHYS.REV.,C21,1215(1980)	J.T.CALDWELL+
10050016				11.395	113.1						

EXFOR	NUCL	A	REACT	E-MAX MEV	SIG MB	FWHM MEV	E-INT MEV	SIG-INT MEV*MB	SIG-INT-1 MB	REFERENCE	AUTHOR
m0017007	92-U	238	G,F	13.9	162.	6.	20.00	1104.1	81.	YAD.FIZ.,30,910(1979)	I.S.KORECKAYA+
	92-U	238	G,F	14.	152.	6.5				PHYS.REV.,C14,1499(1976)	J.D.T.ARRUDA-NETO+
10031013	92-U	238	G,F	14.02	154.	7.	18.30	919.		NUCL.PHYS.,A199,45(1973)	A.VEYSSIERE+
10031013				11.04	90.						
	92-U	238	G,F	14.	110.	6.4	19.00	760.		YAD.FIZ.,13,334(1971)	E.A.ZHAGROV+
m0300003	92-U	238	G,F	14.4	164.55	7.	105.00	2574.7	113.7	CDFE/FIS2,,87	V.V.VARLAMOV+
m0300003				11.4	102.27						
10058011	93-NP	237	G,XN	14.34	1790.	7.	18.30	10909.		PHYS.REV.,C34,2201(1986)	B.L.BERMAN+
10058011				11.4	1195.						
10031006	93-NP	237	G,XN	14.43	1376.	7.	16.60	7792.		NUCL.PHYS.,A199,45(1973)	A.VEYSSIERE+
10031006				11.18	987.						
	93-NP	237	G,SN	14.34	590.	6.5	18.30	3799.	298.	PHYS.REV.,C34,2201(1986)	B.L.BERMAN+
				11.4	481.						
	93-NP	237	G,SN	14.43	472.	7.	16.60	2795.	233.	NUCL.PHYS.,A199,45(1973)	A.VEYSSIERE+
				11.18	396.						
10058008	93-NP	237	G,N	12.38	212.	5.5	18.30	1172.		PHYS.REV.,C34,2201(1986)	B.L.BERMAN+
10031007	93-NP	237	G,N	12.26	211.	7.	16.60	1013.		NUCL.PHYS.,A199,45(1973)	A.VEYSSIERE+
10058009	93-NP	237	G,2N	14.34	130.	5.	18.30	349.		PHYS.REV.,C34,2201(1986)	B.L.BERMAN+
10031008	93-NP	237	G,2N	16.06	73.	>5.	16.60	121.		NUCL.PHYS.,A199,45(1973)	A.VEYSSIERE+
10058010	93-NP	237	G,F	13.85	350.	6.	18.30	2278.		PHYS.REV.,C34,2201(1986)	B.L.BERMAN+
10058010				11.4	280.						
10031009	93-NP	237	G,F	14.16	290.	7.	16.60	1661.		NUCL.PHYS.,A199,45(1973)	A.VEYSSIERE+
10031009				11.18	220.						
m0090005	94-PU	239	G,ABS	13.4	447.	6.	18.00	2970.	232.	NUCL.PHYS.,A273,326(1976)	G.M.GUREVICH+
	94-PU	239	G,ABS	12.	450.	6.				PIS'MA ZHETF,20,741(1974)	G.M.GUREVICH+
10058015	94-PU	239	G,XN	13.84	1674.	6.5	17.80	9806.		PHYS.REV.,C34,2201(1986)	B.L.BERMAN+
10058015				11.88	1336.						
	94-PU	239	G,SN	11.4	515.	5.5	17.80	2930.	235.	PHYS.REV.,C34,2201(1986)	B.L.BERMAN+
				13.8	474.						
10058012	94-PU	239	G,N	11.39	208.	3.5	17.80	631.		PHYS.REV.,C34,2201(1986)	B.L.BERMAN+
10058013	94-PU	239	G,2N	13.35	64.	3.5	17.80	153.		PHYS.REV.,C34,2201(1986)	B.L.BERMAN+
10058014	94-PU	239	G,F	13.84	359.	6.5	17.80	2146.		PHYS.REV.,C34,2201(1986)	B.L.BERMAN+
10058014				11.88	293.						
	94-PU	240	G,F	14.5	340.	7.1				PHYS.REV.,C23,2104(1981)	H.THIERENS+
	94-PU	244	G,F	14.	250.	7.1	30.00	1860.		PHYS.REV.,C27,1117(1983)	H.THIERENS+
m0017005	95-AM	241	G,F	14.	336.	7.	20.00	2291.	169.3	YAD.FIZ.,30,910(1979)	I.S.KORECKAYA+
m0017006	95-AM	243	G,F	13.9	350.	8.	20.00	2228.1	174.	YAD.FIZ.,30,910(1979)	I.S.KORECKAYA+

GRAPHS

Photonuclear reaction cross sections from the international nuclear data library EXFOR

Notations

The following 3 - 4 lines of EXFOR information is given under the each graph:

REACTION
COMMENT (1 line if exists)
G-SOURCE
NUMBER (EXFOR) REFERENCE FIRST AUTHOR (+).

REACTION. The EXFOR description format for the **REACTION** (the sum of two or more reactions can be given also in such a manner like (reaction 1 + reaction 2)) is:
TARGET NUCLEUS(G,OUTGOING PARTICLE)FINAL NUCLEUS,
where
TARGET NUCLEUS - ZZ-NN-AAA,
FINAL NUCLEUS - ZZ-NN-AAA,
for which
0-NN-1 is the only one exception for the total photoneutron reaction (G,XN) = (G,X)N; the presence of the code UNW distinguishs the (G,SN) reaction from the (G,XN) one.

COMMENT. The 1-line **COMMENT** explains what kind reaction is coded.

G-SOURCE is the EXFOR description of the type of incident photons beam for which one of the following codes or their combinations are used:

ARAD	(Annihilation radiation)
BRST	(Bremsstrahlung)
KINDT	(Kinematically determined)
MPH	(Monoenergetic photons)
QMPH	(Quasimonoenergetic photons)
TAGD	(Electron tagged).

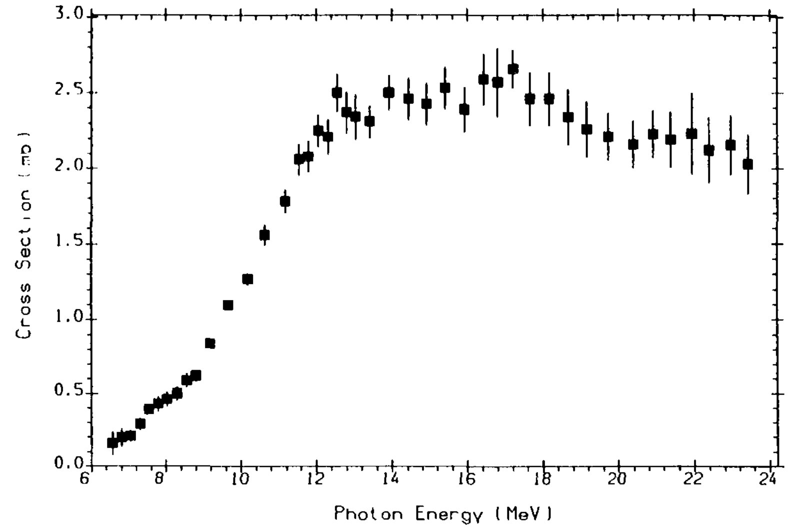
NUMBER (EXFOR) is the 8-digit number of the corrersponding SUBENtry (data set) in the EXFOR library.

REFERENCE. The EXFOR description format for **REFERENCE** is:
REFERENCE-TYPE,JOURNAL CODE,VOLUME,PAGE,DATE,
where
REFERENCE-TYPE s: C - conference and J - journal,
DATE - two or four digit number describing year (YY) or year-month (YYMM) date of the relevant publication,
JOURNAL CODEs used are the following:

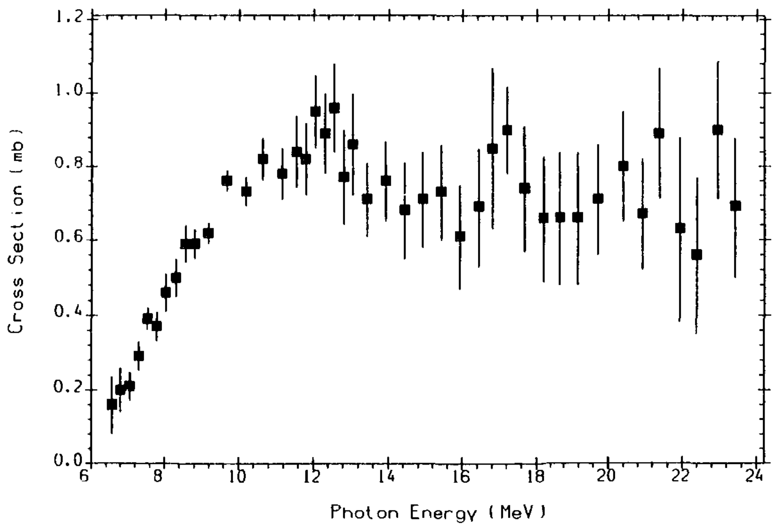
AE	(Atomnaya Energiya)
AUJ	(Australian Journal of Physics)
IZV	(Izvestiya Rossiiskoi Akademii Nauk, Seriya Fizicheskaya)
NC, NC/A, NC/B	(Nuovo Cimento)
NIM, NIM/A, NIM/B	(Nuclear Instruments and Methods in Physical Research)
NP,NP/A,NP/B	(Nuclear Physics)
PKL	(Problemy Kosmicheskikh Luchej)
PL, PL/A, PL/B, PL/C	(Physics Letters)
PR, PR/A, PR/B, PR/C	(Physical Review)
PRL	(Physical Review Letters),
UFZ	(Ukrainskii Fizichnii Zhurnal)
VAT/F	(Voprosy Atomnoi Nauki i Tekhniki, Seriya: Fizika Vysokykh Energii i Atomnogo Yadra)
VAT/O	(Voprosy Atomnoi Nauki i Tekhniki, Seriya: Obshchaya Yadernaya Fizika)
VMU	(Vestnik Moskovskogo Universiteta, Seriya: Fizika. Astronomiya)
VTYF	(Voprosy Teoreticheskoj Yadernoj Fiziki)
YF	(Yadernaya Fizika)
YK	(Voprosy Atomnoi Nauki i Tekhniki, Seriya: Yadernye Konstanty)
ZEP	(Zhurnal Eksperimental'noi i Teoreticheskoi Fiziki, Pisma v Redakciyu)
ZET	(Zhurnal Eksperimental'noi i Teoreticheskoi Fiziki)
ZP, ZP/A, ZP/B	(Zeitschrift fur Physik).

$^{3}_{1}H$

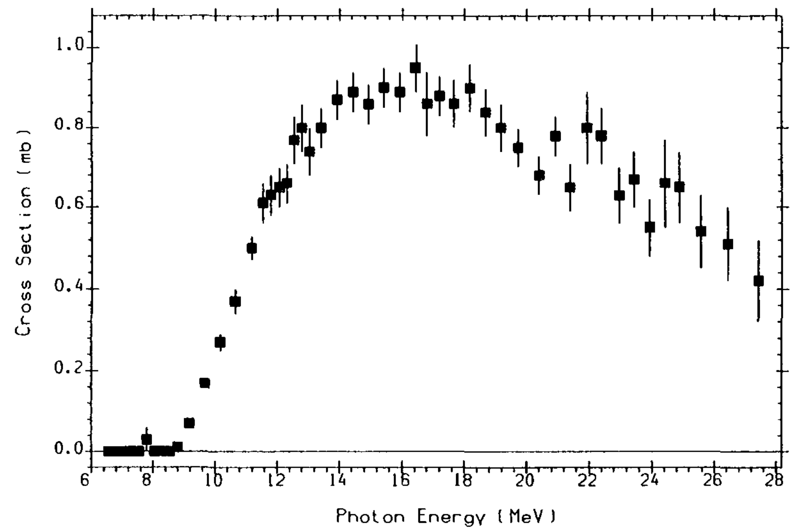
Abundance	Separation Energies (MeV)							
(%)	γ,n	γ,p	γ,t	γ,^{3}He	γ,α	γ,2n	γ,np	γ,2p
*	6.3	8.5	*	*	*	8.5	8.5	*



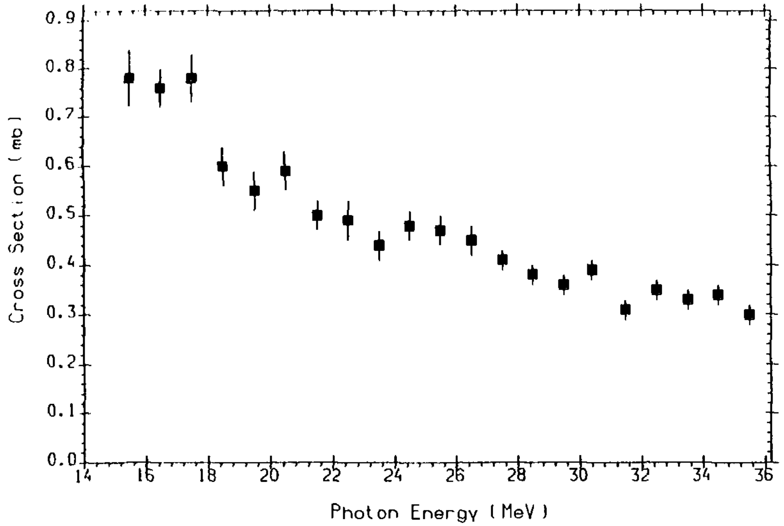
1-H-3(G,X)0-NN-1
QMPH,ARAD
L0052004 J,PR/C,24,849,8109 D.D.FAUL+



(1-H-3(G,N)1-H-2)+(1-H-3(G,N+P)0-NN-1)
QMPH,ARAD
L0052002 J,PR/C,24,849,8109 D.D.FAUL+



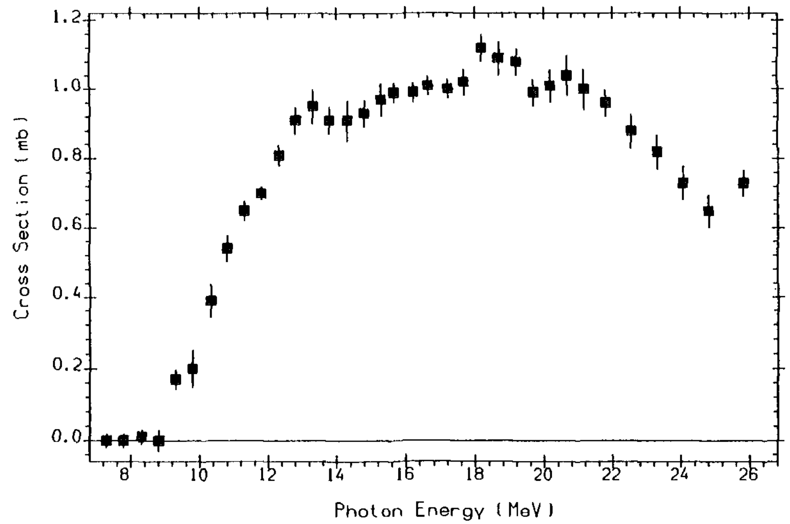
1-H-3(G,2N)1-H-1
QMPH,ARAD
L0052003 J,PR/C,24,849,8109 D.D.FAUL+



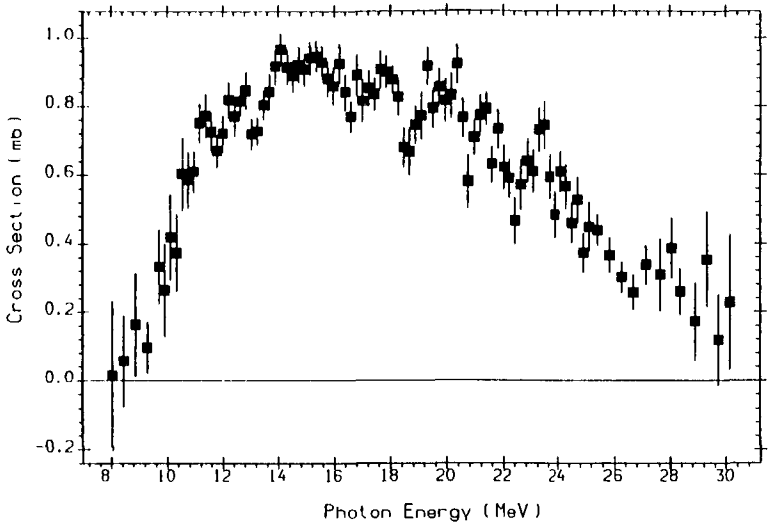
1-H-3(G,N)1-H-2
BRST
M0472002 J,PR/C,24,1791,81 D.M.SKOPIK+

$^{3}_{2}He$

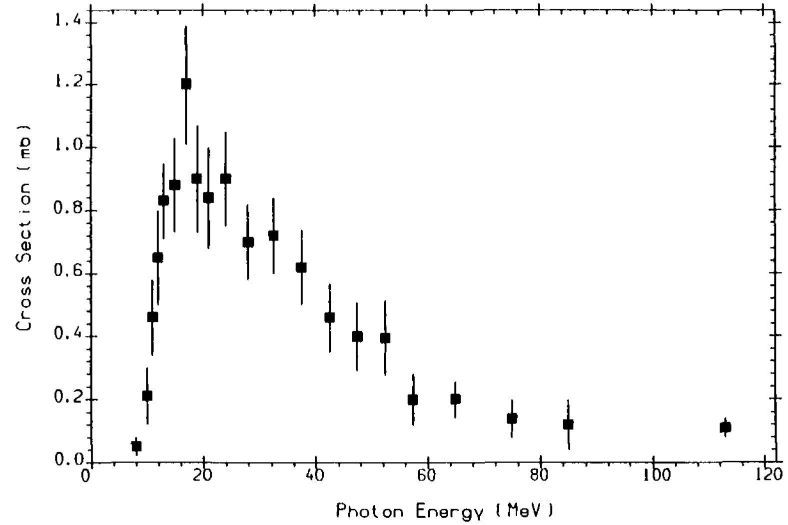
Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	γ,^{3}He	γ,α	γ,2n	γ,np	γ,2p
$1.4 \cdot 10^{-4}$	7.7	5.5	*	*	*	*	7.7	7.7



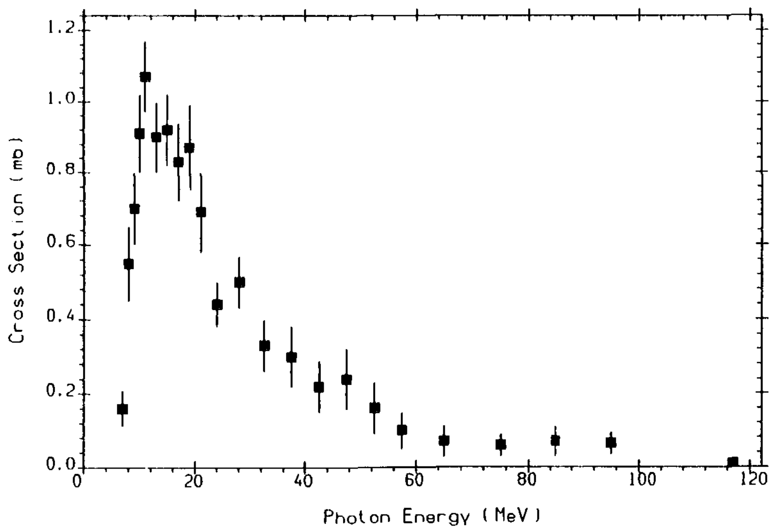
2-HE-3(G,X)0-NN-1
QMPH,ARAD
L0052005 J,PR/C,24,849,8109 D.D.FAUL+



2-HE-3(G,X)0-NN-1
Positron annihilation
L0018002 J,PRL,24,1494,7006 J,PR/C,10,2221,7412 B.L.BERMAN+



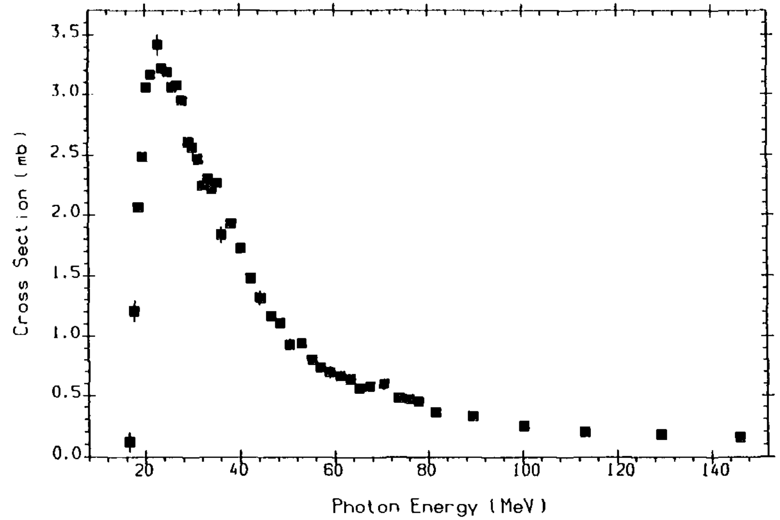
2-HE-3(G,N+P)1-H-1
QMPH,KINDT
M0479005 J,PL,11,137,64 A.N.GORBUNOV+



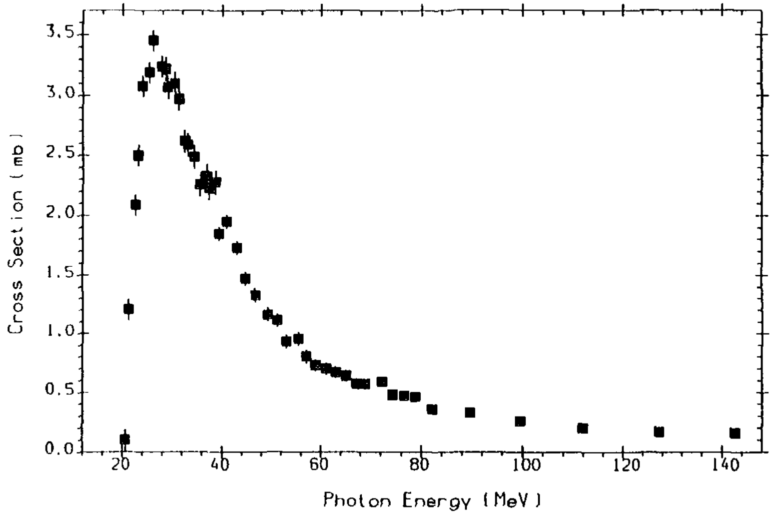
2-HE-3(G,P)1-H-2
QMPH,KINDT
M0479002 J,PL,11,137,64 A.N.GORBUNOV+

${}^{4}_{2}$He

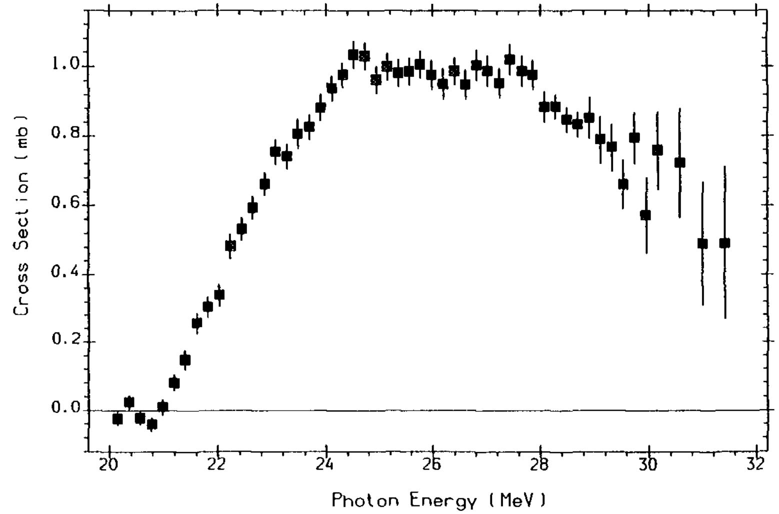
Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	γ,^{3}He	γ,α	γ,2n	γ,np	γ,2p
99.99	20.6	19.8	19.8	20.6	*	28.3	26.1	28.3



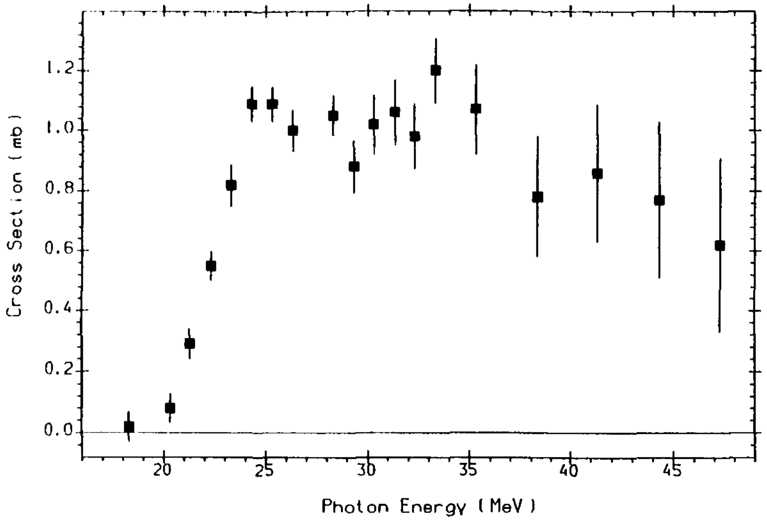
2-HE-4(G,ABS)
BRST
M0040002 J,YF,31,1400,80 YU.M.ARKATOV+



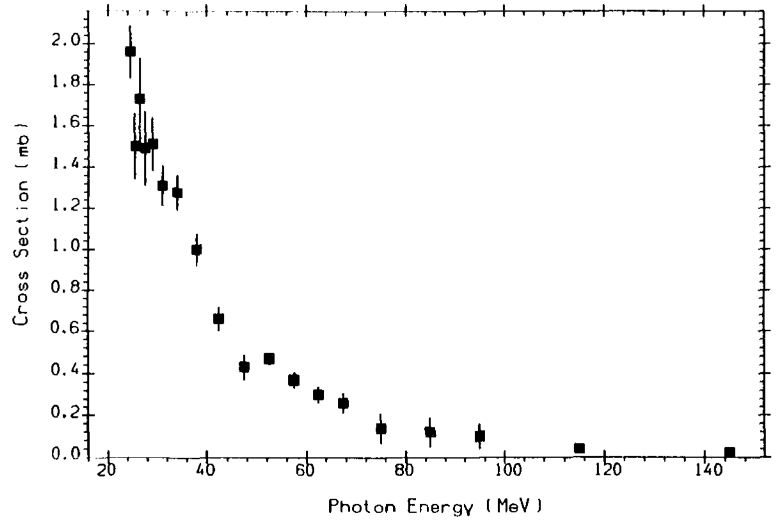
2-HE-4(G,ABS)
BRST
M0019002 J,VAT/O,4,55,79 YU.M.ARKATOV+



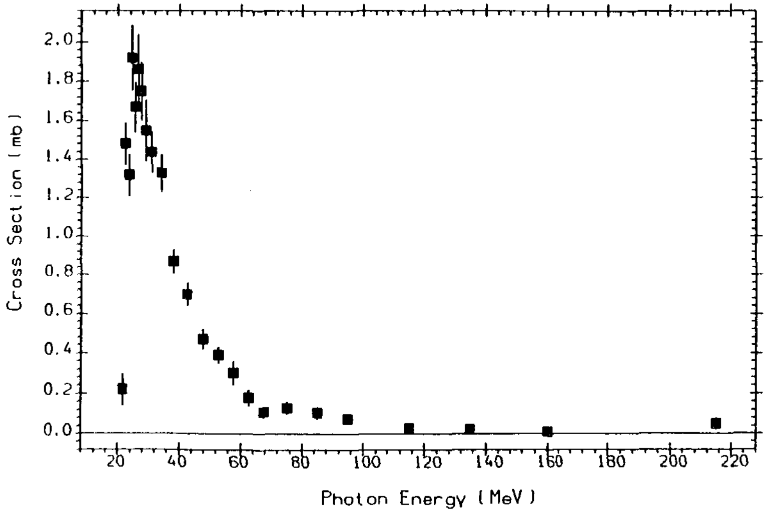
2-HE-4(G,X)0-NN-1 UNW
The sum: (G,N)+(G,N+P)+(G,2N).
Positron annihilation
L0023002 J,PR/C,4,723,7109 B.L.BERMAN+



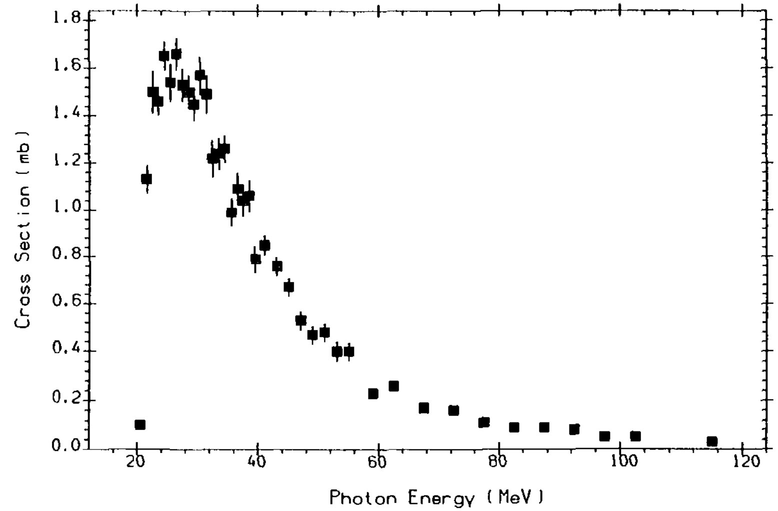
(2-HE-4(G,N)2-HE-3)+(2-HE-4(G,N+P)1-H-2)
QMPH,ARAD Positron annihilation in flight.
L0051002 J,PR/C,22,2273,8012 B.L.BERMAN+



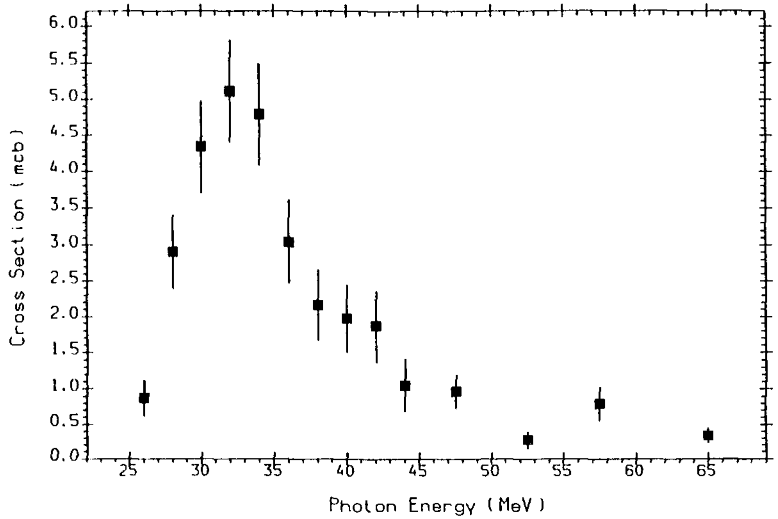
2-HE-4(G,N)2-HE-3
BRST
M0489002 J,PL/B,27,436,68 A.N.GORBUNOV



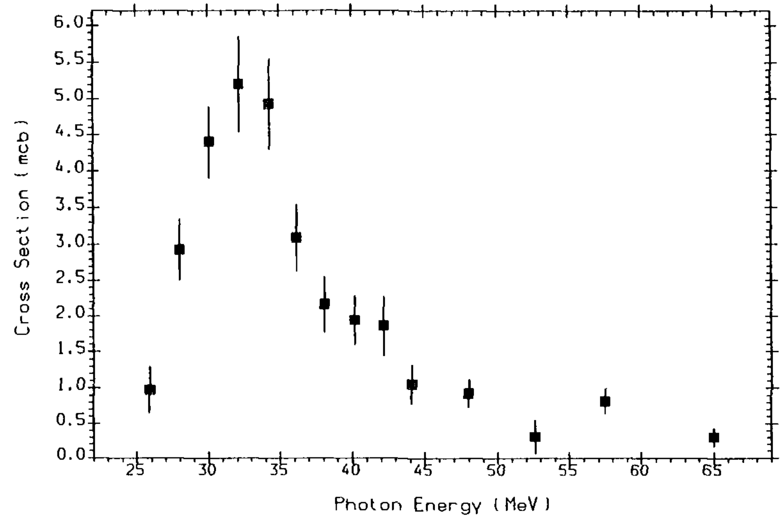
2-HE-4(G,P)1-H-3
BRST
M0489003 J,PL/B,27,436,68 A.N.GORBUNOV



2-HE-4(G,P)1-H-3
BRST
M0012002 J,UFZ,23,1818,78 YU.M.ARKATOV+



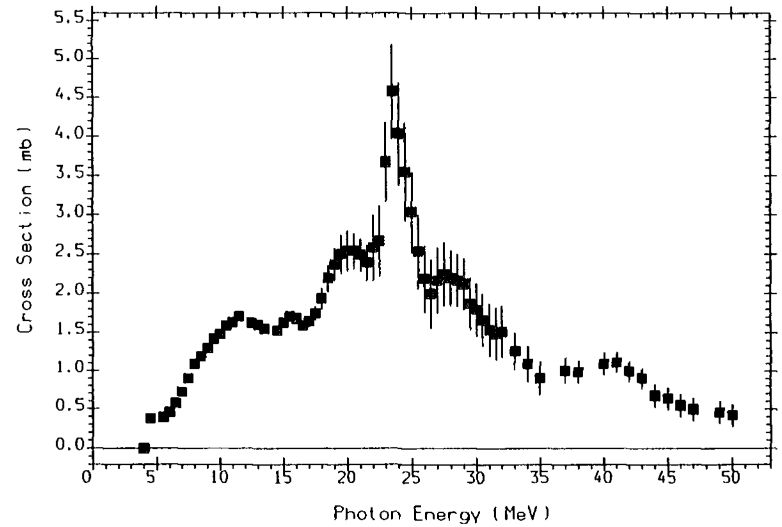
2-HE-4(G,D)1-H-2
BRST
M0011002 J,UFZ,23,919,78 YU.M.ARKATOV+



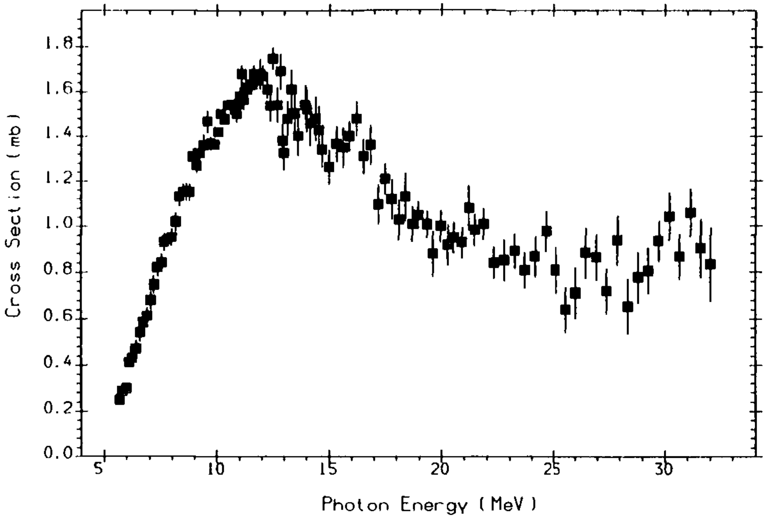
2-HE-4(G,D)1-H-2
BRST
M0034005 J,YF,31,297,80 YU.M.ARKATOV+

$^{6}_{3}$Li

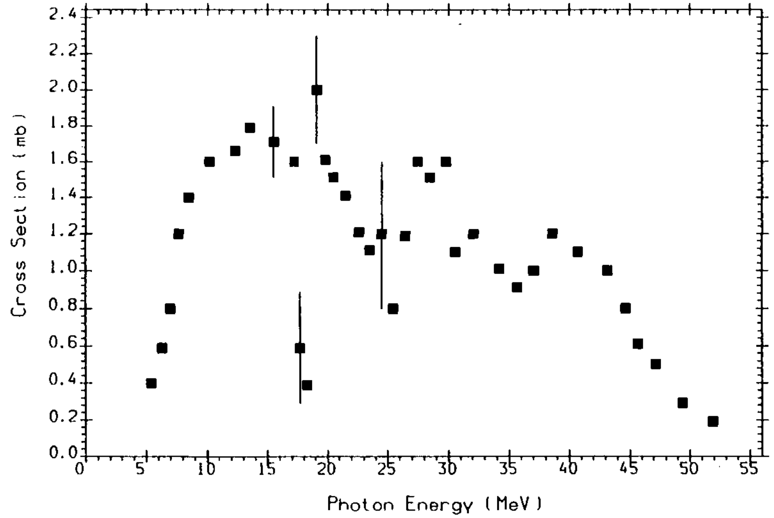
Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	γ,^{3}He	γ,α	γ,2n	γ,np	γ,2p
7.50	5.7	4.6	15.8	15.8	1.5	27.3	3.7	26.4



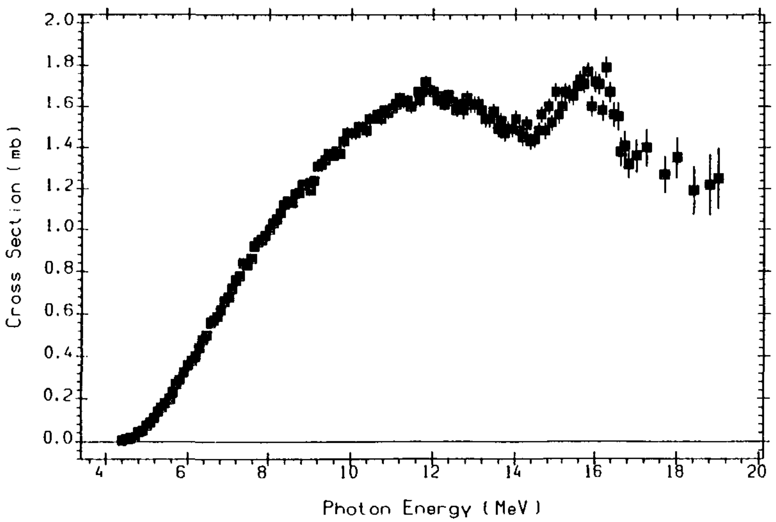
3-LI-6(G,ABS)
BRST,QMPH,ARAD
M0140016 B,CDFE/LI2,,86 V.V.VARLAMOV+



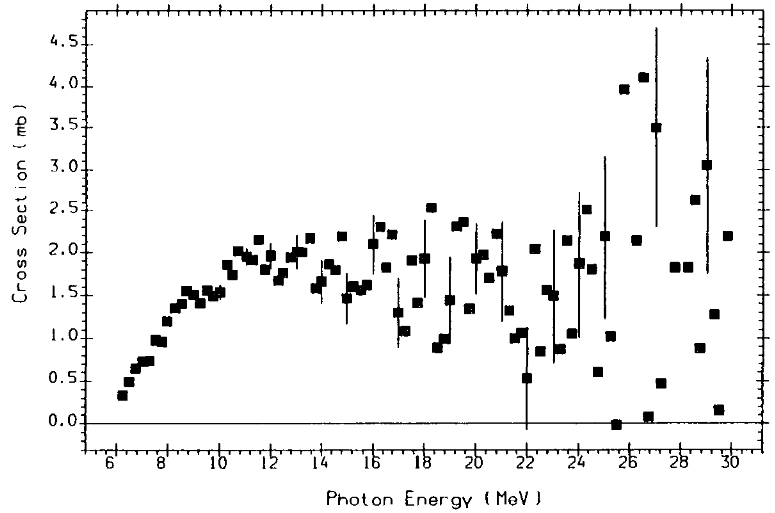
3-LI-6(G,X)0-NN-1
The sum: (G,N)+(G,N+P)+2(G,2N)+2(G,2N+P)
Positron annihilation
L0008002 J,PRL,15,727,6511 B.L.BERMAN+



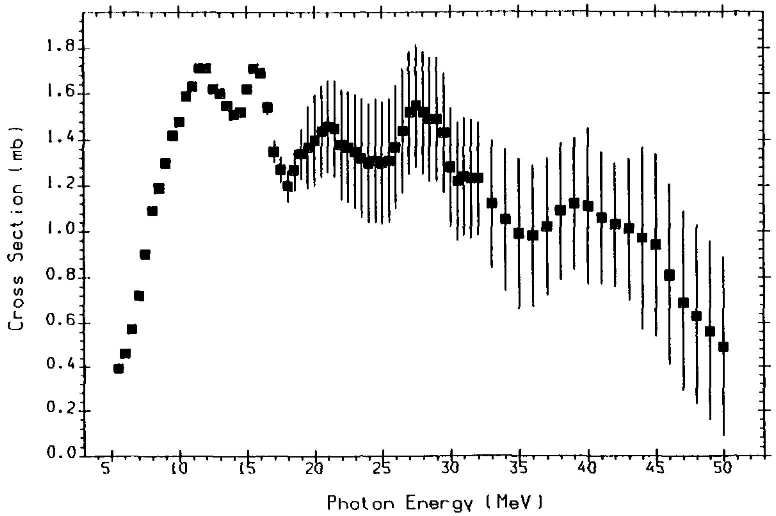
3-LI-6(G,X)0-NN-1
BRST
M0107002 J,NP,68,191,65 E.B.BAZHANOV+



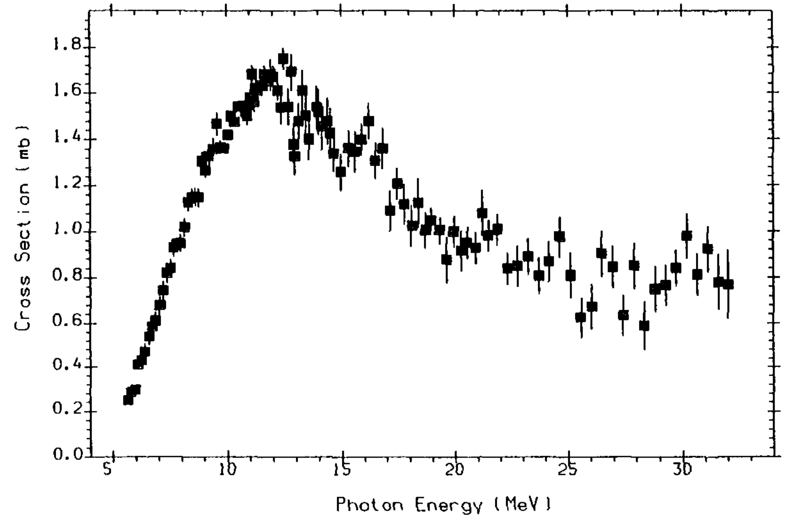
3-LI-6(G,X)0-NN-1
BRST
M0235002 J,NP/A,430,214,84 N.DYTLEWSKY+



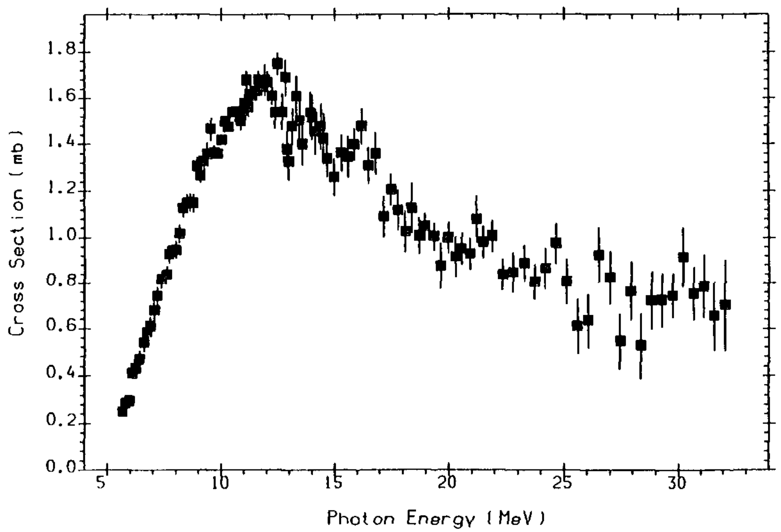
3-LI-6(G,X)0-NN-1
BRST
M0251002 J,NP,69,241,65 E.HAYWARD



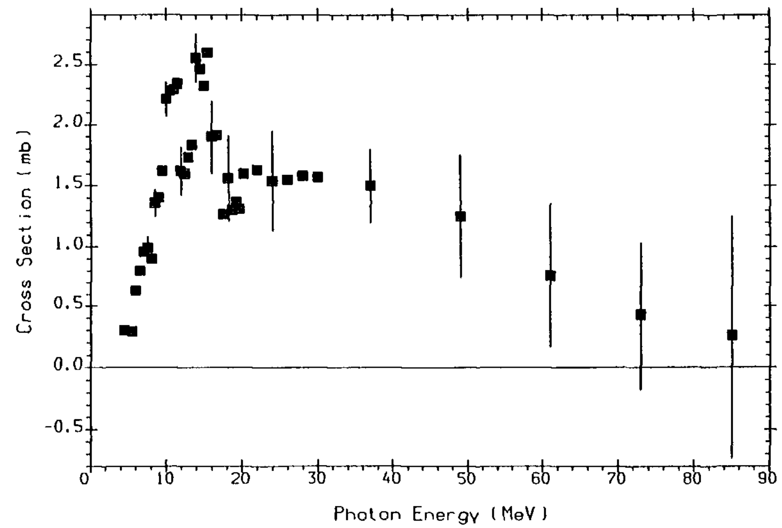
3-LI-6(G,X)0-NN-1
BRST,QMPH,ARAD
M0140002 B,CDFE/LI2,,86 V.V.VARLAMOV+



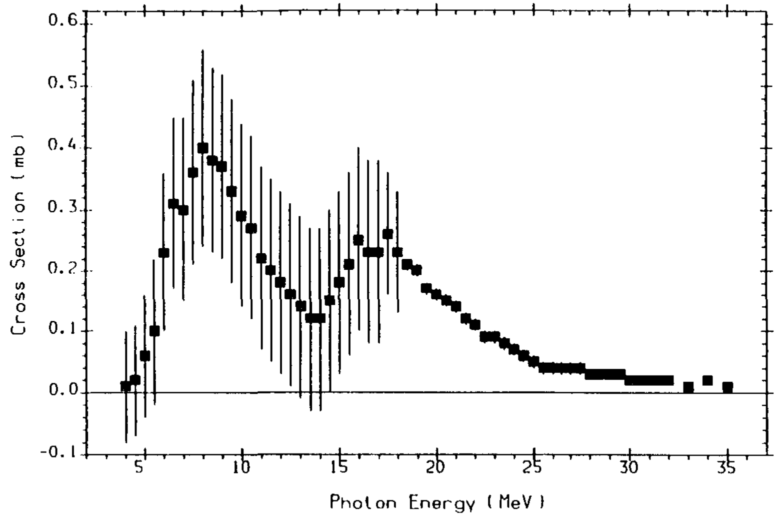
3-LI-6(G,X)0-NN-1 UNW
The sum: (G,N)+(G,N+P)+(G,2N)+(G,2N+P).
Positron annihilation
L0008005 J,PRL,15,727,6511 B.L.BERMAN+



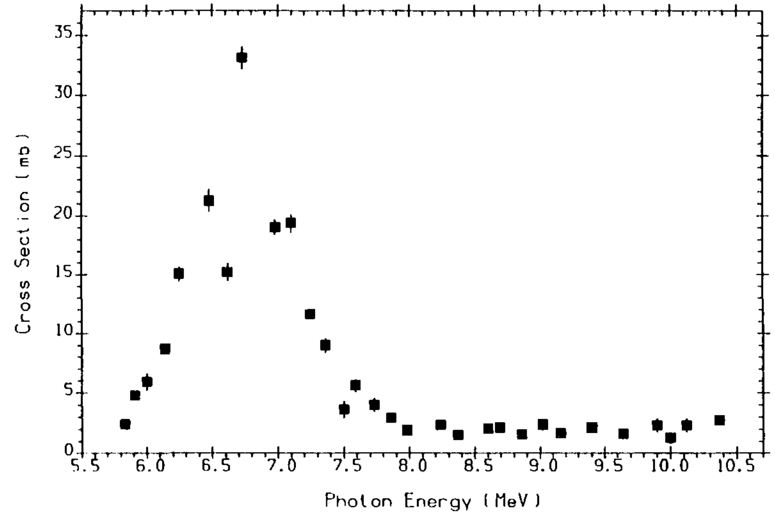
(3-LI-6(G,N)3-LI-5)+(3-LI-6(G,N+P)2-HE-4)
Positron annihilation
L0008003 J,PRL,15,727,6511 B.L.BERMAN+



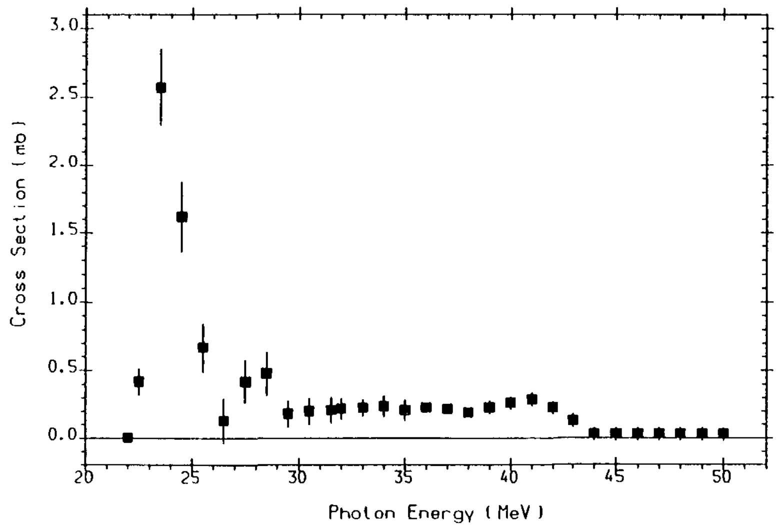
3-LI-6(G,N)3-LI-5
BRST
M0252002 J,NC/B,42,(2),382,66 S.COSTA+



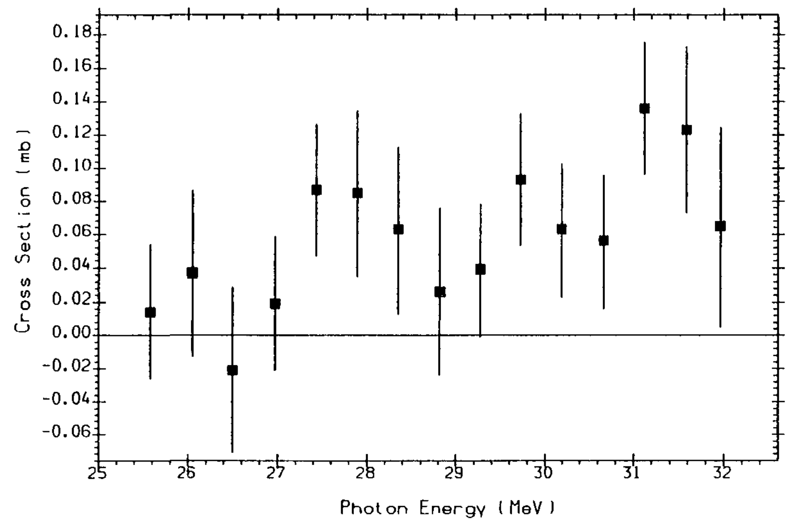
3-LI-6(G,N+P)2-HE-4
BRST,QMPH,ARAD
M0140008 B,CDFE/LI2,,86 V.V.VARLAMOV+



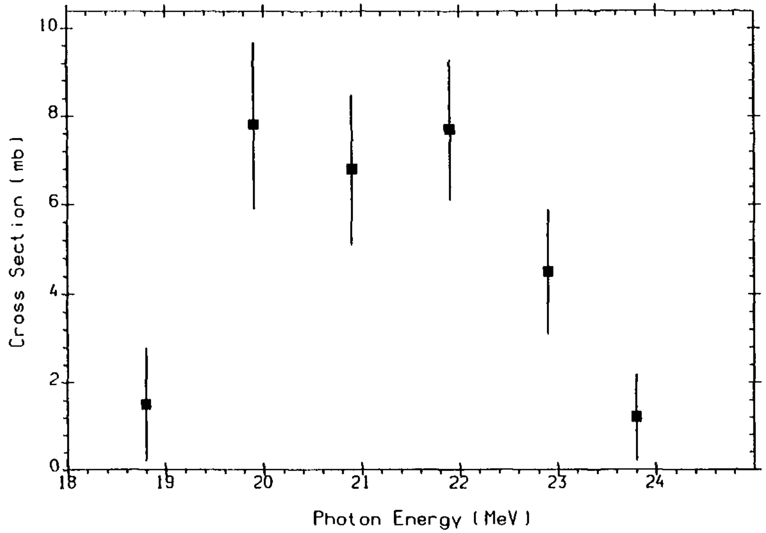
3-LI-6(G,P)2-HE-5
BRST
M0104003 J,IZV,28,(1),60,64 A.KH.SHARDANOV+



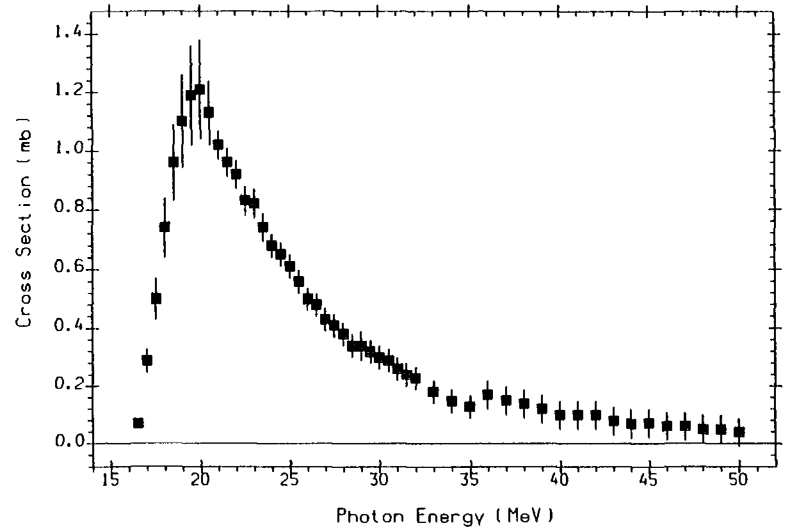
3-LI-6(G,P+D)1-H-3
BRST,QMPH,ARAD
M0140009 B,CDFE/LI2,,86 V.V.VARLAMOV+



(3-LI-6(G,2N)3-LI-4)+(3-LI-6(G,2N+P)2-HE-3)
Positron annihilation
L0008004 J,PRL,15,727,6511 B.L.BERMAN+



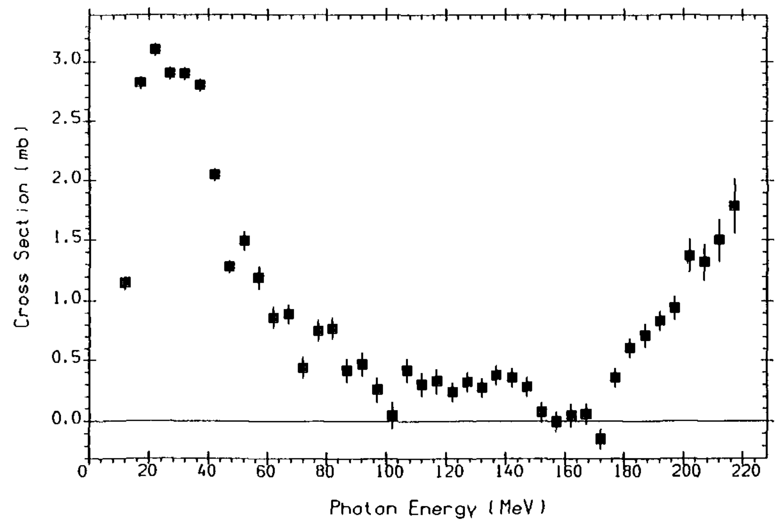
3-LI-6(G,T)2-HE-4
BRST
M0107008 J,NP,68,191,65 E.B.BAZHANOV+



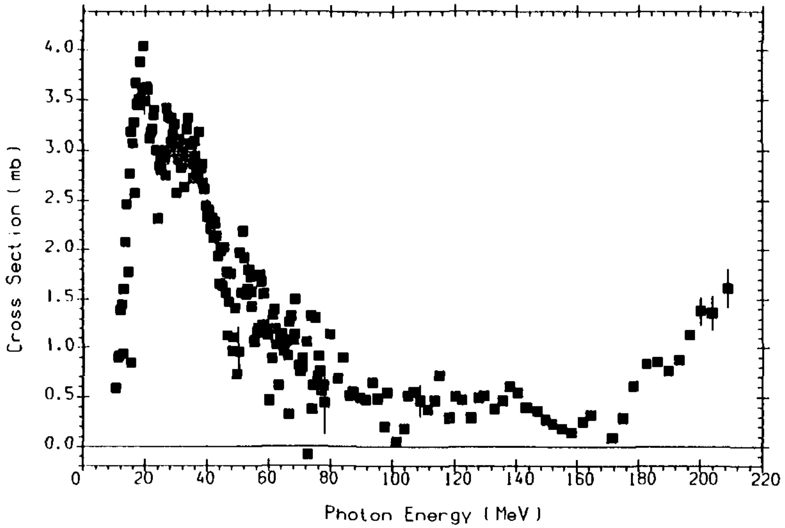
3-LI-6(G,T)2-HE-3
BRST,QMPH,ARAD
M0140013 B,CDFE/LI2,,86 V.V.VARLAMOV+

$^{7}_{3}Li$

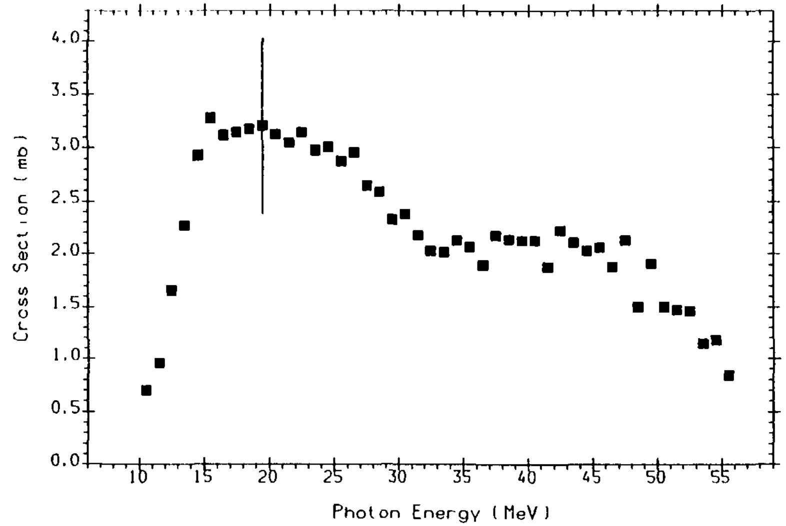
Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	γ,^{3}He	γ,α	γ,2n	γ,np	γ,2p
92.50	7.3	10.0	2.5	25.9	2.5	12.9	11.8	36.5



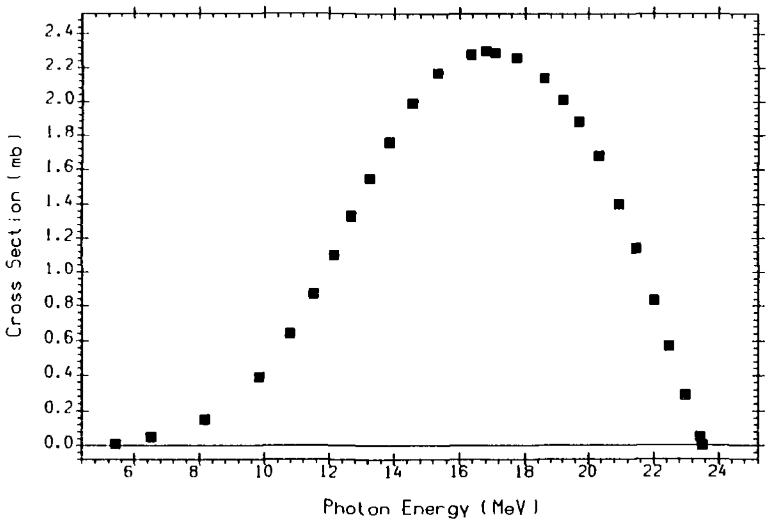
3-LI-7(G,ABS)
BRST
M0230002 J,PL/B,52,43,74 J.AHRENS+



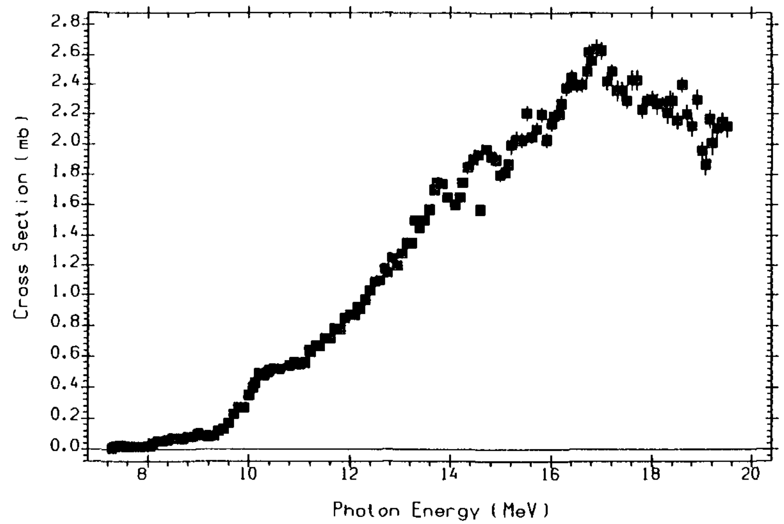
3-LI-7(G,ABS)
BRST
M0372002 J,NP/A,251,479,75 J.AHRENS+



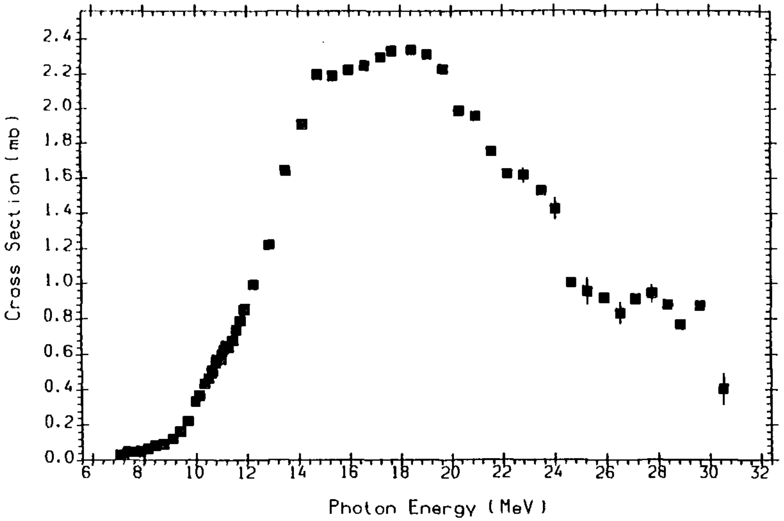
3-LI-7(G,X)0-NN-1
BRST
M0214002 J,PR,118,(2),535,60 R.W.FAST+



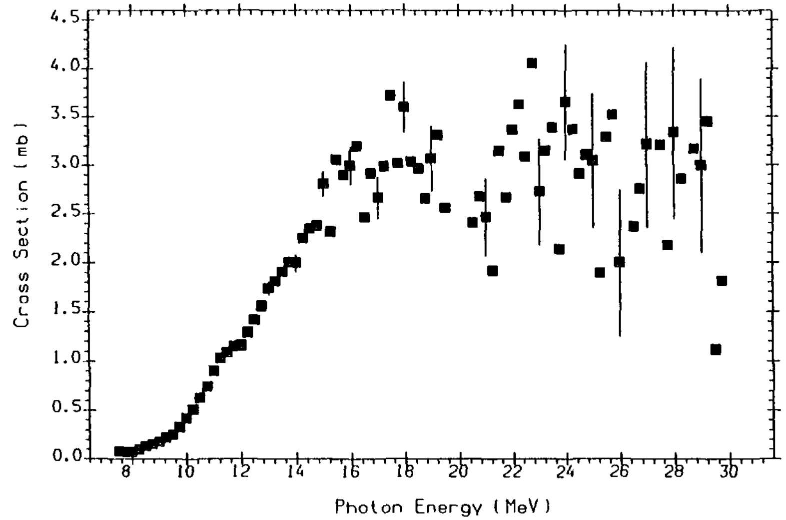
3-LI-7(G,X)0-NN-1
BRST
M0211003 J,PR,110,(5),1123,58 T.W.RYBKA+



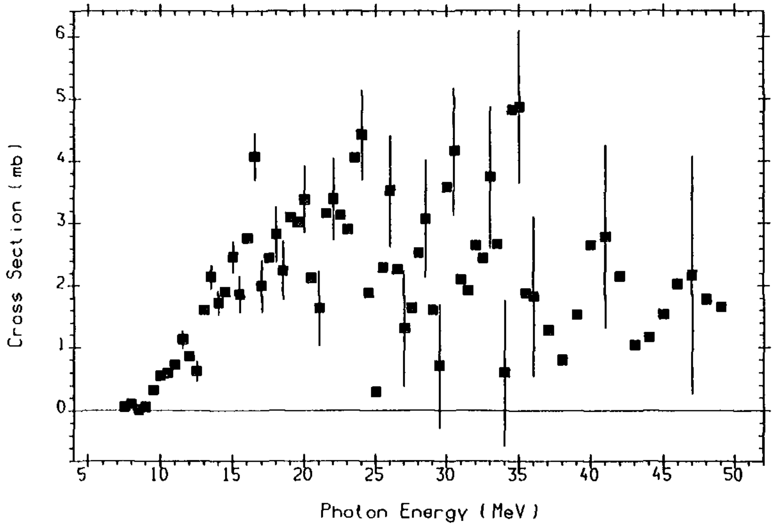
3-LI-7(G,X)0-NN-1
BRST
M0276002 J,NP/A,458,387,86 S.A.SIDDIQUI+



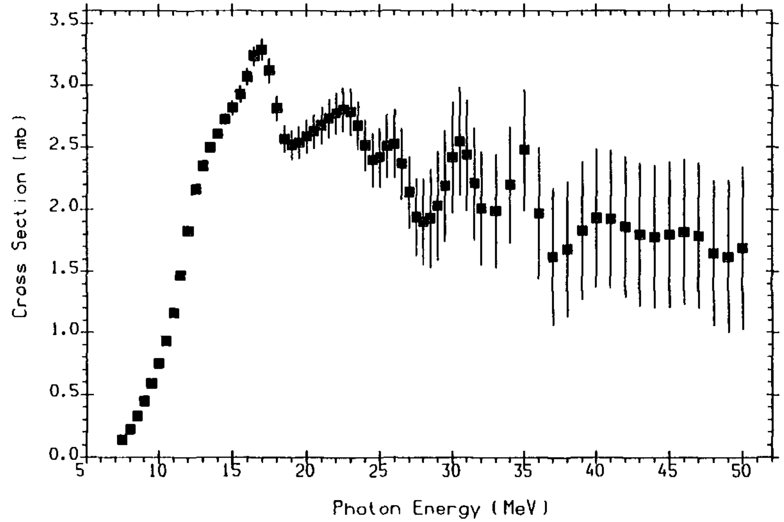
3-LI-7(G,X)0-NN-1
The sum: (G,N)+(G,N+P)+2(G,2N)+2(G,2N+P).
Positron annihilation
L0030002 C,73PACIFI,1,175,7303 R.L.BRAMBLETT+



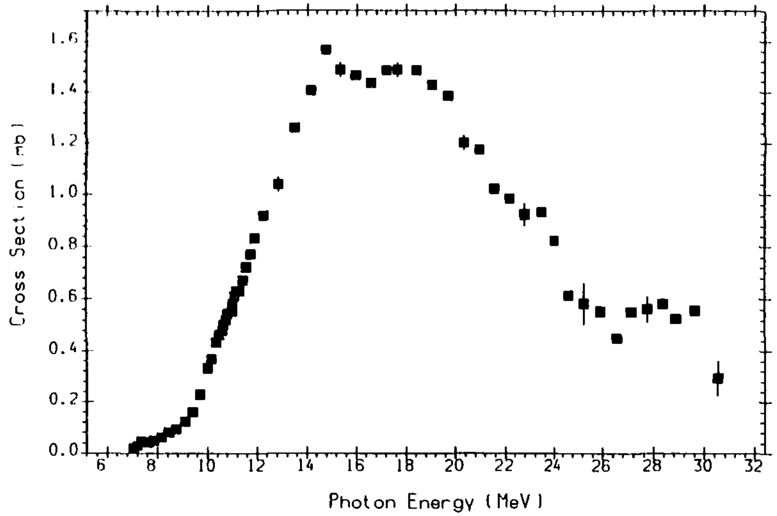
3-LI-7(G,X)0-NN-1
BRST
M0251004 J,NP,69,241,65 E.HAYWARD+



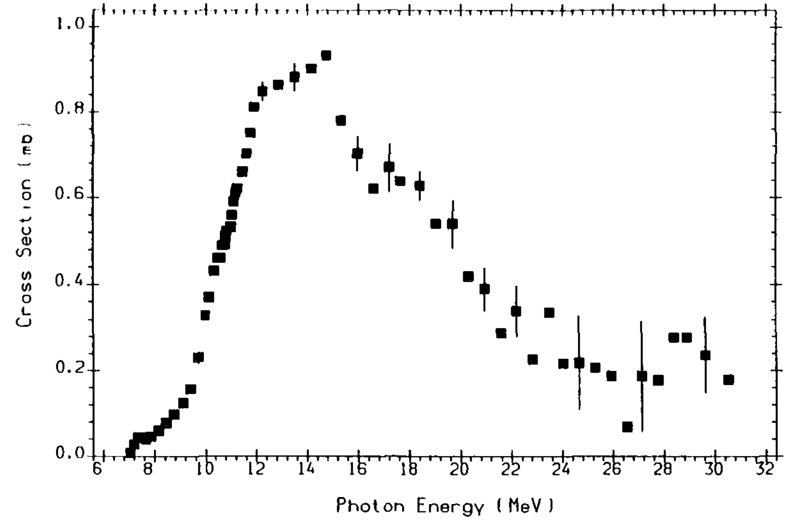
3-LI-7(G,X)0-NN-1
BRST
M0109002 J,DOK,171,(3),549,66 E.B.BAZHANOV+



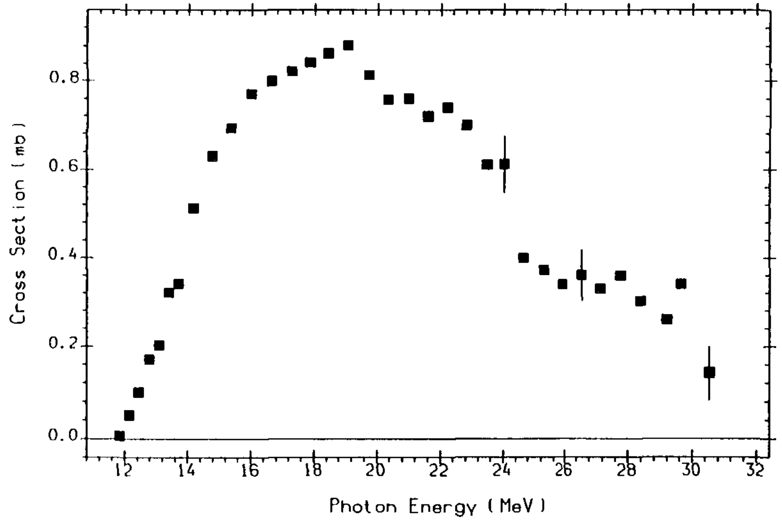
3-LI-7(G,X)0-NN-1
BRST,QMPH,ARAD
M0140017 B,CDFE/LI2,,86 V.V.VARLAMOV+



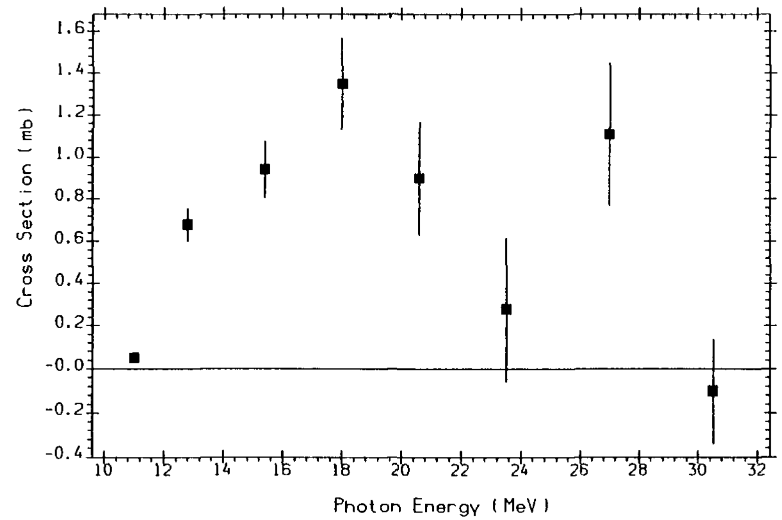
3-LI-7(G,X)0-NN-1 UNW
The sum: (G,N)+(G,N+P)+(G,2N)+(G,2N+P).
Positron annihilation
L0030005 C,73PACIFI,1,175,7303 R.L.BRAMBLETT+



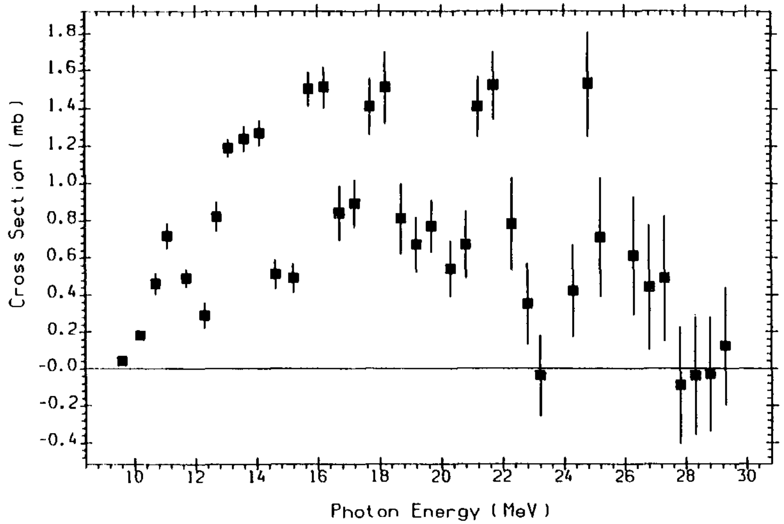
(3-LI-7(G,N)3-LI-6)+(3-LI-7(G,N+P)2-HE-5)
Positron annihilation
L0030003 C,73PACIFI,1,175,7303 R.L.BRAMBLETT+



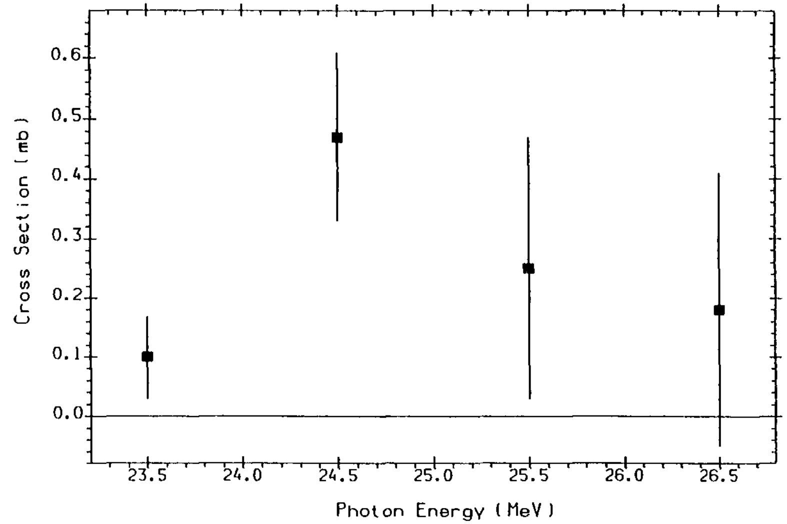
(3-LI-7(G,2N)3-LI-5)+(3-LI-7(G,2N+P)2-HE-4)
Positron annihilation
L0030004 C,73PACIFI,1,175,7303 R.L.BRAMBLETT+



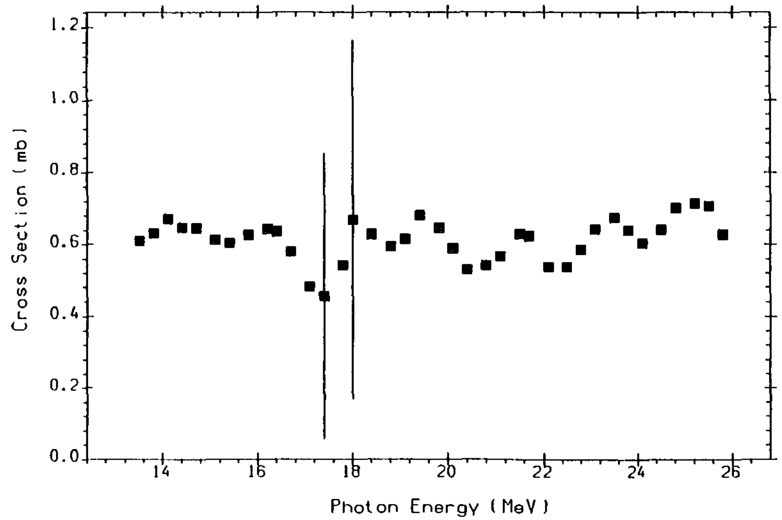
3-LI-7(G,P)2-HE-6
BRST
M0247003 J,NP,32,543,62 A.G.GREGORY+



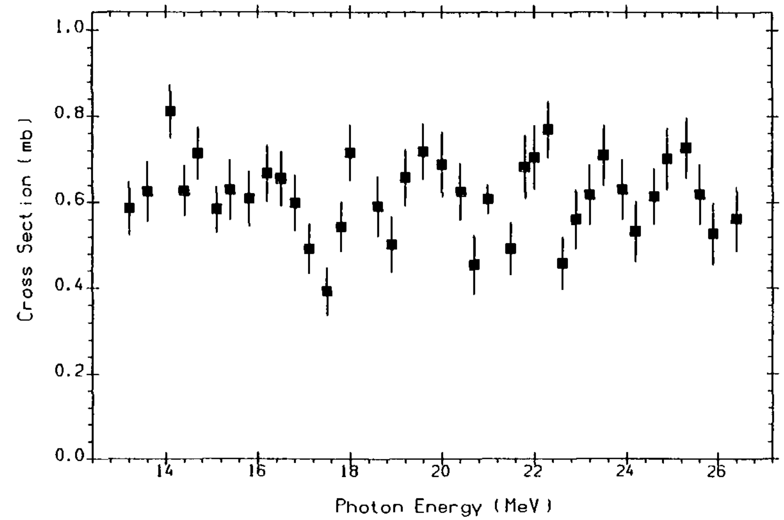
3-LI-7(G,P)2-HE-6
BRST
M0102003 J,IZV,27,(11),1412,63 L.A.KUL'CHITSKIY+



3-LI-7(G,P+T)1-H-3
BRST
M0113002 J,YF,18,(2),245,73 E.A.KOTIKOV+



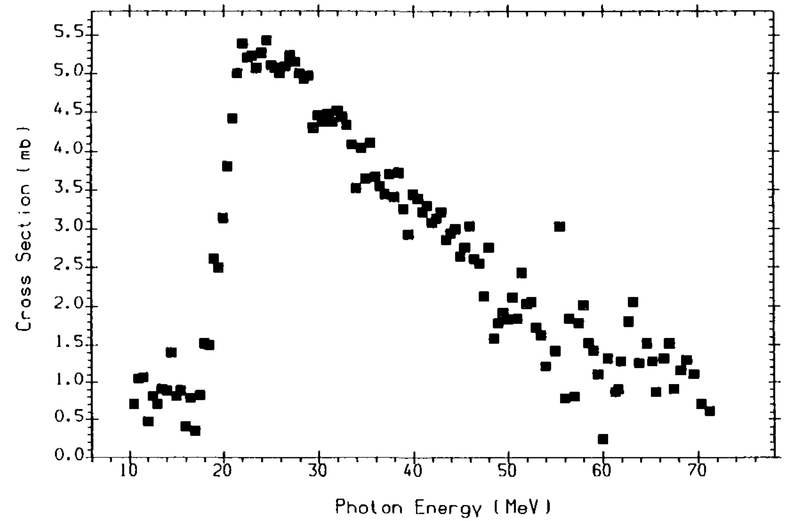
3-LI-7(G,T)2-HE-4
BRST
M0101007 J,ZET,44,(4),1153,63 L.A.KUL'CHITSKIY+



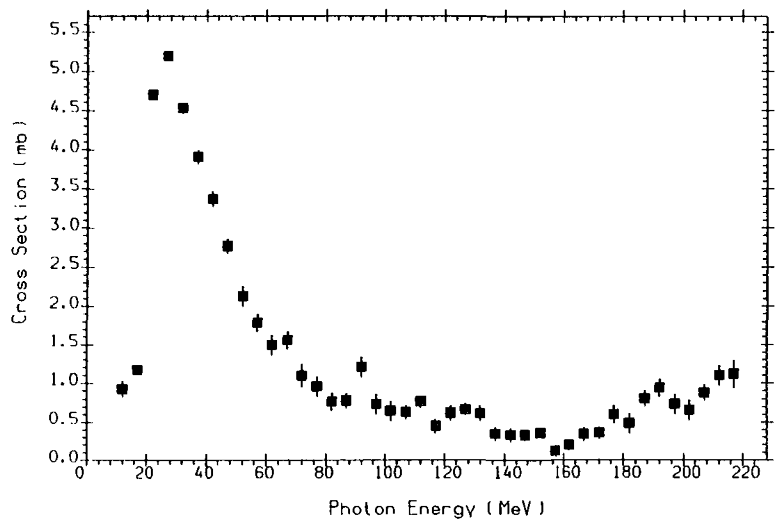
3-LI-7(G,T)2-HE-4
BRST
M0102004 J,IZV,27,(11),1412,63 L.A.KUL'CHITSKIY+

$^{9}_{4}Be$

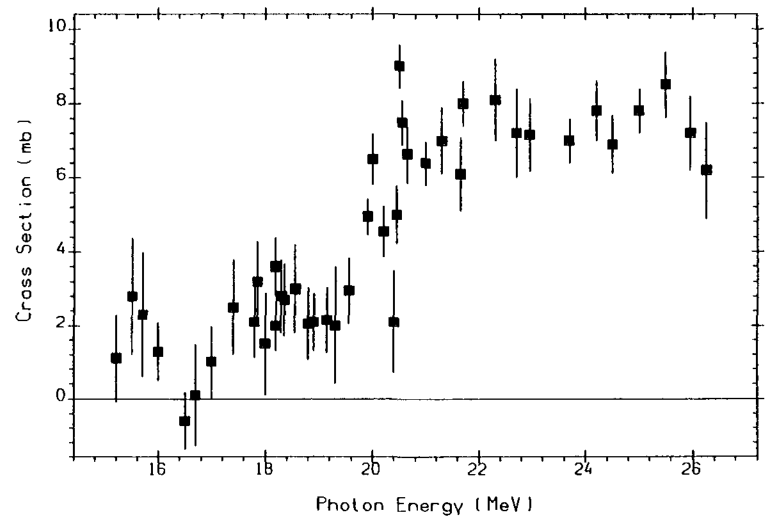
Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	$γ,^{3}He$	γ,α	γ,2n	γ,np	γ,2p
100.00	1.7	16.9	17.7	21.2	2.5	20.6	18.9	29.3



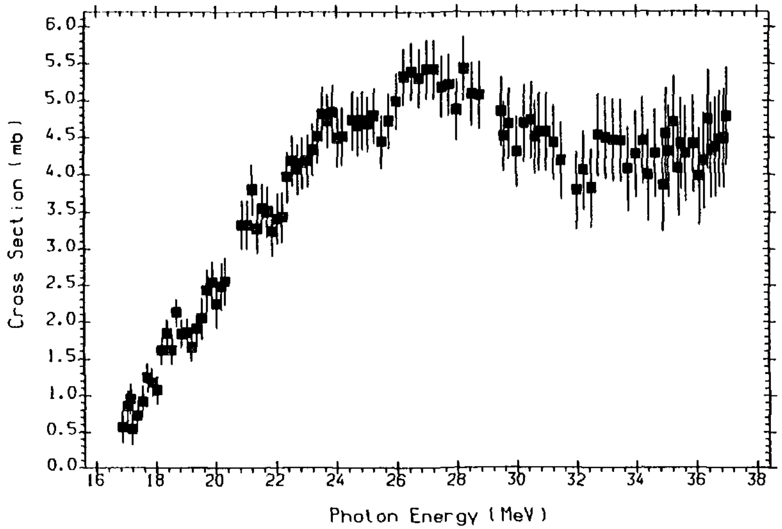
4-BE-9(G,ABS)
BRST
M0372003 J,NP/A,251,479,75 J.AHRENS+



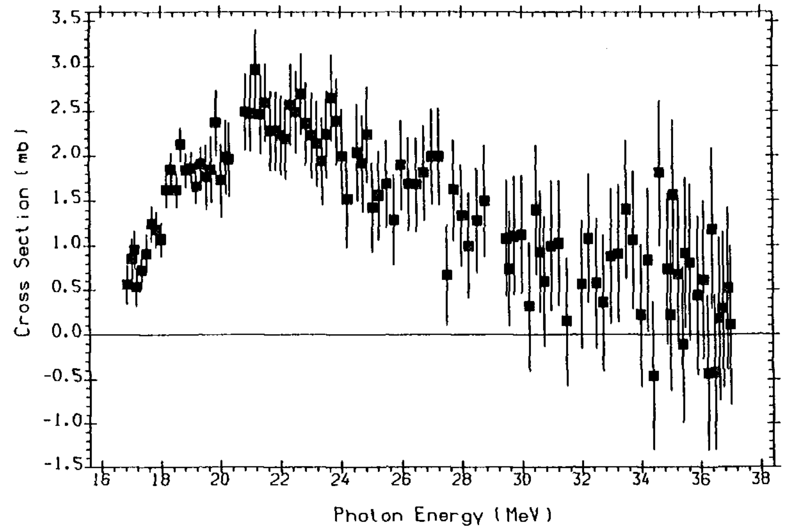
4-BE-9(G,ABS)
BRST
M0230003 J,PL/B,52,43,74 J.AHRENS+



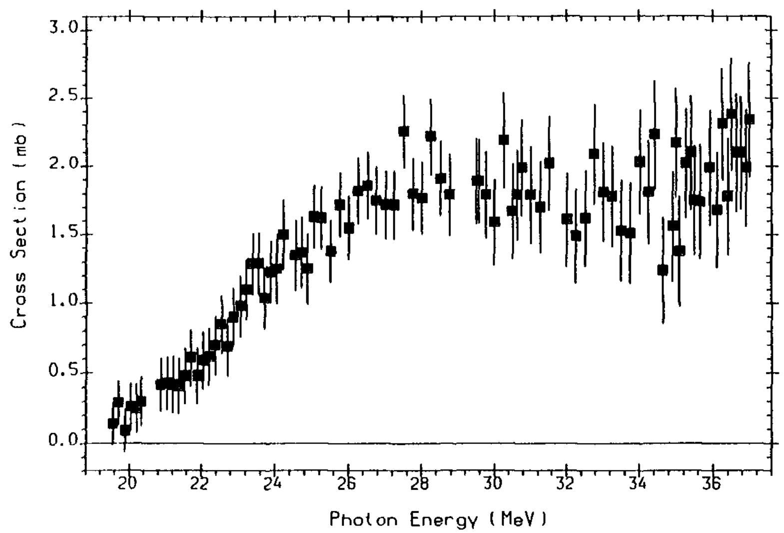
4-BE-9(G,ABS)
BRST
M0451002 J,NP,31,570,62 U.MIKLAVZIC+



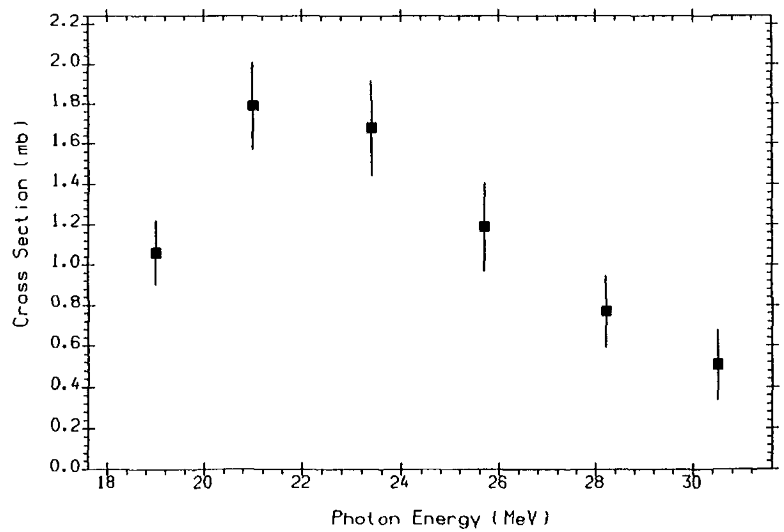
4-BE-9(G,X)0-NN-1
The sum: (G,N)+(G,NP)+(G,2N)+2(G,2N+P).
QMPH,ARAD Positron annihilation in flight.
L0040004 J,NP/A,247,91,75 U.KNEISSL+



(4-BE-9(G,N)4-BE-8)+(4-BE-9(G,N+P)3-LI-7)
QMPH,ARAD Positron annihilation in flight.
L0040002 J,NP/A,247,91,75 U.KNEISSL+



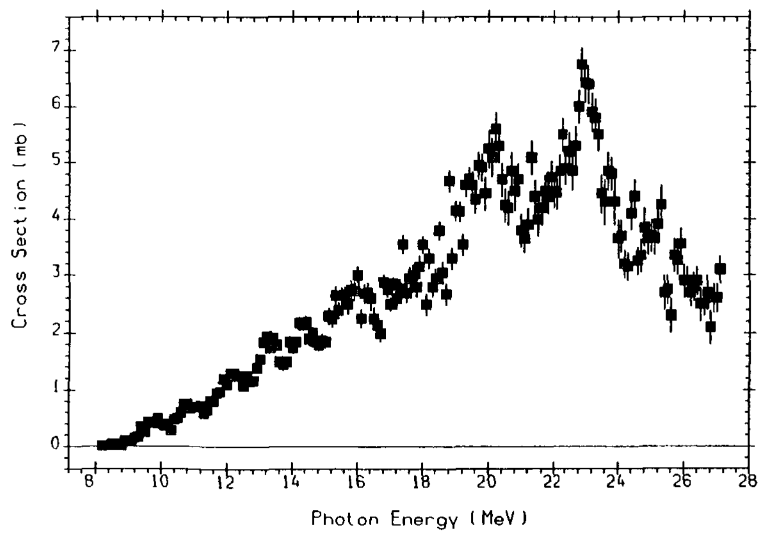
(4-BE-9(G,2N)4-BE-7)+(4-BE-9(G,2N+P)3-LI-6)
QMPH,ARAD Positron annihilation in flight.
L0040003 J,NP/A,247,91,75 U.KNEISSL+



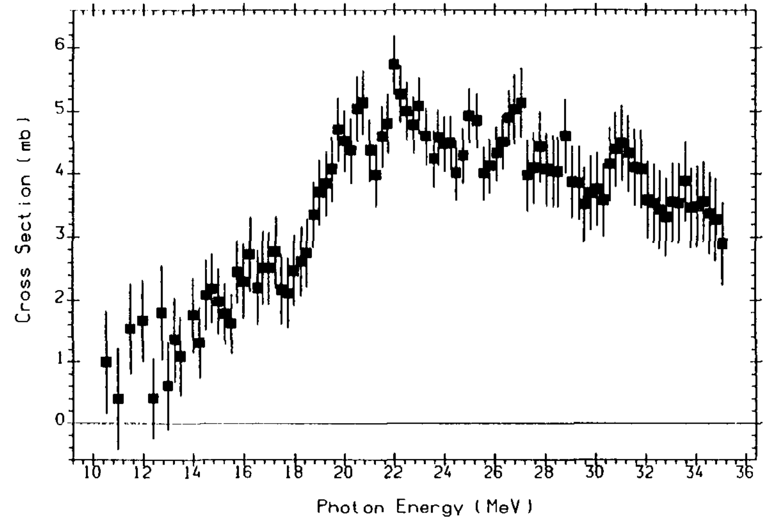
4-BE-9(G,P)3-LI-8
QMPH,KINDT *KINEMATICALLY DETERMINED*
M0440002 J,NP,65,662,64 A.P.KOMAR+

$^{10}_{5}B$

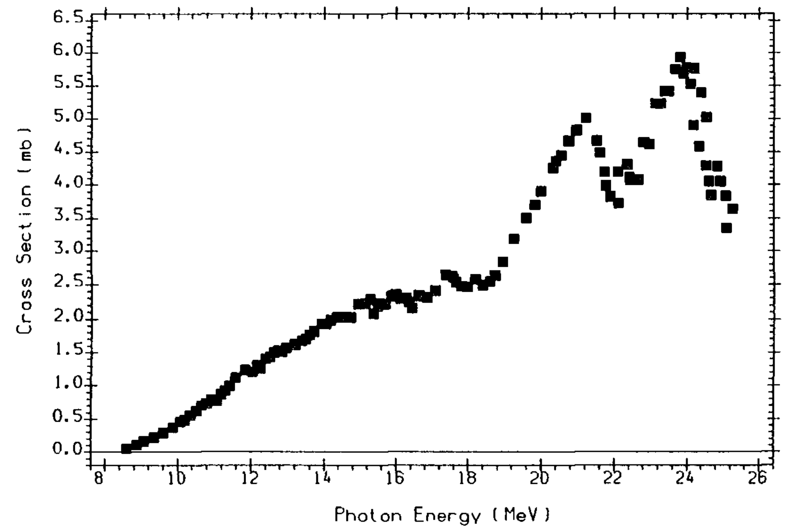
Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	γ,^{3}He	γ,α	γ,2n	γ,np	γ,2p
20.00	8.4	6.6	18.7	17.8	4.5	27.0	8.3	23.5



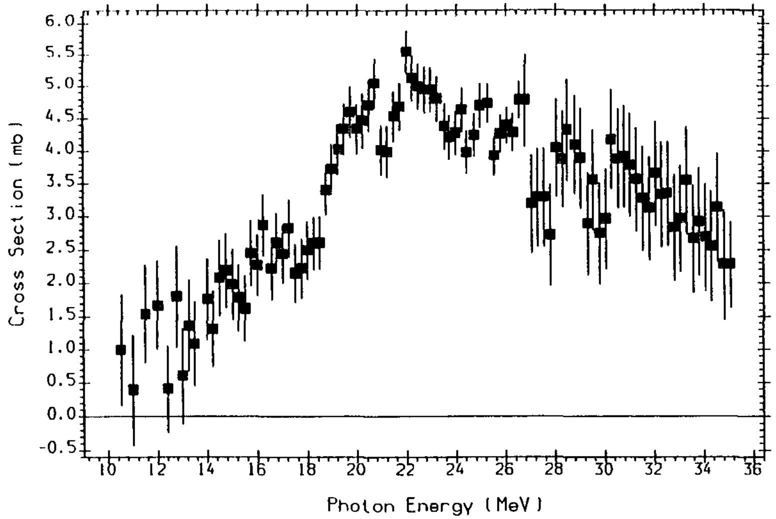
5-B-10(G,X)0-NN-1
THE SUM OF THE CROSS SECTIONS FOR THE REACTIONS (G,N), (G,N+P), AND 2(G,2N).
BRST
M0498002 J,NP/A,215,147,73 R.J.HUGHES+



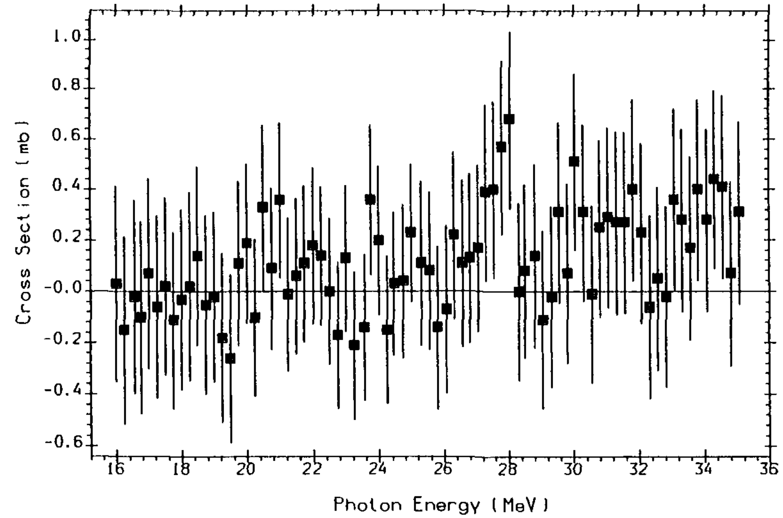
5-B-10(G,X)0-NN-1
The sum: (G,N)+(G,N+P)+2(G,2N)+2(G,2N+P).
QMPH,ARAD Positron annihilation in flight.
L0044004 J,NP/A,264,30,76 U.KNEISSL+



(5-B-10(G,N)5-B-9)+(5-B-10(G,N+P)4-BE-8)
BRST
M0207002 J,NP/A,469,381,87 M.H.AHSAN+



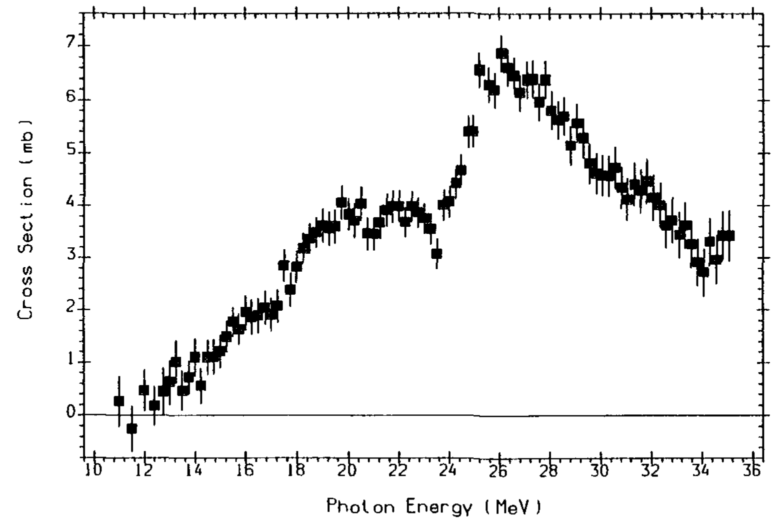
(5-B-10(G,N)5-B-9)+(5-B-10(G,N+P)4-BE-8)
QMPH,ARAD Positron annihilation in flight.
L0044002 J,NP/A,264,30,76 U.KNEISSL+



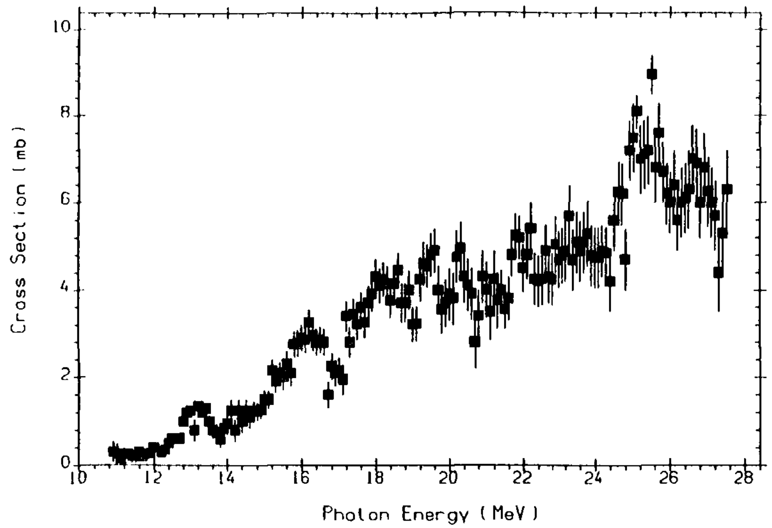
(5-B-10(G,2N)5-B-8)+(5-B-10(G,2N+P)4-BE-7)
QMPH,ARAD Positron annihilation in flight.
L0044003 J,NP/A,264,30,76 U.KNEISSL+

$^{11}_{5}$B

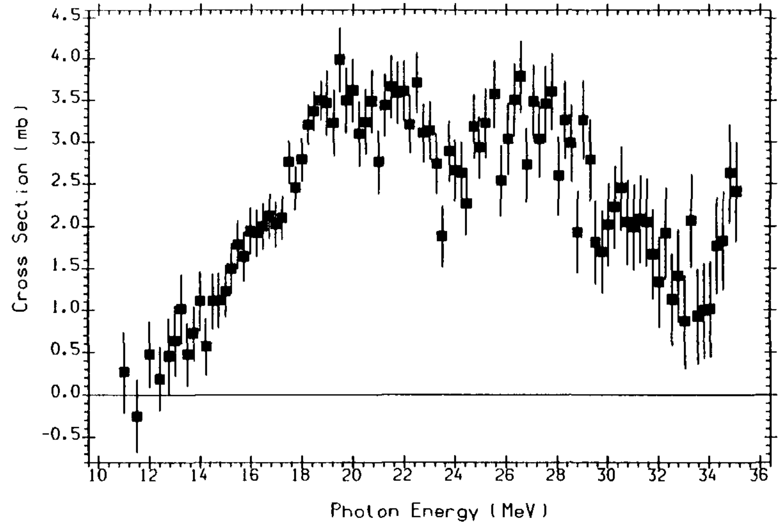
Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	γ,^{3}He	γ,α	γ,2n	γ,np	γ,2p
80.00	11.5	11.2	11.2	27.2	8.7	19.9	18.0	30.9



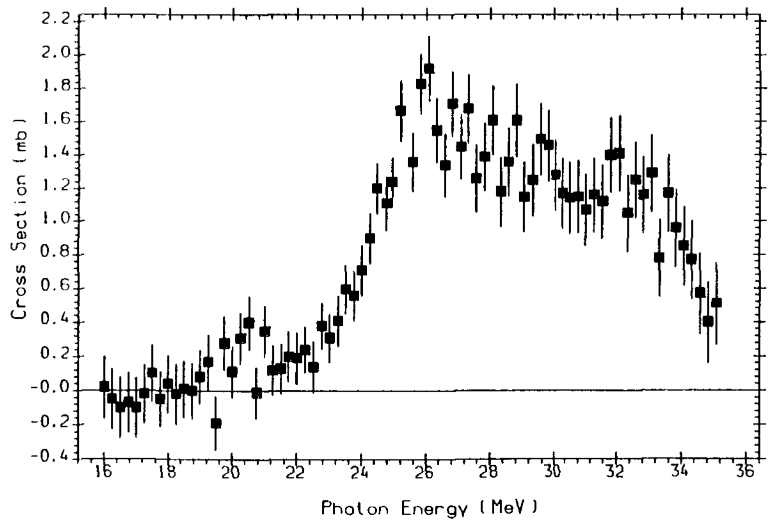
5-B-11(G,X)0-NN-1
The sum: (G,N)+(G,N+P)+2(G,2N)+2(G,2N+P).
QMPH,ARAD Positron annihilation in flight.
L0044007 J,NP/A,264,30,76 U.KNEISSL+



5-B-11(G,X)0-NN-1
THE SUM OF THE CROSS SECTIONS FOR THE REACTIONS (G,N), (G,N+P), AND 2(G,2N).
BRST
M0498003 J,NP/A,215,147,73 R.J.HUGHES+



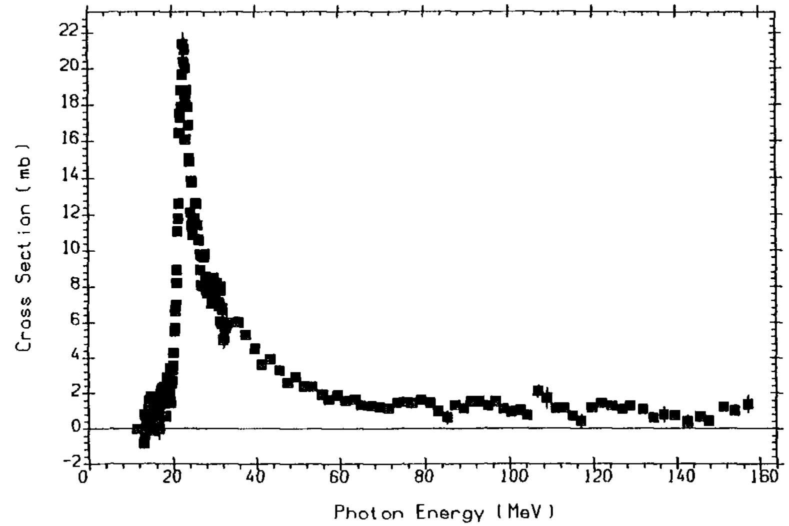
(5-B-11(G,N)5-B-10)+(5-B-11(G,N+P)4-BE-9)
QMPH,ARAD Positron annihilation in flight.
L0044005 J,NP/A,264,30,76 U.KNEISSL+



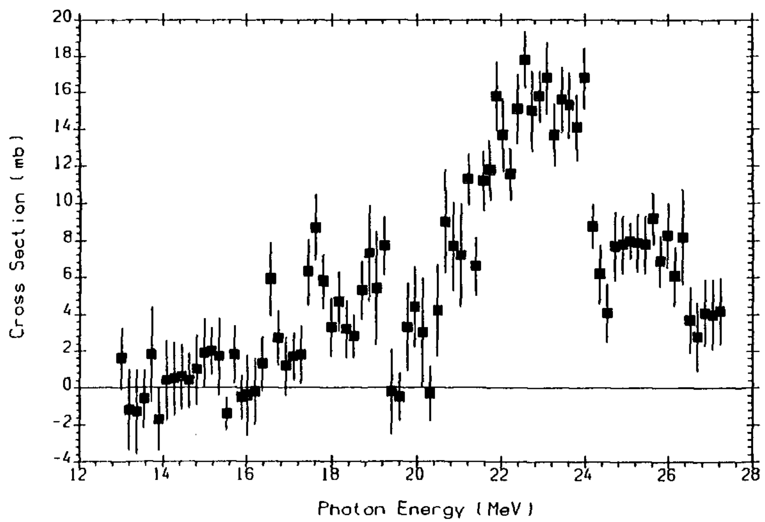
5-B-11(G,2N)5-B-9
QMPH,ARAD Positron annihilation in flight.
L0044006 J,NP/A,264,30,76 U.KNEISSL+

$^{12}_{6}C$

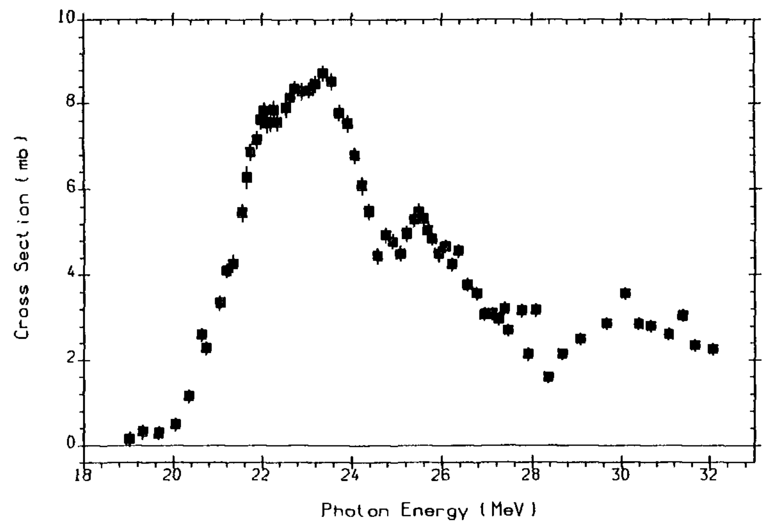
Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	γ,^{3}He	γ,α	γ,2n	γ,np	γ,2p
98.89	18.7	16.0	27.4	26.3	7.4	31.8	27.4	27.2



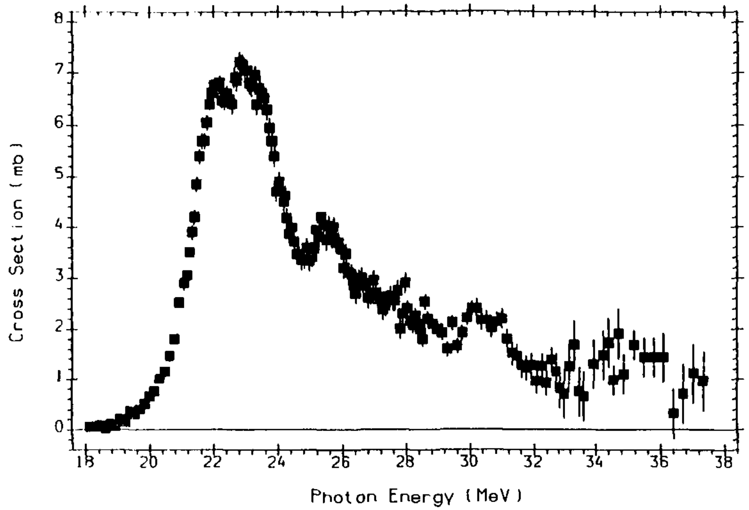
6-C-12(G,ABS)
BRST
M0372004 J,NP/A,251,479,75 J.AHRENS+



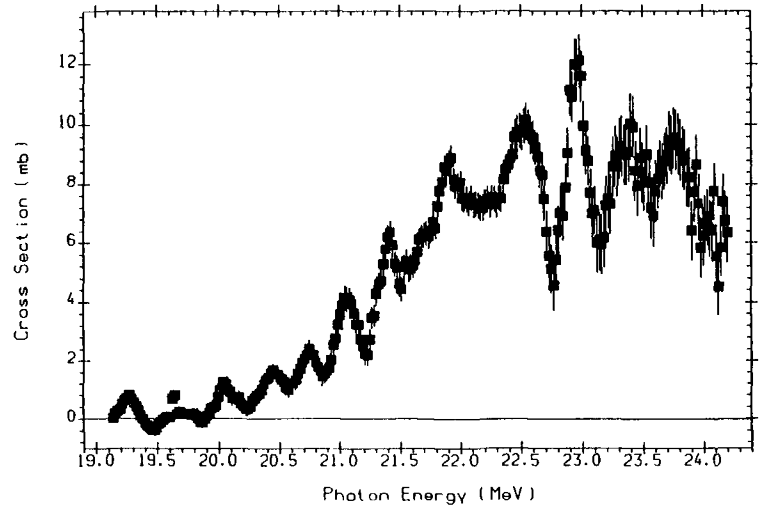
6-C-12(G,ABS)
BRST
M0160002 J,ZET,45,(6),1694,63 N.A.BURGOV+



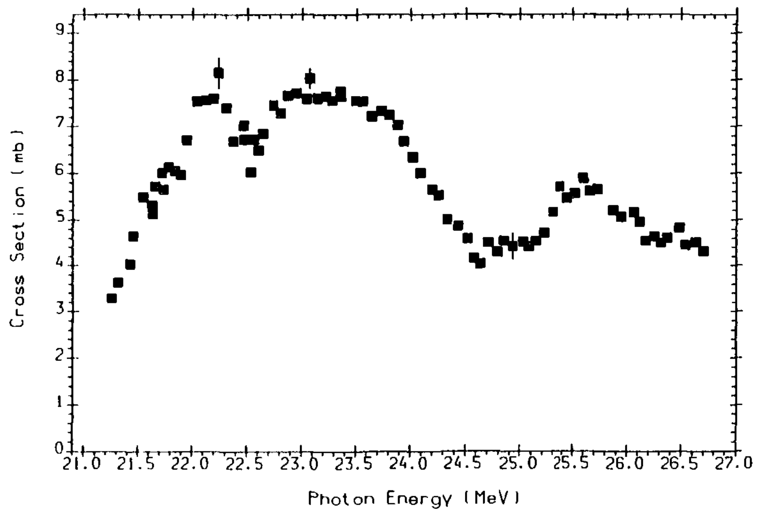
((6-C-12(G,N)6-C-11)+(6-C-12(G,N+P)5-B-10))
QMPH,ARAD Positron annihilation in flight.
L0041002 J,NIM,127,1,75 U.KNEISSL+



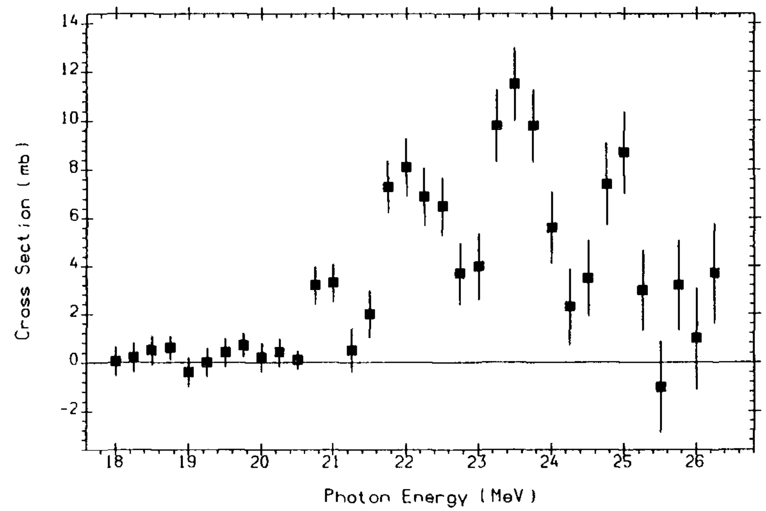
((6-C-12(G,N)6-C-11)+(6-C-12(G,N+P)5-B-10))
Positron annihilation
L0010002 J,PR,143,790,6603 S.C.FULTZ+



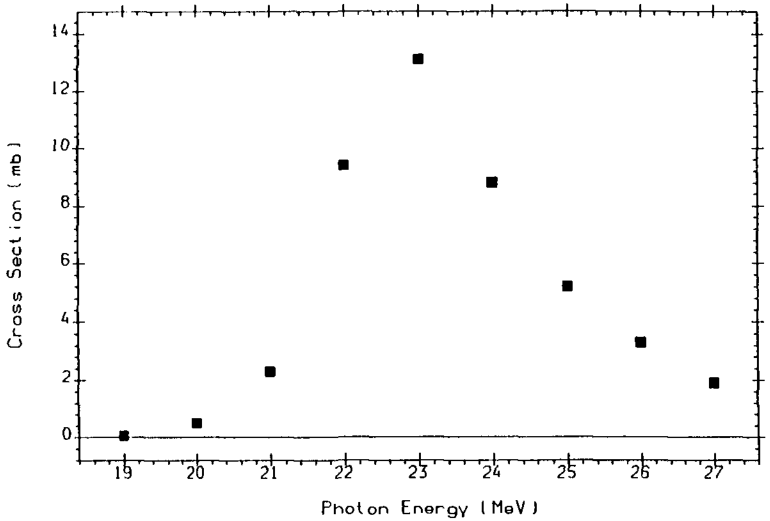
6-C-12(G,X)0-NN-1
BRST
M0238002 J,YF,14,253,71 B.S.ISHKHANOV+



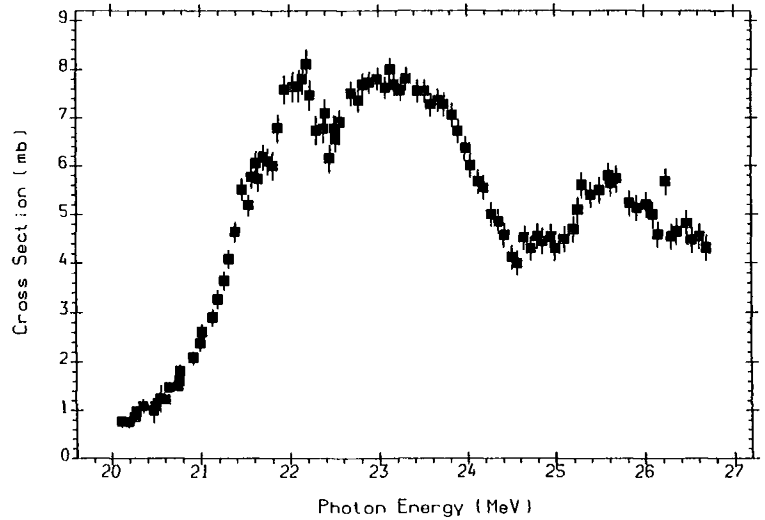
6-C-12(G,N)6-C-11
MPH=1-H-3(P,G2-HE-4)
L0038002 J,PR,141,1002,6601 W.A.LOCHSTET+



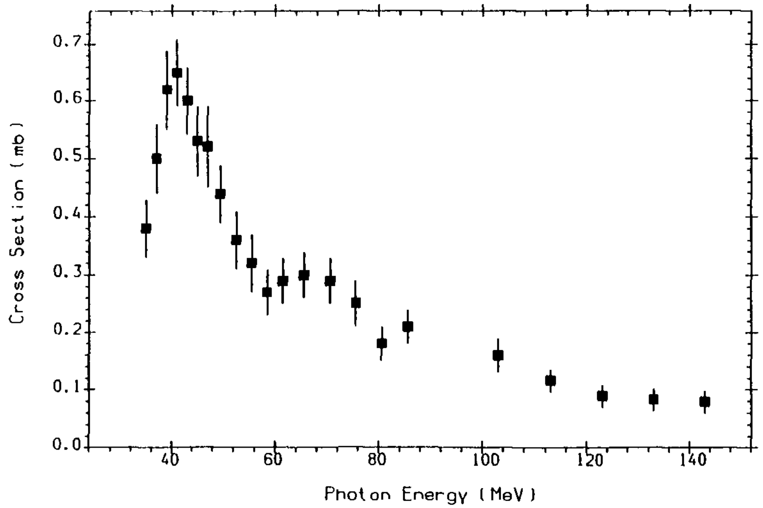
6-C-12(G,N)6-C-11
BRST
M0319002 J,YF,3,711,66 E.B.BAZHANOV+



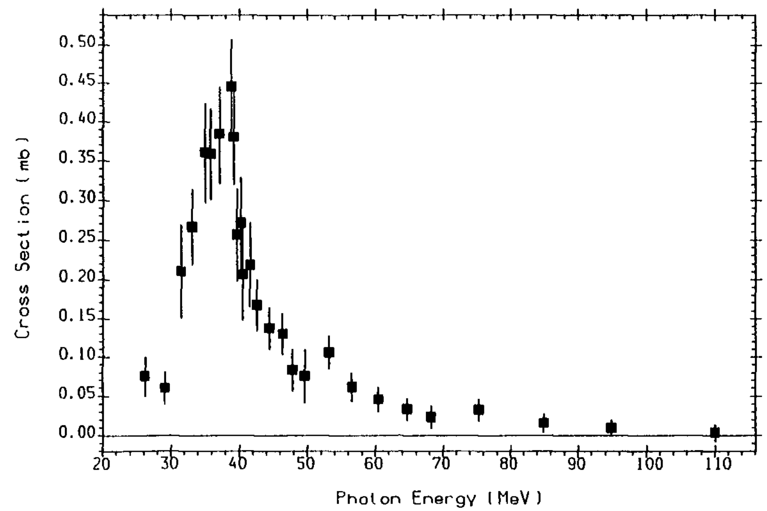
6-C-12(G,N)6-C-11
BRST
M0273002 J,CJP,29,518,51 L.KATZ+



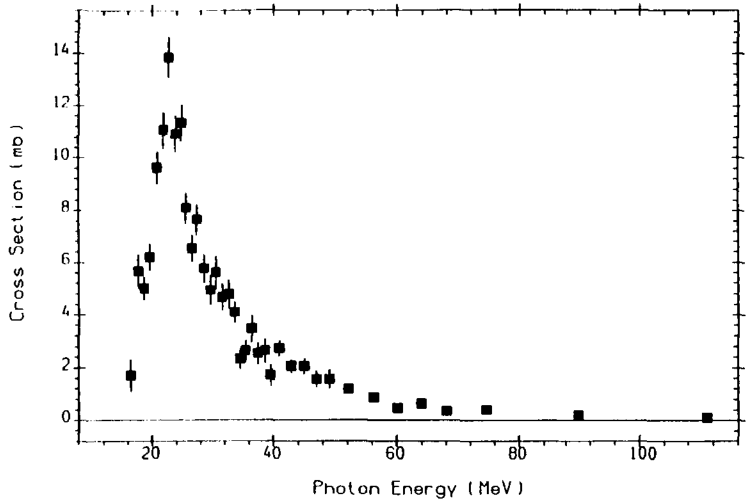
6-C-12(G,N)6-C-11
MPH,P-T
M0241002 J,PR,141,1002,66 W.A.LOCHSTET+



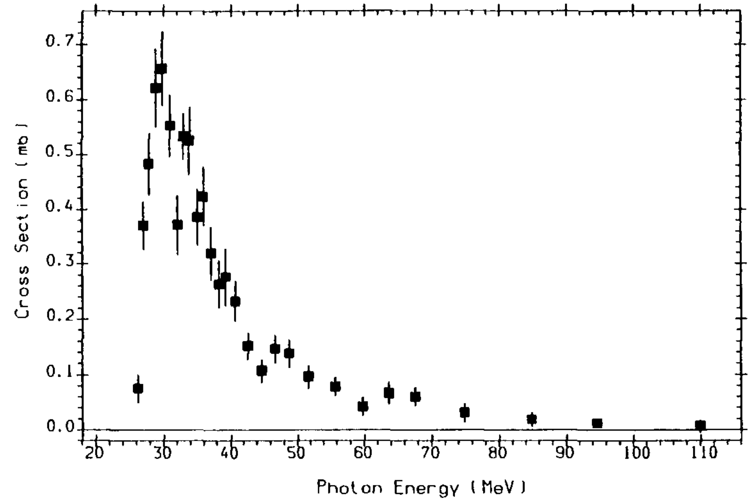
6-C-12(G,N+P)5-B-10
BRST
M0033006 J,YF,32,881,80 A.F.KHODYACHIKH+



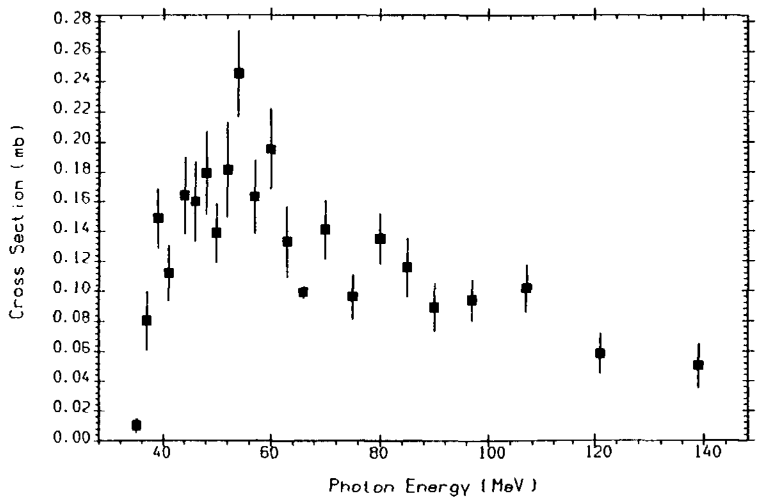
6-C-12(G,N+A)4-BE-7
BRST
M0071003 J,YF,29,572,79 V.V.KIRICHENKO+



6-C-12(G,P)5-B-11
BRST
M0013002 J,YF,27,588,78 V.V.KIRICHENKO+



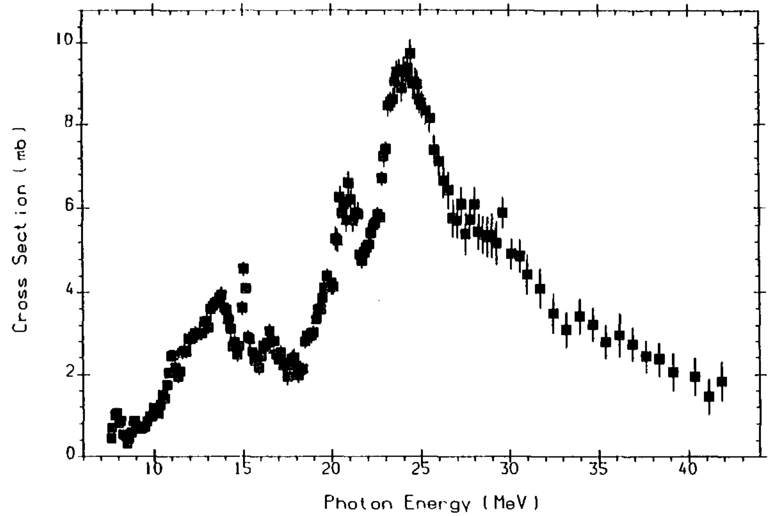
6-C-12(G,P+A)3-LI-7
BRST
M0071002 J,YF,29,572,79 V.V.KIRICHENKO+



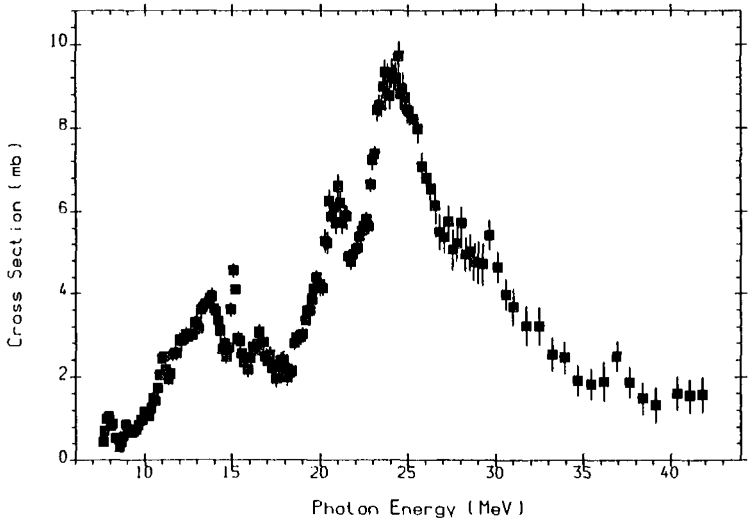
6-C-12(G,N+P+A)
BRST
M0065002 J,UFZ,10,1465,82 I.V.DOGYUST+

$^{13}_{6}C$

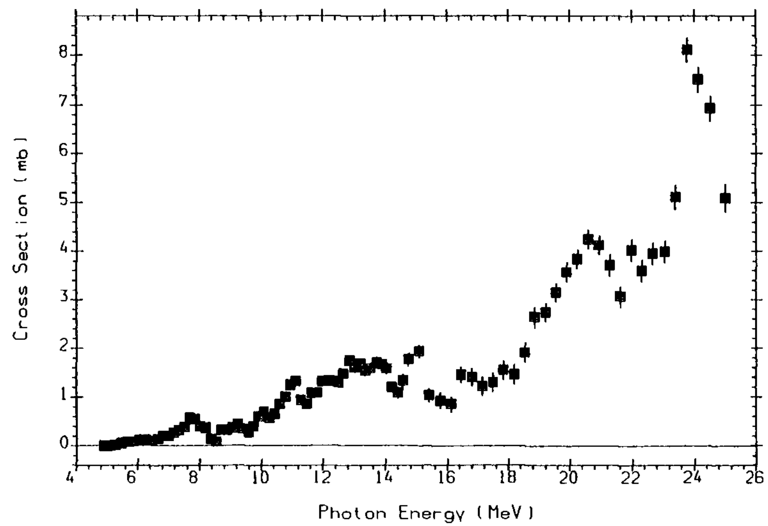
Abundance	Separation Energies (MeV)							
(%)	γ,n	γ,p	γ,t	γ,^{3}He	γ,α	γ,2n	γ,np	γ,2p
1.11	4.9	17.5	23.9	24.4	10.6	23.7	20.9	31.6



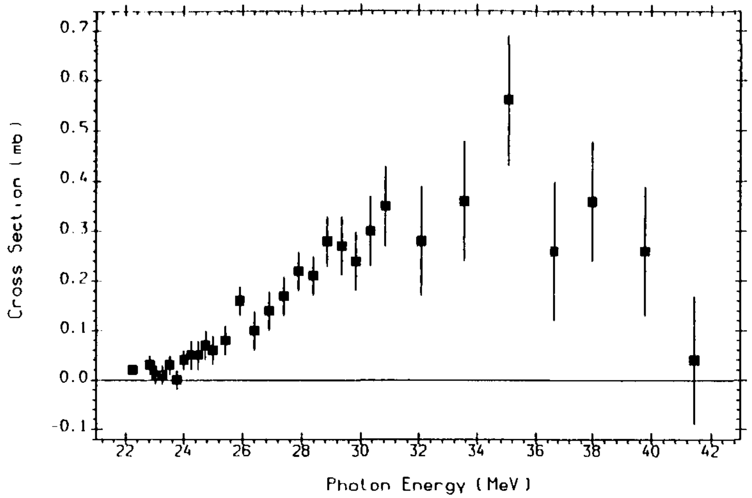
6-C-13(G,X)0-NN-1
The sum: (G,N)+(G,N+P)+2(G,2N)+2(G,2N+P).
QMPH,ARAD Positron annihilation in flight.
L0048004 J,PR/C,19,1684,7905 J.W.JURY+



((6-C-13(G,N)6-C-12)+(6-C-13(G,N+P)5-B-11))
QMPH,ARAD Positron annihilation in flight.
L0048002 J,PR/C,19,1684,7905 J.W.JURY+



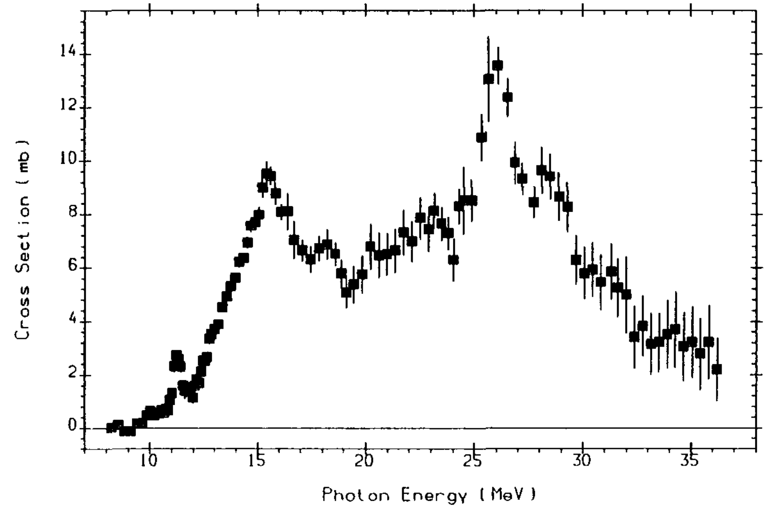
((6-C-13(G,N)6-C-12)+(6-C-13(G,N+P)5-B-11))
BRST
M0363002 J,NP/A,272,296,76 R.KOCH+



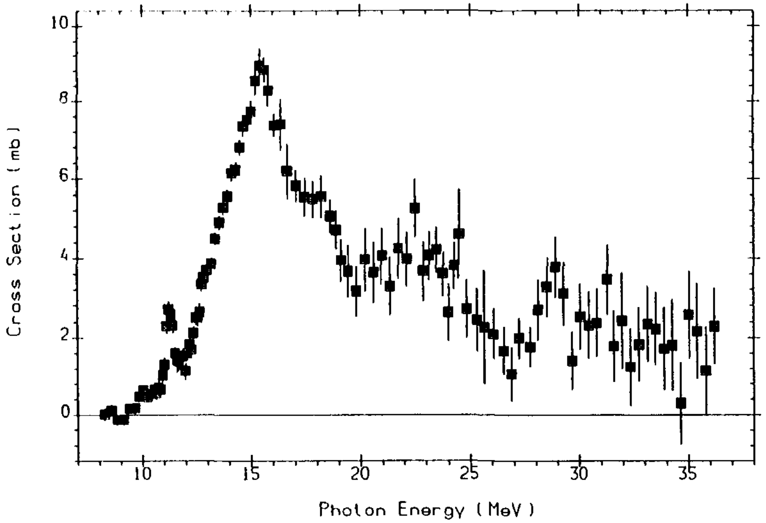
((6-C-13(G,2N)6-C-11)+(6-C-13(G,2N+P)5-B-10))
QMPH,ARAD Positron annihilation in flight.
L0048003 J,PR/C,19,1684,7905 J.W.JURY+

$^{14}_{6}C$

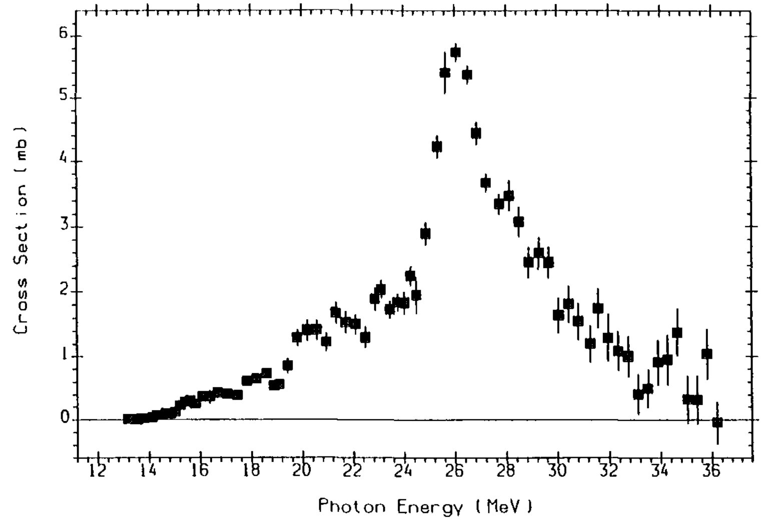
Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	γ,^{3}He	γ,α	γ,2n	γ,np	γ,2p
*	8.2	20.8	20.9	22.5	12.0	13.1	25.7	36.6



6-C-14(G,X)0-NN-1
The sum: (G,N)+(G,N+P)+2(G,2N).
QMPH,ARAD Positron annihilation in flight.
L0056004 J,PR/C,32,384,8508 R.E.PYWELL+



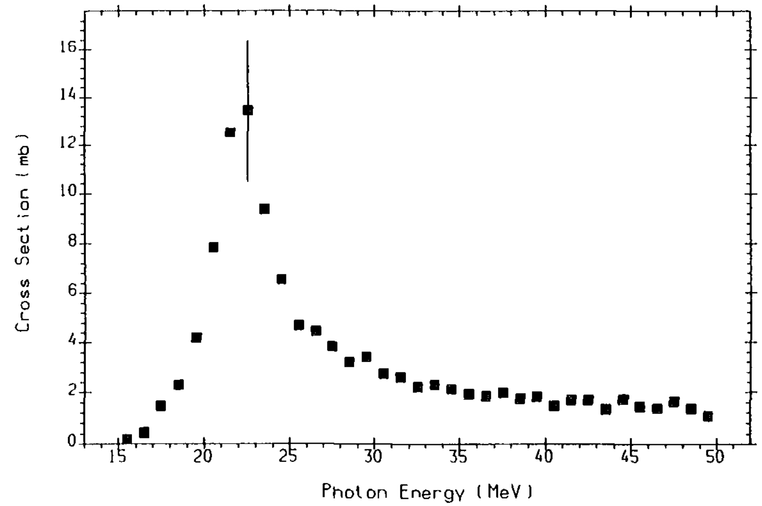
((6-C-14(G,N)6-C-13)+(6-C-14(G,N+P)5-B-12))
QMPH,ARAD Positron annihilation in flight.
L0056002 J,PR/C,32,384,8508 R.E.PYWELL+



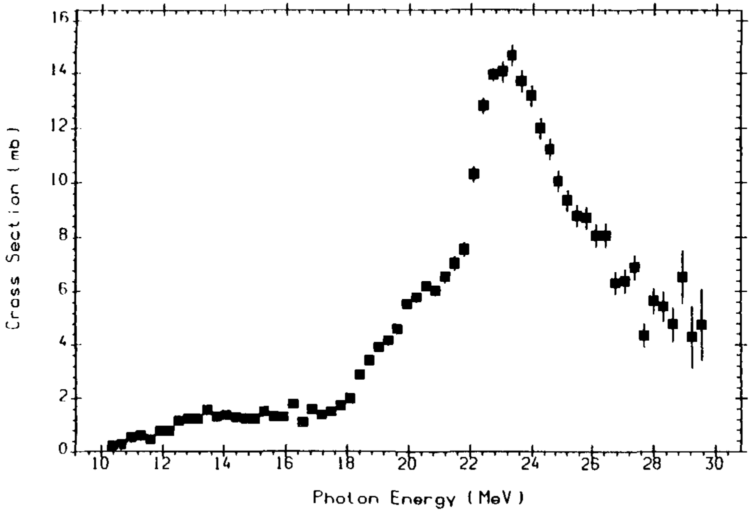
6-C-14(G,2N)6-C-12
QMPH,ARAD Positron annihilation in flight.
L0056003 J,PR/C,32,384,8508 R.E.PYWELL+

$^{14}_{7}N$

Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	γ,^{3}He	γ,α	γ,2n	γ,np	γ,2p
99.63	10.6	7.6	22.7	20.7	11.6	30.6	12.5	25.1



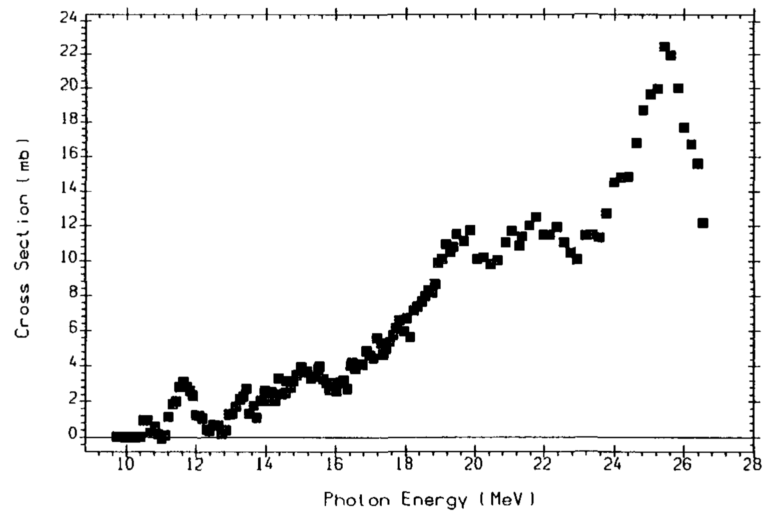
7-N-14(G,X)0-NN-1
BRST
M0214003 J,PR,118,(2),535,60 R.W.FAST+



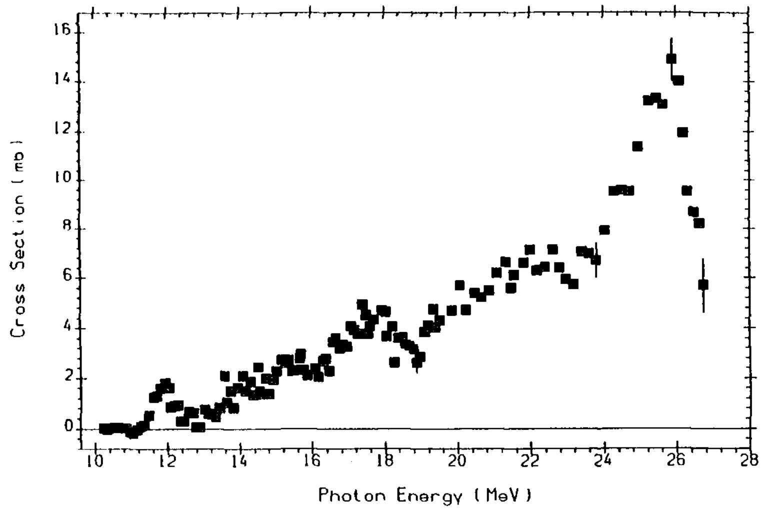
((7-N-14(G,N)7-N-13)+(7-N-14(G,N+P)6-C-12))
Positron annihilation
L0019002 J,PR/C,2,2318,7012 B.L.BERMAN+

$^{15}_{7}N$

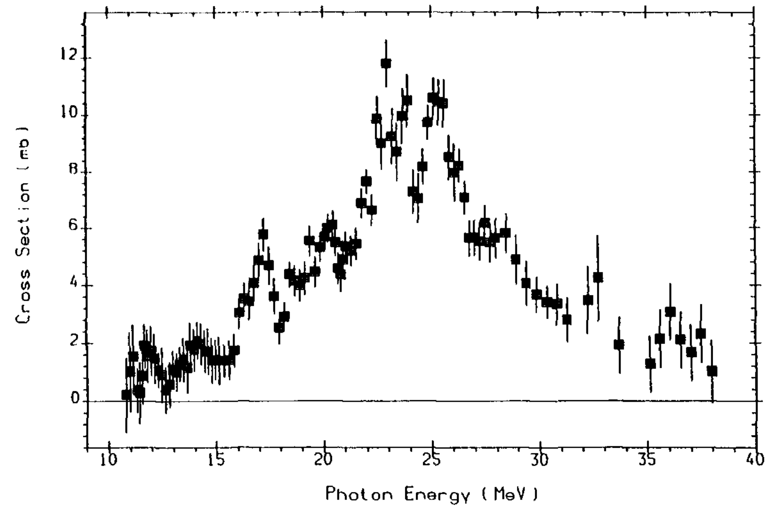
Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	$\gamma,^3He$	γ,α	γ,2n	γ,np	γ,2p
0.37	10.8	10.2	14.8	28.2	11.0	21.4	18.4	31.0



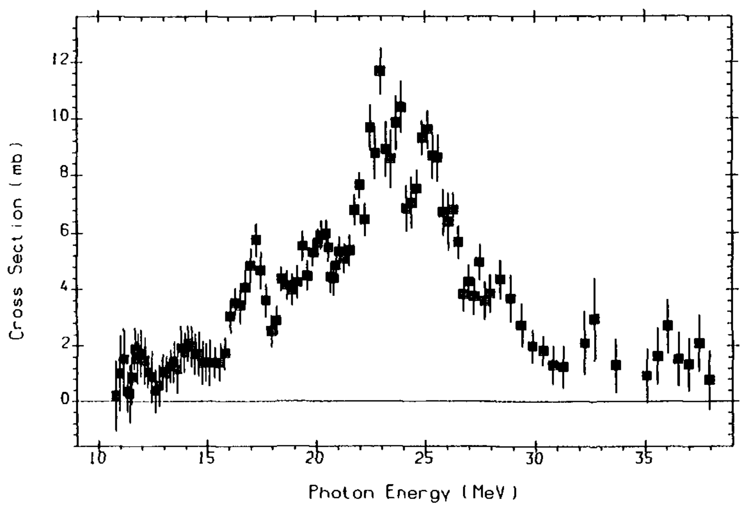
7-N-15(G,ABS)
BRST
M0264003 J,PR/C,40,506,89 A.D.BATES+



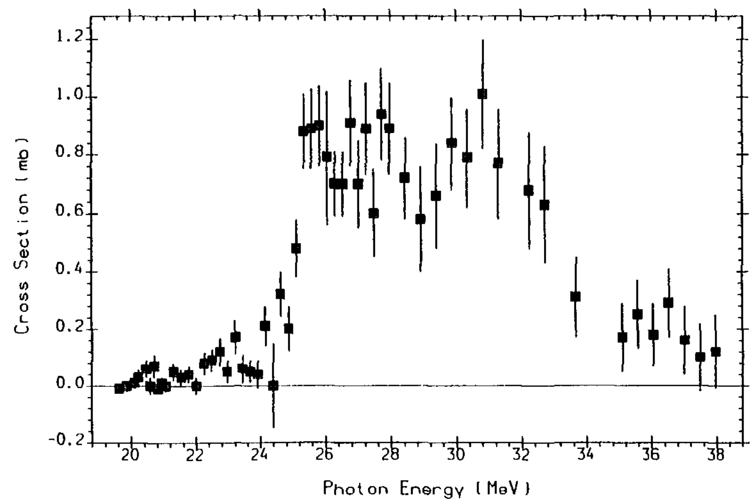
7-N-15(G,N)7-N-14,UNW,SIG,,BRA,EXP
BRST
M0264002 J,PR/C,40,506,89 A.D.BATES+



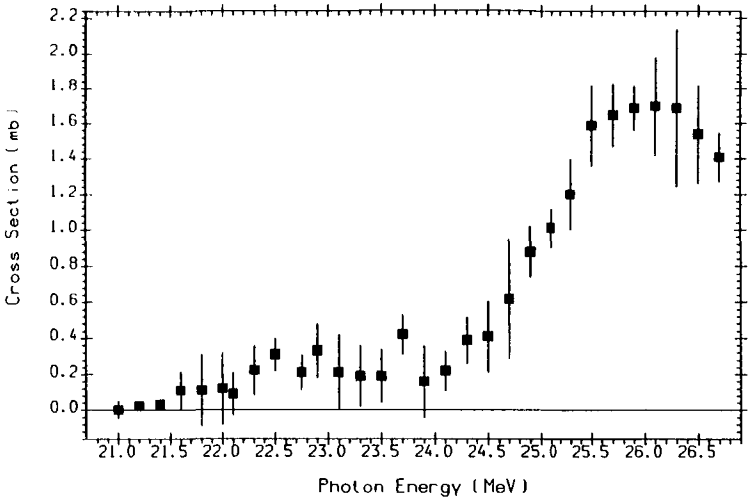
7-N-15(G,X)0-NN-1
The sum: (G,N)+(G,N+P)+2(G,2N)+2(G,2N+P).
QMPH,ARAD Positron annihilation in flight.
L0053004 J,PR/C,26,777,8209 J.W.JURY+



((7-N-15(G,N)7-N-14)+(7-N-15(G,N+P)6-C-13))
QMPH,ARAD Positron annihilation in flight.
L0053002 J,PR/C,26,777,8209 J.W.JURY+



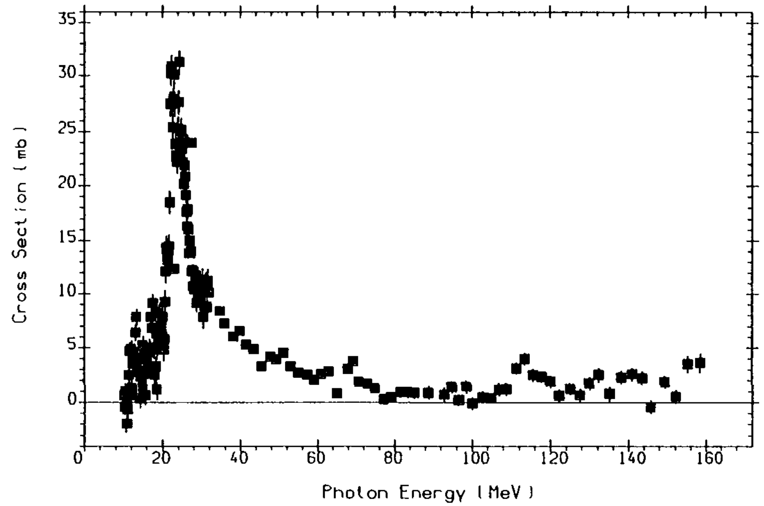
(7-N-15(G,2N)7-N-13)+(7-N-15(G,2N+P)6-C-12))
QMPH,ARAD Positron annihilation in flight.
L0053003 J,PR/C,26,777,8209 J.W.JURY+



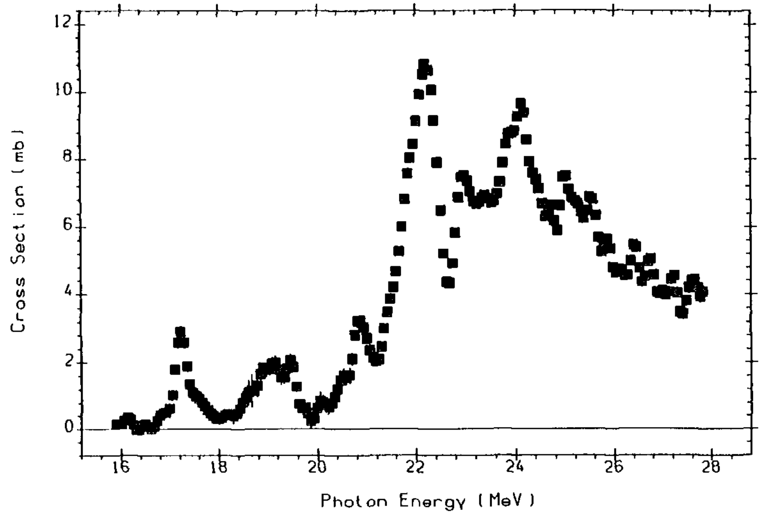
7-N-15(G,2N)7-N-13
BRST
M0480002 J,PR/C,37,1403,88 K.G.MCNEIL+

$^{16}_{8}O$

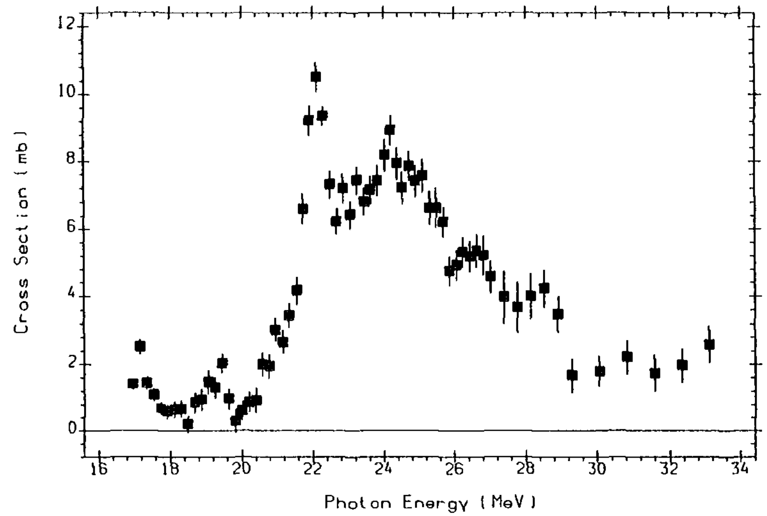
Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	$\gamma,^{3}He$	γ,α	γ,2n	γ,np	γ,2p
99.76	15.7	12.1	25.0	22.8	7.2	28.9	23.0	22.3



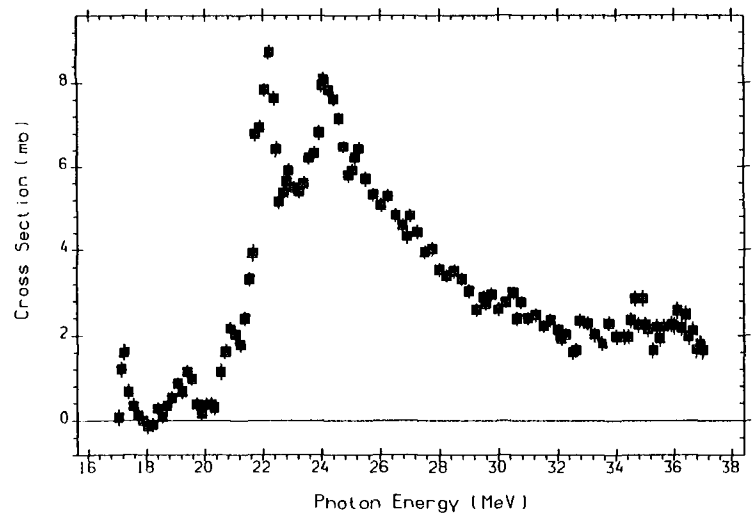
8-O-16(G,ABS)
BRST
M0372005 J,NP/A,251,479,75 J.AHRENS+



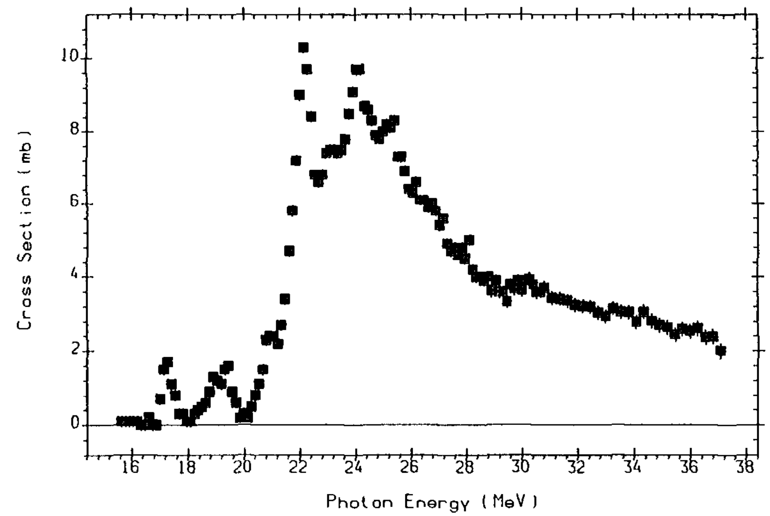
((8-O-16(G,N)8-O-15)+(8-O-16(G,N+P)7-N-14))
BRST
M0345002 J,YK,1,52,93 V.V.VARLAMOV+



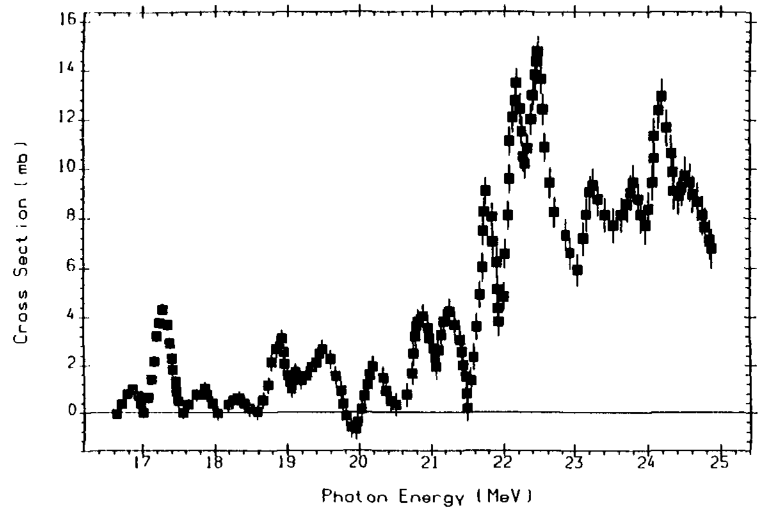
((8-O-16(G,N)8-O-15)+(8-O-16(G,N+P)7-N-14))
QMPH,ARAD Positron annihilation in flight.
L0054002 J,PR/C,27,1,8301 B.L.BERMAN+



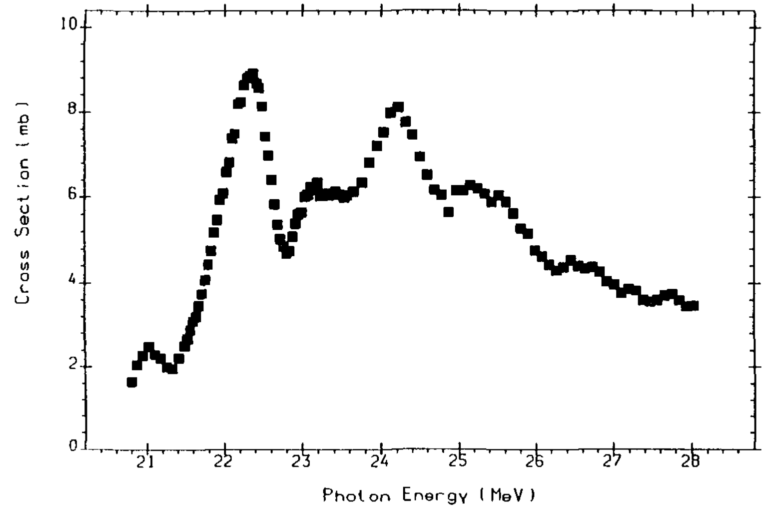
((8-O-16(G,N)8-O-15)+(8-O-16(G,N+P)7-N-14))
The sum: (G,N)+(G,NP)+(G,2N)+(G,2N+P) measured.
QMPH,ARAD Positron annihilation in flight.
L0041003 J,NIM,127,1,75 U.KNEISSL+



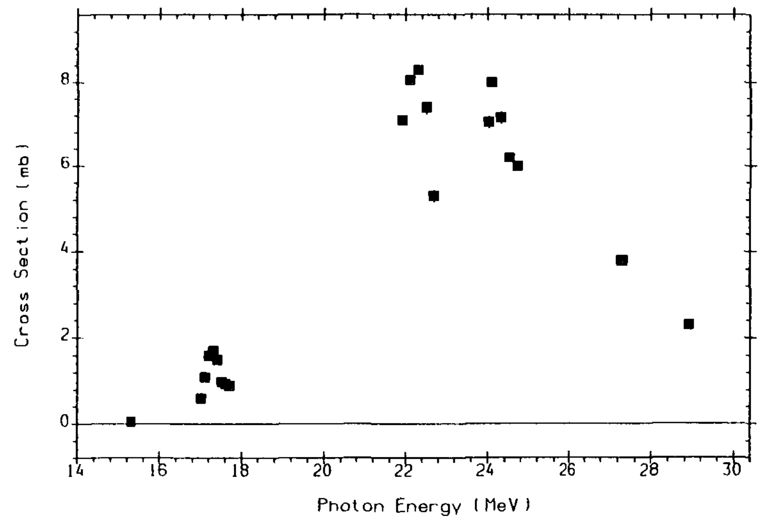
8-O-16(G,X)0-NN-1
The sum: (G,N)+(G,N+P)+2(G,2N)+2(G,2N+P).
QMPH,ARAD Positron annihilation in flight.
L0039005 J,NP/A,227,513,74 A.VEYSSIERE+



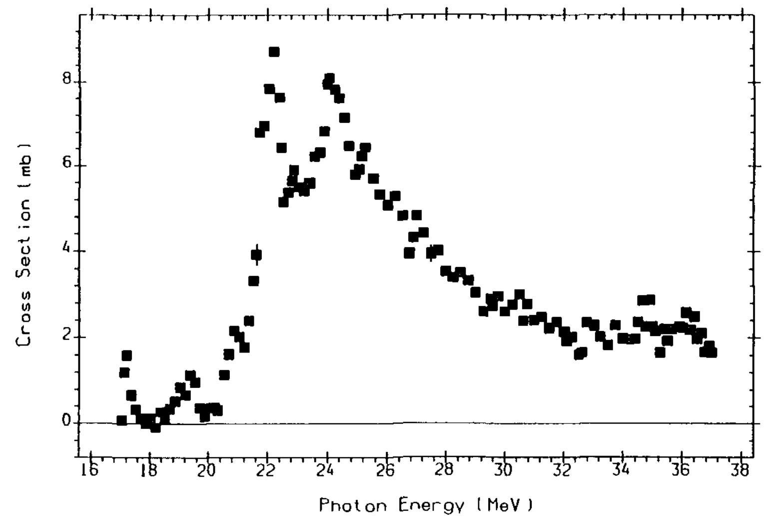
8-O-16(G,N)8-O-15
THE (G,XN) = ((G,N) + (G,NP) + 2(G,2N) + ...)
BRST
M0396002 J,YF,12,892,70 B.S.ISHKHANOV+



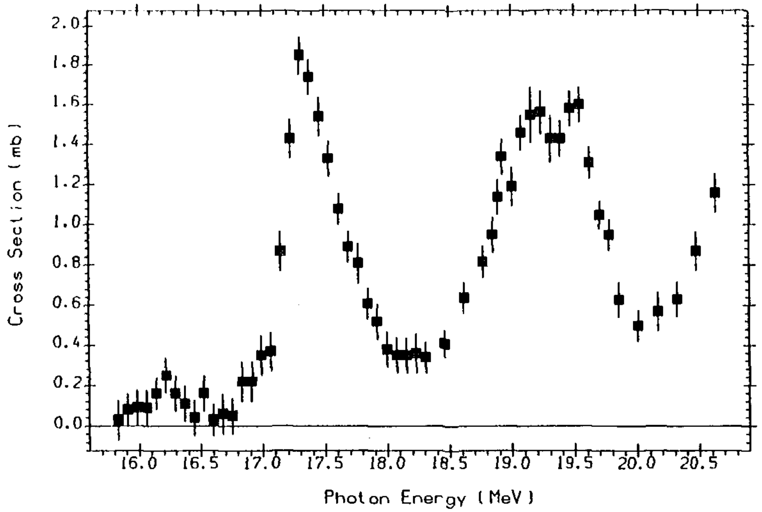
8-O-16(G,X)0-NN-1
Positron annihilation
L0036002 J,PRL,15,976,6512 J.T.CALDWELL+



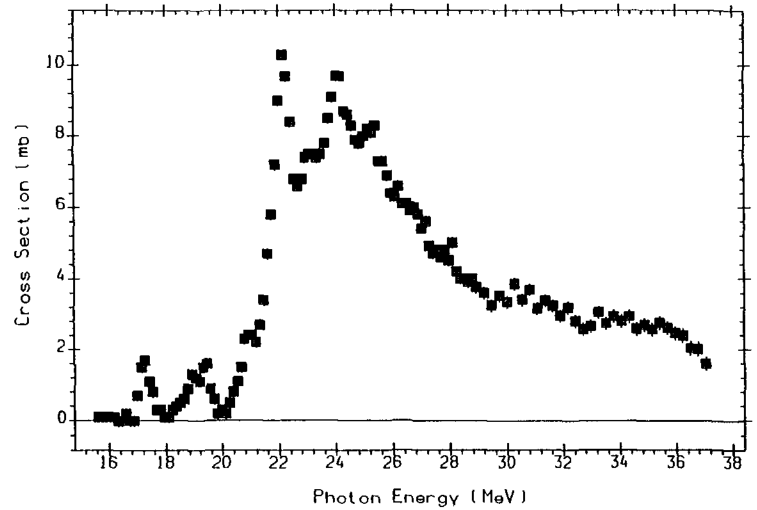
((8-O-16(G,N)8-O-15)+(8-O-16(G,N+P)7-N-14))
QMPH,ARAD Positron annihilation in flight.
L0051004 J,PR/C,22,2273,8012 B.L.BERMAN+



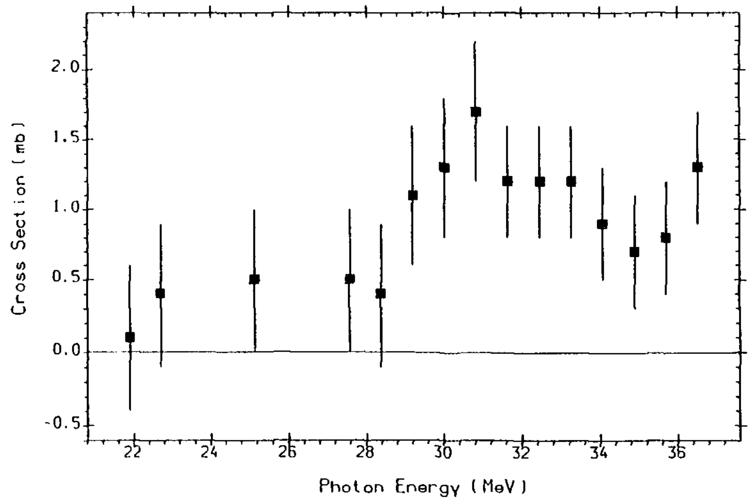
8-O-16(G,X)0-NN-1,UNW,SIG
The sum: (G,N)+(G,NP)+(G,2N)+(G,2N+P).
QMPH,ARAD Positron annihilation in flight.
L0040005 J,NP/A,247,91,75 U.KNEISSL+



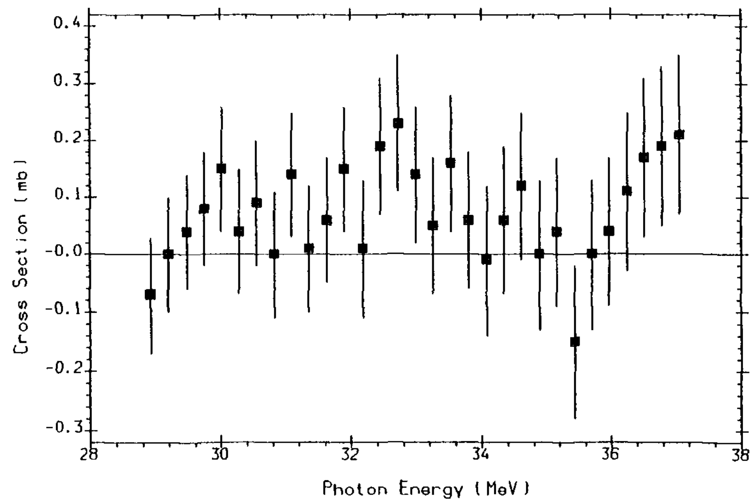
((8-O-16(G,N)8-O-15)+(8-O-16(G,N+P)7-N-14))
Positron annihilation
L0005002 J,PR/B,133,869,6402 R.L.BRAMLETT+



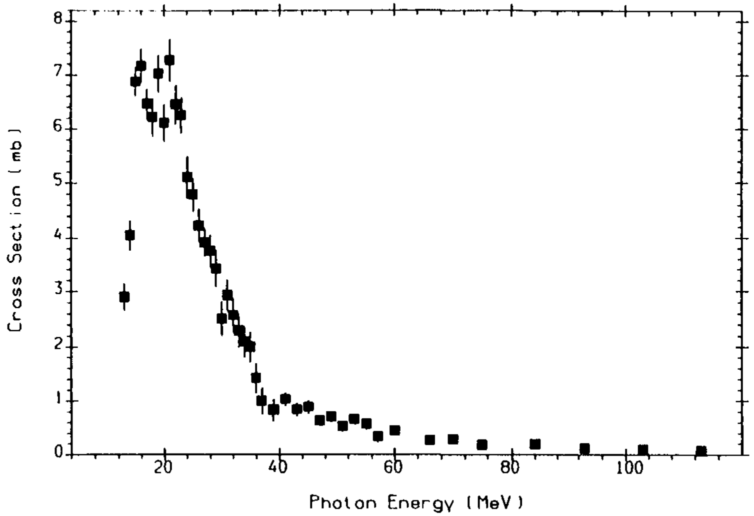
((8-O-16(G,N)8-O-15)+(8-O-16(G,N+P)7-N-14))
QMPH,ARAD Positron annihilation in flight.
L0039002 J,NP/A,227,513,74 A.VEYSSIERE+



8-O-16(G,N+P)7-N-14
QMPH,ARAD Positron annihilation in flight.
L0039004 J,NP/A,227,513,74 A.VEYSSIERE+



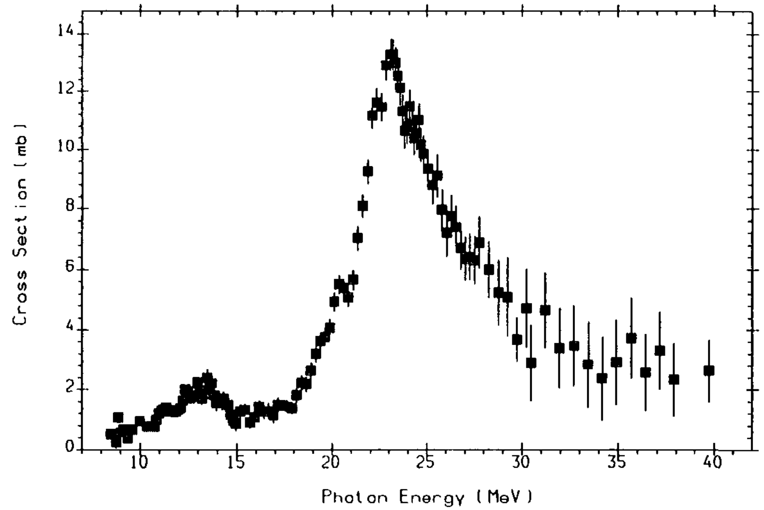
((8-O-16(G,2N)8-O-14)+(8-O-16(G,2N+P)7-N-13))
QMPH,ARAD Positron annihilation in flight.
L0039003 J,NP/A,227,513,74 A.VEYSSIERE+



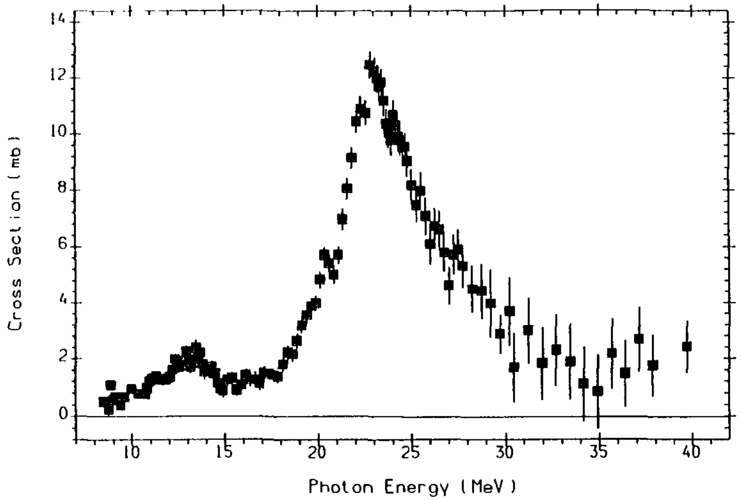
8-O-16(G,P)7-N-15
BRST
M0039002 J,UFZ,25,229,80 A.F.KHODYACHIKH+

$^{17}_{8}O$

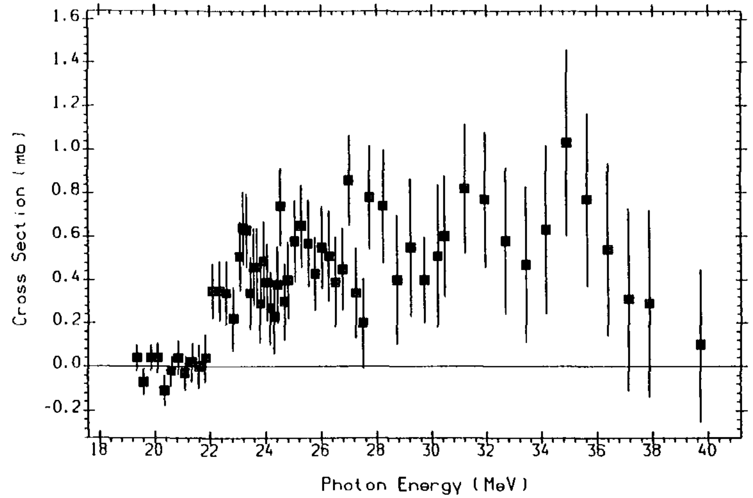
Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	γ,^{3}He	γ,α	γ,2n	γ,np	γ,2p
0.04	4.1	13.8	18.6	18.8	6.4	19.8	16.3	25.3



8-O-17(G,X)0-NN-1 UNW
The sum: (G,N)+(G,N+P)+(G,2N)+(G,2N+P).
QMPH,ARAD Positron annihilation in flight.
L0049002 J,PR/C,21,503,8002 J.W.JURY+



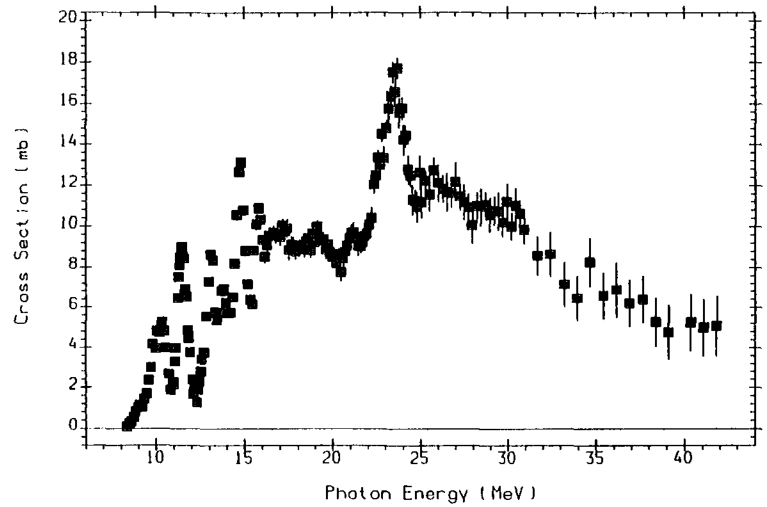
((8-O-17(G,N)8-O-16,,SIG)+(8-O-17(G,N+P)7-N-15))
QMPH,ARAD Positron annihilation in flight.
L0049003 J,PR/C,21,503,8002 J.W.JURY+



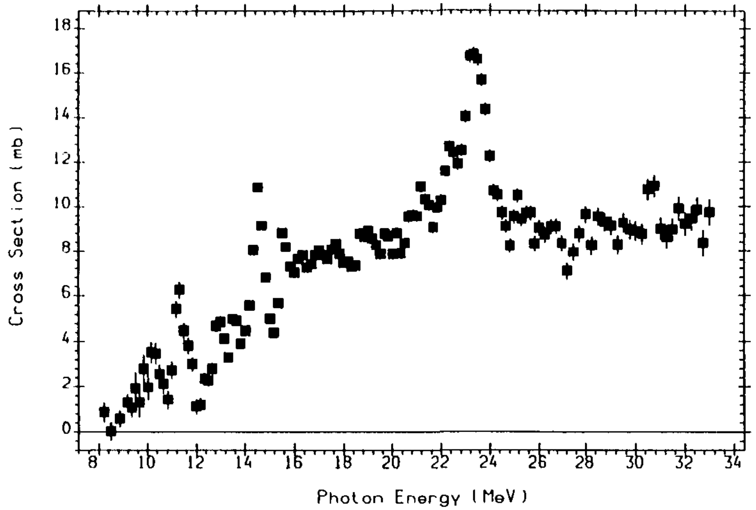
((8-O-17(G,2N)8-O-15)+(8-O-17(G,2N+P)7-N-14))
QMPH,ARAD Positron annihilation in flight.
L0049004 J,PR/C,21,503,8002 J.W.JURY+

$^{18}_{8}O$

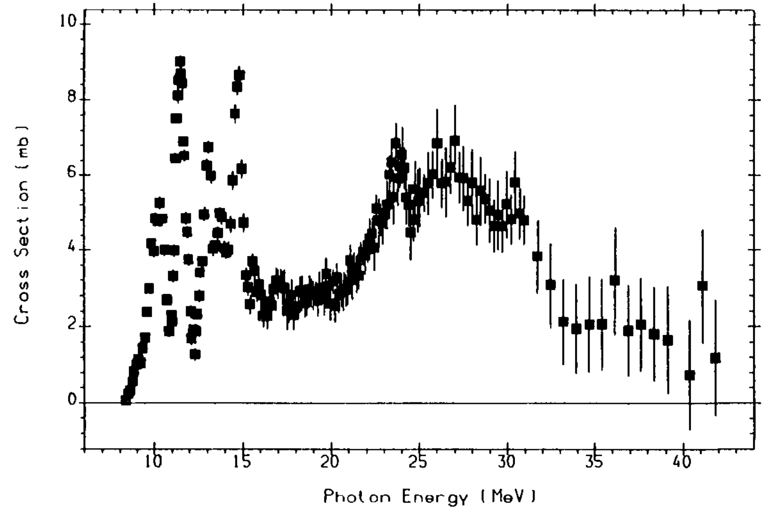
Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	γ,^{3}He	γ,α	γ,2n	γ,np	γ,2p
0.20	8.0	15.9	15.8	25.6	6.2	12.2	21.8	29.1



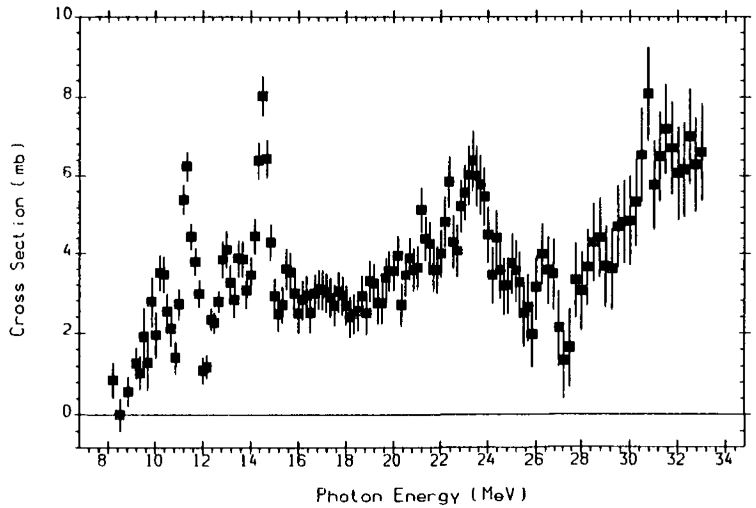
8-O-18(G,X)0-NN-1
The sum: (G,N)+(G,N+P)+2(G,2N)+2(G,2N+P).
QMPH,ARAD Positron annihilation in flight.
L0047004 J,PR/C,19,1667,7905 J.G.WOODWORTH+



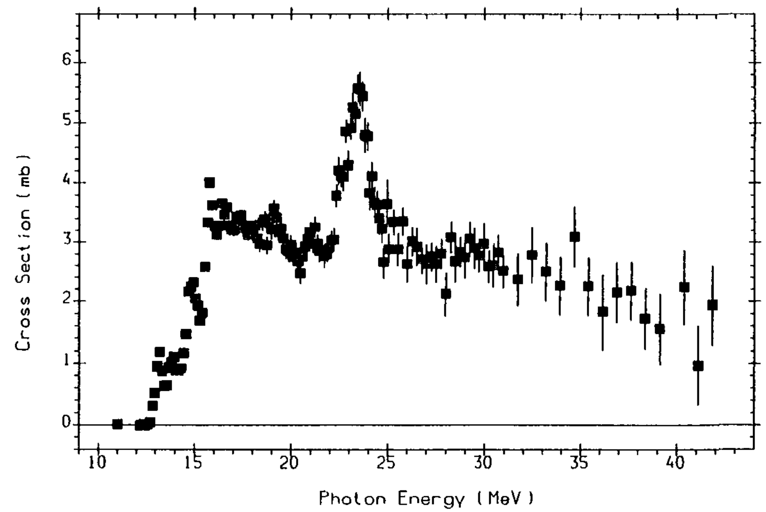
8-O-18(G,X)0-NN-1
The sum: (G,N)+(G,N+P)+2(G,2N)+2(G,2N+P).
QMPH,ARAD Positron annihilation in flight.
L0045004 J,NP/A,272,125,76 U.KNEISSL+



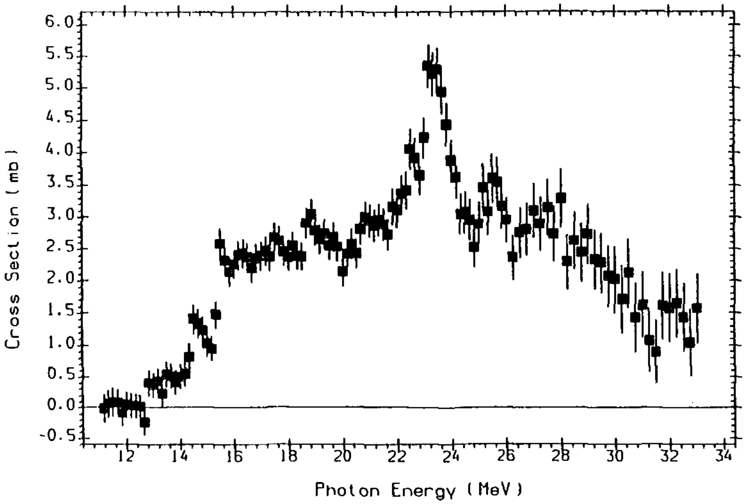
((8-O-18(G,N)8-O-17)+(8-O-18(G,N+P)7-N-16))
QMPH,ARAD Positron annihilation in flight.
L0047002 J,PR/C,19,1667,7905 J.G.WOODWORTH+



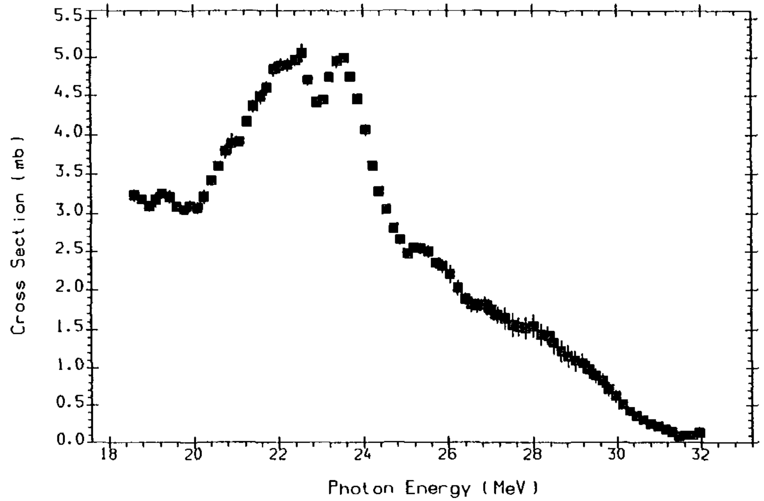
((8-O-18(G,N)8-O-17)+(8-O-18(G,N+P)7-N-16))
QMPH,ARAD Positron annihilation in flight.
L0045002 J,NP/A,272,125,76 U.KNEISSL+



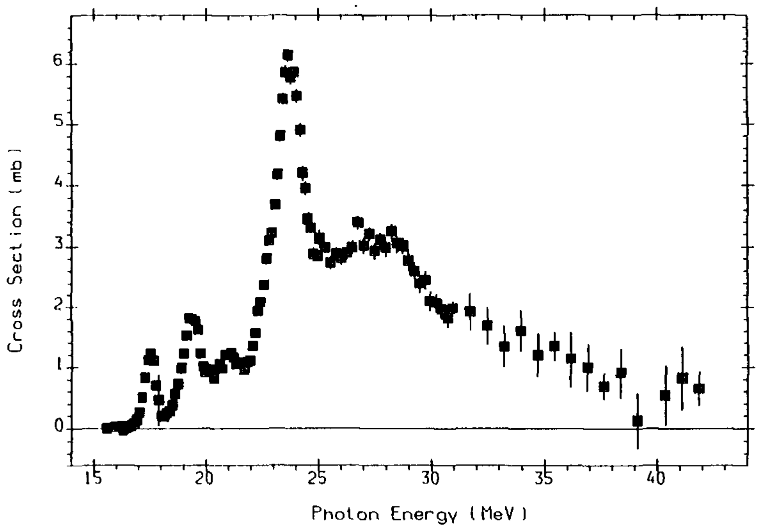
((8-O-18(G,2N)8-O-16)+(8-O-18(G,2N+P)7-N-15))
QMPH,ARAD Positron annihilation in flight.
L0047003 J,PR/C,19,1667,7905 J.G.WOODWORTH+



((8-O-18(G,2N)8-O-16)+(8-O-18(G,2N+P)7-N-15))
QMPH,ARAD Positron annihilation in flight.
L0045003 J,NP/A,272,125,76 U.KNEISSL+



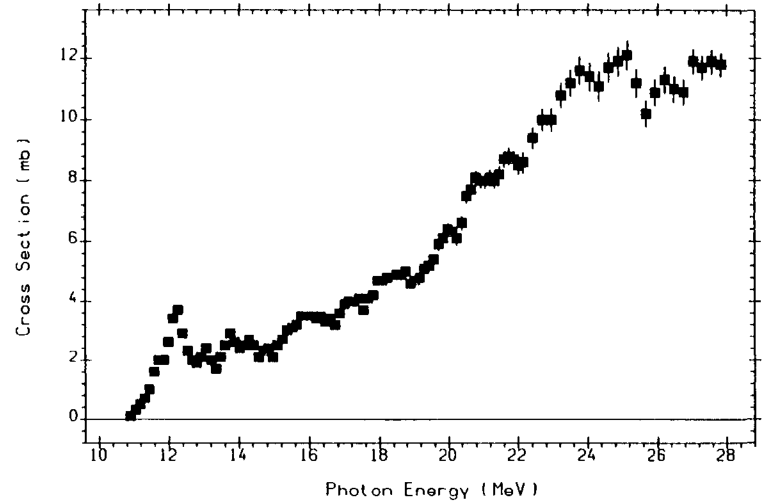
8-O-18(G,P)7-N-17
BRST
M0242002 J,NP/A,376,15,82 K.BANGERT+



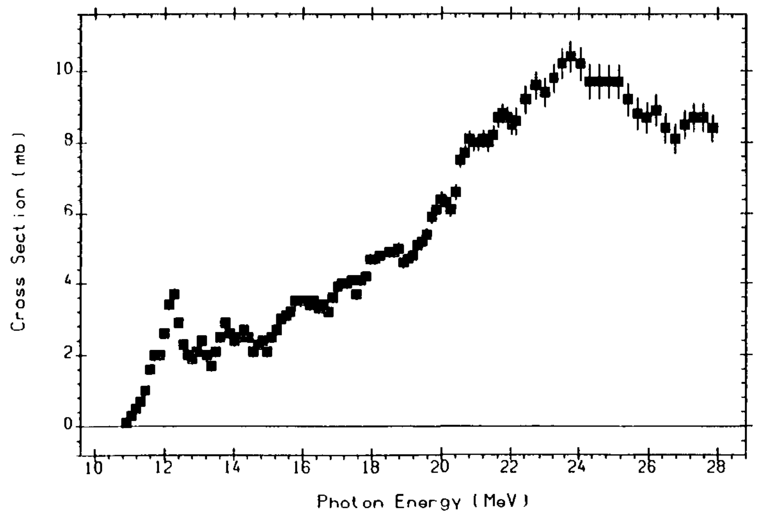
8-O-18(G,P)7-N-17
QMPH,ARAD Positron annihilation in flight.
L0047005 J,PR/C,19,1667,7905 J.G.WOODWORTH+

$^{19}_{9}F$

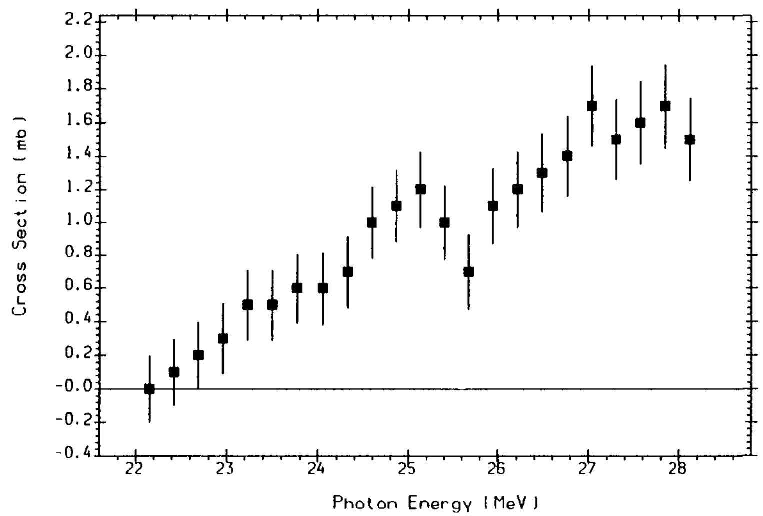
Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	γ,^{3}He	γ,α	γ,2n	γ,np	γ,2p
100.00	10.4	8.0	11.7	22.1	4.0	19.6	16.0	23.9



9-F-19(G,X)0-NN-1
The sum: (G,N)+(G,N+P)+2(G,2N)+2(G,2N+P).
QMPH,ARAD Positron annihilation in flight.
L0039008 J,NP/A,227,513,74 A.VEYSSIERE+



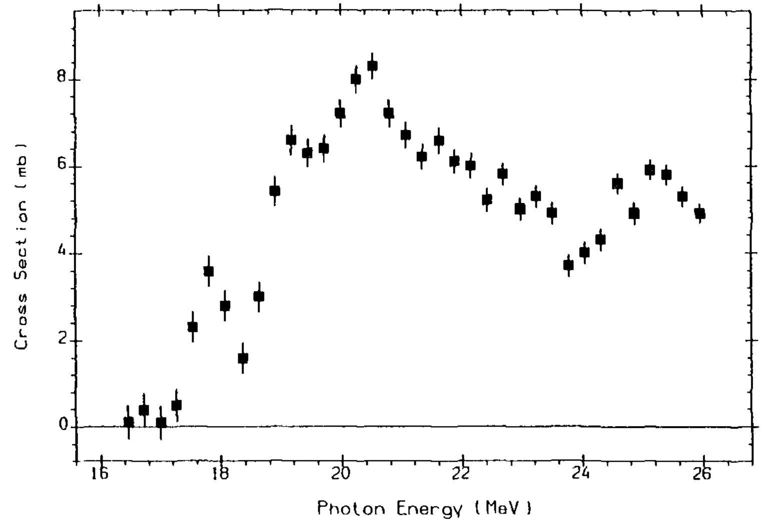
(9-F-19(G,N)9-F-18)+(9-F-19(G,N+P)8-O-17))
QMPH,ARAD Positron annihilation in flight.
L0039006 J,NP/A,227,513,74 A.VEYSSIERE+



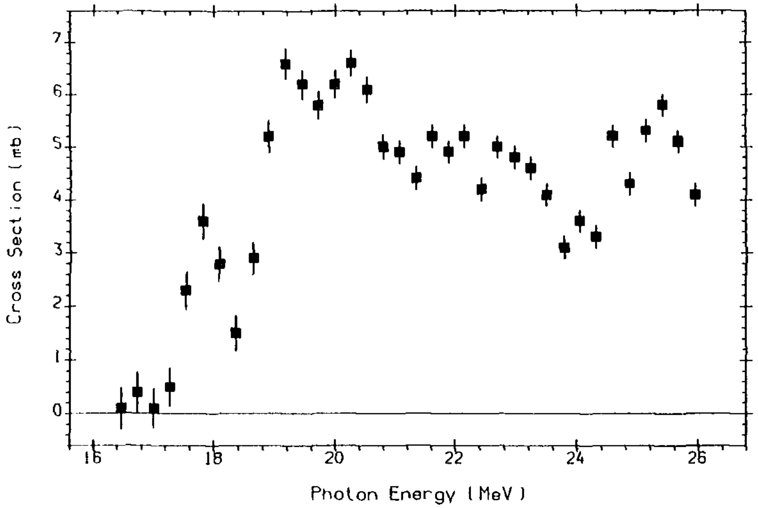
(9-F-19(G,2N)9-F-17)+(9-F-19(G,2N+P)8-O-16))
QMPH,ARAD Positron annihilation in flight.
L0039007 J,NP/A,227,513,74 A.VEYSSIERE+

$^{nat.}_{10}Ne$

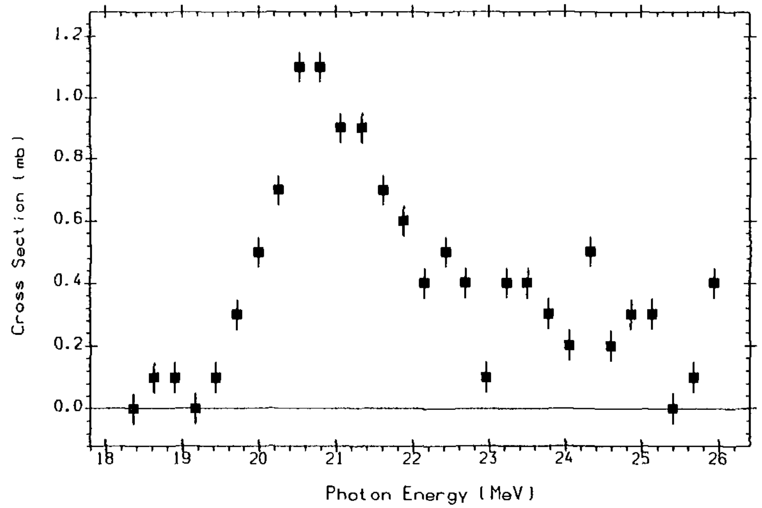
Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	γ,^{3}He	γ,α	γ,2n	γ,np	γ,2p
	6.8	12.8	21.5	19.9	4.7	17.1	19.6	20.8



10-NE-0(G,X)0-NN-1
The sum: (G,N)+(G,N+P)+2(G,2N).
QMPH,ARAD Positron annihilation in flight.
L0039011 J,NP/A,227,513,74 A.VEYSSIERE+



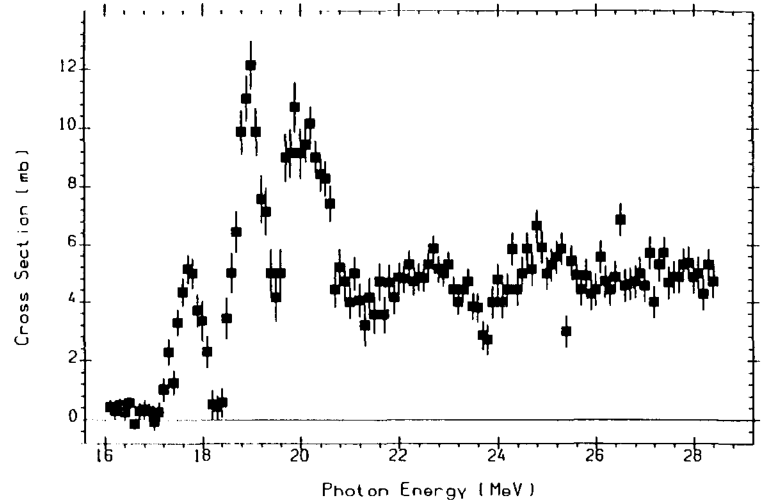
((10-NE-0(G,N))+(10-NE-0(G,N+P)))
QMPH,ARAD Positron annihilation in flight.
L0039009 J,NP/A,227,513,74 A.VEYSSIERE+



10-NE-0(G,2N)
QMPH,ARAD Positron annihilation in flight.
L0039010 J,NP/A,227,513,74 A.VEYSSIERE+

$^{20}_{10}Ne$

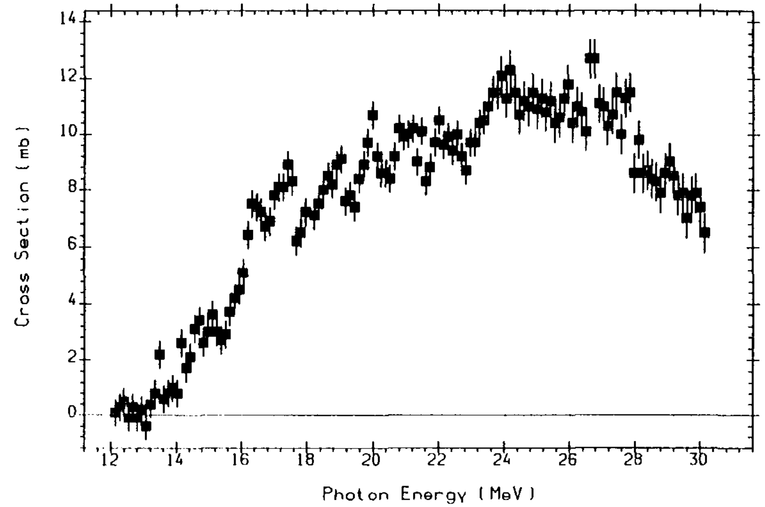
Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	γ,^{3}He	γ,α	γ,2n	γ,np	γ,2p
90.51	16.9	12.8	23.9	21.2	4.7	28.5	23.3	20.8



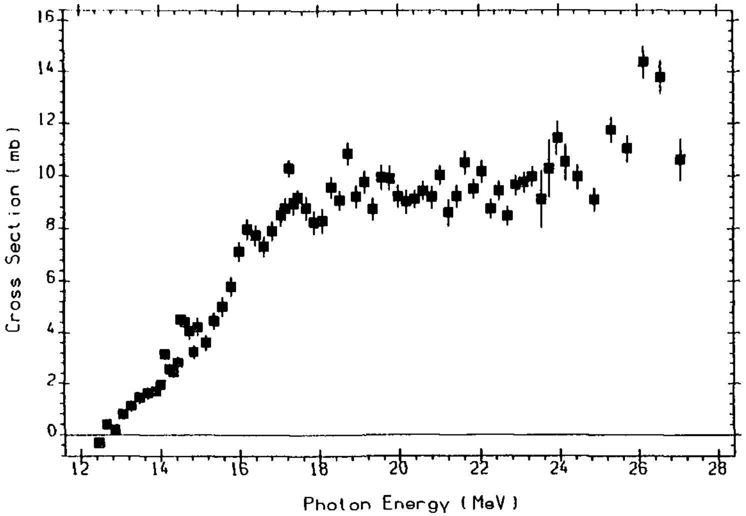
((10-NE-20(G,N)10-NE-19)+(10-NE-20(G,N+P)9-F-18))
BRST
M0369002 J,NP/A,357,171,81 P.D.ALLEN+

$^{23}_{11}Na$

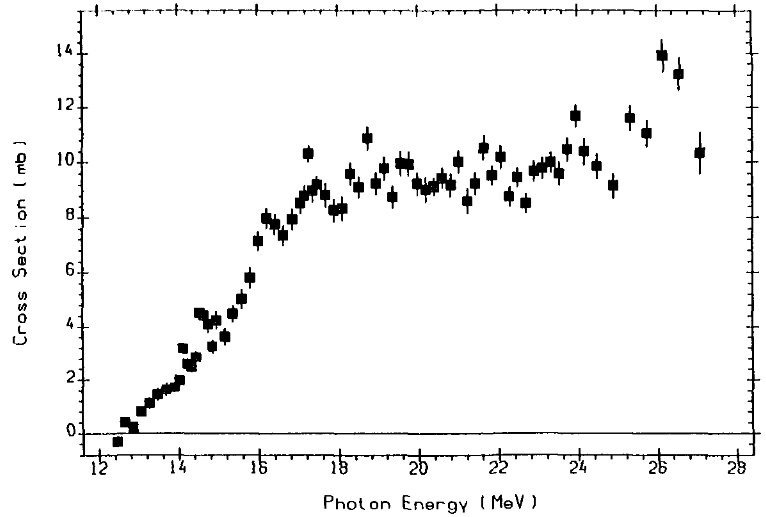
Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	γ,^{3}He	γ,α	γ,2n	γ,np	γ,2p
100.00	12.4	8.8	17.4	24.4	10.5	23.5	19.2	24.1



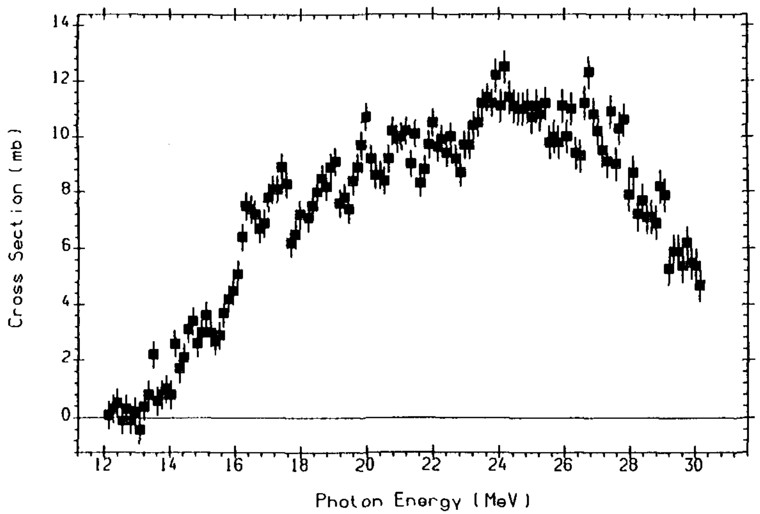
11-NA-23(G,X)0-NN-1
The sum: (G,N)+(G,N+P)+2(G,2N)+2(G,2N+P).
QMPH,ARAD Positron annihilation in flight.
L0039014 J,NP/A,227,513,74 A.VEYSSIERE+



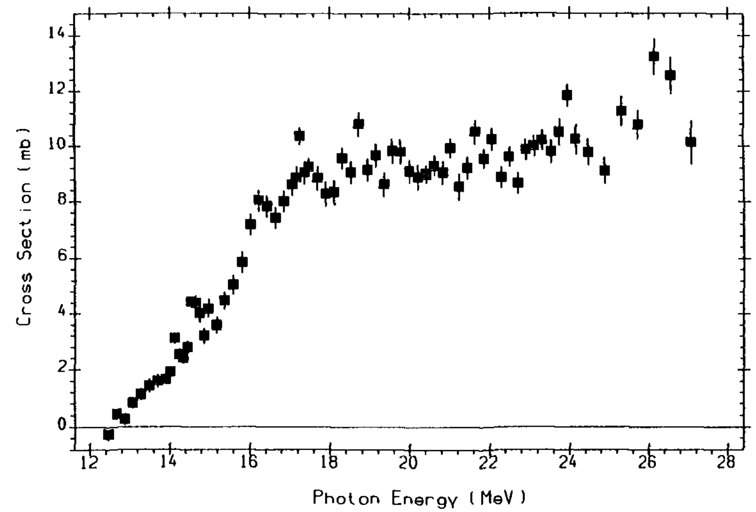
11-NA-23(G,X)0-NN-1
The sum: (G,N)+(G,N+P)+2(G,2N)+2(G,2N+P).
Positron annihilation
L0022002 J,PR/C,4,1673,7111 R.A.ALVAREZ+



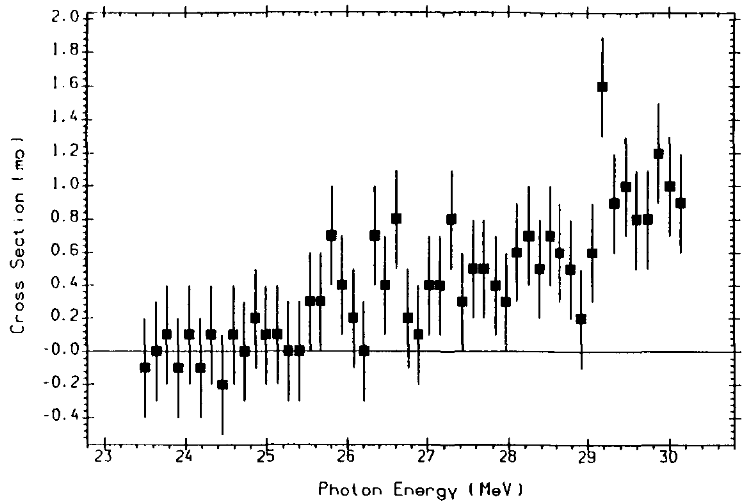
11-NA-23(G,X)0-NN-1 UNW
The sum: (G,N)+(G,N+P)+(G,2N)+(G,2N+P).
Positron annihilation
L0022008 J,PR/C,4,1673,7111 R.A.ALVAREZ+



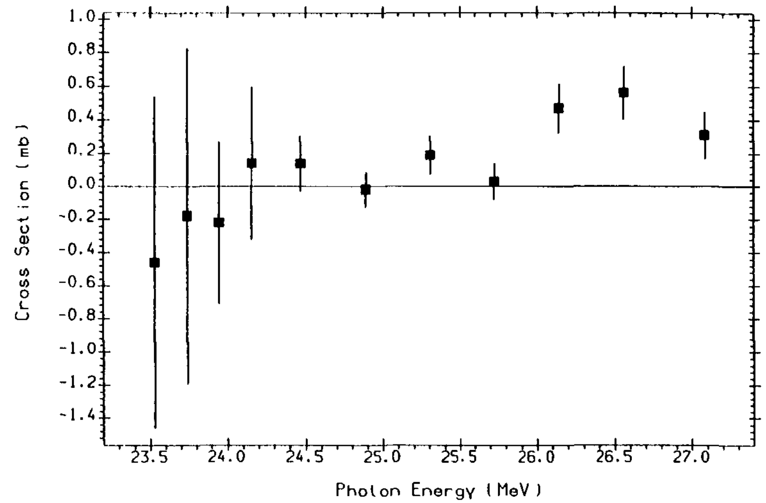
((11-NA-23(G,N)11-NA-22)+(11-NA-23(G,N+P)10-NE-21))
QMPH,ARAD Positron annihilation in flight.
L0039012 J,NP/A,227,513,74 A.VEYSSIERE+



((11-NA-23(G,N)11-NA-22)+(11-NA-23(G,N+P)10-NE-21))
Positron annihilation
L0022003 J,PR/C,4,1673,7111 R.A.ALVAREZ+



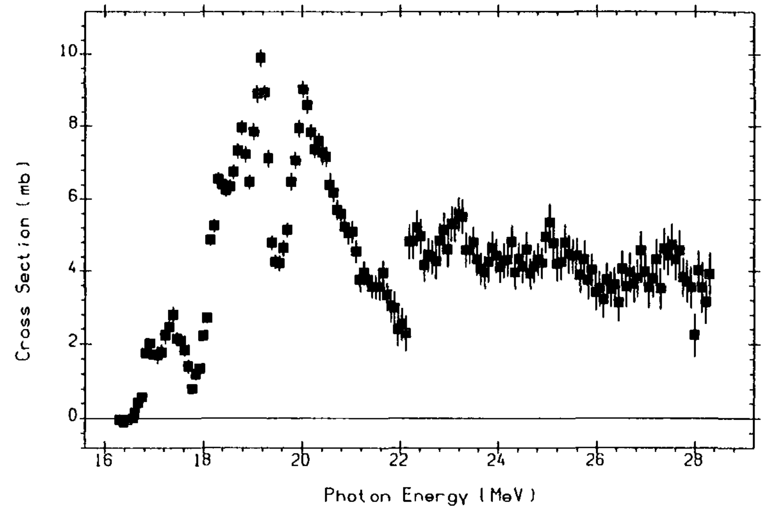
((11-NA-23(G,2N)11-NA-21)+(11-NA-23(G,2N+P)10-NE-20))
QMPH,ARAD Positron annihilation in flight.
L0039013 J,NP/A,227,513,74 A.VEYSSIERE+



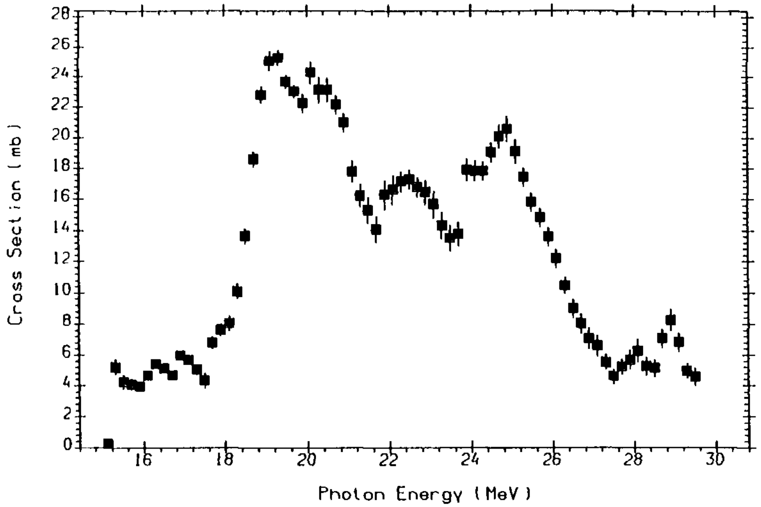
((11-NA-23(G,2N)11-NA-21)+(11-NA-23(G,2N+P)10-NE-20))
Positron annihilation
L0022004 J,PR/C,4,1673,7111 R.A.ALVAREZ+

$^{24}_{12}Mg$

Abundance	Separation Energies (MeV)							
(%)	γ,n	γ,p	γ,t	γ,^{3}He	γ,α	γ,2n	γ,np	γ,2p
78.99	16.5	11.7	26.7	23.1	9.3	29.7	24.1	20.5



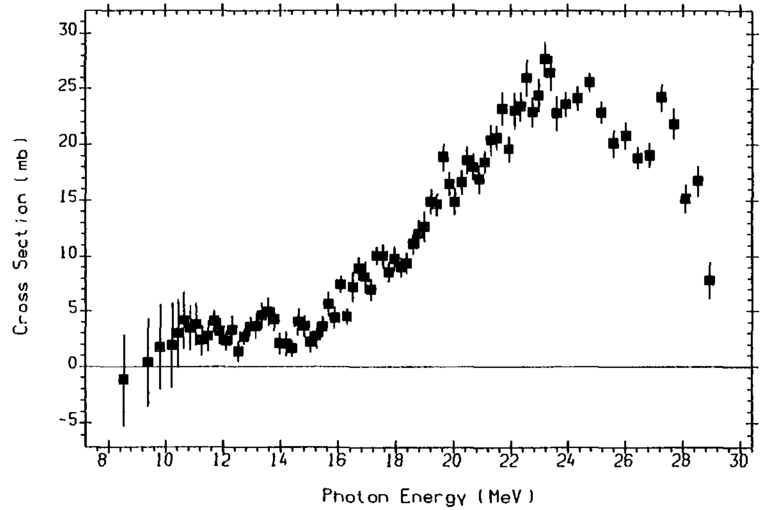
((12-MG-24(G,N)12-MG-23)+(12-MG-24(G,N+P)11-NA-22))
Positron annihilation
L0026002 J,PR/C,4,149,7107 S.C.FULTZ+



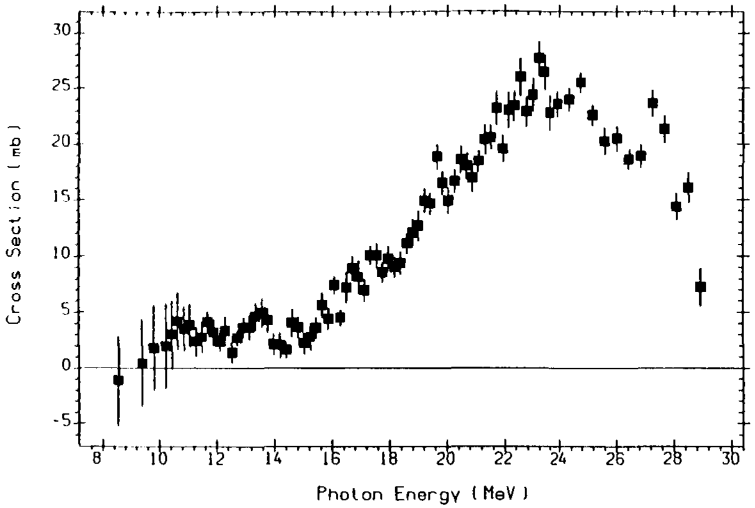
12-MG-24(G,P)11-NA-23
BRST
M0001027 J,YF,30,1185,79 V.V.VARLAMOV+

$^{25}_{12}Mg$

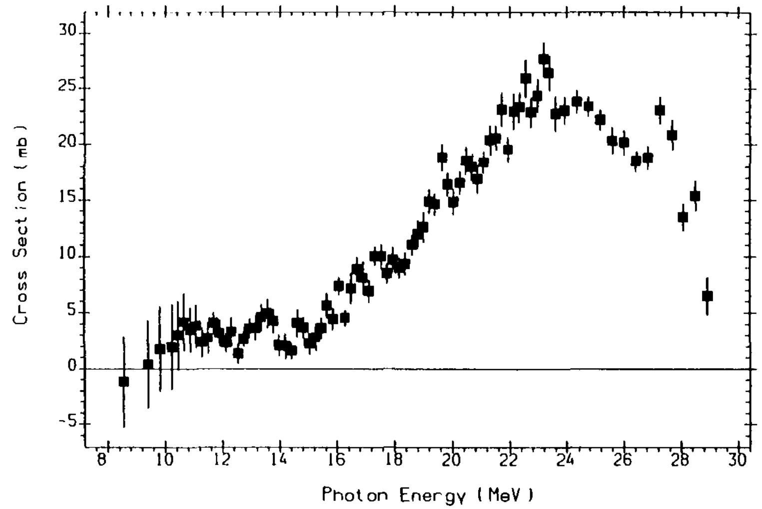
Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	γ,^{3}He	γ,α	γ,2n	γ,np	γ,2p
10.00	7.3	12.1	23.0	20.1	9.9	23.9	19.0	22.6



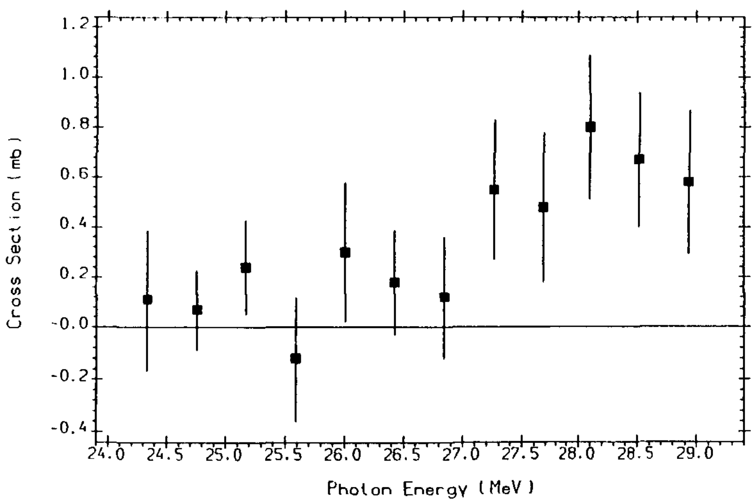
12-MG-25(G,X)0-NN-1
The sum: (G,N)+(G,N+P)+2(G,2N).
Positron annihilation
L0022005 J,PR/C,4,1673,7111 R.A.ALVAREZ+



12-MG-25(G,X)0-NN-1 UNW
The sum: (G,N)+(G,N+P)+(G,2N).
Positron annihilation
L0022009 J,PR/C,4,1673,7111 R.A.ALVAREZ+



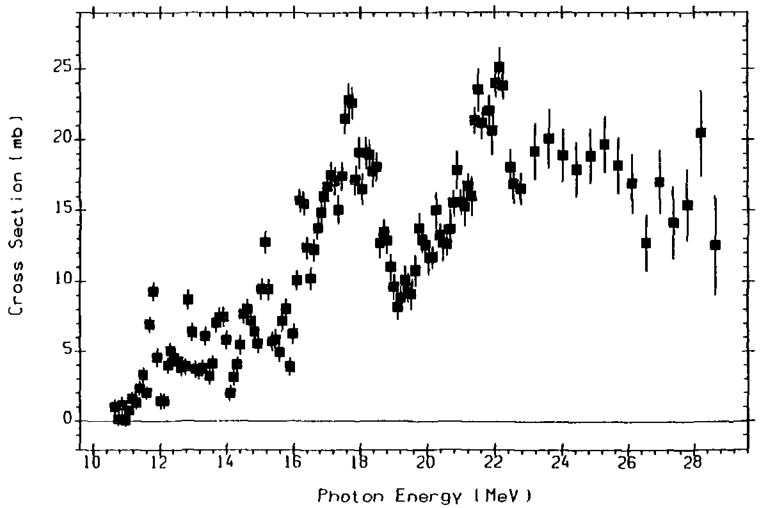
((12-MG-25(G,N)12-MG-24)+(12-MG-25(G,N+P)11-NA-23))
Positron annihilation
L0022006 J,PR/C,4,1673,7111 R.A.ALVAREZ+



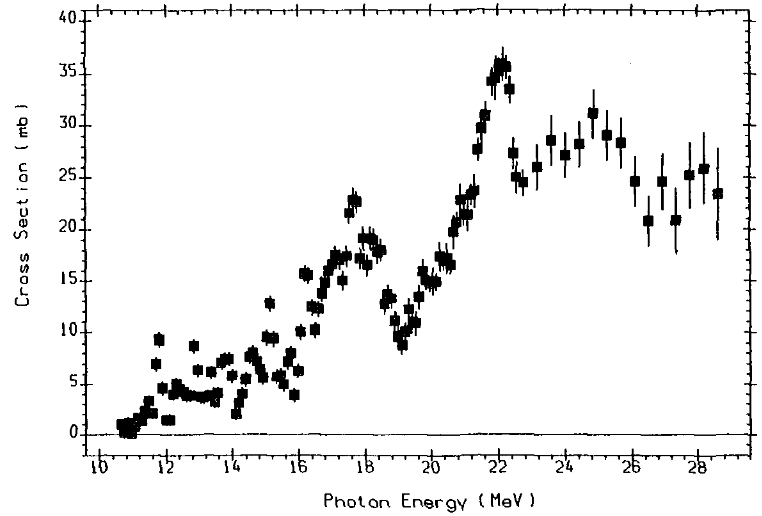
((12-MG-25(G,2N)12-MG-23)+(12-MG-25(G,2N+P)11-NA-22))
Positron annihilation
L0022007 J,PR/C,4,1673,7111 R.A.ALVAREZ+

$^{26}_{12}Mg$

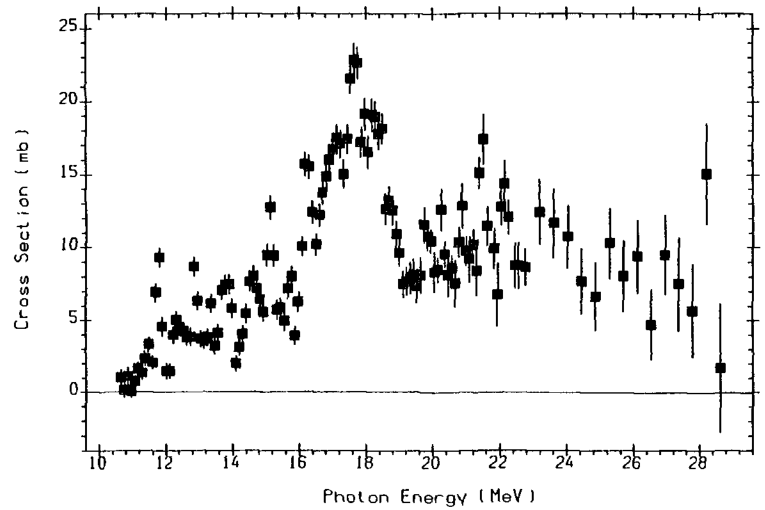
Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	γ,^{3}He	γ,α	γ,2n	γ,np	γ,2p
11.01	11.1	14.1	21.6	26.0	10.6	18.4	23.2	24.8



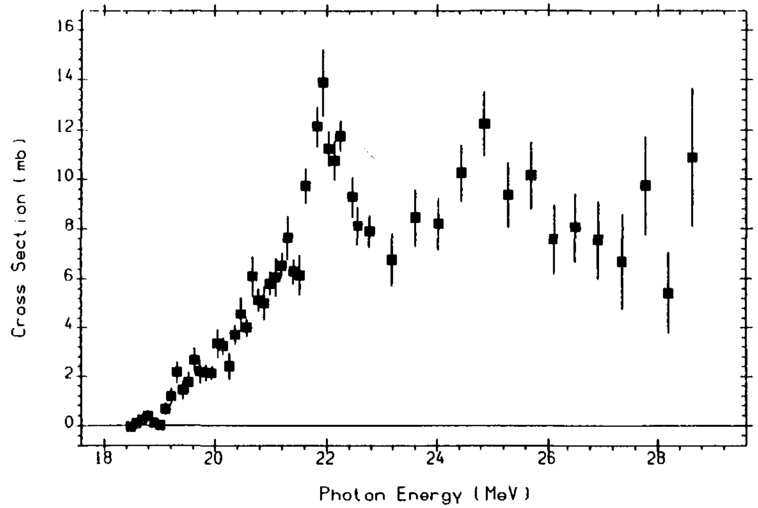
12-MG-26(G,X)0-NN-1 UNW
The sum: (G,N)+(G,N+P)+(G,2N).
Positron annihilation
L0026006 J,PR/C,4,149,7107 S.C.FULTZ+



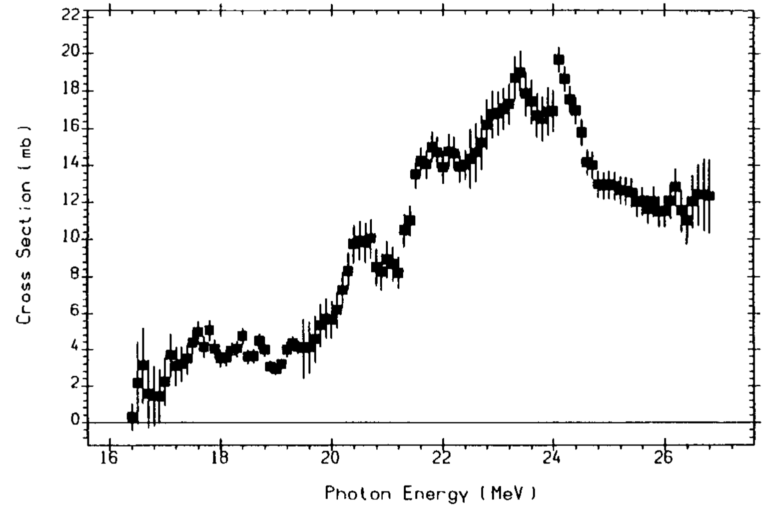
12-MG-26(G,X)0-NN-1
The sum: (G,N)+(G,N+P)+2(G,2N).
Positron annihilation
L0026003 J,PR/C,4,149,7107 S.C.FULTZ+



((12-MG-26(G,N)12-MG-25)+(12-MG-26(G,N+P)11-NA-24))
Positron annihilation
L0026004 J,PR/C,4,149,7107 S.C.FULTZ+



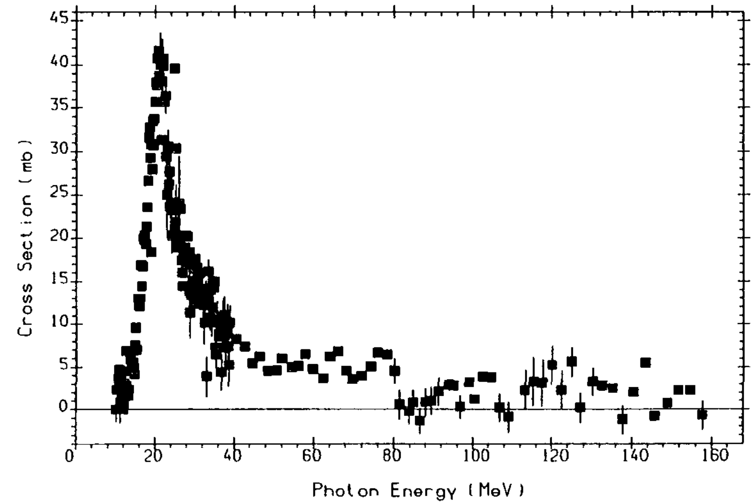
12-MG-26(G,2N)12-MG-24
Positron annihilation
L0026005 J,PR/C,4,149,7107 S.C.FULTZ+



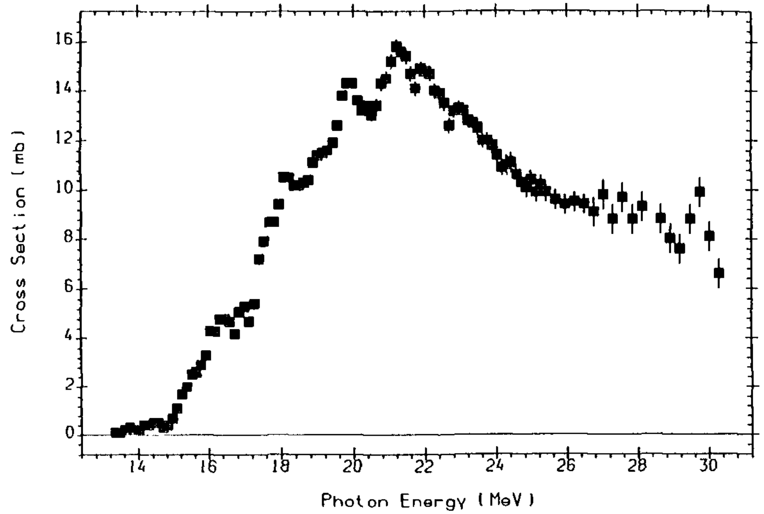
12-MG-26(G,P)11-NA-25
BRST
M0002013 J,NP/A,313,317,79 B.S.ISHKHANOV+

$^{27}_{13}Al$

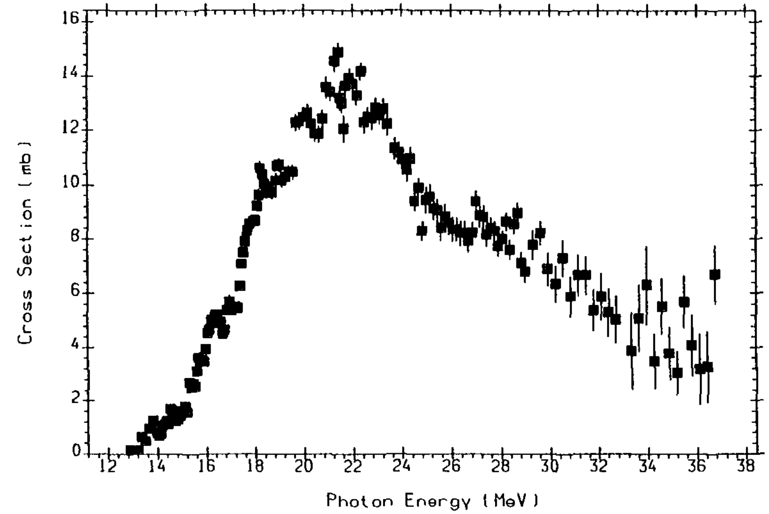
Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	γ,^{3}He	γ,α	γ,2n	γ,np	γ,2p
100.00	13.1	8.3	18.2	23.7	10.1	24.4	19.4	22.4



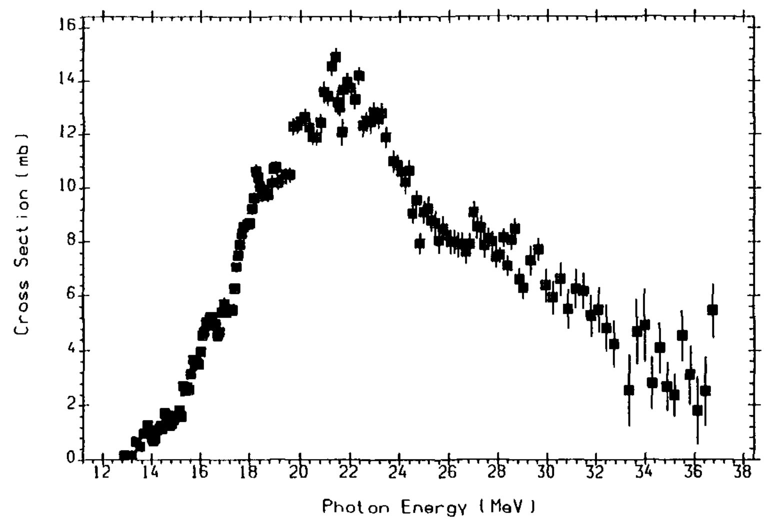
13-AL-27(G,ABS)
BRST
M0372006 J,NP/A,251,479,75 J.AHRENS+



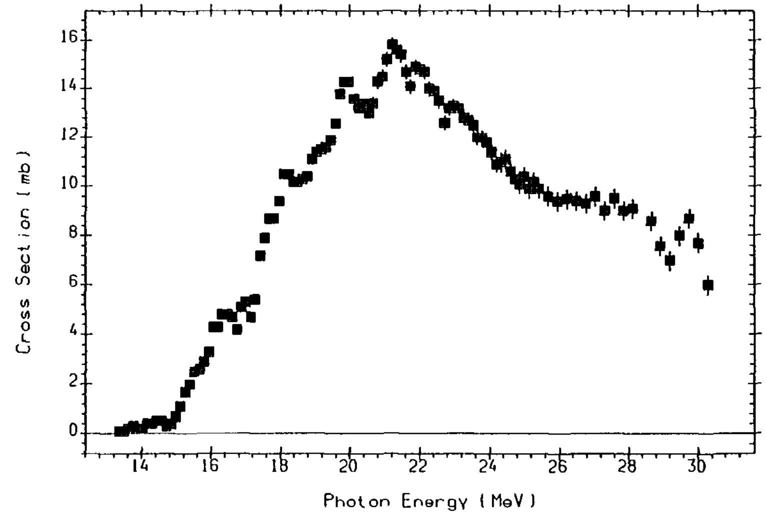
13-AL-27(G,X)0-NN-1
The sum: (G,N)+(G,N+P)+2(G,2N)+2(G,2N+P).
QMPH,ARAD Positron annihilation in flight.
L0039017 J,NP/A,227,513,74 A.VEYSSIERE+



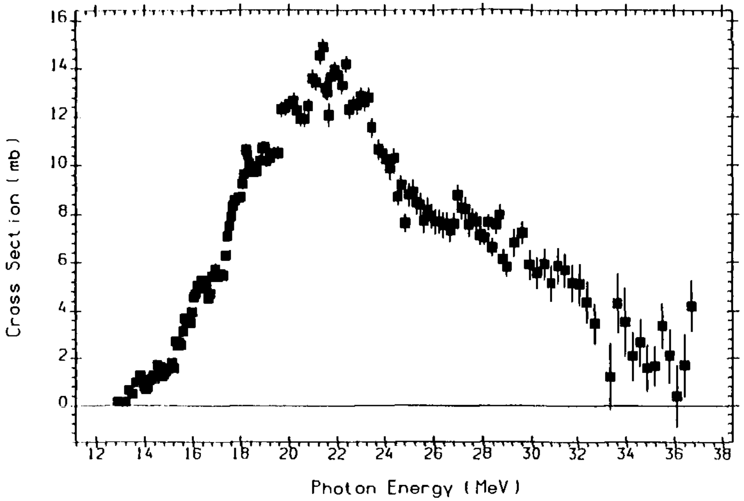
13-AL-27(G,X)0-NN-1
The sum: (G,N)+(G,N+P)+2(G,2N)+2(G,2N+P).
Positron annihilation
L0010004 J,PR,143,790,6603 S.C.FULTZ+



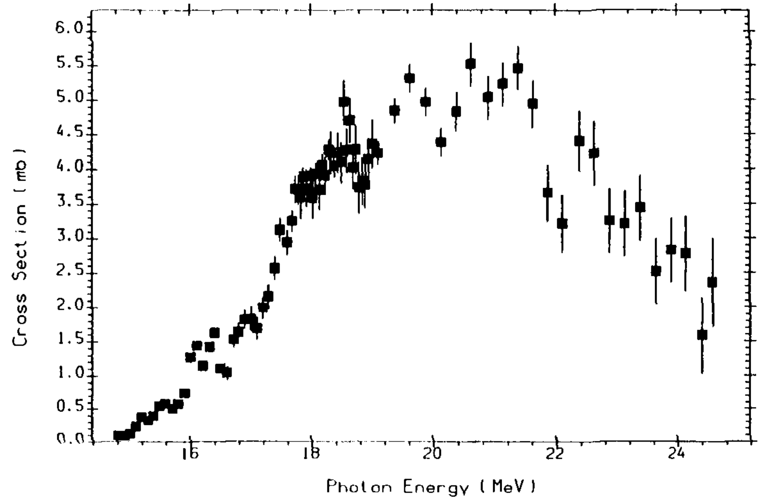
13-AL-27(G,X)0-NN-1 UNW+
The sum: (G,N)+(G,N+P)+(G,2N)+(G,2N+P).
Positron annihilation
L0010007 J,PR,143,790,6603 S.C.FULTZ+



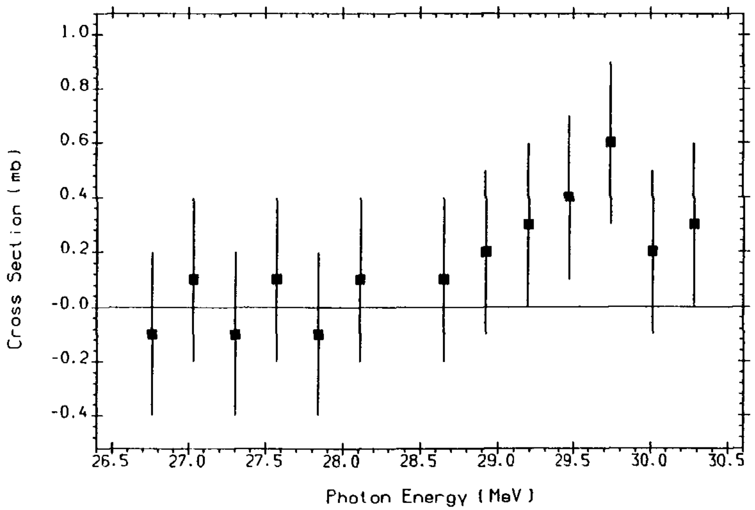
((13-AL-27(G,N)13-AL-26)+(13-AL-27(G,N+P)12-MG-25))
QMPH,ARAD Positron annihilation in flight.
L0039015 J,NP/A,227,513,74 A.VEYSSIERE+



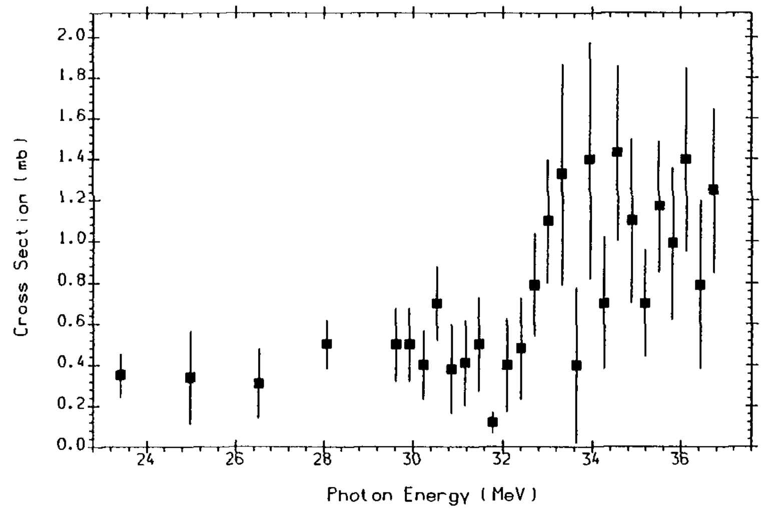
((13-AL-27(G,N)13-AL-26)+(13-AL-27(G,N+P)12-MG-25))
Positron annihilation
L0010005 J,PR,143,790,6603 S.C.FULTZ+



13-AL-27(G,N)13-AL-26-M
BRST
M0267002 J,NP,64,486,65 M.N.THOMPSON+



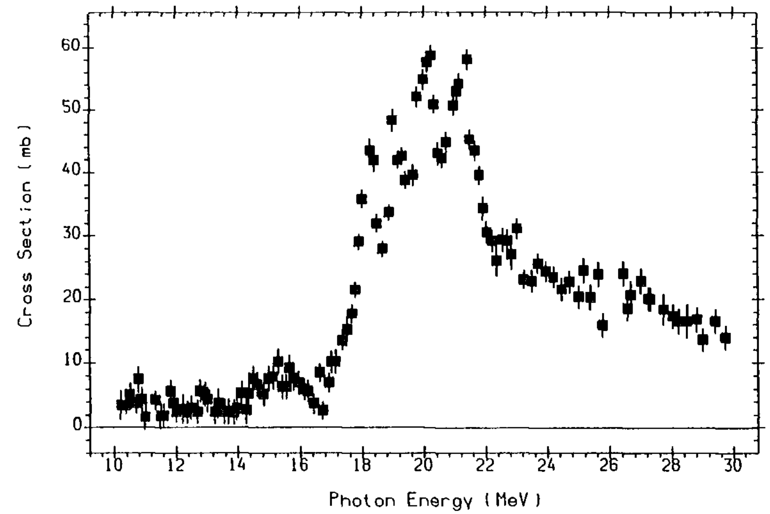
((13-AL-27(G,2N)13-AL-25)+(13-AL-27(G,2N+P)12-MG-24))
QMPH,ARAD Positron annihilation in flight.
L0039016 J,NP/A,227,513,74 A.VEYSSIERE+



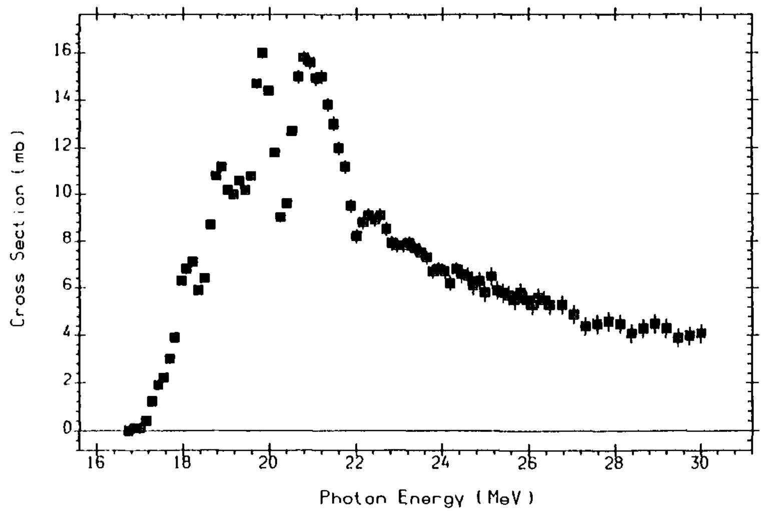
((13-AL-27(G,2N)13-AL-25)+(13-AL-27(G,2N+P)12-MG-24))
Positron annihilation
L0010006 J,PR,143,790,6603 S.C.FULTZ+

$^{nat.}_{14}\mathrm{Si}$

Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	γ,^{3}He	γ,α	γ,2n	γ,np	γ,2p
*	8.5	11.6	22.2	20.6	10.0	19.1	20.1	19.9



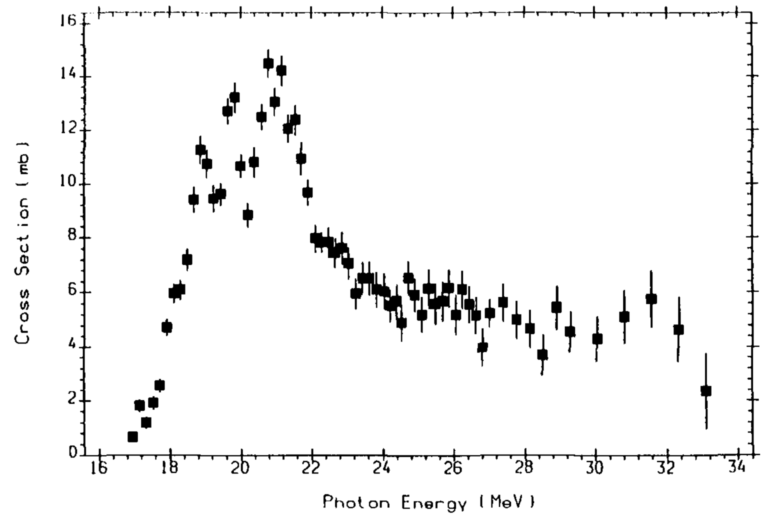
14-SI-0(G,ABS)
BRST
M0372007 J,NP/A,251,479,75 J.AHRENS+



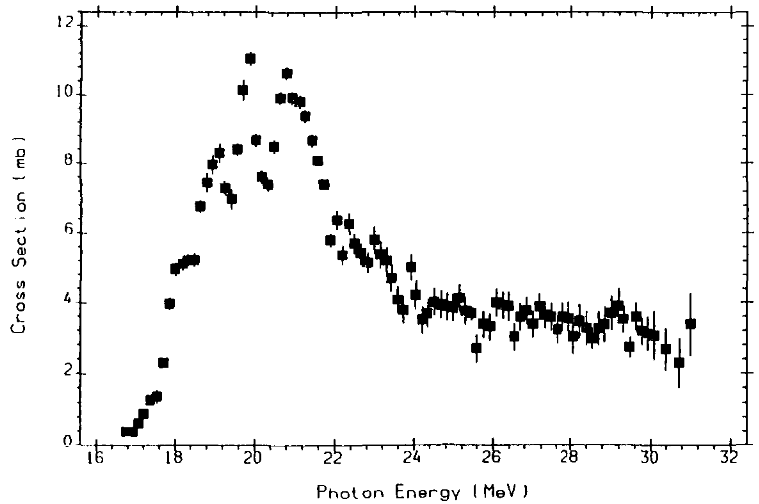
((14-SI-0(G,N))+(14-SI-0(G,N+P)))
QMPH,ARAD Positron annihilation in flight.
L0039018 J,NP/A,227,513,74 A.VEYSSIERE+

$^{28}_{14}Si$

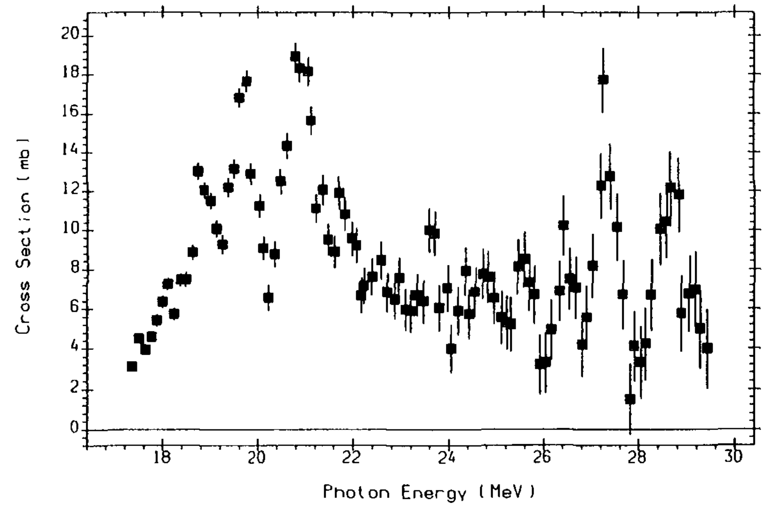
Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	$\gamma,^3He$	γ,α	γ,2n	γ,np	γ,2p
92.23	17.2	11.6	27.5	23.2	10.0	30.5	24.6	19.9



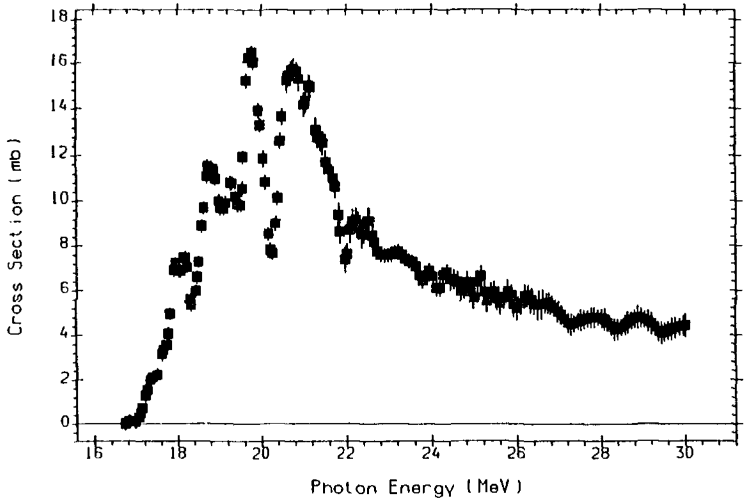
((14-SI-28(G,N)14-SI-27)+(14-SI-28(G,N+P)13-AL-26))
QMPH,ARAD Positron annihilation in flight.
L0055002 J,PR/C,27,960,8303 R.E.PYWELL+



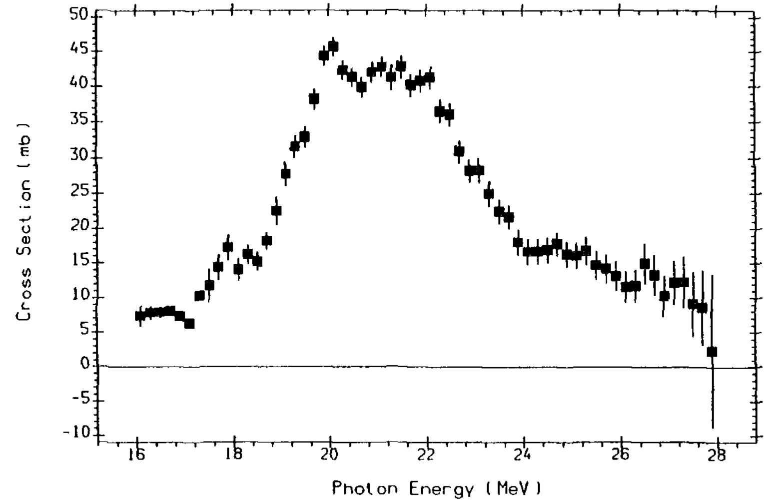
((14-SI-28(G,N)14-SI-27)+(14-SI-28(G,N+P)13-AL-26))
Positron annihilation
L0004002 J,PL,6,213,6309 J.T.CALDWELL+



((14-SI-28(G,N)14-SI-2)+(14-SI-28(G,N+P)13-AL-26))
BRST
M0397002 J,YF,2,1168,68 B.I.GORYACHEV+



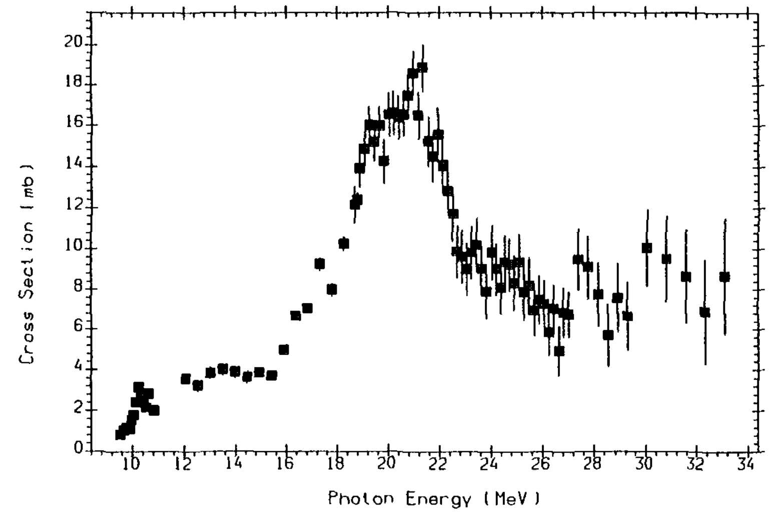
14-SI-28(G,N)14-SI-27
BRST
M0345003 J,YK,1,52,93 V.V.VARLAMOV+



14-SI-28(G,P)13-AL-27
SUM OF THE PARTIAL CROSS SECTIONS FOR E-LVL = 0.0, 0.9, 2.8, 4.0, 6.4.
BRST
M0003025 J,IZV,43,186,79 V.V.VARLAMOV+

$^{29}_{14}Si$

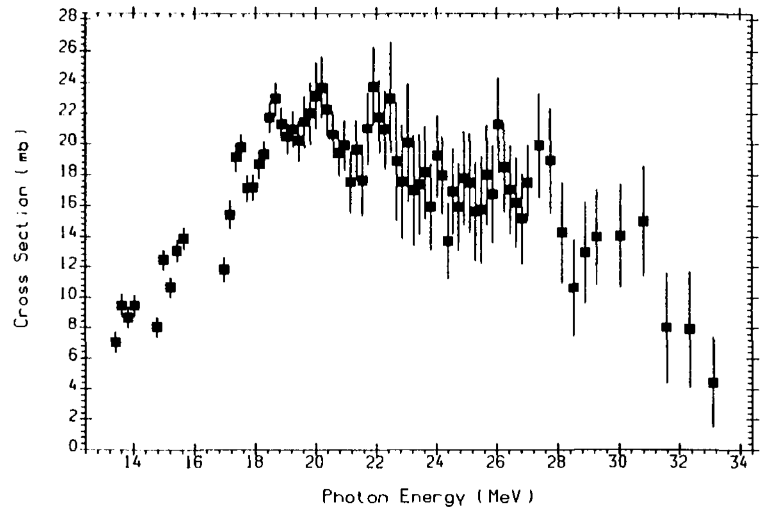
Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	γ,^{3}He	γ,α	γ,2n	γ,np	γ,2p
4.67	8.5	12.3	24.6	20.6	11.1	25.7	20.1	21.9



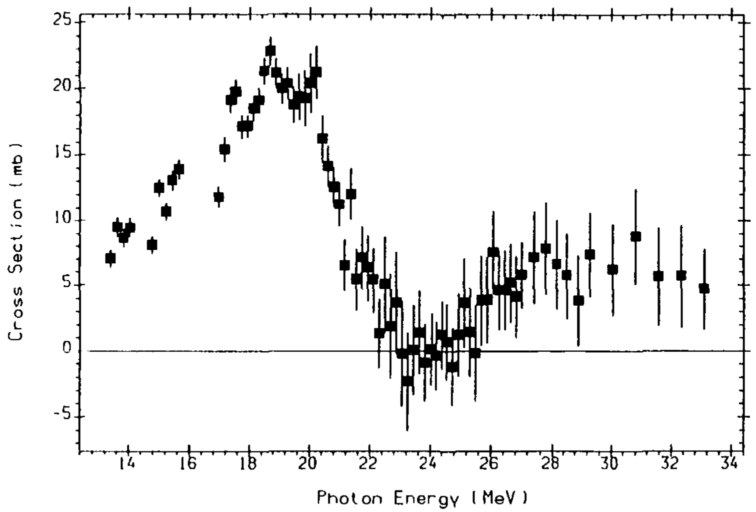
((14-SI-29(G,N)14-SI-28)+(14-SI-29(G,N+P)13-AL-27))
QMPH,ARAD Positron annihilation in flight.
L0055003 J,PR/C,27,960,8303 R.E.PYWELL+

$^{30}_{14}Si$

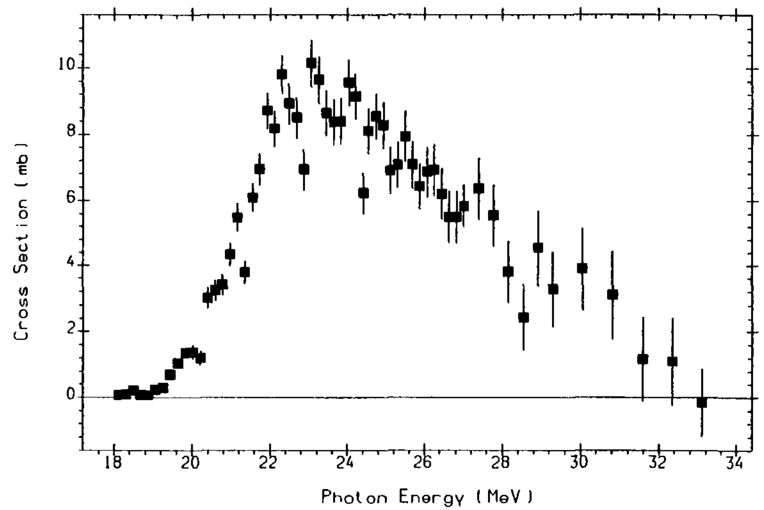
Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	γ,^{3}He	γ,α	γ,2n	γ,np	γ,2p
3.10	10.6	13.5	22.2	24.8	10.6	19.1	22.9	24.0



14-SI-30(G,X)0-NN-1
The sum: (G,N)+(G,N+P)+2(G,2N)+2(G,2N+P).
QMPH,ARAD Positron annihilation in flight.
L0055006 J,PR/C,27,960,8303 R.E.PYWELL+



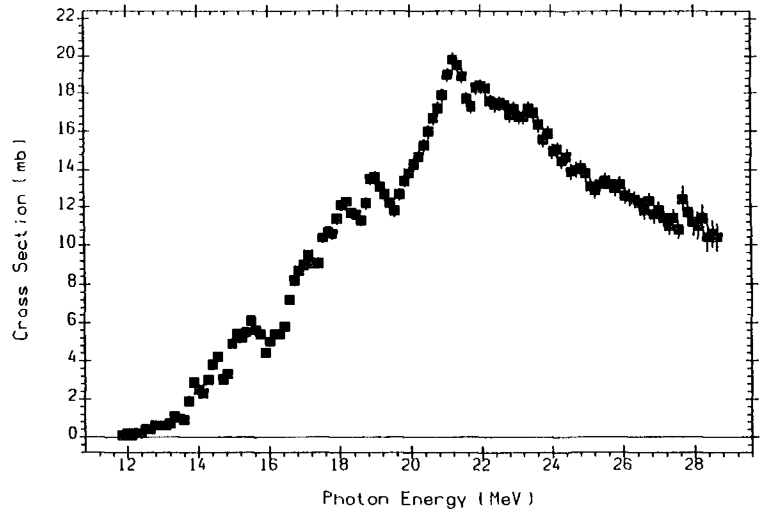
((14-SI-30(G,N)14-SI-29)+(14-SI-30(G,N+P)13-AL-28))
QMPH,ARAD Positron annihilation in flight.
L0055004 J,PR/C,27,960,8303 R.E.PYWELL+



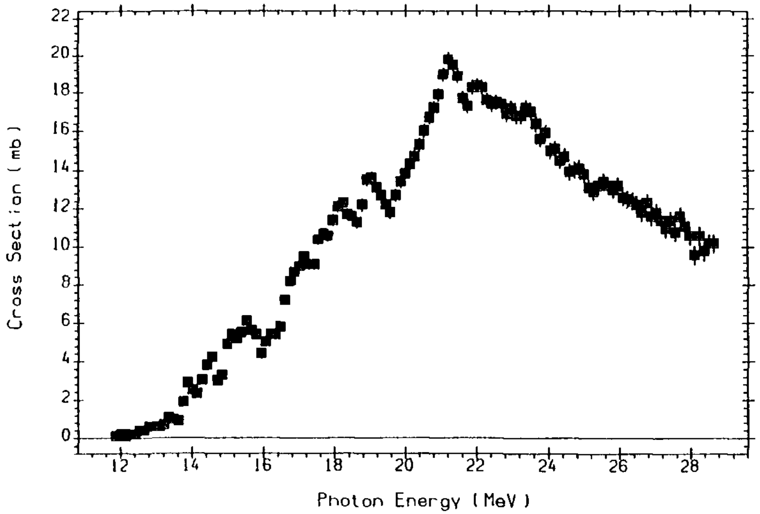
((14-SI-30(G,2N)14-SI-28)+(14-SI-30(G,2N+P)13-AL-27))
QMPH,ARAD Positron annihilation in flight.
L0055005 J,PR/C,27,960,8303 R.E.PYWELL+

$^{31}_{15}P$

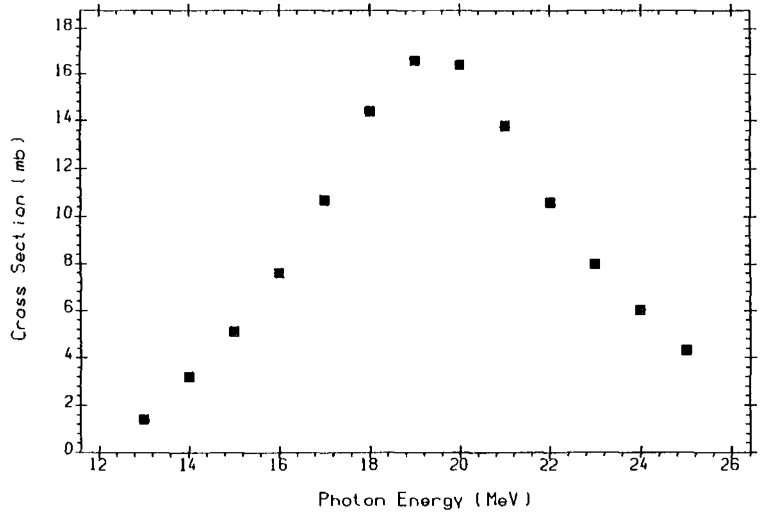
Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	γ,^{3}He	γ,α	γ,2n	γ,np	γ,2p
100.00	12.3	7.3	17.9	22.5	9.7	23.6	17.9	20.8



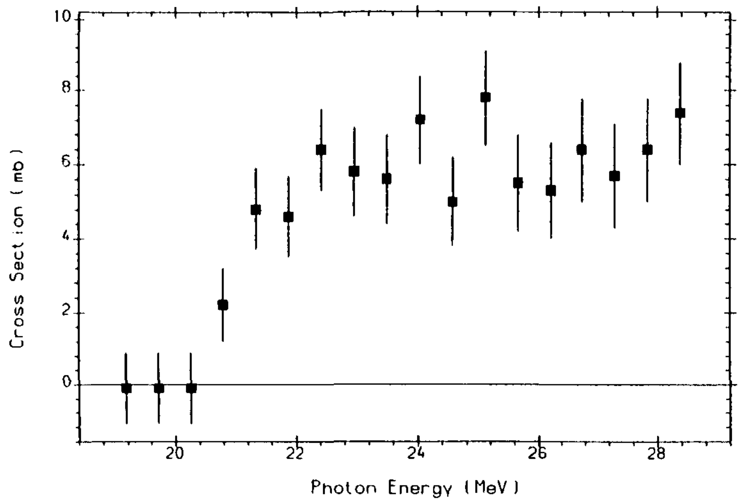
15-P-31(G,X)0-NN-1
The sum: (G,N)+(G,N+P)+2(G,2N).
QMPH,ARAD Positron annihilation in flight.
L0039022 J,NP/A,227,513,74 A.VEYSSIERE+



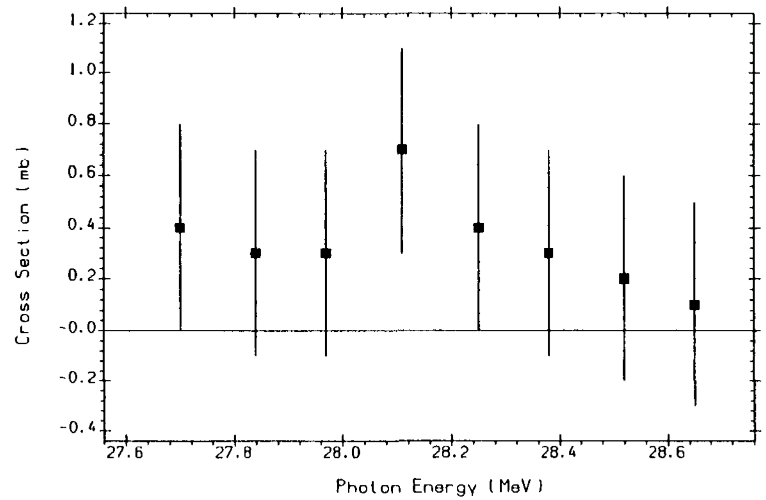
((15-P-31(G,N)15-P-30)+(15-P-31(G,N+P)14-SI-29))
QMPH,ARAD Positron annihilation in flight.
L0039019 J,NP/A,227,513,74 A.VEYSSIERE+



15-P-31(G,N)15-P-30
BRST
M0273003 J,CJP,29,518,51 L.KATZ+



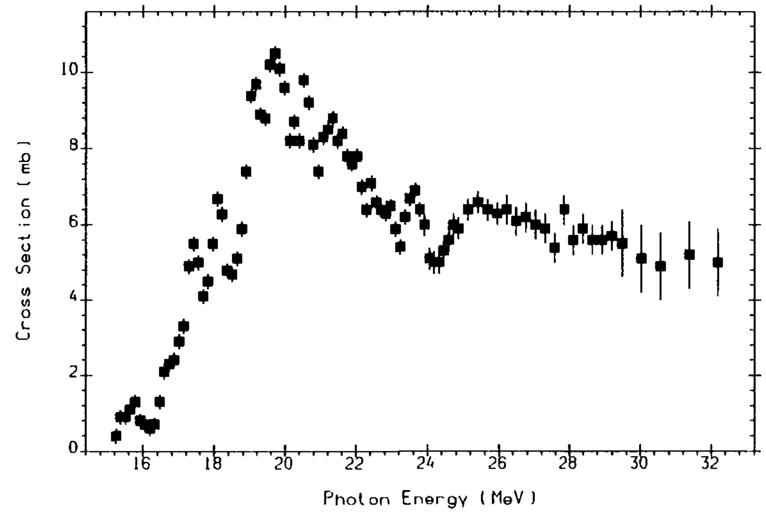
15-P-31(G,N+P)14-SI-29
QMPH,ARAD Positron annihilation in flight.
L0039020 J,NP/A,227,513,74 A.VEYSSIERE+



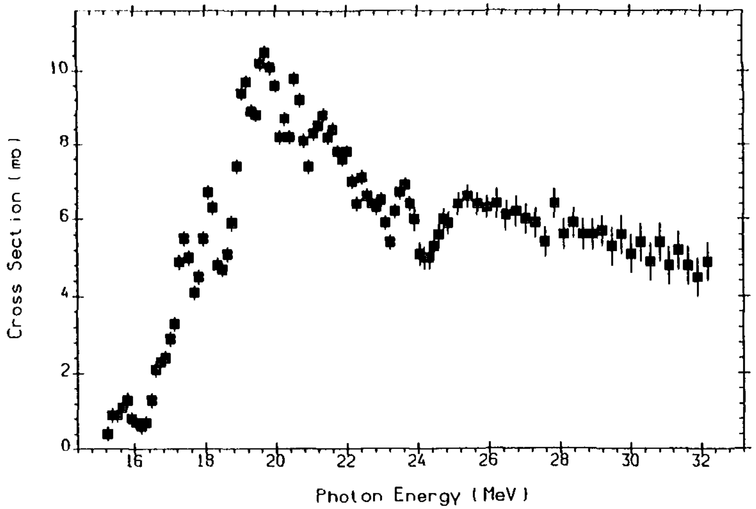
15-P-31(G,2N)15-P-29
QMPH,ARAD Positron annihilation in flight.
L0039021 J,NP/A,227,513,74 A.VEYSSIERE+

$^{32}_{16}S$

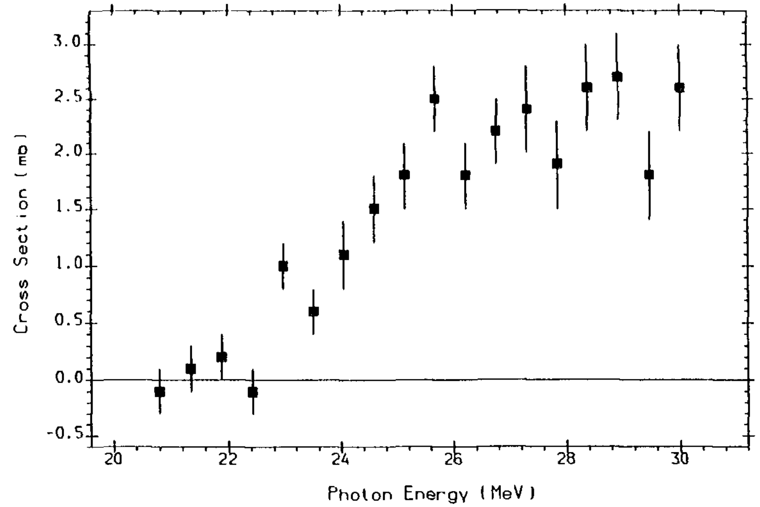
Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	γ,^{3}He	γ,α	γ,2n	γ,np	γ,2p
95.02	15.0	8.9	24.0	19.1	6.9	28.1	21.2	16.2



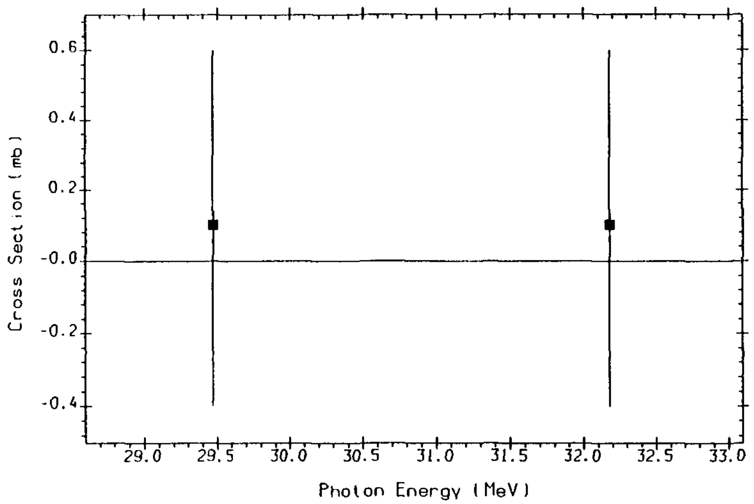
16-S-32(G,X)0-NN-116-S-32(G,X)0-NN-1
The sum: (G,N)+(G,N+P)+2(G,2N).
QMPH,ARAD Positron annihilation in flight.
L0039026 J,NP/A,227,513,74 A.VEYSSIERE+



((16-S-32(G,N)16-S-31)+(16-S-32(G,N+P)15-P-30))
QMPH,ARAD Positron annihilation in flight.
L0039023 J,NP/A,227,513,74 A.VEYSSIERE+



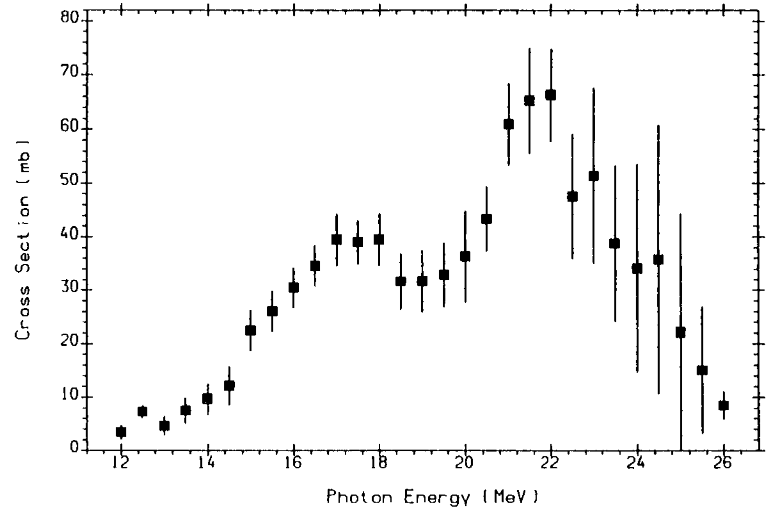
16-S-32(G,N+P)15-P-30
QMPH,ARAD Positron annihilation in flight.
L0039025 J,NP/A,227,513,74 A.VEYSSIERE+



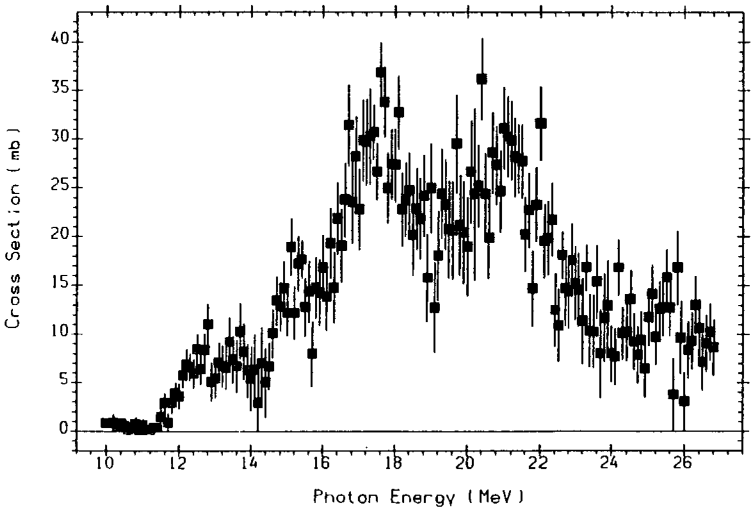
16-S-32(G,2N)16-S-30
QMPH,ARAD Positron annihilation in flight.
L0039024 J,NP/A,227,513,74 A.VEYSSIERE+

$^{34}_{16}S$

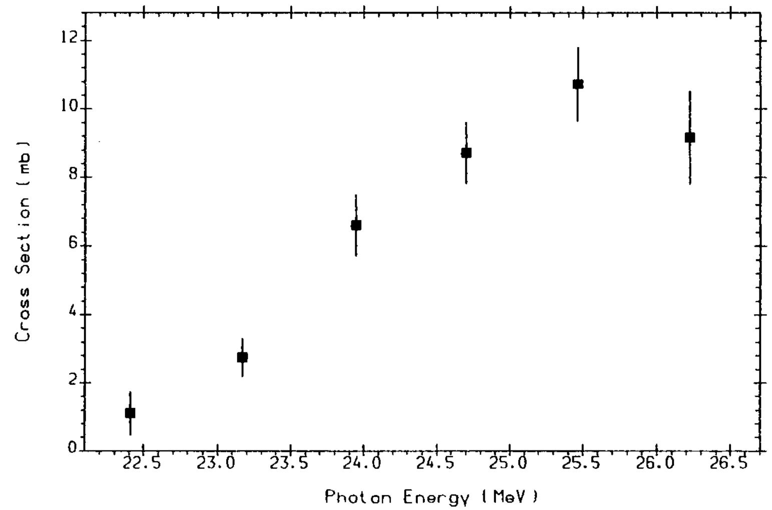
Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	γ,^{3}He	γ,α	γ,2n	γ,np	γ,2p
4.21	11.4	10.9	20.4	21.9	7.9	20.1	21.0	20.4



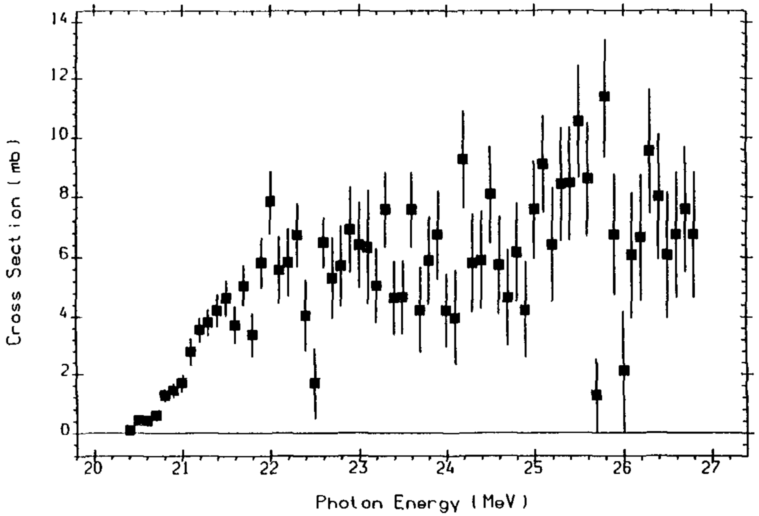
16-S-34(G,ABS)
BRST
M0510006 J,NC/A,460,455,86 Y.I.ASSAFIRI+



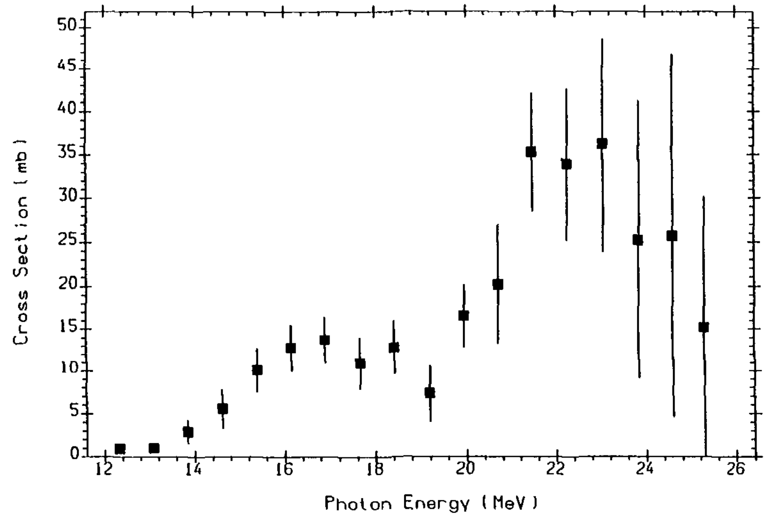
16-S-34(G,X)0-NN-1 UNW
BRST
M0506002 J,NP/A,413,416,84 Y.I.ASSAFIRI+



16-S-34(G,N+P)15-P-32
BRST
M0510003 J,NC/A,460,455,86 Y.I.ASSAFIRI+



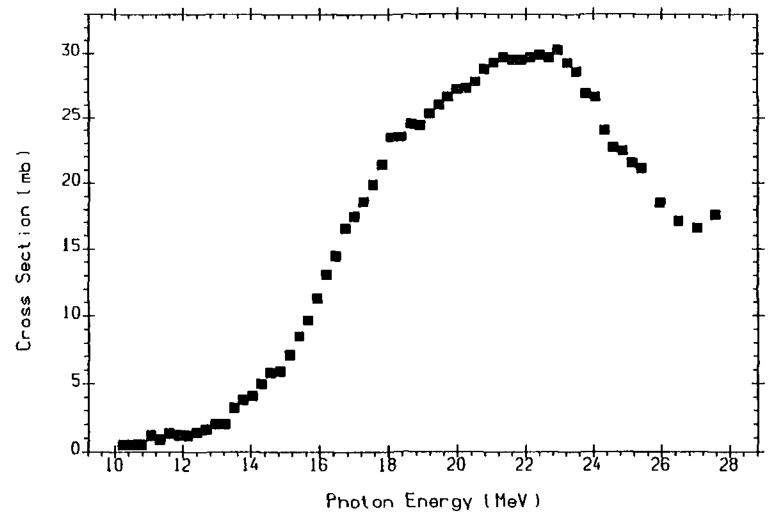
16-S-34(G,2N)16-S-32
BRST
M0506003 J,NP/A,413,416,84 Y.I.ASSAFIRI+



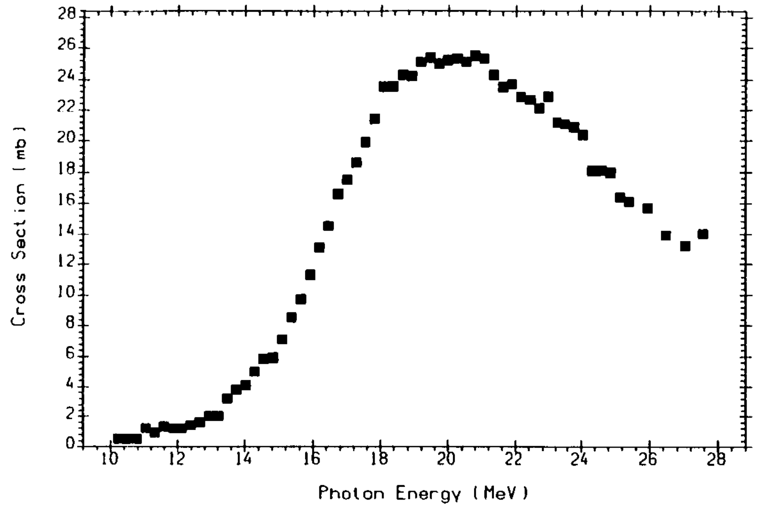
16-S-34(G,P)15-P-33
BRST
M0510002 J,NC/A,460,455,86 Y.I.ASSAFIRI+

$^{nat.}_{17}\mathrm{Cl}$

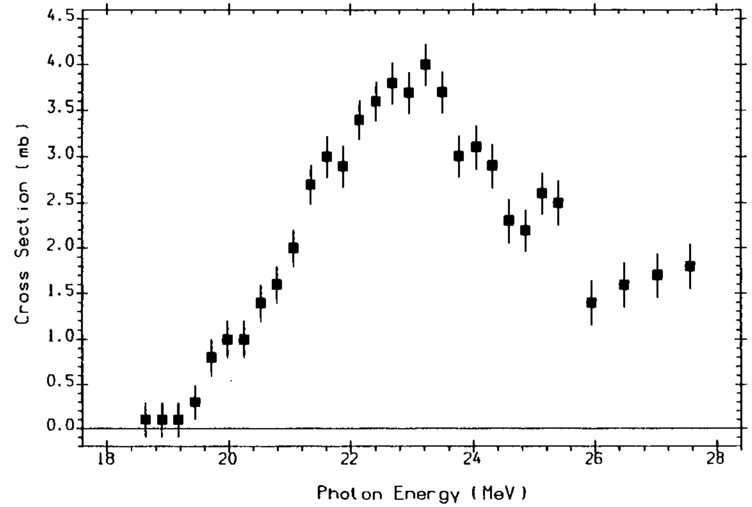
Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	γ,^{3}He	γ,α	γ,2n	γ,np	γ,2p
*	10.3	6.4	16.8	19.6	7.0	18.9	17.8	17.3



17-CL-0(G,X)0-NN-1
The sum: (G,N)+(G,N+P)+2(G,2N)+2(G,2N+P).
QMPH,ARAD Positron annihilation in flight.
L0039029 J,NP/A,227,513,74 A.VEYSSIERE+



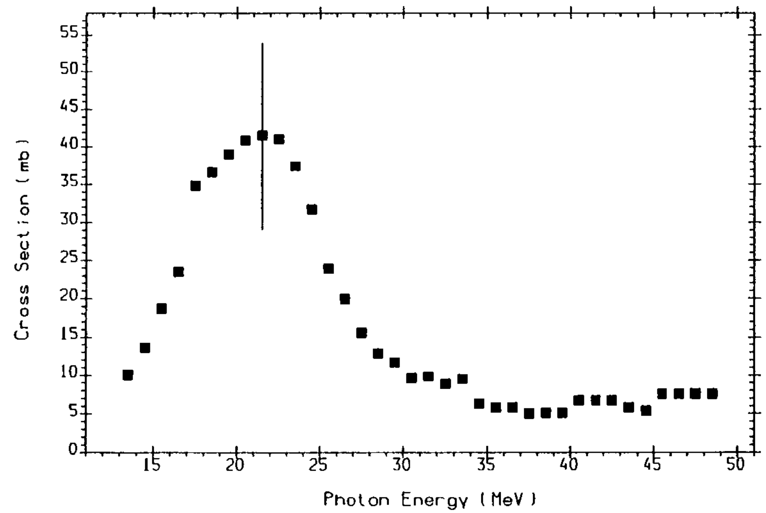
((17-CL-0(G,N))+(17-CL-0(G,N+P)))
QMPH,ARAD **Positron annihilation in flight.**
L0039027 J,NP/A,227,513,74 A.VEYSSIERE+



((17-CL-0(G,2N))+(17-CL-0(G,2N+P)))
QMPH,ARAD **Positron annihilation in flight.**
L0039028 J,NP/A,227,513,74 A.VEYSSIERE+

$^{nat.}_{18}Ar$

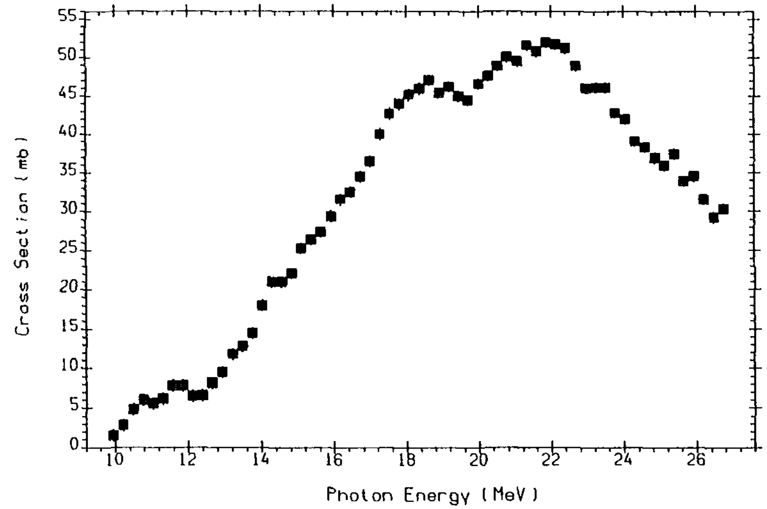
Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	γ,^{3}He	γ,α	γ,2n	γ,np	γ,2p
*	9.9	8.5	18.2	18.6	6.6	16.5	20.6	14.9



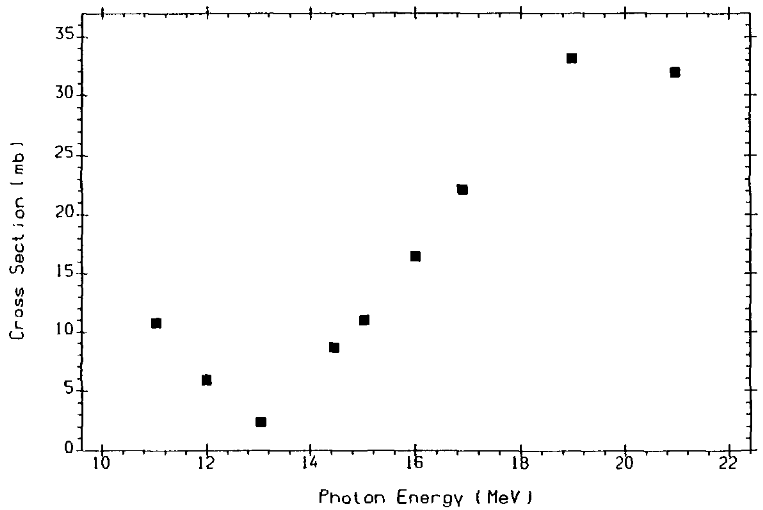
18-AR-0(G,X)0-NN-1
BRST
M0214004 J,PR,118,(2),535,60 R.W.FAST+

$^{40}_{18}\mathrm{Ar}$

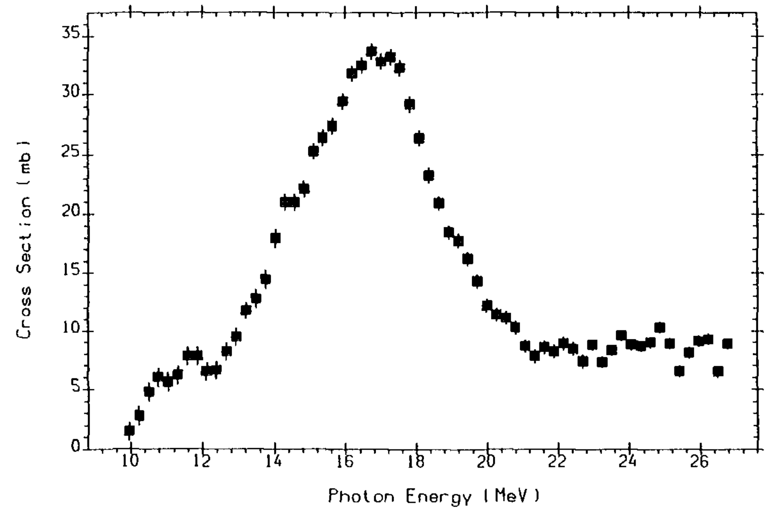
Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	γ,^{3}He	γ,α	γ,2n	γ,np	γ,2p
99.60	9.9	12.5	18.2	23.1	6.8	16.5	20.6	22.8



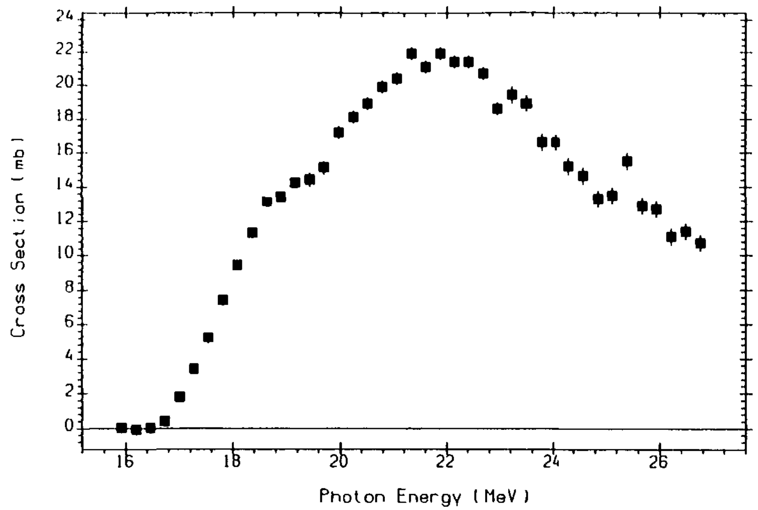
18-AR-40(G,X)0-NN-1
The sum: (G,N)+(G,N+P)+2(G,2N)+2(G,2N+P).
QMPH,ARAD Positron annihilation in flight.
L0039032 J,NP/A,227,513,74 A.VEYSSIERE+



18-AR-40(G,X)0-NN-1
BRST
M0346010 J,CJP,51,1176,73 J.W.JURY+



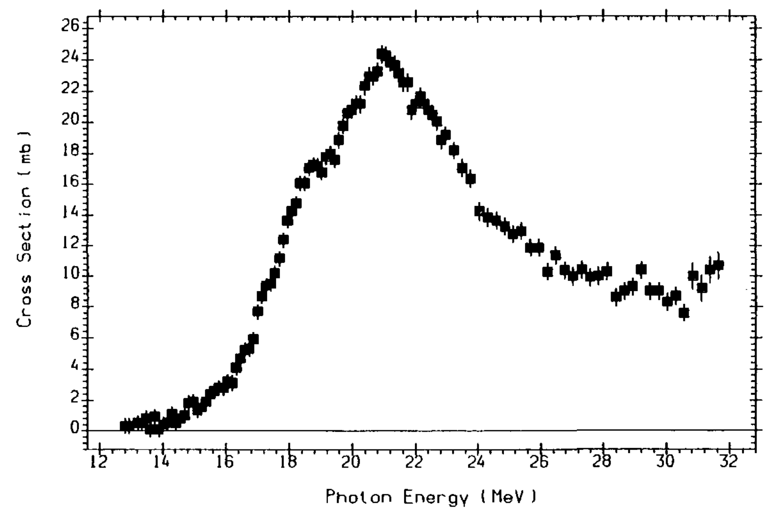
((18-AR-40(G,N)18-AR-39)+(18-AR-40(G,N+P)17-CL-38))
QMPH,ARAD Positron annihilation in flight.
L0039030 J,NP/A,227,513,74 A.VEYSSIERE+



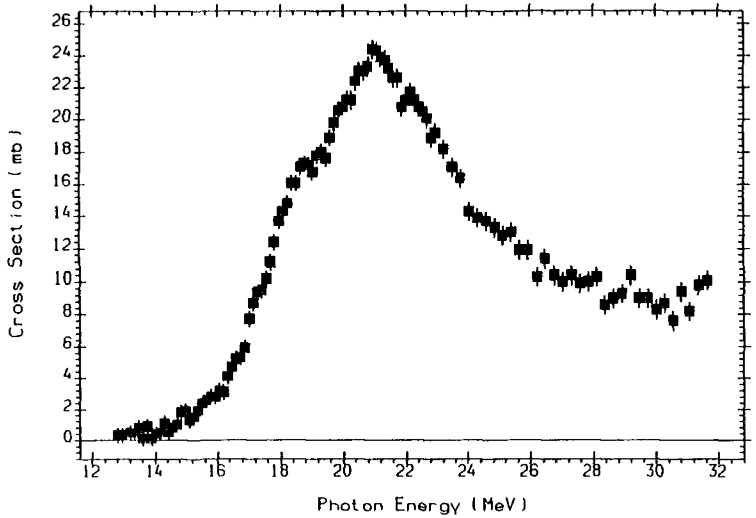
((18-AR-40(G,2N)18-AR-38)+(18-AR-40(G,2N+P)17-CL-37))
QMPH,ARAD Positron annihilation in flight.
L0039031 J,NP/A,227,513,74 A.VEYSSIERE+

$^{nat.}_{19}K$

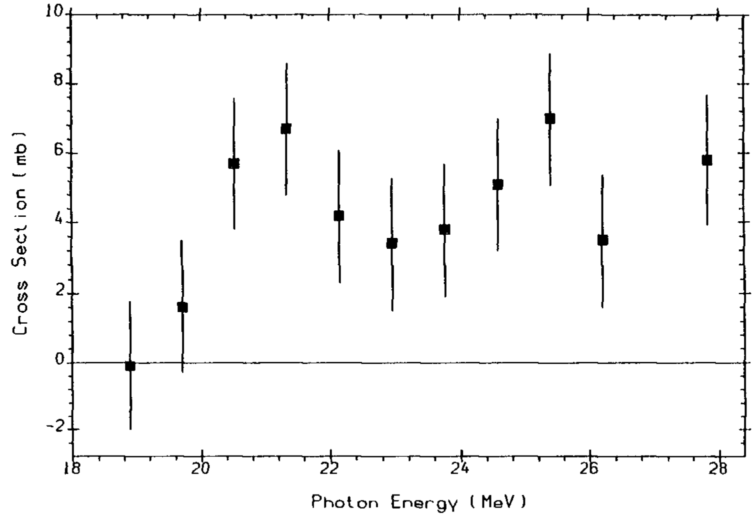
Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	γ,^{3}He	γ,α	γ,2n	γ,np	γ,2p
*	7.8	5.1	15.8	16.7	6.2	17.9	14.2	16.6



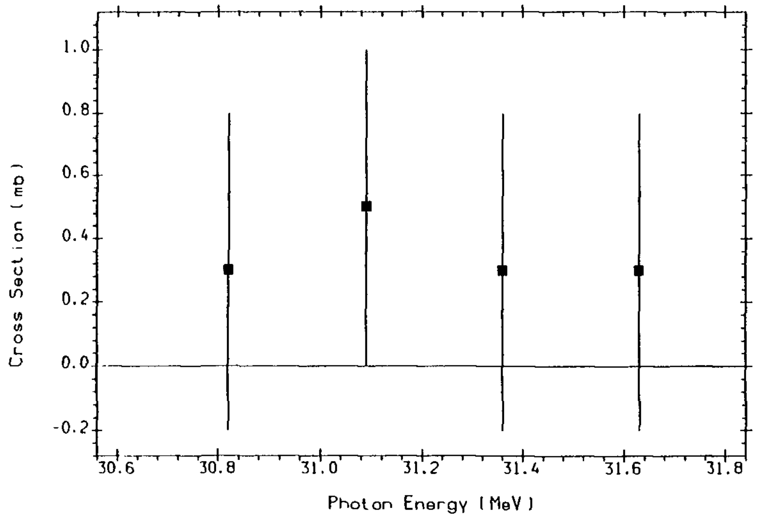
19-K-0(G,X)0-NN-1
The sum: (G,N)+(G,N+P)+2(G,2N)+2(G,2N+P).
QMPH,ARAD Positron annihilation in flight.
L0039036 J,NP/A,227,513,74 A.VEYSSIERE+



((19-K-0(G,N))+(19-K-0(G,N+P)))
QMPH,ARAD Positron annihilation in flight.
L0039033 J,NP/A,227,513,74 A.VEYSSIERE+



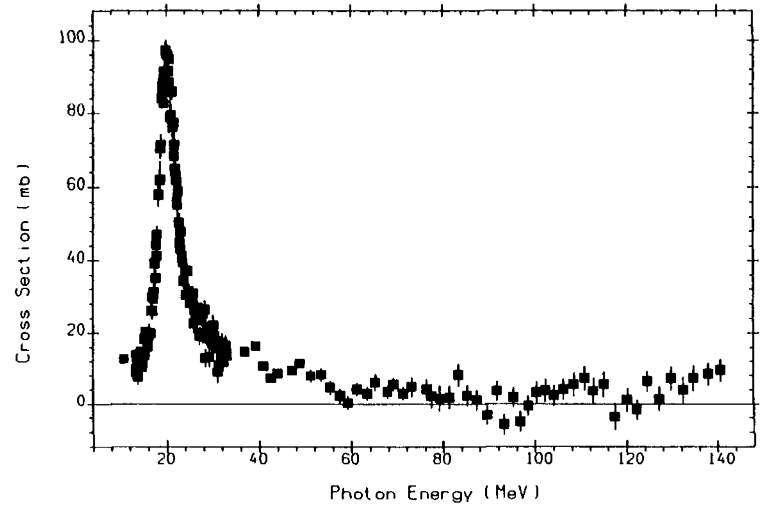
19-K-0(G,N+P)
QMPH,ARAD Positron annihilation in flight.
L0039035 J,NP/A,227,513,74 A.VEYSSIERE+



((19-K-0(G,2N))+(19-K-0(G,2N+P)))
QMPH,ARAD Positron annihilation in flight.
L0039034 J,NP/A,227,513,74 A.VEYSSIERE+

$^{nat.}_{20}Ca$

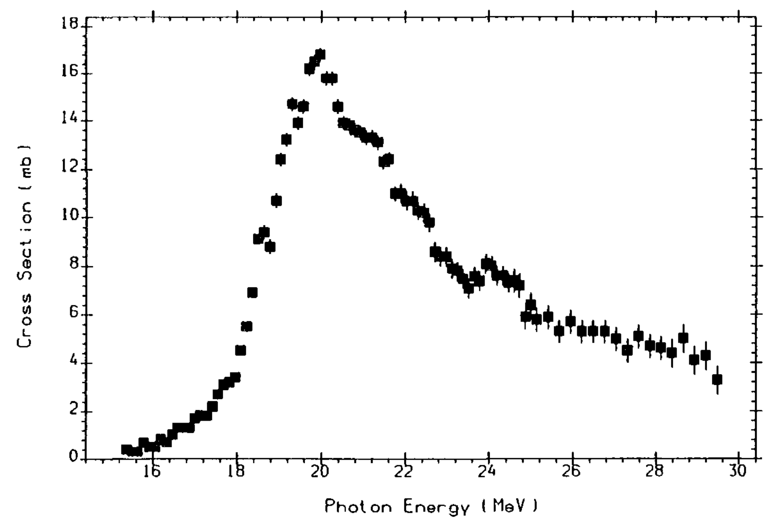
Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	γ,^{3}He	γ,α	γ,2n	γ,np	γ,2p
*	7.9	8.3	19.7	18.3	6.3	17.2	20.4	14.7



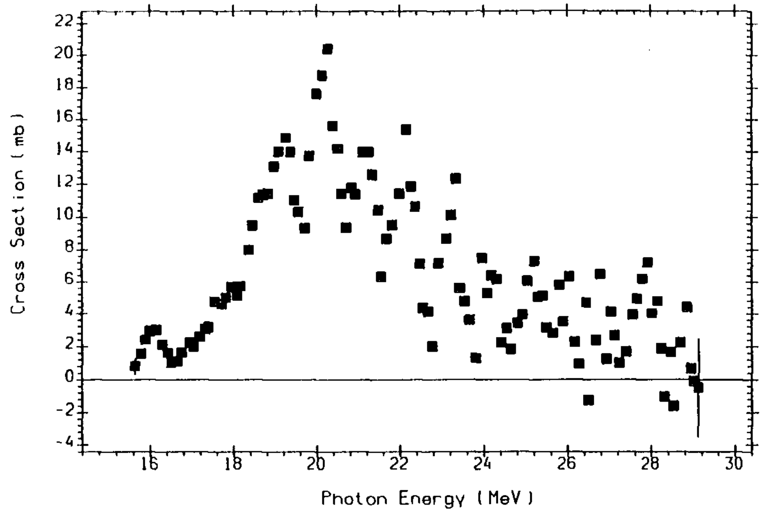
20-CA-0(G,ABS)
BRST
M0372008 J,NP/A,251,479,75 J.AHRENS+

$^{40}_{20}Ca$

Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	γ,^{3}He	γ,α	γ,2n	γ,np	γ,2p
96.94	15.6	8.3	25.0	18.8	7.0	29.0	21.4	14.7



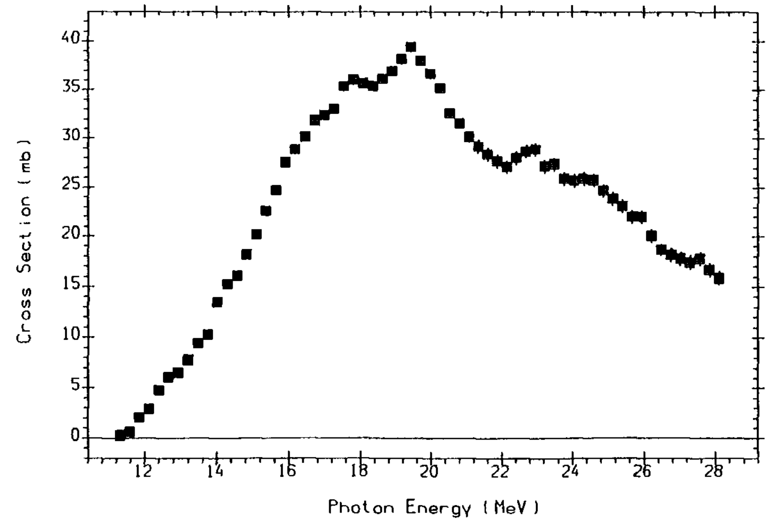
((20-CA-40(G,N)20-CA-39,,SIG)+(20-CA-40(G,N+P)19-K-38))
QMPH,ARAD Positron annihilation in flight.
L0039037 J,NP/A,227,513,74 A.VEYSSIERE+



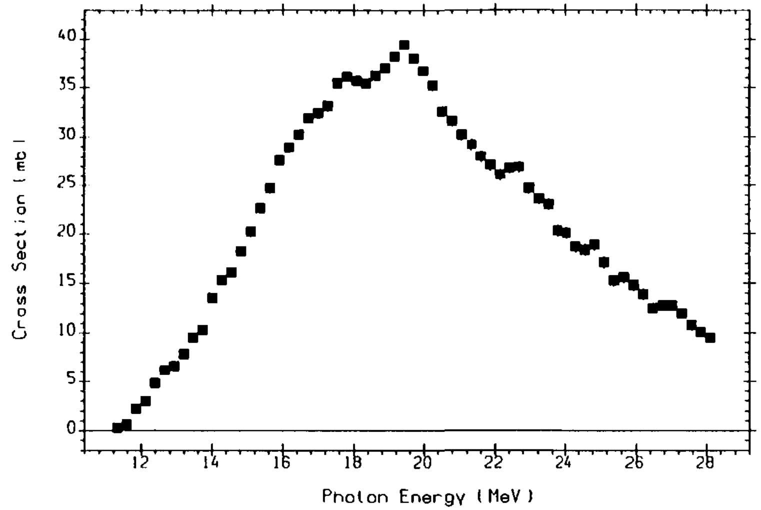
((20-CA-40(G,N)20-CA-39)+(20-CA-40(G,N+P)19-K-38))
BRST
M0397004 J,YF,2,1168,68 B.I.GORYACHEV+

$^{45}_{21}Sc$

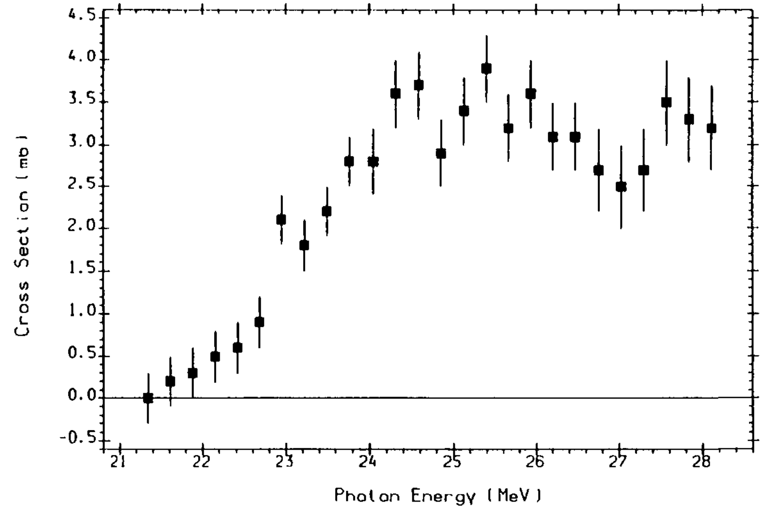
Abundance	Separation Energies (MeV)							
(%)	γ,n	γ,p	γ,t	γ,^{3}He	γ,α	γ,2n	γ,np	γ,2p
100.00	11.3	6.9	17.5	21.0	7.9	21.0	18.0	19.1



21-SC-45(G,X)0-NN-1
***The sum:* (G,N)+(G,N+P)+2(G,2N)+2(G,2N+P).**
QMPH,ARAD Positron annihilation in flight.
L0039040 J,NP/A,227,513,74 A.VEYSSIERE+



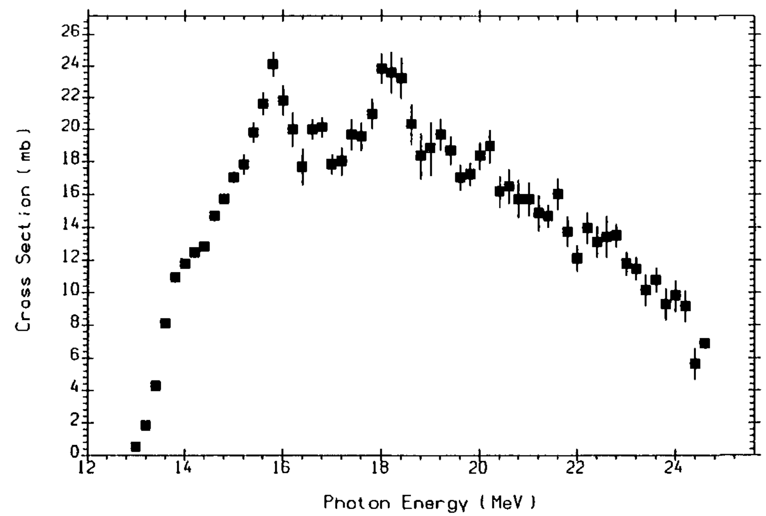
((21-SC-45(G,N)21-SC-44)+(21-SC-45(G,N+P)20-CA-43))
QMPH,ARAD Positron annihilation in flight.
L0039038 J,NP/A,227,513,74 A.VEYSSIERE+



((21-SC-45(G,2N)21-SC-43)+(21-SC-45(G,2N+P)20-CA-42))
QMPH,ARAD Positron annihilation in flight.
L0039039 J,NP/A,227,513,74 A.VEYSSIERE+

$^{46}_{22}Ti$

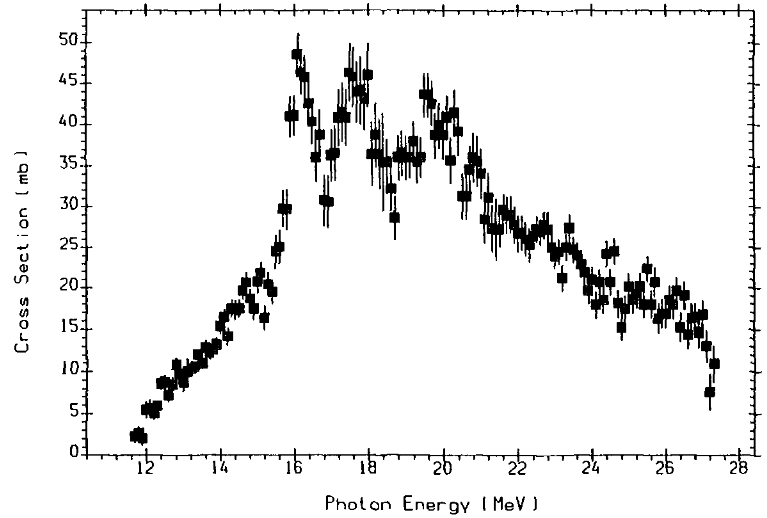
Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	γ,^{3}He	γ,α	γ,2n	γ,np	γ,2p
8.10	13.2	10.3	22.9	20.6	8.0	22.7	21.7	17.2



22-TI-46(G,N)22-TI-45
BRST
M0370002 J,NP/A,318,461,79 R.E.PYWELL+

$^{48}_{22}Ti$

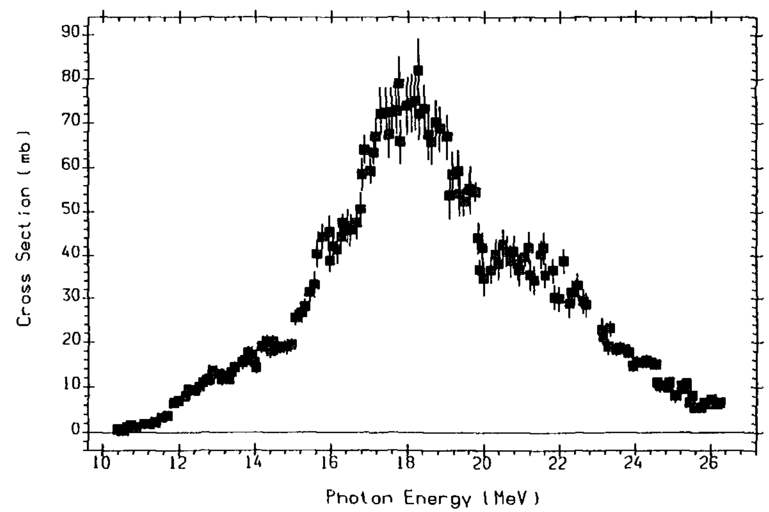
Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	$γ,^3He$	γ,α	γ,2n	γ,np	γ,2p
73.80	11.6	11.4	22.4	22.6	9.4	20.5	22.1	19.9



22-TI-48(G,X)0-NN-1 UNW
THE SUM OF THE (G,N), (G,NP), AND (G,2N) REACTION CROSS SECTIONS.
BRST
M0532002 J,NP/A,339,125,80 R.SUTTON+

$^{50}_{22}Ti$

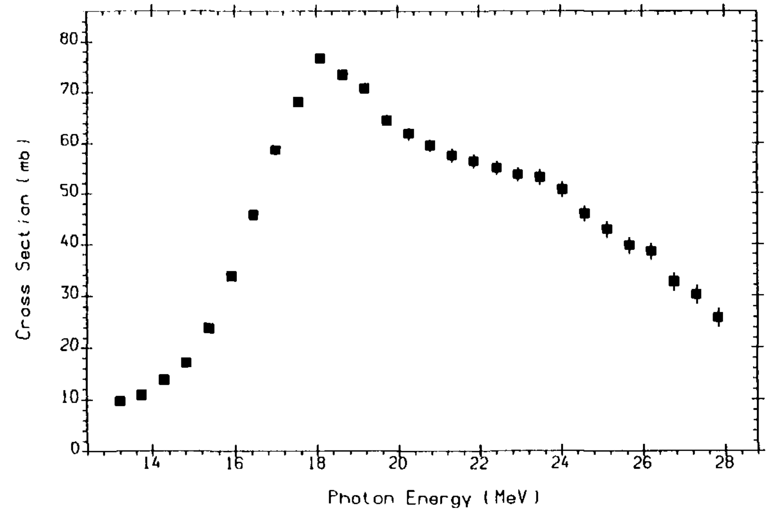
Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	$γ,^3He$	γ,α	γ,2n	γ,np	γ,2p
5.30	10.9	12.2	22.1	24.0	10.7	19.1	22.3	21.8



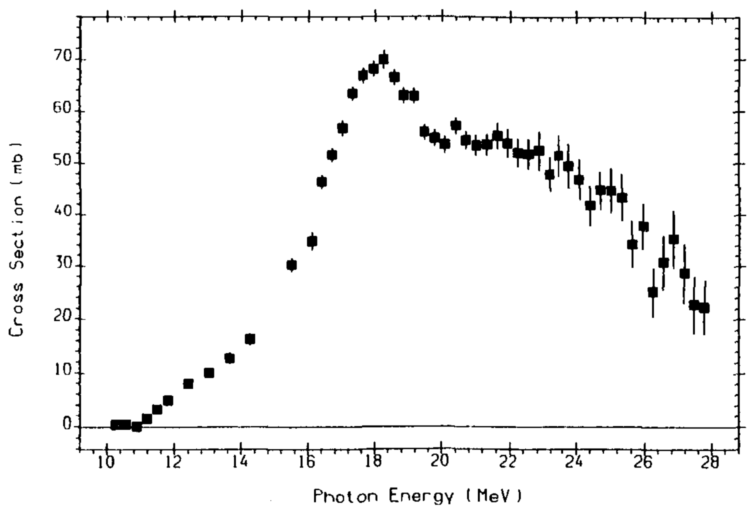
((22-TI-50(G,N)22-TI-49)+(22-TI-50(G,2N)22-TI-48))
BRST
M0326002 J,NP/A,325,116,79 R.E.PYWELL+

$^{51}_{23}V$

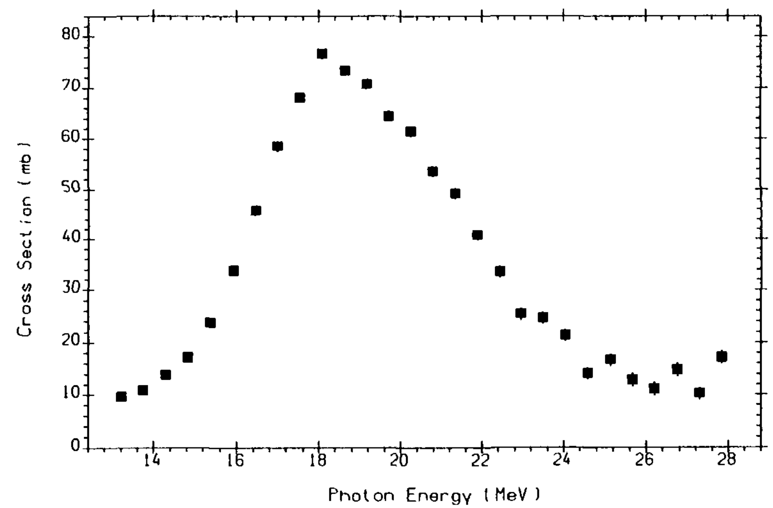
Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	γ,^{3}He	γ,α	γ,2n	γ,np	γ,2p
99.75	11.1	8.1	18.7	22.6	10.3	20.4	19.0	20.2



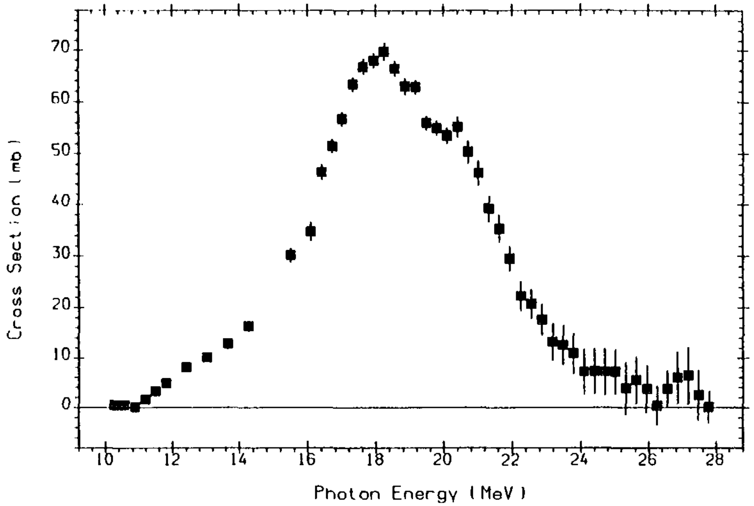
23-V-51(G,X)0-NN-1
The sum: (G,N)+(G,N+P)+2(G,2N).
QMPH,ARAD Positron annihilation in flight.
L0039043 J,NP/A,227,513,74 A.VEYSSIERE+



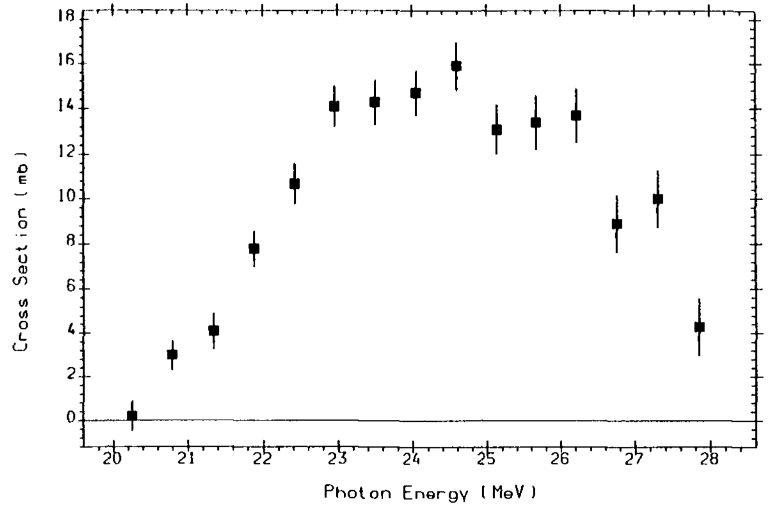
23-V-51(G,X)0-NN-1 UNW
The sum: (G,N)+(G,N+P)+(G,2N)+(G,3N).
Positron annihilation
L0001002 J,PR,128,2345,6212 S.C.FULTZ+



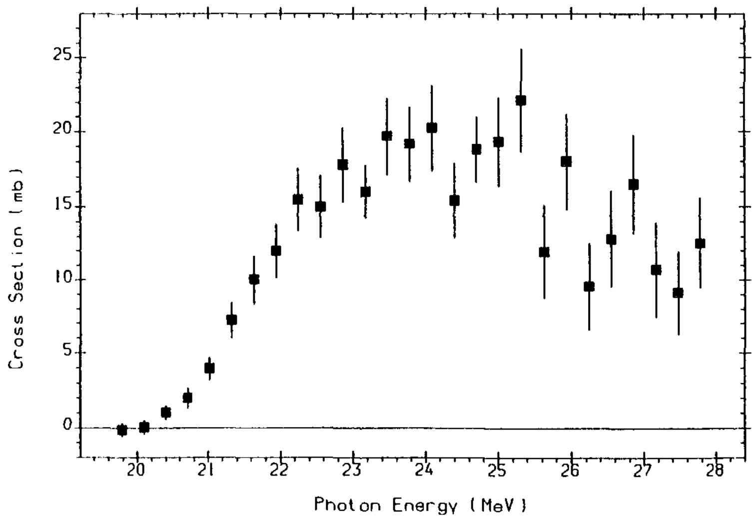
((23-V-51(G,N)23-V-50)+(23-V-51(G,N+P)22-TI-49))
QMPH,ARAD Positron annihilation in flight.
L0039041 J,NP/A,227,513,74 A.VEYSSIERE+



((23-V-51(G,N)23-V-50)+(23-V-51(G,N+P)22-TI-49))
Positron annihilation
L0001003 J,PR,128,2345,6212 S.C.FULTZ+



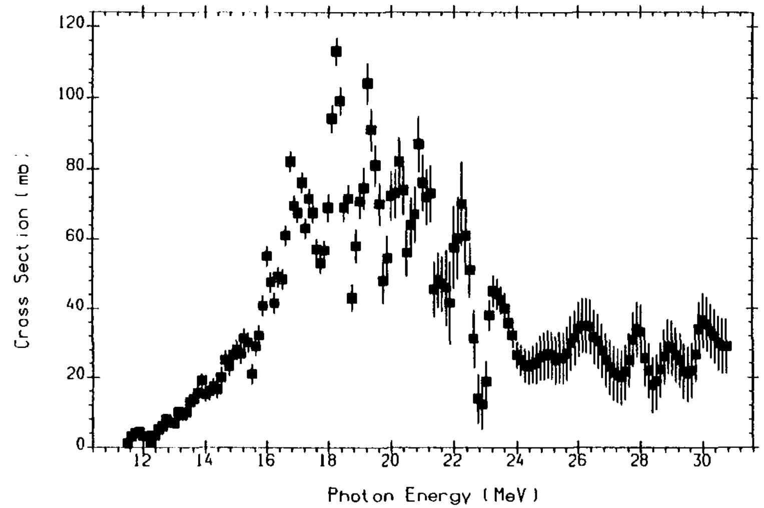
23-V-51(G,2N)23-V-49
QMPH,ARAD Positron annihilation in flight.
L0039042 J,NP/A,227,513,74 A.VEYSSIERE+



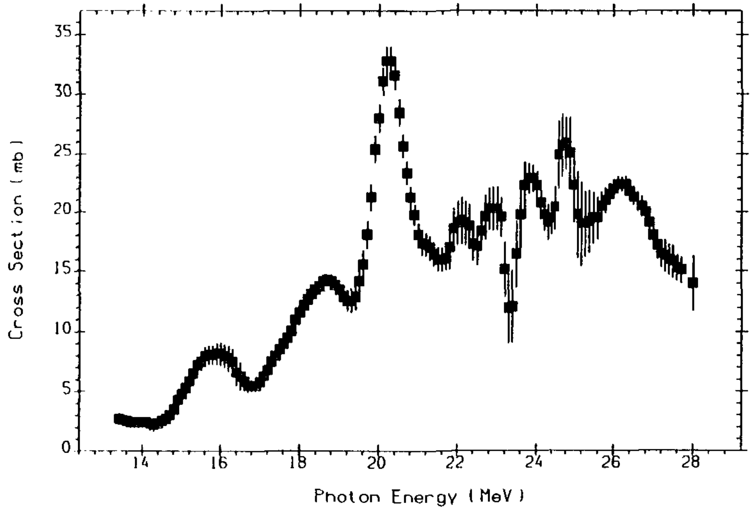
((23-V-51(G,2N)23-V-49)+(23-V-51(G,2N+P)22-TI-48))
Positron annihilation
L0001004 J,PR,128,2345,6212 S.C.FULTZ+

$^{52}_{24}Cr$

Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	γ,^{3}He	γ,α	γ,2n	γ,np	γ,2p
83.79	12.0	10.5	22.4	21.8	9.4	21.3	21.6	18.6



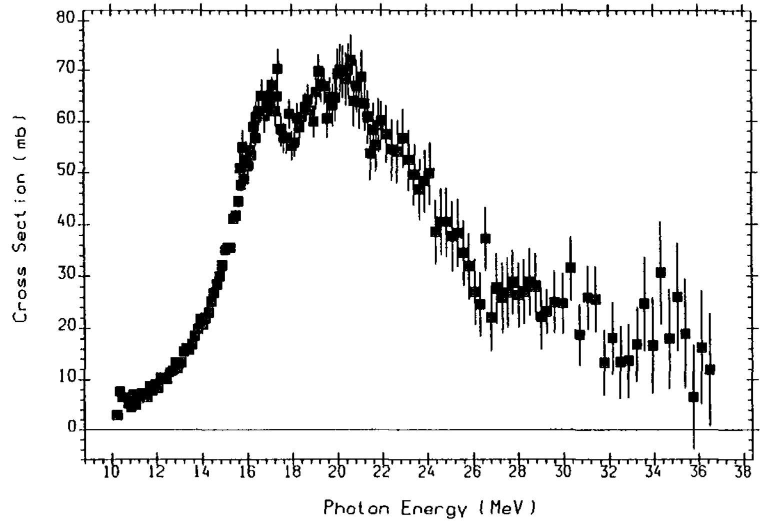
((24-CR-52(G,N)24-CR-51)+(24-CR-52(G,2N)24-CR-50))
BRST
M0093003 J,IZV,33,(10),1736,69 B.I.GORYACHEV+



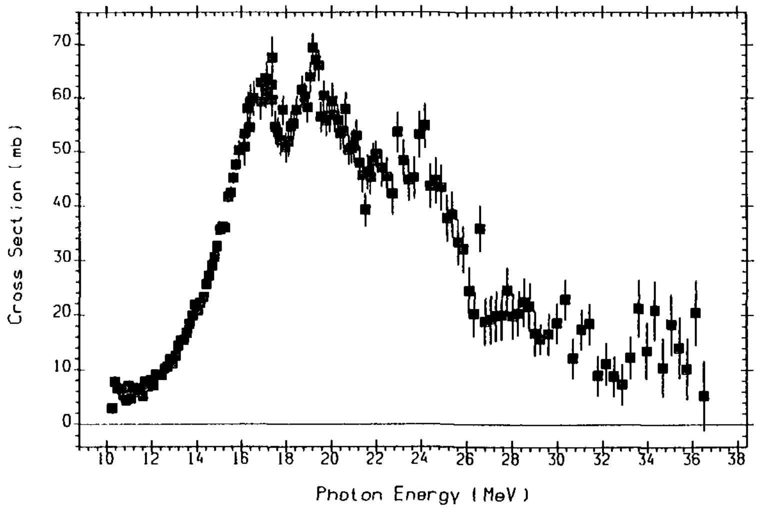
((24-CR-52(G,P)23-V-51)+(24-CR-52(G,N+P)23-V-50))
BRST
M0067002 J,YF,11,(3),485,70 B.S.ISHKHANOV+

$^{55}_{25}$Mn

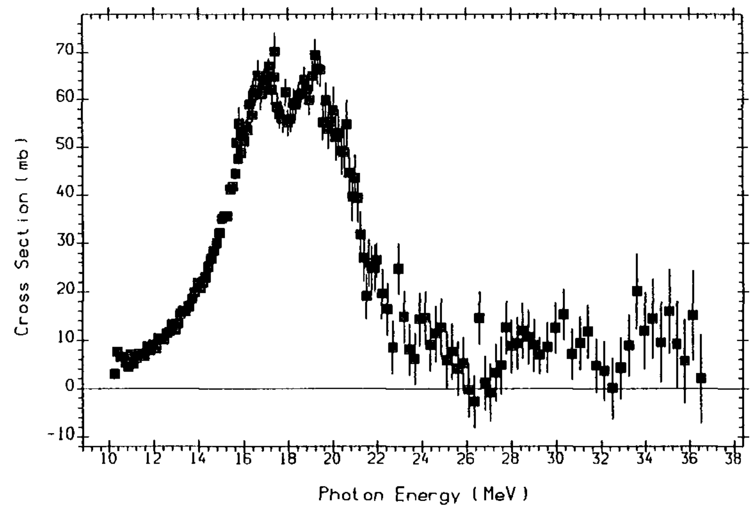
Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	γ,^{3}He	γ,α	γ,2n	γ,np	γ,2p
100.00	10.2	8.1	17.2	21.2	7.9	19.2	17.8	20.4



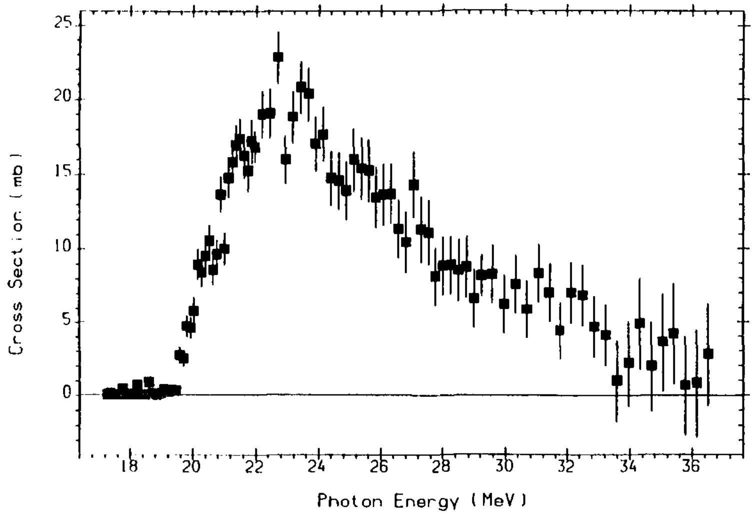
25-MN-55(G,X)0-NN-1
The sum: (G,N)+(G,N+P)+2(G,2N)+2(G,2N+P)+3G,3N).
QMPH,ARAD Positron annihilation in flight.
L0028002 J,PR/C,20,128,7907 R.A.ALVAREZ+



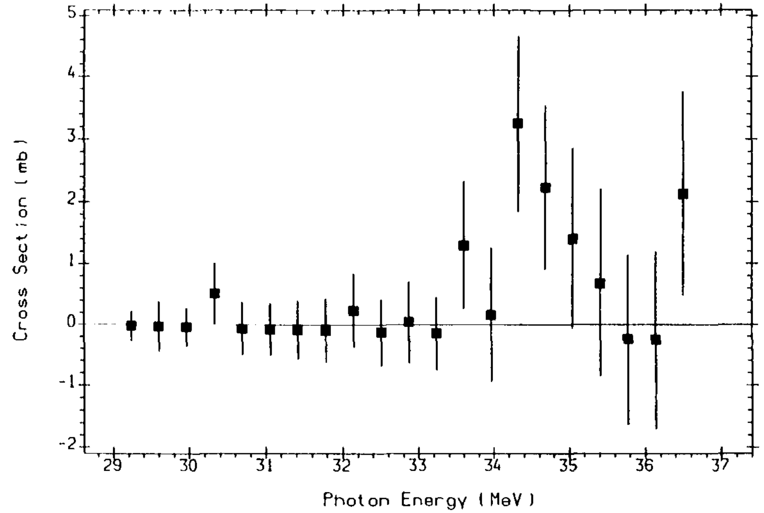
25-MN-55(G,X)0-NN-1 UNW
The sum: (G,N)+(G,N+P)+(G,2N)+(G,2N+P)+G,3N).
QMPH,ARAD Positron annihilation in flight.
L0028011 J,PR/C,20,128,7907 R.A.ALVAREZ+



((25-MN-55(G,N)25-MN-54)+(25-MN-55(G,N+P)24-CR-53))
QMPH,ARAD Positron annihilation in flight.
L0028003 J,PR/C,20,128,7907 R.A.ALVAREZ+



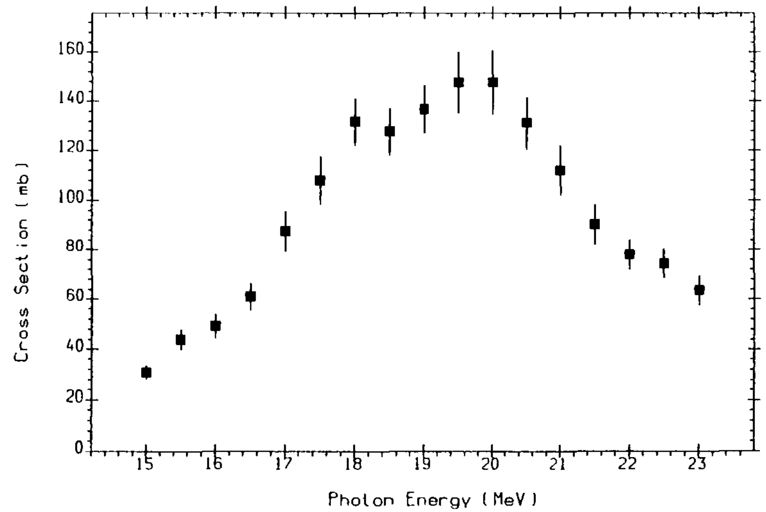
((25-MN-55(G,2N)25-MN-53)+(25-MN-55(G,2N+P)24-CR-52))
QMPH,ARAD Positron annihilation in flight.
L0028004 J,PR/C,20,128,7907 R.A.ALVAREZ+



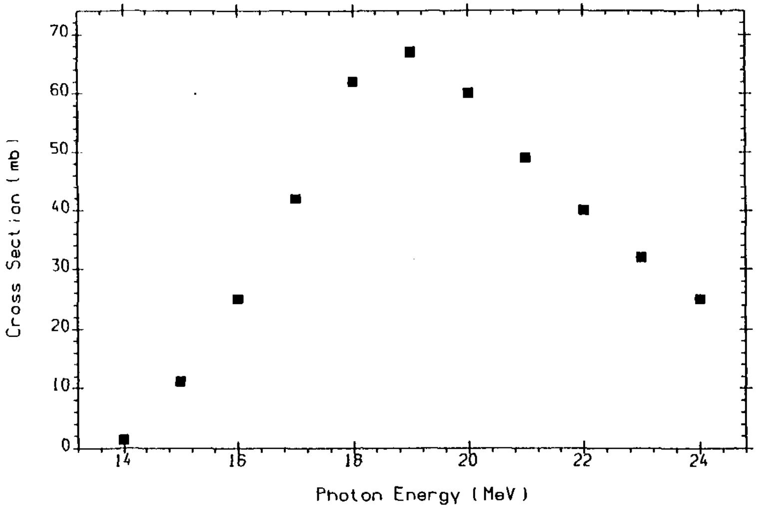
25-MN-55(G,3N)25-MN-52
QMPH,ARAD Positron annihilation in flight.
L0028005 J,PR/C,20,128,7907 R.A.ALVAREZ+

$^{54}_{26}Fe$

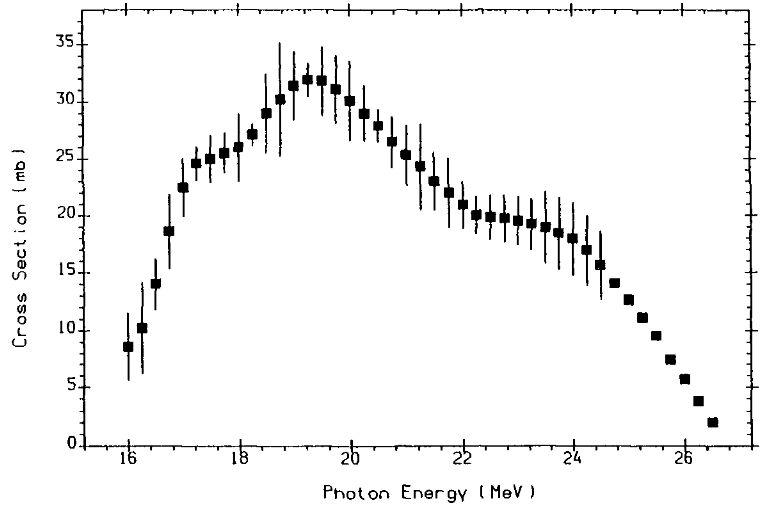
Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	γ,^{3}He	γ,α	γ,2n	γ,np	γ,2p
5.80	13.4	8.9	23.0	19.7	8.4	24.1	20.9	15.4



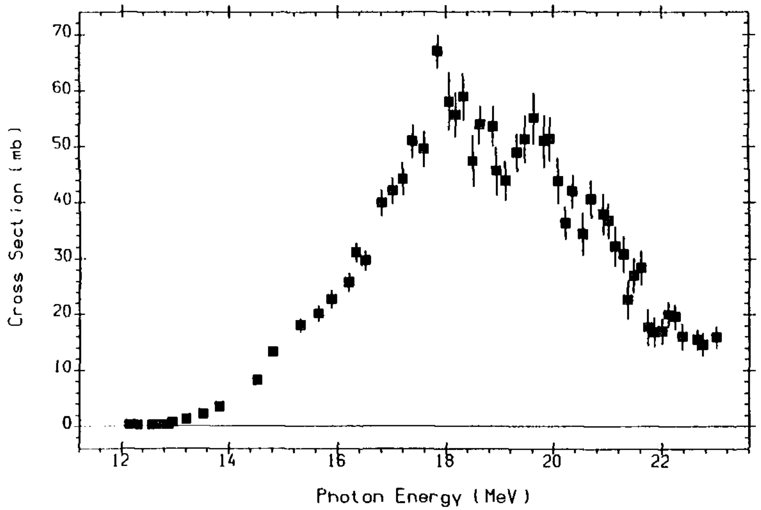
26-FE-54(G,ABS)
THE SUM OF (G,N) AND (G,P) CROSS SECTIONS
BRST
M0507004 J,AJP,31,471,78 J.W.NORBURY+



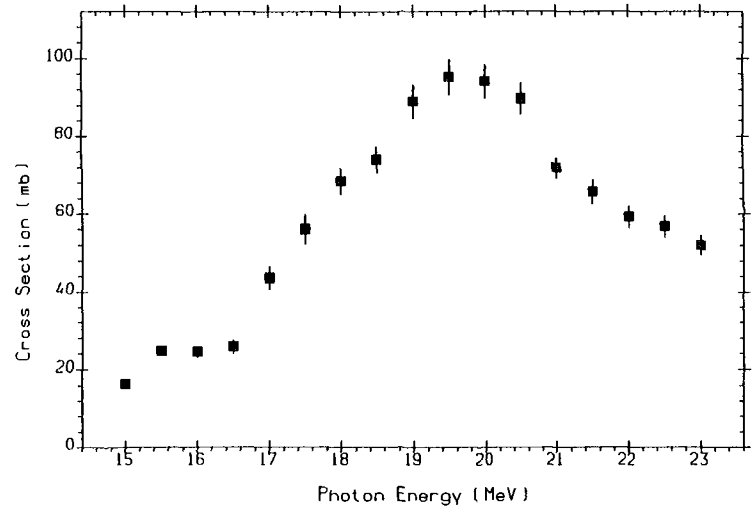
26-FE-54(G,N)26-FE-53
BRST
M0273004 J,CJP,29,518,51 L.KATZ+



26-FE-54(G,N)26-FE-53
BRST
M0024002 J,NP/A,285,71,7702 B.S.RATNER+



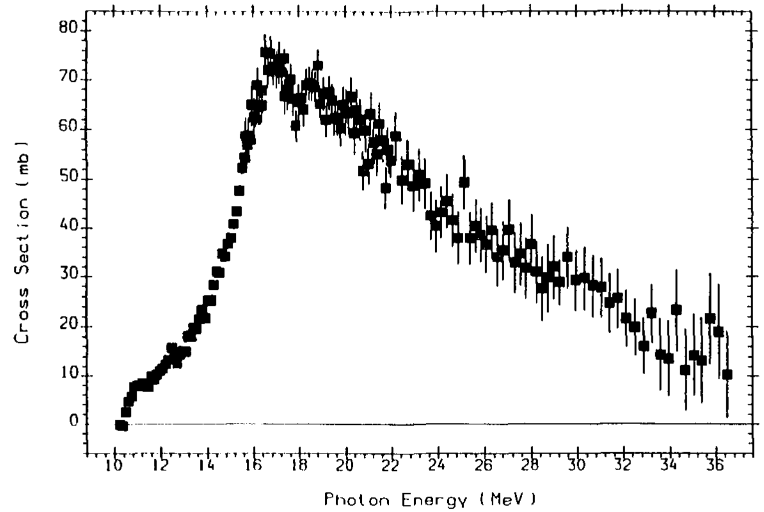
26-FE-54(G,N)26-FE-53
BRST
M0507002 J,AJP,31,471,78 J.W.NORBURY+



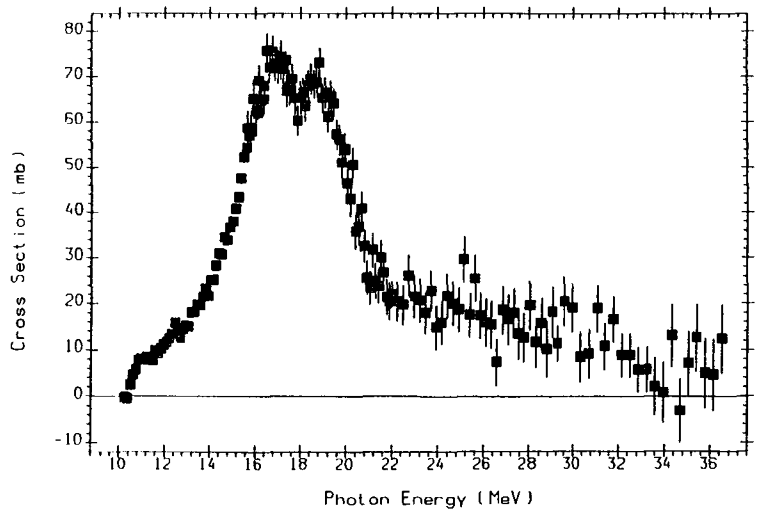
26-FE-54(G,P)25-MN-53
BRST
M0507003 J,AJP,31,471,78 J.W.NORBURY+

$^{59}_{27}Co$

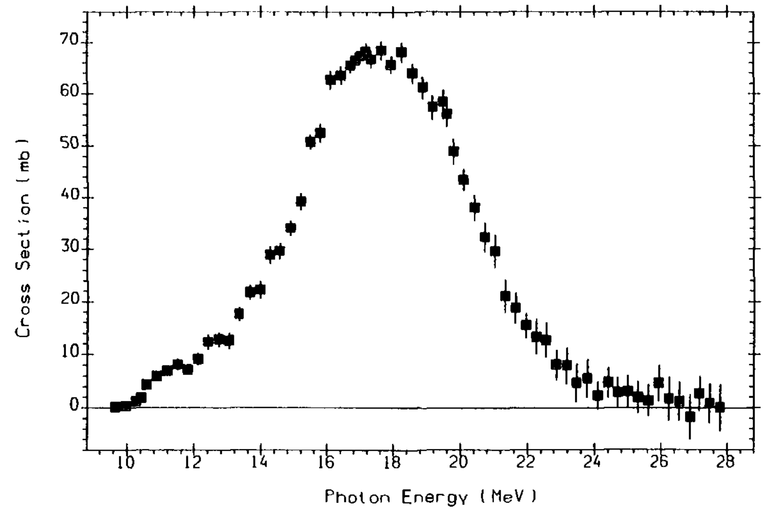
Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	γ,^{3}He	γ,α	γ,2n	γ,np	γ,2p
100.00	10.5	7.4	16.6	20.3	7.0	19.0	17.4	19.3



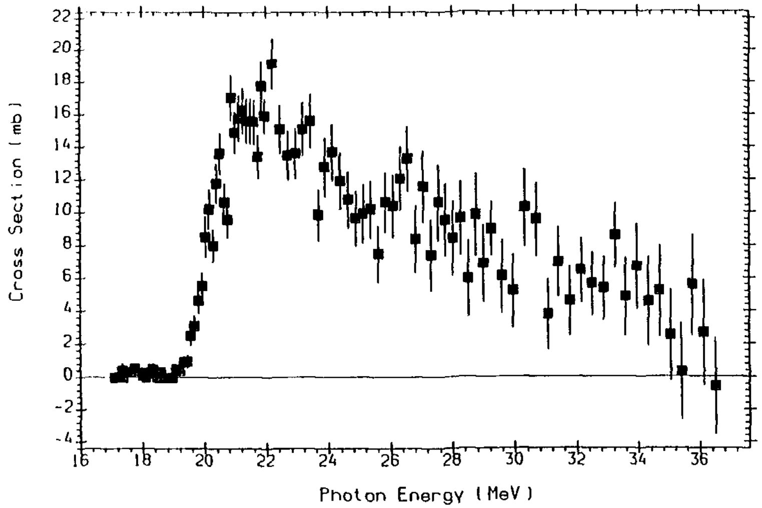
27-CO-59(G,X)0-NN-1
The sum: (G,N)+(G,N+P)+2(G,2N)+2(G,2N+P)+3(G,3N).
QMPH,ARAD Positron annihilation in flight.
L0028006 J,PR/C,20,128,7907 R.A.ALVAREZ+



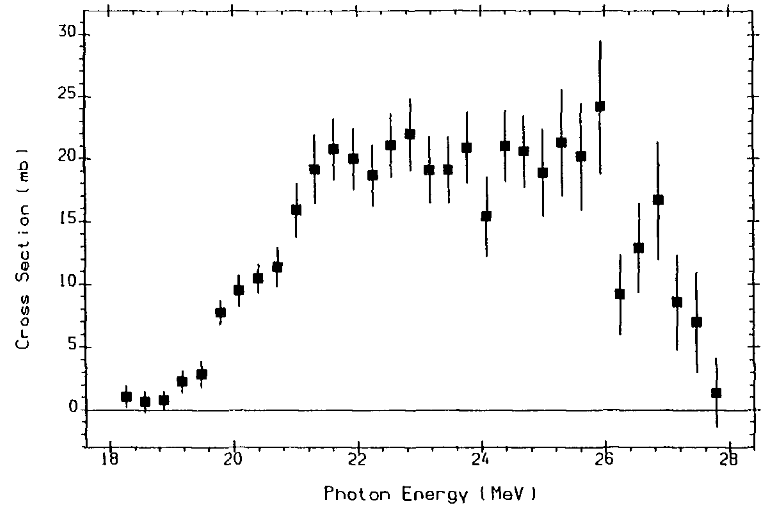
((27-CO-59(G,N)27-CO-58)+(27-CO-59(G,N+P)26-FE-57))
QMPH,ARAD Positron annihilation in flight.
L0028008 J,PR/C,20,128,7907 R.A.ALVAREZ+



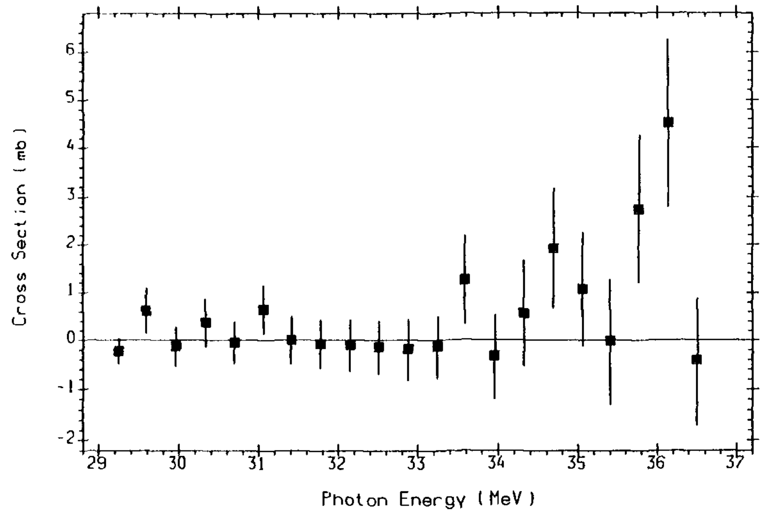
((27-CO-59(G,N)27-CO-58)+(27-CO-59(G,N+P)26-FE-57))
Positron annihilation
L0001006 J,PR,128,2345,6212 S.C.FULTZ+



((27-CO-59(G,2N)27-CO-57)+(27-CO-59(G,2N+P)26-FE-56))
QMPH,ARAD Positron annihilation in flight.
L0028009 J,PR/C,20,128,7907 R.A.ALVAREZ+



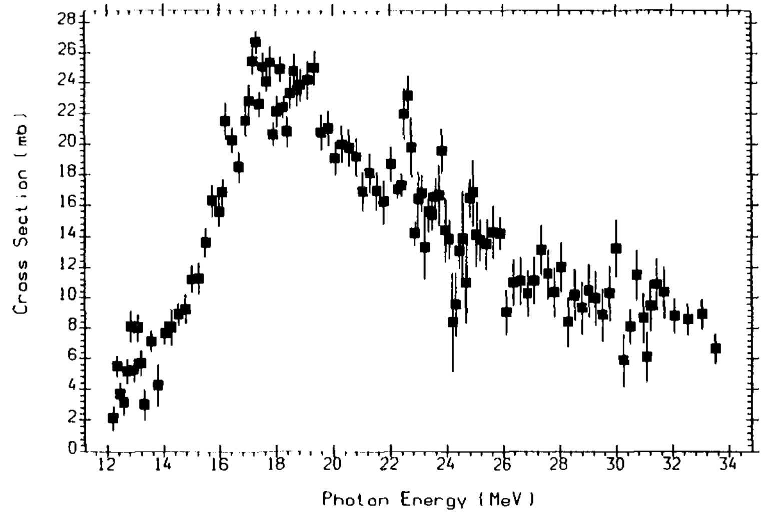
((27-CO-59(G,2N)27-CO-57)+ (27-CO-59(G,2N+P)26-FE-56))
Positron annihilation
L0001007 J,PR,128,2345,6212 S.C.FULTZ+



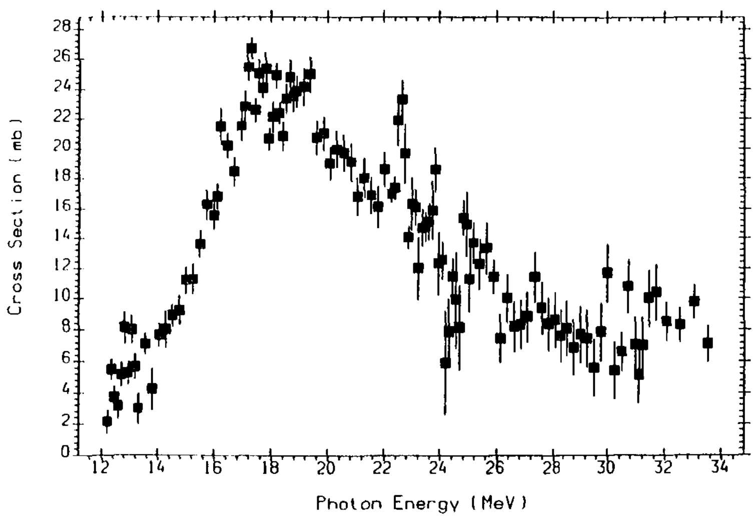
27-CO-59(G,3N)27-CO-56
QMPH,ARAD Positron annihilation in flight.
L0028010 J,PR/C,20,128,7907 R.A.ALVAREZ+

$^{58}_{28}\mathrm{Ni}$

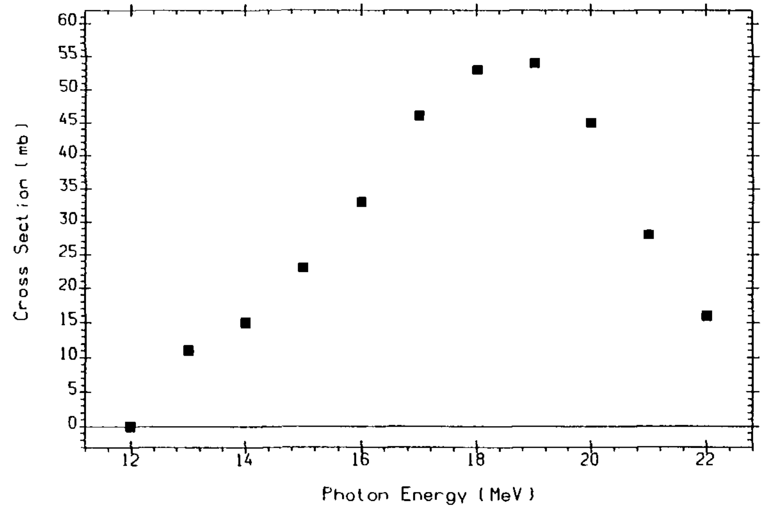
Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	γ,^{3}He	γ,α	γ,2n	γ,np	γ,2p
68.27	12.2	8.2	21.2	17.7	6.4	22.5	19.6	14.2



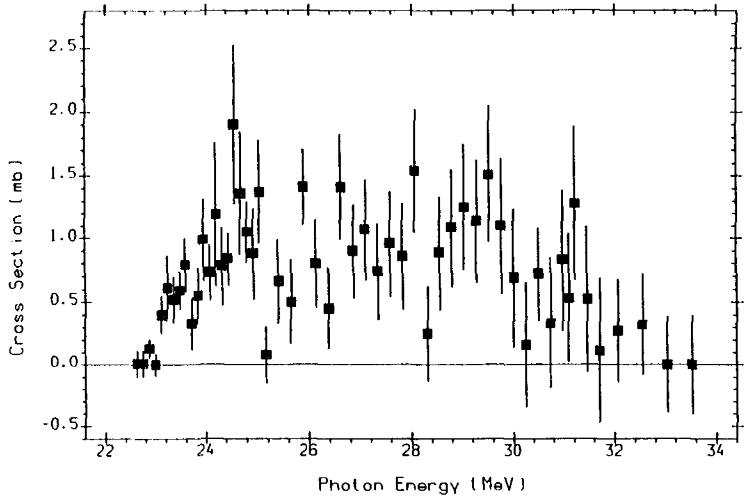
28-NI-58(G,X)0-NN-1 UNW
The sum: (G,N)+(G,N+P)+(G,2N)+(G,2N+P).
Positron annihilation
L0034002 J,PR/C,10,608,7408 S.C.FULTZ+



((28-NI-58(G,N)28-NI-57)+(28-NI-58(G,N+P)27-CO-56))
Positron annihilation
L0034003 J,PR/C,10,608,7408 S.C.FULTZ+



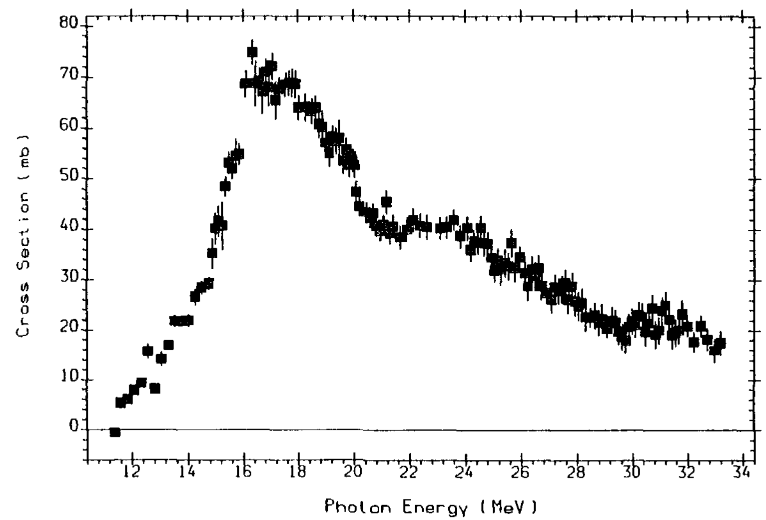
28-NI-58(G,N)28-NI-57
BRST
M0273005 J,CJP,29,518,51 L.KATZ+



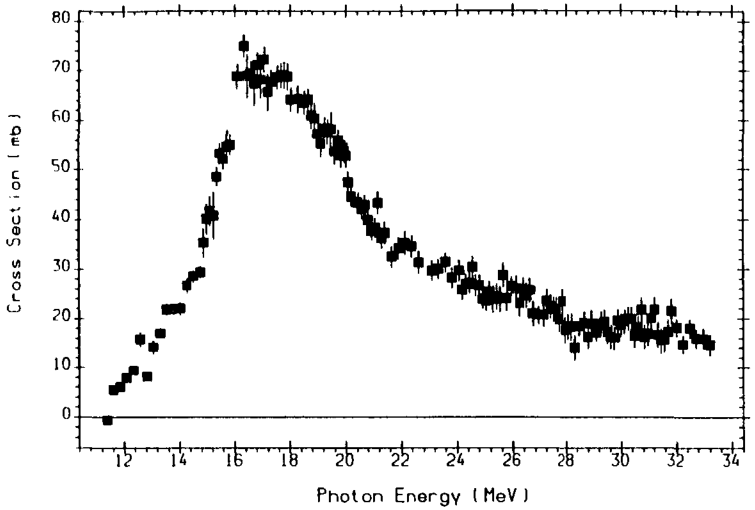
((28-NI-58(G,2N)28-NI-56)+(28-NI-58(G,2N+P)27-CO-55))
Positron annihilation
L0034004 J,PR/C,10,608,7408 S.C.FULTZ+

$^{60}_{28}Ni$

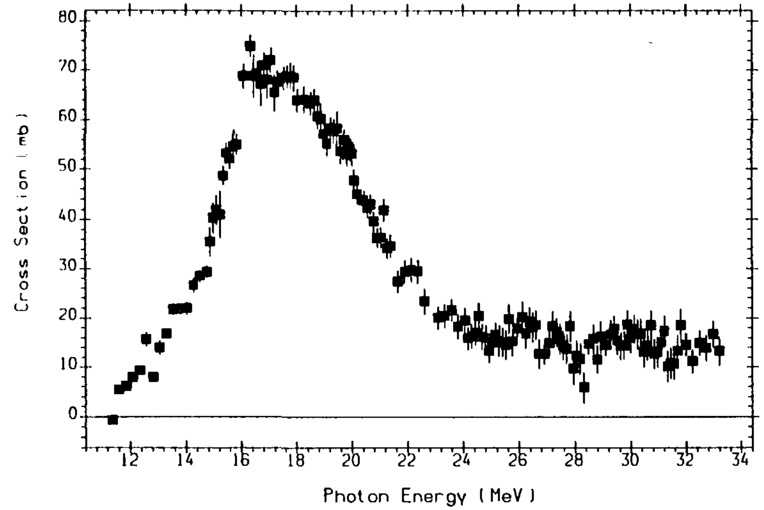
Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	γ,^{3}He	γ,α	γ,2n	γ,np	γ,2p
26.10	11.4	9.5	20.1	19.2	6.3	20.4	20.0	16.9



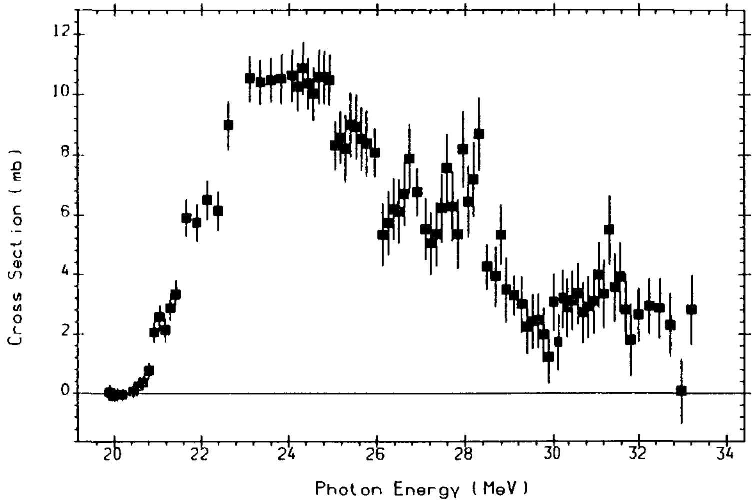
28-NI-60(G,X)0-NN-1
The sum: (G,N)+(G,N+P)+(G,2N)+2(G,2N+P).
Positron annihilation
L0034005 J,PR/C,10,608,7408 S.C.FULTZ+



28-NI-60(G,X)0-NN-1 UNW
The sum: (G,N)+(G,N+P)+(G,2N)+(G,2N+P).
Positron annihilation
L0034008 J,PR/C,10,608,7408 S.C.FULTZ+



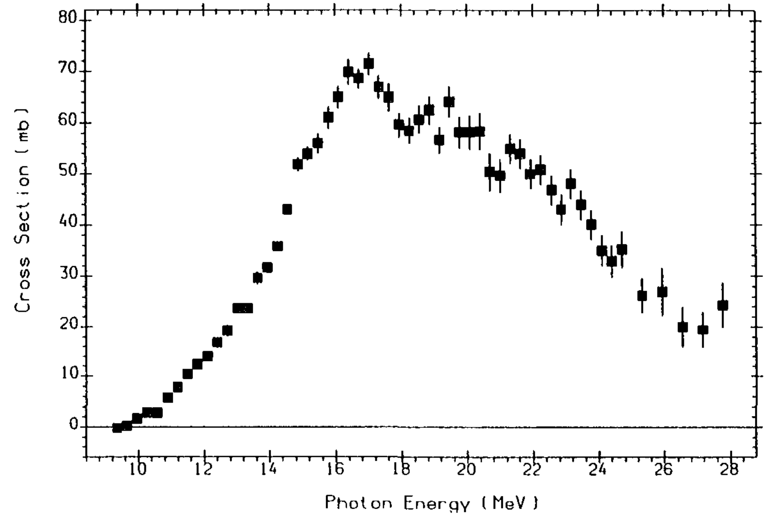
((28-NI-60(G,N)28-NI-59)+(28-NI-60(G,N+P)27-CO-58))
Positron annihilation
L0034006 J,PR/C,10,608,7408 S.C.FULTZ+



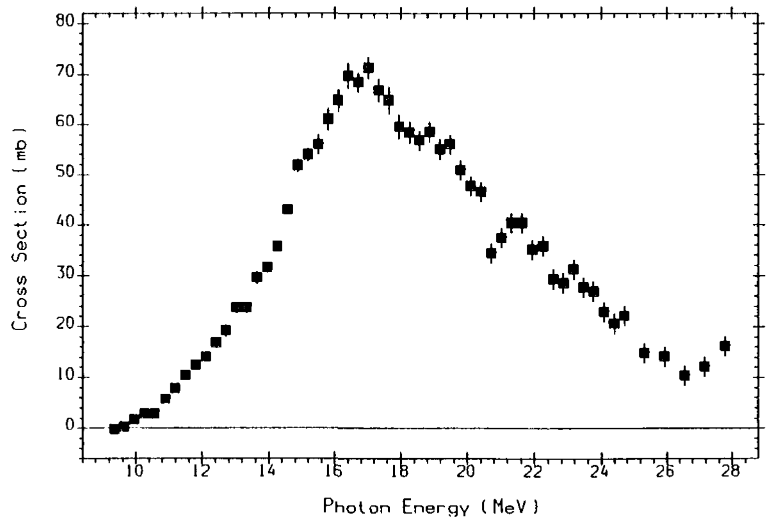
((28-NI-60(G,2N)28-NI-58)+(28-NI-60(G,2N+P)27-CO-57))
Positron annihilation
L0034007 J,PR/C,10,608,7408 S.C.FULTZ+

$^{nat.}_{29}Cu$

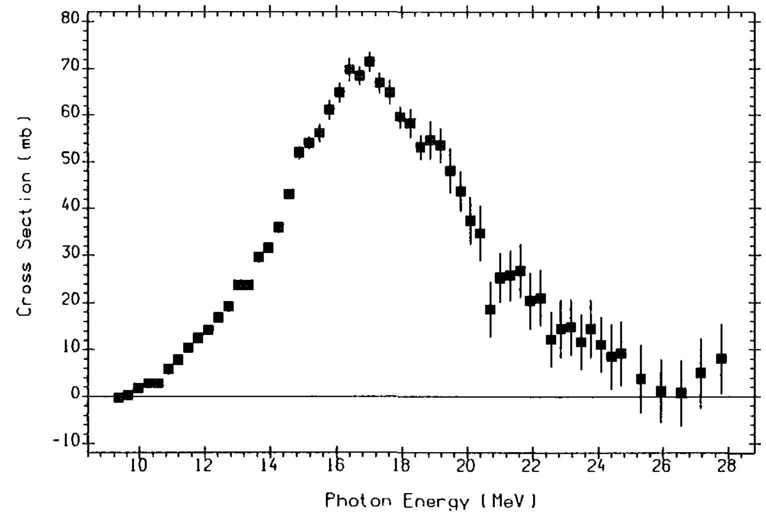
Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	γ,^{3}He	γ,α	γ,2n	γ,np	γ,2p
*	9.9	6.1	15.5	18.9	5.8	17.8	16.7	17.2



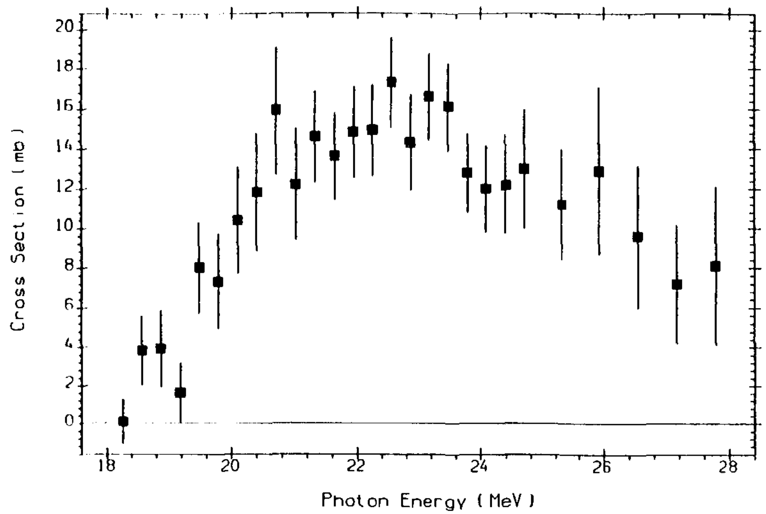
29-CU-0(G,X)0-NN-1
The sum: (G,N)+(G,N+P)+2(G,2N)+2(G,2N+P).
Positron annihilation
L0006002 J,PR/B,133,1149,6403 S.C.FULTZ+



29-CU-0(G,X)0-NN-1 UNW
The sum: (G,N)+(G,N+P)+(G,2N)+(G,2N+P).
Positron annihilation
L0006011 J,PR/B,133,1149,6403 S.C.FULTZ+



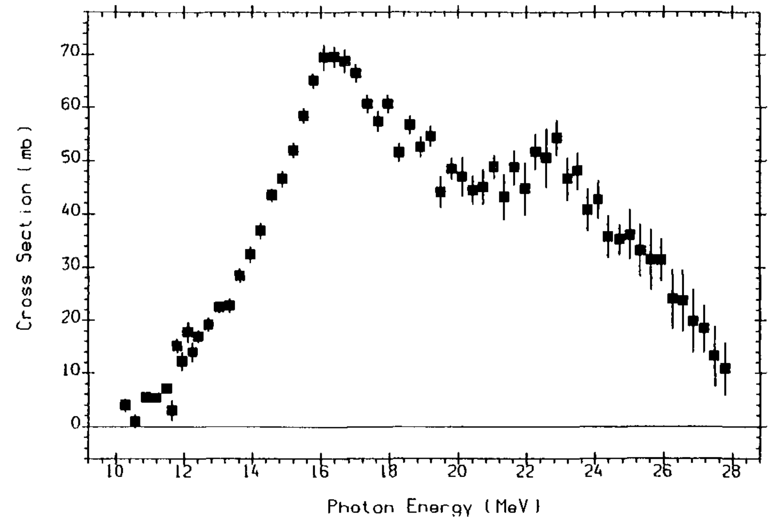
(29-CU-0(G,N))+(29-CU-0(G,N+P))
Positron annihilation
L0006003 J,PR/B,133,1149,6403 S.C.FULTZ+



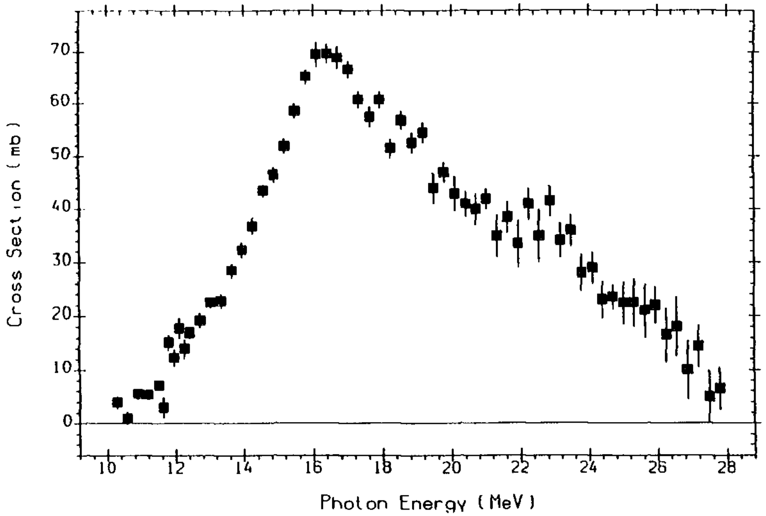
(29-CU-0(G,2N))+ (29-CU-0(G,2N+P))
Positron annihilation
L0006004 J,PR/B,133,1149,6403 S.C.FULTZ+

$^{63}_{29}$Cu

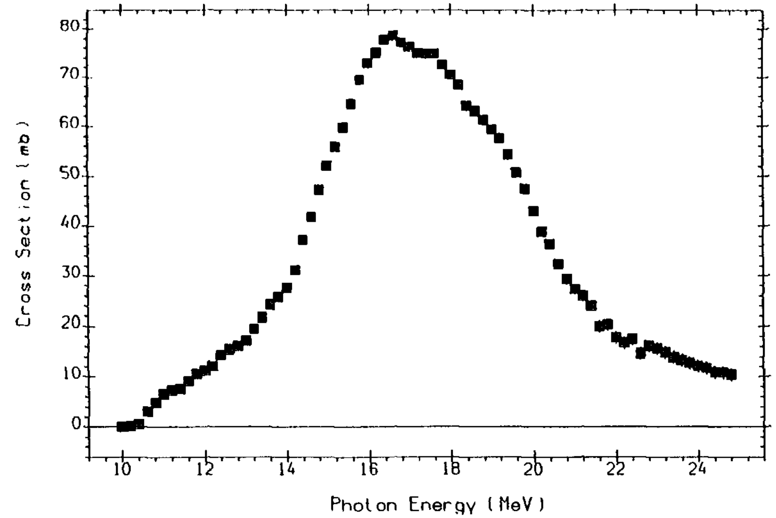
Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	γ,^{3}He	γ,α	γ,2n	γ,np	γ,2p
69.17	10.9	6.1	16.1	18.9	5.8	19.7	16.7	17.2



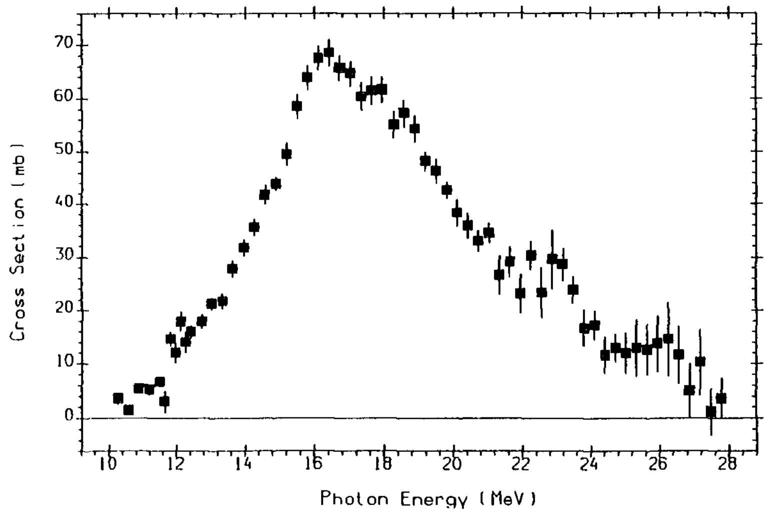
29-CU-63(G,X)0-NN-1
The sum: (G,N)+(G,N+P)+2(G,2N)+2(G,2N+P).
Positron annihilation
L0006005 J,PR/B,133,1149,6403 S.C.FULTZ+



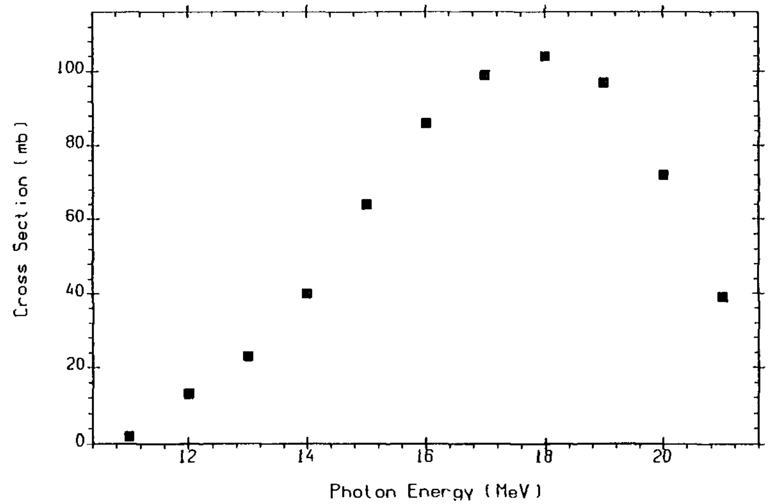
29-CU-63(G,X)0-NN-1 UNW
The sum: (G,N)+(G,N+P)+(G,2N)+(G,2N+P).
Positron annihilation
L0006012 J,PR/B,133,1149,6403 S.C.FULTZ+



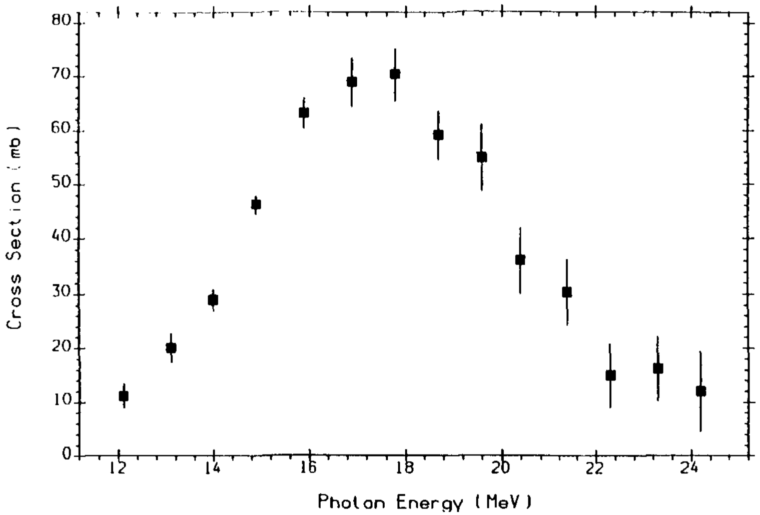
29-CU-63(G,N)29-CU-62
BRST, QMPH, ARAD
M0385002 J,YF,58,387,95 V.V.VARLAMOV+



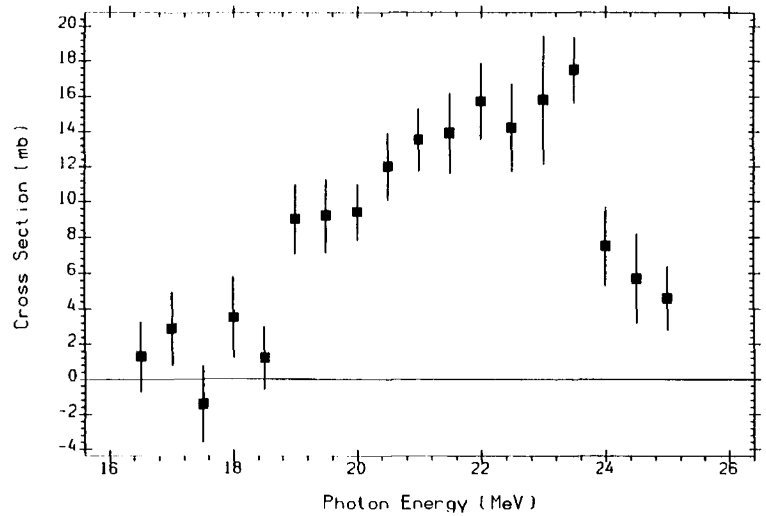
(29-CU-63(G,N)29-CU-62)+(29-CU-63(G,N+P)28-NI-61)
Positron annihilation
L0006006 J,PR/B,133,1149,6403 S.C.FULTZ+



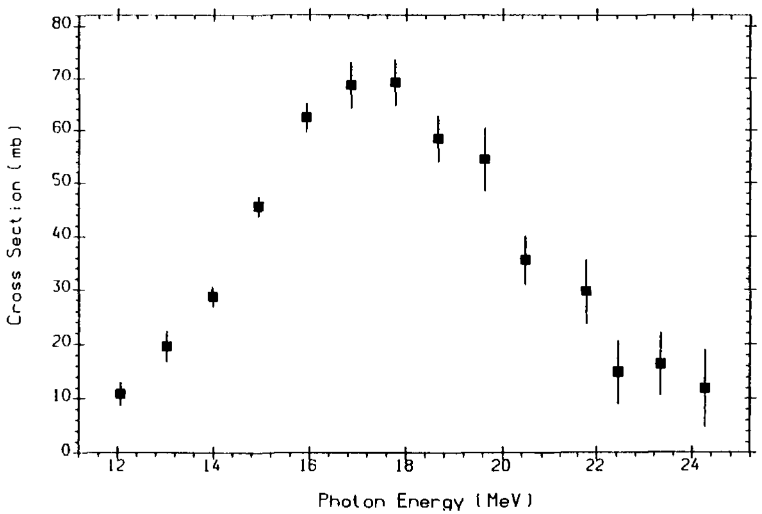
29-CU-63(G,N)29-CU-62
BRST
M0273006 J,CJP,29,518,51 L.KATZ+



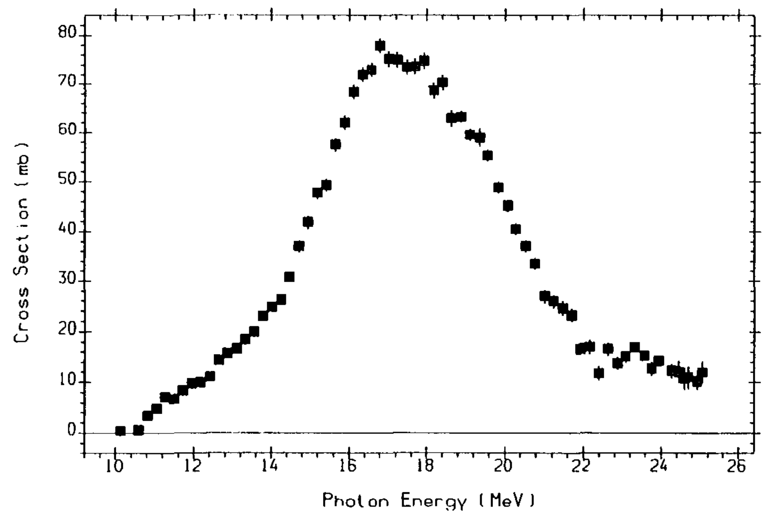
29-CU-63(G,N)29-CU-62
QMPH, ARAD
M0239004 J,YF,30,294,79 L.Z.DZHILAVYAN+



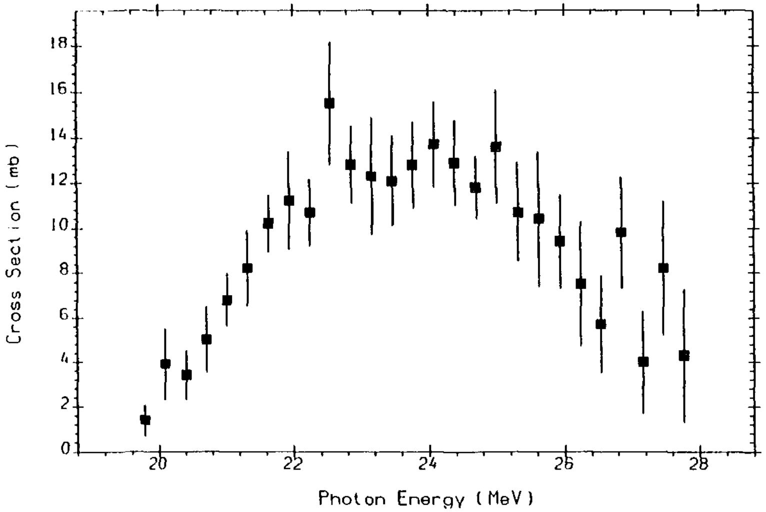
29-CU-63(G,N+P)28-NI-61
BRST, MPH, ARAD
M0385003 J,YF,58,387,95 V.V.VARLAMOV+



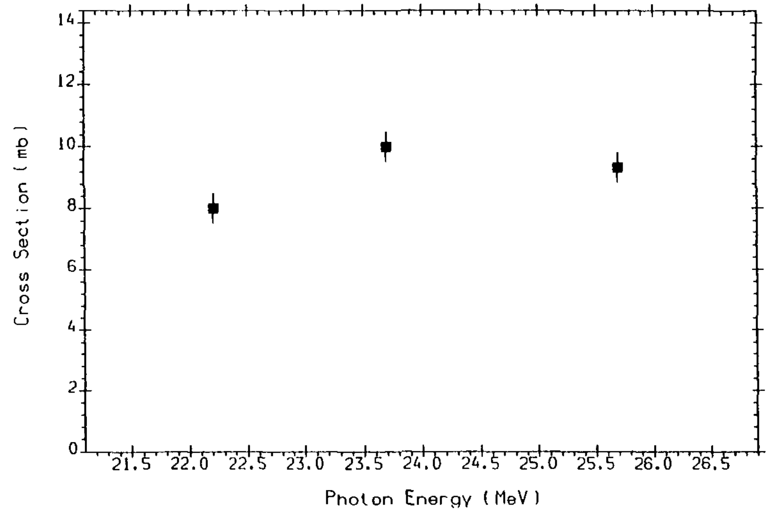
29-CU-63(G,N)29-CU-62
QMPH, TAGD
M0026002 J,YF,30,294,79 L.Z.DZHILAVYAN+



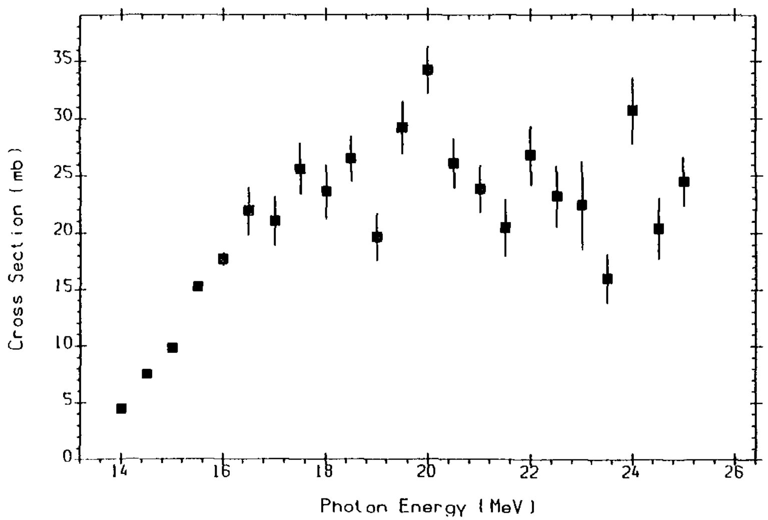
29-CU-63(G,N)29-CU-62
Positron annihilation
L0013002 J,PR,176,1366,6812 R.E.SUND+



(29-CU-63(G,2N)29-CU-61)+ (29-CU-63(G,2N+P)28-NI-60)
Positron annihilation
L0006007 J,PR/B,133,1149,6403 S.C.FULTZ+



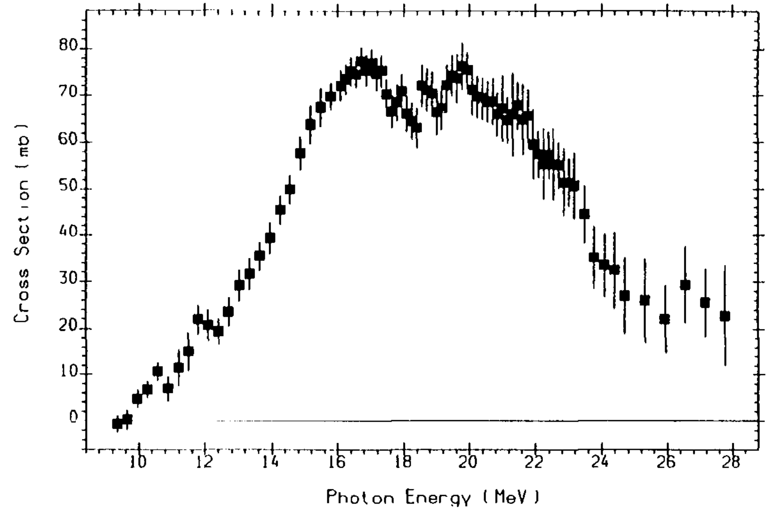
29-CU-63(G,2N)29-CU-61,,SIG
Positron annihilation
L0013003 J,PR,176,1366,6812 R.E.SUND+



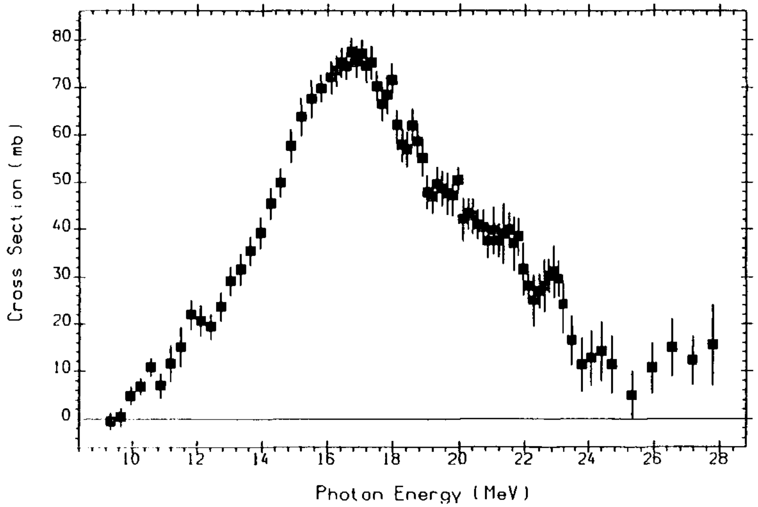
29-CU-63(G,P)28-NI-62
BRST, QMPH,ARAD
M0385004 J,YF,58,387,95 V.V.VARLAMOV+

$^{65}_{29}$Cu

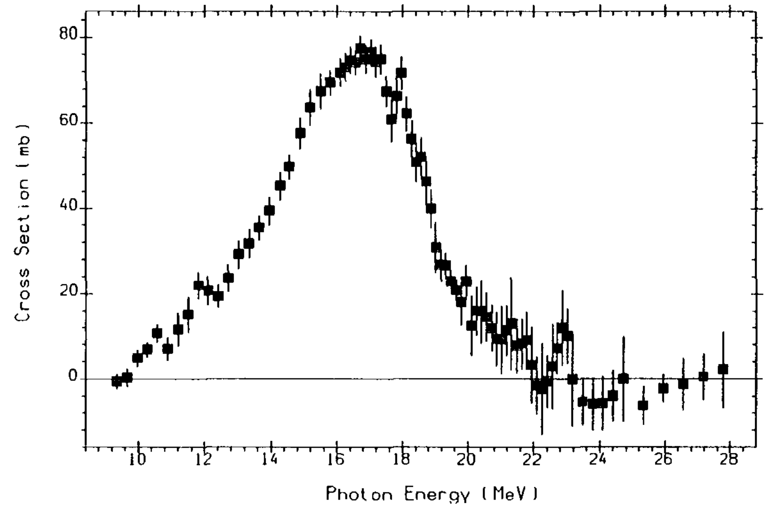
Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	γ,^{3}He	γ,α	γ,2n	γ,np	γ,2p
30.83	9.9	7.5	15.5	20.7	6.8	17.8	17.1	20.0



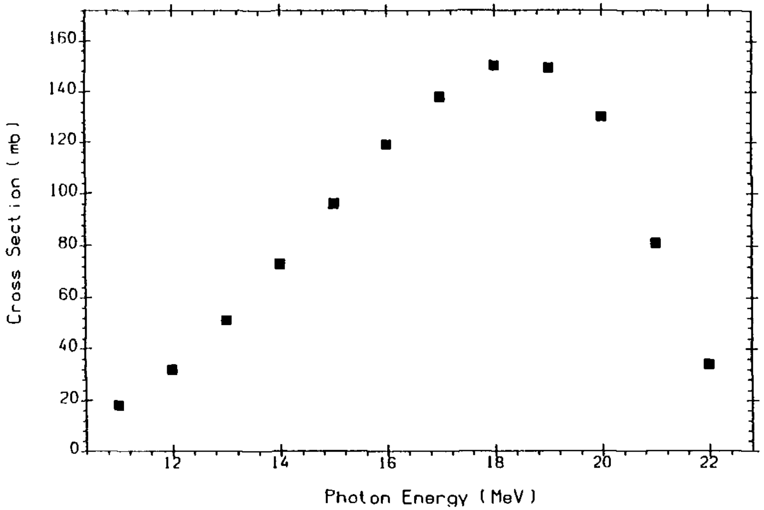
29-CU-65(G,X)0-NN-1
The sum: (G,N)+(G,N+P)+2(G,2N)+2(G,2N+P).
Positron annihilation
L0006008 J,PR/B,133,1149,6403 S.C.FULTZ+



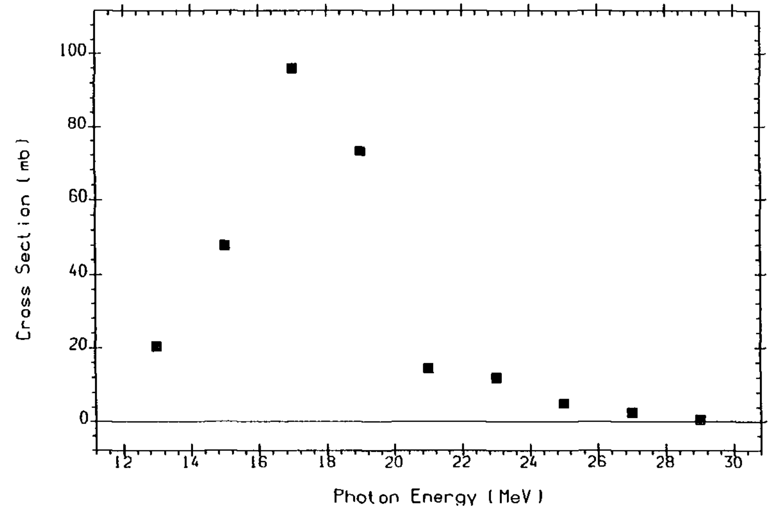
29-CU-65(G,X)0-NN-1 UNW
The sum: (G,N)+(G,N+P)+(G,2N)+(G,2N+P).
Positron annihilation
L0006013 J,PR/B,133,1149,6403 S.C.FULTZ+



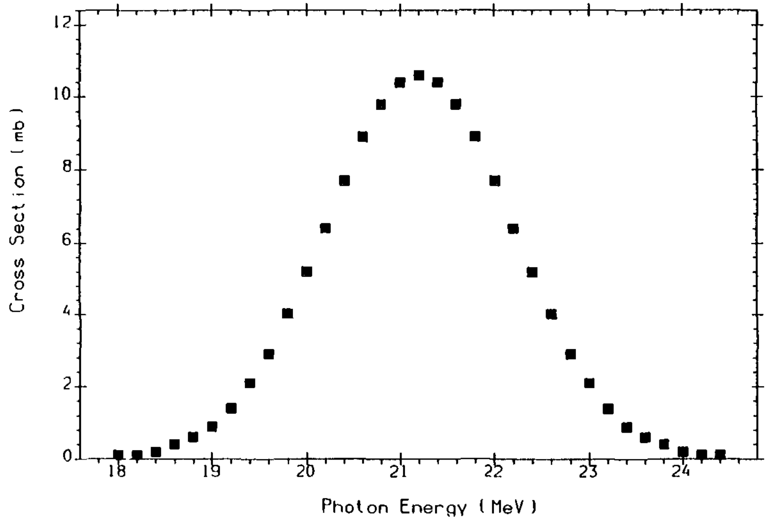
(29-CU-65(G,N)29-CU-64)+ (29-CU-65(G,N+P)28-NI-63)
Positron annihilation
L0006009 J,PR/B,133,1149,6403 S.C.FULTZ+



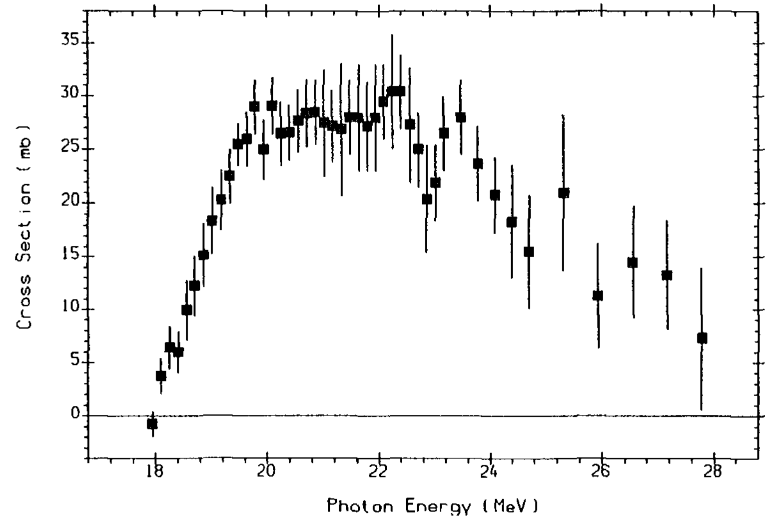
29-CU-65(G,N)29-CU-64
BRST
M0273007 J,CJP,29,518,51 L.KATZ+



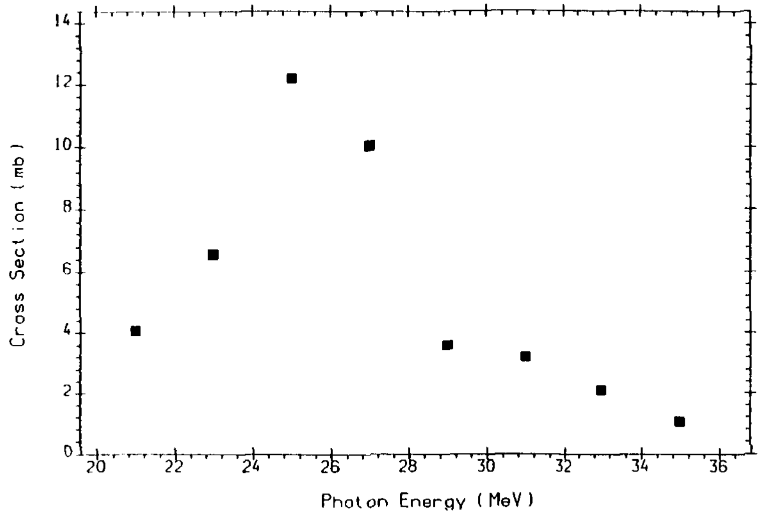
29-CU-63(G,N)29-CU-62
BRST
M0450002 J,PR,96,83,54 A.I.BERMAN+



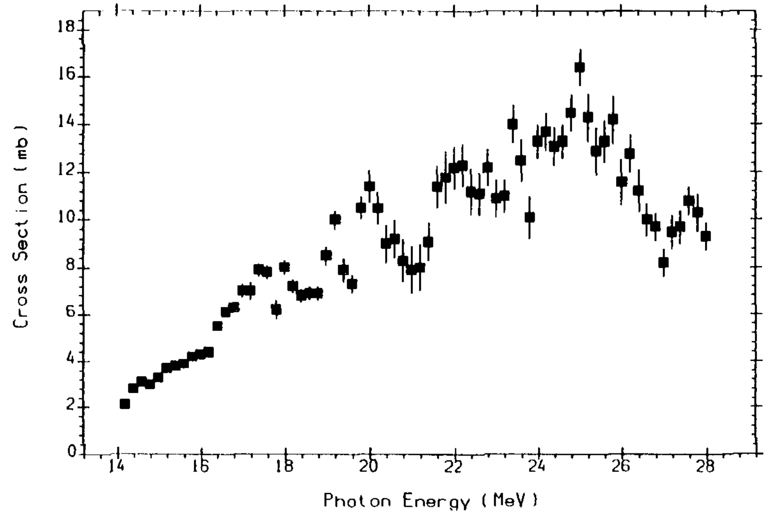
29-CU-65(G,N+P)28-NI-63
BRST, QMPH, ARAD
M0374006 J,IZV,59,222,95 V.V.VARLAMOV+



(29-CU-65(G,2N)29-CU-63)+ (29-CU-65(G,2N+P)28-NI-62)
Positron annihilation
L0006010 J,PR/B,133,1149,6403 S.C.FULTZ+



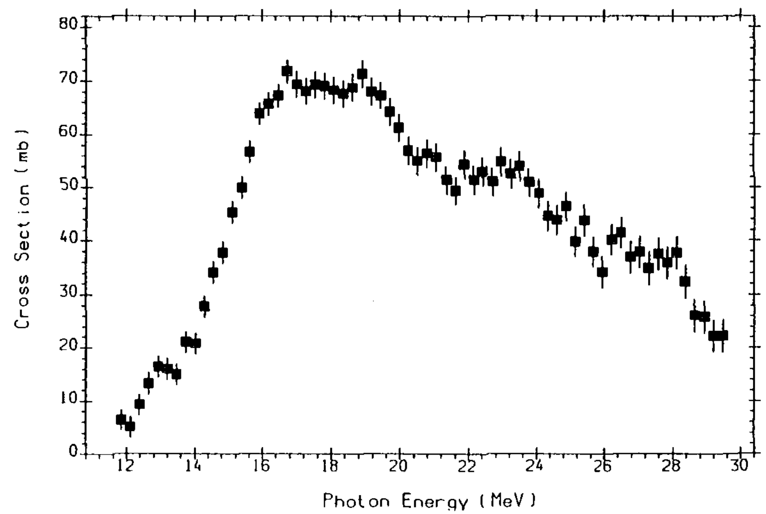
29-CU-63(G,2N)29-CU-61
BRST
M0450003 J,PR,96,83,54 A.I.BERMAN+



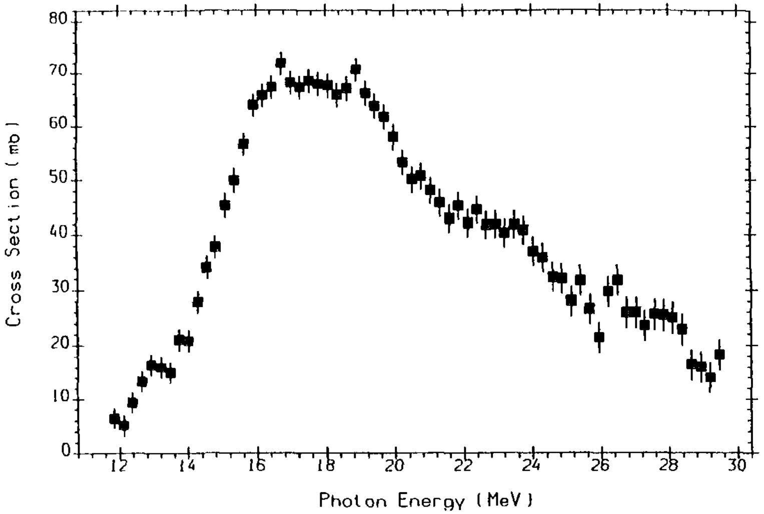
29-CU-65(G,P)28-NI-64
BRST, QMPH, ARAD
M0374008 J,IZV,59,222,95 V.V.VARLAMOV+

$^{64}_{30}Zn$

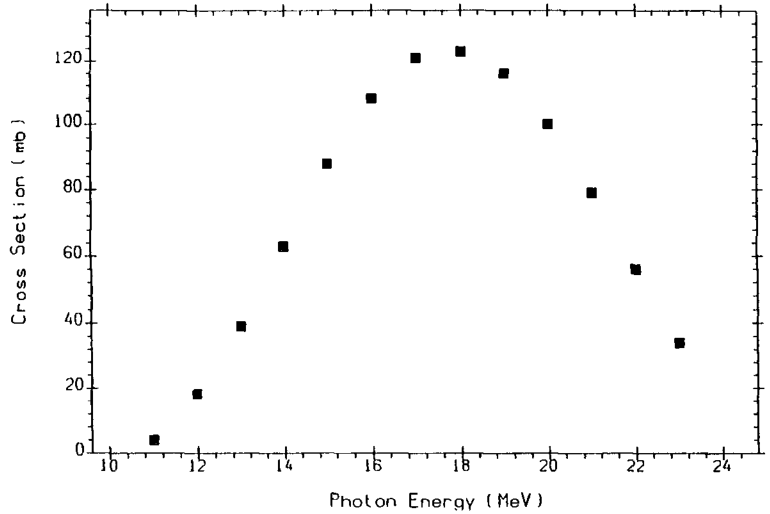
Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	γ,^{3}He	γ,α	γ,2n	γ,np	γ,2p
48.60	11.9	7.7	19.0	16.7	4.0	21.0	18.6	13.8



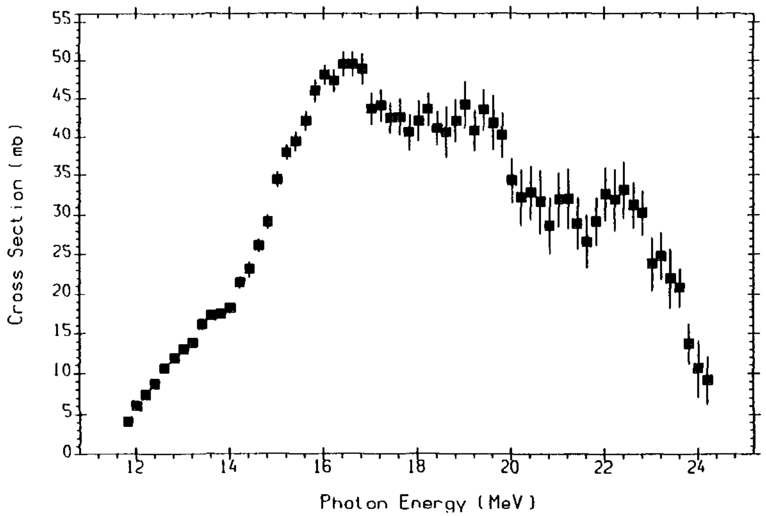
30-ZN-64(G,X)0-NN-1
The sum: (G,N)+(G,N+P)+2(G,2N)+2(G,2N+P).
QMPH, ARAD Positron annihilation in flight.
L0043004 J,NP/A,258,365,76 P.CARLOS+



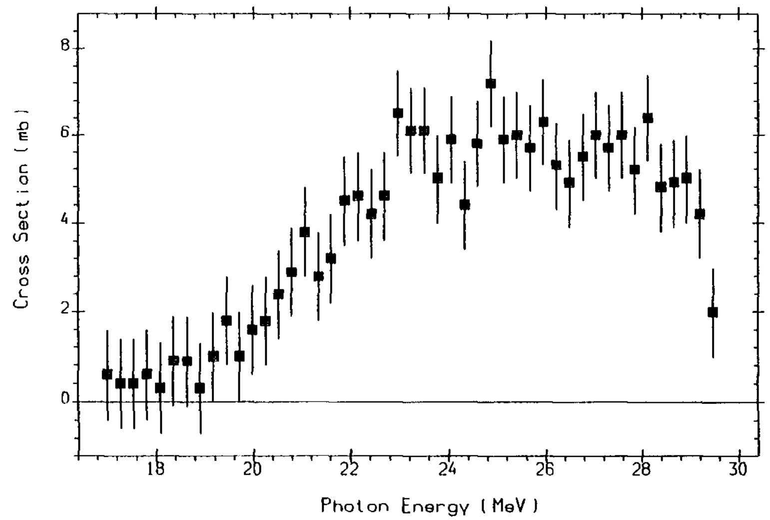
(30-ZN-64(G,N)30-ZN-63)+ (30-ZN-64(G,N+P)29-CU-62)
QMPH, ARAD Positron annihilation in flight.
L0043002 J,NP/A,258,365,76 P.CARLOS+



30-ZN-64(G,N)30-ZN-63,,SIG,,BRA,EXP
BRST
M0273008 J,CJP,29,518,51 L.KATZ+



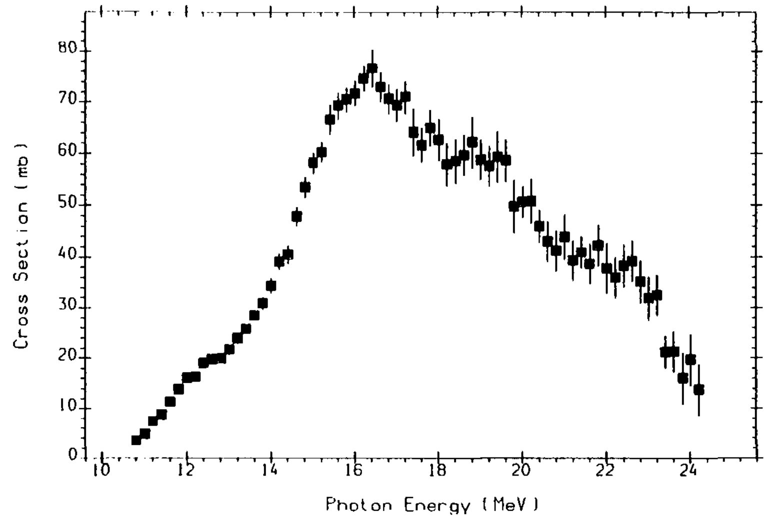
30-ZN-64(G,N)30-ZN-63,,SIG,,BRA,EXP
BRST
M0070002 J,VTYF,8,121,82 A.M.GORYACHEV+



(30-ZN-64(G,2N)30-ZN-62)+ (30-ZN-64(G,2N+P)29-CU-61)
QMPH, ARAD Positron annihilation in flight.
L0043003 J,NP/A,258,365,76 P.CARLOS+

$^{66}_{30}$Zn

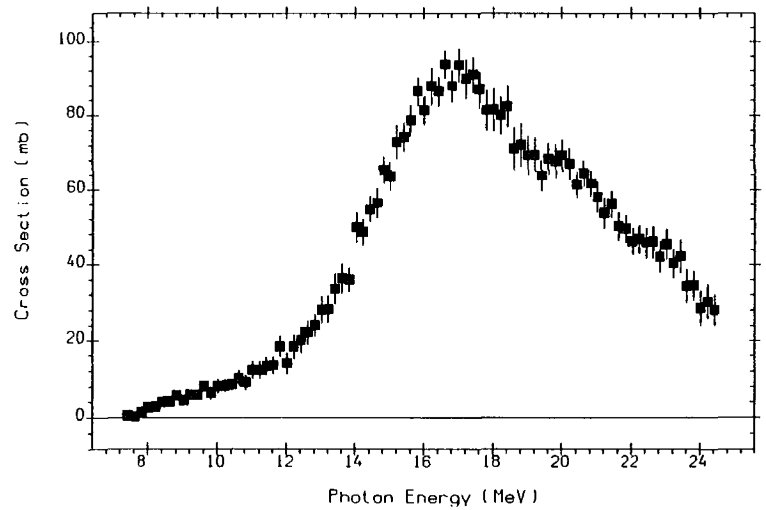
Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	γ,^{3}He	γ,α	γ,2n	γ,np	γ,2p
27.90	11.1	8.9	18.3	18.3	4.6	19.0	18.8	16.4



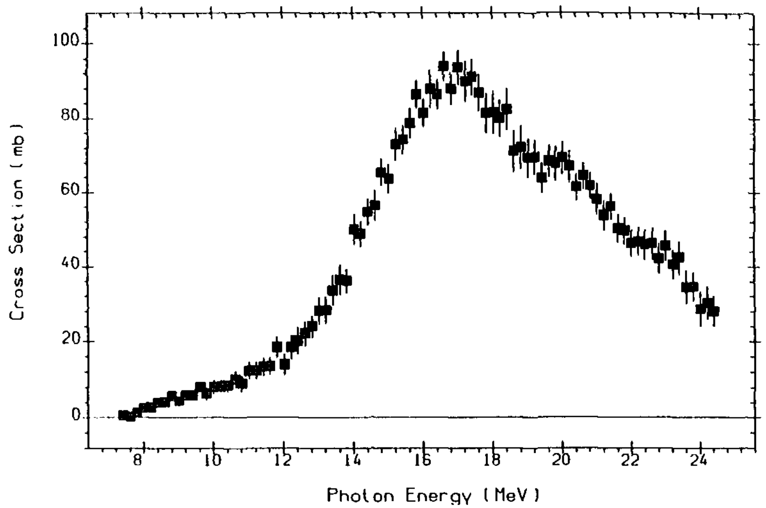
30-ZN-66(G,N)30-ZN-65
BRST
M0070003 J,VTYF,8,121,82 A.M.GORYACHEV+

$^{67}_{30}$Zn

Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	γ,^{3}He	γ,α	γ,2n	γ,np	γ,2p
4.10	7.1	8.9	17.4	15.7	4.8	18.1	16.0	17.3



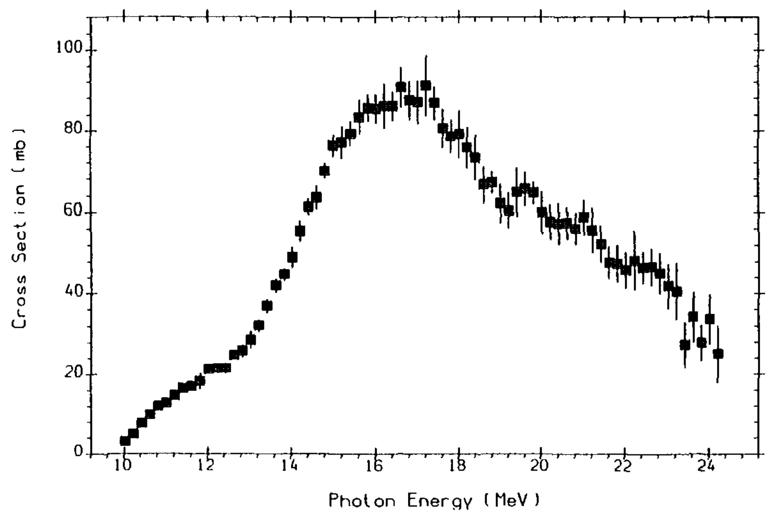
30-ZN-67(G,N)30-ZN-66
BRST
M0042002 J,IZK,6,16,80 A.M.GORYACHEV+



30-ZN-67(G,N)30-ZN-66
BRST
M0070004 J,VTYF,8,121,82 A.M.GORYACHEV+

$^{68}_{30}Zn$

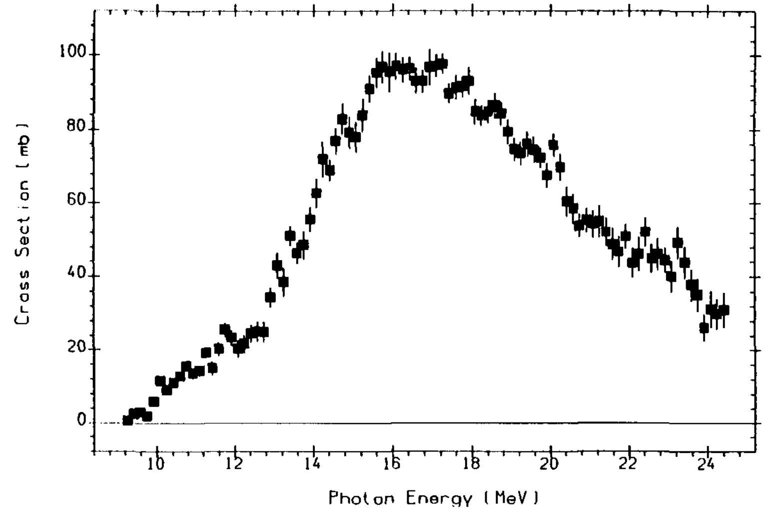
Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	γ,^{3}He	γ,α	γ,2n	γ,np	γ,2p
18.80	10.2	10.0	17.7	19.8	5.3	17.3	19.1	18.6



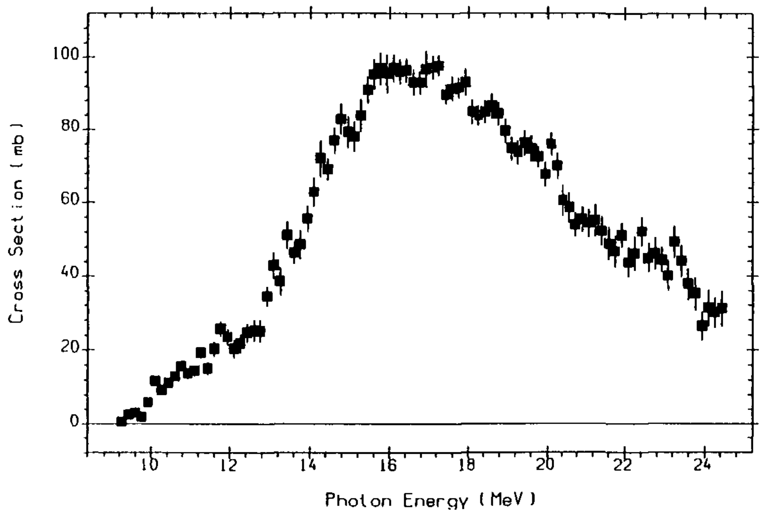
30-ZN-68(G,N)30-ZN-67
BRST
M0070005 J,VTYF,8,121,82 A.M.GORYACHEV+

$^{70}_{30}Zn$

Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	γ,^{3}He	γ,α	γ,2n	γ,np	γ,2p
0.60	9.2	10.9	17.2	21.0	6.0	15.7	19.5	20.7



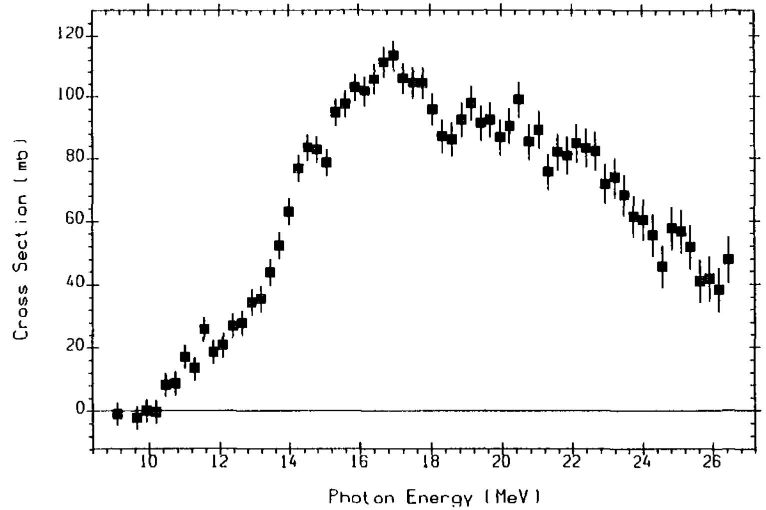
30-ZN-70(G,N)30-ZN-69
BRST
M0042003 J,IZK,6,16,80 A.M.GORYACHEV+



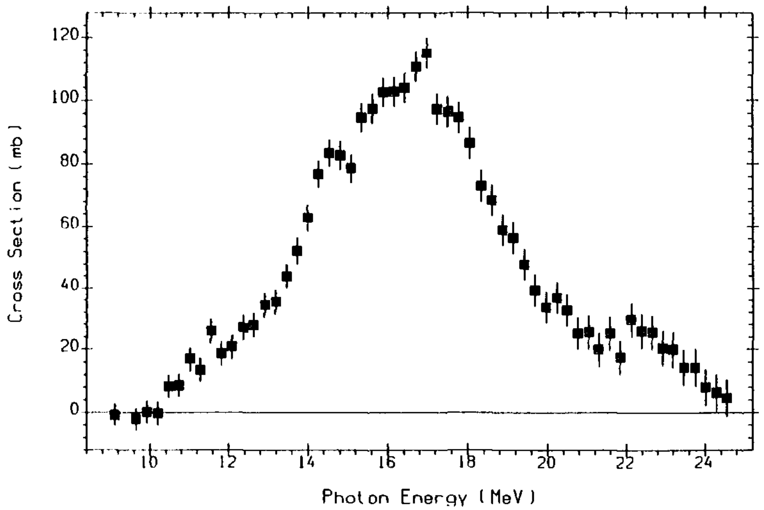
30-ZN-70(G,N)30-ZN-69
BRST
M0070006 J,VTYF,8,121,82 A.M.GORYACHEV+

$^{nat.}_{31}Ga$

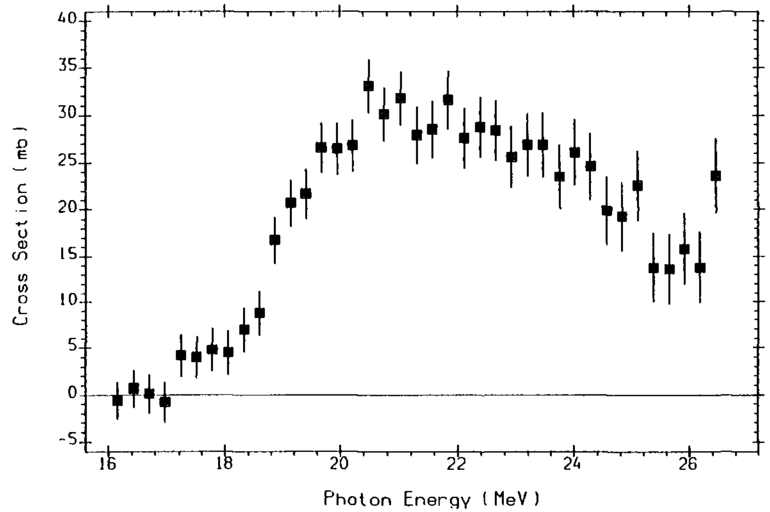
Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	$γ,^{3}He$	γ,α	γ,2n	γ,np	γ,2p
*	9.3	6.6	15.1	18.0	4.5	17.0	16.8	16.6



31-GA-0(G,X)0-NN-1
The sum: (G,N)+(G,N+P)+2(G,2N)+2(G,2N+P).
QMPH,ARAD Positron annihilation in flight.
L0043007 J,NP/A,258,365,76 P.CARLOS+



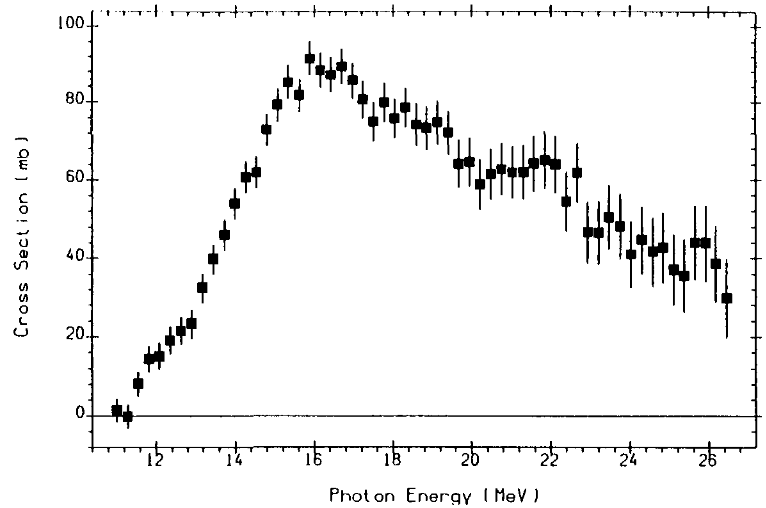
(31-GA-0(G,N))+ (31-GA-0(G,N+P))
QMPH,ARAD Positron annihilation in flight.
L0043005 J,NP/A,258,365,76 P.CARLOS+



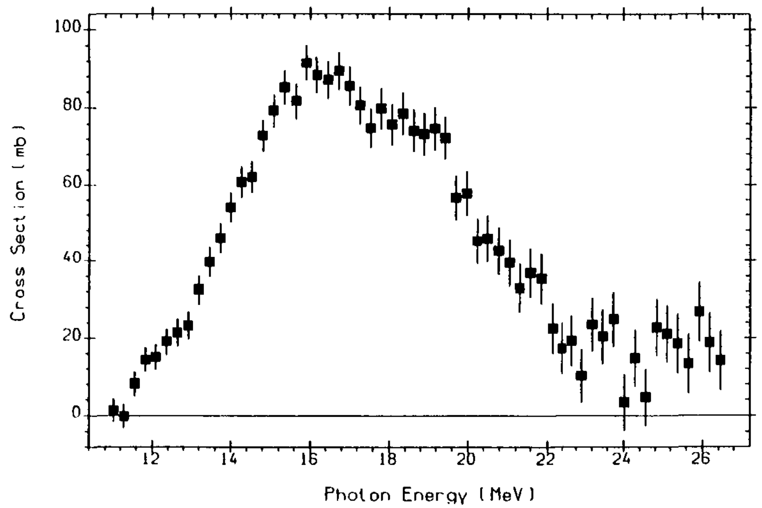
(31-GA-0(G,2N))+ (31-GA-0(G,2N+P))
QMPH,ARAD Positron annihilation in flight.
L0043006 J,NP/A,258,365,76 P.CARLOS+

$^{70}_{32}\mathrm{Ge}$

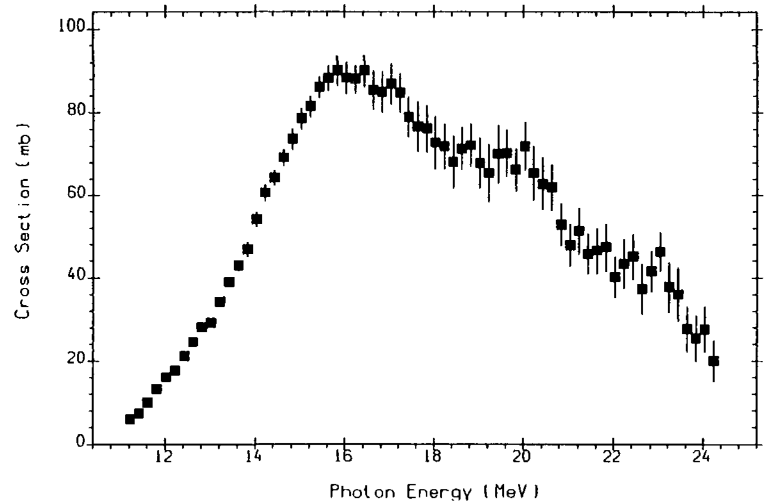
Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	γ,^{3}He	γ,α	γ,2n	γ,np	γ,2p
20.50	11.5	8.5	18.6	17.6	4.1	19.7	18.8	15.1



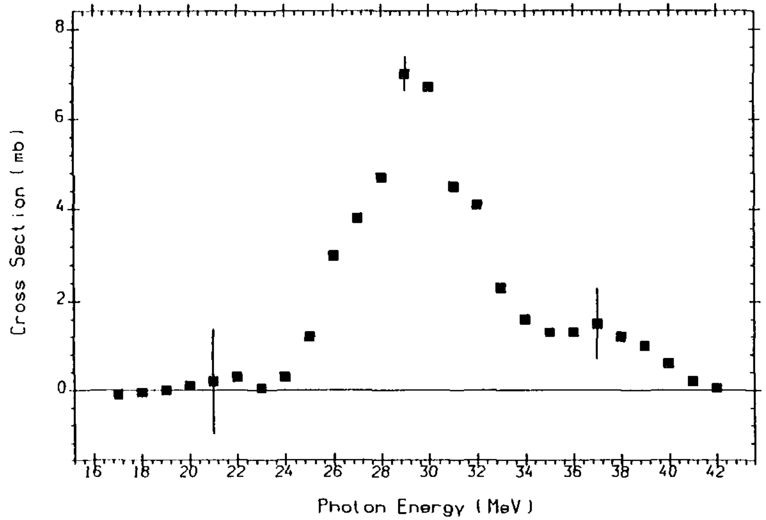
32-GE-70(G,X)0-NN-1
The sum: (G,N)+(G,N+P)+2(G,2N)+2(G,2N+P).
QMPH,ARAD Positron annihilation in flight.
L0043010 J,NP/A,258,365,76 P.CARLOS+



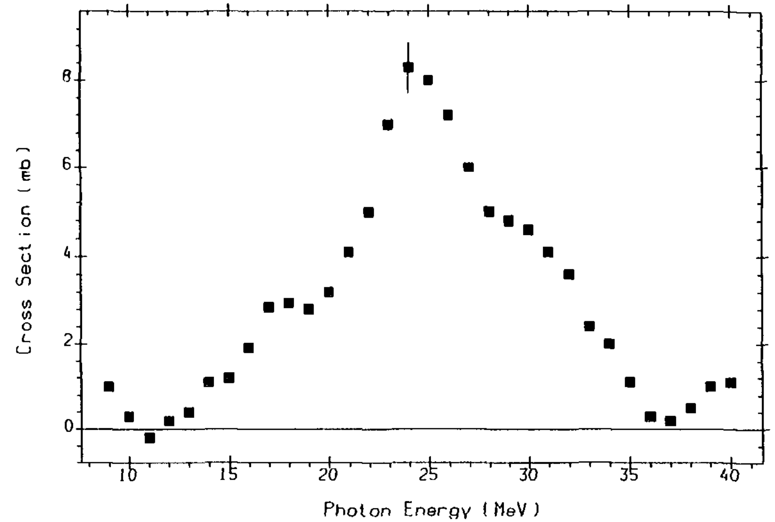
(32-GE-70(G,N)32-GE-69)+ (32-GE-70(G,N+P)31-GA-68)
QMPH,ARAD Positron annihilation in flight.
L0043008 J,NP/A,258,365,76 P.CARLOS+



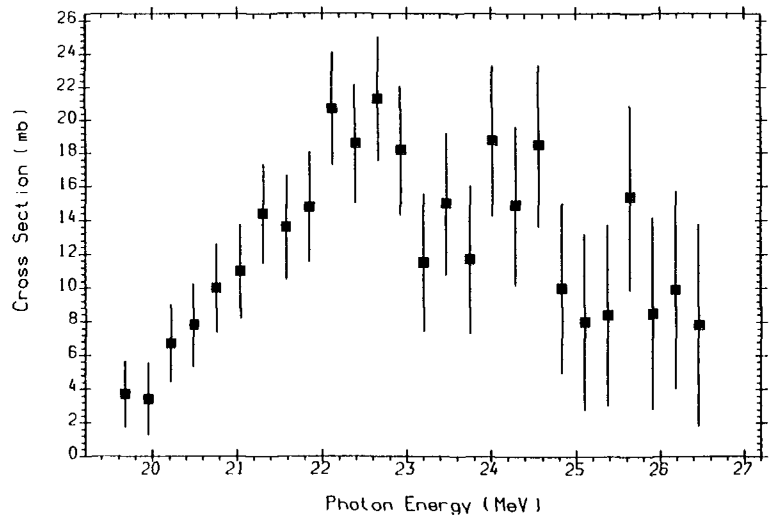
32-GE-70(G,N)32-GE-69
BRST
M0070007 J,VTYF,8,121,82 A.M.GORYACHEV+



32-GE-70(G,N+P)31-GA-68
BRST
M0497003 J,NP/A,213,371,73 J.J.MCCARTHY+



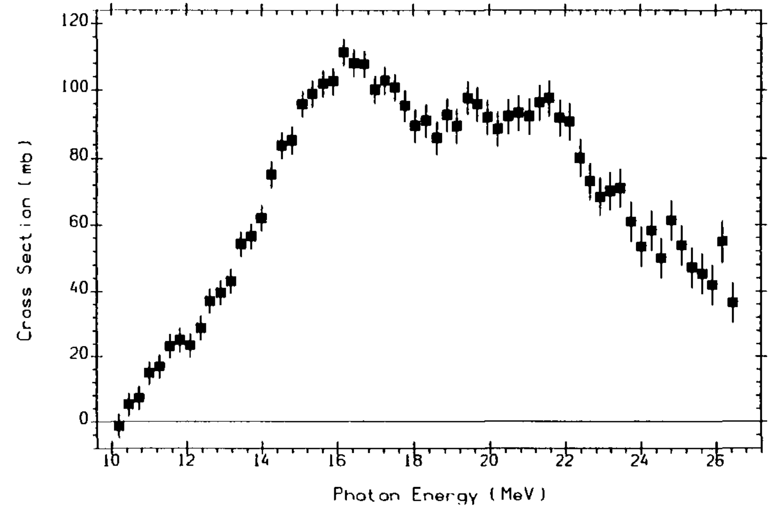
32-GE-70(G,P)31-GA-69
BRST
M0497002 J,NP/A,213,371,73 J.J.MCCARTHY+



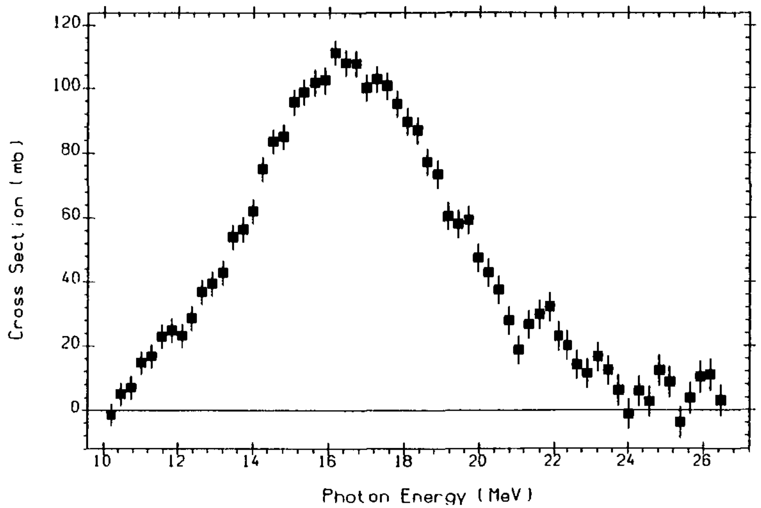
(32-GE-70(G,2N)32-GE-68)+ (32-GE-70(G,2N+P)31-GA-67)
QMPH,ARAD Positron annihilation in flight.
L0043009 J,NP/A,258,365,76 P.CARLOS+

$^{72}_{32}Ge$

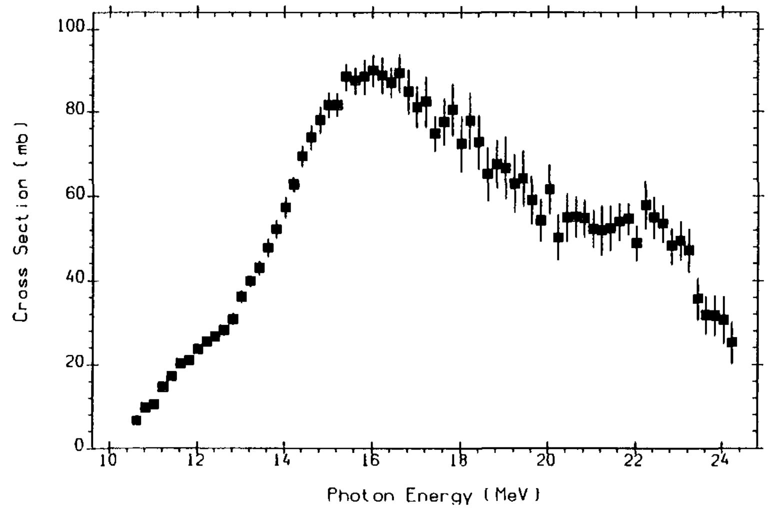
Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	$γ,^3He$	γ,α	γ,2n	γ,np	γ,2p
27.40	10.7	9.7	18.2	19.1	5.0	18.2	19.0	17.6



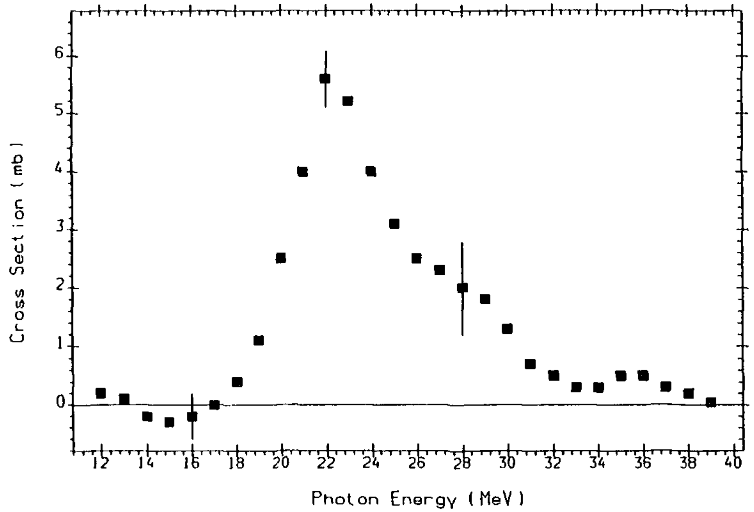
32-GE-72(G,X)0-NN-1
The sum: (G,N)+(G,N+P)+2(G,2N).
QMPH,ARAD Positron annihilation in flight.
L0043013 J,NP/A,258,365,76 P.CARLOS+



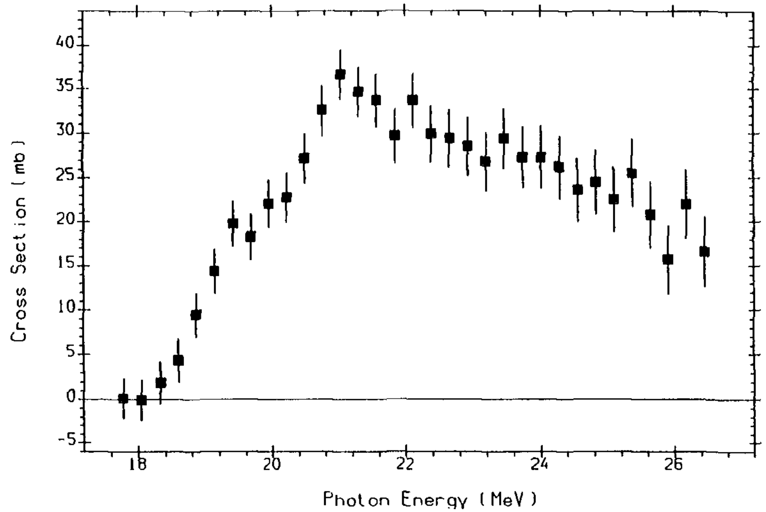
(32-GE-72(G,N)32-GE-71)+ (32-GE-72(G,N+P)31-GA-70)
QMPH,ARAD Positron annihilation in flight.
L0043011 J,NP/A,258,365,76 P.CARLOS+



32-GE-72(G,N)32-GE-71
BRST
M0070008 J,VTYF,8,121,82 A.M.GORYACHEV+



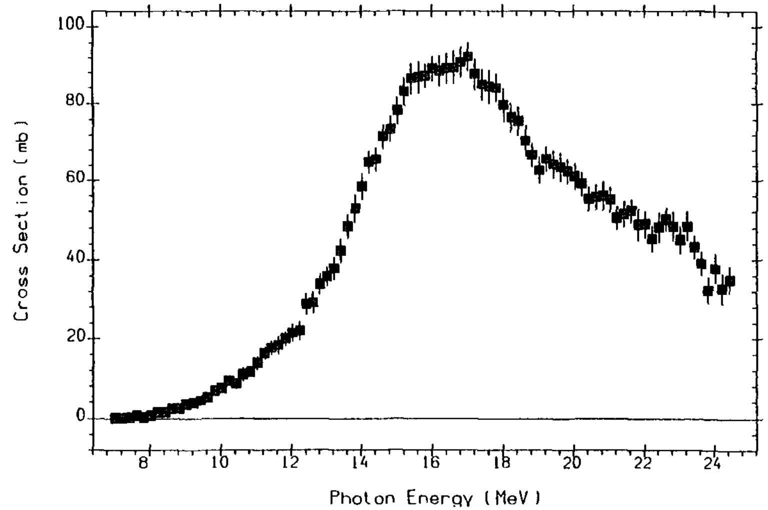
32-GE-72(G,N+P)31-GA-70
BRST
M0497004 J,NP/A,213,371,73 J.J.MCCARTHY+



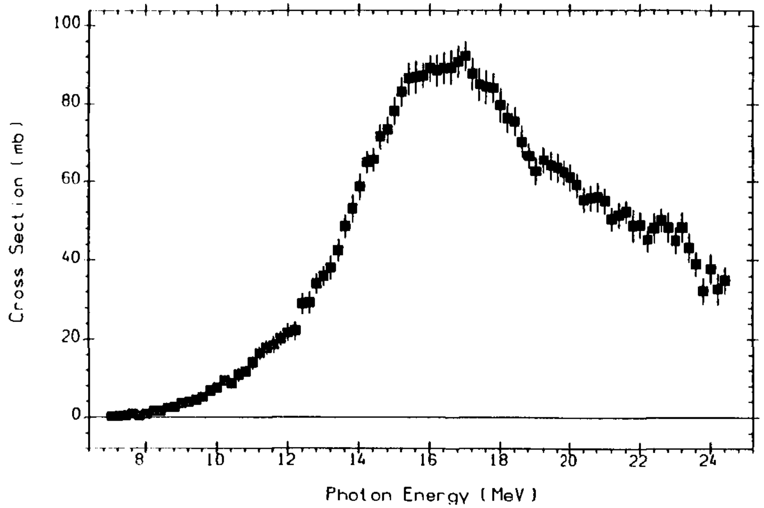
32-GE-72(G,2N)32-GE-70
QMPH,ARAD **Positron annihilation in flight.**
L0043012 J,NP/A,258,365,76 P.CARLOS+

$^{73}_{32}$Ge

Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	γ,^{3}He	γ,α	γ,2n	γ,np	γ,2p
7.80	6.8	10.0	17.3	16.7	5.3	17.5	16.5	18.6



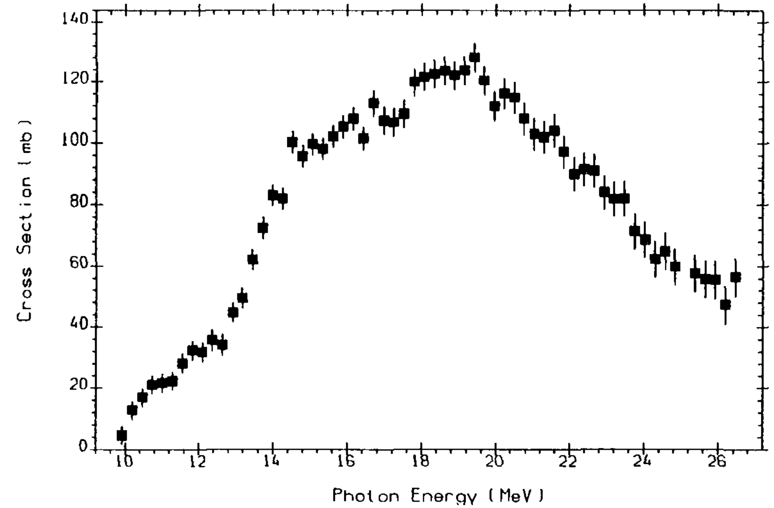
32-GE-73(G,N)32-GE-72
BRST
M0042004 J,IZK,6,16,80 A.M.GORYACHEV+



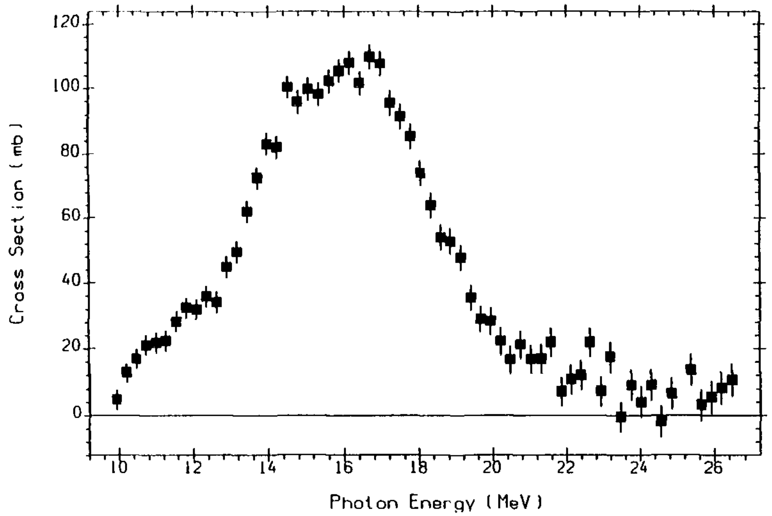
32-GE-73(G,N)32-GE-72
BRST
M0070009 J,VTYF,8,121,82 A.M.GORYACHEV+

$^{74}_{32}$Ge

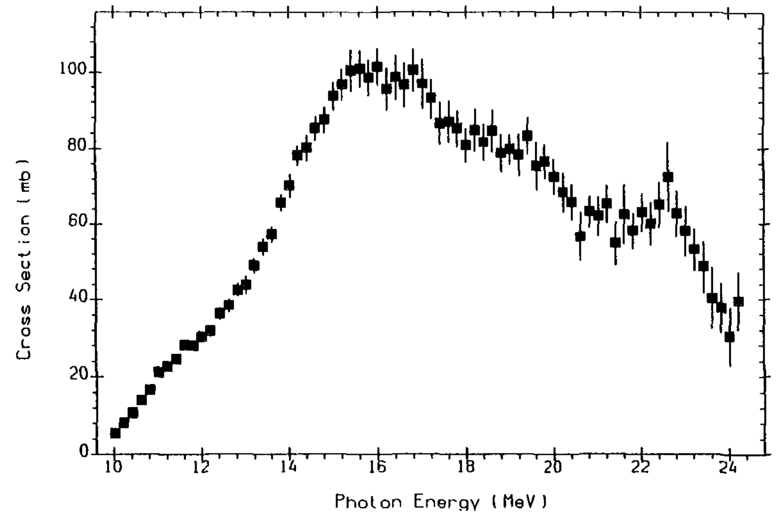
Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	γ,^{3}He	γ,α	γ,2n	γ,np	γ,2p
36.50	10.2	11.0	18.2	21.0	6.3	17.0	20.2	19.9



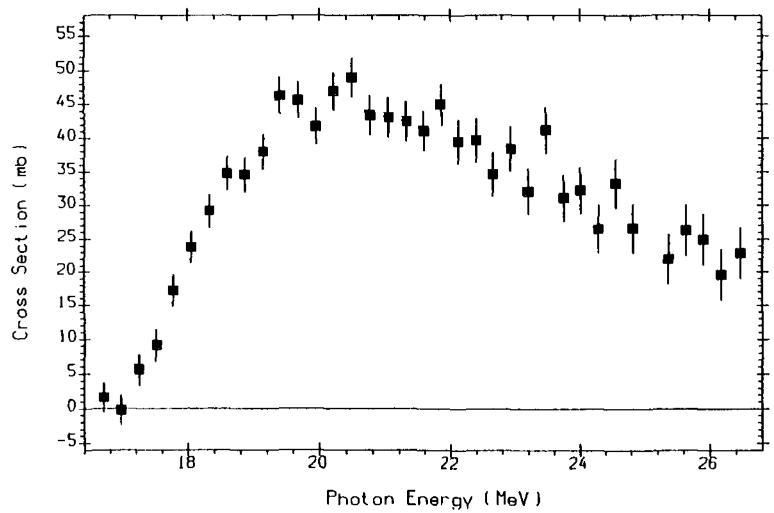
32-GE-74(G,X)0-NN-1
The sum: (G,N)+(G,N+P)+2(G,2N).
QMPH,ARAD Positron annihilation in flight.
L0043016 J,NP/A,258,365,76 P.CARLOS+



(32-GE-74(G,N)32-GE-73)+ (32-GE-74(G,N+P)31-GA-72)
QMPH,ARAD Positron annihilation in flight.
L0043014 J,NP/A,258,365,76 P.CARLOS+



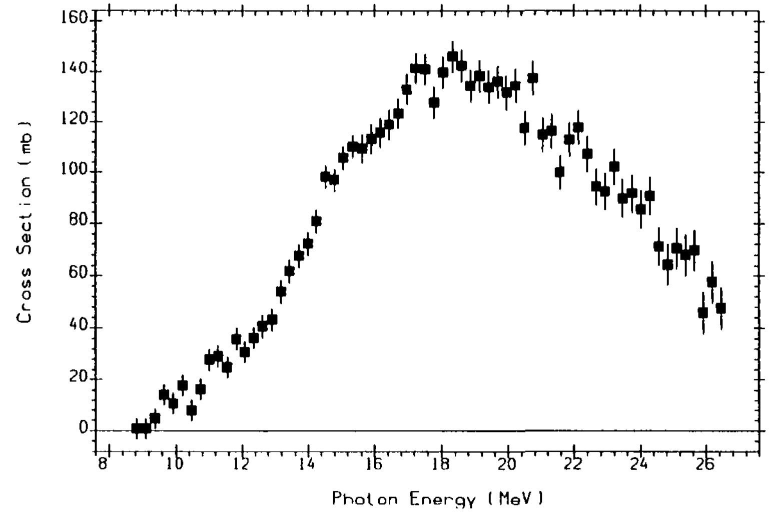
32-GE-74(G,N)32-GE-73
BRST
M0070010 J,VTYF,8,121,82 A.M.GORYACHEV+



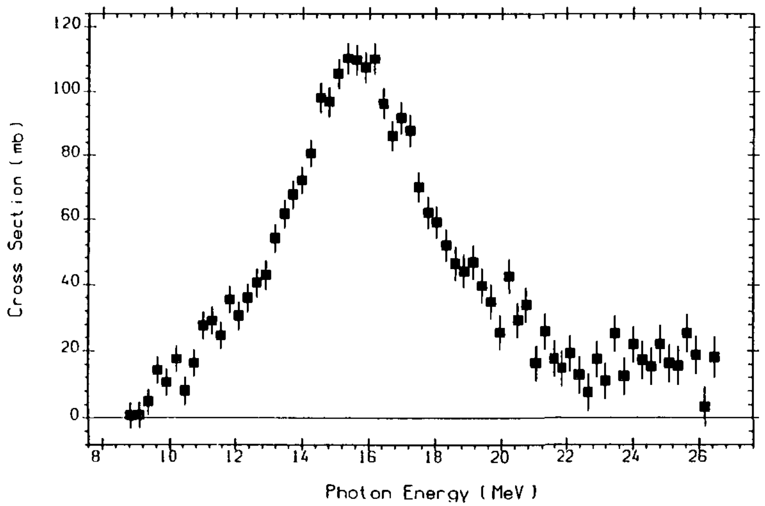
32-GE-74(G,2N)32-GE-72
QMPH,ARAD Positron annihilation in flight.
L0043015 J,NP/A,258,365,76 P.CARLOS+

$^{76}_{32}\mathrm{Ge}$

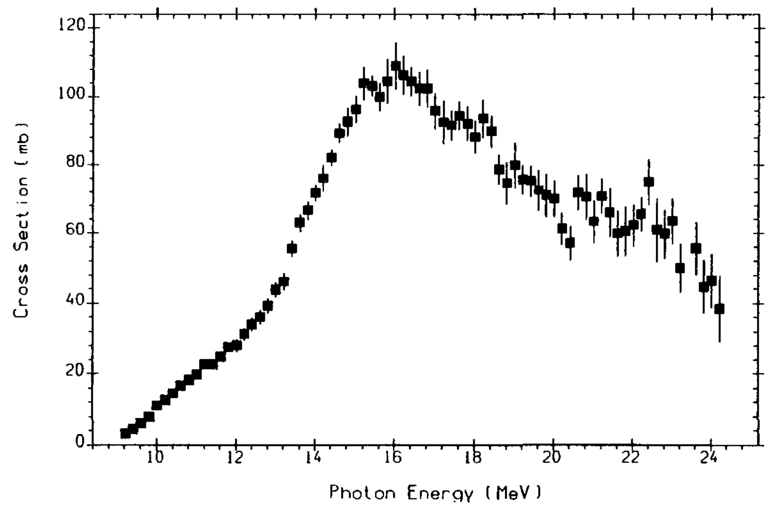
Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	γ,^{3}He	γ,α	γ,2n	γ,np	γ,2p
7.80	9.4	12.0	18.4	23.1	7.5	15.9	20.6	22.1



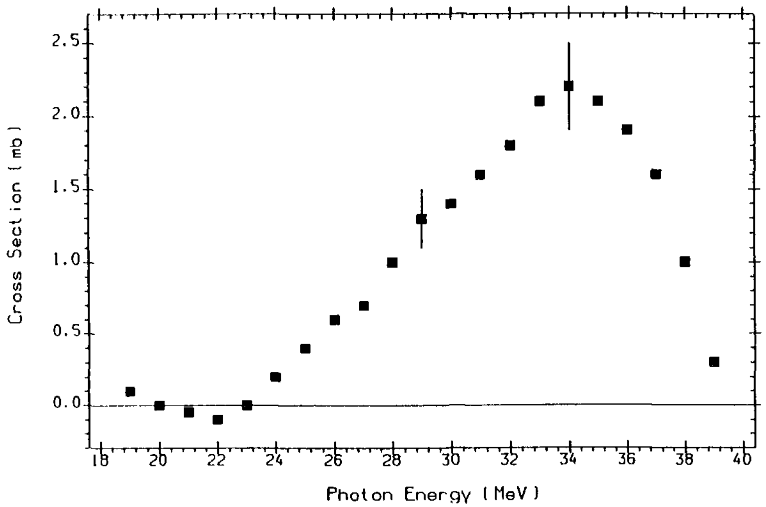
32-GE-76(G,X)0-NN-1
The sum: (G,N)+(G,N+P)+2(G,2N).
QMPH,ARAD Positron annihilation in flight.
L0043019 J,NP/A,258,365,76 P.CARLOS+



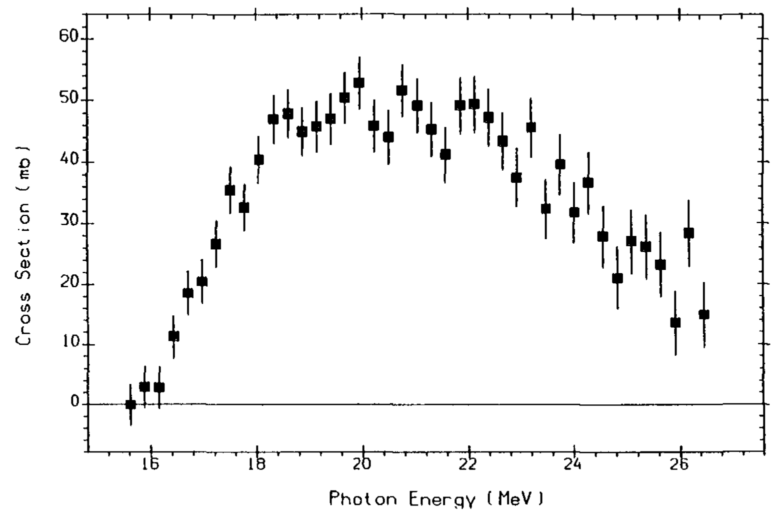
(32-GE-76(G,N)32-GE-75)+ (32-GE-76(G,N+P)31-GA-74)
QMPH,ARAD Positron annihilation in flight.
L0043017 J,NP/A,258,365,76 P.CARLOS+



32-GE-76(G,N)32-GE-75
BRST
M0070011 J,VTYF,8,121,82 A.M.GORYACHEV+



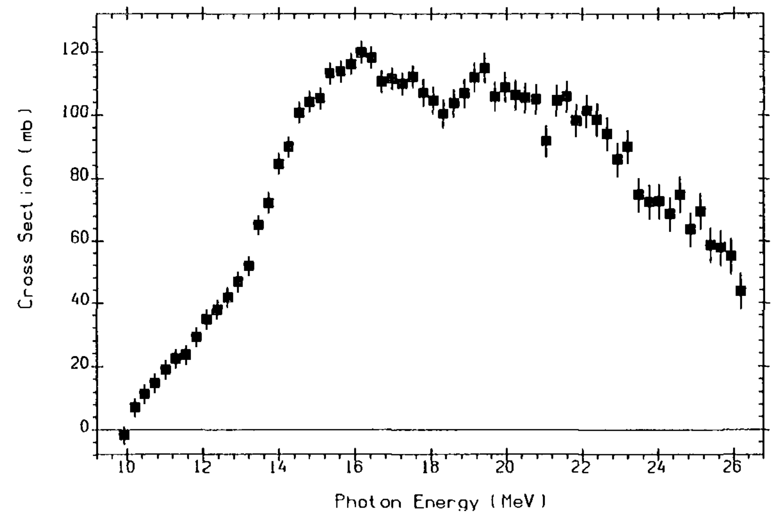
32-GE-76(G,N+P)31-GA-74
BRST
M0497005 J,NP/A,213,371,73 J.J.MCCARTHY+



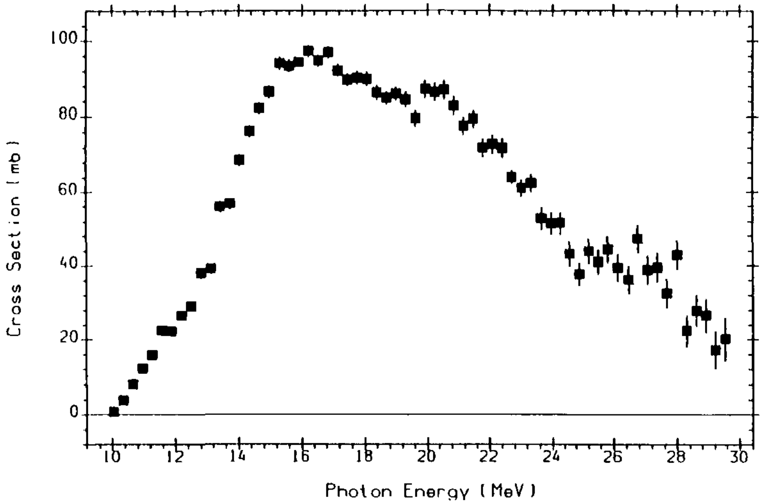
32-GE-76(G,2N)32-GE-74
QMPH,ARAD Positron annihilation in flight.
L0043018 J,NP/A,258,365,76 P.CARLOS+

$^{75}_{33}As$

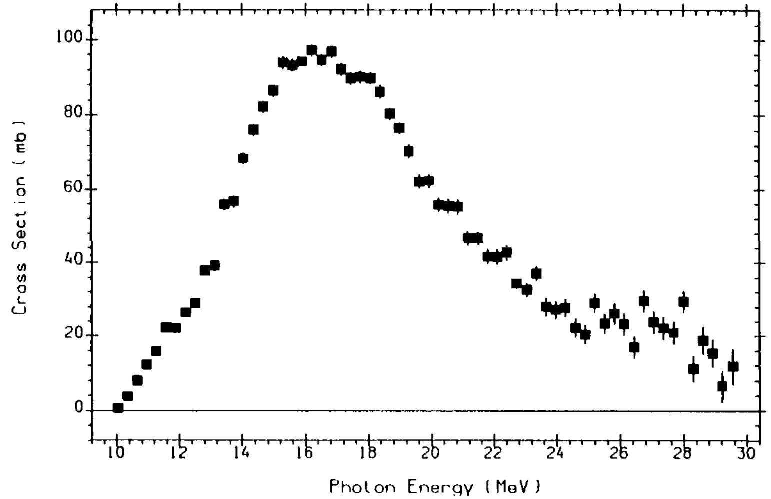
Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	γ,^{3}He	γ,α	γ,2n	γ,np	γ,2p
100.0	10.2	6.9	15.4	19.4	5.3	18.2	17.1	17.9



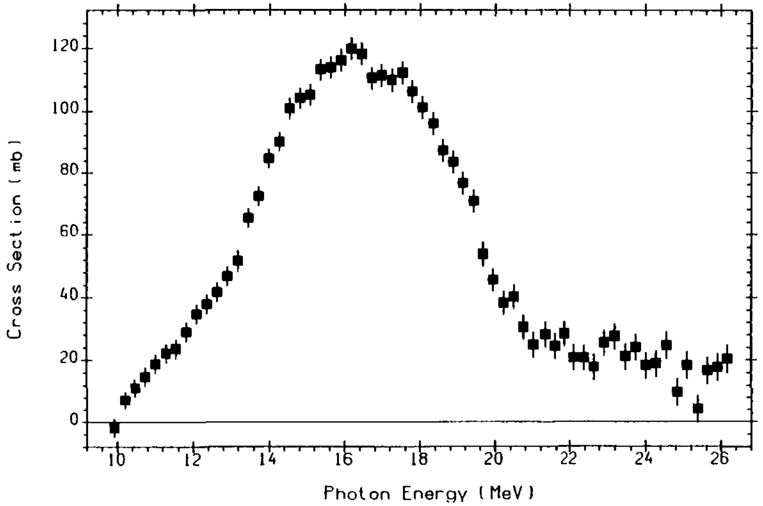
33-AS-75(G,X)0-NN-1
The sum: (G,N)+(G,N+P)+2(G,2N)+2(G,2N+P).
QMPH,ARAD Positron annihilation in flight.
L0043022 J,NP/A,258,365,76 P.CARLOS+



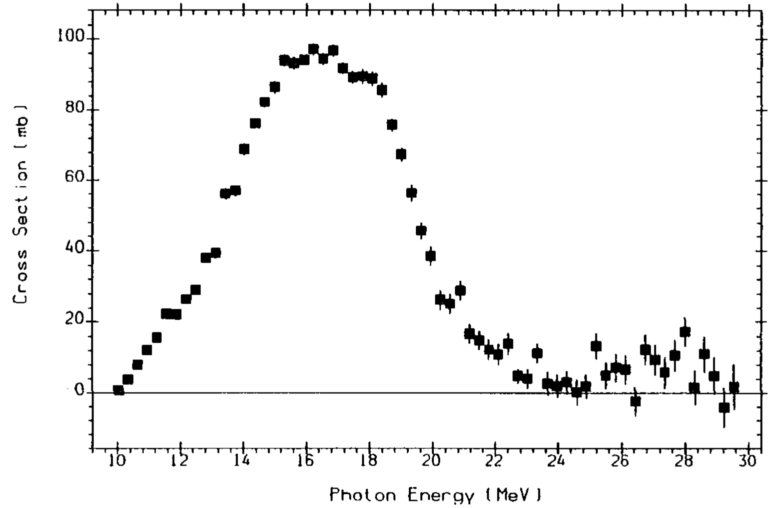
33-AS-75(G,X)0-NN-1
The sum: (G,N)+(G,N+P)+2(G,2N)+2(G,2N+P).
Positron annihilation
L0014002 J,PR,177,1745,6901 B.L.BERMAN+



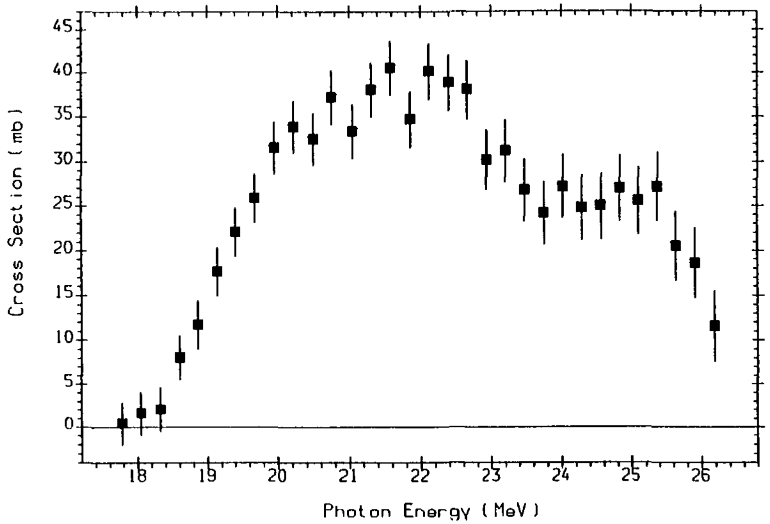
33-AS-75(G,X)0-NN-1 UNW
The sum: (G,N)+(G,N+P)+(G,2N)+(G,2N+P).
Positron annihilation
L0014012 J,PR,177,1745,6901 B.L.BERMAN+



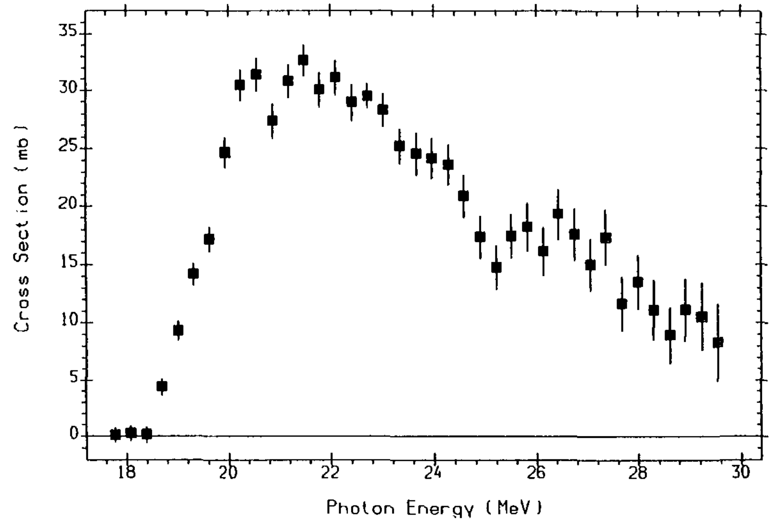
(33-AS-75(G,N)33-AS-74)+ (33-AS-75(G,N+P)32-GE-73)
QMPH,ARAD Positron annihilation in flight.
L0043020 J,NP/A,258,365,76 P.CARLOS+



(33-AS-75(G,N)33-AS-74)+ (33-AS-75(G,N+P)32-GE-73)
Positron annihilation
L0014003 J,PR,177,1745,6901 B.L.BERMAN+



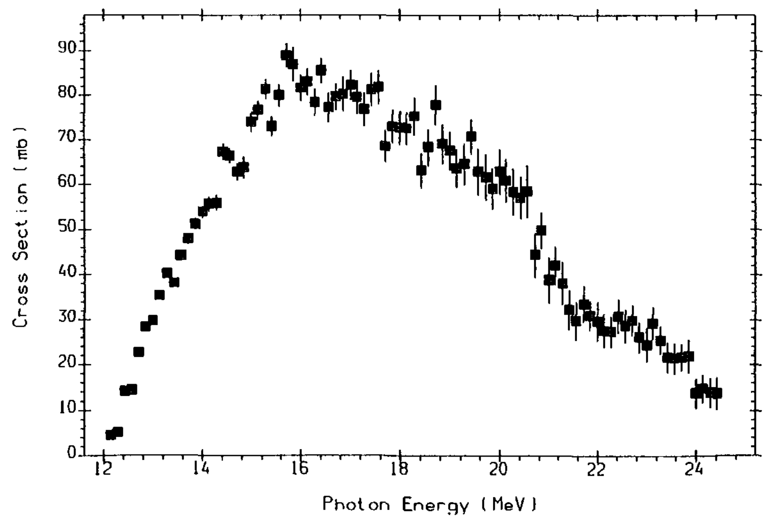
(33-AS-75(G,2N)33-AS-73)+ (33-AS-75(G,2N+P)32-GE-72)
QMPH,ARAD Positron annihilation in flight.
L0043021 J,NP/A,258,365,76 P.CARLOS+



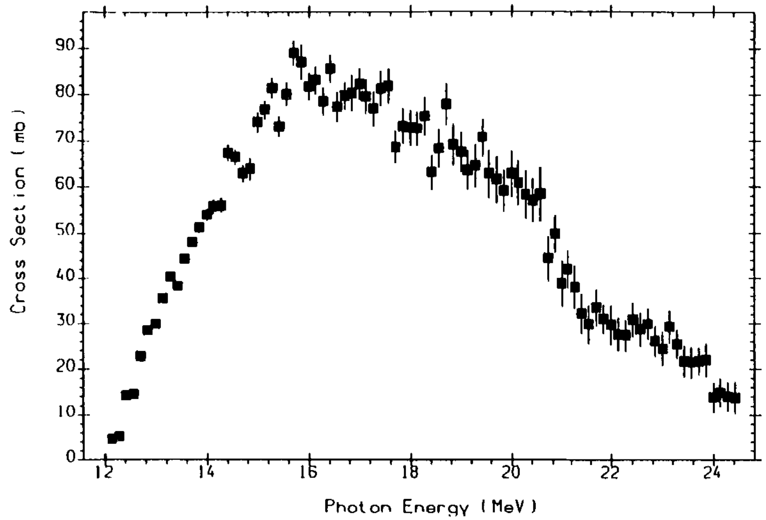
(33-AS-75(G,2N)33-AS-73)+ (33-AS-75(G,2N+P)32-GE-72)
Positron annihilation
L0014004 J,PR,177,1745,6901 B.L.BERMAN+

$^{74}_{34}Se$

Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	γ,^{3}He	γ,α	γ,2n	γ,np	γ,2p
0.90	12.1	8.5	19.3	17.2	4.1	20.7	19.3	14.2



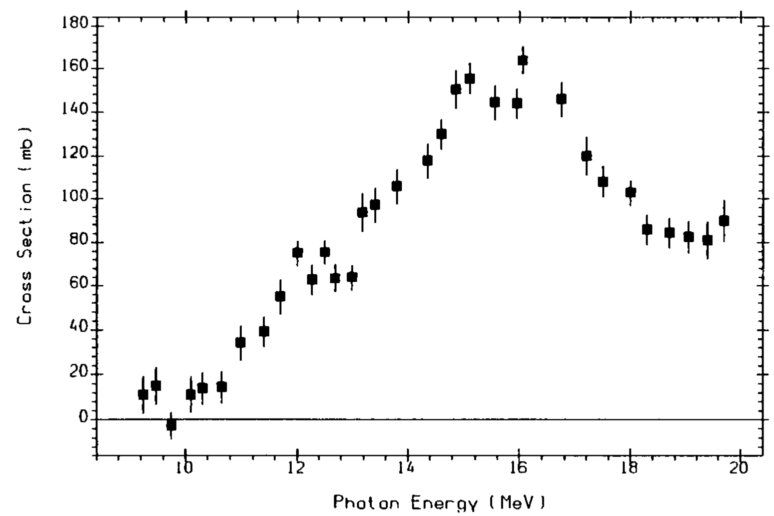
34-SE-74(G,N)34-SE-73
BRST
M0042005 J,IZK,6,16,80 A.M.GORYACHEV+



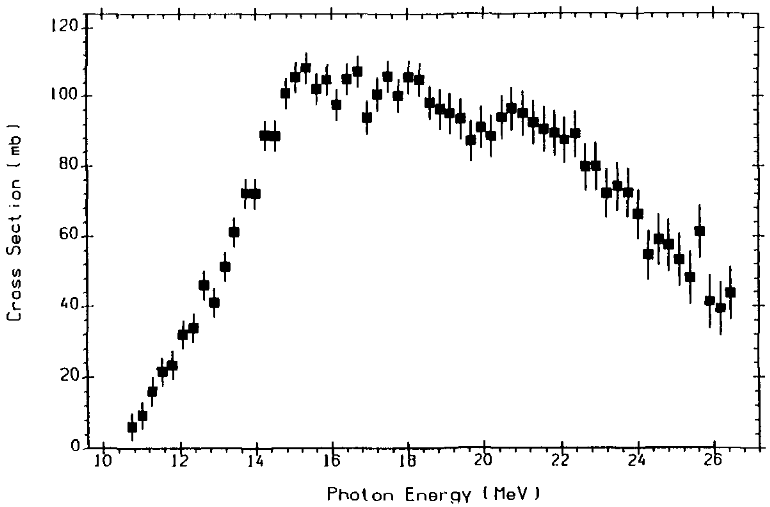
34-SE-74(G,N)34-SE-73
BRST
M0070012 J,VTYF,8,121,82 A.M.GORYACHEV+

$^{76}_{34}Se$

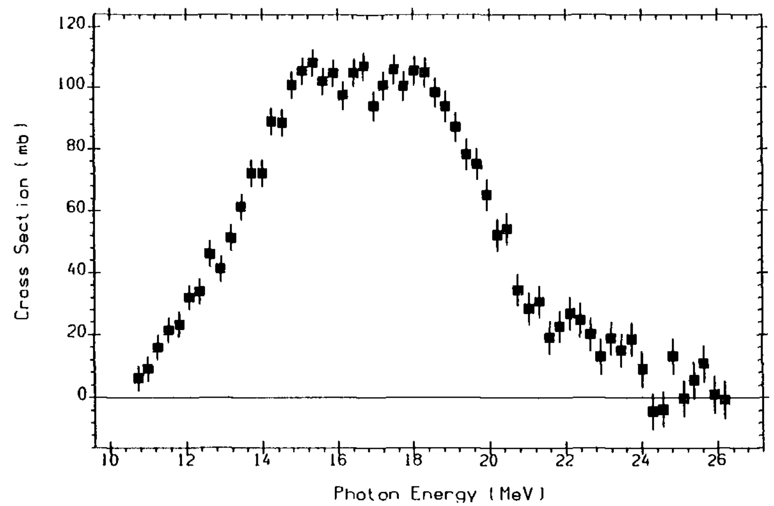
Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	γ,^{3}He	γ,α	γ,2n	γ,np	γ,2p
9.00	11.2	9.5	19.3	18.9	5.1	19.2	19.8	16.4



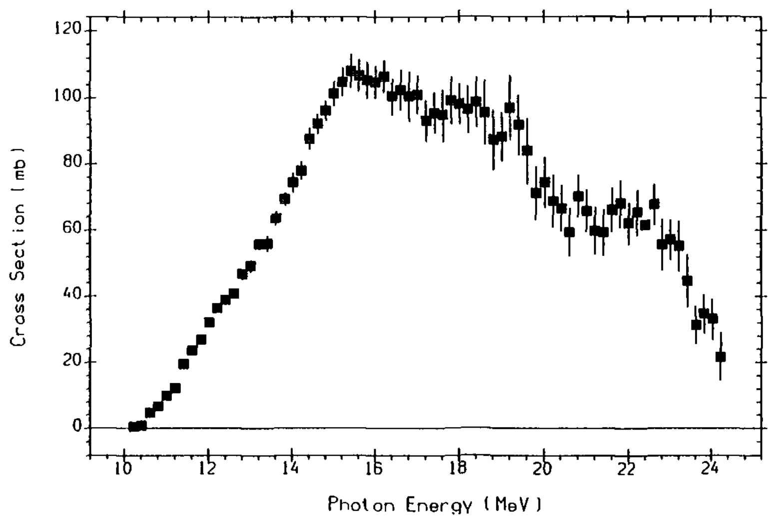
34-SE-76(G,ABS)
BRST
M0023002 J,PKL,8,106,78 G.M.GUREVICH+



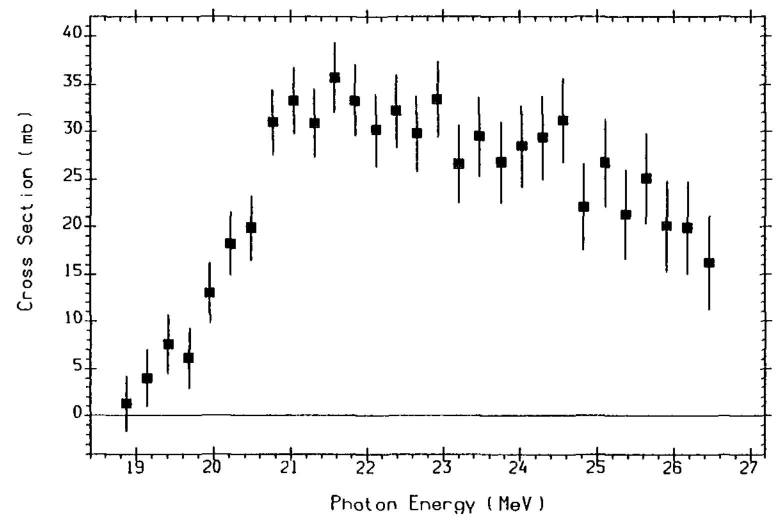
34-SE-76(G,X)0-NN-1
The sum: (G,N)+(G,N+P)+2(G,2N).
QMPH,ARAD Positron annihilation in flight.
L0043025 J,NP/A,258,365,76 P.CARLOS+



(34-SE-76(G,N)34-SE-75)+ (34-SE-76(G,N+P)33-AS-74)
QMPH,ARAD Positron annihilation in flight.
L0043023 J,NP/A,258,365,76 P.CARLOS+



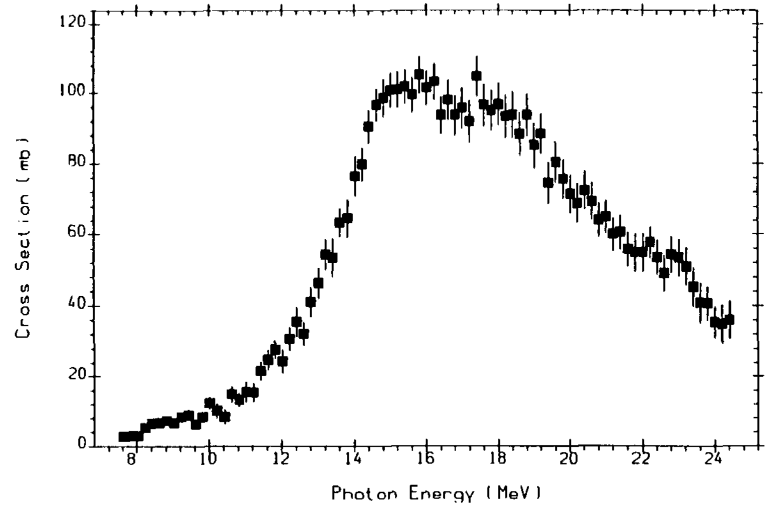
34-SE-76(G,N)34-SE-75
BRST
M0070013 J,VTYF,8,121,82 A.M.GORYACHEV+



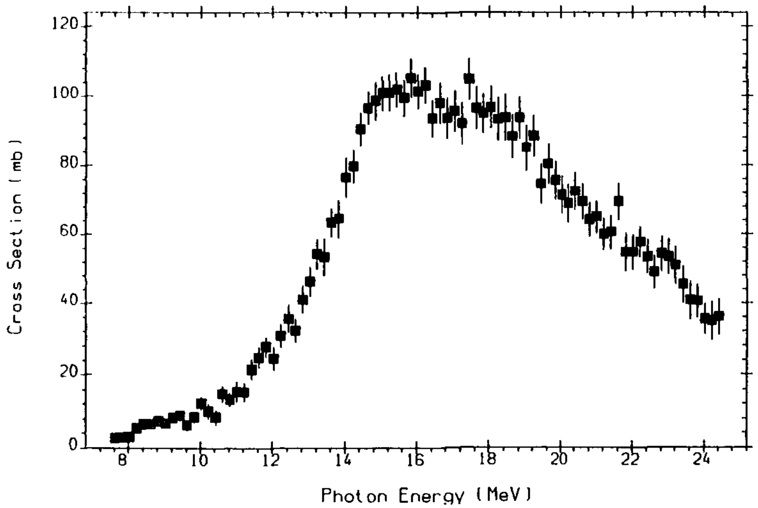
34-SE-76(G,2N)34-SE-74
QMPH,ARAD Positron annihilation in flight.
L0043024 J,NP/A,258,365,76 P.CARLOS+

$^{77}_{34}Se$

Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	$γ,^{3}He$	γ,α	γ,2n	γ,np	γ,2p
7.60	7.4	9.6	18.7	16.1	5.7	18.6	16.9	17.3



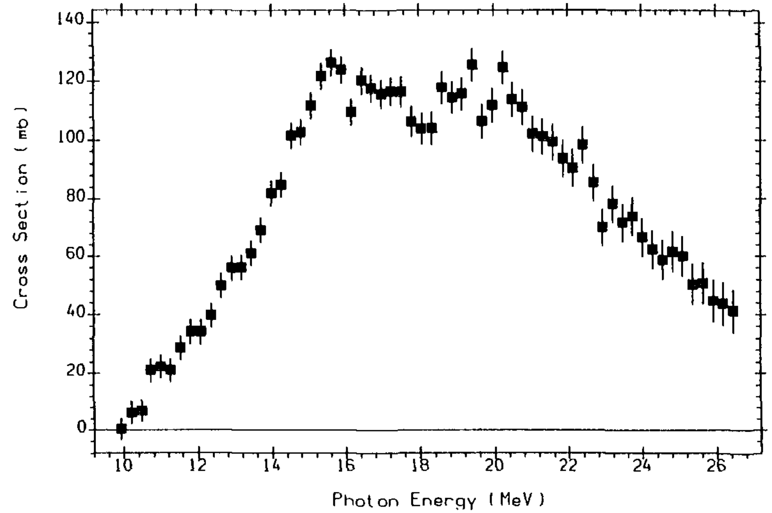
34-SE-77(G,N)34-SE-76
BRST
M0042006 J,IZK,6,16,80 A.M.GORYACHEV+



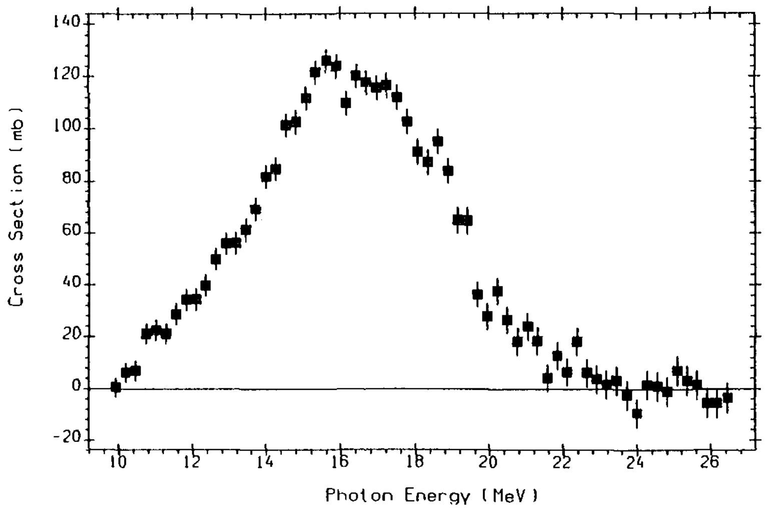
34-SE-77(G,N)34-SE-76
BRST
M0070014 J,VTYF,8,121,82 A.M.GORYACHEV+

$^{78}_{34}Se$

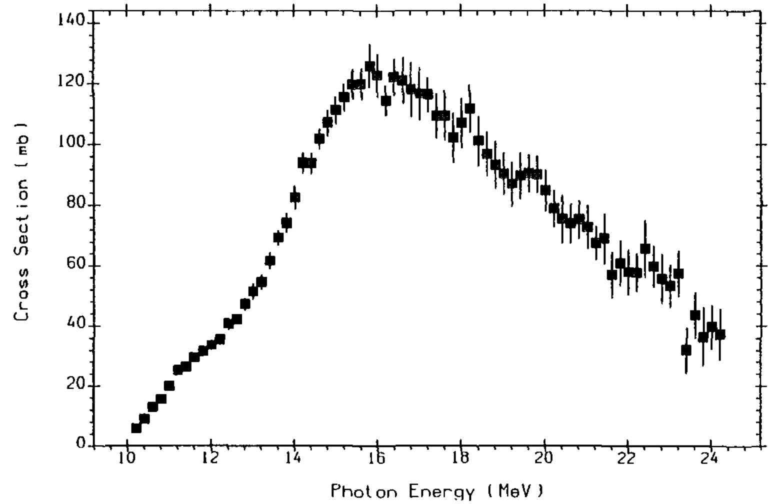
Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	γ,^{3}He	γ,α	γ,2n	γ,np	γ,2p
23.50	10.5	10.4	18.9	20.1	6.0	17.9	20.1	18.4



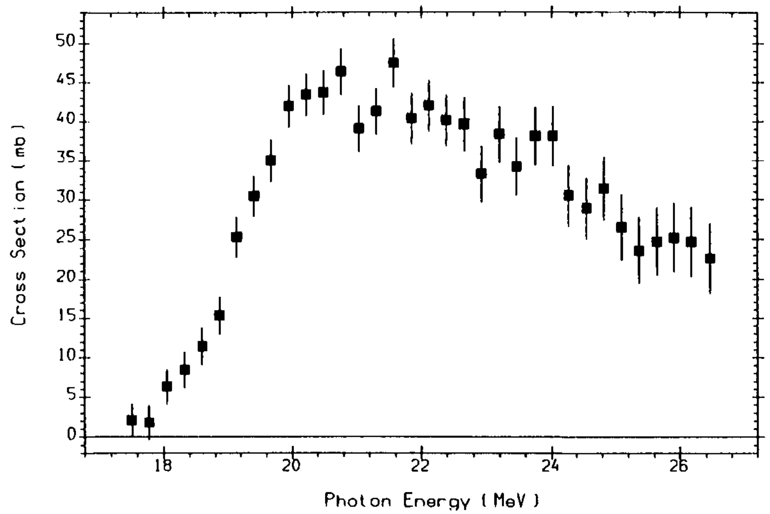
34-SE-78(G,X)0-NN-1
The sum: (G,N)+(G,N+P)+2(G,2N).
QMPH,ARAD Positron annihilation in flight.
L0043028 J,NP/A,258,365,76 P.CARLOS+



(34-SE-78(G,N)34-SE-77)+(34-SE-78(G,N+P)33-AS-76)
QMPH,ARAD Positron annihilation in flight.
L0043026 J,NP/A,258,365,76 P.CARLOS+



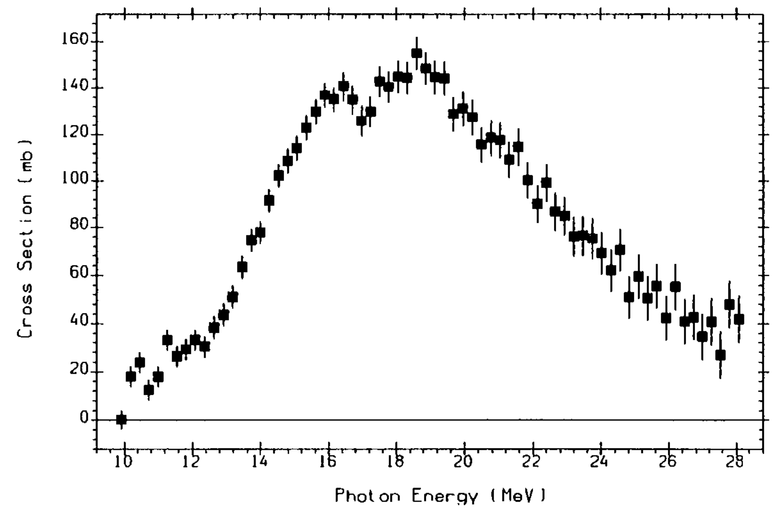
34-SE-78(G,N)34-SE-77
BRST
M0070015 J,VTYF,8,121,82 A.M.GORYACHEV+



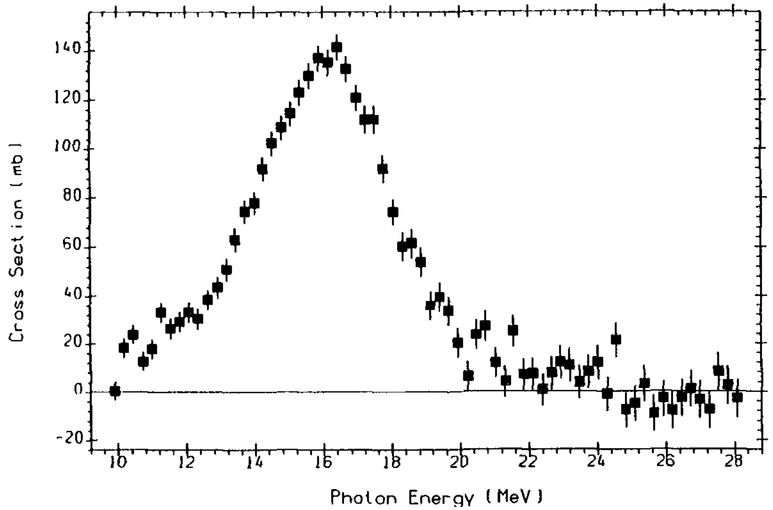
34-SE-78(G,2N)34-SE-76
QMPH,ARAD Positron annihilation in flight.
L0043027 J,NP/A,258,365,76 P.CARLOS+

$^{80}_{34}Se$

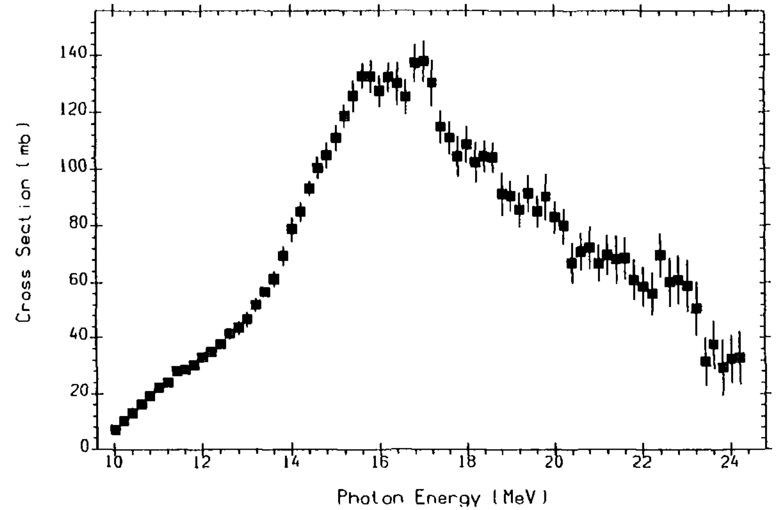
Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	γ,^{3}He	γ,α	γ,2n	γ,np	γ,2p
49.6	9.9	11.4	18.8	21.5	7.0	16.9	20.4	20.5



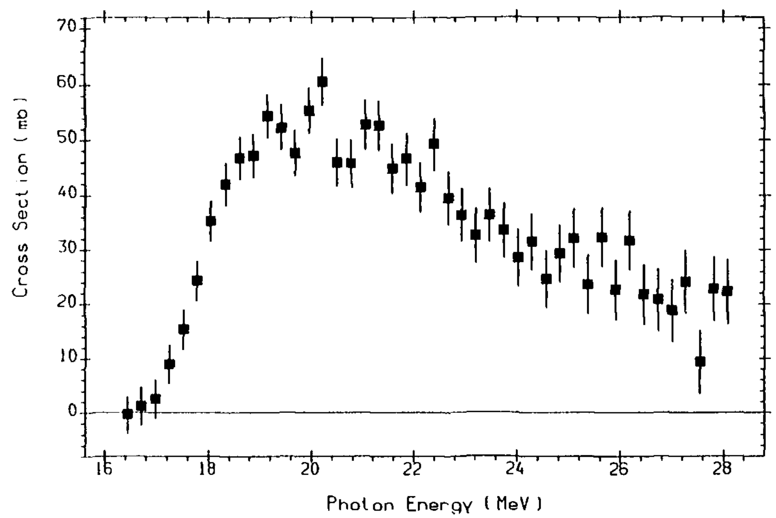
34-SE-80(G,X)0-NN-1
The sum: (G,N)+(G,N+P)+2(G,2N).
QMPH,ARAD Positron annihilation in flight.
L0043031 J,NP/A,258,365,76 P.CARLOS+



(34-SE-80(G,N)34-SE-79)+(34-SE-80(G,N+P)33-AS-78)
QMPH,ARAD Positron annihilation in flight.
L0043029 J,NP/A,258,365,76 P.CARLOS+



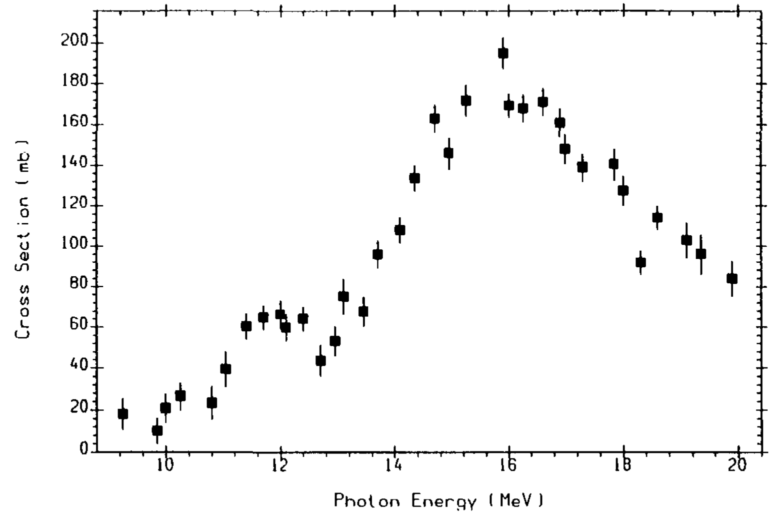
34-SE-80(G,N)34-SE-79
BRST
M0070016 J,VTYF,8,121,82 A.M.GORYACHEV+



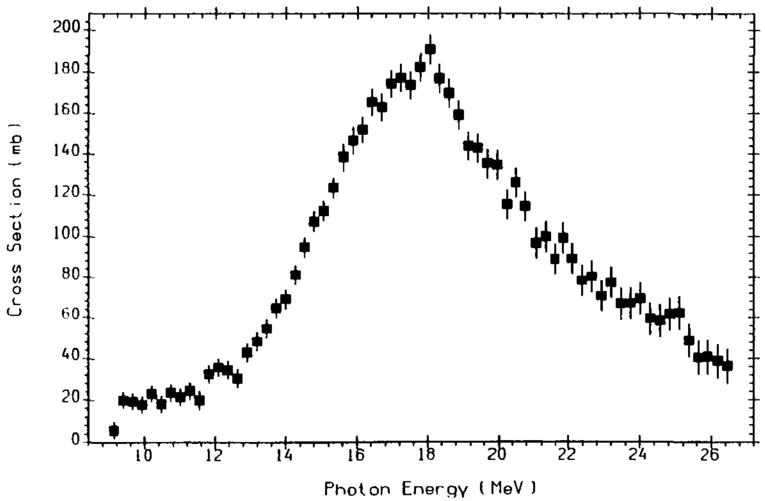
34-SE-80(G,2N)34-SE-78
QMPH,ARAD Positron annihilation in flight.
L0043030 J,NP/A,258,365,76 P.CARLOS+

$^{82}_{34}Se$

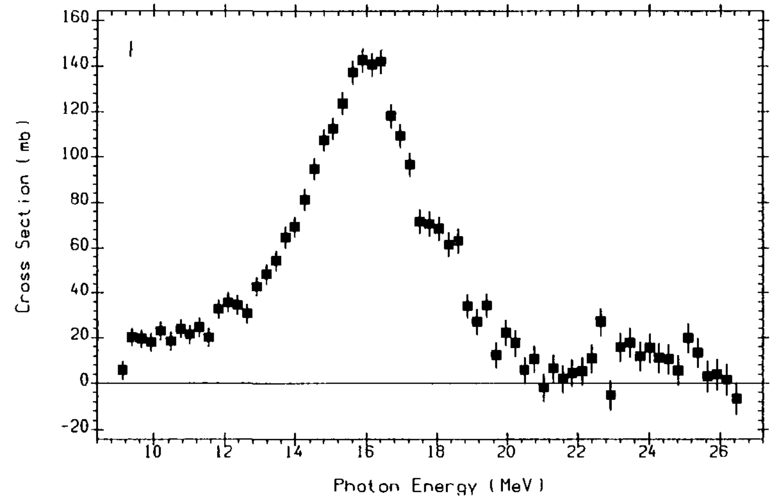
Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	γ,^{3}He	γ,α	γ,2n	γ,np	γ,2p
9.40	9.3	12.4	18.8	23.0	8.2	16.0	20.2	22.7



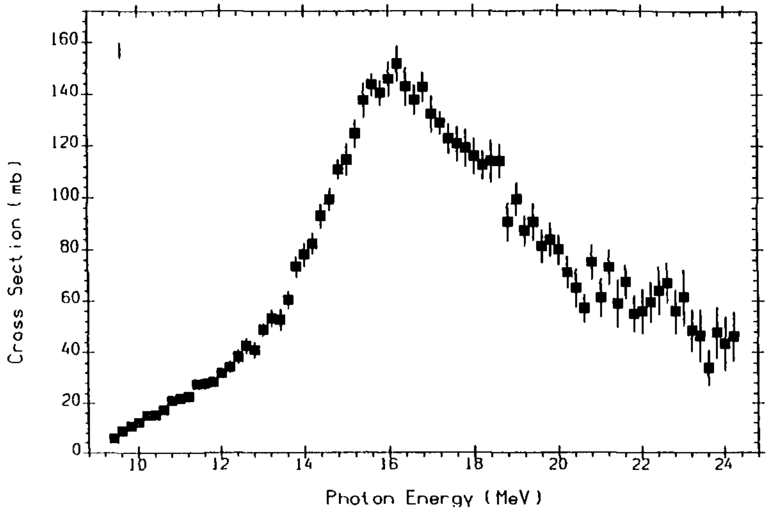
34-SE-82(G,ABS)
BRST
M0023003 J,PKL,8,106,78 G.M.GUREVICH+



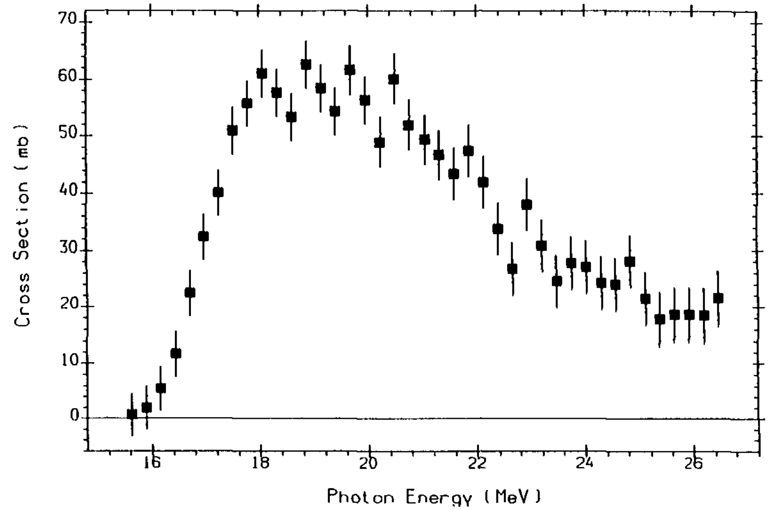
34-SE-82(G,X)0-NN-1
The sum: (G,N)+(G,N+P)+2(G,2N).
QMPH,ARAD Positron annihilation in flight.
L0043034 J,NP/A,258,365,76 P.CARLOS+



(34-SE-82(G,N)34-SE-81)+(34-SE-82(G,N+P)33-AS-80)
QMPH,ARAD Positron annihilation in flight.
L0043032 J,NP/A,258,365,76 P.CARLOS+



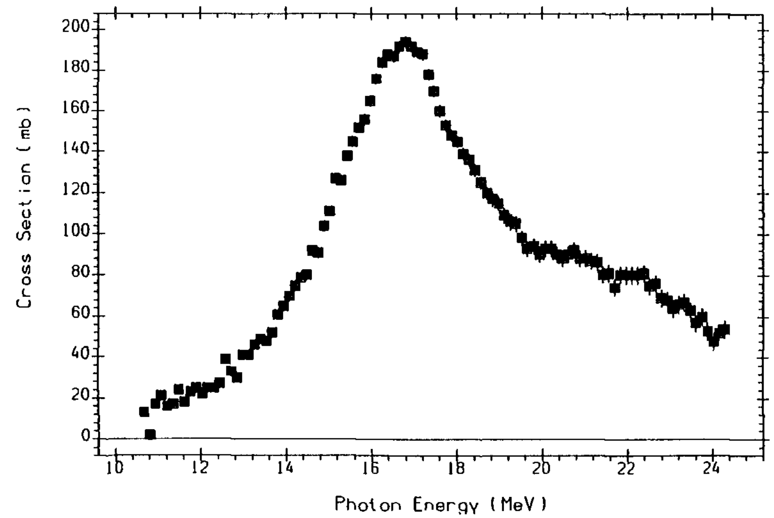
34-SE-82(G,N)34-SE-81
BRST
M0070017 J,VTYF,8,121,82 A.M.GORYACHEV+



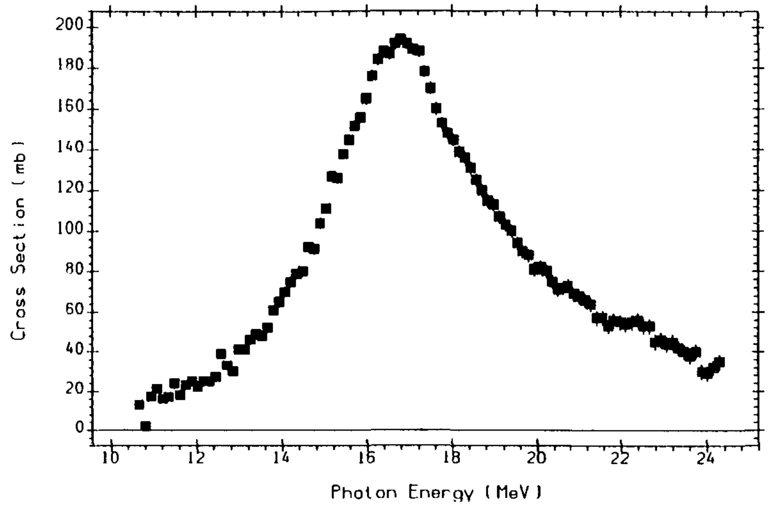
34-SE-82(G,2N)34-SE-80
QMPH,ARAD Positron annihilation in flight.
L0043033 J,NP/A,258,365,76 P.CARLOS+

$^{nat.}_{37}$Rb

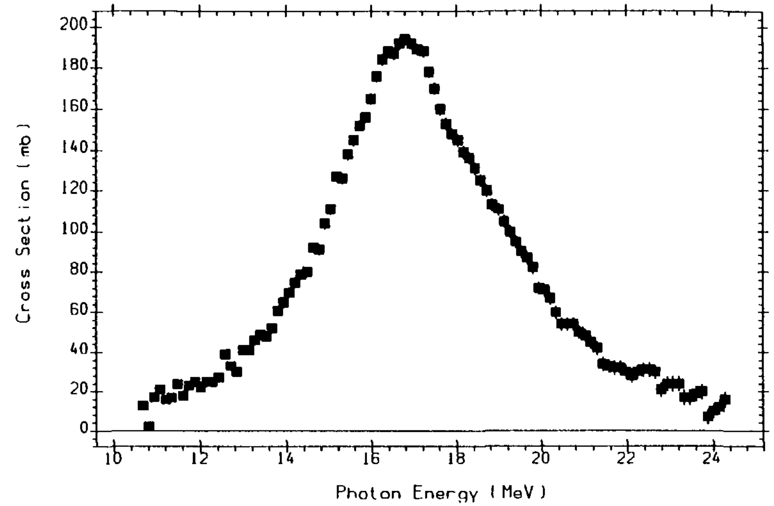
Abundance	Separation Energies (MeV)							
(%)	γ,n	γ,p	γ,t	γ,^{3}He	γ,α	γ,2n	γ,np	γ,2p
*	9.9	7.0	16.5	19.6	6.6	18.6	17.5	17.7



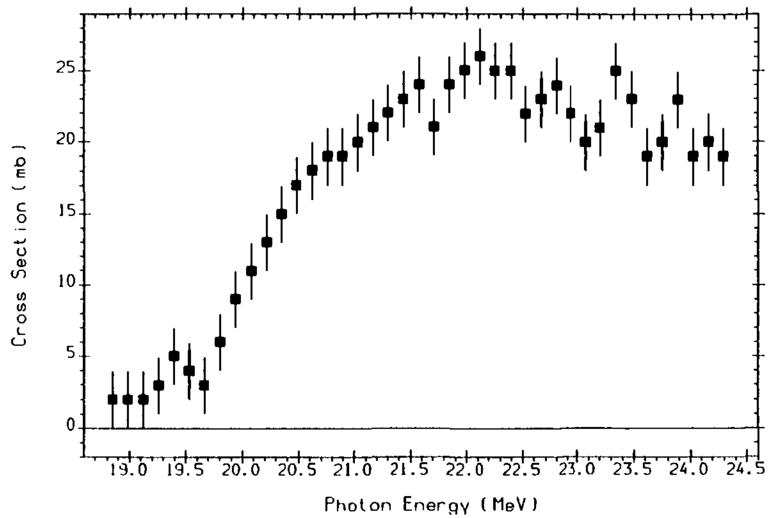
37-RB-0(G,X)0-NN-1
The sum: (G,N)+(G,N+P)+2(G,2N).
Positron annihilation
L0027002 J,NP/A,175,609,7111 A.LEPRETRE+



37-RB-0(G,X)0-NN-1 UNW
The sum: (G,N)+(G,N+P)+(G,2N).
Positron annihilation
L0027017 J,NP/A,175,609,7111 A.LEPRETRE+



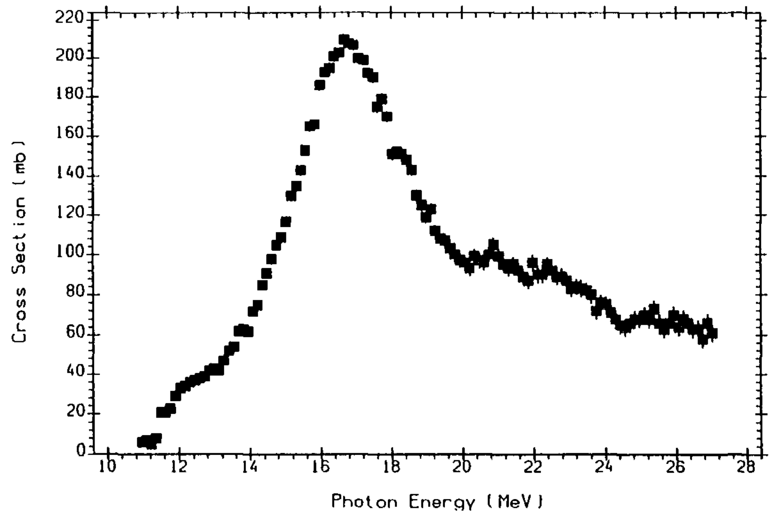
(37-RB-0(G,N))+ (37-RB-0(G,N+P)
Positron annihilation
L0027003 J,NP/A,175,609,7111 A.LEPRETRE+



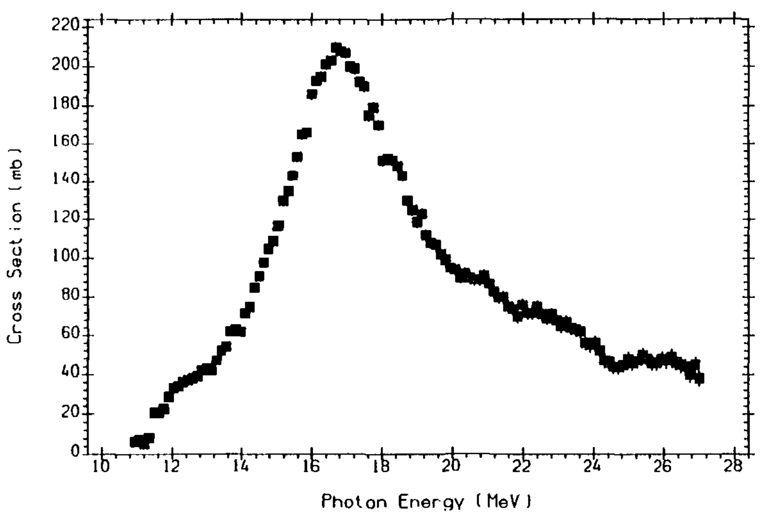
37-RB-0(G,2N)
Positron annihilation
L0027004 J,NP/A,175,609,7111 A.LEPRETRE+

$^{nat.}_{38}Sr$

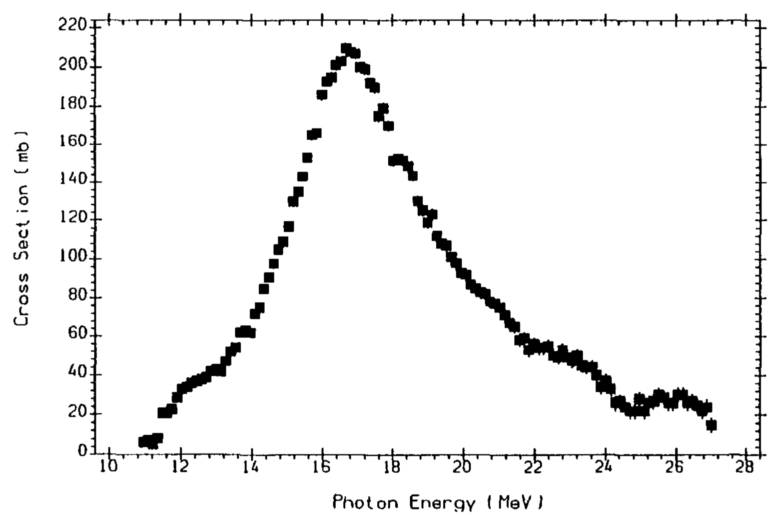
Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	γ,^{3}He	γ,α	γ,2n	γ,np	γ,2p
*	8.4	9.0	20.1	17.4	5.2	19.5	18.1	14.6



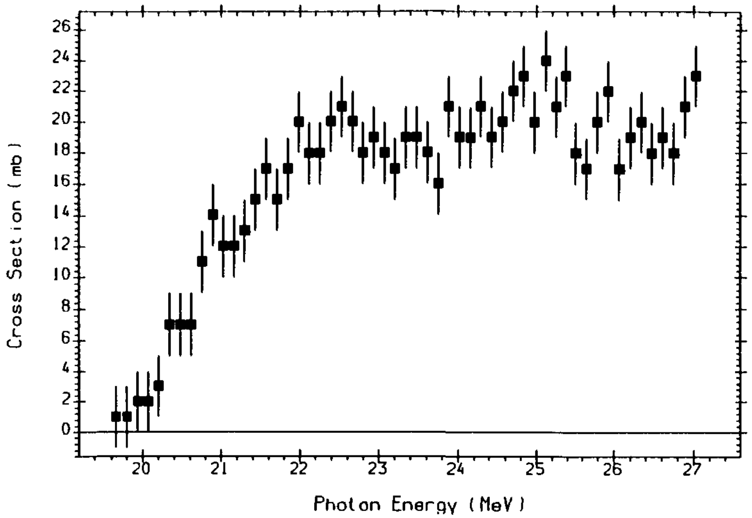
38-SR-0(G,X)0-NN-1
The sum: (G,N)+(G,N+P)+2(G,2N).
Positron annihilation
L0027005 J,NP/A,175,609,7111 A.LEPRETRE+



38-SR-0(G,X)0-NN-1 UNW
The sum: (G,N)+(G,N+P)+(G,2N).
Positron annihilation
L0027018 J,NP/A,175,609,7111 A.LEPRETRE+



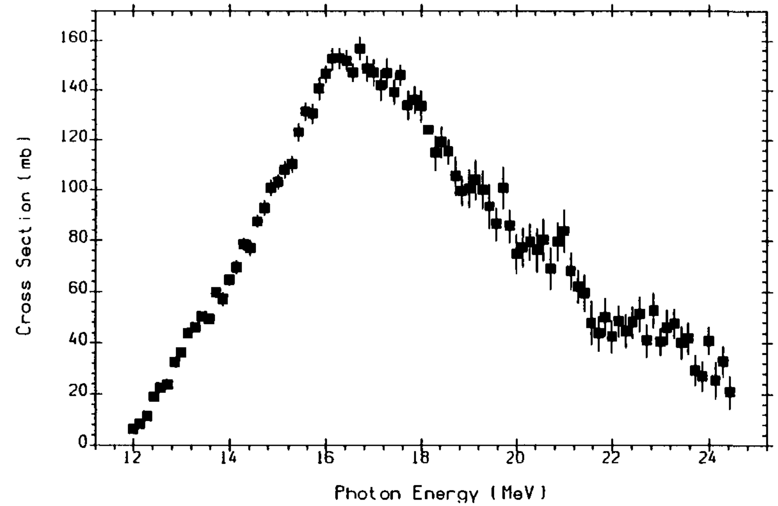
(38-SR-0(G,N))+ (38-SR-0(G,N+P))
Positron annihilation
L0027006 J,NP/A,175,609,7111 A.LEPRETRE+



38-SR-0(G,2N)
Positron annihilation
L0027007 J,NP/A,175,609,7111 A.LEPRETRE+

$^{84}_{38}Sr$

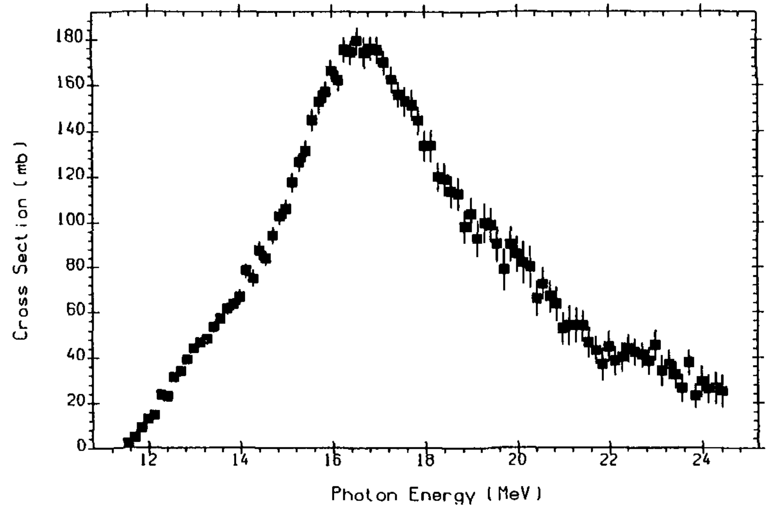
Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	γ,^{3}He	γ,α	γ,2n	γ,np	γ,2p
0.50	11.9	9.0	20.2	17.9	5.2	20.8	19.8	14.6



38-SR-84(G,N)38-SR-83
BRST
M0070018 J,VTYF,8,121,82 A.M.GORYACHEV+

$^{86}_{38}Sr$

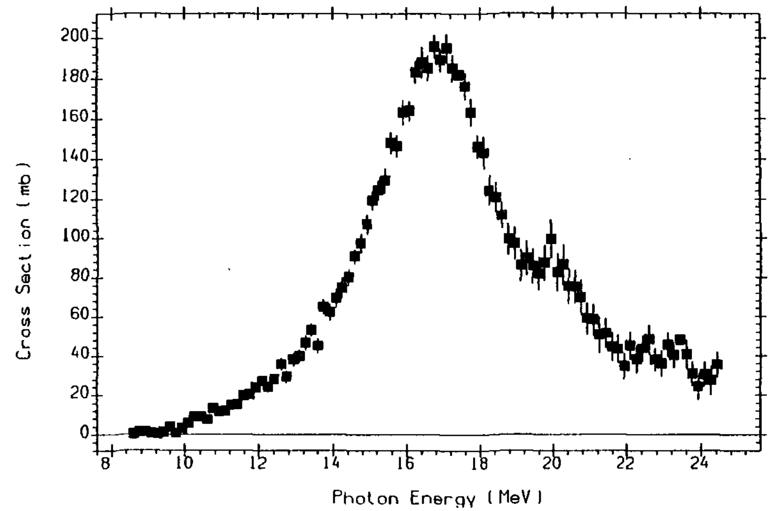
Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	γ,³He	γ,α	γ,2n	γ,np	γ,2p
9.90	11.5	9.6	20.5	19.5	6.4	20.0	20.1	16.7



38-SR-86(G,N)38-SR-85
BRST
M0070019 J,VTYF,8,121,82 A.M.GORYACHEV+

$^{87}_{38}Sr$

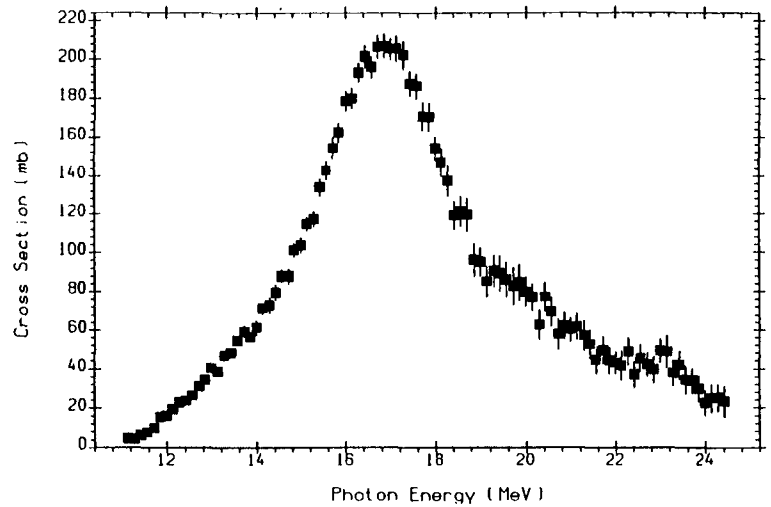
Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	γ,³He	γ,α	γ,2n	γ,np	γ,2p
7.00	8.4	9.4	20.1	17.4	7.3	19.9	18.1	18.0



38-SR-87(G,N)38-SR-86
BRST
M0070020 J,VTYF,8,121,82 A.M.GORYACHEV+

$^{88}_{38}Sr$

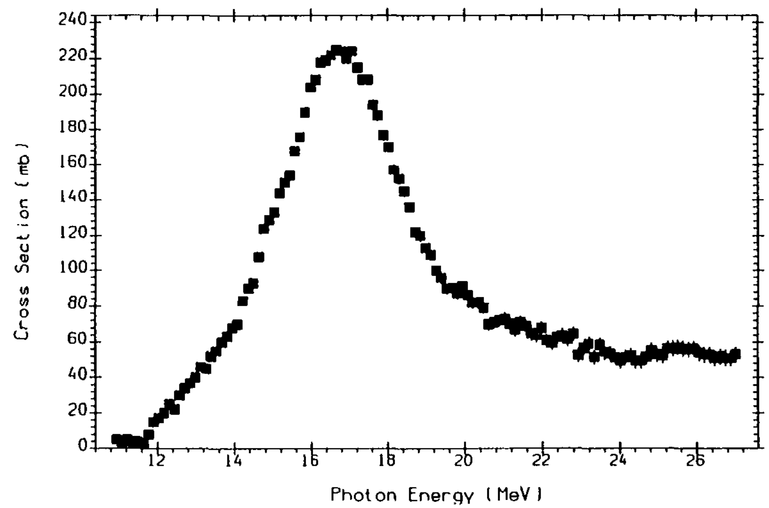
Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	γ,^{3}He	γ,α	γ,2n	γ,np	γ,2p
81.60	11.1	10.6	20.7	21.4	7.9	19.5	20.5	19.2



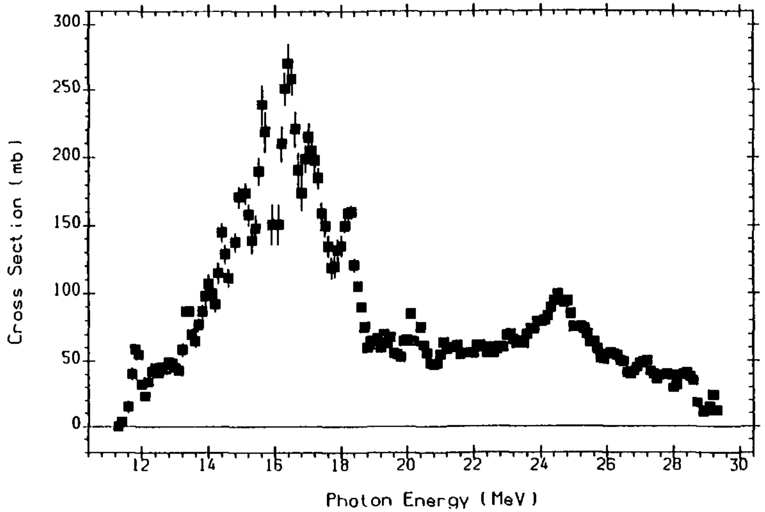
38-SR-88(G,N)38-SR-87
BRST
M0070021 J,VTYF,8,121,82 A.M.GORYACHEV+

$^{89}_{39}Y$

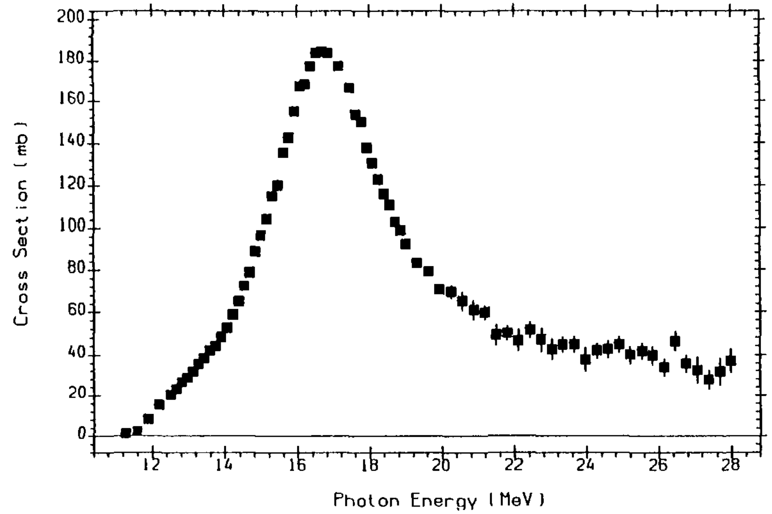
Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	γ,^{3}He	γ,α	γ,2n	γ,np	γ,2p
100.00	11.5	7.1	18.1	19.9	8.0	20.8	18.2	17.7



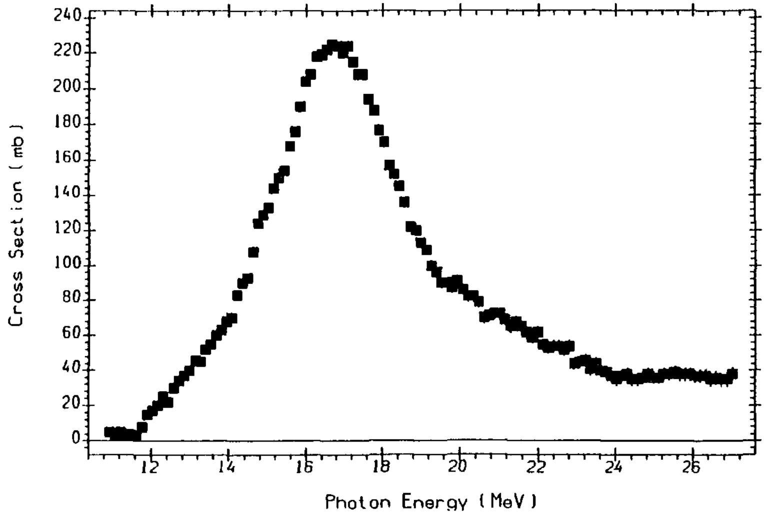
39-Y-89(G,X)0-NN-1
The sum: (G,N)+(G,N+P)+2(G,2N).
Positron annihilation
L0027008 J,NP/A,175,609,7111 A.LEPRETRE+



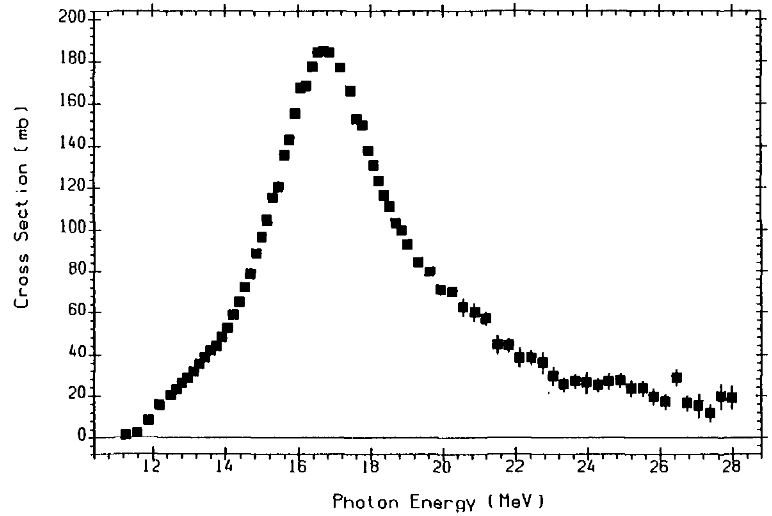
39-Y-89(G,X)0-NN-1
BRST
M0164002 J,IZV,34,2232,70 B.S.ISHKHANOV+



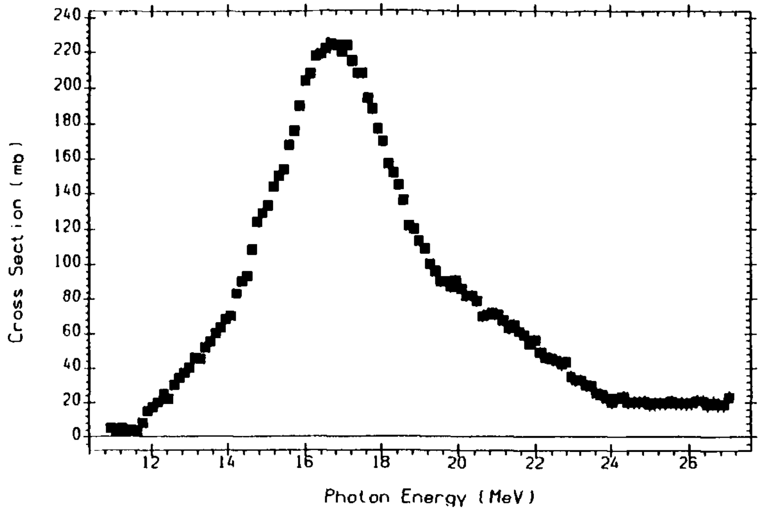
39-Y-89(G,X)0-NN-1
The sum: (G,N)+(G,N+P)+2(G,2N)+2(G,2N+P).
Positron annihilation
L0011002 J,PR,162,1098,6710 B.L.BERMAN+



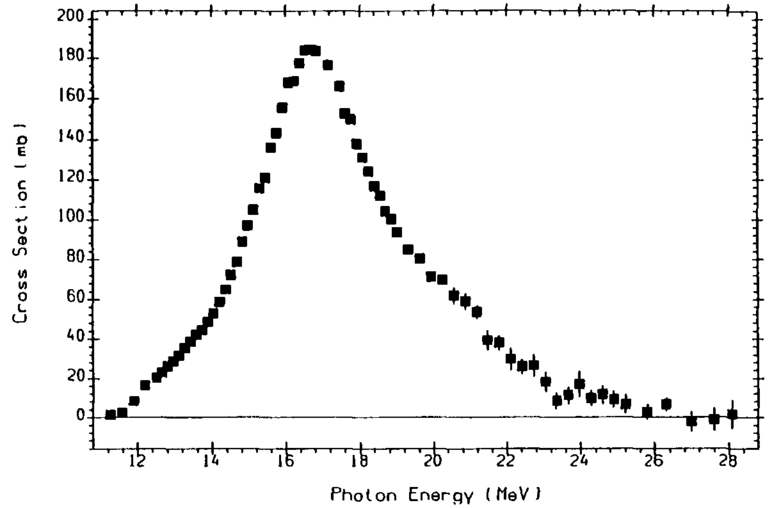
39-Y-89(G,X)0-NN-1 UNW
The sum: (G,N)+(G,N+P)+(G,2N).
Positron annihilation
L0027019 J,NP/A,175,609,7111 A.LEPRETRE+



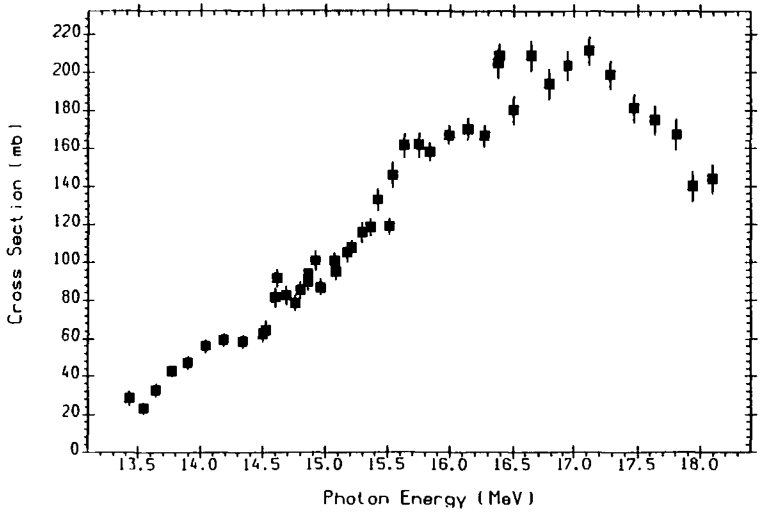
39-Y-89(G,X)0-NN-1 UNW
The sum: (G,N)+(G,N+P)+(G,2N)+(G,2N+P).
Positron annihilation
L0011018 J,PR,162,1098,6710 B.L.BERMAN+



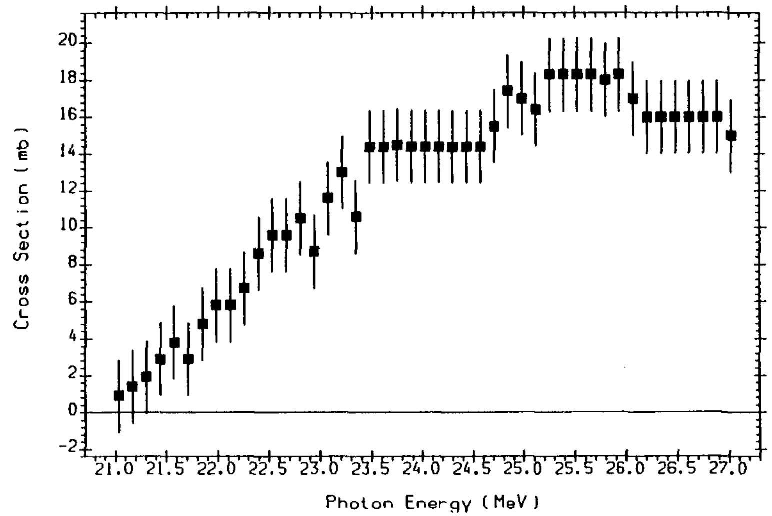
(39-Y-89(G,N)39-Y-88)+ (39-Y-89(G,N+P)38-SR-87)
Positron annihilation
L0027009 J,NP/A,175,609,7111 A.LEPRETRE+



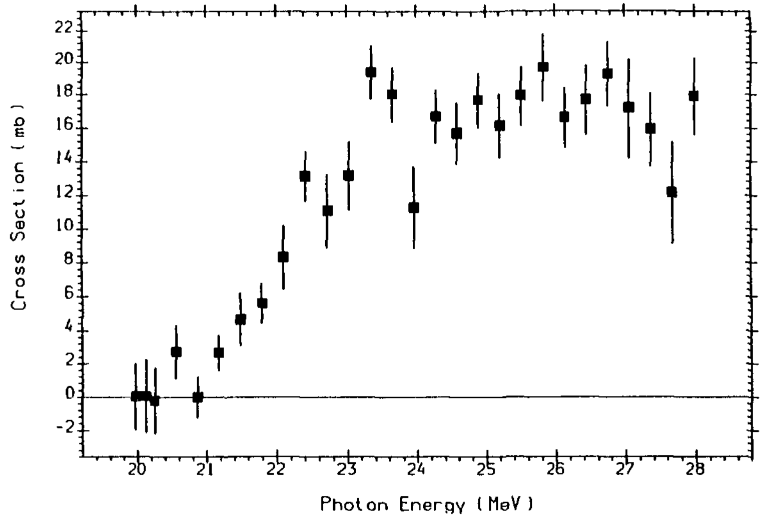
(39-Y-89(G,N)39-Y-88)+ (39-Y-89(G,N+P)38-SR-87)
Positron annihilation
L0011003 J,PR,162,1098,6710 B.L.BERMAN+



39-Y-89(G,N)39-Y-88
QMPH,TAGD Tagged bremsstrahlung.
L0059002 T,YOUNG,72 L.M.YOUNG



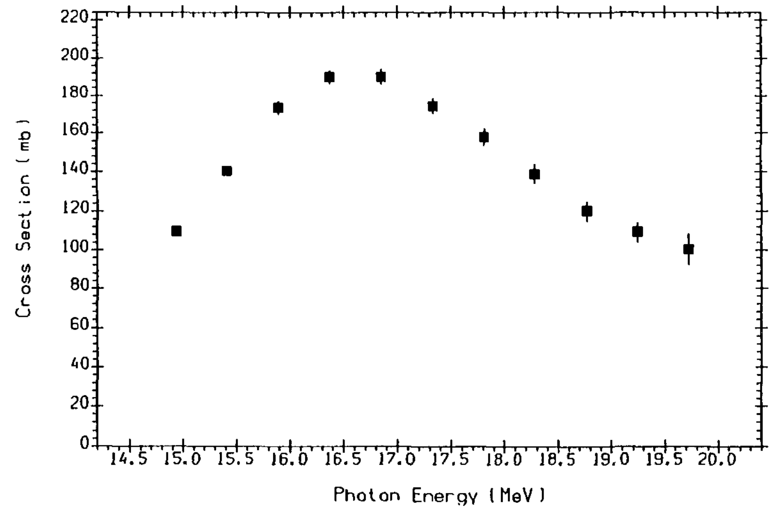
39-Y-89(G,2N)39-Y-87
Positron annihilation
L0027010 J,NP/A,175,609,7111 A.LEPRETRE+



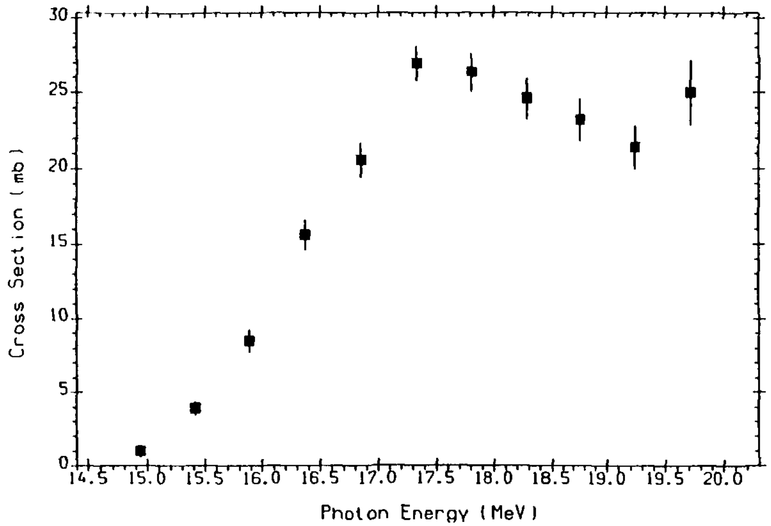
(39-Y-89(G,2N)39-Y-87)+ (39-Y-89(G,2N+P)38-SR-86)
Positron annihilation
L0011004 J,PR,162,1098,6710 B.L.BERMAN+

$^{nat.}_{40}$Zr

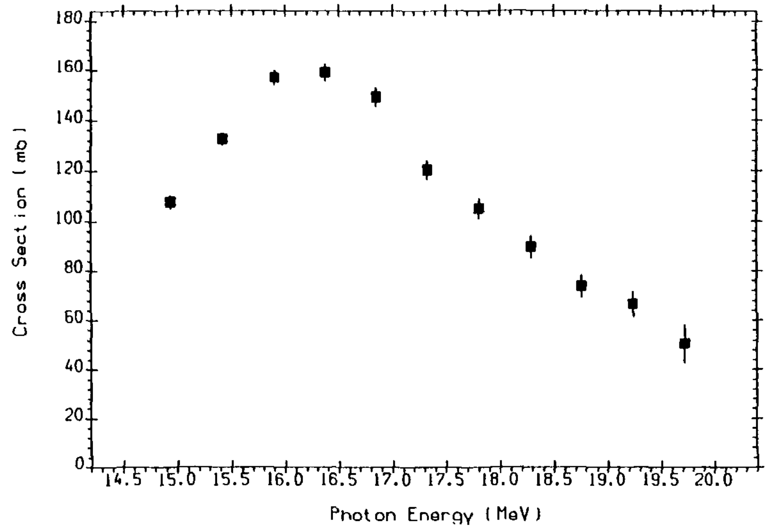
Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	γ,^{3}He	γ,α	γ,2n	γ,np	γ,2p
*	7.2	8.4	15.7	14.9	3.0	14.3	15.6	15.4



40-ZR-0(G,X)0-NN-1 UNW
QMPH,ARAD Positron annihilation in flight.
L0057004 J,PR/C,36,1286,8705 B.L.BERMAN+



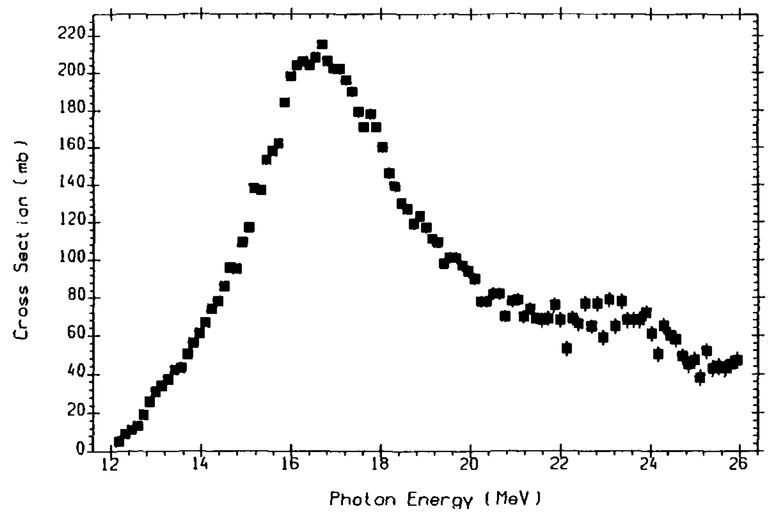
40-ZR-0(G,2N)
MPH,ARAD Positron annihilation in flight.
L0057003 J,PR/C,36,1286,8705 B.L.BERMAN+



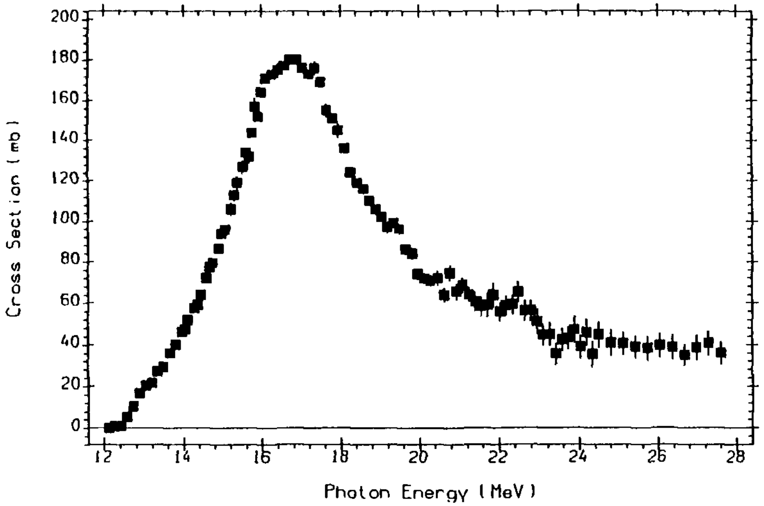
(40-ZR-0(G,N))+(40-ZR-0(G,N+P))
QMPH,ARAD Positron annihilation in flight.
L0057002 J,PR/C,36,1286,8705 B.L.BERMAN+

$^{90}_{40}Zr$

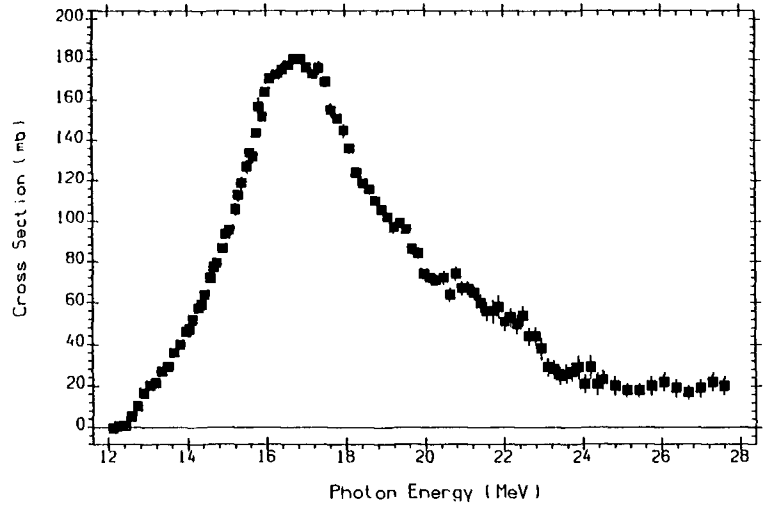
Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	$\gamma,^3He$	γ,α	γ,2n	γ,np	γ,2p
51.50	12.0	8.4	20.7	18.8	6.7	21.3	19.8	15.4



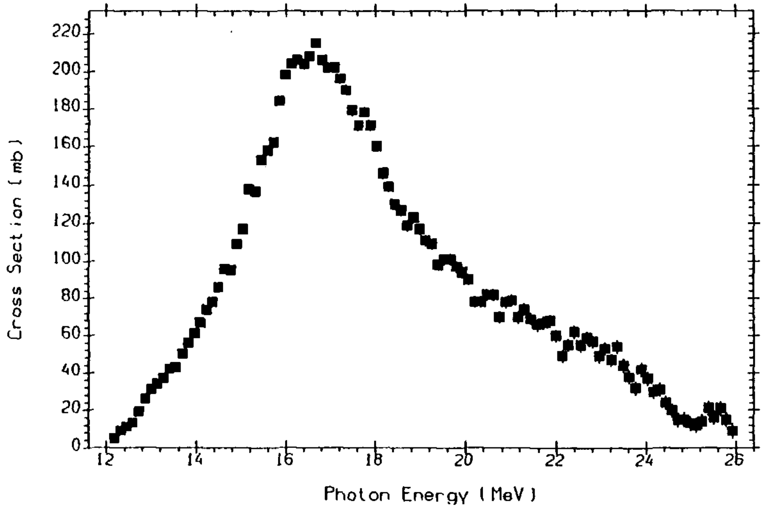
40-ZR-90(G,X)0-NN-1
The sum: (G,N)+(G,N+P)+2(G,2N).
Positron annihilation
L0027011 J,NP/A,175,609,7111 A.LEPRETRE+



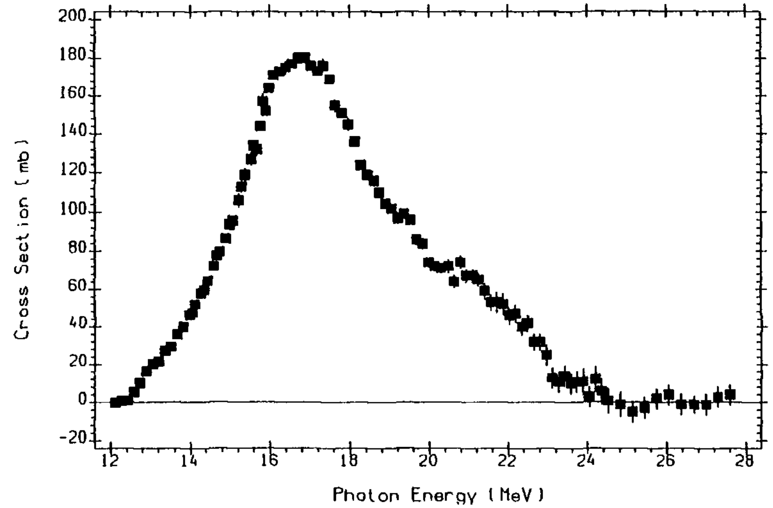
40-ZR-90(G,X)0-NN-1
The sum: (G,N)+(G,N+P)+2(G,2N).
Positron annihilation
L0011005 J,PR,162,1098,6710 B.L.BERMAN+



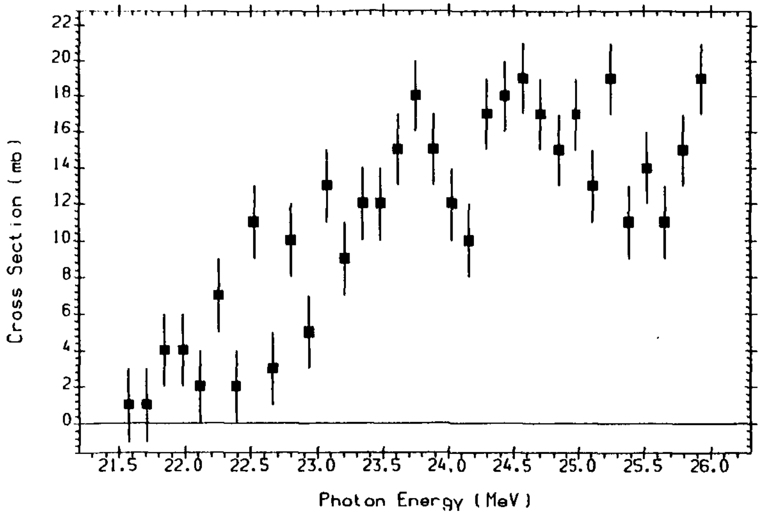
40-ZR-90(G,X)0-NN-1 UNW
The sum: (G,N)+(G,N+P)+(G,2N).
Positron annihilation
L0011019 J,PR,162,1098,6710 B.L.BERMAN+



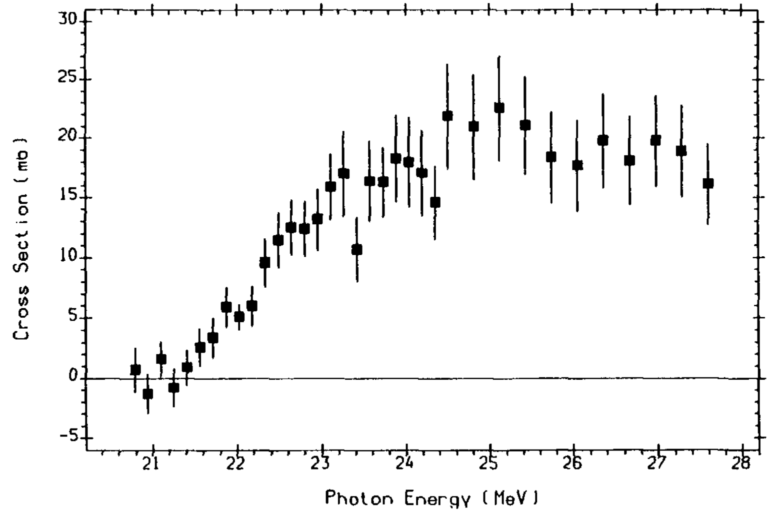
(40-ZR-90(G,N)40-ZR-89)+ (40-ZR-90(G,N+P)39-Y-88)
Positron annihilation
L0027012 J,NP/A,175,609,7111 A.LEPRETRE+



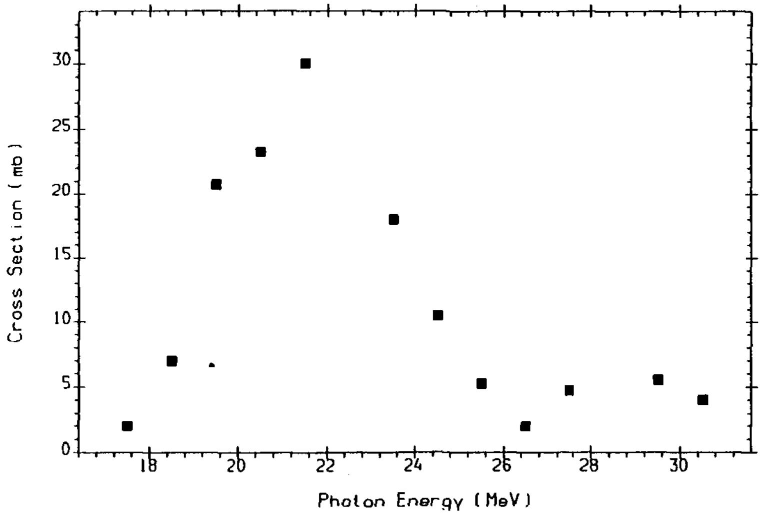
(40-ZR-90(G,N)40-ZR-89)+ (40-ZR-90(G,N+P)39-Y-88)
Positron annihilation
L0011006 J,PR,162,1098,6710 B.L.BERMAN+



40-ZR-90(G,2N)40-ZR-88
Positron annihilation
L0027013 J,NP/A,175,609,7111 A.LEPRETRE+



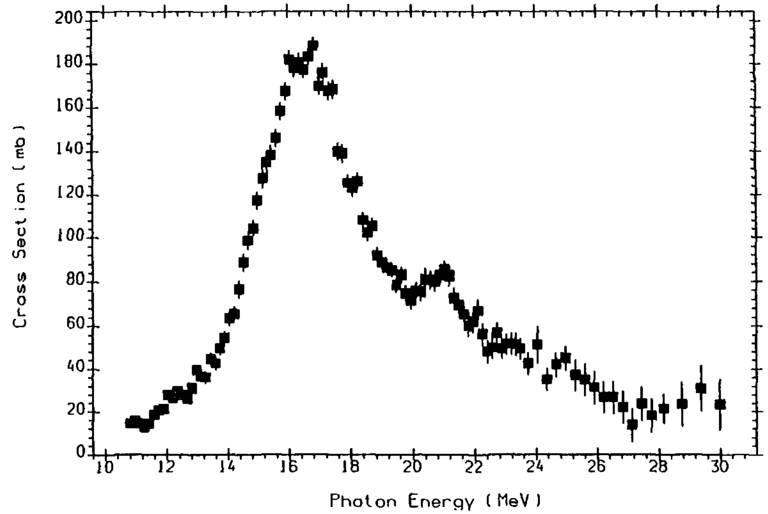
(40-ZR-90(G,2N)40-ZR-88)+ (40-ZR-90(G,2N+P)39-Y-87)
Positron annihilation
L0011007 J,PR,162,1098,6710 B.L.BERMAN+



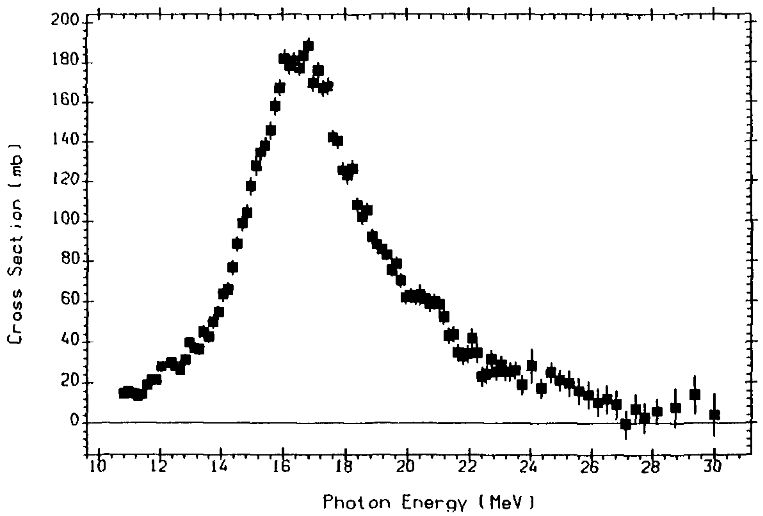
40-ZR-90(G,P)39-Y-89
BRST
M0125002 J,PL,10,310,64 I.I.DUSHKOV+

$^{91}_{40}$Zr

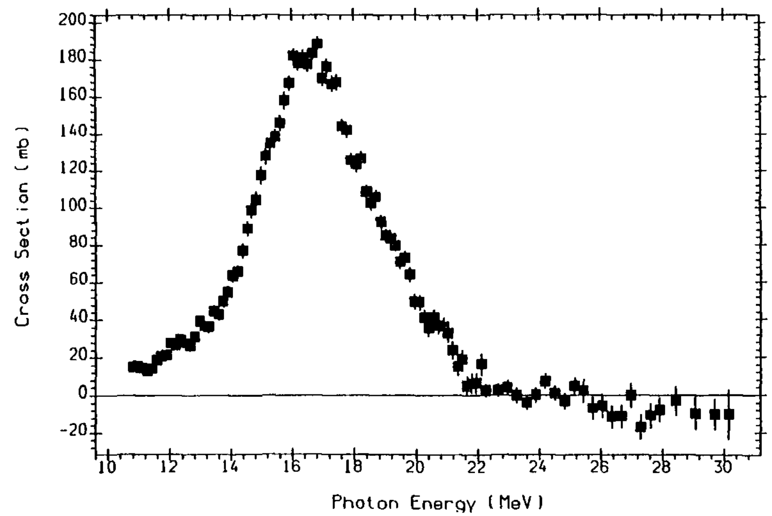
Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	γ,^{3}He	γ,α	γ,2n	γ,np	γ,2p
11.20	7.2	8.7	18.6	14.9	5.5	19.2	15.6	16.3



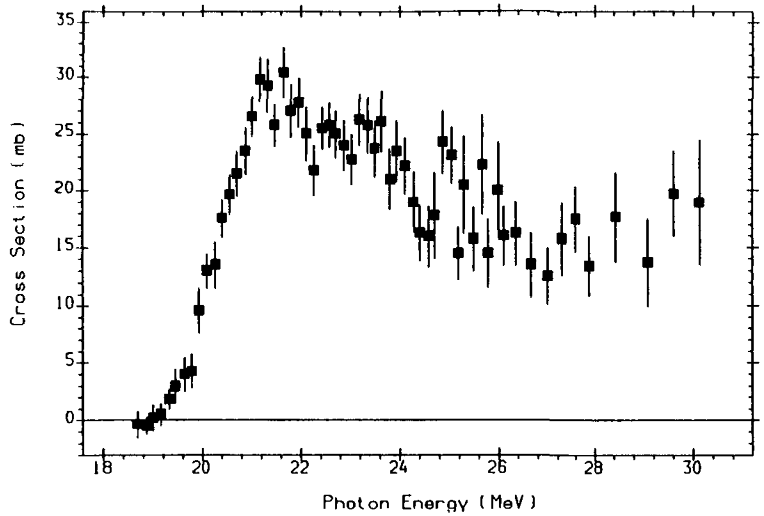
40-ZR-91(G,X)0-NN-1
The sum: (G,N)+(G,N+P)+2(G,2N)+2(G,2N+P).
Positron annihilation
L0011008 J,PR,162,1098,6710 B.L.BERMAN+



40-ZR-91(G,X)0-NN-1 UNW
The sum: (G,N)+(G,N+P)+(G,2N)+(G,2N+P).
Positron annihilation
L0011020 J,PR,162,1098,6710 B.L.BERMAN+



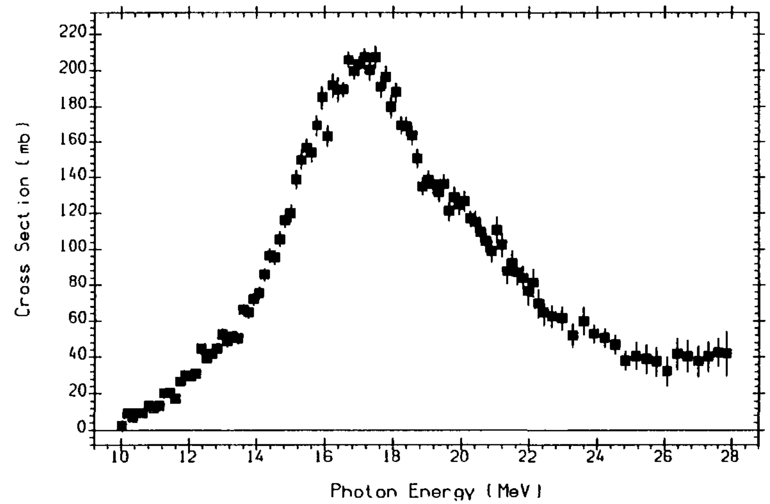
(40-ZR-91(G,N)40-ZR-90)+ (40-ZR-91(G,N+P)39-Y-89)
Positron annihilation
L0011009 J,PR,162,1098,6710 B.L.BERMAN+



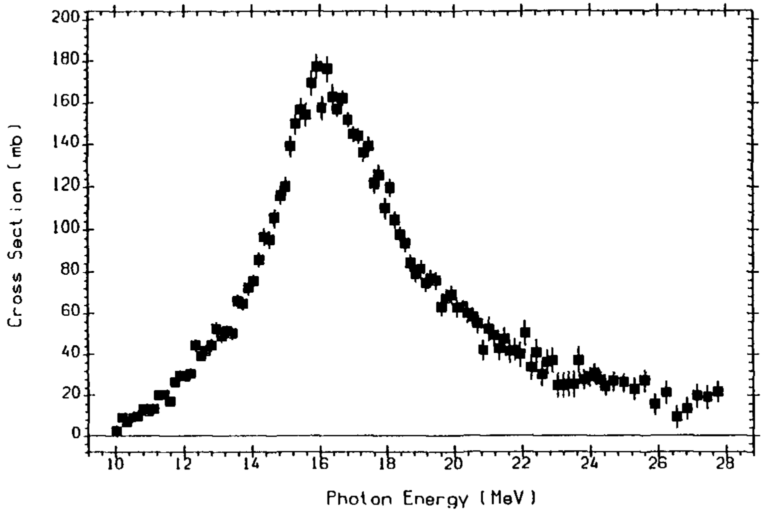
(40-ZR-91(G,2N)40-ZR-89)+ (40-ZR-91(G,2N+P)39-Y-88))
Positron annihilation
L0011010 J,PR,162,1098,6710 B.L.BERMAN+

$^{92}_{40}Zr$

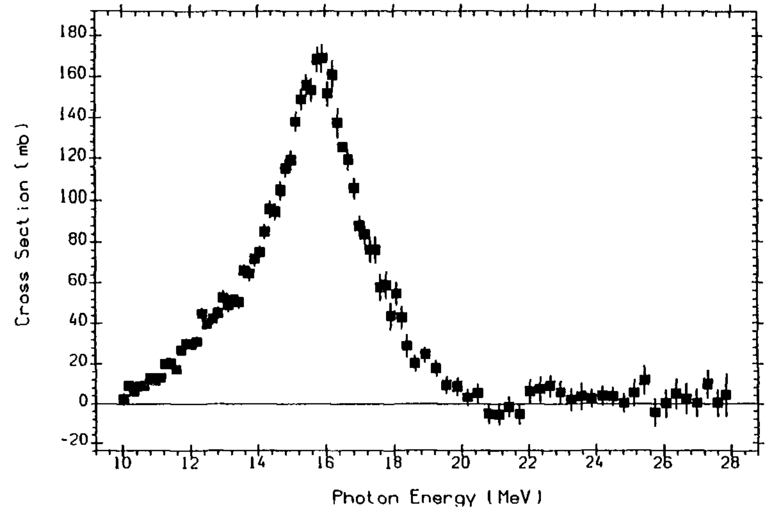
Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	γ,^{3}He	γ,α	γ,2n	γ,np	γ,2p
17.10	8.6	9.4	15.7	17.2	3.0	15.8	17.3	17.1



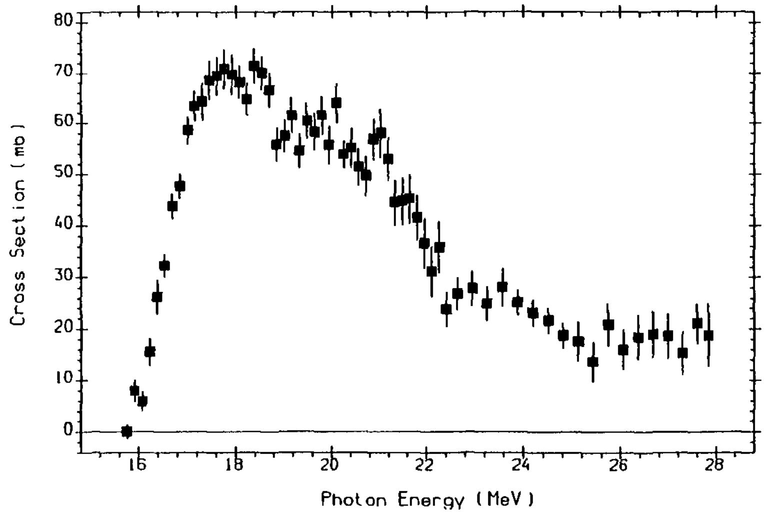
40-ZR-92(G,X)0-NN-1
The sum: (G,N)+(G,N+P)+2(G,2N)+2(G,2N+P).
Positron annihilation
L0011011 J,PR,162,1098,6710 B.L.BERMAN+



40-ZR-92(G,X)0-NN-1 UNW
The sum: (G,N)+(G,N+P)+(G,2N)+(G,2N+P).
Positron annihilation
L0011021 J,PR,162,1098,6710 B.L.BERMAN+



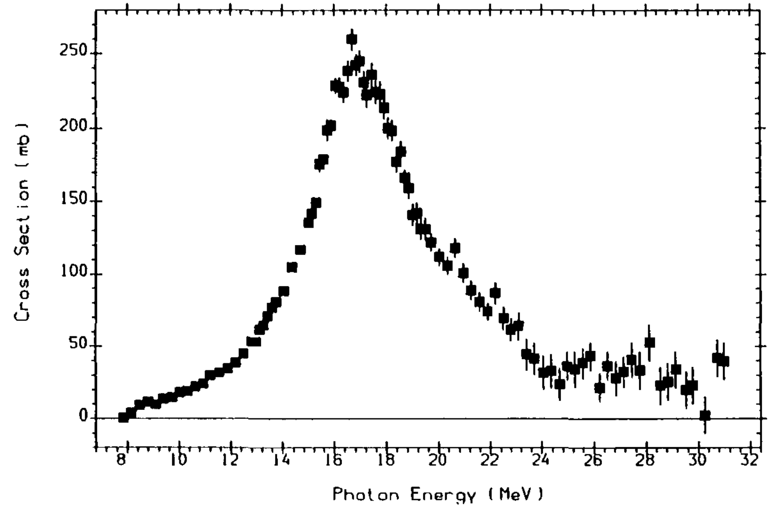
(40-ZR-92(G,N)40-ZR-91)+ (40-ZR-92(G,N+P)39-Y-90)
Positron annihilation
L0011012 J,PR,162,1098,6710 B.L.BERMAN+



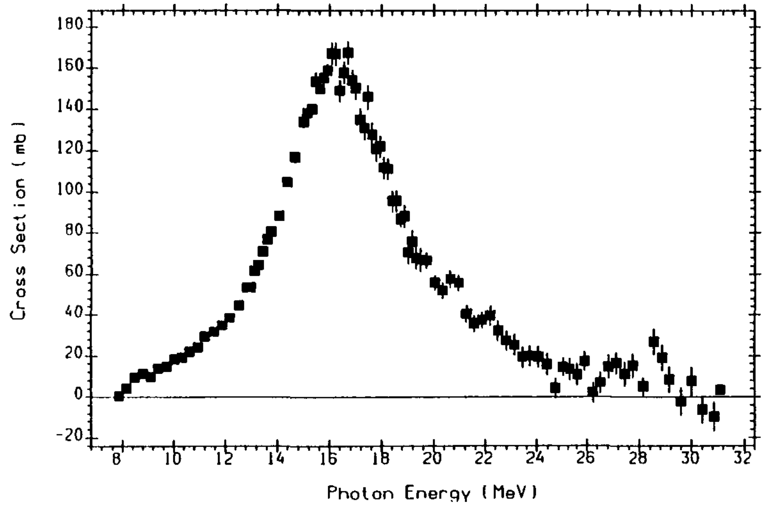
(40-ZR-92(G,2N)40-ZR-90)+ (40-ZR-92(G,2N+P)39-Y-89)
Positron annihilation
L0011013 J,PR,162,1098,6710 B.L.BERMAN+

$^{94}_{40}$Zr

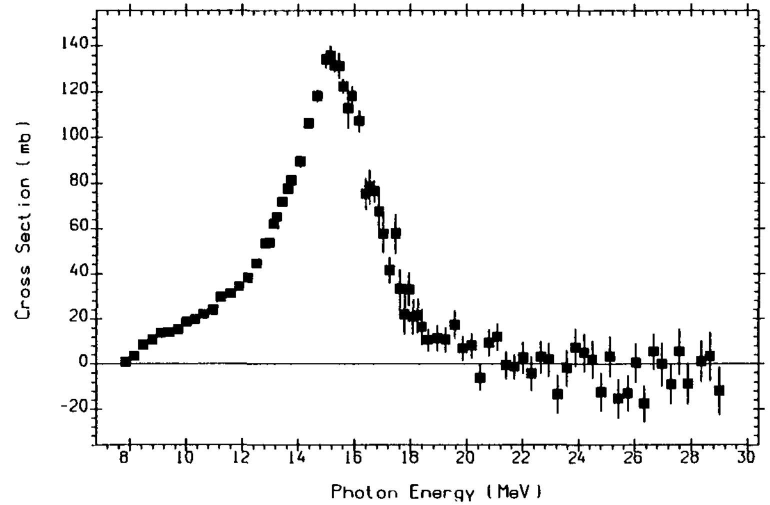
Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	γ,^{3}He	γ,α	γ,2n	γ,np	γ,2p
17.40	8.2	10.3	15.9	18.5	3.8	15.0	17.8	19.0



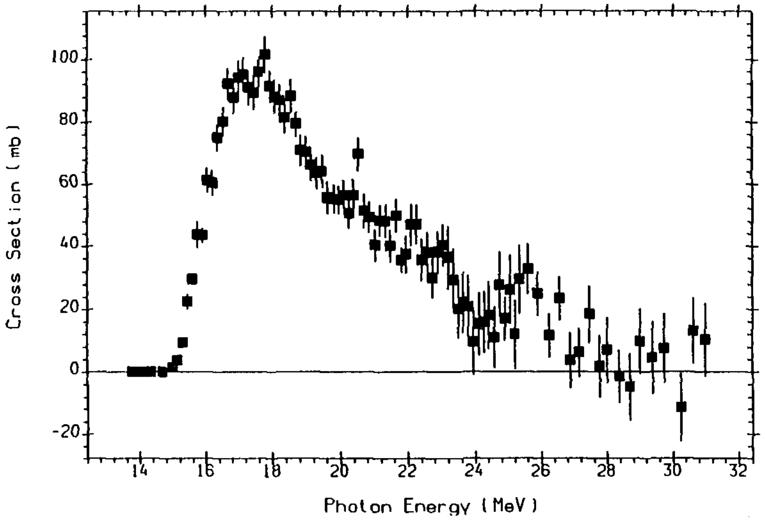
40-ZR-94(G,X)0-NN-1
The sum: (G,N)+(G,N+P)+2(G,2N)+2(G,2N+P)+3(G,3N).
Positron annihilation
L0011014 J,PR,162,1098,6710 B.L.BERMAN+



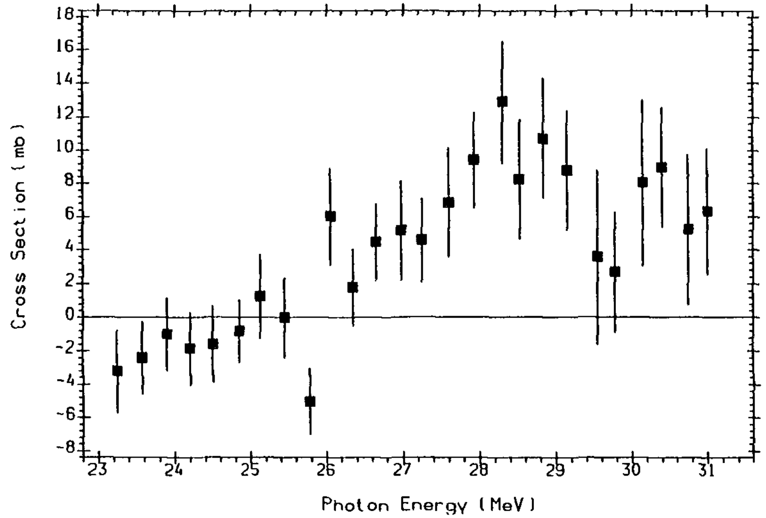
40-ZR-94(G,X)0-NN-1 UNW
The sum: (G,N)+(G,N+P)+(G,2N)+(G,2N+P)+(G,3N).
Positron annihilation
L0011022 J,PR,162,1098,6710 B.L.BERMAN+



(40-ZR-94(G,N)40-ZR-93)+ (40-ZR-94(G,N+P)39-Y-92)
Positron annihilation
L0011015 J,PR,162,1098,6710 B.L.BERMAN+



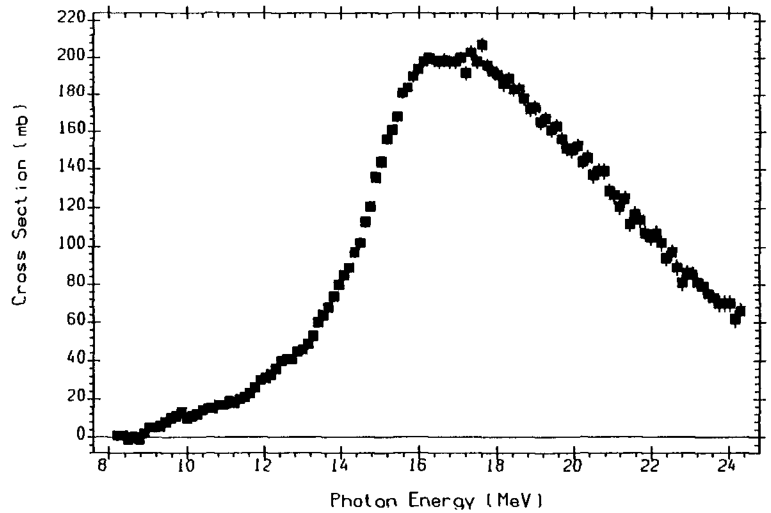
(40-ZR-94(G,2N)40-ZR-92)+ (40-ZR-94(G,2N+P)39-Y-91)
Positron annihilation
L0011016 J,PR,162,1098,6710 B.L.BERMAN+



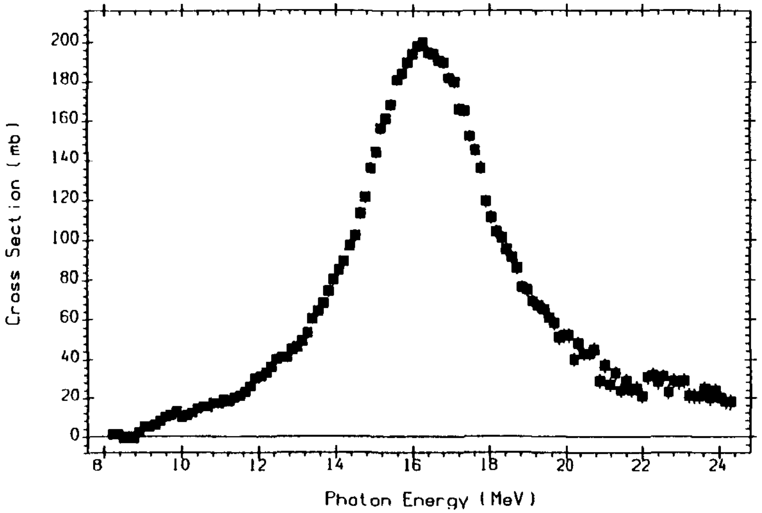
40-ZR-94(G,3N)40-ZR-91
Positron annihilation
L0011017 J,PR,162,1098,6710 B.L.BERMAN+

$^{93}_{41}Nb$

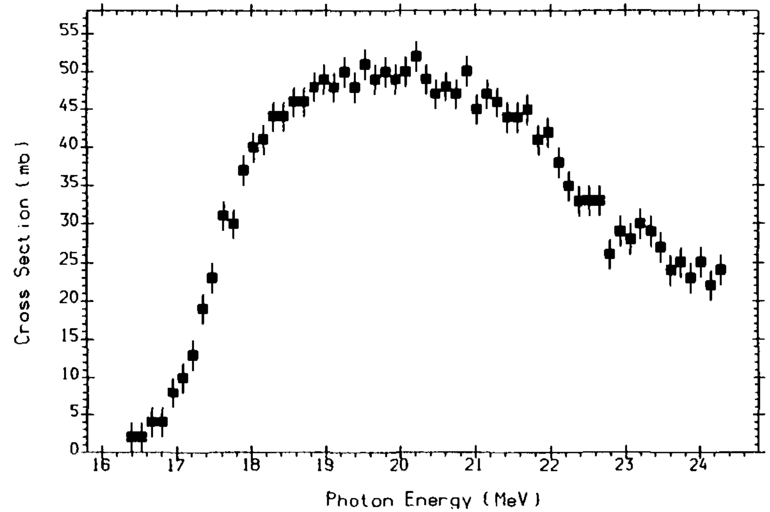
Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	γ,^{3}He	γ,α	γ,2n	γ,np	γ,2p
100.00	8.8	6.0	13.4	15.7	1.9	16.7	14.7	15.4



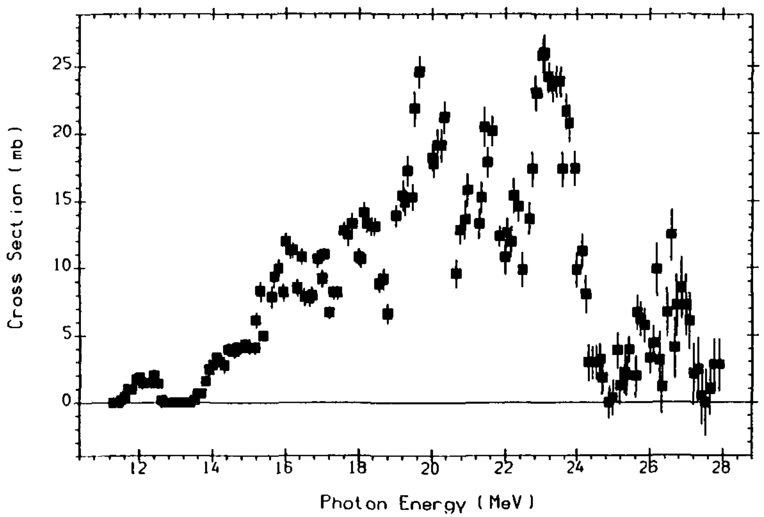
41-NB-93(G,X)0-NN-1
The sum: (G,N)+(G,N+P)+2(G,2N).
Positron annihilation
L0027014 J,NP/A,175,609,7111 A.LEPRETRE+



(41-NB-93(G,N)41-NB-92)+ (41-NB-93(G,N+P)40-ZR-91)
Positron annihilation
L0027015 J,NP/A,175,609,7111 A.LEPRETRE+



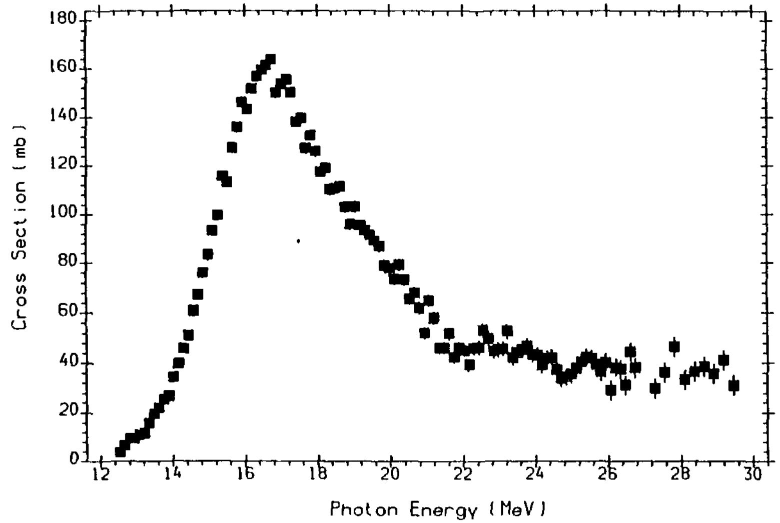
(41-NB-93(G,2N)41-NB-91)+(41-NB-93(G,2N+P)40-ZR-90)
Positron annihilation
L0027016 J,NP/A,175,609,7111 A.LEPRETRE+



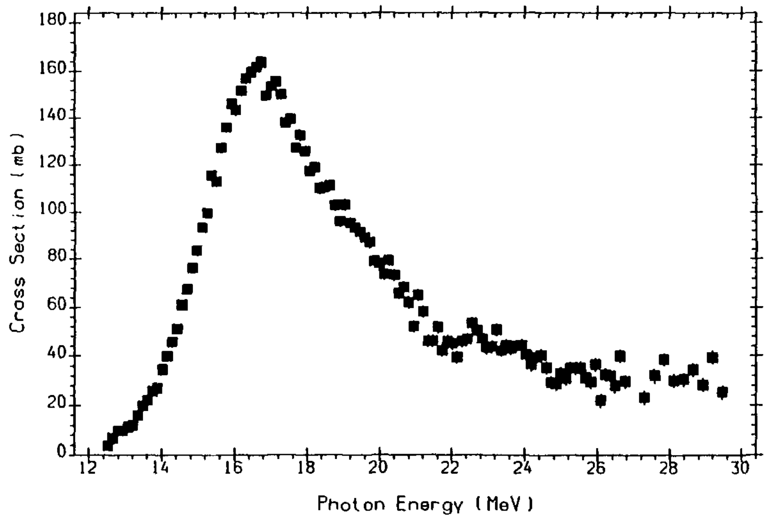
41-NB-93(G,P)40-ZR-92
BRST
M0126002 J,FCY,2,243,75 V.G.SHEVCHENKO

$^{92}_{42}$Mo

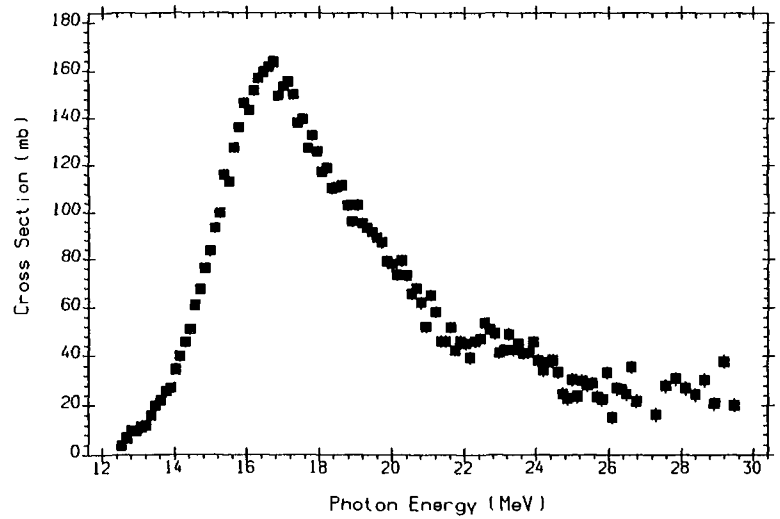
Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	γ,^{3}He	γ,α	γ,2n	γ,np	γ,2p
14.84	12.7	7.5	20.8	16.9	5.6	22.8	19.5	12.6



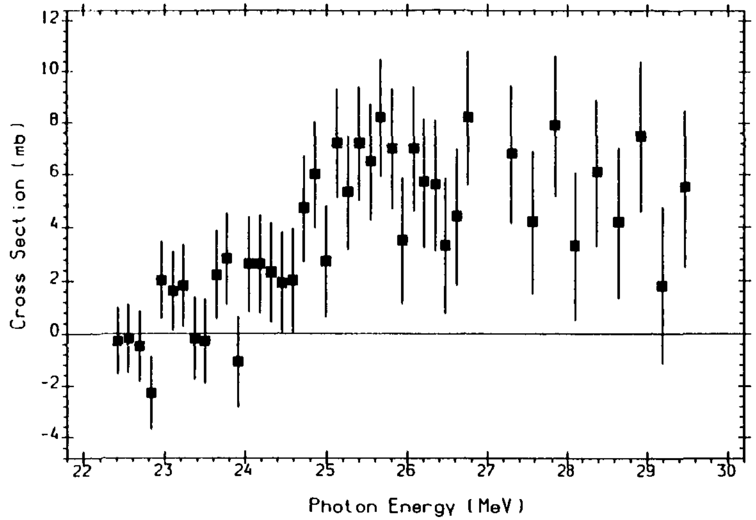
42-MO-92(G,X)0-NN-1
The sum: (G,N)+(G,N+P)+(G,2N)+2(G,2N+P).
Positron annihilation
L0032002 J,NP/A,227,427,74 H.BEIL+



42-MO-92(G,X)0-NN-1 UNW
The sum: (G,N)+(G,N+P)+(G,2N)+(G,2N+P).
Positron annihilation
L0032020 J,NP/A,227,427,74 H.BEIL+



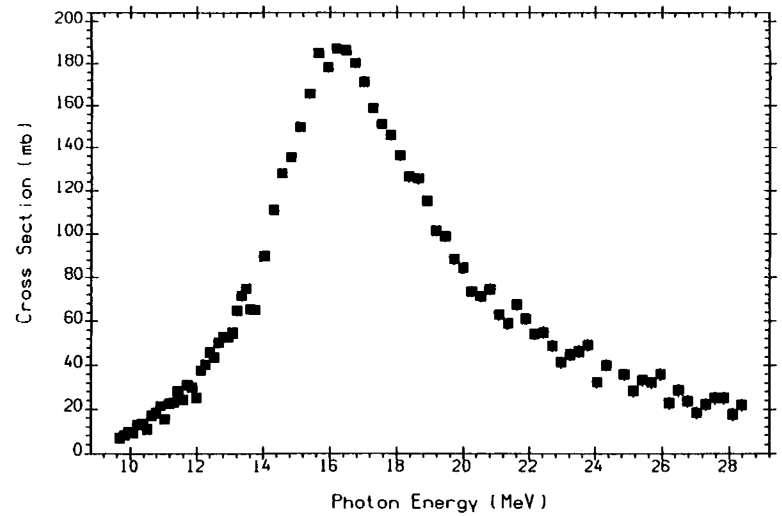
(42-MO-92(G,N)42-MO-91)+(42-MO-92(G,N+P)41-NB-90)
Positron annihilation
L0032003 J,NP/A,227,427,74 H.BEIL+



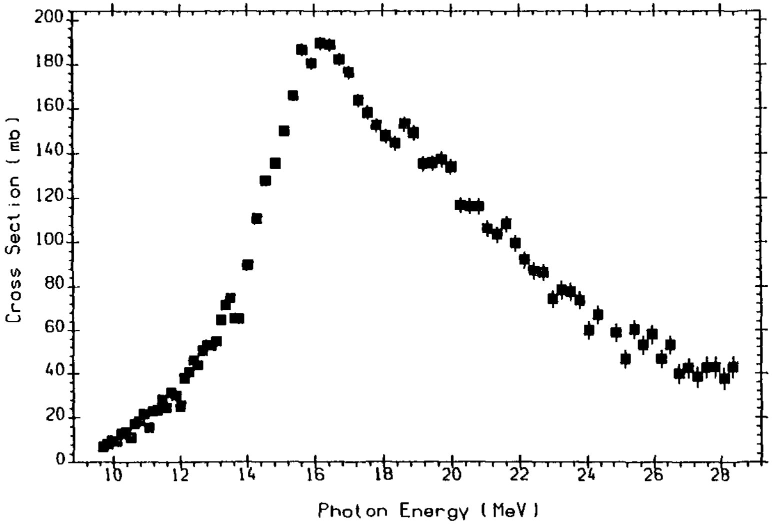
(42-MO-92(G,2N)42-MO-90)+(42-MO-92(G,2N+P)41-NB-89)
Positron annihilation
L0032004 J,NP/A,227,427,74 H.BEIL+

$^{94}_{42}$Mo

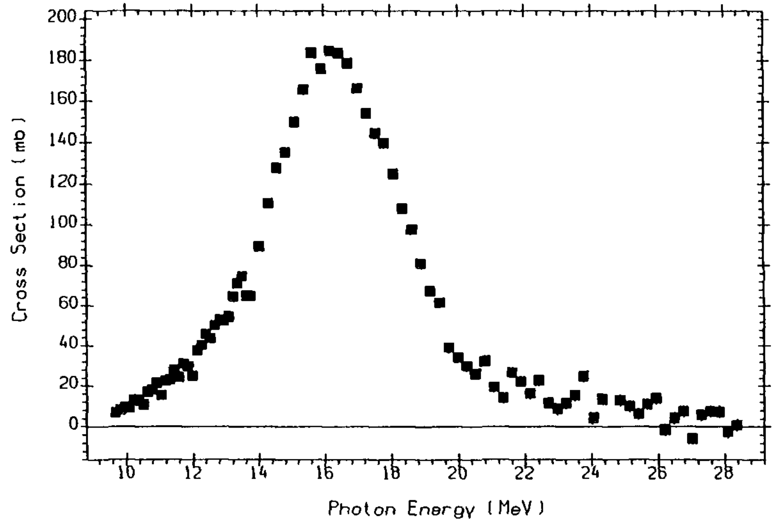
Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	γ,^{3}He	γ,α	γ,2n	γ,np	γ,2p
9.25	9.7	8.5	16.7	15.4	2.1	17.7	17.3	14.5



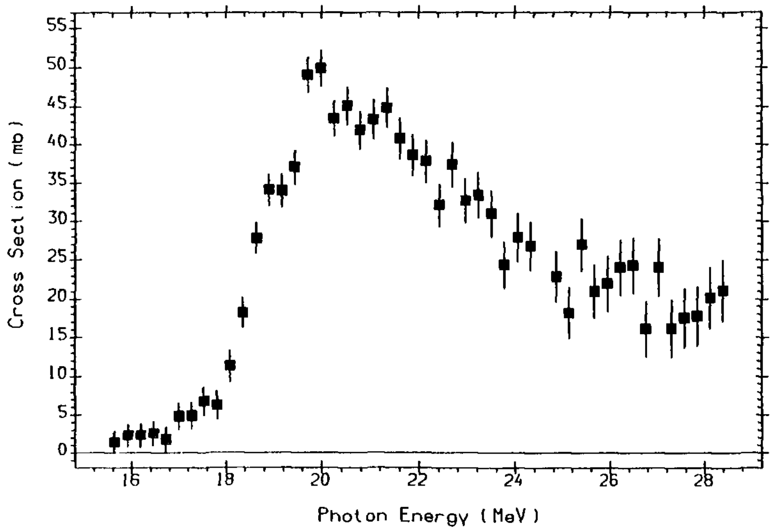
42-MO-94(G,X)0-NN-1 UNW
The sum: (G,N)+(G,N+P)+(G,2N)+(G,2N+P).
Positron annihilation
L0032021 J,NP/A,227,427,74 H.BEIL+



42-MO-94(G,X)0-NN-1 UNW
The sum: (G,N)+(G,N+P)+(G,2N)+(G,2N+P).
Positron annihilation
L0032005 J,NP/A,227,427,74 H.BEIL+



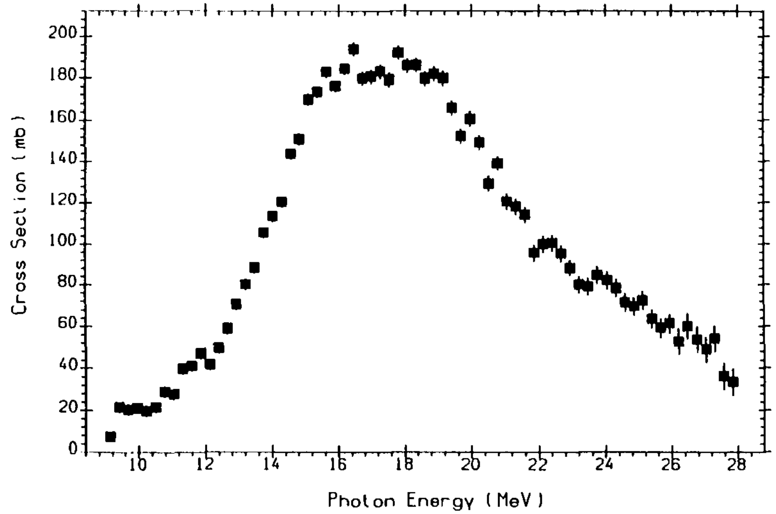
(42-MO-94(G,N)42-MO-93)+(42-MO-94(G,N+P)41-NB-92)
Positron annihilation
L0032006 J,NP/A,227,427,74 H.BEIL+



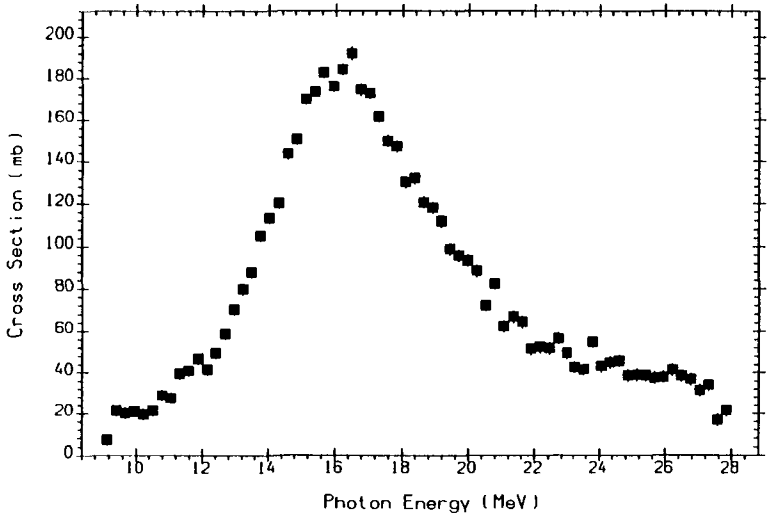
(42-MO-94(G,2N)42-MO-92)+(42-MO-94(G,2N+P)41-NB-91)
Positron annihilation
L0032007 J,NP/A,227,427,74 H.BEIL+

$^{96}_{42}$Mo

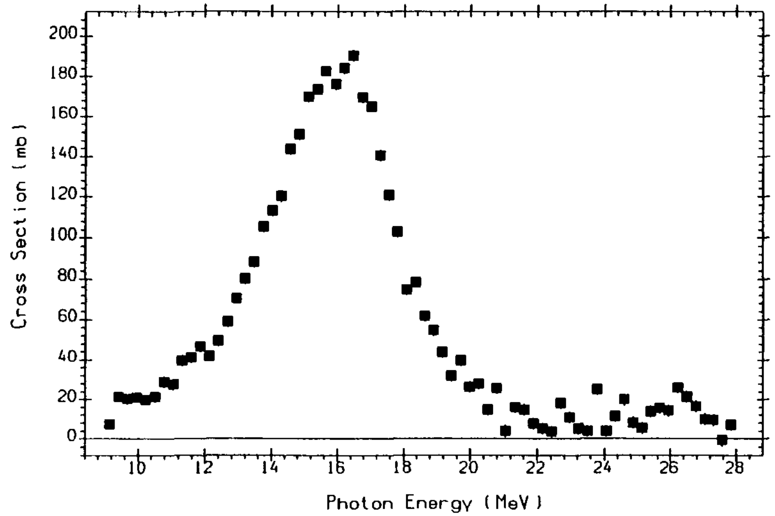
Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	γ,^{3}He	γ,α	γ,2n	γ,np	γ,2p
16.88	9.2	9.3	16.5	16.6	2.8	16.5	17.8	16.1



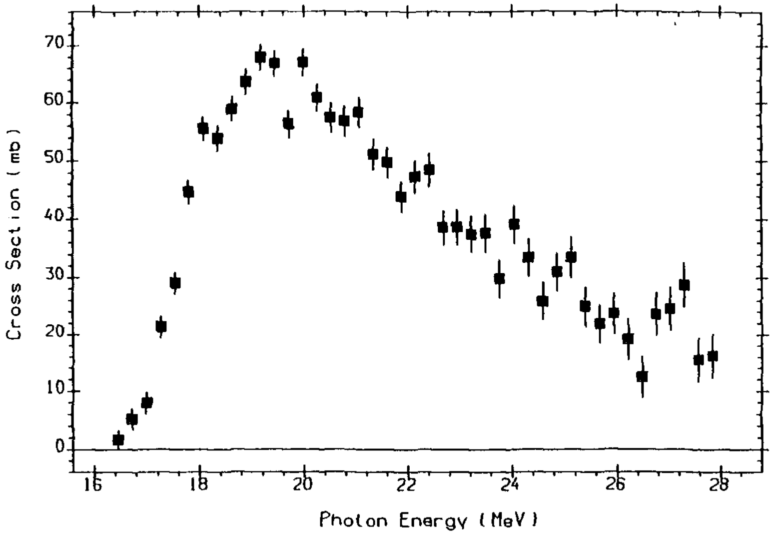
42-MO-96(G,X)0-NN-1
The sum: (G,N)+(G,N+P)+2(G,2N)+2(G,2N+P)+3(G,3N).
Positron annihilation
L0032008 J,NP/A,227,427,74 H.BEIL+



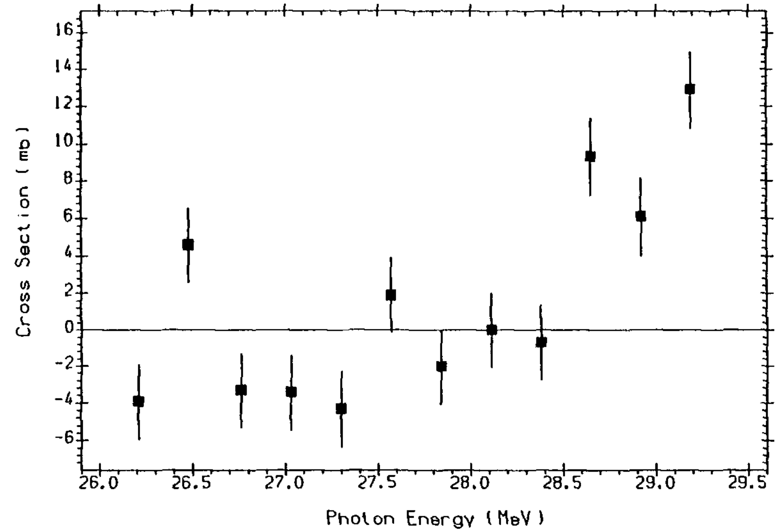
42-MO-96(G,X)0-NN-1 UNW
The sum: (G,N)+(G,N+P)+(G,2N)+(G,2N+P)+G,3N).
Positron annihilation
L0032022 J,NP/A,227,427,74 H.BEIL+



(42-MO-96(G,N)42-MO-95)+(42-MO-96(G,N+P)41-NB-94)
Positron annihilation
L0032009 J,NP/A,227,427,74 H.BEIL+



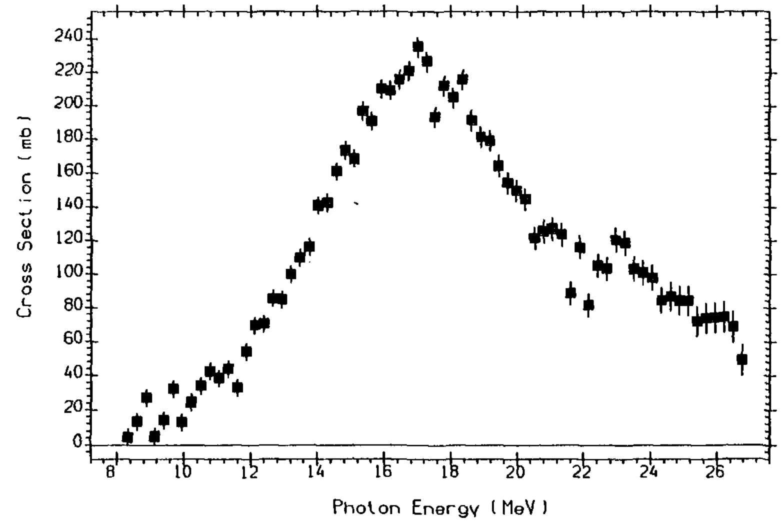
(42-MO-96(G,2N)42-MO-94)+(42-MO-96(G,2N+P)41-NB-93)
Positron annihilation
L0032010 J,NP/A,227,427,74 H.BEIL+



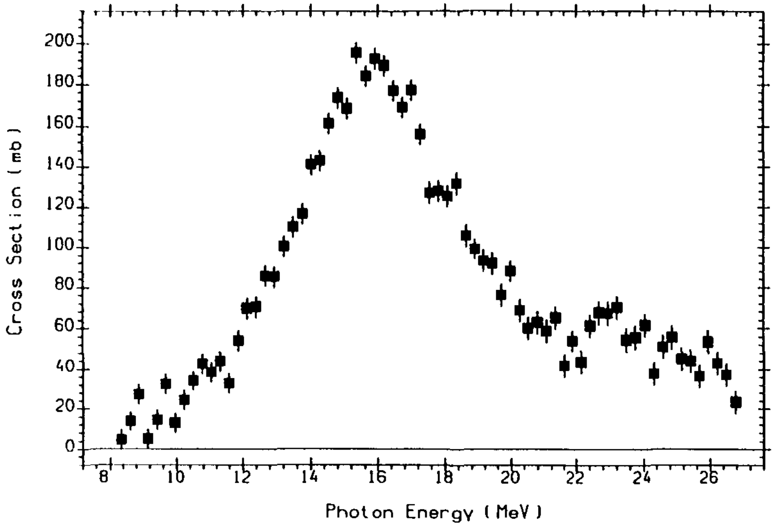
42-MO-96(G,3N)42-MO-93
Positron annihilation
L0032011 J,NP/A,227,427,74 H.BEIL+

$^{98}_{42}$Mo

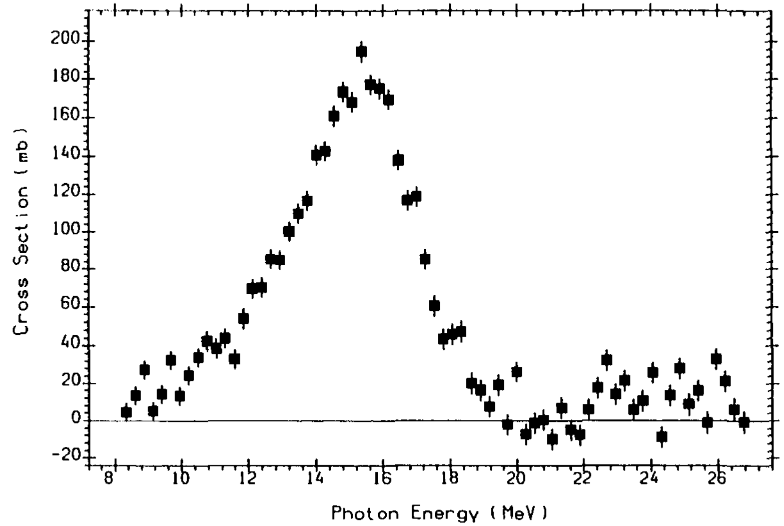
Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	γ,^{3}He	γ,α	γ,2n	γ,np	γ,2p
24.13	8.6	9.8	16.3	17.4	3.3	15.5	17.9	17.2



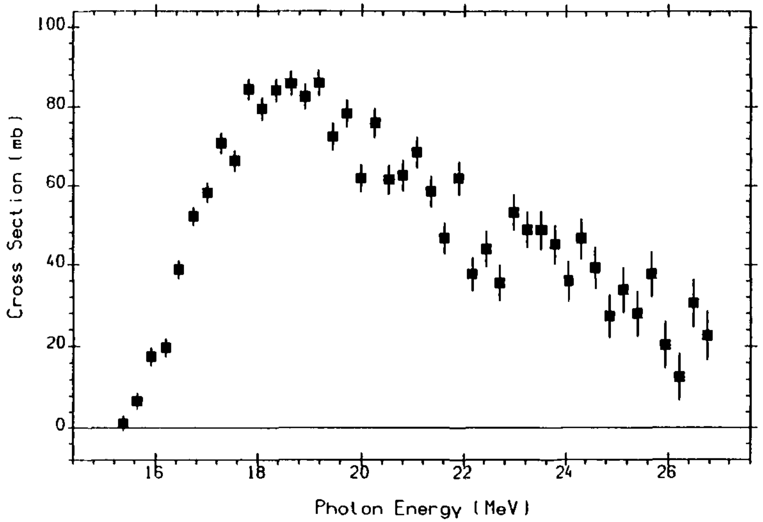
42-MO-98(G,X)0-NN-1
The sum: (G,N)+(G,N+P)+2(G,2N)+2(G,2N+P)+3(G,3N).
Positron annihilation
L0032012 J,NP/A,227,427,74 H.BEIL+



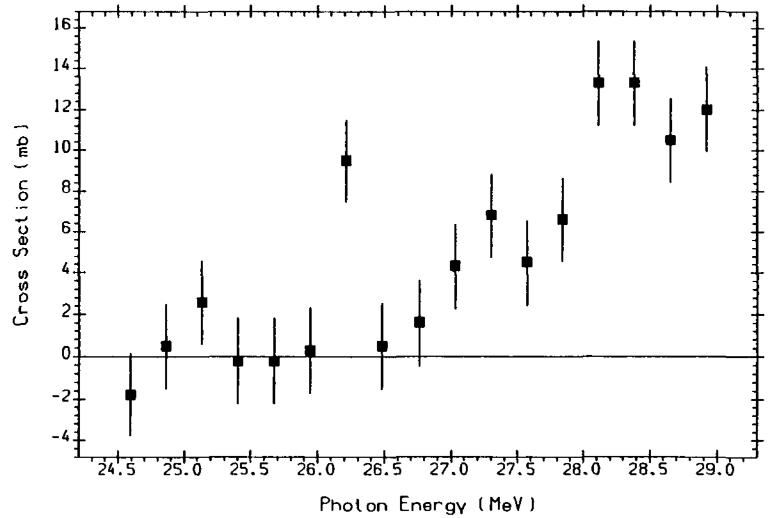
42-MO-98(G,X)0-NN-1 UNW
The sum: (G,N)+(G,N+P)+(G,2N)+(G,2N+P)+(G,3N).
Positron annihilation
L0032023 J,NP/A,227,427,74 H.BEIL+



(42-MO-98(G,N)42-MO-97)+(42-MO-98(G,N+P)41-NB-96)
Positron annihilation
L0032013 J,NP/A,227,427,74 H.BEIL+



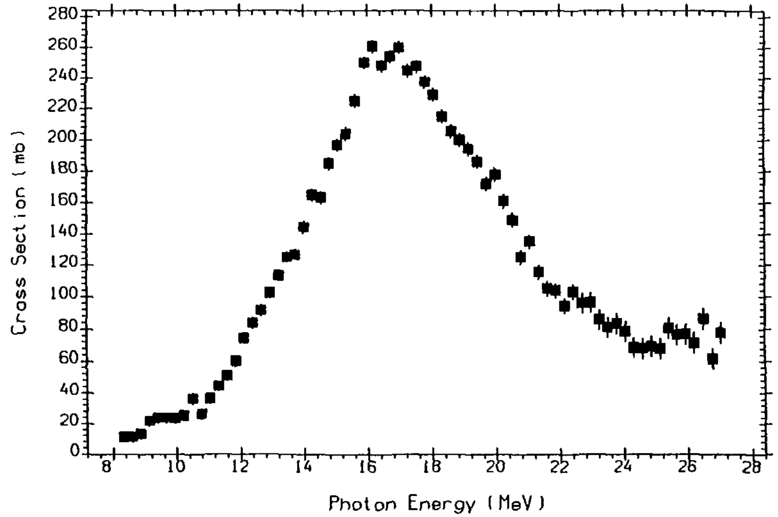
(42-MO-98(G,2N)42-MO-96)+(42-MO-98(G,2N+P)41-NB-95)
Positron annihilation
L0032014 J,NP/A,227,427,74 H.BEIL+



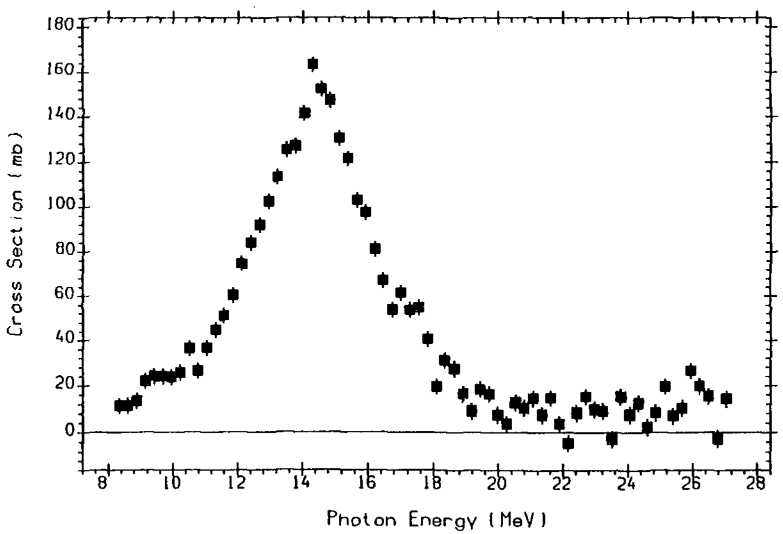
42-MO-98(G,3N)42-MO-95
Positron annihilation
L0032015 J,NP/A,227,427,74 H.BEIL+

$^{100}_{42}$Mo

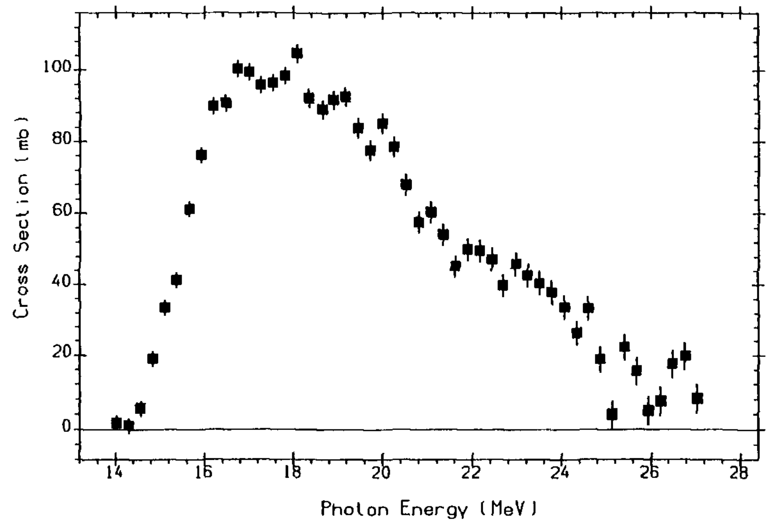
Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	γ,^{3}He	γ,α	γ,2n	γ,np	γ,2p
9.63	8.3	10.1	15.5	18.2	3.2	14.2	18.0	19.5



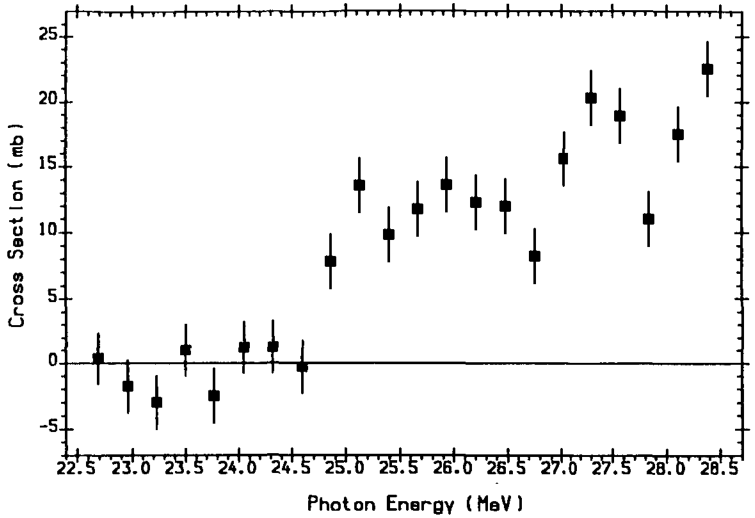
42-MO-100(G,X)0-NN-1
The sum: (G,N)+(G,N+P)+2(G,2N)+2(G,2N+P)+3(G,3N).
Positron annihilation
L0032016 J,NP/A,227,427,74 H.BEIL+



(42-MO-100(G,N)42-MO-99)+(42-MO-100(G,N+P)41-NB-98)
Positron annihilation
L0032017 J,NP/A,227,427,74 H.BEIL+



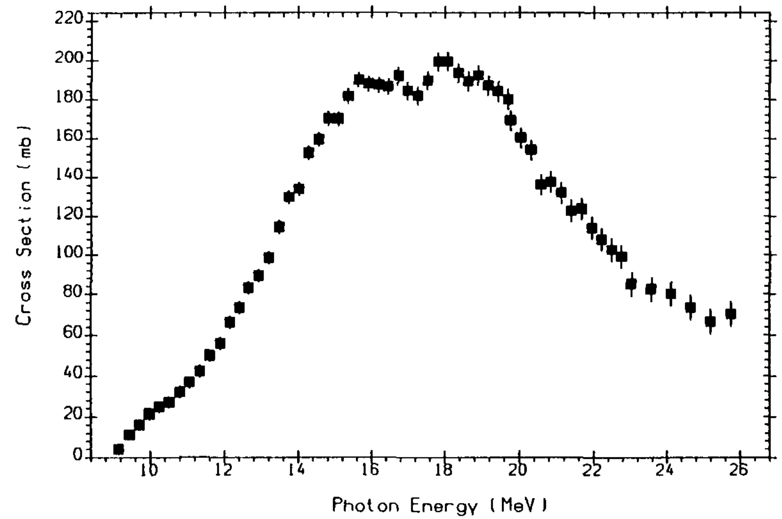
(42-MO-100(G,2N)42-MO-98)+(42-MO-100(G,2N+P)41-NB-97)
Positron annihilation
L0032018 J,NP/A,227,427,74 H.BEIL+



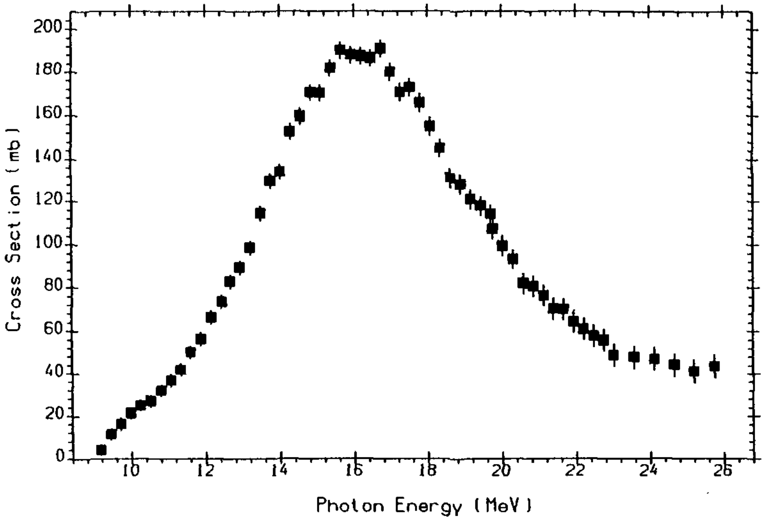
42-MO-100(G,3N)42-MO-97
Positron annihilation
L0032019 J,NP/A,227,427,74 H.BEIL+

$^{103}_{45}$Rh

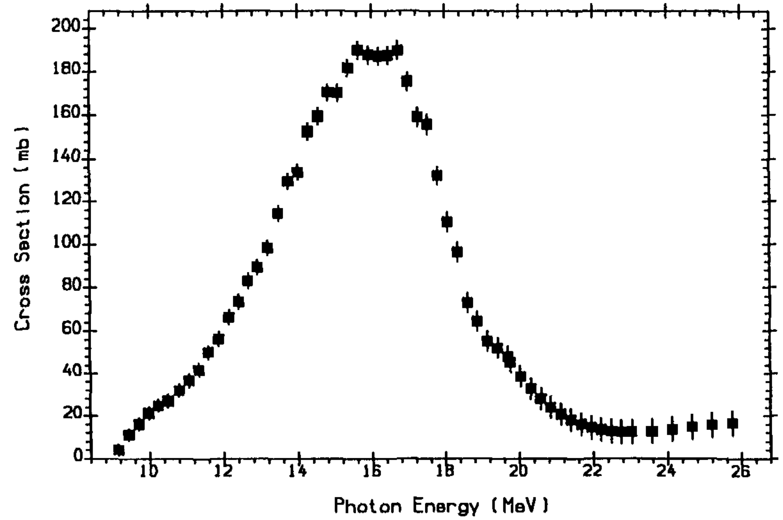
Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	γ,^{3}He	γ,α	γ,2n	γ,np	γ,2p
100.00	9.3	6.2	14.5	13.3	3.1	16.8	12.7	16.3



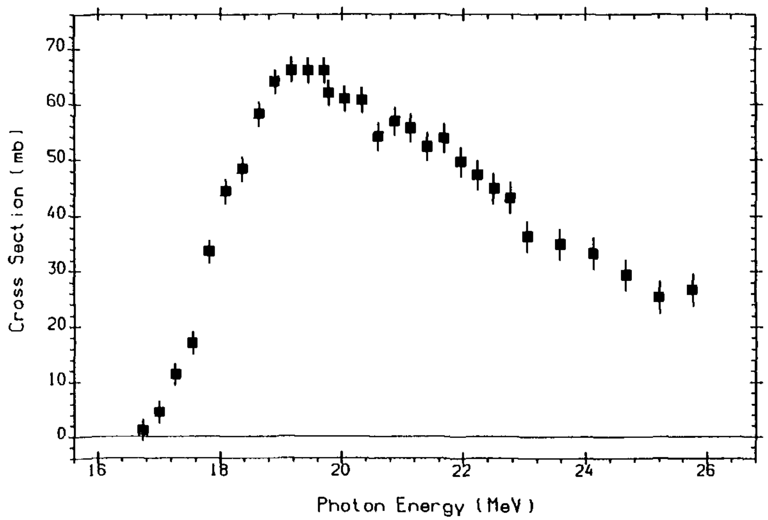
45-RH-103(G,X)0-NN-1
The sum: (G,N)+(G,N+P)+2(G,2N)+2(G,2N+P).
Positron annihilation
L0035002 J,NP/A,219,39,7401 A.LEPRETRE+



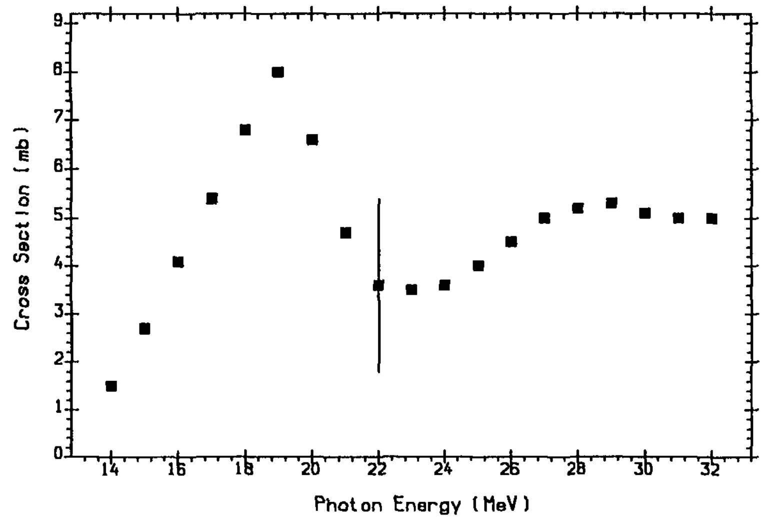
45-RH-103(G,X)0-NN-1 UNW
The sum: (G,N)+(G,N+P)+(G,2N)+(G,2N+P).
Positron annihilation
L0035041 J,NP/A,219,39,7401 A.LEPRETRE+



(45-RH-103(G,N)45-RH-102)+(45-RH-103(G,N+P)44-RU-101)
Positron annihilation
L0035003 J,NP/A,219,39,7401 A.LEPRETRE+



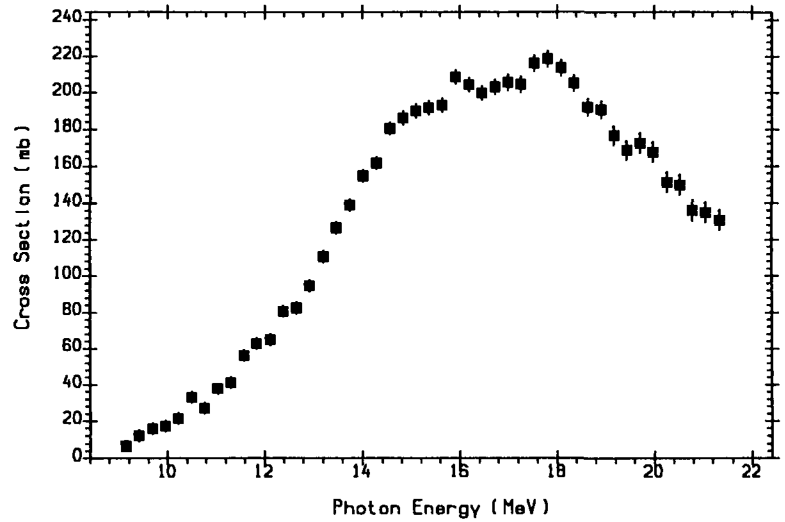
(45-RH-103(G,2N)45-RH-101)+(45-RH-103(G,2N+P)44-RU-100)
Positron annihilation
L0035004 J,NP/A,219,39,7401 A.LEPRETRE+



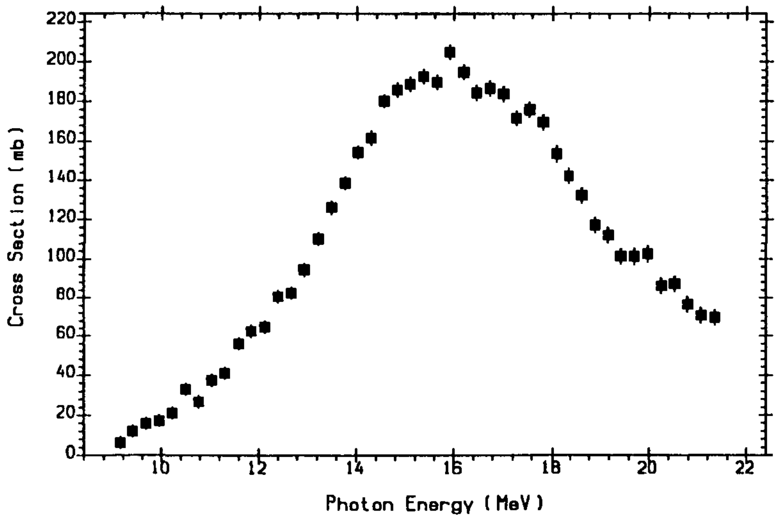
45-RH-103(G,P)44-RU-102
BRST
M0166003 J,PL,10,310,64 B.S.ISHKHANOV+

$^{nat.}_{46}$Pd

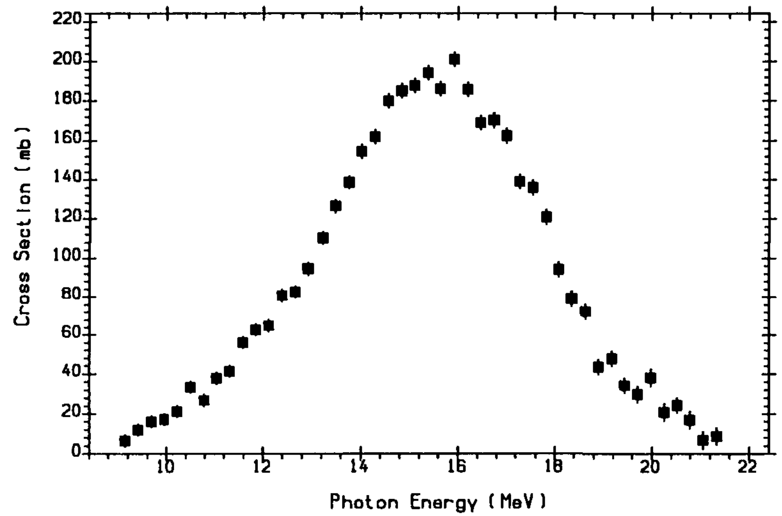
Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	γ,^{3}He	γ,α	γ,2n	γ,np	γ,2p
*	7.1	7.8	16.4	14.2	2.1	15.0	15.8	13.3



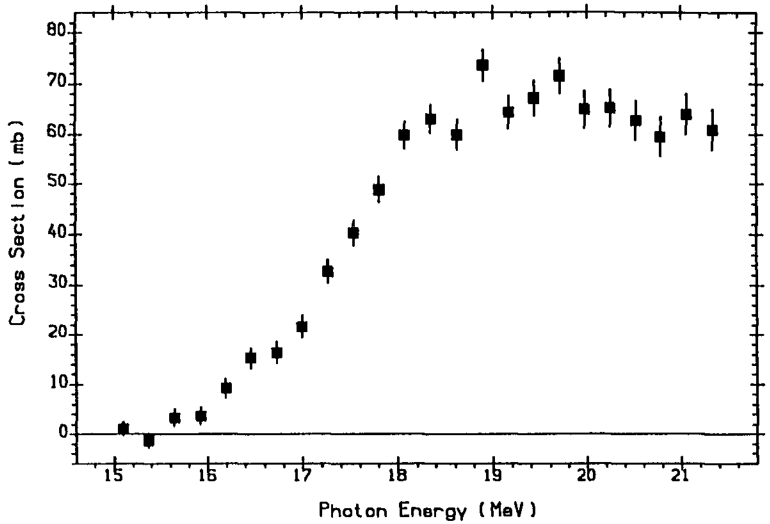
46-PD-0(G,X)0-NN-1
The sum: (G,N)+(G,N+P)+2(G,2N).
Positron annihilation
L0035005 J,NP/A,219,39,7401 A.LEPRETRE+



46-PD-0(G,X)0-NN-1 UNW
The sum: (G,N)+(G,N+P)+(G,2N).
Positron annihilation
L0035042 J,NP/A,219,39,7401 A.LEPRETRE+



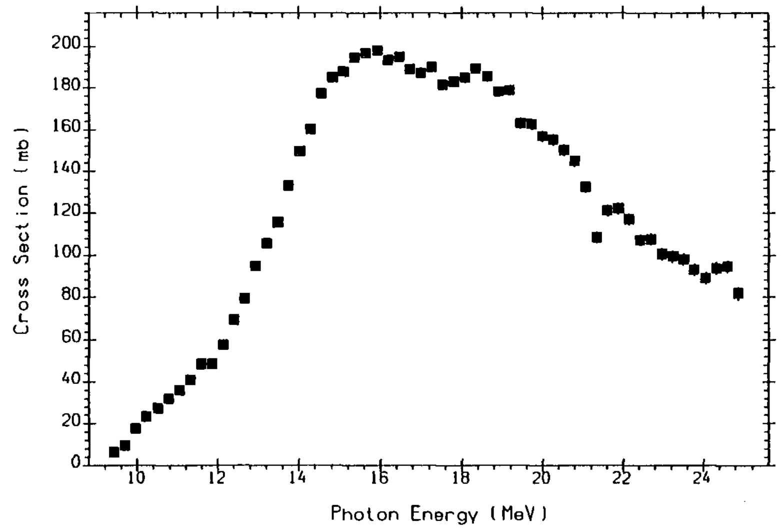
(46-PD-0(G,N))+(46-PD-0(G,N+P))
Positron annihilation
L0035006 J,NP/A,219,39,7401 A.LEPRETRE+



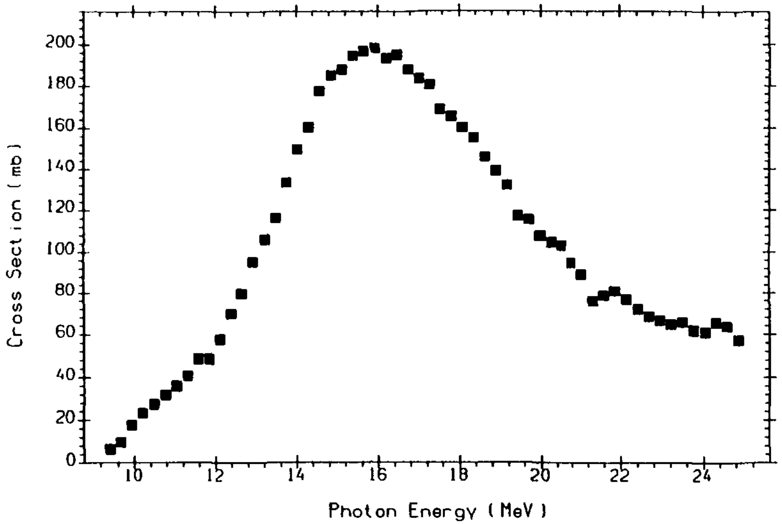
46-PD-0(G,2N)
Positron annihilation
L0035007 J,NP/A,219,39,7401 A.LEPRETRE+

$^{nat.}_{47}Ag$

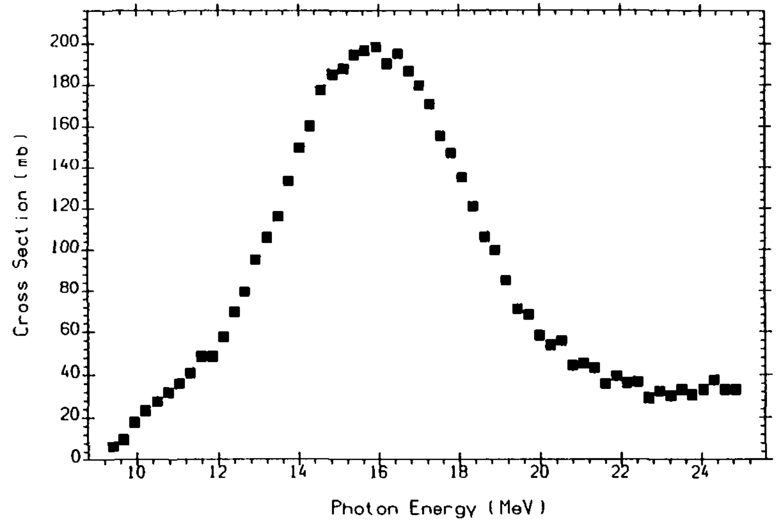
Abundance	Separation Energies (MeV)							
(%)	γ,n	γ,p	γ,t	γ,^{3}He	γ,α	γ,2n	γ,np	γ,2p
*	9.2	5.8	13.8	16.4	2.8	16.5	15.4	15.1



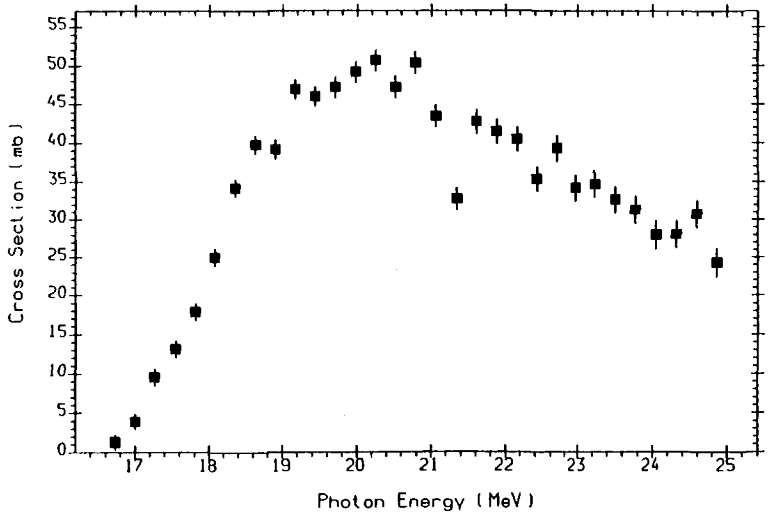
47-AG-0(G,X)0-NN-1
The sum: (G,N)+(G,N+P)+2(G,2N)+2(G,2N+P).
Positron annihilation
L0035008 J,NP/A,219,39,7401 A.LEPRETRE+



47-AG-0(G,X)0-NN-1 UNW
The sum: (G,N)+(G,N+P)+(G,2N)+(G,2N+P).
Positron annihilation
L0035043 J,NP/A,219,39,7401 A.LEPRETRE+



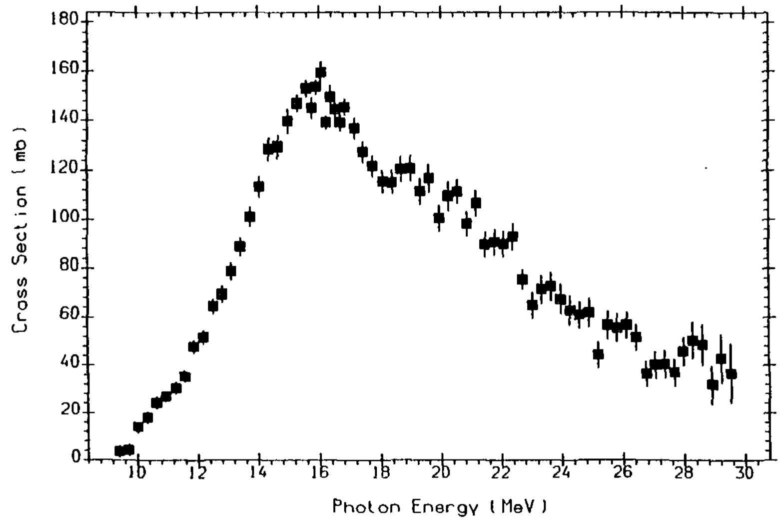
(47-AG-0(G,N))+(47-AG-0(G,N+P))
Positron annihilation
L0035009 J,NP/A,219,39,7401 A.LEPRETRE+



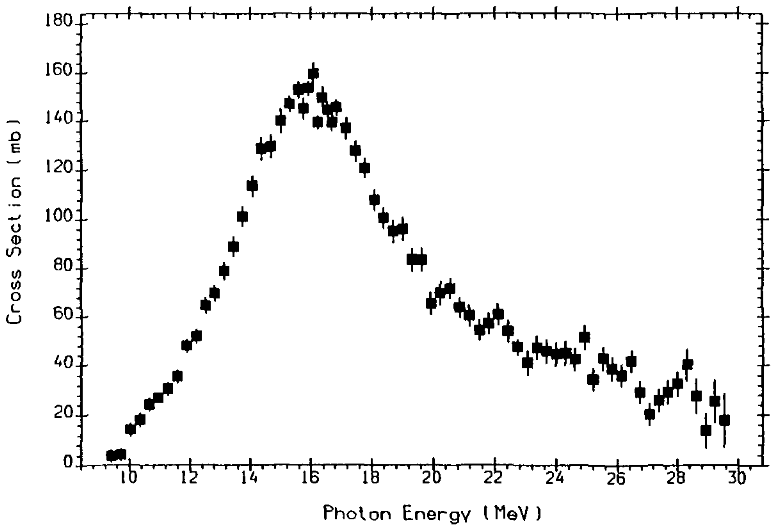
(47-AG-0(G,2N))+(47-AG-0(G,2N+P))
Positron annihilation
L0035010 J,NP/A,219,39,7401 A.LEPRETRE+

$^{107}_{47}$Ag

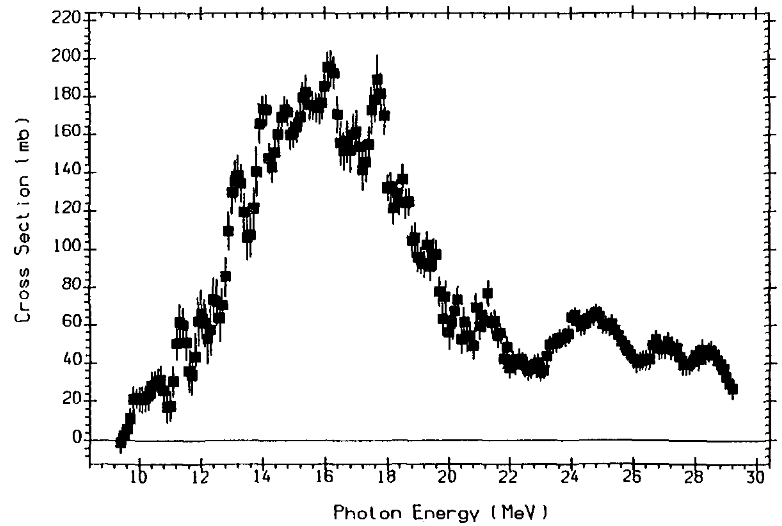
Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	γ,^{3}He	γ,α	γ,2n	γ,np	γ,2p
51.83	9.5	5.8	13.9	16.4	2.8	17.5	15.4	15.1



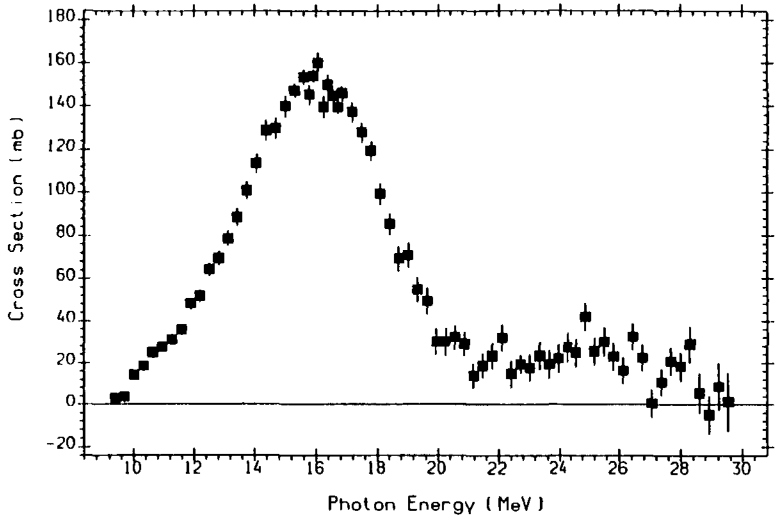
47-AG-107(G,X)0-NN-1
The sum: (G,N)+(G,N+P)+2(G,2N)+2(G,2N+P)+3(G,3N).
Positron annihilation
L0014005 J,PR,177,1745,6901 B.L.BERMAN+



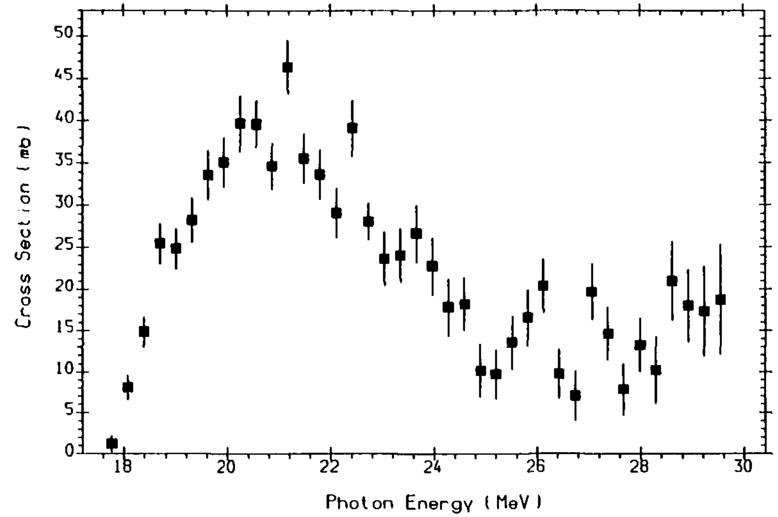
47-AG-107(G,X)0-NN-1 UNW
The sum: (G,N)+(G,N+P)+(G,2N)+(G,2N+P)+(G,3N).
Positron annihilation
L0014013 J,PR,177,1745,6901 B.L.BERMAN+



47-AG-107(G,XN) UNW
THE SUM OF THE (G,N), (G,NP), AND (G,2N) REACTION CROSS SECTIONS.
BRST
M0524002 J,IZV,33,(12),2074,69 B.S.ISHKHANOV+



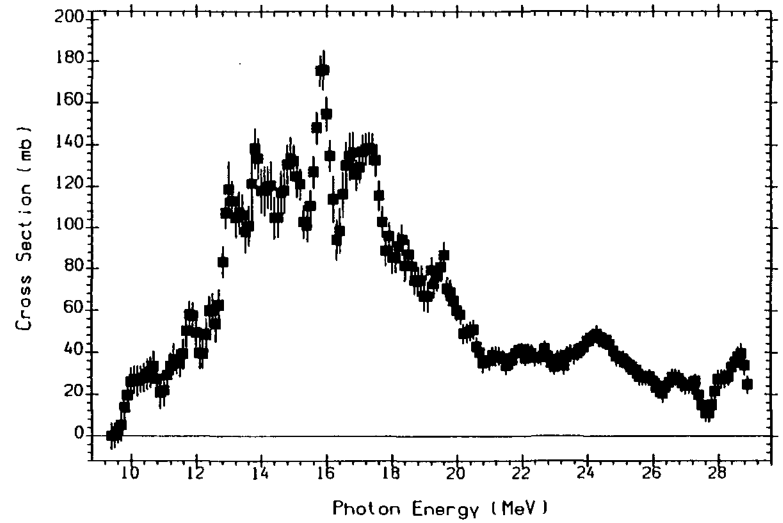
(47-AG-107(G,N)47-AG-106)+(47-AG-107(G,N+P)46-PD-105)
Positron annihilation
L0014006 J,PR,177,1745,6901 B.L.BERMAN+



(47-AG-107(G,2N)47-AG-105)+(47-AG-107(G,2N+P)46-PD-104)
Positron annihilation
L0014007 J,PR,177,1745,6901 B.L.BERMAN+

$^{109}_{47}Ag$

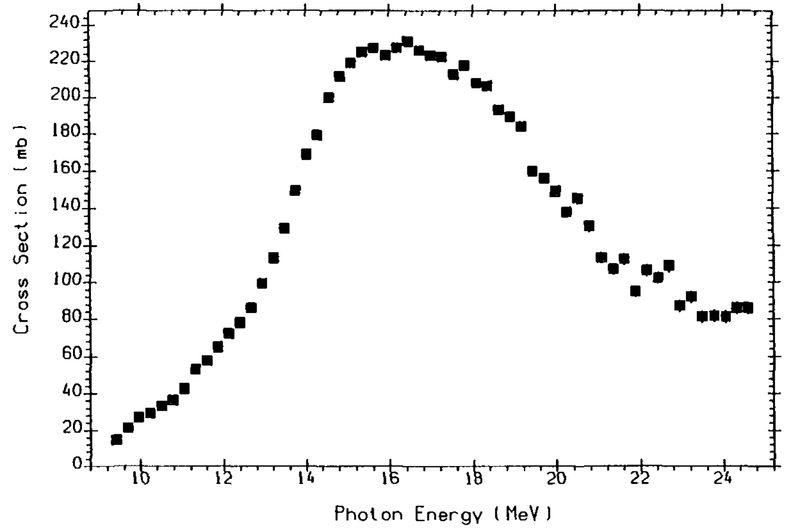
Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	$\gamma,^3$He	γ,α	γ,2n	γ,np	γ,2p
48.17	9.2	6.5	13.8	17.3	3.3	16.5	15.7	16.4



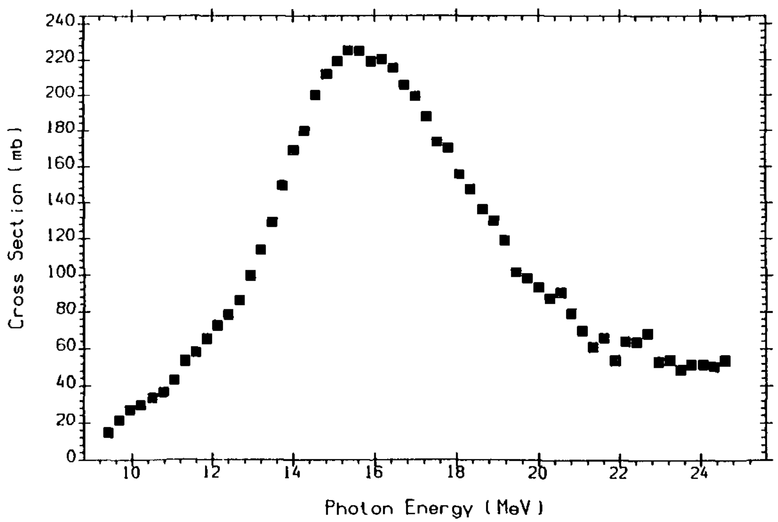
47-AG-109(G,XN) UNW
THE SUM OF THE (G,N), (G,NP), AND (G,2N) REACTION CROSS SECTIONS.
BRST
M0524003 J,IZV,33,(12),2074,69 B.S.ISHKHANOV+

$^{nat.}_{48}$Cd

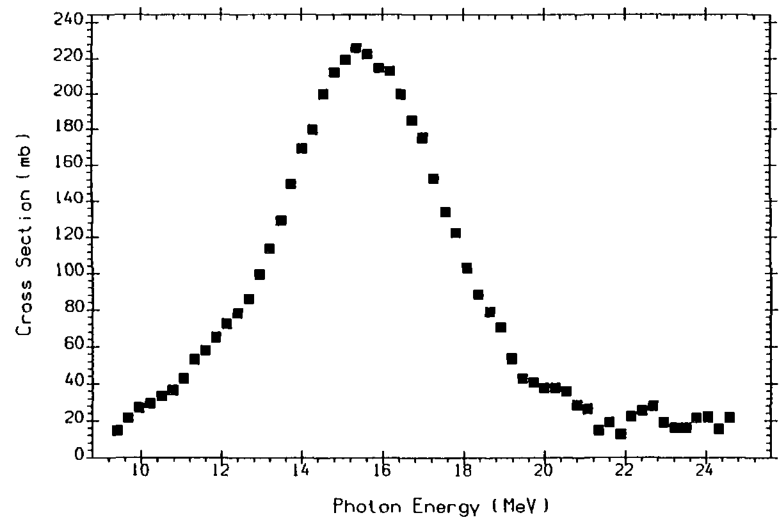
Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	γ,^{3}He	γ,α	γ,2n	γ,np	γ,2p
*	6.5	7.4	16.5	14.6	1.6	14.8	15.9	12.3



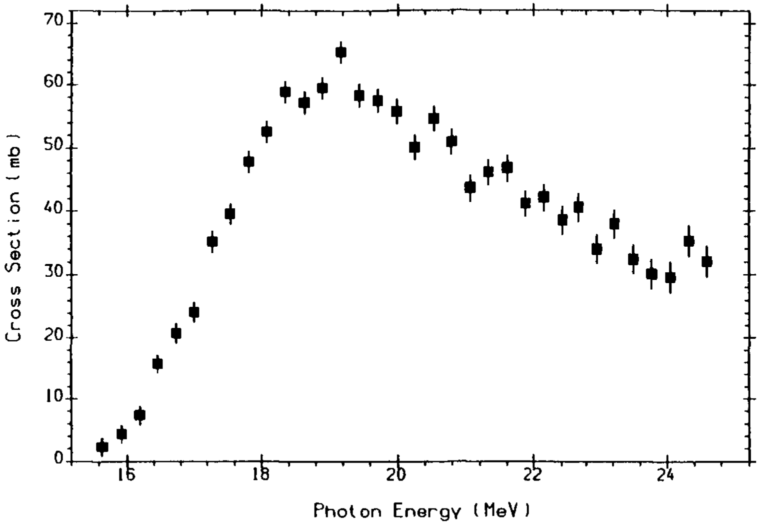
48-CD-0(G,X)0-NN-1
The sum: (G,N)+(G,N+P)+2(G,2N).
Positron annihilation
L0035011 J,NP/A,219,39,7401 A.LEPRETRE+



48-CD-0(G,X)0-NN-1 UNW
The sum: (G,N)+(G,N+P)+(G,2N).
Positron annihilation
L0035044 J,NP/A,219,39,7401 A.LEPRETRE+



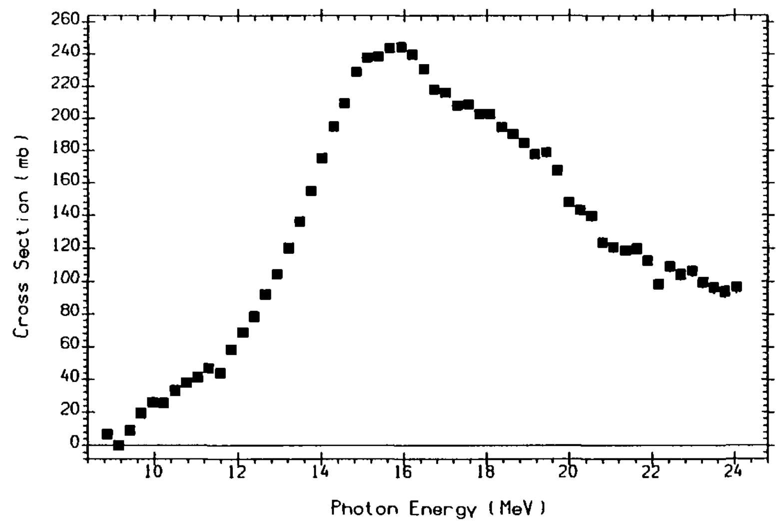
(48-CD-0(G,N))+(48-CD-0(G,N+P))
Positron annihilation
L0035012 J,NP/A,219,39,7401 A.LEPRETRE+



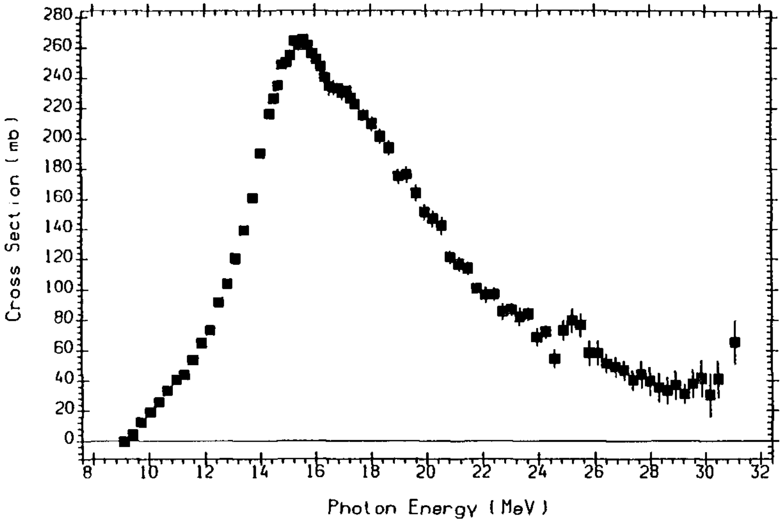
48-CD-0(G,2N)
Positron annihilation
L0035013 J,NP/A,219,39,7401 A.LEPRETRE+

$^{115}_{49}In$

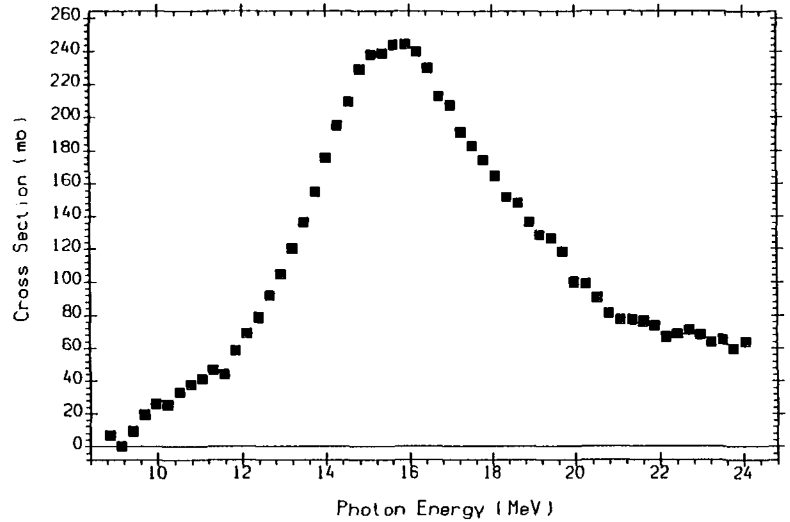
Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	γ,^{3}He	γ,α	γ,2n	γ,np	γ,2p
95.70	9.0	6.8	13.9	17.9	3.7	16.3	15.9	17.1



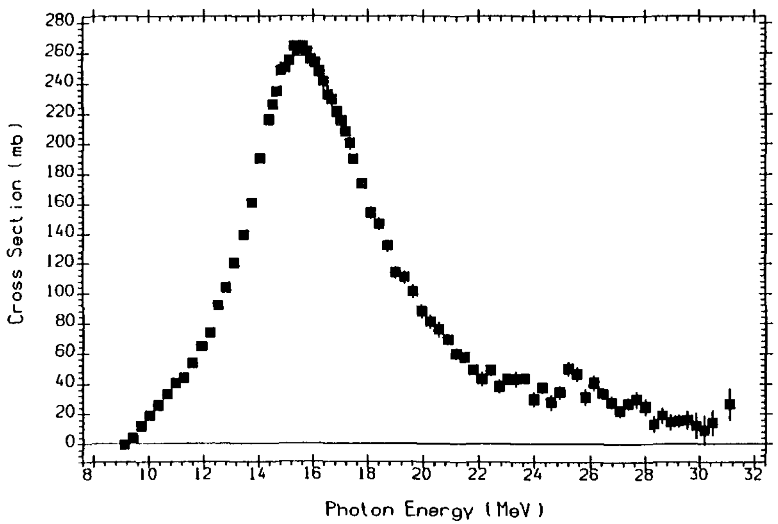
49-IN-115(G,X)0-NN-1
The sum: (G,N)+(G,N+P)+2(G,2N).
Positron annihilation
L0035014 J,NP/A,219,39,7401 A.LEPRETRE+



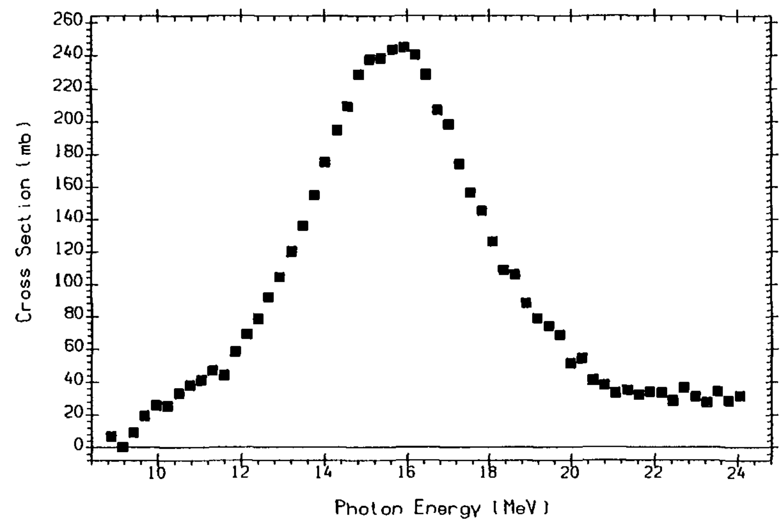
49-IN-115(G,X)0-NN-1
The sum: (G,N)+(G,N+P)+2(G,2N)+2(G,2N+P)+3(G,3N).
Positron annihilation
L0017002 J,PR,186,1255,6910 S.C.FULTZ+



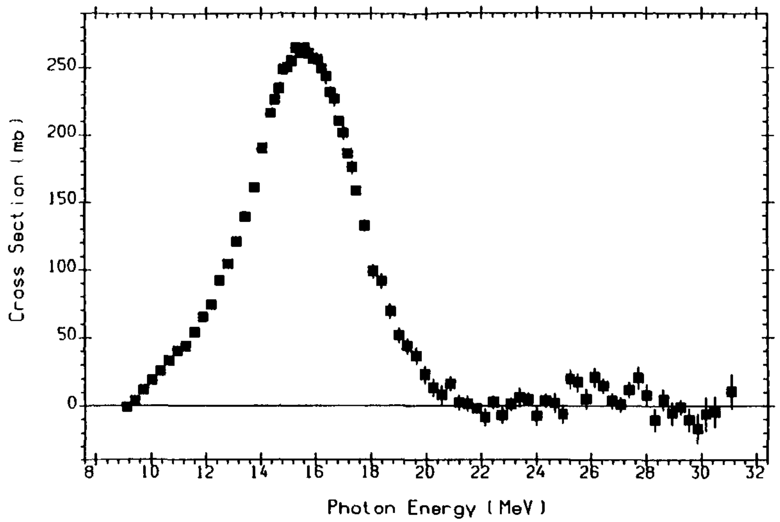
49-IN-115(G,X)0-NN-1 UNW
The sum: (G,N)+(G,N+P)+(G,2N).
Positron annihilation
L0035045 J,NP/A,219,39,7401 A.LEPRETRE+



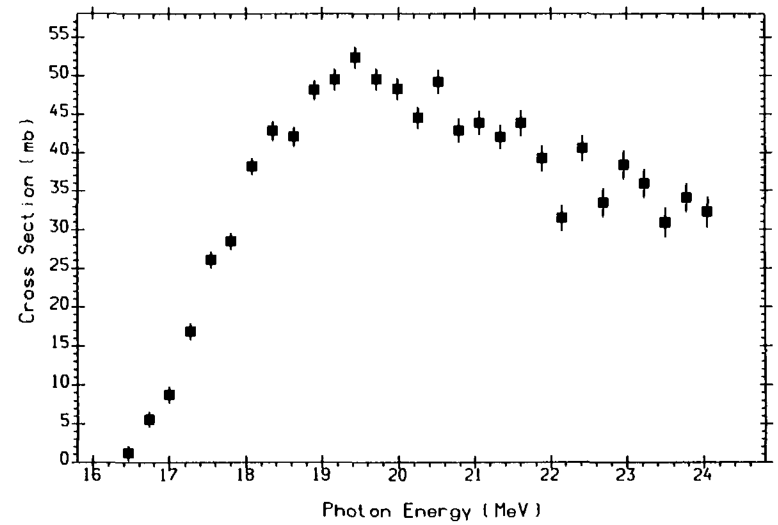
49-IN-115(G,X)0-NN-1 UNW
The sum: (G,N)+(G,N+P)+(G,2N)+(G,2N+P)+(G,3N).
Positron annihilation
L0017029 J,PR,186,1255,6910 S.C.FULTZ+



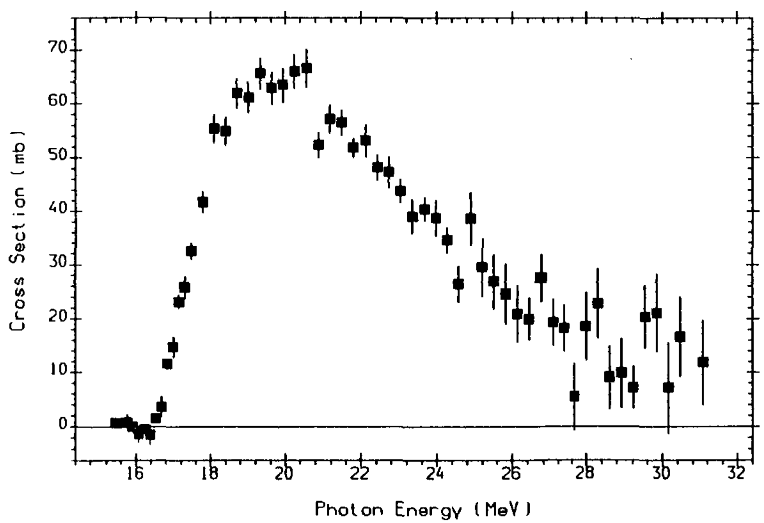
(49-IN-115(G,N)49-IN-114)+(49-IN-115(G,N+P)48-CD-113)
Positron annihilation
L0035015 J,NP/A,219,39,7401 A.LEPRETRE+



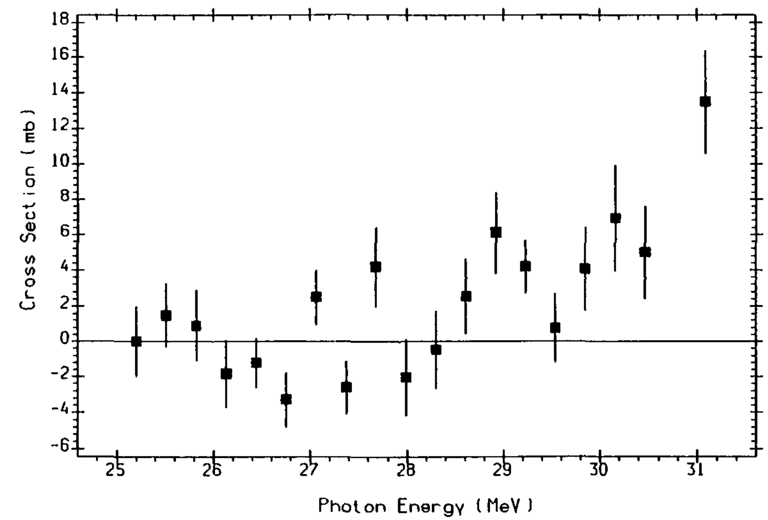
(49-IN-115(G,N)49-IN-114)+(49-IN-115(G,N+P)48-CD-113)
Positron annihilation
L0017003 J,PR,186,1255,6910 S.C.FULTZ+



49-IN-115(G,2N)49-IN-113
Positron annihilation
L0035016 J,NP/A,219,39,7401 A.LEPRETRE+



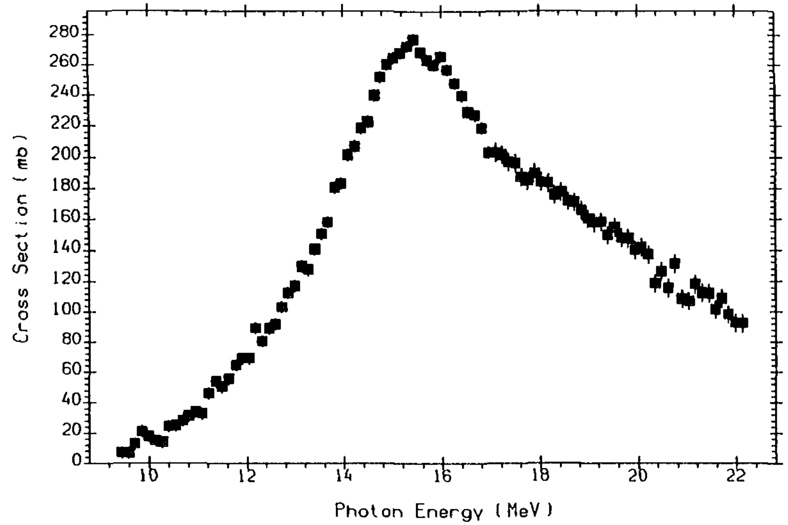
(49-IN-115(G,2N)49-IN-113)+(49-IN-115(G,2N+P)48-CD-112)
Positron annihilation
L0017004 J,PR,186,1255,6910 S.C.FULTZ+



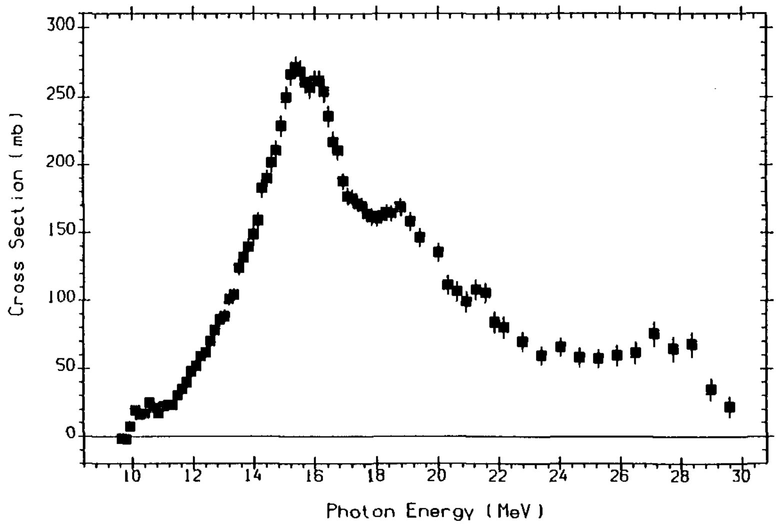
49-IN-115(G,3N)49-IN-112
Positron annihilation
L0017005 J,PR,186,1255,6910 S.C.FULTZ+

$^{116}_{50}Sn$

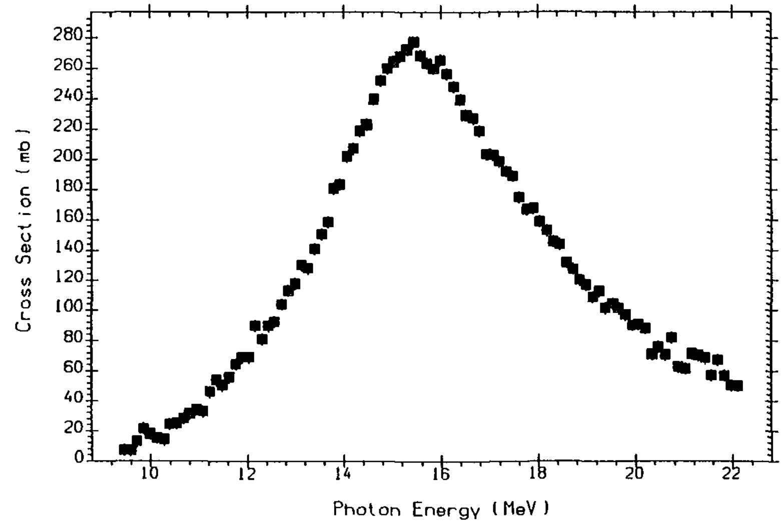
Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	γ,^{3}He	γ,α	γ,2n	γ,np	γ,2p
14.70	9.6	9.3	17.1	17.4	3.4	17.1	18.3	16.1



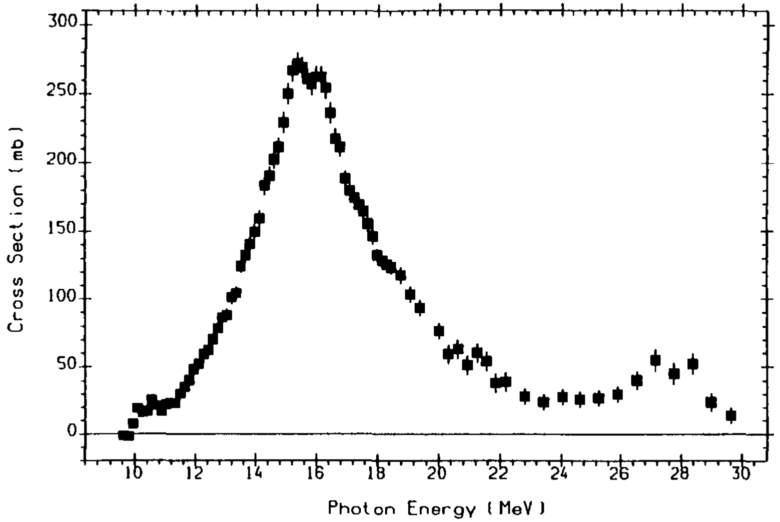
50-SN-116(G,X)0-NN-1
The sum: (G,N)+(G,N+P)+2(G,2N).
Positron annihilation
L0035017 J,NP/A,219,39,7401 A.LEPRETRE+



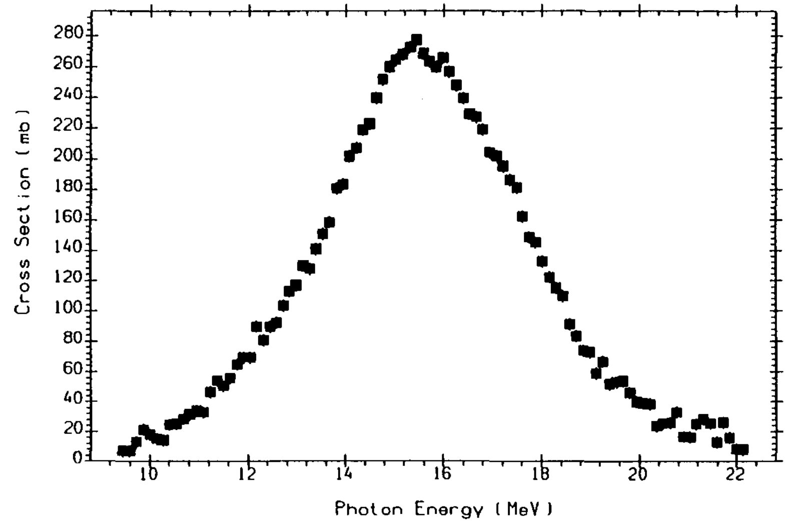
50-SN-116(G,X)0-NN-1
The sum: (G,N)+(G,N+P)+2(G,2N).
Positron annihilation
L0017006 J,PR,186,1255,6910 S.C.FULTZ+



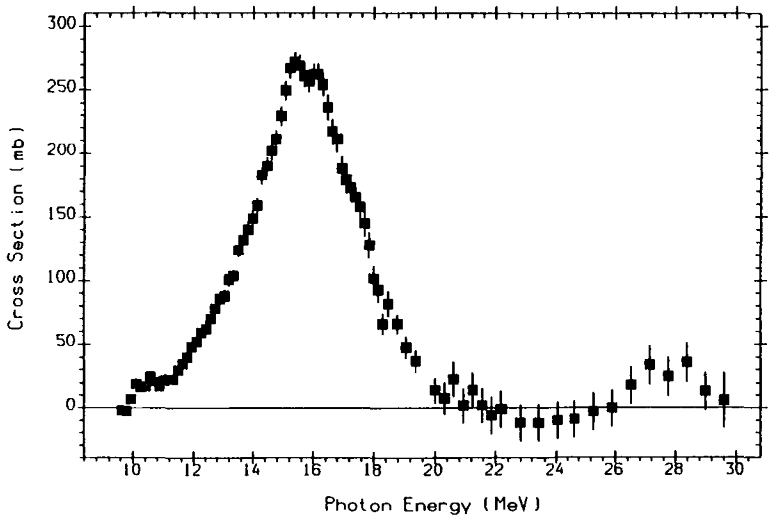
50-SN-116(G,X)0-NN-1 UNW
The sum: (G,N)+(G,N+P)+(G,2N).
Positron annihilation
L0035046 J,NP/A,219,39,7401 A.LEPRETRE+



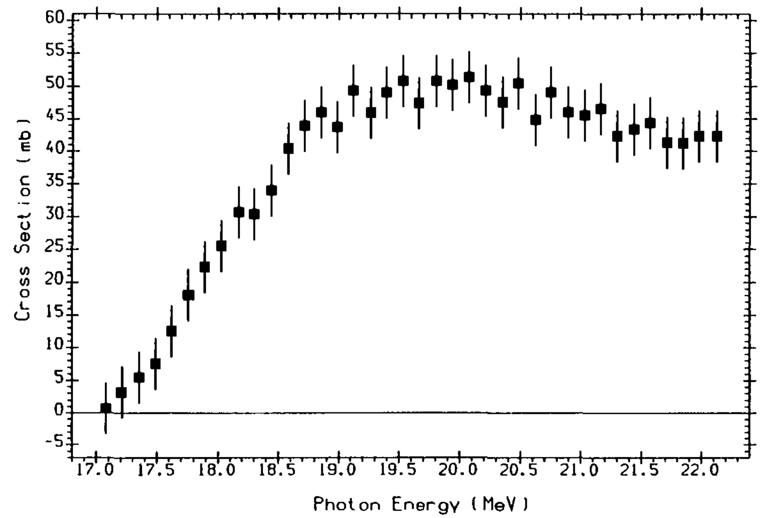
50-SN-116(G,X)0-NN-1 UNW
The sum: (G,N)+(G,N+P)+(G,2N).
Positron annihilation
L0017030 J,PR,186,1255,6910 S.C.FULTZ+



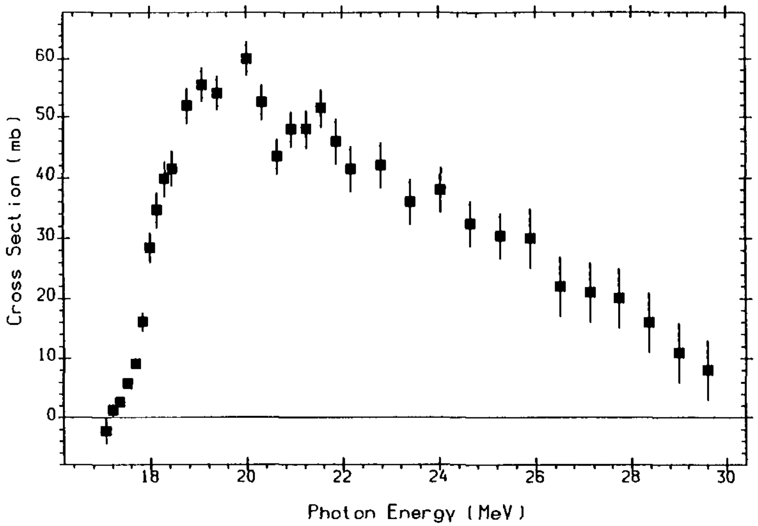
(50-SN-116(G,N)50-SN-115)+(50-SN-116(G,N+P)49-IN-114)
Positron annihilation
L0035018 J,NP/A,219,39,7401 A.LEPRETRE+



(50-SN-116(G,N)50-SN-115)+(50-SN-116(G,N+P)49-IN-114)
Positron annihilation
L0017007 J,PR,186,1255,6910 S.C.FULTZ+



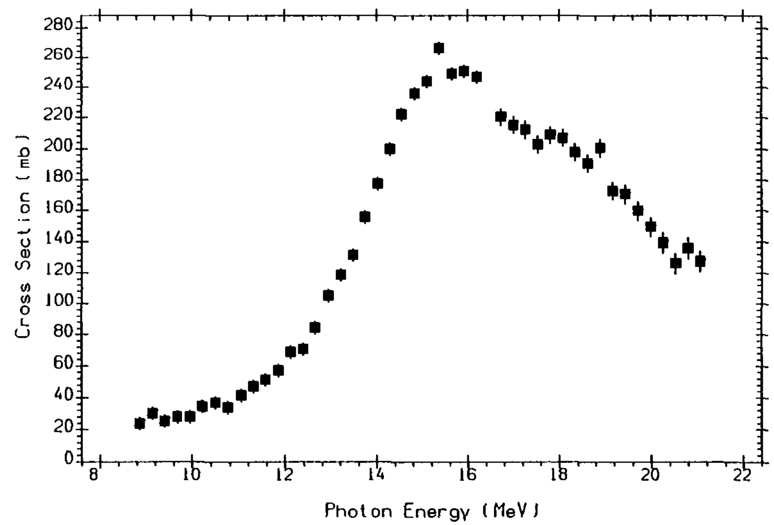
50-SN-116(G,2N)50-SN-114
Positron annihilation
L0035019 J,NP/A,219,39,7401 A.LEPRETRE+



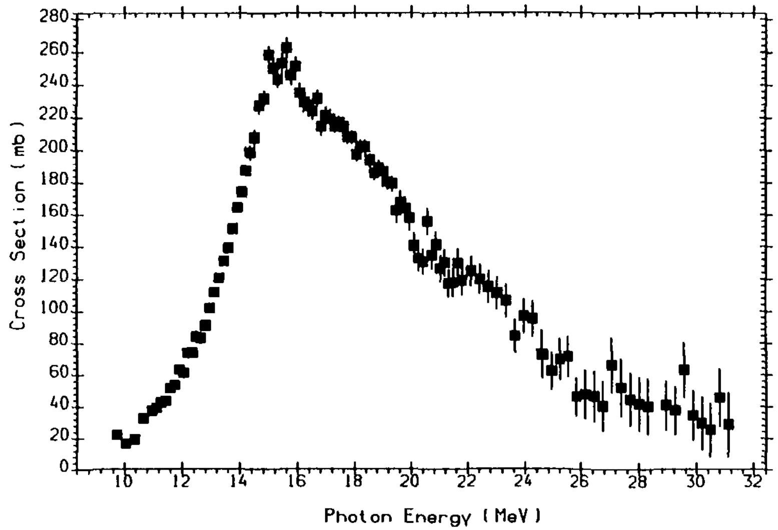
(50-SN-116(G,2N)50-SN-114)+(50-SN-116(G,2N+P)49-IN-113)
Positron annihilation
L0017008 J,PR,186,1255,6910 S.C.FULTZ+

$^{117}_{50}Sn$

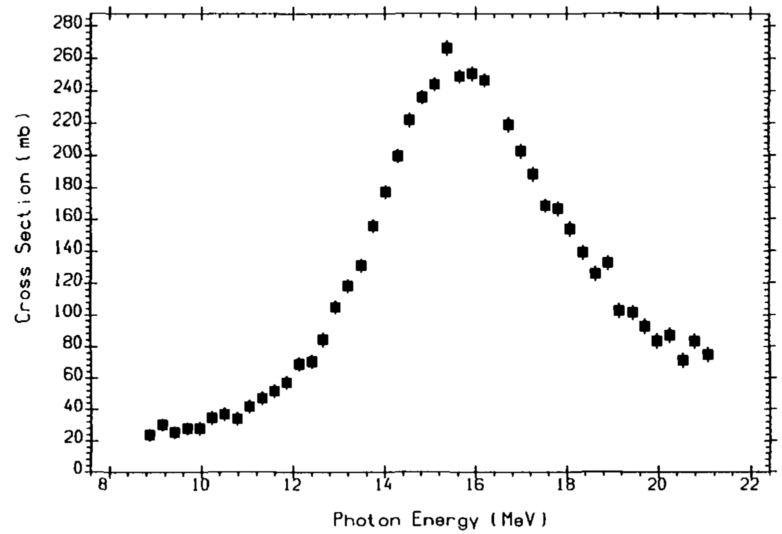
Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	γ,^{3}He	γ,α	γ,2n	γ,np	γ,2p
7.70	6.9	9.4	16.8	15.3	3.8	16.5	16.2	16.9



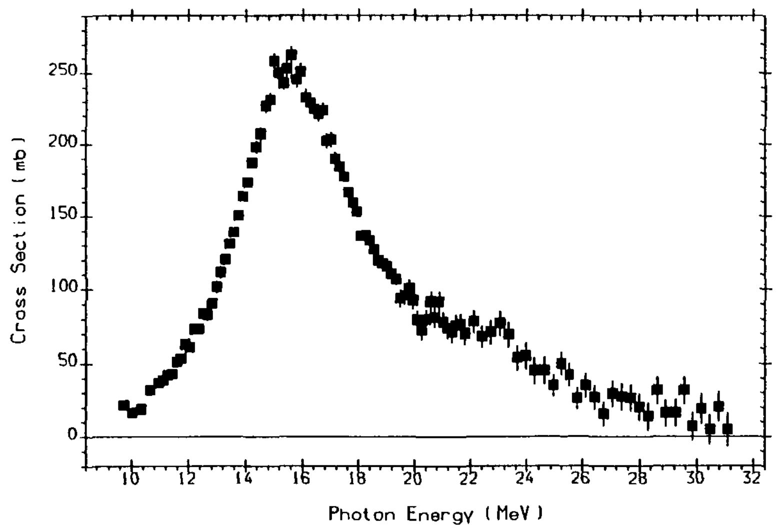
50-SN-117(G,X)0-NN-1
The sum: (G,N)+(G,N+P)+2(G,2N).
Positron annihilation
L0035020 J,NP/A,219,39,7401 A.LEPRETRE+



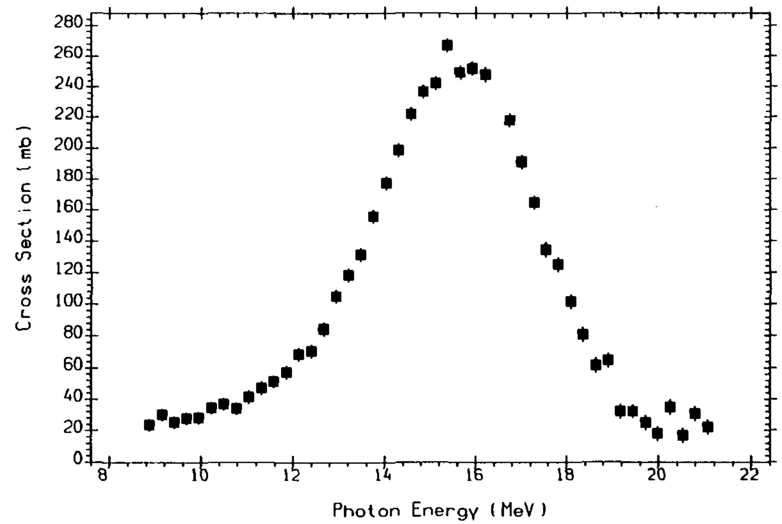
50-SN-117(G,X)0-NN-1
The sum: (G,N)+(G,N+P)+2(G,2N)+2(G,2N+P)+3(G,3N).
Positron annihilation
L0017009 J,PR,186,1255,6910 S.C.FULTZ+



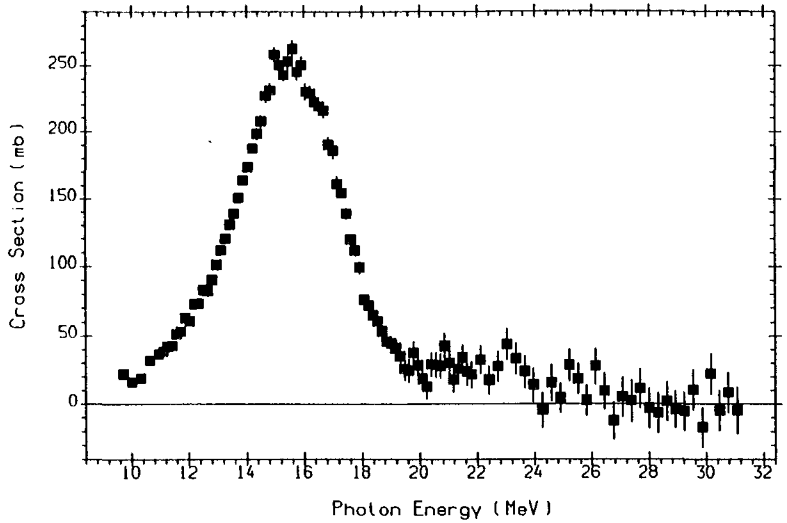
50-SN-117(G,X)0-NN-1 UNW
The sum: (G,N)+(G,N+P)+(G,2N).
Positron annihilation
L0035047 J,NP/A,219,39,7401 A.LEPRETRE+



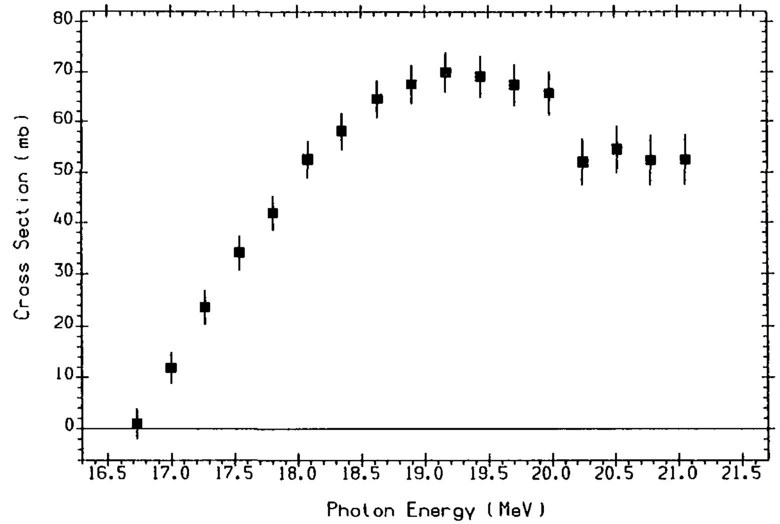
50-SN-117(G,X)0-NN-1 UNW
The sum: (G,N)+(G,N+P)+(G,2N)+(G,2N+P)+(G,3N).
Positron annihilation
L0017031 J,PR,186,1255,6910 S.C.FULTZ+



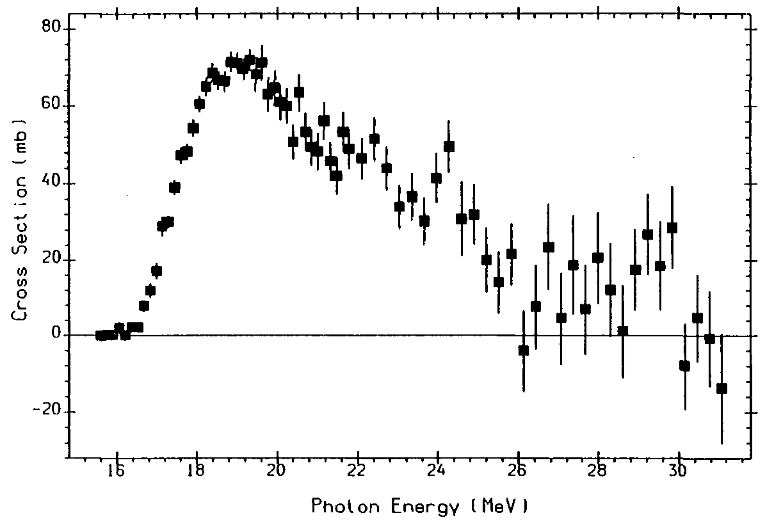
(50-SN-117(G,N)50-SN-116)+(50-SN-117(G,N+P)49-IN-115)
Positron annihilation
L0035021 J,NP/A,219,39,7401 A.LEPRETRE+



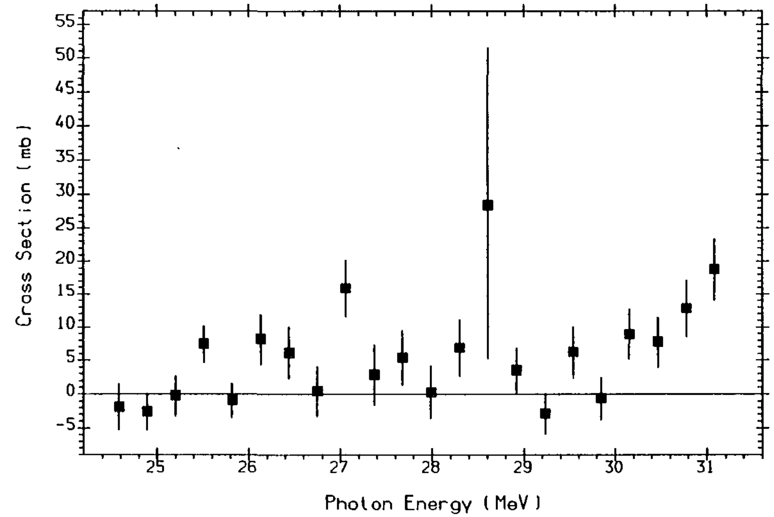
(50-SN-117(G,N)50-SN-116)+(50-SN-117(G,N+P)49-IN-115)
Positron annihilation
L0017010 J,PR,186,1255,6910 S.C.FULTZ+



50-SN-117(G,2N)50-SN-115
Positron annihilation
L0035022 J,NP/A,219,39,7401 A.LEPRETRE+



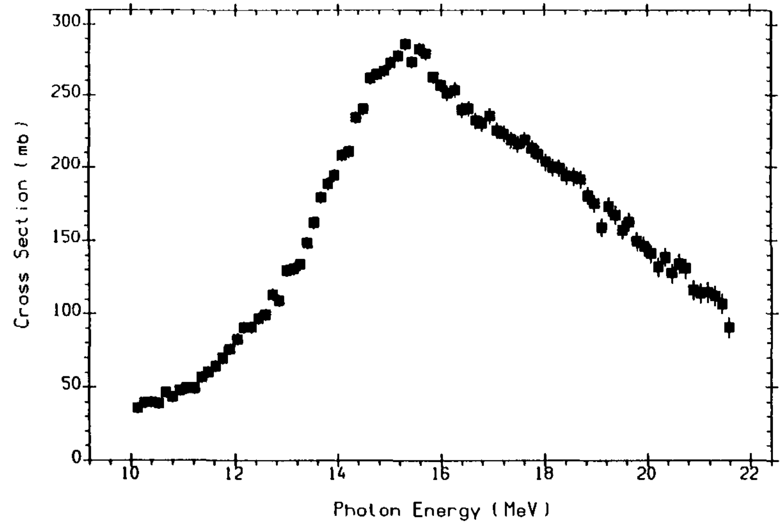
(50-SN-117(G,2N)50-SN-115)+(50-SN-117(G,2N+P)49-IN-114)
Positron annihilation
L0017011 J,PR,186,1255,6910 S.C.FULTZ+



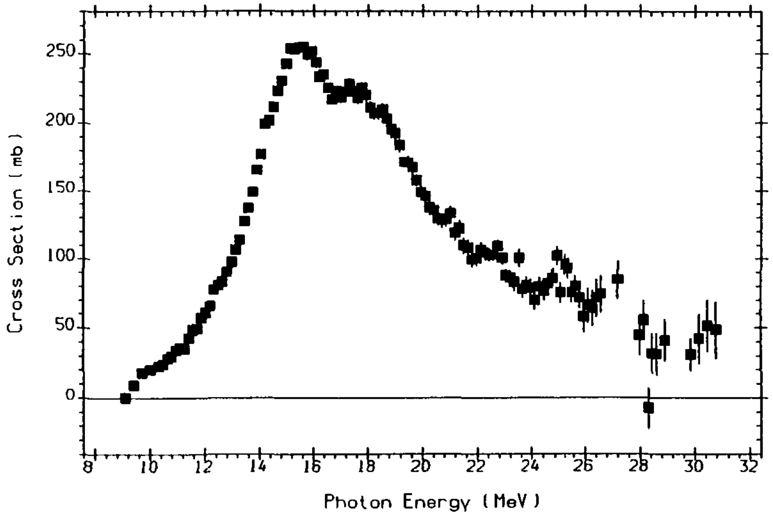
50-SN-117(G,3N)50-SN-114
Positron annihilation
L0017012 J,PR,186,1255,6910 S.C.FULTZ+

$^{118}_{50}Sn$

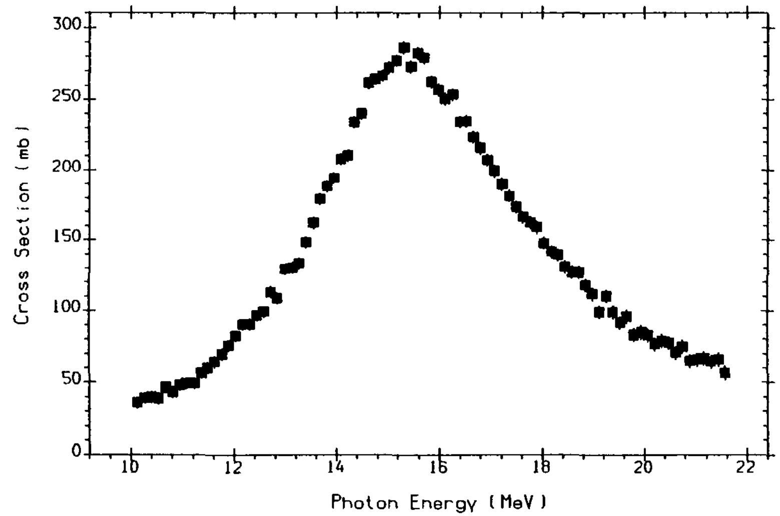
Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	γ,^{3}He	γ,α	γ,2n	γ,np	γ,2p
24.30	9.3	10.0	17.1	18.5	4.1	16.3	18.8	17.5



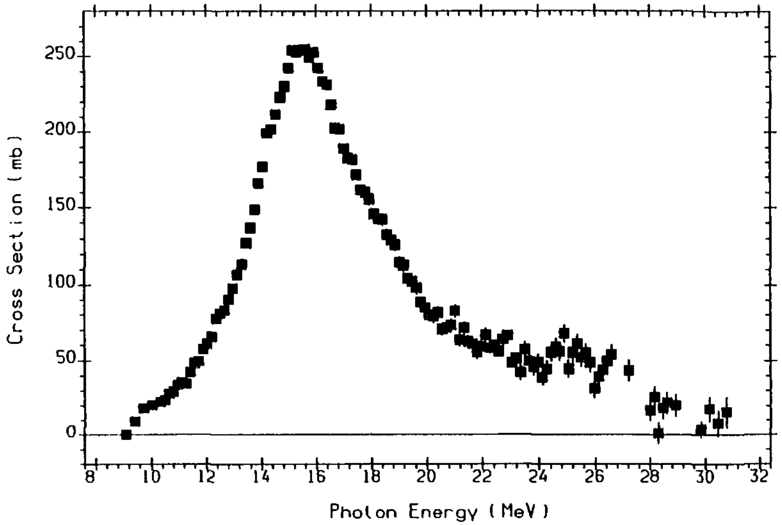
50-SN-118(G,X)0-NN-1
The sum: (G,N)+(G,N+P)+2(G,2N).
Positron annihilation
L0035023 J,NP/A,219,39,7401 A.LEPRETRE+



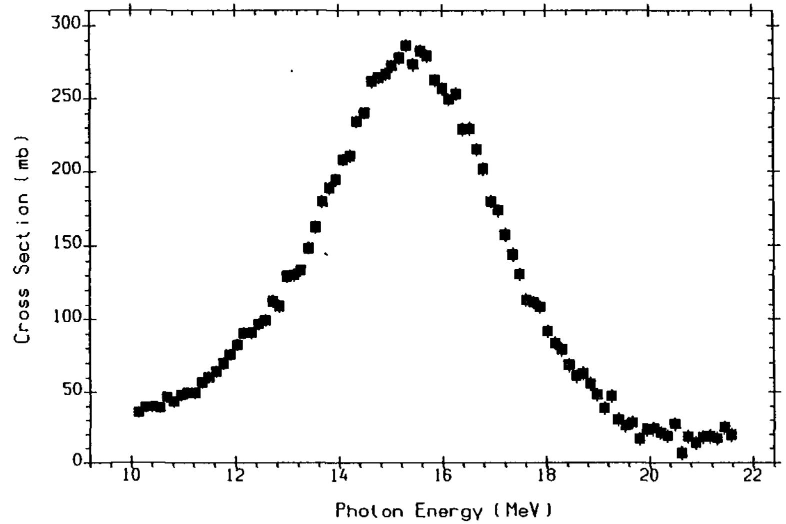
50-SN-118(G,X)0-NN-1
The sum: (G,N)+(G,N+P)+2(G,2N)+2(G,2N+P)+3(G,3N).
Positron annihilation
L0017013 J,PR,186,1255,6910 S.C.FULTZ+



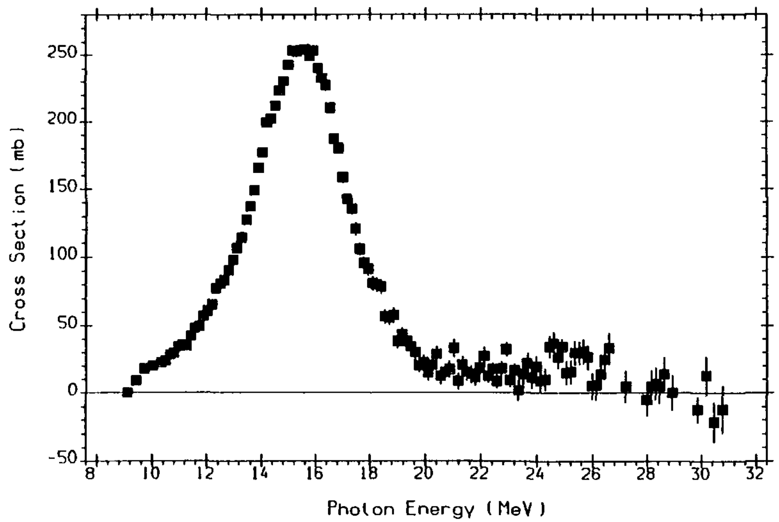
50-SN-118(G,X)0-NN-1 UNW
The sum: (G,N)+(G,N+P)+(G,2N).
Positron annihilation
L0035048 J,NP/A,219,39,7401 A.LEPRETRE+



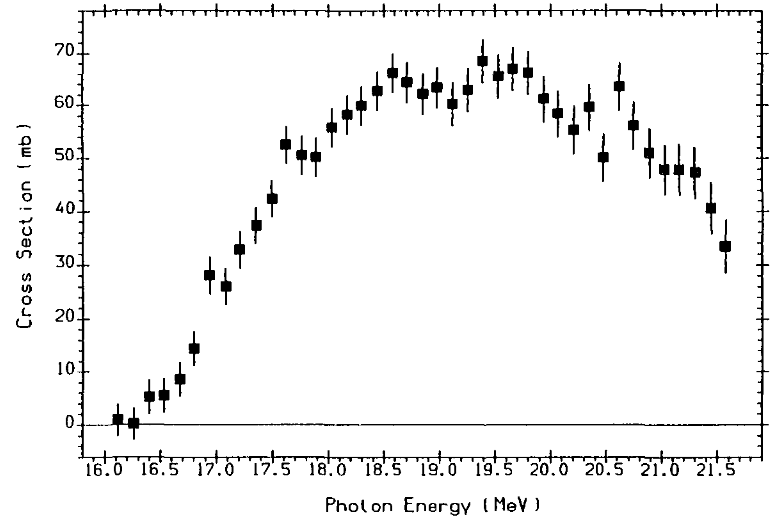
50-SN-118(G,X)0-NN-1 UNW
The sum: (G,N)+(G,N+P)+(G,2N)+(G,2N+P)+(G,3N).
Positron annihilation
L0017032 J,PR,186,1255,6910 S.C.FULTZ+



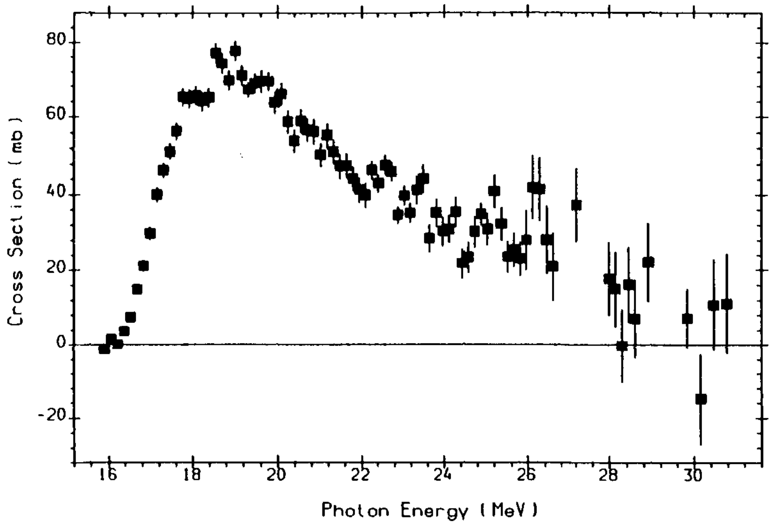
(50-SN-118(G,N)50-SN-117)+(50-SN-118(G,N+P)49-IN-116)
Positron annihilation
L0035024 J,NP/A,219,39,7401 A.LEPRETRE+



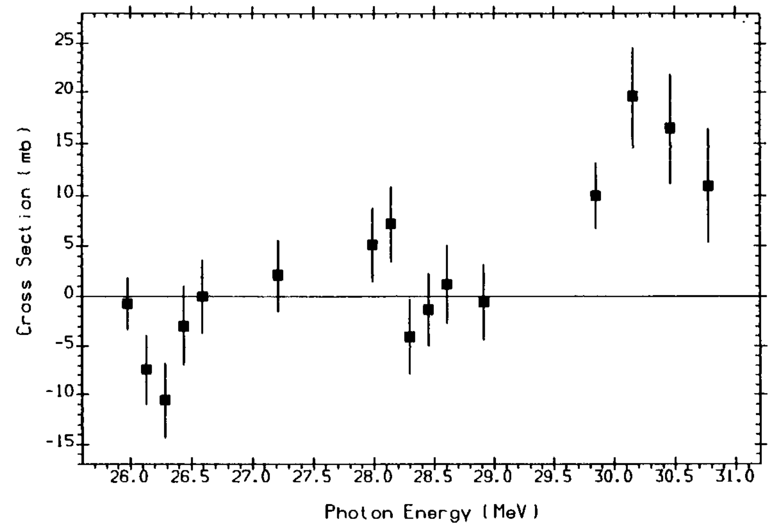
(50-SN-118(G,N)50-SN-117)+(50-SN-118(G,N+P)49-IN-116)
Positron annihilation
L0017014 J,PR,186,1255,6910 S.C.FULTZ+



50-SN-118(G,2N)50-SN-116
Positron annihilation
L0035025 J,NP/A,219,39,7401 A.LEPRETRE+



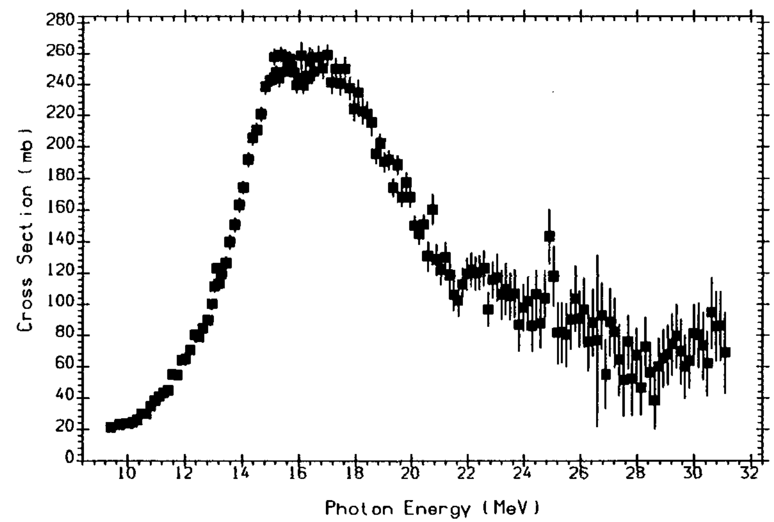
(50-SN-118(G,2N)50-SN-116)+(50-SN-118(G,2N+P)49-IN-115)
Positron annihilation
L0017015 J,PR,186,1255,6910 S.C.FULTZ+



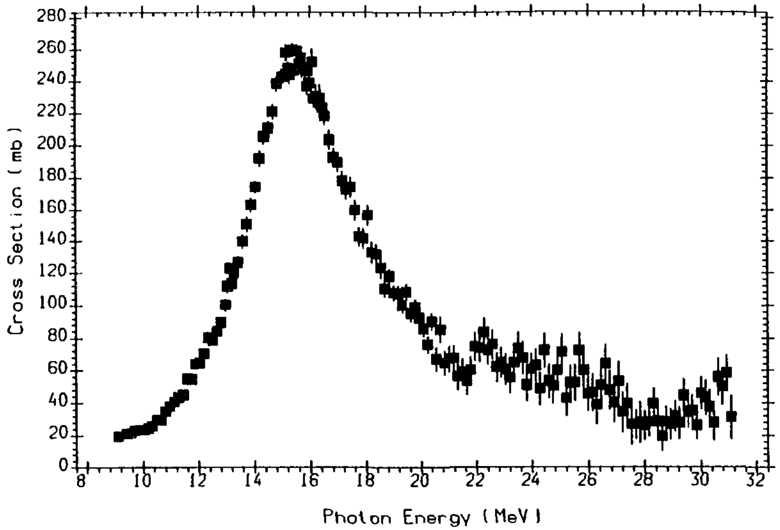
50-SN-118(G,3N)50-SN-115
Positron annihilation
L0017016 J,PR,186,1255,6910 S.C.FULTZ+

$^{119}_{50}Sn$

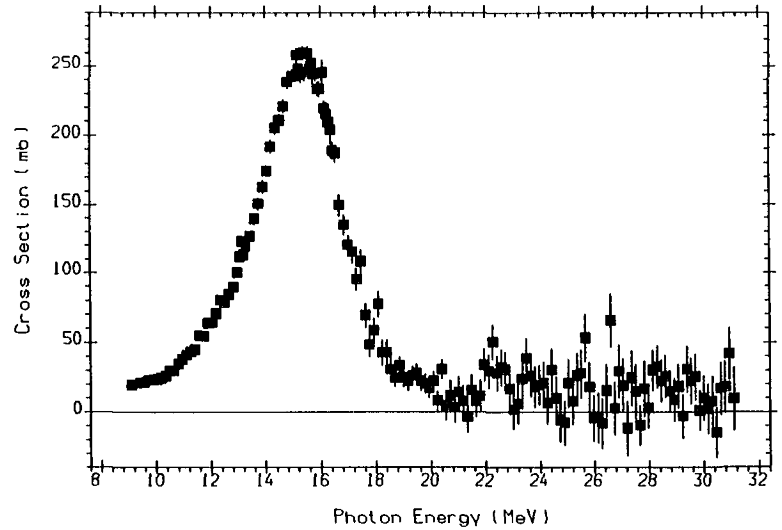
Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	γ,^{3}He	γ,α	γ,2n	γ,np	γ,2p
8.60	6.5	10.1	16.8	16.3	4.4	15.8	16.5	18.2



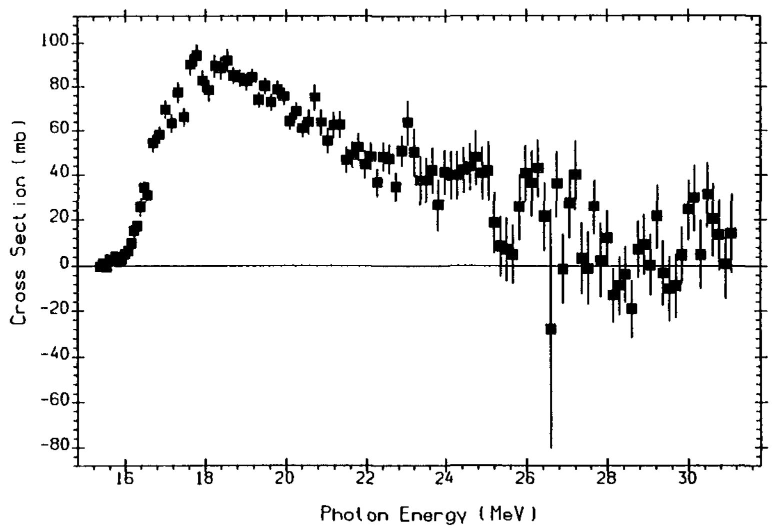
50-SN-119(G,X)0-NN-1
The sum: (G,N)+(G,N+P)+2(G,2N)+2(G,2N+P)+3(G,3N).
Positron annihilation
L0017017 J,PR,186,1255,6910 S.C.FULTZ+



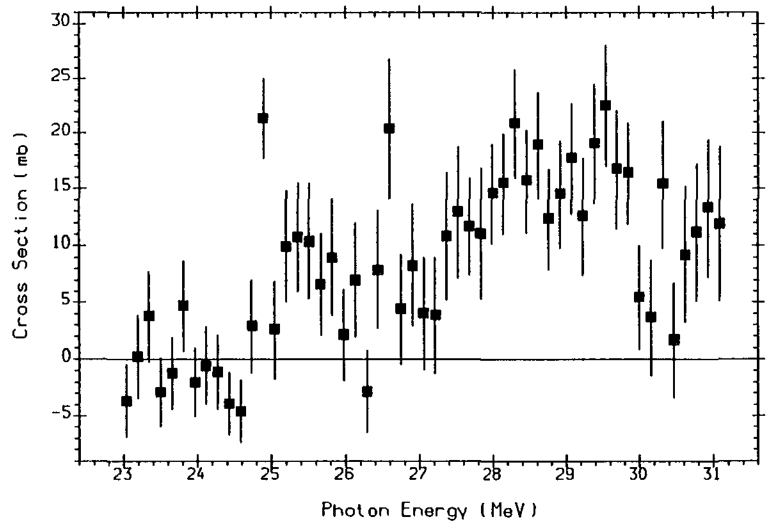
50-SN-119(G,X)0-NN-1 UNW
The sum: (G,N)+(G,N+P)+(G,2N)+(G,2N+P)+(G,3N).
Positron annihilation
L0017033 J,PR,186,1255,6910 S.C.FULTZ+



(50-SN-119(G,N)50-SN-118)+(50-SN-119(G,N+P)49-IN-117)
Positron annihilation
L0017018 J,PR,186,1255,6910 S.C.FULTZ+



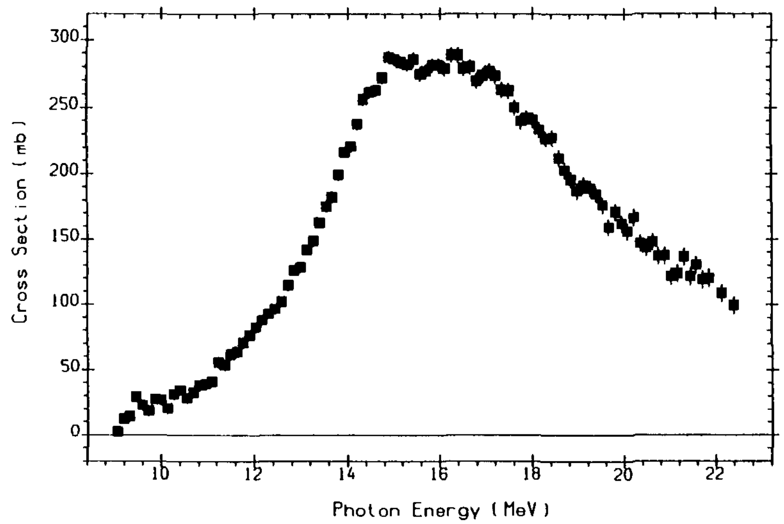
(50-SN-119(G,2N)50-SN-117)+(50-SN-119(G,2N+P)49-IN-116)
Positron annihilation
L0017019 J,PR,186,1255,6910 S.C.FULTZ+



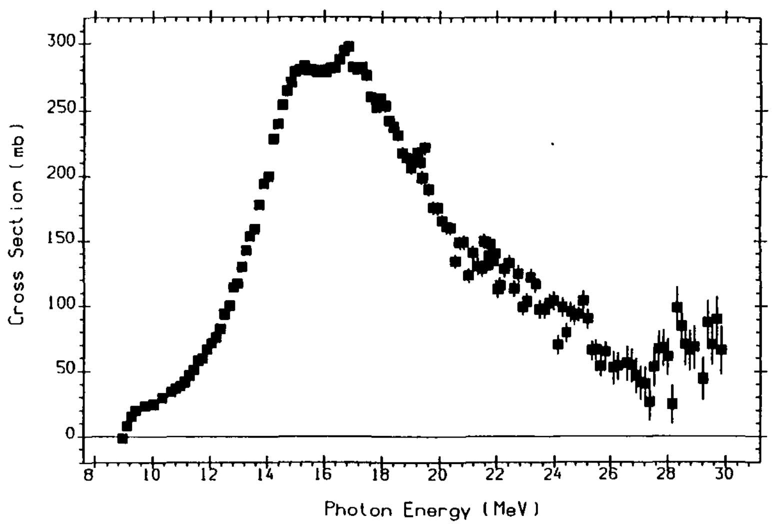
50-SN-119(G,3N)50-SN-116
Positron annihilation
L0017020 J,PR,186,1255,6910 S.C.FULTZ+

$^{120}_{50}Sn$

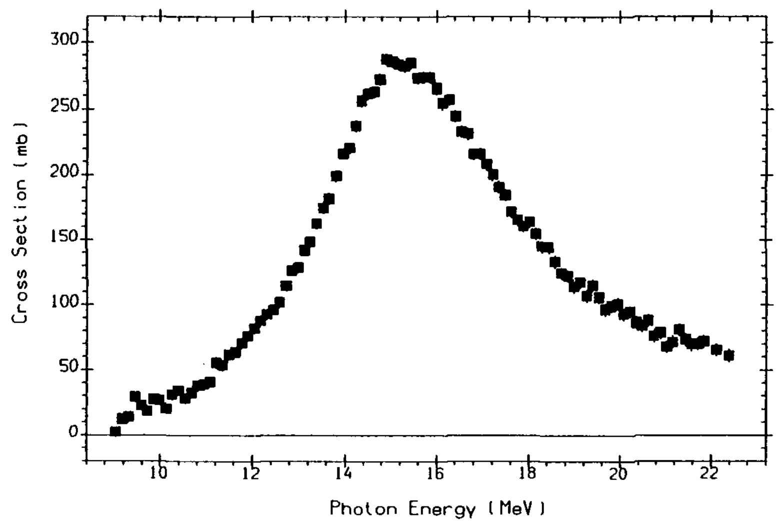
Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	γ,^{3}He	γ,α	γ,2n	γ,np	γ,2p
32.40	9.1	10.7	17.1	19.6	4.8	15.6	19.0	19.0



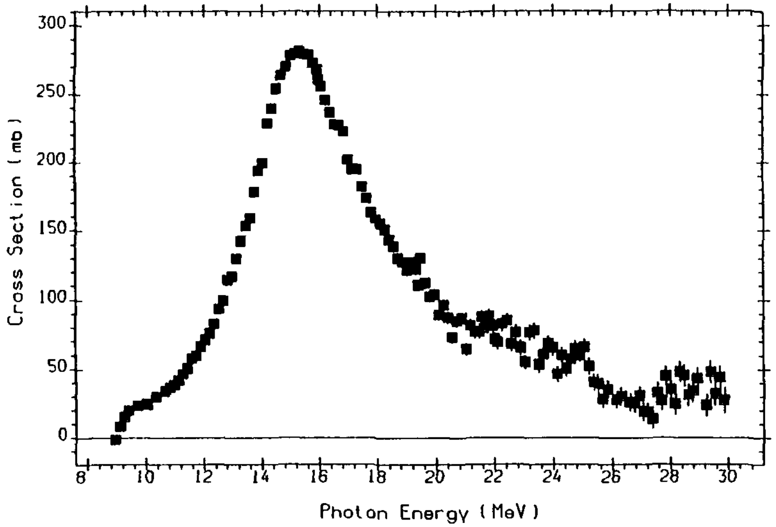
50-SN-120(G,X)0-NN-1
The sum: (G,N)+(G,N+P)+2(G,2N).
Positron annihilation
L0035026 J,NP/A,219,39,7401 A.LEPRETRE+



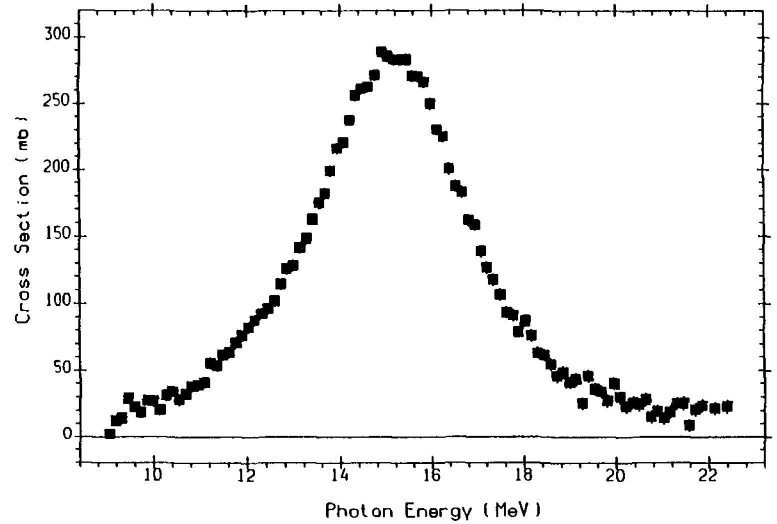
50-SN-120(G,X)0-NN-1
The sum: (G,N)+(G,N+P)+2(G,2N)+2(G,2N+P)+3(G,3N).
Positron annihilation
L0017021 J,PR,186,1255,6910 S.C.FULTZ+



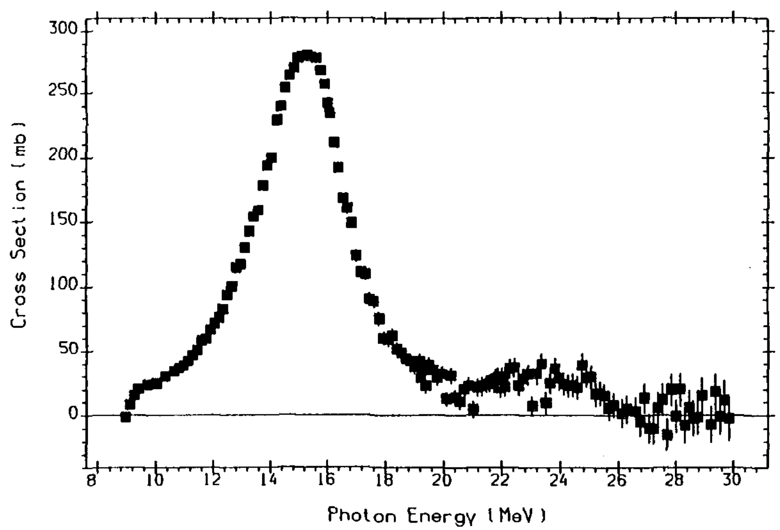
50-SN-120(G,X)0-NN-1 UNW
The sum: (G,N)+(G,N+P)+(G,2N).
Positron annihilation
L0035049 J,NP/A,219,39,7401 A.LEPRETRE+



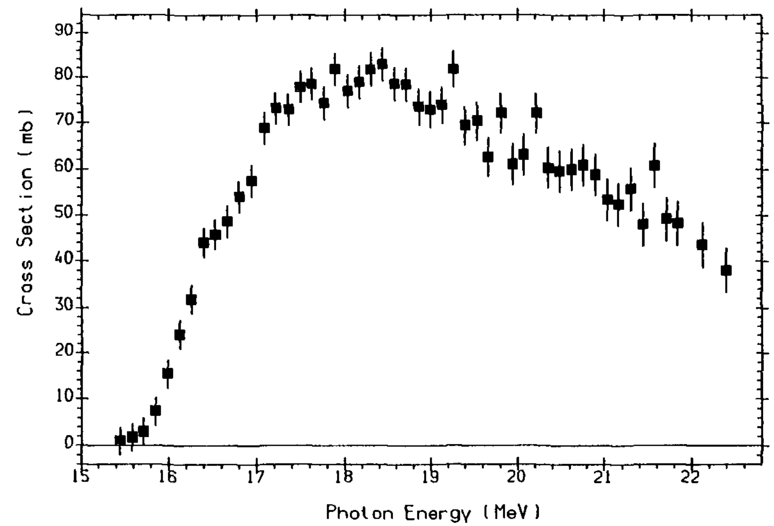
50-SN-120(G,X)0-NN-1 UNW
The sum: (G,N)+(G,N+P)+(G,2N)+(G,2N+P)+(G,3N).
Positron annihilation
L0017034 J,PR,186,1255,6910 S.C.FULTZ+



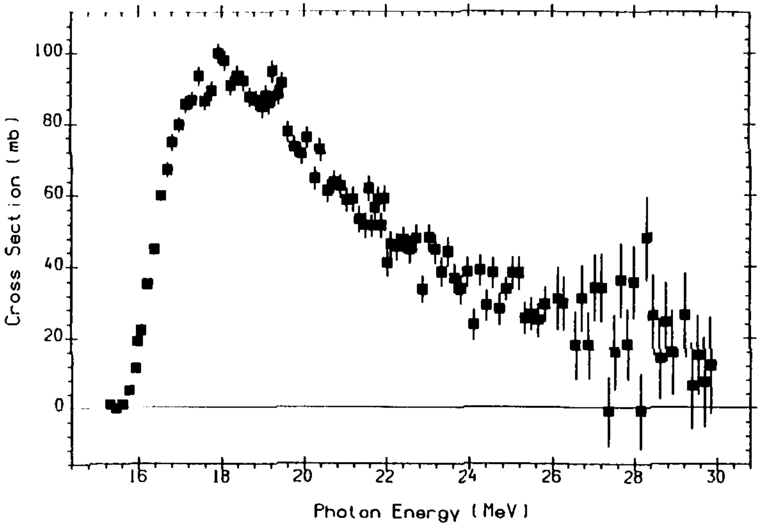
(50-SN-120(G,N)50-SN-119)+(50-SN-120(G,N+P)49-IN-118)
Positron annihilation
L0035027 J,NP/A,219,39,7401 A.LEPRETRE+



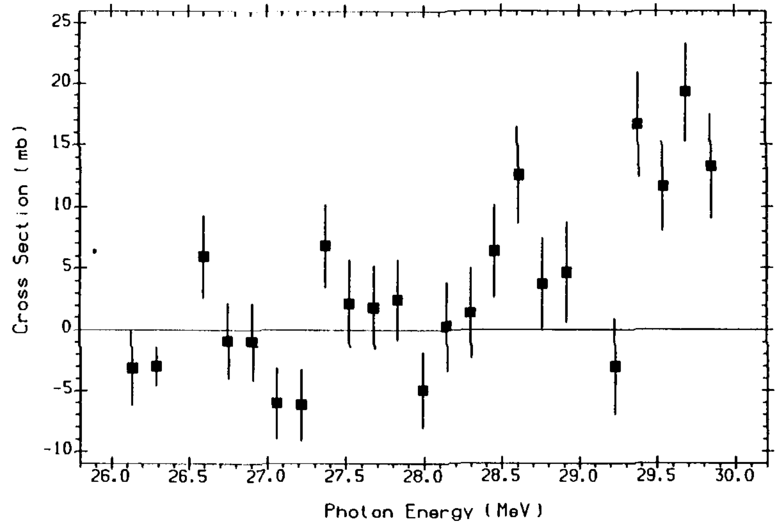
(50-SN-120(G,N)50-SN-119)+(50-SN-120(G,N+P)49-IN-118)
Positron annihilation
L0017022 J,PR,186,1255,6910 S.C.FULTZ+



50-SN-120(G,2N)50-SN-118
Positron annihilation
L0035028 J,NP/A,219,39,7401 A.LEPRETRE+



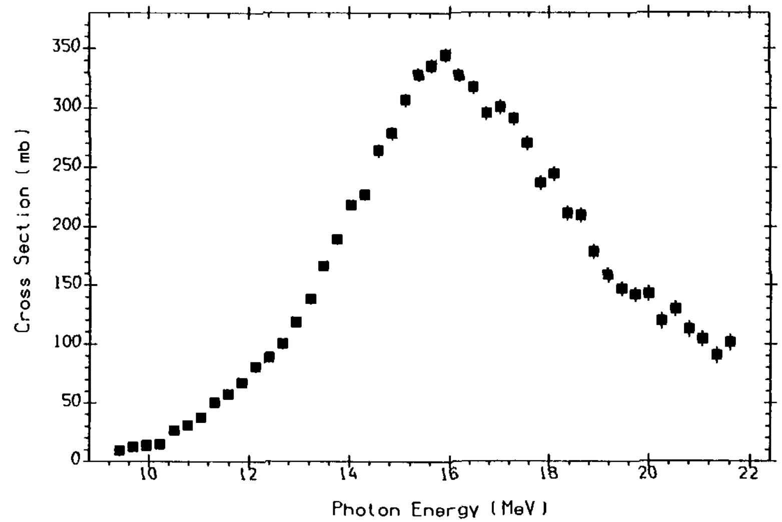
(50-SN-120(G,2N)50-SN-118)+(50-SN-120(G,2N+P)49-IN-117)
Positron annihilation
L0017023 J,PR,186,1255,6910 S.C.FULTZ+



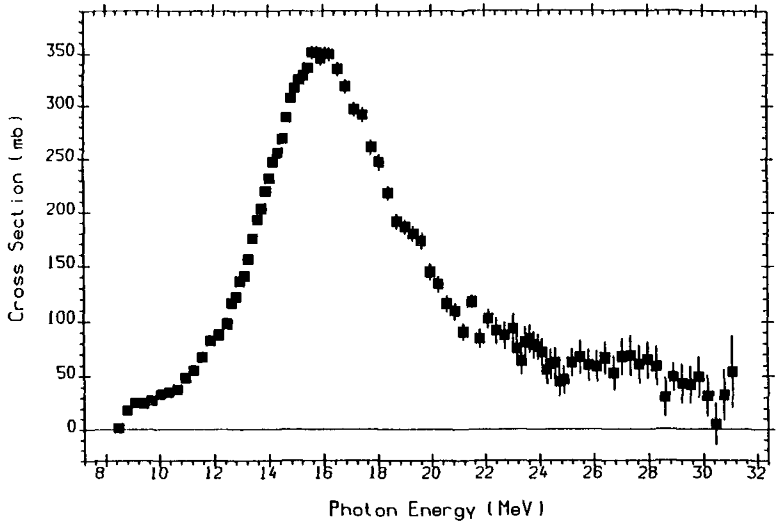
50-SN-120(G,3N)50-SN-117
Positron annihilation
L0017024 J,PR,186,1255,6910 S.C.FULTZ+

$^{124}_{50}Sn$

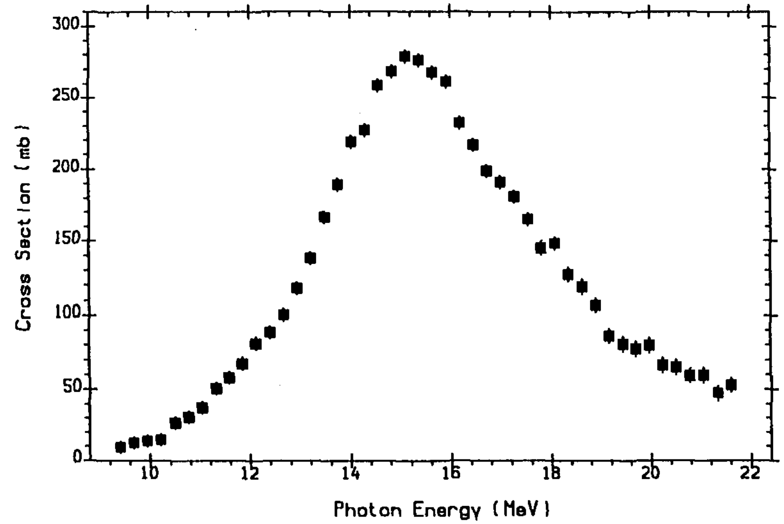
Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	γ,^{3}He	γ,α	γ,2n	γ,np	γ,2p
5.60	8.5	12.1	17.4	21.5	6.7	14.4	20.0	22.2



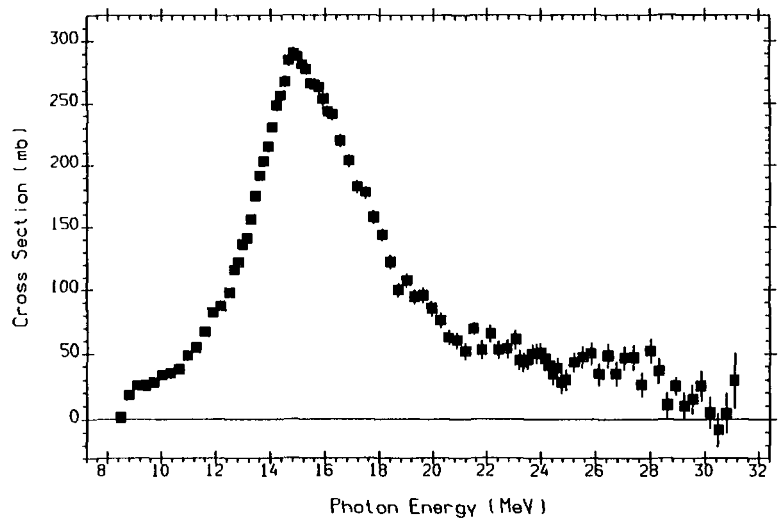
50-SN-124(G,X)0-NN-1
The sum: (G,N)+(G,N+P)+2(G,2N).
Positron annihilation
L0035029 J,NP/A,219,39,7401 A.LEPRETRE+



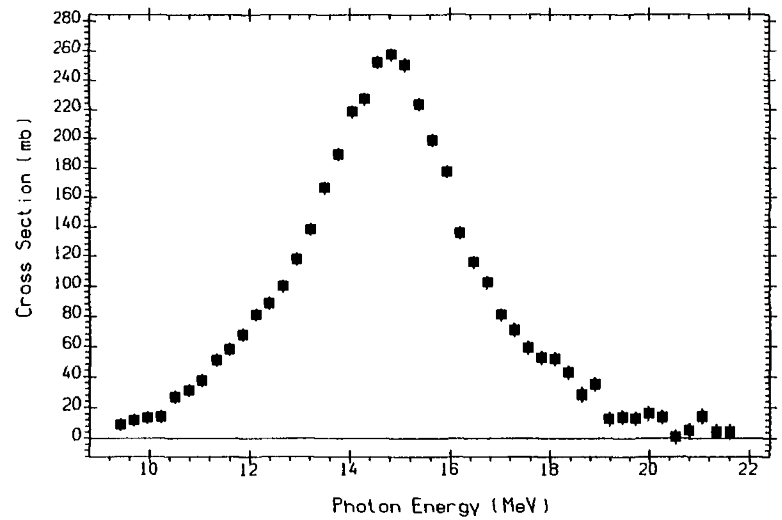
50-SN-124(G,X)0-NN-1
The sum: (G,N)+(G,N+P)+2(G,2N)+2(G,2N+P)+3(G,3N).
Positron annihilation
L0017025 J,PR,186,1255,6910 S.C.FULTZ+



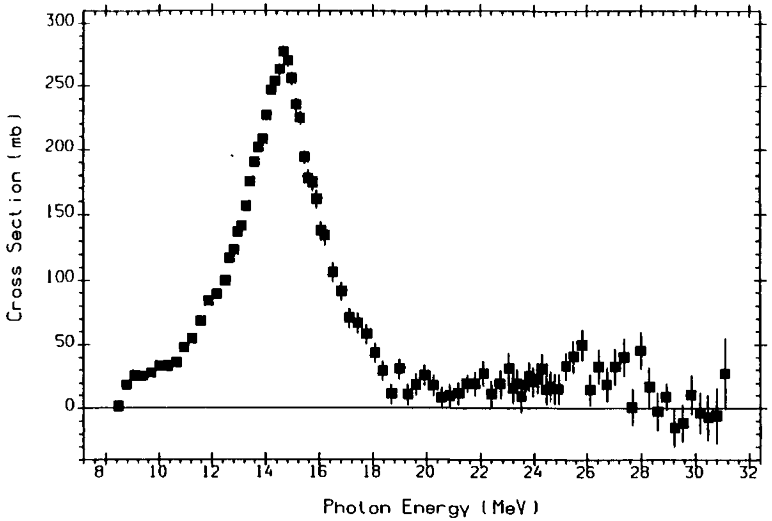
50-SN-124(G,X)0-NN-1 UNW
The sum: (G,N)+(G,N+P)+(G,2N).
Positron annihilation
L0035050 J,NP/A,219,39,7401 A.LEPRETRE+



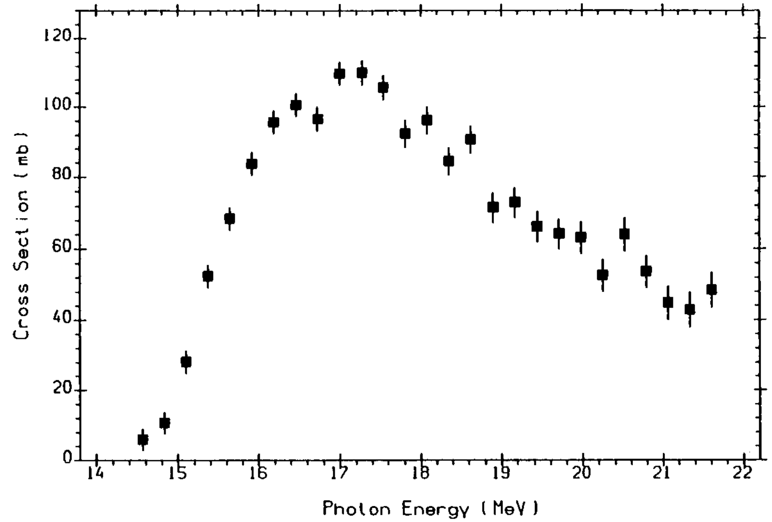
50-SN-124(G,X)0-NN-1 UNW
The sum: (G,N)+(G,N+P)+(G,2N)+(G,2N+P)+(G,3N).
Positron annihilation
L0017035 J,PR,186,1255,6910 S.C.FULTZ+



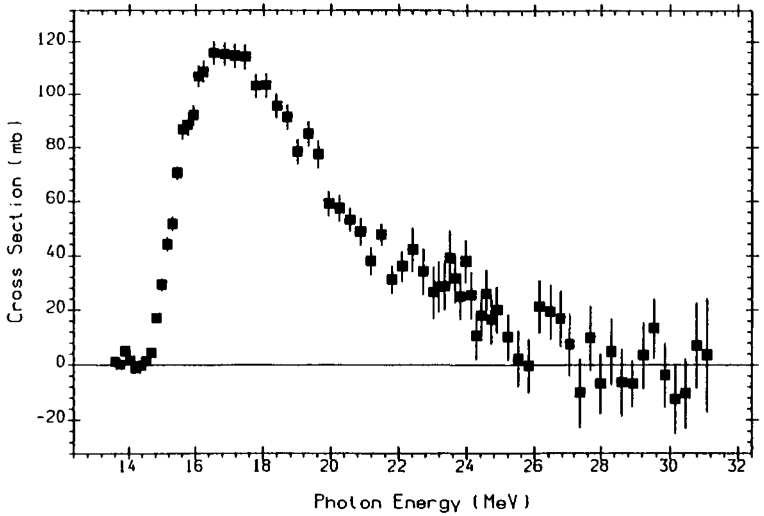
(50-SN-124(G,N)50-SN-123)+(50-SN-124(G,N+P)49-IN-122)
Positron annihilation
L0035030 J,NP/A,219,39,7401 A.LEPRETRE+



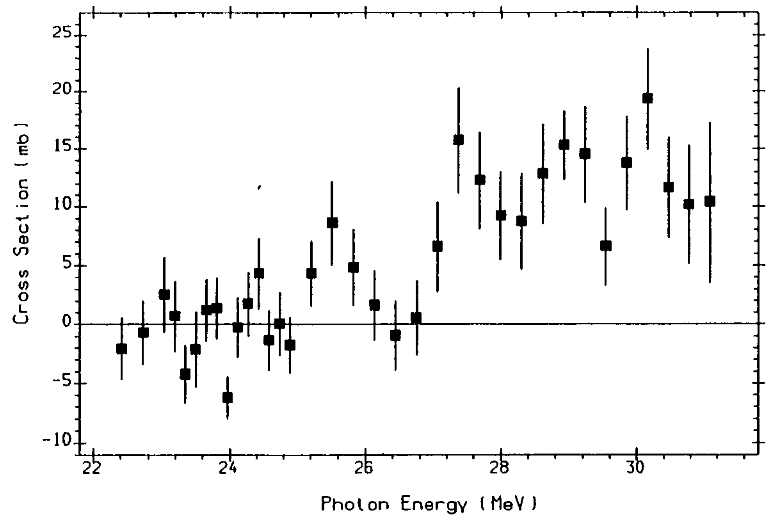
(50-SN-124(G,N)50-SN-123)+(50-SN-124(G,N+P)49-IN-122)
Positron annihilation
L0017026 J,PR,186,1255,6910 S.C.FULTZ+



60-SN-124(G,2N)50-SN-122
Positron annihilation
L0035031 J,NP/A,219,39,7401 A.LEPRETRE+



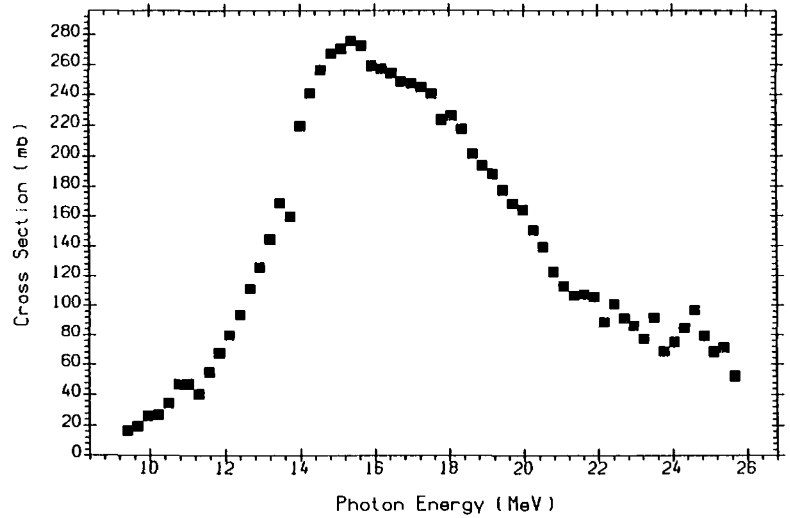
(50-SN-124(G,2N)50-SN-122)+(50-SN-124(G,2N+P)49-IN-121)
Positron annihilation
L0017027 J,PR,186,1255,6910 S.C.FULTZ+



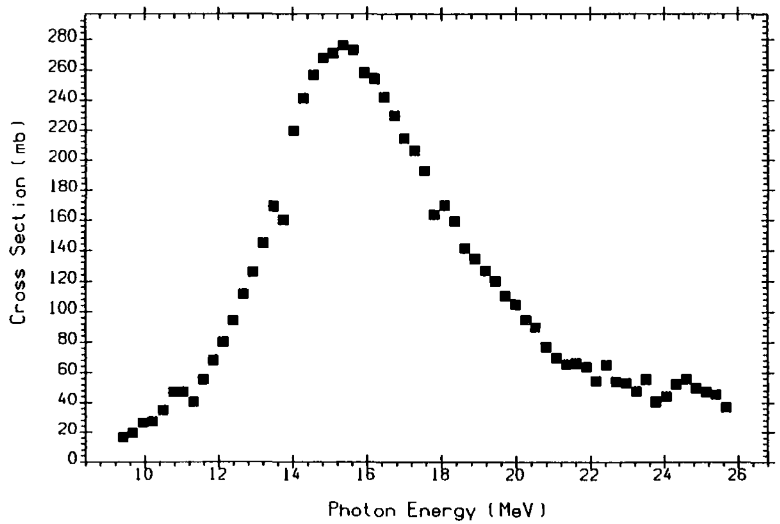
50-SN-124(G,3N)50-SN-121
Positron annihilation
L0017028 J,PR,186,1255,6910 S.C.FULTZ+

$^{nat.}_{51}\mathrm{Sb}$

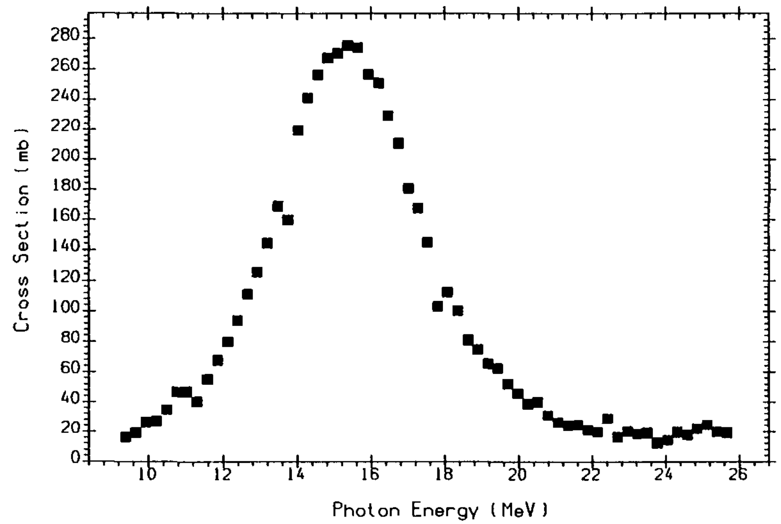
Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	γ,^{3}He	γ,α	γ,2n	γ,np	γ,2p
*	9.0	5.8	12.9	17.1	3.1	15.8	14.9	16.5



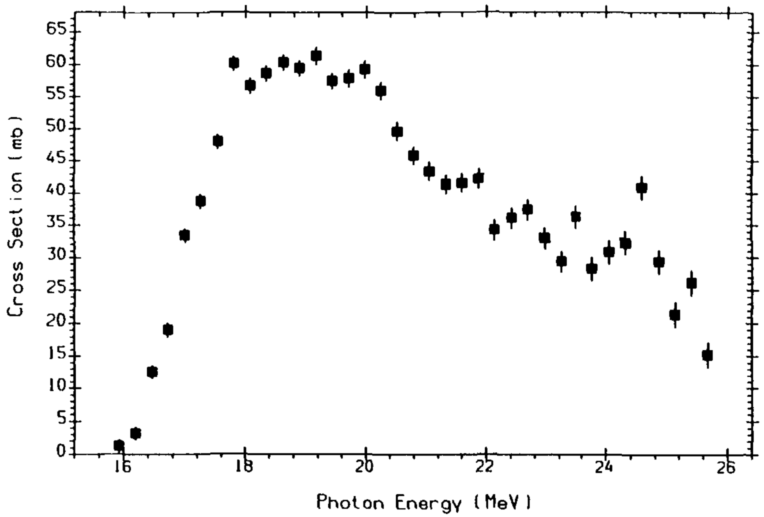
51-SB-0(G,X)0-NN-1
The sum: (G,N)+(G,N+P)+2(G,2N)+2(G,2N+P).
Positron annihilation
L0035032 J,NP/A,219,39,7401 A.LEPRETRE+



51-SB-0(G,X)0-NN-1 UNW
The sum: (G,N)+(G,N+P)+(G,2N)+(G,2N+P).
Positron annihilation
L0035051 J,NP/A,219,39,7401 A.LEPRETRE+



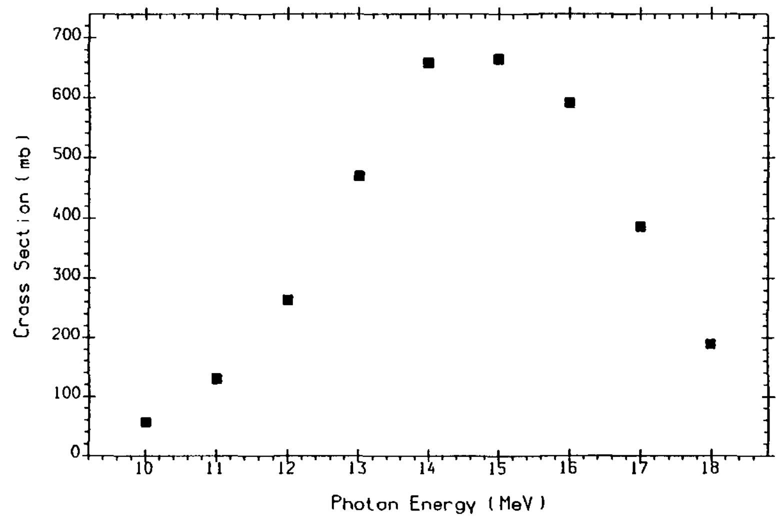
(51-SB-0(G,N))+(51-SB-0(G,N+P))
Positron annihilation
L0035033 J,NP/A,219,39,7401 A.LEPRETRE+



(51-SB-0(G,2N))+(51-SB-0(G,2N+P))
Positron annihilation
L0035034 J,NP/A,219,39,7401 A.LEPRETRE+

$^{121}_{51}Sb$

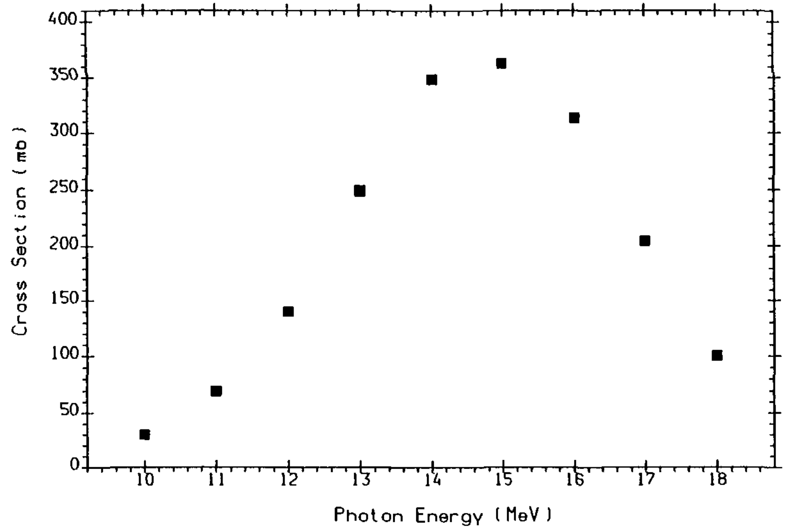
Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	γ,^{3}He	γ,α	γ,2n	γ,np	γ,2p
57.30	9.2	5.8	12.9	17.1	3.1	16.3	14.9	16.5



51-SB-121(G,N)51-SB-120
BRST
M0273009 J,CJP,29,518,51 L.KATZ+

$^{123}_{51}\mathrm{Sb}$

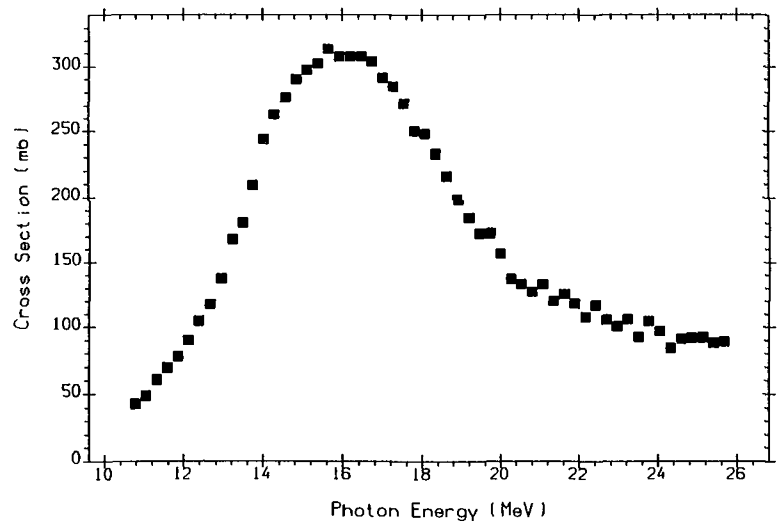
Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	γ,^{3}He	γ,α	γ,2n	γ,np	γ,2p
42.70	9.0	6.6	13.1	18.7	3.9	15.8	15.4	18.0



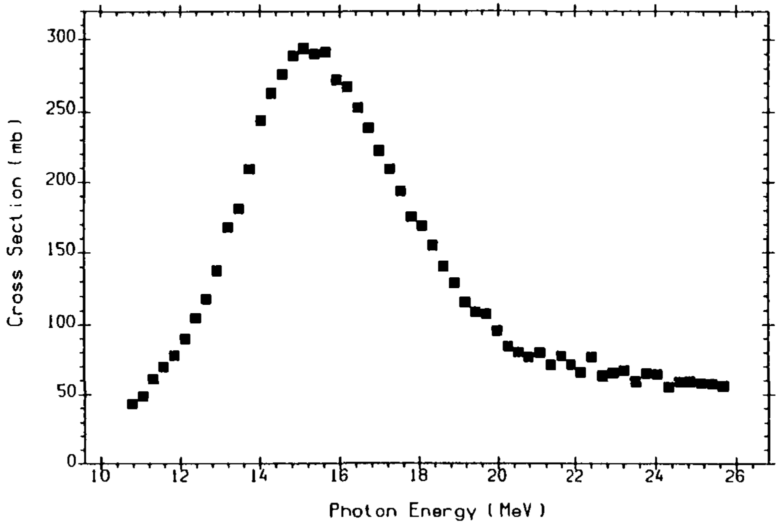
51-SB-123(G,N)51-SB-122
BRST
M0273010 J,CJP,29,518,51 L.KATZ+

$^{nat.}_{52}\mathrm{Te}$

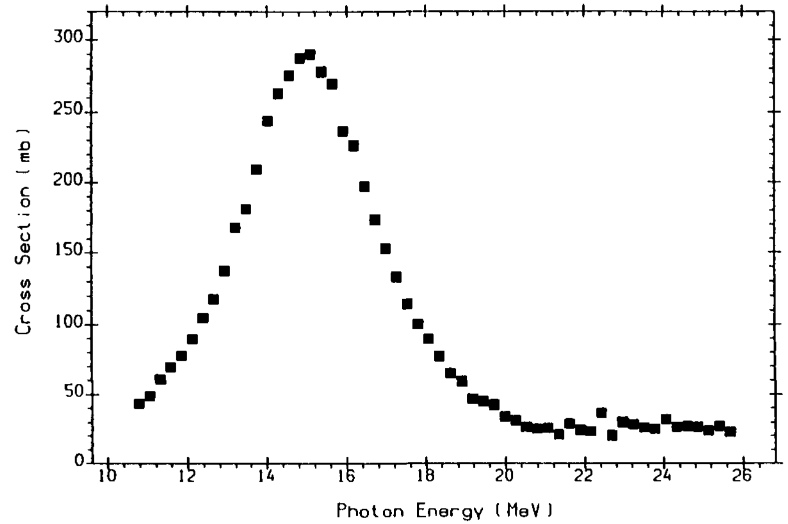
Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	γ,^{3}He	γ,α	γ,2n	γ,np	γ,2p
*	6.6	7.2	15.6	13.0	0.3	14.5	14.9	12.3



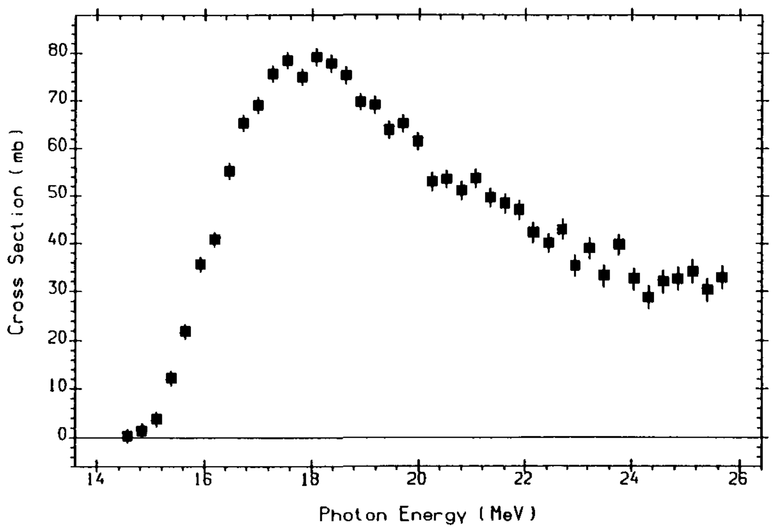
52-TE-0(G,X)0-NN-1
The sum: (G,N)+(G,N+P)+2(G,2N)+2(G,2N+P).
Positron annihilation
L0035035 J,NP/A,219,39,7401 A.LEPRETRE+



52-TE-0(G,X)0-NN-1 UNW
The sum: (G,N)+(G,N+P)+(G,2N)+(G,2N+P).
Positron annihilation
L0035052 J,NP/A,219,39,7401 A.LEPRETRE+



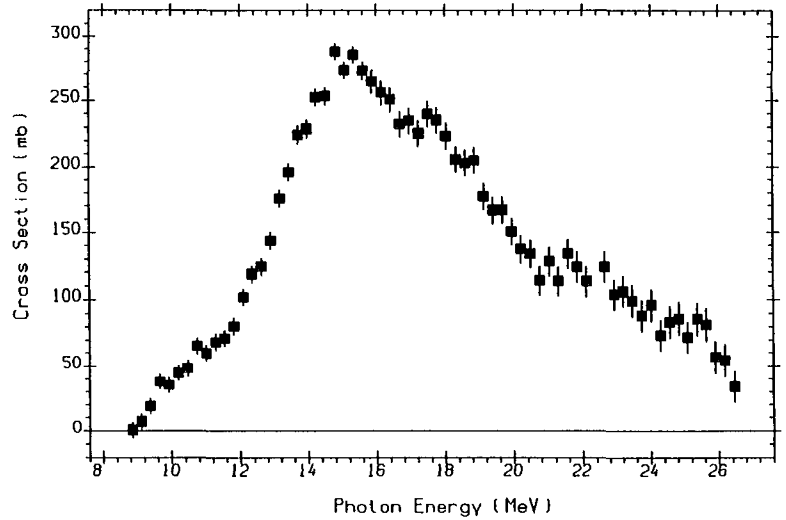
(52-TE-0(G,N))+(52-TE-0(G,N+P))
Positron annihilation
L0035036 J,NP/A,219,39,7401 A.LEPRETRE+



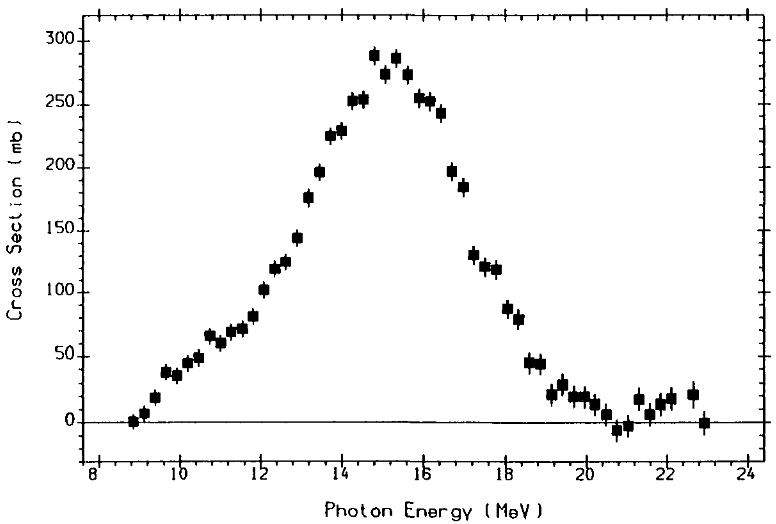
(52-TE-0(G,2N))+(52-TE-0(G,2N+P))
Positron annihilation
L0035037 J,NP/A,219,39,7401 A.LEPRETRE+

$^{124}_{52}Te$

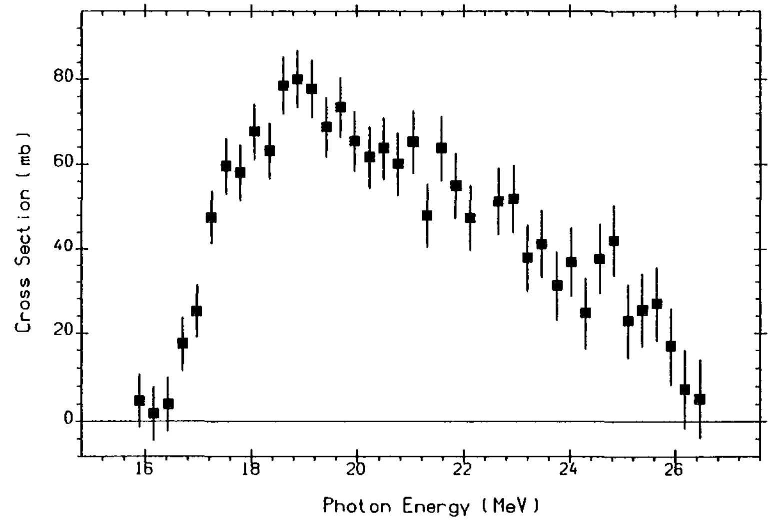
Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	$γ,^3He$	γ,α	γ,2n	γ,np	γ,2p
4.60	9.4	8.6	15.9	16.2	1.8	16.4	17.5	15.2



52-TE-124(G,X)0-NN-1
The sum: (G,N)+(G,NP)+2(G,2N)+2(G,2N+P).
QMPH,ARAD Positron annihilation in flight.
L0042004 J,NP/A,258,350,76 A.LEPRETRE+



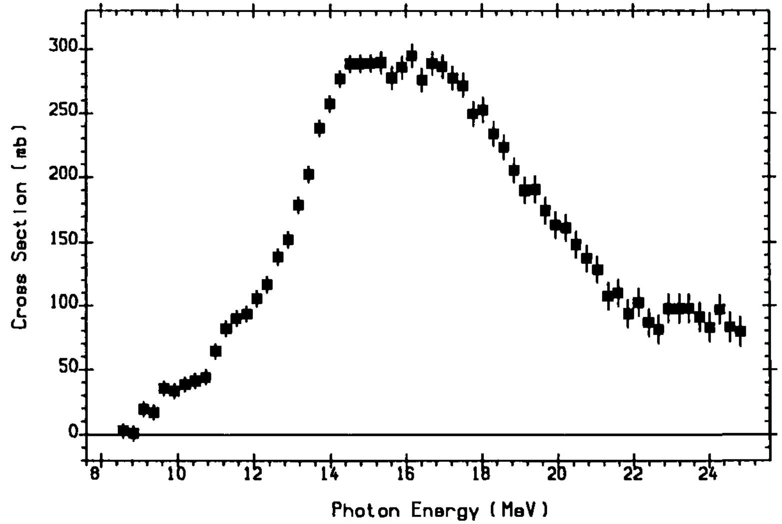
(52-TE-124(G,N)52-TE-123)+(52-TE-124(G,N+P)51-SB-122)
QMPH,ARAD Positron annihilation in flight.
L0042002 J,NP/A,258,350,76 A.LEPRETRE+



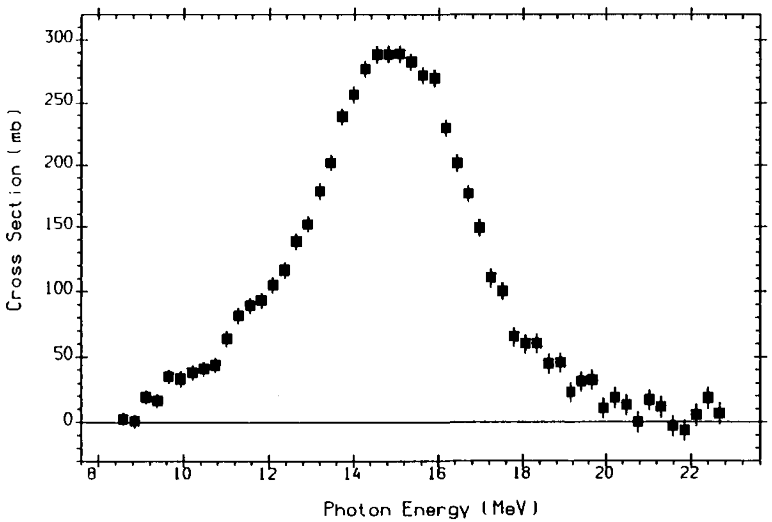
(52-TE-124(G,2N)52-TE-122)+(52-TE-124(G,2N+P)51-SB-121)
QMPH,ARAD Positron annihilation in flight.
L0042003 J,NP/A,258,350,76 A.LEPRETRE+

$^{126}_{52}Te$

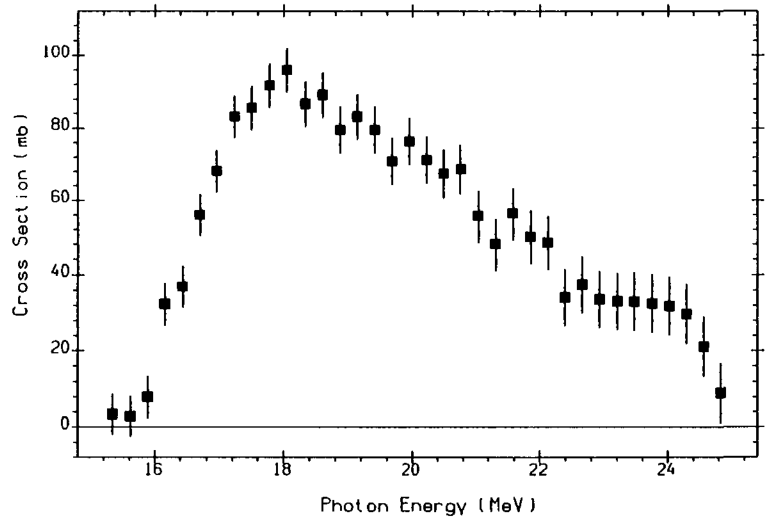
Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	γ,^{3}He	γ,α	γ,2n	γ,np	γ,2p
18.70	9.1	9.1	15.8	17.2	2.6	15.7	17.8	16.4



52-TE-126(G,X)0-NN-1
The sum: (G,N)+(G,NP)+2(G,2N)+2(G,2N+P).
QMPH,ARAD Positron annihilation in flight.
L0042007 J,NP/A,258,350,76 A.LEPRETRE+



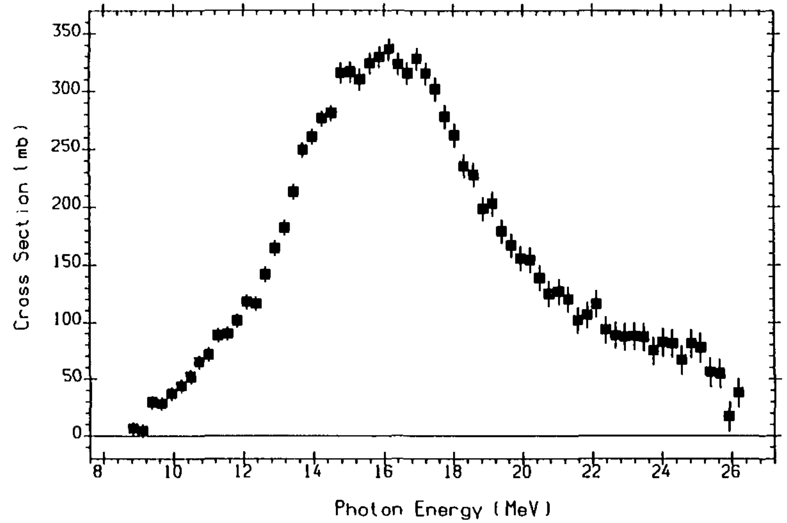
(52-TE-126(G,N)52-TE-125)+(52-TE-126(G,N+P)51-SB-124)
QMPH,ARAD Positron annihilation in flight.
L0042005 J,NP/A,258,350,76 A.LEPRETRE+



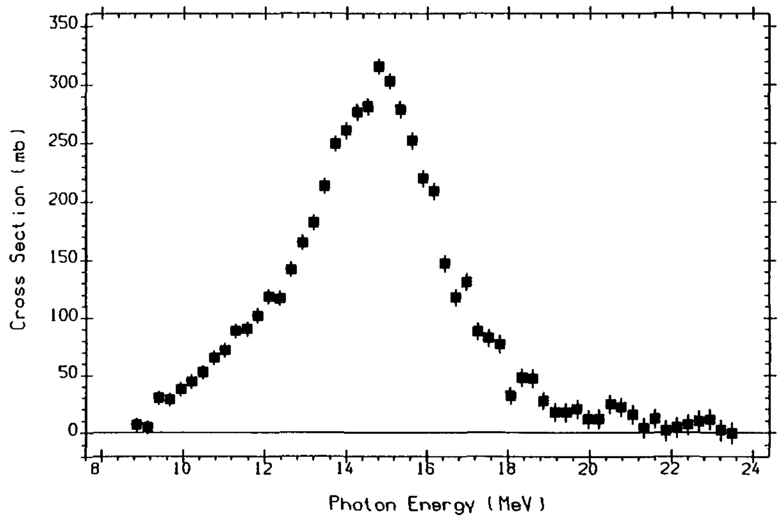
(52-TE-126(G,2N)52-TE-124)+(52-TE-126(G,2N+P)51-SB-123)
QMPH,ARAD Positron annihilation in flight.
L0042006 J,NP/A,258,350,76 A.LEPRETRE+

$^{128}_{52}\mathrm{Te}$

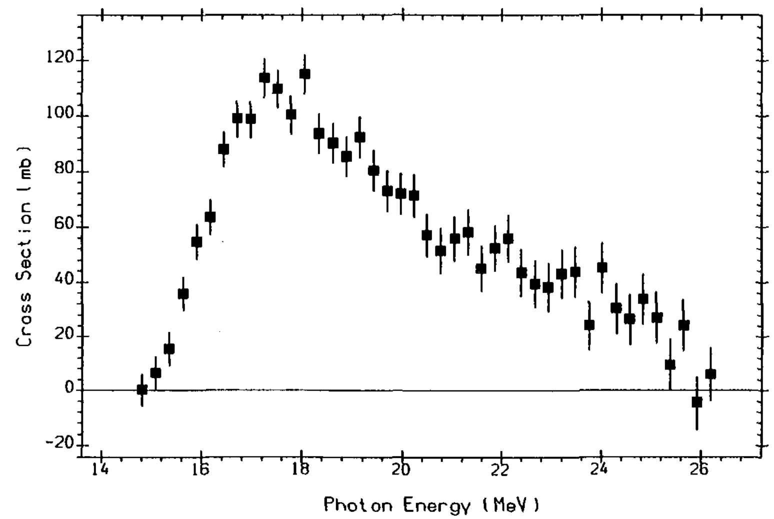
Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	γ,^{3}He	γ,α	γ,2n	γ,np	γ,2p
31.70	8.8	9.6	15.7	18.0	3.2	15.1	18.0	17.6



52-TE-128(G,X)0-NN-1
The sum: (G,N)+(G,NP)+2(G,2N)+2(G,2N+P).
QMPH,ARAD Positron annihilation in flight.
L0042010 J,NP/A,258,350,76 A.LEPRETRE+



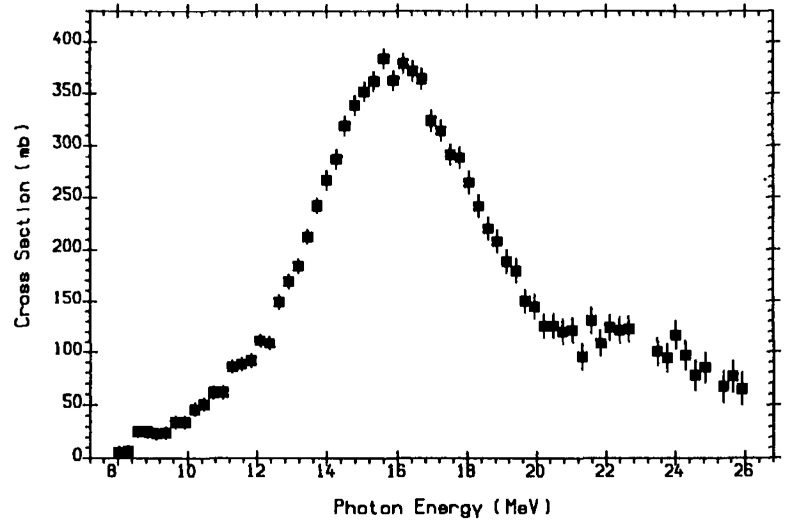
(52-TE-128(G,N)52-TE-127)+(52-TE-128(G,N+P)51-SB-126)
QMPH,ARAD Positron annihilation in flight.
L0042008 J,NP/A,258,350,76 A.LEPRETRE+



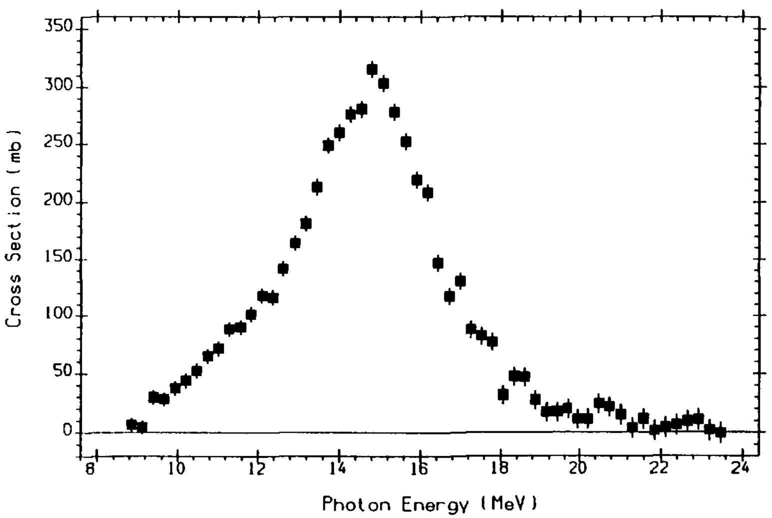
(52-TE-128(G,2N)52-TE-126)+(52-TE-128(G,2N+P)51-SB-125)
QMPH,ARAD Positron annihilation in flight.
L0042009 J,NP/A,258,350,76 A.LEPRETRE+

$^{130}_{52}Te$

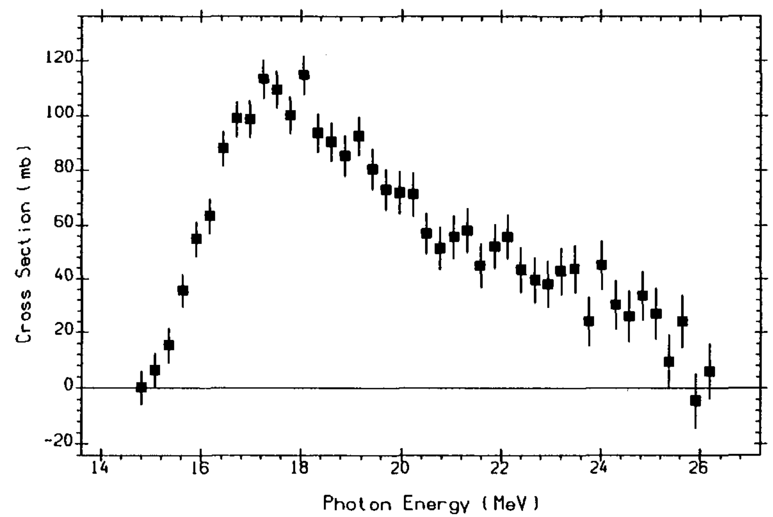
Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	γ,^{3}He	γ,α	γ,2n	γ,np	γ,2p
34.50	8.4	10.0	15.6	18.8	3.8	14.5	18.0	18.6



52-TE-130(G,X)0-NN-1
The sum: (G,N)+(G,NP)+2(G,2N)+2(G,2N+P).
QMPH,ARAD Positron annihilation in flight.
L0042013 J,NP/A,258,350,76 A.LEPRETRE+



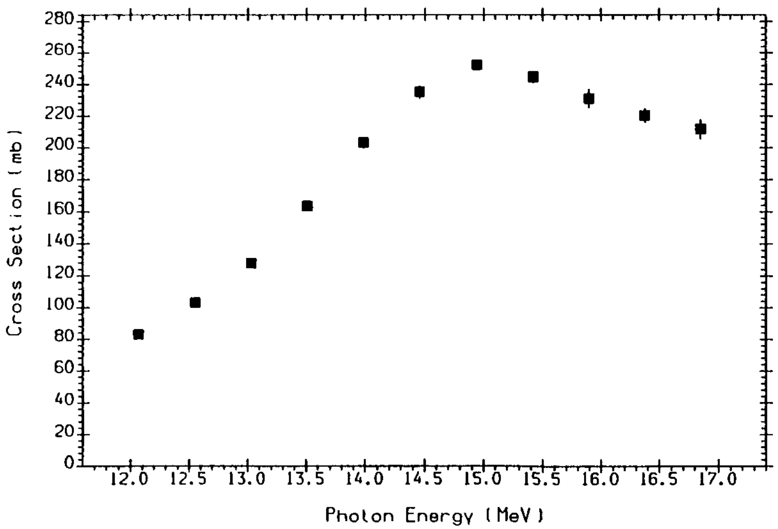
(52-TE-130(G,N)52-TE-129)+(52-TE-130(G,N+P)51-SB-128)
QMPH,ARAD Positron annihilation in flight.
L0042011 J,NP/A,258,350,76 A.LEPRETRE+



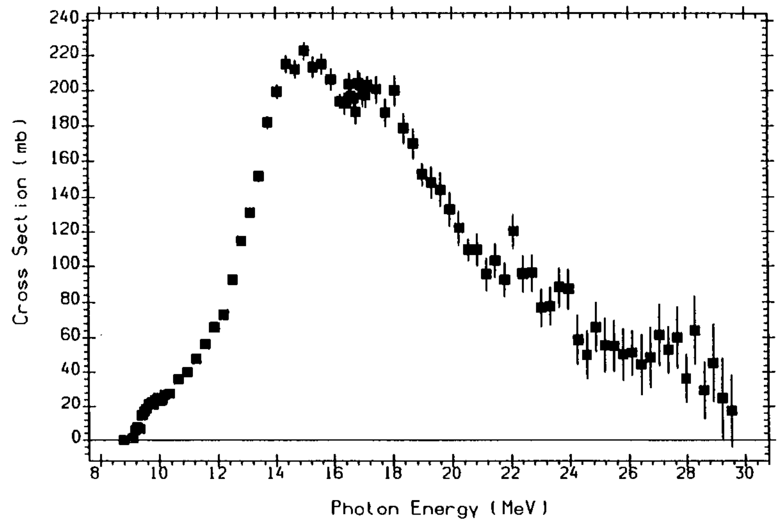
(52-TE-130(G,2N)52-TE-128)+(52-TE-130(G,2N+P)51-SB-127)
QMPH,ARAD Positron annihilation in flight.
L0042012 J,NP/A,258,350,76 A.LEPRETRE+

$^{127}_{53}I$

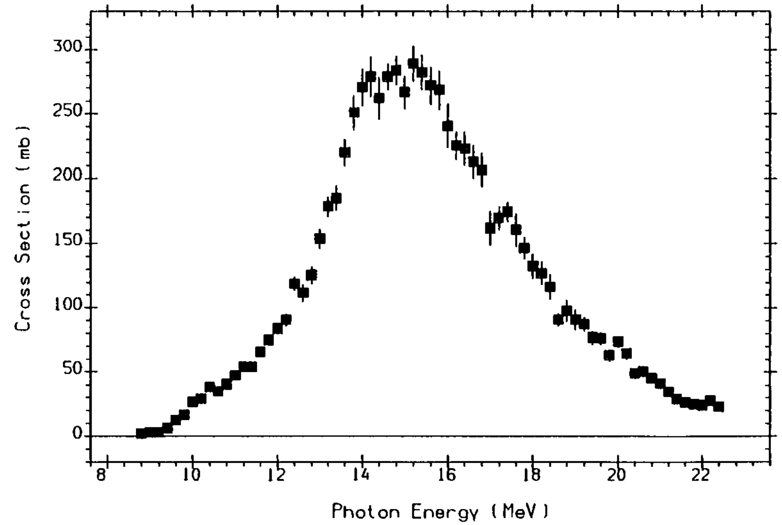
Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	$γ,^3He$	γ,α	γ,2n	γ,np	γ,2p
100.00	9.1	6.2	13.4	16.3	2.2	16.3	15.3	15.3



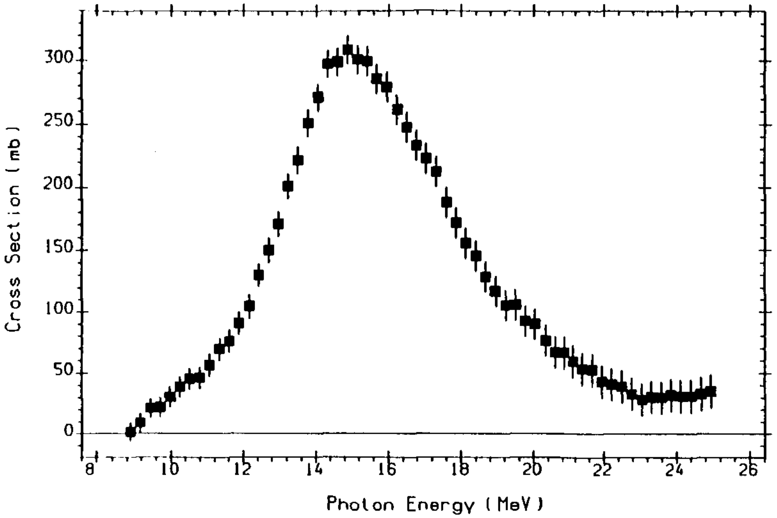
53-I-127(G,X)0-NN-1
The sum: (G,N)+(G,N+P)+2(G,2N).
QMPH,ARAD Positron annihilation in flight.
L0057007 J,PR/C,36,1286,8705 B.L.BERMAN+



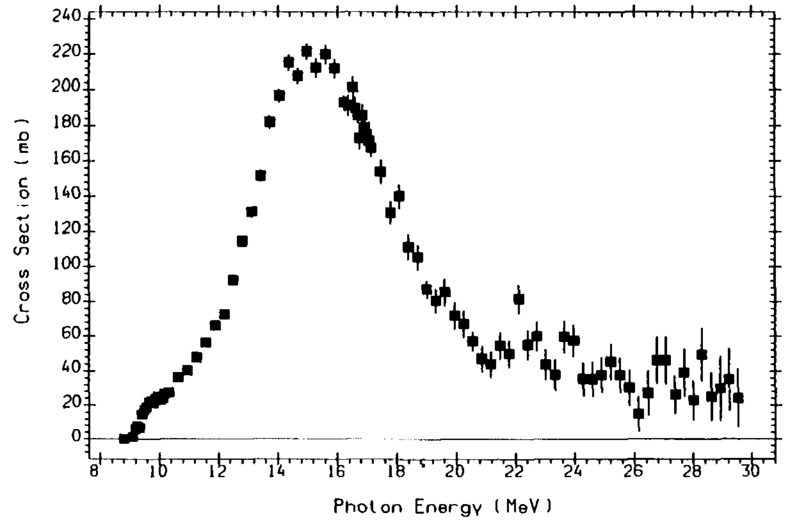
53-I-127(G,X)0-NN-1
The sum: (G,N)+(G,N+P)+2(G,2N)+2(G,2N+P)+3(G,3N).
Positron annihilation
L0009002 J,PR,148,1198,6608 R.L.BRAMBLETT+



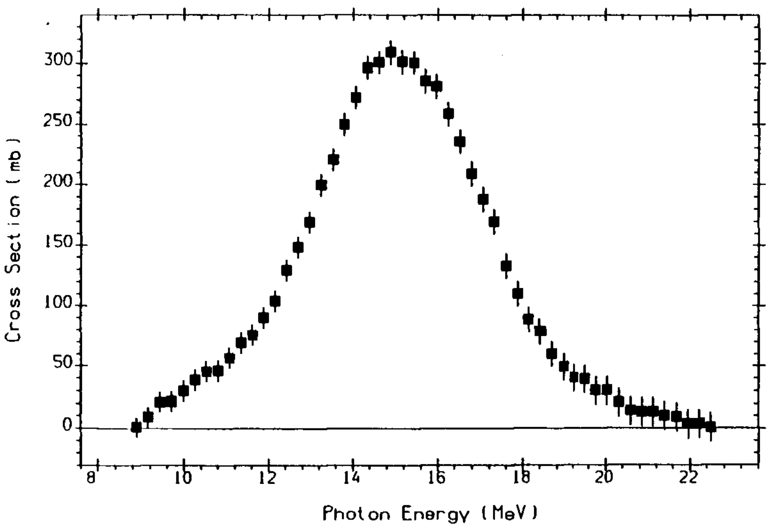
53-I-127(G,X)0-NN-1 UNW
THE SUM OF THE (G,N), (G,NP), AND (G,2N) REACTION CROSS SECTIONS.
BRST
M0511002 J,PR/C,39,1631,89 R.P.RASSOOL+



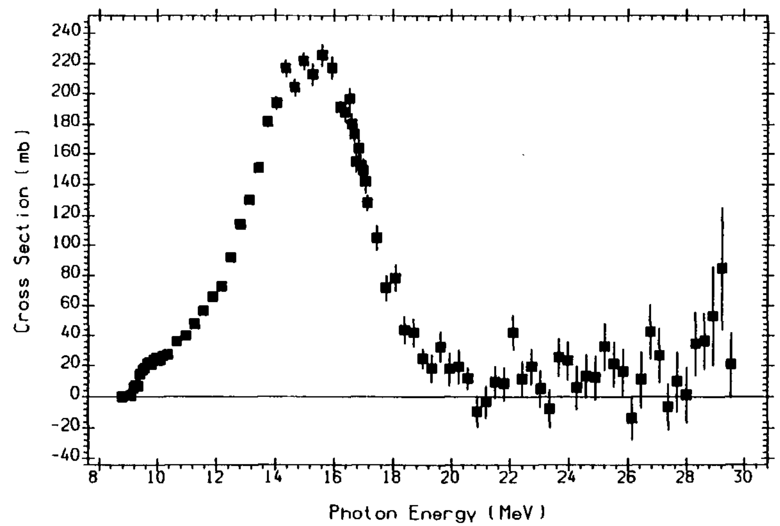
53-I-127(G,X)0-NN-1 UNW
The sum: (G,N)+(G,N+P)+(G,2N)+(G,2N+P)+(G,3N).
Positron annihilation
L0015022 J,NP/A,133,417,6904 R.BERGERE+



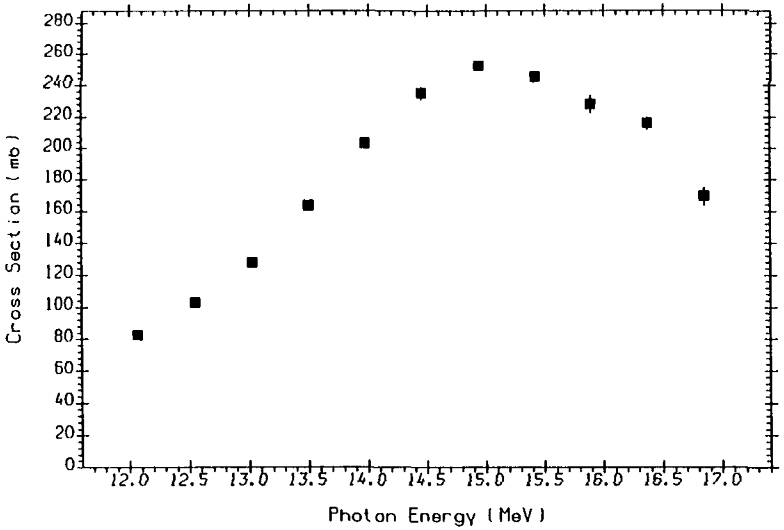
53-I-127(G,X)0-NN-1 UNW
The sum: (G,N)+(G,N+P)+(G,2N)+(G,2N+P)+(G,3N).
Positron annihilation
L0009009 J,PR,148,1198,6608 R.L.BRAMBLETT+



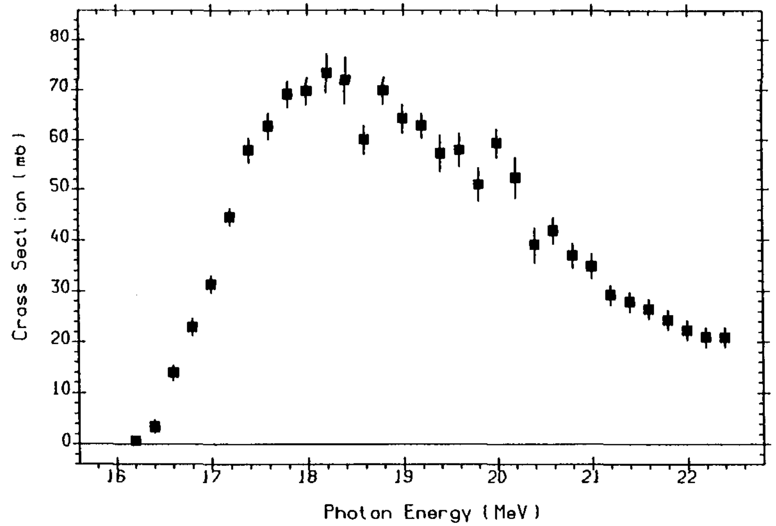
(53-I-127(G,N)53-I-126)+(53-I-127(G,N+P)52-TE-125)
Positron annihilation
L0015003 J,NP/A,133,417,6904 R.BERGERE+



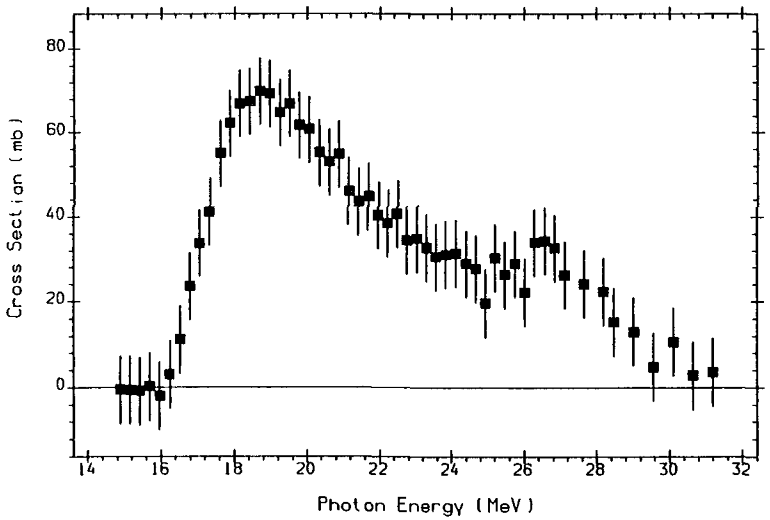
(53-I-127(G,N)53-I-126)+(53-I-127(G,N+P)52-TE-125)
Positron annihilation
L0009003 J,PR,148,1198,6608 R.L.BRAMBLETT+



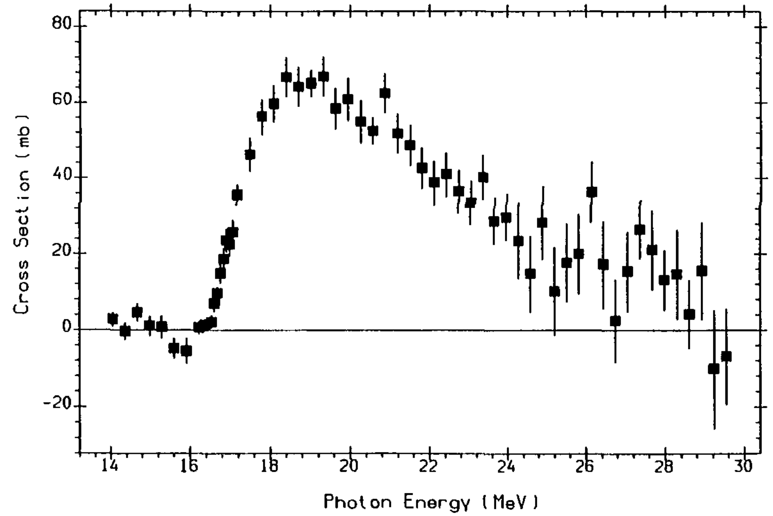
(53-I-127(G,N)53-I-126)+(53-I-127(G,N+P)52-TE-125)
QMPH,ARAD Positron annihilation in flight.
L0057005 J,PR/C,36,1286,8705 B.L.BERMAN+



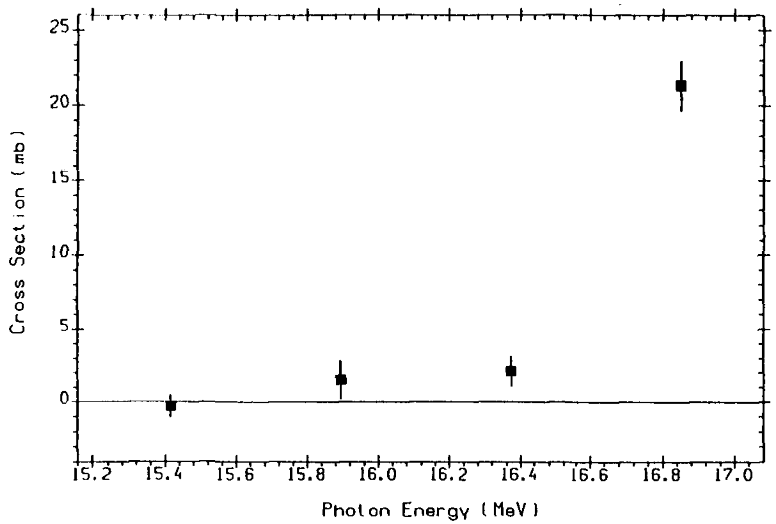
53-I-127(G,2N)53-I-125
BRST
M0511003 J,PR/C,39,1631,89 R.P.RASSOOL+



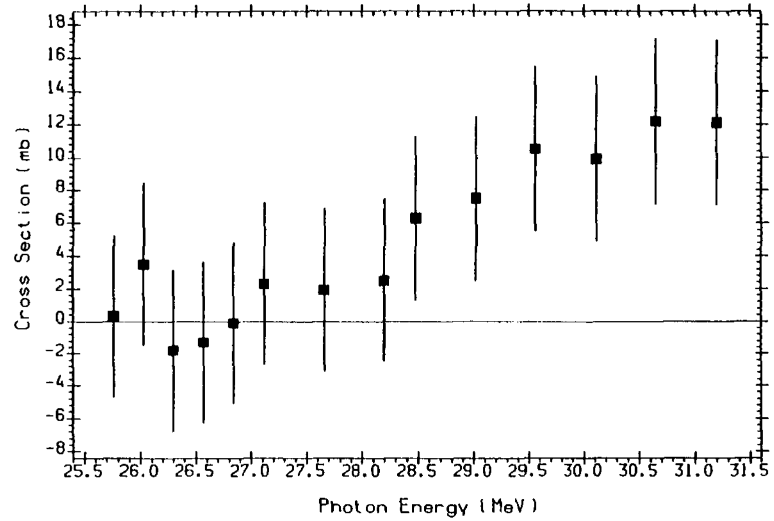
(53-I-127(G,2N)53-I-125)+(53-I-127(G,2N+P)52-TE-124)
Positron annihilation
L0015004 J,NP/A,133,417,6904 R.BERGERE+



(53-I-127(G,2N)53-I-125)+(53-I-127(G,2N+P)52-TE-124)
Positron annihilation
L0009004 J,PR,148,1198,6608 R.L.BRAMBLETT+



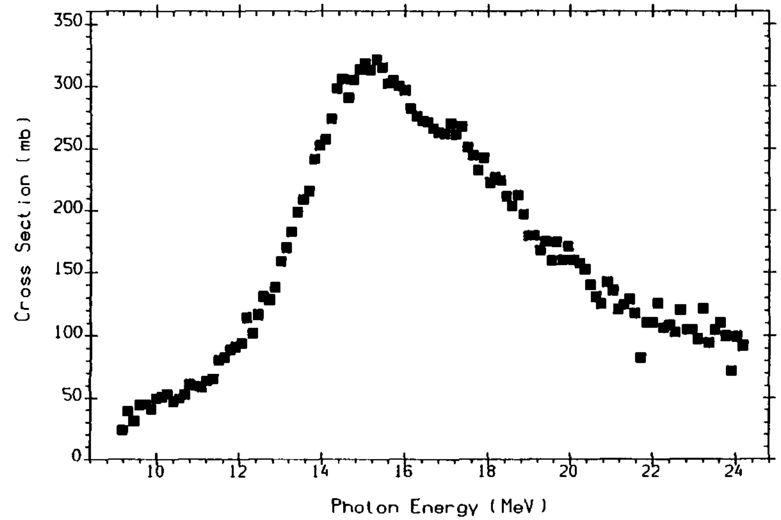
53-I-127(G,2N)53-I-125
QMPH,ARAD Positron annihilation in flight.
L0057006 J,PR/C,36,1286,8705 B.L.BERMAN+



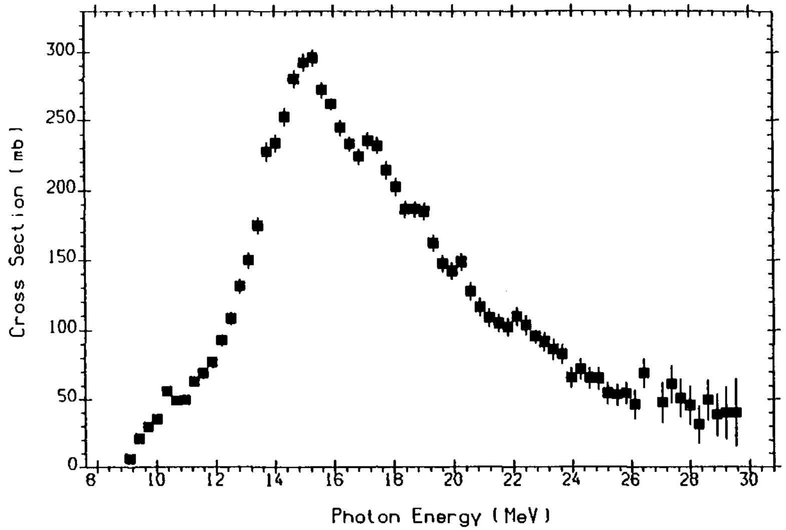
53-I-127(G,3N)53-I-124
Positron annihilation
L0015005 J,NP/A,133,417,6904 R.BERGERE+

$^{133}_{55}Cs$

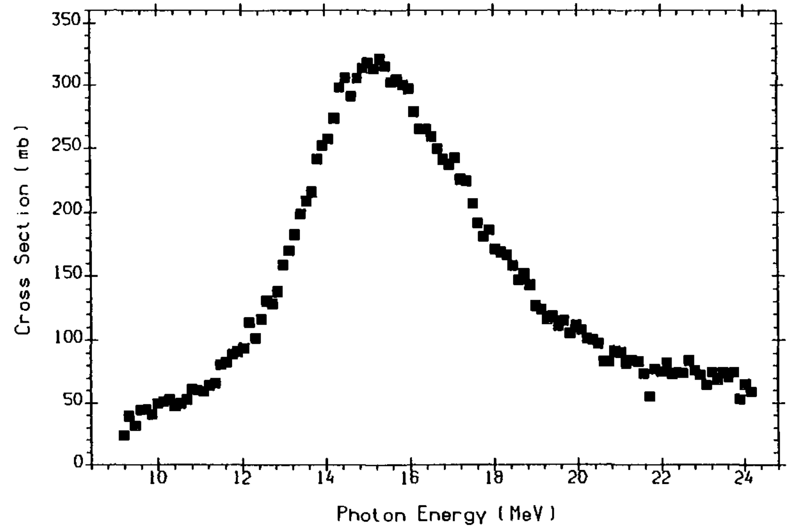
Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	γ,^{3}He	γ,α	γ,2n	γ,np	γ,2p
100.00	9.0	6.1	13.2	16.1	2.0	16.2	15.0	15.2



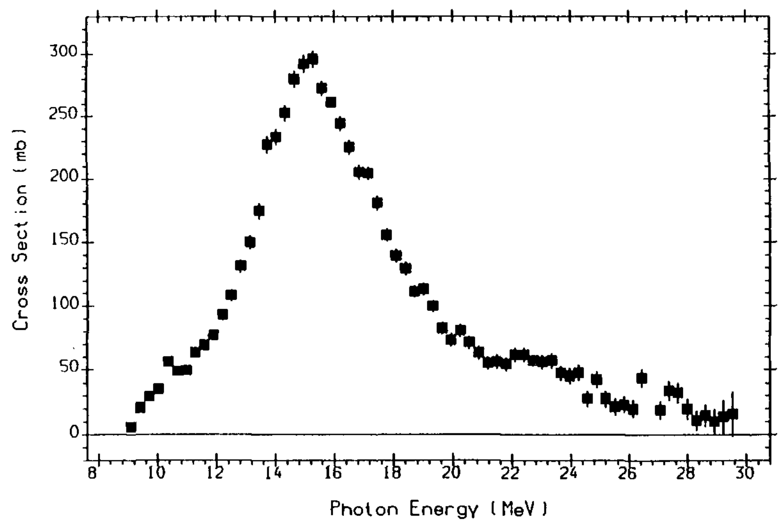
55-CS-133(G,X)0-NN-1
The sum: (G,N)+(G,N+P)+2(G,2N)+2(G,2N+P).
Positron annihilation
L0035038 J,NP/A,219,39,7401 A.LEPRETRE+



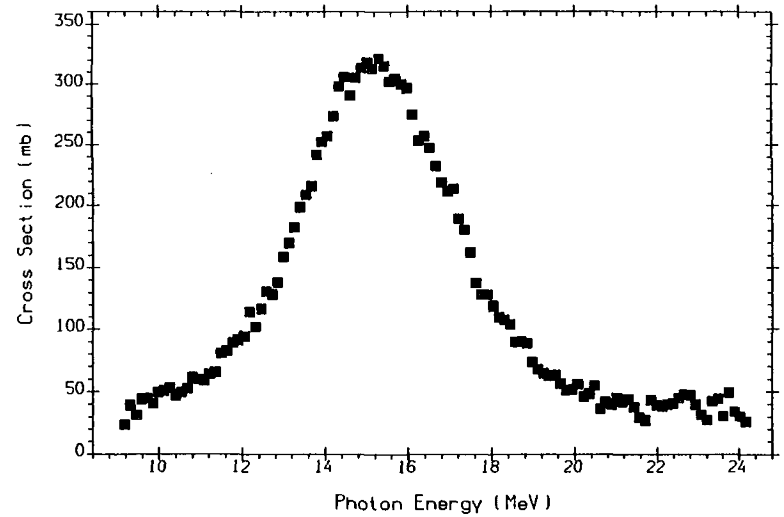
55-CS-133(G,X)0-NN-1
The sum: (G,N)+(G,N+P)+2(G,2N)+2(G,2N+P)+3(G,3N).
Positron annihilation
L0014008 J,PR,177,1745,6901 B.L.BERMAN+



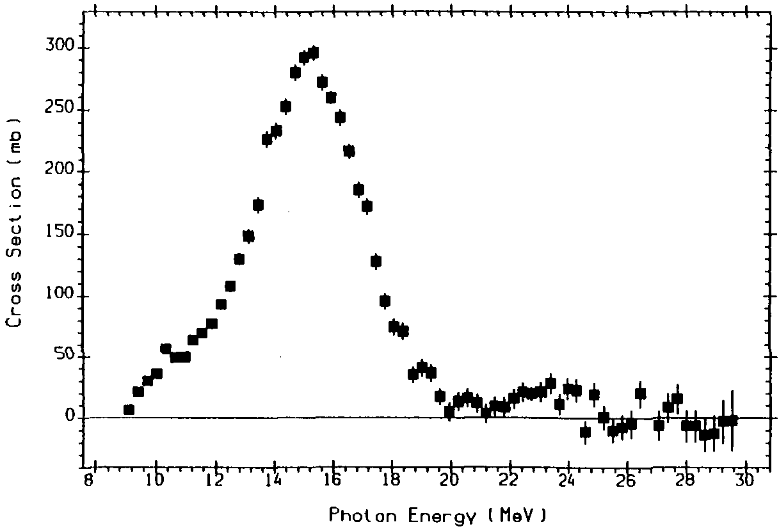
55-CS-133(G,X)0-NN-1 UNW
The sum: (G,N)+(G,N+P)+(G,2N)+(G,2N+P).
Positron annihilation
L0035053 J,NP/A,219,39,7401 A.LEPRETRE+



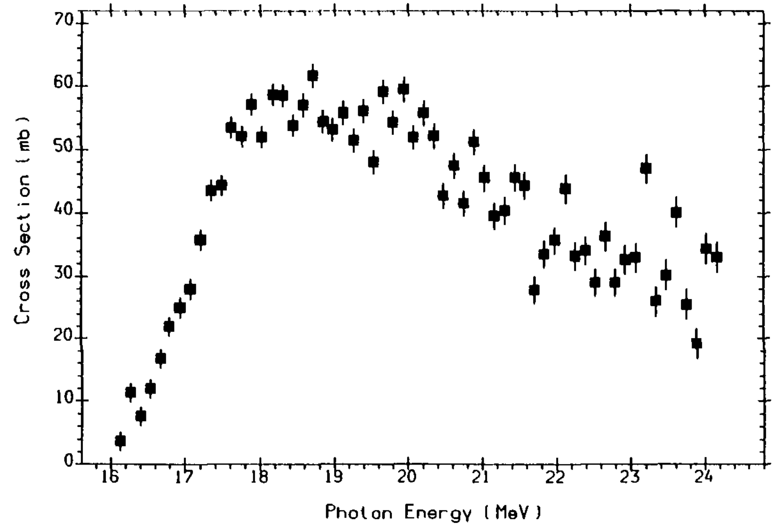
55-CS-133(G,X)0-NN-1 UNW
The sum: (G,N)+(G,N+P)+(G,2N)+(G,2N+P)+(G,3N).
Positron annihilation
L0014014 J,PR,177,1745,6901 B.L.BERMAN+



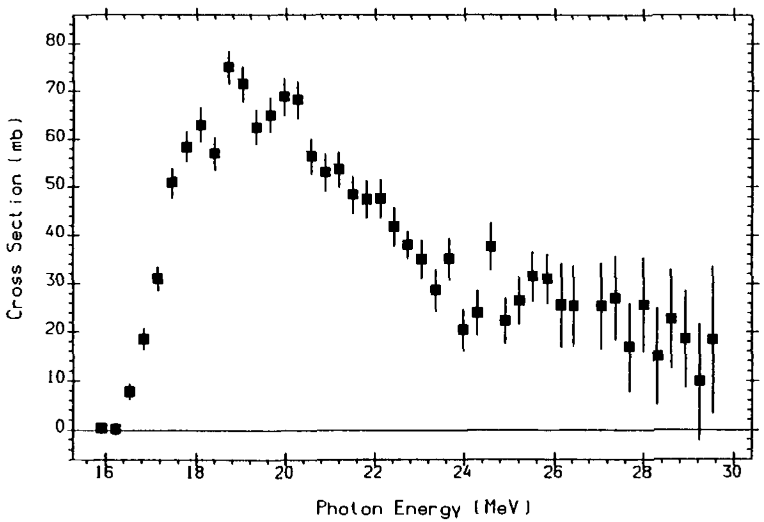
(55-CS-133(G,N)55-CS-132)+(55-CS-133(G,N+P)54-XE-131)
Positron annihilation
L0035039 J,NP/A,219,39,7401 A.LEPRETRE+



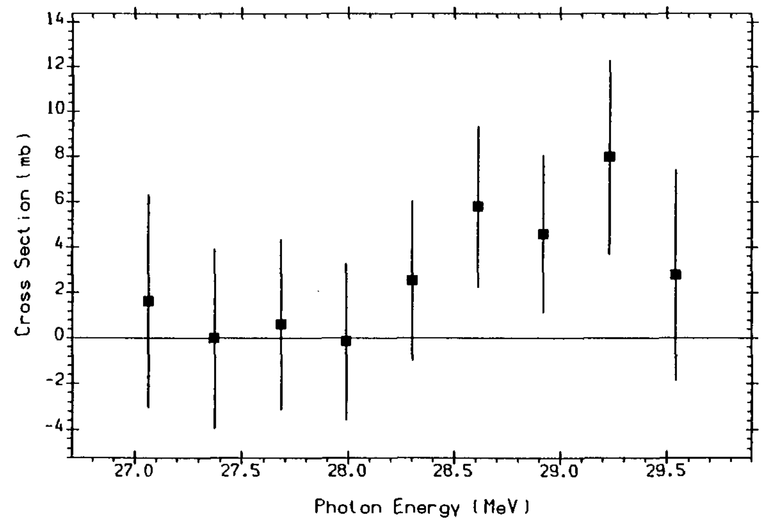
(55-CS-133(G,N)55-CS-132)+(55-CS-133(G,N+P)54-XE-131)
Positron annihilation
L0014009 J,PR,177,1745,6901 B.L.BERMAN+



(55-CS-133(G,2N)55-CS-131)+(55-CS-133(G,2N+P)54-XE-130)
Positron annihilation
L0035040 J,NP/A,219,39,7401 A.LEPRETRE+



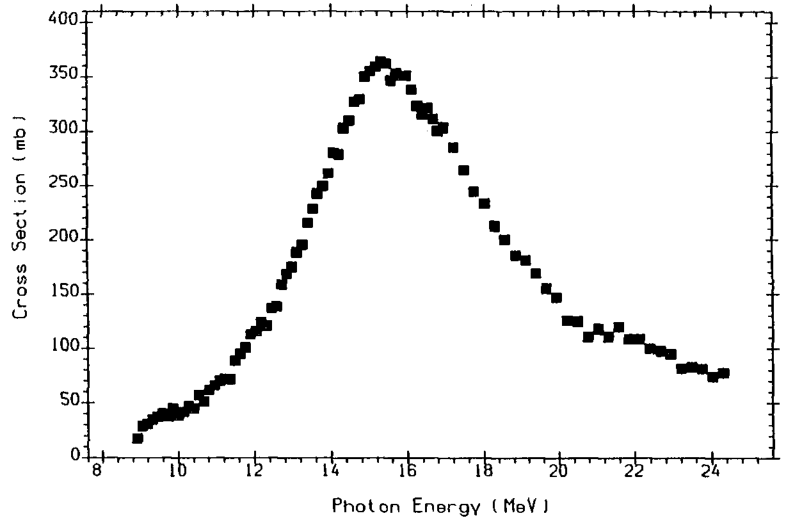
(55-CS-133(G,2N)55-CS-131)+(55-CS-133(G,2N+P)54-XE-130)
Positron annihilation
L0014010 J,PR,177,1745,6901 B.L.BERMAN+



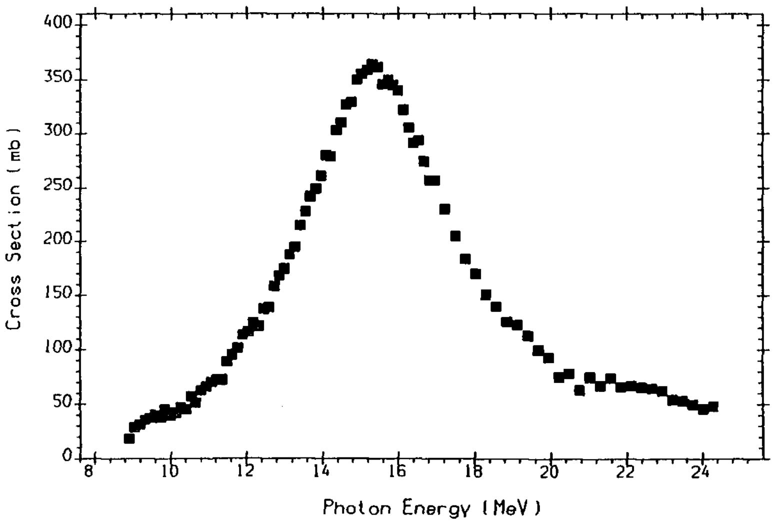
55-CS-133(G,3N)55-CS-130
Positron annihilation
L0014011 J,PR,177,1745,6901 B.L.BERMAN+

$^{nat.}_{56}$Ba

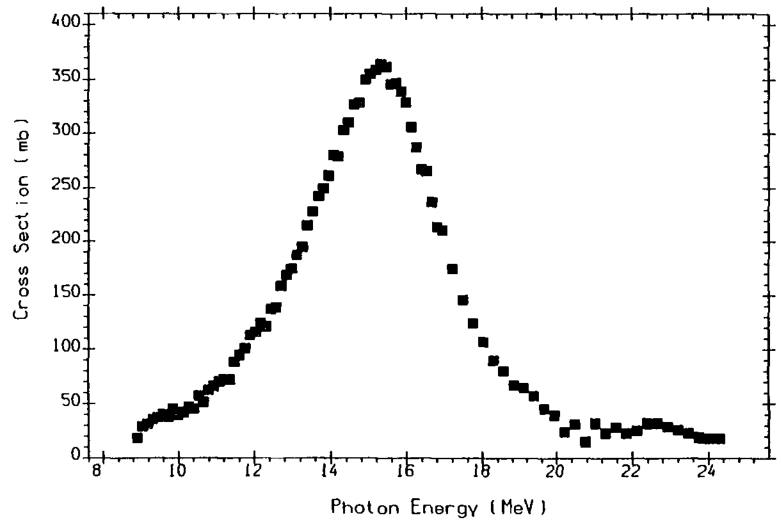
Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	γ,^{3}He	γ,α	γ,2n	γ,np	γ,2p
*	6.9	7.1	15.6	13.5	0.5	15.5	15.1	12.0



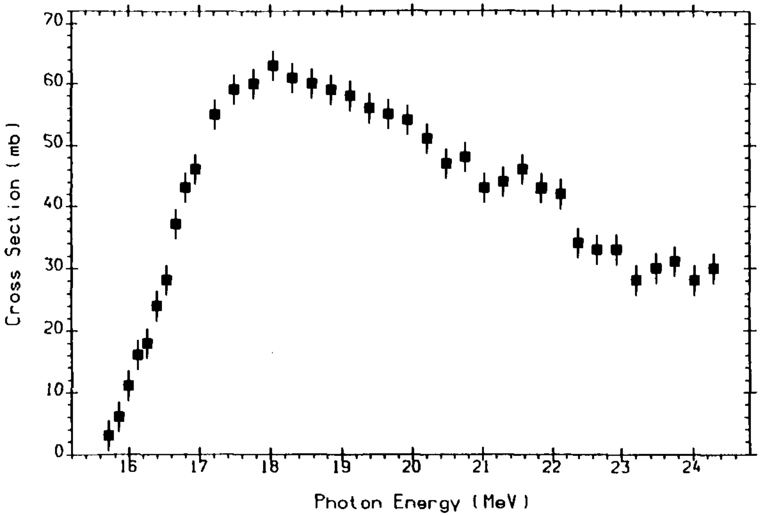
56-BA-0(G,X)0-NN-1
The sum: (G,N)+(G,N+P)+2(G,2N).
Positron annihilation
L0024002 J,NP/A,172,426,7109 H.BEIL+



56-BA-0(G,X)0-NN-1 UNW
The sum: (G,N)+(G,N+P)+(G,2N).
Positron annihilation
L0024016 J,NP/A,172,426,7109 H.BEIL+



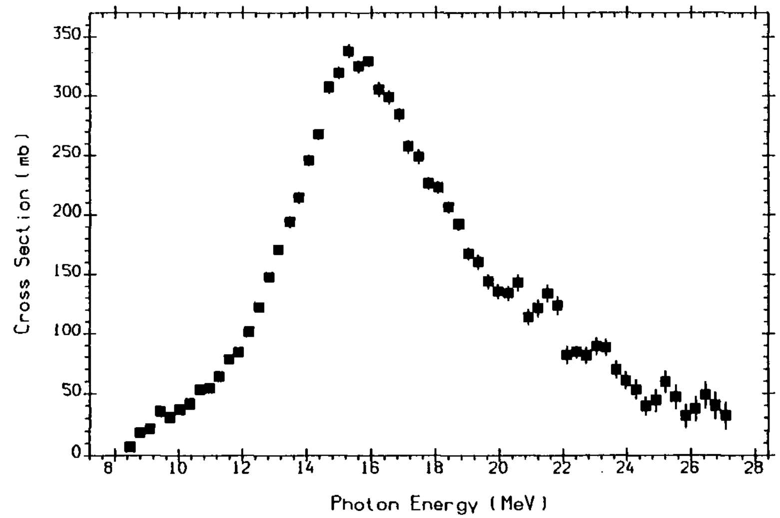
(56-BA-0(G,N))+(56-BA-0(G,N+P))
Positron annihilation
L0024003 J,NP/A,172,426,7109 H.BEIL+



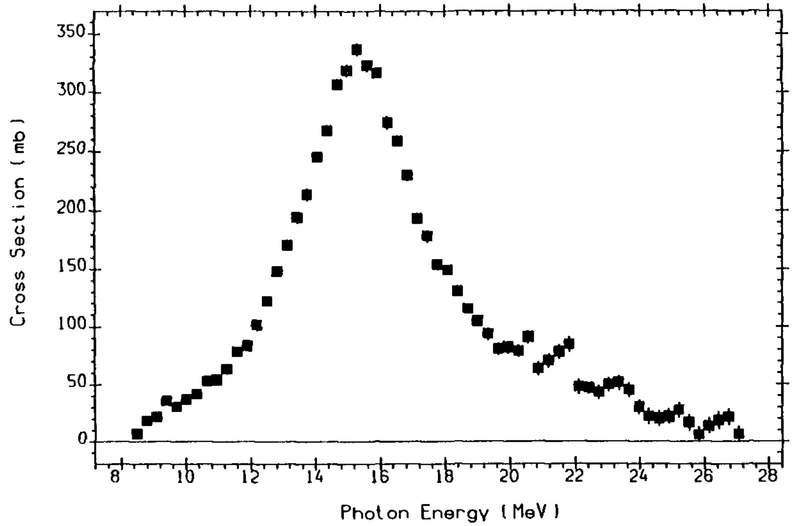
56-BA-0(G,2N)
Positron annihilation
L0024004 J,NP/A,172,426,7109 H.BEIL+

$^{138}_{56}Ba$

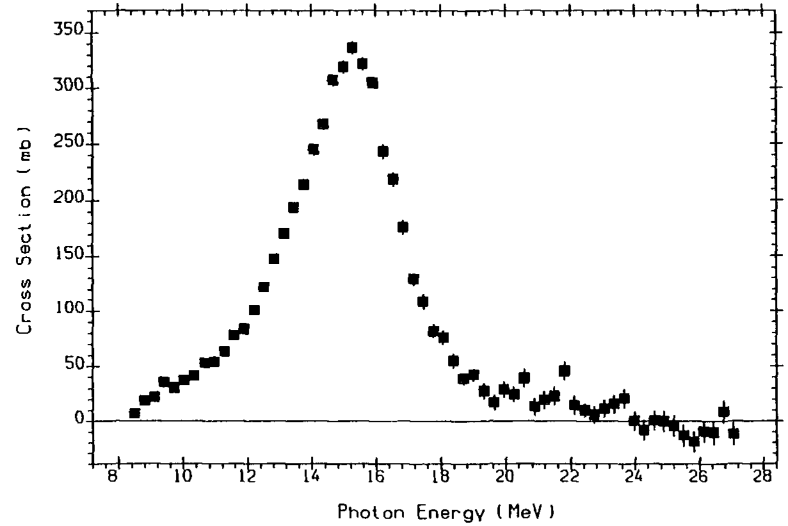
Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	γ,^{3}He	γ,α	γ,2n	γ,np	γ,2p
71.70	8.6	9.0	15.6	16.7	2.6	15.5	17.3	16.4



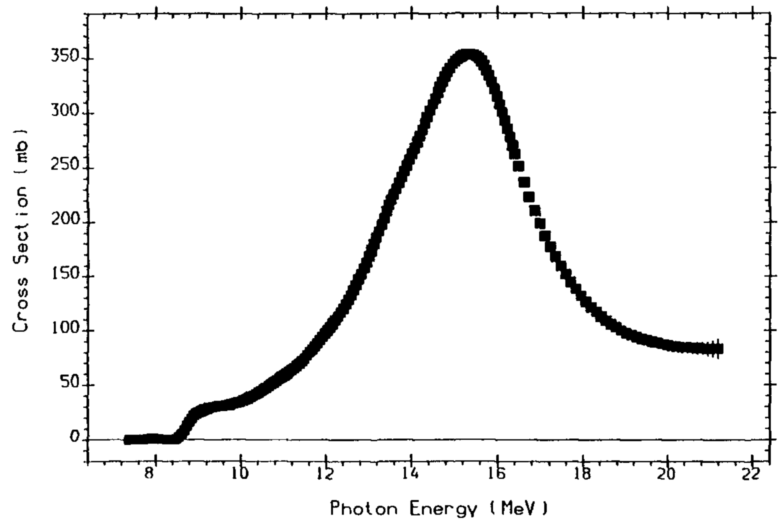
56-BA-138(G,X)0-NN-1
The sum: (G,N)+(G,N+P)+2(G,2N)+2(G,2N+P)+3(G,3N).
Positron annihilation
L0019004 J,PR/C,2,2318,7012 B.L.BERMAN+



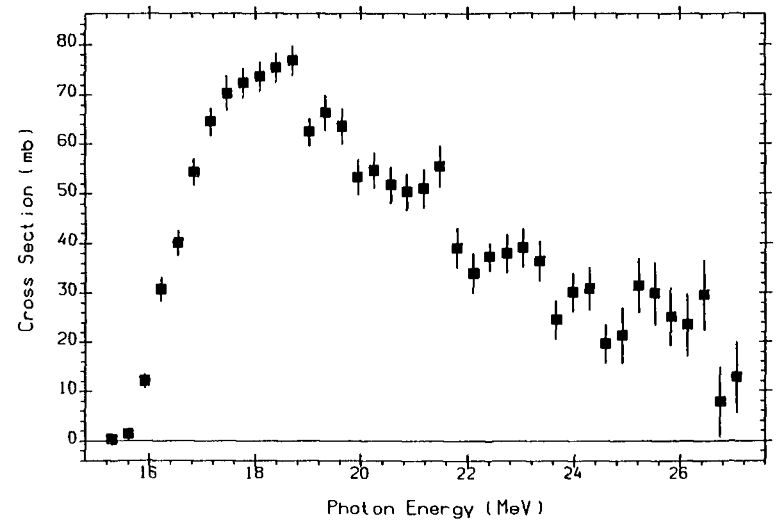
56-BA-138(G,X)0-NN-1 UNW
The sum: (G,N)+(G,N+P)+(G,2N)+(G,2N+P)+(G,3N).
Positron annihilation
L0019008 J,PR/C,2,2318,7012 B.L.BERMAN+



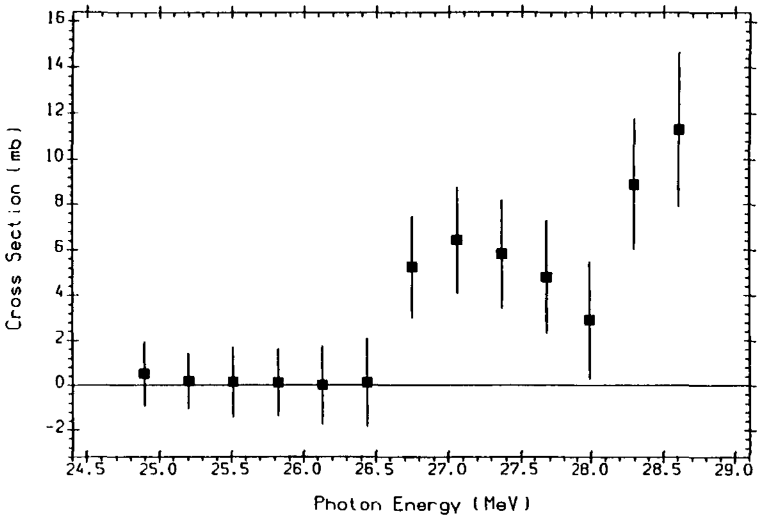
(56-BA-138(G,N)56-BA-137)+(56-BA-138(G,N+P)55-CS-136)
Positron annihilation
L0019005 J,PR/C,2,2318,7012 B.L.BERMAN+



56-BA-138(G,N)56-BA-137
BRST
M0367003 J,IZV,55,(5),953,91 S.N.BELJAEV+



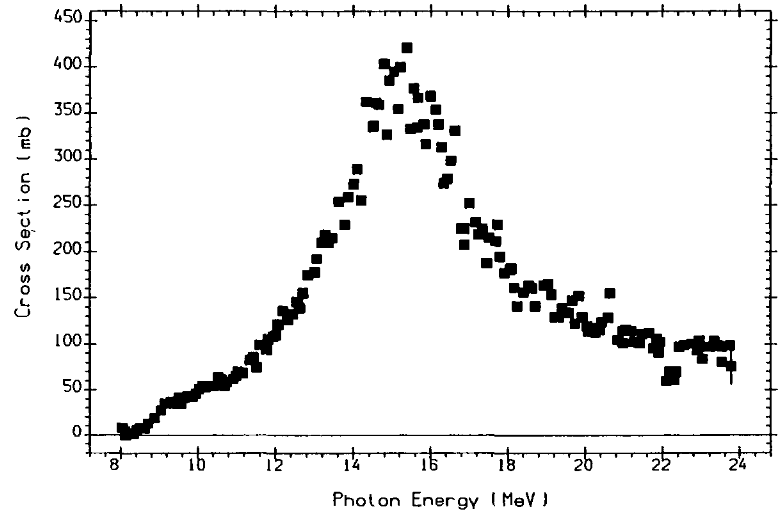
(56-BA-138(G,2N)56-BA-136)+(56-BA-138(G,2N+P)55-CS-135)
Positron annihilation
L0019006 J,PR/C,2,2318,7012 B.L.BERMAN+



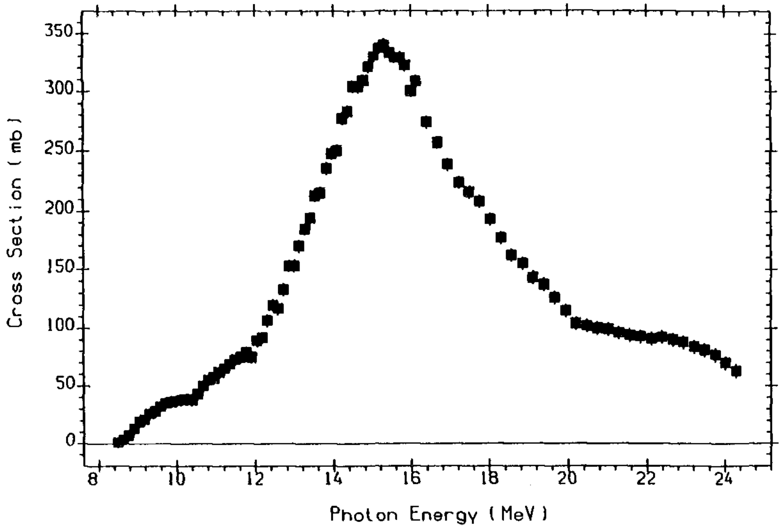
56-BA-138(G,3N)56-BA-135
Positron annihilation
L0019007 J,PR/C,2,2318,7012 B.L.BERMAN+

$^{139}_{57}La$

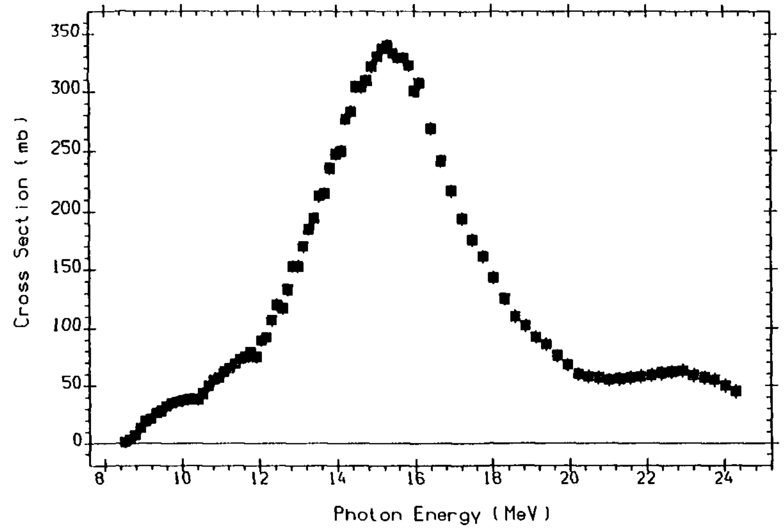
Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	$\gamma,^3He$	γ,α	γ,2n	γ,np	γ,2p
99.91	8.8	6.3	13.2	15.8	2.1	16.3	14.8	15.3



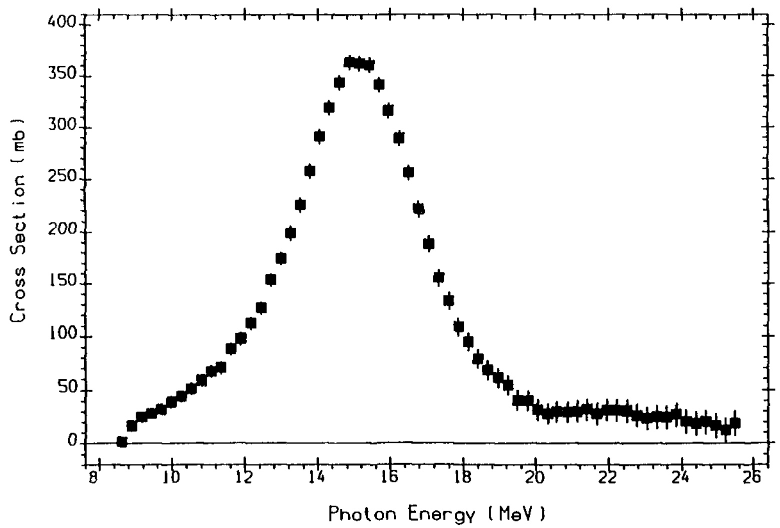
57-LA-139(G,X)0-NN-1
THE (G,XN) = ((G,N) + (G,NP) + 2(G,2N) + ...)
BRST
M0398004 J,NP/A,191,305,72 T.K.DEAGUE+



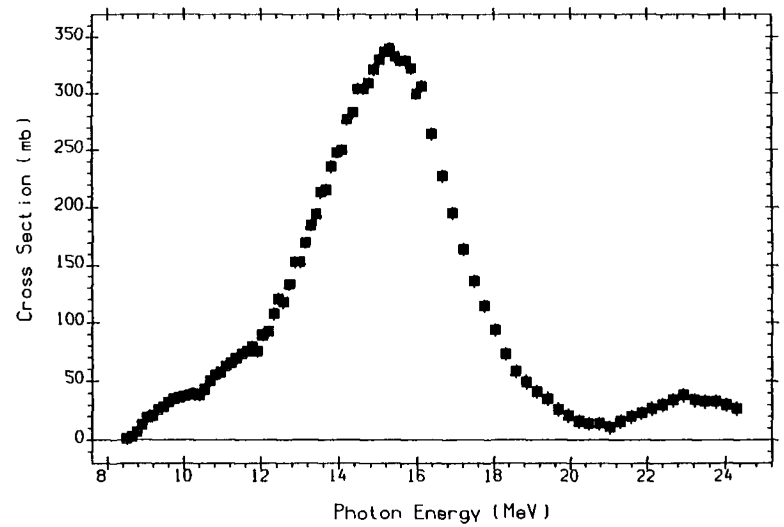
57-LA-139(G,X)0-NN-1
The sum: (G,N)+(G,N+P)+2(G,2N)+2(G,2N+P).
Positron annihilation
L0024005 J,NP/A,172,426,7109 H.BEIL+



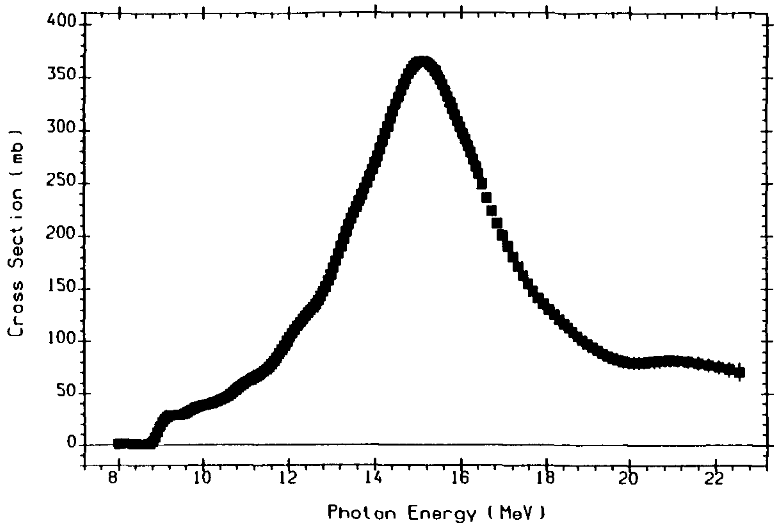
57-LA-139(G,X)0-NN-1 UNW
The sum: (G,N)+(G,N+P)+(G,2N)+(G,2N+P).
Positron annihilation
L0024017 J,NP/A,172,426,7109 H.BEIL+



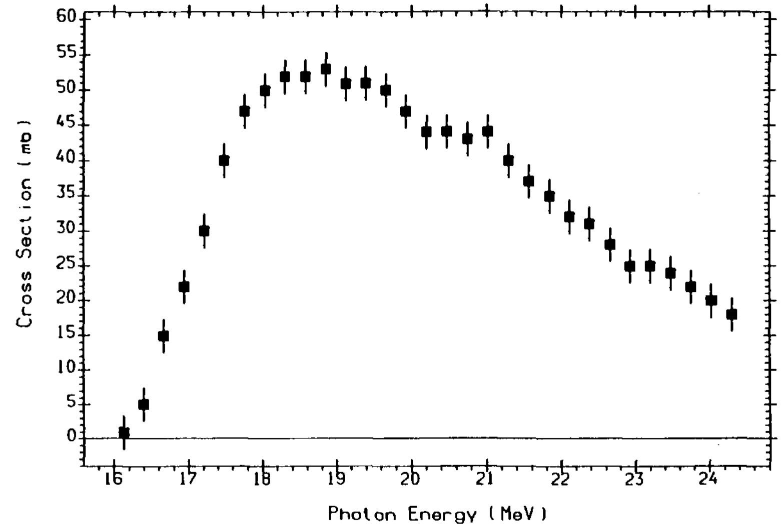
(57-LA-139(G,N)57-LA-138)+(57-LA-139(G,N+P)56-BA-137)
Positron annihilation
L0012003 J,NP/A,121,463,6807 R.BERGERE+



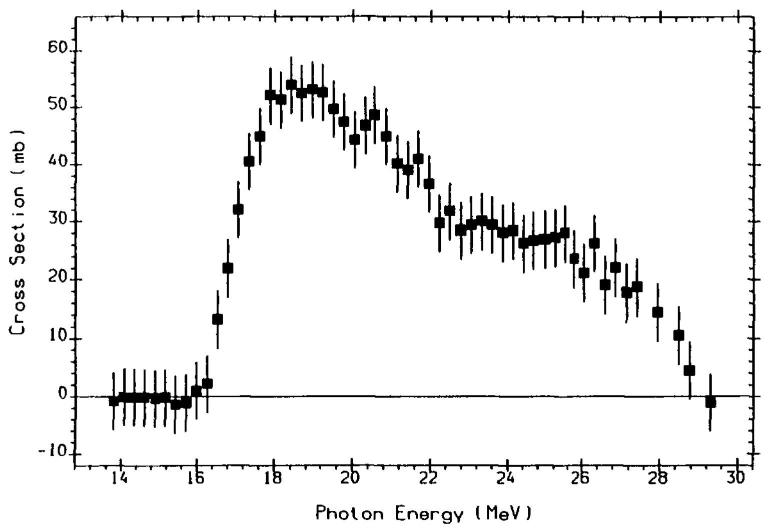
(57-LA-139(G,N)57-LA-138)+(57-LA-139(G,N+P)56-BA-137)
Positron annihilation
L0024018 J,NP/A,172,426,7109 H.BEIL+



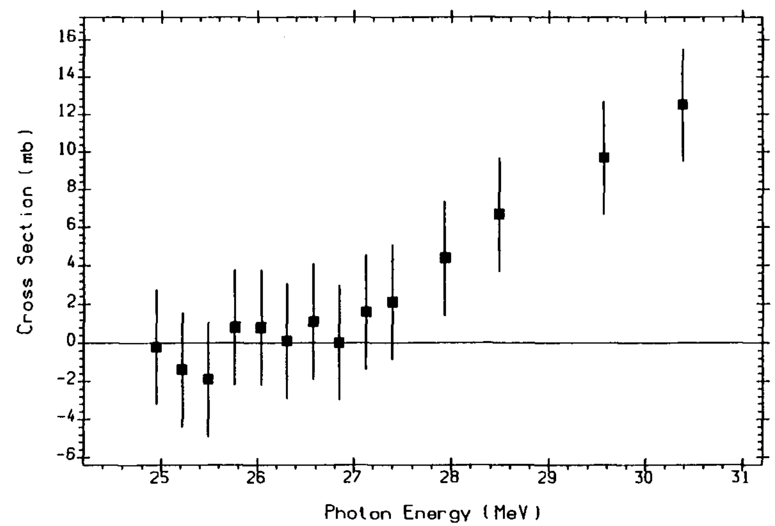
57-LA-139(G,N)57-LA-138
BRST
M0367004 J,IZV,55,(5),953,91 S.N.BELJAEV+



(57-LA-139(G,2N)57-LA-137)+(57-LA-139(G,2N+P)56-BA-136)
Positron annihilation
L0024007 J,NP/A,172,426,7109 H.BEIL+



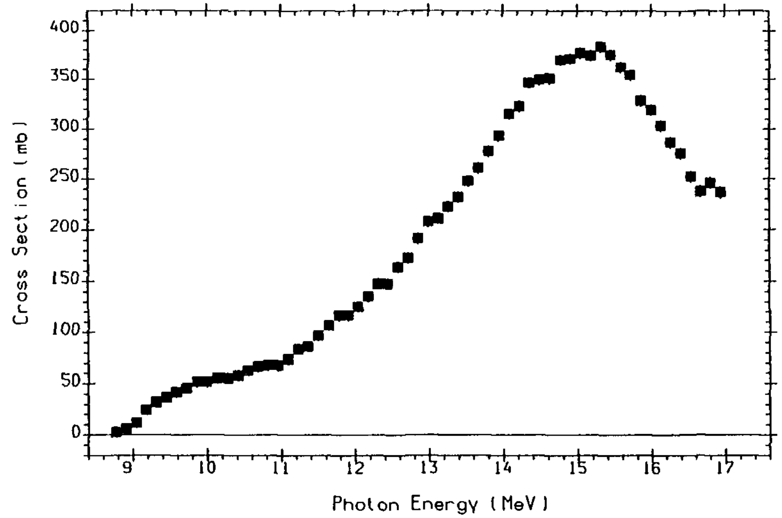
(57-LA-139(G,2N)57-LA-137)+(57-LA-139(G,2N+P)56-BA-136)
Positron annihilation
L0012004 J,NP/A,121,463,6807 R.BERGERE+



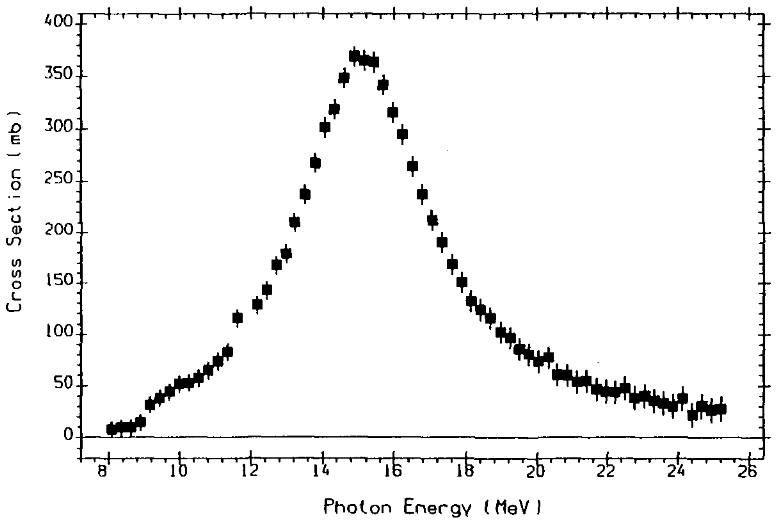
57-LA-139(G,3N)57-LA-136
Positron annihilation
L0012005 J,NP/A,121,463,6807 R.BERGERE+

$^{nat.}_{58}Ce$

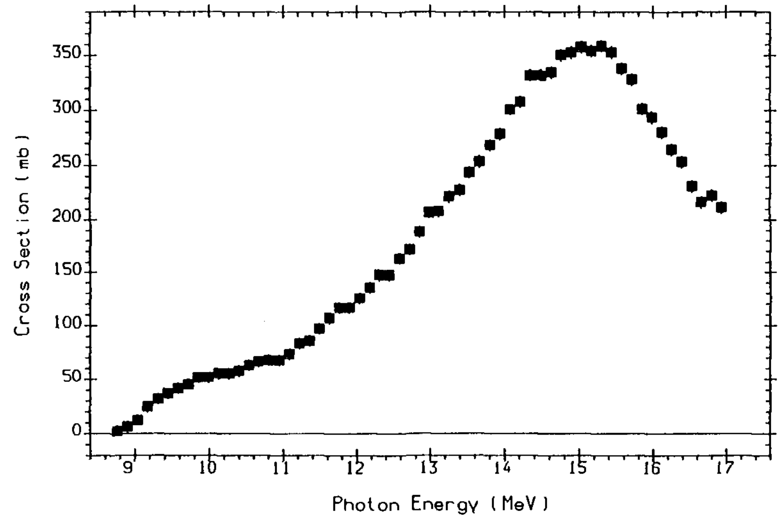
Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	$\gamma,^3He$	γ,α	γ,2n	γ,np	γ,2p
*	7.2	7.1	12.3	13.8	-1.2	12.6	15.6	12.1



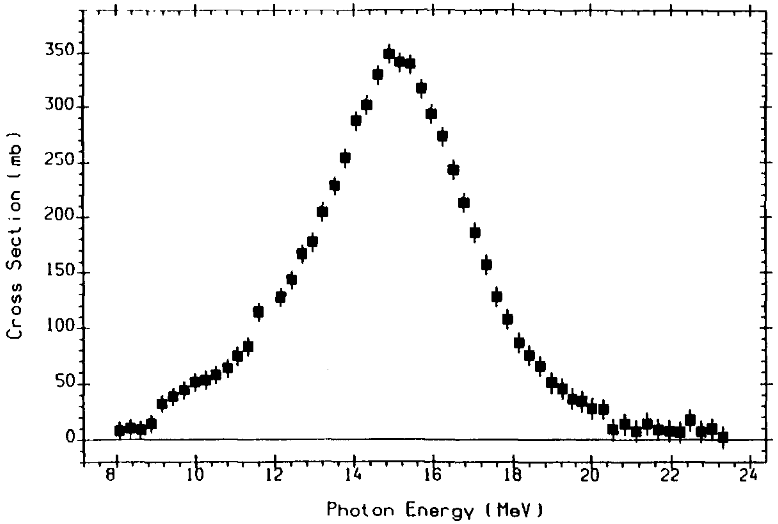
58-CE-0(G,X)0-NN-1
The sum: (G,N)+(G,N+P)+2(G,2N).
Positron annihilation
L0024008 J,NP/A,172,426,7109 H.BEIL+



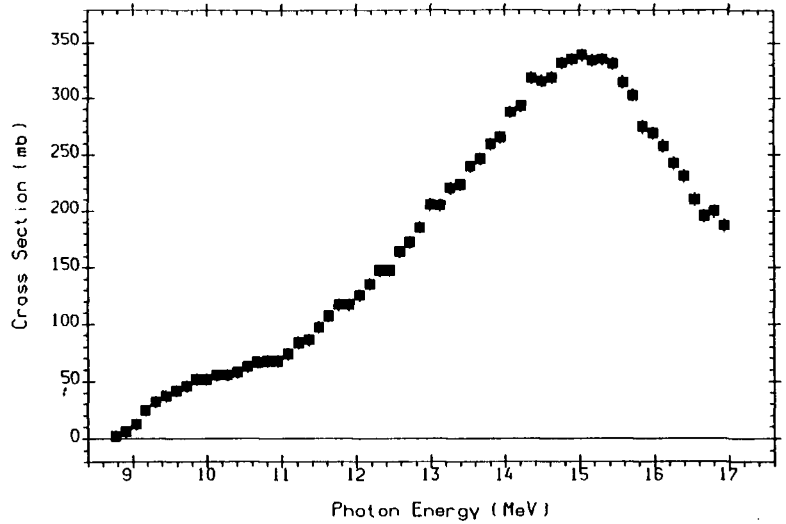
58-CE-0(G,X)0-NN-1 UNW
The sum: (G,N)+(G,N+P)+(G,2N)+(G,2N+P)+(G,3N).
Positron annihilation
L0015023 J,NP/A,133,417,6904 R.BERGERE+



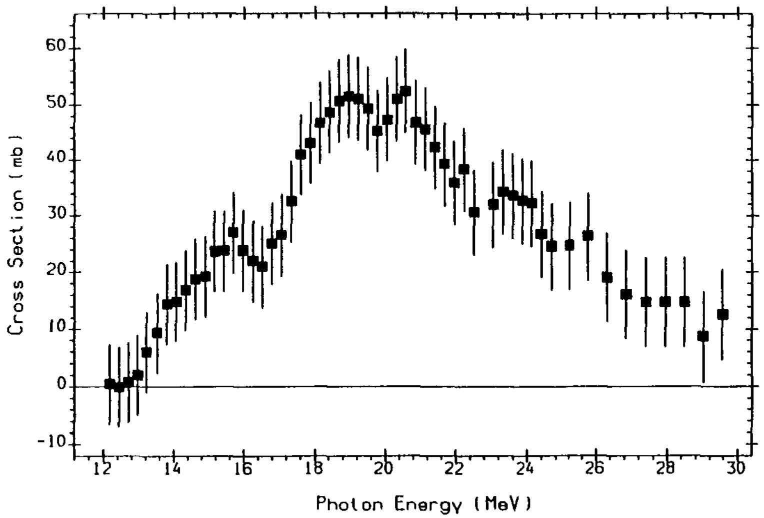
58-CE-0(G,X)0-NN-1 UNW
The sum: (G,N)+(G,N+P)+(G,2N).
Positron annihilation
L0024019 J,NP/A,172,426,7109 H.BEIL+



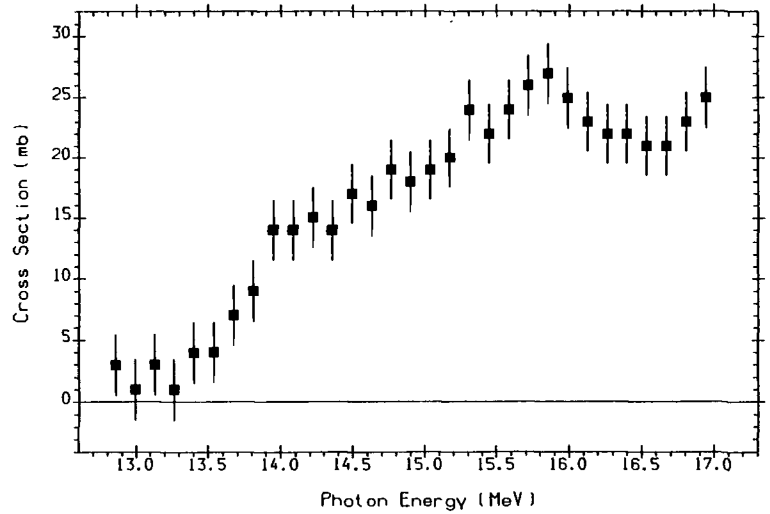
(58-CE-0(G,N))+(58-CE-0(G,N+P))
Positron annihilation
L0015007 J,NP/A,133,417,6904 R.BERGERE+



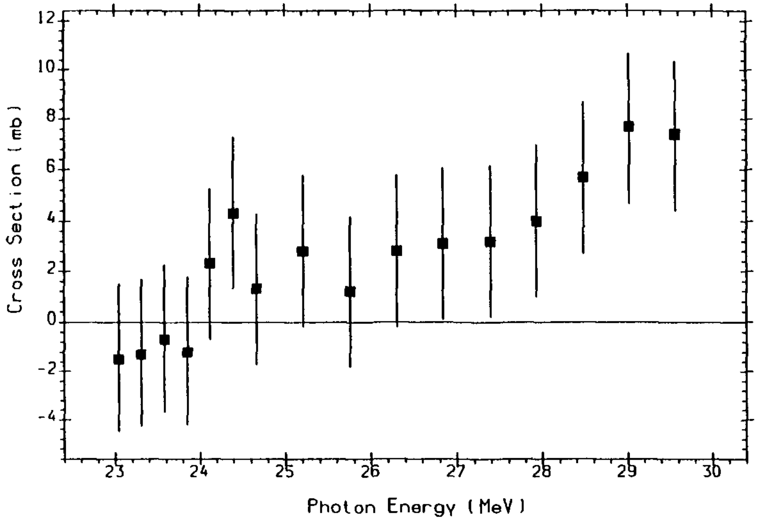
(58-CE-0(G,N))+(58-CE-0(G,N+P))
Positron annihilation
L0024009 J,NP/A,172,426,7109 H.BEIL+



(58-CE-0(G,2N))+(58-CE-0(G,2N+P))
Positron annihilation
L0015008 J,NP/A,133,417,6904 R.BERGERE+



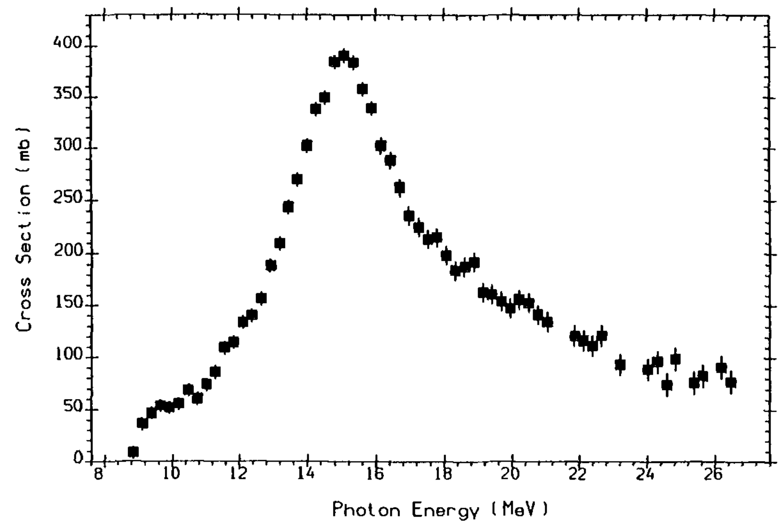
58-CE-0(G,2N)
Positron annihilation
L0024010 J,NP/A,172,426,7109 H.BEIL+



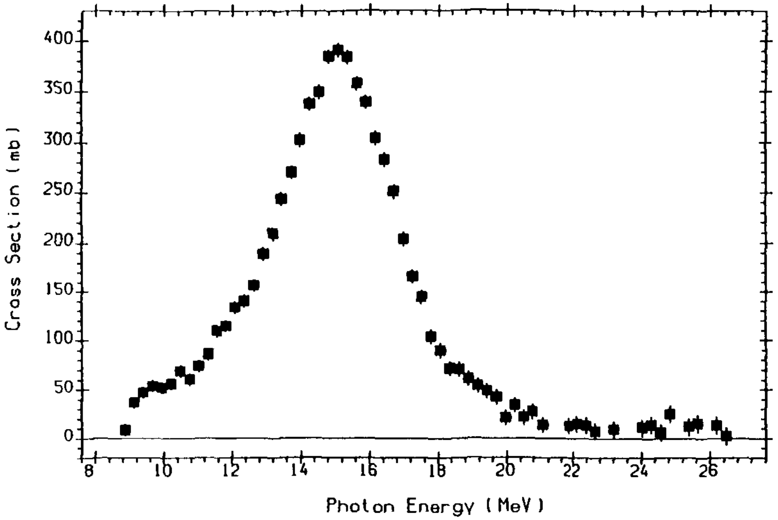
58-CE-0(G,3N)
Positron annihilation
L0015009 J,NP/A,133,417,6904 R.BERGERE+

$^{140}_{58}Ce$

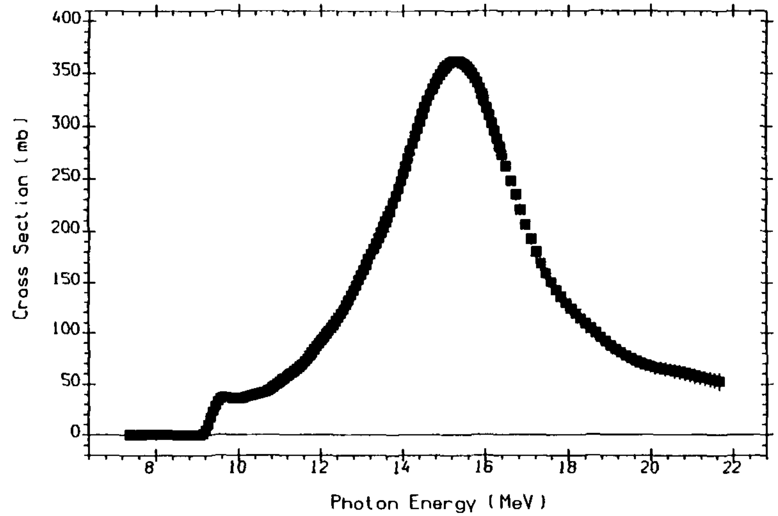
Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	γ,^{3}He	γ,α	γ,2n	γ,np	γ,2p
88.40	9.2	8.1	15.8	15.2	1.6	16.7	16.9	14.4



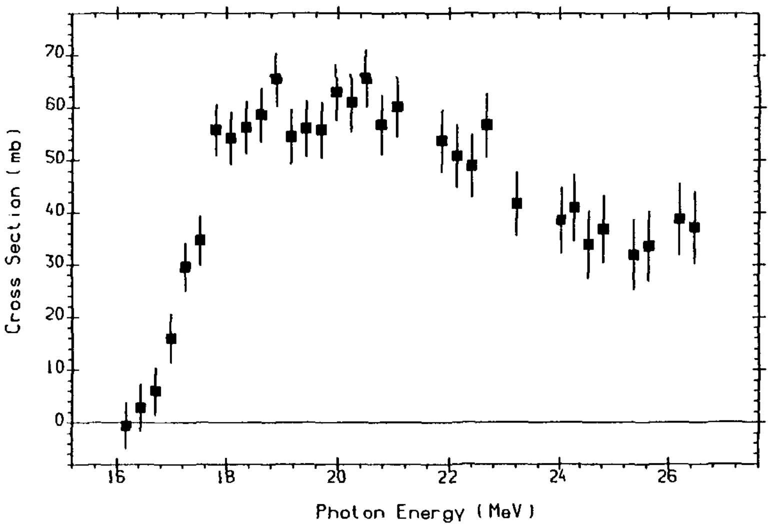
58-CE-140(G,X)0-NN-1
The sum: (G,N)+(G,NP)+2(G,2N)+2(G,2N+P).
QMPH,ARAD Positron annihilation in flight.
L0042016 J,NP/A,258,350,76 A.LEPRETRE+



(58-CE-140(G,N)58-CE-139)+(58-CE-140(G,N+P)57-LA-138)
QMPH,ARAD **Positron annihilation in flight.**
L0042014 J,NP/A,258,350,76 A.LEPRETRE+



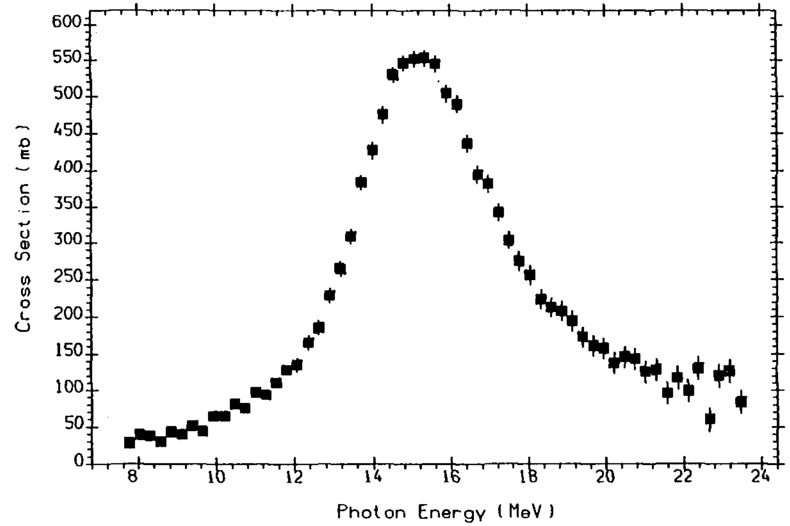
58-CE-140(G,N)58-CE-139
BRST
M0367005 J,IZV,55,(5),953,91 S.N.BELJAEV+



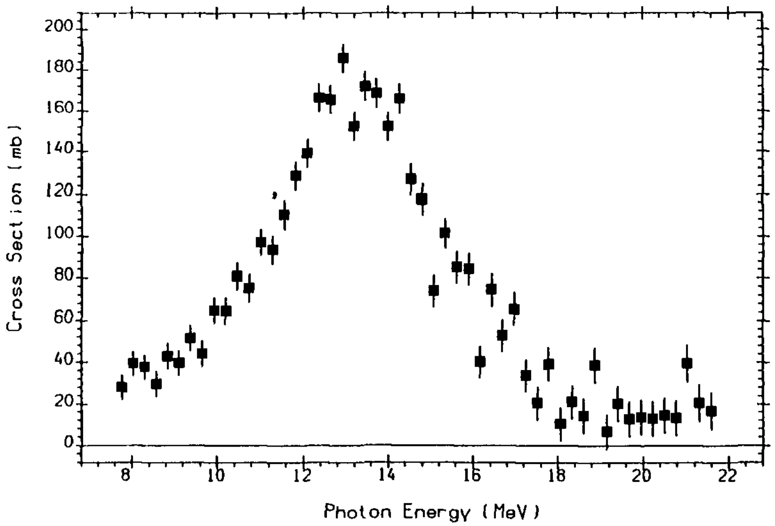
(58-CE-140(G,2N)58-CE-138)+(58-CE-140(G,2N+P)57-LA-137)
QMPH,ARAD **Positron annihilation in flight.**
L0042015 J,NP/A,258,350,76 A.LEPRETRE+

$^{142}_{58}\mathrm{Ce}$

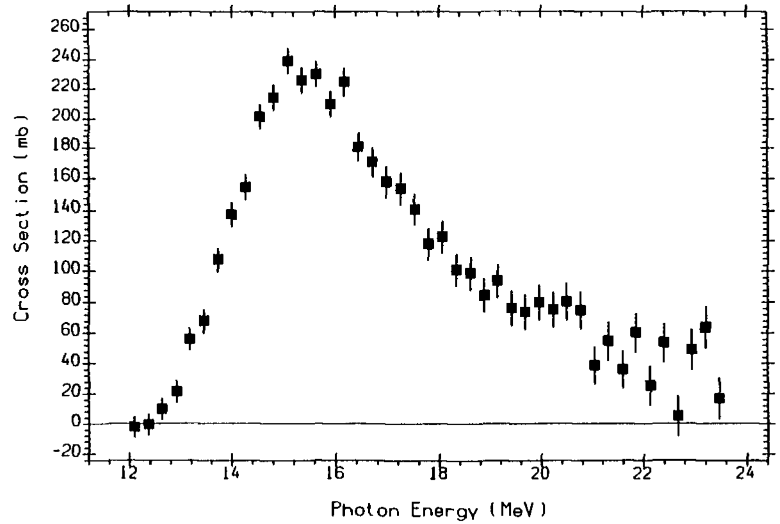
Abundance	Separation Energies (MeV)							
(%)	γ,n	γ,p	γ,t	γ,^{3}He	γ,α	γ,2n	γ,np	γ,2p
11.10	7.2	8.9	12.3	14.5	-1.2	12.6	15.6	15.8



58-CE-142(G,X)0-NN-1
The sum: (G,N)+(G,NP)+2(G,2N)+2(G,2N+P).
QMPH,ARAD Positron annihilation in flight.
L0042019 J,NP/A,258,350,76 A.LEPRETRE+



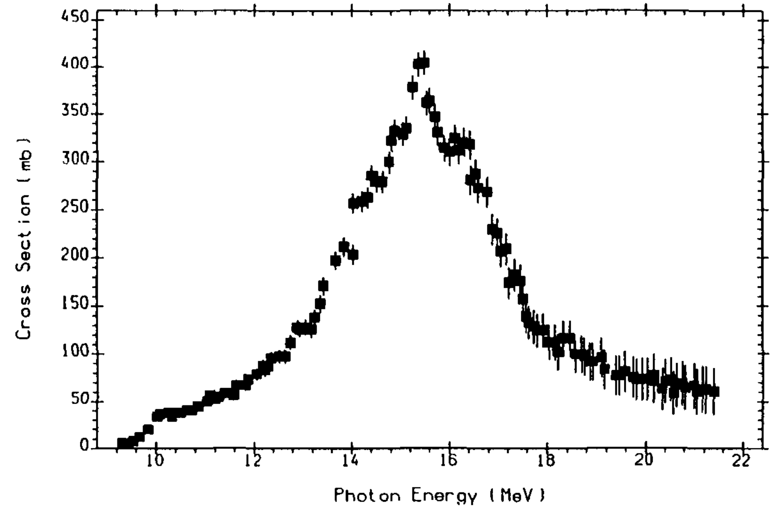
(58-CE-142(G,N)58-CE-141)+(58-CE-142(G,N+P)57-LA-140)
QMPH,ARAD Positron annihilation in flight.
L0042017 J,NP/A,258,350,76 A.LEPRETRE+



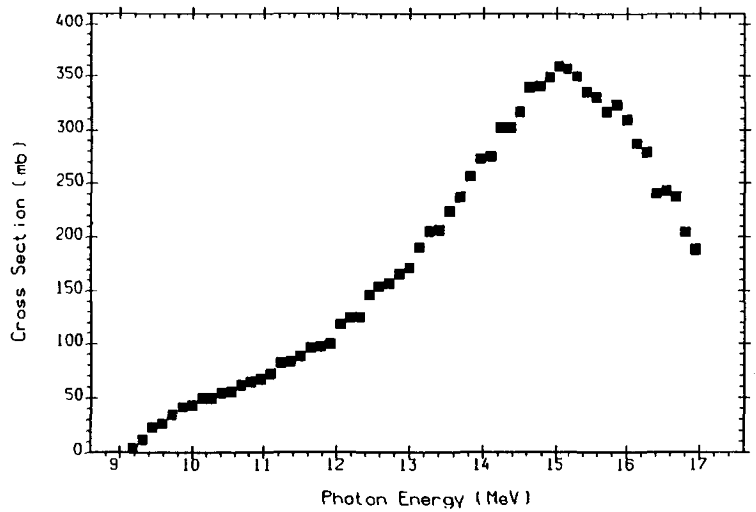
(58-CE-142(G,2N)58-CE-140)+(58-CE-142(G,2N+P)57-LA-139)
QMPH,ARAD Positron annihilation in flight.
L0042018 J,NP/A,258,350,76 A.LEPRETRE+

$^{141}_{59}Pr$

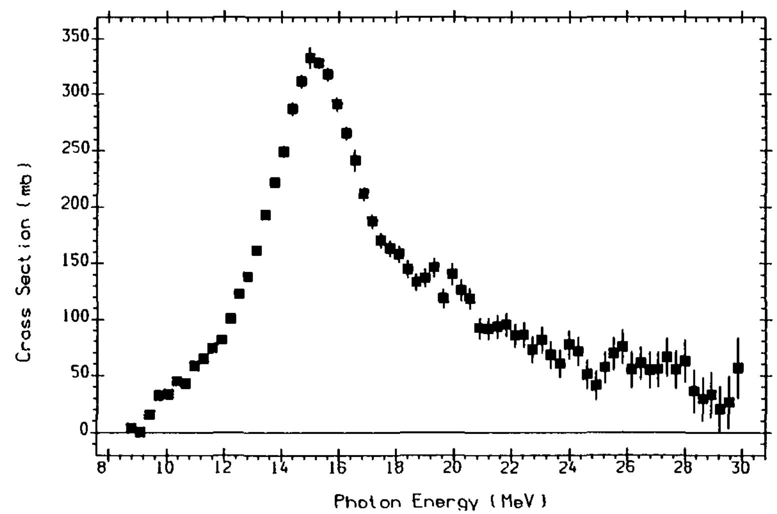
Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	γ,^{3}He	γ,α	γ,2n	γ,np	γ,2p
100.00	9.4	5.2	13.4	14.4	1.2	17.3	14.4	13.4



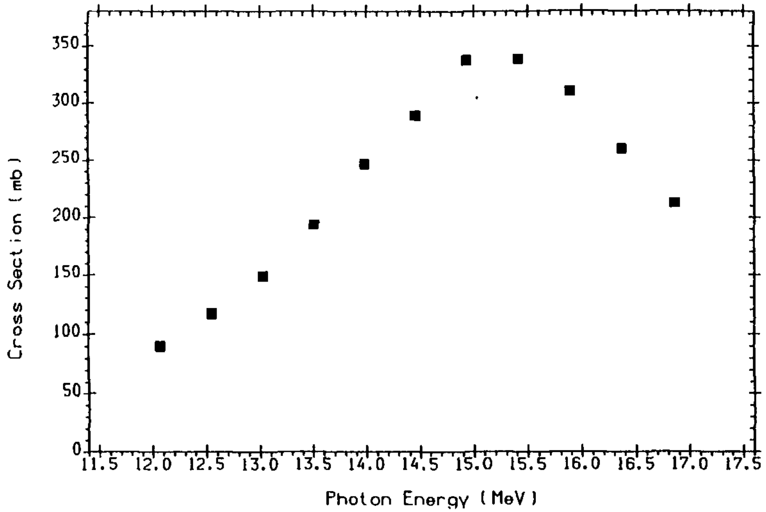
58-PR-141(G,X)0-NN-1,,SIG,,BRS,EXP
THE (G,XN) = ((G,N) + (G,NP) + 2(G,2N) +...)
BRST
M0398002 J,NP/A,191,305,72 T.K.DEAGUE+



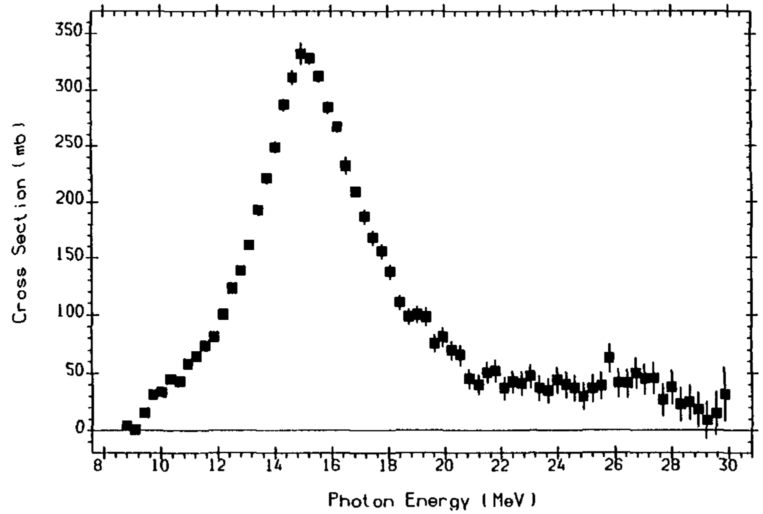
(59-PR-141(G,N)59-PR-140)+ (59-PR-141(G,N+P)58-CE-139)
Positron annihilation
L0024012 J,NP/A,172,426,7109 H.BEIL+



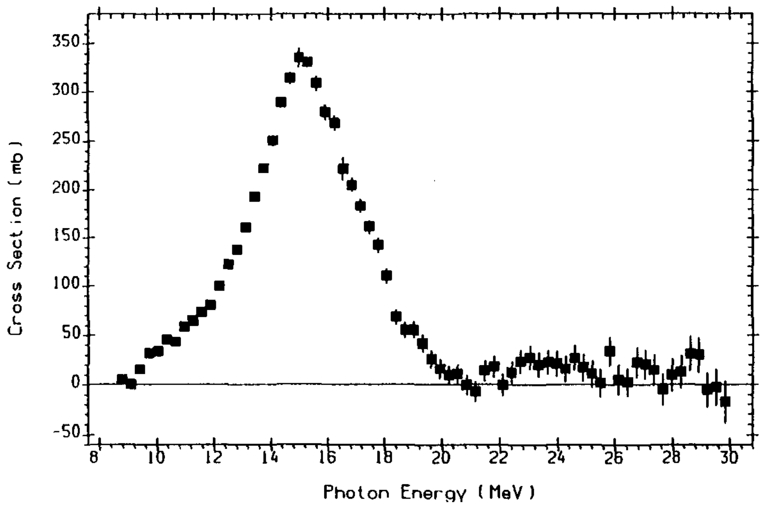
59-PR-141(G,X)0-NN-1
The sum: (G,N)+(G,N+P)+2(G,2N)+2(G,2N+P)+3(G,3N).
Positron annihilation
L0009005 J,PR,148,1198,6608 R.L.BRAMBLETT+



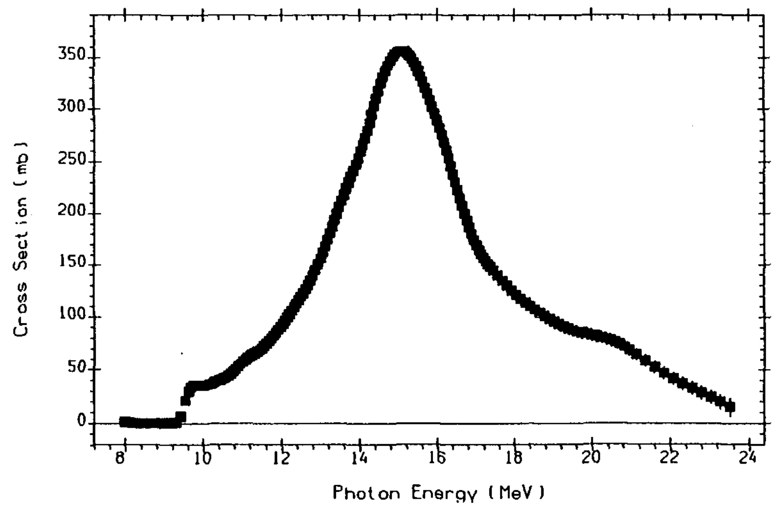
(59-PR-141(G,N)59-PR-140)+(59-PR-141(G,N+P)58-CE-139)
QMPH,ARAD Positron annihilation in flight.
L0057008 J,PR/C,36,1286,8705 B.L.BERMAN+



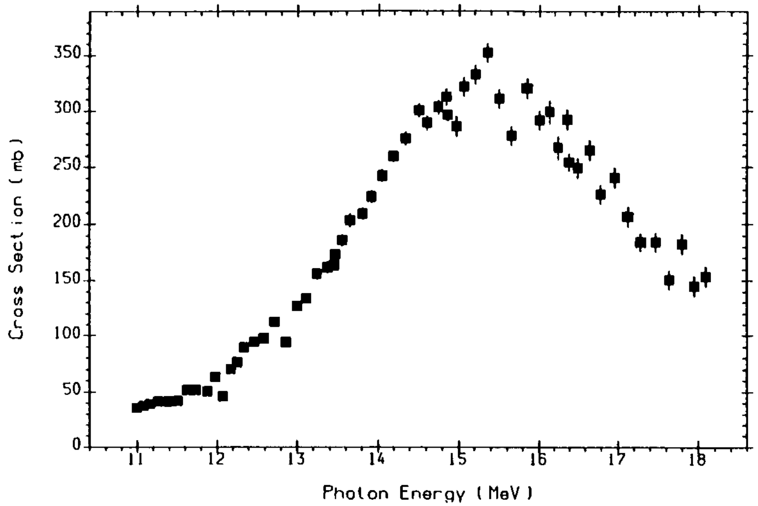
59-PR-141(G,X)0-NN-1 UNW
The sum: (G,N)+(G,N+P)+(G,2N)+(G,2N+P)+(G,3N).
Positron annihilation
L0009010 J,PR,148,1198,6608 R.L.BRAMBLETT+



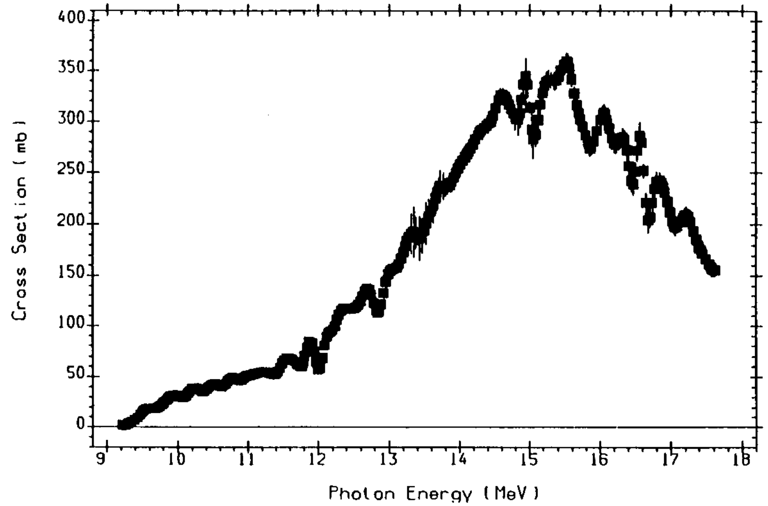
(59-PR-141(G,N)59-PR-140)+ (59-PR-141(G,N+P)58-CE-139)
Positron annihilation
L0009006 J,PR,148,1198,6608 R.L.BRAMBLETT+



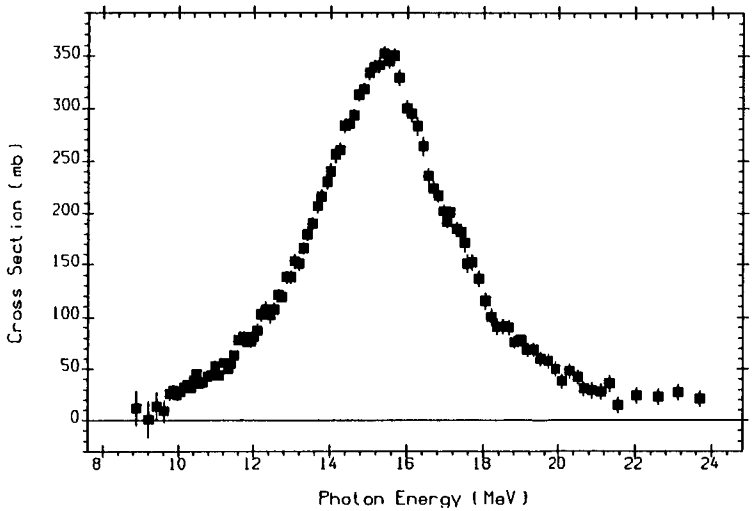
59-PR-141(G,N)59-PR-140
BRST
M0367006 J,IZV,55,(5),953,91 S.N.BELJAEV+



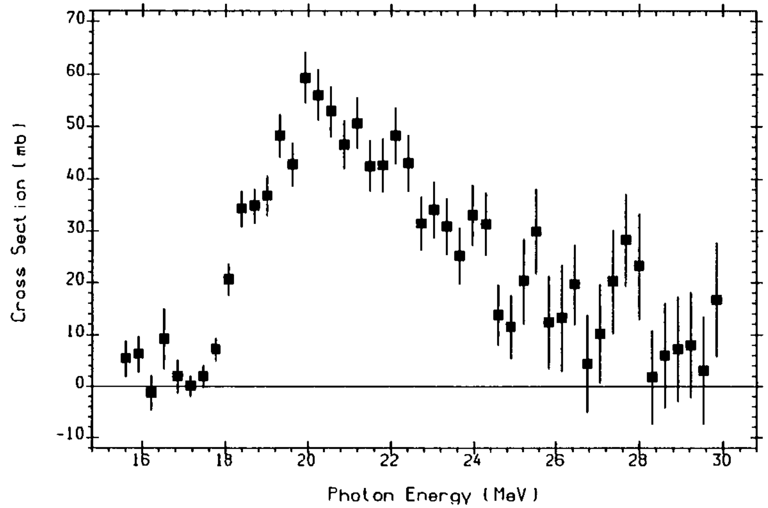
(59-PR-141(G,N)59-PR-140)+ (59-PR-141(G,N+P)58-CE-139)
QMPH,TAGD Tagged bremsstrahlung.
L0059003 T,YOUNG,72 L.M.YOUNG



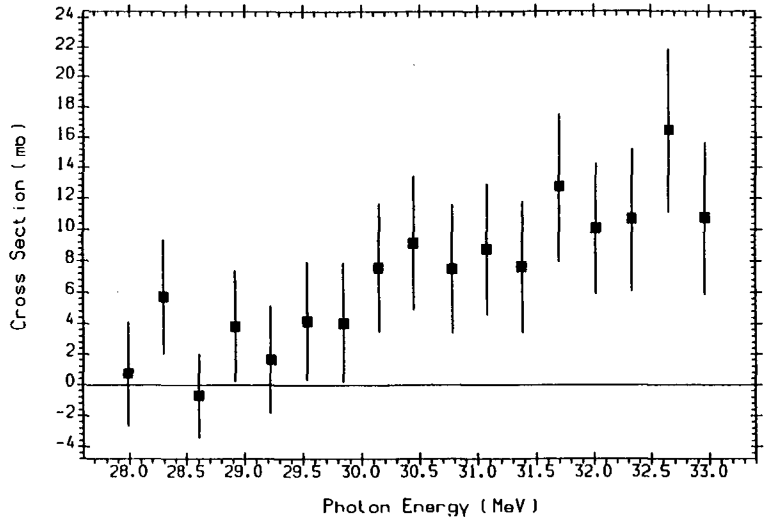
(59-PR-141(G,N)59-PR-140)+(59-PR-141(G,N+P)58-CE-140)
BRST, QMPH,ARAD
M0345004 J,YK,1,52,93 V.V.VARLAMOV+



59-PR-141(G,N)59-PR-140
Positron annihilation
L0020002 J,PR/C,2,1129,7009 R.E.SUND+



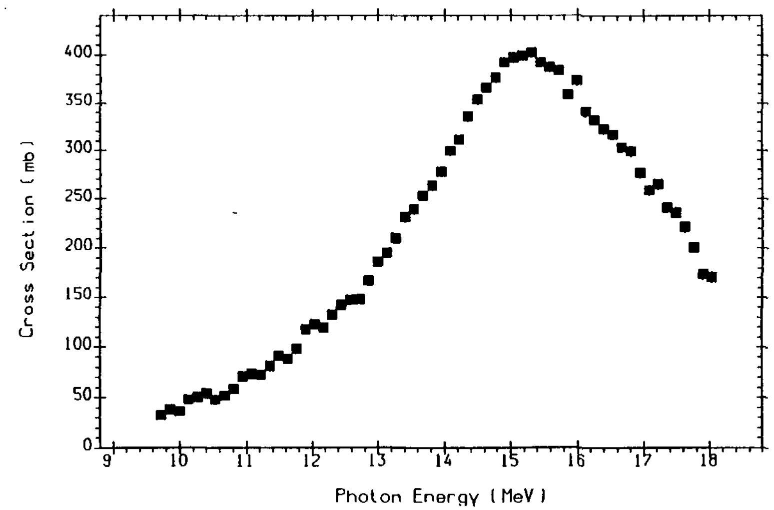
(59-PR-141(G,2N)59-PR-139)+ (59-PR-141(G,2N+P)58-CE-138)
Positron annihilation
L0009007 J,PR,148,1198,6608 R.L.BRAMBLETT+



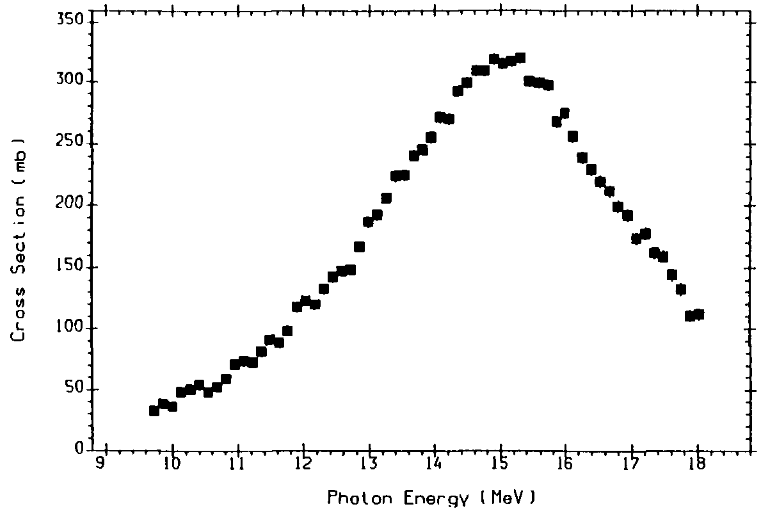
59-PR-141(G,3N)59-PR-138
Positron annihilation
L0009008 J,PR,148,1198,6608 R.L.BRAMBLETT+

$^{nat.}_{60}Nd$

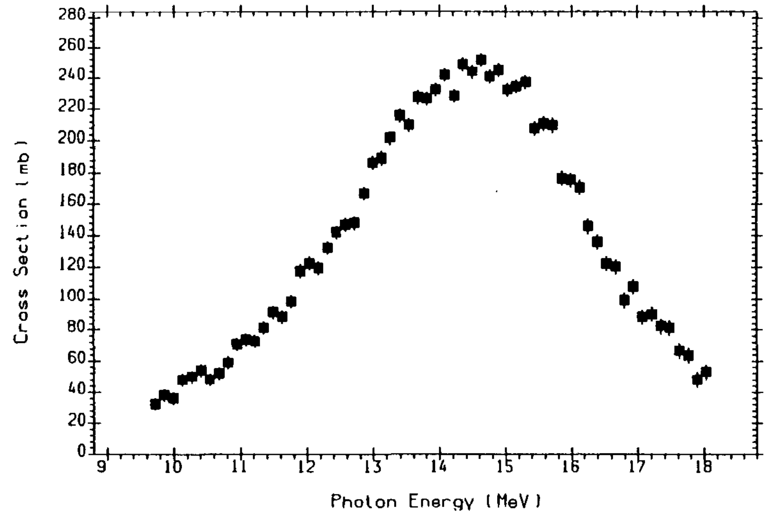
Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	γ,^{3}He	γ,α	γ,2n	γ,np	γ,2p
*	5.8	7.2	12.6	10.9	-1.9	12.4	13.4	12.5



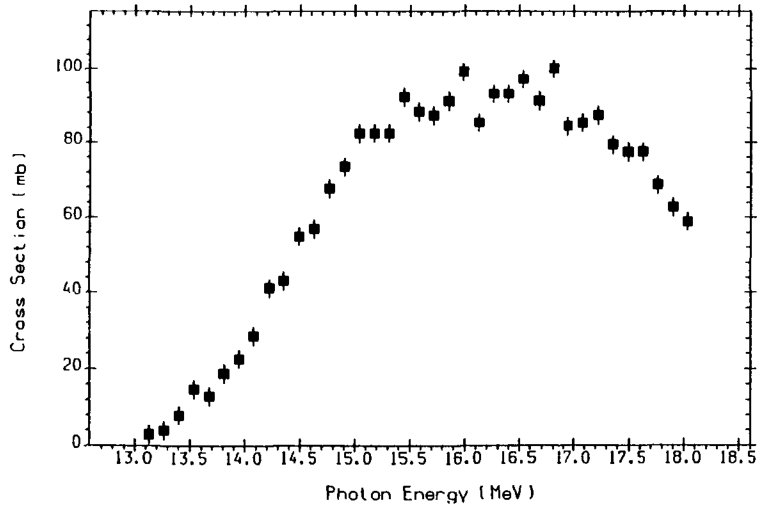
60-ND-0(G,X)0-NN-1
The sum: (G,N)+(G,N+P)+2(G,2N).
Positron annihilation
L0024013 J,NP/A,172,426,7109 H.BEIL+



60-ND-0(G,X)0-NN-1 UNW
The sum: (G,N)+(G,N+P)+(G,2N).
Positron annihilation
L0024020 J,NP/A,172,426,7109 H.BEIL+



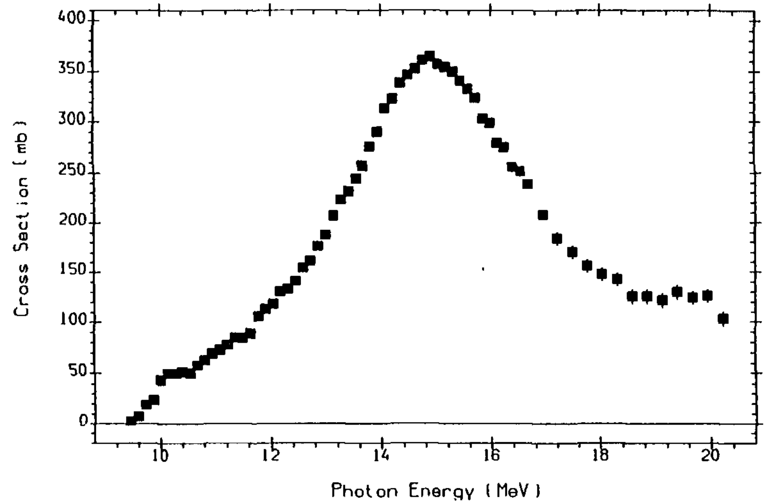
(60-ND-0(G,N))+ (60-ND-0(G,N+P)
Positron annihilation
L0024014 J,NP/A,172,426,7109 H.BEIL+



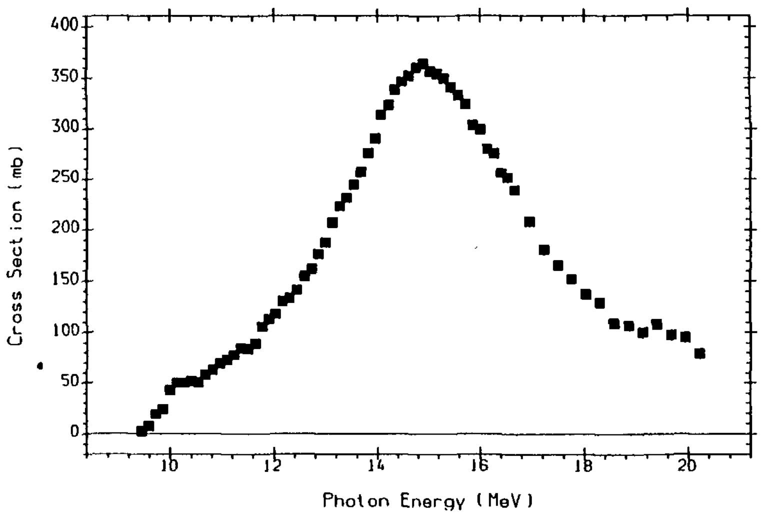
60-ND-0(G,2N)
Positron annihilation
L0024015 J,NP/A,172,426,7109 H.BEIL+

$^{142}_{60}$Nd

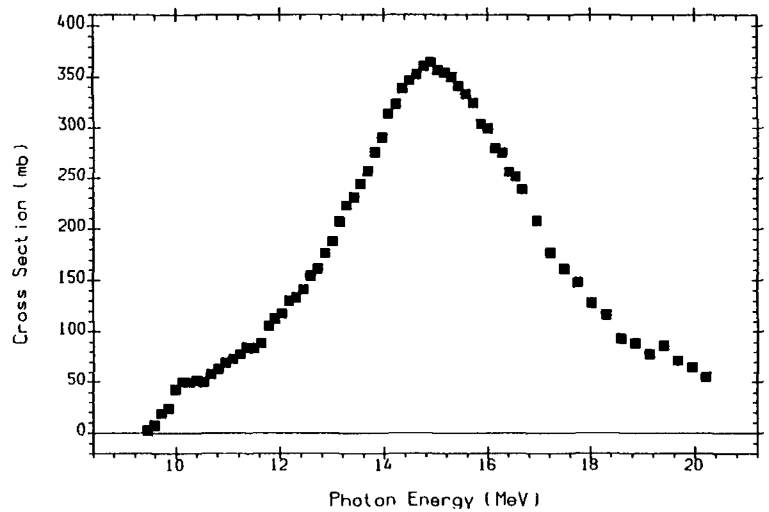
Abundance	Separation Energies (MeV)							
(%)	γ,n	γ,p	γ,t	γ,^{3}He	γ,α	γ,2n	γ,np	γ,2p
27.16	9.8	7.2	16.1	13.9	0.8	17.6	16.6	12.5



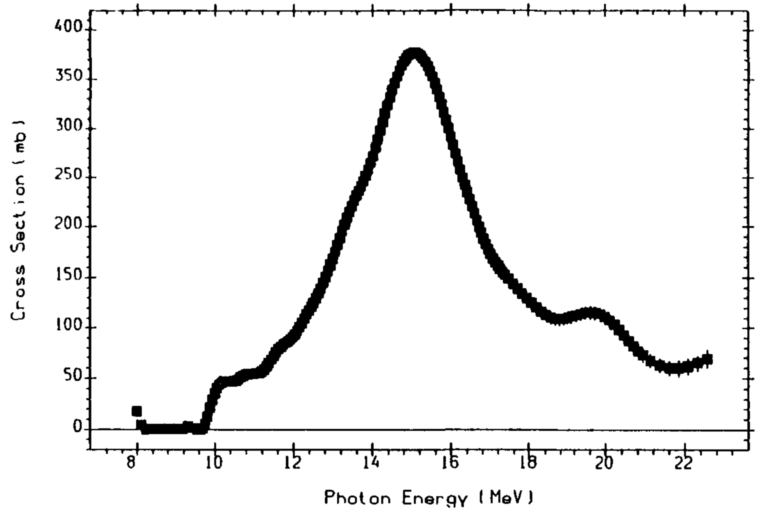
60-ND-142(G,X)0-NN-1
The sum: (G,N)+(G,N+P)+2(G,2N).
Positron annihilation
L0025002 J,NP/A,172,437,7109 P.CARLOS+



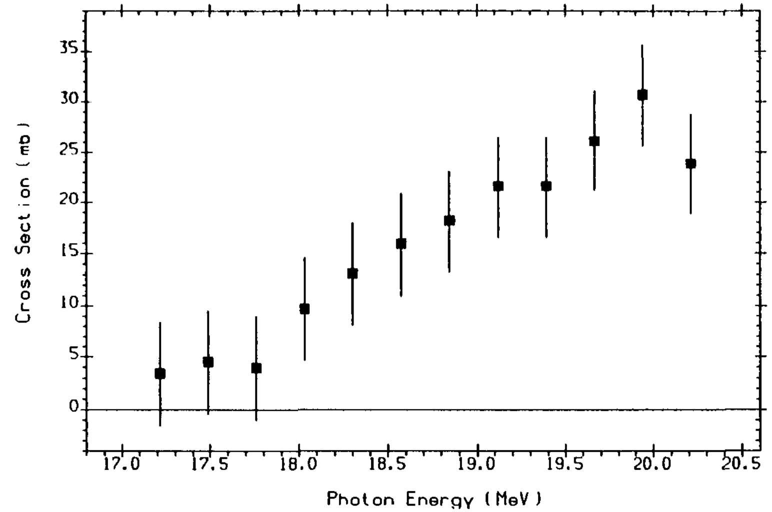
60-ND-142(G,X)0-NN-1 UNW
The sum: (G,N)+(G,N+P)+(G,2N).
Positron annihilation
L0025023 J,NP/A,172,437,7109 P.CARLOS+



(60-ND-142(G,N)60-ND-141)+ (60-ND-142(G,N+P)59-PR-140)
Positron annihilation
L0025003 J,NP/A,172,437,7109 P.CARLOS+



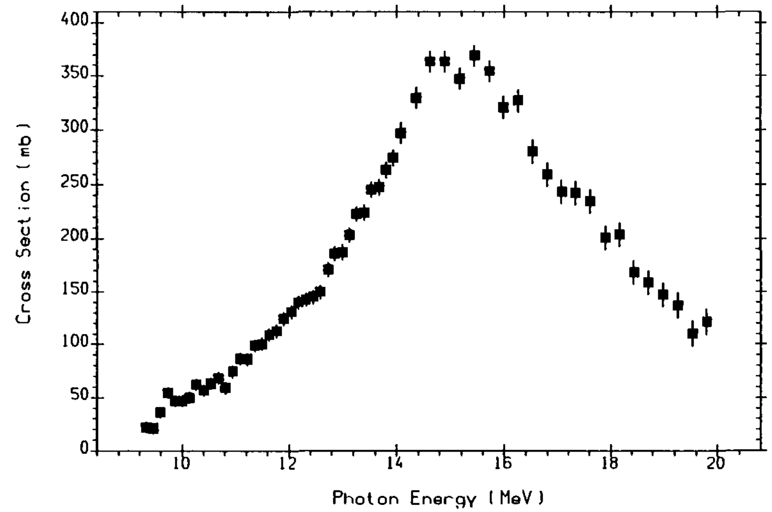
60-ND-142(G,N)60-ND-141
BRST
M0367007 J,IZV,55,(5),953,91 S.N.BELJAEV+



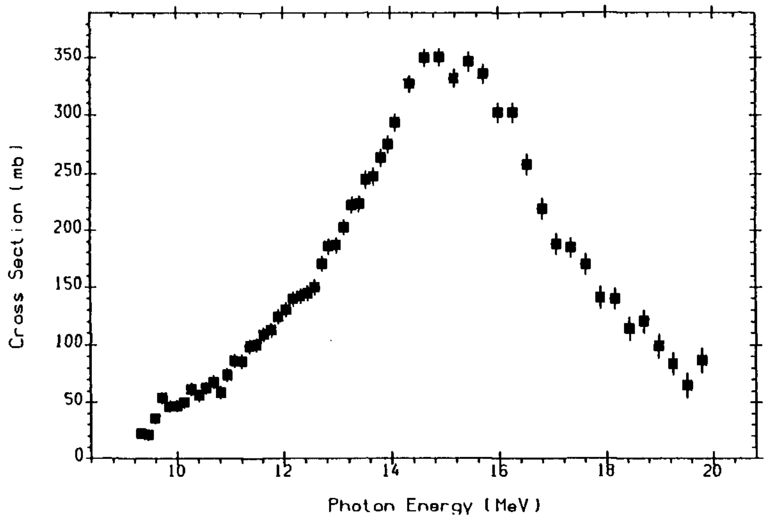
60-ND-142(G,2N)60-ND-140
Positron annihilation
L0025004 J,NP/A,172,437,7109 P.CARLOS+

$^{143}_{60}Nd$

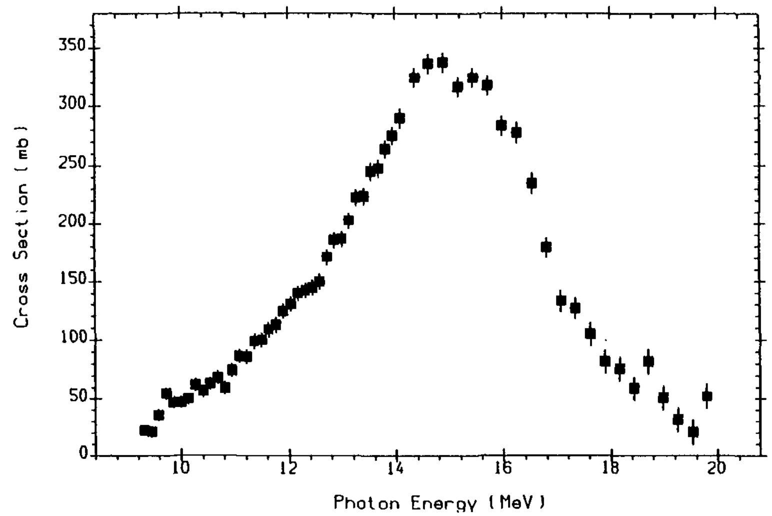
Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	$γ,^3He$	γ,α	γ,2n	γ,np	γ,2p
12.18	6.1	7.5	14.3	10.9	-0.5	16.0	13.4	13.1



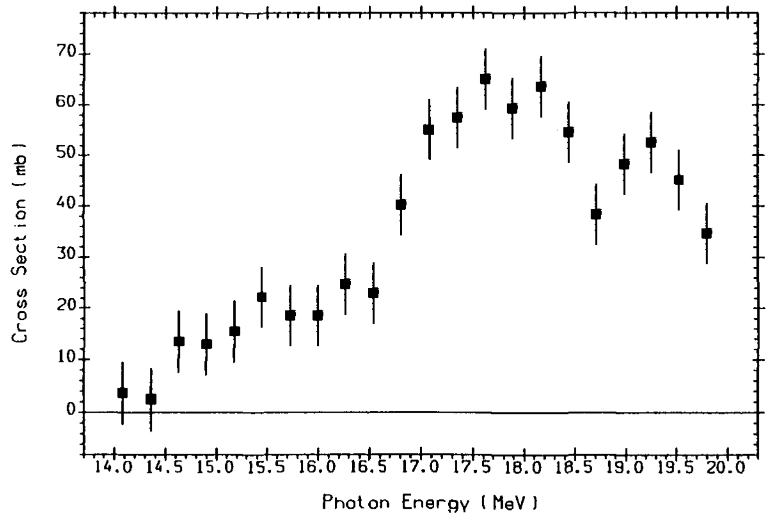
60-ND-143(G,X)0-NN-1
The sum: (G,N)+(G,N+P)+2(G,2N).
Positron annihilation
L0025005 J,NP/A,172,437,7109 P.CARLOS+



60-ND-143(G,X)0-NN-1 UNW
The sum: (G,N)+(G,N+P)+(G,2N).
Positron annihilation
L0025024 J,NP/A,172,437,7109 P.CARLOS+



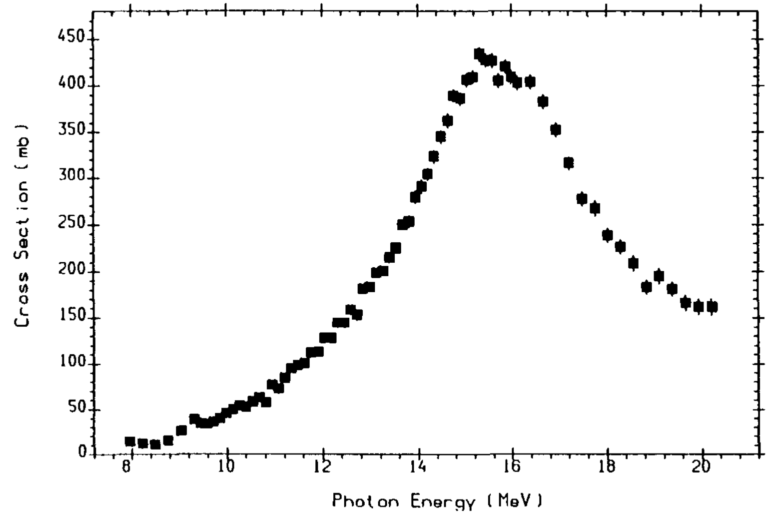
(60-ND-143(G,N)60-ND-142)+ (60-ND-143(G,N+P)59-PR-141)
Positron annihilation
L0025006 J,NP/A,172,437,7109 P.CARLOS+



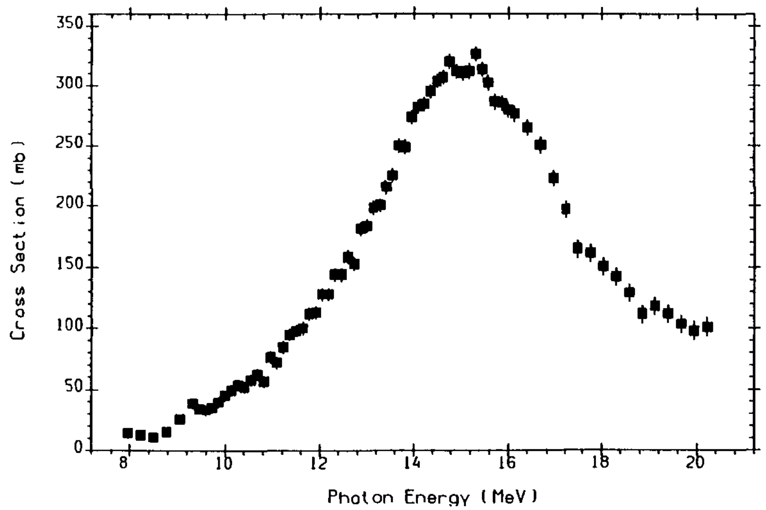
60-ND-143(G,2N)60-ND-141
Positron annihilation
L0025007 J,NP/A,172,437,7109 P.CARLOS+

$^{144}_{60}$Nd

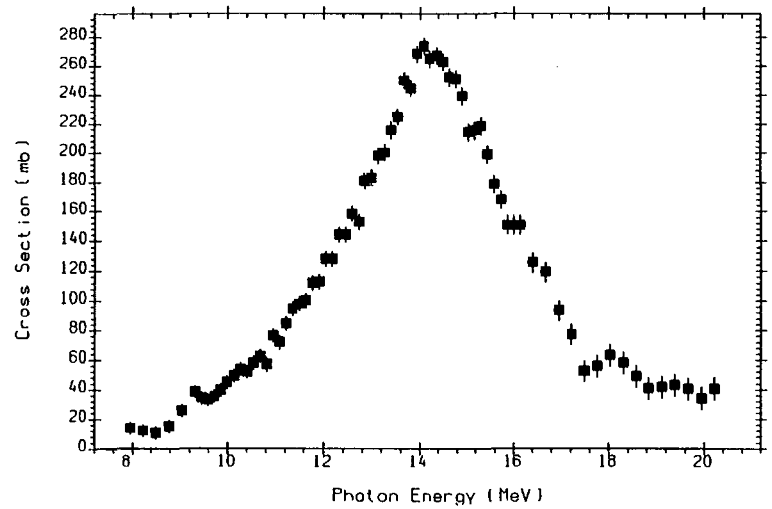
Abundance	Separation Energies (MeV)							
(%)	γ,n	γ,p	γ,t	γ,^{3}He	γ,α	γ,2n	γ,np	γ,2p
12.18	6.1	7.5	14.3	10.9	-0.5	16.0	13.4	13.1



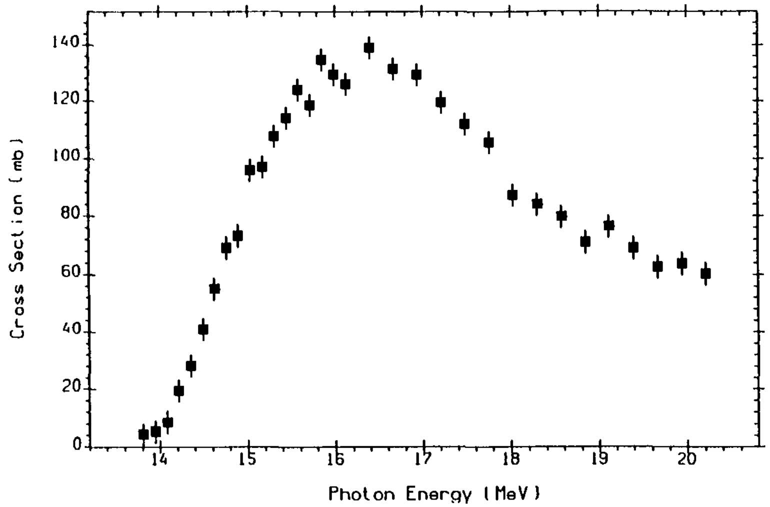
The sum: (G,N)+(G,N+P)+2(G,2N).
Positron annihilation
60-ND-144(G,X)0-NN-1
L0025008 J,NP/A,172,437,7109 P.CARLOS+



60-ND-144(G,X)0-NN-1 UNW
The sum: (G,N)+(G,N+P)+(G,2N).
Positron annihilation
L0025025 J,NP/A,172,437,7109 P.CARLOS+



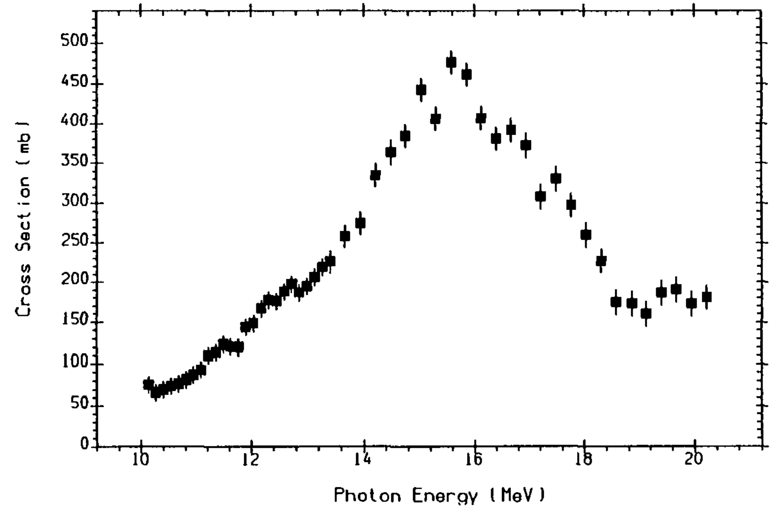
(60-ND-144(G,N)60-ND-143)+ (60-ND-144(G,N+P)59-PR-142)
Positron annihilation
L0025009 J,NP/A,172,437,7109 P.CARLOS+



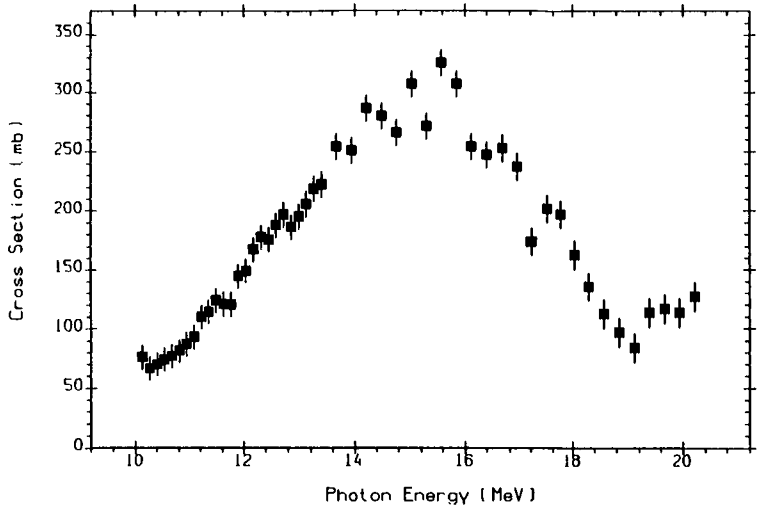
60-ND-144(G,2N)60-ND-142
Positron annihilation
L0025010 J,NP/A,172,437,7109 P.CARLOS+

$^{145}_{60}$Nd

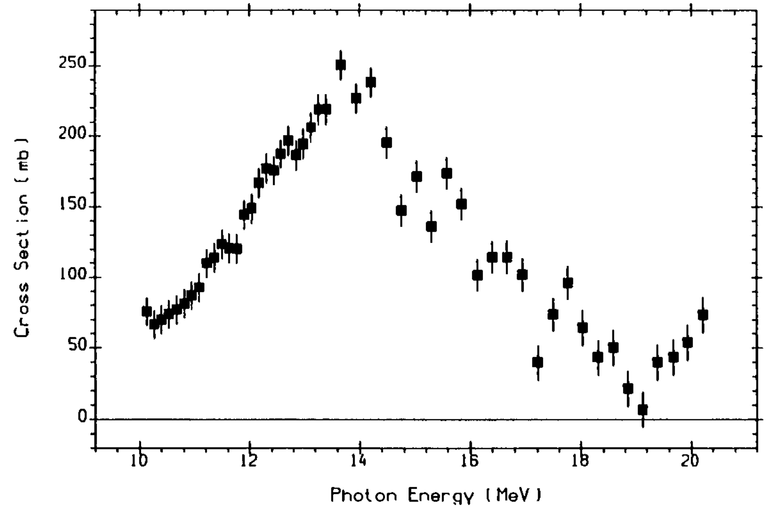
Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	γ,^{3}He	γ,α	γ,2n	γ,np	γ,2p
8.29	5.8	8.0	12.6	11.8	-1.6	13.6	13.7	14.4



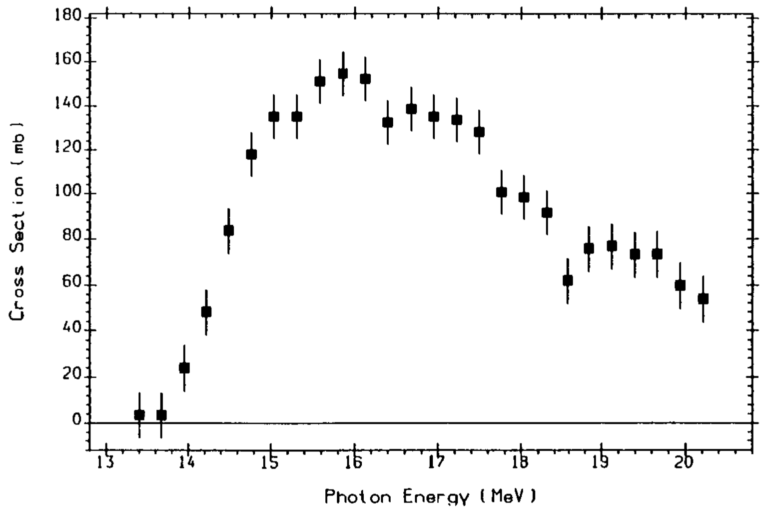
60-ND-145(G,X)0-NN-1
The sum: (G,N)+(G,N+P)+2(G,2N).
Positron annihilation
L0025011 J,NP/A,172,437,7109 P.CARLOS+



60-ND-145(G,X)0-NN-1 UNW
The sum: (G,N)+(G,N+P)+(G,2N).
Positron annihilation
L0025026 J,NP/A,172,437,7109 P.CARLOS+



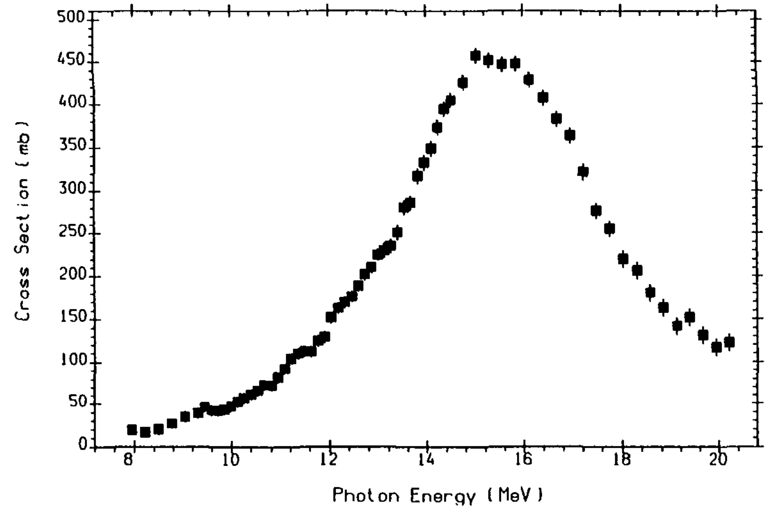
(60-ND-145(G,N)60-ND-144)+ (60-ND-145(G,N+P)59-PR-143)
Positron annihilation
L0025012 J,NP/A,172,437,7109 P.CARLOS+



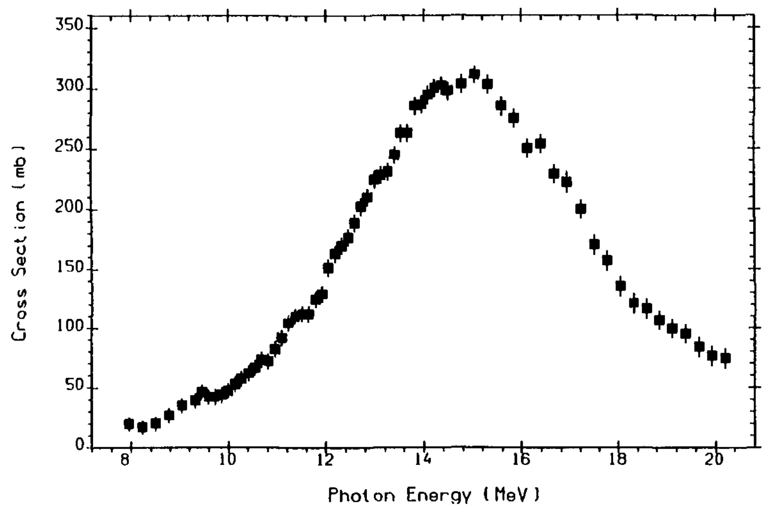
60-ND-145(G,2N)60-ND-143
Positron annihilation
L0025013 J,NP/A,172,437,7109 P.CARLOS+

$^{146}_{60}Nd$

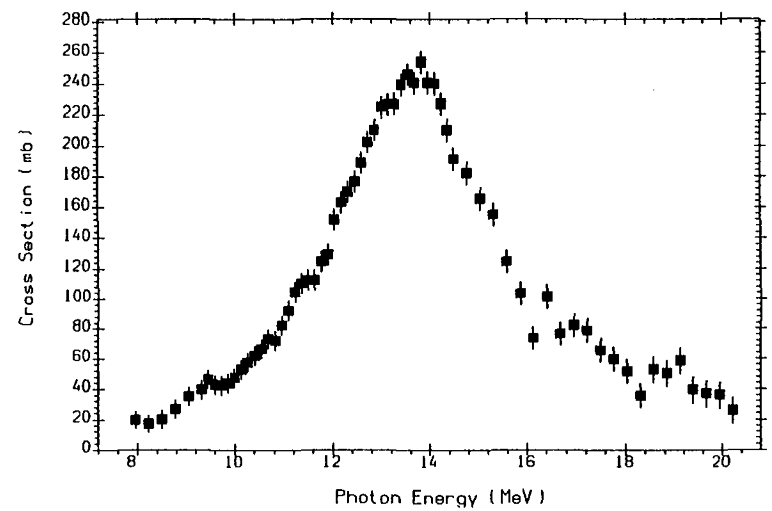
Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	γ,^{3}He	γ,α	γ,2n	γ,np	γ,2p
17.19	7.6	8.6	12.8	14.2	-1.2	13.3	15.5	15.1



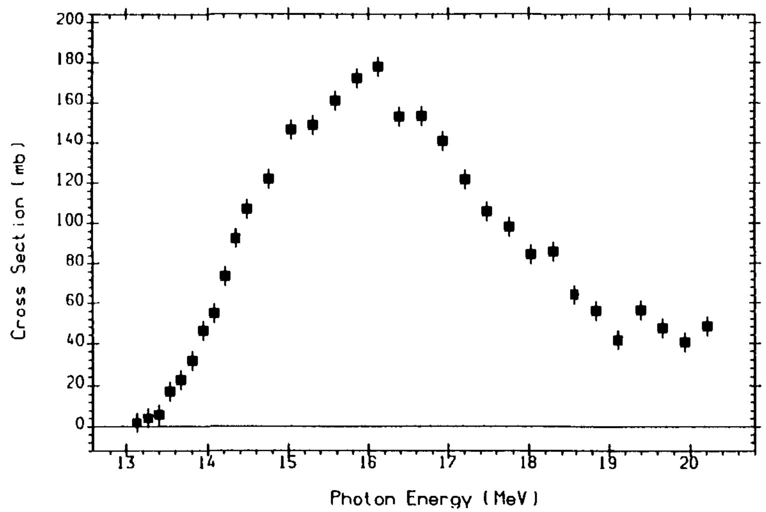
60-ND-146(G,X)0-NN-1
The sum: (G,N)+(G,N+P)+2(G,2N).
Positron annihilation
L0025014 J,NP/A,172,437,7109 P.CARLOS+



60-ND-146(G,X)0-NN-1 UNW
The sum: (G,N)+(G,N+P)+(G,2N).
Positron annihilation
L0025027 J,NP/A,172,437,7109 P.CARLOS+



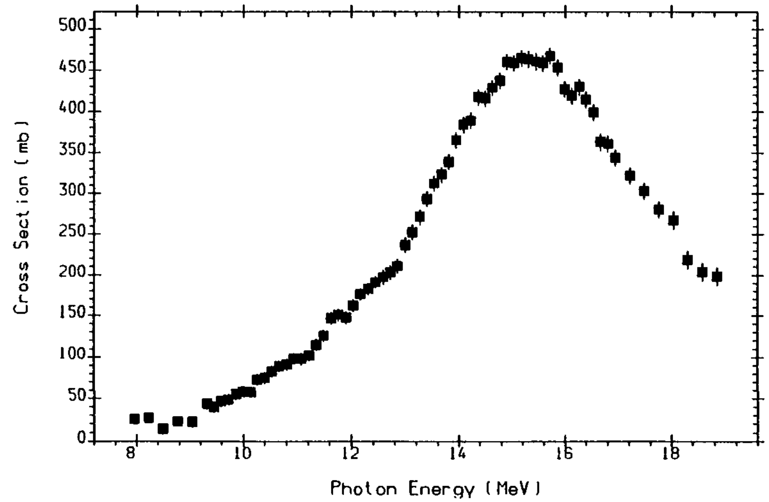
(60-ND-146(G,N)60-ND-145)+ (60-ND-146(G,N+P)59-PR-144)
Positron annihilation
L0025015 J,NP/A,172,437,7109 P.CARLOS+



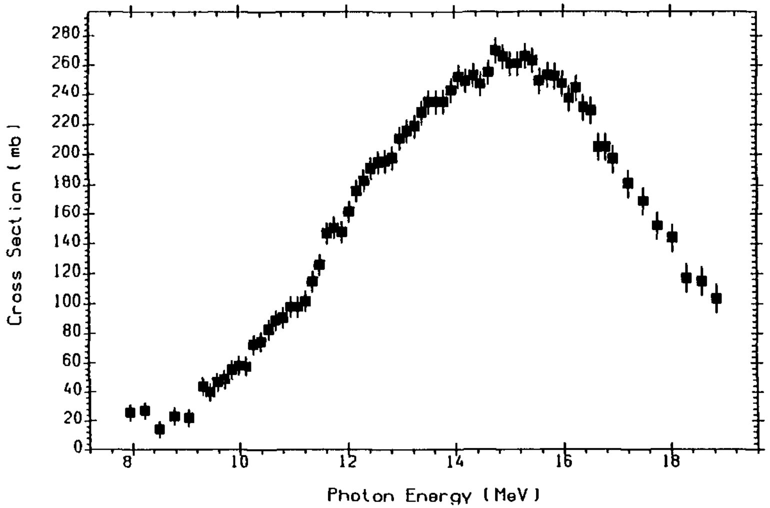
60-ND-146(G,2N)60-ND-144
Positron annihilation
L0025016 J,NP/A,172,437,7109 P.CARLOS+

$^{148}_{60}Nd$

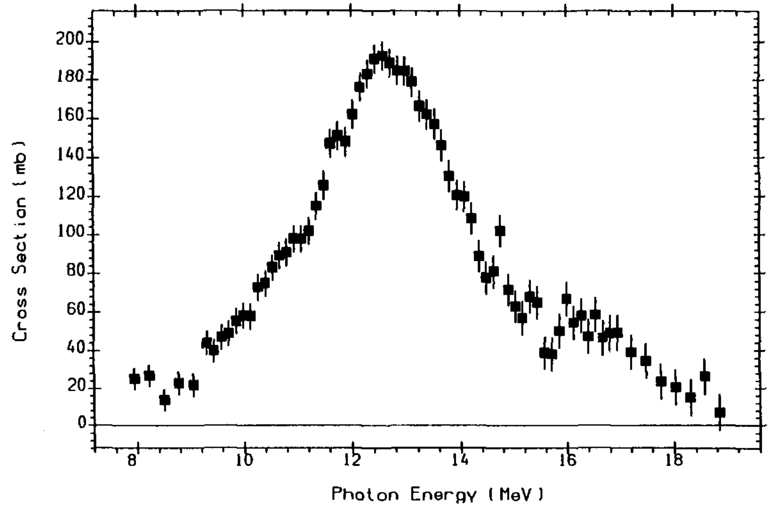
Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	γ,^{3}He	γ,α	γ,2n	γ,np	γ,2p
5.75	7.3	9.2	12.7	15.2	-0.6	12.6	15.9	16.3



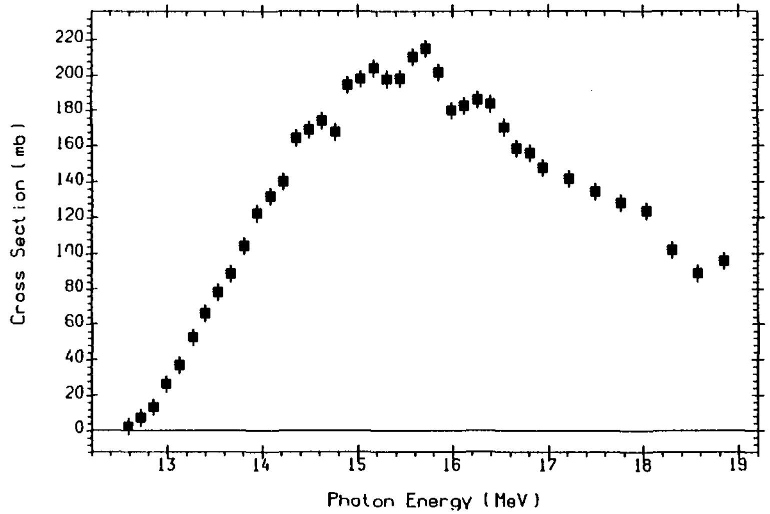
60-ND-148(G,X)0-NN-1
The sum: (G,N)+(G,N+P)+2(G,2N).
Positron annihilation
L0025017 J,NP/A,172,437,7109 P.CARLOS+



60-ND-148(G,X)0-NN-1 UNW
The sum: (G,N)+(G,N+P)+(G,2N).
Positron annihilation
L0025028 J,NP/A,172,437,7109 P.CARLOS+



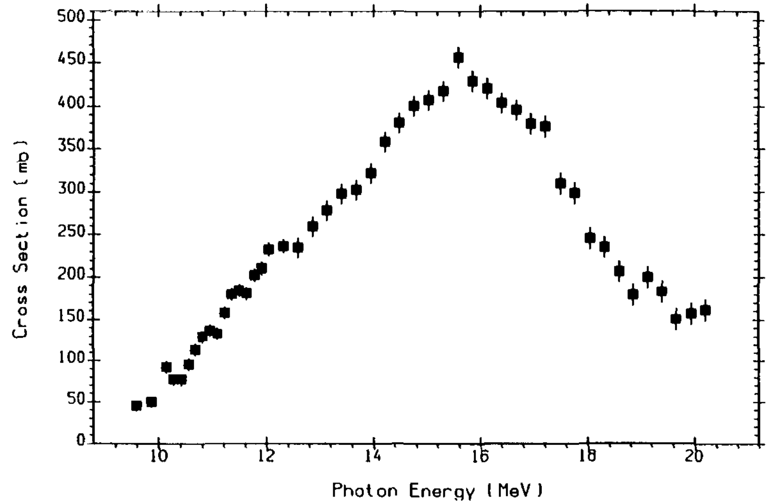
(60-ND-148(G,N)60-ND-147)+ (60-ND-148(G,N+P)59-PR-146)
Positron annihilation
L0025018 J,NP/A,172,437,7109 P.CARLOS+



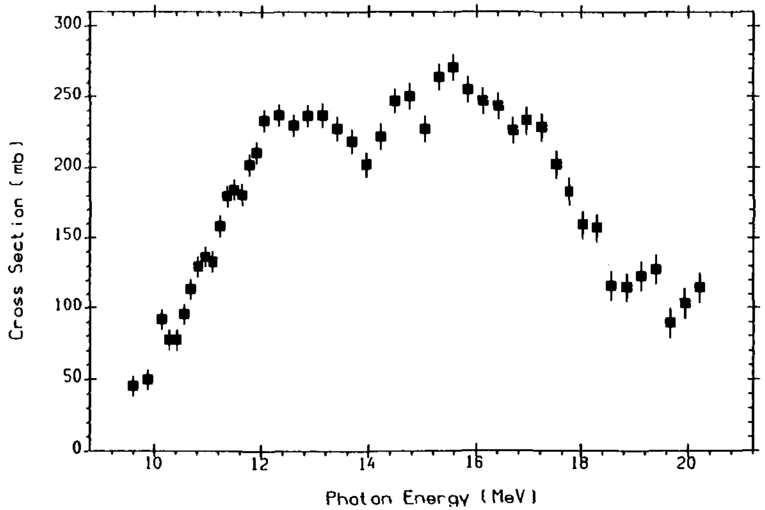
60-ND-148(G,2N)60-ND-146
Positron annihilation
L0025019 J,NP/A,172,437,7109 P.CARLOS+

$^{150}_{60}$Nd

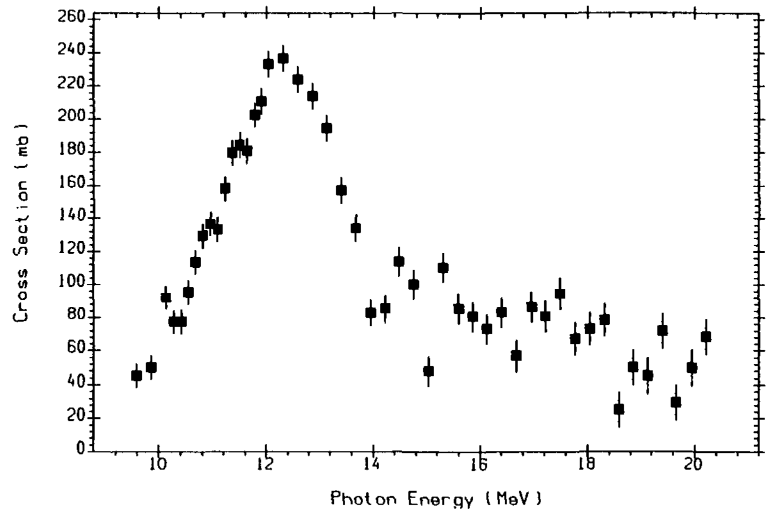
Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	γ,^{3}He	γ,α	γ,2n	γ,np	γ,2p
5.63	7.4	10.0	13.2	16.4	0.4	12.4	16.5	17.8



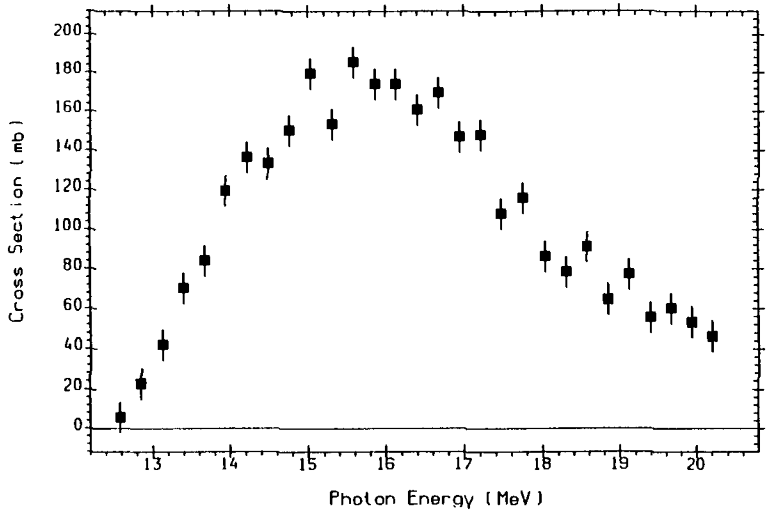
60-ND-150(G,X)0-NN-1
The sum: (G,N)+(G,N+P)+2(G,2N).
Positron annihilation
L0025020 J,NP/A,172,437,7109 P.CARLOS+



60-ND-150(G,X)0-NN-1 UNW
The sum: (G,N)+(G,N+P)+(G,2N).
Positron annihilation
L0025029 J,NP/A,172,437,7109 P.CARLOS+



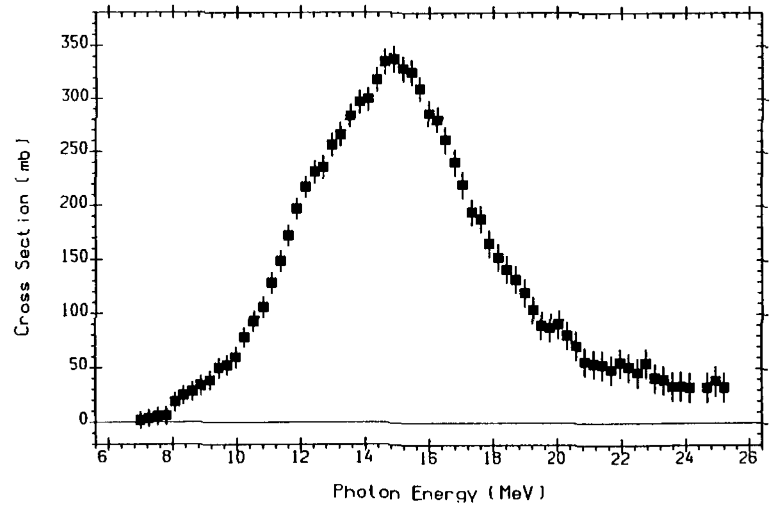
(60-ND-150(G,N)60-ND-149)+ (60-ND-150(G,N+P)59-PR-148)
Positron annihilation
L0025021 J,NP/A,172,437,7109 P.CARLOS+



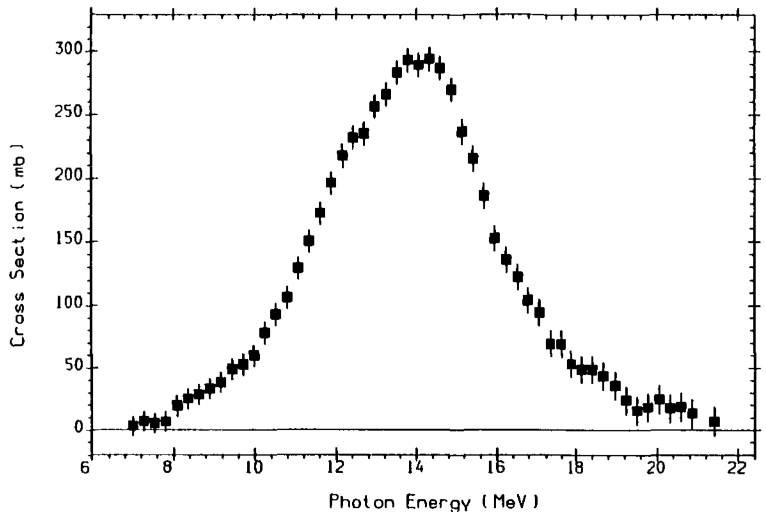
60-ND-150(G,2N)60-ND-148
Positron annihilation
L0025022 J,NP/A,172,437,7109 P.CARLOS+

$^{nat.}_{62}$Sm

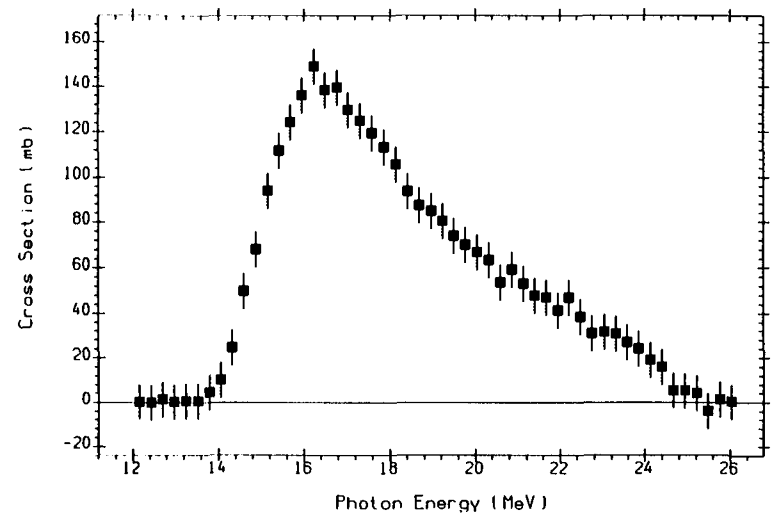
Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	γ,^{3}He	γ,α	γ,2n	γ,np	γ,2p
*	5.9	6.3	12.6	10.5	-2.3	13.9	13.4	10.6



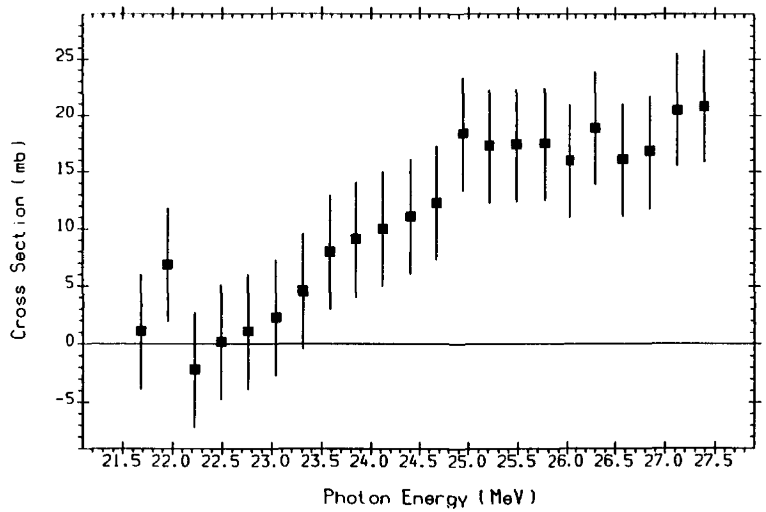
62-SM-0(G,X)0-NN-1 UNW
The sum: (G,N)+(G,N+P)+(G,2N)+(G,2N+P)+(G,3N).
Positron annihilation
L0015024 J,NP/A,133,417,6904 R.BERGERE+



(62-SM-0(G,N))+ (62-SM-0(G,N+P))
Positron annihilation
L0015011 J,NP/A,133,417,6904 R.BERGERE+



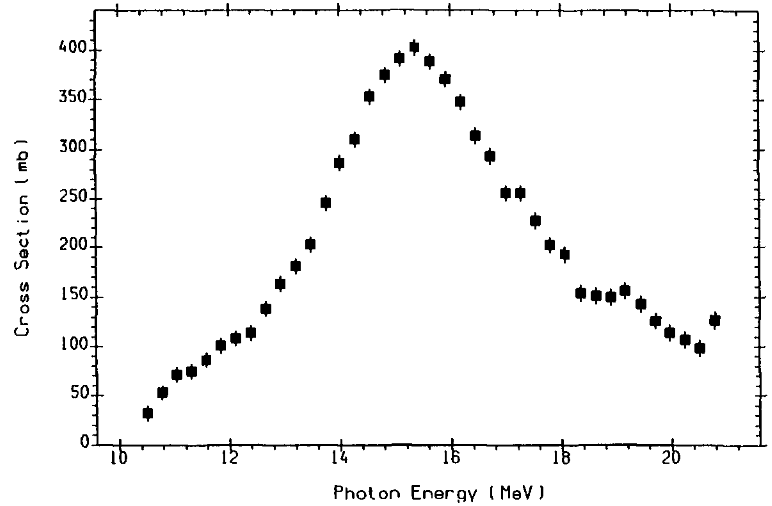
(62-SM-0(G,2N))+ (62-SM-0(G,2N+P))
Positron annihilation
L0015012 J,NP/A,133,417,6904 R.BERGERE+



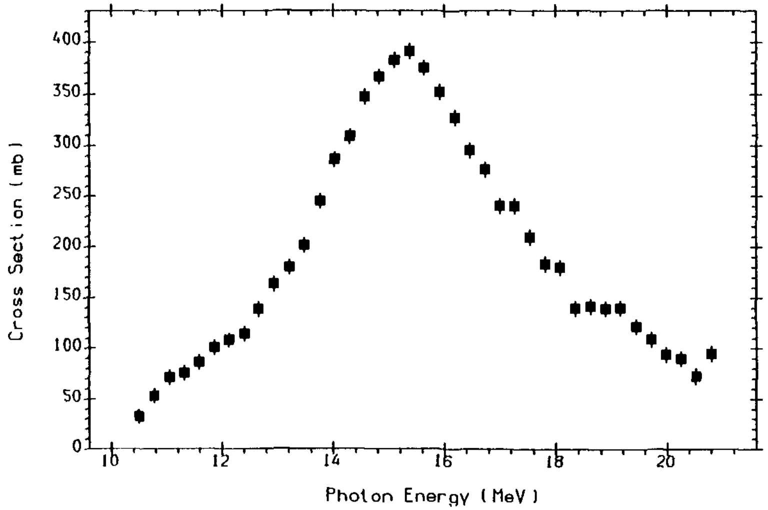
62-SM-0(G,3N)
Positron annihilation
L0015013 J,NP/A,133,417,6904 R.BERGERE+

$^{144}_{62}\mathrm{Sm}$

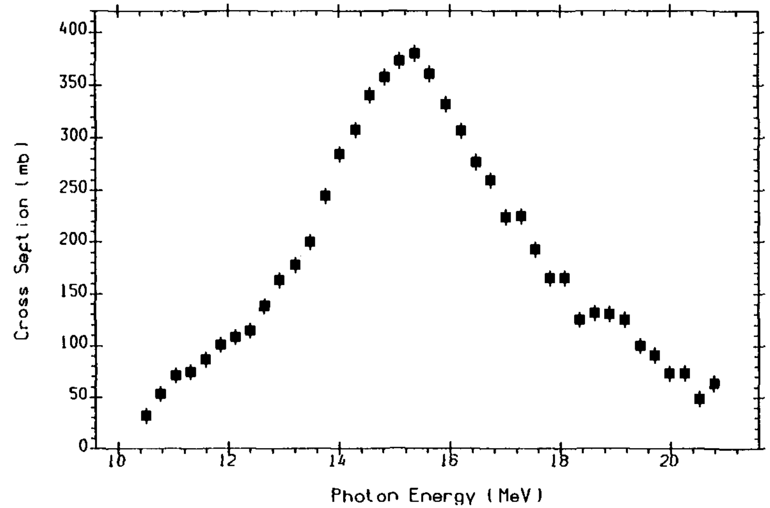
Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	$\gamma,^{3}He$	γ,α	γ,2n	γ,np	γ,2p
3.10	10.5	6.3	16.4	12.7	-0.1	19.1	16.2	10.6



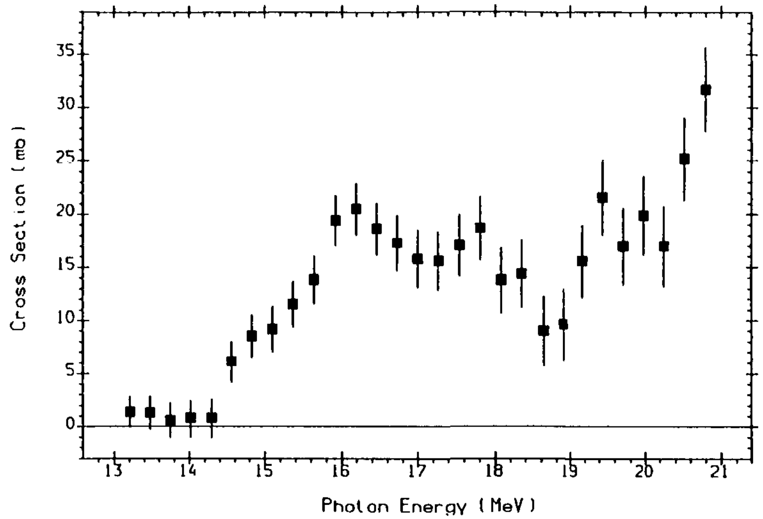
62-SM-144(G,X)0-NN-1
The sum: (G,N)+(G,N+P)+2(G,2N).
Positron annihilation
L0033002 J,NP/A,225,171,7406 P.CARLOS+



62-SM-144(G,X)0-NN-1 UNW
The sum: (G,N)+(G,N+P)+(G,2N).
Positron annihilation
L0033017 J,NP/A,225,171,7406 P.CARLOS+



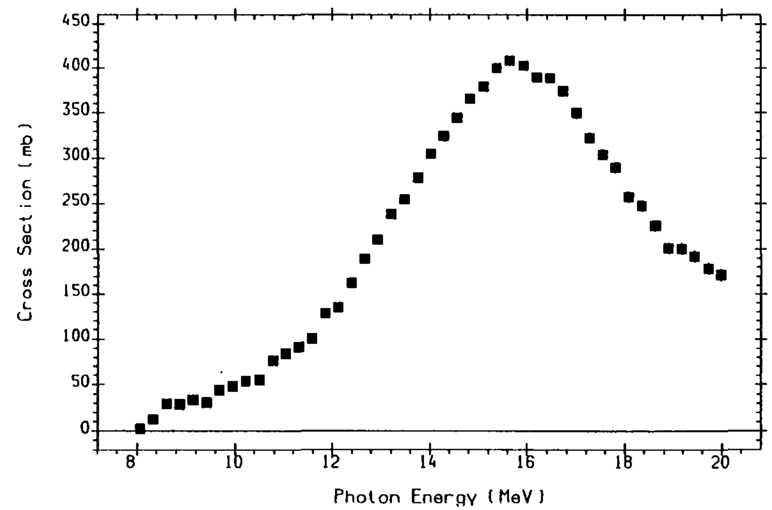
(62-SM-144(G,N)62-SM-143)+ (62-SM-144(G,N+P)61-PM-142)
Positron annihilation
L0033003 J,NP/A,225,171,7406 P.CARLOS+



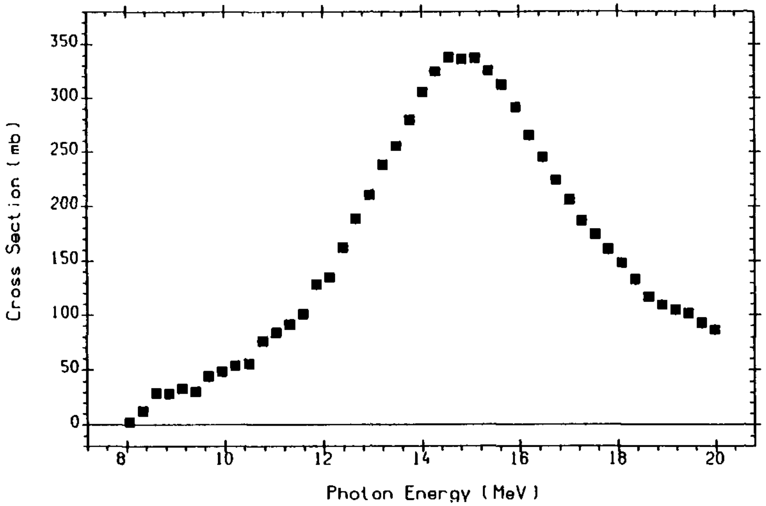
62-SM-144(G,2N)62-SM-142
Positron annihilation
L0033004 J,NP/A,225,171,7406 P.CARLOS+

$^{148}_{62}$Sm

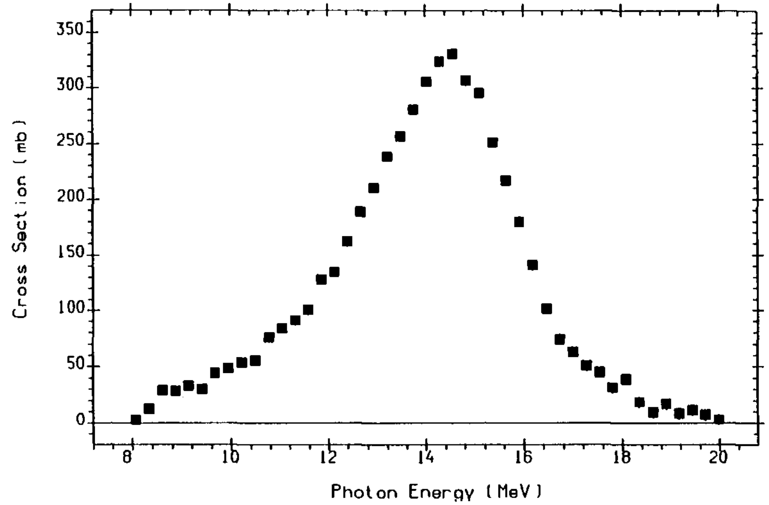
Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	γ,^{3}He	γ,α	γ,2n	γ,np	γ,2p
11.30	8.1	7.6	13.0	12.8	-2.0	14.5	15.3	13.0



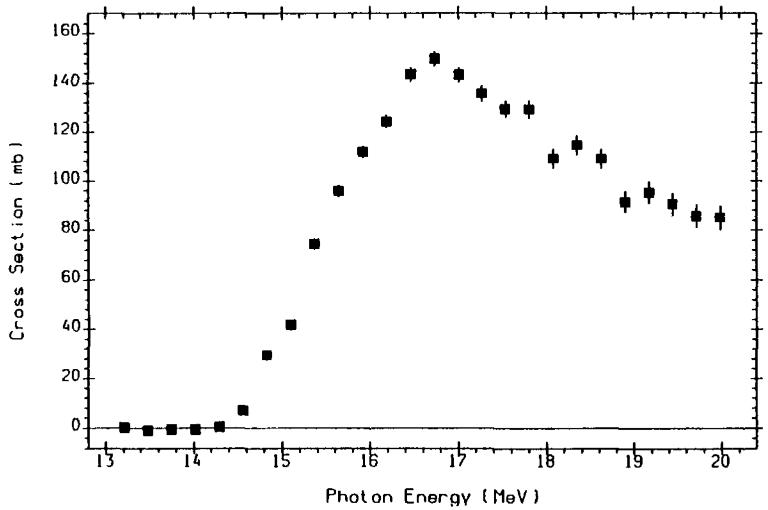
62-SM-148(G,X)0-NN-1
The sum: (G,N)+(G,N+P)+2(G,2N).
Positron annihilation
L0033005 J,NP/A,225,171,7406 P.CARLOS+



62-SM-148(G,X)0-NN-1 UNW
The sum: (G,N)+(G,N+P)+(G,2N).
Positron annihilation
L0033018 J,NP/A,225,171,7406 P.CARLOS+



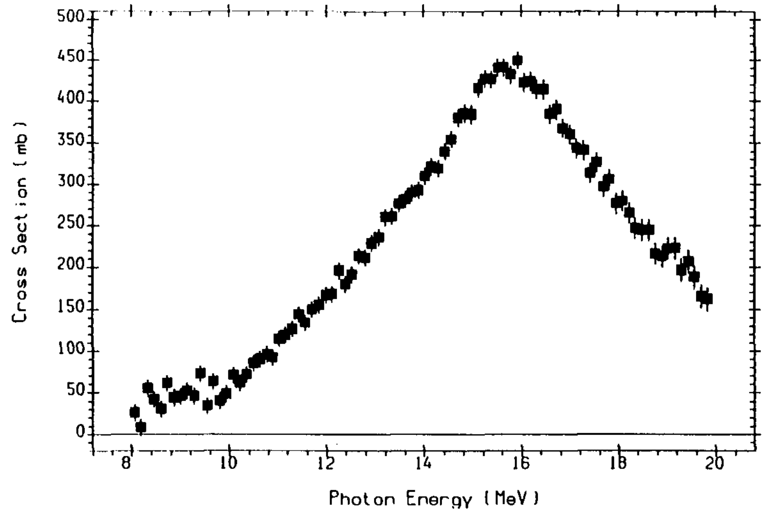
(62-SM-148(G,N)62-SM-147)+ (62-SM-148(G,N+P)61-PM-146)
Positron annihilation
L0033006 J,NP/A,225,171,7406 P.CARLOS+



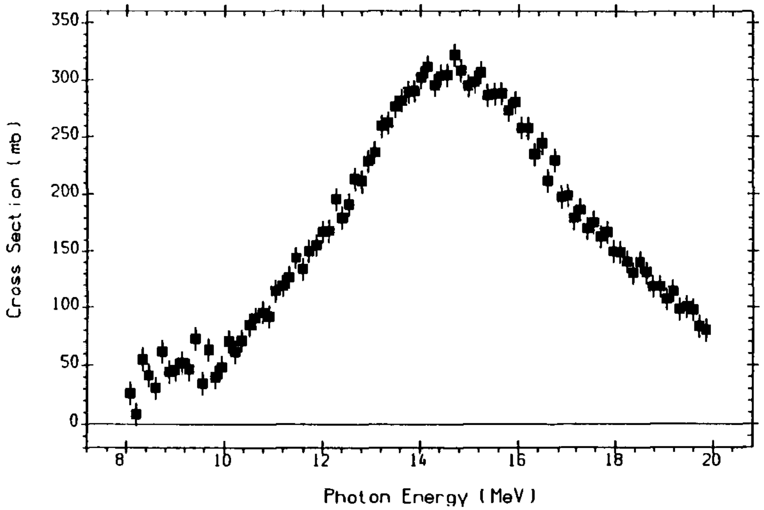
62-SM-148(G,2N)62-SM-146
Positron annihilation
L0033007 J,NP/A,225,171,7406 P.CARLOS+

$^{150}_{62}$Sm

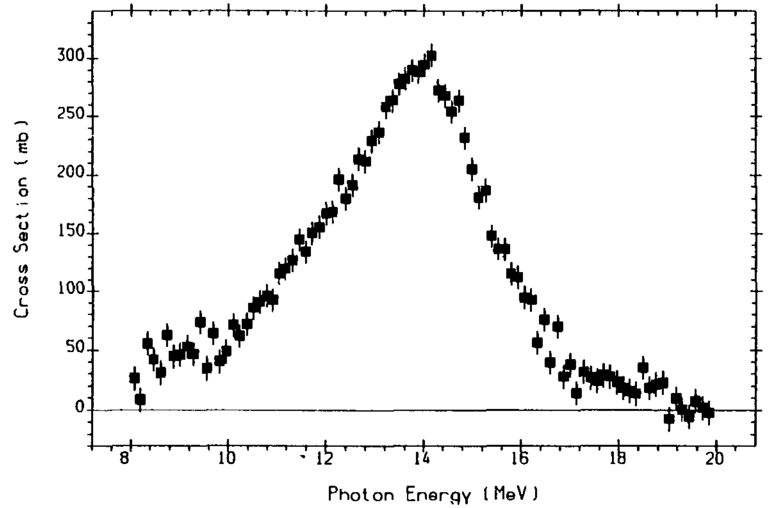
Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	γ,^{3}He	γ,α	γ,2n	γ,np	γ,2p
7.40	8.0	8.3	13.0	13.8	-1.4	13.9	15.5	14.2



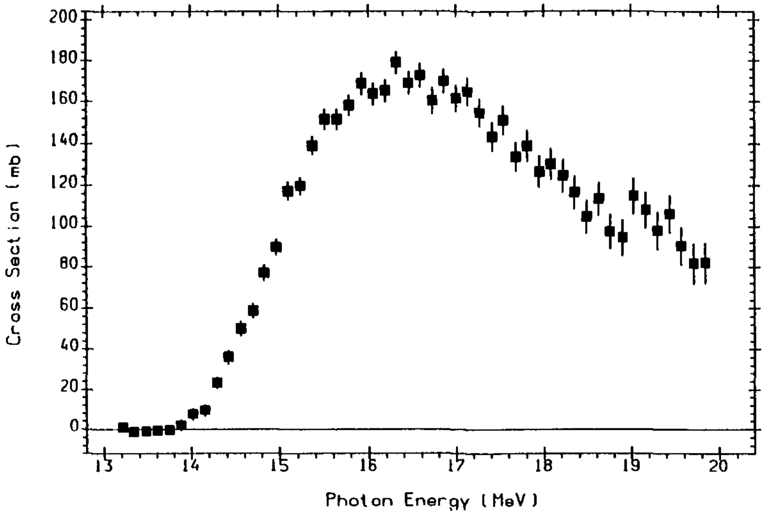
62-SM-150(G,X)0-NN-1
The sum: (G,N)+(G,N+P)+2(G,2N).
Positron annihilation
L0033008 J,NP/A,225,171,7406 P.CARLOS+



62-SM-150(G,X)0-NN-1 UNW
The sum: (G,N)+(G,N+P)+(G,2N).
Positron annihilation
L0033019 J,NP/A,225,171,7406 P.CARLOS+



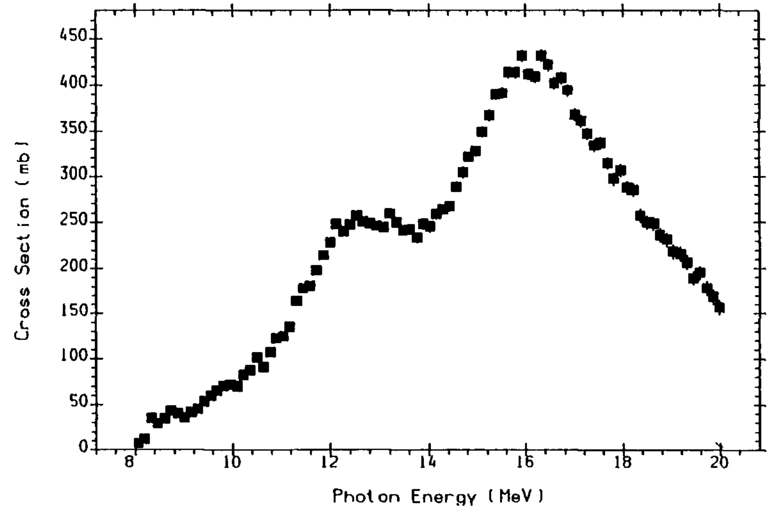
(62-SM-150(G,N)62-SM-149)+ (62-SM-150(G,N+P)61-PM-148)
Positron annihilation
L0033009 J,NP/A,225,171,7406 P.CARLOS+



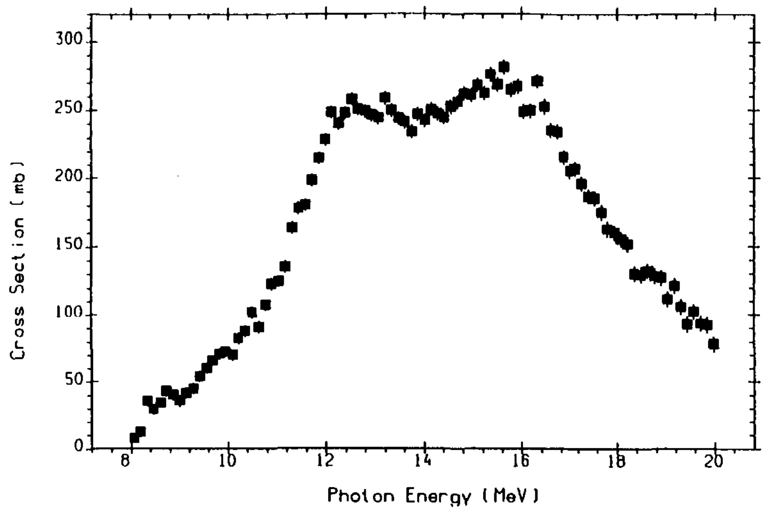
62-SM-150(G,2N)62-SM-148
Positron annihilation
L0033010 J,NP/A,225,171,7406 P.CARLOS+

$^{152}_{62}$Sm

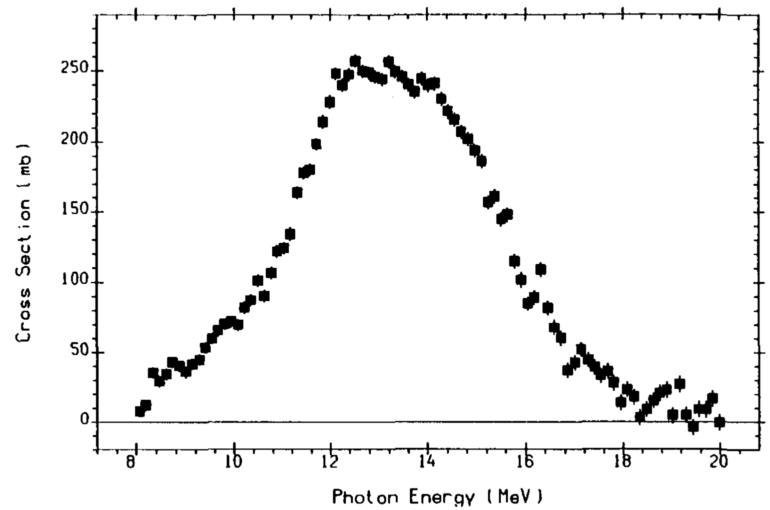
Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	γ,^{3}He	γ,α	γ,2n	γ,np	γ,2p
26.60	8.3	8.7	13.7	15.3	-0.2	13.9	16.6	15.7



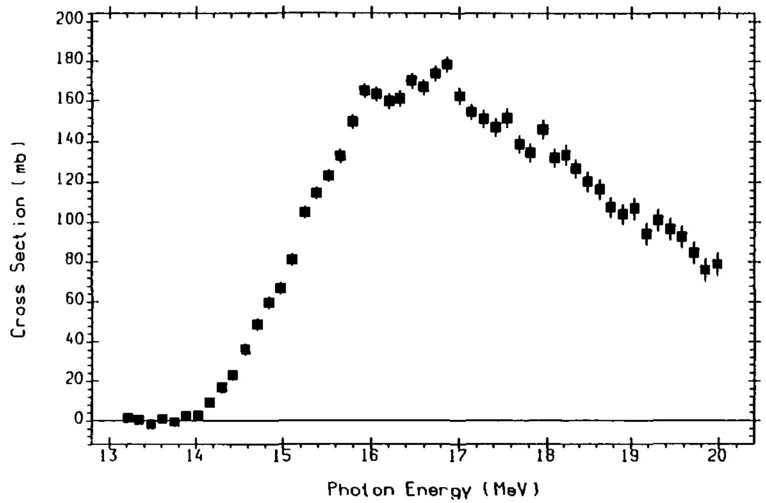
62-SM-152(G,X)0-NN-1
The sum: (G,N)+(G,N+P)+2(G,2N).
Positron annihilation
L0033011 J,NP/A,225,171,7406 P.CARLOS+



62-SM-152(G,X)0-NN-1 UNW
The sum: (G,N)+(G,N+P)+(G,2N).
Positron annihilation
L0033020 J,NP/A,225,171,7406 P.CARLOS+



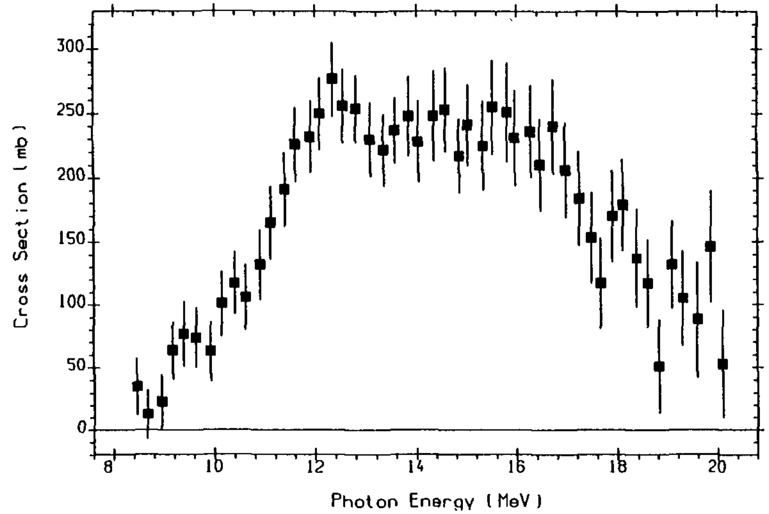
(62-SM-152(G,N)62-SM-151)+ (62-SM-152(G,N+P)61-PM-150)
Positron annihilation
L0033012 J,NP/A,225,171,7406 P.CARLOS+



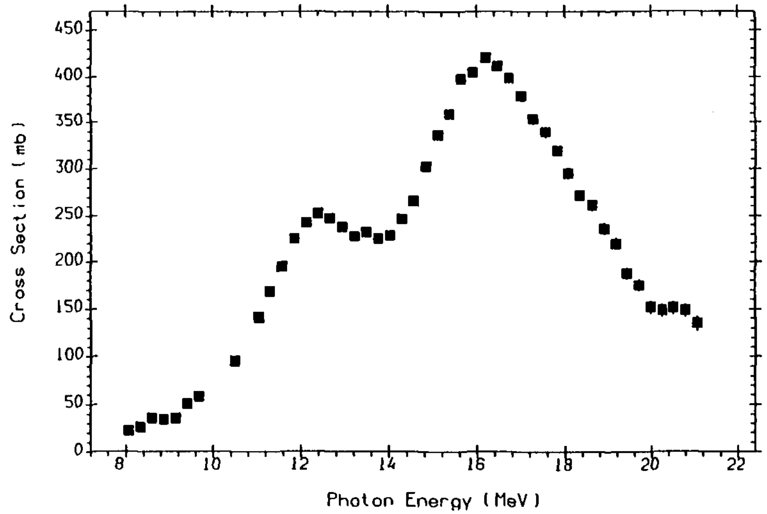
62-SM-152(G,2N)62-SM-150
Positron annihilation
L0033013 J,NP/A,225,171,7406 P.CARLOS+

$^{154}_{62}$Sm

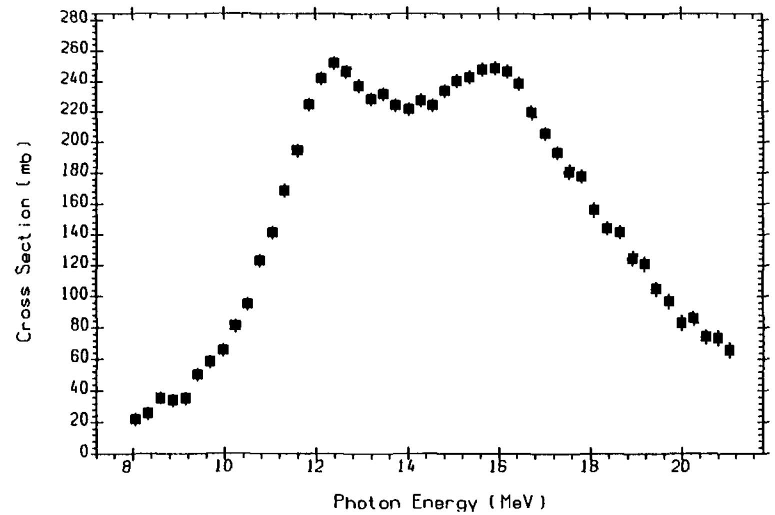
Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	$\gamma,^{3}$He	γ,α	γ,2n	γ,np	γ,2p
22.60	8.0	9.1	14.0	16.5	1.2	13.8	16.5	16.9



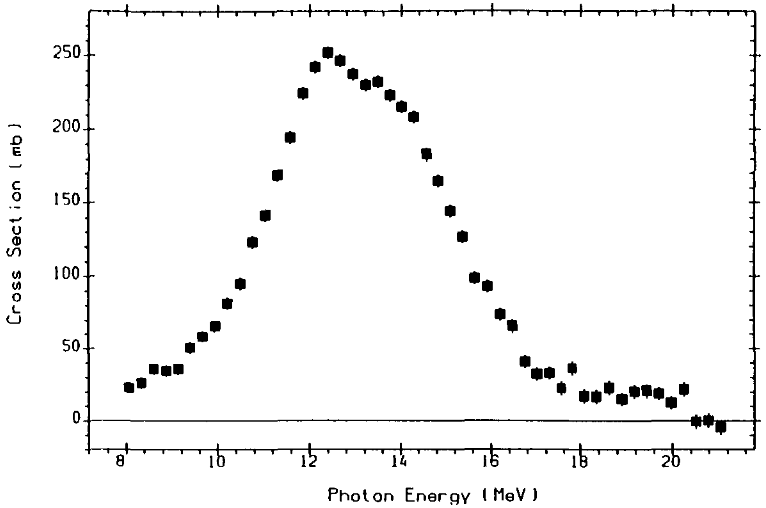
62-SM-154(G,ABS)
BRST
M0073002 J,NP/A,351,257,81 G.M.GUREVICH+



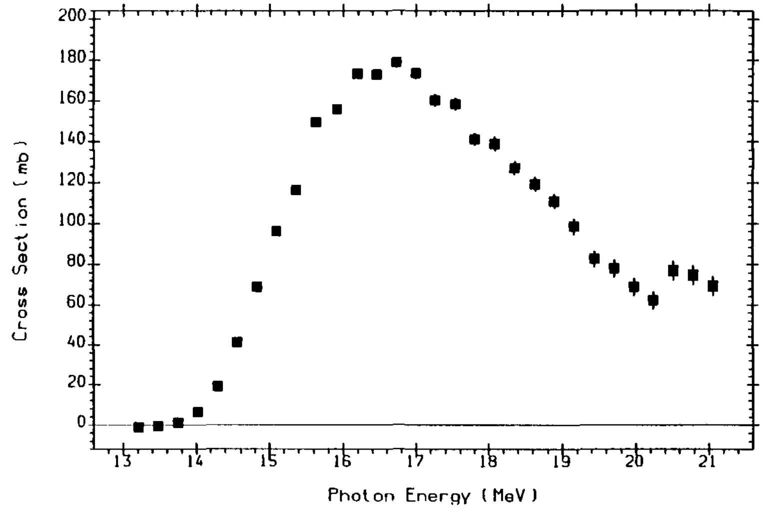
62-SM-154(G,X)0-NN-1
The sum: (G,N)+(G,N+P)+2(G,2N).
Positron annihilation
L0033014 J,NP/A,225,171,7406 P.CARLOS+



62-SM-154(G,X)0-NN-1 UNW
Positron annihilation
L0033021 J,NP/A,225,171,7406 P.CARLOS+



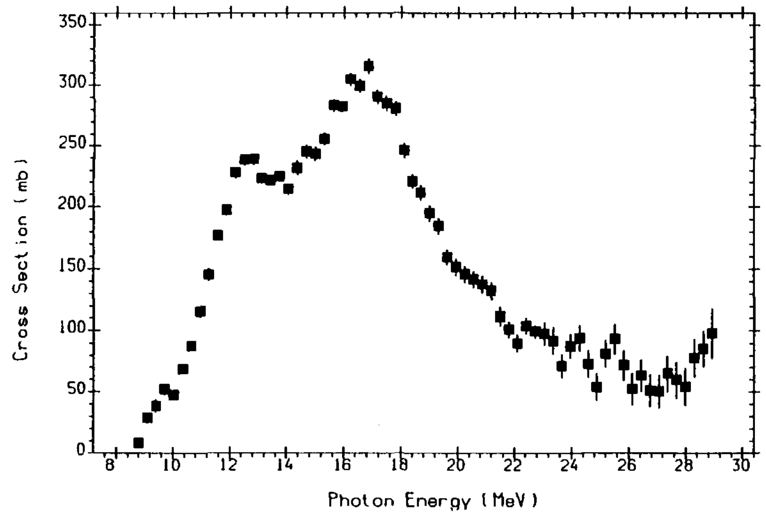
(62-SM-154(G,N)62-SM-153)+ (62-SM-154(G,N+P)61-PM-152)
Positron annihilation
L0033015 J,NP/A,225,171,7406 P.CARLOS+



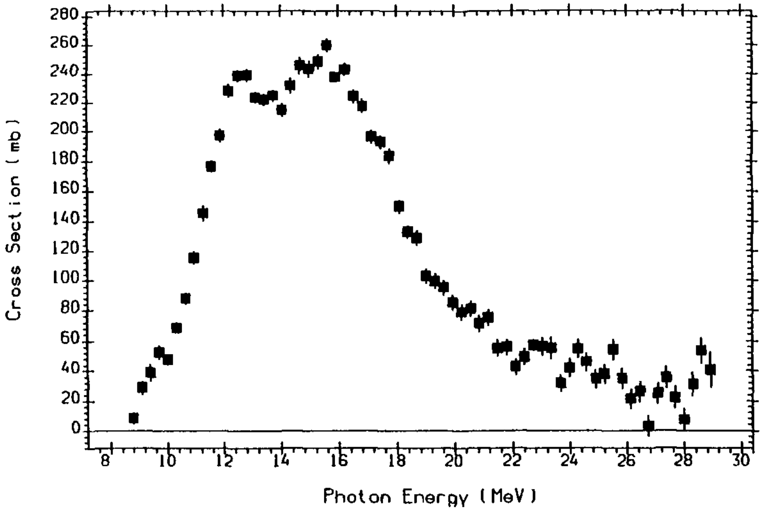
62-SM-154(G,2N)62-SM-152
Positron annihilation
L0033016 J,NP/A,225,171,7406 P.CARLOS+

$^{153}_{63}$Eu

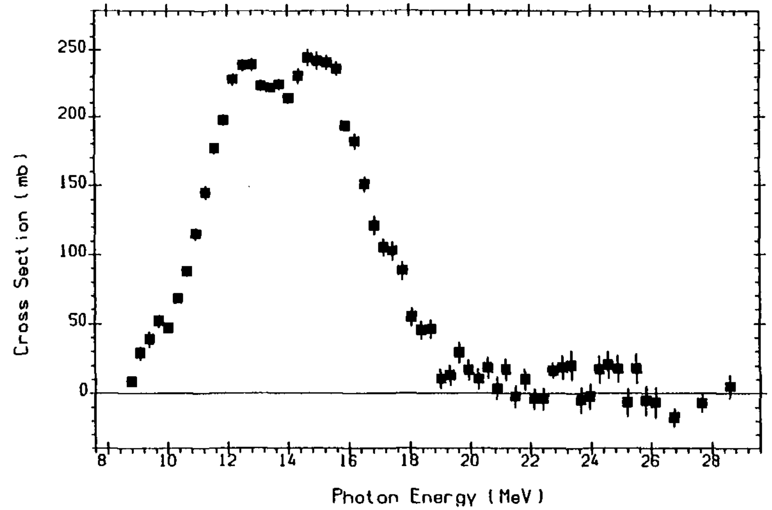
Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	γ,^{3}He	γ,α	γ,2n	γ,np	γ,2p
52.10	8.6	5.9	11.3	14.8	-0.3	14.9	14.2	14.6



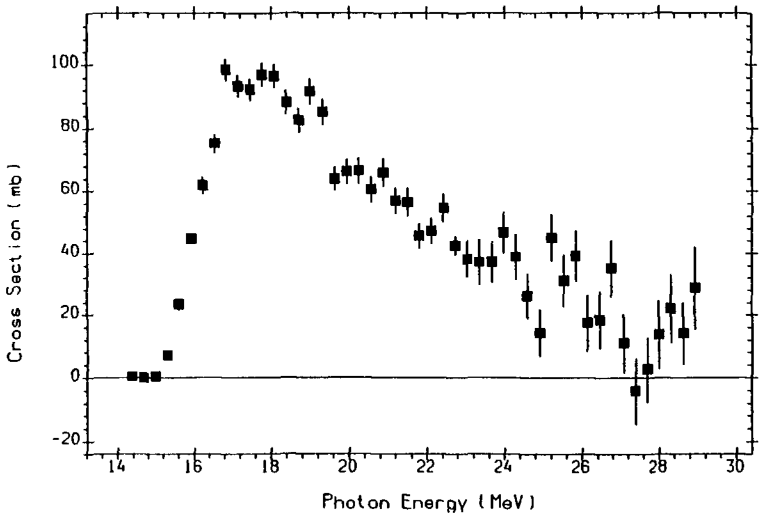
63-EU-153(G,X)0-NN-1
The sum: (G,N)+(G,N+P)+2(G,2N)+2(G,2N+P)+3(G,3N).
Positron annihilation
L0016002 J,PR,185,1576,6909 B.L.BERMAN+



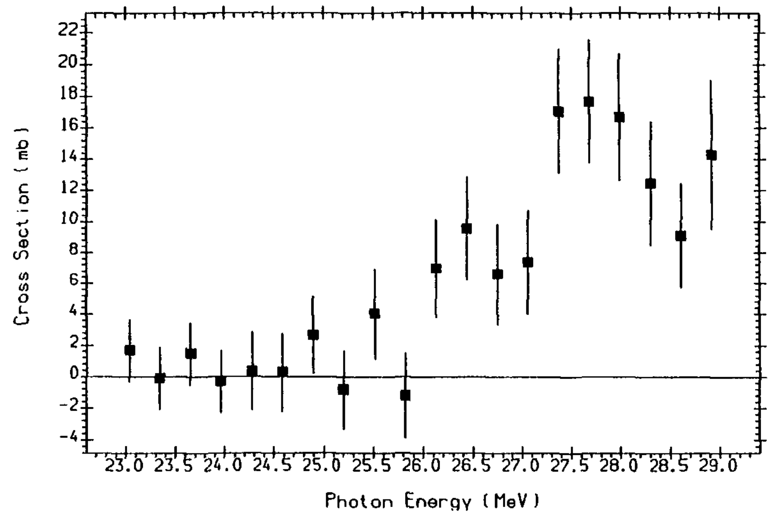
63-EU-153(G,X)0-NN-1 UNW
The sum: (G,N)+(G,N+P)+(G,2N)+(G,2N+P)+(G,3N).
Positron annihilation
L0016018 J,PR,185,1576,6909 B.L.BERMAN+



(63-EU-153(G,N)63-EU-152)+ (63-EU-153(G,N+P)62-SM-151)
Positron annihilation
L0016003 J,PR,185,1576,6909 B.L.BERMAN+



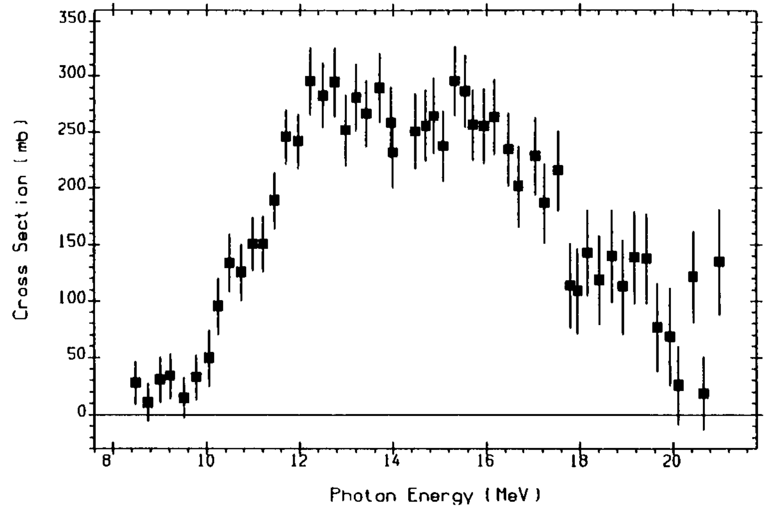
(63-EU-153(G,2N)63-EU-151)+ (63-EU-153(G,2N+P)62-SM-150)
Positron annihilation
L0016004 J,PR,185,1576,6909 B.L.BERMAN+



63-EU-153(G,3N)63-EU-150
Positron annihilation
L0016005 J,PR,185,1576,6909 B.L.BERMAN+

$^{156}_{64}Gd$

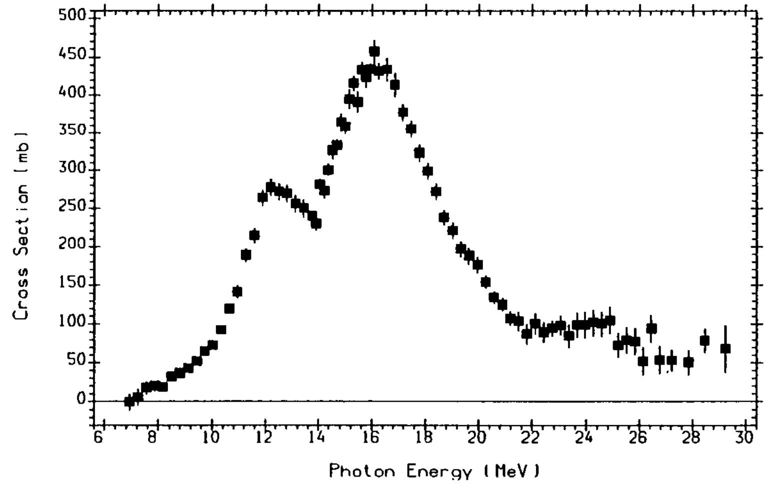
Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	γ,^{3}He	γ,α	γ,2n	γ,np	γ,2p
20.60	8.5	8.0	14.1	14.9	0.2	15.0	16.2	14.7



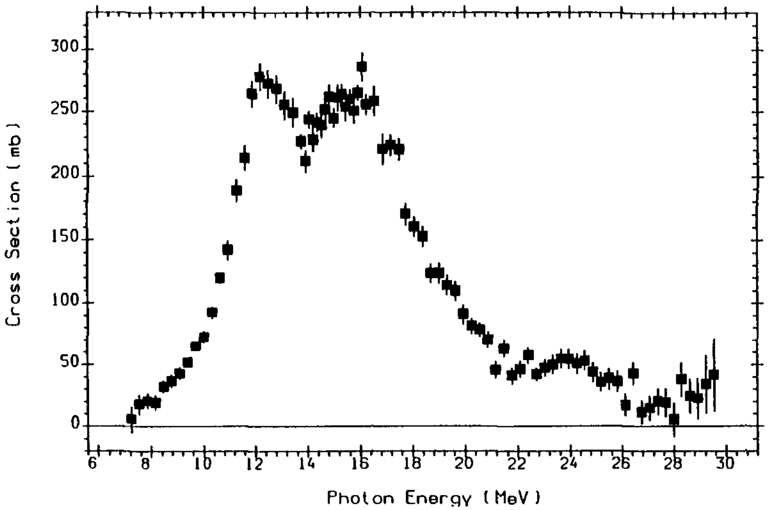
64-GD-156(G,ABS)
BRST
M0073003 J,NP/A,351,257,81 G.M.GUREVICH+

$^{160}_{64}Gd$

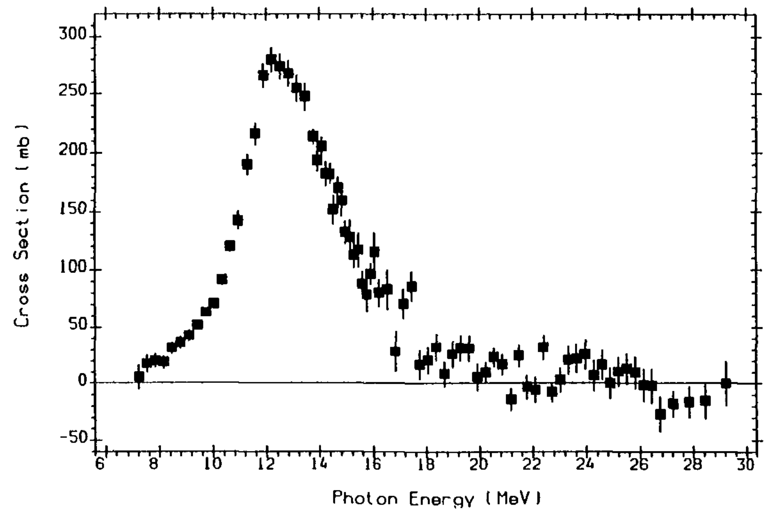
Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	γ,^{3}He	γ,α	γ,2n	γ,np	γ,2p
21.80	7.5	9.2	13.4	16.0	1.0	13.4	16.0	17.3



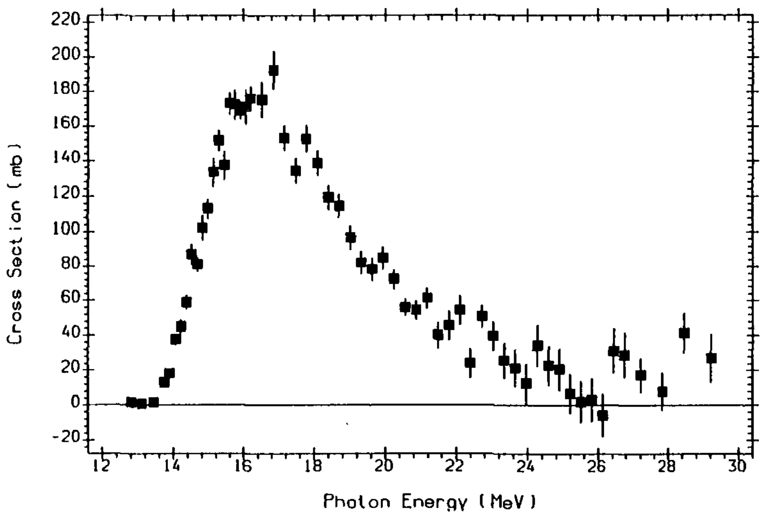
64-GD-160(G,X)0-NN-1
The sum: (G,N)+(G,N+P)+2(G,2N)+2(G,2N+P)+3(G,3N).
Positron annihilation
L0016006 J,PR,185,1576,6909 B.L.BERMAN+



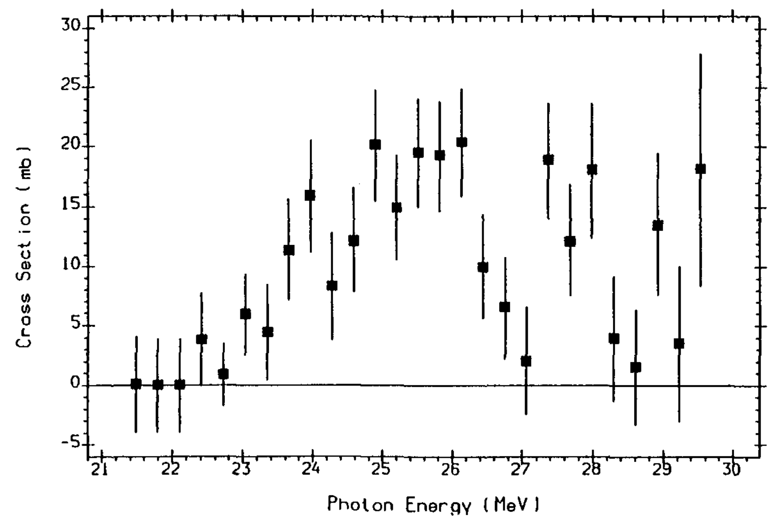
64-GD-160(G,X)0-NN-1 UNW
The sum: (G,N)+(G,N+P)+(G,2N)+(G,2N+P)+(G,3N).
Positron annihilation
L0016019 J,PR,185,1576,6909 B.L.BERMAN+



(64-GD-160(G,N)64-GD-159)+ (64-GD-160(G,N+P)63-EU-158)
Positron annihilation
L0016007 J,PR,185,1576,6909 B.L.BERMAN+



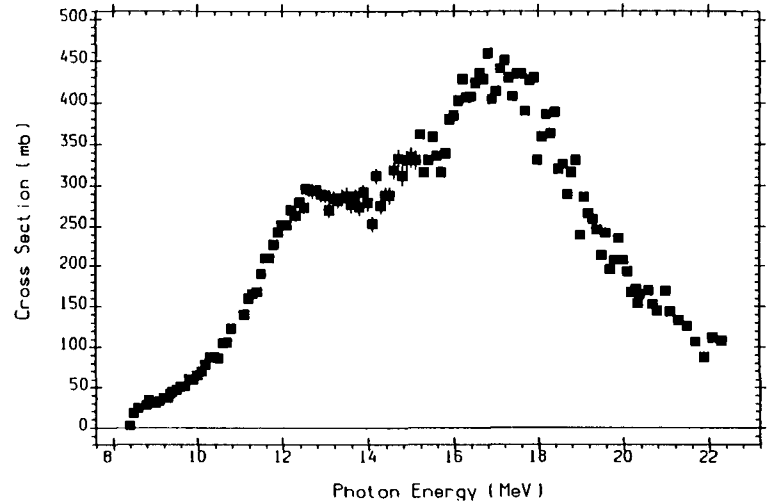
(64-GD-160(G,2N)64-GD-158)+ (64-GD-160(G,2N+P)63-EU-157)
Positron annihilation
L0016008 J,PR,185,1576,6909 B.L.BERMAN+



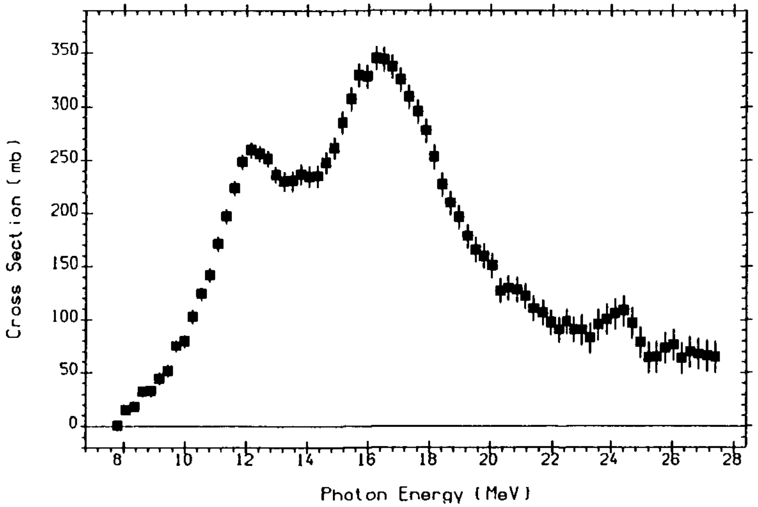
64-GD-160(G,3N)64-GD-157
Positron annihilation
L0016009 J,PR,185,1576,6909 B.L.BERMAN+

$^{159}_{65}Tb$

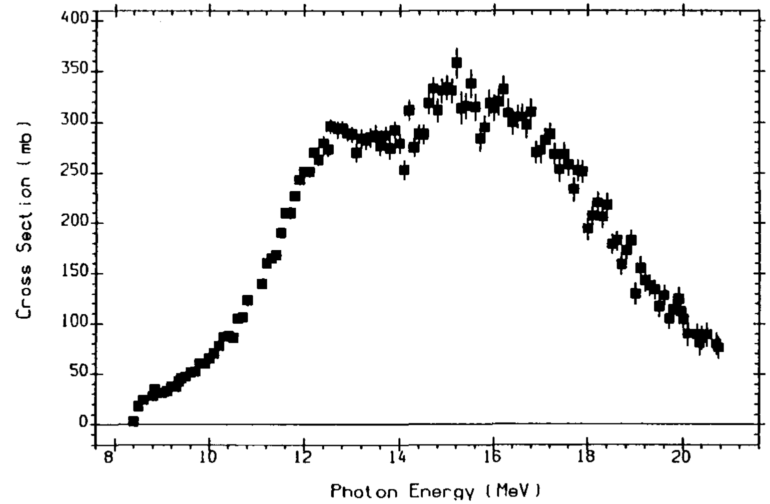
Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	γ,^{3}He	γ,α	γ,2n	γ,np	γ,2p
100.00	8.1	6.1	11.9	14.4	0.1	14.9	14.0	14.7



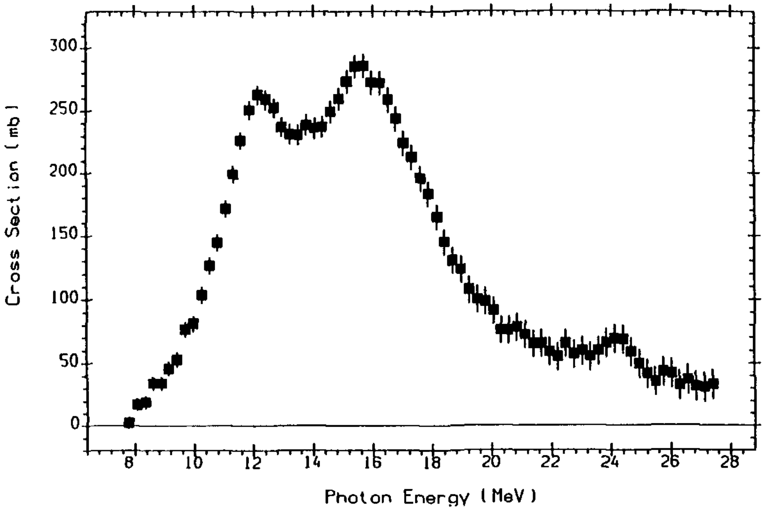
(65-TB-159(G,N)65-TB-158)+(65-TB-159(G,N+P)64-GD-157)+2(65-TB-159(G,2N)65-TB-157)
BRST
M0057003 J,YF,23,1145,76 B.I.GORYACHEV+



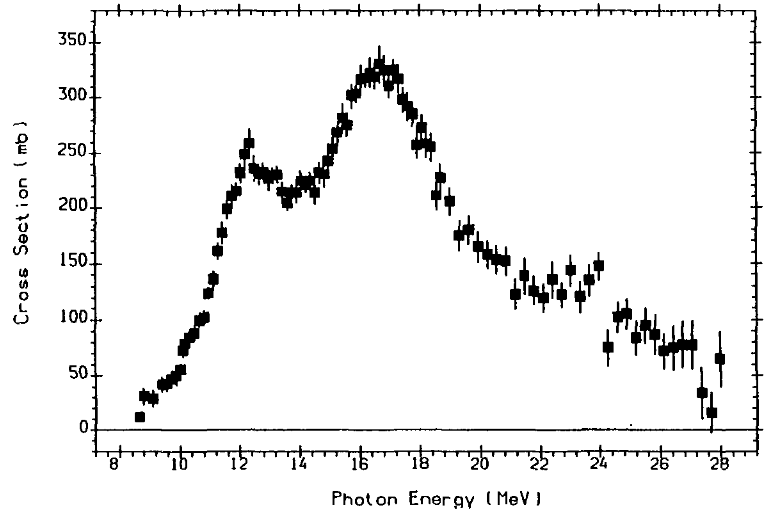
65-TB-159(G,X)0-NN-1
The sum: (G,N)+(G,N+P)+2(G,2N)+2(G,2N+P)+3(G,3N).
Positron annihilation
L0012006 J,NP/A,121,463,6807 R.BERGERE+



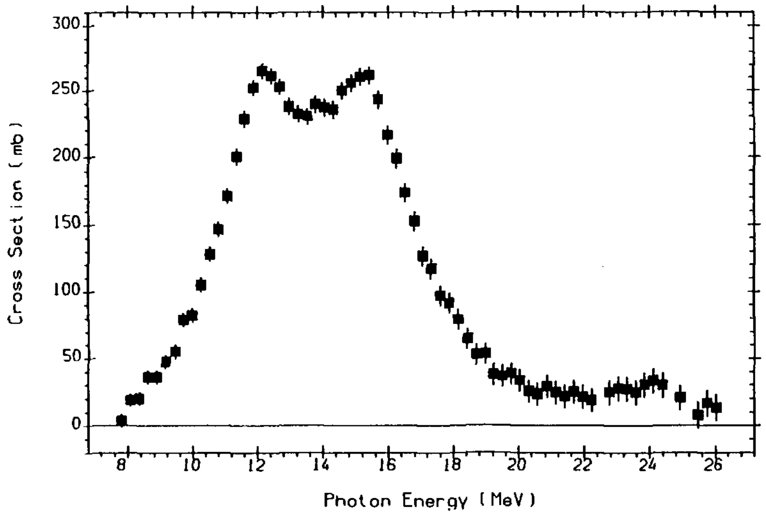
(65-TB-159(G,N)65-TB-158)+ (65-TB-159(G,N+P)64-GD-157)+ (65-TB-159(G,2N)65-TB-157)
BRST
M0057002 J,YF,23,1145,76 B.I.GORYACHEV+



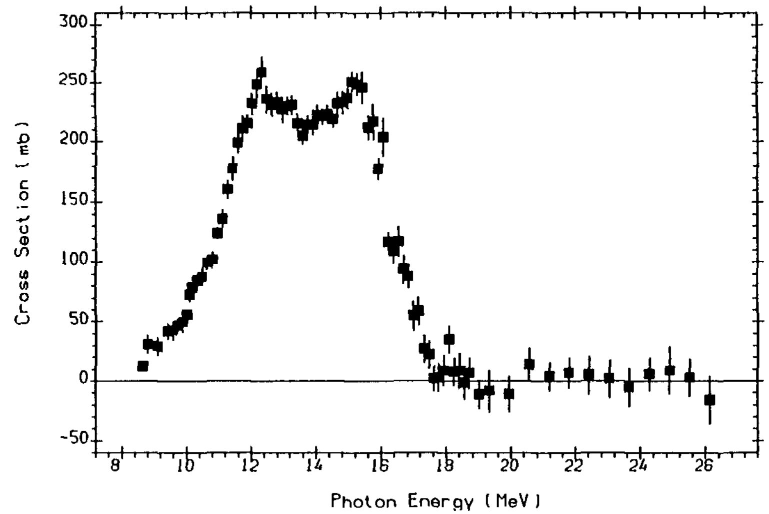
65-TB-159(G,X)0-NN-1 UNW
The sum: (G,N)+(G,N+P)+(G,2N)+(G,2N+P)+(G,3N).
Positron annihilation
L0012019 J,NP/A,121,463,6807 R.BERGERE+



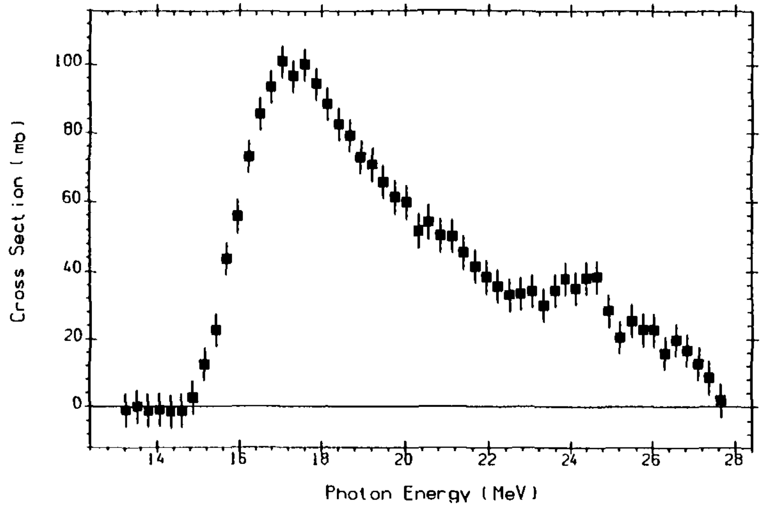
65-TB-159(G,X)0-NN-1 UNW
The sum: (G,N)+(G,N+P)+(G,2N)+(G,2N+P)+(G,3N).
Positron annihilation
L0005003 J,PR/B,133,869,6402 R.L.BRAMLETT+



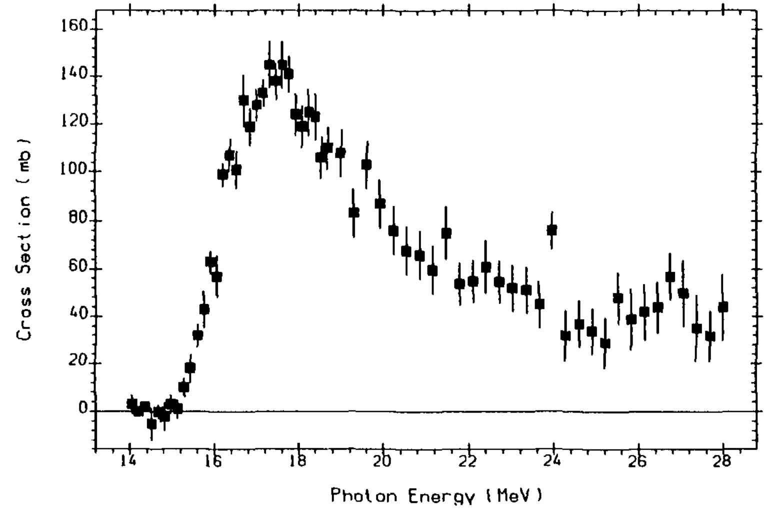
(65-TB-159(G,N)65-TB-158)+ (65-TB-159(G,N+P)64-GD-157)
Positron annihilation
L0012007 J,NP/A,121,463,6807 R.BERGERE+



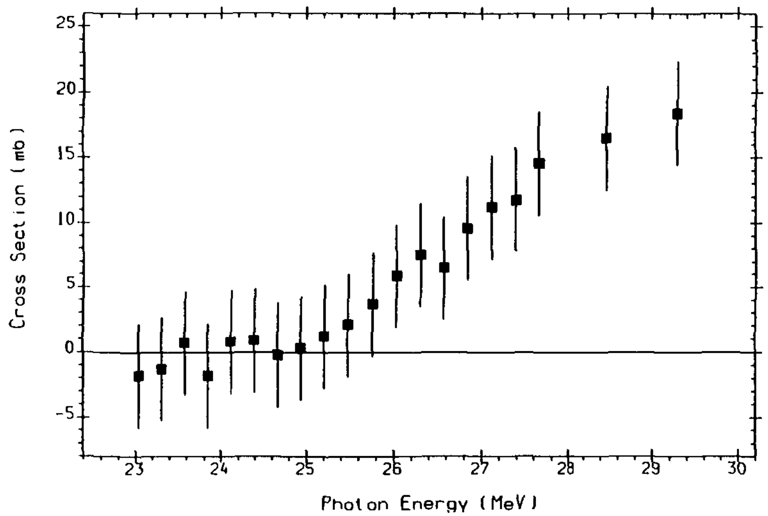
(65-TB-159(G,N)65-TB-158)+ (65-TB-159(G,N+P)64-GD-157)
Positron annihilation
L0005004 J,PR/B,133,869,6402 R.L.BRAMLETT+



(65-TB-159(G,2N)65-TB-157)+ (65-TB-159(G,2N+P)64-GD-156)
Positron annihilation
L0012008 J,NP/A,121,463,6807 R.BERGERE+



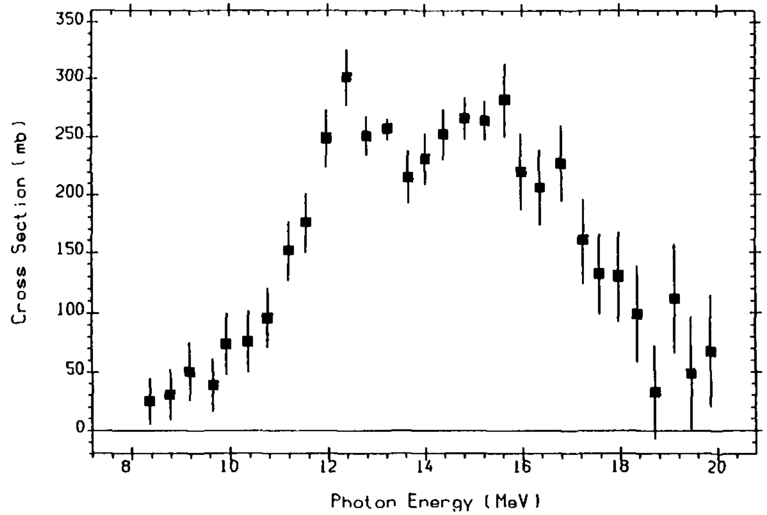
(65-TB-159(G,2N)65-TB-157)+ (65-TB-159(G,2N+P)64-GD-156)
Positron annihilation
L0005005 J,PR/B,133,869,6402 R.L.BRAMLETT+



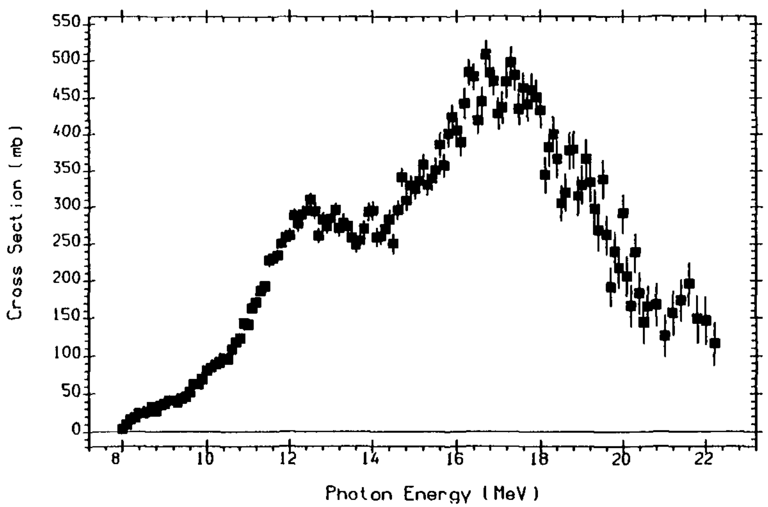
65-TB-159(G,3N)65-TB-156
Positron annihilation
L0012009 J,NP/A,121,463,6807 R.BERGERE+

$^{165}_{67}Ho$

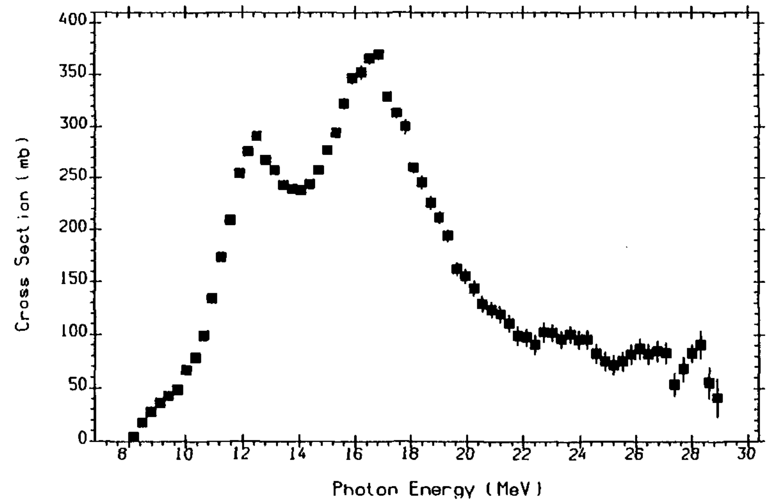
Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	γ,^{3}He	γ,α	γ,2n	γ,np	γ,2p
100.00	8.0	6.2	11.7	14.1	-0.1	14.7	13.9	14.9



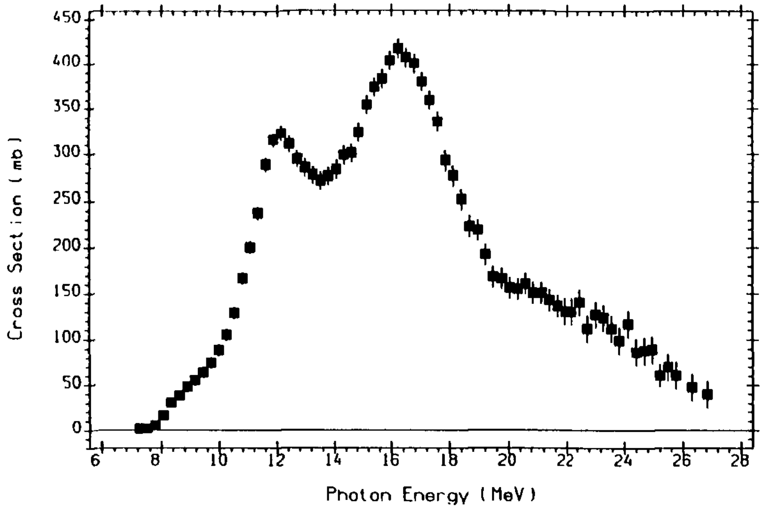
67-HO-165(G,ABS)
BRST
M0073004 J,NP/A,351,257,81 G.M.GUREVICH+



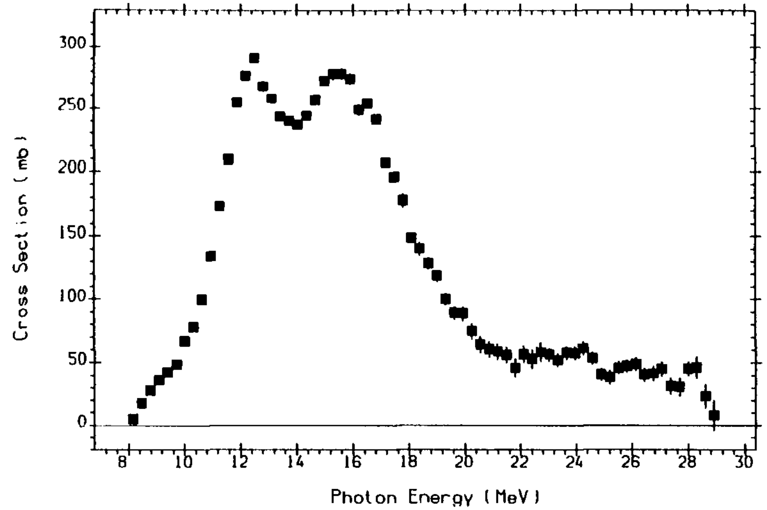
(67-HO-165(G,N)67-HO-164)+(67-HO-165(G,N+P)66-DY-163)+2(67-HO-165(G,2N)67-HO-163)
BRST
M0057004 J,YF,23,1145,76 B.I.GORYACHEV+



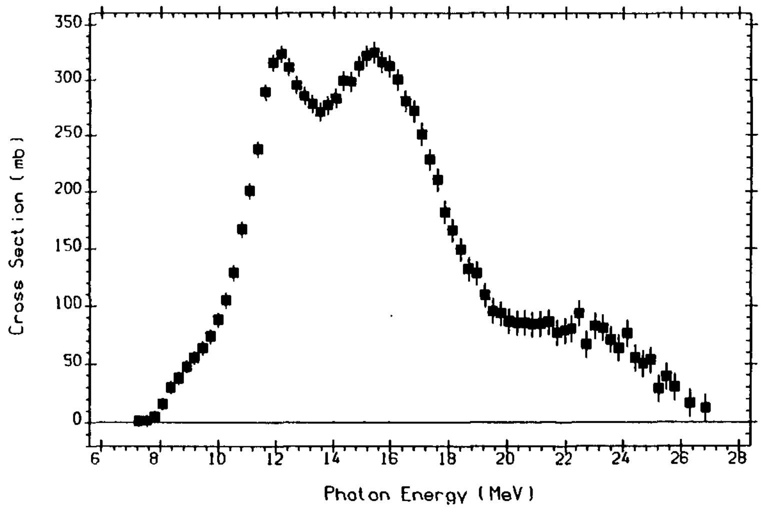
67-HO-165(G,X)0-NN-1
The sum: (G,N)+(G,N+P)+2(G,2N)+2(G,2N+P)+3(G,3N).
Positron annihilation
L0016010 J,PR,185,1576,6909 B.L.BERMAN+



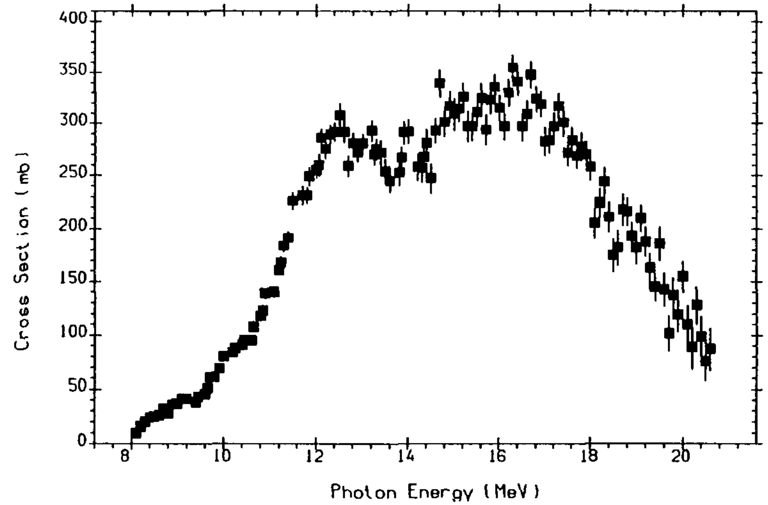
67-HO-165(G,X)0-NN-1
The sum: (G,N)+(G,N+P)+2(G,2N)+2(G,2N+P)+3(G,3N).
Positron annihilation
L0012010 J,NP/A,121,463,6807 R.BERGERE+



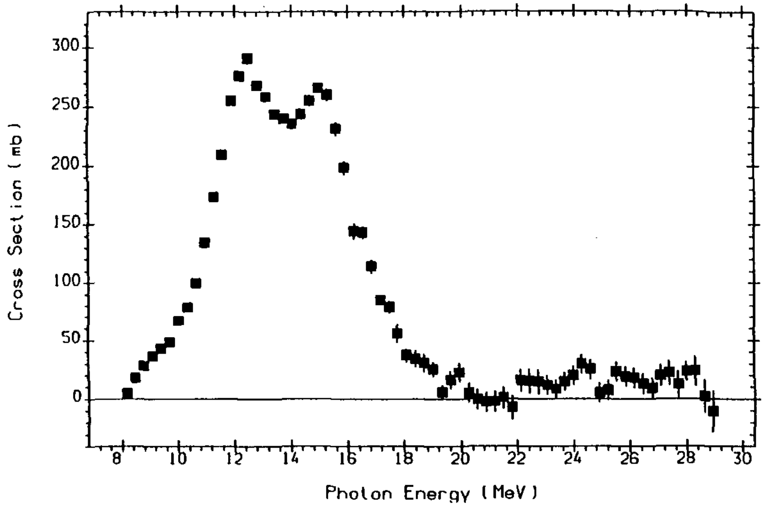
67-HO-165(G,X)0-NN-1 UNW
The sum: (G,N)+(G,N+P)+(G,2N)+(G,2N+P)+(G,3N).
Positron annihilation
L0016020 J,PR,185,1576,6909 B.L.BERMAN+



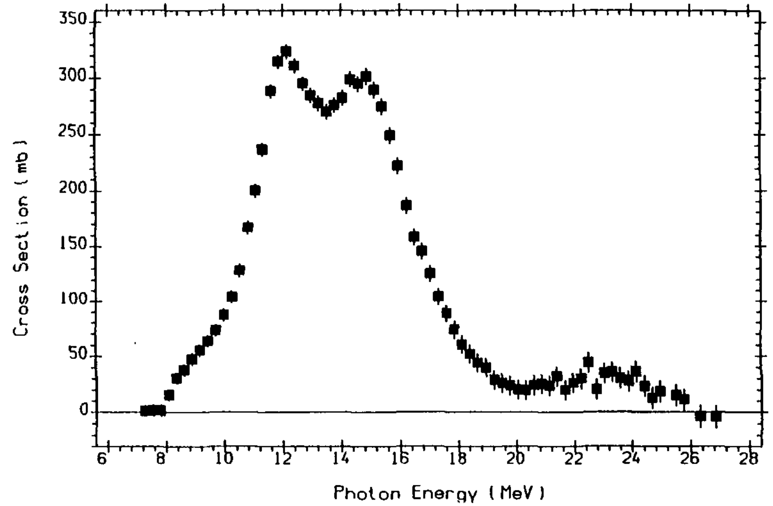
67-HO-165(G,X)0-NN-1 UNW
The sum: (G,N)+(G,N+P)+(G,2N)+(G,2N+P)+(G,3N).
Positron annihilation
L0012020 J,NP/A,121,463,6807 R.BERGERE+



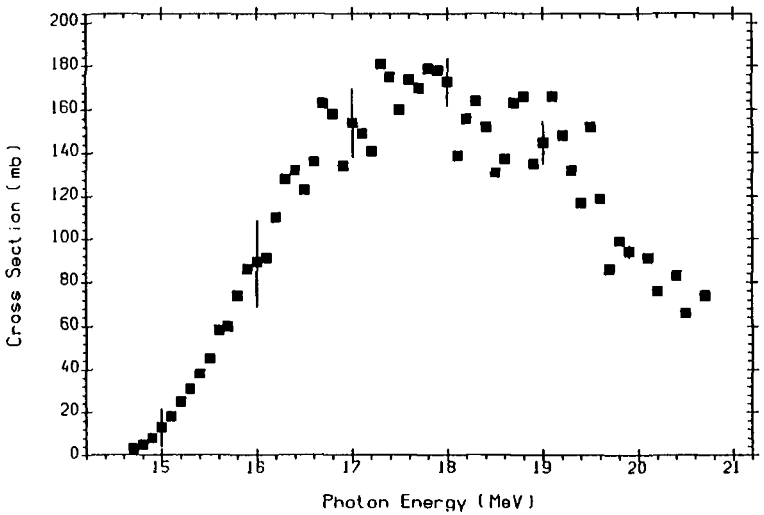
(67-HO-165(G,N)67-HO-164)+(67-HO-165(G,N+P)66-DY-163)+(67-HO-165(G,2N)67-HO-163)
BRST
M0057006 J,YF,23,1145,76 B.I.GORYACHEV+



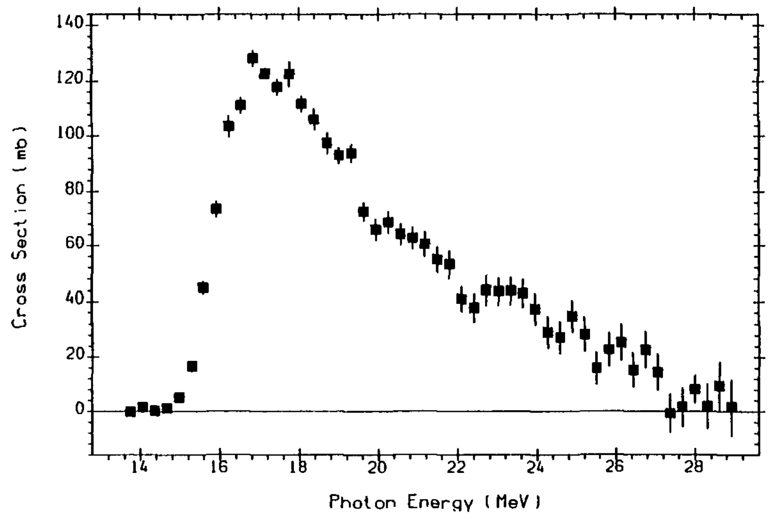
(67-HO-165(G,N)67-HO-164)+ (67-HO-165(G,N+P)66-DY-163)
Positron annihilation
L0016011 J,PR,185,1576,6909 B.L.BERMAN+



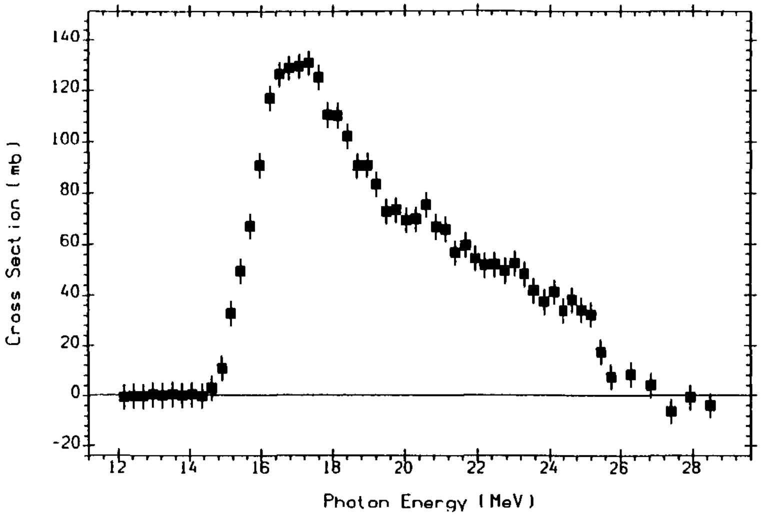
(67-HO-165(G,N)67-HO-164)+ (67-HO-165(G,N+P)66-DY-163)
Positron annihilation
L0012011 J,NP/A,121,463,6807 R.BERGERE+



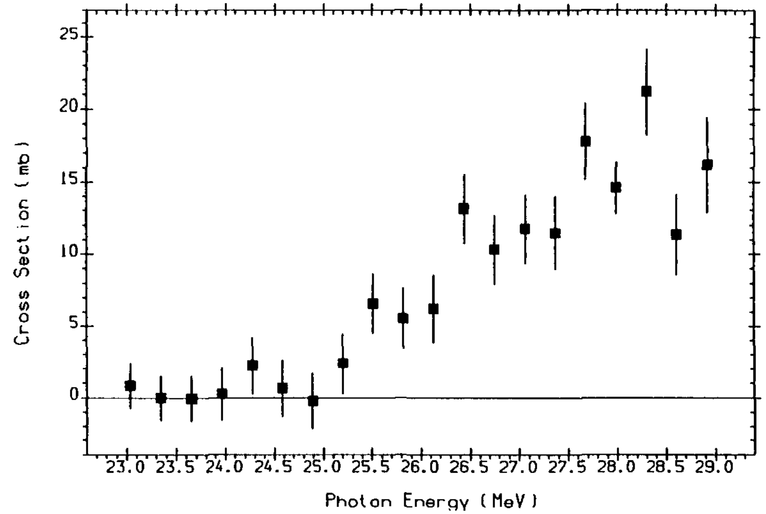
67-HO-165(G,2N)67-HO-163
BRST
M0057005 J,YF,23,1145,76 B.I.GORYACHEV+



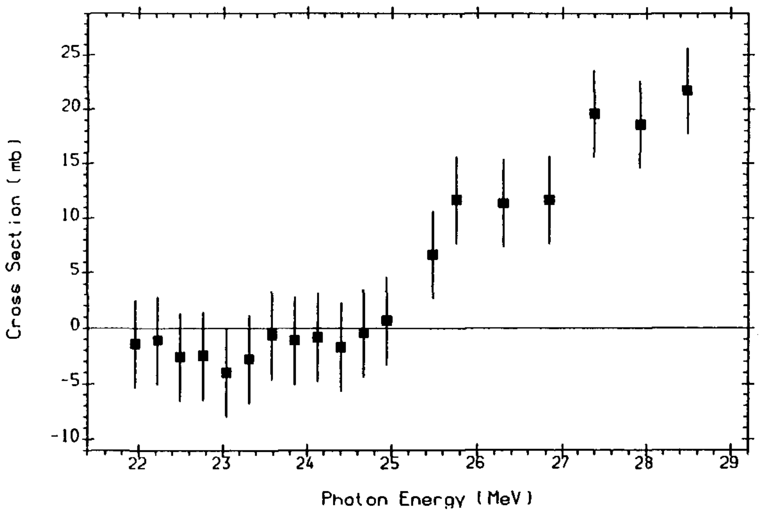
(67-HO-165(G,2N)67-HO-163)+(67-HO-165(G,2N+P)66-DY-162)
Positron annihilation
L0016012 J,PR,185,1576,6909 B.L.BERMAN+



(67-HO-165(G,2N)67-HO-163)+ (67-HO-165(G,2N+P)66-DY-162)
Positron annihilation
L0012012 J,NP/A,121,463,6807 R.BERGERE+



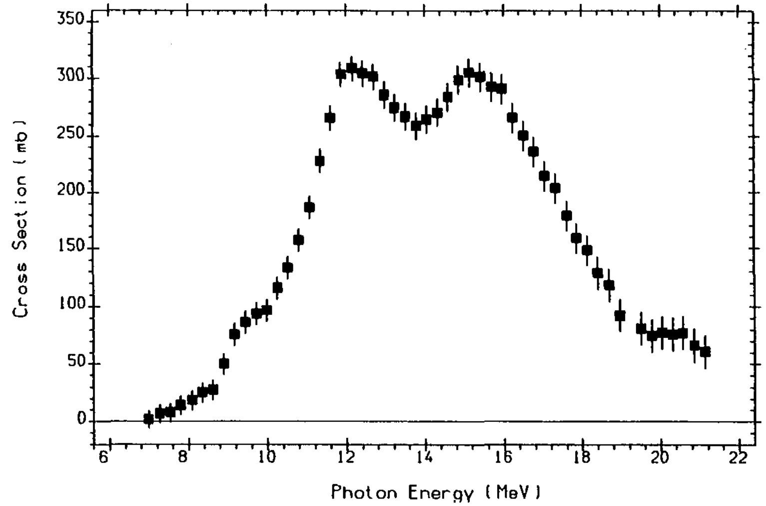
67-HO-165(G,3N)67-HO-162
Positron annihilation
L0016013 J,PR,185,1576,6909 B.L.BERMAN+



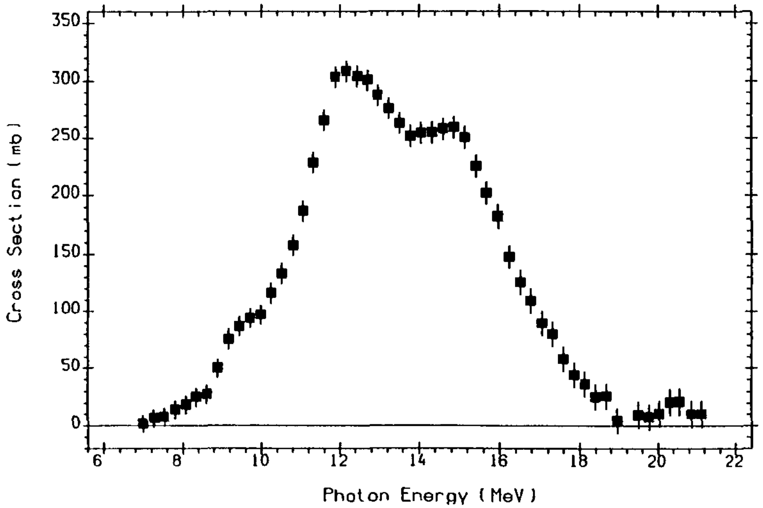
67-HO-165(G,3N)67-HO-162
Positron annihilation
L0012013 J,NP/A,121,463,6807 R.BERGERE+

$^{nat.}_{68}Er$

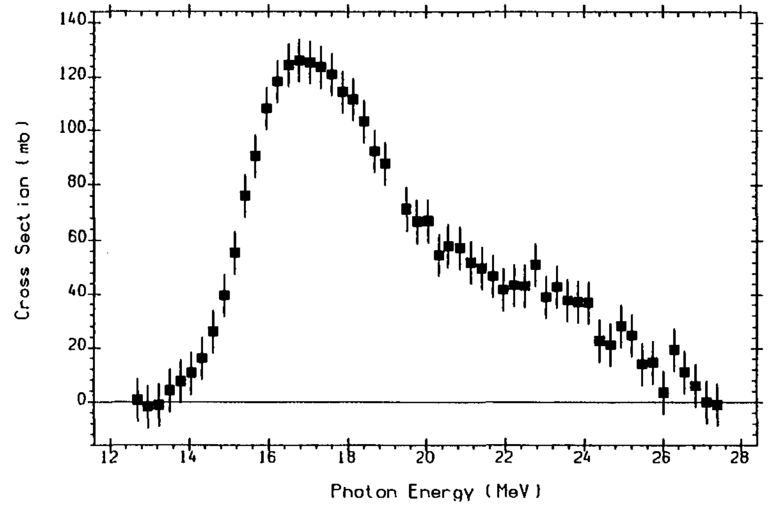
Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	γ,^{3}He	γ,α	γ,2n	γ,np	γ,2p
*	6.4	6.4	12.7	12.1	-1.7	13.3	14.9	11.2



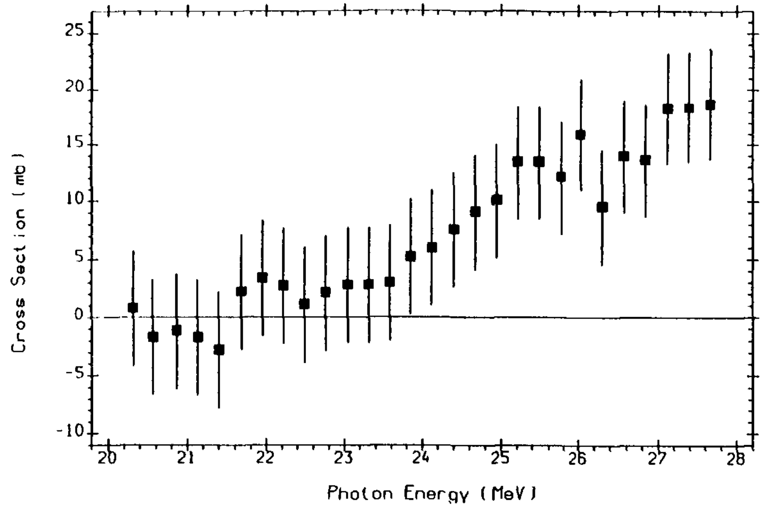
68-ER-0(G,X)0-NN-1 UNW
The sum: (G,N)+(G,N+P)+(G,2N)+(G,2N+P)+(G,3N).
Positron annihilation
L0015025 J,NP/A,133,417,6904 R.BERGERE+



(68-ER-0(G,N))+(68-ER-0(G,N+P))
Positron annihilation
L0015015 J,NP/A,133,417,6904 R.BERGERE+



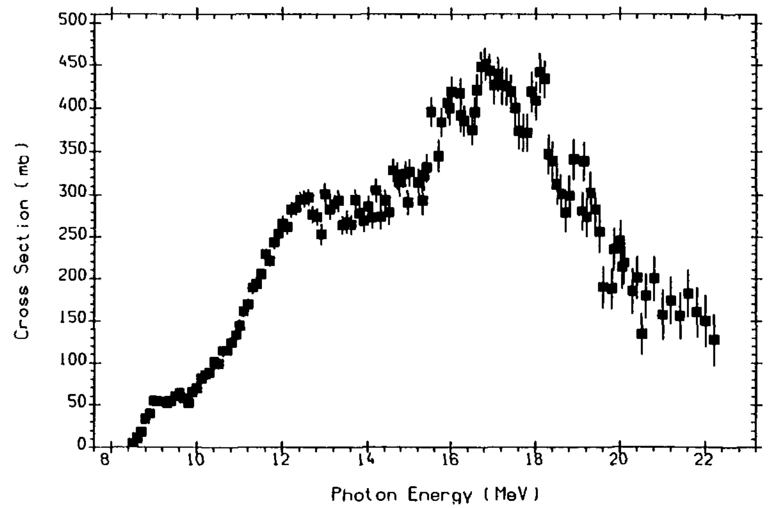
(68-ER-0(G,2N))+(68-ER-0(G,2N+P))
Positron annihilation
L0015016 J,NP/A,133,417,6904 R.BERGERE+



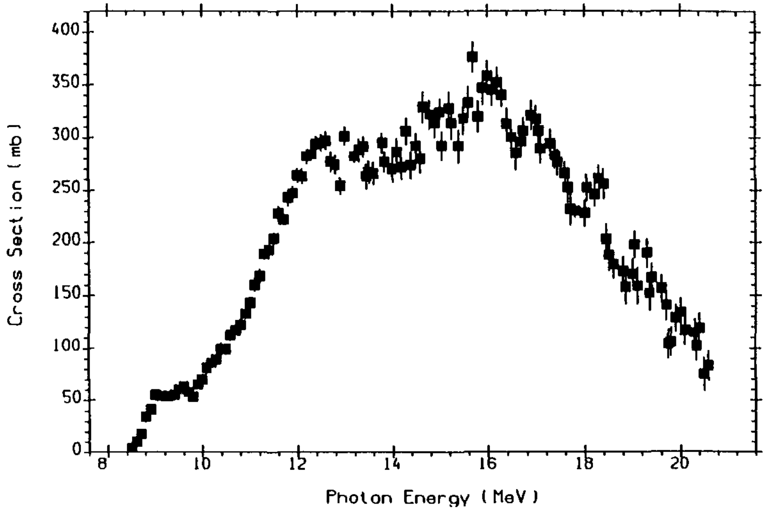
68-ER-0(G,3N)
Positron annihilation
L0015017 J,NP/A,133,417,6904 R.BERGERE+

$^{166}_{68}Er$

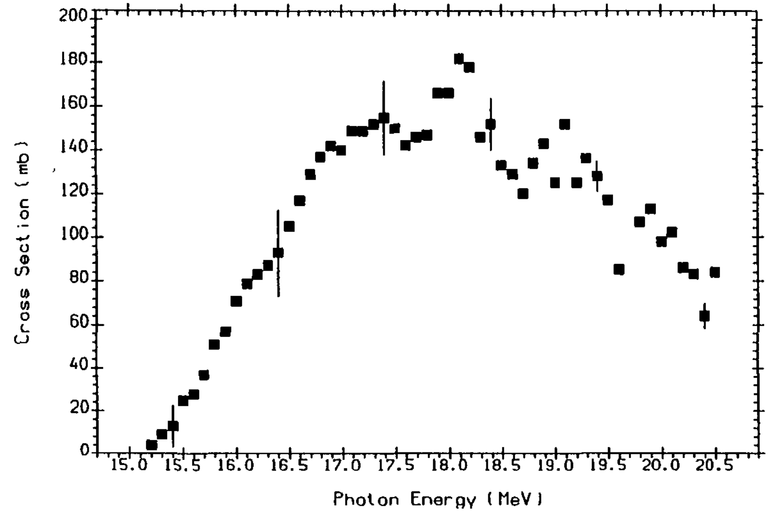
Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	γ,^{3}He	γ,α	γ,2n	γ,np	γ,2p
33.40	8.5	7.3	13.5	13.5	-0.8	15.1	15.3	13.5



(68-ER-166(G,N)68-ER-165)+ (68-ER-166(G,N+P)67-HO-164)+ 2(68-ER-166(G,2N)68-ER-164)
BRST
M0057007 J,YF,23,1145,76 B.I.GORYACHEV+



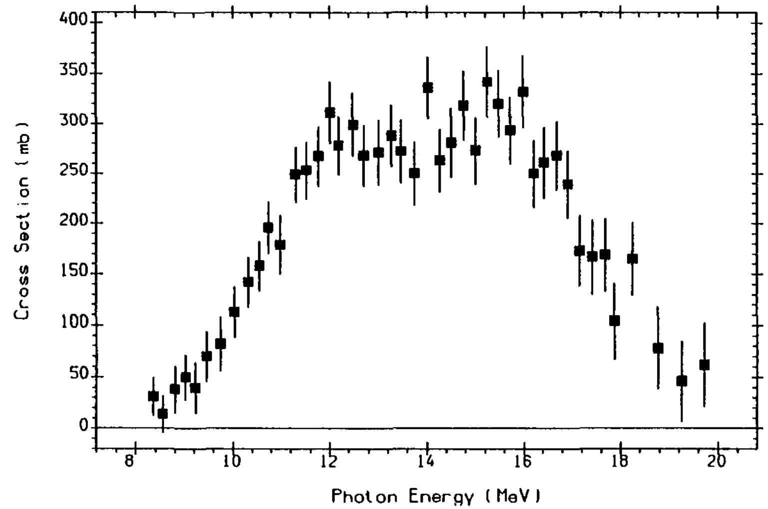
(68-ER-166(G,N)68-ER-165)+ (68-ER-166(G,N+P)67-HO-164)+ (68-ER-166(G,2N)68-ER-164)
BRST
M0057009 J,YF,23,1145,76 B.I.GORYACHEV+



68-ER-166(G,2N)68-ER-164
BRST
M0057008 J,YF,23,1145,76 B.I.GORYACHEV+

$^{168}_{68}$Er

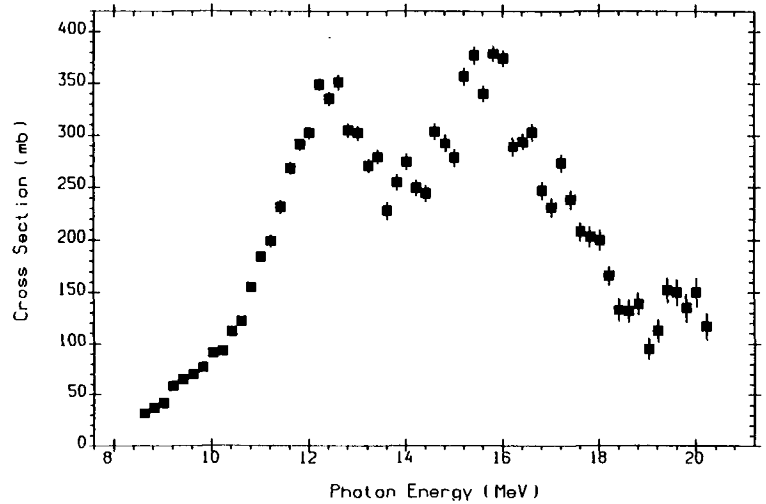
Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	γ,^{3}He	γ,α	γ,2n	γ,np	γ,2p
27.10	7.8	8.0	13.0	14.3	-0.6	14.2	15.3	15.0



68-ER-168(G,ABS)
BRST
M0073005 J,NP/A,351,257,81 G.M.GUREVICH+

$^{170}_{70}Yb$

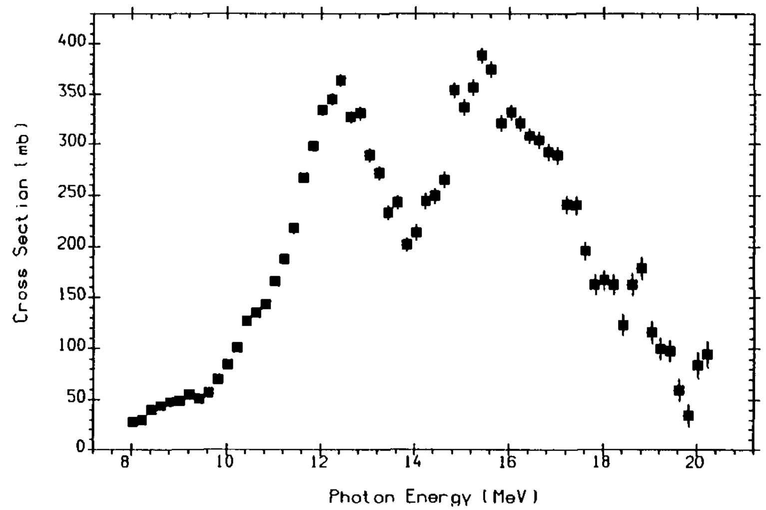
Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	$\gamma,^3He$	γ,α	γ,2n	γ,np	γ,2p
3.10	8.5	6.8	13.2	12.4	-1.7	15.3	14.8	12.4



70-YB-170(G,X)0-NN-1
BRST
M0318002 J,VTYF,5,42,76 A.M.GORYACHEV+

$^{171}_{70}Yb$

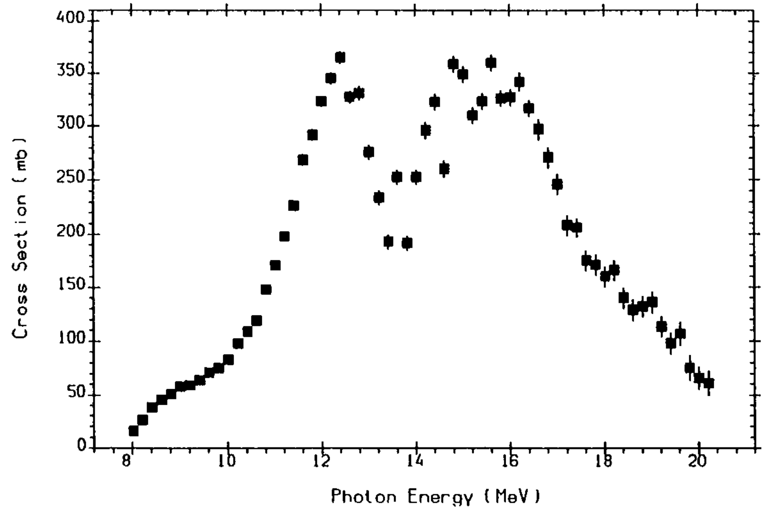
Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	$\gamma,^3He$	γ,α	γ,2n	γ,np	γ,2p
14.40	6.6	6.8	13.0	11.3	-1.6	15.1	13.4	13.0



70-YB-171(G,X)0-NN-1
BRST
M0318003 J,VTYF,5,42,76 A.M.GORYACHEV+

$^{172}_{70}$Yb

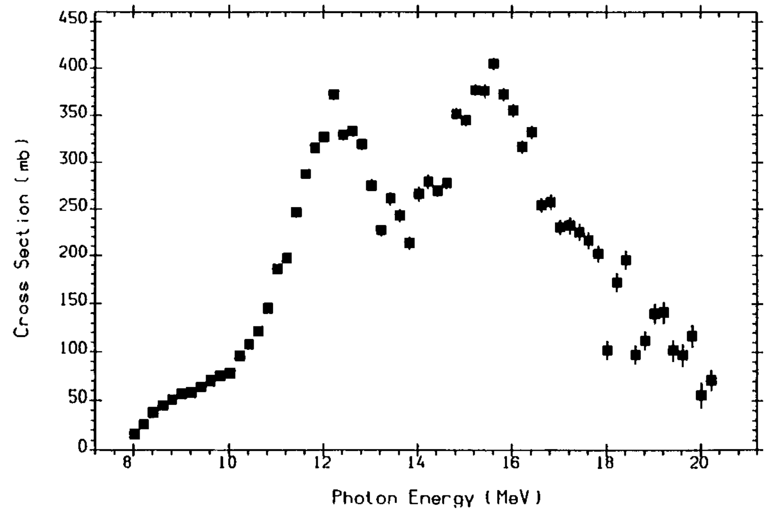
Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	γ,^{3}He	γ,α	γ,2n	γ,np	γ,2p
21.90	8.0	7.3	12.9	13.3	-1.3	14.6	14.8	13.7



70-YB-172(G,X)0-NN-1
BRST
M0318004 J,VTYF,5,42,76 A.M.GORYACHEV+

$^{173}_{70}$Yb

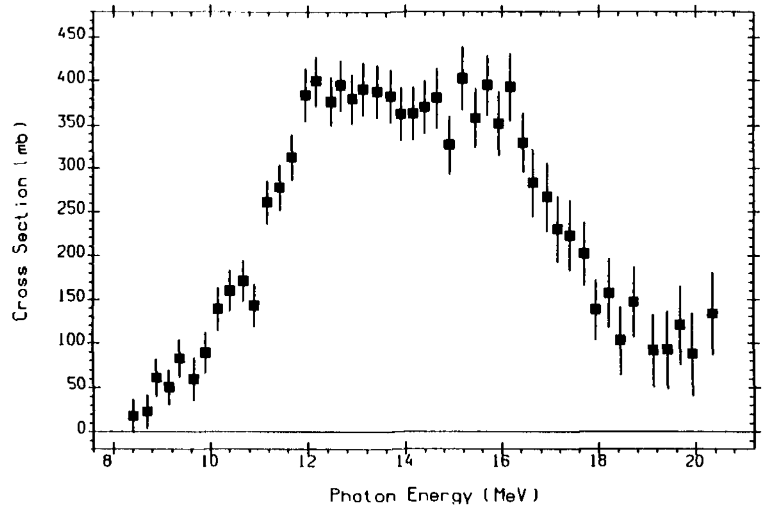
Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	γ,^{3}He	γ,α	γ,2n	γ,np	γ,2p
16.20	6.4	7.5	12.7	12.4	-0.9	14.4	13.7	14.4



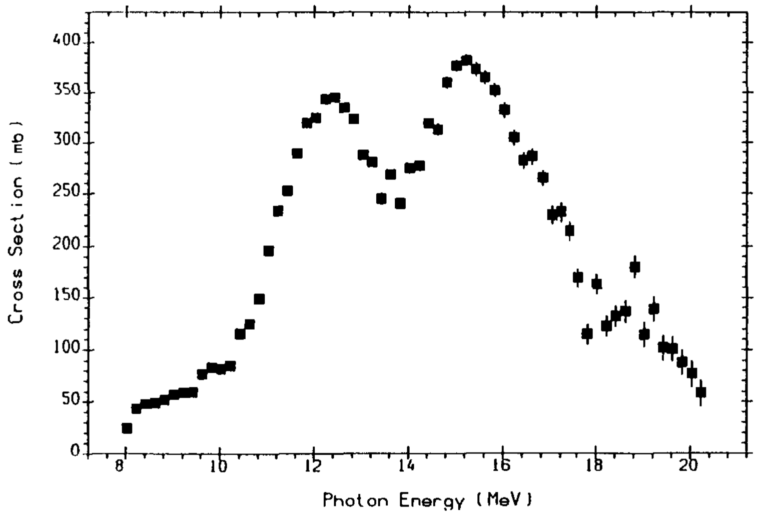
70-YB-173(G,X)0-NN-1
BRST
M0318005 J,VTYF,5,42,76 A.M.GORYACHEV+

$^{174}_{70}Yb$

Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	γ,^{3}He	γ,α	γ,2n	γ,np	γ,2p
31.70	7.5	8.0	12.7	14.2	-0.7	13.8	14.9	15.0



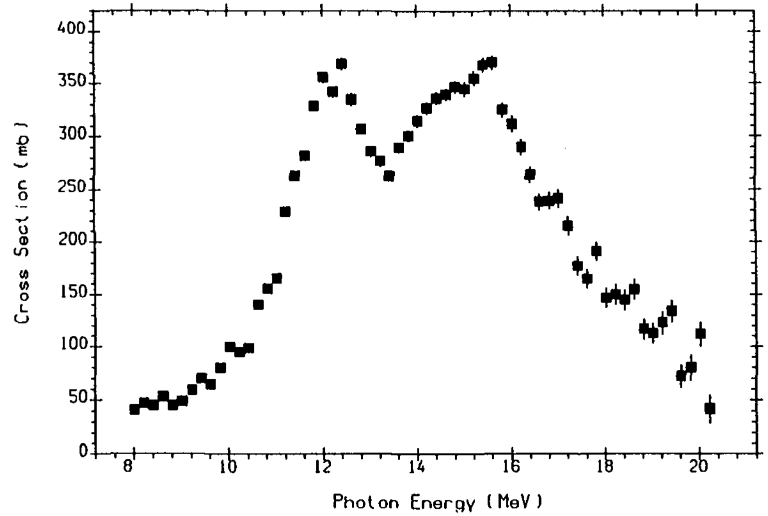
70-YB-174(G,ABS)
BRST
M0073006 J,NP/A,351,257,81 G.M.GUREVICH+



70-YB-174(G,X)0-NN-1
BRST
M0318006 J,VTYF,5,42,76 A.M.GORYACHEV+

$^{176}_{70}$Yb

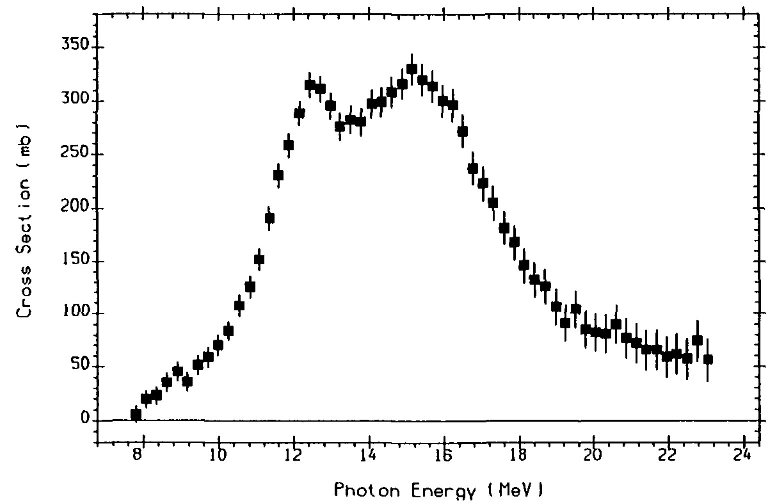
Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	γ,^{3}He	γ,α	γ,2n	γ,np	γ,2p
12.60	6.9	8.5	12.7	15.0	-0.6	12.7	15.0	16.2



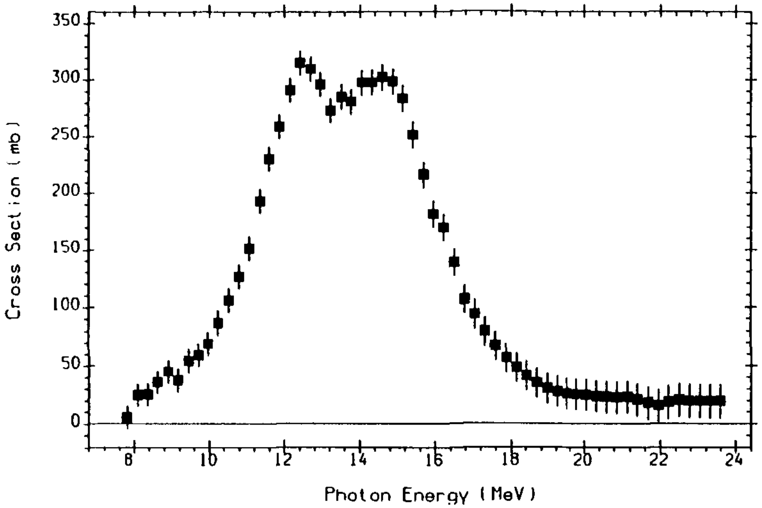
70-YB-176(G,X)0-NN-1
BRST
M0318007 J,VTYF,5,42,76 A.M.GORYACHEV+

$^{175}_{71}$Lu

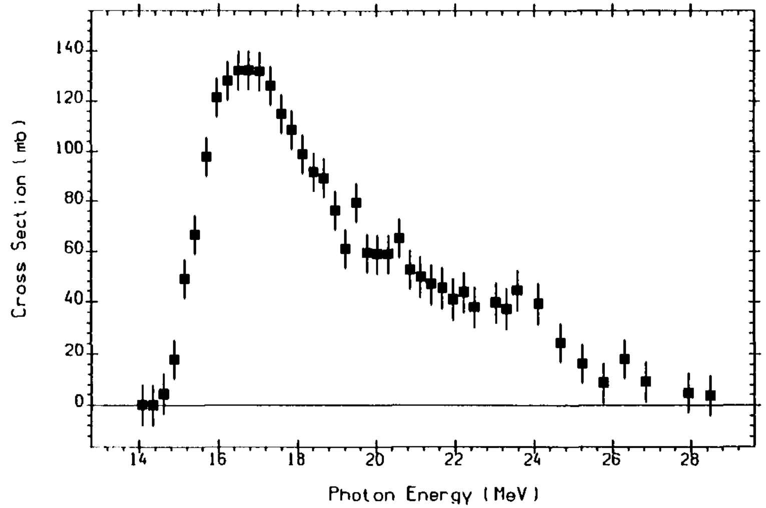
Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	γ,^{3}He	γ,α	γ,2n	γ,np	γ,2p
97.39	7.7	5.5	10.9	12.7	-1.6	14.4	13.0	13.5



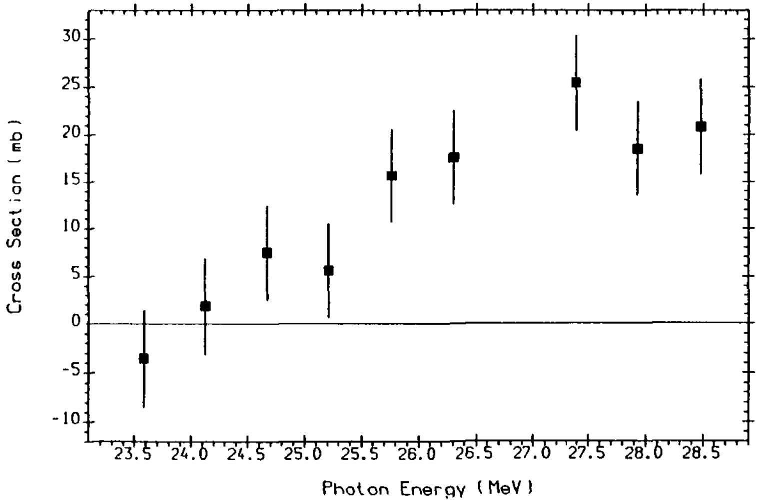
71-LU-175(G,X)0-NN-1 UNW
The sum: (G,N)+(G,N+P)+(G,2N)+(G,2N+P)+(G,3N).
Positron annihilation
L0015026 J,NP/A,133,417,6904 R.BERGERE+



(71-LU-175(G,N)71-LU-174)+ (71-LU-175(G,N+P)70-YB-173)
Positron annihilation
L0015019 J,NP/A,133,417,6904 R.BERGERE+



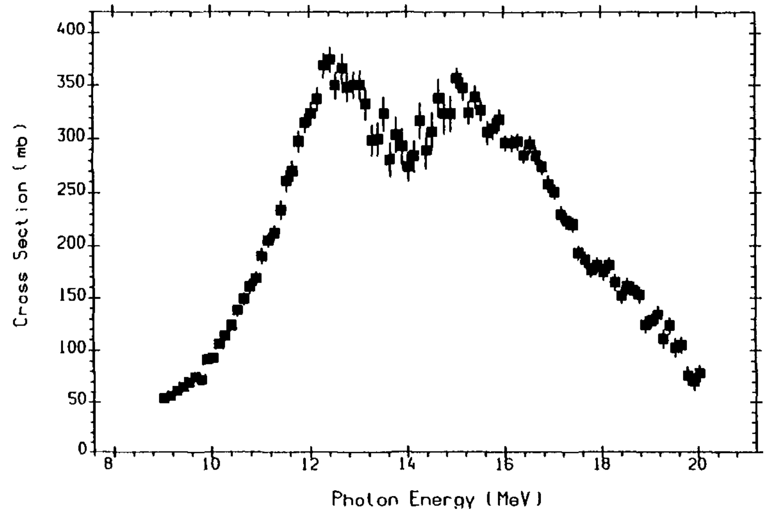
(71-LU-175(G,2N)71-LU-173)+ (71-LU-175(G,2N+P)70-YB-172)
Positron annihilation
L0015020 J,NP/A,133,417,6904 R.BERGERE+



71-LU-175(G,3N)71-LU-172
Positron annihilation
L0015021 J,NP/A,133,417,6904 R.BERGERE+

$^{176}_{72}Hf$

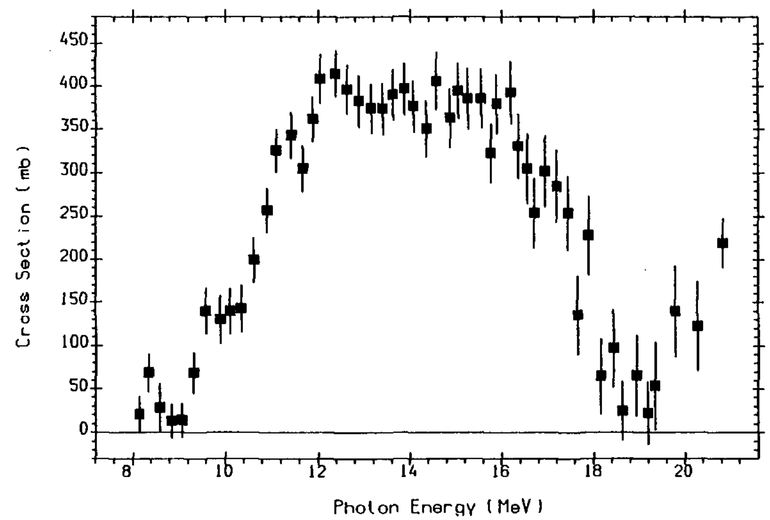
Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	γ,^{3}He	γ,α	γ,2n	γ,np	γ,2p
5.20	8.2	6.7	12.7	12.0	-2.3	14.9	14.4	12.2



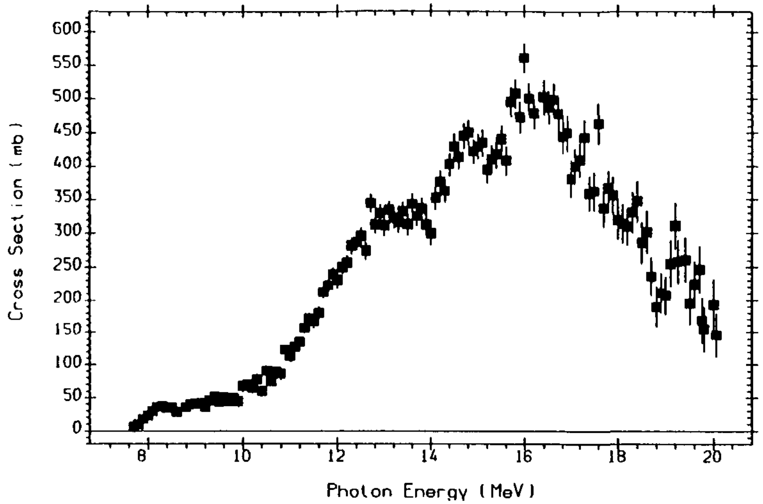
(72-HF-176(G,N)72-HF-175)+(72-HF-176(G,N+P)71-LU-174)+ (72-HF-176(G,2N)72-HF-174)
BRST
M0007002 J,YF,26,465,77 A.M.GORYACHEV+

$^{178}_{72}Hf$

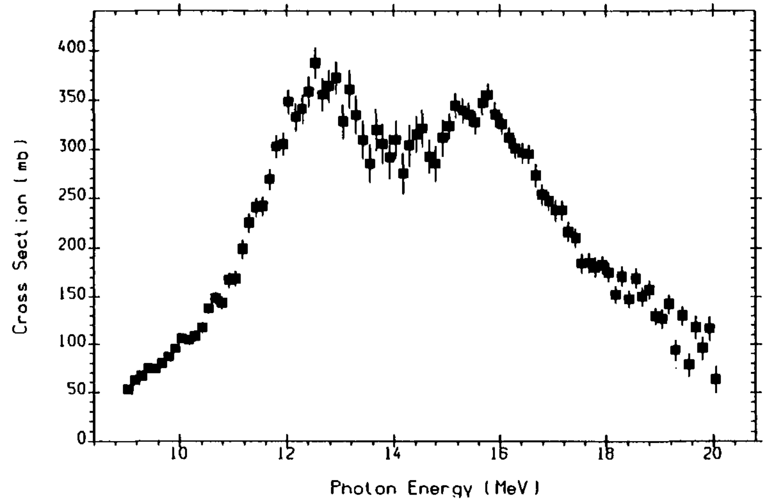
Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	γ,^{3}He	γ,α	γ,2n	γ,np	γ,2p
27.10	7.6	7.3	12.2	12.7	-2.1	14.0	14.4	13.5



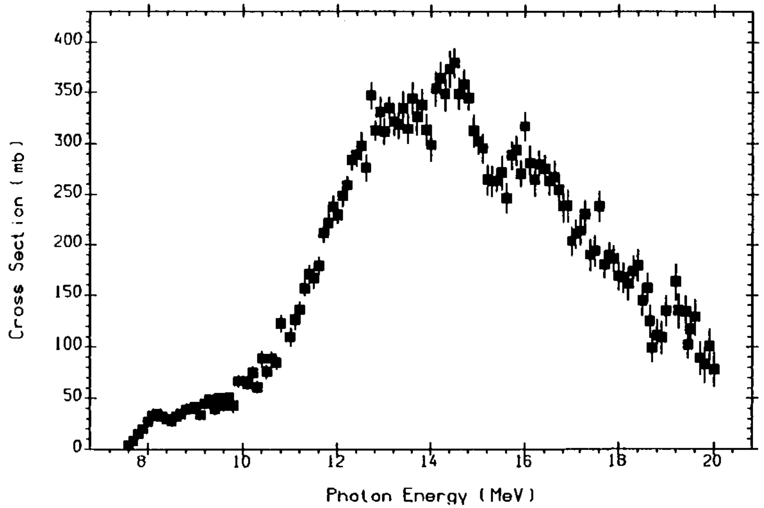
72-HF-178(G,ABS)
BRST
M0073007 J,NP/A,351,257,81 G.M.GUREVICH+



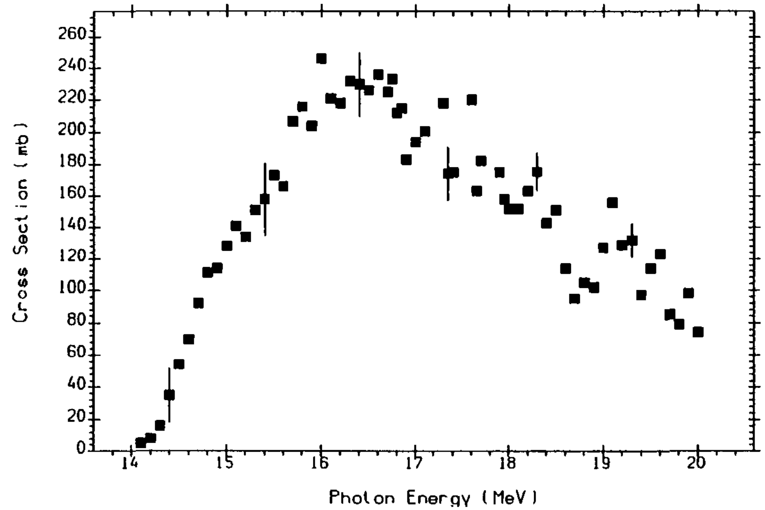
(72-HF-178(G,N)72-HF-177)+(72-HF-178(G,N+P)71-LU-176)+2(72-HF-178(G,2N)72-HF-176)
BRST
M0057010 J,YF,23,1145,76 B.I.GORYACHEV+



(72-HF-178(G,N)72-HF-177)+(72-HF-178(G,N+P)71-LU-176)+(72-HF-178(G,2N)72-HF-176)
BRST
M0007003 J,YF,26,465,77 A.M.GORYACHEV+



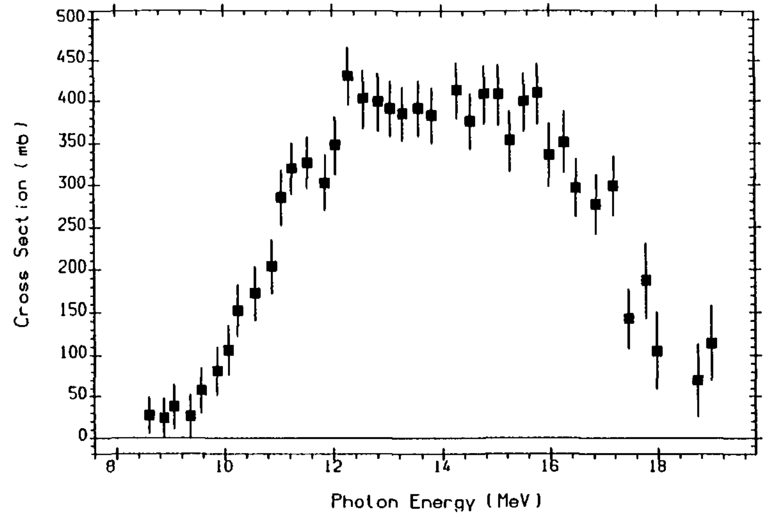
(72-HF-178(G,N)72-HF-177)+(72-HF-178(G,N+P)71-LU-176)+(72-HF-178(G,2N)72-HF-176)
BRST
M0057012 J,YF,23,1145,76 B.I.GORYACHEV+



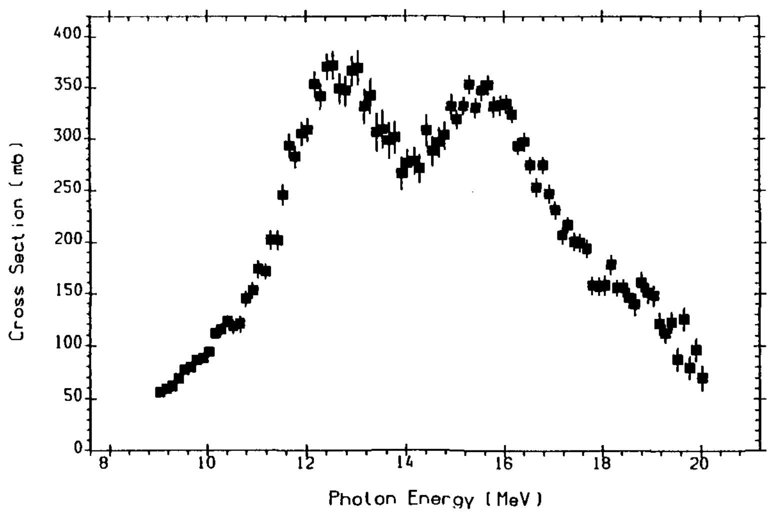
72-HF-178(G,2N)72-HF-176
BRST
M0057011 J,YF,23,1145,76 B.I.GORYACHEV+

$^{180}_{72}$Hf

Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	γ,^{3}He	γ,α	γ,2n	γ,np	γ,2p
35.20	7.4	8.0	12.3	13.7	-1.3	13.5	15.0	14.7



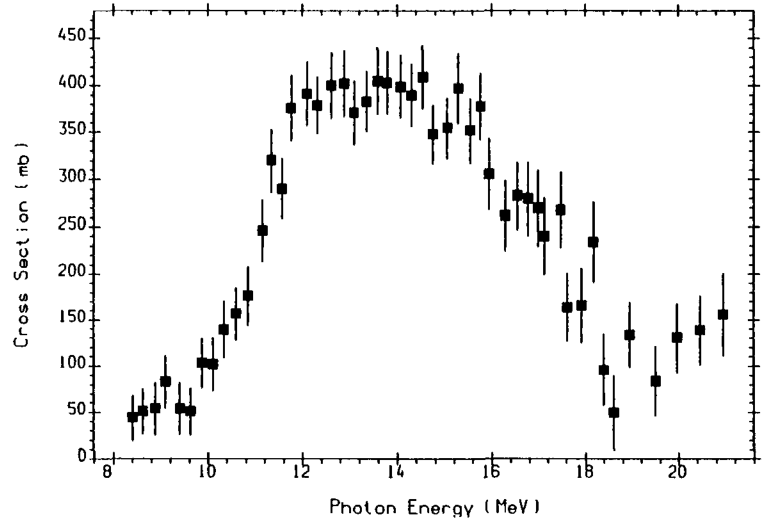
72-HF-180(G,ABS)
BRST
M0073008 J,NP/A,351,257,81 G.M.GUREVICH+



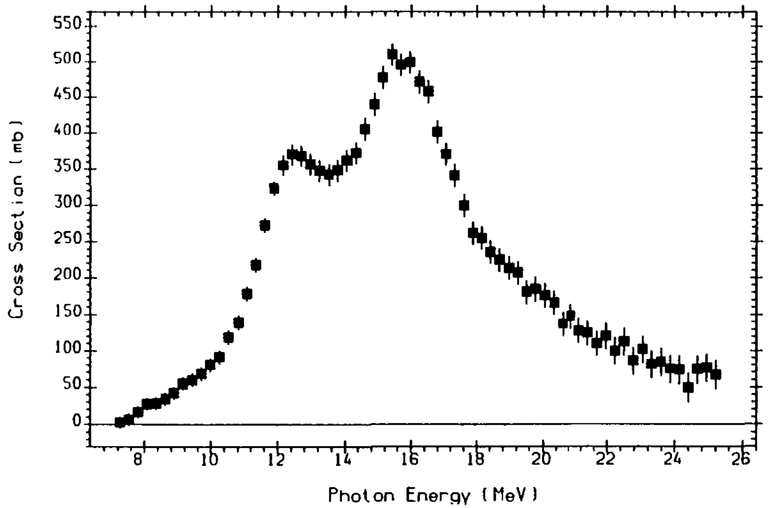
(72-HF-180(G,N)72-HF-179)+(72-HF-180(G,N+P)71-LU-178)+(72-HF-180(G,2N)72-HF-178)
BRST
M0007004 J,YF,26,465,77 A.M.GORYACHEV+

$^{181}_{73}$Ta

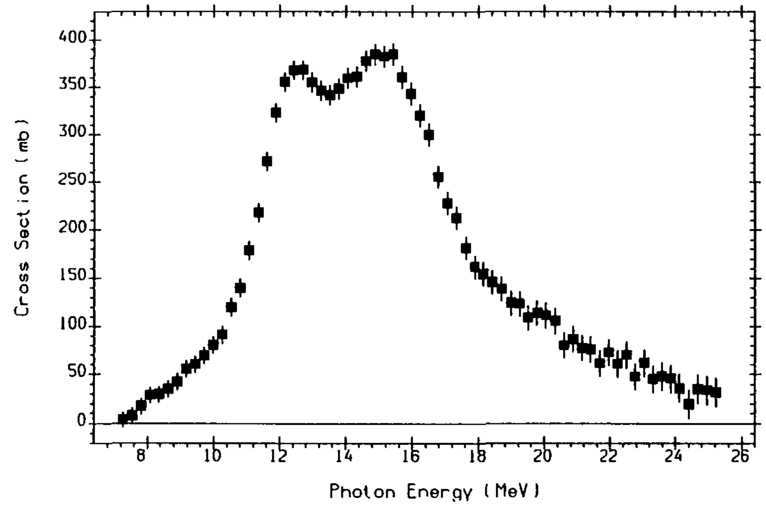
Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	γ,^{3}He	γ,α	γ,2n	γ,np	γ,2p
99.988	7.6	5.9	10.9	13.2	-1.5	14.2	13.3	14.0



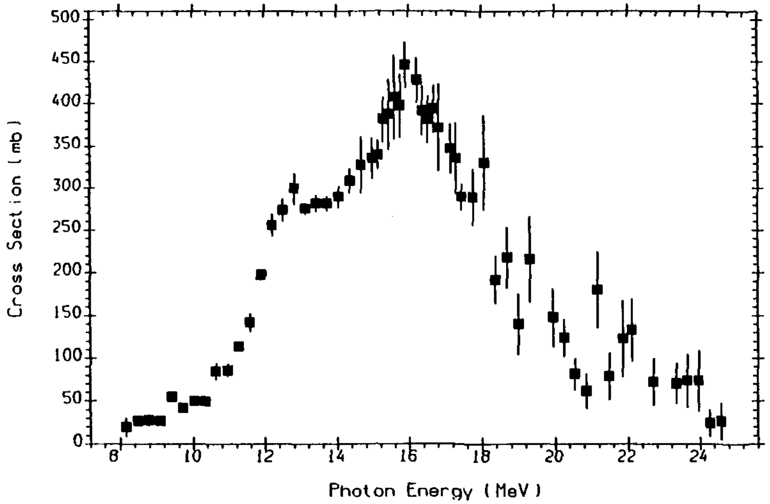
73-TA-181(G,ABS)
BRST
M0073009 J,NP/A,351,257,81 G.M.GUREVICH+



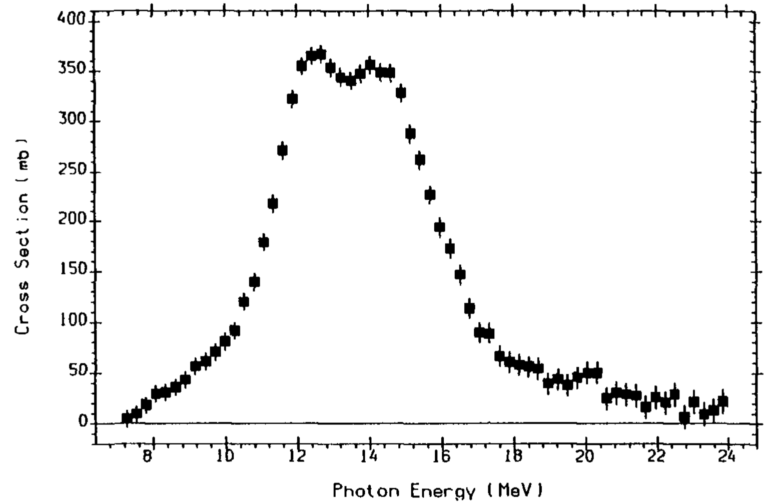
73-TA-181(G,X)0-NN-1
The sum: (G,N)+(G,N+P)+2(G,2N)+2(G,2N+P)+3(G,3N).
Positron annihilation
L0012014 J,NP/A,121,463,6807 R.BERGERE+



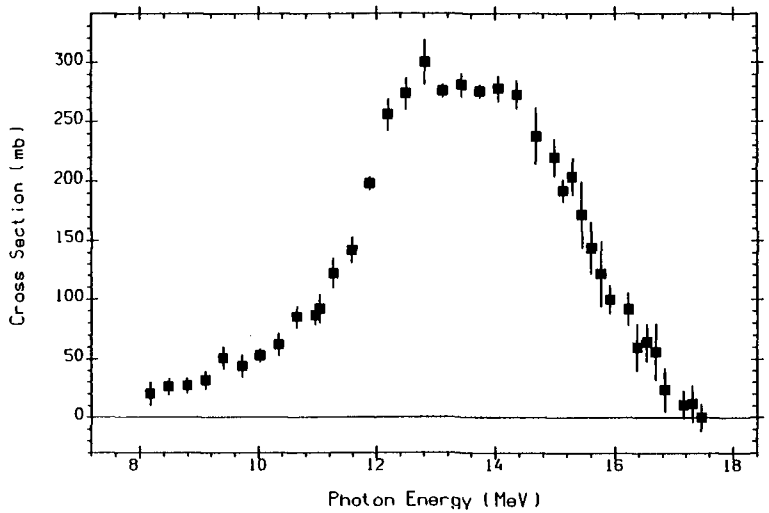
73-TA-181(G,X)0-NN-1 UNW
The sum: (G,N)+(G,N+P)+(G,2N)+(G,2N+P)+(G,3N).
Positron annihilation
L0012021 J,NP/A,121,463,6807 R.BERGERE+



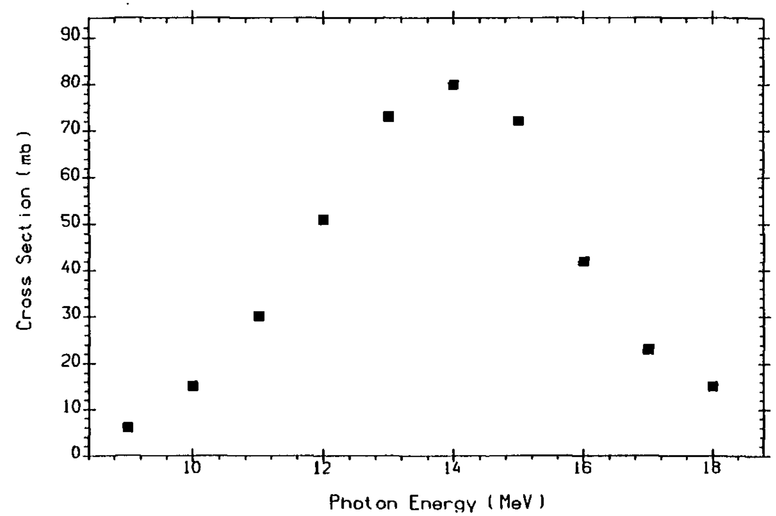
73-TA-181(G,X)0-NN-1 UNW
The sum: (G,N)+(G,N+P)+(G,2N)+(G,2N+P).
Positron annihilation
L0003002 J,PR,129,2723,6303 R.L.BRAMBLETT+



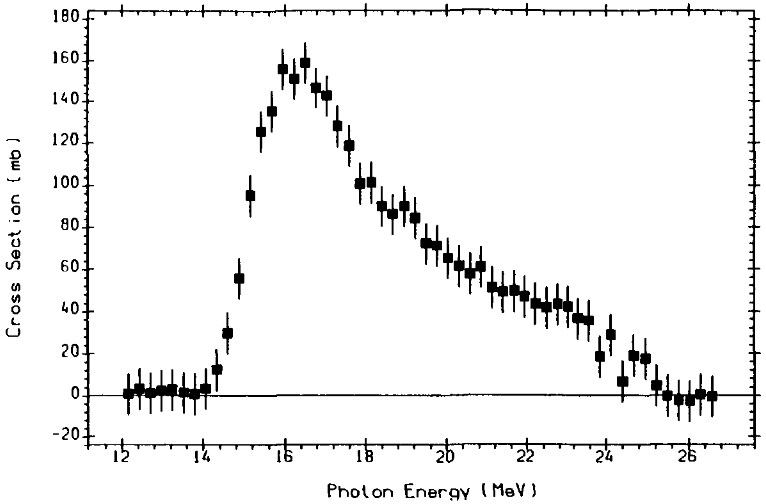
(73-TA-181(G,N)73-TA-180)+ (73-TA-181(G,N+P)72-HF-179)
Positron annihilation
L0012015 J,NP/A,121,463,6807 R.BERGERE+



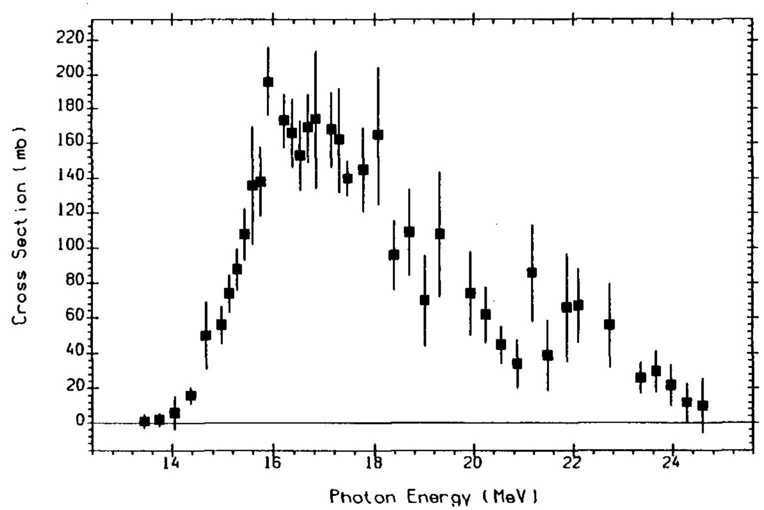
(73-TA-181(G,N)73-TA-180)+ (73-TA-181(G,N+P)72-HF-179)
Positron annihilation
L0003003 J,PR,129,2723,6303 R.L.BRAMBLETT+



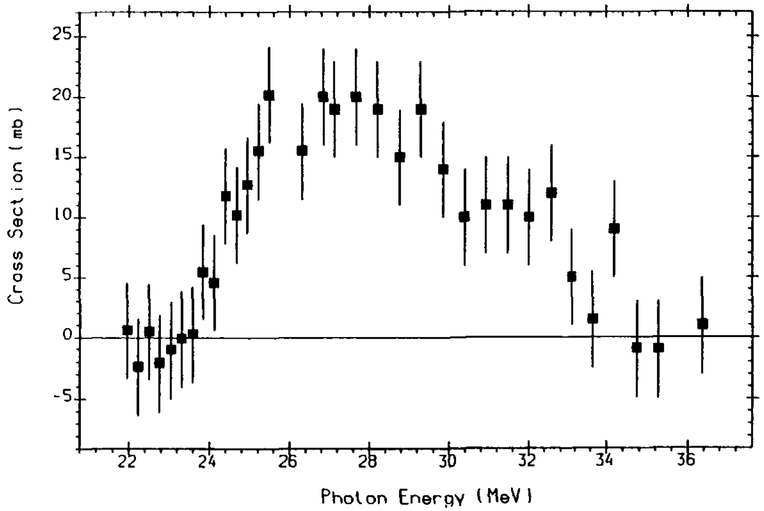
73-TA-181(G,N)73-TA-180
BRST
M0273011 J,CJP,29,518,51 L.KATZ+



(73-TA-181(G,2N)73-TA-179)+(73-TA-181(G,2N+P)72-HF-178)
Positron annihilation
L0012016 J,NP/A,121,463,6807 R.BERGERE+



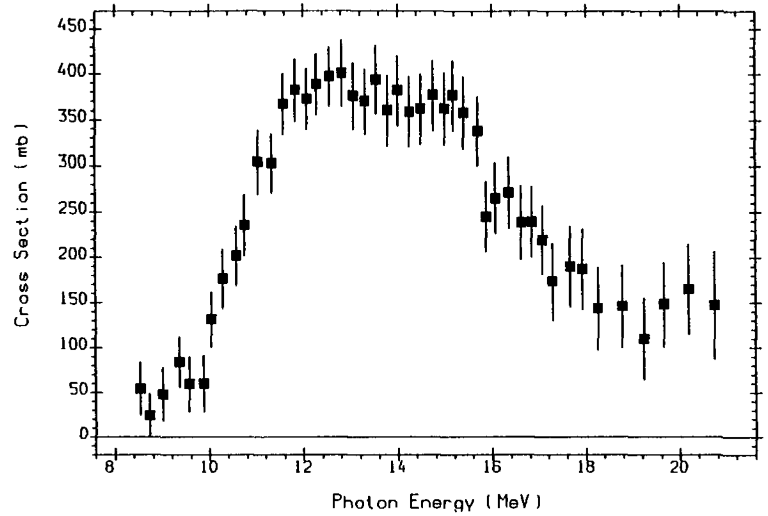
(73-TA-181(G,2N)73-TA-179)+(73-TA-181(G,2N+P)72-HF-178)
Positron annihilation
L0003004 J,PR,129,2723,6303 R.L.BRAMBLETT+



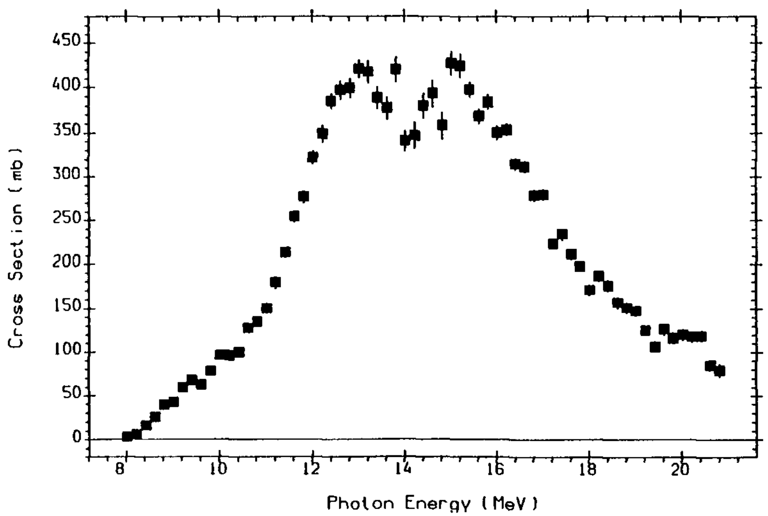
73-TA-181(G,3N)73-TA-178
Positron annihilation
L0012017 J,NP/A,121,463,6807 R.BERGERE+

$^{182}_{74}W$

Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	γ,^{3}He	γ,α	γ,2n	γ,np	γ,2p
26.30	8.1	7.1	12.8	12.7	-1.8	14.7	14.7	13.0



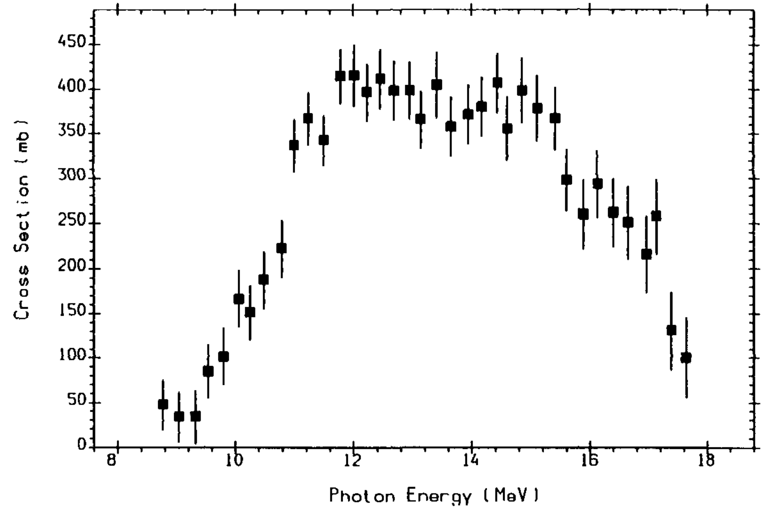
74-W-182(G,ABS)
BRST
M0073010 J,NP/A,351,257,81 G.M.GUREVICH+



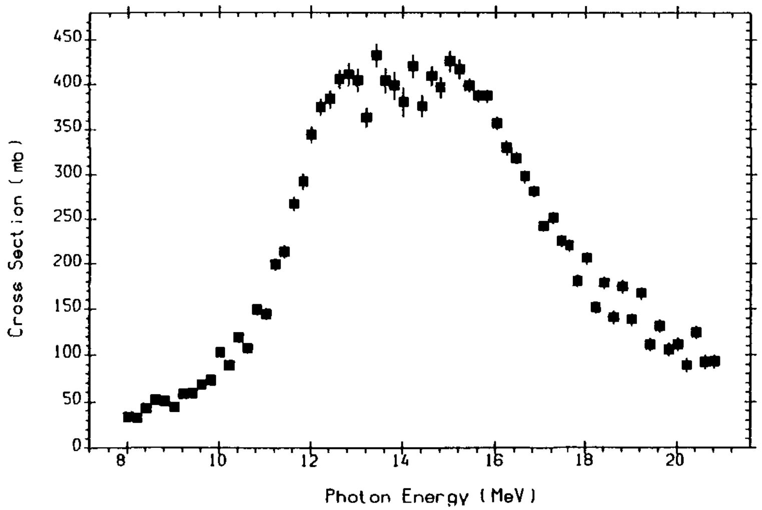
(74-W-182(G,N)74-W-181)+(74-W-182(G,N+P)73-TA-180)+(74-W-182(G,2N)74-W-180)
BRST
M0025002 J,IZK,6,8,78 A.M.GORYACHEV+

$^{184}_{74}W$

Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	γ,^{3}He	γ,α	γ,2n	γ,np	γ,2p
30.70	7.4	7.7	12.2	13.2	-1.7	13.6	14.6	14.2



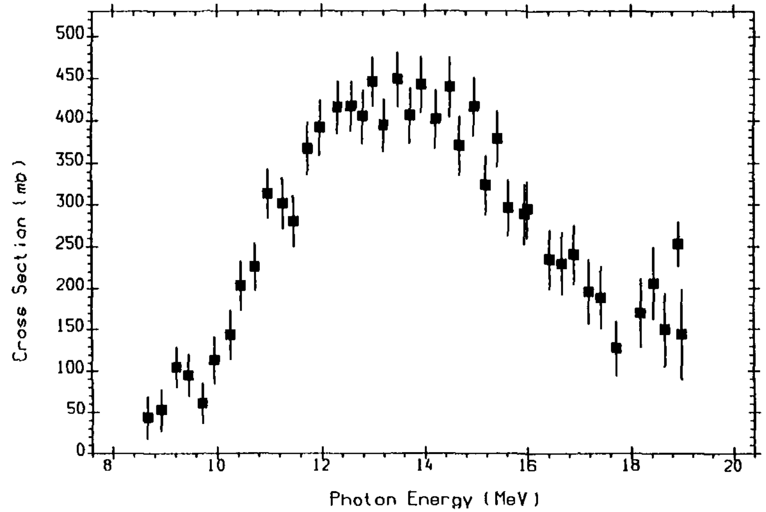
74-W-184(G,ABS)
BRST
M0073011 J,NP/A,351,257,81 G.M.GUREVICH+



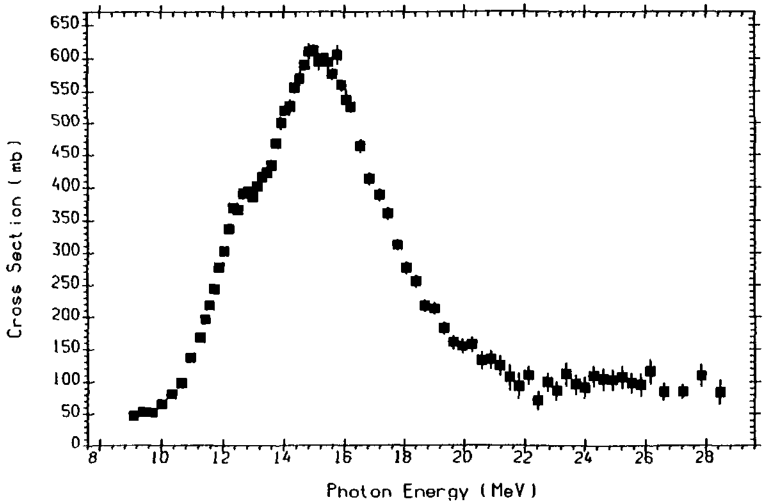
(74-W-184(G,N)74-W-183)+(74-W-184(G,N+P)73-TA-182)+(74-W-184(G,2N)74-W-182)
BRST
M0025003 J,IZK,6,8,78 A.M.GORYACHEV+

$^{186}_{74}\mathrm{W}$

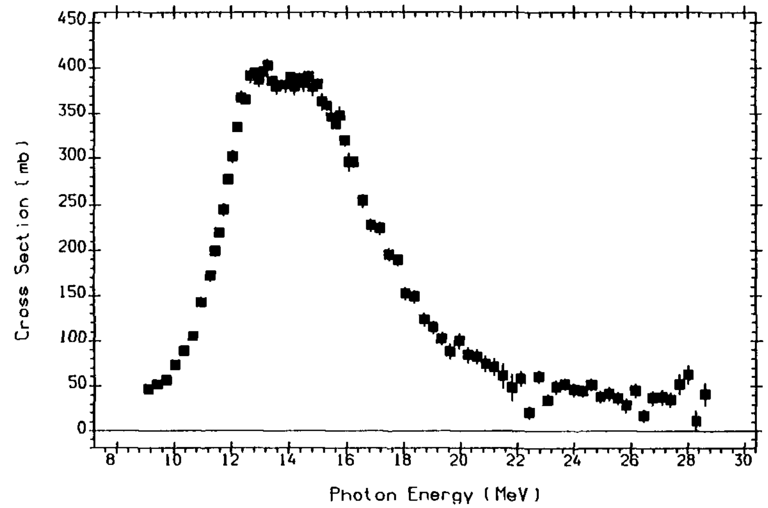
Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	$\gamma,^3$He	γ,α	γ,2n	γ,np	γ,2p
28.60	7.2	8.4	12.2	14.2	-1.1	13.0	15.2	15.6



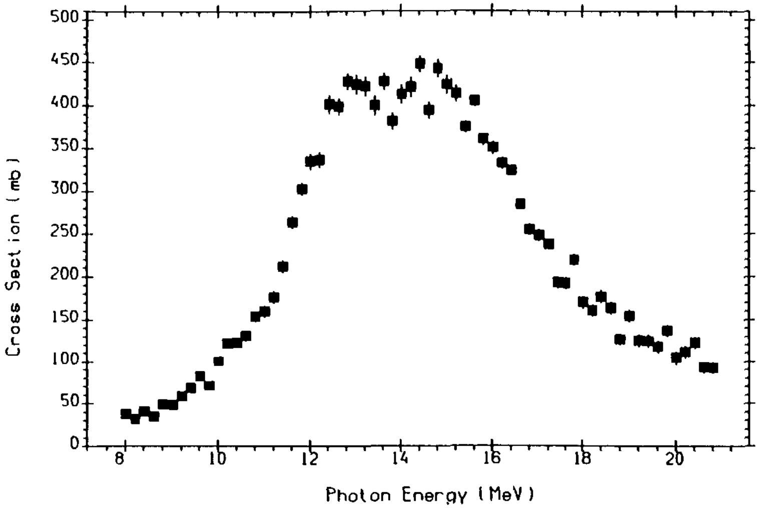
74-W-186(G,ABS)
BRST
M0073012 J,NP/A,351,257,81 G.M.GUREVICH+



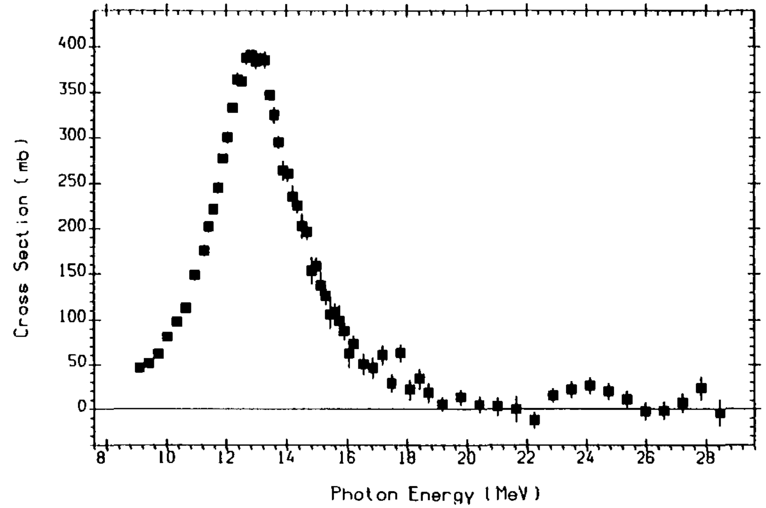
74-W-186(G,X)0-NN-1
The sum: (G,N)+(G,N+P)+2(G,2N)+2(G,2N+P)+3(G,3N).
Positron annihilation
L0016014 J,PR,185,1576,6909 B.L.BERMAN+



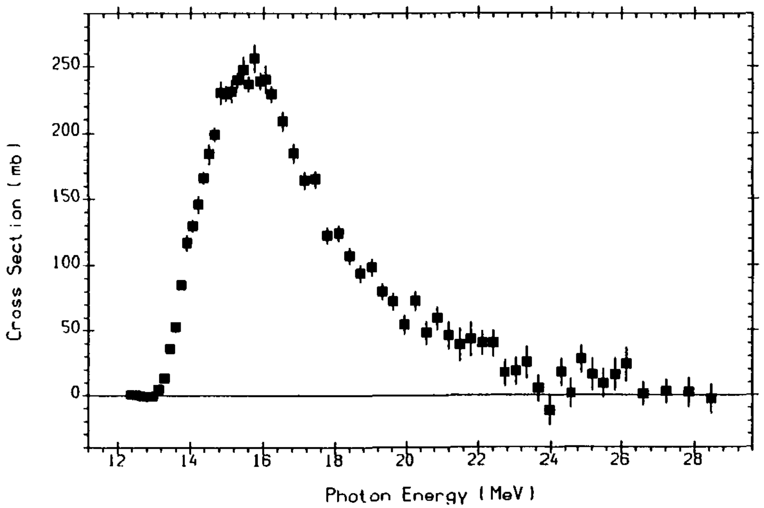
74-W-186(G,X)0-NN-1 UNW
The sum: (G,N)+(G,N+P)+(G,2N)+(G,2N+P)+(G,3N).
Positron annihilation
L0016021 J,PR,185,1576,6909 B.L.BERMAN+



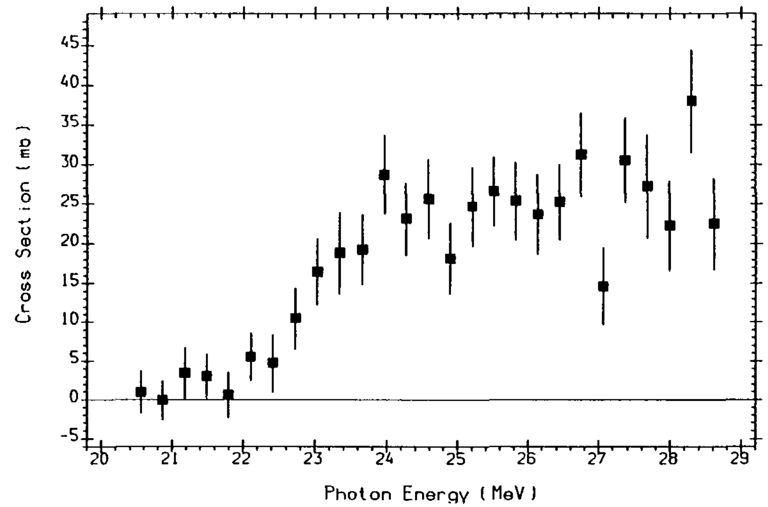
(74-W-186(G,N)74-W-185)+(74-W-186(G,N+P)73-TA-184)+(74-W-186(G,2N)74-W-184)
BRST
M0025004 J,IZK,6,8,78 A.M.GORYACHEV+



(74-W-186(G,N)74-W-185)+(74-W-186(G,N+P)73-TA-184)
Positron annihilation
L0016015 J,PR,185,1576,6909 B.L.BERMAN+



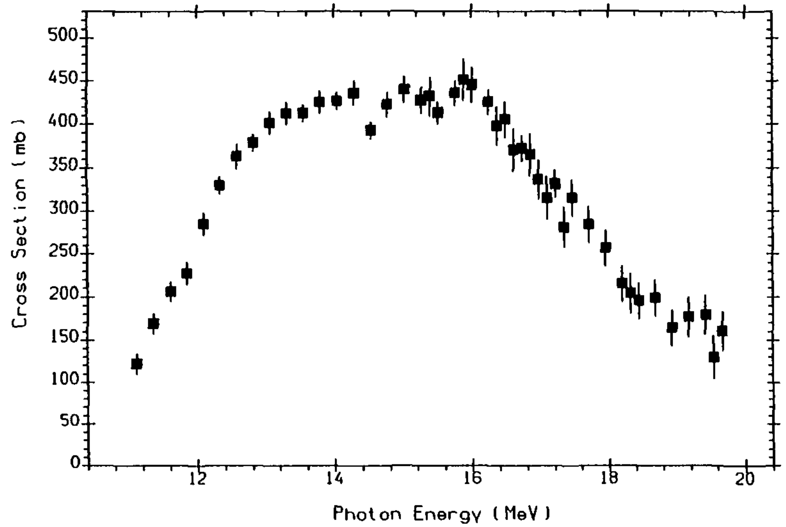
(74-W-186(G,2N)74-W-184)+(74-W-186(G,2N+P)73-TA-183)
Positron annihilation
L0016016 J,PR,185,1576,6909 B.L.BERMAN+



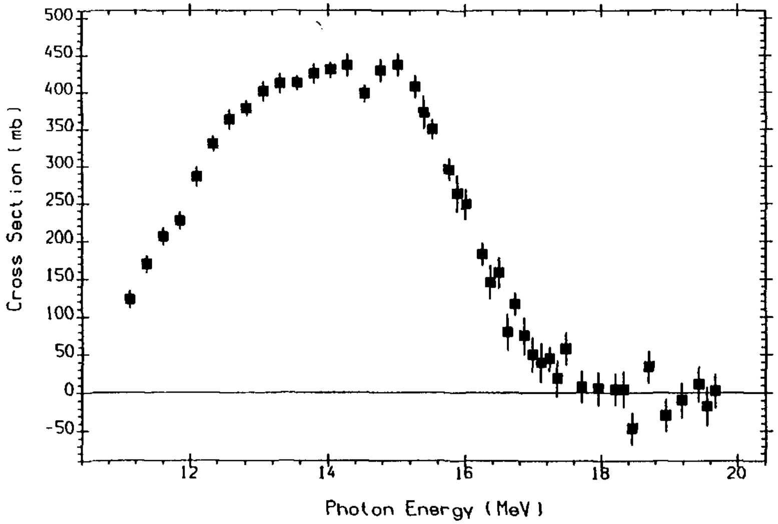
74-W-186(G,3N)74-W-183
Positron annihilation
L0016017 J,PR,185,1576,6909 B.L.BERMAN+

$^{186}_{76}Os$

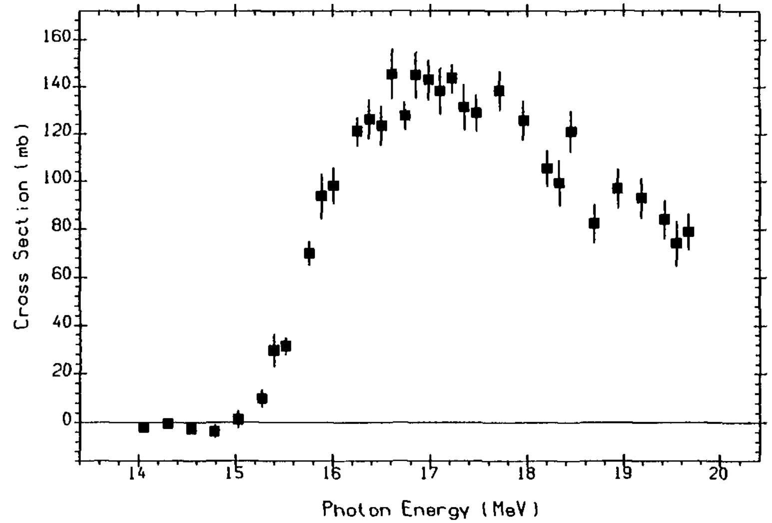
Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	$γ,^3He$	γ,α	γ,2n	γ,np	γ,2p
1.58	8.3	6.5	12.1	11.6	-2.8	14.9	14.3	11.9



76-OS-186(G,X)0-NN-1
The sum: (G,N)+(G,N+P)+2(G,2N).
QMPH,ARAD Positron annihilation in flight.
L0046004 J,PR/C,19,1205,7904 B.L.BERMAN+



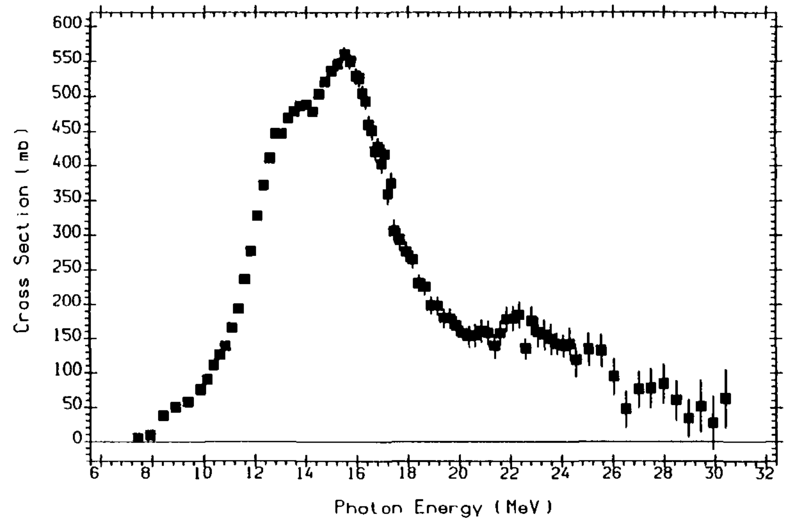
(76-OS-186(G,N)76-OS-185)+(76-OS-186(G,N+P)75-RE-184)
QMPH,ARAD Positron annihilation in flight.
L0046002 J,PR/C,19,1205,7904 B.L.BERMAN+



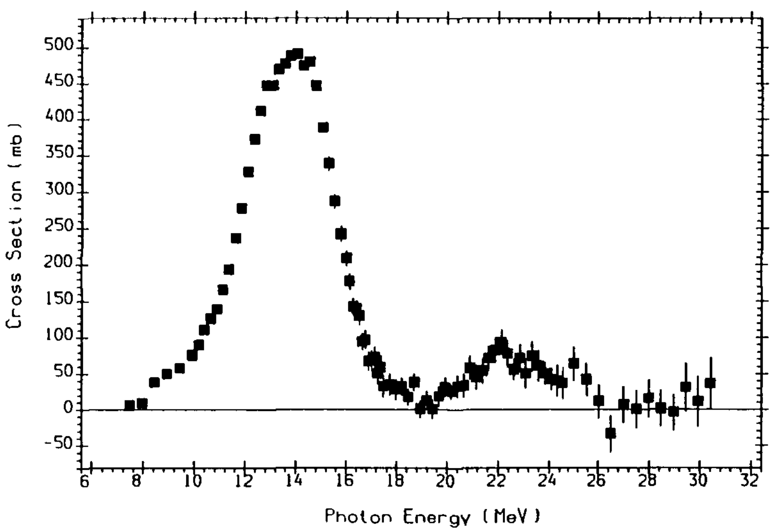
76-OS-186(G,2N)76-OS-184
QMPH,ARAD Positron annihilation in flight.
L0046003 J,PR/C,19,1205,7904 B.L.BERMAN+

$^{188}_{76}Os$

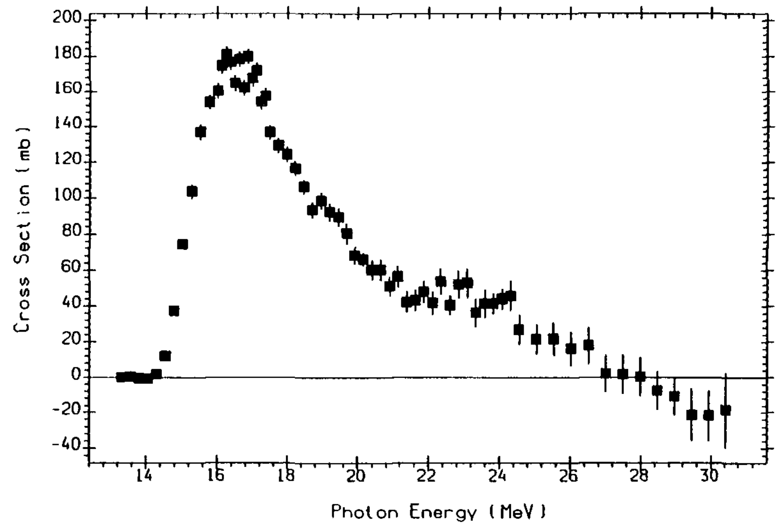
Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	γ,^{3}He	γ,α	γ,2n	γ,np	γ,2p
13.30	8.0	7.2	12.3	12.7	-2.1	14.3	14.6	13.2



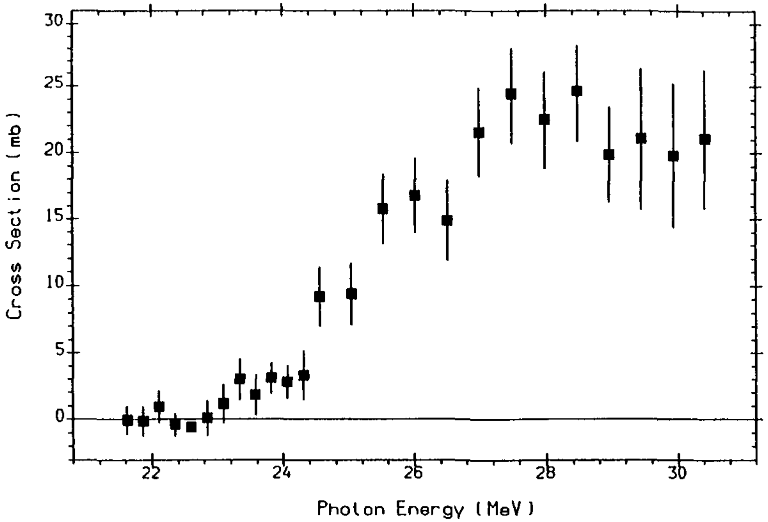
76-OS-188(G,X)0-NN-1
The sum: (G,N)+(G,N+P)+2(G,2N)+2(G,2N+P)+3(G,3N).
QMPH,ARAD Positron annihilation in flight.
L0046008 J,PR/C,19,1205,7904 B.L.BERMAN+



(76-OS-188(G,N)76-OS-187)+(76-OS-188(G,N+P)75-RE-186)
QMPH,ARAD Positron annihilation in flight.
L0046005 J,PR/C,19,1205,7904 B.L.BERMAN+



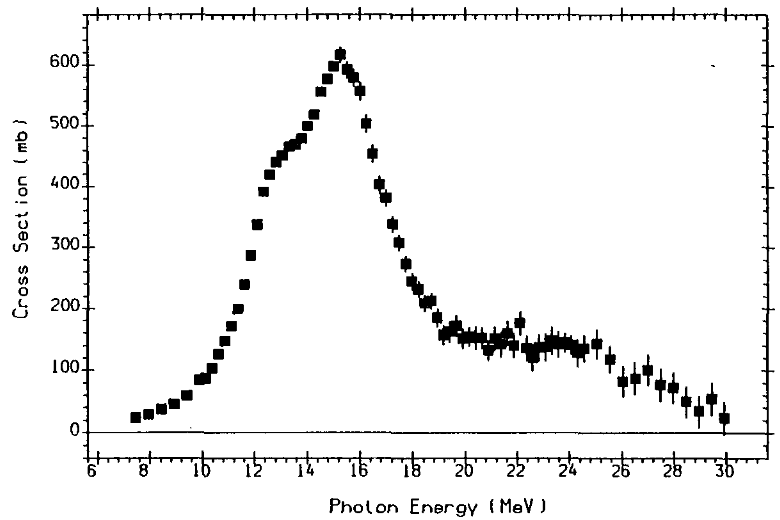
(76-OS-188(G,2N)76-OS-186)+(76-OS-188(G,2N+P)75-RE-185)
QMPH,ARAD Positron annihilation in flight.
L0046006 J,PR/C,19,1205,7904 B.L.BERMAN+



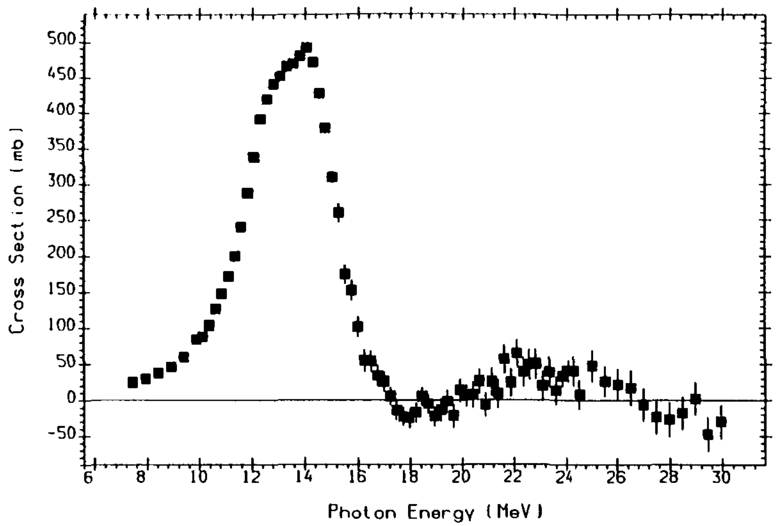
76-OS-188(G,3N)76-OS-185
QMPH,ARAD Positron annihilation in flight.
L0046007 J,PR/C,19,1205,7904 B.L.BERMAN+

$^{189}_{76}Os$

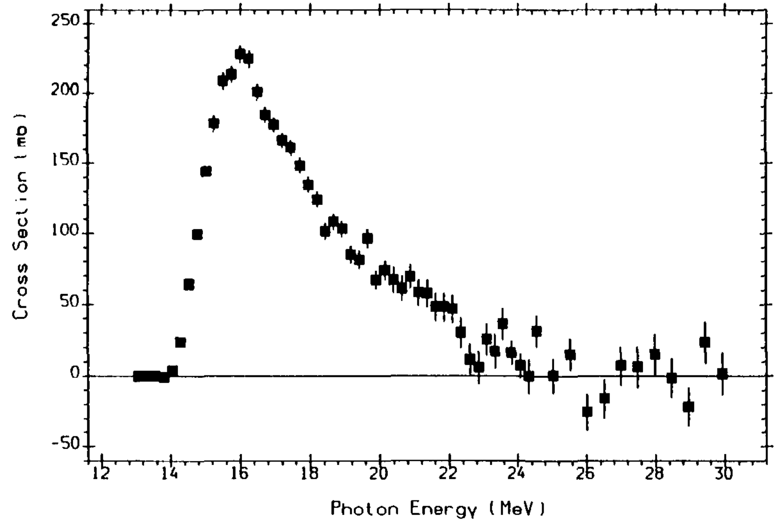
Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	γ,^{3}He	γ,α	γ,2n	γ,np	γ,2p
16.10	5.9	7.3	12.0	11.4	-2.0	13.9	13.1	13.7



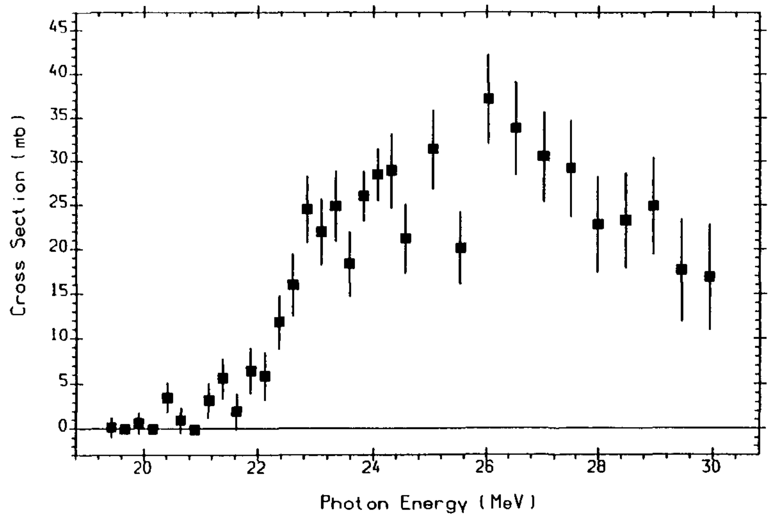
76-OS-189(G,X)0-NN-1
The sum: (G,N)+(G,N+P)+2(G,2N)+2(G,2N+P)+3(G,3N).
QMPH,ARAD Positron annihilation in flight.
L0046012 J,PR/C,19,1205,7904 B.L.BERMAN+



(76-OS-189(G,N)76-OS-188)+(76-OS-189(G,N+P)75-RE-187)
QMPH,ARAD Positron annihilation in flight.
L0046009 J,PR/C,19,1205,7904 B.L.BERMAN+



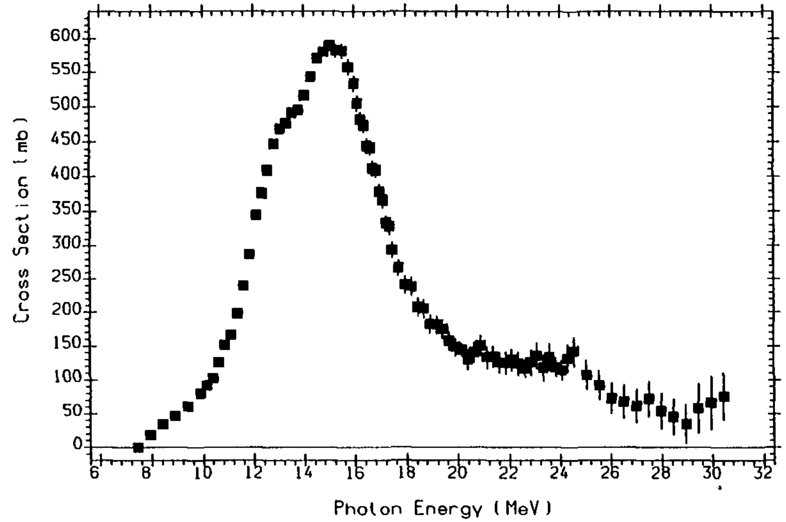
(76-OS-189(G,2N)76-OS-187)+(76-OS-189(G,2N+P)75-RE-186)
QMPH,ARAD Positron annihilation in flight.
L0046010 J,PR/C,19,1205,7904 B.L.BERMAN+



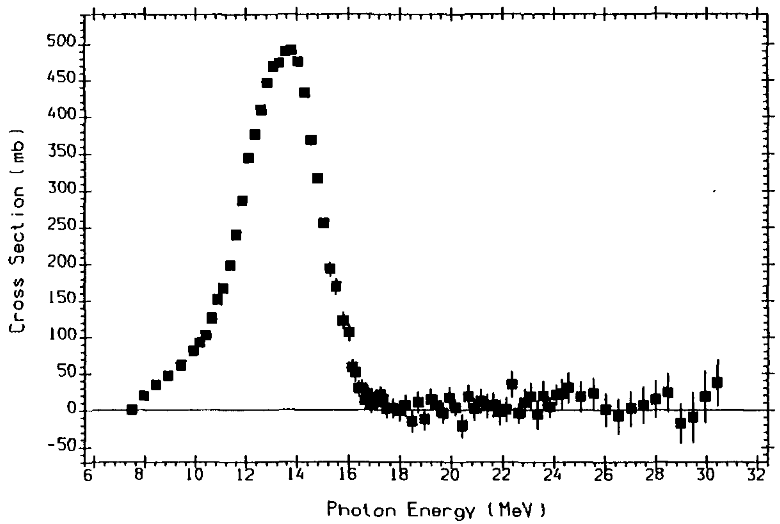
76-OS-189(G,3N)76-OS-186
QMPH,ARAD Positron annihilation in flight.
L0046011 J,PR/C,19,1205,7904 B.L.BERMAN+

$^{190}_{76}Os$

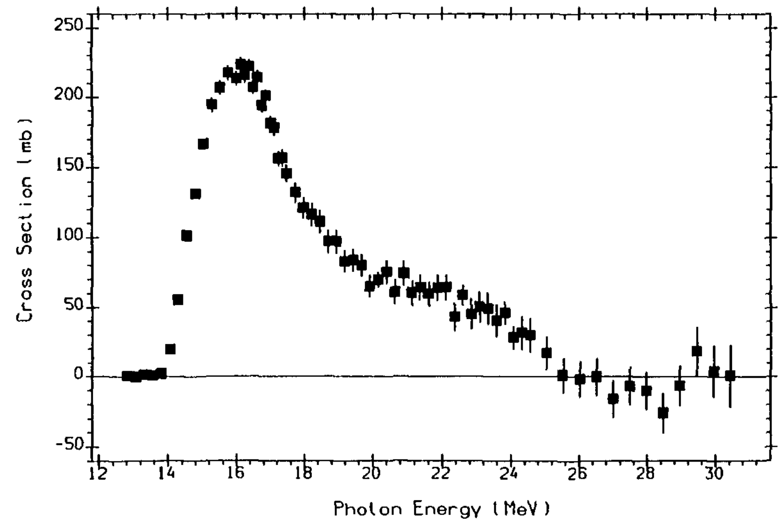
Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	γ,^{3}He	γ,α	γ,2n	γ,np	γ,2p
26.40	7.8	8.0	12.4	13.7	-1.4	13.7	15.1	14.6



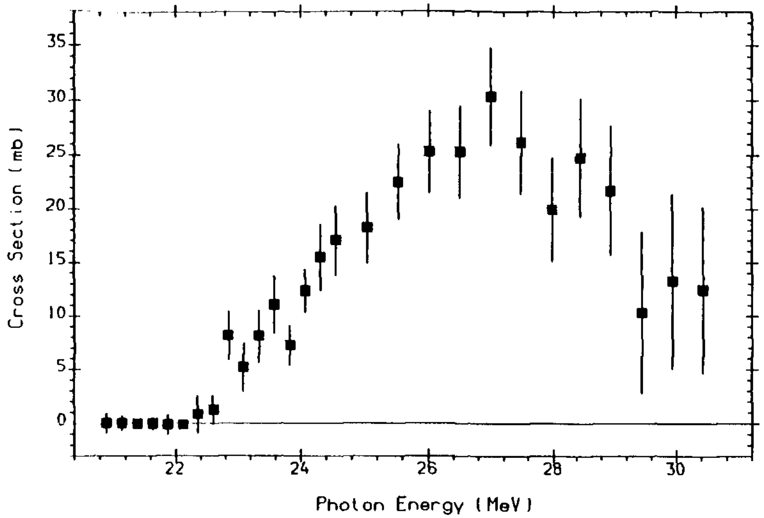
76-OS-190(G,X)0-NN-1
The sum: (G,N)+(G,N+P)+2(G,2N)+2(G,2N+P)+3(G,3N).
QMPH,ARAD Positron annihilation in flight.
L0046016 J,PR/C,19,1205,7904 B.L.BERMAN+



(76-OS-190(G,N)76-OS-189)+(76-OS-190(G,N+P)75-RE-188)
QMPH,ARAD Positron annihilation in flight.
L0046013 J,PR/C,19,1205,7904 B.L.BERMAN+



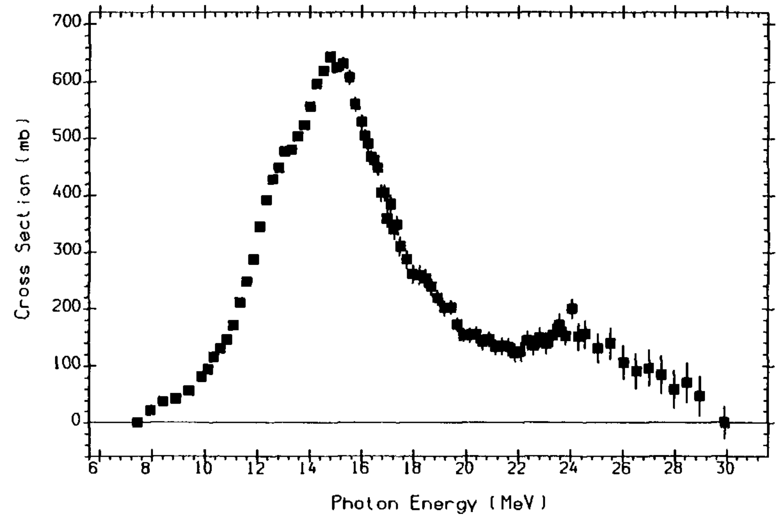
(76-OS-190(G,2N)76-OS-188)+(76-OS-190(G,2N+P)75-RE-187)
QMPH,ARAD Positron annihilation in flight.
L0046014 J,PR/C,19,1205,7904 B.L.BERMAN+



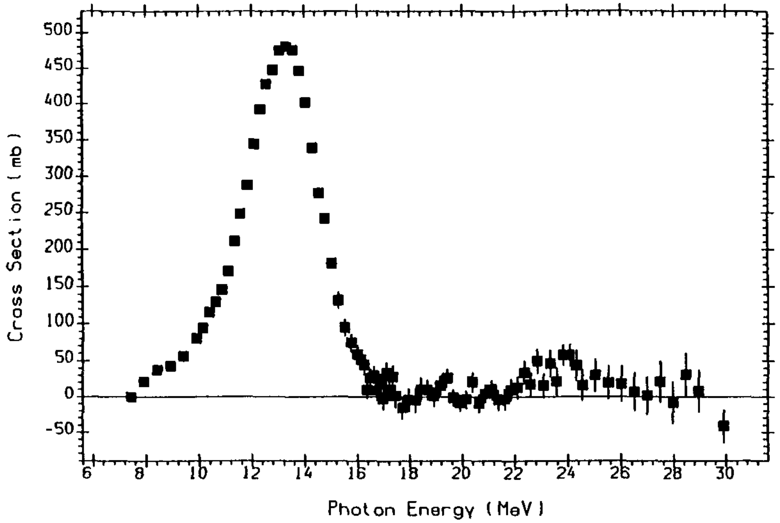
76-OS-190(G,3N)76-OS-187
QMPH,ARAD Positron annihilation in flight.
L0046015 J,PR/C,19,1205,7904 B.L.BERMAN+

$^{192}_{76}$Os

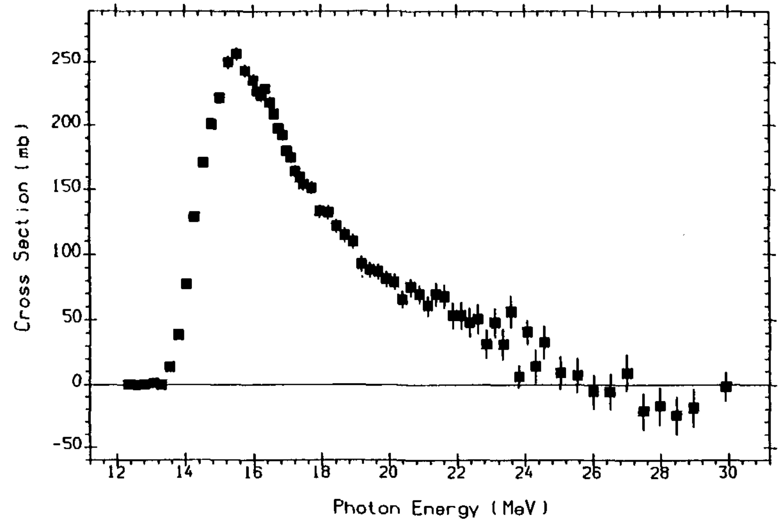
Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	γ,^{3}He	γ,α	γ,2n	γ,np	γ,2p
41.00	7.6	8.8	12.9	15.3	-0.4	13.3	15.7	16.2



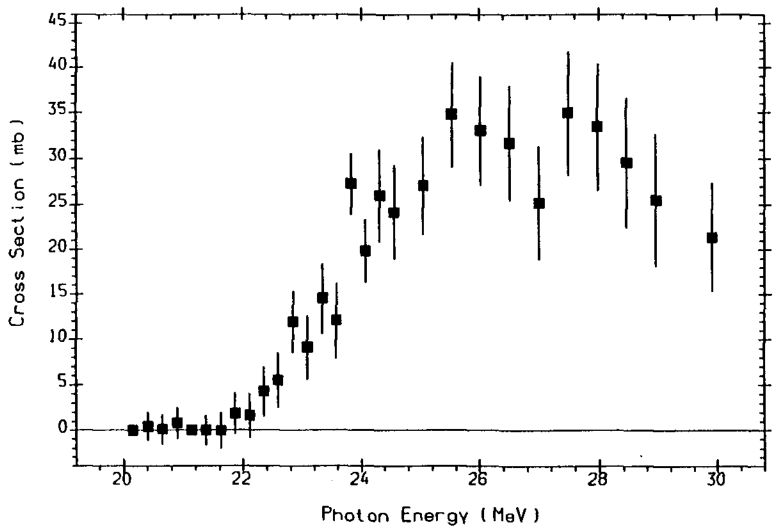
76-OS-192(G,X)0-NN-1
The sum: (G,N)+(G,N+P)+2(G,2N)+2(G,2N+P)+3(G,3N).
QMPH,ARAD Positron annihilation in flight.
L0046020 J,PR/C,19,1205,7904 B.L.BERMAN+



(76-OS-192(G,N)76-OS-191)+(76-OS-192(G,N+P)75-RE-190)
QMPH,ARAD Positron annihilation in flight.
L0046017 J,PR/C,19,1205,7904 B.L.BERMAN+



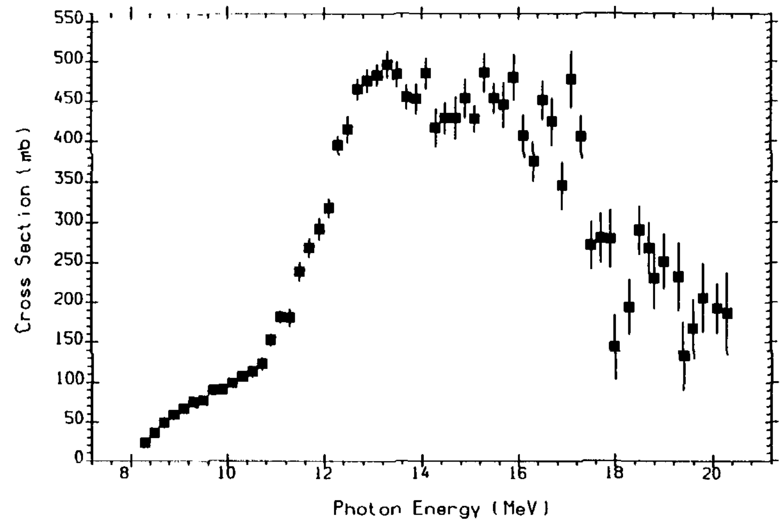
(76-OS-192(G,2N)76-OS-190)+(76-OS-192(G,2N+P)75-RE-189)
QMPH,ARAD Positron annihilation in flight.
L0046018 J,PR/C,19,1205,7904 B.L.BERMAN+



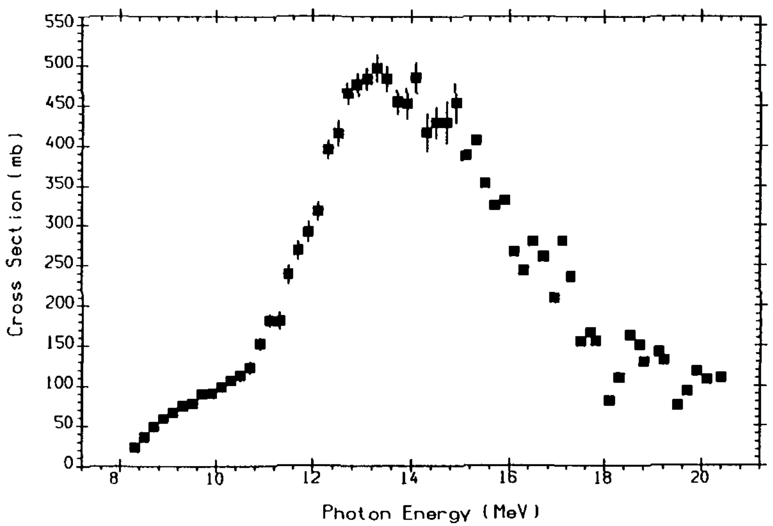
76-OS-192(G,3N)76-OS-189
QMPH,ARAD Positron annihilation in flight.
L0046019 J,PR/C,19,1205,7904 B.L.BERMAN+

$^{191}_{77}\mathrm{Ir}$

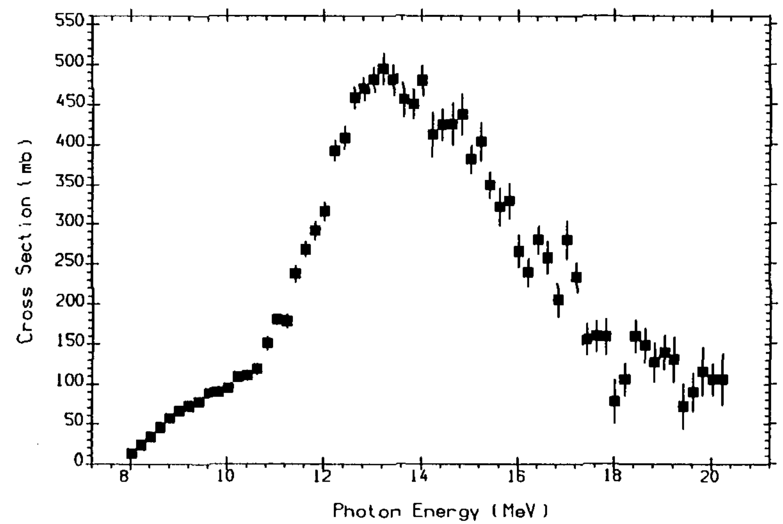
Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	γ,^{3}He	γ,α	γ,2n	γ,np	γ,2p
37.30	8.1	5.3	10.5	12.6	-2.1	14.4	13.1	13.3



77-IR-191(G,X)0-NN-1
BRST
M0049002 J,YF,27,1479,78 A.M.GORYACHEV+



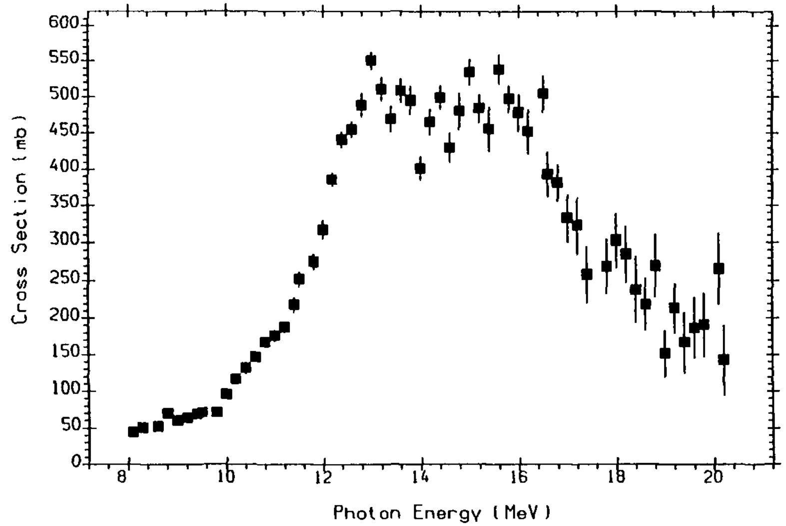
(77-IR-191(G,N)77-IR-190)+(77-IR-191(G,N+P)76-OS-189)+(77-IR-191(G,2N)77-IR-189)
BRST
M0049003 J,YF,27,1479,78 A.M.GORYACHEV+



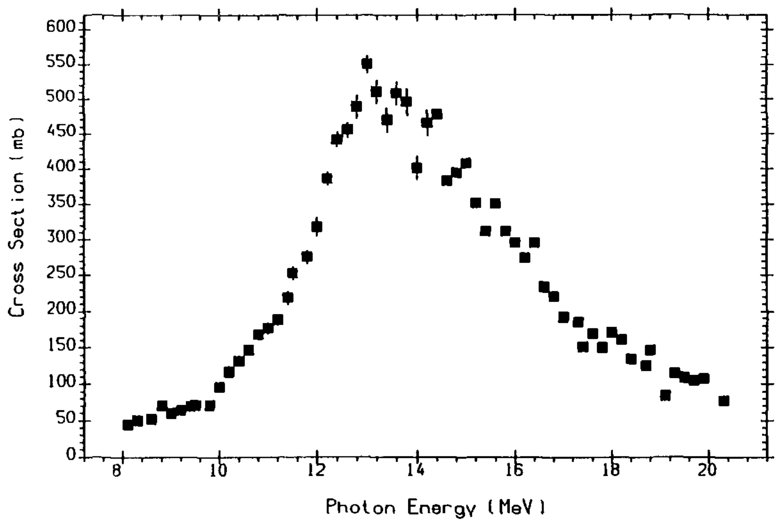
(77-IR-191(G,N)77-IR-190)+(77-IR-191(G,2N)77-IR-189)
BRST
M0008002 J,ZEP,26,107,78 A.M.GORYACHEV+

$^{193}_{77}Ir$

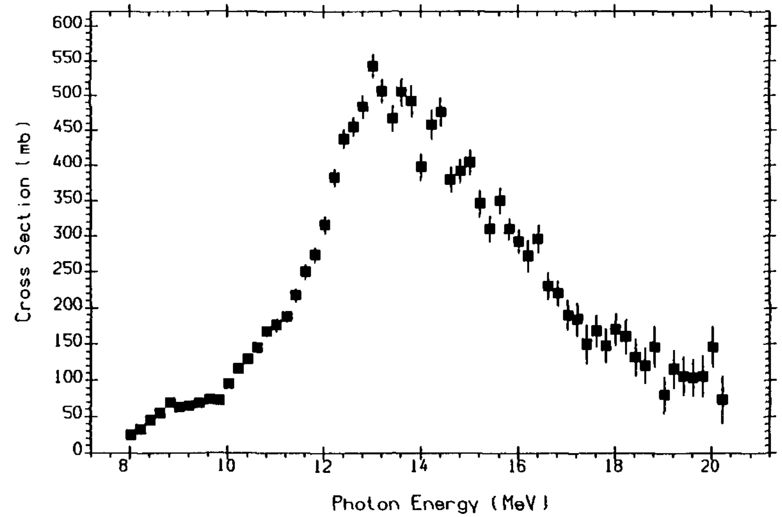
Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	γ,^{3}He	γ,α	γ,2n	γ,np	γ,2p
62.70	7.8	5.9	10.8	13.9	-1.0	14.0	13.5	14.7



77-IR-193(G,X)0-NN-1
BRST
M0049004 J,YF,27,1479,78 A.M.GORYACHEV+



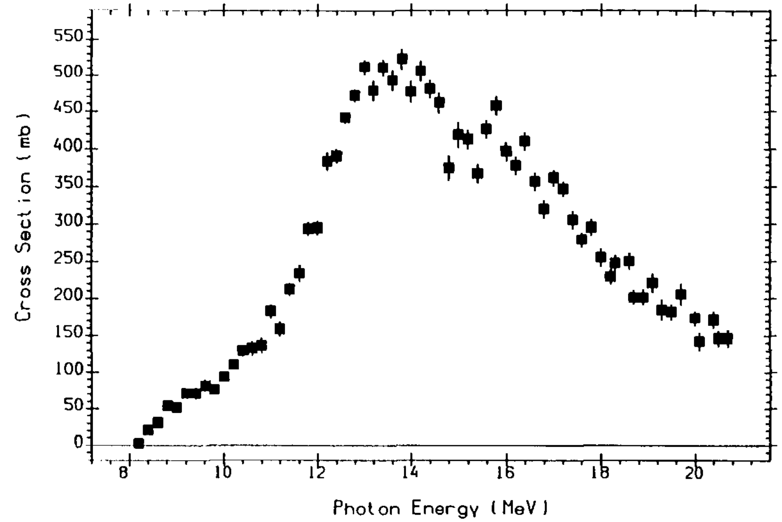
(77-IR-193(G,N)77-IR-192)+(77-IR-193(G,N+P)76-OS-191)+(77-IR-193(G,2N)77-IR-191)
BRST
M0049005 J,YF,27,1479,78 A.M.GORYACHEV+



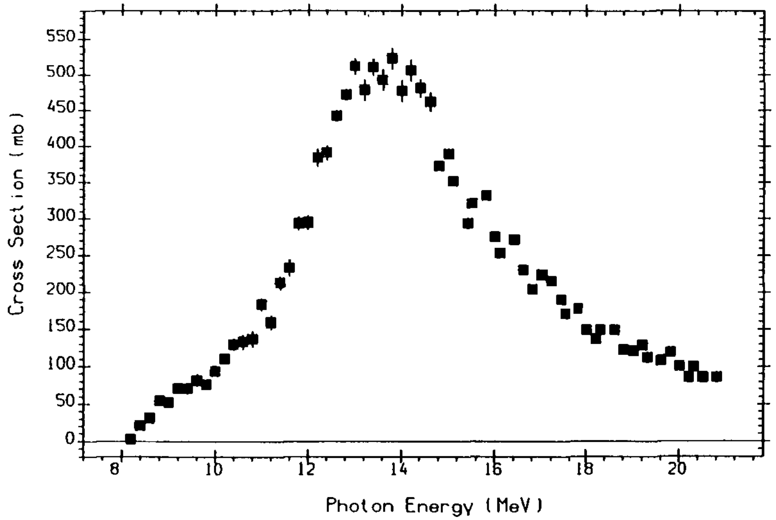
(77-IR-193(G,N)77-IR-192)+(77-IR-193(G,2N)77-IR-191)
BRST
M0008003 J,ZEP,26,107,78 A.M.GORYACHEV+

$^{194}_{78}Pt$

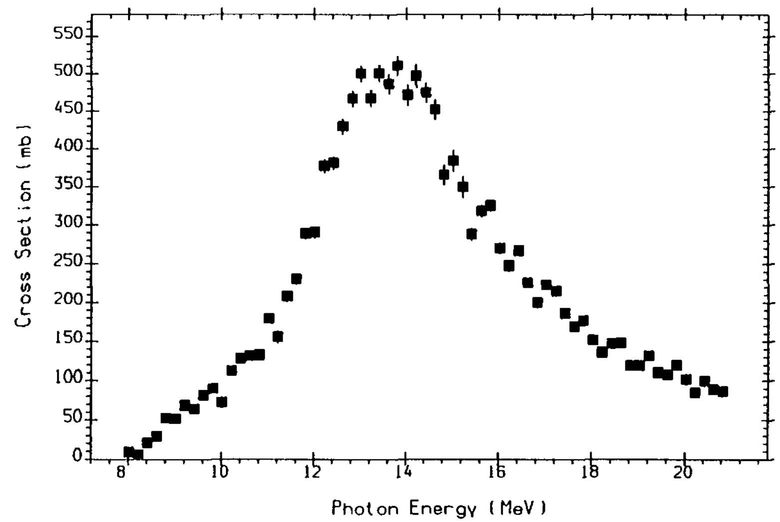
Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	γ,^{3}He	γ,α	γ,2n	γ,np	γ,2p
32.90	8.4	7.5	13.0	13.3	-1.5	14.6	15.3	13.5



78-PT-194(G,X)0-NN-1
BRST
M0049006 J,YF,27,1479,78 A.M.GORYACHEV+



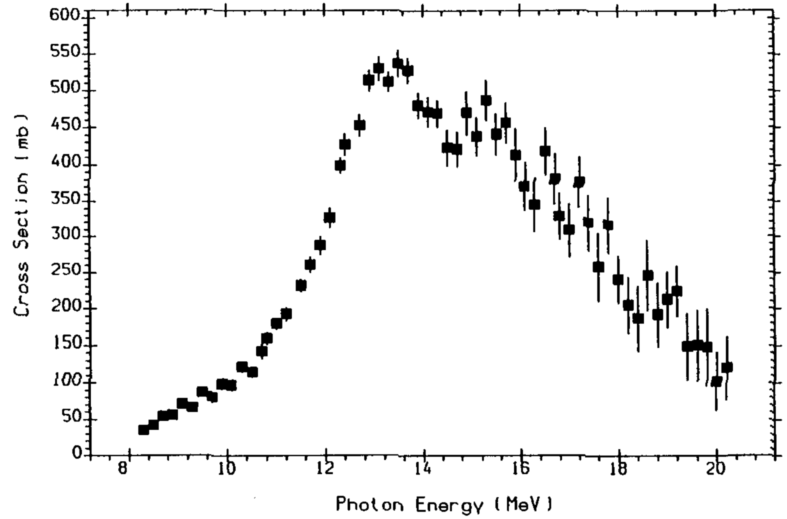
(78-PT-194(G,N)78-PT-193)+(78-PT-194(G,N+P)77-IR-192)+(78-PT-194(G,2N)78-PT-192)
BRST
M0049007 J,YF,27,1479,78 A.M.GORYACHEV+



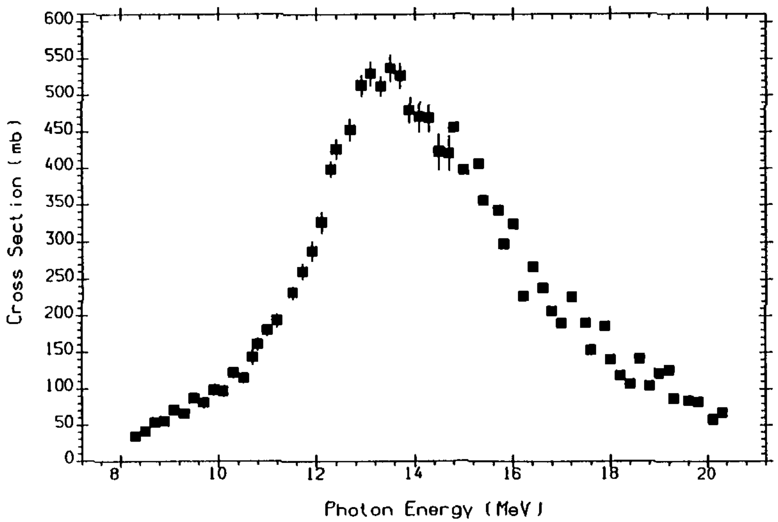
(78-PT-194(G,N)78-PT-193)+(78-PT-194(G,2N)78-PT-192)
BRST
M0008004 J,ZEP,26,107,78 A.M.GORYACHEV+

$^{195}_{78}$Pt

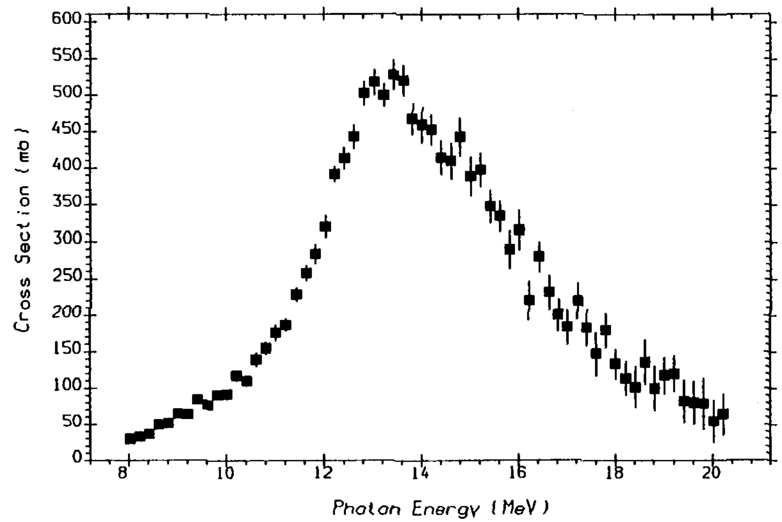
Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	γ,^{3}He	γ,α	γ,2n	γ,np	γ,2p
33.80	6.1	7.6	12.9	11.9	-1.2	14.5	13.6	14.0



78-PT-195(G,X)0-NN-1
BRST
M0049008 J,YF,27,1479,78 A.M.GORYACHEV+



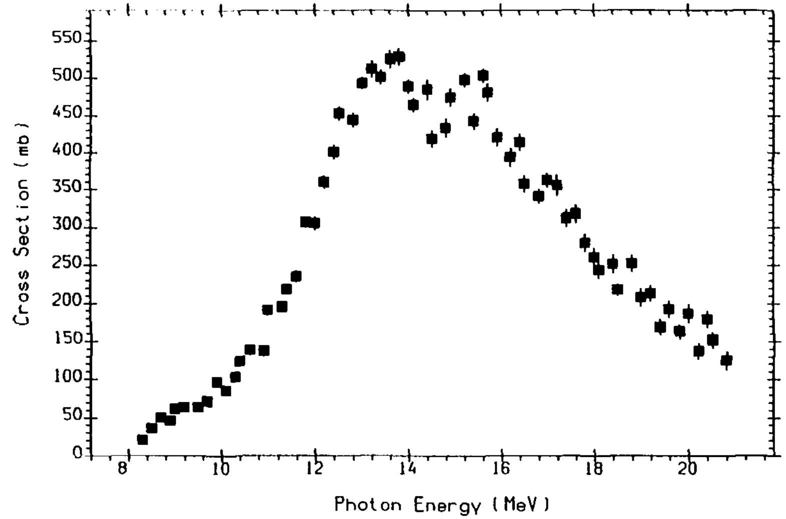
(78-PT-195(G,N)78-PT-194)+(78-PT-195(G,N+P)77-IR-193)+(78-PT-195(G,2N)78-PT-193)
BRST
M0049009 J,YF,27,1479,78 A.M.GORYACHEV+



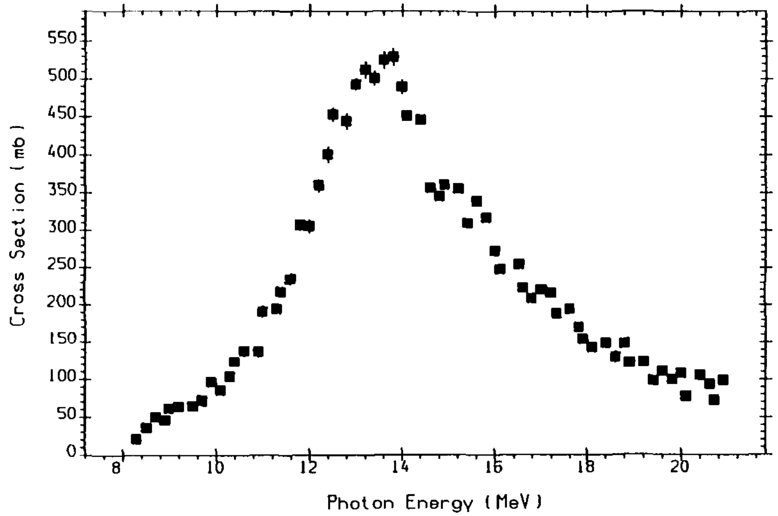
(78-PT-195(G,N)78-PT-194)+(78-PT-195(G,2N)78-PT-193)
BRST
M0008005 J,ZEP,26,107,78 A.M.GORYACHEV+

$^{196}_{78}$Pt

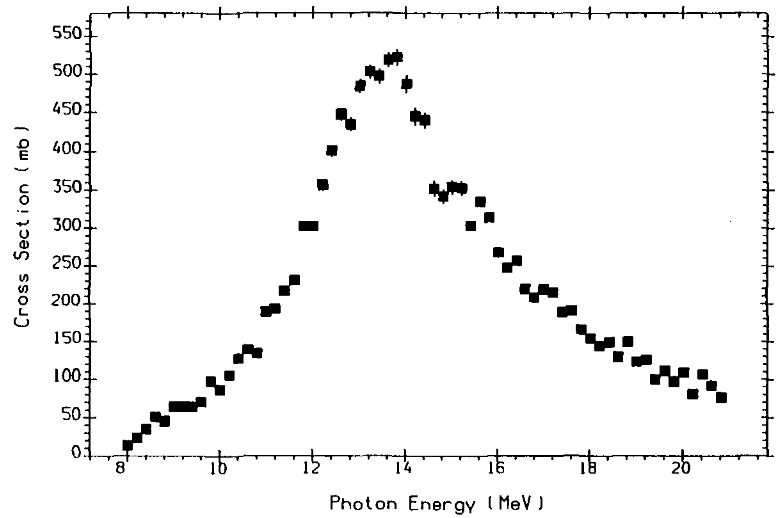
Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	γ,^{3}He	γ,α	γ,2n	γ,np	γ,2p
25.30	7.9	8.1	13.1	14.2	-0.8	14.0	15.5	14.8



78-PT-196(G,X)0-NN-1
BRST
M0049010 J,YF,27,1479,78 A.M.GORYACHEV+



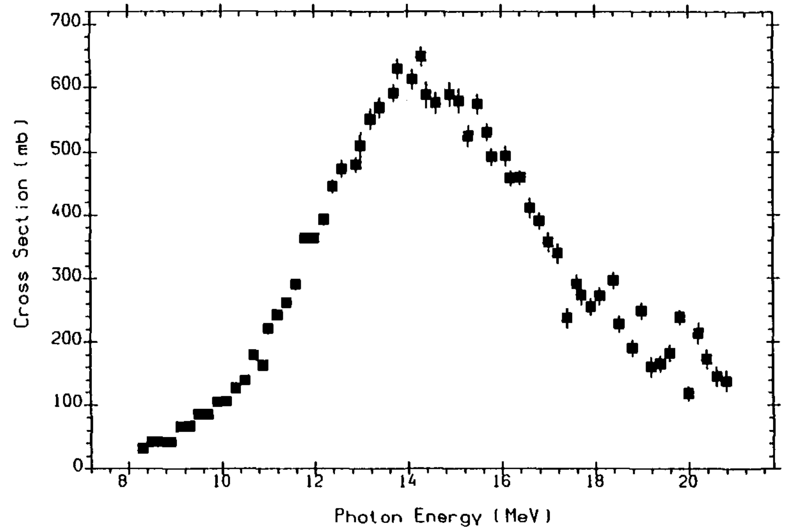
(78-PT-196(G,N)78-PT-195)+(78-PT-196(G,N+P)77-IR-194)+(78-PT-196(G,2N)78-PT-194)
BRST
M0049011 J,YF,27,1479,78 A.M.GORYACHEV+



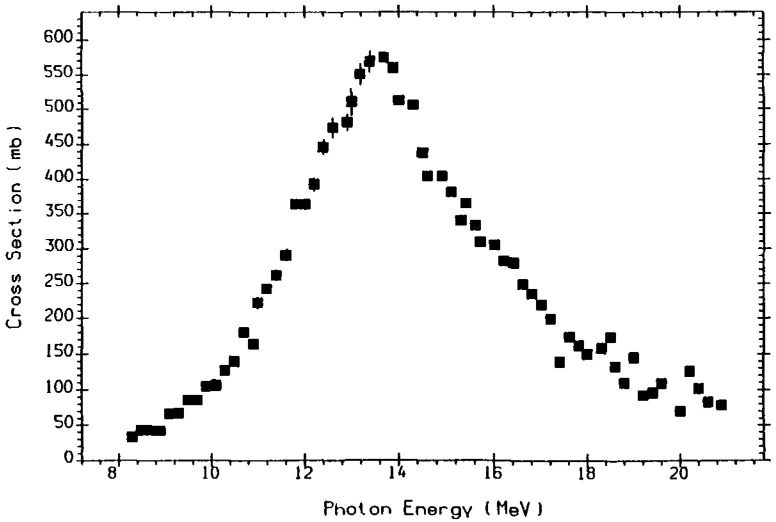
(78-PT-196(G,N)78-PT-195)+(78-PT-196(G,2N)78-PT-194)
BRST
M0008006 J,ZEP,26,107,78 A.M.GORYACHEV+

$^{198}_{78}Pt$

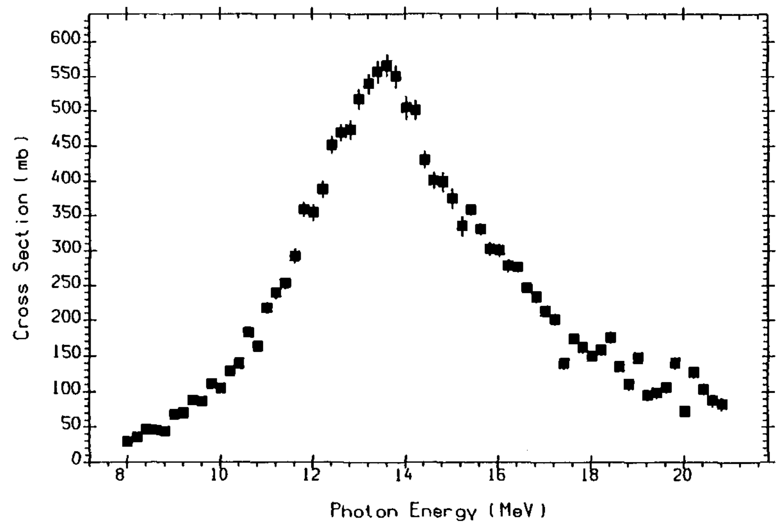
Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	γ,^{3}He	γ,α	γ,2n	γ,np	γ,2p
7.20	7.6	8.9	13.0	15.0	-0.1	13.4	15.8	16.2



78-PT-198(G,X)0-NN-1
BRST
M0049012 J,YF,27,1479,78 A.M.GORYACHEV+



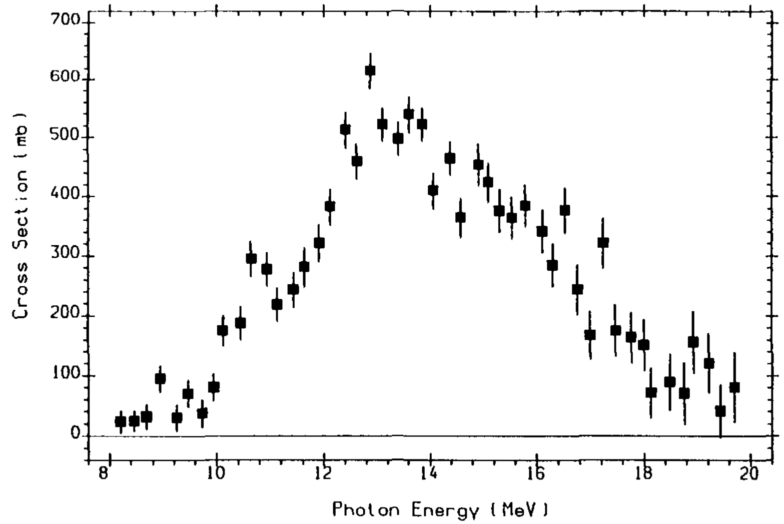
(78-PT-198(G,N)78-PT-197)+(78-PT-198(G,N+P)77-IR-196)+(78-PT-198(G,2N)78-PT-196)
BRST
M0049013 J,YF,27,1479,78 A.M.GORYACHEV+



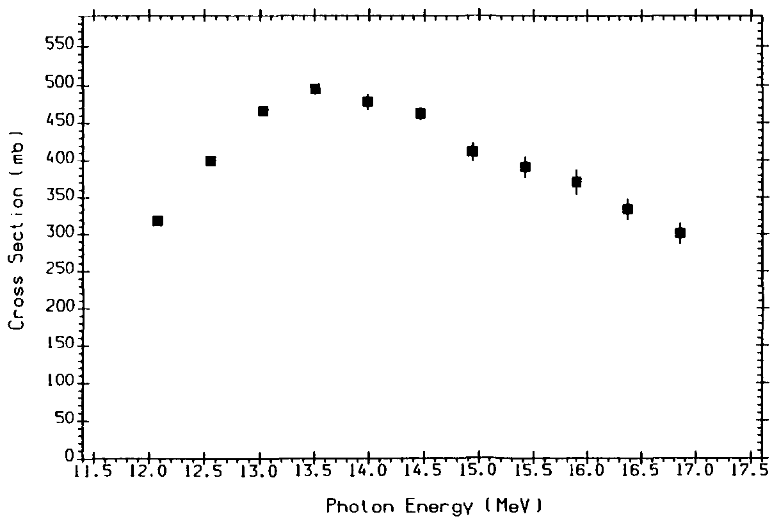
(78-PT-198(G,N)78-PT-197)+(78-PT-198(G,2N)78-PT-196)
BRST
M0008007 J,ZEP,26,107,78 A.M.GORYACHEV+

$^{197}_{79}$Au

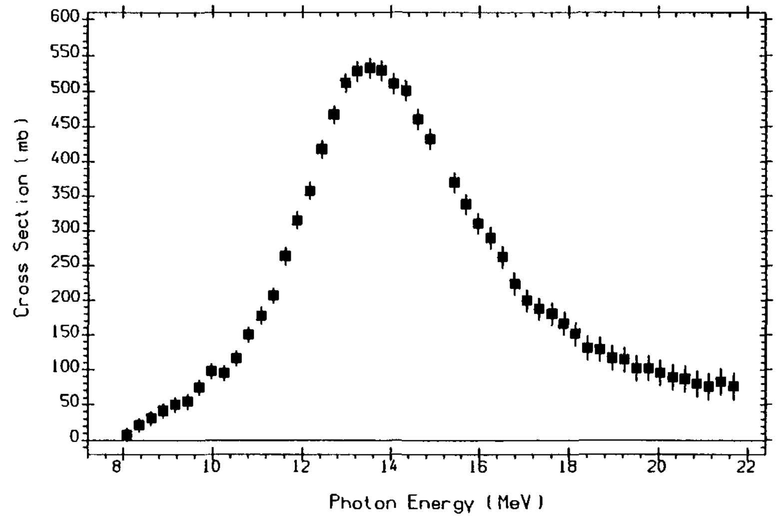
Abundance	Separation Energies (MeV)							
(%)	γ,n	γ,p	γ,t	γ,^{3}He	γ,α	γ,2n	γ,np	γ,2p
100.00	8.1	5.8	11.4	13.6	-1.0	14.7	13.7	14.0



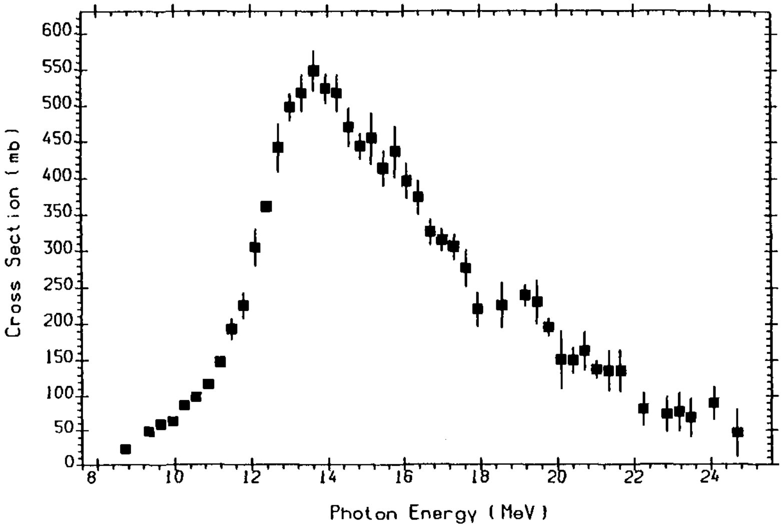
79-AU-197(G,ABS)
BRST
M0073013 J,NP/A,351,257,81 G.M.GUREVICH+



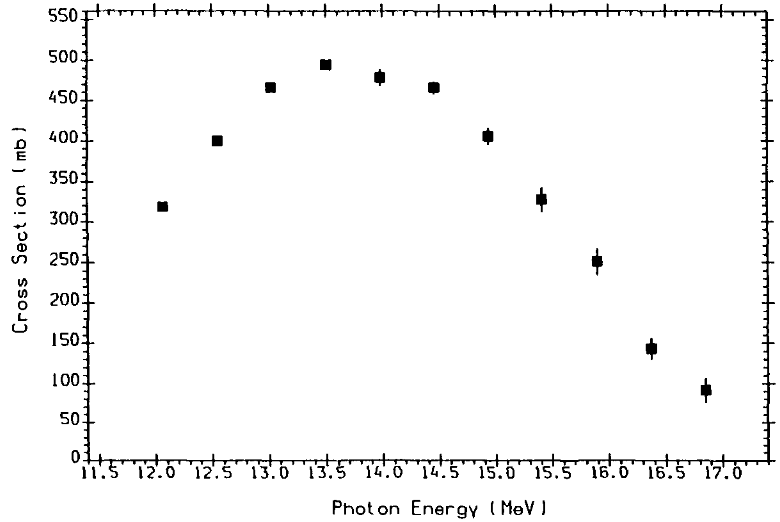
79-AU-197(G,X)0-NN-1
The sum: (G,N)+(G,N+P)+2(G,2N).
QMPH,ARAD Positron annihilation in flight.
L0057011 J,PR/C,36,1286,8705 B.L.BERMAN+



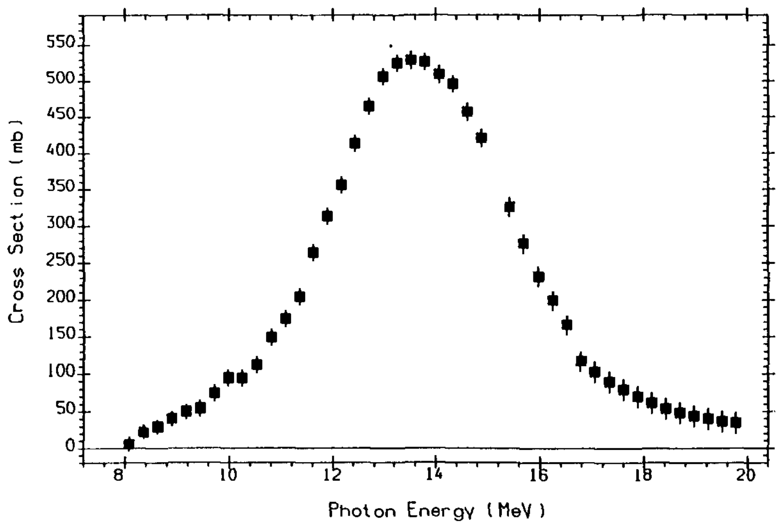
79-AU-197(G,X)0-NN-1 UNW
The sum: (G,N)+(G,N+P)+(G,2N)+(G,2N+P)+(G,3N).
Positron annihilation
L0021010 J,NP/A,159,561,7012 A.VEYSSIERE+



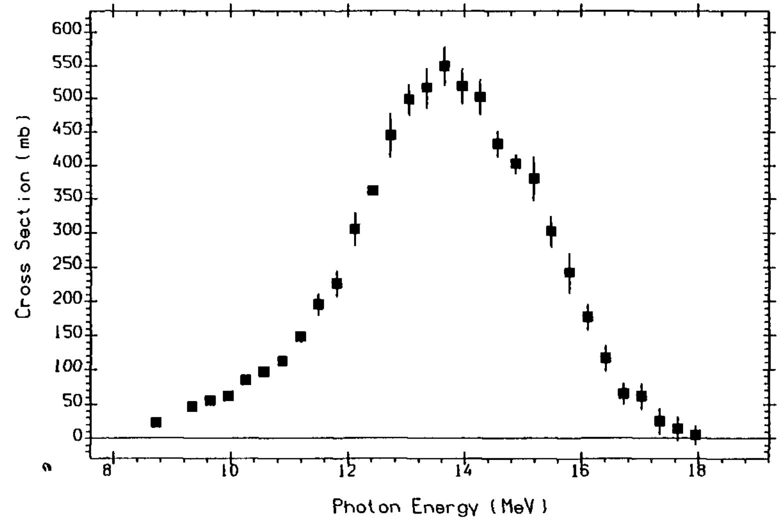
79-AU-197(G,X)0-NN-1 UNW
The sum: (G,N)+(G,N+P)+(G,2N)+(G,2N+P).
Positron annihilation
L0002002 J,PR,127,1273,6208 S.C.FULTZ+



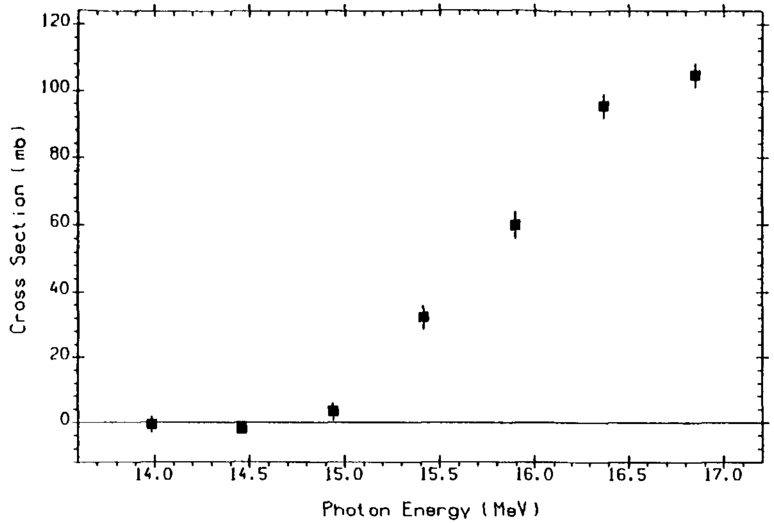
(79-AU-197(G,N)79-AU-196)+(79-AU-197(G,N+P)78-PT-195)
QMPH,ARAD Positron annihilation in flight.
L0057009 J,PR/C,36,1286,8705 B.L.BERMAN+



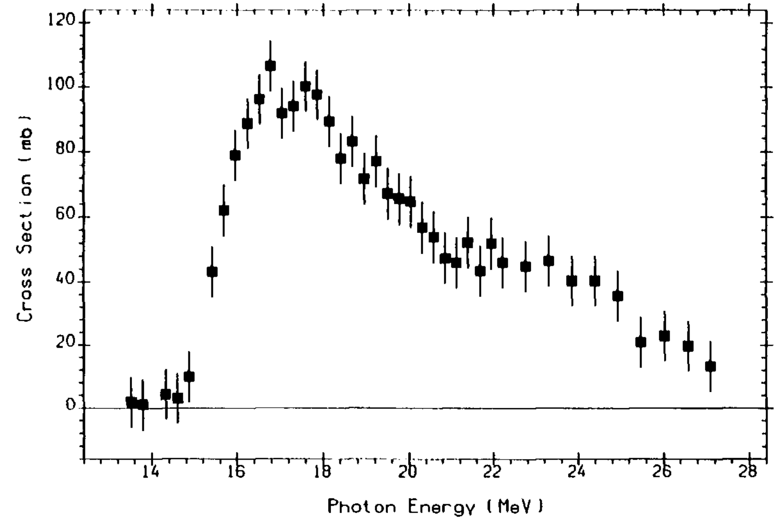
(79-AU-197(G,N)79-AU-196)+(79-AU-197(G,N+P)78-PT-195)
Positron annihilation
L0021003 J,NP/A,159,561,7012 A.VEYSSIERE+



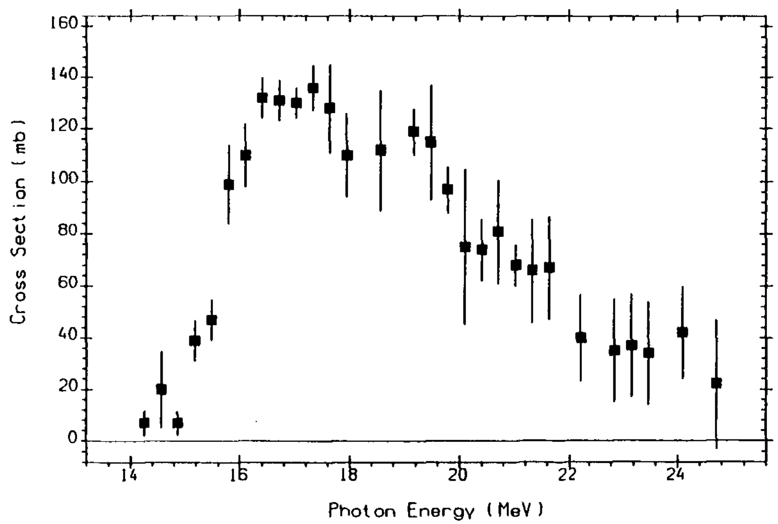
(79-AU-197(G,N)79-AU-196)+(79-AU-197(G,N+P)78-PT-195)
Positron annihilation
L0002003 J,PR,127,1273,6208 S.C.FULTZ+



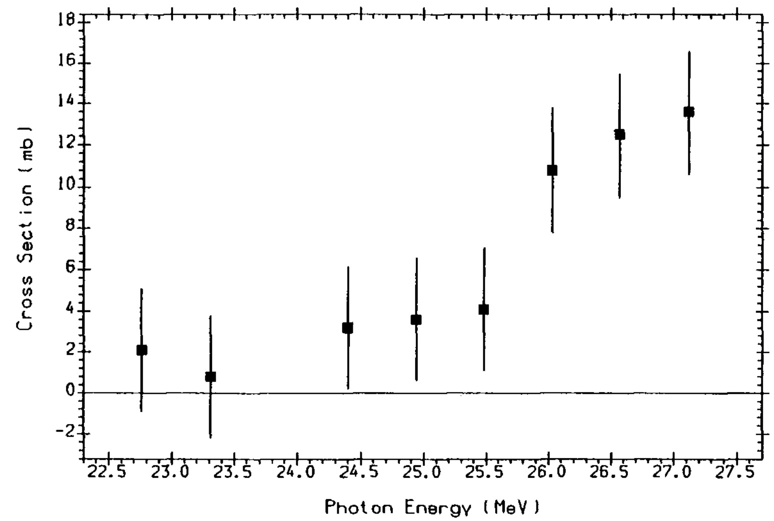
79-AU-197(G,2N)79-AU-195
QMPH,ARAD Positron annihilation in flight.
L0057010 J,PR/C,36,1286,8705 B.L.BERMAN+



(79-AU-197(G,2N)79-AU-195)+(79-AU-197(G,2N+P)78-PT-194)
Positron annihilation
L0021004 J,NP/A,159,561,7012 A.VEYSSIERE+



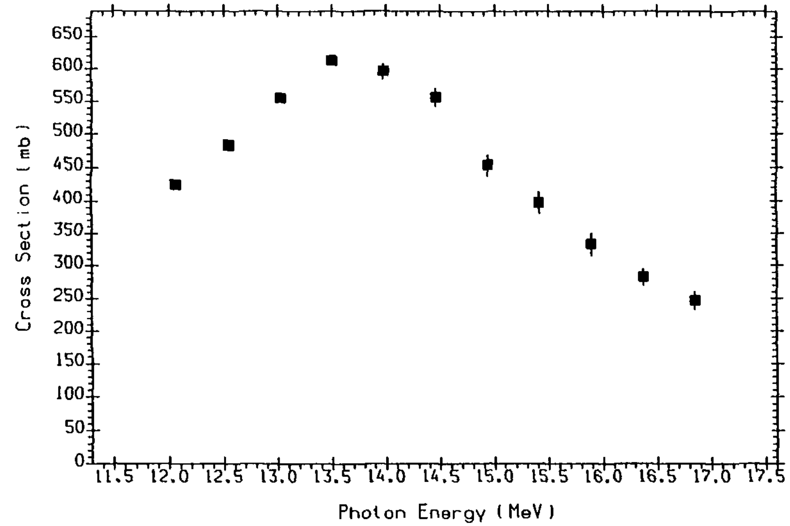
(79-AU-197(G,2N)79-AU-195)+(79-AU-197(G,2N+P)78-PT-194)
Positron annihilation
L0002004 J,PR,127,1273,6208 S.C.FULTZ+



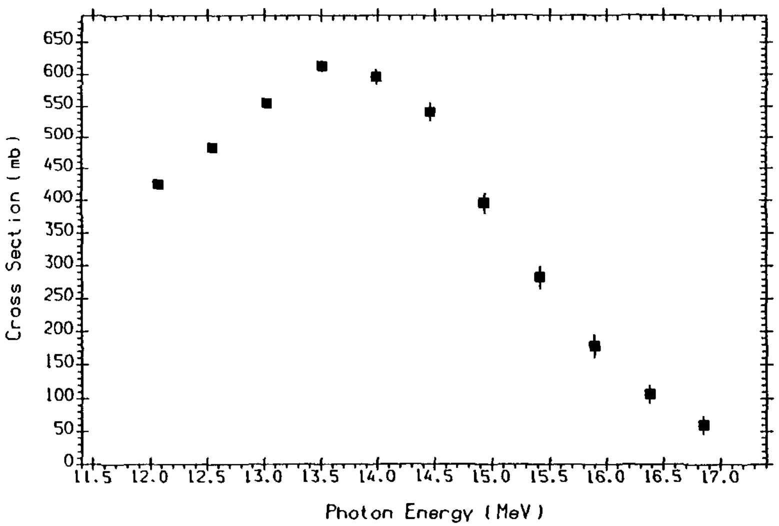
79-AU-197(G,3N)79-AU-194
Positron annihilation
L0021005 J,NP/A,159,561,7012 A.VEYSSIERE+

$^{nat.}_{82}Pb$

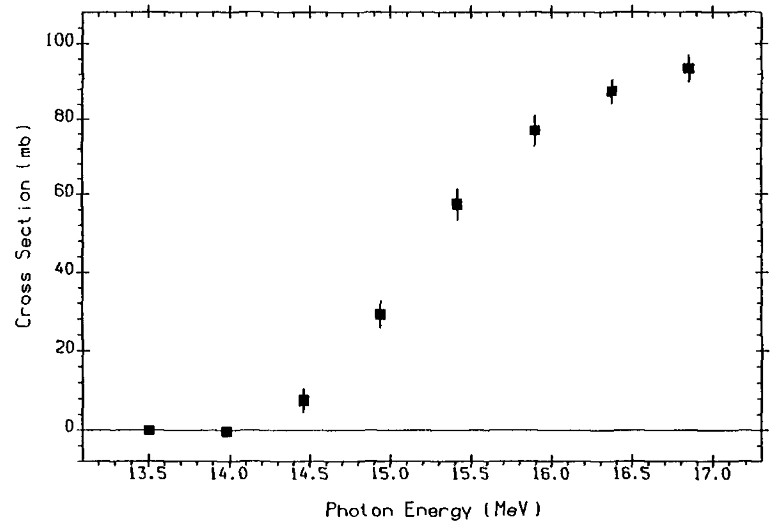
Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	$\gamma,^3He$	γ,α	γ,2n	γ,np	γ,2p
*	6.7	6.6	12.8	12.4	-2.0	14.1	14.0	12.3



82-PB-0(G,X)0-NN-1
The sum: (G,N)+(G,N+P)+2(G,2N).
QMPH,ARAD Positron annihilation in flight.
L0057014 J,PR/C,36,1286,8705 B.L.BERMAN+



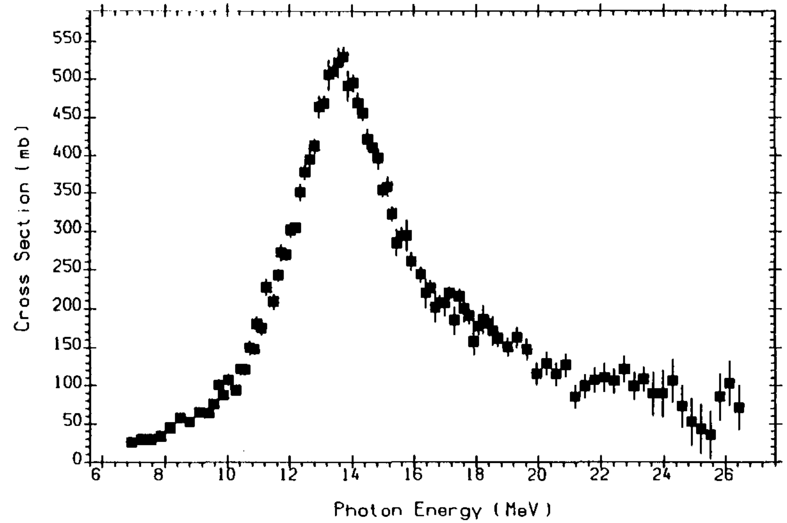
(82-PB-0(G,N))+(82-PB-0(G,N+P))
QMPH,ARAD Positron annihilation in flight.
L0057012 J,PR/C,36,1286,8705 B.L.BERMAN+



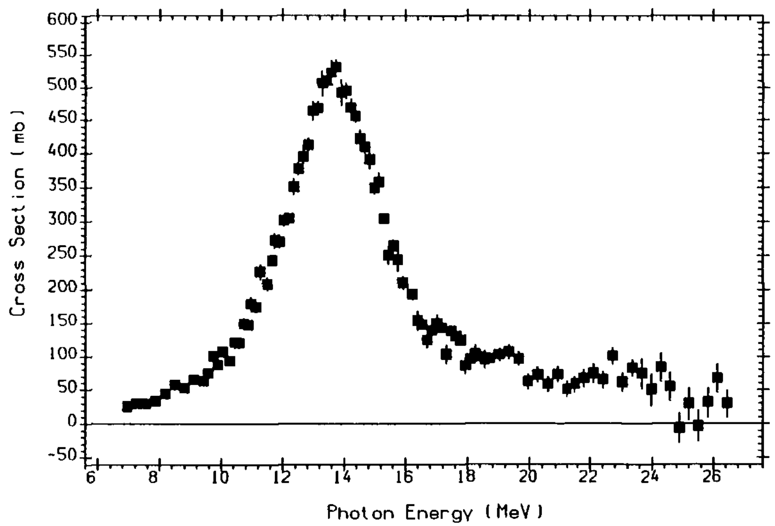
82-PB-0(G,2N)
QMPH,ARAD Positron annihilation in flight.
L0057013 J,PR/C,36,1286,8705 B.L.BERMAN+

$^{206}_{82}\mathrm{Pb}$

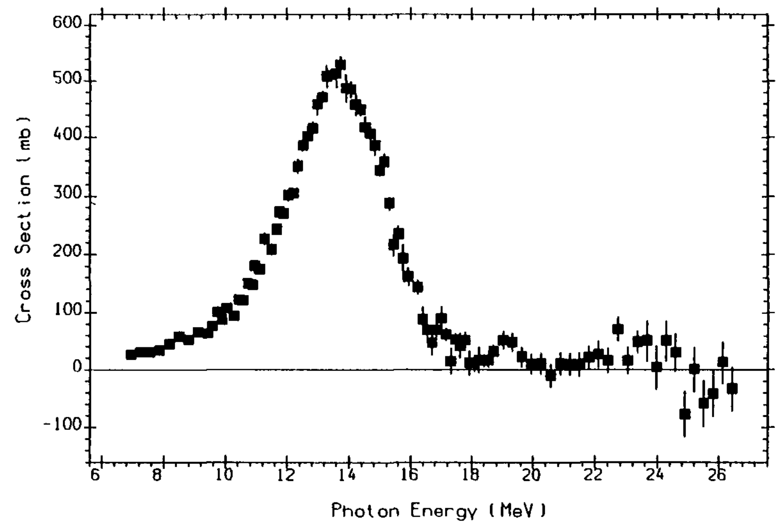
Abundance	Separation Energies (MeV)							
(%)	γ,n	γ,p	γ,t	γ,^{3}He	γ,α	γ,2n	γ,np	γ,2p
24.10	8.1	7.3	13.0	13.4	-1.1	14.8	14.8	13.7



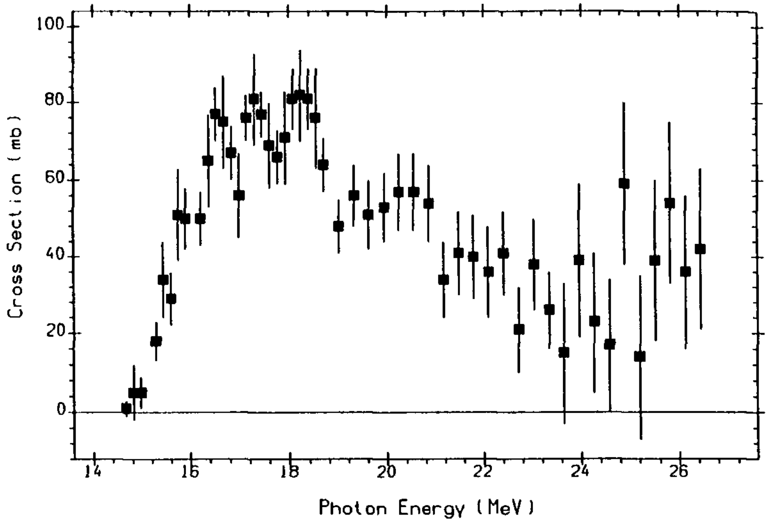
82-PB-206(G,X)0-NN-1
The sum: (G,N)+(G,N+P)+2(G,2N)+2(G,2N+P)+3(G,3N).
Positron annihilation
L0007002 J,PR/B,136,126,6410 R.R.HARVEY+



82-PB-206(G,X)0-NN-1 UNW
The sum: (G,N)+(G,N+P)+(G,2N)+(G,2N+P)+(G,3N).
Positron annihilation
L0007014 J,PR/B,136,126,6410 R.R.HARVEY+



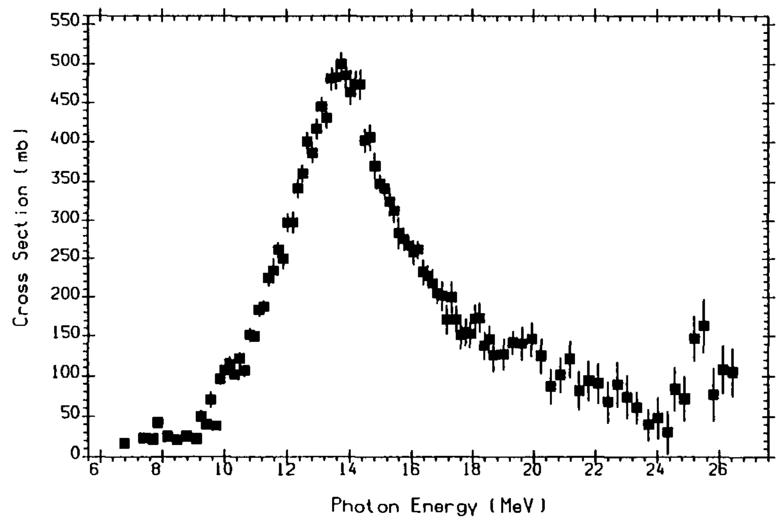
(82-PB-206(G,N)82-PB-205)+(82-PB-206(G,N+P)81-TL-204)
Positron annihilation
L0007003 J,PR/B,136,126,6410 R.R.HARVEY+



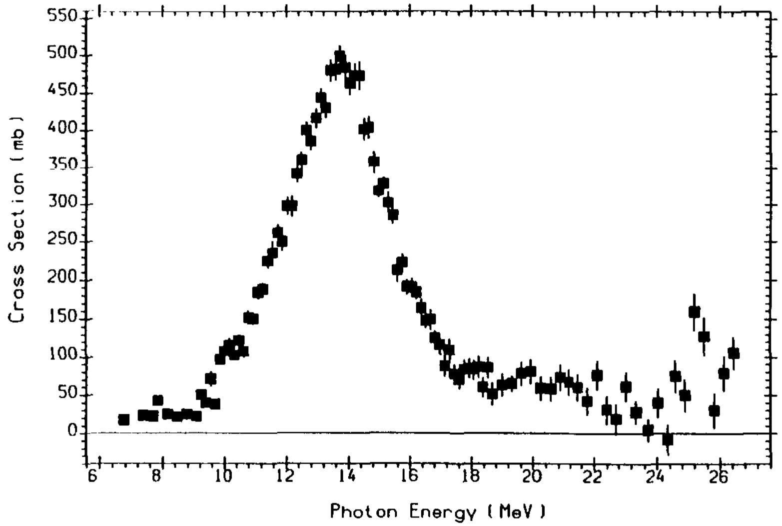
(82-PB-206(G,2N)82-PB-204)+(82-PB-206(G,2N+P)81-TL-203)
Positron annihilation
L0007004 J,PR/B,136,126,6410 R.R.HARVEY+

$^{207}_{82}$Pb

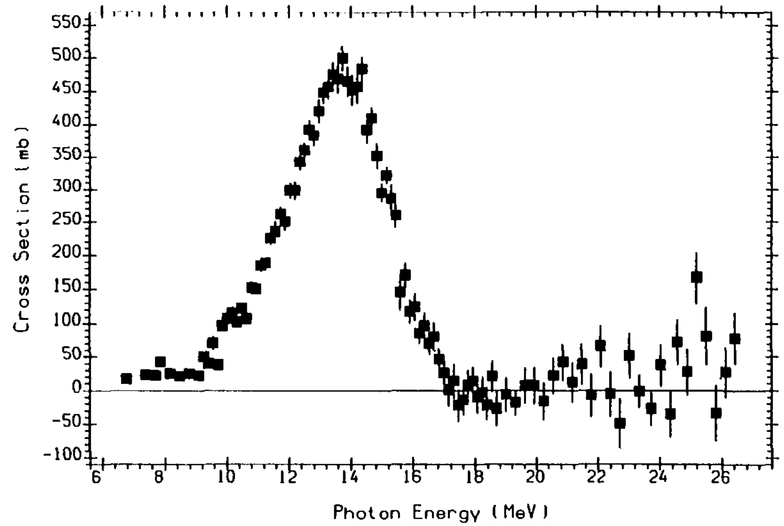
Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	γ,^{3}He	γ,α	γ,2n	γ,np	γ,2p
22.10	6.7	7.5	13.1	12.7	-0.4	14.8	14.0	14.7



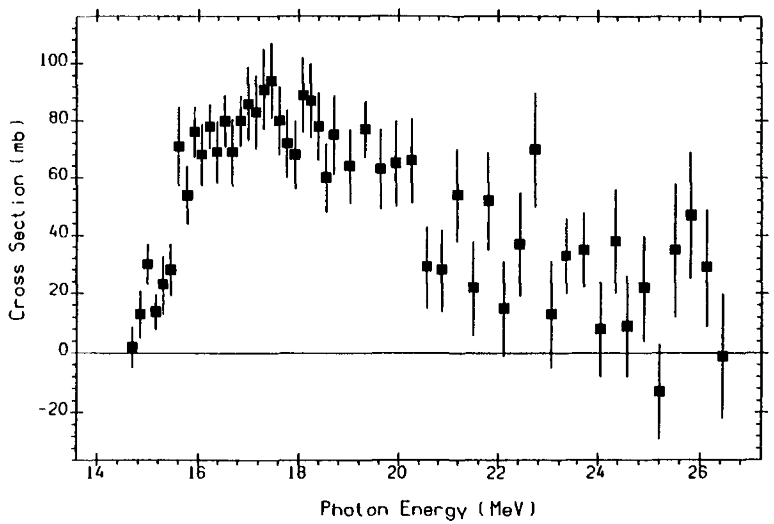
82-PB-207(G,X)0-NN-1
The sum: (G,N)+(G,N+P)+2(G,2N)+2(G,2N+P)+3(G,3N).
Positron annihilation
L0007005 J,PR/B,136,126,6410 R.R.HARVEY+



82-PB-207(G,X)0-NN-1 UNW
The sum: (G,N)+(G,N+P)+(G,2N)+(G,2N+P)+(G,3N).
Positron annihilation
L0007015 J,PR/B,136,126,6410 R.R.HAR√EY+



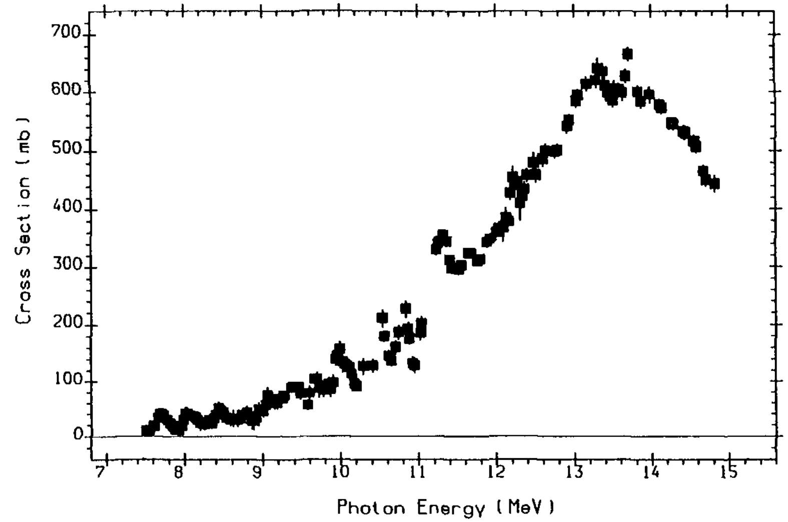
(82-PB-207(G,N)82-PB-206)+(82-PB-207(G,N+P)81-TL-205)
Positron annihilation
L0007006 J,PR/B,136,126,6410 R.R.HAR√EY+



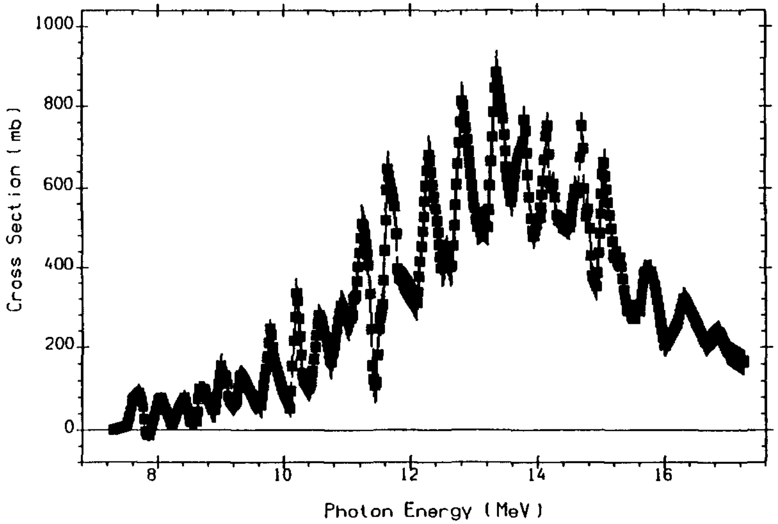
(82-PB-207(G,2N)82-PB-205)+(82-PB-207(G,2N+P)81-TL-204)
Positron annihilation
L0007007 J,PR/B,136,126,6410 R.R.HAR√EY+

$^{208}_{82}Pb$

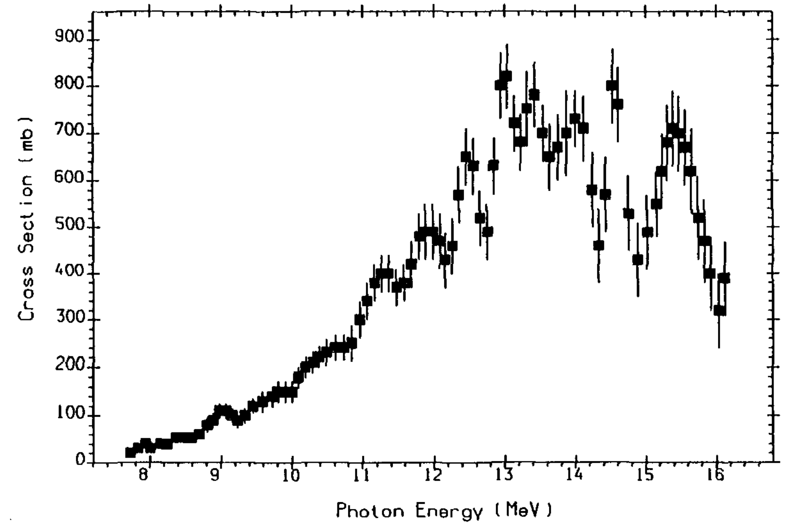
Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	γ,^{3}He	γ,α	γ,2n	γ,np	γ,2p
52.40	7.4	8.0	12.9	14.4	-0.5	14.1	14.9	15.4



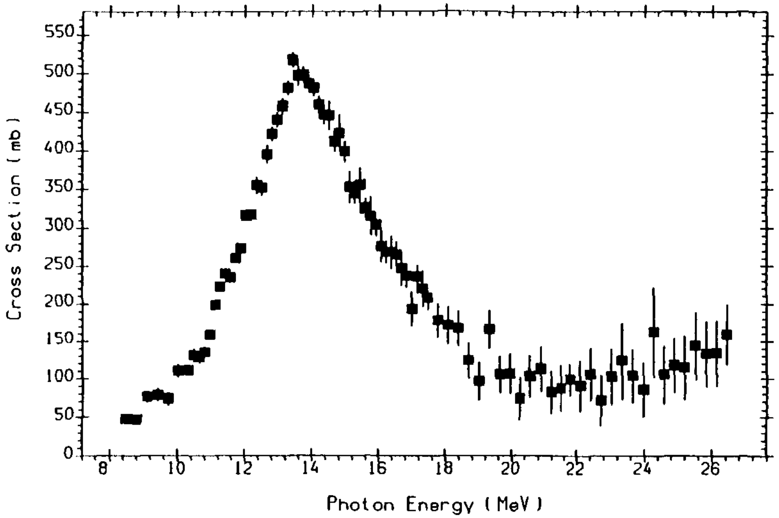
82-PB-2O8(G,N)82-PB-207
BRST,QMPH,ARAD
M0345005 J,YK,1,52,93 V.V.VARLAMOV+



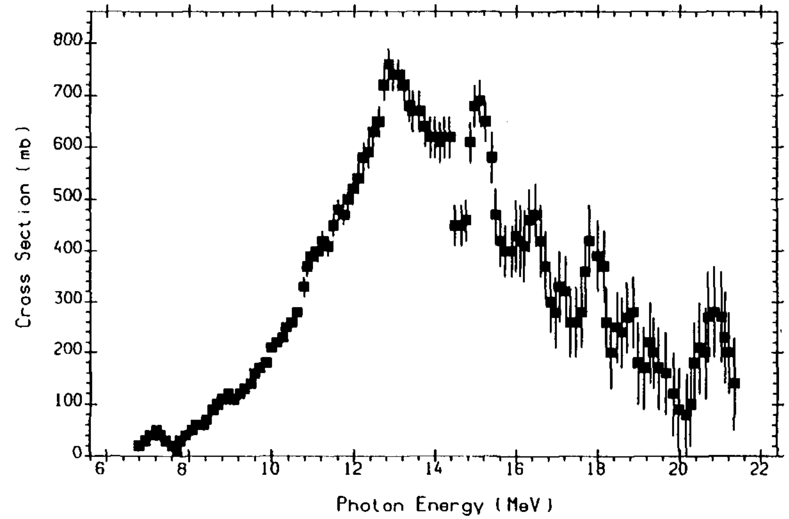
82-PB-208(G,X)0-NN-1
BRST
M0400002 J,YF,12,682,70 B.S.ISHKHANOV+



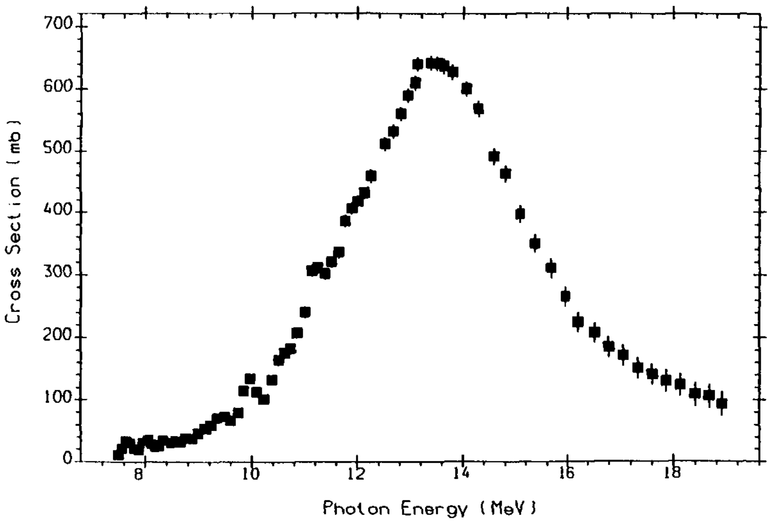
82-PB-208(G,X)0-NN-1
BRST
M0399004 J,JEP,7,210,68 B.I.GORYACHEV+



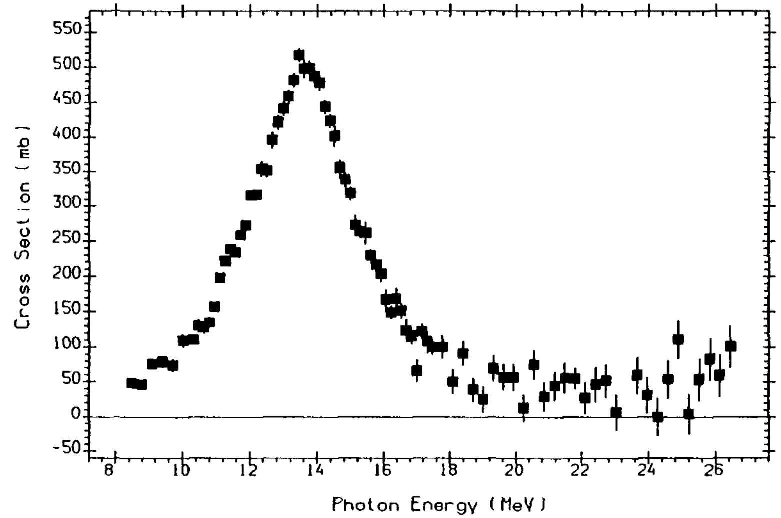
82-PB-208(G,X)0-NN-1
The sum: (G,N)+(G,N+P)+2(G,2N)+2(G,2N+P)+3(G,3N).
Positron annihilation
L0007008 J,PR/B,136,126,6410 R.R.HARVEY+



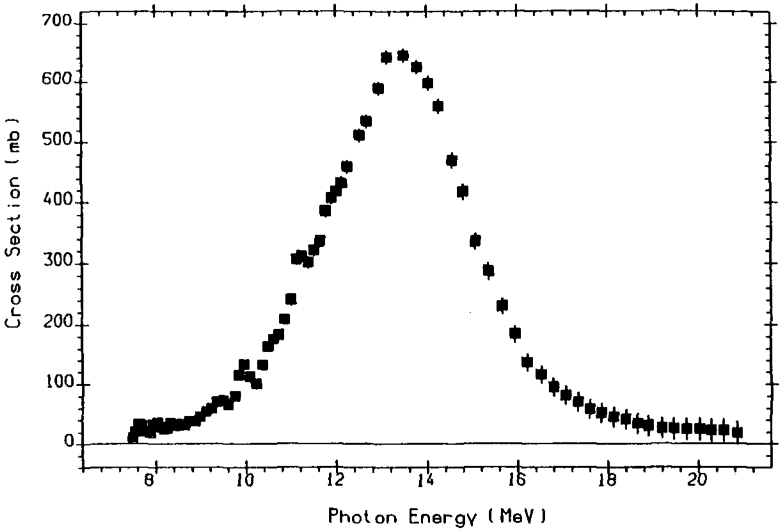
82-PB-208(G,X)0-NN-1
BRST
M0399002 J,JEP,7,210,68 B.I.GORYACHEV+



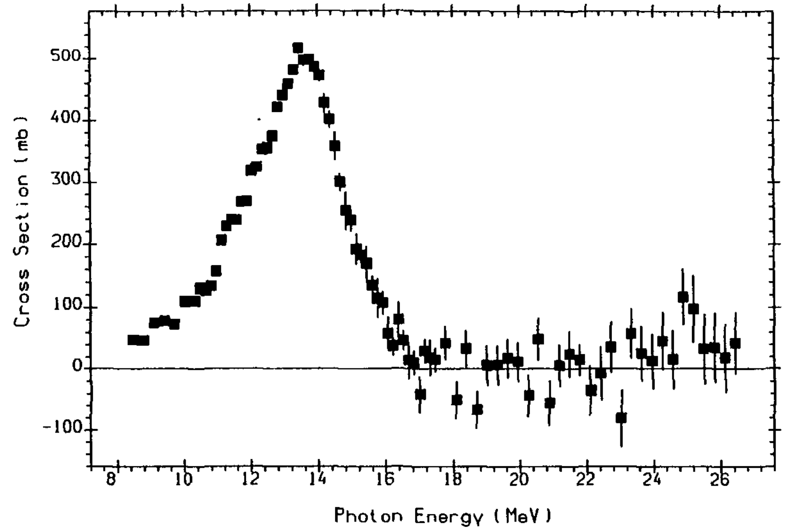
82-PB-208(G,X)0-NN-1 UNW
The sum: (G,N)+(G,N+P)+(G,2N)+(G,2N+P)+(G,3N).
Positron annihilation
L0021011 J,NP/A,159,561,7012 A.VEYSSIERE+



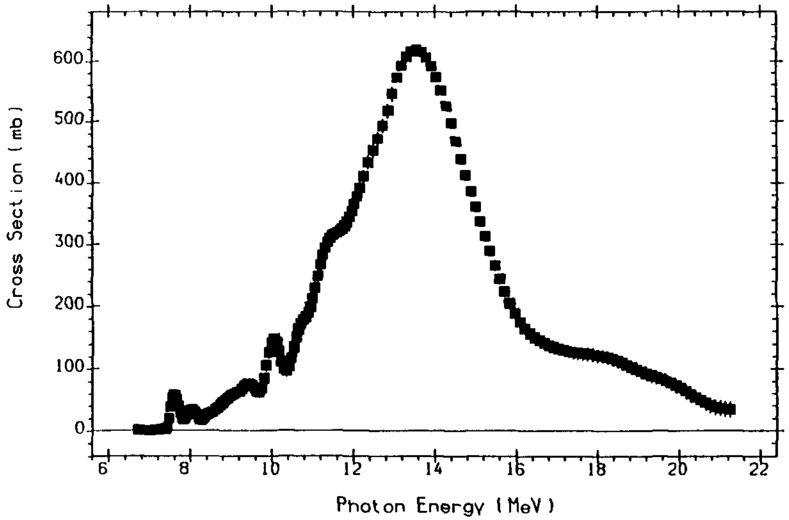
82-PB-208(G,X)0-NN-1 UNW
The sum: (G,N)+(G,N+P)+(G,2N)+(G,2N+P)+(G,3N).
Positron annihilation
L0007016 J,PR/B,136,126,6410 R.R.HARVEY+



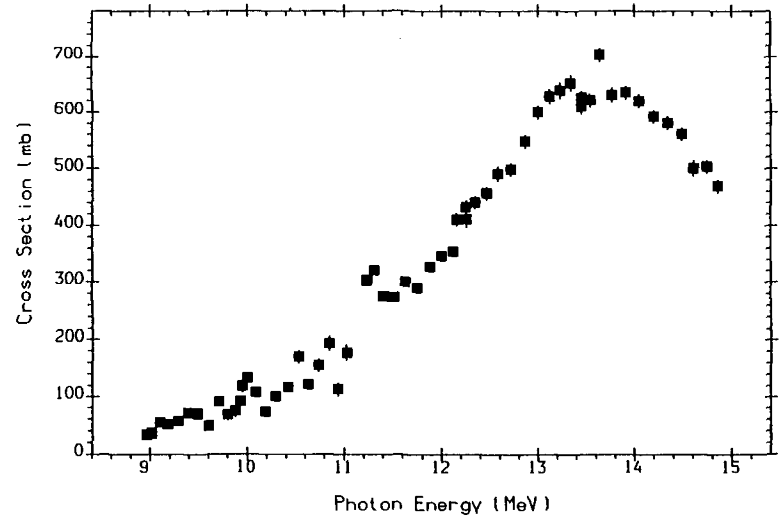
(82-PB-208(G,N)82-PB-207)+(82-PB-208(G,N+P)81-TL-206)
Positron annihilation
L0021007 J,NP/A,159,561,7012 A.VEYSSIERE+



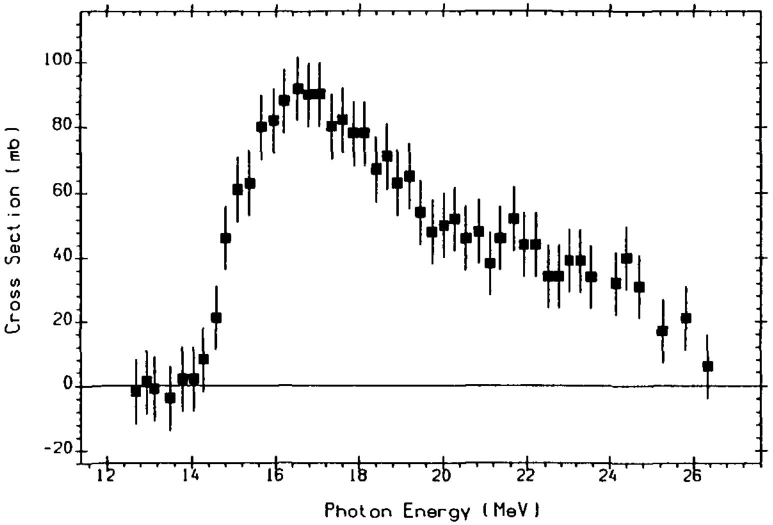
(82-PB-208(G,N)82-PB-207)+(82-PB-208(G,N+P)81-TL-206)
Positron annihilation
L0007009 J,PR/B,136,126,6410 R.R.HARVEY+



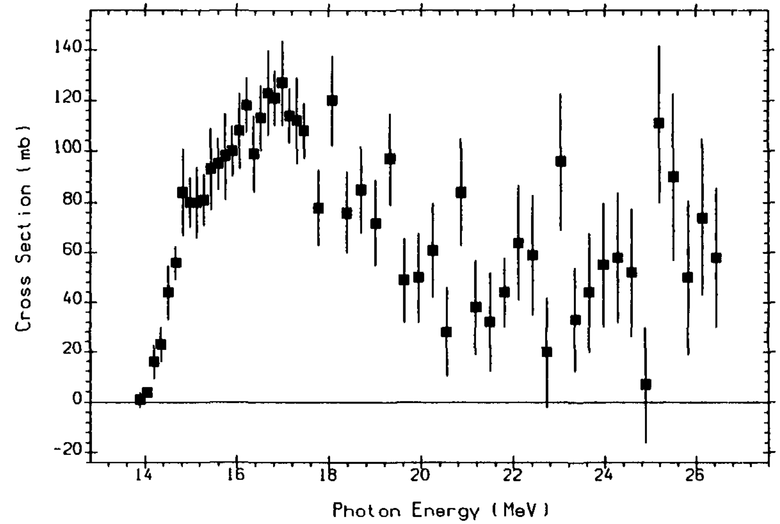
82-PB-208(G,N)82-PB-207
BRST
M0367008 J,IZV,55,(5),953,91 S.N.BELJAEV+



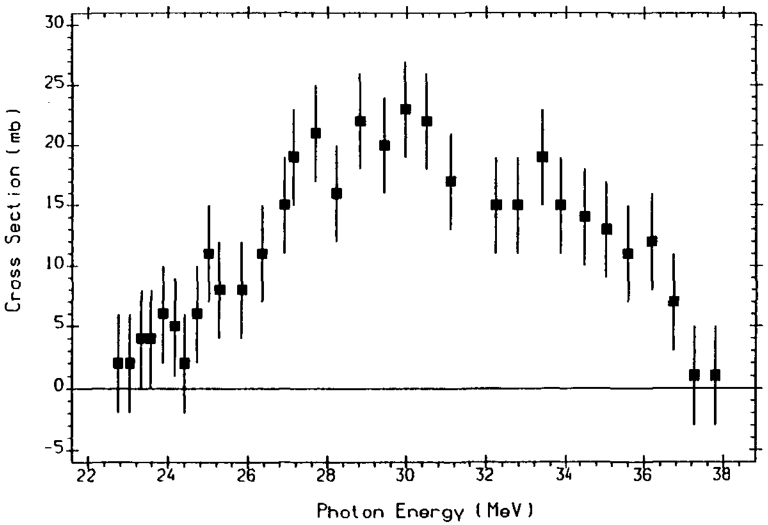
82-PB-208(G,N)82-PB-207
QMPH,TAGD Tagged bremsstrahlung.
L0059004 T,YOUNG,72 L.M.YOUNG



(82-PB-208(G,2N)82-PB-206)+(82-PB-208(G,2N+P)81-TL-205)
Positron annihilation
L0021008 J,NP/A,159,561,7012 A.VEYSSIERE+



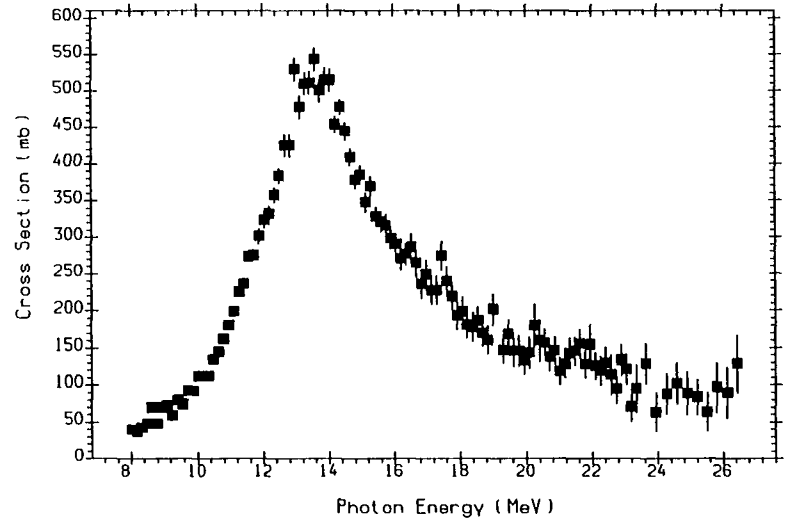
(82-PB-208(G,2N)82-PB-206)+(82-PB-208(G,2N+P)81-TL-205)
Positron annihilation
L0007010 J,PR/B,136,126,6410 R.R.HARVEY+



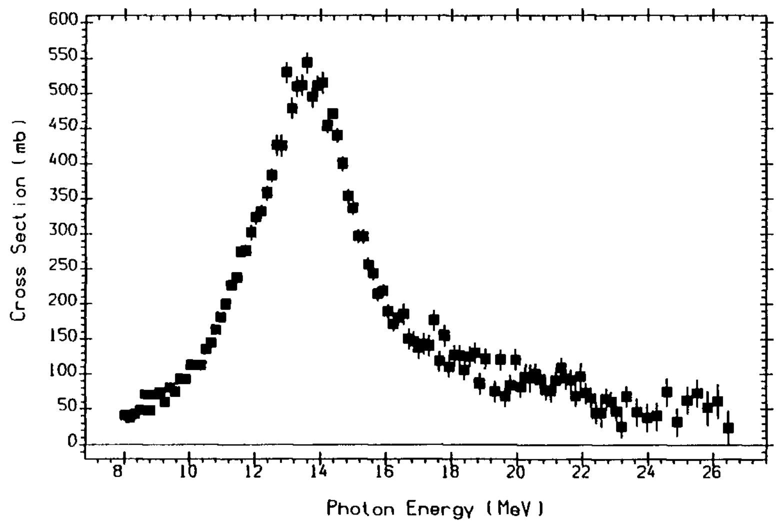
82-PB-208(G,3N)82-PB-205
Positron annihilation
L0021009 J,NP/A,159,561,7012 A.VEYSSIERE+

$^{209}_{83}Bi$

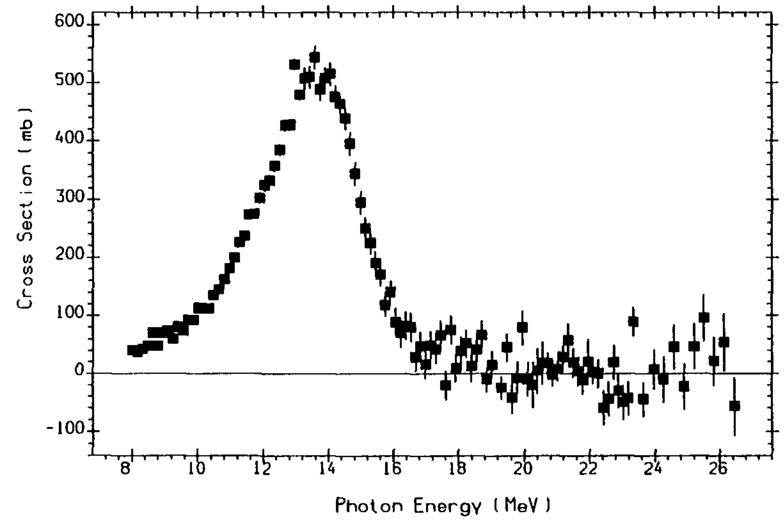
Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	γ,^{3}He	γ,α	γ,2n	γ,np	γ,2p
100.00	7.5	3.8	9.4	10.9	-3.1	14.3	11.2	11.8



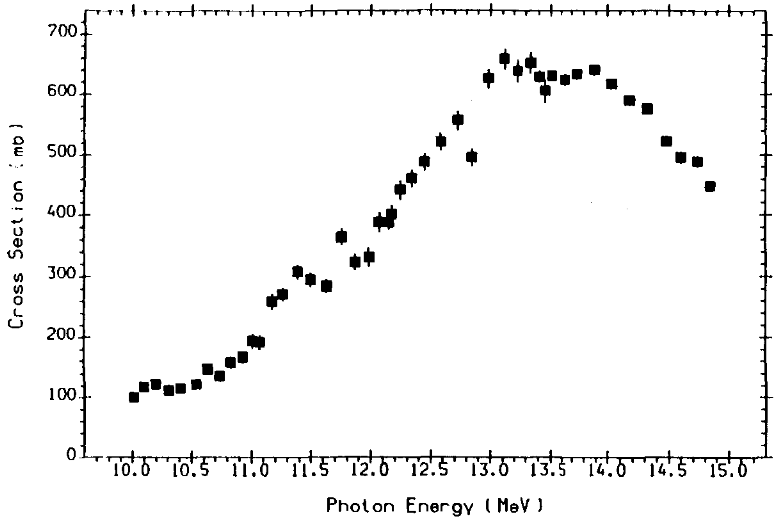
83-BI-209(G,X)0-NN-1
The sum: (G,N)+(G,N+P)+2(G,2N)+2(G,2N+P)+3(G,3N).
Positron annihilation
L0007011 J,PR/B,136,126,6410 R.R.HARVEY+



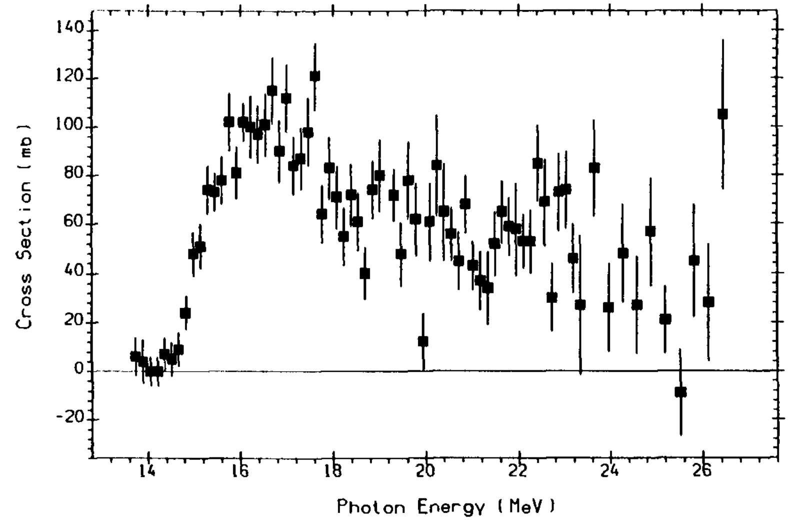
83-BI-209(G,X)0-NN-1 UNW
The sum: (G,N)+(G,N+P)+(G,2N)+(G,2N+P)+(G,3N).
Positron annihilation
L0007017 J,PR/B,136,126,6410 R.R.HARVEY+



(83-BI-209(G,N)83-BI-208)+(83-BI-209(G,N+P)82-PB-207)
Positron annihilation
L0007012 J,PR/B,136,126,6410 R.R.HARVEY+



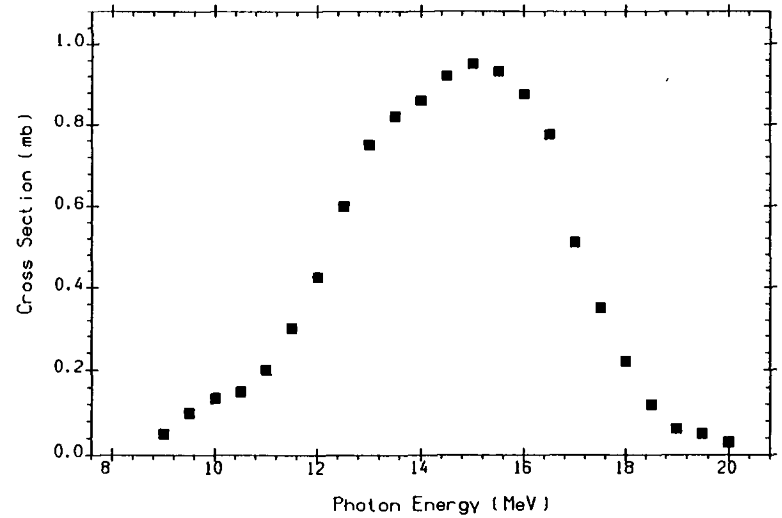
(83-BI-209(G,N)83-BI-208)+(83-BI-209(G,N+P)82-PB-207)
QMPH,TAGD Tagged bremsstrahlung.
L0059005 T,YOUNG,72 L.M.YOUNG



(83-BI-209(G,2N)83-BI-207)+(83-BI-209(G,2N+P)82-PB-206)
Positron annihilation
L0007013 J,PR/B,136,126,6410 R.R.HARVEY+

$^{226}_{88}Ra$

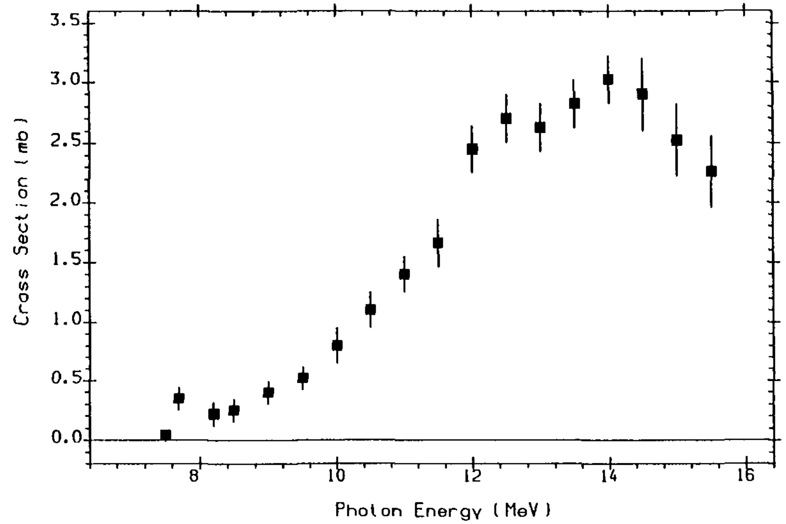
Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	$γ,^3He$	γ,α	γ,2n	γ,np	γ,2p
-	6.4	7.5	9.7	*	-4.9	11.4	13.4	11.3



88-RA-226(G,F)
BRST
M0195002 J,YF,13,934,71 E.A.ZHAGROV+

$^{227}_{89}$Ac

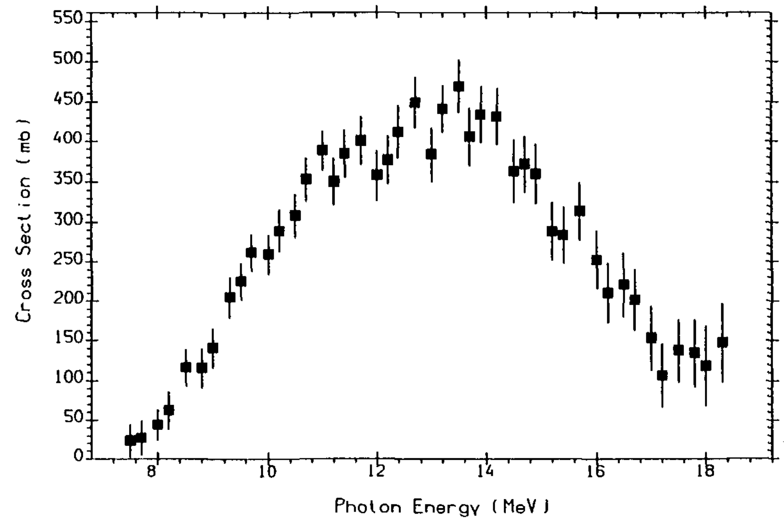
Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	γ,^{3}He	γ,α	γ,2n	γ,np	γ,2p
-	6.5	5.1	9.4	7.9	-5.0	11.9	11.5	12.6



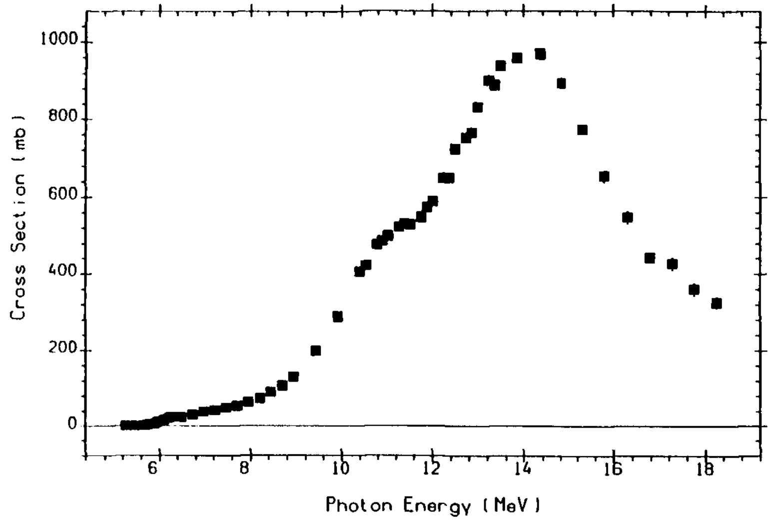
89-AC-227(G,F)
BRST
M0015002 J,YF,27,301,78 V.E.ZHUCHKO+

$^{232}_{90}$Th

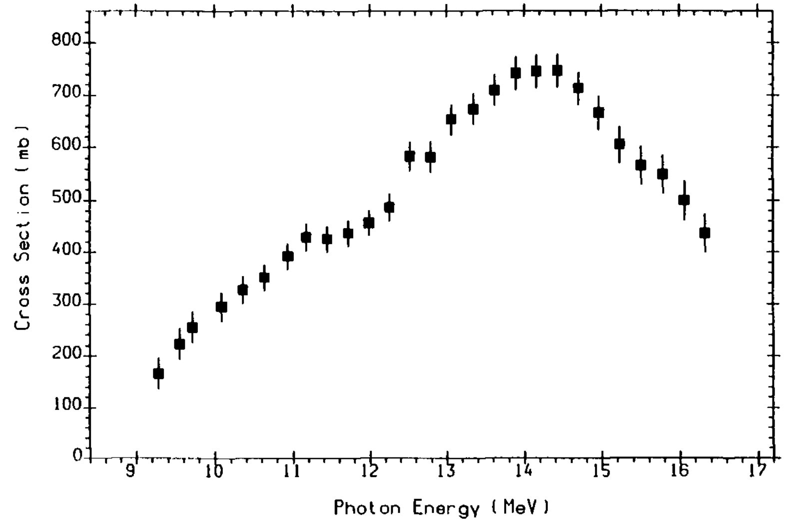
Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	γ,^{3}He	γ,α	γ,2n	γ,np	γ,2p
100.00	6.4	7.8	10.2	12.2	-4.1	11.6	13.7	13.7



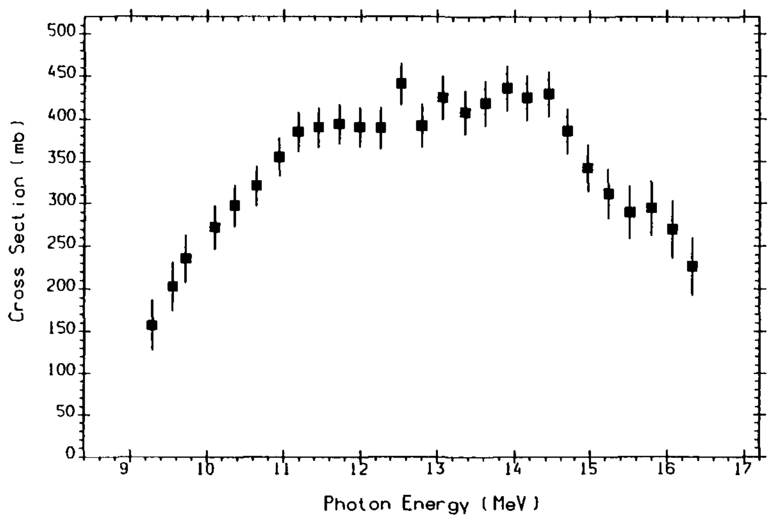
90-TH-232(G,ABS)
BRST
M0090002 J,NP/A,275,326,76 G.M.GUREVICH+



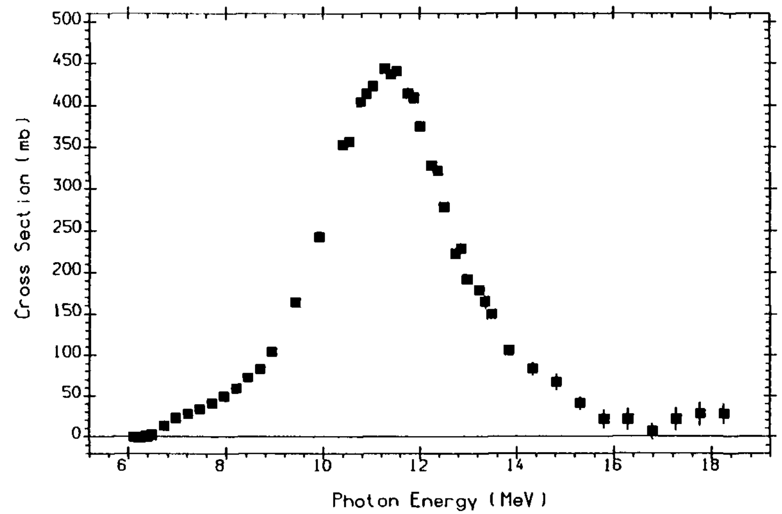
90-TH-232(G,X)0-NN-1
The sum: (G,N)+(G,N+P)+2(G,2N)+(G,F).
QMPH,ARAD Positron annihilation in flight.
L0050005 J,PR/C,21,1215,8004 J.T.CALDWELL+



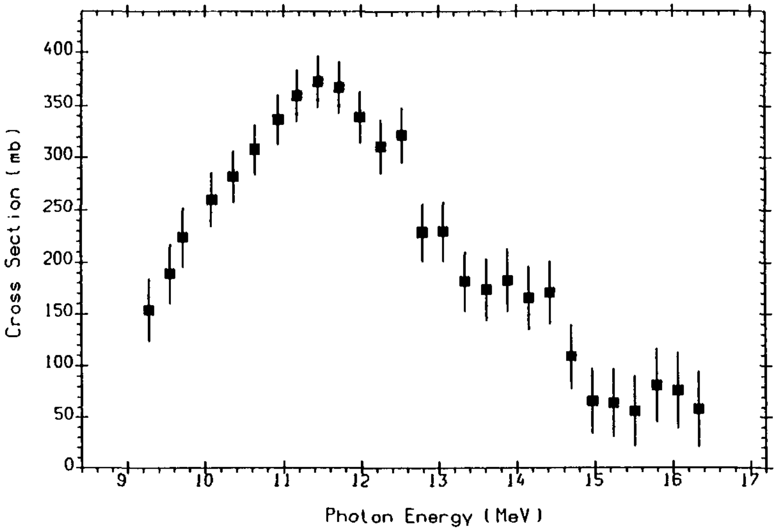
90-TH-232(G,X)0-NN-1
The sum: (G,N)+(G,N+P)+2(G,2N).
Positron annihilation
L0031002 J,NP/A,199,45,7301 A.VEYSSIERE+



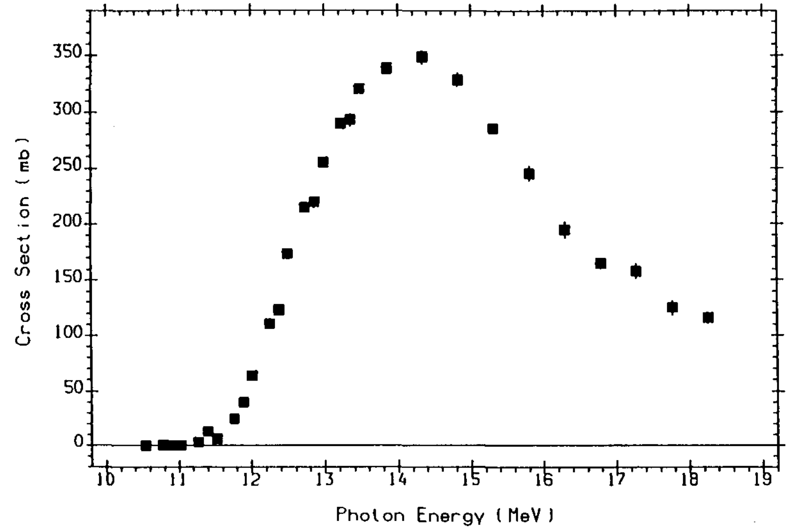
90-TH-232(G,X)0-NN-1 UNW
The sum: (G,N)+(G,N+P)+(G,2N).
Positron annihilation
L0031014 J,NP/A,199,45,7301 A.VEYSSIERE+



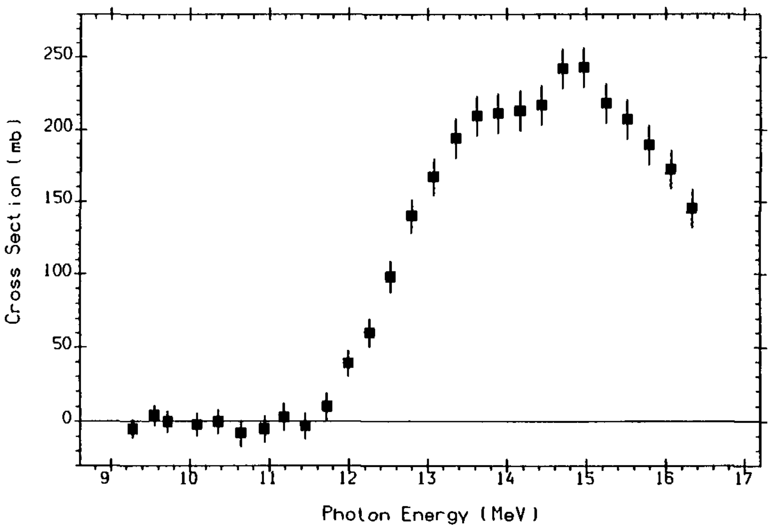
(90-TH-232(G,N)90-TH-231)+(90-TH-232(G,N+P)89-AC-230)
QMPH,ARAD Positron annihilation in flight.
L0050002 J,PR/C,21,1215,8004 J.T.CALDWELL+



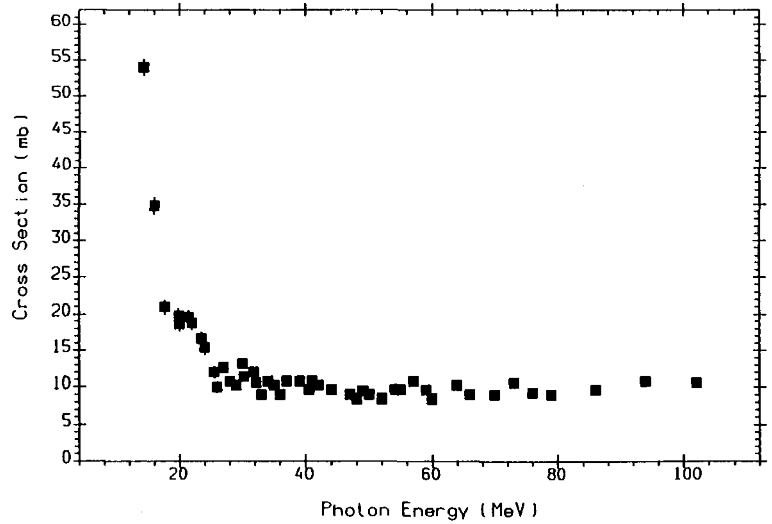
(90-TH-232(G,N)90-TH-231)+(90-TH-232(G,N+P)89-AC-230)
Positron annihilation
L0031003 J,NP/A,199,45,7301 A.VEYSSIERE+



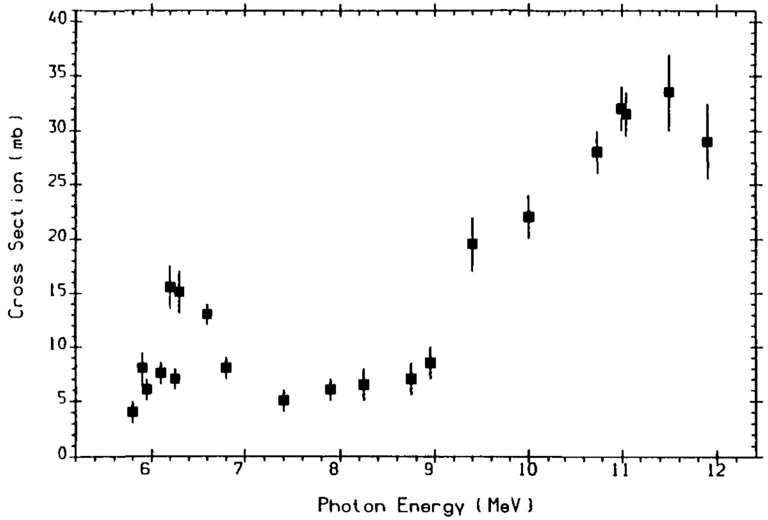
90-TH-232(G,2N)90-TH-230
QMPH,ARAD Positron annihilation in flight.
L0050003 J,PR/C,21,1215,8004 J.T.CALDWELL+



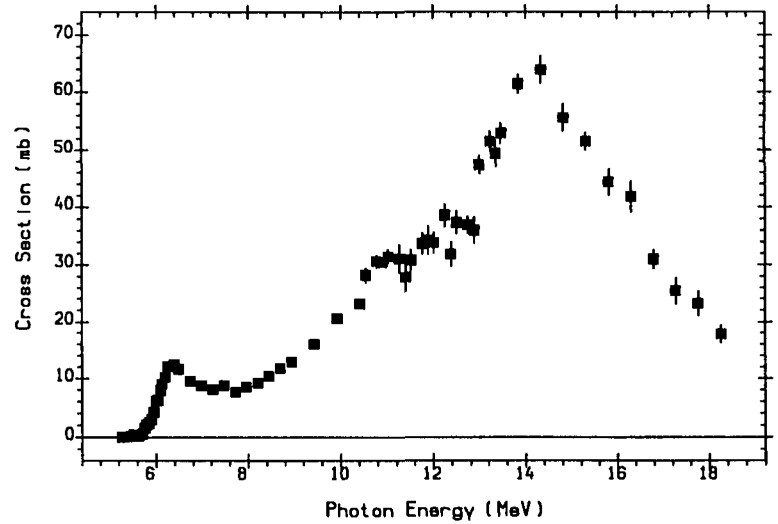
90-TH-232(G,2N)90-TH-230
Positron annihilation
L0031004 J,NP/A,199,45,7301 A.VEYSSIERE+



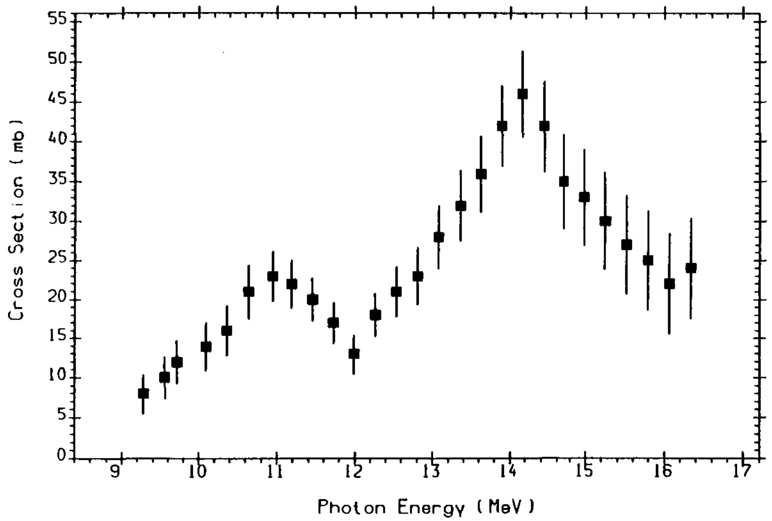
90-TH-232(G,F)
QMPH,TAGD
M0491002 J,NP/A,472,533,87 A.LEPRETRE+



90-TH-232(G,F)
MPH=(73-TA-181(P,G74-W-182))
M0449002 J,PR/C,34,1397,86 H.X.ZHANG+



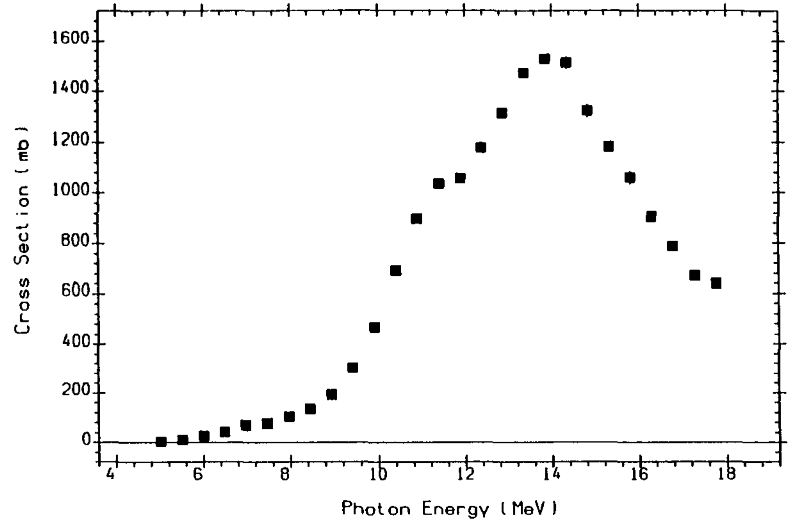
90-TH-232(G,F)
QMPH,ARAD Positron annihilation in flight.
L0050004 J,PR/C,21,1215,8004 J.T.CALDWELL+



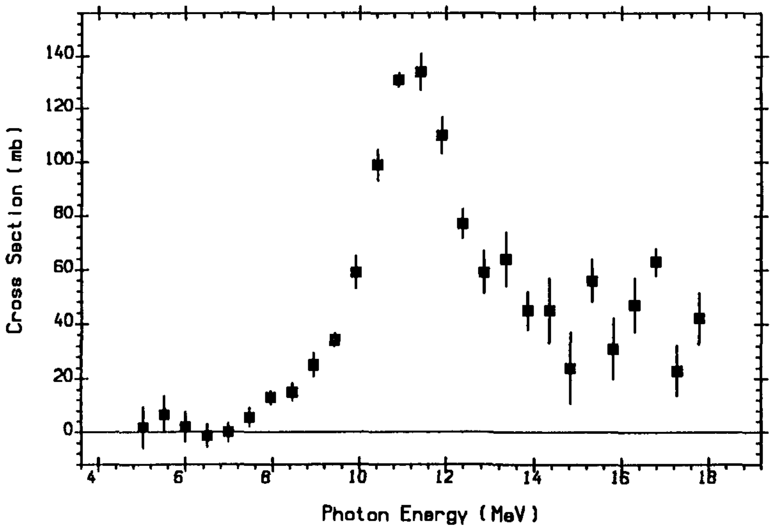
90-TH-232(G,F)
Positron annihilation
L0031005 J,NP/A,199,45,7301 A.VEYSSIERE+

$^{233}_{92}U$

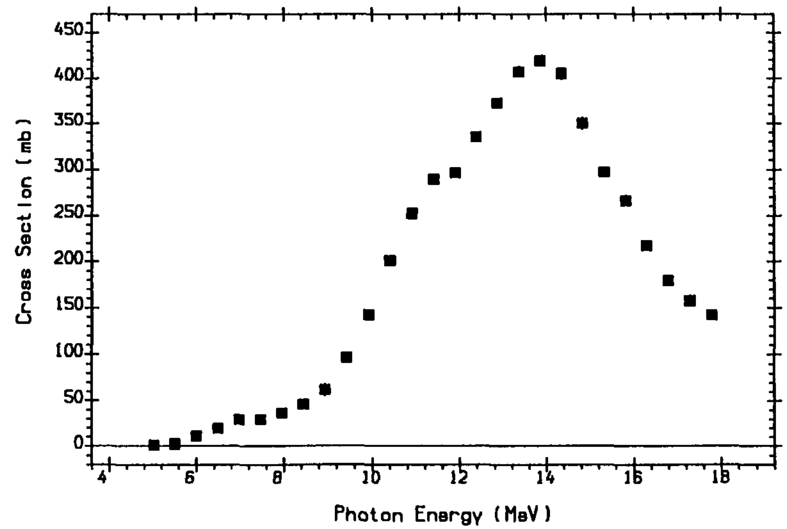
Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	γ,^{3}He	γ,α	γ,2n	γ,np	γ,2p
*	5.8	6.3	10.1	10.0	-4.9	13.0	12.7	11.5



92-U-233(G,X)0-NN-1
The sum: (G,N)+(G,N+P)+2(G,2N)+(G,F).
QMPH,ARAD Positron annihilation in flight.
L0058004 J,PR/C,34,2201,8612 B.L.BERMAN+



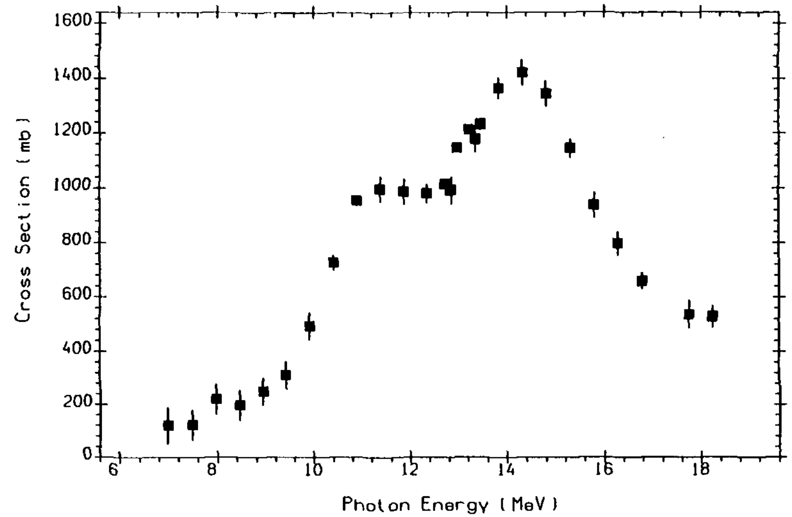
(92-U-233(G,N)92-U-232)+(92-U-233(G,N+P)91-PA-231)
QMPH,ARAD Positron annihilation in flight.
L0058003 J,PR/C,34,2201,8612 B.L.BERMAN+



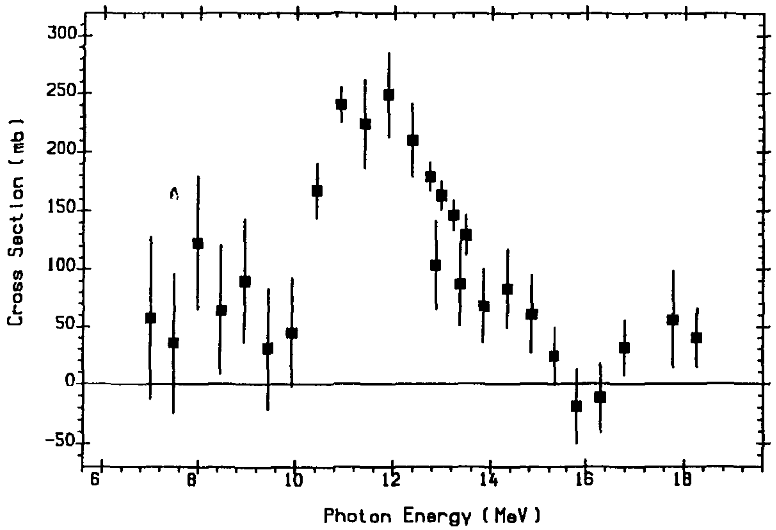
92-U-233(G,F)
QMPH,ARAD Positron annihilation in flight.
L0058002 J,PR/C,34,2201,8612 B.L.BERMAN+

$^{234}_{92}U$

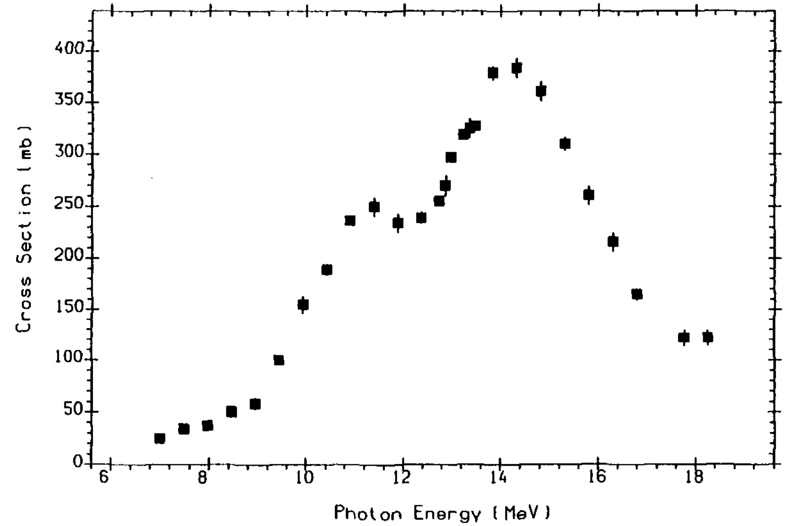
Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	γ,^{3}He	γ,α	γ,2n	γ,np	γ,2p
0.005	6.8	6.6	10.2	10.6	-4.9	12.6	13.1	11.9



92-U-234(G,X)0-NN-1
The sum: (G,N)+(G,N+P)+2(G,2N)+(G,F).
QMPH,ARAD Positron annihilation in flight.
L0058007 J,PR/C,34,2201,8612 B.L.BERMAN+



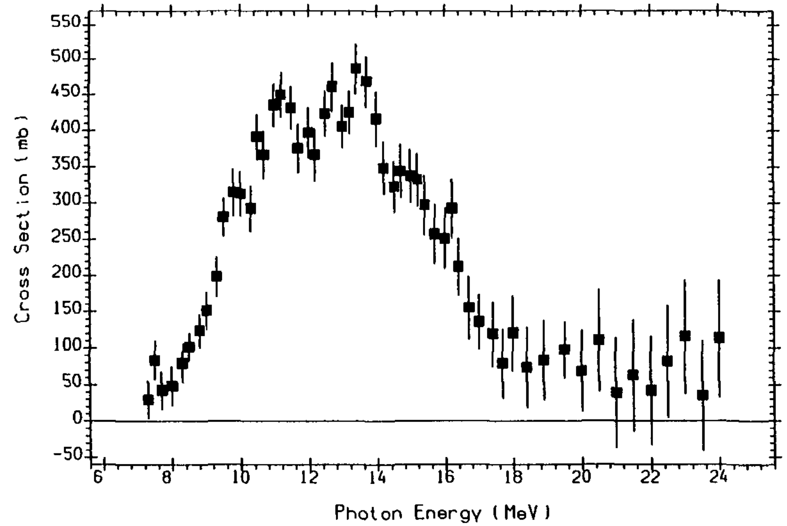
(92-U-234(G,N)92-U-233)+(92-U-234(G,N+P)91-PA-232)
QMPH,ARAD Positron annihilation in flight.
L0058006 J,PR/C,34,2201,8612 B.L.BERMAN+



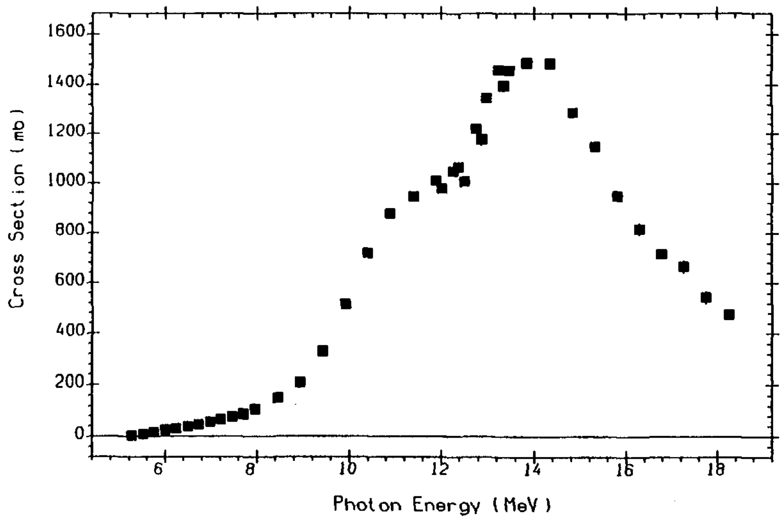
92-U-234(G,F)
QMPH,ARAD Positron annihilation in flight.
L0058005 J,PR/C,34,2201,8612 B.L.BERMAN+

$^{235}_{92}U$

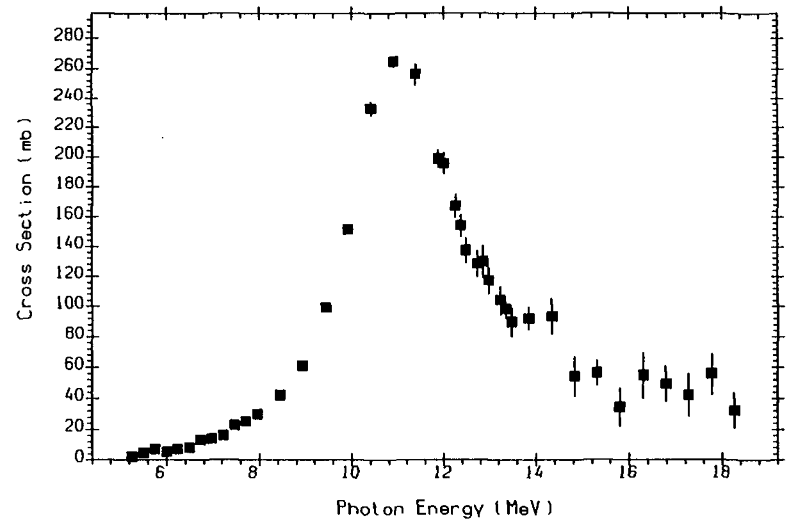
Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	γ,^{3}He	γ,α	γ,2n	γ,np	γ,2p
0.720	5.3	6.7	10.0	9.5	-4.7	12.1	11.9	12.4



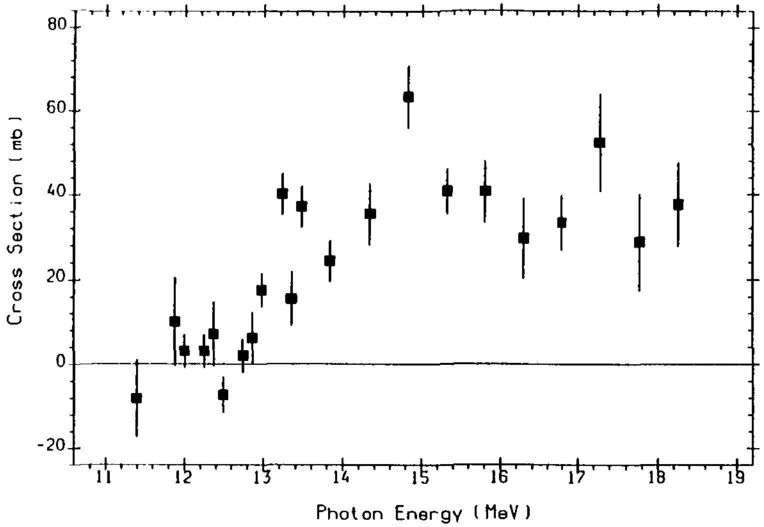
92-U-235(G,ABS)
BRST
M0090003 J,NP/A,275,326,76 G.M.GUREVICH+



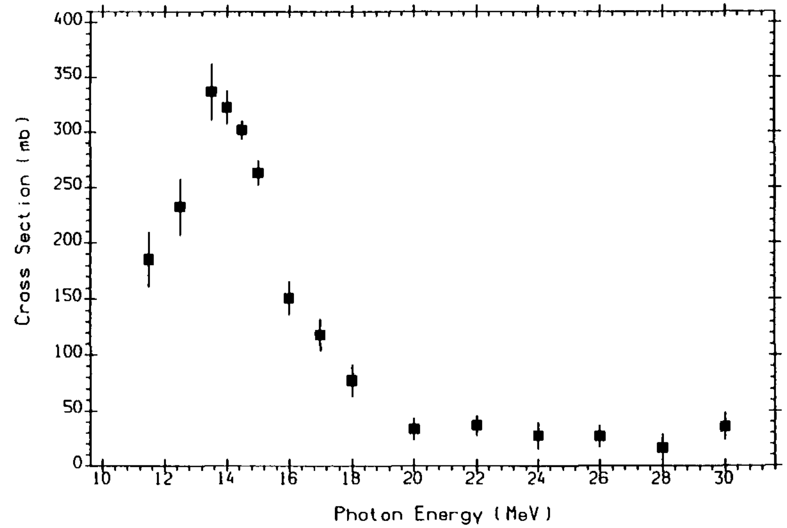
92-U-235(G,X)0-NN-1
The sum: (G,N)+(G,N+P)+2(G,2N)+(G,F).
QMPH,ARAD Positron annihilation in flight.
L0050009 J,PR/C,21,1215,8004 J.T.CALDWELL+



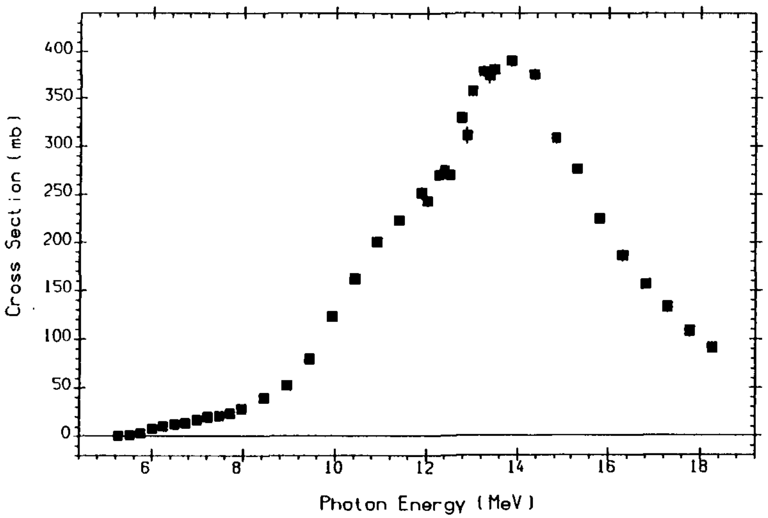
(92-U-235(G,N)92-U-234)+(92-U-235(G,N+P)91-PA-233)
QMPH,ARAD Positron annihilation in flight.
L0050006 J,PR/C,21,1215,8004 J.T.CALDWELL+



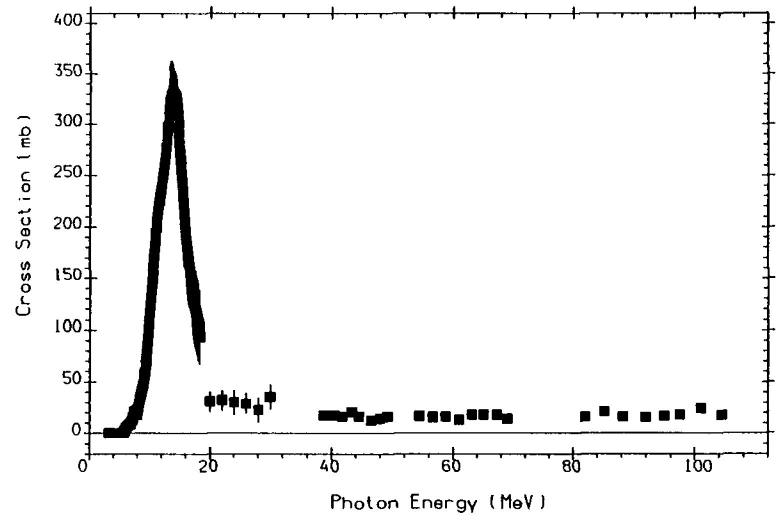
92-U-235(G,2N)92-U-233
QMPH,ARAD Positron annihilation in flight.
L0050007 J,PR/C,21,1215,8004 J.T.CALDWELL+



92-U-235(G,F)
QMPH QUASIMONOENERGETIC PHOTONS
M0503002 J,PR/C,29,2346,84 H.RIES+



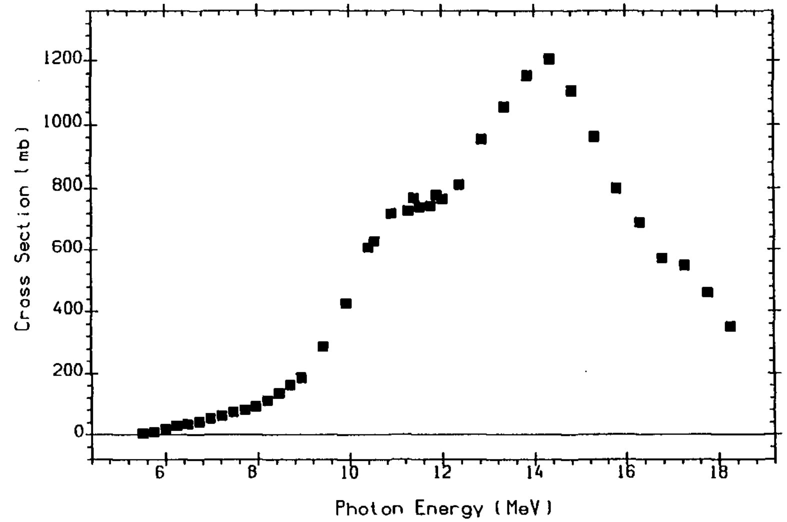
92-U-235(G,F)
QMPH,ARAD Positron annihilation in flight.
L0050008 J,PR/C,21,1215,8004 J.T.CALDWELL+



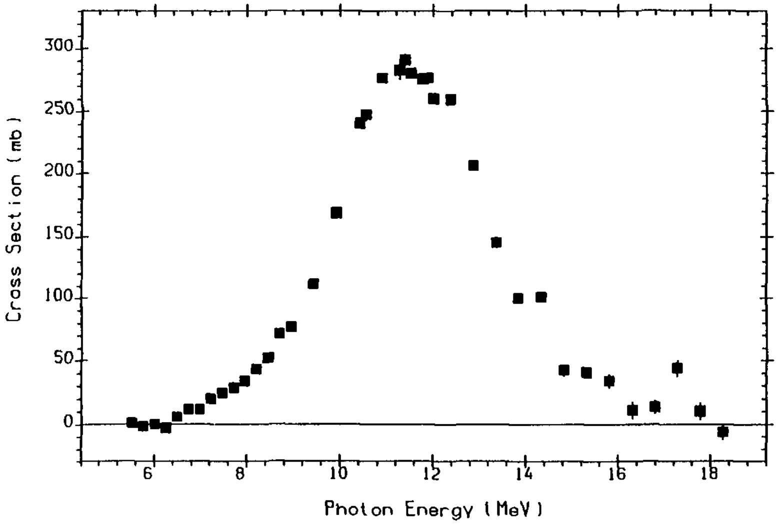
92-U-235(G,F)
BRST,QMPH,ARAD
M0300002 B,CDFE/FIS2,,87 V.V.VARLAMOV+

$^{236}_{92}U$

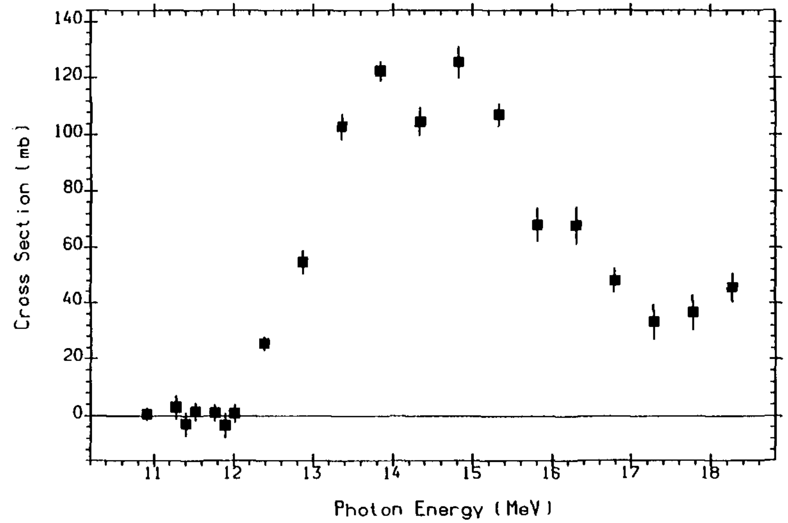
Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	γ,^{3}He	γ,α	γ,2n	γ,np	γ,2p
*	6.5	7.2	10.0	10.7	-4.6	11.8	12.6	12.7



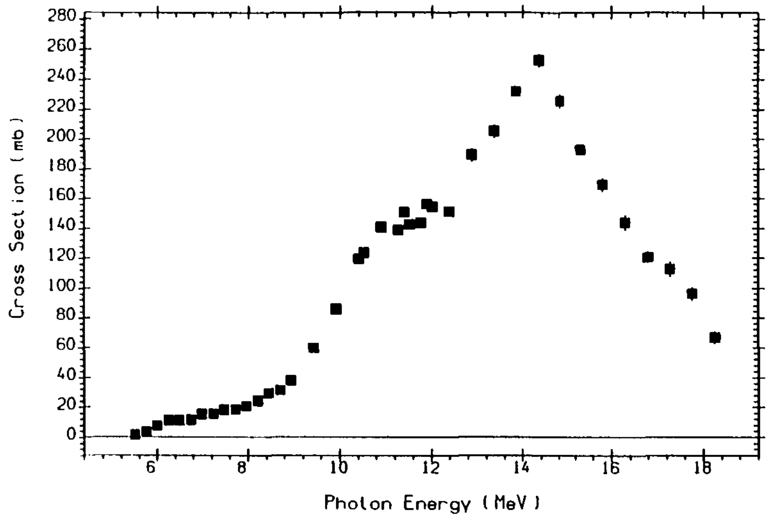
92-U-236(G,X)0-NN-1
The sum: (G,N)+(G,N+P)+2(G,2N)+(G,F).
QMPH,ARAD Positron annihilation in flight.
L0050013 J,PR/C,21,1215,8004 J.T.CALDWELL+



(92-U-236(G,N)92-U-235)+(92-U-236(G,N+P)91-PA-234)
QMPH,ARAD Positron annihilation in flight.
L0050010 J,PR/C,21,1215,8004 J.T.CALDWELL+



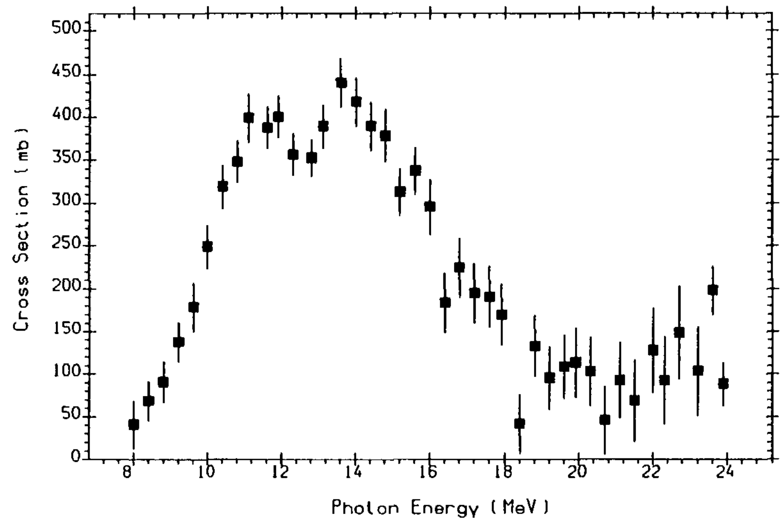
92-U-236(G,2N)92-U-234
QMPH,ARAD Positron annihilation in flight.
L0050011 J,PR/C,21,1215,8004 J.T.CALDWELL+



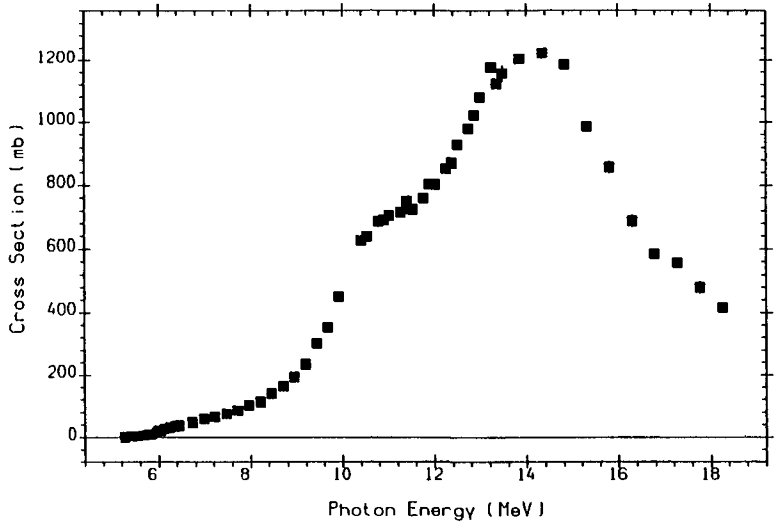
92-U-236(G,F)
QMPH,ARAD Positron annihilation in flight.
L0050012 J,PR/C,21,1215,8004 J.T.CALDWELL+

$^{238}_{92}U$

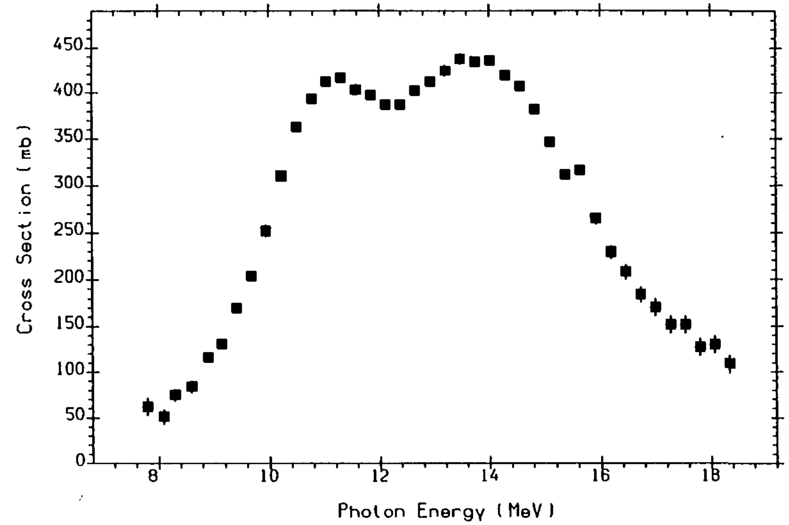
Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	γ,^{3}He	γ,α	γ,2n	γ,np	γ,2p
99.275	6.2	7.6	10.0	11.8	-4.3	11.3	13.6	13.6



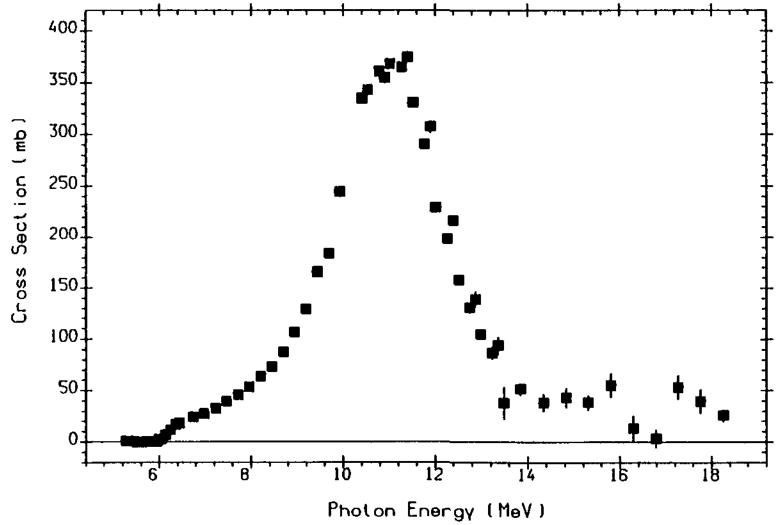
92-U-238(G,ABS)
BRST
M0090004 J,NP/A,275,326,76 G.M.GUREVICH+



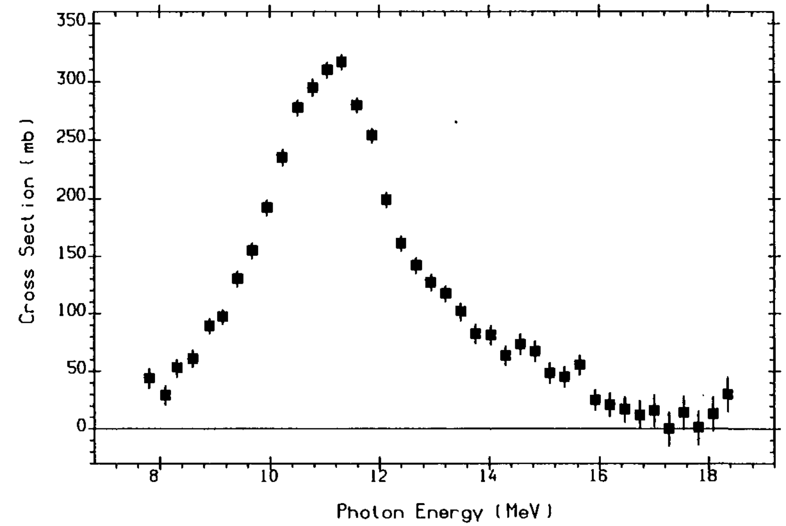
92-U-238(G,X)0-NN-1
The sum: (G,N)+(G,N+P)+2(G,2N)+(G,F).
QMPH,ARAD Positron annihilation in flight.
L0050017 J,PR/C,21,1215,8004 J.T.CALDWELL+



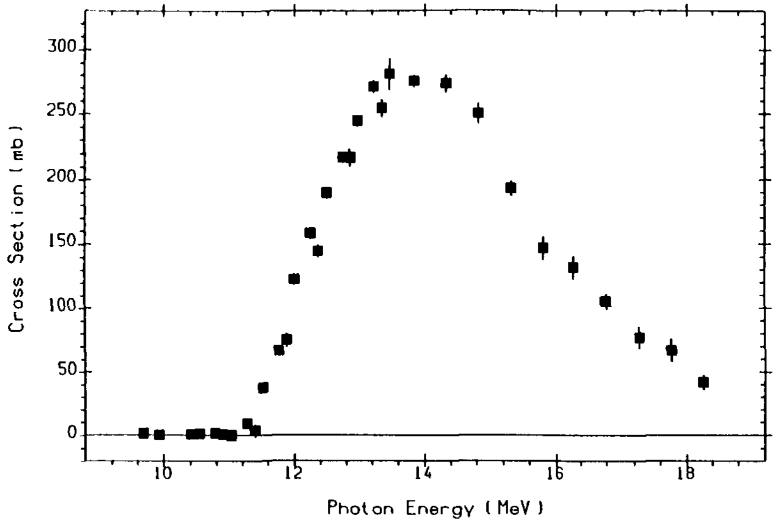
92-U-238(G,X)0-NN-1 UNW
The sum: (G,N)+(G,N+P)+(G,2N).
Positron annihilation
L0031015 J,NP/A,199,45,7301 A.VEYSSIERE+



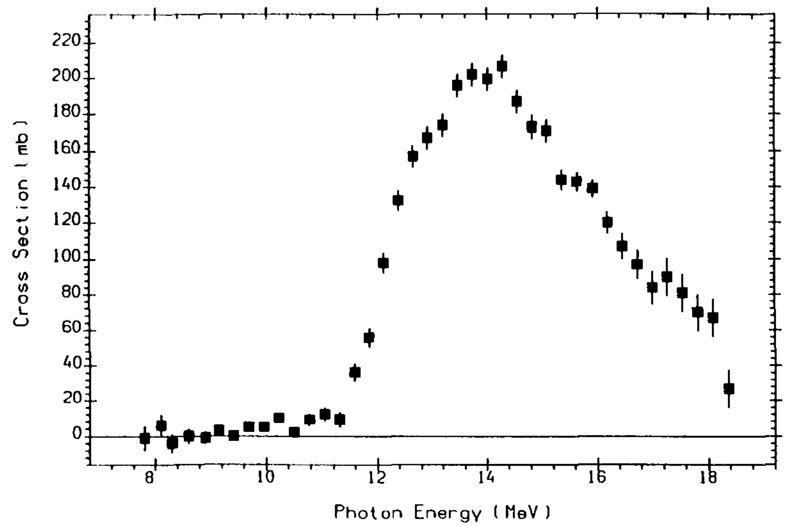
(92-U-238(G,N)92-U-237)+(92-U-238(G,N+P)91-PA-236)
QMPH,ARAD Positron annihilation in flight.
L0050014 J,PR/C,21,1215,8004 J.T.CALDWELL+



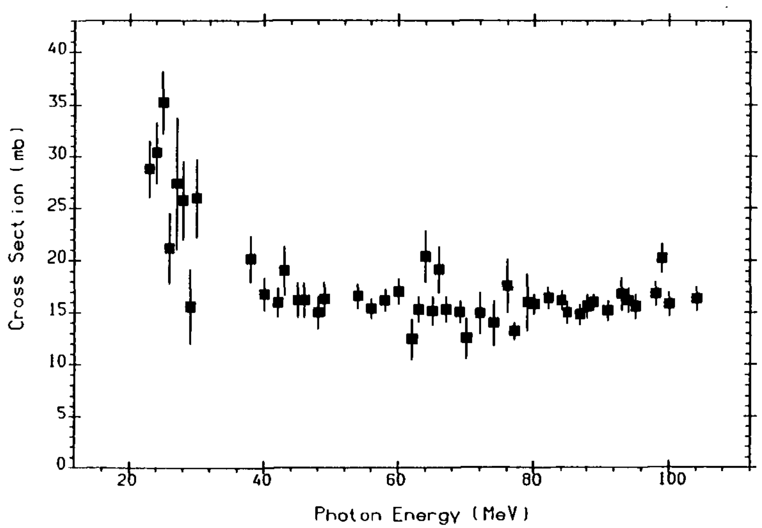
(92-U-238(G,N)92-U-237)+(92-U-238(G,N+P)91-PA-236)
Positron annihilation
L0031011 J,NP/A,199,45,7301 A.VEYSSIERE+



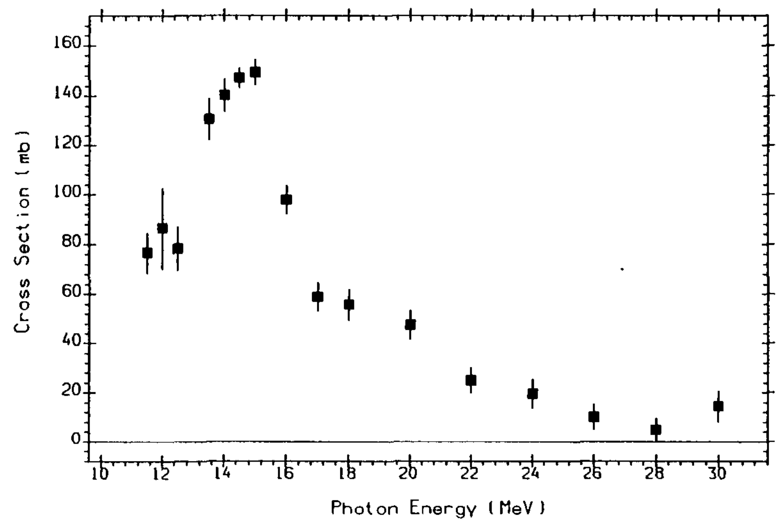
92-U-238(G,2N)92-U-236
QMPH,ARAD Positron annihilation in flight.
L0050015 J,PR/C,21,1215,8004 J.T.CALDWELL+



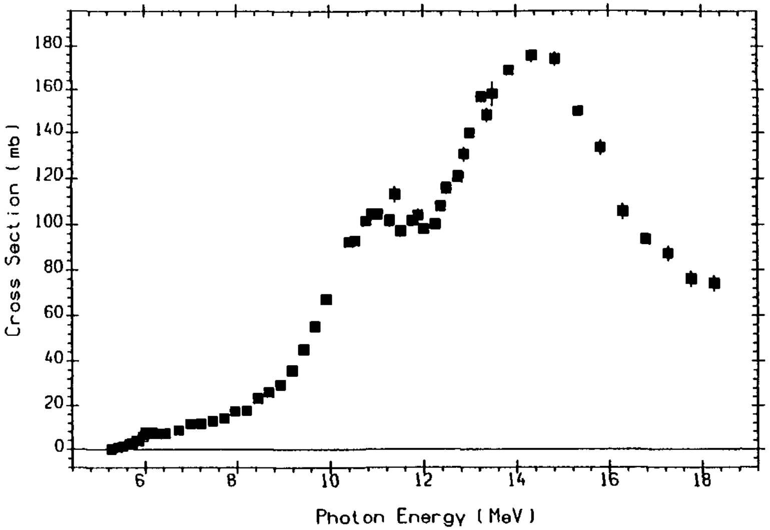
92-U-238(G,2N)92-U-236
Positron annihilation
L0031012 J,NP/A,199,45,7301 A.VEYSSIERE+



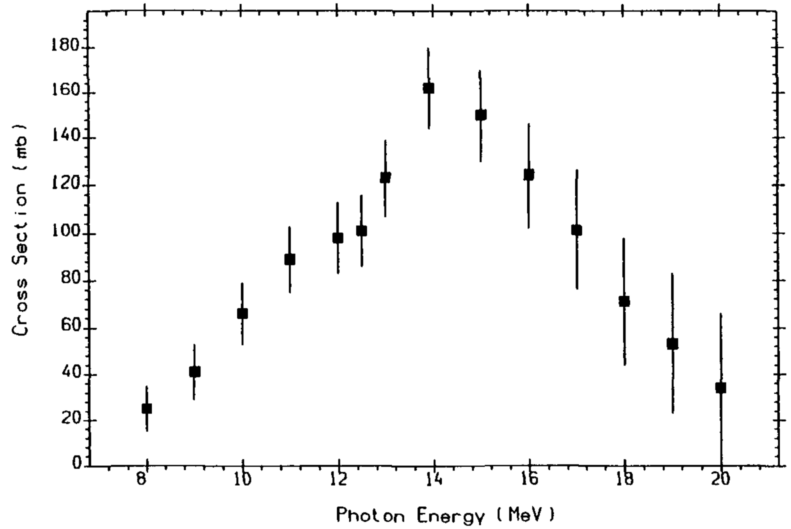
92-U-238(G,F)
QMPH,TAGD
M0491004 J,NP/A,472,533,87 A.LEPRETRE+



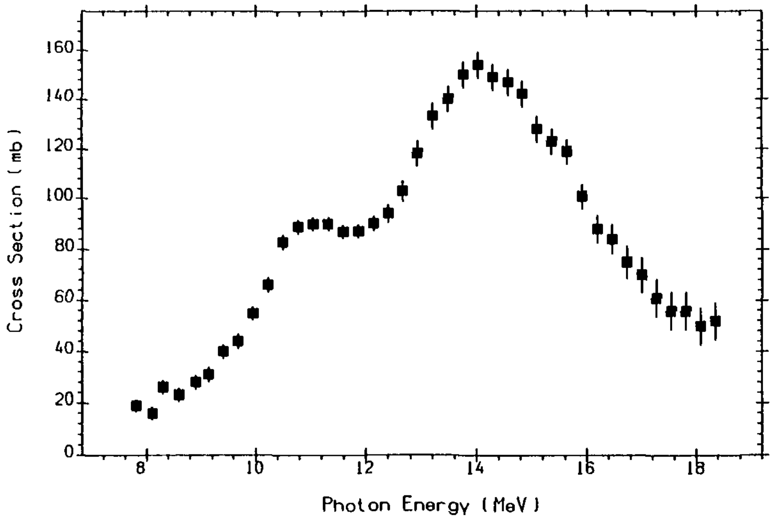
92-U-238(G,F)
QMPH QUASIMONOENERGETIC PHOTONS
M0503003 J,PR/C,29,2346,84 H.RIES+



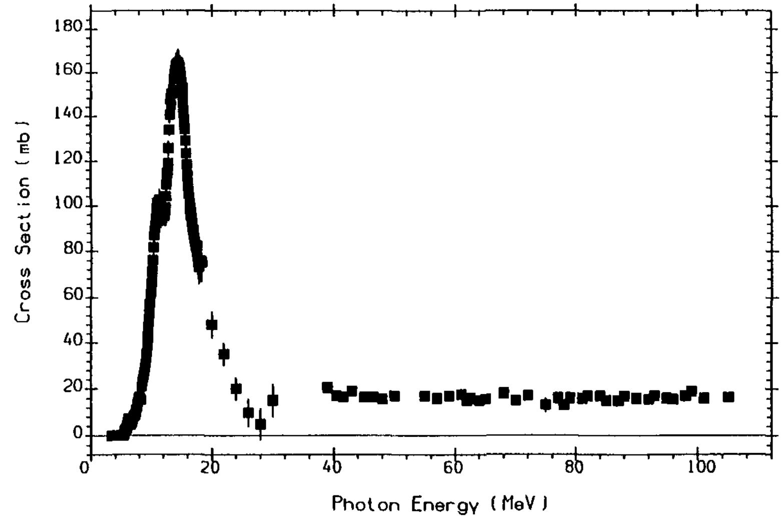
92-U-238(G,F)
QMPH,ARAD ***Positron annihilation in flight.***
L0050016 J,PR/C,21,1215,8004 J.T.CALDWELL+



92-U-238(G,F)
BRST
M0017007 J,YF,30,910,79 I.S.KORETSKAYA+



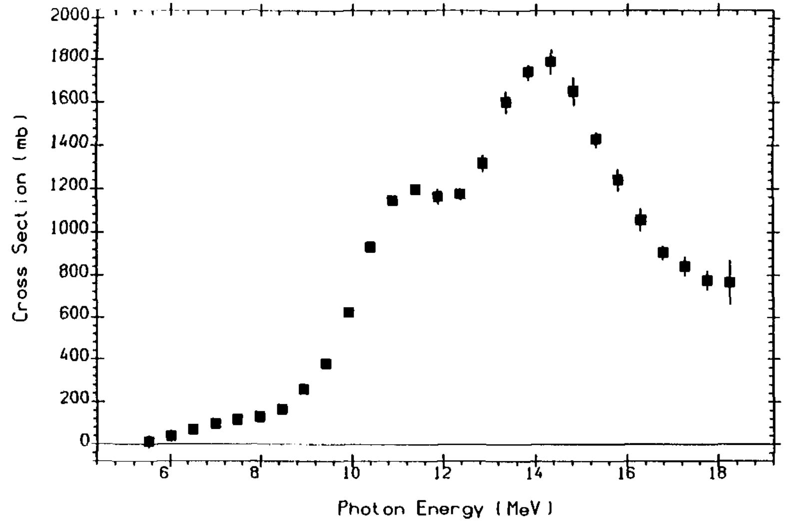
92-U-238(G,F)
Positron annihilation
L0031013 J,NP/A,199,45,7301 A.VEYSSIERE+



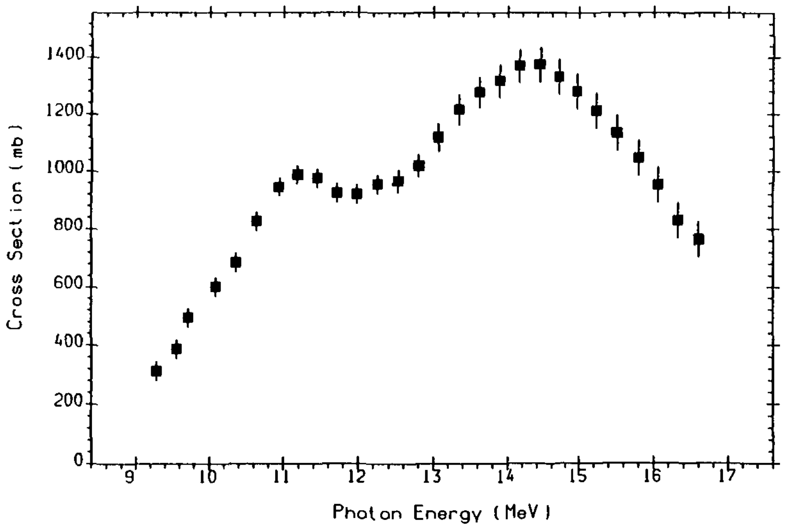
92-U-238(G,F)
BRST,QMPH,ARAD
M0300003 B,CDFE/FIS2,,87 V.V.VARLAMOV+

$^{237}_{93}Np$

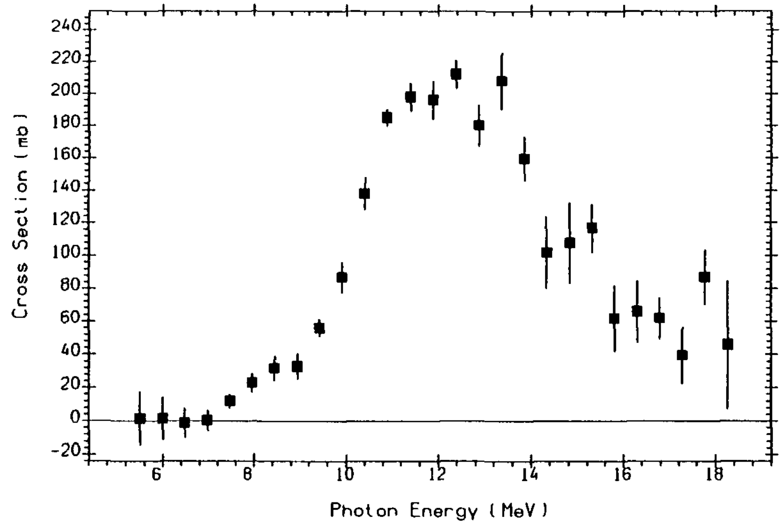
Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	γ,^{3}He	γ,α	γ,2n	γ,np	γ,2p
-	6.6	4.9	8.2	10.4	-5.0	12.3	11.4	12.0



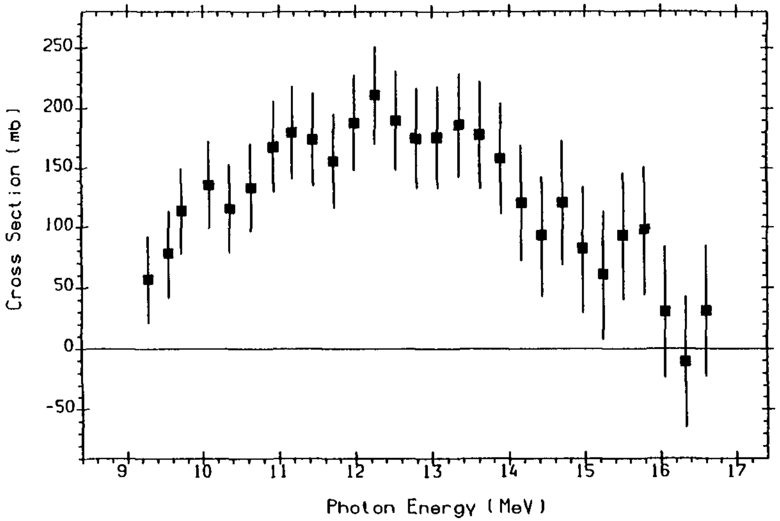
93-NP-237(G,X)0-NN-1
The sum: (G,N)+(G,N+P)+2(G,2N)+(G,2N+P)+(G,F).
QMPH,ARAD Positron annihilation in flight.
L0058011 J,PR/C,34,2201,8612 B.L.BERMAN+



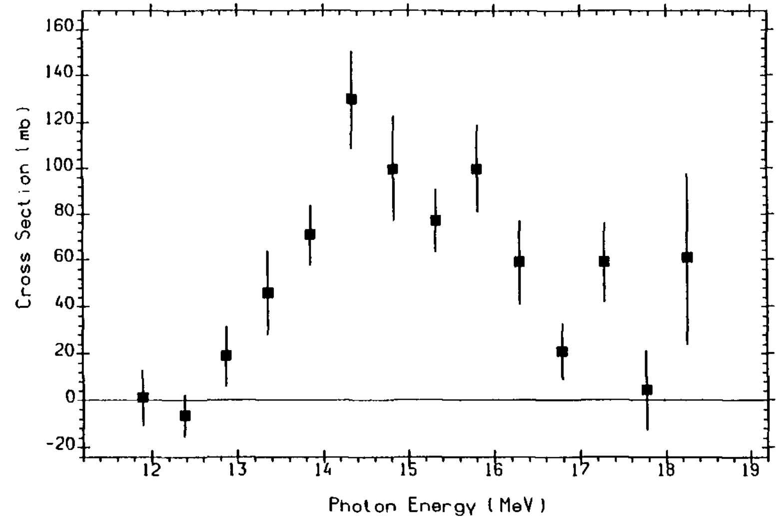
93-NP-237(G,X)0-NN-1
The sum: (G,N)+(G,N+P)+2(G,2N).
Positron annihilation
L0031006 J,NP/A,199,45,7301 A.VEYSSIERE+



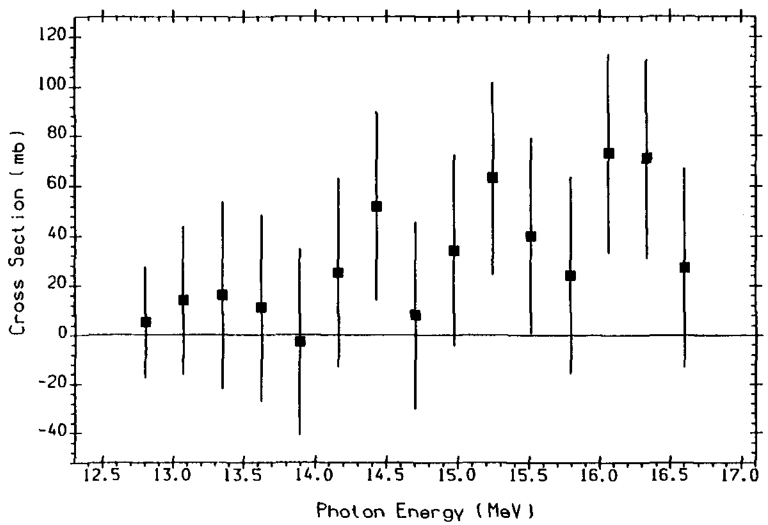
(93-NP-237(G,N)93-NP-236)+(93-NP-237(G,N+P)92-U-235)
QMPH,ARAD Positron annihilation in flight.
L0058008 J,PR/C,34,2201,8612 B.L.BERMAN+



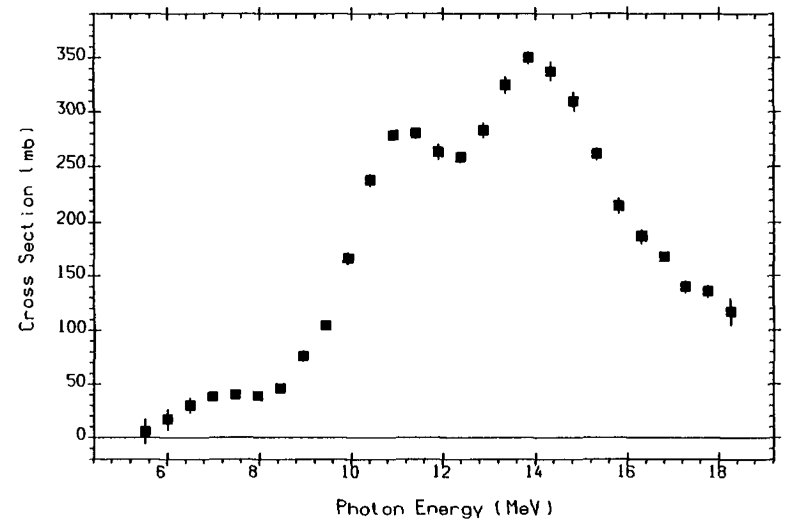
(93-NP-237(G,N)93-NP-236)+(93-NP-237(G,N+P)92-U-235)
Positron annihilation
L0031007 J,NP/A,199,45,7301 A.VEYSSIERE+



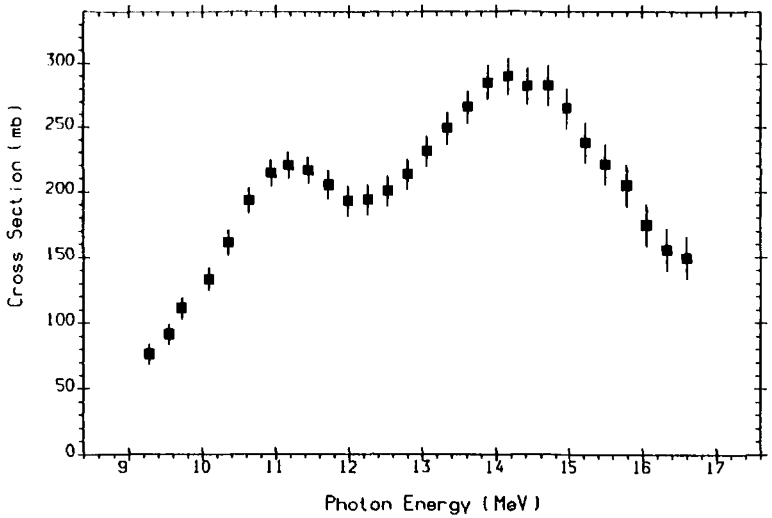
(93-NP-237(G,2N)93-NP-235)+(93-NP-237(G,2N+P)92-U-234)
QMPH,ARAD Positron annihilation in flight.
L0058009 J,PR/C,34,2201,8612 B.L.BERMAN+



93-NP-237(G,2N)93-NP-235
Positron annihilation
L0031008 J,NP/A,199,45,7301 A.VEYSSIERE+



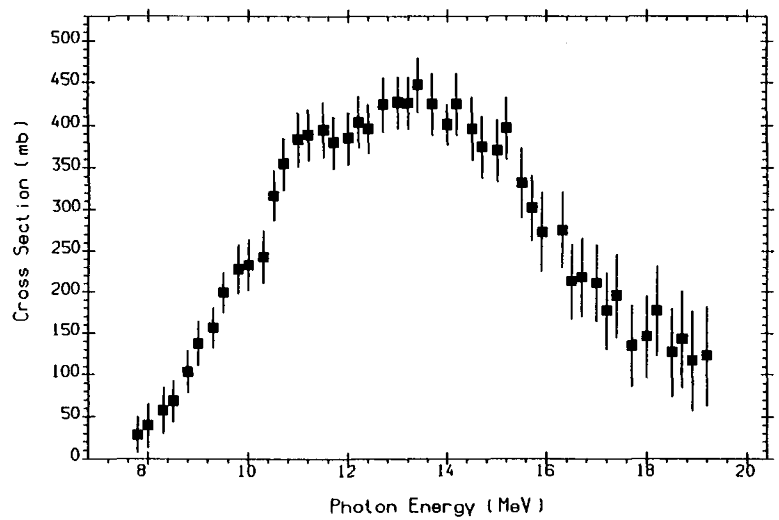
93-NP-237(G,F)
QMPH,ARAD Positron annihilation in flight.
L0058010 J,PR/C,34,2201,8612 B.L.BERMAN+



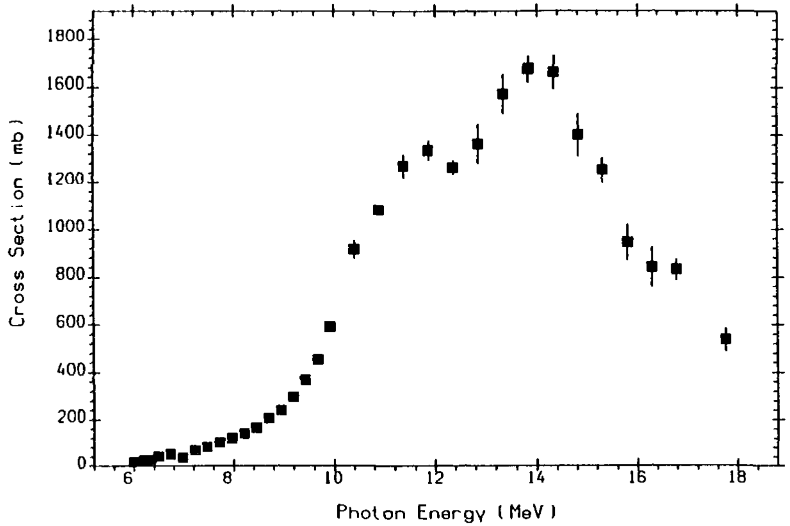
93-NP-237(G,F)
Positron annihilation
L0031009 J,NP/A,199,45,7301 A.VEYSSIERE+

$^{239}_{94}$Pu

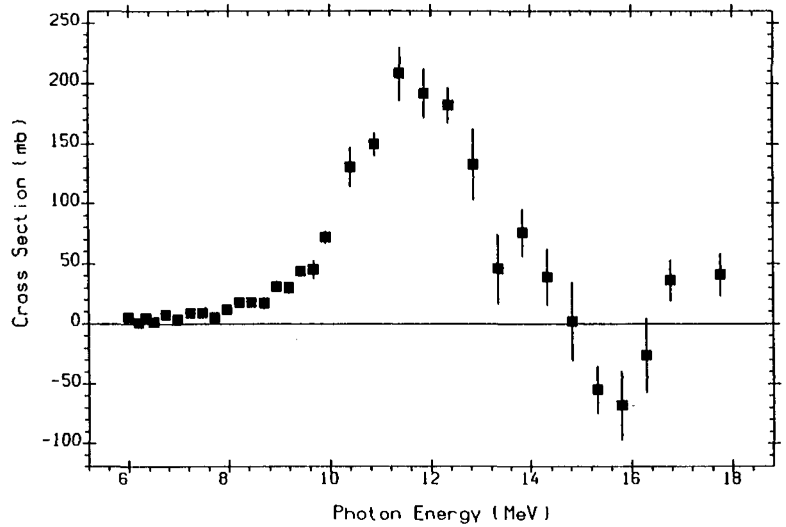
Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	γ,^{3}He	γ,α	γ,2n	γ,np	γ,2p
-	5.7	6.2	9.8	8.8	-5.2	12.7	11.6	10.1



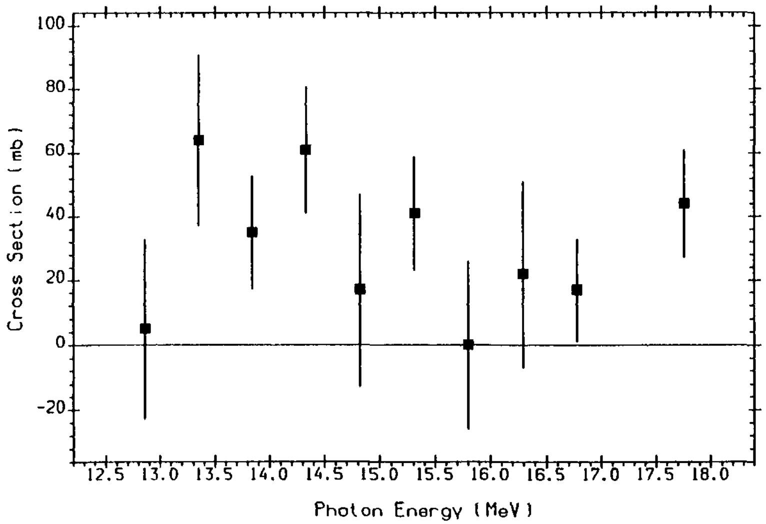
94-PU-239(G,ABS)
BRST
M0090005 J,NP/A,275,326,76 G.M.GUREVICH+



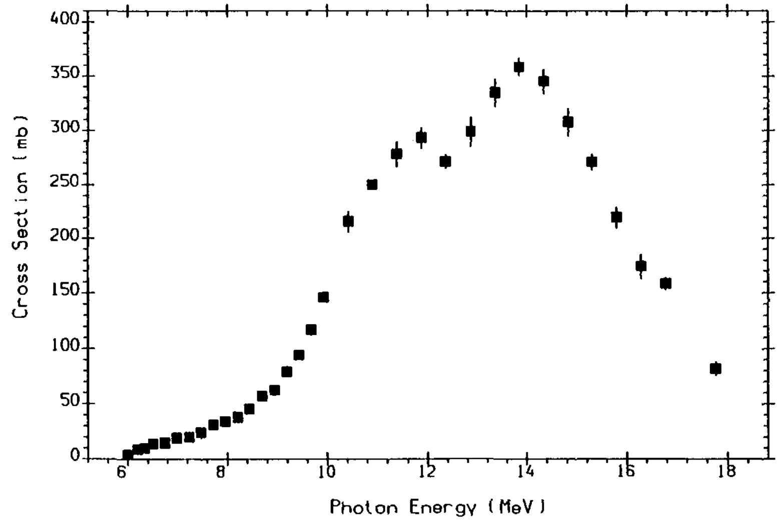
94-PU-239(G,X)0-NN-1 UNW
QMPH,ARAD Positron annihilation in flight.
L0058015 J,PR/C,34,2201,8612 B.L.BERMAN+



(94-PU-239(G,N)94-PU-238)+(94-PU-239(G,N+P)93-NP-237)
QMPH,ARAD Positron annihilation in flight.
L0058012 J,PR/C,34,2201,8612 B.L.BERMAN+



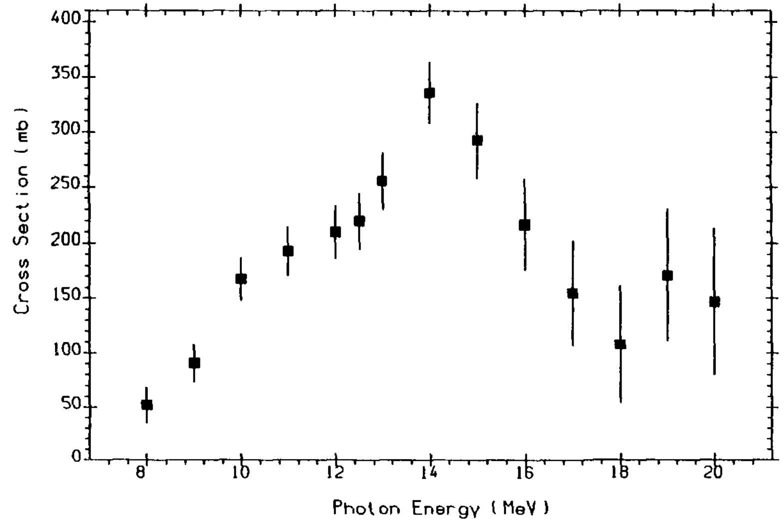
94-PU-239(G,2N)94-PU-237
QMPH,ARAD Positron annihilation in flight.
L0058013 J,PR/C,34,2201,8612 B.L.BERMAN+



94-PU-239(G,F)
QMPH,ARAD Positron annihilation in flight.
L0058014 J,PR/C,34,2201,8612 B.L.BERMAN+

$^{241}_{95}Am$

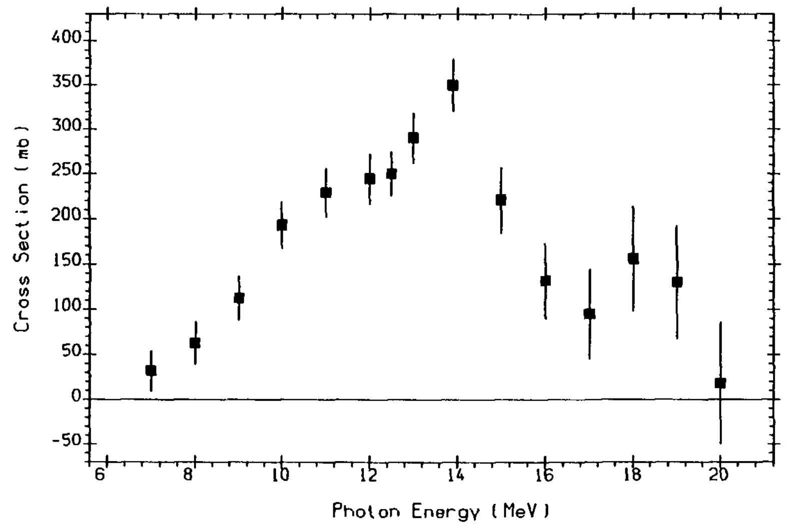
Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	γ,^{3}He	γ,α	γ,2n	γ,np	γ,2p
-	6.6	4.5	8.2	9.5	-5.6	12.6	11.0	11.0



95-AM-241(G,F)
BRST
M0017005 J,YF,30,910,79 I.S.KORETSKAYA+

$^{243}_{95}Am$

Abundance (%)	Separation Energies (MeV)							
	γ,n	γ,p	γ,t	γ,^{3}He	γ,α	γ,2n	γ,np	γ,2p
-	6.4	4.5	8.1	9.3	-5.4	11.9	11.1	11.7



95-AM-243(G,F)
BRST
M0017006 J,YF,30,910,79 I.S.KORETSKAYA+

Index of target nuclei

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