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**38 reference(s) found :**

**Keynumber:** 1999ZHJM

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

**Authors:** C.Zhou

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

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

**Keynumber:** 1998SHZT

**Reference:** Proc.Intern.Symposium on Nuclear Astrophysics, Nuclei in the Cosmos V, Volos, Greece, July 6-11, 1998, N.Prantzos, S.Harissopoulos, Eds., Editions Frontieres, Paris, p.25 (1998)

**Authors:** T.Shima, T.Kobayashi, K.Takaoka, M.Kinoshita, Y.Nobuhara, T.Kikuchi, T.Kii, F.Okazaki, Y.Nagai, M.Igashira

**Title:** Neutron Capture Cross Sections of Deuteron and  $^7\text{Li}$  at Stellar Energies

**Keyword abstract:** NUCLEAR REACTIONS  $^2\text{H}(n,\gamma), E=30.5, 54.2, 531 \text{ keV}$ ; measured  $E\gamma, I\gamma, \text{capture } \sigma$ .  $^7\text{Li}(n,\gamma), E=42.4 \text{ keV}$ ; measured  $E\gamma, I\gamma, \gamma\text{-ray branching ratio}$ . Comparison with previous results.

**Keynumber:** 1998NA15

**Reference:** Nucl.Instrum.Methods Phys.Res. A402, 408 (1998)

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

**Title:** Nuclear and Nuclear Astrophysical Interest in  $\text{D}(n,\gamma)^3\text{H}$  Reaction

**Keyword abstract:** NUCLEAR REACTIONS  $^2\text{H}(n,\gamma), E=10-80 \text{ keV}$ ; measured  $\sigma$ . Astrophysical implications.

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

**Keynumber:** 1994KR20

**Reference:** Fiz.Elem.Chastits At.Yadra 25, 1444 (1994); Sov.J.Part.Nucl 25, 612 (1994)

**Authors:** P.A.Krupchitsky

**Title:** Parity Violation in Nuclear Reactions with Polarized Neutrons

**Keyword abstract:** NUCLEAR REACTIONS  $^2, ^1\text{H}, ^{35}\text{Cl}, ^{57}\text{Fe}, ^{79}, ^{81}\text{Br}, ^{111}, ^{113}\text{Cd}, ^{117}\text{Sn}, ^{139}\text{La}, ^{207}\text{Pb}(\text{polarized } n,\gamma), E=\text{thermal, resonance}$ ; compiled, reviewed parity violation data, analyses; deduced dominant mechanism.

**Keynumber:** 1993FA06

**Reference:** J.Phys.(London) G19, 569 (1993)

**Authors:** G.Faltdt, L.-G.Larsson

**Title:** Pole Model for  $n + d \rightarrow {}^3\text{H} + \gamma$  at Threshold

**Keyword abstract:** NUCLEAR REACTIONS  ${}^2\text{H}(n,\gamma), E \approx \text{threshold}$ ; calculated capture  $\sigma$ , photon polarization parameter. Pole model.

-----  
**Keynumber:** 1990FR19

**Reference:** Phys.Lett. 251B, 11 (1990)

**Authors:** J.L.Friar, B.F.Gibson, G.L.Payne

**Title:** Thermal n-d Radiative Capture

**Keyword abstract:** NUCLEAR REACTIONS  ${}^2\text{H}(n,\gamma), E=\text{thermal}$ ; calculated capture  $\sigma$  vs triton binding energy. Configuration space Faddeev equations.

-----  
**Keynumber:** 1989ABZZ

**Reference:** Bull.Am.Phys.Soc. 34, No.4, 1139, A7 6 (1989)

**Authors:** K.Abrahams

**Title:** Neutron Capture and Exchange Currents

**Keyword abstract:** NUCLEAR REACTIONS  ${}^1, {}^2\text{H}, {}^3\text{He}(n,\gamma), E=\text{thermal}$ ; calculated radiative capture  $\sigma$ ; deduced single photon  ${}^3\text{He}(n,\gamma) \sigma$ .

-----  
**Keynumber:** 1988KO07

**Reference:** Phys.Lett. 205B, 215 (1988)

**Authors:** M.W.Konijnenberg, K.Abrahams, J.Kopecky, F.Stecher-Rasmussen, R.Wervelman, J.H.Koch  
**Title:** Evidence for Meson-Exchange Currents in the Radiative Thermal Neutron Capture by Deuterium Nuclei

**Keyword abstract:** NUCLEAR REACTIONS  ${}^2\text{H}(\text{polarized } n,\gamma), E=\text{thermal}$ ; measured  $\gamma$  CP; deduced meson exchange current role.

-----  
**Keynumber:** 1988AL29

**Reference:** Can.J.Phys. 66, 542 (1988)

**Authors:** J.Alberi, R.Hart, E.Jeenicke, R.Ost, R.Wilson, I.G.Schroder, M.Avenier, G.Bagieu, H.Benkoula, J.F.Cavaignac, A.Idrissi, D.H.Koang, B.Vignon

**Title:** Studies of Parity Violation using Polarized Slow Neutron Beams

**Keyword abstract:** NUCLEAR REACTIONS  ${}^2, {}^1\text{H}(\text{polarized } n,\gamma), E=\text{slow}$ ; compiled asymmetry data; deduced parity violation information.

-----  
**Keynumber:** 1988AB04

**Reference:** J.Phys.(London) G14, Supplement S373 (1988)

**Authors:** K.Abrahams, M.W.Konijnenberg, J.Kopecky, F.Stecher-Rasmussen, R.Wervelman

**Title:** Meson Exchange Currents in Few-Nucleon Systems and Radiative Capture of Neutrons

**Keyword abstract:** NUCLEAR REACTIONS  ${}^2\text{H}(\text{polarized } n,\gamma), E \text{ not given}$ ; measured  $\gamma$  CP vs  $E\gamma$ .

-----  
**Keynumber:** 1986MIZU

**Reference:** Diss.Abst.Int. 46B, 2708 (1986)

**Authors:** G.Mitev

**Title:** Radiative Neutron Capture by Deuterium

**Keyword abstract:** NUCLEAR REACTIONS  ${}^2\text{H}(n,\gamma)$ , (polarized  $n,\gamma$ ),  $E=9,10.8,14 \text{ MeV}$ ; measured  $\sigma(\theta)$ , analyzing power vs  $\theta, \sigma$ ; deduced s-wave scattering length.  ${}^3\text{H}$  deduced E1, E2 relative transition strengths.

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**Keynumber:** [1986MI17](#)

**Reference:** Phys.Rev. C34, 389 (1986)

**Authors:** G.Mitev, P.Colby, N.R.Roberson, H.R.Weller, D.R.Tilley

**Title:** Radiative Neutron Capture by Deuterium

**Keyword abstract:** NUCLEAR REACTIONS  $^2\text{H}(n,\gamma)$ , (polarized  $n,\gamma$ ),  $E=9-14$  MeV; measured  $\sigma(\theta)$ ,  $A(\theta)$ ; deduced capture  $\sigma$ ,  $E1, E2$ , amplitudes, phases,  $\sigma(^3\text{H}(\gamma,n))/\sigma(^3\text{He}(\gamma,n))$ . Direct capture models.

-----  
**Keynumber:** 1986DE24

**Reference:** Nucl.Phys. A458, 689 (1986)

**Authors:** B.Desplanques, J.J.Benayoun

**Title:** Parity Non-Conserving Effects in Thermal Neutron-Deuteron Radiative Capture

**Keyword abstract:** NUCLEAR REACTIONS  $^2\text{H}(n,\gamma)$ ,  $E=\text{thermal}$ ; calculated  $\gamma$  CP,  $\gamma$  asymmetry with respect to  $n,d$ ; deduced parity nonconserving effects. Super soft core, Reid soft core potentials.

-----  
**Keynumber:** 1986AV04

**Reference:** Nucl.Phys. A459, 335 (1986)

**Authors:** M.Avenier, J.F.Cavaignac, D.H.Koang, B.Vignon, R.Hart, R.Wilson

**Title:** Measurement of the Photon Asymmetry in Capture of Polarized Neutrons by Deuterons

**Keyword abstract:** NUCLEAR REACTIONS  $^2\text{H}(\text{polarized } n,\gamma)$ ,  $E=\text{thermal}$ ; measured  $E\gamma, I\gamma, \gamma(\theta)$ , asymmetry.

-----  
**Keynumber:** 1986AK06

**Reference:** Dok.Akad.Nauk SSSR 288, 100 (1986); Sov.Phys.Dokl. 31, 408 (1986)

**Authors:** A.I.Akhiezer, M.P.Rekalo

**Title:** Polarization Correlations in the Radiative Capture of Nucleons by Deuterons,  $n+d \rightarrow ^3\text{H}+\gamma$  and  $p+d \rightarrow ^3\text{He}+\gamma$

**Keyword abstract:** NUCLEAR REACTIONS  $^2\text{H}(\text{polarized } p,\gamma)$ , (polarized  $n,\gamma$ ),  $E=\text{slow}$ ; calculated reaction amplitude, tensor polarization,  $\sigma(\theta)$ . Hadronic electromagnetic interaction, polarized target.

-----  
**Keynumber:** 1984HU12

**Reference:** Can.J.Phys. 62, 1114 (1984)

**Authors:** D.A.Hutcheon

**Title:** Experiments at TRIUMF on Radiative Processes

**Keyword abstract:** NUCLEAR REACTIONS  $^2\text{H}(\text{polarized } n,\gamma)$ ,  $E=270, 180$  MeV; analyzed analyzing power vs  $\theta, \gamma d$ -coin data.

-----  
**Keynumber:** 1983TO12

**Reference:** Phys.Rev. C28, 529 (1983)

**Authors:** J.Torre, B.Goulard

**Title:** Mesonic Exchange Currents and Radiative Thermal Neutron Capture by the Deuteron

**Keyword abstract:** NUCLEAR STRUCTURE  $^3\text{H}$ ; calculated  $\mu$ . Three-body forces, meson exchange currents.

**Keyword abstract:** NUCLEAR REACTIONS  $^2\text{H}(n,\gamma)$ ,  $E=\text{thermal}$ ; calculated  $\sigma(\text{capture})$ ; deduced three-body force role. Meson exchange currents.

-----  
**Keynumber:** 1982MIZS

**Reference:** Bull.Am.Phys.Soc. 27, No.7, 701, AE10 (1982)

**Authors:** G.Mitev, H.R.Weller, N.R.Roberson, D.R.Tilley, D.M.Skopik

**Title:** Radiative Capture of Neutrons by  $^2\text{H}$

**Keyword abstract:** NUCLEAR REACTIONS  $^2\text{H}(\text{polarized } n, \gamma), E=9-14 \text{ MeV}$ ; measured  $\sigma(\theta)$ , analyzing power.

-----  
**Keynumber:** 1982JU01

**Reference:** Phys.Rev. C25, 2810 (1982)

**Authors:** E.T.Jurney, P.J.Bendt, J.C.Browne

**Title:** Thermal Neutron Capture Cross Section of Deuterium

**Keyword abstract:** NUCLEAR REACTIONS  $^2\text{H}, ^{12}\text{C}(n, \gamma), E=\text{thermal}$ ; measured  $E\gamma, I\gamma, \sigma$ .  $^{13}\text{C}$  transitions deduced  $I\gamma$ .

-----  
**Keynumber:** 1981SH25

**Reference:** Fiz.Elem.Chastits At.Yadra 12, 962 (1981); Sov.J.Part.Nucl. 12, 386 (1981)

**Authors:** E.I.Sharapov

**Title:** Radiative Capture of Neutrons by the Lightest Nuclei

**Keyword abstract:** NUCLEAR REACTIONS  $^1, ^2\text{H}, ^3\text{He}(n, \gamma), E=\text{thermal}$ ; analyzed  $\sigma(\text{capture})$  data; deduced meson exchange, two-photon capture, wave function symmetry rule selection effects.

-----  
**Keynumber:** 1980TOZQ

**Coden:** REPT ISN 80-01,P106,Torre

**Keyword abstract:** NUCLEAR REACTIONS  $^2\text{H}(n, \gamma), E=\text{thermal}$ ; calculated  $\sigma$ . Impulse approximation, meson exchange contribution.

-----  
**Keynumber:** 1980BEYU

**Coden:** REPT ISN 80-01,P104,Benayoun

**Keyword abstract:** NUCLEAR REACTIONS  $^2\text{H}(n, \gamma), E=\text{thermal}$ ; calculated scattering length. Realistic interactions.

-----  
**Keynumber:** 1980ALZZ

**Coden:** REPT JINR-P3-12667,2/11/80,Alfimenkov

**Keyword abstract:** NUCLEAR REACTIONS  $^2\text{H}(n, \gamma), E=\text{th}$ ; measured  $\sigma$ . Three-body model, Faddeev calculations.

-----  
**Keynumber:** 1980ALZH

**Coden:** CONF Kiev(Neutron Physics) Proc,Part2,P194,Alfimenkov

**Keyword abstract:** NUCLEAR REACTIONS  $^2\text{H}(n, \gamma), E=\text{thermal}$ ; measured  $\sigma$ . Ge(Li) spectrometer, tof. Other data input.

-----  
**Keynumber:** 1980AL31

**Reference:** Yad.Fiz. 32, 1491 (1980)

**Authors:** V.P.Alfimenkov, S.B.Borzakov, E.V.Vasilyeva, Wo Wang Thuang, B.P.Osipenko, L.B.Pikelner, V.G.Tishin, E.I.Sharapov

**Title:** Direct Measurements of the Effective Cross Section of Thermal Neutron Radiative Capture by Deuterons

**Keyword abstract:** NUCLEAR REACTIONS  $^2\text{H}(n, \gamma), E=\text{thermal}$ ; measured  $\sigma$ . Ge(Li) spectrometer.

-----  
**Keynumber:** 1979WU05

**Reference:** Phys.Rev. C19, 1153 (1979)

**Authors:** N.Wust, H.Seyfarth, L.Aldea

**Title:** Two-Quantum Radiative Thermal Neutron Capture in  $^1\text{H}$

**Keyword abstract:** NUCLEAR REACTIONS  $^2\text{H}$ ,  $^{16}\text{O}(n,\gamma)$ , E=thermal; measured  $\sigma$  for double-photon emission,  $\sigma\gamma$ .

-----  
**Keynumber:** 1979ALZL

**Coden:** JOUR BAPSA 24 873,DB4,Alfimenkov

**Keyword abstract:** NUCLEAR REACTIONS  $^2\text{H}(n,\gamma)$ , E=thermal; measured  $\sigma$ . Tof method.

-----  
**Keynumber:** 1978BAYO

**Coden:** REPT INDC(CCP)-111/U,p<sub>1</sub>,Bazazyants

**Keyword abstract:** NUCLEAR REACTIONS  $^2\text{H}(n,n)$ ,  $(n,\gamma)$ ,  $(n,2n)$ , E=0.0001 eV to 15 MeV; evaluated available data on  $\sigma$ .

-----  
**Keynumber:** 1977MC05

**Reference:** Nucl.Phys. A281, 325 (1977)

**Authors:** A.B.McDonald, E.D.Earle, M.A.Lone, F.C.Khanna, H.C.Lee

**Title:** Doubly Radiative Thermal Neutron Capture in  $^2\text{H}$  and  $^{16}\text{O}$ : Experiment and Theory

**Keyword abstract:** NUCLEAR REACTIONS  $^2\text{H}$ ,  $^{16}\text{O}(n,\gamma)$ , E=th; measured  $\sigma(E\gamma)$ ; deduced upper limit for  $\sigma(2\gamma)$ .  $^{17}\text{O}$  levels deduced  $\gamma$ -branching. Enriched target.

-----  
**Keynumber:** 1976LE27

**Reference:** Phys.Lett. 65B, 201 (1976)

**Authors:** H.C.Lee, F.C.Khanna, M.A.Lone, A.B.McDonald

**Title:** Doubly Radiative Neutron Capture by  $^2\text{H}$ ,  $^3\text{He}$ ,  $^{16}\text{O}$  and  $^{208}\text{Pb}$

**Keyword abstract:** NUCLEAR REACTIONS  $^2\text{H}$ ,  $^3\text{He}$ ,  $^{16}\text{O}$ ,  $^{208}\text{Pb}(n,\gamma)$ , E=th; calculated  $\sigma(2\gamma)$ ,  $\sigma(2\gamma)/\sigma(\gamma)$ .

-----  
**Keynumber:** 1975SM02

**Reference:** Phys.Rev. C11, 1392 (1975)

**Authors:** L.G.Smith, A.H.Wapstra

**Title:** Masses of Isotopes of H, He, C, N, O, and F

**Keyword abstract:** ATOMIC MASSES  $^3\text{H}$ ,  $^3\text{He}$ ,  $^{13}$ ,  $^{14}\text{C}$ ,  $^{14}$ ,  $^{15}\text{N}$ ,  $^{16}\text{O}$ ,  $^{19}\text{F}$ ; measured atomic mass.

**Keyword abstract:** NUCLEAR REACTIONS  $^2\text{H}$ ,  $^3\text{He}$ ,  $^{12}$ ,  $^{13}\text{C}$ ,  $^{14}\text{N}(n,\gamma)$ ; calculated quadrupole moment.

-----  
**Keynumber:** 1974MC06

**Reference:** Phys.Rev. C9, 1790 (1974)

**Authors:** B.H.J.McKellar

**Title:** Analysis of the Parity-Nonconserving Amplitudes of the Reactions  $n + p \rightarrow d + \gamma$  and  $n + d \rightarrow t + \gamma$

**Keyword abstract:** NUCLEAR REACTIONS  $^1\text{H}(n,\gamma)$ ,  $^2\text{H}(n,\gamma)$ , thermal neutrons; formalism for calculating parity-nonconserving effects.

-----  
**Keynumber:** 1973IS08

**Reference:** Nucl.Instrum.Methods 109, 493 (1973)

**Authors:** H.Ishikawa

**Title:** Measurements of Neutron Reaction Cross Sections Using a Liquid Scintillation Spectrometer

**Keyword abstract:** NUCLEAR REACTIONS  $^2\text{H}$ ,  $^{31}\text{P}$ ,  $^{34}\text{S}$ ,  $^{44}\text{Ca}$ ,  $^{62}\text{Ni}(n,\gamma)$ ; measured  $\sigma(E)$ .

**Keynumber:** 1973HA30

**Reference:** Phys.Rev.Lett. 31, 183 (1973)

**Authors:** E.Hadjimichael

**Title:** Meson-Exchange Corrections to the Cross Section for  $n + H^2 \rightarrow H^3 + \gamma$

**Keyword abstract:** NUCLEAR REACTIONS  $^2H(n,\gamma)$ ;  $^3He$  calculated  $\sigma$  for n-d capture.

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**Keynumber:** 1971GR36

**Reference:** Yad.Fiz. 14, 109 (1971); Sov.J.Nucl.Phys. 14, 62 (1972)

**Authors:** D.P.Grechukhin

**Title:** Two-Quantum Radiative Capture of a Slow Neutron by a Proton

**Keyword abstract:** NUCLEAR REACTIONS  $^2H(n,\gamma\gamma)$ ,  $^3He(n,\gamma\gamma)$ , E not given; calculated 2-quantum  $\sigma$  ( $E\gamma, \theta(\gamma)$ ).

-----

**Keynumber:** 1969PR06

**Reference:** Phys.Rev. 180, 945 (1969)

**Authors:** W.V.Prestwich, G.E.Thomas

**Title:** Precision Determination of the D-T Neutron Separation Energy

**Keyword abstract:** NUCLEAR REACTIONS  $^2H(n,\gamma)$ , E= thermal; measured  $E\gamma$ ; deduced Q.

-----

**Keynumber:** 1969MO22

**Reference:** Yadern.Fiz. 9, 163 (1969); Soviet J.Nucl.Phys. 9, 99 (1969)

**Authors:** A.N.Moskalev

**Title:** Effects of Parity Nonconservation in the Capture of Thermal Neutrons by Deuterons

**Keyword abstract:** NUCLEAR REACTIONS  $^2H(n,\gamma)$ , E = thermal; calculated  $\gamma$  circular polarization,  $\sigma$  ( $\theta(\gamma)$ ).

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