BNL-ND-51771
FIRST EDITION
SUPPLEMENT ONE

120 cap

JT

①

7-19-85

2R-1141-X

I-21930

INTEGRAL CHARGED PARTICLE NUCLEAR DATA BIBLIOGRAPHY

LITERATURE SCANNED FROM APRIL 1, 1984
THROUGH MARCH 31, 1985

N.E. Helden
S. Ramavataram
C.L. Dunford

April 1985

INFORMATION ANALYSIS CENTER REPORT

BROOKHAVEN NATIONAL LABORATORY
ASSOCIATED UNIVERSITIES, INC.
UPTON, LONG ISLAND, NEW YORK 11973

CONTENTS OF THIS SUPPLEMENT IS LISTED

BNL-NCS--51771-Ed.1-Suppl.1

DE85 014388

INTEGRAL CHARGED PARTICLE NUCLEAR DATA BIBLIOGRAPHY

Literature scanned from April 1, 1984, through March 31, 1985

N.E. HOLDEN
S. RAMAVATARAM
C.L. DUNFORD

DISCLAIMER

This report was prepared as an account of work sponsored by an agency of the United States Government. Neither the United States Government nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights. Reference herein to any specific commercial product, process, or service by trade name, trademark, manufacturer, or otherwise does not necessarily constitute or imply its endorsement, recommendation, or favoring by the United States Government or any agency thereof. The views and opinions of authors expressed herein do not necessarily state or reflect those of the United States Government or any agency thereof.

April 1985

(in support of the International Nuclear Reaction Data Centers Network)

BROOKHAVEN NATIONAL LABORATORY
ASSOCIATED UNIVERSITIES, INC.

UNDER CONTRACT NO. DE-AC02-76CH00016 WITH THE

UNITED STATES DEPARTMENT OF ENERGY

MASTER

TABLE OF CONTENTS

INTRODUCTION

I.	Introduction	iv
II.	Scope	v
III.	Dates of Coverage	v
IV.	Secondary Sources of Information	vi
V.	Organization	vi
VI.	Compilations and Evaluations	vii
VII.	Methods of Radioisotope Production	viii
VIII.	Retrieval Capabilities	viii
IX.	Acknowledgements	viii

REFERENCES	1
------------	---

TARGET INDEX	16
--------------	----

RESIDUAL INDEX	33
----------------	----

LIST OF THE ELEMENTS	Back Cover
----------------------	------------

Table 2

Other Nuclear Data Bibliographic Sources

1. W.B. Ewbank, *et al.* Nuclear Structure References. 1969-1974. Nuclear Data Sheets 16, Supplement. Academic Press, NY (1975).
S. Ramavatarani, *et al.* "Recent References". 3 issues/year with the last issue cumulative for the year in Nuclear Data Sheets. Academic Press, NY.
2. INIS Atomindex. International Atomic Energy Agency, Vienna.
3. F.K. McGowan and W.T. Milner. *Reaction List for Charged-Particle-Induced Reactions*. Atomic Data Nuclear Data Reprints 2, Academic Press, NY (1974).
Nuclear Data Tables A11, 1. Academic Press (1972).
Atomic Data Nuclear Data Tables 12, 499. Academic Press, NY (1973).
Atomic Data Nuclear Data Tables 15, 189. Academic Press, NY (1975).
Atomic Data Nuclear Data Tables 18, 1. Academic Press, NY (1976).
4. N.E. Holden and T.W. Burrows. *The Bibliography of Integral Charged Particle Nuclear Data*. BNL-NCS-50640 (1982). Fourth Edition, Supplement 2.

T.W. Burrows and G. Wyant. *The Bibliography of Integral Charged Particle Nuclear Data*. BNL-NCS-50640 (1981). Fourth Edition, Supplement 1.

T.W. Burrows and P. Dempsey. *The Bibliography of Integral Charged Particle Nuclear Data*. BNL-NCS-50640 (1980). Fourth Edition, (Archival Edition).

II. SCOPE

For the purposes of this bibliography, integral charged particle data may be defined as data which have been integrated over the product angle, and energy or data which may be easily converted to such a representation. General criteria for inclusion of data in this bibliography are the following:

1. Excitation functions, thick target, or product yields[§] leading to the formation of a ground or metastable state. This includes such quantities as fission yields, isomeric ratios, and excitation functions for specific particle groups where such data readily yield information on the excitation functions or thick target yields for the ground or metastable state.
2. The atomic mass and charge of the incident particle must be greater than or equal to 1.
3. The atomic mass of the target must be greater than or equal to 1.
4. The atomic masses of the outgoing and residual nuclei must be greater than or equal to 1 with the exception of processes which do not lead to a definite residual nucleus (e.g. total cross sections) and of gamma-ray production cross sections.
5. The incident particle energy must have a minimum of less than 100 MeV in the laboratory system.

EXCEPTIONS: 1. If there are data in an article satisfying the above criteria and there are additional data satisfying all the criteria except minimum energy, these additional data are also cited.

III. DATES OF COVERAGE

The coverage for this bibliography includes all journals, reports, and other publications scanned between April 1, 1984, and March 31, 1985.

Table 3 lists the coverage of 27 "core" journals to give an indication of how current this bibliography is in journal coverage. A complete list of the coverage may be obtained from the authors.

[§]Thick target yields are defined as measurements on targets whose thickness is sufficient to degrade the incident particle energy below the reaction threshold. The term product yield is employed when, in our opinion, there is an ambiguity in what quantity has been measured.

Table 3
"Core" Journal Coverage

Journal [‡]	Last Issue Scanned		Journal [‡]	Last Issue Scanned	
	Vol.	No.		Vol.	No.
Acta Phys.Pol.B	15	11	Nucl.Inst.Meth.	233	3
Ann.Nucl.Energy	12	1	Nucl.Phys.A	433	4
Ann.Phys.(N.Y.)	159	2	Nucl.Sci.Eng.	89	2
At.Energy	56	6	Nuovo Cim.A	83	3
Aust.J.Phys.	37	5	Phys.Scr.	31	1
Can.J.Phys.	62	12	Phys.Rev.C	31	2
Chin.J.Nucl.Phys.	6	3	Phys.Rev.Lett.	54	8
Czech.J.Phys.B	34	12	Phys.Lett.B	151	2
Helv.Phys.Acta	57	5	Progr.Theor.Phys.	72	4
Int.J.Appl.Radiat.Isotop.	35	12	Radiochim.Acta	35	4
Izv.Akad.Nauk SSSR, Ser.Fiz.	48	12	Ukr.Fiz.Zh.	29	12
J.Phys.Soc.Jpn.	53	10	Yad.Fiz.	40	6
J.Phys.(London) G	11	3	Z.Phys.A	320	2
Lett.Nuovo Cim.	41	15			

IV. SECONDARY SOURCES OF INFORMATION

Since this bibliography is designed to be both archival and current, abstracts, theses, progress reports, *etc.* have been included.

V. ORGANIZATION

This bibliography is divided into three sections, References, Target Index, and Residual Index. The References section contains all references satisfying the criteria noted previously and is organized as described in the next paragraph. Entries in the References section are key-numbered. These keynumbers serve as a link between the three sections. The Target Index section contains the incident particle energy and the abbreviated reference lines for all entries, which contain information on a definite target nucleus and reaction. These reference lines contain the Journal name, followed by the volume and page number, as well as the keynumber of the reference. This section is described in more detail in a later paragraph. The Residual Index section also contains the incident particle energy and the abbreviated reference lines for all entries, which contain information on a definite residual nucleus, and a definite target-reaction, as well as the keynumber of the reference. This section is described in more detail in a later paragraph.

[‡] Journal abbreviations are in agreement with those from the Chemical Abstracts Service for 1970. See also TID-4579-R9.

The References section is ordered by keynumber. This keynumber is composed of two digits corresponding to the year of publication, followed by the first two letters of the first authors name, and completed with a two digit running number to distinguish entries with the same first four symbols. The reference gives all authors by name and initials, the Journal title, volume number, page number, year and the full title of the article. A list of keywords is given, which are designed to tell the reader what experimental results are reported in the article and what the author concluded from these results.

The Target Index section contains information on those references to a particular reaction on a particular target nucleus at a given energy. The section is ordered by increasing Z of the target nucleus, and by increasing A of the target. For a given target the ordering is by increasing Z and A of the incident projectile, and finally by increasing Z and A of the sum of the outgoing particles. The incident energy, the abbreviated reference and keynumber complete the entry line.

The Residual Index section contains information on those references to the production of a particular residual nucleus at a given energy. The section is ordered by increasing Z and A of the residual nucleus, and then by increasing Z and A of the incident projectile. The incident energy, the abbreviated reference and the keynumber complete the entry line.

VI. COMPILATIONS AND EVALUATIONS

To enhance the usefulness of this bibliography several compilations, evaluations, and reviews are given in Table 4. Reference 1 contains a more comprehensive list.

Table 4
Selected Compilations, Evaluations, and Reviews of
Charged-Particle Nuclear Data

1. R.J. Howerton. Maxwell-Averaged Reaction Rates ($\overline{\sigma v}$) for Selected Reactions between Ions with Atomic Mass ≤ 11 . UCRL-50400 Vol. 21, Pt. A (1979).
2. K.A. Keller, et al. *Q-Values and Excitation Functions of Nuclear Reactions*. Landholt-Boernstein, Group I, Vol. 5. Parts A-C. Springer-Verlag, Berlin (1973).
3. H.J. Kim, et al. *Nuclear Cross Sections for Charged-Particle-Induced Reactions*. Nucl. Data A1, 203. Academic Press, NY (1965).
Nucl. Data A2, 1. Academic Press, NY (1966).
Nucl. Data A3, 123. Academic Press, NY (1967).
4. H. Liskien and A. Paulsen. *Neutron Production Cross Sections and Energies for the Reactions $T(p,n)^3\text{He}$, $D(d,n)^3\text{He}$, and $T(d,n)^4\text{He}$* . Nucl. Data Tables 11, 569. Academic Press, NY (1973).
Neutron Production Cross Sections and Energies for the Reactions $^7\text{Li}(p,n)^7\text{Be}$ and $^7\text{Li}(p,n)^7\text{Be}^$* . At. Data Nucl. Data Tables 15, 57. Academic Press, NY (1975).
5. F.K. McGowan, et al. *Nuclear Cross Sections for Charged-Particle Induced Reactions Mn, Fe, Co*. ORNL-CPX-1 (1964).
Nuclear Cross Sections for Charged-Particle Induced Reactions Ni, Cu. ORNL-CPX-2 (1964).
6. H. Muenzel, et al. *Karlsruhe Charged Particle Reaction Data Compilation*. Physik Daten 15-Index (1979).
Physik Daten 15-1 (1979).
Physik Daten 15-2 (1979).
Physik Daten 15-3 (1982).
Physik Daten 15-4 (1982).
Physik Daten 15-5 (1982).
7. W. Neubert. *Peak Cross Sections for (H^1, xn) Reactions*. Nucl. Data Tables A11, 531. Academic Press, NY (1973).
8. S. Pearlstein. *Starter Evaluated Charged Particle Data Library*. BNL-19148 (1974).
9. S.T. Perkins and D.E. Cullen. *Experimental and Evaluated Nuclear Plus Interference Cross Sections for Light Charged Particles*. Nucl. Sci. Eng. 77(1), 20 (1981).
ibid. UCRL-50400 Vol. 15, Pt. F.

VII. METHODS OF RADIOISOTOPE PRODUCTION

While this publication should be very useful in providing the sources of cross section data for radioisotope production, its scope does not include the indexing of techniques for radioisotope or labelled-compound production. The Radiopharmaceutical Research Group, Chemistry Department, Brookhaven National Laboratory does index such techniques for accelerators.²

VIII. RETRIEVAL CAPABILITIES

Retrievals may be obtained from this Charged-Particle Bibliography using the Nuclear Structure References file, based on target nucleus, incident particle, outgoing particles or reactions, residual nuclide, topic, or any combination of these. The term topic refers to the integral cross section, (σ), the thick target yield, (TTY), or the product yield, (yield). Additional criteria are list of keynumbers of the references, publication date, and entry date. Send requests to:

National Nuclear Data Center
Building 197D
Upton, NY 11973
U.S.A.

For more detailed information, contact the authors.

All Information Analysis Centers supported by the Department of Energy are required to conform with a DOE plan for charging services. There are no charges to the DOE and its contractors; however, there could be nominal charges for others. Further information will be supplied upon request.

IX. ACKNOWLEDGEMENTS

The Nuclear Reaction Data Centers should be thanked for their activities in developing the generalized EXFOR format and establishing a world-wide exchange of experimental charged-particle nuclear data.

The charged-particle activities at the National Nuclear Data Center have been supported by the Office of Basic Energy Sciences, US Department of Energy.

²D.R. Christman and K.I. Karlstrom. Accelerator Produced Nuclides for Use in Biology and Medicine. A Bibliography, 1939-1973. BNL-50449 (1975).

K.I. Karlstrom and D.R. Christman. Accelerator Produced Nuclides for Use in Biology and Medicine. A Bibliography, January 1974 - June 1976. BNL-50448-Vol. II (1978).

K.I. Karlstrom and D.R. Christman. Accelerator Produced Nuclides for Use in Biology and Medicine. A Bibliography, July 1976 - December 1980. BNL-50448-Vol. III (1983).

REFERENCES

- 80Bi16 G.T.Bida, T.J.Ruth, A.P.Wolf - *Radiochim.Acta* 27, 181 (1980) - Experimentally Determined Thick Target Yields for the $^{14}\text{N}(\text{p},\alpha)^{11}\text{C}$ Reaction
NUCLEAR REACTIONS $^{14}\text{N}(\text{p},\alpha)$, $E=\text{threshold}-18$ MeV; measured absolute $\sigma(E)$, thick target yields.
- 80Wa29 C.Wasilevsky, M.de la Vega Vedoya, S.J.Nassiff - *Radiochim.Acta* 27, 125 (1980) - Cross Sections and Thick Target Yields of (d,xn) Reactions on Natural Lead
NUCLEAR REACTIONS $\text{Pb}(\text{d},\text{xn})^{203}\text{Bi}/^{204}\text{Bi}/^{205}\text{Bi}/^{206}\text{Bi}/^{207}\text{Bi}$, $E=\text{threshold}-30$ MeV; measured residuals production $\sigma(E)$; deduced thick target yields, production rates for $^{205},^{206},^{207}\text{Bi}$. Stacked lead foils.
- 81No15 T.Nozaki, M.Iwamoto - *Radiochim.Acta* 29, 57 (1981) - Yield of ^{14}O for the Reactions $^{14}\text{N}(\text{p},\text{n})^{14}\text{O}$, $^{12}\text{C}(\text{He},\text{n})^{14}\text{O}$ and $^{12}\text{C}(\alpha,\text{n})^{14}\text{O}$
NUCLEAR REACTIONS $^{14}\text{N}(\text{p},\text{n})$, $E \approx 6.75-14.5$ MeV; measured $\sigma(E)$, thick target yield. $^{14}\text{N}(\text{p},\alpha)$, $E < 15$ MeV; $^{12}\text{C}(\text{He},\text{n})$, (He,α) , $(\alpha,2\text{n})$, $(\alpha,\text{n}\alpha)$, $E < 40$ MeV; measured thick target yields; deduced pairing effect role in ^{14}O production.
- 83Be63 M.Behar, A.M.J.Ferrero, A.Filevich, A.O.Macchiavelli - *Z.Phys. A314*, 111 (1983) - On the Assignment of High-Spin Cascades to ^{96}Rh and ^{98}Pd Isotopes
NUCLEAR REACTIONS $^{96}\text{Ru}(\alpha,\text{n})$, $(\alpha,2\text{n})$, (α,np) , (α,p) , $(\alpha,3\text{n})$, $E=30-55$ MeV; measured $E_\gamma, I_\gamma, \sigma(E, E_\gamma, \theta)$, $\gamma\gamma$ -coin, residual production $\sigma(E)$. $^{98}\text{Ru}(\text{d},\text{xnp})$, $E=20-28$ MeV; measured $E_\gamma, I_\gamma, \sigma(E, E_\gamma, \theta)$, $\gamma\gamma$ -coin. ^{96}Rh , ^{98}Pd deduced levels, J, π , band structure. Enriched targets, Ge(Li) detectors.
- 83Dm06 P.P.Dmitriev, G.A.Molin - *At.Energ.* 55, 256 (1983); *Sov.At.Energy* 55, 707 (1983) - Yield of ^{118}Te (Generator of ^{118}Sb), $^{119\text{m}}\text{Te}$, $^{121\text{m}}\text{Te}$, ^{121}Te , and $^{123\text{m}}\text{Te}$ in $\text{Sn}(\alpha,\text{Xn})$ Reactions
NUCLEAR REACTIONS $\text{Sn}(\alpha,\text{xn})^{118}\text{Te}/^{119\text{m}}\text{Te}/^{119\text{m}}\text{Te}/^{121}\text{Te}/^{121\text{m}}\text{Te}/^{123}\text{Te}/^{123\text{m}}\text{Te}$, $E=18.1-43.7$ MeV; measured thick target residuals yield. Activation techniques.
- 83Ka40 R.Kaps, U.Mösel, R.Wolf - *Z.Phys. A314*, 317 (1983) - Polarization Effects for Elastic and Inelastic Scattering with an Adiabatic-Propagator Approximation
NUCLEAR REACTIONS $^{16}\text{O}(\text{He},^{16}\text{O})$, $(^{16}\text{O},^{16}\text{O})$, $E(\text{cm}) \approx 20-32$ MeV; calculated $\sigma(E)$, polarization potential vs separation distance. Adiabatic propagator approximation.
- 83Kl10 H.Klewe-Nebenius, F.Michel, H.Munzel, G.Pfenning - *Radiochim.Acta* 33, 177 (1983) - Excitation Functions for the Production of ^{49}V
NUCLEAR REACTIONS $^{51}\text{V}(\text{p},\text{t})$, $E=14-25$ MeV; $^{51}\text{V}(\text{d},\text{nt})$, $E=10-25$ MeV; $^{51}\text{V}(\text{He},\text{n}\alpha)$, $E=0.5-4$ MeV; $^{51}\text{V}(\alpha,2\text{n}\alpha)$, $E=0.2-2$ MeV; measured I X-ray, I_γ ; deduced production σ for ^{49}V .
- 83Kl11 H.Klewe-Nebenius, F.Michel, H.Munzel, B.Neumann - *Radiochim.Acta* 33, 181 (1983) - Monitor Reactions for High Energetic ^6Li -Projectiles
NUCLEAR REACTIONS $^{27}\text{Al}(\text{Li},\text{X})^{22}\text{Na}/^{24}\text{Na}$, $E=25-153$ MeV; measured σ vs E .
- 83Ko42 T.Komppa, R.Kommu, M.Kortelahti, J.Muhonen, A.Pakkanen, M.Piiparinen, I.Prochazka, J.Blomqvist - *Z.Phys. A314*, 33 (1983) - Medium-Spin Levels in the $N = 83$ Nucleus ^{147}Gd
NUCLEAR REACTIONS $^{147}\text{Sm}(\text{He},3\text{n})$, $E=22$ MeV; $^{144}\text{Sm}(\alpha,\text{n})$, $E=17.5$ MeV; measured $E_\gamma, I_\gamma, \gamma(\theta)$, $\gamma\gamma$ -coin, $I(\text{ce})$, $\sigma(E_\gamma, E)$, $\gamma\gamma(\text{t}), \gamma$ yield vs E . ^{147}Gd deduced levels, γ -branching, J, π , ICC, γ -multipolarity, configuration. Shell model.
- 83Kr16 H.J.Krappe, K.Mohring, M.C.Nemes, H.Rossner - *Z.Phys. A314*, 23 (1983) - On the Interpretation of Heavy-Ion Sub-Barrier Fusion Data
NUCLEAR REACTIONS $^{10}\text{B}(\text{He},\text{X})$, $E(\text{cm}) \approx 2-4$ MeV; $^{14}\text{N}(\text{He},\text{X})$, $E(\text{cm}) \approx 2.75-7$ MeV; $^{12}\text{C}(\text{He},\text{X})$, $E(\text{cm})=4-12$ MeV; $^{14}\text{N}(\text{He},\text{X})$, $E(\text{cm})=5.5-12$ MeV; $^{20}\text{Ne}(\text{He},\text{X})$, $E(\text{cm})=6-15$ MeV; $^9\text{Be}(\text{He},\text{X})$, $E(\text{cm})=2.5-5$ MeV; $^{12}\text{C}(\text{He},\text{X})$, $E(\text{cm})=2.5-5.5$ MeV; $^{14}\text{N}(\text{He},\text{X})$, $E(\text{cm})=3.5-10$ MeV; $^{14}\text{N}(\text{He},\text{X})$, $E(\text{cm})=4.5-11$ MeV; $^{16}\text{O}(\text{He},\text{X})$, $E(\text{cm})=7-14.5$ MeV; $^{110}\text{Pd}(\text{He},\text{X})$, $E(\text{cm})=30-50$ MeV; $^{64},^{58}\text{Ni}(\text{He},\text{X})$, $E(\text{cm})=90-110$ MeV; $^{122}\text{Sn}(\text{He},\text{X})$, $E=102.5-130$ MeV; calculated fusion $\sigma(E)$; deduced subbarrier fusion characteristics, neck formation role. Two-dimensional tunneling model.
- 83Qa02 S.M.Qaim, G.Stocklin - *Radiochim.Acta* 34, 25 (1983) - Production of Some Medically Important Short-Lived Neutron-Deficient Radioisotopes of Halogens

REFERENCES

- NUCLEAR REACTIONS $^{16}\text{O}(\text{He},\text{p})$, $E=3-42$ MeV; $^{16}\text{O}(\alpha,\text{d})$, $E=22-40$ MeV; $^{16}\text{O}(\alpha,2\text{n})$, $E=0-55$ MeV; $^{18}\text{O}(\text{p},\text{n})$, $E=0-20$ MeV; $^{20}\text{Ne}(\text{d},\alpha)$, $E=0-18$ MeV; $^{20}\text{Ne}(\text{d},3\text{np})$, $E=60-65$ MeV; $^{20}\text{Ne}(\text{He},\text{p}\alpha)$, $E=10-65$ MeV; $^{31}\text{P}(\alpha,\text{n})$, $E=10-45$ MeV; $\text{S}(\text{p},\text{xn})^{34}\text{Cl}/^{34\text{m}}\text{Cl}$, $E=8-22$ MeV; $^{32}\text{S}(\text{He},\text{p})$, $E=5-30$ MeV; $^{32}\text{S}(\alpha,\text{np})$, $E=20-45$ MeV; $^{35}\text{Cl}(\text{p},\text{np})$, $E=12-24$ MeV; $^{75}\text{As}(\alpha,2\text{n})$, $E=14-30$ MeV; $^{77}\text{Se}(\text{p},\text{n})$, $E=0-13.5$ MeV; $^{78}\text{Se}(\text{p},2\text{n})$, $E=20-33$ MeV; $\text{Se}(\text{He},\text{xn})^{77}\text{Br}$, $E=0-38$ MeV; $\text{Se}(\text{p},\text{xn})^{77}\text{Br}$, $E=15-30$ MeV; $^{76}\text{Se}(\text{He},\text{np})$, $E=15-22$ MeV; $^{77}\text{Se}(\text{He},2\text{np})$, $E=15-30$ MeV; $\text{Mo}(\text{p},\text{X})^{77}\text{Br}$, $E=800$ MeV; $^{75}\text{As}(\text{He},3\text{n})$, $E=25-36$ MeV; $^{75}\text{As}(\alpha,4\text{n})$, $E=54-65$ MeV; $^{76}\text{Se}(\text{p},2\text{n})$, $E=22-28$ MeV; $^{76}\text{Se}(\text{d},3\text{n})$, $E=29-35$ MeV; $^{76}\text{Se}(\text{He},3\text{np})$, $E=28-36$ MeV; $^{78}\text{Kr}(\text{p},\alpha)$, $E=12-15$ MeV; $^{121}\text{Sb}(\alpha,2\text{n})$, $E=8-28$ MeV; $\text{Sb}(\text{He},\text{xn})^{123}\text{I}$, $E=12-26$ MeV; $^{124}\text{Te}(\text{p},2\text{n})$, $E=12-26$ MeV; $^{123}\text{Te}(\text{p},\text{n})$, $E=9-15$ MeV; $^{122}\text{Te}(\text{d},\text{n})$, $E=6-14$ MeV; $^{209}\text{Bi}(\text{He},\text{n})$, $E=25-32$ MeV; $^{209}\text{Bi}(\alpha,2\text{n})$, $E=0-28$ MeV; $^{209}\text{Bi}(\text{Kr},\text{X})^{211}\text{At}$, $E=500$ MeV; ^{232}Th , $^{238}\text{U}(\text{p},\text{X})^{211}\text{At}$, $E=660$ MeV; analyzed thick target residual yield data. $^{20}\text{Ne}(\text{d},\text{X})^{18}\text{F}$, $E=60-65$ MeV; $^{20}\text{Ne}(\text{He},\text{n}\alpha)^{18}\text{F}$, $E=0-33$ MeV; $^{79,81}\text{Br}(\text{p},\text{xn})^{77}\text{Br}$, $E=25-65$ MeV; $^{79,81}\text{Br}(\text{d},\text{xn})^{77}\text{Br}$, $E=25-50$ MeV; $^{79,81}\text{Br}(\alpha,\text{xn})^{77}\text{Br}$, $E=70-102$ MeV; $^{79,81}\text{Br}(\text{d},\text{xn})^{75}\text{Br}$, $E=68-90$ MeV; $^{122}\text{Te}(\alpha,3\text{n})^{123}\text{I}$, $E=32-45$ MeV; $^{123}\text{Te}(\text{He},3\text{n})^{123}\text{I}$, $E=20.7-35.2$ MeV; $^{124}\text{Te}(\text{He},4\text{n})^{123}\text{I}$, $E=35.4-52.2$ MeV; $^{127}\text{I}(\text{p},5\text{n})$, $E=45-65$ MeV; $^{127}\text{I}(\text{d},6\text{n})^{123}\text{I}$, $E=64-78$ MeV; $^{127}\text{I}(\alpha,\text{X})^{123}\text{I}$, $E=70-130$ MeV; $\text{Cs},\text{La}(\text{p},\text{X})^{123}\text{I}$, $E=320-800$ MeV; analyzed residual thick target yield following intermediate nucleus β -decay.
- 83Va33 G.Vakilova, A.Vasidov, S.Mukhammedov, E.Pardaev, A.Rakhmanov, Zh.Saidmuradov - At.Energ. 55, 164 (1983); Sov.At.Energy 55, 598 (1983) - Sensitivity of the Determination of Some Elements with $Z \leq 42$ by a Deuteron Activation Method in a Cyclotron
NUCLEAR REACTIONS $^{17}\text{O}, ^{42,43}\text{Ca}, ^{47}\text{Ti}, ^{50}\text{V}, ^{50}\text{Cr}, ^{54}\text{Fe}, ^{60}\text{Ni}, ^{66}\text{Zn}, ^{71}\text{Ga}, ^{70}\text{Ge}, ^{86}\text{Sr}, ^{94,96}\text{Zr}, ^{92,94,95,98}\text{Mo}(\text{d},\text{n}), ^{43,44}\text{Ca}, ^{56}\text{Fe}, ^{63}\text{Cu}, ^{66}\text{Zn}, ^{80,82}\text{Se}, ^{87}\text{Sr}, ^{89}\text{Y}, ^{96}\text{Zr}, ^{94,95,96}\text{Mo}(\text{d},2\text{n}), ^{23}\text{Na}, ^{37}\text{Cl}, ^{41}\text{K}, ^{50}\text{Cr}, ^{55}\text{Mn}, ^{59}\text{Co}, ^{63}\text{Cu}, ^{66}\text{Zn}, ^{75}\text{As}, ^{81}\text{Br}, ^{89}\text{Y}, ^{94,96}\text{Zr}(\text{d},\text{p}), ^{24,26}\text{Mg}(\text{d},\alpha), ^{55}\text{Mn}(\text{d},\text{n}\alpha)$, $E=4-12$ MeV; measured residuals yield. Activation techniques.
- 84Aa01 E.H.L.Aarts, R.A.R.L.Malfliet, R.J.De Meijer, S.Y.Van Der Werf - Nucl.Phys. A425, 23 (1984) - Reaction Mechanisms in ^3He Projectile Breakup at 52 MeV on $^{12}\text{C}, ^{28}\text{Si}$ and ^{58}Ni
NUCLEAR REACTIONS $^{12}\text{C}, ^{28}\text{Si}, ^{58}\text{Ni}(\text{He},\text{p}), (\text{He},\text{d}), (\text{He},2\text{p}), (\text{He},\text{pd})$, $E=52$ MeV; measured inclusive $\sigma(\theta\text{p}), \sigma(\theta\text{d}), \sigma(\text{Ep}), \sigma(\text{Ed}), \sigma(\theta\text{p},\theta\text{d},\text{Ed}), \sigma(\theta\text{p},\theta\text{d}), \sigma(\theta_1,\theta_2\text{Ep}), \sigma(\theta_1,\theta_2)$; deduced reaction mechanism, σ vs target mass. Quasifree breakup calculations.
- 84Ab05 K.Abe, A.Iizuka, A.Hasegawa, S.Morozumi - J.Nucl.Mater. 122/123, 972 (1984) - Induced Radioactivity of Component Materials by 16-MeV Protons and 30-MeV Alpha Particles
NUCLEAR REACTIONS $^{45}\text{Sc}, ^{59}\text{Co}, ^{58}\text{Ni}, ^{65}\text{Cu}, ^{66}\text{Zn}, ^{91}\text{Zr}, ^{93}\text{Nb}, ^{181}\text{Ta}, ^{197}\text{Au}(\text{p},\text{np}), ^{46,47}\text{Ti}(\text{p},\alpha), ^{48}\text{Ti}, ^{51}\text{V}, ^{52}\text{Cr}, ^{56}\text{Fe}, ^{61}\text{Ni}, ^{63}\text{Cu}, ^{67}\text{Zn}, ^{72,74,76}\text{Ge}, ^{89}\text{Y}, ^{90,92,96}\text{Zr}, ^{93}\text{Nb}, ^{94,95,96}\text{Mo}, ^{107}\text{Ag}, ^{116,117,118,120,122}\text{Sn}, ^{181}\text{Ta}, ^{182}\text{W}, ^{194,196}\text{Pt}, ^{197}\text{Au}(\text{p},\text{n}), ^{49}\text{Ti}, ^{53}\text{Cr}, ^{57}\text{Fe}, ^{62}\text{Ni}, ^{63}\text{Cu}, ^{66}\text{Zn}, ^{73}\text{Ge}, ^{94,95,96,97,100}\text{Mo}, ^{117,119}\text{Sn}, ^{182}\text{W}, ^{194,196}\text{Pt}(\text{p},2\text{n}), $E=16$ MeV; $^{45}\text{Sc}, ^{46,48}\text{Ti}, ^{51}\text{V}, ^{54}\text{Fe}, ^{63}\text{Cu}, ^{70}\text{Ge}, ^{89}\text{Y}, ^{90,96}\text{Zr}, ^{93}\text{Nb}, ^{92,94,100}\text{Mo}, ^{103}\text{Rh}, ^{107}\text{Ag}, ^{181}\text{Ta}, ^{182}\text{W}, ^{194}\text{Pt}(\alpha,\text{n}), ^{45}\text{Sc}(\alpha,\text{n}\alpha), ^{45}\text{Sc}, ^{59}\text{Co}(\alpha,2\text{p}), ^{46}\text{Ti}, ^{50,52,54}\text{Cr}, ^{54,56}\text{Fe}, ^{70}\text{Ge}, ^{92}\text{Mo}(\alpha,\text{np}), ^{46,49}\text{Ti}, ^{50}\text{Cr}, ^{59}\text{Co}, ^{65}\text{Cu}, ^{91}\text{Zr}, ^{93}\text{Nb}, ^{103}\text{Rh}, ^{107,109}\text{Ag}, ^{181}\text{Ta}, ^{182}\text{W}(\alpha,2\text{n}), ^{51}\text{V}, ^{56}\text{Fe}, ^{182}\text{W}(\alpha,3\text{n}), ^{186}\text{W}(\alpha,2\text{np})$, $E=30$ MeV; measured residuals thick target yields. Activation technique.$
- 84Ab07 D.N.Abrams, E.E.Knaus, L.I.Wiebe, F.Helus, W.Maier-Borst - Int.J.Appl.Radiat.Isotop. 35, 1045 (1984) - Production of $^{34\text{m}}\text{Cl}$ from a Gaseous Hydrogen Sulfide Target
NUCLEAR REACTIONS $^{34}\text{S}(\text{p},\text{n})$, $E=22$ MeV; $^{34}\text{S}(\text{d},2\text{n})$, $E=12$ MeV; measured residual isomer production yield. Gaseous H_2S target.
- 84Al24 T.K.Alexander, G.C.Ball, W.N.Lennard, H.Geissel, H.-B.Mak - Nucl.Phys. A427, 526 (1984) - Measurement of the Absolute Cross Section of the $^3\text{He}(\text{He},\gamma)^7\text{Be}$ Reaction at $E(\text{c.m.}) = 525$ keV
NUCLEAR REACTIONS $^3\text{He}(\alpha,\gamma)$, $E=1.3$ MeV; measured capture yield, absolute σ , E_γ , γ -branching ratio; deduced zero-energy cross section factor. Target implantation in Nb.
- 84Al25 H.A.Aljuwair, R.J.Ledoux, M.Beckerman, S.B.Gazes, J.Wiggins, E.R.Cosman, R.R.Betts, S.Saini, O.Hansen - Phys.Rev. C30, 1223 (1984) - Isotopic Effects in the Fusion of ^{40}Ca with $^{40,44,48}\text{Ca}$
NUCLEAR REACTIONS $^{44,48,40}\text{Ca}(\text{Ca},\text{X})$, $E=90-135$ MeV; measured fusion $\sigma(E)$. Velocity filter.
- 84Al2U T.K.Alexander - Bull.Am.Phys.Soc. 29, No.7, 1076, R6.3 (1984) - Direct Capture of ^4He on ^3He Implanted in Nb and the Solar Neutrino Problem
NUCLEAR REACTIONS $^3\text{He}(\alpha,\gamma)$, $E(\text{cm})=525$ keV; measured capture γ yields; deduced σ , cross section factors $S(E), S(0)$. $^3\text{He}(\text{d},\text{p})$, $E(\text{cm})=300$ keV; $^3\text{He}(\text{n},\text{p})$, $E=\text{thermal}$; measured yields.
- 84ArZW E.D.Arthur - LA-10069-PR, p.29 (1984) - Calculated (t,n) Cross Sections
NUCLEAR REACTIONS $^{54}\text{Fe}, ^{46}\text{Ti}, ^{58}\text{Ni}(\text{t},\text{n})$, $E=1.7-4$ MeV; calculated $\sigma(E)$; deduced optical model parameters. Multi-step Hauser-Feshbach statistical model.
- 84ArZX E.D.Arthur - LA-10069-PR, p.25 (1984) - Theoretical Calculations of $^{91}\text{Zr}(\text{p},\text{pn}+\text{p},\text{np})$ Cross Sections
NUCLEAR REACTIONS $^{91}\text{Zr}(\text{p},\text{np}), (\text{p},\text{n}2\text{p})$, $E=13-17$ MeV; calculated $\sigma(E)$. Multi-step Hauser-Feshbach statistical model.

REFERENCES

- 84ArZY E.D.Arthur - LA-10069-PR, p.18 (1984) - Theoretical Analyses of Recent Simulation Experiments Involving Proton Reactions on Strontium Isotopes
NUCLEAR REACTIONS $^{87}\text{Sr}(p,n),(p,n2p),E=13.5-18$ MeV; $^{87}\text{Sr}(p,n),(p,2n),E=14-18$ MeV; $^{86}\text{Sr}(p,\gamma),E=3.5-6$ MeV; calculated $\sigma(E)$; deduced optical model parameters. Multi-step Hauser-Feshbach statistical model.
- 84ArZZ D.Armstrong, S.K.Saha, E.Adamides, S.-S.Wang, C.-Y.Cheng, A.Henrikson, M.A.Lone, B.C.Robertson - Phys.Can. 40, No.3, p.70, PP16 (1984) - Strength Function Measurement from the $^{197}\text{Au}(p,\gamma)$ Reaction at $E(p) = 4.0$ MeV
NUCLEAR REACTIONS $^{197}\text{Au}(p,\gamma),E=4$ MeV; measured E_{γ},I_{γ} ,production σ . ^{198}Hg deduced EI strength function.
- 84Ba12 P.H.Barker, R.E.White - Phys.Rev. C29, 1530 (1984) - $^{10}\text{B}(p,n)^{10}\text{C}$ Q Value
NUCLEAR REACTIONS $^{10}\text{B}(p,n),E \approx$ threshold; measured yield; deduced Q.
- 84Ba15 K.A.Baskova, Yu.V.Krivosnogov, B.M.Makuni, E.A.Skakun, T.V.Chugai, L.Ya.Shavtvalov - Izv.Akad.Nauk SSSR, Ser.Fiz. 48, 38 (1984) - Excitation of the Isomers $^{110m}\text{In},^{111m}\text{In}$ and ^{112m}In in Reactions Induced by 30 MeV α -Particles
NUCLEAR REACTIONS $^{107,109}\text{Ag}(\alpha,n),^{109}\text{Ag}(\alpha,2n),^{110}\text{Cd}(\alpha,np),E=30$ MeV; measured E_{γ},I_{γ} ; deduced residual isomer to ground state production σ .
- 84Ba18 V.G.Baty, E.A.Skakun, O.A.Rastrepin, Yu.N.Rakivnenko - Izv.Akad.Nauk SSSR, Ser.Fiz. 48, 194 (1984) - Excitation Function for the Reactions $^{121}\text{Sb}(p,n)^{121m}\text{Te}$ and $^{123}\text{Sb}(p,n)^{123m}\text{Te}$
NUCLEAR REACTIONS $^{121,123}\text{Sb}(p,n),E=5-9$ MeV; measured residuals production $\sigma(E)$,isomer to ground state production $\sigma(E)$ ratio. Activation technique.
- 84Ba20 K.A.Baskova, E.A.Skakun, T.V.Chugai, L.Ya.Shavtvalov - Yad.Fiz. 39, 538 (1984) - Anomalous Behaviour of Isomeric Cross Section Ratios for ^{110m}Sb and ^{118m}Sb Measured in (α,n) Reactions
NUCLEAR REACTIONS $^{113,115}\text{In}(\alpha,n),E \approx 12.5-30$ MeV; measured residual isomer to ground state production $\sigma(E)$ ratio. Statistical model analysis.
- 84Ba64 K.A.Baskova, A.B.Vovk, Yu.V.Krivosnogov, B.M.Makuni, E.A.Skakun, T.V.Chugai, L.Ya.Shavtvalov - Izv.Akad.Nauk SSSR, Ser.Fiz. 48, 1833 (1984) - Isomer Excitation in the Reactions $^{107}\text{Ag}(\alpha,2n)^{109m},^{109}\text{In}$ and $^{112}\text{Sn}(\alpha,n)^{115m},^{115}\text{Te}$
NUCLEAR REACTIONS $^{107}\text{Ag}(\alpha,2n),^{112}\text{Sn}(\alpha,n),E=21-32$ MeV; measured ground state to isomer production $\sigma(E)$ for residuals. Activation technique.
- 84Be22 C.Beck, F.Haas, R.M.Freeman, B.Heusch, J.P.Coffin, G.Guillaume, F.Rami, P.Wagner - Phys.Rev. C29, 1942 (1984) - Fusion Cross Sections of the $^{12}\text{C} + ^{16}\text{O}$ Reaction at $E(^{16}\text{O})$ up to 150 MeV
NUCLEAR REACTIONS $^{12}\text{C}(^{16}\text{O},X),^{16}\text{O}(^{12}\text{C},X),E(\text{cm})=26.6,34.3,42.9,53.6,64.3$ MeV; measured evaporation residue yields; deduced fusion $\sigma(E)$,critical,grazing (L).
- 84Be29 S.D.Beizin, M.G.Itkis, Yu.A.Muzychka, V.N.Okolovich, B.I.Pustyl'nik - Yad.Fiz. 39, 1093 (1984) - Study of Probability of Sn and ^{140}Ce Isotope Fission Induced by ^{12}C and ^{20}Ne Ions
NUCLEAR REACTIONS $^{112,118,124}\text{Sn},^{140}\text{Ce}(^{12}\text{C},F),E=86-110$ MeV; $^{120}\text{Sn}(^{20}\text{Ne},F),E=104-120$ MeV; measured fission σ ,fragment $\sigma(\theta)$. $^{153}\text{Tb},^{124,130,136}\text{Ba},^{144}\text{Nd},^{142}\text{Gd}$ deduced fission barriers.
- 84BhZZ H.D.Bhardwaj, R.Prasad - Bull.Am.Phys.Soc. 29, No.7, 1117, P2.98 (1984) - Excitation Functions of $^{197}\text{Au}(\alpha,xn)$ Reactions between 10-40 MeV Energy Range
NUCLEAR REACTIONS $^{197}\text{Au}(\alpha,n),(\alpha,2n),(\alpha,3n),E=10-40$ MeV; measured $\sigma(E)$. Activation technique,thick,stacked Au foils. Equilibrium decay,hybrid models analyses.
- 84Bi02 R.Bimbot, D.Gardes, L.De Reilhac, M.F.Rivet, A.Fleury, F.Hubert, Y.Llabador - Nucl.Phys. A413, 489 (1984) - Influence of the Potential Energy Surface on the Cross Sections for Deeply Inelastic Transfer Reactions Induced by Heavy Ions
NUCLEAR REACTIONS $^{148}\text{Sm}(^{40}\text{Ca},X),E=193,211,236,266$ MeV; $^{144,150}\text{Sm},^{142,144,146}\text{Nd}(^{40}\text{Ca},X),E=211,236$ MeV; $^{154}\text{Sm}(^{40}\text{Ca},X),E=236$ MeV; $^{144}\text{Sm}(^{40}\text{Ar},X),E=211,245$ MeV; measured production σ for $^{151},^{150}\text{Dy},^{149}\text{Tb}$; deduced transfer reaction potential energy surface dependence,reaction mechanism.
- 84Bi04 A.M.Bizzeti-Sona, P.Biasi, P.A.Mando, A.A.Stefanini - Z.Phys. A315, 277 (1984) - Properties of Excited Levels in ^{102}Rh by the $^{102}\text{Ru}(p,n\gamma)$ Reaction
NUCLEAR REACTIONS $^{102}\text{Ru}(p,n\gamma),E=3.1-6$ MeV; measured $E_{\gamma},I_{\gamma},\gamma\gamma$ -coin,centroid shifts, γ yield vs E . ^{102}Rh deduced levels, $T_{1/2},\gamma$ -branching.
- 84Bi06 M.Blann, T.T.Komoto - Phys.Rev. C29, 1678 (1984) - Precompound Evaporation Analyses of Excitation Functions for (α,xn) Reactions

REFERENCES

- NUCLEAR REACTIONS $^{181}\text{Ta}(\alpha,n),(\alpha,2n),(\alpha,3n),(\alpha,4n),E=\text{threshold}-65\text{ MeV}$; $^{234},^{233}\text{U}(\alpha,n),(\alpha,2n),(\alpha,3n),E=\text{threshold}-45\text{ MeV}$; $^{234}\text{U}(\alpha,4n),E=40-45\text{ MeV}$; $^{197}\text{Au}(\alpha,n),(\alpha,2n),(\alpha,3n),(\alpha,4n),E=\text{threshold}-80\text{ MeV}$; $^{237}\text{Np},^{235}\text{U}(\alpha,4n),(\alpha,3n),(\alpha,2n),(\alpha,n),E\approx\text{threshold}-50\text{ MeV}$; calculated $\sigma(E)$. $^{237}\text{Np},^{239}\text{Pu}(^3\text{He},t),(^3\text{He},d),^{240}\text{Pu}(^3\text{He},t),E$ not given; calculated fission probability vs excitation energy. $^{239},^{238},^{237},^{235},^{234},^{233}\text{Pu},^{241},^{240},^{239},^{238},^{237}\text{Am}$ deduced fission barriers, neutron binding energy, barrier $(a(F)/a(n))$. Precompound evaporation model.
- 84B116 G.Blessing, S.M.Qaim - Int.J.Appl.Radiat.Isotop. 35, 927 (1984) - An Improved Internal Cu_3As -Alloy Cyclotron Target for the Production of ^{75}Br and ^{77}Br and Separation of the By-Product ^{67}Ga from the Matrix Activity
NUCLEAR REACTIONS $^{75}\text{As}(^3\text{He},3n),E=25-36\text{ MeV}$; $^{75}\text{As}(\alpha,n),E=14-28\text{ MeV}$; measured residuals thick target yields vs E . $^{65}\text{Cu}(\alpha,2n),E=28\text{ MeV}$; measured residual thick target yield. Internal target system, high current Cu_3As alloy.
- 84Bo22 M.Bonardi, C.Birattari - Int.J.Appl.Radiat.Isotop. 35, 564 (1984) - Excitation Functions for the $\text{Au}(p,3n)^{195m},^{195}\text{Hg}$ Nuclear Reactions and $^{195m},^{195}\text{Hg}/^{195m}\text{Au}$ Generator Yields
NUCLEAR REACTIONS $\text{Au}(p,3n)^{195}\text{Hg}/^{195m}\text{Hg},E=27,28\text{ MeV}$; measured residuals production σ .
- 84Bo24 A.Bonasera, G.F.Bertsch, E.N.El-Sayed - Phys.Lett. 141B, 9 (1984) - Newtonian Dynamics of Time-Dependent Mean Field Theory
NUCLEAR REACTIONS $^{208}\text{Pb}(^{208}\text{Pb},^{208}\text{Pb}),E(\text{cm})=800\text{ MeV}$; calculated neck radius vs separation distance. $^{40}\text{Ca}(^{40}\text{Ca},^{40}\text{Ca}),E(\text{cm})=80\text{ MeV}$; calculated nuclear velocity vs separation distance. $^{28}\text{Si}(^{28}\text{Si},^{28}\text{Si}),E(\text{cm})\approx 30-100\text{ MeV}$; calculated collision characteristics vs E , impact parameter. $^{20}\text{Ne}(^{20}\text{Ne},^{20}\text{Ne}),E(\text{cm})\approx 20-80\text{ MeV}$; calculated fusion $\sigma(E)$. Time-dependent mean field theory.
- 84Bo36 D.Bohle, K.Glasner, L.Ricken, E.Kuhlmann - Z.Phys. A318, 339 (1984) - High Resolution Study of the $^{24}\text{Mg}(\alpha,\gamma_0)^{28}\text{Si}$ Capture Reaction
NUCLEAR REACTIONS $^{24}\text{Mg}(\alpha,\gamma),E=4.4-9.6\text{ MeV}$; measured $E_\gamma, I_\gamma, \sigma(E), \sigma(\theta, E_\gamma, E), \gamma$ yields; deduced two-level interference role ^{28}Si deduced levels, Γ, E_1, E_2 contributions.
- 84Br14 H.C.Britt, D.C.Hoffman, J.van der Plicht, J.B.Wilhelmy, E.Cheifetz, R.J.Dupzyk, R.W.Lougheed - Phys.Rev. C30, 559 (1984) - Fission of $^{255},^{256}\text{Es},^{255-257}\text{Fm}$, and ^{258}Md at Moderate Excitation Energies
NUCLEAR REACTIONS $^{254}\text{Es}(d,pF),(t,pF),(^3\text{He},dF),(^3\text{He},pF),E=\text{tandem}$; $^{254}\text{Es}(p,F),(d,F),(t,F),E=11-17\text{ MeV}$; $^{254}\text{Es}(\alpha,F),E=20-26\text{ MeV}$; measured fission fragment yield, total kinetic energy vs mass, (fragment)(fragment)-coin. $^{255},^{256}\text{Es},^{255},^{256},^{257}\text{Fm},^{258}\text{Md}$ deduced fission characteristics, potential energy surface role.
- 84BrZX R.E.Brown, N.Jarmie, R.A.Hardekopf - Bull.Am.Phys.Soc. 29, No.4, 747, JH3 (1984) - Final Data and Thermonuclear Reactivities for the $\text{D}(t,\alpha)n$ Reaction at Low Energies
NUCLEAR REACTIONS $^2\text{H}(t,\alpha),E=12.5-117\text{ keV}$; measured $\sigma(E)$; deduced Maxwellian reactivities from plasma temperature to 20 keV .
- 84Bu09 L.Buchmann, M.Hilgemaier, A.Krauss, A.Redder, C.Rolfs, H.P.Trautvetter, T.R.Donoghue - Nucl.Phys. A415, 93 (1984) - The Abundance of ^{26}Al in the MgAl Cycle
NUCLEAR REACTIONS $^{26}\text{Al}(p,\gamma),(p,p'\gamma),E=0.17-1.58\text{ MeV}$; measured $E(\gamma), I(\gamma)(E), \gamma$ yield vs E . ^{27}Si deduced levels, absolute γ -transition strength, Γ, J, π, γ -branching ratios, astrophysical reaction rate. Artificially produced ^{26}Al target, $\text{Ge}(\text{Li})$ detector.
- 84Bu26 D.Bucurescu, G.Constantinescu, D.Cutoiu, M.Ivascu, N.V.Zamfir, A.A.Haliem - J.Phys.(London) G10, 1189 (1984) - High-Spin States in ^{86}Y
NUCLEAR REACTIONS $^{76}\text{Ge}(^{14}\text{N},4n),E=38-56\text{ MeV}$; $^{76}\text{Ge}(^{16}\text{O},2np),E=48-60\text{ MeV}$; measured $E_\gamma, I_\gamma, \sigma(E), \sigma(E_\gamma, \theta_\gamma), (\text{charged-particle})\gamma-\gamma\gamma\text{-coin}$. ^{86}Y deduced levels, J, π . $\text{Ge}(\text{Li})$ detectors, enriched targets.
- 84Ca30 M.Carchidi, H.T.Fortune, G.S.F.Stephans, L.C.Bland - Phys.Rev. C30, 1293 (1984) - Coexistence in Ge Isotopes and Two-Neutron Transfer
NUCLEAR REACTIONS $^{70},^{72},^{74}\text{Ge}(t,p),(p,t),E=26,35.4\text{ MeV}$; analyzed σ ratio. $^{68},^{78}\text{Ge}$ deduced wave functions. Generalized two state model.
- 84ChZY T.E.Chupp, A.B.Mc Donald, R.T.Kouzes, A.J.Howard, P.D.Parker, T.F.Wang - Bull.Am.Phys.Soc. 29, No.4, 717, GG10 (1984) - Properties of the 5.17 MeV State in ^{14}O Relevant to the Hot CNO Cycle
NUCLEAR REACTIONS $^{14}\text{N}(^3\text{He},t),E$ not given; measured $(t)(^{14}\text{O})\text{-coin}$; deduced relevance to $^{13}\text{N}(p,\gamma)\sigma$ factor $S(E)$. ^{14}O level deduced $\Gamma, \Gamma_\gamma/\Gamma$. Hot-CNO cycle.
- 84Da04 P.David, J.Debrus, J.Hartfiel, H.Janszen, R.Von Mutius, H.J.Maier - Nucl.Phys. A417, 24 (1984) - A Study of the $^{230}\text{Th}(\alpha,\alpha'f)$ Reaction at 50 MeV

REFERENCES

- NUCLEAR REACTIONS. $^{230}\text{Th}(\alpha,\alpha'f)$, $E=50$ MeV; measured fission fragment energies, mass yield distribution, total kinetic energy vs excitation.
- 84Da06 M. Davidson, J. Davidson, A. J. Kreiner, C. Pomar - Phys. Rev. C29, 1717 (1984) - Excited States in ^{86}Y
NUCLEAR REACTIONS $^{85}\text{Rb}(\alpha,3n), (\alpha,\alpha n), (\alpha,2np), (\alpha,2n\alpha)$, $E=30-55$ MeV; measured $E_\gamma, \gamma, \sigma(E, E_\gamma, \theta_\gamma), \gamma\gamma$ -coin, residuals production $\sigma(E)$. ^{86}Y deduced levels, J, π , configurations. Ge(Li) detectors. Weak coupling model.
- 84Da14 J. M. D'Auria, M. Dombisky, G. Sheffer, T. E. Ward, H. J. Karwowski, A. I. Yavin, J. L. Clark - Phys. Rev. C30, 236 (1984) - Inclusive Measurement of Quasifree (p,xn) Charge Exchange Reactions on Bismuth from 62 to 800 MeV
NUCLEAR REACTIONS $^{209}\text{Bi}(p,n), (p,2n), (p,4n), (p,6n)$, $E=62-800$ MeV; measured residuals production $\sigma(E)$, production σ relative to ^{209}Po vs E . $^{209}\text{Bi}(p,10n), (p,9n), (p,11n), (p,12n), (p,13n), (p,14n)$, $E=210-480$ MeV; measured residuals production σ relative to ^{209}Po . Radiochemical activation techniques. Intranuclear cascade calculation.
- 84Da17 B. Dasmahapatra, B. Cujec, F. Lahlou - Nucl. Phys. A427, 186 (1984) - Total Reaction and Transfer Cross Sections for $^{11}\text{B} + ^9\text{Be}$ and $^{13}\text{C} + ^9\text{Be}$ Reactions at Low Energies
NUCLEAR REACTIONS $^{11}\text{B}(^9\text{Be}, X), (^9\text{Be}, ^9\text{Be})$, $E=1.4-4.4$ MeV; $^{13}\text{C}(^9\text{Be}, X), (^9\text{Be}, ^9\text{Be}), (^9\text{Be}, \alpha n)$, $E=1.2-5.2$ MeV; measured $\sigma(E), \gamma$ yields; deduced evidence for α -transfer reaction. NaI, hyperpure Ge, surface barrier detectors, enriched targets. Optical model analysis.
- 84Da22 J. D'Auria, M. Dombisky, L. Moritz, T. Ruth, G. Sheffer, T. E. Ward, C. C. Foster, J. W. Watson, B. D. Anderson, J. Rapaport - Phys. Rev. C30, 1999 (1984) - Activation Measurements of the $^7\text{Li}(p, n)^7\text{Be}$ Reaction from 60-480 MeV
NUCLEAR REACTIONS $^7\text{Li}(p, n)$, $E=60-480$ MeV; measured reaction σ . Activation analysis. Comparison with theoretical analysis.
- 84De38 D. M. De Castro Rizzo, E. Bozek, S. Cavallaro, B. Delaunay, J. Delaunay, H. Dumont, M. G. Saint-Laurent, F. Terrasi - Nucl. Phys. A427, 151 (1984) - Fusion Excitation Functions near and below the Coulomb Barrier for Symmetric and Asymmetric Medium-Mass Systems
NUCLEAR REACTIONS $^{46,48,50}\text{Ti}(^{12}\text{C}, X), ^{44}\text{Ca}(^{18}\text{O}, X)$, $E(\text{cm}) \approx 20-45$ MeV; $^{28,30}\text{Si}(^{30}\text{Si}, X)$, $E(\text{cm}) \approx 25-45$ MeV; measured fusion $\sigma(E)$. $^{48,50}\text{Ti}(^{12}\text{C}, ^{12}\text{C})$, $E=20-60$ MeV; $^{44}\text{Ca}(^{18}\text{O}, ^{18}\text{O})$, $E=30-60$ MeV; measured inelastic $\sigma(E)$; deduced barrier parameters. Hyperpure Ge, Ge(Li) detectors, in-beam γ -rays, rotating target. Zero-point motion, neck formation.
- 84De39 H. Delagrange, A. Benachou, F. Huber, Y. Llabador, B. Heusch, J. P. Coffin, P. Engelstein, P. Fintz, G. Guillaume - Nucl. Phys. A429, 173 (1984) - Statistical Decay of $^{193}\text{Au}, ^{194}\text{Hg}$ and ^{198}Hg Compound Nuclei
NUCLEAR REACTIONS $^{181}\text{Ta}(^{12}\text{C}, f)$, $E=60-110$ MeV; $^{182}\text{W}(^{12}\text{C}, f)$, $E=70-130$ MeV; $^{186}\text{W}(^{12}\text{C}, f)$, $E=80-100$ MeV; measured fission $\sigma(E)$. $^{181}\text{Ta}(^{12}\text{C}, X)$, $E=105$ MeV; measured $\sigma(\text{fragment } \theta, E), \sigma(\text{fragment } \theta, \text{mass})$. $^{182}\text{W}(^{12}\text{C}, X)$, $E=98.7$ MeV; measured evaporation residue $\sigma(\theta)$. $^{181}\text{Ta}, ^{182}\text{W}(^{12}\text{C}, \alpha)$, $E=80, 98.7$ MeV; measured σ ; deduced fission mechanism, fusion σ . Statistical decay.
- 84De42 P. Descouvemont, D. Baye, P.-H. Heenen - Nucl. Phys. A430, 426 (1984) - Microscopic Analysis of the $^{12}\text{C}(\alpha, \gamma)^{16}\text{O}$ Reaction
NUCLEAR REACTIONS $^{12}\text{C}(\alpha, \gamma)$, $E \leq 3$ MeV; calculated capture $\sigma(E)$, astrophysical S-factor vs E . Generator coordinate method.
- 84Dh02 K. S. Dhuga, H. T. Fortune, M. Carchidi, G. P. Gilfoyle, R. Gilman, J. W. Sweet, A. Wuosmaa - Phys. Rev. C29, 1566 (1984) - Dominance of $l = 10$ in $^{12}\text{C}(^{12}\text{C}, \alpha)^{20}\text{Ne}(\text{g.s.})$ at $E(\text{c.m.}) = 13-15$ MeV
NUCLEAR REACTIONS $^{12}\text{C}(^{12}\text{C}, \alpha)$, $E(\text{cm})=13-15$ MeV; measured $\sigma(E), \sigma(\theta)$ vs E ; deduced $L=10$ partial wave dominance. Legendre polynomial analysis.
- 84Es01 K. Eskola, P. Eskola, M. M. Fowler, H. Ohm, E. N. Treher, J. B. Wilhelmy, D. Lee, G. T. Seaborg - Phys. Rev. C29, 2160 (1984) - Production of Neutron-Rich Bi Isotopes by Transfer Reactions
NUCLEAR REACTIONS $^{208}\text{Pb}(^{18}\text{O}, X)^{211}\text{Bi}/^{212}\text{Bi}/^{213}\text{Bi}, ^{205}\text{Tl}(^{18}\text{O}, X)^{212}\text{Bi}/^{213}\text{Bi}, ^{204}\text{Hg}(^{18}\text{O}, X)^{212}\text{Bi}$, $E \approx 80-180$ MeV; measured residuals absolute production $\sigma(E), \sigma(E_\alpha), ^{212}\text{Bi}$ isomer yield ratio; deduced reaction mechanism. Activation technique. $^{208}\text{Pb}(^{18}\text{O}, ^{15}\text{N}), (^{18}\text{O}, ^{14}\text{N}), (^{18}\text{O}, ^{13}\text{N}), (^{18}\text{O}, ^{12}\text{N})$, $E \approx 100-200$ MeV; calculated absolute $\sigma(E)$. Sum rule technique.
- 84Fi05 B. W. Filippone, C. N. Davids, R. C. Pardo, J. Aysto - Phys. Rev. C29, 2118 (1984) - Mass and Low-Lying Levels of $^{108,108}\text{In}$ from the $^{106,108}\text{Cd}(p, n\gamma)$ Reactions
NUCLEAR REACTIONS $^{106,108}\text{Cd}(p, n\gamma)$, $E=6-9$ MeV; measured E_γ, γ, β -delayed $\sigma(E_\gamma, E), \gamma\gamma$ -coin, γ yield vs E . ^{108}In deduced levels, mass excess, J, γ -multipolarity. ^{108}In deduced mass excess.
- 84Fo12 H. T. Fortune, K. Wells - Phys. Rev. C30, 527 (1984) - High-J States in ^{23}Na

REFERENCES

- NUCLEAR REACTIONS $^{12}\text{C}(^{12}\text{C},\text{p})$, $E=39$ MeV; measured $\sigma(\theta)$, $\sigma(\text{Ep})$, σ . ^{23}Na deduced levels, possible J, π .
- 84Fo15 H.T.Fortune - Phys.Rev. C30, 848 (1984) - Direct Component in the $^{12}\text{C}(^7\text{Li},\text{p})^{16}\text{O}$ Reaction
NUCLEAR REACTIONS $^{12}\text{C}(^7\text{Li},\text{p})$, $E=16$ MeV; calculated direct transfer σ .
- 84Fo21 R.Fonte, A.Insolia - Phys.Lett. 148B, 257 (1984) - 1-Window Model for Complete Fusion
NUCLEAR REACTIONS $^{27}\text{Al}(^{12}\text{C},\text{X})$, $(^{16}\text{O},\text{X})$, $(^{32}\text{S},\text{X})$, $E(\text{cm}) \approx 25-175$ MeV; $^{116}\text{Sn}(^{35}\text{Cl},\text{X})$, $E(\text{cm})=150-300$ MeV; $^{82}\text{Ni}(^{35}\text{Cl},\text{X})$, $E(\text{cm})=102-302$ MeV; calculated fusion $\sigma(E)$. L-window model.
- 84Fu02 B.R.Fulton, J.S.Lilley, R.Lindsay, M.A.Nagarajan, N.Rowley, R.Shyam, T.M.Cormier, P.M.Stwertka - Phys.Lett. 136B, 322 (1984) - Structure in the O_2^+ Excitation Function in $^{12}\text{C} + ^{12}\text{C}$ Scattering
NUCLEAR REACTIONS $^{12}\text{C}(^{12}\text{C},^{12}\text{C})$, $E(\text{cm})=20-40$ MeV; measured $\sigma(E)$, $\sigma(\theta)$; deduced barrier matching, barrier, internal wave interference effects. DWBA, no resonance contribution.
- 84Ga14 E.Gadioli, E.Gadioli Erba, J.Asher, D.J.Parker - Z.Phys. A317, 155 (1984) - Analysis of $^{59}\text{Co}(\alpha, \text{xpynza})$ Reactions up to 170 MeV Incident α Energy
NUCLEAR REACTIONS $^{59}\text{Co}(\alpha, 2n)$, $(\alpha, 3n)$, $(\alpha, n2p)$, $(\alpha, n3p)$, $(\alpha, 5np)$, $(\alpha, 4n2p)$, $(\alpha, 3n2p)$, $(\alpha, 5n2p)$, $(\alpha, 6n2p)$, $(\alpha, 5n4p)$, $(\alpha, 3n4p)$, $(\alpha, 7n4p)$, $(\alpha, 7n5p)$, $(\alpha, 8n4p)$, $(\alpha, 9n6p)$, $(\alpha, 10n5p)$, $E=\text{threshold}-170$ MeV; measured residuals productions $\sigma(E)$; deduced α -nucleon interaction role. Exciton model.
- 84Ga15 A.O.Gattone, A.M.J.Ferrero, O.Dragun - Nucl.Phys. A424, 1 (1984) - The Contribution of One- and Two-Step Processes to Inclusive (p,d) Reactions
NUCLEAR REACTIONS $^{54}\text{Fe}, ^{209}\text{Bi}(\text{p},\text{d})$, $E=38.8, 62$ MeV; $^{120}\text{Sn}(\text{p},\text{d})$, $E=28.8, 62$ MeV; calculated $\sigma(\text{Ed})$, $\sigma(\theta)$. $^{54}\text{Fe}, ^{209}\text{Bi}(\text{p},\text{d})$, $E=39.62$ MeV; calculated σ . $^{54}\text{Fe}(\text{p},\text{pd})$, $E=62$ MeV; calculated σ vs transfer L. $^{209}\text{Bi}, ^{54}\text{Fe}(\text{p},\text{p}')$, $E=62$ MeV; calculated $\sigma(\text{Ep}')$; deduced one-step process dominance. Multi-step direct reaction model.
- 84Ga20 E.Gadioli, E.Gadioli Erba - Nuovo Cim. 81A, 66 (1984) - A Model for Alpha-Particle-Induced Reaction
NUCLEAR REACTIONS $^{93}\text{Nb}(\alpha, \text{p})$, $E=42, 54.8$ MeV; $^{59}\text{Ni}, ^{90}\text{Zr}(\alpha, \text{p})$, $E=140$ MeV; $^{59}\text{Co}(\alpha, \text{p})$, $E=54.8$ MeV; calculated proton spectra. $^{93}\text{Nb}(\alpha, \text{n})$, $(\alpha, 2\text{n})$, $E=40-140$ MeV; $^{93}\text{Nb}(\alpha, 5\text{n}2\text{p})$, $(\alpha, 7\text{n}2\text{p})$, $E=\text{threshold}-140$ MeV; $^{93}\text{Nb}(\alpha, 5\text{n}3\text{p})$, $(\alpha, 6\text{n}4\text{p})$, $E=60-140$ MeV; calculated $\sigma(E)$; deduced reaction mechanism. Preequilibrium α -nucleon scattering cascade.
- 84Ga30 A.Gavron, J.Boissevain, H.C.Britt, K.Eskola, P.Eskola, M.M.Fowler, H.Ohm, J.B.Wilhelmy, T.C.Awes, R.L.Ferguson, F.E.Obenshain, F.Plasil, G.R.Young, S.Wald - Phys.Rev. C30, 1550 (1984) - Fission Cross Sections up to 20 MeV/Nucleon
NUCLEAR REACTIONS $^{174}\text{Yb}, ^{198}\text{Pt}, ^{238}\text{U}(^{12}\text{C}, \text{F})$, $E=95-291$ MeV; $^{142}\text{Nd}, ^{170}\text{Er}, ^{192}\text{Os}, ^{238}\text{U}(^{16}\text{O}, \text{F})$, $E=140-315$ MeV; $^{126}\text{Te}, ^{144}\text{Nd}, ^{238}\text{U}(^{32}\text{S}, \text{F})$, $E=350, 500, 700$; $^{96}\text{Zr}, ^{116}\text{Cd}, ^{238}\text{U}(^{58}\text{Ni}, \text{F})$, $E=352, 875$ MeV; measured fission $\sigma(E)$, fragment $\sigma(\theta)$ anisotropy; deduced incomplete fusion reaction role.
- 84Go03 A.Gokmen, H.Breuer, A.C.Mignerey, B.G.Glagola, K.Kwiatkowski, V.E.Viola, Jr. - Phys.Rev. C29, 1595 (1984) - Fragment Mass, Energy, and Angular Distributions for the $^{12}\text{C}(^4\text{He}, \text{Heavy Ion})$ Reaction between 49 and 159 MeV
NUCLEAR REACTIONS $^{12}\text{C}(\alpha, \text{X})$, $E=49, 61, 80, 121, 159$ MeV; measured $\sigma(\text{fragment } \theta, E)$, fragment production $\sigma(E)$ for fragment mass 7, 9, 11, 13, reaction $\sigma(E)$; deduced astrophysical implications.
- 84Go04 A.Gokmen, G.J.Mathews, V.E.Viola, Jr. - Phys.Rev. C29, 1606 (1984) - Intranuclear Cascade and Fermi Breakup Calculations of ^1H - and ^4He -Induced Reactions on Light Target Nuclei
NUCLEAR REACTIONS $^{12}\text{C}(\alpha, \text{X})$, $E=61, 80.1, 159.3$ MeV; calculated $\sigma(\text{fragment } \theta)$ for fragment mass 6-15; $^{16}\text{O}(\alpha, \text{X})$, $E=81.9$ MeV; calculated $\sigma(\text{fragment } \theta)$ for fragment mass 12-19; $^{16}\text{O}(\text{p}, \text{X})$, $E=75$ MeV; $^{12}\text{C}(\text{p}, \text{X})$, $E=100$ MeV; calculated $\sigma(\text{fragment } \theta)$ for fragment mass 6-11. $^{12}\text{C}(\alpha, \text{X})$, $E=61$ MeV; calculated $\sigma(\text{fragment } \theta, E)$ for fragment mass $A=11, 14$; $^{12}\text{C}(\alpha, \text{X})$, $E=80.1$ MeV; calculated $\sigma(\text{fragment } \theta, E)$ for fragment mass $A=6, 11$; $^{12}\text{C}(\alpha, \text{X})$, $E=159.3$ MeV; calculated $\sigma(\text{fragment } \theta)$ for $A=9, 11$; $^{12}\text{C}(\alpha, \text{X})$, $E=80.1$ MeV; calculated σ vs fragment mass.
- 84Go05 J.Gomez del Campo, J.A.Biggerstaff, R.A.Dayras, D.Shapira, A.H.Snell, P.H.Stelson, R.G.Stokstad - Phys.Rev. C29, 1722 (1984) - Comparison of Fusion Cross Sections for the $^{10}\text{B} + ^{16}\text{O}$ and $^{12}\text{C} + ^{14}\text{N}$ Systems
NUCLEAR REACTIONS $^{12}\text{C}(^{14}\text{N}, \text{X})$, $E=158, 248$ MeV; $^{10}\text{B}(^{16}\text{O}, \text{X})$, $E=203.6$ MeV; measured $\sigma(\text{fragment } \theta, E)$ for fragment $Z=3, 10$, fusion, reaction, direct $\sigma(E)$, fragment velocity spectra. $^{16}\text{O}(^{10}\text{B}, \text{X})$, $E=42-169.7$ MeV; measured fusion, reaction $\sigma(E)$. $^{10}\text{B}(^{16}\text{O}, \text{X})$, $E=203.6$ MeV; measured evaporation residue $\sigma(\theta)$. $^{12}\text{C}(^{14}\text{N}, \text{X})$, $E=182$ MeV; measured evaporation residue relative yield. Monte Carlo Hauser-Feshbach calculations.

REFERENCES

- 84Gr12 D.Grambole, C.Bauer, P.Gippner, C.Heiser, W.Rudolph, H.-J.Thomas - J.Radioanal.Nucl.Chem. 83, 107 (1984) - Fluorine Determination in the near Surface Region of Solids using the $^{19}\text{F}(p,p'\gamma)^{19}\text{F}$ Resonance Reaction
NUCLEAR REACTIONS $^{19}\text{F}(p,p'\gamma)$, $E=0.8-3$ MeV; $^{19}\text{F}(p,\alpha)$, $E=0.7-1.9$ MeV; measured γ yield vs E , $\sigma(E,\gamma)$.
- 84Gr13 E.N.Gruzintsev, M.G.Itkis, V.N.Okolovich, G.N.Smirenkin, A.Ya.Rusanov, V.N.Tolstikov - Yad.Fiz. 39, 1100 (1984) - Investigation of Symmetric Fission of Pre Actinide Nuclei in the (α,f) Reactions
NUCLEAR REACTIONS $^{209}\text{Bi}(\alpha,f)$, $E=34.7-50$ MeV; $^{207,208}\text{Pb}(\alpha,f)$, $E=44-50$ MeV; $^{204,206}\text{Pb}(\alpha,f)$, $E \approx 35-50$ MeV; ^{197}Au , $^{203,205}\text{Tl}(\alpha,f)^{201}\text{Tl}/^{209}\text{Bi}/^{207}\text{Bi}/^{212}\text{Po}/^{211}\text{Po}/^{210}\text{Po}/^{208}\text{Po}/^{213}\text{At}$, $E=46.4-50$ MeV; measured residuals production yield vs mass,energy.
- 84Gr16 E.N.Gruzintsev, M.G.Itkis, V.N.Okolovich, G.N.Smirenkin - Yad.Fiz. 39, 1336 (1984) - Properties of W - Bi Symmetric Fission Induced by ^3He Ions
NUCLEAR REACTIONS ^{209}Bi , $^{204,206,207,208}\text{Pb}$, $^{203,205}\text{Tl}$, ^{197}Au , $^{194,196}\text{Pt}$, ^{183}W ($^3\text{He},f$) $^{200}\text{Tl}/^{201}\text{Tl}/^{208}\text{Bi}/^{209}\text{Bi}/^{206}\text{Bi}/^{207}\text{Bi}/^{211}\text{Po}/^{210}\text{Po}/^{209}\text{Po}/^{207}\text{Po}/^{208}\text{Po}/^{212}\text{At}/^{213}\text{At}$, $E < 60$ MeV; measured fission fragment mass,energy distribution,fragment yields. ^{212}At , $^{207,209,210,211}\text{Po}$, $^{206,208}\text{Bi}$, ^{200}Tl , $^{197,201}\text{Hg}$, ^{186}Os deduced symmetric fission saddle point role.
- 84Gr20 K.Grotowski, Z.Majka, R.Planeta, M.Szczodrak, Y.Chan, G.Guarino, L.G.Moretto, D.J.Morrissey, L.C.Sobotka, R.C.Stokstad, I.Terruya, S.Wald, G.J.Wozniak - Phys.Rev. C30, 1214 (1984) - Symmetric Splitting of very Light Systems
NUCLEAR REACTIONS $^{40}\text{Ca}(^6\text{Li},X)$, $E=153$ MeV; $^{40}\text{Ca}(^9\text{Be},X)$, $E=141$ MeV; $^{40}\text{Ca}(^{12}\text{C},X)$, $E=74-185$ MeV; measured (fragment)(fragment)-coin, $\sigma(\text{fragment } \theta, E)$, $\sigma(\text{fragment } \theta, E, Z)$, angular, energy, charge correlations, $\sigma(\theta, E)$; deduced symmetric mass split $\sigma(E)$. ^{52}Fe , ^{49}Cr , ^{46}V deduced near symmetric breakup.
- 84GrZZ L.R.Greenwood, R.K.Smith - Bull.Am.Phys.Soc. 29, No.1, 65, HF10 (1984) - Spallation Product Cross Section Measurements for Al and Cu from 50-500 MeV
NUCLEAR REACTIONS $^{27}\text{Al}(p,X)^2\text{Be}/^{22}\text{Na}/^{24}\text{Na}$, $\text{Cu}(p,X)$, $E=50-500$ MeV; measured residual production σ .
- 84Gu09 S.K.Gupta, S.Kailas - Z.Phys. A317, 75 (1984) - Heavy-Ion Total Reaction Cross Sections
NUCLEAR REACTIONS $^{40}\text{Ca}(^6\text{Li},^6\text{Li})$, ^{59}Co , $^{40}\text{Ca}(^{16}\text{O},^{16}\text{O})$, $E=40-160$ MeV; $^{28}\text{Si}(^9\text{Be},^9\text{Be})$, $(^{16}\text{O},^{16}\text{O})$, $E=40-200$ MeV; $^{40}\text{Ca}(^{40}\text{Ca},^0\text{Ca})$, $E=120-240$ MeV; $^{27}\text{Al}(^{32}\text{S},^{32}\text{S})$, $E=70-120$ MeV; $^{40}\text{Ca}(^{20}\text{Ne},^{20}\text{Ne})$, $E \approx 50-80$ MeV; $^{209}\text{Bi}(^{84}\text{Kr},^{84}\text{Kr})$, $E=600-700$ MeV; $^{90}\text{Zr}(^6\text{Li},^6\text{Li})$, $E=40-160$ MeV; $^{208}\text{Pb}(^{20}\text{Ne},^{20}\text{Ne})$, $E=100-250$ MeV; $^{62,58}\text{Ni}(^{35}\text{Cl},^{35}\text{Cl})$, $E=100-160$ MeV; $^{24}\text{Mg}(^{32}\text{S},^{32}\text{S})$, $E=60-140$ MeV; $^{209}\text{Pb}(^{16}\text{O},^{16}\text{O})$, $^{235}\text{U}(^{20}\text{Ne},^{20}\text{Ne})$, $E=100-300$ MeV; $^{139}\text{La}(^{86}\text{Kr},^{86}\text{Kr})$, $^{208}\text{Pb}(^{84}\text{Kr},^{84}\text{Kr})$, $E=300-700$ MeV; $^{209}\text{Bi}(^{136}\text{Xe},^{136}\text{Xe})$, $E=700-1300$ MeV; ^{238}U , $^{209}\text{Bi}(^{40}\text{Ar},^{40}\text{Ar})$, $E=200-350$ MeV; $^{65}\text{Cu}(^{84}\text{Kr},^{84}\text{Kr})$, $E=300-600$ MeV; $^{58}\text{Ni}(^{16}\text{O},^{16}\text{O})$, $E=50-300$ MeV; $^{109}\text{Ag}(^{40}\text{Ar},^{40}\text{Ar})$, $E=150-350$ MeV; analyzed data; deduced reaction $\sigma(E)$. One parameter fit, strong absorption model.
- 84Ha05 O.Hashimoto, H.Hamagaki, H.Yonehara, Y.Shida - Nucl.Phys. A413, 432 (1984) - Excitation Functions of the $^{197}\text{Au}(\alpha,2p)^{199}\text{Au}$ and $^{197}\text{Au}(\alpha,2n)^{199}\text{Tl}$ Reactions
NUCLEAR REACTIONS $^{197}\text{Au}(\alpha,2p)$, $(\alpha,2n)$, $E=40-119$ MeV; measured E_γ, I_γ ; deduced $\sigma(E)$. Ge(Li) detectors.
- 84Ha13 G.Hardie, B.W.Filippone, A.J.Elwyn, M.Wiescher, R.E.Segel - Phys.Rev. C29, 1199 (1984) - Resonant Alpha Capture by ^7Be and ^7Li
NUCLEAR REACTIONS $^7\text{Li}(\alpha,\gamma)$, $E=401,814,953$ keV; measured thick target γ yield, E_γ, I_γ . $^7\text{Be}(\alpha,\gamma)$, $E=894,1376$ keV; measured γ yield, E_γ, I_γ . ^{11}B , ^{11}C resonances deduced resonance strength, I_γ, α, γ -branching ratios.
- 84Ha27 R.Hanninen - Nucl.Phys. A420, 351 (1984) - Study of Resonances in $^{38}\text{Ar}(p,\gamma)^{39}\text{K}$: Application in thermonuclear explosive oxygen burning
NUCLEAR REACTIONS $^{38}\text{Ar}(p,\gamma)$, $E=0.7-2.4$ MeV; measured $E_\gamma, I_\gamma, \gamma$ yield vs E ; deduced thermonuclear reaction rate. ^{39}K deduced levels, J, π, γ -branching ratios, resonance strengths. Enriched target.
- 84Ha43 Q.Haider, B.Cujec - Nucl.Phys. A429, 116 (1984) - Description of Sub-Barrier Fusion Cross Sections by the Proximity Potential
NUCLEAR REACTIONS $^{12}\text{C}(^{12}\text{C},^{12}\text{C})$, $(^{12}\text{C},X)$, $E=3-9$ MeV; $^{16}\text{O}(^{16}\text{O},^{16}\text{O})$, $(^{16}\text{O},X)$, $E=7-15$ MeV; calculated $\sigma(\theta)$, σ factor vs E ; deduced model parameters. Subbarrier fusion, proximity potential.
- 84HaZK J.S.Hanspal, L.C.Dennis, A.D.Frawley, R.A.Farker - Bull.Am.Phys.Soc. 29, No.7, 1047, DB2 (1984) - $^{12}\text{B} + ^{12}\text{C}$ and $^{11}\text{B} + ^{13}\text{C}$ Fusion Cross-Sections

REFERENCES

- NUCLEAR REACTIONS $^{12}\text{C}(^{10}\text{B},\text{X}), ^{13}\text{C}(^{11}\text{B},\text{X}), E=17-48$ MeV; measured fusion $\sigma(E)$.
- 84HeZV R.L.Hershberger, F.Gabbard - Bull.Am.Phys.Soc. 29, No.7, 1056, ED7 (1984) - Comparison of Measured and Calculated (p,n) Reaction Rates for Selected Targets with $51 \leq A \leq 75$
NUCLEAR REACTIONS $^{51}\text{V}, ^{61}\text{Ni}, ^{65}\text{Cu}, ^{67}\text{Zn}, ^{75}\text{As}(p,n), E=\text{threshold}-6.7$ MeV; measured $\sigma(E)$, reaction rates. Optical model extrapolation.
- 84Ho10 H.M.Hofmann, D.Fick - Phys.Rev.Lett. 52, 2038 (1984) - Fusion of Polarized Deuterons
NUCLEAR REACTIONS $^2\text{H}(\text{polarized } d,n), E(\text{cm}) \leq 150$ keV; calculated total reaction $\sigma(E), \sigma(\theta)$ anisotropy, attenuation vs E; deduced nonsuppression of fusion, neutron production processes. Discussion of d- ^3He fusion reactor implications.
- 84Ho14 B.Hoffmann, G.Baur - Phys.Rev. C30, 247 (1984) - Coulomb Dissociation at Nonrelativistic and Relativistic Energies
NUCLEAR REACTIONS $^{208}\text{Pb}(\alpha, \alpha'), E=96, 172, 480$ MeV; calculated $\sigma(\theta)$, $^{232}\text{Th}(d, np), E=0.01-10$ GeV; $^{208}\text{Pb}(d, np), E=0.2-10$ GeV; calculated Coulomb dissociation $\sigma(E)$. DWBA model.
- 84Hu02 J.R.Hurd, L.C.Bland, G.P.Gilfoyle, R.Gilman, G.S.Stephans, J.W.Sweet, H.T.Fortune - Phys.Lett. 134B, 166 (1984) - Resonance with $l > l(\text{gr})$ in $^{12}\text{C} + ^{16}\text{O}$
NUCLEAR REACTIONS $^{12}\text{C}(^{16}\text{O}, \alpha), E(\text{cm}) \approx 9-12.75$ MeV; measured $\sigma(\theta), \sigma(E)$; deduced exit, entrance channel grazing l -value vs E. ^{28}Si deduced resonance, L. Legendre polynomial analysis.
- 84Is01 M.Isshiki, Y.Fukuda, K.Igaki - J.Radioanal.Nucl.Chem. 82, 135 (1984) - Proton Activation Analysis of Trace Impurities in Purified Cobalt
NUCLEAR REACTIONS $\text{Ti}, \text{Cr}, \text{Fe}, \text{Ni}, \text{Cu}, \text{Zn}, \text{Ga}, \text{Ge}, ^{75}\text{As}, \text{Se}, \text{Zr}, ^{93}\text{Nb}, \text{Mo}, \text{Cd}, \text{Sn}, \text{Sb}, \text{Te}(p, n), \text{Ni}(p, \gamma)^{48}\text{V} / ^{52}\text{Mn} / ^{56}\text{Co} / ^{61}\text{Cu} / ^{63}\text{Zn} / ^{66}\text{Ga} / ^{69}\text{Ge} / ^{72}\text{As} / ^{75}\text{Se} / ^{82}\text{Br} / ^{90}\text{Nb} / ^{93}\text{Mo} / ^{95}\text{Tc} / ^{111}\text{In} / ^{122}\text{Sb} / ^{121}\text{Te} / ^{130}\text{I} / ^{206}\text{Bi}, E=10.4 MeV; measured E_{γ}, I_{γ} ; deduced residuals thick target yields. Activation analysis.$
- 84It01 M.G.Itkis, V.N.Okolovich, A.Ya.Rusanov, G.N.Smirenkin - Yad.Fiz. 39, 1349 (1984) - Asymmetrical Fission of $^{208-212}\text{Po}$ Nuclei
NUCLEAR REACTIONS $^{204}, ^{206}, ^{208}\text{Pb}, ^{209}\text{Bi}(\alpha, f)^{213}\text{At} / ^{212}\text{Po} / ^{210}\text{Po} / ^{208}\text{Po}, E=37.3, 41.1, 45.1, 50$ MeV; $^{209}\text{Bi}(p, f)^{210}\text{Po}, E=24.3, 27.1, 29.6$ MeV; measured fission fragment yield vs mass. $^{208}, ^{210}, ^{212}\text{Po}$ deduced asymmetric fission role.
- 84Ja08 N.Jarmie, R.E.Brown, R.A.Hardekopf - Phys.Rev. C29, 2031 (1984) - Fusion-Energy Reaction $^2\text{H}(t, \alpha)n$ from $E(t) = 12.5$ to 117 keV
NUCLEAR REACTIONS $^2\text{H}(t, \alpha), E=12.5-117$ keV; measured fusion $\sigma(E), \sigma(E_{\alpha})$, astrophysical S-function vs E; deduced Maxwellian reactivities upto plasma temperatures. Single level R-matrix analysis. $^2\text{H}(p, p), E=10.04$ MeV; measured $\sigma(\theta)$.
- 84JaZY N.Jarmie, R.E.Brown - Bull.Am.Phys.Soc. 29, No.4, 747, JH2 (1984) - D(d,p)T and D(d,n) ^3He Reactions for $E(d) = 20-117$ keV
NUCLEAR REACTIONS $^2\text{H}(d, p), (d, n), E=20-117$ MeV; measured $\sigma(\theta)$; deduced astrophysical (S-functions), σ .
- 84Jo04 P.C.Johnson, M.C.Lagunas-Solar, M.J.Avila - Int.J.Appl.Radiat.Isotop. 35, 371 (1984) - The Indirect Production of No-Carrier-Added ^{57}Co via the $^{59}\text{Co}(p, 3n)^{57}\text{Ni} \rightarrow ^{57}\text{Co}$ Reaction
NUCLEAR REACTIONS $^{59}\text{Co}(p, 3n)^{57}\text{Ni} / ^{57}\text{Co}, ^{59}\text{Co}(p, 3np), E=10-40$ MeV; measured residual, β^- -decay daughter thick target, cumulative yields vs E, production $\sigma(E)$, reaction $\sigma(E)$.
- 84Jo08 R.V.Jolos, R.Schmidt, J.Teichert - Nucl.Phys. A429, 139 (1984) - One-Body Collisions and Classical Collective Dynamics in Heavy-Ion Reactions
NUCLEAR REACTIONS $^{16}\text{O}(^{16}\text{O}, ^{16}\text{O}), E(\text{cm})=62$ MeV; calculated ion distance radial kinetic energy, intrinsic excitation, interaction, collective energies vs t. $^{16}\text{O}(^{16}\text{O}, X), E(\text{cm}) \approx 10-70$ MeV; $^{40}\text{Ca}(^{40}\text{Ca}, X), E(\text{cm}) \approx 60-100$ MeV; calculated fusion $\sigma(E)$. $^{40}\text{Ca}(^{40}\text{Ca}, ^{40}\text{Ca}), E(\text{cm})=139$ MeV; $^{238}\text{U}(^{238}\text{U}, ^{238}\text{U}), E=1785$ MeV; calculated energy loss, deflection angle vs L. Approximate TDHF.
- 84Ka03 H.J.Karwowski, S.E.Vigdor - Phys.Rev. C29, 872 (1984) - Calculations of High-Spin Fission for A ≈ 200
NUCLEAR REACTIONS $^{181}\text{Ta}(^{19}\text{F}, f), E=95.7, 109.9$ MeV; $^{170}\text{Er}(^{30}\text{Si}, f), E=134.7, 152.9$ MeV; $^{197}\text{Au}(^6\text{Li}, f), E=84.4$ MeV; calculated fission $\sigma(E)$. $^{181}\text{Ta}(^{19}\text{F}, \alpha), E=80-120$ MeV; calculated evaporation $\sigma(E)$. $^{181}\text{Ta}(^{19}\text{F}, f), E=96$ MeV; calculated fission fragment $\sigma(\theta)$. $^{170}\text{Er}(^{30}\text{Si}, 4n), (^{30}\text{Si}, 5n), (^{30}\text{Si}, 6n), E \approx 120-170$ MeV; calculated $\sigma(E)$; deduced rotating liquid drop model validity. $^{200}, ^{203}\text{Pb}$ deduced fission, evaporation decay characteristics.
- 84Ka10 J.Kantele, W.Stoffl, L.E.Ussery, D.J.Decman, E.A.Henry, R.J.Estep, R.W.Hoff, L.G.Mann - Phys.Rev. C29, 1693 (1984) - Reinvestigation of the Gamma Branch from the ^{238}U Shape Isomer

REFERENCES

- NUCLEAR REACTIONS $^{238}\text{U}(\text{d},\text{np})$, $E=18.1$ MeV; measured E_{γ} , I_{γ} ; deduced (isomeric/ground state) σ . ^{238}U deduced shape isomer SF, conversion decay characteristics, levels.
- 84Ka17 J.Kantele, W.Stoffl, L.E.Ussery, D.J.Decman, E.A.Henry, R.J.Estep, R.W.Hoff, L.G.Mann - *ATOMKI Kozlem.* 26, 59 (1984) - Gamma Branch from the ^{238}U Shape Isomer
NUCLEAR REACTIONS $^{238}\text{U}(\text{d},\text{np})$, $E=18$ MeV; measured γ spectra; deduced $^{238\text{m}}\text{U}$ production σ . ^{238}U deduced isomer decay characteristics, transitions. In-beam spectroscopy.
- 84Ke03 J.G.Keller, K.-H.Schmidt, H.Stelzer, W.Reisdorf, Y.K.Agarwal, F.P.Hessberger, G.Munzenberg, H.-G.Clerc, C.-C.Sahm - *Phys.Rev.* C29, 1569 (1984) - Fusion of the System $^{90}\text{Zr} + ^{90}\text{Zr}$
NUCLEAR REACTIONS $^{90}\text{Zr}(^{90}\text{Zr},\text{X})$, $E(\text{cm}) \approx 172-195$ MeV; measured compound residue $\sigma(E)$; deduced fusion barrier, fluctuations.
- 84Ke12 B.D.Kern, T.Fenyas, A.Krasznahorkay, ZS.Dombradi, S.Brant, V.Paar - *Nucl.Phys.* A430, 301 (1984) - Excited States of ^{96}Nb from the $^{96}\text{Zr}(\text{p},\text{n}\gamma)^{96}\text{Nb}$ Reaction
NUCLEAR REACTIONS $^{96}\text{Zr}(\text{p},\text{n}\gamma)$, $E=1.3-5.1$ MeV; measured E_{γ} , I_{γ} , $\gamma\gamma$ -coin, $\sigma(E)$. ^{96}Nb deduced levels, J, π, γ -branching ratios, configurations. Enriched target, $\text{Ge}(\text{Li})$ detectors. Hauser-Feshbach analysis.
- 84Ku15 V.I.Kukulin, M.Kamal, V.T.Voronchev, V.M.Krasnopolsky - *J.Phys.(London)* G10, L213 (1984) - On the Extrapolation of the Low-Energy Cross Sections of Nuclear Reactions in the $\text{d} + ^6\text{Li}$ System
NUCLEAR REACTIONS $^6\text{Li}(\text{d},\text{d})$, $E=9$ MeV; calculated $\sigma(\theta)$. $^6\text{Li}(\text{d},\text{n})$, (d,α) , (d,pt) , $(\text{d},\text{n}^3\text{He})$, (d,p) , $E=10-100$ keV; calculated $\sigma(E)$. $^6\text{Li}(\text{d},\text{pt})$, (d,p) , $E=10-400$ keV; calculated astrophysical S-factor vs E .
- 84La18 K.Langanke - *Z.Phys.* A317, 325 (1984) - The $^{16}\text{O}(\alpha,\gamma)^{20}\text{Ne}$ Direct Capture Reaction at Low Energies
NUCLEAR REACTIONS $^{16}\text{O}(\alpha,\gamma)$, $E(\text{cm}) = 0.4-2$ MeV; calculated capture $\sigma(E)$, astrophysical S-factor vs E . Microscopic cluster model, local potential.
- 84La23 M.C.Lagunas-Solar, M.J.Avila, P.C.Johnson - *Int.J.Appl.Radiat.Isotop.* 35, 743 (1984) - Cyclotron Production of $^{101\text{m}}\text{Rh}$ via Proton-Induced Reactions on ^{103}Rh Targets
NUCLEAR REACTIONS $^{103}\text{Rh}(\text{p},2\text{np})$, (p,nd) , (p,t) , $(\text{p},3\text{n})$, $(\text{p},3\text{np})$, $(\text{p},2\text{nd})$, (p,nt) , $(\text{p},4\text{n})$, $E=15-67$ MeV; measured thin target residual yields, $^{100,101}\text{Pd}$, $^{101\text{m}}$, 101 , ^{100}Rh production $\sigma(E)$. Activation technique.
- 84La31 R.M.Lambrecht, S.Mirzadeh - *J.Labelled Compd.Radiopharm.* 21, 1288 (1984) - Astatine-211: Production, radiochemistry and nuclear data
NUCLEAR REACTIONS $^{209}\text{Bi}(\alpha,2\text{n})$, $(\alpha,3\text{n})$, $E=21.1-29.2$ MeV; measured $\sigma(E)$. Thin targets, activation technique. $^{209}\text{Bi}(\alpha,\text{t})$, $E=21-27.7$ MeV; measured ^{210}Po production. Thick targets, activation technique.
- 84LaZX C.E.Laird, M.S.Freedman, C.N.Davids - *Bull.Am.Phys.Soc.* 29, No.7, 1056, ED9 (1984) - Proton Induced Reactions on ^{197}Au , ^{203}Tl , and ^{205}Tl
NUCLEAR REACTIONS ^{197}Au , $^{203}\text{Tl}(\text{p},\text{X})$, $E \leq 25$ MeV; measured reaction $\sigma(E)$. Activation technique, natural targets. Hauser-Feshbach, optical model analyses.
- 84Le06 H.Lehr, W.Bohne, K.Grabisch, H.Morgenstern, W.Von Oertzen - *Nucl.Phys.* A415, 149 (1984) - Complete Fusion in a Light Heavy-Ion Reaction from 2.5 to 20 MeV/Nucleon
NUCLEAR REACTIONS $^{26}\text{Mg}(^{20}\text{Ne},\text{X})$, $E=51-395$ MeV; measured evaporation residues, σ vs mass, E . Statistical model calculations.
- 84Le19 R.J.Ledoux, C.E.Ordenez, M.J.Bechara, H.A.Al-Juwair, G.Lavelle, E.R.Cosman - *Phys.Rev.* C30, 866 (1984) - Selective Alpha Particle Decay of $^{12}\text{C} + ^{12}\text{C}$ Resonances to Excited ^{20}Ne Rotational Bands Observed in the $^{12}\text{C}(^{12}\text{C},\alpha)^{20}\text{Ne}$ Reaction
NUCLEAR REACTIONS $^{12}\text{C}(^{12}\text{C},\alpha)$, $E(\text{cm})=14-20.6$ MeV; measured $\sigma(E_{\alpha})$, $\sigma(\theta)$ vs E_{α} , yield vs E . ^{24}Mg deduced resonances, J, π, Γ, α , reduced widths, possible isomeric resonance selective decay to ^{20}Ne rotational band.
- 84Li09 R.Lindsay, N.Rowley - *J.Phys.(London)* G10, 805 (1984) - Approximate Treatment of Coupled-Channels Effects in Sub-Barrier Fusion
NUCLEAR REACTIONS $^{154}\text{Sm}(^{16}\text{O},\text{X})$, $E(\text{cm})=54-63$ MeV; calculated fusion $\sigma(E)$. $^{154}\text{Sm}(^{16}\text{O},^{16}\text{O})$, $E=58$ MeV; calculated inelastic $\sigma(E)$.
- 84LiZY P.W.Lisowski, R.E.Brown, J.C.Gursky, S.D.Howe, N.Jarmie, G.L.Morgan - *Bull.Am.Phys.Soc.* 29, No.4, 748, JH13 (1984) - Cross Sections for the $^6\text{Li}(\text{t},\text{n})2\alpha$ Reaction
NUCLEAR REACTIONS $^6\text{Li}(\text{t},\text{n})$, $E=2-4.5$ MeV; measured $\sigma(\theta)$, $\sigma(E_{\text{n}})$, σ . ^6Be deduced levels. Comparison with mirror reaction, other data.

REFERENCES

- 84Ma28 J.F.Mateja, J.Garman, D.E.Fields, R.L.Kozub, A.D.Frawley, L.C.Dennis - Phys.Rev. C30, 134 (1984) - Fusion Cross Sections for Four Heavy-Ion Entrance Channels leading to the ^{23}Na Compound Nucleus
NUCLEAR REACTIONS $^{16}\text{O}(^7\text{Li},\text{X}), \text{E}=12-34$ MeV; $^9\text{Be}(^{14}\text{N},\text{X}), \text{E}=15-57$ MeV; measured residual fragment production σ vs mass, compound nucleus excitation, fusion $\sigma(\text{E})$, reaction $\sigma(\text{E})$. ^{23}Na level deduced entrance channel spin.
- 84Ma62 L.F.Mausner, S.Mirzadeh, T.Prach, P.Richards - J.Labelled Compd.Radiopharm. 21, 1284 (1984) - Production and Separation of Tin-117m for Bone Radiotherapy
NUCLEAR REACTIONS $^{121}\text{Sb}(\text{p},3\text{n}2\text{p}), (\text{p},5\text{n}2\text{p}), \text{E}=43-60$ MeV; measured thin target $\sigma(\text{E})$; deduced $^{117\text{m}}\text{Sn}$ production optimum conditions.
- 84Mo04 T.Motobayashi, H.Ejiri, T.Shibata, K.Okada, M.Sasao, K.Maeda, H.Suzuki, A.Shimizu, H.Sakai - Nucl.Phys. A413, 290 (1984) - Breakup Process for 100 MeV ^3He Interacting with ^{165}Ho and $^{166,167}\text{Er}$ Nuclei
NUCLEAR REACTIONS $^{166,167}\text{Er}(^3\text{He},\text{xn})^{160}\text{Yb}/^{162}\text{Yb}/^{164}\text{Yb}/^{166}\text{Yb}, ^{165}\text{Ho}(^3\text{He},\text{xnp})^{158}\text{Er}/^{160}\text{Er}/^{162}\text{Er}/^{164}\text{Er}/^{166}\text{Er}, ^{166,167}\text{Er}(^3\text{He},\text{xn}2\text{p})^{162}\text{Er}/^{164}\text{Er}, ^{166}\text{Er}, ^{165}\text{Ho}, ^{166,167}\text{Er}(^3\text{He},\text{pX}), (^3\text{He},\text{dX}), (^3\text{He},\text{tX}), (^3\text{He},\text{xnpd}), \text{E}=100$ MeV; measured $\sigma(\text{fragment } \theta, \text{E}), \text{E}\gamma, \text{I}\gamma, (\text{particle})\gamma\text{-coin}$; deduced elastic, inelastic breakup, breakup fusion σ . Enriched targets, $\Delta\text{E-E}$ counter telescopes, pure Ge detectors. Exciton model analysis.
- 84Mo28 S.Mordechai, H.T.Fortune - Phys.Rev. C30, 1924 (1984) - Mechanism of the $^{16}\text{O}(^7\text{Li},\alpha)^{18}\text{F}$ Reaction at 20 MeV
NUCLEAR REACTIONS $^{16}\text{O}(^7\text{Li},\alpha), \text{E}=20$ MeV; measured $\sigma(\text{Ea}), \sigma(\theta)$; deduced reaction mechanism, σ . ^{18}F deduced levels, excitation σ dependence on band characteristics. Finite-range DWBA. Hauser-Feshbach analysis.
- 84Mu16 J.J.L.Mulders - Int.J.Appl.Radiat.Isotop. 35, 475 (1984) - Yield Curves and Beam Current Dependent Production Rates of Rb Radioisotopes Produced by Protons on a Krypton Gas Target
NUCLEAR REACTIONS $\text{Kr}(\text{p},\text{X})^{79}\text{Rb}/^{81}\text{Rb}/^{81\text{m}}\text{Rb}/^{82}\text{Rb}/^{82\text{m}}\text{Rb}/^{83}\text{Rb}/^{84}\text{Rb}/^{84\text{m}}\text{Rb}/^{86}\text{Rb}, \text{E}=5-26$ MeV; measured residuals yield vs E. Activation technique.
- 84Na06 T.Nakamura, Y.Uwamino - Phys.Rev. C29, 1317 (1984); Erratum Phys.Rev. C30, 413 (1984) - Neutron and Photon Production from Thick Targets Bombarded by 30-MeV p, 33-MeV d, 65-MeV ^3He , and 65-MeV α Ions: Phenomenological analysis of experimental neutron energy spectra
NUCLEAR REACTIONS $^{12}\text{C}, ^{63}\text{Cu}, ^{208}\text{Pb}(\text{p},\text{n}), \text{E}=30$ MeV; $^{12}\text{C}, ^{63}\text{Cu}, ^{208}\text{Pb}(\text{d},\text{n}), \text{E}=33$ MeV; $^{12}\text{C}, ^{63}\text{Cu}, ^{208}\text{Pb}(^3\text{He},\text{n}), (\alpha,\text{n}), (\alpha,\gamma), \text{E}=65$ MeV; analyzed thick target $\sigma(\text{E},\theta)$, neutron spectra; deduced reaction mechanism. Equilibrium, preequilibrium hybrid models.
- 84Na07 J.Napolitano, S.J.Freedman - Nucl.Phys. A417, 289 (1984) - The Width of the 5.11 MeV State in ^{10}B and Isovector Parity Mixing
NUCLEAR REACTIONS $^6\text{Li}(\alpha,\gamma), \text{E}=1.03-1.2$ MeV; measured thick target yields. ^{10}B deduced level parity mixing parameter, $2^+, \text{T}=1$ level $\Gamma\alpha$. Vector polarized target.
- 84Na12 Y.Nagame, H.Nakahara, K.Sueki, H.Kudo, I.Kohno, M.Yanokura - Z.Phys. A317, 31 (1984) - Studies on Strongly Damped Components in Relatively Light Ion Reaction Systems
NUCLEAR REACTIONS $^{50}\text{Cr}(^{20}\text{Ne}, ^{20}\text{Ne}), (^{20}\text{Ne}, \text{X}), \text{E}=93, 120, 146$ MeV; $^{92,100}\text{Mo}, ^{54}\text{Cr}(^{20}\text{Ne}, ^{20}\text{Ne}), (^{20}\text{Ne}, \text{X}), \text{E}=146$ MeV; measured elastic $\sigma(\theta)$, evaporation $\sigma(\theta)$, $\sigma(\text{fragment } \theta, \text{Z})$ for fragment $\text{Z}=6-20$, fragment kinetic energy, yield vs mass. $^{70,74}\text{Se}, ^{92,100}\text{Mo}$ deduced mean $\text{T}_{1/2}$ bombarding energy dependence. Transport theory.
- 84Ne06 G.W.A.Newton, V.J.Robinson, E.M.Shaw, R.J.Smith, H.E.Sims - J.Radioanal.Nucl.Chem. 84, 149 (1984) - Single Neutron Transfer Reactions in the Systems: $^{139}\text{La} + ^{16}\text{O}, ^{93}\text{Nb} + ^{12}\text{C}, ^{14}\text{N}, ^{18}\text{O}$ and ^{20}Ne
NUCLEAR REACTIONS $^{139}\text{La}(^{16}\text{O}, ^{15}\text{O}), \text{E}=105.8-153.1$ MeV; $^{93}\text{Nb}(^{12}\text{C}, ^{12}\text{C}), \text{E}=88.7-171.2$ MeV; $^{93}\text{Nb}(^{14}\text{N}, ^{15}\text{N}), \text{E}=89.4-145.6$ MeV; $^{93}\text{Nb}(^{16}\text{O}, ^{17}\text{O}), \text{E}=117.3-183.6$ MeV; $^{93}\text{Nb}(^{20}\text{Ne}, ^{21}\text{Ne}), \text{E}=112.2-191.4$ MeV; measured $\sigma(\text{E})$, residuals yields, isomer production σ ; deduced reaction mechanism.
- 84Ni02 R.J.Nickles, M.E.Daube, T.J.Ruth - Int.J.Appl.Radiat.Isotop. 35, 117 (1984) - An $^{18}\text{O}_2$ Target for the Production of ^{18}F
NUCLEAR REACTIONS $^{18}\text{O}(\text{p},\text{n}), \text{E}=10$ MeV; measured thick target ^{18}F saturation yield. Cryogenic enriched gas retrieval.
- 84No05 G.J.L.Nooren, C.Van Der Leun - Nucl.Phys. A423, 197 (1984) - The Reaction $^{36}\text{S}(\text{p},\gamma)^{37}\text{Cl}$ (I). Excitation Energies and γ -Ray Branchings of Bound States Deduced from Resonances in the Range $\text{E}(\text{p}) = 500-2000$ keV
NUCLEAR REACTIONS $^{36}\text{S}(\text{p},\gamma), \text{E}=0.5-2$ MeV; measured $\sigma(\text{E}), \text{E}\gamma$; deduced Q. ^{37}Cl deduced resonances, strengths, γ -branching, Γ , bound states γ branching, J, π . Enriched targets.

REFERENCES

- 84No07 E.B.Norman, T.E.Chupp, K.T.Lesko, P.J.Grant, G.L.Woodruff - Phys.Rev. C30, 1339 (1984) - ^{22}Na Production Cross Sections from the $^{19}\text{F}(\alpha,n)$ Reaction
NUCLEAR REACTIONS $^{19}\text{F}(\alpha,n)$, $E = 3.5\text{--}10$ MeV; measured thick target neutron yield; deduced ^{22}Na production cross sections. ^3He filled proportional counter imbedded in graphite neutron detector. Hauser-Feshbach analysis.
- 84Oh02 M.Ohta, K.Hatogai, S.Okai, Y.Abe - Phys.Rev. C29, 1948 (1984) - Limitation on Heavy Ion Fusion and Nuclear Level Density at High Excitation Energies
NUCLEAR REACTIONS $^{26}\text{Mg}(^{20}\text{Ne},X)$, $E(\text{cm}) \approx 30\text{--}100$ MeV; calculated fusion $\sigma(E)$, critical angular momentum, temperature. Compound nuclear level density, finite single particle space.
- 84Ol05 M.D.Olson, R.W.Kavanagh - Phys.Rev. C30, 1375 (1984) - $^7\text{Li}(\alpha,n)$ Cross Section from Threshold to 5.67 MeV
NUCLEAR REACTIONS $^7\text{Li}(\alpha,n)$, $E=4.38\text{--}4.67$ MeV; measured $\sigma(E)$; deduced inverse reaction $\sigma(E)$. ^{11}B resonances deduced parameters.
- 84Om01 T.Omori, K.Omori, C.Ochi, K.Yoshihara, M.Yagi - J.Radioanal.Nucl.Chem. 82, 61 (1984) - Simultaneous Production of ^{96}Tc and ^{111}In by α -Particle Irradiation of Stacked Nb and Ag Foils, and Their Carrier-Free Separations
NUCLEAR REACTIONS $^{109}\text{Ag}(\alpha,2n)$, $^{93}\text{Nb}(\alpha,n)$, $E=35$ MeV; measured $E\gamma$; deduced residuals production yields. Stacked foil method.
- 84Om03 A.R.Omar, J.S.Eck, T.R.Ophel, J.R.Leigh - Phys.Rev. C30, 1516 (1984) - Total Fusion of $^9\text{Be} + ^9\text{Be}$ at $E(^9\text{Be}) = 35\text{--}55$ MeV
NUCLEAR REACTIONS $^9\text{Be}(^9\text{Be},X)$, $E=35,40,45,50,55$ MeV; measured evaporation residue $\sigma(\theta)$, σ vs Z , fusion $\sigma(E)$. $^{12}\text{C}(^{12}\text{C},X)$, $E(\text{cm})=10\text{--}45$ MeV; calculated total reaction σ . Optical model.
- 84Os03 J.L.Osborne, C.A.Barnes, R.W.Kavanagh, R.M.Kremer, G.J.Mathews, J.L.Zyskind, P.D.Parker, A.J.Howard - Nucl.Phys. A419, 115 (1984) - Low-Energy Behaviour of the $^3\text{He}(\alpha,\gamma)^7\text{Be}$ Cross Section
NUCLEAR REACTIONS $^3\text{He}(\alpha,\gamma)$, $E=165\text{--}1169$ keV; measured $\sigma(E)$, $E\gamma$ -branching ratio. $^3\text{He}(\alpha,\gamma)$, $E(\text{cm})=947.1255$ keV; measured $\sigma(E)$. Enriched target.
- 84Pa13 D.J.Parker, J.Asher, T.W.Conlon, I.Naqib - Phys.Rev. C30, 143 (1984) - Complete and Incomplete Fusion in $^{12}\text{C} + ^{51}\text{V}$ at $E(^{12}\text{C}) = 36\text{--}100$ MeV from Analysis of Recoil Range and Light Particle Measurements
NUCLEAR REACTIONS $^{51}\text{V}(^{12}\text{C},2n)$, $(^{12}\text{C},3n)$, $(^{12}\text{C},3n2p)$, $(^{12}\text{C},4n2p)$, $(^{12}\text{C},5n2p)$, $(^{12}\text{C},7n4p)$, $(^{12}\text{C},5n4p)$, $(^{12}\text{C},7n5p)$, $E=36\text{--}100$ MeV; measured residuals production yield, $\sigma(E)$; deduced complete, incomplete fusion component separation.
- 84Pl01 F.Plasil, T.C.Awes, B.Cheynis, D.Drain, R.L.Ferguson, F.E.Obenshain, A.J.Sierk, S.G.Steadman, G.R.Young - Phys.Rev. C29, 1145 (1984) - Angular-Momentum-Dependent Fission Barriers in the Rare-Earth Region
NUCLEAR REACTIONS $^{169}\text{Tm}(^{12}\text{C},X)$, $E=78.2,100.8,122.6$ MeV; $^{159}\text{Tb}(^{22}\text{Ne},X)$, $E=113,130,161.5$ MeV; measured evaporation residue production σ . $^{133}\text{Cs}(^{20}\text{Ne},F)$, ^{141}Pr , $^{169}\text{Tm}(^{12}\text{C},F)$, $^{159}\text{Tb}(^{22}\text{Ne},F)$, E not given; calculated fission σ vs excitation function. ^{153}Tb , ^{181}Re deduced level density parameters ratio $(a(F)/a(\nu))$. Angular momentum dependent fission barriers, rotating liquid drop, rotating finite-range models.
- 84Pr06 H.Prade, W.Enghardt, W.D.Fromm, H.U.Jager, L.Kaubler, H.-J.Keller, L.K.Kostov, F.Stary, G.Winkler, L.Westerberg - Nucl.Phys. A425, 317 (1984) - New Positive-Parity States and the Shell-Model Description of ^{117}Sn
NUCLEAR REACTIONS $^{108}\text{Cd}(\alpha,n)$, $E=20\text{--}27$ MeV; measured $E\gamma$, $\gamma\gamma$ -coin, $\sigma(E, E\gamma, \theta\gamma)$, $\alpha\gamma(t)$, $I(\text{ce})$, γ yield vs E . $^{111}\text{Cd}(^3\text{He},3n)$, $E=28\text{--}32$ MeV; measured $E\gamma$, $\gamma\gamma$ -coin, $\sigma(E, E\gamma, \gamma\gamma)$, $^3\text{He}\gamma(t)$, γ yield vs E . $^{109}\text{Ag}(^6\text{Li},4n)$, $E=40.5$ MeV; measured $E\gamma$, $I\gamma$. ^{117}Sn deduced levels, $J, \pi, T_{1/2}$, $ICC, \delta(E2/M1)$. Enriched targets, Ge(Li), Si-Li detectors. Shell model analysis.
- 84Qa02 S.M.Qaim, H.J.Probst - Radiochim.Acta 35, 11 (1984) - Excitation Functions of Deuteron Induced Nuclear Reactions on Vanadium with Special Reference to the Production of ^{43}K : Systematics of (d, xn) reaction cross sections relevant to the formation of highly neutron deficient radioisotopes
NUCLEAR REACTIONS $^{51}\text{V}(d,pa)$, $(d,2pa)$, (d,npa) , $(d,2npa)$, $(d,4np)$, $(d,4npa)$, $(d,3\alpha)$, $(d,2np2\alpha)$, $(d,np2\alpha)$, $(d,3\alpha)$, $E=\text{threshold--}90$ MeV; measured residuals production $\sigma(E)$, ^{43}K thick target yield vs E .
- 84Qa03 S.M.Qaim, H.Dohler - Int.J.Appl.Radiat.Isotop. 35, 645 (1984) - Production of Carrier-free ^{117m}Sn
NUCLEAR REACTIONS $^{116}\text{Cd}(\alpha,3n)$, $E=20\text{--}45$ MeV; $^{115}\text{In}(\alpha,npd)$, $E=20\text{--}120$ MeV; measured residual isomer production $\sigma(E)$, thick target yield.

REFERENCES

- 84Qa05 S.M.Qaim, H.Dohler, G.Stocklin - J.Labelled Compd.Radiopharm. 21, 1283 (1984) - Production of No-Carrier-Added ^{117m}Sn
NUCLEAR REACTIONS $\text{Cd,In}(\alpha,\text{X})^{113}\text{Sn}/^{117}\text{Sn}/^{117m}\text{Sn}, E=\text{threshold}-140\text{ MeV}$; $\text{Cd,In}(\alpha,\text{X})^{113}\text{Sn}/^{117}\text{Sn}/^{117m}\text{Sn}, E=\text{threshold}-120\text{ MeV}$; measured yield vs E. No-carrier added technique, stacked foils.
- 84Re09 P.-G.Reinhard, J.Friedrich, K.Goeke, F.Grummer, D.H.E.Gross - Phys.Rev. C30, 878 (1984) - Dynamics of the $^{16}\text{O} + ^{16}\text{O} \rightarrow ^{32}\text{S}$ Fusion Process
NUCLEAR REACTIONS $^{16}\text{O}(\alpha,\text{X}), E(\text{cm})=2-50\text{ MeV}$; calculated subbarrier, above barrier fusion $\sigma(E)$, astrophysical S-factor vs E. $^{16}\text{O}(e,e), E$ not given; calculated form factor. Quantized adiabatic TDHF.
- 84Rh01 M.J.Rhoades-Brown, P.Braun-Munzinger - Phys.Lett. 136B, 19 (1984) - Explanation of Sub-Barrier Fusion Enhancement in a Coupled Channels Model
NUCLEAR REACTIONS $^{26}\text{Mg}(^{32}\text{S},\text{X}), E(\text{cm})=24-33\text{ MeV}$; calculated fusion $\sigma(E)$; deduced subbarrier fusion enhancement. Coupled-channels method, short range absorption.
- 84Rh02 M.J.Rhoades-Brown, M.Prakash - Phys.Rev.Lett. 53, 333 (1984) - Simultaneous Description of Quasielastic and Fusion Reactions in Low-Energy Heavy-Ion Collisions
NUCLEAR REACTIONS $^{208}\text{Pb}(^{16}\text{O},^{18}\text{O}), (^{18}\text{O},\text{X}), (^{18}\text{O},\text{F}), E=80-102\text{ MeV}$; calculated elastic $\sigma(\theta)$, spin-dependent fusion σ , fusion-fission σ , fission fragment anisotropies; deduced near barrier entrance channel, fragment anisotropy connection. Quasielastic, fusion processes, unified treatment.
- 84Ro04 R.G.H.Robertson, P.Dyer, R.C.Melin, T.J.Bowles, A.B.McDonald, G.C.Ball, W.G.Davies, E.D.Earle - Phys.Rev. C29, 755 (1984) - Upper Limit on the Isovector Parity-Violating Decay Width of the $0^+ T = 1$ State of ^6Li
NUCLEAR REACTIONS $^2\text{H}(\alpha,\gamma), E=6.24\text{ MeV}$; measured capture σ . ^6Li level deduced isovector parity violating decay Γ upper limit.
- 84Ru07 W.Rudolph, C.Bauer, P.Gippner, D.Grambole, C.Heiser, F.Herrmann, H.-J.Thomas - J.Radioanal.Nucl.Chem. 83, 99 (1984) - Hydrogen Determination by Means of the $^1\text{H}(^{12}\text{F},\alpha\gamma)^{16}\text{O}$ and $^1\text{H}(^{15}\text{N},\alpha\gamma)^{12}\text{C}$ Resonance Reactions
NUCLEAR REACTIONS $^1\text{H}(^{19}\text{F},\alpha\gamma), E=6-18\text{ MeV}$; $^1\text{H}(^{15}\text{N},\alpha\gamma), E=6.1-6.7\text{ MeV}$; measured yield vs E. Thick Si targets, hydrogen atom implantation.
- 84Sa15 F.Saint-Laurent, M.Conjeaud, R.Dayras, S.Harar, H.Oeschler, C.Volant - Nucl.Phys. A422, 307 (1984) - Momentum Transfer in Light-Ion-Induced Fission Reactions
NUCLEAR REACTIONS $^{232}\text{Th}(p,\text{F}), E=140-1000\text{ MeV}$; $^{232}\text{Th}(d,\text{F}), E=70-1000\text{ MeV}$; $^{232}\text{Th}(\alpha,\text{F}), E=280, 1000\text{ MeV}$; $^{197}\text{Au}(\alpha,\text{F}), E=280\text{ MeV}$; measured fission σ , $\sigma(\text{fragment } \theta)$, $(\text{fragment } \theta)/(\text{fragment } \theta)$. $^{233,234}\text{Pu}, ^{238}\text{U}$ deduced spins, linear momentum transfer. Intranuclear cascade model.
- 84Sa22 Z.P.Sawa, J.F.Lamb - Int.J.Appl.Radiat.Isotop. 35, 909 (1984) - Increased Yield of ^{201}Tl Produced via $\text{Pb}(p,xn)^{201}\text{Bi} \rightarrow ^{201}\text{Pb} \rightarrow ^{201}\text{Tl}$
NUCLEAR REACTIONS $\text{Pb}(p,xn)^{201}\text{Tl}, E=60.3-65.2\text{ MeV}$; measured residual production yield; deduced early Bi grandparent chemical separation role. Activation Technique.
- 84Sa29 F.Saporetti, F.Fabbri, R.Guidotti - Nucl.Phys. A431, 288 (1984) - Finite-Range Nucleon-Nucleon Interaction in the Radiative Capture of Fast Nucleons
NUCLEAR REACTIONS $^{142}\text{Ce}(p,\gamma), E=5-30\text{ MeV}$; calculated radiative capture $\sigma(E)$. Direct-semidirect model, finite-range interactions.
- 84Sa30 M.Sajjad, R.M.Lambrecht, A.P.Wolf - J.Labelled Compd.Radiopharm. 21, 1260 (1984) - Excitation Function for the $^{15}\text{N}(p,n)^{15}\text{O}$ Reaction
NUCLEAR REACTIONS $^{15}\text{N}(p,n), E=3.72-16.58\text{ MeV}$; measured absolute $\sigma(E)$. Activation technique, enriched target.
- 84Sc06 U.J.Schrewe, E.Hagberg, H.Schmeing, J.C.Hardy, V.T.Koslowsky, K.S.Sharma - Z.Phys. A315, 49 (1984) - Alpha Decay of Neutron-Deficient Rhenium and Osmium Isotopes
NUCLEAR REACTIONS $^{144}\text{Sm}(^{27}\text{Al},2n), (^{27}\text{Al},3n), (^{27}\text{Al},4n), (^{27}\text{Al},5n), (^{27}\text{Al},6n), E=130\text{ MeV}$; $^{144}\text{Sm}(^{28}\text{Si},2n), (^{28}\text{Si},3n), (^{28}\text{Si},4n), (^{28}\text{Si},5n), (^{28}\text{Si},6n), E=155\text{ MeV}$; measured residuals yields vs compound nucleus excitation. $^{144}\text{Sm}(^{28}\text{Si},xn), E=130,140,145,150,155\text{ MeV}$; measured E_{α}, I_{α} . $^{144}\text{Sm}(^{27}\text{Al},xn), E=138,150\text{ MeV}$; measured E_{α}, I_{α} .
- 84Sc16 W.Schmidt, O.Bohn, H.Bruckmann, E.Filos, D.Gola, C.Heinrich, K.Wick - Nucl.Phys. A423, 1 (1984) - Charge Dependence of the Total Nucleon-Deuteron Reaction Cross Section
NUCLEAR REACTIONS $^1\text{H}(d,np), E=13.1, 15.9\text{ MeV}$; measured $\sigma(\text{Ep},p)$; deduced reaction $\sigma(E)$.

REFERENCES

- 84Sc24 A.Scalia - Lett.Nuovo Cim. 40, 33 (1984) - Some Remarks on the Generalized Critical-Distance Model for Heavy-Ion Fusion
NUCLEAR REACTIONS $^{165}\text{Ho}(^{40}\text{Ar},X), E(\text{cm})=144.87-314.7$ MeV; $^{181}\text{Ta}(^{24}\text{Mg},X), E(\text{cm})=238.39-300.19$ MeV; $^{197}\text{Au}(^{35}\text{Cl},X), E(\text{cm})=174-270$ MeV; $^{62}\text{Ni}(^{35}\text{Cl},X), E(\text{cm})=102.26-137.42$ MeV; $^{116}\text{Sn}(^{35}\text{Cl},X), E(\text{cm})=122.91-165.16$ MeV; $^{141}\text{Pr}(^{35}\text{Cl},X), E(\text{cm})=124.17-172.24$ MeV; $^{109}\text{Ag}(^{40}\text{Ar},X), E(\text{cm})=123.63-246.53$ MeV; $^{24}\text{Mg}(^{12}\text{C},X), E(\text{cm})=13.33-40$ MeV; $\text{Sb}(^{40}\text{Ar},X), E(\text{cm})=125.76-222.91$ MeV; $^{76}\text{Ge}(^{32}\text{S},X), E(\text{cm})=76-158.33$ MeV; calculated fusion σ . Generalized critical distance model.
- 84Sh04 K.Shin, K.Hibi, M.Fujii, Y.Uwamino, T.Nakamura - Phys.Rev. C29, 1307 (1984) - Neutron and Photon Production from Thick Targets Bombarded by 30-MeV p, 33-MeV d, 65-MeV ^3He , and 65-MeV α ions: Experiment and comparison with cascade Monte Carlo calculations
NUCLEAR REACTIONS C,Fe,Pb,Cu(p,n),(p, γ),E=30 MeV; C,Fe,Pb,Cu(d,n),(d, γ),E=33 MeV; C,Fe,Pb,Cu(^3He ,n),(^3He , γ),(α ,n),(α , γ),E=65 MeV; measured thick target yields, $\sigma(E_\gamma)$, $\sigma(E_n)$; deduced $\sigma(\theta)$. Monte Carlo calculations.
- 84Sk03 S.J.Skorka, D.Evers, K.E.G.Lobner, R.Pergo, U.Quade, K.Rudolph, I.Weidl - Nuovo Cim. 81A, 331 (1984) - Experiments with the Munich Recoil Spectrometer
NUCLEAR REACTIONS $^{100,98,96,94,92}\text{Mo}(^{32}\text{S},X),(^{36}\text{S},X), E(\text{cm}) \approx 74-90$ MeV; measured fusion $\sigma(E)$. $^{12}\text{C}(^{10}\text{O},p), E(\text{cm})=19-26$ MeV; measured $\sigma(E_p)$, $\sigma(\theta)$ vs E. ^{27}Al deduced high-spin state decay characteristics. Recoil spectrometer.
- 84Sp03 K.-H.Speidel, V.Mertens, W.Trolenberg, M.Knopp, H.Neuburger, K.Bharuth-Ram, J.Gerber - Z.Phys. A315, 319 (1984) - g-Factor of the Second 4^+ State in ^{24}Mg
NUCLEAR REACTIONS $^{12}\text{C}(^{16}\text{O},\alpha), E=39-40$ MeV; measured α yield vs E, (^{24}Mg) γ - γ (particle)-coin, γ (particle)(θ), γ (θ ,H.t). ^{24}Mg levels deduced g.
- 84St23 A.M.Stefanini, G.Fortuna, A.Tivelli, W.Meczyński, S.Beghini, C.Signorini, S.Lunardi, M.Morando - Phys.Rev. C30, 2088 (1984) - Sub-Barrier Fusion of $^{28,30}\text{Si}$ with $^{58,62,64}\text{Ni}$
NUCLEAR REACTIONS $^{58,62,64}\text{Ni}(^{28}\text{Si},X),(^{30}\text{Si},X), E(\text{cm}) \approx 47-64$ MeV; measured fusion $\sigma(E)$; deduced isotopic effects. Channel coupling model.
- 84Su05 Z.Sujkowski, D.Chmielewska, M.N.Harakeh - Nucl.Instrum.Methods 219, 111 (1984) - Determination of the α -Induced K-Shell Ionization Cross Sections from the Measured Intensity Ratios of K X-Rays to ($2^+ \rightarrow 0^+$) γ -Rays in Even Deformed Nuclei
NUCLEAR REACTIONS $^{158,160}\text{Gd}(\alpha,\alpha'), E=13-30$ MeV; measured K X-ray, γ -spectra, $I(K \text{ X-ray})/I_\gamma$; deduced K-shell ionization $\sigma(E)$. Calculated inelastic $\sigma(E)$.
- 84Ta20 O.Tanimura - Z.Phys. A319, 227 (1984) - Distorted Wave Approach to Heavy Ion Molecular Resonance
NUCLEAR REACTIONS $^{12}\text{C}(^{12}\text{C},^{12}\text{C}),(^{12}\text{C},^{12}\text{C}'), ^{14}\text{C}(^{14}\text{C},^{14}\text{C}),(^{14}\text{C},^{14}\text{C}'), E \approx 15-35$ MeV; $^{12}\text{C}(^{14}\text{C},^{13}\text{C}), E(\text{cm}) \approx 18-26$ MeV; $^{16}\text{O}(^{16}\text{O},^{16}\text{O}),(^{16}\text{O},^{16}\text{O}'), E(\text{cm}) \approx 20-24$ MeV; $^{14}\text{C}(^{16}\text{O},^{16}\text{O}), E(\text{cm}) \approx 17.5-35$ MeV; $^{14}\text{C}(^{16}\text{O},^{18}\text{O}), E(\text{cm}) \approx 17.5-35$ MeV; calculated $\sigma(\theta)$ vs E, $\sigma(E)$; deduced elastic,exit channel matching requirement,potential parameters. First-,second-order distorted wave methods.
- 84Th07 J.M.Thirion, G.Chouraqui, Th.Muller, M.Port - Z.Phys. A317, 329 (1984) - Gamma-Ray Spectroscopy of ^{61}Zn
NUCLEAR REACTIONS $^{58}\text{Ni}(\alpha,n\gamma), E=10.3-14.25$ MeV; measured $n\gamma$ - $\gamma\gamma$ -coin, $\gamma\gamma(\theta)$, γ yield vs E. ^{71}Zn deduced levels,J, γ -branching.
- 84ThZY J.Thomas, S.Hinds, D.Meredith, Y.T.Chen, M.Olson, C.A.Barnes - Bull.Am.Phys.Soc. 29, No.7, 1047, DB5 (1984) - Sub-Barrier Fusion of the Oxygen Isotopes
NUCLEAR REACTIONS $^{16}\text{O}(^{16}\text{O},X),(^{18}\text{O},X), E(\text{cm})=7-12.5$ MeV; measured E_γ , I_γ ; deduced fusion $\sigma(E)$. Statistical model analysis.
- 84Tr01 W.Trombik, W.Trautmann, F.Krug, W.Dunnveber, D.Konnerth, W.Hering, R.Singh, D.Zeppenfeld - Phys.Lett. 135B, 271 (1984) - Alignment and Resonances in $^{12}\text{C} + ^{12}\text{C}$ Inelastic Scattering
NUCLEAR REACTIONS $^{12}\text{C}(^{12}\text{C},^{12}\text{C}'), E(\text{cm})=16-33$ MeV; measured $\gamma(^{12}\text{C})(\varphi)$, $\sigma(\theta)$,inelastic σ ,spin alignment vs E; deduced single,mutual excitation correlated resonance structure.
- 84Va26 L.C.Vaz, J.M.Alexander - Z.Phys. A318, 231 (1984) - Empirical and Theoretical Fusion Barriers for ^1H and ^4He : Connections to evaporation from hot nuclei

REFERENCES

- NUCLEAR REACTIONS $^{50}\text{Co}, ^{94}\text{Zr}(p, X), E(\text{cm})=2-6$ MeV; $^{116}\text{Cd}, ^{139}\text{La}(p, X), E(\text{cm})=2-8$ MeV; $^{98}\text{Mo}, ^{118}\text{Sn}(p, X), E(\text{cm}) \approx 2.5-7$ MeV; $^{103}\text{Rh}(p, X), E(\text{cm})=2-12$ MeV; $^{233}\text{U}(p, X), E(\text{cm})=5-13$ MeV; $^{40}\text{Ca}(\alpha, X), E(\text{cm}) \approx 5-19$ MeV; $^{48}\text{Ti}(\alpha, X), E(\text{cm}) \approx 5-8$ MeV; $^{51}\text{V}(\alpha, X), E(\text{cm})=6-10$ MeV; $^{59}\text{Co}(\alpha, X), E(\text{cm}) \approx 8-20$ MeV; $^{164}\text{Dy}(\alpha, X), E(\text{cm}) \approx 15-25$ MeV; $^{208}\text{Pb}(\alpha, X), E(\text{cm}) \approx 17-21$ MeV; $^{209}\text{Bi}(\alpha, X), E(\text{cm}) \approx 16-20$ MeV; $^{233}\text{U}(\alpha, X), E(\text{cm})=18-30$ MeV; calculated fusion $\sigma(E)$; deduced projectile fusion barriers. $^{181}\text{Ta}(^{18}\text{O}, \alpha), E=215$ MeV; $^{56}\text{Fe}(^{12}\text{C}, p), E=430$ MeV; calculated evaporation $\sigma(\theta, E, \alpha, E, \alpha, \theta, p, E, p)$.
- 84Vo11 W.von Oertzen, B.Imanishi - Nucl.Phys. A424, 262 (1984) - Coupled-Reaction-Channel Approach for Molecular Orbital Phenomena of Valence Nucleons in Heavy-Ion Collisions: The $^{12}\text{C} + ^{13}\text{C}$ system
NUCLEAR REACTIONS $^{12}\text{C}(^{13}\text{C}, ^{13}\text{C}), E(\text{cm})=5-20$ MeV; calculated $\sigma(\theta)$ vs E . $^{13}\text{C}(^{12}\text{C}, ^{12}\text{C}), E=7.8, 9.88$ MeV; calculated $\sigma(\theta)$. $^{12}\text{C}(^{13}\text{C}, ^{13}\text{C}'), E(\text{cm})=7.8, 9.88$ MeV; calculated $\sigma(\theta), P(\theta), \sigma$. Coupled reaction channels model, valence nucleon molecular orbiting.
- 84Wa06 H.Walliser, H.Kanada, Y.C.Tang - Nucl.Phys. A419, 133 (1984) - Study of the $^3\text{He}(\alpha, \gamma)^7\text{Be}$ Radiative-Capture Reaction with Resonating-Group Wave Functions
NUCLEAR REACTIONS $^3\text{He}(\alpha, \gamma), E=0.25-2.5$ MeV; calculated electric dipole capture $\sigma(E)$. Resonating group wave functions.
- 84We07 W.Westmeier, R.A.Esterlund - Z.Phys. A316, 27 (1984) - Particle-to-Fission Competition at High Excitation Energies
NUCLEAR REACTIONS $^{182}\text{W}(^{12}\text{C}, F), (^{12}\text{C}, p), (^{12}\text{C}, \alpha), E=70-170$ MeV; $^{154}\text{Sm}(^{40}\text{Ar}, F), (^{40}\text{Ar}, p), (^{40}\text{Ar}, \alpha), E=200-350$ MeV; calculated fission, reaction $\sigma(E)$. $^{181}\text{Ta}(^{19}\text{F}, F), E=105-125$ MeV; $^{163}\text{Ho}(^{20}\text{Ne}, F), E=292$ MeV; calculated pre-scission neutron multiplicity following $^{200}\text{Pb}, ^{185}\text{Ir}$ fission; deduced particle evaporation, collective motion towards scission relative times. Phenomenological model.
- 84Wi13 B.D.Wilkins, B.B.Back, J.E.Gindler, B.G.Glagola, K.Kwiatkowski, S.H.Zhou, V.E.Viola, Jr. - Phys.Rev. C30, 1228 (1984) - Mass and Kinetic Energy Distributions in Near-Barrier Fission of ^{182}W
NUCLEAR REACTIONS $^{178}\text{Hf}(\alpha, F), E=49.2$ MeV; measured fission fragment yields, total kinetic energy release vs fragment mass; deduced no shell effects. ^{182}W deduced fission characteristics.
- 84Wu04 S.-C.Wu, C.A.Barnes - Nucl.Phys. A422, 373 (1984) - Fusion and Elastic Scattering Cross Sections for the $^{16}\text{O} + ^{16}\text{O}$ Reactions near the Coulomb Barrier
NUCLEAR REACTIONS $^{16}\text{O}(^{16}\text{O}, X), (^{16}\text{O}, ^{16}\text{O}), E(\text{cm})=7-12$ MeV; measured $E_{\gamma}, I_{\gamma}, \text{elastic } \sigma(E), \sigma(\theta)$; deduced reaction σ , production $\sigma(E)$ for $^{28}, ^{30}\text{Si}, ^{30}, ^{31}\text{P}, ^{31}\text{S}, ^{27}\text{Al}, ^{24}\text{Mg}$, astrophysical S-factor. Statistical, incoming wave boundary condition models.
- 84Za04 N.I.Zaika, Yu.V.Kibkalo, V.P.Tokarev, V.A.Shityuk - Yad.Fiz. 39, 548 (1984) - Analysis of the Actinide Fission Data ($E(\alpha) \leq 100$ MeV) taking into Account the Exit-Channel Parameters and the Emission Fission
NUCLEAR REACTIONS $^{232}\text{Th}, ^{235}, ^{238}\text{U}(\alpha, F), E \approx 20-100$ MeV; measured fission $\sigma(E), \sigma(\theta)$; deduced fission parameter energy dependence. Optical model, parabolic barrier approximation.
- 84Zh02 B.V.Zhuravlev, O.V.Grusha, S.P.Ivanova, V.I.Trykova, Yu.N.Shubin - Yad.Fiz. 39, 264 (1984) - Analysis of Neutron Spectra in 22-MeV Proton Interactions with Nuclei
NUCLEAR REACTIONS $^{27}\text{Al}(p, n), ^{56}\text{Fe}, ^{60}\text{Ni}, ^{52}\text{Cr}, ^{90}\text{Zr}, ^{115}\text{In}(p, n), (p, 2n), (p, np), (p, n\gamma), ^{58}\text{Ni}(p, n), (p, np), (p, n\gamma), ^{91}\text{Zr}(p, n), (p, 2n), (p, n\gamma), ^{181}\text{Ta}, ^{94}\text{Zr}(p, n), (p, 2n), (p, n\gamma), (p, 2n\gamma), ^{115}\text{In}(p, 3n), (p, 2n\gamma), E=22$ MeV; measured equilibrium emission $\sigma(E, n)$; deduced absorption, direct, reaction σ . $^{27}\text{Si}, ^{27}\text{Al}, ^{24}\text{Mg}, ^{52}, ^{51}\text{Mn}, ^{52}, ^{51}\text{Cr}, ^{56}, ^{55}\text{Co}, ^{55}, ^{56}\text{Fe}, ^{58}, ^{57}, ^{59}\text{Ni}, ^{60}, ^{59}\text{Cu}, ^{57}, ^{58}, ^{59}\text{Ni}, ^{89}, ^{90}, ^{91}, ^{92}, ^{93}, ^{94}\text{Nb}, ^{113}, ^{114}, ^{115}\text{Sn}, ^{179}, ^{180}, ^{181}\text{W}$ deduced level density parameters. Statistical theory.
- 85Bu02 B.Buck, R.A.Baldock, J.A.Rubio - J.Phys.(London) G11, L11 (1985) - Cluster Model of $A = 7$ Nuclei and the Astrophysical S Factor for $^3\text{He}(\alpha, \gamma)^7\text{Be}$ at Zero Energy
NUCLEAR REACTIONS $^3\text{He}(\alpha, \gamma), E \approx 0$; calculated astrophysical σ factor $S(E)$. $^4\text{He}(^3\text{He}, ^3\text{He}), E(\text{cm})=0-15$ MeV; calculated phase shifts. Cluster model.
- 85CaZZ R.F.Carlson, A.J.Cox, N.E.Davison, R.H.McCamis, W.T.H.van Oers - Bull.Am.Phys.Soc. 30, No.1, 21, AE8 (1985) - A Study of Proton Total Reaction Cross Sections for Several Medium Mass Nuclei between 20 and 48 MeV
NUCLEAR REACTIONS $^{51}\text{V}, ^{54}, ^{56}, ^{57}\text{Fe}, ^{59}\text{Co}(p, X), E=20.8-47.8$ MeV; measured reaction $\sigma(E)$; deduced N, Z dependences. Global model, nuclear transparency calculations.
- 85Ce01 A.Celler, Ch.Briancon, J.S.Dionisio, A.Lefebvre, Ch.Vieu, J.Zylicz, R.Kulesa, C.Mittag, J.Fernandez-Niello, Ch.Lautebach, H.Puchta, F.Riess - Nucl.Phys. A432, 421 (1985) - Yrast Levels of ^{220}Ra Populated in the $^{208}\text{Pb}(^{14}\text{C}, 2n)$ Reaction

REFERENCES

- NUCLEAR REACTIONS $^{208}\text{Pb}(^{14}\text{C},2n\gamma),(^{14}\text{C},3n),(^{14}\text{C},4n),(^{14}\text{C},5n),E=60-83$ MeV; measured $E\gamma, I\gamma, \gamma\gamma-, (ce)\gamma\text{-coin}, I(ce)$; deduced $\sigma(E)$ for $^{220,219,218,217}\text{Ra}$ production. ^{220}Ra deduced levels J, π , $B(E1)/B(E2)$ ratios, ICC. Ge(Li), Ge detectors, electron spectrometer, enriched targets, pulsed beam.
- 85Ka02 G.Kajrys, W.Del Bianco, S.Pi'otte, S.Landsberger, S.Monaro - Phys.Rev. C31, 409 (1985) - High Spin States in ^{99}Tc
NUCLEAR REACTIONS $^{96}\text{Zr}(^6\text{Li},3n),E=18-25$ MeV; measured $E\gamma, I\gamma, \gamma\gamma\text{-coin}, \gamma$ yields vs $E, \gamma(\theta)$. ^{99}Tc deduced levels, J, π . Enriched targets, Ge(Li) detectors.
- 85Kr01 A.J.Kreiner, D.E.Digregorio, A.J.Fendrik, J.Davidson, M.Davidson - Nucl.Phys. A432, 451 (1985) - Structure of ^{186}Ir and Decoupling Phenomena in Doubly-Odd Deformed Nuclei
NUCLEAR REACTIONS $^{181}\text{Ta}(^9\text{Be},4n),E=40-55$ MeV; $^{185}\text{Re}(\alpha,3n\gamma),E=30-55$ MeV; $^{187}\text{Re}(\alpha,5n\gamma),E=55$ MeV; measured $E\gamma, I\gamma, \sigma(E\gamma, E, \theta\gamma), \gamma\gamma\text{-coin}, E$ X-ray, I X-ray. $^{181}\text{Ta}(^9\text{Be},3n),(^9\text{Be},4n),(^9\text{Be},5n),E=40-55$ MeV; measured $\sigma(E)$. ^{186}Ir deduced levels, J, π . Ge detectors, enriched, natural targets. Particle-rotor, alignment analyses.
- 85Mo01 T.Morek, H.Beuscher, B.Bochev, T.Kutsarova, R.M.Lieder, M.Muller-Veggian, A.Neskakis - Nucl.Phys. A433, 159 (1985) - In-Beam Study of the Odd-Odd Nuclei ^{134}La and ^{136}La
NUCLEAR REACTIONS $^{133}\text{Cs}(\alpha,3n),E=55$ MeV; $^{138}\text{Ba}(p,xn),E=32-45$ MeV; $^{138}\text{Ba}(p,xn),E=17-45$ MeV; measured $E\gamma, I\gamma, I\gamma(E), \sigma(E\gamma, \theta), \gamma\gamma(t), \alpha\gamma(t), p\gamma(t), \gamma$ yield. $^{134}, ^{136}\text{La}$ deduced levels, $J, \pi, T_{1/2}$, configurations. Ge(Li) detectors.
- 85Po02 L.Potvin, B.Cujec - Nucl.Phys. A433, 550 (1985) - Measurement of the $^{11}\text{B}(^{11}\text{B}, ^{10}\text{Be})^{12}\text{C}$ Proton Transfer Reaction at Low Energies
NUCLEAR REACTIONS $^{11}\text{B}(^{11}\text{B}, ^{10}\text{Be}),E(\text{cm})=5.5$ MeV; measured $\sigma(\theta)$; $^{11}\text{B}(^{11}\text{B}, ^{10}\text{Be}),E(\text{cm})=2.66-3.64$ MeV; measured γ yields; deduced $\sigma(E)$.
- 85Si01 K.P.Singh, D.C.Tayal, G.Singh, H.S.Hans - Phys.Rev. C31, 79 (1985) - Coulomb Excitation of Cadmium Isotopes with Protons
NUCLEAR REACTIONS $^{110,111,112,113,114,116}\text{Cd}(p,p'\gamma),E=2.7-4.2$ MeV; measured $E\gamma, I\gamma(\theta)$, Coulomb excitation. $^{111}\text{Cd}(p,p'\gamma),E=2.7-4.2$ MeV; measured thick target γ yield. $^{110,111,112,113,114,116}\text{Cd}$ deduced levels, $B(E2), J, \pi, \delta$. Natural target, Ge(Li) detector.

TARGET INDEX

TARGET	REACTION	INCIDENT ENERGY	REFERENCE	KEY NUMBER
^1H	(d,np)	E=13.1,15.9 MeV	JOUR Nucl.Phys. A423, 1	84Sc16
	($^{15}\text{N},\alpha$)	E=6.1-6.7 MeV	JOUR J.Radiopanal.Nucl.Chem. 83, 99	84Ru07
	($^{18}\text{F},\alpha$)	E=6-18 MeV	JOUR J.Radiopanal.Nucl.Chem. 83, 99	84Ru07
^2H	(d,n)	E(cm)≤150 keV	JOUR Phys.Rev.Lett. 52, 2038	84Ho10
	(d,n)	E=20-117 MeV	JOUR Bull.Am.Phys.Soc. 29, 747,JH2	84Ja2Y
	(d,p)	E=20-117 MeV	JOUR Bull.Am.Phys.Soc. 29, 747,JH2	84Ja2Y
	(t,α)	E=12.5-117 keV	JOUR Bull.Am.Phys.Soc. 29, 747,JH3	84Br2X
	(t,α)	E=12.5-117 keV	JOUR Phys.Rev. C29, 2031	84Ja08
	(α,γ)	E=6.24 MeV	JOUR Phys.Rev. C29, 755	84Ro04
	(α,γ)	E=6.24 MeV	JOUR Phys.Rev. C29, 755	84Ro04
^3He	(d,p)	E(cm)=300 keV	JOUR Bull.Am.Phys.Soc. 29, 1076,R6.3	84A12U
	(α,γ)	E=1.3 MeV	JOUR Nucl.Phys. A427, 526	84A124
	(α,γ)	E(cm)=525 keV	JOUR Bull.Am.Phys.Soc. 29, 1076,R6.3	84A12U
	(α,γ)	E=165-1169 keV	JOUR Nucl.Phys. A419, 115	84Os03
	(α,γ)	E(cm)=947,1255 keV	JOUR Nucl.Phys. A419, 115	84Os03
	(α,γ)	E=0.25-2.5 MeV	JOUR Nucl.Phys. A419, 133	84Wa06
	(α,γ)	E≈0	JOUR J.Phys.(London) G11, L11	85Bu02
	(α,γ)	E≈0	JOUR J.Phys.(London) G11, L11	85Bu02
^6Li	(d,n)	E=10-100 keV	JOUR J.Phys.(London) G10, L213	84Ku15
	(d,p)	E=10-100 keV	JOUR J.Phys.(London) G10, L213	84Ku15
	(d,n ^3He)	E=10-100 keV	JOUR J.Phys.(London) G10, L213	84Ku15
	(d,pt)	E=10-100 keV	JOUR J.Phys.(London) G10, L213	84Ku15
	(d,α)	E=10-100 keV	JOUR J.Phys.(London) G10, L213	84Ku15
	(t,n)	E=2-4.5 MeV	JOUR Bull.Am.Phys.Soc. 29, 748,JH13	84Li2Y
	(α,γ)	E=1.03-1.2 MeV	JOUR Nucl.Phys. A417, 289	84Na07
	(α,γ)	E=1.03-1.2 MeV	JOUR Nucl.Phys. A417, 289	84Na07
^7Li	(p,n)	E=60-480 MeV	JOUR Phys.Rev. C30, 1999	84Da22
	(α,γ)	E=401,814,953 keV	JOUR Phys.Rev. C29, 1199	84Ha13
	(α,n)	E=4.38-4.67 MeV	JOUR Phys.Rev. C30, 1375	84O105
^7Be	(α,γ)	E=884,1376 keV	JOUR Phys.Rev. C29, 1199	84Ha13
^9Be	($^9\text{Be},X$)	E=35,40,45,50,55 MeV	JOUR Phys.Rev. C30, 1516	84Om03
	($^{14}\text{N},X$)	E=15-57 MeV	JOUR Phys.Rev. C30, 134	84Ma28
	($^{16}\text{O},X$)	E(cm)=2.5-5 MeV	JOUR Z.Phys. A314, 23	83Kr16
^{10}B	(p,n)	E≈ threshold	JOUR Phys.Rev. C29, 1530	84Ba12
	($^{10}\text{B},X$)	E(cm)≈2-4 MeV	JOUR Z.Phys. A314, 23	83Kr16
	($^{16}\text{O},X$)	E=203.6 MeV	JOUR Phys.Rev. C29, 1722	84Go05
^{11}B	($^9\text{Be},^8\text{Be}$)	E=1.4-4.4 MeV	JOUR Nucl.Phys. A427, 186	84Da17
	($^9\text{Be},X$)	E=1.4-4.4 MeV	JOUR Nucl.Phys. A427, 186	84Da17
	($^{11}\text{B},^{10}\text{Be}$)	E(cm)=5.5 MeV	JOUR Nucl.Phys. A433, 550	85Po02
	($^{11}\text{B},^{10}\text{Be}$)	E(cm)=2.66-3.64 MeV	JOUR Nucl.Phys. A433, 550	85Po02
C	(p,γ)	E=30 MeV	JOUR Phys.Rev. C29, 1307	84Sh04
	(p,n)	E=30 MeV	JOUR Phys.Rev. C29, 1307	84Sh04
	(d,γ)	E=33 MeV	JOUR Phys.Rev. C29, 1307	84Sh04
	(d,n)	E=33 MeV	JOUR Phys.Rev. C29, 1307	84Sh04
	($^3\text{He},\gamma$)	E=45 MeV	JOUR Phys.Rev. C29, 1307	84Sh04
	($^3\text{He},n$)	E=65 MeV	JOUR Phys.Rev. C29, 1307	84Sh04
	(α,γ)	E=65 MeV	JOUR Phys.Rev. C29, 1307	84Sh04
	(α,n)	E=65 MeV	JOUR Phys.Rev. C29, 1307	84Sh04
	(α,n)	E=65 MeV	JOUR Phys.Rev. C29, 1307	84Sh04
	(α,n)	E=65 MeV	JOUR Phys.Rev. C29, 1307	84Sh04
^{12}C	(p,n)	E=30 MeV	JOUR Phys.Rev. C29, 1317	84Na06
	(d,n)	E=33 MeV	JOUR Phys.Rev. C29, 1317	84Na06
	($^3\text{He},n$)	E<40 MeV	JOUR Radiochim.Acta 29, 57	81No15
	($^3\text{He},n$)	E=65 MeV	JOUR Phys.Rev. C29, 1317	84Na06
	($^3\text{He},p$)	E=52 MeV	JOUR Nucl.Phys. A425, 23	84Aa01
	($^3\text{He},d$)	E=52 MeV	JOUR Nucl.Phys. A425, 23	84Aa01
	($^3\text{He},2p$)	E=52 MeV	JOUR Nucl.Phys. A425, 23	84Aa01
	($^3\text{He},pd$)	E=52 MeV	JOUR Nucl.Phys. A425, 23	84Aa01
	($^3\text{He},\alpha$)	E<40 MeV	JOUR Radiochim.Acta 29, 57	81No15
	(α,γ)	E≤3 MeV	JOUR Nucl.Phys. A430, 426	84De42
	(α,γ)	E=65 MeV	JOUR Phys.Rev. C29, 1317	84Na06
	(α,γ)	E=65 MeV	JOUR Phys.Rev. C29, 1317	84Na06
	(α,γ)	E=65 MeV	JOUR Phys.Rev. C29, 1317	84Na06
	(α,γ)	E=65 MeV	JOUR Phys.Rev. C29, 1317	84Na06

TARGET INDEX

TARGET	REACTION	INCIDENT ENERGY	REFERENCE	KEY NUMBER
¹² C	(α, n)	E=65 MeV	JOUR Phys.Rev. C29, 1317	84Na06
	($\alpha, 2n$)	E<40 MeV	JOUR Radiochim.Acta 29, 57	81No15
	($\alpha, n\alpha$)	E<40 MeV	JOUR Radiochim.Acta 29, 57	81No15
	(α, X)	E=49,61,80,121,159 MeV	JOUR Phys.Rev. C29, 1595	84Go03
	(α, X)	E=61 MeV	JOUR Phys.Rev. C29, 1606	84Go04
	(α, X)	E=80.1 MeV	JOUR Phys.Rev. C29, 1606	84Go04
	(α, X)	E=159.3 MeV	JOUR Phys.Rev. C29, 1606	84Go04
	(α, X)	E=80.1 MeV	JOUR Phys.Rev. C29, 1606	84Go04
	(⁷ Li, p)	E=16 MeV	JOUR Phys.Rev. C30, 848	84Fo15
	(¹⁰ B, X)	E=17-48 MeV	JOUR Bull.Am.Phys.Soc. 29, 1047,DB2	84HaZK
	(¹² C, p)	E=39 MeV	JOUR Phys.Rev. C30, 527	84Fo12
	(¹² C, α)	E(cm)=13-15 MeV	JOUR Phys.Rev. C29, 1566	84Dh02
	(¹² C, α)	E(cm)=14-20.6 MeV	JOUR Phys.Rev. C30, 866	84Le19
	(¹² C, ¹² C)	E=3-9 MeV	JOUR Nucl.Phys. A429, 116	84Ha43
	(¹² C, ¹² C)	E≈15-35 MeV	JOUR Z.Phys. A319, 227	84Ta20
	(¹² C, ¹² C')	E(cm)=20-40 MeV	JOUR Phys.Lett. 136, 322	84Fu02
	(¹² C, ¹² C')	E≈15-35 MeV	JOUR Z.Phys. A319, 227	84Ta20
	(¹² C, ¹² C')	E(cm)=16-33 MeV	JOUR Phys.Lett. 135, 271	84Tr01
	(¹² C, X)	E(cm)=2.5-5.5 MeV	JOUR Z.Phys. A314, 23	83Kr16
	(¹² C, X)	E=3-9 MeV	JOUR Nucl.Phys. A429, 116	84Ha43
	(¹³ C, ¹³ C')	E(cm)=7.8,9.88 MeV	JOUR Nucl.Phys. A424, 262	84Vo11
	(¹³ C, X)	E(cm)=10-45 MeV	JOUR Phys.Rev. C30, 1516	84Om03
	(¹⁴ C, ¹³ C)	E(cm)≈18-26 MeV	JOUR Z.Phys. A319, 227	84Ta20
	(¹⁴ N, X)	E=158,248 MeV	JOUR Phys.Rev. C29, 1722	84Go05
	(¹⁴ N, X)	E=182 MeV	JOUR Phys.Rev. C29, 1722	84Go05
	(¹⁶ O, α)	E(cm)≈9-12.75 MeV	JOUR Phys.Lett. 134, 166	84Hu02
	(¹⁶ O, α)	E=39-40 MeV	JOUR Z.Phys. A315, 319	84Sp03
	(¹⁶ O, X)	E(cm)=4-12 MeV	JOUR Z.Phys. A314, 23	83Kr16
	(¹⁶ O, X)	E(cm)=26.6-64.3 MeV	JOUR Phys.Rev. C29, 1942	84Be22
¹³ C	(⁹ Be, n α)	E=1.2-5.2 MeV	JOUR Nucl.Phys. A427, 186	84Da17
	(⁹ Be, ⁹ Be)	E=1.2-5.2 MeV	JOUR Nucl.Phys. A427, 186	84Da17
	(⁹ Be, X)	E=1.2-5.2 MeV	JOUR Nucl.Phys. A427, 186	84Da17
	(¹¹ B, X)	E=17-48 MeV	JOUR Bull.Am.Phys.Soc. 29, 1047,DB2	84HaZK
¹⁴ C	(¹⁴ C, ¹⁴ C)	E≈15-35 MeV	JOUR Z.Phys. A319, 227	84Ta20
	(¹⁴ C, ¹⁴ C')	E≈15-35 MeV	JOUR Z.Phys. A319, 227	84Ta20
	(¹⁶ O, ¹⁶ O)	E(cm)≈17.5-35 MeV	JOUR Z.Phys. A319, 227	84Ta20
	(¹⁶ O, ¹⁶ O)	E(cm)≈17.5-35 MeV	JOUR Z.Phys. A319, 227	84Ta20
¹⁴ N	(p, n)	E≈6.75-14.5 MeV	JOUR Radiochim.Acta 29, 57	81No15
	(p, α)	E=threshold-18 MeV	JOUR Radiochim.Acta 27, 181	80Bi16
	(p, α)	E<15 MeV	JOUR Radiochim.Acta 29, 57	81No15
	(³ He, t)	E not given	JOUR Bull.Am.Phys.Soc. 29, 717,GG10	84ChZY
	(¹⁰ B, X)	E(cm)≈2.75-7 MeV	JOUR Z.Phys. A314, 23	83Kr16
	(¹² C, X)	E(cm)=3.5-10 MeV	JOUR Z.Phys. A314, 23	83Kr16
	(¹⁴ N, X)	E(cm)=4.5-11 MeV	JOUR Z.Phys. A314, 23	83Kr16
	(¹⁶ O, X)	E(cm)=5.5-12 MeV	JOUR Z.Phys. A314, 23	83Kr16
¹⁵ N	(p, n)	E=3.72-16.58 MeV	JOUR J.Labelled Compd.Radiopharm. 21, 1260	84Sa30
¹⁶ O	(³ He, p)	E=3-42 MeV	JOUR Radiochim.Acta 34, 25	83Qa02
	(α, γ)	E(cm)=0.4-2 MeV	JOUR Z.Phys. A317, 325	84La18
	($\alpha, 2n$)	E=0-55 MeV	JOUR Radiochim.Acta 34, 25	83Qa02
	(α, d)	E=22-40 MeV	JOUR Radiochim.Acta 34, 25	83Qa02
	(⁷ Li, α)	E=20 MeV	JOUR Phys.Rev. C30, 1924	84Mo28
	(⁷ Li, X)	E=12-34 MeV	JOUR Phys.Rev. C30, 134	84Ma28
	(¹⁰ B, X)	E=42-169.7 MeV	JOUR Phys.Rev. C29, 1722	84Go05
	(¹² C, X)	E(cm)=26.6-64.3 MeV	JOUR Phys.Rev. C29, 1942	84Be22
	(¹⁶ O, ¹⁶ O)	E(cm)≈20-32 MeV	JOUR Z.Phys. A314, 317	83Ka40
	(¹⁶ O, ¹⁶ O)	E=7-15 MeV	JOUR Nucl.Phys. A429, 116	84Ha43
	(¹⁶ O, ¹⁶ O)	E(cm)≈20-24 MeV	JOUR Z.Phys. A319, 227	84Ta20
	(¹⁶ O, ¹⁶ O)	E(cm)=7-12 MeV	JOUR Nucl.Phys. A422, 373	84Wu04
	(¹⁶ O, ¹⁶ O')	E(cm)≈20-32 MeV	JOUR Z.Phys. A314, 317	83Ka40
	(¹⁶ O, ¹⁶ O')	E(cm)≈20-24 MeV	JOUR Z.Phys. A319, 227	84Ta20
	(¹⁶ O, X)	E(cm)=7-14.5 MeV	JOUR Z.Phys. A314, 23	83Kr16

TARGET INDEX

TARGET	REACTION	INCIDENT ENERGY	REFERENCE	KEY NUMBER
¹⁶ O	(¹⁶ O,X)	E=7-15 MeV	JOUR Nucl.Phys. A429, 116	84Ha43
	(¹⁶ O,X)	E(cm)≈10-70 MeV	JOUR Nucl.Phys. A429, 139	84Jo06
	(¹⁶ O,X)	E(cm)=2-50 MeV	JOUR Phys.Rev. C30, 878	84Re09
	(¹⁶ O,X)	E(cm)=7-12.5 MeV	JOUR Bull.Am.Phys.Soc. 29, 1047,DB5	84ThZy
	(¹⁶ O,X)	E(cm)=7-12 MeV	JOUR Nucl.Phys. A422, 373	84Wu04
	(¹⁶ O,X)	E(cm)=7-12.5 MeV	JOUR Bull.Am.Phys.Soc. 29, 1047,DB5	84ThZy
¹⁷ O	(d,n)	E=4-12 MeV	JOUR At.Energ. 55, 164	83Va33
¹⁸ O	(p,n)	E=0-20 MeV	JOUR Radiochim.Acta 34, 25	83Qa02
	(p,n)	E=10 MeV	JOUR Int.J.Appl.Radiat.Isotop. 35, 117	84Ni02
¹⁹ F	(p,p')	E=0.8-3 MeV	JOUR J.Radioanal.Nucl.Chem. 83, 107	84Gr12
	(p,α)	E=0.7-1.9 MeV	JOUR J.Radioanal.Nucl.Chem. 83, 107	84Gr12
	(α,n)	E=3.5-10 MeV	JOUR Phys.Rev. C30, 1339	84No07
²⁰ Ne	(d,3np)	E=60-65 MeV	JOUR Radiochim.Acta 34, 25	83Qa02
	(d,α)	E=0-18 MeV	JOUR Radiochim.Acta 34, 25	83Qa02
	(³ He,pα)	E=10-65 MeV	JOUR Radiochim.Acta 34, 25	83Qa02
	(¹² C,X)	E(cm)=6-15 MeV	JOUR Z.Phys. A314, 23	83Kr16
	(²⁰ Ne, ²⁰ Ne)	E(cm)≈20-80 MeV	JOUR Phys.Lett. 141, 9	84Bo24
²³ Na	(d,p)	E=4-12 MeV	JOUR At.Energ. 55, 164	83Va33
²⁴ Mg	(d,α)	E=4-12 MeV	JOUR At.Energ. 55, 164	83Va33
	(α,γ)	E=4.4-9.6 MeV	JOUR Z.Phys. A318, 339	84Bo36
	(¹² C,X)	E(cm)=13.33-40 MeV	JOUR Lett.Nuovo Cim. 40, 33	84Sc24
	(³² S, ³² S)	E=60-140 MeV	JOUR Z.Phys. A317, 75	84Gu09
²⁶ Mg	(d,α)	E=4-12 MeV	JOUR At.Energ. 55, 164	83Va33
	(²⁰ Ne,X)	E=51-395 MeV	JOUR Nucl.Phys. A415, 149	84Le06
	(²⁰ Ne,X)	E(cm)≈30-100 MeV	JOUR Phys.Rev. C29, 1948	84Oh02
	(³² S,X)	E(cm)=24-33 MeV	JOUR Phys.Lett. 136, 19	84Rh01
²⁶ Al	(p,γ)	E=0.17-1.58 MeV	JOUR Nucl.Phys. A415, 93	84Ju09
	(p,p')	E=0.17-1.58 MeV	JOUR Nucl.Phys. A415, 93	84Bu09
²⁷ Al	(p,n)	E=22 MeV	JOUR Yad.Fiz. 39, 264	84Zh02
	(p,X)	E=50-500 MeV	JOUR Bull.Am.Phys.Soc. 29, 65,HF10	84GrZZ
	(⁶ Li,X)	E=25-153 MeV	JOUR Radiochim.Acta 33, 181	83K111
	(¹² C,X)	E(cm)≈25-175 MeV	JOUR Phys.Lett. 148, 257	84Fo21
	(¹⁶ O,X)	E(cm)≈25-175 MeV	JOUR Phys.Lett. 148, 257	84Fo21
	(³² S, ³² S)	E=70-120 MeV	JOUR Z.Phys. A317, 75	84Gu09
	(³² S,X)	E(cm)≈25-175 MeV	JOUR Phys.Lett. 148, 257	84Fo21
²⁸ Si	(³ He,p)	E=52 MeV	JOUR Nucl.Phys. A425, 23	84Aa01
	(³ He,d)	E=52 MeV	JOUR Nucl.Phys. A425, 23	84Aa01
	(³ He,2p)	E=52 MeV	JOUR Nucl.Phys. A425, 23	84Aa01
	(³ He,pd)	E=52 MeV	JOUR Nucl.Phys. A425, 23	84Aa01
	(⁹ Be, ⁹ Be)	E=40-200 MeV	JOUR Z.Phys. A317, 75	84Gu09
	(¹⁶ O, ¹⁶ O)	E=40-200 MeV	JOUR Z.Phys. A317, 75	84Gu09
	(³⁰ Si,X)	E(cm)≈25-45 MeV	JOUR Nucl.Phys. A427, 151	84De38
³⁰ Si	(³⁰ Si,X)	E(cm)≈25-45 MeV	JOUR Nucl.Phys. A427, 151	84De38
³¹ P	(α,n)	E=10-45 MeV	JOUR Radiochim.Acta 34, 25	83Qa02
S	(p,xn)	E=8-22 MeV	JOUR Radiochim.Acta 34, 25	83Qa02
³² S	(³ He,p)	E=5-30 MeV	JOUR Radiochim.Acta 34, 25	83Qa02
	(α,np)	E=20-45 MeV	JOUR Radiochim.Acta 34, 25	83Qa02
³⁴ S	(p,n)	E=22 MeV	JOUR Int.J.Appl.Radiat.Isotop. 35, 1045	84Ab07
	(d,2n)	E=12 MeV	JOUR Int.J.Appl.Radiat.Isotop. 35, 1045	84Ab07
³⁶ S	(p,γ)	E=0.5-2 MeV	JOUR Nucl.Phys. A423, 197	84No05

TARGET INDEX

TARGET	REACTION	INCIDENT ENERGY	REFERENCE	KEY NUMBER
³⁵ Cl	(p,np)	E=12-24 MeV	JOUR Radiochim.Acta 34, 25	P3Qa02
³⁷ Cl	(d,p)	E=4-12 MeV	JOUR At.Energ. 55, 164	83Va33
³⁸ Ar	(p,γ)	E=0.7-2.4 MeV	JOUR Nucl.Phys. A420, 351	84Ha27
⁴¹ K	(d,p)	E=4-12 MeV	JOUR At.Energ. 55, 164	83Va33
⁴⁰ Ca	(α,X)	E(cm)≈5-19 MeV	JOUR Z.Phys. A318, 231	84Va26
	(⁶ Li, ⁶ Li)	E=40-160 MeV	JOUR Z.Phys. A317, 75	84Gu09
	(⁸ Li,X)	E=153 MeV	JOUR Phys.Rev. C30, 1214	84Gr20
	(⁹ Be,X)	E=141 MeV	JOUR Phys.Rev. C30, 1214	84Gr20
	(¹² C,X)	E=74-185 MeV	JOUR Phys.Rev. C30, 1214	84Gr20
	(¹⁶ O, ¹⁶ O)	E=40-160 MeV	JOUR Z.Phys. A317, 75	84Gu09
	(²⁰ Ne, ²⁰ Ne)	E≈50-80 MeV	JOUR Z.Phys. A317, 75	84Gu09
	(⁴⁰ Ca, ⁴⁰ Ca)	E=120-240 MeV	JOUR Z.Phys. A317, 75	84Gu09
	(⁴⁰ Ca,X)	E=90-135 MeV	JOUR Phys.Rev. C30, 1223	84A125
	(⁴⁰ Ca,X)	E(cm)≈60-100 MeV	JOUR Nucl.Phys. A429, 139	84Jo06
⁴² Ca	(d,n)	E=4-12 MeV	JOUR At.Energ. 55, 164	83Va33
⁴³ Ca	(d,n)	E=4-12 MeV	JOUR At.Energ. 55, 164	83Va33
	(d,2n)	E=4-12 MeV	JOUR At.Energ. 55, 164	83Va33
⁴⁴ Ca	(d,2n)	E=4-12 MeV	JOUR At.Energ. 55, 164	83Va33
	(¹⁸ O, ¹⁸ O')	E=30-60 MeV	JOUR Nucl.Phys. A427, 151	84De38
	(¹⁸ O,λ)	E(cm)≈20-45 MeV	JOUR Nucl.Phys. A427, 151	84De38
	(⁴⁰ Ca,X)	E=90-135 MeV	JOUR Phys.Rev. C30, 1223	84A125
⁴⁸ Ca	(⁴⁰ Ca,X)	E=90-135 MeV	JOUR Phys.Rev. C30, 1223	84A125
⁴⁵ Sc	(p,np)	E=16 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
	(α,n)	E=30 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
	(α,2p)	E=30 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
	(α,nα)	E=30 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
Ti	(p,n)	E=10.4 MeV	JOUR J.Radioanal.Nucl.Chem. 82, 135	84Is01
⁴⁶ Ti	(p,α)	E=16 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
	(t,n)	E=1.7-4 MeV	REPT LA-10069-PR,P29	84Ar2W
	(α,n)	E=30 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
	(α,2n)	E=30 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
	(α,np)	E=30 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
	(¹² C,X)	E(cm)≈20-45 MeV	JOUR Nucl.Phys. A427, 151	84De38
⁴⁷ Ti	(p,α)	E=16 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
	(d,n)	E=4-12 MeV	JOUR At.Energ. 55, 164	83Va33
⁴⁸ Ti	(p,n)	E=16 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
	(α,n)	E=30 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
	(α,X)	E(cm)≈5-8 MeV	JOUR Z.Phys. A318, 231	84Va26
	(¹² C, ¹² C')	E=20-60 MeV	JOUR Nucl.Phys. A427, 151	84De38
	(¹² C,X)	E(cm)≈20-45 MeV	JOUR Nucl.Phys. A427, 151	84De38
⁴⁹ Ti	(p,2n)	E=16 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
	(α,2n)	E=30 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
⁵⁰ Ti	(¹² C, ¹² C')	E=20-60 MeV	JOUR Nucl.Phys. A427, 151	84De38
	(¹² C,X)	E(cm)≈20-45 MeV	JOUR Nucl.Phys. A427, 151	84De38
⁵⁰ V	(d,n)	E=4-12 MeV	JOUR At.Energ. 55, 164	83Va33
⁵¹ V	(p,n)	E=16 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
	(p,n)	E=threshold-6.7 MeV	JOUR Bull.Am.Phys.Soc. 29, 1056,ED7	84HeZV
	(p,t)	E=14-25 MeV	JOUR Radiochim.Acta 33, 177	83K110
	(p,X)	E=20.8-47.8 MeV	JOUR Bull.Am.Phys.Soc. 30, 21,AE8	85CaZZ

TARGET INDEX

TARGET	REACTION	INCIDENT ENERGY	REFERENCE	KEY NUMBER
⁵¹ V	(d,nt)	E=10-25 MeV	JOUR Radiochim.Acta 33, 177	83K110
	(d,4np)	E=threshold-90 MeV	JOUR Radiochim.Acta 35, 11	84Qa02
	(d,pa)	E=threshold-90 MeV	JOUR Radiochim.Acta 35, 11	84Qa02
	(d,npa)	E=threshold-90 MeV	JOUR Radiochim.Acta 35, 11	84Qa02
	(d,2pa)	E=threshold-90 MeV	JOUR Radiochim.Acta 35, 11	84Qa02
	(d,2npa)	E=threshold-90 MeV	JOUR Radiochim.Acta 35, 11	84Qa02
	(d,4npa)	E=threshold-90 MeV	JOUR Radiochim.Acta 35, 11	84Qa02
	(d,np2a)	E=threshold-90 MeV	JOUR Radiochim.Acta 35, 11	84Qa02
	(d,2np2a)	E=threshold-90 MeV	JOUR Radiochim.Acta 35, 11	84Qa02
	(d,3a)	E=threshold-90 MeV	JOUR Radiochim.Acta 35, 11	84Qa02
	(d,3a)	E=threshold-90 MeV	JOUR Radiochim.Acta 35, 11	84Qa02
	(³ He,nα)	E=0.5-4 MeV	JOUR Radiochim.Acta 33, 177	83K110
	(α,n)	E=30 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
	(α,3n)	E=30 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
	(α,2na)	E=0.2-2 MeV	JOUR Radiochim.Acta 33, 177	83K110
	(α,X)	E(cm)=6-10 MeV	JOUR Z.Phys. A318, 231	84Va26
	(¹² C,2n)	E=36-100 MeV	JOUR Phys.Rev. C30, 143	84Pa13
	(¹² C,3n)	E=36-100 MeV	JOUR Phys.Rev. C30, 143	84Pa13
	(¹² C,3n2p)	E=36-100 MeV	JOUR Phys.Rev. C30, 143	84Pa13
	(¹² C,4n2p)	E=36-100 MeV	JOUR Phys.Rev. C30, 143	84Pa13
	(¹² C,5n2p)	E=36-100 MeV	JOUR Phys.Rev. C30, 143	84Pa13
	(¹² C,5n4p)	E=36-100 MeV	JOUR Phys.Rev. C30, 143	84Pa13
	(¹² C,7n4p)	E=36-100 MeV	JOUR Phys.Rev. C30, 143	84Pa13
	(¹² C,7n5p)	E=36-100 MeV	JOUR Phys.Rev. C30, 143	84Pa13
Cr	(p,n)	E=10.4 MeV	JOUR J.Radioanal.Nucl.Chem. 82, 135	84Is01
⁵⁰ Cr	(d,n)	E=4-12 MeV	JOUR At.Energ. 55, 164	83Va33
	(d,p)	E=4-12 MeV	JOUR At.Energ. 55, 164	83Va33
	(α,2n)	E=30 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
	(α,np)	E=30 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
	(²⁰ Ne, ²⁰ Ne)	E=93,120,146 MeV	JOUR Z.Phys. A317, 31	84Na12
	(²⁰ Ne,X)	E=93,120,146 MeV	JOUR Z.Phys. A317, 31	84Na12
⁵² Cr	(p,n)	E=16 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
	(p,n)	E=22 MeV	JOUR Yad.Fiz. 39, 264	84Zh02
	(p,n)	E=22 MeV	JOUR Yad.Fiz. 39, 264	84Zh02
	(p,2n)	E=22 MeV	JOUR Yad.Fiz. 39, 264	84Zh02
	(p,np)	E=22 MeV	JOUR Yad.Fiz. 39, 264	84Zh02
	(α,np)	E=30 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
⁵³ Cr	(p,2n)	E=16 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
⁵⁴ Cr	(α,np)	E=30 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
	(²⁰ Ne, ²⁰ Ne)	E=146 MeV	JOUR Z.Phys. A317, 31	84Na12
	(²⁰ Ne,X)	E=146 MeV	JOUR Z.Phys. A317, 31	84Na12
⁵⁵ Mn	(d,p)	E=4-12 MeV	JOUR At.Energ. 55, 164	83Va33
	(d,nα)	E=4-12 MeV	JOUR At.Energ. 55, 164	83Va33
Fe	(p,γ)	E=30 MeV	JOUR Phys.Rev. C29, 1307	84Sh04
	(p,n)	E=10.4 MeV	JOUR J.Radioanal.Nucl.Chem. 82, 135	84Is01
	(p,n)	E=30 MeV	JOUR Phys.Rev. C29, 1307	84Sh04
	(d,γ)	E=33 MeV	JOUR Phys.Rev. C29, 1307	84Sh04
	(d,n)	E=33 MeV	JOUR Phys.Rev. C29, 1307	84Sh04
	(³ He,γ)	E=65 MeV	JOUR Phys.Rev. C29, 1307	84Sh04
	(³ He,n)	E=65 MeV	JOUR Phys.Rev. C29, 1307	84Sh04
	(α,γ)	E=65 MeV	JOUR Phys.Rev. C29, 1307	84Sh04
	(α,n)	E=65 MeV	JOUR Phys.Rev. C29, 1307	84Sh04
⁵⁴ Fe	(p,d)	E=39,62 MeV	JOUR Nucl.Phys. A424, 1	84Ga15
	(p,pd)	E=62 MeV	JOUR Nucl.Phys. A424, 1	84Ga15
	(p,X)	E=20.8-47.8 MeV	JOUR Bull.Am.Phys.Soc. 30, 21.AE8	85CaZz
	(d,n)	E=4-12 MeV	JOUR At.Energ. 55, 164	83Va33
	(t,n)	E=1.7-4 MeV	REPT LA-10069-PR,P29	84ArZW
	(α,n)	E=30 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05

TARGET INDEX

TARGET	REACTION	INCIDENT ENERGY	REFERENCE	KEY NUMBER
⁵⁴ Fe	(α ,np)	E=30 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
⁵⁶ Fe	(p,n)	E=16 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
	(p,n)	E=22 MeV	JOUR Yad.Fiz. 39, 264	84Zh02
	(p,n)	E=22 MeV	JOUR Yad.Fiz. 39, 264	84Zh02
	(p,2n)	E=22 MeV	JOUR Yad.Fiz. 39, 264	84Zh02
	(p,np)	E=22 MeV	JOUR Yad.Fiz. 39, 264	84Zh02
	(p,X)	E=20.8-47.8 MeV	JOUR Bull.Am.Phys.Soc. 30, 21,AE8	85Ca22
	(d,2n)	E=4-12 MeV	JOUR At.Energ. 55, 164	83Va33
	(α ,np)	E=30 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
	(α ,3n)	E=30 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
⁵⁷ Fe	(p,2n)	E=16 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
	(p,X)	E=20.8-47.8 MeV	JOUR Bull.Am.Phys.Soc. 30, 21,AE8	85Ca22
⁵⁸ Co	(p,np)	E=16 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
	(p,3n)	E=10-40 MeV	JOUR Int.J.Appl.Radiat.Isotop. 35, 371	84Jo04
	(p,3np)	E=10-40 MeV	JOUR Int.J.Appl.Radiat.Isotop. 35, 371	84Jo04
	(p,X)	E(cm)=2-6 MeV	JOUR Z.Phys. A318, 231	84Va26
	(p,X)	E=20.8-47.8 MeV	JOUR Bull.Am.Phys.Soc. 30, 21,AE8	85Ca22
	(d,p)	E=4-12 MeV	JOUR At.Energ. 55, 164	83Va33
	(α ,2n)	E=30 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
	(α ,2n)	E=threshold-170 MeV	JOUR Z.Phys. A317, 155	84Ga14
	(α ,2p)	E=30 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
	(α ,3n)	E=threshold-170 MeV	JOUR Z.Phys. A317, 155	84Ga14
	(α ,n2p)	E=threshold-170 MeV	JOUR Z.Phys. A317, 155	84Ga14
	(α ,n3p)	E=threshold-170 MeV	JOUR Z.Phys. A317, 155	84Ga14
	(α ,3n2p)	E=threshold-170 MeV	JOUR Z.Phys. A317, 155	84Ga14
	(α ,5np)	E=threshold-170 MeV	JOUR Z.Phys. A317, 155	84Ga14
	(α ,4n2p)	E=threshold-170 MeV	JOUR Z.Phys. A317, 155	84Ga14
	(α ,5n2p)	E=threshold-170 MeV	JOUR Z.Phys. A317, 155	84Ga14
	(α ,3n4p)	E=threshold-170 MeV	JOUR Z.Phys. A317, 155	84Ga14
	(α ,6n2p)	E=threshold-170 MeV	JOUR Z.Phys. A317, 155	84Ga14
	(α ,5n4p)	E=threshold-170 MeV	JOUR Z.Phys. A317, 155	84Ga14
	(α ,7n4p)	E=threshold-170 MeV	JOUR Z.Phys. A317, 155	84Ga14
	(α ,8n4p)	E=threshold-170 MeV	JOUR Z.Phys. A317, 155	84Ga14
	(α ,7n5p)	E=threshold-170 MeV	JOUR Z.Phys. A317, 155	84Ga14
	(α ,10n5p)	E=threshold-170 MeV	JOUR Z.Phys. A317, 155	84Ga14
	(α ,9n6p)	E=threshold-170 MeV	JOUR Z.Phys. A317, 155	84Ga14
	(α ,X)	E(cm)=8-20 MeV	JOUR Z.Phys. A318, 231	84Va26
	(¹⁶ O, ¹⁶ O)	E=40-160 MeV	JOUR Z.Phys. A317, 75	84Gu09
Ni	(p, γ)	E=10.4 MeV	JOUR J.Radioanal.Nucl.Chem. 82, 135	84Is01
	(p,n)	E=10.4 MeV	JOUR J.Radioanal.Nucl.Chem. 82, 135	84Is01
⁵⁸ Ni	(p,n)	E=22 MeV	JOUR Yad.Fiz. 39, 264	84Zh02
	(p,n)	E=22 MeV	JOUR Yad.Fiz. 39, 264	84Zh02
	(p,np)	E=16 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
	(p,np)	E=22 MeV	JOUR Yad.Fiz. 39, 264	84Zh02
	(t,n)	E=1.7-4 MeV	REPT LA-10069-PR,P29	84Ar2W
	(³ He,p)	E=52 MeV	JOUR Nucl.Phys. A425, 23	84Aa01
	(³ He,d)	E=52 MeV	JOUR Nucl.Phys. A425, 23	84Aa01
	(³ He,2p)	E=52 MeV	JOUR Nucl.Phys. A425, 23	84Aa01
	(³ He,pd)	E=52 MeV	JOUR Nucl.Phys. A425, 23	84Aa01
	(α ,n)	E=10.3-14.25 MeV	JOUR Z.Phys. A317, 329	84Th07
	(¹⁶ O, ¹⁶ O)	E=50-300 MeV	JOUR Z.Phys. A317, 75	84Gu09
	(²⁸ Si,X)	E(cm)=47-64 MeV	JOUR Phys.Rev. C30, 2088	84St23
	(³⁰ Si,X)	E(cm)=47-64 MeV	JOUR Phys.Rev. C30, 2088	84St23
	(³⁵ Cl, ³⁵ Cl)	E=100-160 MeV	JOUR Z.Phys. A317, 75	84Gu09
	(⁵⁸ Ni,X)	E(cm)=90-110 MeV	JOUR Z.Phys. A314, 23	83Kr16
⁶⁰ Ni	(p,n)	E=22 MeV	JOUR Yad.Fiz. 39, 264	84Zh02
	(p,n)	E=22 MeV	JOUR Yad.Fiz. 39, 264	84Zh02
	(p,2n)	E=22 MeV	JOUR Yad.Fiz. 39, 264	84Zh02
	(p,np)	E=22 MeV	JOUR Yad.Fiz. 39, 264	84Zh02
	(d,n)	E=4-12 MeV	JOUR At.Energ. 55, 164	83Va33

TARGET INDEX

TARGET	REACTION	INCIDENT ENERGY	REFERENCE	KEY NUMBER
⁶¹ Ni	(p,n)	E=16 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
	(p,n)	E=threshold-6.7 MeV	JOUR Bull.Am.Phys.Soc. 29, 1056,ED7	84HeZV
⁶² Ni	(p,2n)	E=16 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
	(²⁸ Si,X)	E(cm)≈47-64 MeV	JOUR Phys.Rev. C30, 2088	84St23
	(³⁰ Si,X)	E(cm)≈47-64 MeV	JOUR Phys.Rev. C30, 2088	84St23
	(³⁵ Cl, ³⁵ Cl)	E=100-160 MeV	JOUR Z.Phys. A317, 75	84Gu09
	(³⁵ Cl,X)	E(cm)=102-302 MeV	JOUR Phys.Lett. 148, 257	84Fo21
	(³⁵ Cl,X)	E(cm)=102.26-137.42 MeV	JOUR Lett.Nuovo Cim. 40, 33	84Sc24
⁶⁴ Ni	(p,n)	E=threshold-6.7 MeV	JOUR Bull.Am.Phys.Soc. 29, 1056,ED7	84HeZV
	(²⁸ Si,X)	E(cm)≈47-64 MeV	JOUR Phys.Rev. C30, 2088	84St23
	(³⁰ Si,X)	E(cm)≈47-64 MeV	JOUR Phys.Rev. C30, 2088	84St23
	(⁵⁸ Ni,X)	E(cm)=90-110 MeV	JOUR Z.Phys. A314, 23	83Kr16
	(⁶⁴ Ni,X)	E(cm)=90-110 MeV	JOUR Z.Phys. A314, 23	83Kr16
Cu	(p,γ)	E=30 MeV	JOUR Phys.Rev. C29, 1307	84Sh04
	(p,n)	E=10.4 MeV	JOUR J.Radioanal.Nucl.Chem. 82, 135	84Is01
	(p,n)	E=30 MeV	JOUR Phys.Rev. C29, 1307	84Sh04
	(p,X)	E=50-500 MeV	JOUR Bull.Am.Phys.Soc. 29, 65,HF10	84GrZZ
	(d,γ)	E=33 MeV	JOUR Phys.Rev. C29, 1307	84Sh04
	(d,n)	E=33 MeV	JOUR Phys.Rev. C29, 1307	84Sh04
	(³ He,γ)	E=65 MeV	JOUR Phys.Rev. C29, 1307	84Sh04
	(³ He,n)	E=65 MeV	JOUR Phys.Rev. C29, 1307	84Sh04
	(α,γ)	E=65 MeV	JOUR Phys.Rev. C29, 1307	84Sh04
	(α,n)	E=65 MeV	JOUR Phys.Rev. C29, 1307	84Sh04
	(α,n)	E=65 MeV	JOUR Phys.Rev. C29, 1307	84Sh04
⁶³ Cu	(p,n)	E=30 MeV	JOUR Phys.Rev. C29, 1317	84Na06
	(p,2n)	E=16 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
	(d,n)	E=33 MeV	JOUR Phys.Rev. C29, 1317	84Na06
	(d,p)	E=4-12 MeV	JOUR At.Energ. 55, 164	83Va33
	(d,2n)	E=4-12 MeV	JOUR At.Energ. 55, 164	83Va33
	(³ He,n)	E=65 MeV	JOUR Phys.Rev. C29, 1317	84Na06
	(α,γ)	E=65 MeV	JOUR Phys.Rev. C29, 1317	84Na06
	(α,n)	E=30 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
	(α,n)	E=65 MeV	JOUR Phys.Rev. C29, 1317	84Na06
	(α,n)	E=65 MeV	JOUR Phys.Rev. C29, 1317	84Na06
⁶⁵ Cu	(p,n)	E=16 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
	(p,n)	E=threshold-6.7 MeV	JOUR Bull.Am.Phys.Soc. 29, 1056,ED7	84HeZV
	(p,np)	E=16 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
	(α,2n)	E=30 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
	(α,2n)	E=28 MeV	JOUR Int.J.Appl.Radiat.Isotop. 35, 927	84B116
	(⁸⁴ Kr, ⁸⁴ Kr)	E=300-600 MeV	JOUR Z.Phys. A317, 75	84Gu09
	(⁸⁴ Kr, ⁸⁴ Kr)	E=300-600 MeV	JOUR Z.Phys. A317, 75	84Gu09
Zn	(p,n)	E=10.4 MeV	JOUR J.Radioanal.Nucl.Chem. 82, 135	84Is01
⁶⁶ Zn	(p,np)	E=16 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
	(d,n)	E=4-12 MeV	JOUR At.Energ. 55, 164	83Va33
	(d,2n)	E=4-12 MeV	JOUR At.Energ. 55, 164	83Va33
⁶⁷ Zn	(p,n)	E=16 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
	(p,n)	E=threshold-6.7 MeV	JOUR Bull.Am.Phys.Soc. 29, 1056,ED7	84HeZV
⁶⁸ Zn	(p,n)	E=threshold-6.7 MeV	JOUR Bull.Am.Phys.Soc. 29, 1056,ED7	84HeZV
	(p,2n)	E=16 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
	(d,p)	E=4-12 MeV	JOUR At.Energ. 55, 164	83Va33
Ga	(p,n)	E=10.4 MeV	JOUR J.Radioanal.Nucl.Chem. 82, 135	84Is01
⁷¹ Ga	(d,n)	E=4-12 MeV	JOUR At.Energ. 55, 164	83Va33
Ge	(p,n)	E=10.4 MeV	JOUR J.Radioanal.Nucl.Chem. 82, 135	84Is01
⁷⁰ Ge	(p,t)	E=26,35.4 MeV	JOUR Phys.Rev. C30, 1293	84Ca30
	(d,n)	E=4-12 MeV	JOUR At.Energ. 55, 164	83Va33
	(t,p)	E=26,35.4 MeV	JOUR Phys.Rev. C30, 1293	84Ca30

TARGET INDEX

TARGET	REACTION	INCIDENT ENERGY	REFERENCE	KEY NUMBER
⁷⁰ Ge	(α ,n)	E=30 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
	(α ,np)	E=30 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
⁷² Ge	(p,n)	E=16 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
	(p,t)	E=26,35.4 MeV	JOUR Phys.Rev. C30, 1293	84Ca30
	(t,p)	E=26,35.4 MeV	JOUR Phys.Rev. C30, 1293	84Ca30
⁷³ Ge	(p,2n)	E=16 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
	(¹⁸ O,2np)	E=48-60 MeV	JOUR J.Phys.(London) G10, 1189	84Bu26
⁷⁴ Ge	(p,n)	E=16 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
	(p,t)	E=26,35.4 MeV	JOUR Phys.Rev. C30, 1293	84Ca30
	(t,p)	E=26,35.4 MeV	JOUR Phys.Rev. C30, 1293	84Ca30
⁷⁶ Ge	(p,n)	E=16 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
	(¹⁴ N,4n)	E=38-56 MeV	JOUR J.Phys.(London) G10, 1189	84Bu26
	(³² S,X)	E(cm)=76-158.33 MeV	JOUR Lett.Nuovo Cim. 40, 33	84Sc24
⁷⁵ As	(p,n)	E=threshold-6.7 MeV	JOUR Bull.Am.Phys.Soc. 29, 1056,ED7	84He2V
	(p,n)	E=10.4 MeV	JOUR J.Radioanal.Nucl.Chem. 82, 135	84Is01
	(d,p)	E=4-12 MeV	JOUR At.Energ. 55, 164	83Va33
	(³ He,3n)	E=25-36 MeV	JOUR Radiochim.Acta 34, 25	83Qa02
	(³ He,3n)	E=25-36 MeV	JOUR Int.J.Appl.Radiat.Isotop. 35, 927	84B116
	(α ,n)	E=14-28 MeV	JOUR Int.J.Appl.Radiat.Isotop. 35, 927	84B116
	(α ,2n)	E=14-30 MeV	JOUR Radiochim.Acta 34, 25	83Qa02
	(α ,4n)	E=54-65 MeV	JOUR Radiochim.Acta 34, 25	83Qa02
Se	(p,n)	E=10.4 MeV	JOUR J.Radioanal.Nucl.Chem. 82, 135	84Is01
	(p,xn)	E=15-30 MeV	JOUR Radiochim.Acta 34, 25	83Qa02
	(³ He,xnp)	E=0-38 MeV	JOUR Radiochim.Acta 34, 25	83Qa02
⁷⁶ Se	(p,2n)	E=22-28 MeV	JOUR Radiochim.Acta 34, 25	83Qa02
	(d,3n)	E=29-35 MeV	JOUR Radiochim.Acta 34, 25	83Qa02
	(³ He,np)	E=15-22 MeV	JOUR Radiochim.Acta 34, 25	83Qa02
	(³ He,3np)	E=28-36 MeV	JOUR Radiochim.Acta 34, 25	83Qa02
⁷⁷ Se	(p,n)	E=0-13.5 MeV	JOUR Radiochim.Acta 34, 25	83Qa02
	(³ He,2np)	E=15-30 MeV	JOUR Radiochim.Acta 34, 25	83Qa02
⁷⁸ Se	(p,2n)	E=20-33 MeV	JOUR Radiochim.Acta 34, 25	83Qa02
⁸⁰ Se	(d,2n)	E=4-12 MeV	JOUR At.Energ. 55, 164	83Va33
⁸² Se	(d,2n)	E=4-12 MeV	JOUR At.Energ. 55, 164	83Va33
⁸¹ Br	(d,p)	E=4-12 MeV	JOUR At.Energ. 55, 164	83Va33
Kr	(p,X)	E=5-26 MeV	JOUR Int.J.Appl.Radiat.Isotop. 35, 475	84Mu16
⁷⁸ Kr	(p, α)	E=12-15 MeV	JOUR Radiochim.Acta 34, 25	83Qa02
⁸⁵ Rb	(α ,3n)	E=30-55 MeV	JOUR Phys.Rev. C29, 1717	84Da06
	(α ,2np)	E=30-55 MeV	JOUR Phys.Rev. C29, 1717	84Da06
	(α ,n α)	E=30-55 MeV	JOUR Phys.Rev. C29, 1717	84Da06
	(α ,2n α)	E=30-55 MeV	JOUR Phys.Rev. C29, 1717	84Da06
⁸⁶ Sr	(p, γ)	E=3.5-6 MeV	REPT LA-10069-PR,P18	84ArZY
	(d,n)	E=4-12 MeV	JOUR At.Energ. 55, 164	83Va33
⁸⁷ Sr	(p,n)	E=14-18 MeV	REPT LA-10069-PR,P18	84ArZY
	(p,2n)	E=14-18 MeV	REPT LA-10069-PR,P18	84ArZY
	(p,np)	E=13.5-18 MeV	REPT LA-10069-PR,P18	84ArZY
	(p,n2p)	E=13.5-18 MeV	REPT LA-10069-PR,P18	84ArZY
	(d,2n)	E=4-12 MeV	JOUR At.Energ. 55, 164	83Va33
⁸⁹ Y	(p,n)	E=16 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05

TARGET INDEX

TARGET	REACTION	INCIDENT ENERGY	REFERENCE	KEY NUMBER
⁸⁹ Y	(d,p)	E=4-12 MeV	JOUR At.Energ. 55, 164	83Va33
	(d,2n)	E=4-12 MeV	JOUR At.Energ. 55, 164	83Va33
	(α,n)	E=30 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
Zr	(p,n)	E=10.4 MeV	JOUR J.Radioanal.Nucl.Chem. 82, 135	84Is01
⁹⁰ Zr	(p,n)	E=16 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
	(p,n)	E=22 MeV	JOUR Yad.Fiz. 39, 264	84Zh02
	(p,n)	E=22 MeV	JOUR Yad.Fiz. 39, 264	84Zh02
	(p,2n)	E=22 MeV	JOUR Yad.Fiz. 39, 264	84Zh02
	(p,np)	E=22 MeV	JOUR Yad.Fiz. 39, 264	84Zh02
	(α,n)	E=30 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
	(⁶ Li, ⁶ Li)	E=40-160 MeV	JOUR Z.Phys. A317, 75	84Gu09
	(⁹⁰ Zr,X)	E(cm)≈172-195 MeV	JOUR Phys.Rev. C29, 1569	84Ke03
⁹¹ Zr	(p,n)	E=22 MeV	JOUR Yad.Fiz. 39, 264	84Zh02
	(p,n)	E=22 MeV	JOUR Yad.Fiz. 39, 264	84Zh02
	(p,2n)	E=22 MeV	JOUR Yad.Fiz. 39, 264	84Zh02
	(p,np)	E=16 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
	(p,np)	E=13-17 MeV	REPT LA-10069-PR,P25	84ArZX
	(p,n2p)	E=13-17 MeV	REPT LA-10069-PR,P25	84ArZX
	(α,2n)	E=30 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
⁹² Zr	(p,n)	E=16 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
⁹⁴ Zr	(p,n)	E=22 MeV	JOUR Yad.Fiz. 39, 264	84Zh02
	(p,n)	E=22 MeV	JOUR Yad.Fiz. 39, 264	84Zh02
	(p,2n)	E=22 MeV	JOUR Yad.Fiz. 39, 264	84Zh02
	(p,2n)	E=22 MeV	JOUR Yad.Fiz. 39, 264	84Zh02
	(p,X)	E(cm)=2-6 MeV	JOUR Z.Phys. A318, 231	84Va26
	(d,n)	E=4-12 MeV	JOUR At.Energ. 55, 164	83Va33
	(d,p)	E=4-12 MeV	JOUR At.Energ. 55, 164	83Va33
⁹⁶ Zr	(p,n)	E=16 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
	(p,n)	E=1.3-5.1 MeV	JOUR Nucl.Phys. A430, 301	84Ke12
	(d,n)	E=4-12 MeV	JOUR At.Energ. 55, 164	83Va33
	(d,p)	E=4-12 MeV	JOUR At.Energ. 55, 164	83Va33
	(d,2n)	E=4-12 MeV	JOUR At.Energ. 55, 164	83Va33
	(α,n)	E=30 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
	(⁶ Li,3n)	E=18-25 MeV	JOUR Phys.Rev. C31, 409	85Ka02
	(⁵⁸ Ni,F)	E=352,875 MeV	JOUR Phys.Rev. C30, 1550	84Ga30
⁹³ Nb	(p,n)	E=16 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
	(p,n)	E=10.4 MeV	JOUR J.Radioanal.Nucl.Chem. 82, 135	84Is01
	(p,np)	E=16 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
	(α,n)	E=30 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
	(α,n)	E=40-140 MeV	JOUR Nuovo Cim. 81, 66	84Ga20
	(α,n)	E=35 MeV	JOUR J.Radioanal.Nucl.Chem. 82, 61	84Om01
	(α,2n)	E=30 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
	(α,2n)	E=40-140 MeV	JOUR Nuovo Cim. 81, 66	84Ga20
	(α,5n2p)	E=threshold-140 MeV	JOUR Nuovo Cim. 81, 66	84Ga20
	(α,5n3p)	E=60-140 MeV	JOUR Nuovo Cim. 81, 66	84Ga20
	(α,7n2p)	E=threshold-140 MeV	JOUR Nuovo Cim. 81, 66	84Ga20
	(α,6n4p)	E=60-140 MeV	JOUR Nuovo Cim. 81, 66	84Ga20
	(¹² C, ¹³ C)	E=88.7-171.2 MeV	JOUR J.Radioanal.Nucl.Chem. 84, 149	84Ne06
	(¹⁴ N, ¹⁵ N)	E=89.4-145.6 MeV	JOUR J.Radioanal.Nucl.Chem. 84, 149	84Ne06
	(¹⁶ O, ¹⁷ O)	E=117.3-183.6 MeV	JOUR J.Radioanal.Nucl.Chem. 84, 149	84Ne06
	(²⁰ Ne, ²¹ Ne)	E=112.2-191.4 MeV	JOUR J.Radioanal.Nucl.Chem. 84, 149	84Ne06
Mo	(p,n)	E=10.4 MeV	JOUR J.Radioanal.Nucl.Chem. 82, 135	84Is01
	(p,X)	E=800 MeV	JOUR Radiochim.Acta 34, 25	83Qa02
⁹² Mo	(d,n)	E=4-12 MeV	JOUR At.Energ. 55, 164	83Va33
	(α,n)	E=30 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
	(α,np)	E=30 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
	(²⁰ Ne, ²⁰ Ne)	E=146 MeV	JOUR Z.Phys. A317, 31	84Na12

TARGET INDEX

TARGET	REACTION	INCIDENT ENERGY	REFERENCE	KEY NUMBER
⁹² Mo	(²⁰ Ne,X)	E=146 MeV	JOUR Z.Phys. A317, 31	84Na12
	(³² S,X)	E(cm)≈74-90 MeV	JOUR Nuovo Cim. 81, 331	84Sk03
	(³⁶ S,X)	E(cm)≈74-90 MeV	JOUR Nuovo Cim. 81, 331	84Sk03
⁹⁴ Mo	(p,n)	E=16 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
	(p,2n)	E=16 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
	(d,n)	E=4-12 MeV	JOUR At.Energ. 55, 164	83Va33
	(d,2n)	E=4-12 MeV	JOUR At.Energ. 55, 164	83Va33
	(α,n)	E=30 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
	(³² S,X)	E(cm)≈74-90 MeV	JOUR Nuovo Cim. 81, 331	84Sk03
	(³⁶ S,X)	E(cm)≈74-90 MeV	JOUR Nuovo Cim. 81, 331	84Sk03
⁹⁵ Mo	(p,n)	E=16 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
	(p,2n)	E=16 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
	(d,n)	E=4-12 MeV	JOUR At.Energ. 55, 164	83Va33
	(d,2n)	E=4-12 MeV	JOUR At.Energ. 55, 164	83Va33
⁹⁶ Mo	(p,n)	E=16 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
	(p,2n)	E=16 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
	(d,2n)	E=4-12 MeV	JOUR At.Energ. 55, 164	83Va33
	(³² S,X)	E(cm)≈74-90 MeV	JOUR Nuovo Cim. 81, 331	84Sk03
	(³⁶ S,X)	E(cm)≈74-90 MeV	JOUR Nuovo Cim. 81, 331	84Sk03
⁹⁷ Mo	(p,2n)	E=16 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
⁹⁸ Mo	(p,X)	E(cm)≈2.5-7 MeV	JOUR Z.Phys. A318, 231	84Va26
	(d,n)	E=4-12 MeV	JOUR At.Energ. 55, 164	83Va33
	(³² S,X)	E(cm)≈74-90 MeV	JOUR Nuovo Cim. 81, 331	84Sk03
	(³⁶ S,X)	E(cm)≈74-90 MeV	JOUR Nuovo Cim. 81, 331	84Sk03
¹⁰⁰ Mo	(p,2n)	E=16 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
	(α,n)	E=30 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
	(²⁰ Ne, ²⁰ Ne)	E=146 MeV	JOUR Z.Phys. A317, 31	84Na12
	(²⁰ Ne,X)	E=146 MeV	JOUR Z.Phys. A317, 31	84Na12
	(³² S,X)	E(cm)≈74-90 MeV	JOUR Nuovo Cim. 81, 331	84Sk03
	(³⁶ S,X)	E(cm)≈74-90 MeV	JOUR Nuovo Cim. 81, 331	84Sk03
⁹⁶ Ru	(α,n)	E=30-55 MeV	JOUR Z.Phys. A314, 111	83Be63
	(α,p)	E=30-55 MeV	JOUR Z.Phys. A314, 111	83Be63
	(α,2n)	E=30-55 MeV	JOUR Z.Phys. A314, 111	83Be63
	(α,np)	E=30-55 MeV	JOUR Z.Phys. A314, 111	83Be63
	(α,3n)	E=30-55 MeV	JOUR Z.Phys. A314, 111	83Be63
¹⁰² Ru	(p,n)	E=3.1-6 MeV	JOUR Z.Phys. A315, 277	84Bi04
¹⁰³ Rh	(p,3n)	E=15-67 MeV	JOUR Int.J.Appl.Radiat.Isotop. 35, 743	84La23
	(p,nd)	E=15-67 MeV	JOUR Int.J.Appl.Radiat.Isotop. 35, 743	84La23
	(p,2np)	E=15-67 MeV	JOUR Int.J.Appl.Radiat.Isotop. 35, 743	84La23
	(p,t)	E=15-67 MeV	JOUR Int.J.Appl.Radiat.Isotop. 35, 743	84La23
	(p,4n)	E=15-67 MeV	JOUR Int.J.Appl.Radiat.Isotop. 35, 743	84La23
	(p,nt)	E=15-67 MeV	JOUR Int.J.Appl.Radiat.Isotop. 35, 743	84La23
	(p,2nd)	E=15-67 MeV	JOUR Int.J.Appl.Radiat.Isotop. 35, 743	84La23
	(p,3np)	E=15-67 MeV	JOUR Int.J.Appl.Radiat.Isotop. 35, 743	84La23
	(p,X)	E(cm)≈2-12 MeV	JOUR Z.Phys. A318, 231	84Va26
	(α,n)	E=30 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
	(α,2n)	E=30 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
¹¹⁰ Pd	(¹² C,X)	E(cm)≈30-50 MeV	JOUR Z.Phys. A314, 23	83Kr16
¹⁰⁷ Ag	(p,n)	E=16 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
	(α,n)	E=30 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
	(α,n)	E=30 MeV	JOUR Izv.Akad.Nauk SSSR, Ser.Fiz. 48, 38	84Ba15
	(α,2n)	E=30 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
	(α,2n)	E=21-32 MeV	JOUR Izv.Akad.Nauk SSSR, Ser.Fiz. 48, 1833	84Ba64
¹⁰⁹ Ag	(α,n)	E=30 MeV	JOUR Izv.Akad.Nauk SSSR, Ser.Fiz. 48, 38	84Ba15

TARGET INDEX

TARGET	REACTION	INCIDENT ENERGY	REFERENCE	KEY NUMBER
¹⁰⁹ Ag	(α ,2n)	E=30 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
	(α ,2n)	E=30 MeV	JOUR Izv.Akad.Nauk SSSR, Ser.Fiz. 48, 38	84Ba15
	(α ,2n)	E=35 MeV	JOUR J.Radioanal.Nucl.Chem. 82, 61	84Om01
	(⁴⁰ Ar, ⁴⁰ Ar)	E=150-350 MeV	JOUR Z.Phys. A317, 75	84Gu09
	(⁴⁰ Ar,X)	E(cm)=123.63-246.53 MeV	JOUR Lett.Nuovo Cim. 40, 33	84Sc24
Cd	(p,n)	E=10.4 MeV	JOUR J.Radioanal.Nucl.Chem. 82, 135	84Is01
	(³ He,X)	E=threshold-120 MeV	JOUR J.Labelled Compd.Radiopharm. 21, 1283	84Qa05
	(α ,X)	E=threshold-140 MeV	JOUR J.Labelled Compd.Radiopharm. 21, 1283	84Qa05
¹⁰⁶ Cd	(p,n)	E=6-9 MeV	JOUR Phys.Rev. C29, 2118	84Fi05
¹⁰⁸ Cd	(p,n)	E=6-9 MeV	JOUR Phys.Rev. C29, 2118	84Fi05
	(α ,n)	E=20-27 MeV	JOUR Nucl.Phys. A425, 317	84Pr06
¹¹⁰ Cd	(α ,np)	E=30 MeV	JOUR Izv.Akad.Nauk SSSR, Ser.Fiz. 48, 38	84Ba15
¹¹¹ Cd	(p,p')	E=2.7-4.2 MeV	JOUR Phys.Rev. C31, 79	85Si01
	(³ He,3n)	E=28-32 MeV	JOUR Nucl.Phys. A425, 317	84Pr06
¹¹⁶ Cd	(p,X)	E(cm)=2-8 MeV	JOUR Z.Phys. A318, 231	84Va26
	(α ,3n)	E=20-45 MeV	JOUR Int.J.Appl.Radiat.Isotop. 35, 645	84Qa03
	(⁵⁸ Ni,F)	E=352,875 MeV	JOUR Phys.Rev. C30, 1550	84Ca30
In	(³ He,X)	E=threshold-120 MeV	JOUR J.Labelled Compd.Radiopharm. 21, 1283	84Qa05
	(α ,X)	E=threshold-140 MeV	JOUR J.Labelled Compd.Radiopharm. 21, 1283	84Qa05
¹¹³ In	(α ,n)	E $\approx$ 12.5-30 MeV	JOUR Yad.Fiz. 39, 538	84Ba20
¹¹⁵ In	(p,n)	E=22 MeV	JOUR Yad.Fiz. 39, 264	84Zh02
	(p,n)	E=22 MeV	JOUR Yad.Fiz. 39, 264	84Zh02
	(p,2n)	E=22 MeV	JOUR Yad.Fiz. 39, 264	84Zh02
	(p,2n)	E=22 MeV	JOUR Yad.Fiz. 39, 264	84Zh02
	(p,np)	E=22 MeV	JOUR Yad.Fiz. 39, 264	84Zh02
	(p,3n)	E=22 MeV	JOUR Yad.Fiz. 39, 264	84Zh02
	(α ,n)	E $\approx$ 12.5-30 MeV	JOUR Yad.Fiz. 39, 538	84Ba20
	(α ,npd)	E=20-120 MeV	JOUR Int.J.Appl.Radiat.Isotop. 35, 645	84Qa03
Sn	(p,n)	E=10.4 MeV	JOUR J.Radioanal.Nucl.Chem. 82, 135	84Is01
	(α ,xn)	E=18.1-43.7 MeV	JOUR At.Energ. 55, 256	83Dm06
¹¹² Sn	(α ,n)	E=21-32 MeV	JOUR Izv.Akad.Nauk SSSR, Ser.Fiz. 48, 1833	84Ba64
	(¹² C,F)	E=86-110 MeV	JOUR Yad.Fiz. 39, 1093	84Be29
¹¹⁶ Sn	(p,n)	E=16 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
	(³⁵ Cl,X)	E(cm)=150-300 MeV	JOUR Phys.Lett. 148, 257	84Fo21
	(³⁵ Cl,X)	E(cm)=122.91-165.16 MeV	JOUR Lett.Nuovo Cim. 40, 33	84Sc24
¹¹⁷ Sn	(p,n)	E=16 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
	(p,2n)	E=16 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
¹¹⁸ Sn	(p,n)	E=16 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
	(¹² C,F)	E=86-110 MeV	JOUR Yad.Fiz. 39, 1093	84Be29
¹¹⁹ Sn	(p,2n)	E=16 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
	(p,X)	E(cm) $\approx$ 2.5-7 MeV	JOUR Z.Phys. A318, 231	84Va26
¹²⁰ Sn	(p,n)	E=16 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
	(²⁰ Ne,F)	E=104-120 MeV	JOUR Yad.Fiz. 39, 1093	84Be29
¹²² Sn	(p,n)	E=16 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
	(⁴⁰ Ar,X)	E=102.5-130 MeV	JOUR Z.Phys. A314, 23	83Kr16
¹²⁴ Sn	(¹² C,F)	E=86-110 MeV	JOUR Yad.Fiz. 39, 1093	84Be29
Sb	(p,n)	E=10.4 MeV	JOUR J.Radioanal.Nucl.Chem. 82, 135	84Is01

TARGET INDEX

TARGET	REACTION	INCIDENT ENERGY	REFERENCE	KEY NUMBER
Sb	(³ He,xn) (⁴⁰ Ar,X)	E=12-26 MeV E(cm)=125.76-222.91 MeV	JOUR Radiochim.Acta 34, 25 JOUR Lett.Nuovo Cim. 40, 33	83Qa02 84Sc24
¹²¹ Sb	(p,n) (p,3n2p) (p,5n2p) (α,2n)	E=5-9 MeV E=43-60 MeV E=43-60 MeV E=8-28 MeV	JOUR Izv.Akad.Nauk SSSR, Ser.Fiz. 48, 194 JOUR J.Labelled Compd.Radiopharm. 21, 1284 JOUR J.Labelled Compd.Radiopharm. 21, 1284 JOUR Radiochim.Acta 34, 25	84Ba18 84Ma62 84Ma62 83Qa02
¹²³ Sb	(p,n)	E=5-9 MeV	JOUR Izv.Akad.Nauk SSSR, Ser.Fiz. 48, 194	84Ba18
Te	(p,n)	E=10.4 MeV	JOUR J.Radioanal.Nucl.Chem. 82, 135	84Is01
¹²² Te	(d,n) (α,3n)	E=6-14 MeV E=32-45 MeV	JOUR Radiochim.Acta 34, 25 JOUR Radiochim.Acta 34, 25	83Qa02 83Qa02
¹²³ Te	(p,n) (³ He,3n)	E=9-15 MeV E=20.7-35.2 MeV	JOUR Radiochim.Acta 34, 25 JOUR Radiochim.Acta 34, 25	83Qa02 83Qa02
¹²⁴ Te	(p,2n) (³ He,4n)	E=12-40 MeV E=35.4-52.2 MeV	JOUR Radiochim.Acta 34, 25 JOUR Radiochim.Acta 34, 25	83Qa02 83Qa02
¹²⁶ Te	(³³ S,F)	E=350,500,700	JOUR Phys.Rev. C30, 1550	84Ga30
¹²⁷ I	(p,5n) (d,6n) (α,X)	E=45-65 MeV E=64-78 MeV E=70-130 MeV	JOUR Radiochim.Acta 34, 25 JOUR Radiochim.Acta 34, 25 JOUR Radiochim.Acta 34, 25	83Qa02 83Qa02 83Qa02
Cs	(p,X)	E=320-800 MeV	JOUR Radiochim.Acta 34, 25	83Qa02
¹³³ Cs	(α,3n) (²⁰ Ne,F)	E=55 MeV E not given	JOUR Nucl.Phys. A433, 159 JOUR Phys.Rev. C29, 1145	85Mo01 84Pi01
¹³⁶ Ba	(p,xn)	E=32-45 MeV	JOUR Nucl.Phys. A433, 159	85Mo01
¹³⁸ Ba	(p,xn)	E=17-45 MeV	JOUR Nucl.Phys. A433, 159	85Mo01
La	(p,X)	E=320-800 MeV	JOUR Radiochim.Acta 34, 25	83Qa02
¹³⁹ La	(p,X) (¹⁶ O, ¹⁵ O) (⁸⁶ Kr, ⁸⁶ Kr)	E(cm)=2-8 MeV E=105.8-153.1 MeV E=300-700 MeV	JOUR Z.Phys. A318, 231 JOUR J.Radioanal.Nucl.Chem. 84, 149 JOUR Z.Phys. A317, 75	84Va26 84Ne06 84Gu09
¹⁴⁰ Ce	(¹² C,F)	E=86-110 MeV	JOUR Yad.Fiz. 39, 1093	84Be29
¹⁴² Ce	(p,γ)	E=5-30 MeV	JOUR Nucl.Phys. A431, 288	84Sa29
¹⁴¹ Pr	(¹² C,F) (³⁵ Cl,X)	E not given E(cm)=124.17-172.24 MeV	JOUR Phys.Rev. C29, 1145 JOUR Lett.Nuovo Cim. 40, 33	84Pi01 84Sc24
¹⁴² Nd	(¹⁶ O,F) (⁴⁰ Ca,X)	E=140-315 MeV E=211,236 MeV	JOUR Phys.Rev. C30, 1550 JOUR Nucl.Phys. A413, 489	84Ga30 84Bi02
¹⁴⁴ Nd	(³² S,F) (⁴⁰ Ca,X)	E=350,500,700 E=211,236 MeV	JOUR Phys.Rev. C30, 1550 JOUR Nucl.Phys. A413, 489	84Ga30 84Bi02
¹⁴⁶ Nd	(⁴⁰ Ca,X)	E=211,236 MeV	JOUR Nucl.Phys. A413, 489	84Bi02
¹⁴⁴ Sm	(α,n) (²⁷ Al,2n) (²⁷ Al,3n) (²⁷ Al,4n) (²⁷ Al,5n) (²⁷ Al,6n) (²⁸ Si,2n) (²⁸ Si,3n) (²⁸ Si,4n)	E=17.5 MeV E=130 MeV E=130 MeV E=130 MeV E=130 MeV E=130 MeV E=155 MeV E=155 MeV E=155 MeV	JOUR Z.Phys. A314, 33 JOUR Z.Phys. A315, 49 JOUR Z.Phys. A315, 49 JOUR Z.Phys. A315, 49 JOUR Z.Phys. A315, 49 JOUR Z.Phys. A315, 49 JOUR Z.Phys. A315, 49 JOUR Z.Phys. A315, 49 JOUR Z.Phys. A315, 49	83Ko42 84Sc06 84Sc06 84Sc06 84Sc06 84Sc06 84Sc06 84Sc06 84Sc06

TARGET INDEX

TARGET	REACTION	INCIDENT ENERGY	REFERENCE	KEY NUMBER
¹⁴⁴ Sm	(²⁸ Si,5n)	E=155 MeV	JOUR Z.Phys. A315, 49	84Sc06
	(²⁸ Si,6n)	E=155 MeV	JOUR Z.Phys. A315, 49	84Sc06
	(⁴⁰ Ar,X)	E=211,245 MeV	JOUR Nucl.Phys. A413, 489	84Bi02
	(⁴⁰ Ca,X)	E=211,236 MeV	JOUR Nucl.Phys. A413, 489	84Bi02
¹⁴⁷ Sm	(³ He,3n)	E=22 MeV	JOUR Z.Phys. A314, 33	83Ko42
¹⁴⁸ Sm	(⁴⁰ Ca,X)	E=193,211,236,266 MeV	JOUR Nucl.Phys. A413, 489	84Bi02
¹⁵⁰ Sm	(⁴⁰ Ca,X)	E=211,236 MeV	JOUR Nucl.Phys. A413, 489	84Bi02
¹⁵⁴ Sm	(¹⁶ O, ¹⁶ O')	E=58 MeV	JOUR J.Phys.(London) G10, 805	84Li09
	(¹⁶ O,X)	E(cm)=54-63 MeV	JOUR J.Phys.(London) G10, 805	84Li09
	(⁴⁰ Ar,p)	E=200-350 MeV	JOUR Z.Phys. A316, 27	84We07
	(⁴⁰ Ar,α)	E=200-350 MeV	JOUR Z.Phys. A316, 27	84We07
	(⁴⁰ Ar,F)	E=200-350 MeV	JOUR Z.Phys. A316, 27	84We07
	(⁴⁰ Ca,X)	E=236 MeV	JOUR Nucl.Phys. A413, 489	84Bi02
¹⁵⁸ Gd	(α,α')	E=13-30 MeV	JOUR Nucl.Instrum.Methods 219, 111	84Su05
¹⁶⁰ Gd	(α,α')	E=13-30 MeV	JOUR Nucl.Instrum.Methods 219, 111	84Su05
¹⁵⁹ Tb	(²² Ne,F)	E not given	JOUR Phys.Rev. C29, 1145	84Pi01
	(²² Ne,X)	E=113,130,161.5 MeV	JOUR Phys.Rev. C29, 1145	84Pi01
¹⁶⁴ Dy	(α,X)	E(cm)≈15-25 MeV	JOUR Z.Phys. A318, 231	84Va26
¹⁶⁵ Ho	(³ He,xnp)	E=100 MeV	JOUR Nucl.Phys. A413, 290	84Mo04
	(³ He,xnypd)	E=100 MeV	JOUR Nucl.Phys. A413, 290	84Mo04
	(³ He,pX)	E=100 MeV	JOUR Nucl.Phys. A413, 290	84Mo04
	(³ He,dX)	E=100 MeV	JOUR Nucl.Phys. A413, 290	84Mo04
	(³ He,tX)	E=100 MeV	JOUR Nucl.Phys. A413, 290	84Mo04
	(⁴⁰ Ar,X)	E(cm)=144.87-314.7 MeV	JOUR Lett.Nuovo Cim. 40, 33	84Sc24
¹⁶⁶ Er	(³ He,xn)	E=100 MeV	JOUR Nucl.Phys. A413, 290	84Mo04
	(³ He,xn2p)	E=100 MeV	JOUR Nucl.Phys. A413, 290	84Mo04
	(³ He,xnypd)	E=100 MeV	JOUR Nucl.Phys. A413, 290	84Mo04
	(³ He,xnypd)	E=100 MeV	JOUR Nucl.Phys. A413, 290	84Mo04
	(³ He,pX)	E=100 MeV	JOUR Nucl.Phys. A413, 290	84Mo04
	(³ He,pX)	E=100 MeV	JOUR Nucl.Phys. A413, 290	84Mo04
	(³ He,dX)	E=100 MeV	JOUR Nucl.Phys. A413, 290	84Mo04
	(³ He,dX)	E=100 MeV	JOUR Nucl.Phys. A413, 290	84Mo04
	(³ He,tX)	E=100 MeV	JOUR Nucl.Phys. A413, 290	84Mo04
	(³ He,tX)	E=100 MeV	JOUR Nucl.Phys. A413, 290	84Mo04
¹⁶⁷ Er	(³ He,xn)	E=100 MeV	JOUR Nucl.Phys. A413, 290	84Mo04
	(³ He,xn2p)	E=100 MeV	JOUR Nucl.Phys. A413, 290	84Mo04
	(³ He,xnypd)	E=100 MeV	JOUR Nucl.Phys. A413, 290	84Mo04
	(³ He,pX)	E=100 MeV	JOUR Nucl.Phys. A413, 290	84Mo04
	(³ He,dX)	E=100 MeV	JOUR Nucl.Phys. A413, 290	84Mo04
	(³ He,tX)	E=100 MeV	JOUR Nucl.Phys. A413, 290	84Mo04
¹⁷⁰ Er	(¹⁶ O,F)	E=140-315 MeV	JOUR Phys.Rev. C30, 1550	84Ga30
	(³⁰ Si,4n)	E≈120-170 MeV	JOUR Phys.Rev. C29, 872	84Ka03
	(³⁰ Si,5n)	E≈120-170 MeV	JOUR Phys.Rev. C29, 872	84Ka03
	(³⁰ Si,6n)	E≈120-170 MeV	JOUR Phys.Rev. C29, 872	84Ka03
	(³⁰ Si,F)	E=134.7,152.9 MeV	JOUR Phys.Rev. C29, 872	84Ka03
¹⁶⁹ Tm	(¹² C,F)	E not given	JOUR Phys.Rev. C29, 1145	84Pi01
	(¹² C,X)	E=78.2,100.8,122.6 MeV	JOUR Phys.Rev. C29, 1145	84Pi01
¹⁷⁴ Yb	(¹² C,F)	E=95-291 MeV	JOUR Phys.Rev. C30, 1550	84Ga30
¹⁷⁸ Hf	(α,F)	E=49.2 MeV	JOUR Phys.Rev. C30, 1228	84Wi13
¹⁸¹ Ta	(p,n)	E=16 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05

TARGET INDEX

TARGET	REACTION	INCIDENT ENERGY	REFERENCE	KEY NUMBER
¹⁸¹ Ta	(p,n)	E=22 MeV	JOUR Yad.Fiz. 39, 264	84Zh02
	(p,n)	E=22 MeV	JOUR Yad.Fiz. 39, 264	84Zh02
	(p,2n)	E=22 MeV	JOUR Yad.Fiz. 39, 264	84Zh02
	(p,2n)	E=22 MeV	JOUR Yad.Fiz. 39, 264	84Zh02
	(p,np)	E=16 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
	(α,n)	E=30 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
	(α,n)	E=threshold-65 MeV	JOUR Phys.Rev. C29, 1678	84B106
	(α,2n)	E=30 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
	(α,2n)	E=threshold-65 MeV	JOUR Phys.Rev. C29, 1678	84B106
	(α,3n)	E=threshold-65 MeV	JOUR Phys.Rev. C29, 1678	84B106
	(α,4n)	E=threshold-65 MeV	JOUR Phys.Rev. C29, 1678	84B106
	(⁹ Be,3n)	E=40-55 MeV	JOUR Nucl.Phys. A432, 451	85Kr01
	(⁹ Be,4n)	E=40-55 MeV	JOUR Nucl.Phys. A432, 451	85Kr01
	(⁹ Be,5n)	E=40-55 MeV	JOUR Nucl.Phys. A432, 451	85Kr01
	(¹² C,α)	E=80,98.7 MeV	JOUR Nucl.Phys. A429, 173	84De39
	(¹² C,F)	E=60-110 MeV	JOUR Nucl.Phys. A429, 173	84De39
	(¹⁹ F,α)	E=80-120 MeV	JOUR Phys.Rev. C29, 872	84Ka03
	(¹⁹ F,F)	E=95.7,109.9 MeV	JOUR Phys.Rev. C29, 872	84Ka03
	(²⁴ Mg,X)	E(cm)=238.39-300.19 MeV	JOUR Lett.Nuovo Cim. 40, 33	84Sc24
¹⁸² W	(p,n)	E=16 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
	(p,2n)	E=16 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
	(α,n)	E=30 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
	(α,3n)	E=30 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
	(¹² C,p)	E=70-170 MeV	JOUR Z.Phys. A316, 27	84We07
	(¹² C,α)	E=80,98.7 MeV	JOUR Nucl.Phys. A429, 173	84De39
	(¹² C,α)	E=70-170 MeV	JOUR Z.Phys. A316, 27	84We07
	(¹² C,F)	E=70-130 MeV	JOUR Nucl.Phys. A429, 173	84De39
	(¹² C,F)	E=70-170 MeV	JOUR Z.Phys. A316, 27	84We07
	(¹² C,F)	E=70-170 MeV	JOUR Z.Phys. A316, 27	84We07
¹⁸³ W	(³ He,F)	E<60 MeV	JOUR Yad.Fiz. 39, 1336	84Gr16
	(α,2n)	E=30 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
¹⁸⁶ W	(α,2np)	E=30 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
	(¹² C,α)	E=80,98.7 MeV	JOUR Nucl.Phys. A429, 173	84De39
	(¹² C,F)	E=80-100 MeV	JOUR Nucl.Phys. A429, 173	84De39
¹⁹² Os	(¹⁶ O,F)	E=140-315 MeV	JOUR Phys.Rev. C30, 1550	84Ga30
¹⁹⁴ Pt	(p,n)	E=16 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
	(p,2n)	E=16 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
	(³ He,F)	E<60 MeV	JOUR Yad.Fiz. 39, 1336	84Gr16
	(α,n)	E=30 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
¹⁹⁵ Pt	(p,2n)	E=16 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
¹⁹⁶ Pt	(p,n)	E=16 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
¹⁹⁸ Pt	(³ He,F)	E<60 MeV	JOUR Yad.Fiz. 39, 1336	84Gr16
	(¹² C,F)	E=95-291 MeV	JOUR Phys.Rev. C30, 1550	84Ga30
Au	(p,3n)	E=27,28 MeV	JOUR Int.J.Appl.Radiat.Isotop. 35, 564	84Bo22
¹⁹⁷ Au	(p,γ)	E=4 MeV	JOUR Phys.Can. No.40, 70,PP16	84Ar22
	(p,n)	E=16 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
	(p,np)	E=16 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
	(p,X)	E≤25 MeV	JOUR Bull.Am.Phys.Soc. 29, 1056,ED9	84La2X
	(³ He,F)	E<60 MeV	JOUR Yad.Fiz. 39, 1336	84Gr16
	(α,n)	E=10-40 MeV	JOUR Bull.Am.Phys.Soc. 29, 1117,P2.98	84Bh22
	(α,n)	E=threshold-80 MeV	JOUR Phys.Rev. C29, 1678	84B106
	(α,2n)	E=10-40 MeV	JOUR Bull.Am.Phys.Soc. 29, 1117,P2.98	84Bh22
	(α,2n)	E=threshold-80 MeV	JOUR Phys.Rev. C29, 1678	84B106
	(α,2n)	E=40-119 MeV	JOUR Nucl.Phys. A413, 432	84Ha05
	(α,2p)	E=40-119 MeV	JOUR Nucl.Phys. A413, 432	84Ha05
	(α,3n)	E=10-40 MeV	JOUR Bull.Am.Phys.Soc. 29, 1117,P2.98	84Bh22
	(α,3n)	E=threshold-80 MeV	JOUR Phys.Rev. C29, 1678	84B106
	(α,3n)	E=threshold-80 MeV	JOUR Phys.Rev. C29, 1678	84B106
	(α,3n)	E=threshold-80 MeV	JOUR Phys.Rev. C29, 1678	84B106
	(α,3n)	E=threshold-80 MeV	JOUR Phys.Rev. C29, 1678	84B106

TARGET INDEX

TARGET	REACCIÓN	INCIDENT ENERGY	REFERENCE	KEY NUMBER
¹⁹⁷ Au	($\alpha, 4n$)	E=threshold-80 MeV	JOUR Phys.Rev. C29, 1678	84B106
	(α, F)	E=46.4-50 MeV	JOUR Yad.Fiz. 39, 1100	84Gr13
	(α, F)	E=280 MeV	JOUR Nucl.Phys. A422, 307	84Sa15
	(⁶ Li, F)	E=84.4 MeV	JOUR Phys.Rev. C29, 872	84Ka03
	(³⁵ Cl, X)	E(cm)=174-270 MeV	JOUR Lett.Nuovo Cim. 40, 33	84Sc24
²⁰⁴ Hg	(¹⁸ O, X)	E≈80-180 MeV	JOUR Phys.Rev. C29, 2160	84Es01
²⁰³ Tl	(³ He, F)	E<60 MeV	JOUR Yad.Fiz. 39, 1336	84Gr16
	(α, F)	E=46.4-50 MeV	JOUR Yad.Fiz. 39, 1100	84Gr13
²⁰⁵ Tl	(p, X)	E≤25 MeV	JOUR Bull.Am.Phys.Soc. 29, 1056,ED9	84LaZX
	(³ He, F)	E<60 MeV	JOUR Yad.Fiz. 39, 1336	84Gr16
	(α, F)	E=46.4-50 MeV	JOUR Yad.Fiz. 39, 1100	84Gr13
	(¹⁸ O, X)	E≈80-180 MeV	JOUR Phys.Rev. C29, 2160	84Es01
Pb	(p, γ)	E=30 MeV	JOUR Phys.Rev. C29, 1307	84Sh04
	(p, n)	E=30 MeV	JOUR Phys.Rev. C29, 1307	84Sh04
	(p, xn)	E=60.3-65.2 MeV	JOUR Int.J.Appl.Radiat.Isotop. 35, 909	84Sa22
	(d, γ)	E=33 MeV	JOUR Phys.Rev. C29, 1307	84Sh04
	(d, n)	E=33 MeV	JOUR Phys.Rev. C29, 1307	84Sh04
	(d, xn)	E=threshold-30 MeV	JOUR Radiochim.Acta 27, 125	80Wa29
	(³ He, γ)	E=65 MeV	JOUR Phys.Rev. C29, 1307	84Sh04
	(³ He, n)	E=65 MeV	JOUR Phys.Rev. C29, 1307	84Sh04
	(α, γ)	E=65 MeV	JOUR Phys.Rev. C29, 1307	84Sh04
	(α, n)	E=65 MeV	JOUR Phys.Rev. C29, 1307	84Sh04
²⁰⁴ Pb	(³ He, F)	E<60 MeV	JOUR Yad.Fiz. 39, 1336	84Gr16
	(α, F)	E≈35-50 MeV	JOUR Yad.Fiz. 39, 1100	84Gr13
	(α, F)	E=37.3, 41.1, 45.1, 50 MeV	JOUR Yad.Fiz. 39, 1349	84It01
²⁰⁶ Pb	(³ He, F)	E<60 MeV	JOUR Yad.Fiz. 39, 1336	84Gr16
	(α, F)	E≈35-50 MeV	JOUR Yad.Fiz. 39, 1100	84Gr13
	(α, F)	E=37.3, 41.1, 45.1, 50 MeV	JOUR Yad.Fiz. 39, 1349	84It01
²⁰⁷ Pb	(³ He, F)	E<60 MeV	JOUR Yad.Fiz. 39, 1336	84Gr16
	(α, F)	E=44-50 MeV	JOUR Yad.Fiz. 39, 1100	84Gr13
²⁰⁸ Pb	(p, n)	E=30 MeV	JOUR Phys.Rev. C29, 1317	84Na06
	(d, n)	E=33 MeV	JOUR Phys.Rev. C29, 1317	84Na06
	(d, np)	E=0.2-10 GeV	JOUR Phys.Rev. C30, 247	84Ho14
	(³ He, n)	E=65 MeV	JOUR Phys.Rev. C29, 1317	84Na06
	(³ He, F)	E<60 MeV	JOUR Yad.Fiz. 39, 1336	84Gr16
	(α, γ)	E=65 MeV	JOUR Phys.Rev. C29, 1317	84Na06
	(α, n)	E=65 MeV	JOUR Phys.Rev. C29, 1317	84Na06
	(α, F)	E=44-50 MeV	JOUR Yad.Fiz. 39, 1100	84Gr13
	(α, F)	E=37.3, 41.1, 45.1, 50 MeV	JOUR Yad.Fiz. 39, 1349	84It01
	(α, X)	E(cm)≈17-21 MeV	JOUR Z.Phys. A318, 231	84Va26
	(¹⁴ C, 2n)	E=60-83 MeV	JOUR Nucl.Phys. A432, 421	85Ce01
	(¹⁴ C, 3n)	E=60-83 MeV	JOUR Nucl.Phys. A432, 421	85Ce01
	(¹⁴ C, 4n)	E=60-83 MeV	JOUR Nucl.Phys. A432, 421	85Ce01
	(¹⁴ C, 5n)	E=60-83 MeV	JOUR Nucl.Phys. A432, 421	85Ce01
	(¹⁶ O, ¹⁶ O)	E=100-300 MeV	JOUR Z.Phys. A317, 75	84Gu09
	(¹⁶ O, ¹⁶ O)	E=80-102 MeV	JOUR Phys.Rev.Lett. 53, 333	84Rh02
	(¹⁶ O, F)	E=80-102 MeV	JOUR Phys.Rev.Lett. 53, 333	84Rh02
	(¹⁶ O, X)	E=80-102 MeV	JOUR Phys.Rev.Lett. 53, 333	84Rh02
	(¹⁸ O, ¹² N)	E≈100-200 MeV	JOUR Phys.Rev. C29, 2160	84Es01
	(¹⁸ O, ¹³ N)	E≈100-200 MeV	JOUR Phys.Rev. C29, 2160	84Es01
	(¹⁸ O, ¹⁴ N)	E≈100-200 MeV	JOUR Phys.Rev. C29, 2160	84Es01
	(¹⁸ O, ¹⁵ N)	E≈100-200 MeV	JOUR Phys.Rev. C29, 2160	84Es01
	(¹⁸ O, X)	E≈80-180 MeV	JOUR Phys.Rev. C29, 2160	84Es01
	(²⁰ Ne, ²⁰ Ne)	E=100-250 MeV	JOUR Z.Phys. A317, 75	84Gu09
	(⁸⁴ Kr, ⁸⁴ Kr)	E=300-700 MeV	JOUR Z.Phys. A317, 75	84Gu09
²⁰⁹ Bi	(p, n)	E=62-800 MeV	JOUR Phys.Rev. C30, 236	84Da14
	(p, 2n)	E=62-800 MeV	JOUR Phys.Rev. C30, 236	84Da14

TARGET INDEX

TARGET	REACTION	INCIDENT ENERGY	REFERENCE	KEY NUMBER
²⁰⁹ Bi	(p,d)	E=39,62 MeV	JOUR Nucl.Phys. A424, 1	84Ga15
	(p,4n)	E=62-800 MeV	JOUR Phys.Rev. C30, 236	84Da14
	(p,6n)	E=62-800 MeV	JOUR Phys.Rev. C30, 236	84Da14
	(p,9n)	E=210-480 MeV	JOUR Phys.Rev. C30, 236	84Da14
	(p,10n)	E=210-480 MeV	JOUR Phys.Rev. C30, 236	84Da14
	(p,11n)	E=210-480 MeV	JOUR Phys.Rev. C30, 236	84Da14
	(p,12n)	E=210-480 MeV	JOUR Phys.Rev. C30, 236	84Da14
	(p, ¹³ N)	E=210-480 MeV	JOUR Phys.Rev. C30, 236	84Da14
	(p,14n)	E=210-480 MeV	JOUR Phys.Rev. C30, 236	84Da14
	(p,F)	E=24.3,27.1,29.6 MeV	JOUR Yad.Fiz. 39, 1349	84It01
	(³ He,n)	E=25-32 MeV	JOUR Radiochim.Acta 34, 25	83Qa02
	(³ He,F)	E<60 MeV	JOUR Yad.Fiz. 39, 1336	84Gr16
	(α,2n)	E=0-28 MeV	JOUR Radiochim.Acta 34, 25	83Qa02
	(α,2n)	E=21.1-29.2 MeV	JOUR J.Labelled Compd.Radiopharm. 21, 1288	84La31
	(α,3n)	E=21.1-29.2 MeV	JOUR J.Labelled Compd.Radiopharm. 21, 1288	84La31
	(α,F)	E=34.7-50 MeV	JOUR Yad.Fiz. 39, 1100	84Gr13
	(α,F)	E=37.3,41.1,45.1,50 MeV	JOUR Yad.Fiz. 39, 1349	84It01
	(α,X)	E(cm)≈16-20 MeV	JOUR Z.Phys. A318, 231	84Va26
	(⁴⁰ Ar, ⁴⁰ Ar)	E=200-350 MeV	JOUR Z.Phys. A317, 75	84Gu09
	(Kr,X)	E=500 MeV	JOUR Radiochim.Acta 34, 25	83Qa02
	(⁸⁴ Kr, ⁸⁴ Kr)	E=600-700 MeV	JOUR Z.Phys. A317, 75	84Gu09
	(¹³⁶ Xe, ¹³⁶ Xe)	E=700-1300 MeV	JOUR Z.Phys. A317, 75	84Gu09
²³⁰ Th	(α,αF)	E=50 MeV	JOUR Nucl.Phys. A417, 24	84Da04
²³² Th	(p,F)	E=140-1000 MeV	JOUR Nucl.Phys. A422, 307	84Sa15
	(p,X)	E=660 MeV	JOUR Radiochim.Acta 34, 25	83Qa02
	(d,np)	E=0.01-10 GeV	JOUR Phys.Rev. C30, 247	84Ho14
	(d,F)	E=70-1000 MeV	JOUR Nucl.Phys. A422, 307	84Sa15
	(α,F)	E=280,1000 MeV	JOUR Nucl.Phys. A422, 307	84Sa15
	(α,F)	E≈20-100 MeV	JOUR Yad.Fiz. 39, 548	84Za04
²³³ U	(p,X)	E(cm)=5-13 MeV	JOUR Z.Phys. A318, 231	84Va26
	(α,n)	E=threshold-45 MeV	JOUR Phys.Rev. C29, 1678	84B106
	(α,2n)	E=threshold-45 MeV	JOUR Phys.Rev. C29, 1678	84B106
	(α,3n)	E=threshold-45 MeV	JOUR Phys.Rev. C29, 1678	84B106
	(α,X)	E(cm)=18-30 MeV	JOUR Z.Phys. A318, 231	84Va26
²³⁴ U	(α,n)	E=threshold-45 MeV	JOUR Phys.Rev. C29, 1678	84B106
	(α,2n)	E=threshold-45 MeV	JOUR Phys.Rev. C29, 1678	84B106
	(α,3n)	E=threshold-45 MeV	JOUR Phys.Rev. C29, 1678	84B106
	(α,4n)	E=40-45 MeV	JOUR Phys.Rev. C29, 1678	84B106
²³⁵ U	(α,n)	E≈ threshold-50 MeV	JOUR Phys.Rev. C29, 1678	84B106
	(α,2n)	E≈ threshold-50 MeV	JOUR Phys.Rev. C29, 1678	84B106
	(α,3n)	E≈ threshold-50 MeV	JOUR Phys.Rev. C29, 1678	84B106
	(α,4n)	E≈ threshold-50 MeV	JOUR Phys.Rev. C29, 1678	84B106
	(α,F)	E≈20-100 MeV	JOUR Yad.Fiz. 39, 548	84Za04
	(²⁰ Ne, ²⁰ Ne)	E=100-300 MeV	JOUR Z.Phys. A317, 75	84Gu09
²³⁶ U	(α,F)	E≈20-100 MeV	JOUR Yad.Fiz. 39, 548	84Za04
²³⁸ U	(p,X)	E=660 MeV	JOUR Radiochim.Acta 34, 25	83Qa02
	(d,np)	E=18.1 MeV	JOUR Phys.Rev. C29, 1693	84Ka10
	(d,np)	E=18 MeV	JOUR ATOMKI Kozlem. 26, 59	84Ka17
	(¹² C,F)	E=95-291 MeV	JOUR Phys.Rev. C30, 1550	84Ca30
	(¹⁶ O,F)	E=140-315 MeV	JOUR Phys.Rev. C30, 1550	84Ca30
	(³² S,F)	E=350,500,700	JOUR Phys.Rev. C30, 1550	94Ca30
	(⁴⁰ Ar, ⁴⁰ Ar)	E=200-350 MeV	JOUR Z.Phys. A317, 75	84Gu09
	(⁵⁸ Ni,F)	E=352,875 MeV	JOUR Phys.Rev. C30, 1550	84Ca30
²³⁷ Np	(α,n)	E≈ threshold-50 MeV	JOUR Phys.Rev. C29, 1678	84B106
	(α,2n)	E≈ threshold-50 MeV	JOUR Phys.Rev. C29, 1678	84B106
	(α,3n)	E≈ threshold-50 MeV	JOUR Phys.Rev. C29, 1678	84B106
	(α,4n)	E≈ threshold-50 MeV	JOUR Phys.Rev. C29, 1678	84B106

TARGET INDEX

<u>TARGET</u>	<u>REACTION</u>	<u>INCIDENT ENERGY</u>	<u>REFERENCE</u>	<u>KEY NUMBER</u>
²⁵⁴ Es	(p,F)	E=11-17 MeV	JOUR Phys.Rev. C30, 559	84Br14
	(d,F)	E=11-17 MeV	JOUR Phys.Rev. C30, 559	84Br14
	(d,pF)	E=tandem	JOUR Phys.Rev. C30, 559	84Br14
	(t,F)	E=11-17 MeV	JOUR Phys.Rev. C30, 559	84Br14
	(t,pF)	E=tandem	JOUR Phys.Rev. C30, 559	84Br14
	(³ He,pF)	E=tandem	JOUR Phys.Rev. C30, 559	84Br14
	(³ He,dF)	E=tandem	JOUR Phys.Rev. C30, 559	84Br14
	(α,F)	E=20-26 MeV	JOUR Phys.Rev. C30, 559	84Br14

RESIDUAL INDEX

RESIDUAL	TARGET-REACTION	INCIDENT ENERGY	REFERENCE	KEY NUMBER
^1n	$^2\text{H}(\text{t}, \alpha)$ $^2\text{H}(\text{t}, \alpha)$	$E=12.5-117 \text{ keV}$ $E=12.5-117 \text{ keV}$	JOUR Bull.Am.Phys.Soc. 29, 747, JH3 JOUR Phys.Rev. C29, 2031	84BrZX 84Ja08
^1H	$^1\text{H}(\text{d}, \text{np})$	$E=13.1, 15.9 \text{ MeV}$	JOUR Nucl.Phys. A423, 1	84Sc16
^3H	$^2\text{H}(\text{d}, \text{p})$	$E=20-117 \text{ MeV}$	JOUR Bull.Am.Phys.Soc. 29, 747, JH2	84JaZY
^3He	$^2\text{H}(\text{d}, \text{n})$ $^2\text{H}(\text{d}, \text{n})$	$E(\text{cm}) \leq 150 \text{ keV}$ $E=20-117 \text{ MeV}$	JOUR Phys.Rev.Lett. 52, 2038 JOUR Bull.Am.Phys.Soc. 29, 747, JH2	84Ho10 84JaZY
^4He	$^3\text{He}(\text{d}, \text{p})$ $^6\text{Li}(\text{d}, \text{n}^3\text{He})$ $^6\text{Li}(\text{d}, \text{pt})$ $^6\text{Li}(\text{d}, \alpha)$	$E=\text{thermal}$ $E=10-100 \text{ keV}$ $E=10-100 \text{ keV}$ $E=10-100 \text{ keV}$	JOUR Bull.Am.Phys.Soc. 29, 1076, R6.3 JOUR J.Phys.(London) G10, L213 JOUR J.Phys.(London) G10, L213 JOUR J.Phys.(London) G10, L213	84AIZU 84Ku15 84Ku15 84Ku15
^6Li	$^2\text{H}(\alpha, \gamma)$	$E=6.24 \text{ MeV}$	JOUR Phys.Rev. C29, 755	84Ro04
^7Li	$^6\text{Li}(\text{d}, \text{p})$	$E=10-100 \text{ keV}$	JOUR J.Phys.(London) G10, L213	84Ku15
^7Be	$^7\text{Li}(\text{p}, \text{n})$ $^{27}\text{Al}(\text{p}, \text{X})$ $^6\text{Li}(\text{d}, \text{n})$ $^3\text{He}(\alpha, \gamma)$ $^3\text{He}(\alpha, \gamma)$ $^3\text{He}(\alpha, \gamma)$ $^3\text{He}(\alpha, \gamma)$ $^3\text{He}(\alpha, \gamma)$ $^3\text{He}(\alpha, \gamma)$	$E=60-480 \text{ MeV}$ $E=50-500 \text{ MeV}$ $E=10-100 \text{ keV}$ $E=1.3 \text{ MeV}$ $E(\text{cm})=525 \text{ keV}$ $E=165-1169 \text{ keV}$ $E(\text{cm})=947.1255 \text{ keV}$ $E=0.25-2.5 \text{ MeV}$ $E \approx 0$	JOUR Phys.Rev. C30, 1999 JOUR Bull.Am.Phys.Soc. 29, 65, HF10 JOUR J.Phys.(London) G10, L213 JOUR Nucl.Phys. A427, 526 JOUR Bull.Am.Phys.Soc. 29, 1076, R6.3 JOUR Nucl.Phys. A419, 115 JOUR Nucl.Phys. A419, 115 JOUR Nucl.Phys. A419, 133 JOUR J.Phys.(London) G11, L11	84Da22 84GrZZ 84Ku15 84A124 84AIZU 84Os03 84Os03 84Wa06 85Bu02
^8Be	$^6\text{Li}(\text{t}, \text{n})$	$E=2-4.5 \text{ MeV}$	JOUR Bull.Am.Phys.Soc. 29, 748, JH13	84LiZY
^{10}B	$^6\text{Li}(\alpha, \gamma)$ $^7\text{Li}(\alpha, \text{n})$	$E=1.03-1.2 \text{ MeV}$ $E=4.38-4.67 \text{ MeV}$	JOUR Nucl.Phys. A417, 289 JOUR Phys.Rev. C30, 1375	84Na07 84Ol05
^{11}B	$^7\text{Li}(\alpha, \gamma)$	$E=401, 814, 953 \text{ keV}$	JOUR Phys.Rev. C29, 1199	84Ha13
^{12}B	$^{11}\text{B}(^9\text{Be}, ^8\text{Be})$ $^{11}\text{B}(^9\text{Be}, \text{X})$	$E=1.2-5.2 \text{ MeV}$ $E=1.2-5.2 \text{ MeV}$	JOUR Nucl.Phys. A427, 186 JOUR Nucl.Phys. A427, 186	84Da17 84Da17
^{10}C	$^{10}\text{B}(\text{p}, \text{n})$	$E \approx \text{threshold}$	JOUR Phys.Rev. C29, 1530	84Ba12
^{11}C	$^{14}\text{N}(\text{p}, \alpha)$ $^{14}\text{N}(\text{p}, \alpha)$ $^{12}\text{C}(^3\text{He}, \alpha)$ $^7\text{Be}(\alpha, \gamma)$ $^{12}\text{C}(\alpha, \text{n}\alpha)$	$E=\text{threshold}-18 \text{ MeV}$ $E < 40 \text{ MeV}$ $E < 40 \text{ MeV}$ $E=884, 1376 \text{ keV}$ $E < 15 \text{ MeV}$	JOUR Radiochim.Acta 27, 181 JOUR Radiochim.Acta 29, 57 JOUR Radiochim.Acta 29, 57 JOUR Phys.Rev. C29, 1199 JOUR Radiochim.Acta 29, 57	80Bi16 81No15 81No15 84Ha13 81No15
^{12}C	$^{12}\text{C}(^3\text{He}, \text{pd})$ $^{11}\text{B}(^{11}\text{B}, ^{10}\text{Be})$ $^{11}\text{B}(^{11}\text{B}, ^{10}\text{Be})$ $^{12}\text{C}(^{12}\text{C}, ^{12}\text{C})$ $^{12}\text{C}(^{12}\text{C}, ^{12}\text{C})$ $^{12}\text{C}(^{12}\text{C}, ^{12}\text{C}')$ $^{12}\text{C}(^{12}\text{C}, ^{12}\text{C}')$ $^{12}\text{C}(^{12}\text{C}, ^{12}\text{C}')$ $^{12}\text{C}(^{12}\text{C}, ^{12}\text{C}')$ $^{12}\text{C}(^{13}\text{C}, ^{13}\text{C}')$ $^1\text{H}(^{15}\text{N}, \alpha)$ $^{14}\text{C}(^{16}\text{O}, ^{18}\text{O})$	$E=52 \text{ MeV}$ $E(\text{cm})=5.5 \text{ MeV}$ $E(\text{cm})=5.5 \text{ MeV}$ $E=3-9 \text{ MeV}$ $E \approx 15-35 \text{ MeV}$ $E(\text{cm})=20-40 \text{ MeV}$ $E \approx 15-35 \text{ MeV}$ $E(\text{cm})=16-33 \text{ MeV}$ $E(\text{cm})=7.8, 9.88 \text{ MeV}$ $E=6-18 \text{ MeV}$ $E \approx 15-35 \text{ MeV}$	JOUR Nucl.Phys. A425, 23 JOUR Nucl.Phys. A433, 550 JOUR Nucl.Phys. A433, 550 JOUR Nucl.Phys. A429, 116 JOUR Z.Phys. A319, 227 JOUR Phys.Lett. 136, 322 JOUR Z.Phys. A319, 227 JOUR Phys.Lett. 135, 271 JOUR Nucl.Phys. A424, 262 JOUR J.Radioanal.Nucl.Chem. 83, 99 JOUR Z.Phys. A319, 227	84Aa01 85Po02 85Po02 84Ha43 84Ta20 84Fu02 84Ta20 84Tr01 84Vo11 84Ru07 84Ta20
^{13}C	$^{12}\text{C}(^3\text{He}, 2\text{p})$ $^{12}\text{C}(^{14}\text{C}, ^{13}\text{C})$	$E=52 \text{ MeV}$ $E(\text{cm}) \approx 20-24 \text{ MeV}$	JOUR Nucl.Phys. A425, 23 JOUR Z.Phys. A319, 227	84Aa01 84Ta20
^{14}C	$^{13}\text{C}(^9\text{Be}, ^8\text{Be})$ $^{13}\text{C}(^9\text{Be}, \text{X})$ $^{14}\text{C}(^{14}\text{C}, ^{13}\text{C})$ $^{14}\text{C}(^{14}\text{C}, ^{14}\text{C}')$	$E=1.2-5.2 \text{ MeV}$ $E=1.2-5.2 \text{ MeV}$ $E \approx 15-35 \text{ MeV}$ $E(\text{cm}) \approx 18-26 \text{ MeV}$	JOUR Nucl.Phys. A427, 186 JOUR Nucl.Phys. A427, 186 JOUR Z.Phys. A319, 227 JOUR Z.Phys. A319, 227	84Da17 84Da17 84Ta20 84Ta20

RESIDUAL INDEX

RESIDUAL	TARGET-REACTION	INCIDENT ENERGY	REFERENCE	KEY NUMBER
¹⁴ C	¹⁴ C(¹⁶ O, ¹⁶ O)	E(cm)≈17.5-35 MeV	JOUR Z.Phys. A319, 227	84Ta20
¹² N	¹² C(p,n)	E=33 MeV	JOUR Phys.Rev. C29, 1317	84Na06
¹³ N	¹² C(d,n)	E=65 MeV	JOUR Phys.Rev. C29, 1317	84Na06
	¹² C(³ He,d)	E=52 MeV	JOUR Nucl.Phys. A425, 23	84Aa01
¹⁴ N	¹² C(³ He,p)	E=52 MeV	JOUR Nucl.Phys. A425, 23	84Aa01
¹⁴ O	¹⁴ N(p,n)	E≈6.75-14.5 MeV	JOUR Radiochim.Acta 29, 57	81No15
	¹² C(³ He,n)	E<40 MeV	JOUR Radiochim.Acta 29, 57	81No15
	¹² C(³ He,n)	E=65 MeV	JOUR Phys.Rev. C29, 1317	84Na06
	¹⁴ N(³ He,t)	E not given	JOUR Bull.Am.Phys.Soc. 29, 717,GG10	84ChZY
	¹² C(α,2n)	E<40 MeV	JOUR Radiochim.Acta 29, 57	81No15
¹⁵ O	¹⁵ N(p,n)	E=3.72-16.58 MeV	JOUR J.Labelled Compd.Radiopharm. 21, 1260	84Sa30
	¹² C(α,n)	E=65 MeV	JOUR Phys.Rev. C29, 1317	84Na06
¹⁶ O	¹⁹ F(p,α)	E=0.8-3 MeV	JOUR J.Radioanal.Nucl.Chem. 83, 107	84Gr12
	¹² C(α,γ)	E<3 MeV	JOUR Nucl.Phys. A430, 426	84De42
	¹² C(α,γ)	E=30 MeV	JOUR Phys.Rev. C29, 1317	84Na06
	¹⁶ O(¹⁶ O, ¹⁶ O)	E(cm)≈20-32 MeV	JOUR Z.Phys. A314, 317	83Ka40
	¹⁶ O(¹⁶ O, ¹⁶ O)	E=7-15 MeV	JOUR Nucl.Phys. A429, 116	84Ha43
	¹⁶ O(¹⁶ O, ¹⁶ O)	E(cm)≈20-24 MeV	JOUR Z.Phys. A319, 227	84Ta20
	¹⁶ O(¹⁶ O, ¹⁶ O)	E(cm)=7-12 MeV	JOUR Nucl.Phys. A422, 373	84Wu04
	¹⁶ O(¹⁶ O, ¹⁶ O')	E(cm)≈20-32 MeV	JOUR Z.Phys. A314, 317	83Ka40
	¹⁶ O(¹⁶ O, ¹⁶ O')	E(cm)≈17.5-35 MeV	JOUR Z.Phys. A319, 227	84Ta20
	¹⁶ O(¹⁶ O,X)	E(cm)=7-12 MeV	JOUR Nucl.Phys. A422, 373	84Wu04
	¹ H(¹⁹ F,α)	E=6.1-6.7 MeV	JOUR J.Radioanal.Nucl.Chem. 83, 99	84Ru07
¹⁷ O	¹³ C(⁹ Be,α)	E=1.4-4.4 MeV	JOUR Nucl.Phys. A427, 186	84Da17
¹⁸ O	¹² C(⁷ Li,p)	E=16 MeV	JOUR Phys.Rev. C30, 848	84Fo15
¹⁸ F	¹⁸ O(p,n)	E=0-18 MeV	JOUR Radiochim.Acta 34, 25	83Qa02
	¹⁸ O(p,n)	E=10 MeV	JOUR Int.J.Appl.Radiat.Isotop. 35, 117	84Ni02
	¹⁷ O(d,n)	E=4-12 MeV	JOUR At.Energ. 55, 164	83Va33
	²⁰ Ne(d,α)	E=60-65 MeV	JOUR Radiochim.Acta 34, 25	83Qa02
	¹⁶ O(³ He,p)	E=22-40 MeV	JOUR Radiochim.Acta 34, 25	83Qa02
	²⁰ Ne(³ He,pα)	E=10-45 MeV	JOUR Radiochim.Acta 34, 25	83Qa02
	¹⁶ O(α,d)	E=0-55 MeV	JOUR Radiochim.Acta 34, 25	83Qa02
¹⁹ F	¹⁹ F(p,p')	E=0.7-1.9 MeV	JOUR J.Radioanal.Nucl.Chem. 83, 107	84Gr12
	¹⁶ O(⁷ Li,α)	E=20 MeV	JOUR Phys.Rev. C30, 1924	84Mo28
¹⁸ Ne	²⁰ Ne(d,3np)	E=10-65 MeV	JOUR Radiochim.Acta 34, 25	83Qa02
	¹⁶ O(α,2n)	E=0-20 MeV	JOUR Radiochim.Acta 34, 25	83Qa02
²⁰ Ne	¹⁸ O(α,γ)	E(cm)=0.4-2 MeV	JOUR Z.Phys. A317, 325	84La18
	¹² C(¹² C,α)	E(cm)=13-15 MeV	JOUR Phys.Rev. C29, 1566	84Dh02
	¹² C(¹² C,α)	E(cm)=14-20.6 MeV	JOUR Phys.Rev. C30, 866	84Le19
	²⁰ Ne(²⁰ Ne, ²⁰ Ne)	E(cm)≈20-80 MeV	JOUR Phys.Lett. 141, 9	84Bo24
²² Na	²⁷ Al(p,X)	E=50-500 MeV	JOUR Bull.Am.Phys.Soc. 29, 65,HF10	84GrZZ
	²⁴ Mg(d,α)	E=4-12 MeV	JOUR At.Energ. 55, 164	83Va33
	¹⁹ F(α,n)	E=3.5-10 MeV	JOUR Phys.Rev. C30, 1339	84No07
	²⁷ Al(⁶ Li,X)	E=25-153 MeV	JOUR Radiochim.Acta 33, 181	83K111
²³ Na	¹² C(¹² C,p)	E=39 MeV	JOUR Phys.Rev. C30, 527	84Fo12
²⁴ Na	²⁷ Al(p,X)	E=50-500 MeV	JOUR Bull.Am.Phys.Soc. 29, 65,HF10	84GrZZ
	²³ Na(d,p)	E=4-12 MeV	JOUR At.Energ. 55, 164	83Va33
	²⁶ Mg(d,α)	E=4-12 MeV	JOUR At.Energ. 55, 164	83Va33
	²⁷ Al(⁶ Li,X)	E=25-153 MeV	JOUR Radiochim.Acta 33, 181	83K111
²⁴ Mg	¹² C(¹⁶ O,α)	E(cm)≈9-12.75 MeV	JOUR Phys.Lett. 134, 166	84Hu02

RESIDUAL INDEX

RESIDUAL	TARGET-REACTION	INCIDENT ENERGY	REFERENCE	KEY NUMBER
^{24}Mg	$^{12}\text{C}(^{16}\text{O},\alpha)$	$E=39-40\text{ MeV}$	JOUR Z.Phys. A315, 319	84Sp03
	$^{24}\text{Mg}(^{32}\text{S},^{32}\text{S})$	$E=100-300\text{ MeV}$	JOUR Z.Phys. A317, 75	84Gu09
^{26}Al	$^{26}\text{Al}(p,p')$	$E=0.17-1.58\text{ MeV}$	JOUR Nucl.Phys. A415, 93	84Bu09
^{27}Al	$^{27}\text{Al}(^{32}\text{S},^{32}\text{S})$	$E\approx 50-80\text{ MeV}$	JOUR Z.Phys. A317, 75	84Gu09
^{27}Si	$^{26}\text{Al}(p,\gamma)$	$E=0.17-1.58\text{ MeV}$	JOUR Nucl.Phys. A415, 93	84Bu09
	$^{27}\text{Al}(p,n)$	$E=22\text{ MeV}$	JOUR Yad.Fiz. 39, 264	84Zh02
^{28}Si	$^{28}\text{Si}(^3\text{He},pd)$	$E=52\text{ MeV}$	JOUR Nucl.Phys. A425, 23	84Aa01
	$^{24}\text{Mg}(\alpha,\gamma)$	$E=4.4-9.6\text{ MeV}$	JOUR Z.Phys. A318, 339	84Bo36
	$^{28}\text{Si}(^9\text{Be},^9\text{Be})$	$E=40-200\text{ MeV}$	JOUR Z.Phys. A317, 75	84Gu09
	$^{28}\text{Si}(^{16}\text{O},^{16}\text{O})$	$E=120-240\text{ MeV}$	JOUR Z.Phys. A317, 75	84Gu09
^{28}Si	$^{28}\text{Si}(^3\text{He},2p)$	$E=52\text{ MeV}$	JOUR Nucl.Phys. A425, 23	84Aa01
^{29}P	$^{28}\text{Si}(^3\text{He},d)$	$E=52\text{ MeV}$	JOUR Nucl.Phys. A425, 23	84Aa01
^{30}P	$^{28}\text{Si}(^3\text{He},p)$	$E=52\text{ MeV}$	JOUR Nucl.Phys. A425, 23	84Aa01
^{34}Cl	$^{34}\text{S}(p,n)$	$E=12\text{ MeV}$	JOUR Int.J.Appl.Radiat.Isotop. 35, 1045	84Ab07
	$^{35}\text{Cl}(p,np)$	$E=14-30\text{ MeV}$	JOUR Radiochim.Acta 34, 25	83Qa02
	$\text{S}(p,xn)$	$E=5-30\text{ MeV}$	JOUR Radiochim.Acta 34, 25	83Qa02
	$^{34}\text{S}(d,2n)$	$E=22\text{ MeV}$	JOUR Int.J.Appl.Radiat.Isotop. 35, 1045	84Ab07
	$^{32}\text{S}(^3\text{He},p)$	$E=20-45\text{ MeV}$	JOUR Radiochim.Acta 34, 25	83Qa02
	$^{31}\text{P}(\alpha,n)$	$E=8-22\text{ MeV}$	JOUR Radiochim.Acta 34, 25	83Qa02
	$^{32}\text{S}(\alpha,np)$	$E=12-24\text{ MeV}$	JOUR Radiochim.Acta 34, 25	83Qa02
^{37}Cl	$^{36}\text{S}(p,\gamma)$	$E=0.5-2\text{ MeV}$	JOUR Nucl.Phys. A423, 197	84No05
^{38}Cl	$^{37}\text{Cl}(d,p)$	$E=4-12\text{ MeV}$	JOUR At.Energ. 55, 164	83Va33
^{41}Ar	$^{51}\text{V}(d,3\alpha)$	$E=\text{threshold}-90\text{ MeV}$	JOUR Radiochim.Acta 35, 11	84Qa02
	$^{51}\text{V}(d,3\alpha)$	$E=\text{threshold}-90\text{ MeV}$	JOUR Radiochim.Acta 35, 11	84Qa02
^{39}K	$^{38}\text{Ar}(p,\gamma)$	$E=0.7-2.4\text{ MeV}$	JOUR Nucl.Phys. A420, 351	84Ha27
^{42}K	$^{41}\text{K}(d,p)$	$E=4-12\text{ MeV}$	JOUR At.Energ. 55, 164	83Va33
	$^{51}\text{V}(d,2np2\alpha)$	$E=\text{threshold}-90\text{ MeV}$	JOUR Radiochim.Acta 35, 11	84Qa02
^{43}K	$^{51}\text{V}(d,np2\alpha)$	$E=\text{threshold}-90\text{ MeV}$	JOUR Radiochim.Acta 35, 11	84Qa02
^{40}Ca	$^{40}\text{Ca}(^6\text{Li},^6\text{Li})$	$E=40-160\text{ MeV}$	JOUR Z.Phys. A317, 75	84Gu09
	$^{40}\text{Ca}(^{16}\text{O},^{16}\text{O})$	$E=40-200\text{ MeV}$	JOUR Z.Phys. A317, 75	84Gu09
	$^{40}\text{Ca}(^{20}\text{Ne},^{20}\text{Ne})$	$E=600-700\text{ MeV}$	JOUR Z.Phys. A317, 75	84Gu09
	$^{40}\text{Ca}(^{40}\text{Ca},^{40}\text{Ca})$	$E=70-120\text{ MeV}$	JOUR Z.Phys. A317, 75	84Gu09
^{44}Ca	$^{44}\text{Ca}(^{18}\text{O},^{18}\text{O})$	$E=20-60\text{ MeV}$	JOUR Nucl.Phys. A427, 151	84De38
^{47}Ca	$^{51}\text{V}(d,2p\alpha)$	$E=\text{threshold}-90\text{ MeV}$	JOUR Radiochim.Acta 35, 11	84Qa02
^{43}Sc	$^{46}\text{Ti}(p,\alpha)$	$E=16\text{ MeV}$	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
	$^{42}\text{Ca}(d,n)$	$E=4-12\text{ MeV}$	JOUR At.Energ. 55, 164	83Va33
	$^{43}\text{Ca}(d,2n)$	$E=4-12\text{ MeV}$	JOUR At.Energ. 55, 164	83Va33
^{44}Sc	$^{43}\text{Sc}(p,np)$	$E=16\text{ MeV}$	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
	$^{47}\text{Ti}(p,\alpha)$	$E=16\text{ MeV}$	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
	$^{43}\text{Ca}(d,n)$	$E=4-12\text{ MeV}$	JOUR At.Energ. 55, 164	83Va33
	$^{44}\text{Ca}(d,2n)$	$E=4-12\text{ MeV}$	JOUR At.Energ. 55, 164	83Va33
	$^{51}\text{V}(d,4np\alpha)$	$E=\text{threshold}-90\text{ MeV}$	JOUR Radiochim.Acta 35, 11	84Qa02
	$^{43}\text{Sc}(\alpha,n\alpha)$	$E=30\text{ MeV}$	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
^{46}Sc	$^{51}\text{V}(d,2np\alpha)$	$E=\text{threshold}-90\text{ MeV}$	JOUR Radiochim.Acta 35, 11	84Qa02
^{47}Sc	$^{51}\text{V}(d,np\alpha)$	$E=\text{threshold}-90\text{ MeV}$	JOUR Radiochim.Acta 35, 11	84Qa02

RESIDUAL INDEX

RESIDUAL	TARGET-REACTION	INCIDENT ENERGY	REFERENCE	KEY NUMBER
⁴⁷ Sc	⁴⁵ Sc($\alpha, 2p$)	E=30 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
⁴⁸ Sc	⁵¹ V(d, pa)	E=threshold-90 MeV	JOUR Radiochim.Acta 35, 11	84Qa02
⁴⁸ Ti	⁴⁸ Ti(¹² C, ¹² C')	E=30-60 MeV	JOUR Nucl.Phys. A427, 151	84De38
⁵⁰ Ti	⁵⁰ Ti(¹² C, ¹² C')	E=30-60 MeV	JOUR Nucl.Phys. A427, 151	84De38
⁴⁸ V	Ni(p, γ)	E=10.4 MeV	JOUR J.Radioanal.Nucl.Chem. 82, 135	84Is01
	⁴⁸ Ti(p, n)	E=16 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
	⁴⁸ Ti(p, 2n)	E=30 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
	⁴⁷ Ti(d, n)	E=4-12 MeV	JOUR At.Energ. 55, 164	83Va33
	⁵¹ V(d, 4np)	E=threshold-90 MeV	JOUR Radiochim.Acta 35, 11	84Qa02
	⁴⁶ Ti(t, n)	E=1.7-4 MeV	REPT LA-10069-PR,P29	84ArZW
	⁴³ Sc(α , n)	E=30 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
	⁴⁸ Ti(α , np)	E=30 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
	⁵⁰ Co(α , 9n6p)	E=threshold-170 MeV	JOUR Z.Phys. A317, 155	84Ga14
⁴⁹ V	⁵¹ V(p, t)	E=10-25 MeV	JOUR Radiochim.Acta 33, 177	83K110
	⁵¹ V(d, nt)	E=0.5-4 MeV	JOUR Radiochim.Acta 33, 177	83K110
	⁵¹ V(³ He, na)	E=0.2-2 MeV	JOUR Radiochim.Acta 33, 177	83K110
	⁵¹ V(α , 2na)	E=14-25 MeV	JOUR Radiochim.Acta 33, 177	83K110
⁴⁸ Cr	⁴⁸ Ti(α , 2n)	E=30 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
	⁵⁰ Co(α , 10n5p)	E=threshold-170 MeV	JOUR Z.Phys. A317, 155	84Ga14
⁴⁹ Cr	⁴⁸ Ti(α , n)	E=30 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
⁵⁰ Cr	⁵⁰ Cr(²⁰ Ne, ²⁰ Ne)	E=93,120,146 MeV	JOUR Z.Phys. A317, 31	84Na12
⁵¹ Cr	⁵¹ V(p, n)	E=16 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
	⁵¹ V(p, n)	E=threshold-6.7 MeV	JOUR Bull.Am.Phys.Soc. 29, 1056,ED7	84HeZV
	⁵² Cr(p, np)	E=22 MeV	JOUR Yad.Fiz. 39, 264	84Zh02
	⁵⁰ V(d, n)	E=4-12 MeV	JOUR At.Energ. 55, 164	83Va33
	⁵⁰ Cr(d, p)	E=4-12 MeV	JOUR At.Energ. 55, 164	83Va33
	⁴⁸ Ti(α , n)	E=30 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
	⁴⁹ Ti(α , 2n)	E=30 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
	⁵⁰ Co(α , 7n5p)	E=threshold-170 MeV	JOUR Z.Phys. A317, 155	84Ga14
	⁵¹ V(¹² C, 7n5p)	E=36-100 MeV	JOUR Phys.Rev. C30, 143	84Pa13
⁵² Cr	⁵⁵ Mn(d, n α)	E=4-12 MeV	JOUR At.Energ. 55, 164	83Va33
⁵⁴ Cr	⁵⁴ Cr(²⁰ Ne, ²⁰ Ne)	E=146 MeV	JOUR Z.Phys. A317, 31	84Na12
⁵¹ Mn	⁵² Cr(p, 2n)	E=22 MeV	JOUR Yad.Fiz. 39, 264	84Zh02
	⁵⁰ Cr(d, n)	E=4-12 MeV	JOUR At.Energ. 55, 164	83Va33
	⁵⁰ Co(α , 8n4p)	E=threshold-170 MeV	JOUR Z.Phys. A317, 155	84Ga14
⁵² Mn	Ni(p, γ)	E=10.4 MeV	JOUR J.Radioanal.Nucl.Chem. 82, 135	84Is01
	⁵² Cr(p, n)	E=16 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
	⁵² Cr(p, n)	E=22 MeV	JOUR Yad.Fiz. 39, 264	84Zh02
	⁵² Cr(p, n)	E=22 MeV	JOUR Yad.Fiz. 39, 264	84Zh02
	⁵³ Cr(p, 2n)	E=30 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
	⁵⁴ Fe(p, pd)	E=62 MeV	JOUR Nucl.Phys. A424, 1	84Ga15
	⁵⁰ Cr(α , np)	E=30 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
	⁵¹ V(α , 3n)	E=30 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
	⁵⁰ Co(α , 7n4p)	E=threshold-170 MeV	JOUR Z.Phys. A317, 155	84Ga14
	⁵¹ V(¹² C, 7n4p)	E=36-100 MeV	JOUR Phys.Rev. C30, 143	84Pa13
⁵⁴ Mn	⁵¹ V(α , n)	E=30 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
	⁵² Cr(α , np)	E=30 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
	⁵⁰ Co(α , 5n4p)	E=threshold-170 MeV	JOUR Z.Phys. A317, 155	84Ga14
	⁵¹ V(¹² C, 5n4p)	E=36-100 MeV	JOUR Phys.Rev. C30, 143	84Pa13
⁵⁶ Mn	⁵⁵ Mn(d, p)	E=4-12 MeV	JOUR At.Energ. 55, 164	83Va33
	⁵⁴ Cr(α , np)	E=30 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05

RESIDUAL INDEX

RESIDUAL	TARGET-REACTION	INCIDENT ENERGY	REFERENCE	KEY NUMBER
⁵⁶ Mn	⁵⁶ Co(α,3n4p)	E=threshold-170 MeV	JOUR Z.Phys. A317, 155	84Ga14
⁵² Fe	⁵⁰ Cr(α,2n)	E=30 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
⁵³ Fe	⁵⁴ Fe(p,d)	E=39,62 MeV	JOUR Nucl.Phys. A424, 1	84Ga15
⁵⁵ Fe	⁵⁶ Fe(p,np)	E=22 MeV	JOUR Yad.Fiz. 39, 264	84Zh02
⁵⁹ Fe	⁵⁹ Co(α,n3p)	E=threshold-170 MeV	JOUR Z.Phys. A317, 155	84Ga14
⁵⁵ Co	⁵⁶ Fe(p,2n)	E=22 MeV	JOUR Yad.Fiz. 39, 264	84Zh02
	⁵⁴ Fe(d,n)	E=4-12 MeV	JOUR At.Energ. 55, 164	83Va33
	⁵⁹ Co(α,6n2p)	E=threshold-170 MeV	JOUR Z.Phys. A317, 155	84Ga14
⁵⁶ Co	Ni(p,γ)	E=10.4 MeV	JOUR J.Radioanal.Nucl.Chem. 82, 135	84Is01
	⁵⁶ Fe(p,n)	E=16 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
	⁵⁶ Fe(p,n)	E=22 MeV	JOUR Yad.Fiz. 39, 264	84Zh02
	⁵⁶ Fe(p,n)	E=22 MeV	JOUR Yad.Fiz. 39, 264	84Zh02
	⁵⁷ Fe(p,2n)	E=30 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
	⁵⁹ Co(p,3np)	E=10-40 MeV	JOUR Int.J.Appl.Radiat.Isotop. 35, 371	84Jo04
	⁵⁶ Fe(d,2n)	E=4-12 MeV	JOUR At.Energ. 55, 164	83Va33
	⁵⁴ Fe(t,n)	E=1.7-4 MeV	REPT LA-10069-PR,P29	84ArZW
	⁵⁴ Fe(α,np)	E=30 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
	⁵⁹ Co(α,5n2p)	E=threshold-170 MeV	JOUR Z.Phys. A317, 155	84Ga14
	⁵¹ V(¹² C,5n2p)	E=36-100 MeV	JOUR Phys.Rev. C30, 143	84Pa13
	⁵⁹ Co(p,3n)	E=10-40 MeV	JOUR Int.J.Appl.Radiat.Isotop. 35, 371	84Jo04
	⁵⁹ Co(α,4n2p)	E=threshold-170 MeV	JOUR Z.Phys. A317, 155	84Ga14
	⁵¹ V(¹² C,4n2p)	E=36-100 MeV	JOUR Phys.Rev. C30, 143	84Pa13
⁵⁸ Co	⁵⁹ Co(p,np)	E=16 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
	⁵⁶ Fe(α,np)	E=30 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
	⁵⁹ Co(α,3n2p)	E=threshold-170 MeV	JOUR Z.Phys. A317, 155	84Ga14
	⁵¹ V(¹⁸ C,3n2p)	E=36-100 MeV	JOUR Phys.Rev. C30, 143	84Pa13
⁵⁹ Co	⁵⁹ Co(¹⁶ O, ¹⁶ O)	E=40-200 MeV	JOUR Z.Phys. A317, 75	84Gu09
⁶⁰ Co	⁵⁹ Co(d,p)	E=4-12 MeV	JOUR At.Energ. 55, 164	83Va33
	⁵⁹ Co(α,n2p)	E=threshold-170 MeV	JOUR Z.Phys. A317, 155	84Ga14
⁶¹ Co	⁵⁹ Co(α,2p)	E=30 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
⁵⁷ Ni	⁵⁸ Ni(p,np)	E=16 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
	⁵⁸ Ni(p,np)	E=22 MeV	JOUR Yad.Fiz. 39, 264	84Zh02
	⁵⁹ Co(p,3n)	E=10-40 MeV	JOUR Int.J.Appl.Radiat.Isotop. 35, 371	84Jo04
	⁵⁹ Co(p,3n)	E=10-40 MeV	JOUR Int.J.Appl.Radiat.Isotop. 35, 371	84Jo04
	⁵⁴ Fe(α,n)	E=30 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
	⁵⁶ Fe(α,3n)	E=30 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
	⁵⁹ Co(α,5np)	E=threshold-170 MeV	JOUR Z.Phys. A317, 155	84Ga14
⁵⁸ Ni	⁵⁸ Ni(³ He,pd)	E=52 MeV	JOUR Nucl.Phys. A425, 23	84Aa01
	⁵⁸ Ni(¹⁶ O, ¹⁶ O)	E=150-350 MeV	JOUR Z.Phys. A317, 75	84Gu09
	⁵⁸ Ni(³⁵ Cl, ³⁵ Cl)	E=60-140 MeV	JOUR Z.Phys. A317, 75	84Gu09
⁵⁹ Ni	⁶⁰ Ni(p,np)	E=22 MeV	JOUR Yad.Fiz. 39, 264	84Zh02
	⁵⁸ Ni(³ He,2p)	E=52 MeV	JOUR Nucl.Phys. A425, 23	84Aa01
⁶² Ni	⁶² Ni(³⁵ Cl, ³⁵ Cl)	E=60-140 MeV	JOUR Z.Phys. A317, 75	84Gu09
⁵⁸ Cu	⁵⁸ Ni(p,n)	E=22 MeV	JOUR Yad.Fiz. 39, 264	84Zh02
	⁵⁸ Ni(p,n)	E=22 MeV	JOUR Yad.Fiz. 39, 264	84Zh02
⁵⁹ Cu	⁶⁰ Ni(p,2n)	E=22 MeV	JOUR Yad.Fiz. 39, 264	84Zh02
	⁵⁸ Ni(³ He,d)	E=52 MeV	JOUR Nucl.Phys. A425, 23	84Aa01
⁶⁰ Cu	⁶⁰ Ni(p,n)	E=22 MeV	JOUR Yad.Fiz. 39, 264	84Zh02

RESIDUAL INDEX

RESIDUAL	TARGET-REACTION	INCIDENT ENERGY	REFERENCE	KEY NUMBER
⁶⁰ Cu	⁶⁰ Ni(p,n)	E=22 MeV	JOUR Yad.Fiz. 39, 264	84Zh02
	⁵⁸ Ni(t,n)	E=1.7-4 MeV	REPT LA-10069-PR,P29	84Ar2W
	⁵⁸ Ni(³ He,p)	E=52 MeV	JOUR Nucl.Phys. A425, 23	84Aa01
	⁵⁹ Co(α,3n)	E=threshold-170 MeV	JOUR Z.Phys. A317, 155	84Ga14
	⁵¹ V(¹² C,3n)	E=36-100 MeV	JOUR Phys.Rev. C30, 143	84Pa13
⁶¹ Cu	Ni(p,γ)	E=10.4 MeV	JOUR J.Radioanal.Nucl.Chem. 82, 135	84Is01
	⁶¹ Ni(p,n)	E=16 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
	⁶¹ Ni(p,n)	E=threshold-6.7 MeV	JOUR Bull.Am.Phys.Soc. 29, 1056,ED7	84HeZV
	⁶² Ni(p,2n)	E=30 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
	⁶⁰ Ni(d,n)	E=4-12 MeV	JOUR At.Energ. 55, 164	83Va33
	⁵⁹ Co(α,2n)	E=30 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
	⁵⁹ Co(α,2n)	E=threshold-170 MeV	JOUR Z.Phys. A317, 155	84Ga14
	⁵¹ V(¹² C,2n)	E=36-100 MeV	JOUR Phys.Rev. C30, 143	84Pa13
⁶⁴ Cu	⁶⁴ Ni(p,n)	E=threshold-6.7 MeV	JOUR Bull.Am.Phys.Soc. 29, 1056,ED7	84HeZV
	⁶⁵ Cu(p,np)	E=16 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
	⁶³ Cu(d,p)	E=4-12 MeV	JOUR At.Energ. 55, 164	83Va33
⁶⁵ Cu	⁶⁵ Cu(⁸⁴ Kr, ⁸⁴ Kr)	E=50-300 MeV	JOUR Z.Phys. A317, 75	84Gu09
⁶¹ Zn	⁵⁸ Ni(α,n)	E=10.3-14.25 MeV	JOUR Z.Phys. A317, 329	84Th07
⁶² Zn	⁶³ Cu(p,2n)	E=30 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
⁶³ Zn	Ni(p,γ)	E=10.4 MeV	JOUR J.Radioanal.Nucl.Chem. 82, 135	84Is01
	⁶³ Cu(p,n)	E=33 MeV	JOUR Phys.Rev. C29, 1317	84Na06
	⁶³ Cu(d,2n)	E=4-12 MeV	JOUR At.Energ. 55, 164	83Va33
⁶⁴ Zn	⁶³ Cu(d,n)	E=65 MeV	JOUR Phys.Rev. C29, 1317	84Na06
⁶⁵ Zn	⁶⁵ Cu(p,n)	E=16 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
	⁶⁵ Cu(p,n)	E=threshold-6.7 MeV	JOUR Bull.Am.Phys.Soc. 29, 1056,ED7	84HeZV
	⁶⁶ Zn(p,np)	E=16 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
⁶⁶ Zn	⁶⁸ Zn(d,p)	E=4-12 MeV	JOUR At.Energ. 55, 164	83Va33
⁶⁵ Ga	⁶³ Cu(³ He,n)	E=65 MeV	JOUR Phys.Rev. C29, 1317	84Na06
⁶⁶ Ga	Ni(p,γ)	E=10.4 MeV	JOUR J.Radioanal.Nucl.Chem. 82, 135	84Is01
	⁶⁶ Zn(d,2n)	E=4-12 MeV	JOUR At.Energ. 55, 164	83Va33
	⁶³ Cu(α,n)	E=30 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
	⁶³ Cu(α,n)	E=65 MeV	JOUR Phys.Rev. C29, 1317	84Na06
⁶⁷ Ga	⁶⁷ Zn(p,n)	E=16 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
	⁶⁷ Zn(p,n)	E=threshold-6.7 MeV	JOUR Bull.Am.Phys.Soc. 29, 1056,ED7	84HeZV
	⁶⁸ Zn(p,2n)	E=30 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
	⁶⁶ Zn(d,n)	E=4-12 MeV	JOUR At.Energ. 55, 164	83Va33
	⁶³ Cu(α,γ)	E=30 MeV	JOUR Phys.Rev. C29, 1317	84Na06
	⁶⁵ Cu(α,2n)	E=30 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
	⁶⁵ Cu(α,2n)	E=28 MeV	JOUR Int.J.Appl.Radiat.Isotop. 35, 927	84B116
⁶⁸ Ga	⁶⁸ Zn(p,n)	E=threshold-6.7 MeV	JOUR Bull.Am.Phys.Soc. 29, 1056,ED7	84HeZV
⁶⁸ Ge	⁷⁰ Ge(p,t)	E=26,35.4 MeV	JOUR Phys.Rev. C30, 1293	84Ca30
⁶⁹ Ge	Ni(p,γ)	E=10.4 MeV	JOUR J.Radioanal.Nucl.Chem. 82, 135	84Is01
⁷⁰ Ge	⁷² Ge(p,t)	E=26,35.4 MeV	JOUR Phys.Rev. C30, 1293	84Ca30
⁷² Ge	⁷⁴ Ge(p,t)	E=26,35.4 MeV	JOUR Phys.Rev. C30, 1293	84Ca30
	⁷¹ Ge(d,n)	E=4-12 MeV	JOUR At.Energ. 55, 164	83Va33
	⁷⁰ Ge(t,p)	E=26,35.4 MeV	JOUR Phys.Rev. C30, 1293	84Ca30
⁷⁴ Ge	⁷² Ge(t,p)	E=26,35.4 MeV	JOUR Phys.Rev. C30, 1293	84Ca30

RESIDUAL INDEX

RESIDUAL	TARGET-REACTION	INCIDENT ENERGY	REFERENCE	KEY NUMBER
⁷⁶ Ge	⁷⁴ Ge(t,p)	E=26,35.4 MeV	JOUR Phys.Rev. C30, 1293	84Ca30
⁷¹ As	⁷⁰ Ge(d,n)	E=4-12 MeV	JOUR At.Energ. 55, 164	83Va33
⁷² As	Ni(p,γ)	E=10.4 MeV	JOUR J.Radioanal.Nucl.Chem. 82, 135	84Is01
	⁷² Ge(p,n)	E=16 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
	⁷³ Ge(p,2n)	E=30 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
	⁷⁰ Ge(α,np)	E=30 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
⁷⁴ As	⁷⁴ Ge(p,n)	E=16 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
⁷⁶ As	⁷⁶ Ge(p,n)	E=16 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
	⁷⁵ As(d,p)	E=4-12 MeV	JOUR At.Energ. 55, 164	83Va33
⁷³ Se	⁷⁰ Ge(α,n)	E=30 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
⁷⁵ Se	Ni(p,γ)	E=10.4 MeV	JOUR J.Radioanal.Nucl.Chem. 82, 135	84Is01
	Ti(p,n)	E=10.4 MeV	JOUR J.Radioanal.Nucl.Chem. 82, 135	84Is01
	Cr(p,n)	E=10.4 MeV	JOUR J.Radioanal.Nucl.Chem. 82, 135	84Is01
	Fe(p,n)	E=10.4 MeV	JOUR J.Radioanal.Nucl.Chem. 82, 135	84Is01
	Ni(p,n)	E=10.4 MeV	JOUR J.Radioanal.Nucl.Chem. 82, 135	84Is01
	Cu(p,n)	E=10.4 MeV	JOUR J.Radioanal.Nucl.Chem. 82, 135	84Is01
	Zn(p,n)	E=10.4 MeV	JOUR J.Radioanal.Nucl.Chem. 82, 135	84Is01
	Ga(p,n)	E=10.4 MeV	JOUR J.Radioanal.Nucl.Chem. 82, 135	84Is01
	Ge(p,n)	E=10.4 MeV	JOUR J.Radioanal.Nucl.Chem. 82, 135	84Is01
	⁷⁵ As(p,n)	E=threshold-6.7 MeV	JOUR Bull.Am.Phys.Soc. 29, 1056,ED7	84HeZV
	⁷⁵ As(p,n)	E=10.4 MeV	JOUR J.Radioanal.Nucl.Chem. 82, 135	84Is01
	Se(p,n)	E=10.4 MeV	JOUR J.Radioanal.Nucl.Chem. 82, 135	84Is01
	Zr(p,n)	E=10.4 MeV	JOUR J.Radioanal.Nucl.Chem. 82, 135	84Is01
	⁹³ Nb(p,n)	E=10.4 MeV	JOUR J.Radioanal.Nucl.Chem. 82, 135	84Is01
	Mo(p,n)	E=10.4 MeV	JOUR J.Radioanal.Nucl.Chem. 82, 135	84Is01
	Cd(p,n)	E=10.4 MeV	JOUR J.Radioanal.Nucl.Chem. 82, 135	84Is01
	Sn(p,n)	E=10.4 MeV	JOUR J.Radioanal.Nucl.Chem. 82, 135	84Is01
	Sb(p,n)	E=10.4 MeV	JOUR J.Radioanal.Nucl.Chem. 82, 135	84Is01
	Te(p,n)	E=10.4 MeV	JOUR J.Radioanal.Nucl.Chem. 82, 135	84Is01
⁷⁶ Br	⁷⁶ Se(p,2n)	E=29-35 MeV	JOUR Radiochim.Acta 34, 25	83Qa02
	⁷⁸ Kr(p,α)	E=8-28 MeV	JOUR Radiochim.Acta 34, 25	83Qa02
	⁷⁶ Se(d,3n)	E=28-36 MeV	JOUR Radiochim.Acta 34, 25	83Qa02
	⁷⁵ As(³ He,3n)	E=54-65 MeV	JOUR Radiochim.Acta 34, 25	83Qa02
	⁷⁵ As(³ He,3n)	E=14-28 MeV	JOUR Int.J.Appl.Radiat.Isotop. 35, 927	84Bl16
	⁷⁶ Se(³ He,3np)	E=12-15 MeV	JOUR Radiochim.Acta 34, 25	83Qa02
	⁷⁵ As(α,4n)	E=22-28 MeV	JOUR Radiochim.Acta 34, 25	83Qa02
⁷⁷ Br	⁷⁷ Se(p,n)	E=20-33 MeV	JOUR Radiochim.Acta 34, 25	83Qa02
	⁷⁸ Se(p,2n)	E=0-38 MeV	JOUR Radiochim.Acta 34, 25	83Qa02
	Se(p,xn)	E=15-22 MeV	JOUR Radiochim.Acta 34, 25	83Qa02
	Mo(p,X)	E=25-36 MeV	JOUR Radiochim.Acta 34, 25	83Qa02
	⁷⁶ Se(³ He,np)	E=15-30 MeV	JOUR Radiochim.Acta 34, 25	83Qa02
	⁷⁷ Se(³ He,2np)	E=800 MeV	JOUR Radiochim.Acta 34, 25	83Qa02
	Se(³ He,xnp)	E=15-30 MeV	JOUR Radiochim.Acta 34, 25	83Qa02
	⁷⁵ As(α,2n)	E=0-13.5 MeV	JOUR Radiochim.Acta 34, 25	83Qa02
⁷⁸ Br	⁷⁵ As(α,n)	E=25-36 MeV	JOUR Int.J.Appl.Radiat.Isotop. 35, 927	84Bl16
⁸⁰ Br	⁸⁰ Se(d,2n)	E=4-12 MeV	JOUR At.Energ. 55, 164	83Va33
⁸² Br	Ni(p,γ)	E=10.4 MeV	JOUR J.Radioanal.Nucl.Chem. 82, 135	84Is01
	⁸¹ Br(d,p)	E=4-12 MeV	JOUR At.Energ. 55, 164	83Va33
	⁸² Se(d,2n)	E=4-12 MeV	JOUR At.Energ. 55, 164	83Va33
⁷⁹ Rb	Kr(p,X)	E=5-26 MeV	JOUR Int.J.Appl.Radiat.Isotop. 35, 475	84Mu16
⁸¹ Rb	Kr(p,X)	E=5-26 MeV	JOUR Int.J.Appl.Radiat.Isotop. 35, 475	84Mu16
⁸² Rb	Kr(p,X)	E=5-26 MeV	JOUR Int.J.Appl.Radiat.Isotop. 35, 475	84Mu16

RESIDUAL INDEX

RESIDUAL	TARGET-REACTION	INCIDENT ENERGY	REFERENCE	KEY NUMBER
⁸³ Rb	Kr(p,X)	E=5-26 MeV	JOUR Int.J.Appl.Radiat.Isotop. 35, 475	84Mu18
	⁸⁵ Rb(α,2nα)	E=30-55 MeV	JOUR Phys.Rev. C29, 1717	84Da06
⁸⁴ Rb	Kr(p,X)	E=5-26 MeV	JOUR Int.J.Appl.Radiat.Isotop. 35, 475	84Mu16
	⁸⁵ Rb(α,nα)	E=30-55 MeV	JOUR Phys.Rev. C29, 1717	84Da06
⁸⁵ Rb	⁸⁷ Sr(p,n2p)	E=14-18 MeV	REPT LA-10069-PR,P18	84ArZY
⁸⁶ Rb	Kr(p,X)	E=5-26 MeV	JOUR Int.J.Appl.Radiat.Isotop. 35, 475	84Mu16
	⁸⁷ Sr(p,np)	E=13.5-18 MeV	REPT LA-10069-PR,P18	84ArZY
⁸⁶ Sr	⁸⁵ Rb(α,2np)	E=30-55 MeV	JOUR Phys.Rev. C29, 1717	84Da06
	⁸⁷ Sr(p,2n)	E=3.5-6 MeV	REPT LA-10069-PR,P18	84ArZY
⁸⁶ Y	⁸⁵ Rb(α,3n)	E=30-55 MeV	JOUR Phys.Rev. C29, 1717	84Da06
	⁷⁶ Ge(¹⁴ N,4n)	E=48-60 MeV	JOUR J.Phys.(London) G10, 1189	84Bu26
	⁷³ Ge(¹⁶ O,2np)	E=38-56 MeV	JOUR J.Phys.(London) G10, 1189	84Bu26
	⁸⁶ Sr(p,γ)	E=13.5-18 MeV	REPT LA-10069-PR,P18	84ArZY
⁸⁷ Y	⁸⁷ Sr(p,n)	E=14-18 MeV	REPT LA-10069-PR,P18	84ArZY
	⁸⁸ Sr(d,n)	E=4-12 MeV	JOUR At.Energ. 55, 164	83Va33
	⁸⁷ Sr(d,2n)	E=4-12 MeV	JOUR At.Energ. 55, 164	83Va33
	⁹³ Nb(α,6n4p)	E=40-140 MeV	JOUR Nuovo Cim. 81, 66	84Ga20
⁸⁸ Y	⁹¹ Zr(p,n2p)	E=13-17 MeV	REPT LA-10069-PR,P25	84ArZX
⁸⁹ Y	⁸⁹ Y(d,p)	E=4-12 MeV	JOUR At.Energ. 55, 164	83Va33
⁸⁹ Zr	⁸⁹ Y(p,n)	E=16 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
	⁹⁰ Zr(p,np)	E=22 MeV	JOUR Yad.Fiz. 39, 264	84Zh02
	⁸⁹ Y(d,2n)	E=4-12 MeV	JOUR At.Energ. 55, 164	83Va33
	⁹³ Nb(α,5n3p)	E=60-140 MeV	JOUR Nuovo Cim. 81, 66	84Ga20
⁹⁰ Zr	⁹¹ Zr(p,np)	E=16 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
	⁹¹ Zr(p,np)	E=13-17 MeV	REPT LA-10069-PR,P25	84ArZX
	⁹⁰ Zr(⁶ Li, ⁸ Li)	E=100-250 MeV	JOUR Z.Phys. A317, 75	84Gu09
⁹² Zr	⁹⁴ Zr(d,p)	E=4-12 MeV	JOUR At.Energ. 55, 164	83Va33
⁹⁷ Zr	⁹⁶ Zr(d,p)	E=4-12 MeV	JOUR At.Energ. 55, 164	83Va33
⁸⁸ Nb	⁹³ Nb(α,7n2p)	E=60-140 MeV	JOUR Nuovo Cim. 81, 66	84Ga20
⁸⁹ Nb	⁹⁰ Zr(p,2n)	E=22 MeV	JOUR Yad.Fiz. 39, 264	84Zh02
⁹⁰ Nb	Ni(p,γ)	E=10.4 MeV	JOUR J.Radioanal.Nucl.Chem. 82, 135	84Is01
	⁹⁰ Zr(p,n)	E=16 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
	⁹⁰ Zr(p,n)	E=22 MeV	JOUR Yad.Fiz. 39, 264	84Zh02
	⁹⁰ Zr(p,n)	E=22 MeV	JOUR Yad.Fiz. 39, 264	84Zh02
	⁹¹ Zr(p,2n)	E=22 MeV	JOUR Yad.Fiz. 39, 264	84Zh02
	⁹³ Nb(α,5n2p)	E=threshold-140 MeV	JOUR Nuovo Cim. 81, 66	84Ga20
⁹¹ Nb	⁹¹ Zr(p,n)	E=22 MeV	JOUR Yad.Fiz. 39, 264	84Zh02
	⁹¹ Zr(p,n)	E=22 MeV	JOUR Yad.Fiz. 39, 264	84Zh02
⁹² Nb	⁹² Zr(p,n)	E=16 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
	⁹³ Nb(p,np)	E=16 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
	⁸⁹ Y(α,n)	E=30 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
	⁹³ Nb(¹² C, ¹³ C)	E=89.4-145.6 MeV	JOUR J.Radioanal.Nucl.Chem. 84, 149	84Ne06
	⁹³ Nb(¹⁴ N, ¹⁵ N)	E=117.3-183.6 MeV	JOUR J.Radioanal.Nucl.Chem. 84, 149	84Ne06
	⁹³ Nb(¹⁶ O, ¹⁷ O)	E=112.2-191.4 MeV	JOUR J.Radioanal.Nucl.Chem. 84, 149	84Ne06
	⁹³ Nb(²⁰ Ne, ²¹ Ne)	E=105.8-153.1 MeV	JOUR J.Radioanal.Nucl.Chem. 84, 149	84Ne06
⁹³ Nb	⁹⁴ Zr(p,2n)	E=22 MeV	JOUR Yad.Fiz. 39, 264	84Zh02
	⁹⁴ Zr(p,2n)	E=22 MeV	JOUR Yad.Fiz. 39, 264	84Zh02

RESIDUAL INDEX

RESIDUAL	TARGET-REACTION	INCIDENT ENERGY	REFERENCE	KEY NUMBER
⁹⁴ Nb	⁹⁴ Zr(p,n)	E=22 MeV	JOUR Yad.Fiz. 39, 264	84Zh02
	⁹⁴ Zr(p,n)	E=22 MeV	JOUR Yad.Fiz. 39, 264	84Zh02
⁹⁵ Nb	⁹⁴ Zr(d,n)	E=4-12 MeV	JOUR At.Energ. 55, 164	83Va33
⁹⁶ Nb	⁹⁶ Zr(p,n)	E=16 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
	⁹⁶ Zr(p,n)	E=1.3-5.1 MeV	JOUR Nucl.Phys. A430, 301	84Ke12
	⁹⁶ Zr(d,2n)	E=4-12 MeV	JOUR At.Energ. 55, 164	83Va33
⁹⁷ Nb	⁹⁶ Zr(d,n)	E=4-12 MeV	JOUR At.Energ. 55, 164	83Va33
⁹² Mo	⁹² Mo(²⁰ Ne, ²⁰ Ne)	E=146 MeV	JOUR Z.Phys. A317, 31	84Na12
⁹³ Mo	Ni(p,γ)	E=10.4 MeV	JOUR J.Radioanal.Nucl.Chem. 82, 135	84Is01
	Ti(p,n)	E=10.4 MeV	JOUR J.Radioanal.Nucl.Chem. 82, 135	84Is01
	Cr(p,n)	E=10.4 MeV	JOUR J.Radioanal.Nucl.Chem. 82, 135	84Is01
	Fe(p,n)	E=10.4 MeV	JOUR J.Radioanal.Nucl.Chem. 82, 135	84Is01
	Ni(p,n)	E=10.4 MeV	JOUR J.Radioanal.Nucl.Chem. 82, 135	84Is01
	Cu(p,n)	E=10.4 MeV	JOUR J.Radioanal.Nucl.Chem. 82, 135	84Is01
	Zn(p,n)	E=10.4 MeV	JOUR J.Radioanal.Nucl.Chem. 82, 135	84Is01
	Ga(p,n)	E=10.4 MeV	JOUR J.Radioanal.Nucl.Chem. 82, 135	84Is01
	Ge(p,n)	E=10.4 MeV	JOUR J.Radioanal.Nucl.Chem. 82, 135	84Is01
	⁷⁵ As(p,n)	E=10.4 MeV	JOUR J.Radioanal.Nucl.Chem. 82, 135	84Is01
	Se(p,n)	E=10.4 MeV	JOUR J.Radioanal.Nucl.Chem. 82, 135	84Is01
	Zr(p,n)	E=10.4 MeV	JOUR J.Radioanal.Nucl.Chem. 82, 135	84Is01
	⁹³ Nb(p,n)	E=16 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
	⁹³ Nb(p,n)	E=10.4 MeV	JOUR J.Radioanal.Nucl.Chem. 82, 135	84Is01
	Mo(p,n)	E=10.4 MeV	JOUR J.Radioanal.Nucl.Chem. 82, 135	84Is01
	Cd(p,n)	E=10.4 MeV	JOUR J.Radioanal.Nucl.Chem. 82, 135	84Is01
	Sn(p,n)	E=10.4 MeV	JOUR J.Radioanal.Nucl.Chem. 82, 135	84Is01
	Sb(p,n)	E=10.4 MeV	JOUR J.Radioanal.Nucl.Chem. 82, 135	84Is01
	Te(p,n)	E=10.4 MeV	JOUR J.Radioanal.Nucl.Chem. 82, 135	84Is01
	⁹⁰ Zr(α,n)	E=30 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
	⁹¹ Zr(α,2n)	E=30 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
⁹⁹ Mo	⁹⁶ Zr(α,n)	E=30 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
¹⁰⁰ Mo	¹⁰⁰ Mo(²⁰ Ne, ²⁰ Ne)	E=146 MeV	JOUR Z.Phys. A317, 31	84Na12
⁹³ Tc	⁹⁴ Mo(p,2n)	E=30 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
	⁹² Mo(d,n)	E=4-12 MeV	JOUR At.Energ. 55, 164	83Va33
⁹⁴ Tc	⁹⁴ Mo(p,n)	E=16 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
	⁹⁵ Mo(p,2n)	E=30 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
	⁹⁴ Mo(d,2n)	E=4-12 MeV	JOUR At.Energ. 55, 164	83Va33
	⁹² Mo(α,np)	E=30 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
⁹⁵ Tc	Ni(p,γ)	E=10.4 MeV	JOUR J.Radioanal.Nucl.Chem. 82, 135	84Is01
	⁹⁵ Mo(p,n)	E=16 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
	⁹⁶ Mo(p,2n)	E=30 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
	⁹⁴ Mo(d,n)	E=4-12 MeV	JOUR At.Energ. 55, 164	83Va33
	⁹⁵ Mo(d,2n)	E=4-12 MeV	JOUR At.Energ. 55, 164	83Va33
	⁹³ Nb(α,2n)	E=30 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
	⁹³ Nb(α,2n)	E=threshold-140 MeV	JOUR Nuovo Cim. 81, 66	84Ga20
⁹⁶ Tc	⁹⁶ Mo(p,n)	E=16 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
	⁹⁷ Mo(p,2n)	E=30 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
	⁹⁵ Mo(d,n)	E=4-12 MeV	JOUR At.Energ. 55, 164	83Va33
	⁹⁶ Mo(d,2n)	E=4-12 MeV	JOUR At.Energ. 55, 164	83Va33
	⁹³ Nb(α,n)	E=30 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
	⁹³ Nb(α,n)	E=40-140 MeV	JOUR Nuovo Cim. 81, 66	84Ga20
	⁹³ Nb(α,n)	E=35 MeV	JOUR J.Radioanal.Nucl.Chem. 82, 61	84m01
⁹⁸ Tc	¹⁰⁰ Mo(p,2n)	E=30 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
	⁹⁸ Mo(d,n)	E=4-12 MeV	JOUR At.Energ. 55, 164	83Va33
	⁹⁸ Zr(⁶ Li,3n)	E=18-25 MeV	JOUR Phys.Rev. C31, 409	85Ka02

RESIDUAL INDEX

RESIDUAL	TARGET-REACTION	INCIDENT ENERGY	REFERENCE	KEY NUMBER
⁹⁵ Ru	⁹² Mo(α ,n)	E=30 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
⁹⁷ Ru	⁹⁴ Mo(α ,n)	E=30 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
¹⁰³ Ru	¹⁰⁰ Mo(α ,n)	E=30 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
⁹⁸ Rh	⁹⁶ Ru(α ,np)	E=30-55 MeV	JOUR Z.Phys. A314, 111	83Be63
⁹⁹ Rh	⁹⁶ Ru(α ,p)	E=30-55 MeV	JOUR Z.Phys. A314, 111	83Be63
¹⁰⁰ Rh	¹⁰³ Rh(p,nt)	E=15-67 MeV	JOUR Int.J.Appl.Radiat.Isotop. 35, 743	84La23
	¹⁰³ Rh(p,2nd)	E=15-67 MeV	JOUR Int.J.Appl.Radiat.Isotop. 35, 743	84La23
	¹⁰³ Rh(p,3np)	E=15-67 MeV	JOUR Int.J.Appl.Radiat.Isotop. 35, 743	84La23
¹⁰¹ Rh	¹⁰³ Rh(p,nd)	E=15-67 MeV	JOUR Int.J.Appl.Radiat.Isotop. 35, 743	84La23
	¹⁰³ Rh(p,2np)	E=15-67 MeV	JOUR Int.J.Appl.Radiat.Isotop. 35, 743	84La23
	¹⁰³ Rh(p,t)	E=15-67 MeV	JOUR Int.J.Appl.Radiat.Isotop. 35, 743	84La23
¹⁰² Rh	¹⁰² Ru(p,n)	E=3.1-6 MeV	JOUR Z.Phys. A315, 277	84Bi04
⁹⁷ Pd	⁹⁶ Ru(α ,3n)	E=30-55 MeV	JOUR Z.Phys. A314, 111	83Be63
⁹⁸ Pd	⁹⁶ Ru(α ,2n)	E=30-55 MeV	JOUR Z.Phys. A314, 111	83Be63
⁹⁹ Pd	⁹⁶ Ru(α ,n)	E=30-55 MeV	JOUR Z.Phys. A314, 111	83Be63
¹⁰⁰ Pd	¹⁰³ Rh(p,4n)	E=15-67 MeV	JOUR Int.J.Appl.Radiat.Isotop. 35, 743	84La23
¹⁰¹ Pd	¹⁰³ Rh(p,3n)	E=15-67 MeV	JOUR Int.J.Appl.Radiat.Isotop. 35, 743	84La23
¹⁰⁵ Ag	¹⁰³ Rh(α ,2n)	E=30 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
¹⁰⁶ Ag	¹⁰³ Rh(α ,n)	E=30 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
¹⁰⁹ Ag	¹⁰⁹ Ag(⁴⁰ Ar, ⁴⁰ Ar)	E=40-160 MeV	JOUR Z.Phys. A317, 75	84Gu09
¹⁰⁷ Cd	¹⁰⁷ Ag(p,n)	E=16 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
¹¹¹ Cd	¹¹¹ Cd(p,p')	E=2.7-4.2 MeV	JOUR Phys.Rev. C31, 79	85Si01
¹⁰⁶ In	¹⁰⁶ Cd(p,n)	E=6-9 MeV	JOUR Phys.Rev. C29, 2118	84Fi05
¹⁰⁸ In	¹⁰⁸ Cd(p,n)	E=6-9 MeV	JOUR Phys.Rev. C29, 2118	84Fi05
¹⁰⁹ In	¹⁰⁷ Ag(α ,2n)	E=30 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
	¹⁰⁷ Ag(α ,2n)	E=21-32 MeV	JOUR Izv.Akad.Nauk SSSR, Ser.Fiz. 48, 1833	84Ba64
¹¹⁰ In	¹⁰⁷ Ag(α ,n)	E=30 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
	¹⁰⁷ Ag(α ,n)	E=30 MeV	JOUR Izv.Akad.Nauk SSSR, Ser.Fiz. 48, 38	84Ba15
¹¹¹ In	Ni(p, γ)	E=10.4 MeV	JOUR J.Radioanal.Nucl.Chem. 82, 135	84Is01
	¹⁰⁹ Ag(α ,2n)	E=30 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
	¹⁰⁹ Ag(α ,2n)	E=30 MeV	JOUR Izv.Akad.Nauk SSSR, Ser.Fiz. 48, 38	84Ba15
	¹⁰⁹ Ag(α ,2n)	E=35 MeV	JOUR J.Radioanal.Nucl.Chem. 82, 61	84Om01
¹¹² In	¹⁰⁹ Ag(α ,n)	E=30 MeV	JOUR Izv.Akad.Nauk SSSR, Ser.Fiz. 48, 38	84Ba15
	¹¹⁰ Cd(α ,np)	E=30 MeV	JOUR Izv.Akad.Nauk SSSR, Ser.Fiz. 48, 38	84Ba15
¹¹⁴ In	¹¹⁵ In(p,np)	E=22 MeV	JOUR Yad.Fiz. 39, 264	84Zh02
¹¹⁵ In	¹¹⁵ In(α ,npd)	E=20-45 MeV	JOUR Int.J.Appl.Radiat.Isotop. 35, 645	84Qa03
¹¹¹ Sn	¹¹¹ Cd(³ He,3n)	E=28-32 MeV	JOUR Nucl.Phys. A425, 317	84Pr06
	¹⁰⁸ Cd(α ,n)	E=20-27 MeV	JOUR Nucl.Phys. A425, 317	84Pr06
¹¹³ Sn	¹¹⁵ In(p,3n)	E=22 MeV	JOUR Yad.Fiz. 39, 264	84Zh02

RESIDUAL INDEX

RESIDUAL	TARGET-REACTION	INCIDENT ENERGY	REFERENCE	KEY NUMBER
¹¹³ Sn	Cd(³ He,X)	E=threshold-140 MeV	JOUR J.Labelled Compd.Radiopharm. 21, 1283	84Qa05
	Cd(α,X)	E=threshold-120 MeV	JOUR J.Labelled Compd.Radiopharm. 21, 1283	84Qa05
¹¹⁴ Sn	¹¹⁵ In(p,2n)	E=22 MeV	JOUR Yad.Fiz. 39, 264	84Zh02
	¹¹⁵ In(p,2n)	E=22 MeV	JOUR Yad.Fiz. 39, 264	84Zh02
¹¹⁵ Sn	¹¹⁵ In(p,n)	E=22 MeV	JOUR Yad.Fiz. 39, 264	84Zh02
	¹¹⁵ In(p,n)	E=22 MeV	JOUR Yad.Fiz. 39, 264	84Zh02
	¹²¹ Sb(p,5n2p)	E=43-60 MeV	JOUR J.Labelled Compd.Radiopharm. 21, 1284	84Ma62
¹¹⁷ Sn	¹²¹ Sb(p,3n2p)	E=43-60 MeV	JOUR J.Labelled Compd.Radiopharm. 21, 1284	84Ma62
	In(³ He,X)	E=threshold-140 MeV	JOUR J.Labelled Compd.Radiopharm. 21, 1283	84Qa05
	¹¹⁶ Cd(α,3n)	E=20-120 MeV	JOUR Int.J.Appl.Radiat.Isotop. 35, 645	84Qa03
	In(α,X)	E=threshold-120 MeV	JOUR J.Labelled Compd.Radiopharm. 21, 1283	84Qa05
¹¹⁶ Sb	¹¹⁶ Sn(p,n)	E=16 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
	¹¹⁷ Sn(p,2n)	E=30 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
	¹¹³ In(α,n)	E≈12.5-30 MeV	JOUR Yad.Fiz. 39, 538	84Ba20
¹¹⁷ Sb	¹¹⁷ Sn(p,n)	E=16 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
¹¹⁸ Sb	¹¹⁸ Sn(p,n)	E=16 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
	¹¹⁹ Sn(p,2n)	E=30 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
	¹¹⁵ In(α,n)	E≈12.5-30 MeV	JOUR Yad.Fiz. 39, 538	84Ba20
¹²⁰ Sb	¹²⁰ Sn(p,n)	E=16 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
¹²² Sb	Ni(p,γ)	E=10.4 MeV	JOUR J.Radioanal.Nucl.Chem. 82, 135	84Is01
	¹²² Sn(p,n)	E=16 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
¹¹⁵ Te	¹¹² Sn(α,n)	E=21-32 MeV	JOUR Izv.Akad.Nauk SSSR, Ser.Fiz. 48, 1833	84Ba64
¹¹⁸ Te	Sn(α,xn)	E=18.1-43.7 MeV	JOUR At.Energ. 55, 256	83Dm06
¹¹⁹ Te	Sn(α,xn)	E=18.1-43.7 MeV	JOUR At.Energ. 55, 256	83Dm06
¹²¹ Te	Ni(p,γ)	E=10.4 MeV	JOUR J.Radioanal.Nucl.Chem. 82, 135	84Is01
	¹²¹ Sb(p,n)	E=5-9 MeV	JOUR Izv.Akad.Nauk SSSR, Ser.Fiz. 48, 194	84Ba18
	Sn(α,xn)	E=18.1-43.7 MeV	JOUR At.Energ. 55, 256	83Dm06
¹²³ Te	¹²³ Sb(p,n)	E=5-9 MeV	JOUR Izv.Akad.Nauk SSSR, Ser.Fiz. 48, 194	84Ba18
	Sn(α,xn)	E=18.1-43.7 MeV	JOUR At.Energ. 55, 256	83Dm06
¹²³ I	¹²³ Te(p,n)	E=6-14 MeV	JOUR Radiochim.Acta 34, 25	83Qa02
	¹²⁴ Te(p,2n)	E=9-15 MeV	JOUR Radiochim.Acta 34, 25	83Qa02
	Cs(p,X)	E=32-45 MeV	JOUR Radiochim.Acta 34, 25	83Qa02
	La(p,X)	E=32-45 MeV	JOUR Radiochim.Acta 34, 25	83Qa02
	¹²² Te(d,n)	E=25-32 MeV	JOUR Radiochim.Acta 34, 25	83Qa02
	¹²⁷ I(d,6n)	E=70-130 MeV	JOUR Radiochim.Acta 34, 25	83Qa02
	¹²³ Te(³ He,3n)	E=35.4-52.2 MeV	JOUR Radiochim.Acta 34, 25	83Qa02
	¹²⁴ Te(³ He,4n)	E=45-65 MeV	JOUR Radiochim.Acta 34, 25	83Qa02
	Sb(³ He,xn)	E=12-26 MeV	JOUR Radiochim.Acta 34, 25	83Qa02
	¹²¹ Sb(α,2n)	E=12-26 MeV	JOUR Radiochim.Acta 34, 25	83Qa02
	¹²² Te(α,3n)	E=20.7-35.2 MeV	JOUR Radiochim.Acta 34, 25	83Qa02
	¹²⁷ I(α,X)	E=320-800 MeV	JOUR Radiochim.Acta 34, 25	83Qa02
¹³⁰ I	Ni(p,γ)	E=10.4 MeV	JOUR J.Radioanal.Nucl.Chem. 82, 135	84Is01
¹²³ Xe	¹²⁷ I(p,5n)	E=64-78 MeV	JOUR Radiochim.Acta 34, 25	83Qa02
	¹²⁷ I(d,6n)	E=70-130 MeV	JOUR Radiochim.Acta 34, 25	83Qa02
	¹²³ Te(³ He,3n)	E=35.4-52.2 MeV	JOUR Radiochim.Acta 34, 25	83Qa02
	¹²⁴ Te(³ He,4n)	E=45-65 MeV	JOUR Radiochim.Acta 34, 25	83Qa02
	¹²² Te(α,3n)	E=20.7-35.2 MeV	JOUR Radiochim.Acta 34, 25	83Qa02
¹³⁴ La	¹³³ Cs(α,3n)	E=32-45 MeV	JOUR Nucl.Phys. A433, 159	85Mo01

RESIDUAL INDEX

RESIDUAL	TARGET-REACTION	INCIDENT ENERGY	REFERENCE	KEY NUMBER
¹³⁹ La	¹³⁹ La(⁸⁶ Kr, ⁸⁶ Kr)	E=300-700 MeV	JOUR Z.Phys. A317, 75	84Gu09
¹⁴⁰ La	¹³⁹ La(¹⁸ O, ¹⁵ O)	E=88.7-171.2 MeV	JOUR J.Radioanal.Nucl.Chem. 84, 149	84Ne06
¹⁴³ Pr	¹⁴² Ce(p, γ)	E=5-30 MeV	JOUR Nucl.Phys. A431, 288	84Sa29
¹⁵⁴ Sm	¹⁵⁴ Sm(¹⁶ O, ¹⁶ O')	E=58 MeV	JOUR J.Phys.(London) G10, 805	84Li09
¹⁴⁷ Gd	¹⁴⁷ Sm(³ He, 3n)	E=17.5 MeV	JOUR Z.Phys. A314, 33	83Ko42
	¹⁴⁴ Sm(α , n)	E=22 MeV	JOUR Z.Phys. A314, 33	83Ko42
¹⁵⁸ Gd	¹⁵⁸ Gd(α , α')	E=13-30 MeV	JOUR Nucl.Instrum.Methods 219, 111	84Su05
¹⁶⁰ Gd	¹⁶⁰ Gd(α , α')	E=13-30 MeV	JOUR Nucl.Instrum.Methods 219, 111	84Su05
¹⁵⁸ Er	¹⁶⁵ Ho(³ He, xnp)	E=100 MeV	JOUR Nucl.Phys. A413, 290	84Mo04
¹⁶⁰ Er	¹⁶⁵ Ho(³ He, xnp)	E=100 MeV	JOUR Nucl.Phys. A413, 290	84Mo04
¹⁶² Er	¹⁶⁵ Ho(³ He, xnp)	E=100 MeV	JOUR Nucl.Phys. A413, 290	84Mo04
	¹⁶⁸ Er(³ He, xn2p)	E=100 MeV	JOUR Nucl.Phys. A413, 290	84Mo04
¹⁶⁴ Er	¹⁶⁵ Ho(³ He, xnp)	E=100 MeV	JOUR Nucl.Phys. A413, 290	84Mo04
	¹⁶⁷ Er(³ He, xn2p)	E=100 MeV	JOUR Nucl.Phys. A413, 290	84Mo04
¹⁶⁶ Er	¹⁶⁵ Ho(³ He, xnp)	E=100 MeV	JOUR Nucl.Phys. A413, 290	84Mo04
¹⁶⁰ Yb	¹⁶⁶ Er(³ He, xn)	E=100 MeV	JOUR Nucl.Phys. A413, 290	84Mo04
	¹⁶⁷ Er(³ He, xn)	E=100 MeV	JOUR Nucl.Phys. A413, 290	84Mo04
¹⁶² Yb	¹⁶⁶ Er(³ He, xn)	E=100 MeV	JOUR Nucl.Phys. A413, 290	84Mo04
	¹⁶⁷ Er(³ He, xn)	E=100 MeV	JOUR Nucl.Phys. A413, 290	84Mo04
¹⁶⁴ Yb	¹⁶⁶ Er(³ He, xn)	E=100 MeV	JOUR Nucl.Phys. A413, 290	84Mo04
	¹⁶⁷ Er(³ He, xn)	E=100 MeV	JOUR Nucl.Phys. A413, 290	84Mo04
¹⁶⁶ Yb	¹⁶⁶ Er(³ He, xn)	E=100 MeV	JOUR Nucl.Phys. A413, 290	84Mo04
	¹⁶⁷ Er(³ He, xn)	E=100 MeV	JOUR Nucl.Phys. A413, 290	84Mo04
¹⁸⁰ Ta	¹⁸¹ Ta(p, np)	E=16 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
	¹⁸¹ Ta(p, 2n)	E=22 MeV	JOUR Yad.Fiz. 39, 264	84Zh02
	¹⁸¹ Ta(p, 2n)	E=22 MeV	JOUR Yad.Fiz. 39, 264	84Zh02
¹⁸¹ W	¹⁸¹ Ta(p, n)	E=16 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
	¹⁸¹ Ta(p, n)	E=22 MeV	JOUR Yad.Fiz. 39, 264	84Zh02
	¹⁸¹ Ta(p, n)	E=22 MeV	JOUR Yad.Fiz. 39, 264	84Zh02
¹⁶⁵ Re	¹⁴⁴ Sm(²⁷ Al, 6n)	E=155 MeV	JOUR Z.Phys. A315, 49	84Sc06
¹⁶⁶ Re	¹⁴⁴ Sm(²⁷ Al, 5n)	E=130 MeV	JOUR Z.Phys. A315, 49	84Sc06
¹⁶⁷ Re	¹⁴⁴ Sm(²⁷ Al, 4n)	E=130 MeV	JOUR Z.Phys. A315, 49	84Sc06
¹⁶⁸ Re	¹⁴⁴ Sm(²⁷ Al, 3n)	E=130 MeV	JOUR Z.Phys. A315, 49	84Sc06
¹⁶⁹ Re	¹⁴⁴ Sm(²⁷ Al, 2n)	E=130 MeV	JOUR Z.Phys. A315, 49	84Sc06
¹⁸¹ Re	¹⁸² W(p, 2n)	E=30 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
	¹⁸¹ Ta(α , 4n)	E=threshold-45 MeV	JOUR Phys.Rev. C29, 1678	84B106
¹⁸² Re	¹⁸² W(p, n)	E=16 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
	¹⁸¹ Ta(α , 3n)	E=threshold-65 MeV	JOUR Phys.Rev. C29, 1678	84B106
¹⁸³ Re	¹⁸¹ Ta(α , 2n)	E=30 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
	¹⁸¹ Ta(α , 2n)	E=threshold-65 MeV	JOUR Phys.Rev. C29, 1678	84B106

RESIDUAL INDEX

RESIDUAL	TARGET-REACTION	INCIDENT ENERGY	REFERENCE	KEY NUMBER
¹⁸⁴ Re	¹⁸¹ Ta(α ,n)	E=30 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
	¹⁸¹ Ta(α ,n)	E=threshold-65 MeV	JOUR Phys.Rev. C29, 1678	84B106
¹⁸⁷ Re	¹⁸⁶ W(α ,2np)	E=16 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
¹⁸⁶ Os	¹⁴⁴ Sm(²⁸ Si,6n)	E=130 MeV	JOUR Z.Phys. A315, 49	84Sc06
¹⁸⁷ Os	¹⁴⁴ Sm(²⁸ Si,5n)	E=155 MeV	JOUR Z.Phys. A315, 49	84Sc06
¹⁸⁸ Os	¹⁴⁴ Sm(²⁸ Si,4n)	E=155 MeV	JOUR Z.Phys. A315, 49	84Sc06
¹⁸⁹ Os	¹⁴⁴ Sm(²⁸ Si,3n)	E=155 MeV	JOUR Z.Phys. A315, 49	84Sc06
¹⁷⁰ Os	¹⁴⁴ Sm(²⁸ Si,2n)	E=155 MeV	JOUR Z.Phys. A315, 49	84Sc06
¹⁸³ Os	¹⁸² W(α ,3n)	E=30 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
¹⁸⁵ Os	¹⁸² W(α ,n)	E=30 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
	¹⁸³ W(α ,2n)	E=30 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
¹⁸⁵ Ir	¹⁸¹ Ta(⁹ Be,5n)	E=40-55 MeV	JOUR Nucl.Phys. A432, 451	85Kr01
¹⁸⁶ Ir	¹⁸¹ Ta(⁹ Be,4n)	E=40-55 MeV	JOUR Nucl.Phys. A432, 451	85Kr01
¹⁸⁷ Ir	¹⁸¹ Ta(⁹ Be,3n)	E=40-55 MeV	JOUR Nucl.Phys. A432, 451	85Kr01
¹⁸⁹ Ir	¹⁸¹ Ta(¹² C, α)	E=80,98.7 MeV	JOUR Nucl.Phys. A429, 173	84De39
¹⁹⁷ Ir	²⁰⁸ Bi(p, ¹³ N)	E=210-480 MeV	JOUR Phys.Rev. C30, 236	84Da14
¹⁸⁰ Pt	¹⁸² W(¹² C, α)	E=80,98.7 MeV	JOUR Nucl.Phys. A429, 173	84De39
	¹⁸² W(¹² C, α)	E=200-350 MeV	JOUR Z.Phys. A316, 27	84We07
	¹⁵⁴ Sm(⁴⁰ Ar, α)	E=70-170 MeV	JOUR Z.Phys. A316, 27	84We07
¹⁹⁴ Pt	¹⁸⁶ W(¹² C, α)	E=80,98.7 MeV	JOUR Nucl.Phys. A429, 173	84De39
¹⁹³ Au	¹⁹⁴ Pt(p,2n)	E=30 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
	¹⁸² W(¹² C,p)	E=70-170 MeV	JOUR Z.Phys. A316, 27	84We07
	¹⁸² W(¹² C,F)	E=70-170 MeV	JOUR Z.Phys. A316, 27	84We07
	¹⁵⁴ Sm(⁴⁰ Ar,p)	E=200-350 MeV	JOUR Z.Phys. A316, 27	84We07
	¹⁵⁴ Sm(⁴⁰ Ar,F)	E=200-350 MeV	JOUR Z.Phys. A316, 27	84We07
¹⁸⁴ Au	¹⁹⁴ Pt(p,n)	E=16 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
	¹⁹⁵ Pt(p,2n)	E=30 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
¹⁹⁶ Au	¹⁹⁶ Pt(p,n)	E=16 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
	¹⁹⁷ Au(p,np)	E=16 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
¹⁹⁹ Au	¹⁹⁷ Au(α ,2p)	E=40-119 MeV	JOUR Nucl.Phys. A413, 432	84Ha05
¹⁹⁵ Hg	Au(p,3n)	E=27,28 MeV	JOUR Int.J.Appl.Radiat.Isotop. 35, 564	84Bo22
¹⁹⁷ Hg	¹⁹⁷ Au(p,n)	E=16 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
	¹⁹⁴ Pt(α ,n)	E=30 MeV	JOUR J.Nucl.Mater. 122/123, 972	84Ab05
¹⁹⁸ Hg	¹⁹⁷ Au(p, γ)	E=4 MeV	JOUR Phys.Can. No.40, 70, PP16	84ArZZ
¹⁹⁷ Tl	¹⁹⁷ Au(α ,4n)	E= threshold-50 MeV	JOUR Phys.Rev. C29; 1678	84B106
¹⁹⁸ Tl	¹⁹⁷ Au(α ,3n)	E=10-40 MeV	JOUR Bull.Am.Phys.Soc. 29, 1117,P2.98	84BhZZ
	¹⁹⁷ Au(α ,3n)	E=threshold-80 MeV	JOUR Phys.Rev. C29, 1678	84B106
¹⁹⁸ Tl	¹⁹⁷ Au(α ,2n)	E=10-40 MeV	JOUR Bull.Am.Phys.Soc. 29, 1117,P2.98	84BhZZ
	¹⁹⁷ Au(α ,2n)	E=threshold-80 MeV	JOUR Phys.Rev. C29, 1678	84B106
	¹⁹⁷ Au(α ,2n)	E=40-119 MeV	JOUR Nucl.Phys. A413, 432	84Ha05

RESIDUAL INDEX

RESIDUAL	TARGET-REACTION	INCIDENT ENERGY	REFERENCE	KEY NUMBER
200Tl	$^{183}\text{W}(^3\text{He},\text{F})$	E<60 MeV	JOUR Yad.Fiz. 39, 1336	84Gr16
	$^{184}\text{Pt}(^3\text{He},\text{F})$	E<60 MeV	JOUR Yad.Fiz. 39, 1336	84Gr16
	$^{198}\text{Pt}(^3\text{He},\text{F})$	E<60 MeV	JOUR Yad.Fiz. 39, 1336	84Gr16
	$^{197}\text{Au}(^3\text{He},\text{F})$	E<60 MeV	JOUR Yad.Fiz. 39, 1336	84Gr16
	$^{203}\text{Tl}(^3\text{He},\text{F})$	E<60 MeV	JOUR Yad.Fiz. 39, 1336	84Gr16
	$^{205}\text{Tl}(^3\text{He},\text{F})$	E<60 MeV	JOUR Yad.Fiz. 39, 1336	84Gr16
	$^{204}\text{Pb}(^3\text{He},\text{F})$	E<60 MeV	JOUR Yad.Fiz. 39, 1336	84Gr16
	$^{206}\text{Pb}(^3\text{He},\text{F})$	E<60 MeV	JOUR Yad.Fiz. 39, 1336	84Gr16
	$^{207}\text{Pb}(^3\text{He},\text{F})$	E<60 MeV	JOUR Yad.Fiz. 39, 1336	84Gr16
	$^{208}\text{Pb}(^3\text{He},\text{F})$	E<60 MeV	JOUR Yad.Fiz. 39, 1336	84Gr16
	$^{209}\text{Bi}(^3\text{He},\text{F})$	E<60 MeV	JOUR Yad.Fiz. 39, 1336	84Gr16
	$^{197}\text{Au}(\alpha, n)$	E=10-40 MeV	JOUR Bull.Am.Phys.Soc. 29, 1117,P2.98	84BhZZ
	$^{197}\text{Au}(\alpha, n)$	E=threshold-80 MeV	JOUR Phys.Rev. C29, 1678	84B106
201Tl	Pb(p,xn)	E=60.3-65.2 MeV	JOUR Int.J.Appl.Radiat.Isotop. 35, 909	84Sa22
	$^{183}\text{W}(^3\text{He},\text{F})$	E<60 MeV	JOUR Yad.Fiz. 39, 1336	84Gr16
	$^{184}\text{Pt}(^3\text{He},\text{F})$	E<60 MeV	JOUR Yad.Fiz. 39, 1336	84Gr16
	$^{198}\text{Pt}(^3\text{He},\text{F})$	E<60 MeV	JOUR Yad.Fiz. 39, 1336	84Gr16
	$^{197}\text{Au}(^3\text{He},\text{F})$	E<60 MeV	JOUR Yad.Fiz. 39, 1336	84Gr16
	$^{203}\text{Tl}(^3\text{He},\text{F})$	E<60 MeV	JOUR Yad.Fiz. 39, 1336	84Gr16
	$^{205}\text{Tl}(^3\text{He},\text{F})$	E<60 MeV	JOUR Yad.Fiz. 39, 1336	84Gr16
	$^{204}\text{Pb}(^3\text{He},\text{F})$	E<60 MeV	JOUR Yad.Fiz. 39, 1336	84Gr16
	$^{206}\text{Pb}(^3\text{He},\text{F})$	E<60 MeV	JOUR Yad.Fiz. 39, 1336	84Gr16
	$^{207}\text{Pb}(^3\text{He},\text{F})$	E<60 MeV	JOUR Yad.Fiz. 39, 1336	84Gr16
	$^{208}\text{Pb}(^3\text{He},\text{F})$	E<60 MeV	JOUR Yad.Fiz. 39, 1336	84Gr16
	$^{209}\text{Bi}(^3\text{He},\text{F})$	E<60 MeV	JOUR Yad.Fiz. 39, 1336	84Gr16
	$^{197}\text{Au}(\alpha, \text{F})$	E=34.7-50 MeV	JOUR Yad.Fiz. 39, 1100	84Gr13
	$^{203}\text{Tl}(\alpha, \text{F})$	E=34.7-50 MeV	JOUR Yad.Fiz. 39, 1100	84Gr13
194Pb	$^{170}\text{Er}(^{30}\text{Si}, 6n)$	E≈120-170 MeV	JOUR Phys.Rev. C29, 872	84Ka03
	$^{170}\text{Er}(^{30}\text{Si}, 5n)$	E≈120-170 MeV	JOUR Phys.Rev. C29, 872	84Ka03
195Pb	$^{170}\text{Er}(^{30}\text{Si}, 4n)$	E≈120-170 MeV	JOUR Phys.Rev. C29, 872	84Ka03
208Pb	$^{208}\text{Pb}(d, np)$	E=0.01-10 GeV	JOUR Phys.Rev. C30, 247	84Ho14
	$^{208}\text{Pb}(^{16}\text{O}, ^{16}\text{O})$	E=100-300 MeV	JOUR Z.Phys. A317, 75	84Gu09
	$^{208}\text{Pb}(^{16}\text{O}, ^{16}\text{O})$	E=80-102 MeV	JOUR Phys.Rev.Lett. 53, 333	84Rh02
	$^{208}\text{Pb}(^{20}\text{Ne}, ^{20}\text{Ne})$	E=100-160 MeV	JOUR Z.Phys. A317, 75	84Gu09
	$^{208}\text{Pb}(^{84}\text{Kr}, ^{84}\text{Kr})$	E=700-1300 MeV	JOUR Z.Phys. A317, 75	84Gu09
203Bi	Pb(d,xn)	E=threshold-30 MeV	JOUR Radiochim.Acta 27, 125	80Wa29
204Bi	Pb(d,xn)	E=threshold-30 MeV	JOUR Radiochim.Acta 27, 125	80Wa29
205Bi	Pb(d,xn)	E=threshold-30 MeV	JOUR Radiochim.Acta 27, 125	80Wa29
206Bi	Ni(p, γ)	E=10.4 MeV	JOUR J.Radioanal.Nucl.Chem. 82, 135	84Is01
	Pb(d,xn)	E=threshold-30 MeV	JOUR Radiochim.Acta 27, 125	80Wa29
	$^{183}\text{W}(^3\text{He},\text{F})$	E<60 MeV	JOUR Yad.Fiz. 39, 1336	84Gr16
	$^{184}\text{Pt}(^3\text{He},\text{F})$	E<60 MeV	JOUR Yad.Fiz. 39, 1336	84Gr16
	$^{198}\text{Pt}(^3\text{He},\text{F})$	E<60 MeV	JOUR Yad.Fiz. 39, 1336	84Gr16
	$^{197}\text{Au}(^3\text{He},\text{F})$	E<60 MeV	JOUR Yad.Fiz. 39, 1336	84Gr16
	$^{203}\text{Tl}(^3\text{He},\text{F})$	E<60 MeV	JOUR Yad.Fiz. 39, 1336	84Gr16
	$^{205}\text{Tl}(^3\text{He},\text{F})$	E<60 MeV	JOUR Yad.Fiz. 39, 1336	84Gr16
	$^{204}\text{Pb}(^3\text{He},\text{F})$	E<60 MeV	JOUR Yad.Fiz. 39, 1336	84Gr16
	$^{206}\text{Pb}(^3\text{He},\text{F})$	E<60 MeV	JOUR Yad.Fiz. 39, 1336	84Gr16
	$^{207}\text{Pb}(^3\text{He},\text{F})$	E<60 MeV	JOUR Yad.Fiz. 39, 1336	84Gr16
	$^{208}\text{Pb}(^3\text{He},\text{F})$	E<60 MeV	JOUR Yad.Fiz. 39, 1336	84Gr16
	$^{209}\text{Bi}(^3\text{He},\text{F})$	E<60 MeV	JOUR Yad.Fiz. 39, 1336	84Gr16
207Bi	Pb(d,xn)	E=threshold-30 MeV	JOUR Radiochim.Acta 27, 125	80Wa29
	$^{183}\text{W}(^3\text{He},\text{F})$	E<60 MeV	JOUR Yad.Fiz. 39, 1336	84Gr16
	$^{184}\text{Pt}(^3\text{He},\text{F})$	E<60 MeV	JOUR Yad.Fiz. 39, 1336	84Gr16
	$^{198}\text{Pt}(^3\text{He},\text{F})$	E<60 MeV	JOUR Yad.Fiz. 39, 1336	84Gr16

RESIDUAL INDEX

RESIDUAL	TARGET-REACTION	INCIDENT ENERGY	REFERENCE	KEY NUMBER
²⁰⁷ Bi	¹⁹⁷ Au(³ He,F)	E<60 MeV	JOUR Yad.Fiz. 39, 1336	84Gr16
	²⁰³ Tl(³ He,F)	E<60 MeV	JOUR Yad.Fiz. 39, 1336	84Gr16
	²⁰⁵ Tl(³ He,F)	E<60 MeV	JOUR Yad.Fiz. 39, 1336	84Gr16
	²⁰⁴ Pb(³ He,F)	E<60 MeV	JOUR Yad.Fiz. 39, 1336	84Gr16
	²⁰⁶ Pb(³ He,F)	E<60 MeV	JOUR Yad.Fiz. 39, 1336	84Gr16
	²⁰⁷ Pb(³ He,F)	E<60 MeV	JOUR Yad.Fiz. 39, 1336	84Gr16
	²⁰⁸ Pb(³ He,F)	E<60 MeV	JOUR Yad.Fiz. 39, 1336	84Gr16
	²⁰⁹ Bi(³ He,F)	E<60 MeV	JOUR Yad.Fiz. 39, 1336	84Gr16
	¹⁹⁷ Au(α ,F)	E=34.7-50 MeV	JOUR Yad.Fiz. 39, 1100	84Gr13
	²⁰³ Tl(α ,F)	E=34.7-50 MeV	JOUR Yad.Fiz. 39, 1100	84Gr13
	²⁰⁵ Tl(α ,F)	E=34.7-50 MeV	JOUR Yad.Fiz. 39, 1100	84Gr13
²⁰⁸ Bi	²⁰⁸ Pb(p,n)	E=33 MeV	JOUR Phys.Rev. C29, 1317	84Na06
	²⁰⁹ Bi(p,d)	E=39,62 MeV	JOUR Nucl.Phys. A424, 1	84Ga15
	¹⁸³ W(³ He,F)	E<60 MeV	JOUR Yad.Fiz. 39, 1336	84Gr16
	¹⁹⁴ Pt(³ He,F)	E<60 MeV	JOUR Yad.Fiz. 39, 1336	84Gr16
	¹⁹⁸ Pt(³ He,F)	E<60 MeV	JOUR Yad.Fiz. 39, 1336	84Gr16
	¹⁹⁷ Au(³ He,F)	E<60 MeV	JOUR Yad.Fiz. 39, 1336	84Gr16
	²⁰³ Tl(³ He,F)	E<60 MeV	JOUR Yad.Fiz. 39, 1336	84Gr16
	²⁰⁵ Tl(³ He,F)	E<60 MeV	JOUR Yad.Fiz. 39, 1336	84Gr16
	²⁰⁴ Pb(³ He,F)	E<60 MeV	JOUR Yad.Fiz. 39, 1336	84Gr16
	²⁰⁶ Pb(³ He,F)	E<60 MeV	JOUR Yad.Fiz. 39, 1336	84Gr16
	²⁰⁷ Pb(³ He,F)	E<60 MeV	JOUR Yad.Fiz. 39, 1336	84Gr16
	²⁰⁸ Pb(³ He,F)	E<60 MeV	JOUR Yad.Fiz. 39, 1336	84Gr16
	²⁰⁹ Bi(³ He,F)	E<60 MeV	JOUR Yad.Fiz. 39, 1336	84Gr16
	²⁰⁸ Pb(d,n)	E=65 MeV	JOUR Phys.Rev. C29, 1317	84Na06
²⁰⁹ Bi	¹⁸³ W(³ He,F)	E<60 MeV	JOUR Yad.Fiz. 39, 1336	84Gr16
	¹⁹⁴ Pt(³ He,F)	E<60 MeV	JOUR Yad.Fiz. 39, 1336	84Gr16
	¹⁹⁸ Pt(³ He,F)	E<60 MeV	JOUR Yad.Fiz. 39, 1336	84Gr16
	¹⁹⁷ Au(³ He,F)	E<60 MeV	JOUR Yad.Fiz. 39, 1336	84Gr16
	²⁰³ Tl(³ He,F)	E<60 MeV	JOUR Yad.Fiz. 39, 1336	84Gr16
	²⁰⁵ Tl(³ He,F)	E<60 MeV	JOUR Yad.Fiz. 39, 1336	84Gr16
	²⁰⁴ Pb(³ He,F)	E<60 MeV	JOUR Yad.Fiz. 39, 1336	84Gr16
	²⁰⁶ Pb(³ He,F)	E<60 MeV	JOUR Yad.Fiz. 39, 1336	84Gr16
	²⁰⁷ Pb(³ He,F)	E<60 MeV	JOUR Yad.Fiz. 39, 1336	84Gr16
	²⁰⁸ Pb(³ He,F)	E<60 MeV	JOUR Yad.Fiz. 39, 1336	84Gr16
	²⁰⁹ Bi(³ He,F)	E<60 MeV	JOUR Yad.Fiz. 39, 1336	84Gr16
	¹⁹⁷ Au(α ,F)	E=34.7-50 MeV	JOUR Yad.Fiz. 39, 1100	84Gr13
	²⁰³ Tl(α ,F)	E=34.7-50 MeV	JOUR Yad.Fiz. 39, 1100	84Gr13
	²⁰⁵ Tl(α ,F)	E=34.7-50 MeV	JOUR Yad.Fiz. 39, 1100	84Gr13
	²⁰⁹ Bi(⁴⁰ Ar, ⁴⁰ Ar)	E=300-600 MeV	JOUR Z.Phys. A317, 75	84Gu09
	²⁰⁹ Bi(⁸⁴ Kr, ⁸⁴ Kr)	E=40-160 MeV	JOUR Z.Phys. A317, 75	84Gu09
	²⁰⁹ Bi(¹³⁶ Xe, ¹³⁶ Xe)	E=200-350 MeV	JOUR Z.Phys. A317, 75	84Gu09
²¹¹ Bi	²⁰⁸ Pb(¹⁸ O, ¹⁵ N)	E≈100-200 MeV	JOUR Phys.Rev. C29, 2160	84Es01
	²⁰⁸ Pb(¹⁸ O,X)	E≈80-180 MeV	JOUR Phys.Rev. C29, 2160	84Es01
²¹² Bi	²⁰⁸ Pb(¹⁸ O, ¹⁴ N)	E≈100-200 MeV	JOUR Phys.Rev. C29, 2160	84Es01
	²⁰⁴ Hg(¹⁸ O,X)	E≈80-180 MeV	JOUR Phys.Rev. C29, 2160	84Es01
	²⁰⁵ Tl(¹⁸ O,X)	E≈80-180 MeV	JOUR Phys.Rev. C29, 2160	84Es01
	²⁰⁸ Pb(¹⁸ O,X)	E≈80-180 MeV	JOUR Phys.Rev. C29, 2160	84Es01
²¹³ Bi	²⁰⁸ Pb(¹⁸ O, ¹³ N)	E≈100-200 MeV	JOUR Phys.Rev. C29, 2160	84Es01
	²⁰⁵ Tl(¹⁸ O,X)	E≈80-180 MeV	JOUR Phys.Rev. C29, 2160	84Es01
	²⁰⁸ Pb(¹⁸ O,X)	E≈80-180 MeV	JOUR Phys.Rev. C29, 2160	84Es01
²¹⁴ Bi	²⁰⁸ Pb(¹⁸ O, ¹² N)	E≈100-200 MeV	JOUR Phys.Rev. C29, 2160	84Es01
¹⁹⁶ Po	²⁰⁹ Bi(p,14n)	E=210-480 MeV	JOUR Phys.Rev. C30, 236	84Da14
¹⁹⁹ Po	²⁰⁹ Bi(p,12n)	E=210-480 MeV	JOUR Phys.Rev. C30, 236	84Da14
¹⁹⁹ Po	²⁰⁹ Bi(p,11n)	E=210-480 MeV	JOUR Phys.Rev. C30, 236	84Da14
²⁰⁰ Po	²⁰⁹ Bi(p,10n)	E=210-480 MeV	JOUR Phys.Rev. C30, 236	84Da14

RESIDUAL INDEX

RESIDUAL	TARGET-REACTION	INCIDENT ENERGY	REFERENCE	KEY NUMBER
²⁰¹ Po	²⁰⁹ Bi(p,9n)	E=210-480 MeV	JOUR Phys.Rev. C30, 236	84Da14
²⁰⁴ Po	²⁰⁸ Bi(p,6n)	E=62-800 MeV	JOUR Phys.Rev. C30, 236	84Da14
²⁰⁸ Po	²⁰⁹ Bi(p,4n)	E=62-800 MeV	JOUR Phys.Rev. C30, 236	84Da14
²⁰⁷ Po	¹⁸³ W(³ He,F)	E<60 MeV	JOUR Yad.Fiz. 39, 1336	84Gr16
	¹⁹⁴ Pt(³ He,F)	E<60 MeV	JOUR Yad.Fiz. 39, 1336	84Gr16
	¹⁹⁸ Pt(³ He,F)	E<60 MeV	JOUR Yad.Fiz. 39, 1336	84Gr16
	¹⁹⁷ Au(³ He,F)	E<60 MeV	JOUR Yad.Fiz. 39, 1336	84Gr16
	²⁰³ Tl(³ He,F)	E<60 MeV	JOUR Yad.Fiz. 39, 1336	84Gr16
	²⁰⁵ Tl(³ He,F)	E<60 MeV	JOUR Yad.Fiz. 39, 1336	84Gr16
	²⁰⁴ Pb(³ He,F)	E<60 MeV	JOUR Yad.Fiz. 39, 1336	84Gr16
	²⁰⁶ Pb(³ He,F)	E<60 MeV	JOUR Yad.Fiz. 39, 1336	84Gr16
	²⁰⁷ Pb(³ He,F)	E<60 MeV	JOUR Yad.Fiz. 39, 1336	84Gr16
	²⁰⁸ Pb(³ He,F)	E<60 MeV	JOUR Yad.Fiz. 39, 1336	84Gr16
	²⁰⁹ Bi(³ He,F)	E<60 MeV	JOUR Yad.Fiz. 39, 1336	84Gr16
²⁰⁸ Po	²⁰⁹ Bi(p,2n)	E=62-800 MeV	JOUR Phys.Rev. C30, 236	84Da14
	¹⁸³ W(³ He,F)	E<60 MeV	JOUR Yad.Fiz. 39, 1336	84Gr16
	¹⁹⁴ Pt(³ He,F)	E<60 MeV	JOUR Yad.Fiz. 39, 1336	84Gr16
	¹⁹⁸ Pt(³ He,F)	E<60 MeV	JOUR Yad.Fiz. 39, 1336	84Gr16
	¹⁹⁷ Au(³ He,F)	E<60 MeV	JOUR Yad.Fiz. 39, 1336	84Gr16
	²⁰³ Tl(³ He,F)	E<60 MeV	JOUR Yad.Fiz. 39, 1336	84Gr16
	²⁰⁵ Tl(³ He,F)	E<60 MeV	JOUR Yad.Fiz. 39, 1336	84Gr16
	²⁰⁴ Pb(³ He,F)	E<60 MeV	JOUR Yad.Fiz. 39, 1336	84Gr16
	²⁰⁶ Pb(³ He,F)	E<60 MeV	JOUR Yad.Fiz. 39, 1336	84Gr16
	²⁰⁷ Pb(³ He,F)	E<60 MeV	JOUR Yad.Fiz. 39, 1336	84Gr16
	²⁰⁸ Pb(³ He,F)	E<60 MeV	JOUR Yad.Fiz. 39, 1336	84Gr16
	²⁰⁹ Bi(³ He,F)	E<60 MeV	JOUR Yad.Fiz. 39, 1336	84Gr16
	¹⁹⁷ Au(α,F)	E=34.7-50 MeV	JOUR Yad.Fiz. 39, 1100	84Gr13
	²⁰³ Tl(α,F)	E=34.7-50 MeV	JOUR Yad.Fiz. 39, 1100	84Gr13
	²⁰⁵ Tl(α,F)	E=34.7-50 MeV	JOUR Yad.Fiz. 39, 1100	84Gr13
	²⁰⁹ Bi(α,F)	E=24.3,27.1,29.6 MeV	JOUR Yad.Fiz. 39, 1349	84I101
²⁰⁹ Po	²⁰⁹ Bi(p,n)	E=62-800 MeV	JOUR Phys.Rev. C30, 236	84Da14
	¹⁸³ W(³ He,F)	E<60 MeV	JOUR Yad.Fiz. 39, 1336	84Gr16
	¹⁹⁴ Pt(³ He,F)	E<60 MeV	JOUR Yad.Fiz. 39, 1336	84Gr16
	¹⁹⁸ Pt(³ He,F)	E<60 MeV	JOUR Yad.Fiz. 39, 1336	84Gr16
	¹⁹⁷ Au(³ He,F)	E<60 MeV	JOUR Yad.Fiz. 39, 1336	84Gr16
	²⁰³ Tl(³ He,F)	E<60 MeV	JOUR Yad.Fiz. 39, 1336	84Gr16
	²⁰⁵ Tl(³ He,F)	E<60 MeV	JOUR Yad.Fiz. 39, 1336	84Gr16
	²⁰⁴ Pb(³ He,F)	E<60 MeV	JOUR Yad.Fiz. 39, 1336	84Gr16
	²⁰⁶ Pb(³ He,F)	E<60 MeV	JOUR Yad.Fiz. 39, 1336	84Gr16
	²⁰⁷ Pb(³ He,F)	E<60 MeV	JOUR Yad.Fiz. 39, 1336	84Gr16
	²⁰⁸ Pb(³ He,F)	E<60 MeV	JOUR Yad.Fiz. 39, 1336	84Gr16
	²⁰⁹ Bi(³ He,F)	E<60 MeV	JOUR Yad.Fiz. 39, 1336	84Gr16
²¹⁰ Po	²⁰⁹ Bi(p,F)	E=37.3,41.1,45.1,50 MeV	JOUR Yad.Fiz. 39, 1349	84I101
	²⁰⁸ Pb(³ He,n)	E=65 MeV	JOUR Phys.Rev. C29, 1317	84Na06
	¹⁸³ W(³ He,F)	E<60 MeV	JOUR Yad.Fiz. 39, 1336	84Gr16
	¹⁹⁴ Pt(³ He,F)	E<60 MeV	JOUR Yad.Fiz. 39, 1336	84Gr16
	¹⁹⁸ Pt(³ He,F)	E<60 MeV	JOUR Yad.Fiz. 39, 1336	84Gr16
	¹⁹⁷ Au(³ He,F)	E<60 MeV	JOUR Yad.Fiz. 39, 1336	84Gr16
	²⁰³ Tl(³ He,F)	E<60 MeV	JOUR Yad.Fiz. 39, 1336	84Gr16
	²⁰⁵ Tl(³ He,F)	E<60 MeV	JOUR Yad.Fiz. 39, 1336	84Gr16
	²⁰⁴ Pb(³ He,F)	E<60 MeV	JOUR Yad.Fiz. 39, 1336	84Gr16
	²⁰⁶ Pb(³ He,F)	E<60 MeV	JOUR Yad.Fiz. 39, 1336	84Gr16
	²⁰⁷ Pb(³ He,F)	E<60 MeV	JOUR Yad.Fiz. 39, 1336	84Gr16
	²⁰⁸ Pb(³ He,F)	E<60 MeV	JOUR Yad.Fiz. 39, 1336	84Gr16
	²⁰⁹ Bi(³ He,F)	E<60 MeV	JOUR Yad.Fiz. 39, 1336	84Gr16
	¹⁹⁷ Au(α,F)	E=34.7-50 MeV	JOUR Yad.Fiz. 39, 1100	84Gr13
	²⁰³ Tl(α,F)	E=34.7-50 MeV	JOUR Yad.Fiz. 39, 1100	84Gr13
	²⁰⁵ Tl(α,F)	E=34.7-50 MeV	JOUR Yad.Fiz. 39, 1100	84Gr13
	²⁰⁹ Pb(α,F)	E=24.3,27.1,29.6 MeV	JOUR Yad.Fiz. 39, 1349	84I101

RESIDUAL INDEX

RESIDUAL	TARGET-REACTION	INCIDENT ENERGY	REFERENCE	KEY NUMBER
²¹¹ Po	¹⁸³ W(³ He,F)	E<60 MeV	JOUR Yad.Fiz. 39, 1336	84Gr16
	¹⁹⁴ Pt(³ He,F)	E<60 MeV	JOUR Yad.Fiz. 39, 1336	84Gr16
	¹⁹⁸ Pt(³ He,F)	E<60 MeV	JOUR Yad.Fiz. 39, 1336	84Gr16
	¹⁹⁷ Au(³ He,F)	E<60 MeV	JOUR Yad.Fiz. 39, 1336	84Gr16
	²⁰³ Tl(³ He,F)	E<60 MeV	JOUR Yad.Fiz. 39, 1336	84Gr16
	²⁰⁵ Tl(³ He,F)	E<60 MeV	JOUR Yad.Fiz. 39, 1336	84Gr16
	²⁰⁴ Pb(³ He,F)	E<60 MeV	JOUR Yad.Fiz. 39, 1336	84Gr16
	²⁰⁶ Pb(³ He,F)	E<60 MeV	JOUR Yad.Fiz. 39, 1336	84Gr16
	²⁰⁷ Pb(³ He,F)	E<60 MeV	JOUR Yad.Fiz. 39, 1336	84Gr16
	²⁰⁸ Pb(³ He,F)	E<60 MeV	JOUR Yad.Fiz. 39, 1336	84Gr16
	²⁰⁹ Bi(³ He,F)	E<60 MeV	JOUR Yad.Fiz. 39, 1336	84Gr16
	²⁰⁸ Pb(α ,n)	E=65 MeV	JOUR Phys.Rev. C29, 1317	84Na06
	¹⁹⁷ Au(α ,F)	E=34.7-50 MeV	JOUR Yad.Fiz. 39, 1100	84Gr13
	²⁰³ Tl(α ,F)	E=34.7-50 MeV	JOUR Yad.Fiz. 39, 1100	84Gr13
	²⁰⁵ Tl(α ,F)	E=34.7-50 MeV	JOUR Yad.Fiz. 39, 1100	84Gr13
²¹² Po	²⁰⁸ Pb(α , γ)	E=30 MeV	JOUR Phys.Rev. C29, 1317	84Na06
	¹⁹⁷ Au(α ,F)	E=34.7-50 MeV	JOUR Yad.Fiz. 39, 1100	84Gr13
	²⁰³ Tl(α ,F)	E=34.7-50 MeV	JOUR Yad.Fiz. 39, 1100	84Gr13
	²⁰⁵ Tl(α ,F)	E=34.7-50 MeV	JOUR Yad.Fiz. 39, 1100	84Gr13
	²⁰⁶ Pb(α ,F)	E=24.3,27.1,29.6 MeV	JOUR Yad.Fiz. 39, 1349	84It01
²¹⁰ At	²⁰⁹ Bi(α ,3n)	E=21.1-29.2 MeV	JOUR J.Labelled Compd.Radiopharm. 21, 1288	84La31
²¹¹ At	²³² Th(p,X)	E=3-42 MeV	JOUR Radiochim.Acta 34, 25	83Qa02
	²³⁸ U(p,X)	E=3-42 MeV	JOUR Radiochim.Acta 34, 25	83Qa02
	²⁰⁹ Bi(³ He,n)	E=0-28 MeV	JOUR Radiochim.Acta 34, 25	83Qa02
	²⁰⁹ Bi(α ,2n)	E=500 MeV	JOUR Radiochim.Acta 34, 25	83Qa02
	²⁰⁹ Bi(α ,2n)	E=21.1-29.2 MeV	JOUR J.Labelled Compd.Radiopharm. 21, 1288	84La31
	²⁰⁹ Bi(Kr,X)	E=660 MeV	JOUR Radiochim.Acta 34, 25	83Qa02
²¹² At	¹⁸³ W(³ He,F)	E<60 MeV	JOUR Yad.Fiz. 39, 1336	84Gr16
	¹⁹⁴ Pt(³ He,F)	E<60 MeV	JOUR Yad.Fiz. 39, 1336	84Gr16
	¹⁹⁸ Pt(³ He,F)	E<60 MeV	JOUR Yad.Fiz. 39, 1336	84Gr16
	¹⁹⁷ Au(³ He,F)	E<60 MeV	JOUR Yad.Fiz. 39, 1336	84Gr16
	²⁰³ Tl(³ He,F)	E<60 MeV	JOUR Yad.Fiz. 39, 1336	84Gr16
	²⁰⁵ Tl(³ He,F)	E<60 MeV	JOUR Yad.Fiz. 39, 1336	84Gr16
	²⁰⁴ Pb(³ He,F)	E<60 MeV	JOUR Yad.Fiz. 39, 1336	84Gr16
	²⁰⁶ Pb(³ He,F)	E<60 MeV	JOUR Yad.Fiz. 39, 1336	84Gr16
	²⁰⁷ Pb(³ He,F)	E<60 MeV	JOUR Yad.Fiz. 39, 1336	84Gr16
	²⁰⁸ Pb(³ He,F)	E<60 MeV	JOUR Yad.Fiz. 39, 1336	84Gr16
	²⁰⁹ Bi(³ He,F)	E<60 MeV	JOUR Yad.Fiz. 39, 1336	84Gr16
	¹⁸³ W(³ He,F)	E<60 MeV	JOUR Yad.Fiz. 39, 1336	84Gr16
	¹⁹⁴ Pt(³ He,F)	E<60 MeV	JOUR Yad.Fiz. 39, 1336	84Gr16
²¹³ At	¹⁹⁸ Pt(³ He,F)	E<60 MeV	JOUR Yad.Fiz. 39, 1336	84Gr16
	¹⁹⁷ Au(³ He,F)	E<60 MeV	JOUR Yad.Fiz. 39, 1336	84Gr16
	²⁰³ Tl(³ He,F)	E<60 MeV	JOUR Yad.Fiz. 39, 1336	84Gr16
	²⁰⁵ Tl(³ He,F)	E<60 MeV	JOUR Yad.Fiz. 39, 1336	84Gr16
	²⁰⁴ Pb(³ He,F)	E<60 MeV	JOUR Yad.Fiz. 39, 1336	84Gr16
	²⁰⁶ Pb(³ He,F)	E<60 MeV	JOUR Yad.Fiz. 39, 1336	84Gr16
	²⁰⁷ Pb(³ He,F)	E<60 MeV	JOUR Yad.Fiz. 39, 1336	84Gr16
	²⁰⁸ Pb(³ He,F)	E<60 MeV	JOUR Yad.Fiz. 39, 1336	84Gr16
	²⁰⁹ Bi(³ He,F)	E<60 MeV	JOUR Yad.Fiz. 39, 1336	84Gr16
	¹⁹⁷ Au(α ,F)	E=34.7-50 MeV	JOUR Yad.Fiz. 39, 1100	84Gr13
	²⁰³ Tl(α ,F)	E=34.7-50 MeV	JOUR Yad.Fiz. 39, 1100	84Gr13
	²⁰⁵ Tl(α ,F)	E=34.7-50 MeV	JOUR Yad.Fiz. 39, 1100	84Gr13
	²⁰⁴ Pb(α ,F)	E=24.3,27.1,29.6 MeV	JOUR Yad.Fiz. 39, 1349	84It01
	¹⁸³ W(³ He,F)	E<60 MeV	JOUR Yad.Fiz. 39, 1336	84Gr16
	¹⁹⁴ Pt(³ He,F)	E<60 MeV	JOUR Yad.Fiz. 39, 1336	84Gr16
²¹⁷ Ra	²⁰⁸ Pb(¹⁴ C,5n)	E=60-83 MeV	JOUR Nucl.Phys. A432, 421	85Ce01
²¹⁸ Ra	²⁰⁸ Pb(¹⁴ C,4n)	E=60-83 MeV	JOUR Nucl.Phys. A432, 421	85Ce01
²¹⁹ Ra	²⁰⁸ Pb(¹⁴ C,3n)	E=60-83 MeV	JOUR Nucl.Phys. A432, 421	85Ce01
²²⁰ Ra	²⁰⁸ Pb(¹⁴ C,2n)	E=60-83 MeV	JOUR Nucl.Phys. A432, 421	85Ce01

RESIDUAL INDEX

RESIDUAL	TARGET-REACTION	INCIDENT ENERGY	REFERENCE	KEY NUMBER
^{232}Th	$^{232}\text{Th}(\text{d},\text{np})$	$E=0.2-10\text{ GeV}$	JOUR Phys.Rev. C30, 247	84Ho14
^{235}U	$^{235}\text{U}(^{20}\text{Ne},^{20}\text{Ne})$	$E=300-700\text{ MeV}$	JOUR Z.Phys. A317, 75	84Gu09
^{238}U	$^{238}\text{U}(\text{d},\text{np})$	$E=18.1\text{ MeV}$	JOUR Phys.Rev. C29, 1693	84Ka10
	$^{238}\text{U}(\text{d},\text{np})$	$E=18\text{ MeV}$	JOUR ATOMKI Kozlem. 26, 59	84Ka17
	$^{238}\text{U}(^{40}\text{Ar},^{40}\text{Ar})$	$E=300-600\text{ MeV}$	JOUR Z.Phys. A317, 75	84Gu09
^{234}Pu	$^{233}\text{U}(\alpha,3\text{n})$	$E=40-45\text{ MeV}$	JOUR Phys.Rev. C29, 1678	84B106
	$^{234}\text{U}(\alpha,4\text{n})$	$E=\text{threshold}-80\text{ MeV}$	JOUR Phys.Rev. C29, 1678	84B106
^{235}Pu	$^{233}\text{U}(\alpha,2\text{n})$	$E=\text{threshold}-45\text{ MeV}$	JOUR Phys.Rev. C29, 1678	84B106
	$^{234}\text{U}(\alpha,3\text{n})$	$E=40-45\text{ MeV}$	JOUR Phys.Rev. C29, 1678	84B106
	$^{235}\text{U}(\alpha,4\text{n})$	$E\approx \text{threshold}-50\text{ MeV}$	JOUR Phys.Rev. C29, 1678	84B106
^{236}Pu	$^{233}\text{U}(\alpha,\text{n})$	$E=\text{threshold}-45\text{ MeV}$	JOUR Phys.Rev. C29, 1678	84B106
	$^{234}\text{U}(\alpha,2\text{n})$	$E=\text{threshold}-45\text{ MeV}$	JOUR Phys.Rev. C29, 1678	84B106
	$^{235}\text{U}(\alpha,3\text{n})$	$E\approx \text{threshold}-50\text{ MeV}$	JOUR Phys.Rev. C29, 1678	84B106
^{237}Pu	$^{234}\text{U}(\alpha,\text{n})$	$E=\text{threshold}-45\text{ MeV}$	JOUR Phys.Rev. C29, 1678	84B106
	$^{235}\text{U}(\alpha,2\text{n})$	$E\approx \text{threshold}-50\text{ MeV}$	JOUR Phys.Rev. C29, 1678	84B106
^{238}Pu	$^{235}\text{U}(\alpha,\text{n})$	$E=\text{threshold}-65\text{ MeV}$	JOUR Phys.Rev. C29, 1678	84B106
^{237}Am	$^{237}\text{Np}(\alpha,4\text{n})$	$E\approx \text{threshold}-50\text{ MeV}$	JOUR Phys.Rev. C29, 1678	84B106
^{238}Am	$^{237}\text{Np}(\alpha,3\text{n})$	$E\approx \text{threshold}-50\text{ MeV}$	JOUR Phys.Rev. C29, 1678	84B106
^{239}Am	$^{237}\text{Np}(\alpha,2\text{n})$	$E\approx \text{threshold}-50\text{ MeV}$	JOUR Phys.Rev. C29, 1678	84B106
^{240}Am	$^{237}\text{Np}(\alpha,\text{n})$	$E=\text{threshold}-65\text{ MeV}$	JOUR Phys.Rev. C29, 1678	84B106