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**29 reference(s) found :**

**Keynumber:** 1993KO61

**Reference:** Nucl.Instrum.Methods Phys.Res. A336, 246 (1993)

**Authors:** R.J.Komar, H. -B.Mak

**Title:** Digital Signal Processing for BGO Detectors

**Keyword abstract:** NUCLEAR REACTIONS  ${}^3\text{He}(n,\gamma)$ , E not given; analyzed E $\gamma$  spectra; deduced best resolving time for pile-up identification. Medium energy  $\gamma$ -ray spectrometer, large BGO crystal, other data discussed.

**Keynumber:** [1993KO38](#)

**Reference:** Phys.Rev. C48, 2375 (1993)

**Authors:** R.J.Komar, H. -B.Mak, J.R.Leslie, H.C.Evans, E.Bonvin, E.D.Earle, T.K.Alexander

**Title:**  ${}^3\text{He}(n,\gamma){}^4\text{He}$  Cross Section and the Photodisintegration of  ${}^4\text{He}$

**Keyword abstract:** NUCLEAR REACTIONS  ${}^3\text{He}(n,\gamma)$ , E=0.14-2 MeV; measured absolute  $\sigma(E)$  for  $\theta=90^\circ$ ; deduced  $\sigma(\gamma,p)/\sigma(\gamma,n)$ .  ${}^4\text{He}$  deduced charge symmetry breaking related features. Model comparison.

**Keynumber:** [1992SC12](#)

**Reference:** Phys.Rev. C45, 2628 (1992)

**Authors:** R.Schiavilla, R.B.Wiringa, V.R.Pandharipande, J.Carlson

**Title:** Effects of  $\Delta$ -Isobar Degrees of Freedom on Low-Energy Electroweak Transitions in Few-Body Nuclei

**Keyword abstract:** NUCLEAR STRUCTURE  ${}^3\text{H}(\beta^-)$ ; calculated different contributions to Gamow-Teller matrix element. Variational wave functions with  $\Delta$ -isobar components.

**Keyword abstract:** NUCLEAR REACTIONS  ${}^3\text{He}(n,\gamma)$ , E=thermal; calculated different contributions to the radiative capture reaction.  ${}^3\text{He}(p,e^+\nu)$ , E not given; calculated weak capture reaction matrix element. Variational wave functions with  $\Delta$ -isobar components.

**Keynumber:** 1991WE06

**Reference:** Nucl.Phys. A526, 265 (1991)

**Authors:** R.Wervelman, K.Abrahams, H.Postma, J.G.L.Booten, A.G.M.van Hees

**Title:** Nuclear Capture by  ${}^3\text{He}$  and the Production of Solar Hep-Neutrinos: Cross-section measurements and shell-model calculations

**Keyword abstract:** NUCLEAR REACTIONS  ${}^3\text{He}(n,\gamma)$ , E=thermal, 24.5 keV; measured capture  $\sigma$ . Enriched target. Shell model calculations for  ${}^3\text{He}(n,\gamma)$ , ( $p,e^+\nu(e)$ ), meson exchange currents.

**Keynumber:** [1990CA28](#)

**Reference:** Phys.Rev. C42, 830 (1990)

**Authors:** J.Carlson, D.O.Riska, R.Schiavilla, R.B.Wiringa

**Title:** Radiative Neutron Capture on  ${}^3\text{He}$

**Keyword abstract:** NUCLEAR REACTIONS  ${}^3\text{He}(n,\gamma)$ , E=thermal; calculated  $\sigma$ ; deduced scattering length dependence. Monte Carlo variational methods.

**Keynumber:** 1989WOZY

**Reference:** Bull.Am.Phys.Soc. 34, No.4, 1192, E10 7 (1989)

**Authors:** F.L.H.Wolfs, S.J.Freedman, J.Nelson, S.Dewey, G.Greene

**Title:** Measurement of  ${}^3\text{He}(n,\gamma){}^4\text{He}$  Cross Section at Thermal Energies

**Keyword abstract:** NUCLEAR REACTIONS  ${}^3\text{He}(n,\gamma)$ ,E=thermal; measured  $\gamma$  yield; deduced  ${}^3\text{He}$  (p,e $^+\nu$ ) reaction  $\sigma$ .

**Keynumber:** [1989WO10](#)

**Reference:** Phys.Rev.Lett. 63, 2721 (1989)

**Authors:** F.L.H.Wolfs, S.J.Freedman, J.E.Nelson, M.S.Dewey, G.L.Greene

**Title:** Measurement of the  ${}^3\text{He}(n,\gamma){}^4\text{He}$  Cross Section at Thermal Neutron Energies

**Keyword abstract:** NUCLEAR REACTIONS  ${}^3\text{He}(n,\gamma)$ ,E=thermal; measured capture  $\sigma$ .  ${}^3\text{H}(p,\gamma)$ ,E=1 MeV; measured E $\gamma$ ,I $\gamma$ ; deduced astrophysical S-factor for  ${}^3\text{He}(p,e^+\nu)$  reaction.

**Keynumber:** 1989WE07

**Reference:** Nucl.Sci.Eng. 102, 428 (1989)

**Authors:** R.Wervelman, H.Postma, K.Abrahams, F.Stecher-Rasmussen, G.J.Davids, G.J.C.Bots

**Title:** Cross-Section Measurement of the  ${}^3\text{He}(n,\gamma)$  Reaction at  $E_n = 24.5$  keV

**Keyword abstract:** NUCLEAR REACTIONS  ${}^3\text{He}(n,\gamma)$ ,E=24.5 keV; measured capture  $\sigma$ .

**Keynumber:** 1989DOZX

**Reference:** Contrib.12th Int.Conf. on Few Body Problems in Physics, Vancouver, B.C., Canada, July 2-8, 1989, B.K.Jennings, Ed., p.C5 (1989); TRI-89-2 (1989)

**Authors:** P.Doll, G.Fink, S.Hauber, W.Heeringa, H.O.Klages, H.Schieler, F.Smend, G.Wicke

**Title:** n +  ${}^3\text{He}$  - Radiative Capture to  ${}^4\text{He}$

**Keyword abstract:** NUCLEAR REACTIONS  ${}^3\text{He}(\text{polarized } n,\gamma)$ ,E=20-50 MeV; measured analyzing power vs E.

**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=thermal; calculated radiative capture  $\sigma$ ; deduced single photon  ${}^3\text{He}(n,\gamma)$   $\sigma$ .

**Keynumber:** [1988WA20](#)

**Reference:** Phys.Rev. C38, 1139 (1988)

**Authors:** B.Wachter, T.Mertelmeier, H.M.Hofmann

**Title:** Differences in the Mirror Reactions  ${}^3\text{H}(p,\gamma){}^4\text{He}$  and  ${}^3\text{He}(n,\gamma){}^4\text{He}$  from an Isospin Conserving Nuclear Force

**Keyword abstract:** NUCLEAR REACTIONS  ${}^3\text{H}(p,\gamma)$ ,  ${}^3\text{He}(n,\gamma)$ ,E=0.1-50 MeV; calculated  $\sigma(E\gamma)$ , $\sigma(\theta)$ ; deduced no evidence for charge symmetry breaking. Multi-channel resonating group model.

**Keynumber:** 1982WE05

**Reference:** Phys.Rev. C25, 2111 (1982)

**Authors:** H.R.Weller, N.R.Roberson, G.Mitev, L.Ward, D.R.Tilley

**Title:** Polarized Neutron Capture on  ${}^3\text{He}$  at  $E(n) = 9.0$  MeV

**Keyword abstract:** NUCLEAR REACTIONS  ${}^3\text{He}(\text{polarized } n,\gamma)$ ,E=9 MeV; measured  $\sigma(\theta)$ ,A( $\theta$ ). Legendre polynomial analysis.

**Keynumber:** 1982WAZW

**Reference:** Diss.Abst.Int. 42B, 4469 (1982)

**Authors:** L.B.Ward

**Title:** An Experimental Study of the  ${}^3\text{He}(n,\gamma){}^4\text{He}$  Reaction

**Keyword abstract:** NUCLEAR REACTIONS  ${}^3\text{He}(n,\gamma)$ ,E=6-18 MeV; measured  $\sigma(\theta)$ ,analyzing power vs  $\theta$ ; deduced  $\sigma(\gamma,p)/\sigma(\gamma,n)$  vs excitation energy,E1,E2 contributions. Different reaction theories.

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**Keynumber:** 1981WA18

**Reference:** Phys.Rev. C24, 317 (1981)

**Authors:** L.Ward, D.R.Tilley, D.M.Skopik, N.R.Roberson, H.R.Weller

**Title:** Confirmation of the Photoneutron Cross Section for  ${}^4\text{He}$  below 33 MeV

**Keyword abstract:** NUCLEAR REACTIONS  ${}^3\text{He}(n,\gamma)$ ,E=6-17 MeV; measured  $\sigma(\theta,E)$ ; deduced  $\sigma(\gamma,p)/\sigma(\gamma,n)$  vs E. Detailed balance.

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**Keynumber:** 1981TO03

**Reference:** Nucl.Phys. A356, 445 (1981)

**Authors:** I.S.Towner, F.C.Khanna

**Title:** Meson-Exchange Currents in Thermal n -  ${}^3\text{He}$  Radiative Capture

**Keyword abstract:** NUCLEAR REACTIONS  ${}^3\text{He}(n,\gamma)$ ,E=thermal; calculated  $\sigma$ . Oscillator wave functions,meson exchange effects.

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**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=thermal; analyzed  $\sigma(\text{capture})$  data; deduced meson exchange,two-photon capture,wave function symmetry rule selection effects.

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**Keynumber:** 1980WAZT

**Coden:** JOUR BAPSA 25 575,HF13,Ward

**Keyword abstract:** NUCLEAR REACTIONS  ${}^3\text{He}(n,\gamma)$ ,E=6-14.5 MeV; measured  $\sigma(E\gamma),\gamma(\theta)$ . Pulsed beam.

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**Keynumber:** 1980WAZH

**Coden:** CONF Berkeley(Int Conf on Nucl Phys) Proc,P177,Ward

**Keyword abstract:** NUCLEAR REACTIONS  ${}^3\text{He}(\text{polarized } n,\gamma)$ ,E=6-14.5 MeV; measured  $\sigma(\theta),A(\theta)$ .  ${}^4\text{He}$  deduced triplet E1 transition matrix element.

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**Keynumber:** 1980AL05

**Reference:** Yad.Fiz. 31, 21 (1980); Sov.J.Nucl.Phys. 31, 10 (1980)

**Authors:** V.P.Alfimenkov, S.B.Borzakov, G.G.Bunatyan, J.Wierzbicki, L.B.Pikelner, E.I.Sharapov

**Title:** Radiative Capture of Thermal Neutrons by  ${}^3\text{He}$

**Keyword abstract:** NUCLEAR REACTIONS  ${}^3\text{He}(n,\gamma)$ ,E=th; measured  $\sigma$ .  ${}^4\text{He}$  deduced mixed symmetry level.

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**Keynumber:** 1979SU05

**Reference:** Nucl.Phys. A318, 54 (1979)

**Authors:** M.Suffert, R.Bertholet

**Title:** Observation of Doubly Radiative Neutron Capture by  $^3\text{He}$

**Keyword abstract:** NUCLEAR REACTIONS  $^3\text{He}(n,\gamma),E=\text{th}$ ; measured  $\sigma$  for double-photon emission. Enriched target.

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**Keynumber:** 1979ALZS

**Coden:** REPT JINR-E15-12380, V P Alfimenkov, 10/5/79

**Keyword abstract:** NUCLEAR REACTIONS  $^3\text{He}(n,\gamma),E=\text{thermal}$ ; measured  $\sigma$ .  $^4\text{He}$  level deduced admixture of symmetry; calculated  $\sigma(E),M1$  transitions,Gaussian wave functions for  $^3, ^4\text{He}$ .

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**Keynumber:** 1979AL25

**Reference:** Pisma Zh.Eksp.Teor.Fiz. 29, 100 (1979); JETP Lett. 29, 91 (1979)

**Authors:** V.P.Alfimenkov, S.B.Borzakov, J.Wierzbicki, O.N.Ovchinnikov, L.B.Pikelner, E.I.Sharapov

**Title:** Radiative Capture of  $\text{He}^3$  Neutrons in the Energy Interval 1-70 keV

**Keyword abstract:** NUCLEAR REACTIONS  $^3\text{He}(n,\gamma),E=1-70$  keV; measured  $\sigma(E,E\gamma)$ .

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**Keynumber:** 1978ALYX

**Coden:** REPT JINR-E3-11989,V P Alfimenkov

**Keyword abstract:** NUCLEAR REACTIONS  $^3\text{He}(n,\gamma),E=1-70$  keV; measured  $\sigma(E,\theta)$ .

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

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**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.

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**Keynumber:** 1973BOYA

**Coden:** JOUR BAPSA 18 591 DE1

**Keyword abstract:** NUCLEAR REACTIONS  $^3\text{He}(n,\gamma)$ ; measured  $\sigma$ .

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**Keynumber:** 1973BOWJ

**Coden:** REPT ANL-8035 P11

**Keyword abstract:** NUCLEAR REACTIONS  $^3\text{He}(n,\gamma)$ ; measured  $\sigma(E\gamma)$ .

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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  $^2\text{H}(n,\gamma\gamma), ^3\text{He}(n,\gamma\gamma),E$  not given; calculated 2-quantum  $\sigma(E\gamma,\theta(\gamma))$ .

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**Keynumber:** 1964IM03

**Reference:** Nucl.Phys. 59, 81 (1964)

**Authors:** W.L.Imhof, F.J.Vaughn, L.F.Chase, Jr., H.A.Grench, M.Walt

**Title:** A Search for  $H^4$  and  $Li^4$

**Keyword abstract:** RADIOACTIVITY  $^4H$ ,  $^4Li$ ; measured no  $\beta$ (16-21 MeV).

**Keyword abstract:** NUCLEAR REACTIONS  $^3He(n,\gamma)$ ,  $E_n$ =thermal, 0.03-1.20 keV;  $^3H(d,p)$ ,  $E_d$ =2.5 MeV;  $^3He(p,\gamma)$ ,  $E_p$ =0.5-2.6 MeV;  $^3He(d,n)$ ,  $E_d$ =0.5-2.3 MeV; measured no  $\beta$ ; deduced  $\sigma$  limits.  $^3He(p,\gamma)$  measured no  $\gamma$ ; deduced  $\sigma$  limit for  $-0.6 < Q < +4.0$  MeV.

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