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**23 reference(s) found :**

**Keynumber:** 2000BE21

**Reference:** Acta Phys.Pol. B31, 311 (2000)

**Authors:** K.Bennaceur, F.Nowacki, J.Okolowicz, M.Ploszajczak

**Title:** Capture Reactions of Astrophysical Interest in the Shell Model Embedded in the Continuum

**Keyword abstract:** NUCLEAR REACTIONS  $^7\text{Li}(\text{n},\gamma), \text{E(cm)} < 100 \text{ keV}$ ; calculated  $\sigma$ .  $^{208}\text{Pb}$

( $^8\text{B}, \text{p}^7\text{Be}$ ),  $\text{E}=250 \text{ MeV/nucleon}$ ; calculated  $\sigma(\text{E})$ . Shell model embedded in the continuum, comparisons with data.

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**Keynumber:** 1999ZH2M

**Reference:** INDC(CPR)-049/L, p.76 (1999)

**Authors:** C.Zhou

**Title:** Prompt  $\gamma$ -Ray Data Evaluation of Thermal-Neutron Capture for  $A = 1 \text{ } \vartheta 25$

**Keyword abstract:** NUCLEAR REACTIONS  $^1, ^2\text{H}, ^6, ^7\text{Li}, ^9\text{Be}, ^{12}, ^{13}\text{C}, ^{14}\text{N}, ^{16}, ^{17}\text{O}, ^{19}\text{F}, ^{20}, ^{21}, ^{22}\text{Ne}, ^{23}\text{Na}, ^{24}, ^{25}\text{Mg}(\text{n},\gamma), \text{E=thermal}$ ; compiled, evaluated prompt  $\gamma$ -ray data.

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**Keynumber:** 1999BE25

**Reference:** Nucl.Phys. A651, 289 (1999)

**Authors:** K.Bennaceur, F.Nowacki, J.Okolowicz, M.Ploszajczak

**Title:** Study of the  $^7\text{Be}(\text{p},\gamma)^8\text{B}$  and  $^7\text{Li}(\text{n},\gamma)^8\text{Li}$  Capture Reactions using the Shell Model Embedded in the Continuum

**Keyword abstract:** NUCLEAR REACTIONS  $^7\text{Be}(\text{p},\gamma), ^7\text{Li}(\text{n},\gamma), \text{E=low}$ ; calculated  $\sigma$ , astrophysical S-factors. Shell model, continuum coupling.

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**Keynumber:** 1998HE35

**Reference:** Astrophys.J. 507, 997 (1998)

**Authors:** M.Heil, F.Kappeler, M.Wiescher, A.Mengoni

**Title:** The  $(\text{n},\gamma)$  Cross Section of  $^7\text{Li}$

**Keyword abstract:** NUCLEAR REACTIONS  $^7\text{Li}(\text{n},\gamma), \text{E} \approx 5 \text{ meV}, 54 \text{ keV}$ ; measured  $\sigma$ . Activation technique. Astrophysical implications discussed.

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**Keynumber:** 1997NAZZ

**Reference:** Proc.9th Intern.Symposium on Capture Gamma-Ray Spectroscopy and Related Topics, Budapest, Hungary, October 1996, G.L.Molnar, T.Belgya, Zs.Revay, Eds., Vol.2, p.501 (1997)

**Authors:** Y.Nagai, T.Shima, T.Kikuchi, T.Kii, T.Kobayashi, F.Okazaki, T.Baba, K.Takaoka, S.Naito, A.Tomyo, M.Igashira, T.Ohsaki, S.Ishikawa

**Title:** Nuclear Astrophysics Studied by Neutron Capture Reaction of Light Nuclei

**Keyword abstract:** NUCLEAR REACTIONS  $^2\text{H}, ^7\text{Li}, ^{18}\text{O}(\text{n},\gamma), \text{E}=10-80 \text{ keV}$ ; measured  $E\gamma, I\gamma$ ; deduced capture  $\sigma$ . Astrophysical implications discussed.

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**Keynumber:** 1997HEZW

**Reference:** Proc.Intern.on Nuclear Data for Science and Technology, Trieste, Italy, 19-24 May, 1997, G.Reffo, A.Ventura, C.Grandi, Eds., Editrice Compositori, Italy, Pt.2, p.1618 (1997)

**Authors:** M.Heil, F.Kappeler, M.Wiescher

**Title:** The  $(\text{n},\gamma)$  Cross Section of  $^7\text{Li}$

**Keyword abstract:** NUCLEAR REACTIONS  ${}^7\text{Li}(n,\gamma), E \approx 0.005, 54000 \text{ eV}$ ; measured  $\sigma$ . Activation technique. Comparison with other data, calculations.

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**Keynumber:** [1997BA04](#)

**Reference:** Phys.Rev. C55, 535 (1997)

**Authors:** F.C.Barker

**Title:** Low-energy  ${}^7\text{Li}(n,\gamma_0){}^8\text{Li}$  and  ${}^7\text{Li}(p,\gamma_0){}^8\text{Be}$  Cross Sections

**Keyword abstract:** NUCLEAR REACTIONS  ${}^7\text{Li}(n,\gamma), (p,\gamma), E = \text{low}$ ; analyzed p-wave strength in  $\sigma$ ; deduced projectile penetration factors dependence.

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**Keynumber:** 1996SH02

**Reference:** Nucl.Phys. A597, 197 (1996)

**Authors:** N.B.Shulgina, B.V.Danilin, V.D.Efros, J.M.Bang, J.S.Vaagen, M.V.Zhukov, and the Russian-Nordic-British Theory (RNBT) Collaboration

**Title:** Three-Body Structure of  ${}^8\text{Li}$  and the  ${}^7\text{Li}(n,\gamma){}^8\text{Li}$  Reaction

**Keyword abstract:** NUCLEAR REACTIONS  ${}^7\text{Li}(n,\gamma), E = 25 \text{ keV}$ ; calculated  $\sigma$ .  ${}^3\text{H}(\alpha,\alpha), E = 3-8 \text{ MeV}$ ; calculated phase shifts vs E. Three-body cluster model.

**Keyword abstract:** NUCLEAR STRUCTURE  ${}^8\text{Li}$ ; calculated matter density, cluster component separation rms radii. Three-body cluster model.

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**Keynumber:** [1996BL10](#)

**Reference:** Phys.Rev. C54, 383 (1996)

**Authors:** J.C.Blackmon, A.E.Champagne, J.K.Dickens, J.A.Harvey, M.A.Hofstee, S.Kopecky, D.C.Larson, D.C.Powell, S.Raman, M.S.Smith

**Title:** Measurement of  ${}^7\text{Li}(n,\gamma_0){}^8\text{Li}$  Cross Sections at  $E(n) = 1.5-1340 \text{ eV}$

**Keyword abstract:** NUCLEAR REACTIONS  ${}^7\text{Li}(n,\gamma), E = 1.5-1340 \text{ eV}$ ; measured  $E\gamma, I\gamma, \gamma$  yield, absolute  $\sigma(E)$ ; deduced s-wave evidence, normalization relative to  ${}^{10}\text{B}(n,\alpha\gamma)$  reaction.

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**Keynumber:** 1995BA36

**Reference:** Nucl.Phys. A588, 693 (1995)

**Authors:** F.C.Barker

**Title:** The Low-Energy  ${}^7\text{Be}(p,\gamma){}^8\text{B}$  Cross Section from an R-Matrix Approach

**Keyword abstract:** NUCLEAR REACTIONS  ${}^7\text{Li}(n,\gamma), E \leq 1 \text{ MeV}$ ; analyzed  $\sigma(E)$ ; deduced model parameters.  ${}^7\text{Be}(p,\gamma), E \leq 2 \text{ MeV}$ ; analyzed astrophysical S-factor vs E. R-matrix approach.

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**Keynumber:** 1994DE03

**Reference:** Nucl.Phys. A567, 341 (1994)

**Authors:** P.Descouvemont, D.Baye

**Title:** Microscopic Study of the  ${}^7\text{Li}(n,\gamma){}^8\text{Li}$  and  ${}^7\text{Be}(p,\gamma){}^8\text{B}$  Reactions in Multiconfiguration Three-Cluster Model

**Keyword abstract:** NUCLEAR REACTIONS, ICPND  ${}^7\text{Li}(n,\gamma), E(\text{cm}) \leq 0.8 \text{ MeV}$ ; calculated  $\sigma(\theta)$  vs E.  ${}^7\text{Be}(p,\gamma), E(\text{cm}) < 3 \text{ MeV}$ ; calculated astrophysical S-factor vs E. Three-cluster generator coordinate method.

**Keyword abstract:** NUCLEAR STRUCTURE  ${}^8\text{Li}, {}^8\text{B}$ ; calculated  $\mu$ , quadrupole moment, nucleon width of levels,  $B(\lambda)$ . Multi-configuration three-cluster model.

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**Keynumber:** 1993DE30

**Reference:** J.Phys.(London) G19, S141 (1993)

**Authors:** P.Descouvemont

**Title:** Microscopic Models for Nuclear Reaction Rates

**Keyword abstract:** NUCLEAR REACTIONS,ICPND  $^7\text{Li}(\text{n},\gamma),\text{E(cm)} \leq 0.8 \text{ MeV}$ ; calculated  $\sigma(\text{E})$ .  $^7\text{Be}(\text{p},\gamma),\text{E(cm)} \leq 3 \text{ MeV}$ ;  $^{12}\text{C}(\alpha,\gamma),\text{E(cm)} \leq 3 \text{ MeV}$ ;  $^8\text{Li}(\alpha,\text{n}),\text{E} \leq 2 \text{ MeV}$ ; calculated astrophysical S-factor vs E. Generator coordinate method,microscopic description.

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**Keynumber:** 1992PA29

**Reference:** Bull.Rus.Acad.Sci.Phys. 56, 1811 (1992)

**Authors:** A.A.Pasternak, D.Khongiu

**Title:** Doppler Effects in n + Al and n + Li Reactions at Neutron Energy of 14.9 MeV

**Keyword abstract:** NUCLEAR REACTIONS  $^7\text{Li}(\text{n},\gamma),\text{E}=14.9 \text{ MeV}$ ;  $^{27}\text{Al}(\text{n,p}), (\text{n},\alpha), (\text{n,np}),\text{E}=14.9 \text{ MeV}$ ; measured  $\gamma$ -spectra,Doppler broadened line shapes, $I\gamma(\theta)$ .  $^{26}, ^{27}\text{Mg}, ^{24}\text{Na}$  levels deduced  $T_{1/2}$ . Doppler shift reduction method.

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**Keynumber:** 1991NAZY

**Reference:** Inst.Nucl.Study, Univ.Tokyo, Ann.Rept., 1990, p.55 (1991)

**Authors:** Y.Nagai, K.Takeda, S.Motoyama, T.Ohsaki, M.Igashira, N.Mukai, F.Uesawa, T.Ando, H.Kitazawa, T.Fukuda, S.Kubono

**Title:** Neutron Capture Cross Sections of  $^7\text{Li}$  and  $^{12}\text{C}$  in Primordial Nucleosynthesis

**Keyword abstract:** NUCLEAR REACTIONS  $^7\text{Li}, ^{12}\text{C}(\text{n},\gamma),\text{E}=30 \text{ keV}$ ; measured  $\sigma$ .

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**Keynumber:** 1991NA19

**Reference:** Nucl.Instrum.Methods Phys.Res. B56/57, 492 (1991)

**Authors:** Y.Nagai, K.Takeda, S.Motoyama, T.Ohsaki, M.Igashira, N.Mukai, F.Uesawa, T.Ando, H.Kitazawa, T.Fukuda

**Title:** Neutron Capture Cross Sections of Light Nuclei in Primordial Nucleosynthesis

**Keyword abstract:** NUCLEAR REACTIONS  $^7\text{Li}, ^{12}\text{C}(\text{n},\gamma),\text{E}=30 \text{ keV}$ ; measured radiative capture  $E\gamma, I\gamma$ ; deduced intermediate mass nuclei primordial nucleosynthesis process role.

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**Keynumber:** 1991NA16

**Reference:** Astrophys.J. 381, 444 (1991)

**Authors:** Y.Nagai, M.Igashira, N.Mukai, T.Ohsaki, F.Uesawa, K.Takeda, T.Ando, H.Kitazawa, S.Kubono, T.Fukuda

**Title:** Capture Rate of the  $^7\text{Li}(\text{n},\gamma)^8\text{Li}$  Reaction by Prompt Gamma-Ray Detection

**Keyword abstract:** NUCLEAR REACTIONS  $^7\text{Li}(\text{n},\gamma),\text{E}=30 \text{ keV}$ ; measured  $E\gamma, I\gamma, \sigma$ ; deduced reaction rate.

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**Keynumber:** [1991LY01](#)

**Reference:** Phys.Rev. C44, 764 (1991)

**Authors:** J.E.Lynn, E.T.Jurney, S.Raman

**Title:** Direct and Valence Neutron Capture by  $^7\text{Li}$

**Keyword abstract:** NUCLEAR REACTIONS  $^7\text{Li}(\text{n},\gamma),\text{E=thermal}$ ; measured  $E\gamma, I\gamma, \sigma$ . Direct,valence capture.

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**Keynumber:** 1989WIZV

**Reference:** Bull.Am.Phys.Soc. 34, No.4, 1191, E10 1 (1989)

**Authors:** M.Wiescher, R.Steininger, F.Kappeler

**Title:**  $^7\text{Li}(n,\gamma)^8\text{Li}$  - Trigger Reaction to a Primordial r-Process

**Keyword abstract:** NUCLEAR REACTIONS  $^7\text{Li}(n,\gamma)$ , E=25-420 keV; measured  $\sigma$ ; deduced reaction rate,r-process features.

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**Keynumber:** 1989WI16

**Reference:** Astrophys.J. 344, 464 (1989)

**Authors:** M.Wiescher, R.Steininger, F.Kappeler

**Title:**  $^7\text{Li}(n,\gamma)^8\text{Li}$  - Trigger Reaction to a Primordial r-Process ( Question )

**Keyword abstract:** NUCLEAR REACTIONS  $^7\text{Li}(n,\gamma)$ , E=25-420 keV; measured capture  $\sigma(E)$ ; deduced reaction rate,primordial r-process consequences. Activation techniques.

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**Keynumber:** 1988DE38

**Reference:** Nucl.Phys. A487, 420 (1988)

**Authors:** P.Descouvemont, D.Baye

**Title:** The  $^7\text{Be}(p,\gamma)^8\text{B}$  Reaction in a Microscopic Three-Cluster Model

**Keyword abstract:** NUCLEAR REACTIONS,ICPND  $^7\text{Li}(n,\gamma)$ , E(cm)  $\approx$  0-0.75 MeV; calculated capture  $\sigma(E)$ .  $^7\text{Be}(p,\gamma)$ , E(cm)  $\approx$  0.1-2.5 MeV; calculated astrophysical S-factor vs E. Microscopic three-cluster model,generator coordinate method.

**Keyword abstract:** NUCLEAR STRUCTURE  $^8\text{B}$ ,  $^8\text{Li}$ ; calculated levels, $\mu$ ,B(M1). Generator coordinate method,three-cluster model.

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**Keynumber:** 1973JUZU

**Coden:** REPT EANDC(US)-186'U' P109

**Keyword abstract:** NUCLEAR REACTIONS  $^6$ ,  $^7\text{Li}(n,\gamma)$ ; measured  $\sigma(E\gamma)$ .  $^7$ ,  $^8\text{Li}$  deduced transitions.

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**Keynumber:** 1973JUZT

**Coden:** REPT LA-UR-73-1700 P8

**Keyword abstract:** NUCLEAR REACTIONS  $^6$ ,  $^7\text{Li}(n,\gamma)$ , E=thermal; measured  $\sigma(E\gamma)$ .  $^7\text{Li}$  deduced  $\gamma$ -branching.

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**Keynumber:** 1967RA24

**Reference:** Proc.Intern.Conf.Atomic Masses, 3rd, Winnipeg, Canada, R.C.Barber, Ed., Univ.Manitoba Press, p.278(1967)

**Authors:** N.C.Rasmussen, V.J.Orphan, Y.Hukai

**Title:** Determination of (n, $\gamma$ ) Reaction Q Values from Capture  $\gamma$ -Ray Spectra

**Keyword abstract:** NUCLEAR REACTIONS  $^6\text{Li}$ ,  $^7\text{Li}$ ,  $^9\text{Be}$ ,  $^{10}\text{B}$ ,  $^{12}\text{C}$ ,  $^{14}\text{N}$ ,  $^{19}\text{F}$ ,  $^{23}\text{Na}$ ,  $^{24}\text{Mg}$ ,  $^{25}\text{Mg}$ ,  $^{26}\text{Mg}$ ,  $^{27}\text{Al}$ ,  $^{28}\text{Si}$ ,  $^{31}\text{P}$ ,  $^{32}\text{S}$ ,  $^{35}\text{Cl}$ ,  $^{40}\text{Ca}$ ,  $^{45}\text{Sc}$ ,  $^{48}\text{Ti}$ ,  $^{51}\text{V}$ ,  $^{55}\text{Mn}$ ,  $^{54}\text{Fe}$ ,  $^{56}\text{Fe}$ ,  $^{59}\text{Co}$ ,  $^{58}\text{Ni}$ ,  $^{60}\text{Ni}$ ,  $^{63}\text{Cu}$ ,  $^{65}\text{Cu}$ ,  $^{66}\text{Zn}$ ,  $^{67}\text{Zn}$ ,  $^{73}\text{Ge}$ ,  $^{76}\text{Se}$ ,  $^{85}\text{Rb}$ ,  $^{87}\text{Rb}$ ,  $^{89}\text{Y}$ ,  $^{93}\text{Nb}$ ,  $^{103}\text{Rh}$ ,  $^{113}\text{Cd}$ ,  $^{123}\text{Te}$ ,  $^{133}\text{Cs}$ ,  $^{139}\text{La}$ ,  $^{141}\text{Pr}$ ,  $^{149}\text{Sm}$ ,  $^{153}\text{Eu}$ ,  $^{157}\text{Gd}$ ,  $^{159}\text{Tb}$ ,  $^{165}\text{Ho}$ ,  $^{167}\text{Er}$ ,  $^{169}\text{Tm}$ ,  $^{181}\text{Ta}$ ,  $^{182}\text{W}$ ,  $^{195}\text{Pt}$ ,  $^{197}\text{Au}$ ,  $^{199}\text{Hg}$ ,  $^{203}\text{Tl}$ ,  $^{207}\text{Pb}(n,\gamma)$ , E = thermal; measured E $\gamma$ ; deduced Q. Natural targets.