NSR Search Results Page 1 of 23

Visit the **Isotope Explorer** home page!

152 reference(s) found:

Keynumber: 2001KH07

Reference: Yad.Fiz. 64, No 3, 570 (2001); Phys.Atomic Nuclei 64, 516 (2001)

Authors: I.B.Khriplovich

Title: Variations on the Deuteron Theme

Keyword abstract: NUCLEAR STRUCTURE ²H; calculated quadrupole, anapole moments.

Comparison with scattering data.

Keyword abstract: NUCLEAR REACTIONS 1 H(polarized n, γ),E=thermal; calculated photon

polarization.

· -----

Keynumber: 2000SN02

Reference: Nucl.Instrum.Methods Phys.Res. A440, 729 (2000)

Authors: W.M.Snow, A.Bazhenov, C.S.Blessinger, J.D.Bowman, T.E.Chupp, K.P.Coulter,

S.J.Freedman, B.K.Fujikawa, T.R.Gentile, G.L.Greene, G.Hansen, G.E.Hogan, S.Ishimoto, G.L.Jones, J.N.Knudson, E.Kolomenski, S.K.Lamoreaux, M.B.Leuschner, A.Masaike, Y.Masuda, Y.Matsuda, G.L.Morgan, K.Morimoto, C.L.Morris, H.Nann, S.I.Penttila, A.Pirozhkov, V.R.Pomeroy, D.R.Rich, A.Serebrov, E.I.Sharapov, D.A.Smith, T.B.Smith, R.C.Welsh, F.E.Wietfeldt, W.S.Wilburn, V.W.Yuan, J.Zerger

Title: Measurement of the Parity Violating Asymmetry A_{γ} in $n(pol) + p \rightarrow d + \gamma$

Keyword abstract: NUCLEAR REACTIONS 1 H(polarized n, γ),E=low; calculated parity violation measurement systematic effects. Experiment proposal.

Keynumber: 2000RU07

Reference: Nucl.Phys. A678, 405 (2000)

Authors: G.Rupak

Title: Precision Calculation of np \rightarrow d γ Cross Section for Big-Bang Nucleosynthesis

Keyword abstract: NUCLEAR REACTIONS ${}^{1}H(n,\gamma)$, E(cm) < 1 MeV; ${}^{2}H(\gamma,n)$, E=2-10 MeV;

calculated σ . Effective field theory. Applications to big-bang nucleosynthesis discussed.

Keynumber: 2000PA03

Reference: Phys.Lett. 472B, 232 (2000)

Authors: T.-S.Park, K.Kubodera, D.-P.Min, M.Rho

Title: Effective Field Theory Approach to $n(pol) + p(pol) \rightarrow d + \gamma$ at Threshold

Keyword abstract: NUCLEAR REACTIONS ¹H(polarized n, γ),E not given; calculated polarization

observables. Effective field theory, polarized target.

Keynumber: 2000MU04

Reference: Nucl.Instrum.Methods Phys.Res. A440, 736 (2000)

Authors: T.M.Muller, D.Dubbers, P.Hautle, E.I.Bunyatova, E.I.Korobkina, O.Zimmer

Title: Measurement of the γ -Anisotropy in $n(pol) + p(pol) \rightarrow d + \gamma$

Keyword abstract: NUCLEAR REACTIONS 1 H(polarized n, γ), E=low; measured E γ , I γ (θ), γ -

anisotropy. Polarized target.

Keynumber: 2000IV06

Reference: Eur.Phys.J. A 8, 223 (2000)

Authors: A.N.Ivanov, H.Oberhummer, N.I.Troitskaya, M.Faber

NSR Search Results Page 2 of 23

Title: Dynamics of Low-Energy Nuclear Forces for Electromagnetic and Weak Reactions with the Deuteron in the Nambu-Jona-Lasinio Model of Light Nuclei

Keyword abstract: NUCLEAR REACTIONS 1 H(n,γ),E=thermal; 2 H(γ,n),E=2.62-4.45 MeV; 2 H(ν,e⁻p),E=4-10 MeV; calculated σ. 1 H(p,X),E=low; calculated spectroscopic factor Spp(0). 2 H(ν-bar,e⁺n), 2 H(ν,nν),E not given; calculated σ averaged over antineutrino energy spectrum. Astrophysics relevance discussed.

Keynumber: 2000DE25

Reference: J.Res.Natl.Inst.Stand.Technol. 105, 11 (2000)

Authors: M.S.Dewey, E.G.Kessler, Jr.

Title: Precision Measurement of Fudamental Constants using GAMS4

Keyword abstract: NUCLEAR REACTIONS ¹H, ³⁵Cl(n,γ),E=reactor; measured Eγ,Iγ. ²H, ³⁶Cl

deduced binding energies. Crystal diffraction method.

Keynumber: 1999ZHZM

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

Authors: C.Zhou

Title: Prompt γ -Ray Data Evaluation of Thermal-Neutron Capture for A = 1 ϑ 25

Keyword abstract: NUCLEAR REACTIONS ¹, ²H, ⁶, ⁷Li, ⁹Be, ¹², ¹³C, ¹⁴N, ¹⁶, ¹⁷O, ¹⁹F, ²⁰, ²¹,

²²Ne, ²³Na, ²⁴, ²⁵Mg(n, γ),E=thermal; compiled, evaluated prompt γ -ray data.

Keynumber: 1999SA23

Reference: Nucl.Phys. A652, 273 (1999)

Authors: M.J.Savage, K.A.Scaldeferri, M.B.Wise **Title:** $n + p \rightarrow d + \gamma$ in Effective Field Theory

Keyword abstract: NUCLEAR REACTIONS 1 H(n, γ),E=low; calculated σ ; deduced contributions.

Effective field theory.

Keynumber: 1999PA05

Reference: Nucl.Phys. A646, 83 (1999)

Authors: T.-S.Park, K.Kubodera, D.-P.Min, M.Rho

Title: The Power of Effective Field Theories in Nuclei: The deuteron, NN scattering and electroweak

processes

Keyword abstract: NUCLEAR REACTIONS 1 H(p,e $^{+}$), (n, γ),E=low; calculated phase shifts,matrix elements; deduced pion role,cut-off parameter. Effective field theory.

Keynumber: <u>1999KO23</u>

Reference: Phys.Rev. C59, 3473 (1999) **Authors:** Y.Ko, M.K.Cheoun, II.-T.Cheon

Title: Importance of the Doppler Effect for the Determination of the Deuteron Binding Energy

Keyword abstract: NUCLEAR REACTIONS 1 H(n, γ),E not given; analyzed data; deduced Doppler

effects in deuteron binding energy uncertainty.

Kevnumber: 1999KE05

Reference: Phys.Lett. 255A, 221 (1999)

Authors: E.G.Kessler, Jr., M.S.Dewey, R.D.Deslattes, A.Henins, H.G.Borner, M.Jentschel, C.Doll,

H.Lehmann

Title: The Deuteron Binding Energy and the Neutron Mass

Keyword abstract: NUCLEAR REACTIONS 1 H(n, γ),E=reactor; measured E γ ,I γ . 2 H deduced binding

NSR Search Results Page 3 of 23

energy. ¹n deduced mass. Crystal diffraction spectrometer.

Keynumber: 1999KA11

Reference: Phys.Lett. 449B, 1 (1999)

Authors: D.B.Kaplan, M.J.Savage, R.P.Springer, M.B.Wise

Title: An Effective Theory Calculation of the Parity Violating Asymmetry in $n(pol) + p \rightarrow d + \gamma$

Keyword abstract: NUCLEAR REACTIONS ¹H(polarized n, γ), E not given; calculated parity violating

asymmetry.

Keynumber: <u>1999CH38</u>

Reference: Phys.Rev. C60, 065205 (1999)

Authors: J.-W.Chen, M.J.Savage

Title: np \rightarrow d γ for Big-Bang Nucleosynthesis

Keyword abstract: NUCLEAR REACTIONS ${}^{1}H(n,\gamma)$, E(cm) < 1 MeV; ${}^{2}H(\gamma,n)$, E=2.6-9.0 MeV;

calculated σ. Pionless nucleon-nucleon effective field theory.

Keynumber: 1999CH31

Reference: Phys.Lett. 464B, 1 (1999) **Authors:** J.W.Chen, G.Rupak, M.J.Savage

Title: Isoscalar M1 and E2 Amplitudes in np \rightarrow d γ

Keyword abstract: NUCLEAR REACTIONS ${}^{1}H(n,\gamma)$, E=low; calculated isoscaler M1 and E2

amplitudes.

Keyword abstract: NUCLEAR STRUCTURE ²H; calculated quadrupole form factor.

Keynumber: 1999CH21

Reference: Nucl.Phys. A653, 386 (1999) **Authors:** J.-W.Chen, G.Rupak, M.J.Savage

Title: Nucleon-Nucleon Effective Field Theory without Pions

Keyword abstract: NUCLEAR REACTIONS 1 H(n, γ),E=low; calculated σ ,effective range parameters.

Effective field theory without pions.

Keyword abstract: NUCLEAR STRUCTURE ²H; calculated form factors. Effective field theory

without pions.

Keynumber: <u>1999BU10</u>

Reference: Phys.Rev.Lett. 82, 4176 (1999)

Authors: S.Burles, K.M.Nollett, J.W.Truran, M.S.Turner **Title:** Sharpening the Predictions of Big-Bang Nucleosynthesis

Keyword abstract: NUCLEAR REACTIONS ${}^{1}H(n,\gamma)$, ${}^{2}H(p,\gamma)$, (d,p), (d,n), ${}^{3}H(\alpha,\gamma)$, (d,n), ${}^{3}He(\alpha,\gamma)$,

(d,p), (n,p), $^{7}Li(p,\alpha)$, (p,n), E < 2000 keV; analyzed data. ^{2}H , 3 , ^{4}He , ^{7}Li ; deduced big-bang

nucleosynthesis yields, sources of uncertainty.

Keynumber: <u>1998PA21</u>

Reference: Phys.Rev. C58, R637 (1998)

Authors: T.-S.Park, K.Kubodera, D.-P.Min, M.Rho

Title: Effective Field Theory for Low-Energy Two-Nucleon Systems

Keyword abstract: NUCLEAR REACTIONS ${}^{1}H(n,\gamma)$, E(cm) < 220 MeV; calculated phase shift, M1

transition amplitude; deduced little cutoff dependence. Effective field theory.

NSR Search Results Page 4 of 23

Keynumber: 1998FI02

Reference: Phys.Rev. D58, 063506 (1998)

Authors: G.Fiorentini, E.Lisi, S.Sarkar, F.L.Villante

Title: Quantifying Uncertainies in Primordial Nucleosynthesis without Monte Carlo Simulations **Keyword abstract:** NUCLEAR REACTIONS ${}^{1}H(n,\gamma)$, ${}^{2}H(p,\gamma)$, (d,n), (d,p), ${}^{3}H(d,n)$, (α,γ) , ${}^{3}He(n,p)$, (d,p), (α,γ) , ${}^{7}Li(p,\alpha)$, ${}^{7}Be(n,p)$, E not given; analyzed reaction rate uncertanties; deduced uncertainties in elemental abundances from primordial nucleosynthesis. Monte Carlo calculations.

Keynumber: 1997RO26

Reference: IEEE Trans.Instrum.Meas. 46, 560 (1997)

Authors: S.Rottger, A.Paul, U.Keyser

Title: Prompt (n,γ) -Spectrometry for the Isotopic Analysis of Silicon Crystals for the Avogadro Project **Keyword abstract:** NUCLEAR REACTIONS 1 H, 14 N, 28 , 29 Si, 56 Fe, 27 Al, 63 Cu (n,γ) ,E=thermal;

measured Eγ,Iγ.

Keyword abstract: ATOMIC MASSES ¹, ²H, ¹⁴, ¹⁵N, ²⁸, ²⁹, ³⁰, ³¹, ³²Si, ⁵⁶, ⁵⁷Fe; measured neutron-

induced y spectra; deduced mass differences.

Keynumber: <u>1997NA22</u>

Reference: Phys.Rev. C56, 3173 (1997)

Authors: Y.Nagai, T.S.Suzuki, T.Kikuchi, T.Shima, T.Kii, H.Sato, M.Igashira

Title: Measurement of the 1 H(n, γ) 2 H Reaction Cross Section at a Comparable M1/E1 Strength **Keyword abstract:** NUCLEAR REACTIONS 1 H(n, γ),E=550 keV; measured E γ ,I γ , σ ; deduced

transition M1,E1 components,meson exchange currents role.

Keynumber: 1997IV02

Reference: Nucl. Phys. A617, 414 (1997); Erratum Nucl. Phys. A625, 896 (1997)

Authors: A.N.Ivanov, N.I.Troitskaya, M.Faber, H.Oberhummer **Title:** On the Relativistic Field Theory Model of the Deuteron II

Keyword abstract: NUCLEAR REACTIONS ${}^{1}H(n,\gamma)$, E=low; ${}^{1}H(p,X)$, E=low; calculated radiative

capture, fusion σ respectively. Relativistic field theory model.

Keynumber: 1997CS05

Reference: Phys.Rev. C56, 631 (1997) **Authors:** A.Csoto, B.F.Gibson, G.L.Payne

Title: Parity Conserving γ Asymmetry in n-p Radiative Capture

Keyword abstract: NUCLEAR REACTIONS 1 H(polarized n, γ),E=cold; calculated parity conserving γ

asymmetry; deduced weak pion coupling constant extraction related features.

Keynumber: 1996SC19

Reference: Acta Phys.Pol. B27, 263 (1996) **Authors:** Y.Schutz, and the TAPS Collaboration **Title:** Subthreshold Photons in Heavy-Ion Collisions

Keyword abstract: NUCLEAR REACTIONS 1 H(n, γ),E not given; calculated bremsstrahlung photon production probability. Ta(197 Au,X),E=40 MeV/nucleon; Ni(Ni,X),E=60 MeV/nucleon; calculated two-photon correlation function. Sub-threshold bremsstrahlung photons.

Keynumber: 1996PA04

Reference: Nucl. Phys. A596, 515 (1996)

NSR Search Results Page 5 of 23

Authors: T.-S.Park, D.-P.Min, M.Rho

Title: Chiral Lagrangian Approach to Exchange Vector Currents in Nuclei

Keyword abstract: NUCLEAR REACTIONS 1 H(n, γ),E=thermal; calculated σ . Chiral Lagrangian

approach, exchange vector currents.

Keynumber: 1996NA27

Reference: Hyperfine Interactions 103, 43 (1996)

Authors: Y.Nagai, T.Shima, T.S.Suzuki, H.Sato, T.Kikuchi, T.Kii, M.Igashira, T.Ohsaki

Title: Fast Neutron Capture Reactions in Nuclear Astrophysics

Keyword abstract: NUCLEAR REACTIONS 1 H, 12 C, 16 O(n, γ),E=10-300 keV; measured E γ ,I γ ,capture σ at some neutron energies. Implications for primordial and stellar nucleosynthesis.

Keynumber: 1996LY02

Reference: Yad.Fiz. 59, No 2, 282 (1996); Phys.Atomic Nuclei 59, 262 (1996)

Authors: V.L.Lyuboshitz, M.I.Podgoretsky

Title: Soft-Photon Bremsstrahlung in Elastic pp and np Scattering and the Problem of Dibaryon

Resonances

Keyword abstract: NUCLEAR REACTIONS ${}^{1}H(n,\gamma)$, $(p,\gamma X)$, $E \approx$ resonance; calculated bremsstrahlung soft photon production σ ; deduced relevance to dibaryon resonances parameter determination.

Keynumber: 1996CH43

Reference: J.Nucl.Sci.Technol.(Tokyo) 33, 654 (1996)

Authors: S.Chiba, S.-I.Morioka, T.Fukahori

Title: Evaluation of Neutron Cross Sections of Hydrogen from 20 MeV to 1 GeV

Keyword abstract: NUCLEAR REACTIONS ${}^{1}H(n,n)$, (n,n'), (n,γ) , E=0.02-1 GeV; compiled, evaluated

total, capture $\sigma(E)$, $\sigma(\theta)$ data.

, **1**

Keynumber: <u>1995XU03</u>

Reference: Phys.Rev. C52, 2859 (1995)

Authors: G.Xu, S.F.Pate, C.Bloch, S.E.Vigdor, S.M.Bowyer, T.W.Bowyer, W.W.Jacobs, H.O.Meyer,

E.Pierce, J.Sowinski, C.Whiddon, S.W.Wissink, P.L.Jolivette, M.A.Pickar

Title: Radiative Capture of Polarized Neutrons by Polarized Protons at T(n) = 183 MeV

Keyword abstract: NUCLEAR REACTIONS 1 H(polarized n, γ),E=183 MeV; measured $\sigma(\theta)$,proton-

,neutron analyzing powers,normal-component spin correlation coefficent. Polarized target.

Keynumber: 1995WO05

Reference: Nucl.Instrum.Methods Phys.Res. B99, 757 (1995)

Authors: P.C. Womble, F.J. Schultz, G. Vourvopoulos

Title: Non-Destructive Characterization using Pulsed Fast-Thermal Neutrons

Keyword abstract: NUCLEAR REACTIONS 1 H,N,Cl,S,Ca(n, γ),C,O,Ba(n,n' γ),E=14.7 MeV; measured γ spectra. Pulsed fast thermal neutrons,application to nondestructive chemical elements

identification.

Keynumber: 1995SU10

Reference: Astrophys.J. 439, L59 (1995)

Authors: T.S.Suzuki, Y.Nagai, T.Shima, T.Kikuchi, H.Sato, T.Kii, M.Igashira

Title: First Measurement of a $p(n, \gamma)$ d Reaction Cross Section between 10 and 80 keV

Keyword abstract: NUCLEAR REACTIONS 1 H(n, γ),E=10-80 keV; measured E γ ,I γ ; deduced σ

NSR Search Results Page 6 of 23

(E), primordial light elements abundances implications.

Keynumber: <u>1995PA38</u>

Reference: Phys.Rev.Lett. 74, 4153 (1995) **Authors:** T.-S.Park, D.-P.Min, M.Rho

Title: Radiative Neutron-Proton Capture in Effective Chiral Lagrangians

Keyword abstract: NUCLEAR REACTIONS ${}^{1}H(n,\gamma)$, E=thermal; calculated total capture $\sigma(E)$. Chiral

perturbation theory.

Keynumber: 1995BR14

Reference: Phys.Lett. 349B, 272 (1995)

Authors: F.P.Brady, J.L.Romero, D.R.Mayo, J.E.Koster, R.O.Nelson, S.A.Wender

Title: 'Photon Spectrum of the Neutron-Proton Bremsstrahlung at 170 MeV ': Contributions of np \rightarrow dy

to inclusive photon energy spectra from np and pd collisions near 200 MeV

Keyword abstract: NUCLEAR REACTIONS 1 H(n, γ),E=170 MeV; 2 H(p, γ),E=195,200 MeV; analyzed

 $\sigma(\theta, E\gamma)$ data; deduced capture process role in reaction, implications to free np bremsstrahlung.

Keynumber: 1995BR12

Reference: Phys.Lett. 348B, 283 (1995)

Authors: E.L.Bratkovskaya, O.V.Teryaev, V.D.Toneev

Title: Anisotropy of Dilepton Emission from Nuclear Collisions

Keyword abstract: NUCLEAR REACTIONS 1 H(n, γ), (p, γ), E not given; calculated dilepton production

related anisotropy coefficient M dependence. Other dilepton sources studied.

Keynumber: 1994TU03

Reference: Nucl. Phys. A580, 253 (1994)

Authors: M. Tuccillo, D. Fritschi, J. Gotz, R. Henneck, J. Jourdan, G. Masson, H. Muhry, L. M. Qin,

S.Robinson, P.Steiner, I.Sick, P.Trueb, B.Zihlmann

Title: Measurement of the Analyzing Power A(y) in Neutron-Proton Radiative Capture at E(n) = 68

MeV

Keyword abstract: NUCLEAR REACTIONS ¹H(polarized n, γ),E=67.7 MeV; measured analyzing

power A(y) vs θ . Polarized neutrons,BC400 target.

Keynumber: 1994SE17

Reference: Nucl.Instrum.Methods Phys.Res. A339, 556 (1994) **Authors:** K.Senoo, Y.Nagai, T.Shima, T.Ohsaki, M.Igashira

Title: A Monte Carlo Code for Multiple Neutron Scattering Events in a Thick Sample for (n, γ)

Experiments

Keyword abstract: NUCLEAR REACTIONS ${}^{1}H(n,\gamma)$, E=10-80 keV; measured γ yields; deduced

multiple scattering events correction role. Time-introduced Monte Carlo estimation code.

Keynumber: 1994RU08

Reference: Nucl. Phys. A575, 449 (1994)

Authors: G.Russo

Title: Classical Photon Production in Neutron-Proton Collisions

Keyword abstract: NUCLEAR REACTIONS 1 H(n, γ),E=100-400 MeV; calculated $\sigma(\theta \gamma, E \gamma)$

bremsstrahlung, $\sigma(E)$. ${}^{2}H(p,\gamma)$, E=200 MeV; calculated $\sigma(\theta\gamma, E\gamma)$ bremsstrahlung. Classical approach.

Keynumber: 1994KR20

NSR Search Results Page 7 of 23

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, ¹H, ³⁵Cl, ⁵⁷Fe, ⁷⁹, ⁸¹Br, ¹¹¹, ¹¹³Cd, ¹¹⁷Sn, ¹³⁹La, ²⁰⁷Pb(polarized n, γ),E=thermal,resonance; compiled,reviewed parity violation data,analyses; deduced

dominant mechanism.

Kevnumber: 1994KI27

Reference: Nucl.Instrum.Methods Phys.Res. A353, 285 (1994)

Authors: T.Kishikawa, K.Nishimura, S.Noguchi

Title: Gamma-Ray Spectrometry with a Ge Detector: An importance of instrument function on a new

energy calibration method

Keyword abstract: NUCLEAR REACTIONS 35 Cl, 1 H(n,γ),E=thermal; analyzed γ-spectra analysis associated reference index; deduced methodological devation related features for peak position approach to detector energy calibration.

Keyword abstract: ATOMIC PHYSICS,Mesic-Atoms Ca,Ba,Sn,Tl,Pb,Ba,Ce(μ -,X),E at rest; analyzed X-ray spectra analysis associated reference index; deduced methodological devation related features for peak position approach to detector energy calibration.

Keynumber: 1993PA08

Reference: Phys.Rev.Lett. 70, 3205 (1993)

Authors: S.F.Pate, C.Bloch, G.Xu, S.M.Bowyer, T.W.Bowyer, W.W.Jacobs, H.-O.Meyer, E.Pierce,

J.Sowinski, S.E.Vigdor, C.Whiddon, S.W.Wissink, P.L.Jolivette, M.A.Pickar

Title: Spin Correlation and Analyzing Power Measurements for Neutron-Proton Radiative Capture at T

(n) = 183 MeV

Keyword abstract: NUCLEAR REACTIONS ¹H(polarized n, γ),E=183 MeV; measured spin correlation coefficient, analyzing power vs θ; deduced mesonic, isobaric current role. Polarized target.

Keynumber: 1993KO53

Reference: Nucl.Instrum.Methods Phys.Res. B79, 297 (1993)

Authors: J.E.Koster, R.O.Nelson, M.E.Schillaci, S.A.Wender, D.Mayo, F.P.Brady, J.Romero, D.Krofcheck, M.Blann, P.Anthony, V.R.Brown, L.Hansen, B.Pohl, T.C.Sangster, H.Nifenecker,

J.A.Pinston

Title: Neutron-Proton Bremsstrahlung Experiments

Keyword abstract: NUCLEAR REACTIONS 1 H(n, γ),E=138-401 MeV; measured γ rays. Tof

techniques.

Keynumber: 1993KO20

Reference: J.Phys.(London) G19, 921 (1993)

Authors: V.B.Kopeliovich

Title: On Relativistic Effects in Parity-Violating np \rightarrow dy Amplitude

Keyword abstract: NUCLEAR REACTIONS 1 H(n, γ), E not given; calculated parity violating

amplitude. Relativistic effects.

Keynumber: 1993HA40

Reference: Nucl.Instrum.Methods Phys.Res. B83, 557 (1993) **Authors:** O.K.Harling, J.-M.Chabeuf, F.Lambert, G.Yasuda

Title: A Prompt Gamma Neutron Activation Analysis Facility using a Diffracted Beam

Keyword abstract: NUCLEAR REACTIONS ¹H,B,Gd,Cd, ⁵⁹Co,Sm,Cl,In(n,γ),E=0.0143 eV;

NSR Search Results Page 8 of 23

measured $E\gamma$; deduced diffracted beam facility detection sensitivities. Multi-layered graphite monochromator beam diffractor, prompt γ neutron activation analysis facility.

Keynumber: 1993GO26

Reference: Few-Body Systems 14, 91 (1993)

Authors: J.J.Godina, J.L.Lucio

Title: Neutron-Proton Bremsstrahlung at E = 76 MeV

Keyword abstract: NUCLEAR REACTIONS 1 H(n, γ),E not given; calculated electric,magnetic

contributions to bremsstrahlung σ vs nucleon momentum.

Keynumber: 1993AL14

Reference: Phys.Lett. 314B, 173 (1993)

Authors: M.S.Allie, F.D.Brooks, D.G.Aschman, A.Buffler, W.A.Cilliers, R.W.Fearick,

C.G.L.Henderson, M.J.Oliver, M.R.Nchodu, S.M.Perez, D.Steyn, W.R.McMurray, B.R.S.Simpson,

F.D.Smit, H.G.Miller, K.Bharuth-Ram, I.J.van Heerden

Title: Differential Cross Section for n-p Radiative Capture at E(n) = 63.4 MeV

Keyword abstract: NUCLEAR REACTIONS 1 H(n, γ),E=63.4 MeV; measured I γ (θ); deduced σ (θ) for

 2 H(γ,p),E ≈ 34 MeV. Legendre polymonial fits.

Keynumber: 1992ED02

Reference: Nucl.Phys. A543, 685 (1992)

Authors: G.W.R.Edwards, R.Abegg, M.Ahmad, J.M.Cameron, G.H.Coombes, N.Davison, H.Fielding,

P.Green, L.G.Greeniaus, I.J.van Heerden, R.Henderson, D.A.Hutcheon, W.Kellner, C.Lapointe,

C.A.Miller, G.A.Moss, N.L.Rodning, G.Salomons, J.Soukup, B.Ziegler

Title: Forward $p(n,d)\gamma$ Cross Sections Above the Pion Production Threshold

Keyword abstract: NUCLEAR REACTIONS 1 H(n, γ),E=360-460 MeV; measured $\sigma(\theta)$. Model

comparison.

Keynumber: 1992BAZP

Reference: Leningrad Nucl.Phys.Inst., 1990-1991 Ann.Rept., p.35 (1992)

Authors: A.N.Bazhenov, L.A.Grigoreva, V.V.Ivanov, E.A.Kolomensky, V.M.Lobashev,

V.A.Nazarenko, A.N.Pirozhkov, Yu.V.Sobolev

Title: Circular Polarization of γ -Quanta from np \rightarrow d γ Reaction with Polarized Neutrons

Keyword abstract: NUCLEAR REACTIONS 1 H(polarized n, γ), E not given; measured γ CP.

Keynumber: 1992BA43

Reference: Phys.Lett. 289B, 17 (1992)

Authors: A.N.Bazhenov, L.A.Grigoreva, V.V.Ivanov, E.A.Kolomensky, V.M.Lobashev,

V.A.Nazarenko, A.N.Pirozhkov, Yu.V.Sobolev

Title: Circular Polarization of γ-Quanta in np \rightarrow dγ Reactions with Polarized Neutrons

Keyword abstract: NUCLEAR REACTIONS ¹H(polarized n, γ), E=cold neutron source; measured γ

CP. High purity solid parahydrogen target, magnetic transmission polarimeters.

Keynumber: 1991FI07

Reference: Nucl. Phys. A530, 331 (1991)

Authors: G.Fink, P.Doll, S.Hauber, M.Haupenthal, H.O.Klages, H.Schieler, F.Smend, G.D.Wicke

Title: Neutron-Proton Capture Using Polarized Neutrons from 19 to 50 MeV

Keyword abstract: NUCLEAR REACTIONS 1 H(polarized n, γ),E=19-50 MeV; measured σ

 (θ) , analyzing power vs θ . NE213 target.

NSR Search Results Page 9 of 23

Keynumber: 1990MO37

Reference: Izv.Akad.Nauk SSSR, Ser.Fiz. 54, 907 (1990); Bull.Acad.Sci.USSR, Phys.Ser. 54, No.5, 91

(1990)

Authors: A.N.Moskalev, S.G.Porsev

Title: T-Odd (P-Even) Interaction between Nucleons in the np \rightarrow dy Reaction

Keyword abstract: NUCLEAR REACTIONS ¹H(polarized n, γ), E=low; calculated γ CP; deduced T-

odd (P-even) nucleon-nucleon interaction features.

Keynumber: 1990MO14

Reference: J.Phys.(London) G16, 943 (1990)

Authors: S.Morioka

Title: Relativistic Effects on Parity-Violating Phenomena in the Low-Energy np \rightarrow d γ Process **Keyword abstract:** NUCLEAR REACTIONS 1 H(n, γ),E=low; calculated γ CP,asymmetry.

Lorentz, gauge-invariant formalism.

Keynumber: 1990BU20

Reference: Nucl.Phys. A515, 139 (1990) **Authors:** A.P.Burichenko, I.B.Khriplovich

Title: Circular Polarization of γ-Quanta in the Reaction np \rightarrow dγ with Polarized Neutrons **Keyword abstract:** NUCLEAR REACTIONS 1 H(polarized n,γ),E=thermal; calculated γ CP.

Keynumber: 1990BLZX

Reference: Bull.Am.Phys.Soc. 35, No.8, 1658, BD 2 (1990)

Authors: C.Bloch, S.F.Pate, S.E.Vigdor, J.Sowinski, S.W.Wissink, H.O.Meyer, W.W.Jacobs,

S.M.Bowyer, T.W.Bowyer, E.Pierce, C.Whiddon, G.Xu, M.A.Pickar, P.L.Jolivette

Title: Report on Measurement of C(NN) and A(y) for p(pol)(n(pol),d) γ at T(n) = 183 MeV **Keyword abstract:** NUCLEAR REACTIONS ¹H(polarized n, γ),E=183 MeV; measured d γ -

coin, polarization observables.

Keynumber: 1989WAZM

Reference: Contrib.12th Int.Conf. on Few Body Problems in Physics, Vancouver, B.C., Canada, July 2-

8, 1989, B.K.Jennings, Ed., p.C17 (1989); TRI-89-2 (1989)

Authors: P.Wauters, C.Dupont, P.Leleux, P.Lipnik, P.Macq, A.Ninane, S.Wa Kitwanga

Title: Total Cross Section for Neutron-Proton Capture at 39,61 and 76 MeV

Keyword abstract: NUCLEAR REACTIONS 1 H(n, γ),E=39,61,76 MeV; measured capture σ ; deduced

photodisintegration σ .

Keynumber: 1989SUZQ

Reference: RCNP (Osaka), Ann.Rept., 1988, p.61 (1989)

Authors: T.Suda, K.Maeda, K.Takahisa, H.Sakai, N.Matsuoka, M.Yosoi, K.Tamura, H.Okamura,

Title: Measurement of the Analyzing Power for the $p(n(pol), \gamma)$ Reaction

Keyword abstract: NUCLEAR REACTIONS 1 H(polarized n, γ),E=20-50 MeV; measured A(y)(θ).

Keynumber: 1989NA04

Reference: Phys.Rev. C39, 1475 (1989)

Authors: K.Nakayama

Title: High-Energy Photons in Neutron-Proton and Proton-Nucleus Collisions

Keyword abstract: NUCLEAR REACTIONS 1 H(n, γ),E=200,150 MeV; 9 Be(p, γ),E=140 MeV;

NSR Search Results Page 10 of 23

calculated bremsstrahlung $\sigma(\theta(\gamma), E(\gamma))$.

Keynumber: 1989MI09

Reference: J.Phys.(London) G15, 1025 (1989)

Authors: P.Michel, K.Moeller, J.Moesner, G.Schmidt

Title: Measurement of the Capture Reaction $H(n,d)\gamma$ at 25.6 MeV

Keyword abstract: NUCLEAR REACTIONS 1 H(n, γ),E=25.6 MeV; measured E γ , σ (θ =0); deduced σ .

Keynumber: 1989GRZR

Reference: Contrib.12th Int.Conf. on Few Body Problems in Physics, Vancouver, B.C., Canada, July 2-

8, 1989, B.K.Jennings, Ed., p.H6 (1989); TRI-89-2 (1989)

Authors: I.L.Grach, M.Shmatikov

Title: Properties of the Six-Quark Bag following from the Data on the Capture of the Polarized Thermal

Neutrons by Protons

Keyword abstract: NUCLEAR REACTIONS 1 H(polarized n, γ),E=thermal; calculated γ CP. Six-quark

bag model.

Keynumber: 1989DOZW

Reference: Contrib.12th Int.Conf. on Few Body Problems in Physics, Vancouver, B.C., Canada, July 2-

8, 1989, B.K.Jennings, Ed., p.C6 (1989); TRI-89-2 (1989)

Authors: P.Doll, G.Fink, S.Hauber, M.Haupenthal, H.O.Klages, H.Schieler, F.Smend, G.Wicke

Title: Preliminary Results on the $H(n(pol), \gamma)^2H$ Capture Experiment

Keyword abstract: NUCLEAR REACTIONS ¹H(polarized n, γ), E=18-50 MeV; measured analyzing

power (θ =90°); deduced inverse reaction neutron polarization vs Ey.

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, ²H, ³He(n, γ),E=thermal; calculated radiative capture

 σ : deduced single photon ³He(n, γ) σ .

Keynumber: 1988JA03

Reference: Nucl.Phys. A480, 573 (1988)

Authors: W.Jaus, W.S.Woolcock

Title: Spin Correlation Coefficients for Neutron-Proton Radiative Capture

Keyword abstract: NUCLEAR REACTIONS ¹H(polarized n, γ), E not given; calculated spin correlation

coefficient, polarization observables. Deuteron photodisintegration model, polarized target.

Keynumber: 1988DU08

Reference: Nucl.Phys. A481, 424 (1988)

Authors: C.Dupont, C.Deom, P.Leleux, P.Lipnik, P.Macq, A.Ninane, J.Pestieau, S.Wa Kitwanga,

P.Wauters

Title: The Hard Neutron-Proton Bremsstrahlung at 76 MeV

Keyword abstract: NUCLEAR REACTIONS 1 H(n, γ),E=76.5 MeV; measured bremsstrahlung $\sigma(\theta,E)$;

calculated $\sigma(\theta,E)$.

Keynumber: 1988DO15

Reference: Phys.Rev. D38, 2722 (1988)

NSR Search Results Page 11 of 23

Authors: J.Dohner, J.Last, M.Arnold, S.J.Freedom, D.Dubbers

Title: Pair Decay of the 2.2-MeV Excited State of the Deuteron: Limits on light-particle emission **Keyword abstract:** NUCLEAR REACTIONS ${}^{1}H(n,\gamma)$,E=cold neutron; measured pair spectra features;

deduced ²H level $\Gamma(\text{pair})/\Gamma\gamma$.

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, ¹H(polarized n, γ), E=slow; compiled asymmetry data;

deduced parity violation information.

Keynumber: 1987SO06

Reference: Phys.Rev. C35, 1246 (1987) **Authors:** J.P.Soderstrum, L.D.Knutson

Title: Measurement of the Analyzing Power for n-p Radiative Capture

Keyword abstract: NUCLEAR REACTIONS ¹H(polarized n, γ),E=6,13.43 MeV; measured capture

Eγ, Iγ, analyzing power vs θ .

Keynumber: 1987RE03

Reference: Phys.Rev. C35, 1720 (1987)

Authors: B.A.Remington, M.Blann, G.F.Bertsch

Title: n-p Bremsstrahlung Interpretation of High Energy Gamma Rays from Heavy-Ion Collisions **Keyword abstract:** NUCLEAR REACTIONS 1 H(n,γ),E=130,208 MeV; calculated $\sigma(\theta n, \theta p)$. 1 H (p,γ),E=140 MeV; 2 H(p,γ),E=197 MeV; calculated σ . 2 H,C,Pb(p,γ),E=140 MeV; 12 C,Pb(14 N,γX), 197 Au(40 Ar,γX), 12 C,Ag(86 Kr,γX),E=20-44 MeV/nucleon; 12 C(12 C,γX),E=48,84 MeV/nucleon; calculated $\sigma(E\gamma,\theta\gamma)$, σ . 208 Pb(14 N,γX),E=30 MeV/nucleon; calculated γ-ray number vs time. Incoherent pnγ bremsstrahlung mechanism.

Keynumber: 1987NI01

Reference: Phys.Rev. C35, 402 (1987)

Authors: A.Ninane, C.Dupont, P.Leleux, P.Lipnik, P.Macq

Title: Neutron-Proton Capture at Extreme Angles at E(n) = 61 MeV

Keyword abstract: NUCLEAR REACTIONS 1 H(n, γ),E=61 MeV; measured $\sigma(\theta)$, $\theta=0^{0}$,180 0 . Liquid

hydrogen target.

Keynumber: 1987NE02

Reference: Nucl.Phys. A462, 163 (1987) **Authors:** D.Neuhauser, S.E.Koonin

Title: Bremsstrahlung in Heavy Ion Collisions

Keyword abstract: NUCLEAR REACTIONS 1 H(n, γ),E=50,200 MeV; calculated σ

 $(E\gamma)$, quantal, classical emission rates, ratios; $U(C,\gamma)$, E=84 MeV/nucleon; calculated $\sigma(E\gamma,\theta\gamma)$. Simplified

fireball model.

Keynumber: 1987HU10

Reference: Nucl. Phys. A472, 701 (1987)

Authors: M.Hugi, J.M.Cameron, M.Ahmad, J.Collot, G.Gaillard, J.S.Wesick, G.W.R.Edwards,

NSR Search Results Page 12 of 23

H.Fielding, D.A.Hutcheon, R.Abegg, C.A.Miller, P.Kitching, N.E.Davison, N.R.Stevenson, I.J.van

Heerden

Title: Radiative Capture of Polarized Neutrons above Pion Production Threshold

Keyword abstract: NUCLEAR REACTIONS 1 H(polarized n, γ),E=370,478 MeV; measured $\sigma(\theta)$,A(θ).

Keynumber: 1987GR14

Reference: Yad.Fiz. 45, 933 (1987) **Authors:** I.L.Grach, M.Zh.Shmatikov

Title: Properties of Six-Quark Bag following from the Data on the Capture of Polarized Thermal

Neutrons by Protons

Keyword abstract: NUCLEAR REACTIONS 1 H(polarized n, γ),E=thermal; calculated γ CP. Six quark

bag.

Kevnumber: 1987AHZY

Reference: Bull.Am.Phys.Soc. 32, No.4, 1057, EE2 (1987)

Authors: M.Ahmad, R.Abegg, J.M.Cameron, J.Collot, C.A.Davis, G.W.Edwards, H.W.Fielding, G.Gaillard, M.Hugi, D.A.Hutcheon, P.Kitching, C.A.Miller, J.Pasos, J.Soukup, J.Uegaki, J.Wesick, H.S.Wilson, N.E.Davison, W.D.Ramsay, F.Tervisidis, A.W.Stetz, Y.M.Shin, N.R.Stevenson, M.Abdel-

Monem, M.H.Hindi, A.H.Hussein, I.J.van Heerden

Title: Experimental Study of $n(pol)p \rightarrow d\gamma$ Reaction Above Pion Production Threshold

Keyword abstract: NUCLEAR REACTIONS 1 H(polarized n, γ),E=370,478 MeV; measured σ (θ),analyzing power; deduced meson exchange current,isobar excitation roles.

Keynumber: 1986TH02

Reference: Phys.Rev. C33, 1830 (1986) **Authors:** A.E.Thorlacius, H.W.Fearing

Title: Phenomenological Fit to Deuteron Photodisintegration Data in the Medium Energy Region **Keyword abstract:** NUCLEAR REACTIONS ${}^{2}H(\gamma,p)$, ${}^{1}H(n,\gamma)$, E < 1 GeV; compiled, analyzed σ data;

deduced angular, energy dependent parameters.

Keynumber: 1986ST14

Reference: Ann. Phys. (Leipzig) 43, 602 (1986)

Authors: T.Stiehler, J.Mosner, G.Schmidt, K.Moller, W.Neubert, W.Pilz, B.Kuhn, J.Hutsch

Title: The Total n-p Capture Cross Section Measured at E(n) = 25 MeV

Keyword abstract: NUCLEAR REACTIONS ${}^{1}H(n,\gamma)$,E=25 MeV; measured total capture σ . Gas

target, multi-wire proportional counters.

Keynumber: 1986MO17

Reference: Nucl.Phys. A457, 518 (1986) **Authors:** S.Morioka, P.Grange, Y.Avishai

Title: Parity Violating Observables in $n + p \rightarrow d + \gamma$ with a Realistic Weak Model and the Paris NN

Potential

Keyword abstract: NUCLEAR STRUCTURE ²H; calculated ³P₁ wave function component.

Desplanques-Donoghue-Holstein weak interaction model, strong nucleon-nucleon interaction.

Keyword abstract: NUCLEAR REACTIONS ¹H(polarized n, γ),E=thermal; calculated γ

CP, assymmetry; deduced parity violation effects. Desplanques-Donoghue-Holstein weak interaction model, strong nucleon-nucleon interaction.

Kevnumber: 1986LEZR

NSR Search Results Page 13 of 23

Reference: Proc.Inter.Conf.on Fast Neutron Physics, Dubrovnik, Yugoslavia, May 26-31, 1986,

D.Miljanic, B.Antolkovic, G.Paic, Eds., Ruder Boskovic Institute, Zagreb, p.160 (1986)

Authors: P.Leleux

Title: Recent Measurements of the n-p Capture Cross Section

Keyword abstract: NUCLEAR REACTIONS ${}^{1}H(n,\gamma)$, E=61 MeV; measured $\sigma(\theta)$.

Keynumber: <u>1986GR01</u>

Reference: Phys.Rev.Lett. 56, 819 (1986)

Authors: G.L.Greene, E.G.Kessler, Jr., R.D.Deslattes, H.Borner

Title: New Determination of the Deuteron Binding Energy and the Neutron Mass

Keyword abstract: NUCLEAR REACTIONS 1 H(n, γ),E=thermal; measured capture γ spectra; deduced neutron mass,n-hydrogen mass difference. 1 n, 1 H deduced mass difference. 2 H deduced binding energy. Two-Axis flat crystal transmission instrument, absolute wavelength determination.

Keynumber: 1986CA21

Reference: Nucl. Phys. A458, 637 (1986)

Authors: J.M.Cameron, C.A.Davis, H.Fielding, P.Kitching, J.Pasos, J.Soukup, J.Uegaki, J.Wesick,

H.S.Wilson, R.Abegg, D.A.Hutcheon, C.A.Miller, A.W.Stetz, I.J.Van Heerden

Title: Radiative Capture of Polarized Neutrons by Hydrogen below the Pion Production Threshold

Keyword abstract: NUCLEAR REACTIONS 1 H(polarized n, γ),E=180,270 MeV; measured $\sigma(\theta)$,A(θ).

Keynumber: 1985ST04

Reference: Phys.Lett. 151B, 185 (1985)

Authors: T.Stiehler, B.Kuhn, K.Moller, J.Mosner, W.Neubert, W.Pilz, G.Schmidt

Title: A Measurement of the Total Cross Section of the Reaction $n + p \rightarrow d + \gamma$ at E(n) = 25 MeV

Keyword abstract: NUCLEAR REACTIONS ${}^{1}H(n,\gamma)$, E=25 MeV; measured capture σ . Gas

target, scintillation telescope.

Keynumber: 1985SOZZ

Reference: Diss.Abst.Int. 45B, 3543 (1985)

Authors: J.P.Soderstrum

Title: The Neutron-Proton Radiative Capture Analyzing Power

Keyword abstract: NUCLEAR REACTIONS 1 H(polarized n, γ),E=6,13.43 MeV; measured γ analyzing

power.

Keynumber: <u>1985ME03</u>

Reference: Phys.Rev. C31, 309 (1985)

Authors: H.O.Meyer, J.R.Hall, M.Hugi, H.J.Karwowski, R.E.Pollock, P.Schwandt

Title: Neutron-Proton Radiative Capture Cross Section at T(n) = 185 MeV

Keyword abstract: NUCLEAR REACTIONS 1 H(n, γ),E=185 MeV; measured recoil $\sigma(\theta d)$, $\theta=0^{0}$ -65 0 ;

deduced charge density, relativistic corrections role.

Keynumber: 1985CA42

Reference: Nucl. Phys. A446, 351c (1985)

Authors: J.M.Cameron

Title: Radiative Capture of Polarized Nucleons at Intermediate Energies

Keyword abstract: NUCLEAR REACTIONS 1 H(polarized n, γ),E=180-480 MeV; 2 H(polarized p, γ),E=200,500 MeV; 3 H(polarized p, γ),E(cm)=225 MeV; compiled analyzing power vs θ; deduced

rescattering effects, D-state component, meson exchange, isobar current roles.

NSR Search Results Page 14 of 23

Keynumber: 1984NI13

Reference: Can.J.Phys. 62, 1104 (1984)

Authors: A.Ninane, C.Dupont, P.Leleux, P.Lipnik, P.Macq

Title: A Measurement of the Neutron-Proton Capture Differential Cross Section at Extreme Center-of-

Mass Angles at E(n) = 61 MeV

Keyword abstract: NUCLEAR REACTIONS 1 H(n, γ),E=61 MeV; measured deuteron production σ

 (θ) , forward, backward $\sigma(\theta d)/\sigma(\theta p)$.

Keynumber: 1984NI06

Reference: Phys.Lett. 141B, 170 (1984)

Authors: G.Nicklas, J.Franz, E.Rossle, H.Schmitt

Title: Neutron-Proton Radiative Capture at Medium Energies

Keyword abstract: NUCLEAR REACTIONS 1 H(n, γ),E=190-590 MeV; measured capture $\sigma(\theta)$ vs E;

deduced deuteron photodisintegration $\sigma(\theta)$.

Keynumber: 1984MC08

Reference: Phys.Lett. 138B, 6 (1984)

Authors: B.H.J.McKellar

Title: On Parity Violation in the Nucleon Wavefunction

Keyword abstract: NUCLEAR STRUCTURE ¹⁹, ¹⁸F, ²¹Ne; analyzed data; deduced weak coupling

constant, nucleon wave function parity violation implication.

Keyword abstract: NUCLEAR REACTIONS 1 H(polarized n, γ),E not given; calculated γ asymmetry

limit; deduced parity violation nucleon-nucleon interaction limitations.

Keynumber: 1984LO11

Reference: J.Phys.(Paris), Colloq.C3, 103 (1984)

Authors: V.M.Lobashov, V.A.Nazarenko

Title: Parity Non-Conserving Effects in $n\gamma$ -Reactions

Keyword abstract: NUCLEAR REACTIONS ¹H(polarized n, γ), E=low; analyzed data; deduced γ CP.

Keynumber: 1984KNZU

Reference: Program and Theses, Proc.34th Ann.Conf.Nucl.Spectrosc.Struct.At.Nuclei, Alma-Ata, p.268

(1984)

Authors: V.A.Knyazkov, E.A.Kolomensky, V.M.Lobashev, V.A.Nazarenko, A.N.Pirozhkov,

Yu.V.Sobolev, A.I.Shably, E.V.Shulgina

Title:

Keyword abstract: NUCLEAR REACTIONS 1 H(n, γ),E=thermal; measured γ CP; deduced parity

violating effect.

Keynumber: 1984KN01

Reference: Nucl. Phys. A417, 209 (1984)

Authors: V.A.Knyazkov, E.A.Kolomensky, V.M.Lobashov, V.A.Nazarenko, A.N.Pirozhkov,

A.I.Shably, E.V.Shulgina, Y.V.Sobolev, A.I.Yegorov

Title: A New Experimental Study of the Circular Polarization of np Capture γ-Rays

Keyword abstract: NUCLEAR REACTIONS 1 H(n, γ),E=thermal; measured γ CP.

T7 1 1004

Keynumber: 1984GR35

Reference: Yad.Fiz. 40, 440 (1984); Sov.J.Nucl.Phys. 40, 280 (1984)

NSR Search Results Page 15 of 23

Authors: I.L.Grach, M.Zh.Shmatikov

Title: Circular Polarization of Photons Emitted in the Capture of Polarized Neutrons by Protons, and the

Quark Composite Bag Model

Keyword abstract: NUCLEAR REACTIONS 1 H(polarized n, γ),E=thermal; calculated γ CP; deduced

nucleon M1,E2 contributions. ²H deduced quark admixture upper limit. Composite bag model.

Keynumber: 1984AV09

Reference: J.Phys.(London) G10, L263 (1984)

Authors: Y.Avishai, P.Grange

Title: Parity Violation in Threshold Neutron-Proton Scattering

Keyword abstract: NUCLEAR REACTIONS 1 H(polarized n,n), (polarized n, γ), $E \approx$ threshold; calculated neutron spin rotation angle, σ asymmetry; deduced small parity violation effect.

Keynumber: 1984AV04

Reference: J.Phys.(Paris), Colloq.C3, 99 (1984)

Authors: M.Avenier, G.Bagieu, J.F.Cavaignac, D.H.Koang, A.Idrissi, B.Vignon, R.Wilson

Title: Study of the Neutron-Proton Weak Interaction at the ILL Reactor

Keyword abstract: NUCLEAR REACTIONS ¹H, ¹¹⁷Sn, ³⁵Cl(polarized n, γ), E=low; measured γ-

asymmetry.

Keynumber: 1983SOZT

Reference: Bull.Am.Phys.Soc. 28, No.7, 988, DB4 (1983)

Authors: J.P.Soderstrum, L.D.Knutson

Title: Measurement of the Analyzing Power for ${}^{1}H(n(pol),\gamma)^{2}H$ at $E_{n}=6.0$ MeV

Keyword abstract: NUCLEAR REACTIONS ¹H(polarized n, γ),E=6 MeV; measured analyzing power

vs θ ; deduced meson exchange effects role. Impulse approximation data.

Keynumber: 1983MC01

Reference: J.Phys.(London) G9, 275 (1983)

Authors: A.McKerrell, J.P.McTavish, M.W.Kermode, R.Huby **Title:** The S-Wave Component of the Deuteron Wavefunction

Keyword abstract: NUCLEAR STRUCTURE ²H; calculated electric form factor. Unitarily

transformed deuteron wave function,S-wave node.

Keyword abstract: NUCLEAR REACTIONS 1 H(n, γ),E=thermal; calculated σ (capture). 2 H(γ ,p),E \approx 5-100 MeV; calculated photodisintegration σ (E). Unitarily transformed deuteron wave function,S-wave

node.

Kevnumber: 1983KN09

Reference: Pisma Zh.Eksp.Teor.Fiz. 38, 138 (1983); JETP Lett.(USSR) 38, 163 (1983) **Authors:** V.A.Knyazkov, E.A.Kolomensky, V.M.Lobashev, V.A.Nazarenko, A.N.Pirozhkov,

Yu.V.Sobolev, A.I.Shably, E.V.Shulgina

Title: New Measurement of the Circular Polarization of γ Rays in the Reaction np \rightarrow d γ

Keyword abstract: NUCLEAR REACTIONS 1 H(n, γ),E=thermal; measured radiative capture γ CP

upper limit.

Keynumber: 1983GRZU **Reference:** ITEP-115 (1983)

Authors: I.L.Grach, M.Zh.Shmatikov

NSR Search Results Page 16 of 23

Title: Circular Polarization of γ-Quanta Radiated in the Capture of Polarized Neutrons by Protons and

the Quark Compound Bag Model

Keyword abstract: NUCLEAR REACTIONS 1 H(polarized n, γ),E=thermal; calculated γ CP; deduced M1,E2 contributions. Quark compound bag model.

Keynumber: 1983GR09

Reference: J.Phys.(London) G9, 643 (1983) Authors: J.M.Greben, R.M.Woloshyn

Title: Low-Energy n-p Capture as a Probe of Two-Nucleon Dynamics

Keyword abstract: NUCLEAR REACTIONS 1 H(n, γ),E=200 MeV; calculated $\sigma(\theta)$. 1 H(polarized n,γ , E=160,200,240 MeV; calculated neutron analyzing power, γ linear polarization vs θ . ¹H(n, γ), E=120-240 MeV; calculated σ(E). ²H(e.e).E not given; calculated electric form factor. Nonrelativistic

potentials, transformed, untransformed Reid soft-core deuteron wave functions.

Keynumber: 1983ADZU

Reference: Program and Theses, Proc.33nd Ann.Conf.Nucl.Spectrosc.Struct.At.Nuclei, Moscow, p.51

Authors: I.Adam, V.Gnatovich, A.Kugler

Keyword abstract: NUCLEAR REACTIONS 1 H(n, γ),E=Pu-Be source; measured E γ . 2 H deduced

binding energy.

Keynumber: 1983AD05

Reference: Czech.J.Phys. B33, 465 (1983) **Authors:** J.Adam, V.Hnatowicz, A.Kugler

Title: Determination of the Deuteron Binding Energy

Keyword abstract: NUCLEAR REACTIONS 1 H(n, γ),E=Po-Be source; measured E γ . 2 H deduced

binding energy. Precise energy calibration.

Keynumber: 1982VYZZ

Reference: JINR-P6-82-108 (1982)

Authors: Ts. Vylov, V.M. Gorozhankin, K. Ya. Gromov, A.I. Ivanov, I.F. Uchevatkin, V.G. Chumin

Title: On Redetermination of Deuteron Binding Energy

Keyword abstract: NUCLEAR REACTIONS ¹H(n,γ),E=thermal; analyzed data. ²H deduced binding

energy. ¹n deduced improved mass, relative error.

Keynumber: 1982VA13

Reference: Nucl.Phys. A380, 261 (1982) Authors: C.Van Der Leun, C.Alderliesten **Title:** The Deuteron Binding Energy

Keyword abstract: NUCLEAR REACTIONS 1 H(n, γ),E=thermal; measured E γ ; deduced

neutron, proton atomic mass difference, Q-values for ${}^{1}H(n,\gamma)$, ${}^{2}H(n,\gamma)$, ${}^{12}C(n,\gamma)$, ${}^{13}C(n,\gamma)$ and ${}^{14}N(n,\gamma)$

reactions. ²H deduced binding energy. Gold, ⁴⁸V, ¹⁴⁴Ce standards.

Keynumber: 1982HS01

Reference: Nucl.Instrum.Methods 193, 383 (1982)

Authors: H.-H.Hsu

Title: The 870.8 keV Gamma Ray from PuO₂

NSR Search Results Page 17 of 23

Keyword abstract: NUCLEAR REACTIONS ¹⁷, ¹⁸O(n,n'γ), ¹H(n,γ),E=fission spectrum; measured Eγ,Iγ; deduced average σ. Isotopically enriched water, ²⁵²Cf fission neutron source. ¹⁷, ¹⁸O (α , α 'γ),E=5.486 MeV; measured Eγ,Iγ; deduced γ-production yields. Isotopically enriched water, ²⁴¹Am source.

Keynumber: 1981VE01

Reference: Nucl. Phys. A352, 181 (1981)

Authors: V.A. Vesna, E.A. Kolomensky, V.B. Kopeliovich, V.M. Lobashev, V.A. Nazarenko,

A.N.Pirozhkov, E.V.Shulgina

Title: Circular Polarization of Gamma Quanta in the Radiative Capture of Polarized Thermal Neutrons

by Protons

Keyword abstract: NUCLEAR REACTIONS 1 H(polarized n, γ), E=thermal; measured CP for γ -rays.

²H deduced triplet admixture in capturing state. Solid parahydrogen target.

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 H, 3 He(n, γ),E=thermal; analyzed σ (capture) data;

deduced meson exchange, two-photon capture, wave function symmetry rule selection effects.

Keynumber: 1981GI09

Reference: Phys.Rev.Lett. 47, 304 (1981)

Authors: J.F.Gilot, A.Bol, P.Leleux, P.Lipnik, P.Macq

Title: Foward- and Backward-Angle Differential Cross Section for Neutron-Proton Capture at 72 MeV

Keyword abstract: NUCLEAR REACTIONS 1 H(n,n), (n, γ),E=72 MeV; measured $\sigma(\theta)$; deduced σ

(photodisintegration) of deuteron. Liquid hydrogen target.

Keynumber: 1981CA04

Reference: Nucl.Phys. A356, 469 (1981) **Authors:** A.Cambi, B.Mosconi, P.Ricci

Title: Two-Body Modifications of the Siegert Dipole Operator and Doubly Radiative n - p Capture

Keyword abstract: NUCLEAR REACTIONS 1 H(n, γ),E=thermal; calculated σ (two-photon). Siegert

dipole operator, one pion exchange effects.

Keynumber: 1980VEZT

Coden: CONF Kiev(Neutron Physics) Proc, Part 1, P49, Vesna

Keyword abstract: NUCLEAR REACTIONS ¹H(polarized n, γ),E=thermal; measured γ CP. ²H

deduced triplet admixture in capturing state. Solid parahydrogen target.

Keynumber: 1980IS02

Reference: Can.J.Phys. 58, 168 (1980)

Authors: M.A.Islam, T.J.Kennett, S.A.Kerr, W.V.Prestwich **Title:** A Self-Consistent Set of Neutron Separation Energies

Keyword abstract: NUCLEAR REACTIONS ¹H, ⁹Be, ¹⁴N, ²⁴, ²⁵Mg, ²⁷Al, ²⁸, ²⁹Si, ³²S, ³⁵Cl, ⁴⁰, ⁴⁴Ca, ⁴⁷, ⁴⁸, ⁴⁹Ti, ⁵⁰, ⁵², ⁵³Cr, ⁵⁵Mn, ⁵⁴, ⁵⁶, ⁵⁷Fe(n,γ),E=thermal; measured Eγ,Iγ. ²H, ¹⁰Be, ²⁵, ²⁶Mg,

²⁸Al, ²⁹, ³⁰Si, ³³S, ³⁶Cl, ⁴¹, ⁴⁵Ca, ⁴⁸, ⁴⁹, ⁵⁰Ti, ⁵¹, ⁵³, ⁵⁴Cr, ⁵⁶Mn, ⁵⁵, ⁵⁷, ⁵⁸Fe deduced Q,neutron

binding energy.

NSR Search Results Page 18 of 23

Keynumber: 1980GR02

Reference: Phys.Rev. C21, 498 (1980) **Authors:** R.C.Greenwood, R.E.Chrien

Title: Neutron Mass: Measurement of the ${}^{1}H(n,\gamma){}^{2}H$ γ Ray and Revised Values For Selected Neutron

Binding Energies

Keyword abstract: NUCLEAR REACTIONS 1 H(n,γ),E=th; measured Eγ; deduced Q,neutron mass. 2 , 3 H, 13 , 14 C, 15 N deduced neutron binding energy.

Keynumber: 1980DUZV

Coden: REPT JINR-E2-80-555, Dubovik

Keyword abstract: NUCLEAR REACTIONS 1 H(n, γ),E=thermal; calculated γ CP,parity violating

amplitude. Quark-nucleus approach.

Keynumber: 1980CA10

Reference: Phys.Rev. C21, 1921 (1980) **Authors:** A.Cambi, B.Mosconi, P.Ricci

Title: Consistency between Pion Exchange Currents and N-N Potential in Double Radiative n-p Capture **Keyword abstract:** NUCLEAR REACTIONS 1 H(n, γ),E=thermal; calculated two-photon production σ .

Reid soft-core potential, meson exchange currents.

Keynumber: 1979WHZW

Coden: REPT SUNI-61,P18,Whittaker

Keyword abstract: NUCLEAR REACTIONS 1 H(n, γ),E=4.8 MeV; measured bremsstrahlung $\sigma(\theta n, \theta p)$.

Kevnumber: 1979OH01

Reference: Prog. Theor. Phys. 61, 1263 (1979)

Authors: K.Ohya

Title: Strength of Parity-Violating Nucleon-Pion Interactions

Keyword abstract: RADIOACTIVITY ¹⁸F; calculated γ-CP; deduced strength of parity-violating

nucleon-nucleon- π interaction. vector ρ -meson pole dominance assumption.

Keyword abstract: NUCLEAR REACTIONS 1 H(polarized n, γ),E=thermal; calculated asymmetry A γ .

Keynumber: 1979LO15

Reference: Pisma Zh.Eksp.Teor.Fiz. 29, 517 (1979); JETP Lett. 29, 471 (1979)

Authors: G.A.Lobov

Title: Weak Interaction of Nucleons and the Process $n + p \rightarrow d + \gamma$

Keyword abstract: NUCLEAR REACTIONS ${}^{1}H(n,\gamma)$, ${}^{1}H(polarized n,\gamma)$, E=thermal; calculated γ -CP, I γ

 (θ) . Weinberg-Salam model.

Keynumber: 1979EAZZ

Coden: REPT NEANDC(CAN)-51/L,P1,Earle

Keyword abstract: NUCLEAR REACTIONS 1 H(n, γ),E=thermal; measured $\gamma\gamma$ -coin; deduced upper

limit for 2-photon production σ .

Keynumber: 1979EAZY

Reference: Proc.Intern.Symp.Neutron Capture Gamma Ray Spectroscopy and Related Topics, 3rd, BNL, Upton, NY (1978), R.E.Chrien, W.R.Kane, Eds., Plenum Press, New York, p.609 (1979)

NSR Search Results Page 19 of 23

Authors: E.D.Earle, A.B.McDonald

Title: Upper Limit for the ${}^{1}H(n,\gamma\gamma){}^{2}H$ Cross Section

Keyword abstract: NUCLEAR REACTIONS 1 H(n, $\gamma\gamma$),E not given; measured $\gamma\gamma$ -coin, σ upper limit.

Keynumber: 1979BO05

Reference: Phys.Lett. 82B, 212 (1979)

Authors: M.Bosman, A.Bol, J.F.Gilot, P.Leleux, P.Lipnik, P.Macq

Title: Measurement of the Total Cross Section for the 1 H(n, γ) 2 H Reaction between 37 and 72 MeV

Keyword abstract: NUCLEAR REACTIONS ${}^{1}H(n,\gamma)$, E=37-72 MeV; measured $\sigma(E)$.

Keynumber: 1978VYZY

Coden: REPT JINR-P6-11675,T Vylov

Keyword abstract: NUCLEAR REACTIONS 1 H(n, γ); measured σ . 2 H deduced binding energy. Ge

(Li) detectors.

Keynumber: 1978VY02

Reference: Yad.Fiz. 28, 1137 (1978); Sov.J.Nucl.Phys. 28, 585 (1978)

Authors: T. Vylov, K. Y. Gromov, A. I. Ivanov, B. P. Osipenko, E. A. Frolov, V. G. Chumin, A. F. Shchus,

M.F. Yudin

Title: New Measurement of the Deuteron Binding Energy

Keyword abstract: NUCLEAR REACTIONS ¹H(n,γ),E=Po-Be source; measured Eγ; deduced Q. ²H

deduced neutron binding energy.

Keynumber: 1978SI03

Reference: Phys.Lett. 73B, 13 (1978)

Authors: M.Simonius

Title: Exchange Current Contributions to Parity Violating Electric Transitions Revisited

Keyword abstract: NUCLEAR REACTIONS ${}^{1}H(n,\gamma)$, E=th; analyzed possible exchange current

contributions to parity violating E1 transitions, CP.

Keynumber: 1978MO28

Reference: Prog. Theor. Phys. 60, 299 (1978)

Authors: S.Morioka, T.Ueda

Title: A Relativistic Effect of Deuteron on the Photon Circular Polarization In np \rightarrow dy Process

Keyword abstract: NUCLEAR REACTIONS ${}^{1}H(n,\gamma)$, E=low; calculated γ -CP. Relativistic effects in d.

Keynumber: 1978KO23

Reference: Phys.Lett. 78B, 529 (1978)

Authors: V.B.Kopeliovich

Title: Relativistic Invariant Approach to the Parity Violation in np \rightarrow d γ Capture

Keyword abstract: NUCLEAR REACTIONS ${}^{1}H(n,\gamma)$, E=th; calculated reaction process with parity

violation.

Keynumber: 1978GRZT

Coden: CONF Brookhaven(Neutron Capt γ-Ray Spectr), Proc, P618, Greenwood

Keyword abstract: NUCLEAR REACTIONS 1 H(n,γ),E=thermal; measured Eγ. 2 H deduced neutron binding energy. 3 H, 13 , 14 C, 15 N deduced revised neutron binding energy. Nuclear recoil correction.

NSR Search Results Page 20 of 23

Keynumber: 1978GRZN

Coden: CONF BNL(Neutron Capt γ-Ray Spectr), Contrib, No28, Greenwood

Keyword abstract: NUCLEAR REACTIONS ¹H(n,γ),E=th; measured Eγ. ²H, ³H, ¹³C, ¹⁴C, ¹⁵N

deduced B(n).

Keynumber: 1978EAZY

Coden: CONF BNL(Neutron Capt γ-Ray Spectr), Contrib, No 26, Earle

Keyword abstract: NUCLEAR REACTIONS 1 H(n, γ),E=700-1520 keV; measured $\gamma\gamma$ -coin; deduced

upper limit for two-photon decay.

Keynumber: 1978EAZW

Coden: REPT AECL-6216,P70,Earle

Keyword abstract: NUCLEAR REACTIONS 1 H(n, γ); measured σ ; deduced upper limit for double-

photon branching ratio.

Keynumber: 1978EAZV

Coden: CONF Brookhaven(Neutron Capt γ-Ray Spectr), Proc, P609, Earle

Keyword abstract: NUCLEAR REACTIONS 1 H(n, γ),E=thermal; measured $\gamma\gamma$ -coin; deduced upper

limit for 2-photon σ .

Keynumber: 1978CR04

Reference: Phys.Rev. C18, 1559 (1978) **Authors:** B.A.Craver, A.Tubis, Y.E.Kim

Title: Exchange Current and Interaction Effects in Thermal n-p Radiative Capture

Keyword abstract: NUCLEAR REACTIONS 1 H(n, γ),E=th; analyzed sensitivity of exchange-current corrections to unitarily-equivalent short-range transformations, relation to parity-violation in n-p system.

Keynumber: 1977LE06

Reference: Nucl.Phys. A280, 377 (1977) **Authors:** J.P.Leroy, J.Micheli, D.Pignon

Title: Gamma Polarisation in the $n + p \rightarrow \gamma + d$ Reaction Due to Weak Parity Violating Effects

Keyword abstract: NUCLEAR REACTIONS 1 H(n, γ),E=th; calculated effect of parity violating weak

interactions on photon polarization.

Keynumber: 1977KO37

Reference: Yad.Fiz. 25,233 (1977); Sov.J.Nucl.Phys. 25,127 (1977)

Authors: E.A.Kolomenskii, V.B.Kopeliovich, V.M.Lobashev, V.A.Nazarenko, A.I.Okorokov,

A.N.Pirozhkov, L.M.Smotritskii, G.I.Kharkevich, A.F.Shchebetov

Title: The Role of the Triplet State in Radiative Capture of Thermal Neutrons by Protons

Keyword abstract: NUCLEAR REACTIONS 1 H(polarized n, γ),E=th; measured CP(γ); deduced triplet-

state contribution.

Keynumber: 1977CO06

Reference: Phys.Rev. C15, 1636 (1977) **Authors:** D.Cokinos, E.Melkonian

Title: Measurement of the 2200 m/sec Neutron-Proton Capture Cross Section **Keyword abstract:** NUCLEAR REACTIONS 1 H(n, γ),E=0.0253 eV; measured σ .

Keynumber: 1976WUZW

NSR Search Results Page 21 of 23

Coden: REPT KFA 1975 Ann, P89, Wust

Keyword abstract: NUCLEAR REACTIONS ${}^{1}H(n,\gamma)$, E=th; measured σ for two-photon decay.

Keynumber: 1976RI03

Reference: Phys.Rev. C13, 1324 (1976)

Authors: D.O.Riska

Title: Comment on Observation of Two-Photon Decay in n-p Capture

Keyword abstract: NUCLEAR REACTIONS 1 H(n, γ); analyzed wave functions.

Keynumber: 1976LE24

Reference: Phys.Rev. C14, 1306 (1976)

Authors: H.C.Lee, F.C.Khanna **Title:** Doubly Radiative np Capture

Keyword abstract: NUCLEAR REACTIONS 1 H(n, γ),E=thermal; calculated $\sigma(2\gamma)$.

Keynumber: 1976EA04

Reference: Phys.Rev. C14, 1298 (1976)

Authors: E.D.Earle, A.B.McDonald, M.A.Lone **Title:** Upper Limit for the ${}^{1}H(n,\gamma\gamma){}^{2}H$ Cross Section

Keyword abstract: NUCLEAR REACTIONS 1 H(n, γ),E=th; measured $\sigma(2\gamma)$. Ge(Li) detectors.

Keynumber: 1975WU02

Reference: Z.Phys. A274, 349 (1975)

Authors: N. Wust, H.H. Guven, B. Kardon, H. Seyfarth

Title: Experiment on Doubly Radiative Thermal Neutron Capture in Hydrogen

Keyword abstract: NUCLEAR REACTIONS 1 H(n, γ),E=thermal; measured $\gamma\gamma$ -coin, σ (E γ). 2 H level

deduced γ-branching.

Reference: Phys.Rev. C11, 349 (1975) **Authors:** K.R.Lassey, B.H.J.McKellar

Title: Reid Soft-Core Potential and Parity Nonconserving Effects in Thermal-Neutron Capture by

Protons

Keyword abstract: NUCLEAR REACTIONS ${}^{1}H(n,\gamma)$, E=thermal; measured CP.

Keynumber: 1975EA04

Reference: Phys.Rev.Lett. 35, 908 (1975)

Authors: E.D.Earle, A.B.McDonald, O.Hausser, M.A.Lone **Title:** Search for Two-Photon Decay in Thermal np Capture

Keyword abstract: NUCLEAR REACTIONS ${}^{1}H(n,\gamma)$, E=thermal; measured upper limit for branching

ratio of two-photon decay.

Keynumber: 1975DR03

Reference: Phys.Rev.Lett. 34, 752 (1975)

Authors: W.B.Dress, C.Guet, P.Perrin, P.D.Miller **Title:** Observation of Two-Photon Decay in n-p Capture

Keyword abstract: NUCLEAR REACTIONS ${}^{1}H(n,\gamma)$, E=subthermal; measured $\gamma\gamma$ -coin, $\sigma(E\gamma)$. ${}^{2}H$

deduced γ-branching ratios.

NSR Search Results Page 22 of 23

Keynumber: 1975AL22

Reference: Phys.Rev.Lett. 35, 813 (1975)

Authors: D.E.Alburger

Title: Comments on the Observation of Two-Photon Decay in n-p Capture

Keyword abstract: NUCLEAR REACTIONS 1 H(n, γ); analyzed γ -coin data; deduced branching ratio

error due to cross-talk effect between detectors.

Keynumber: 1974MIZP

Coden: PREPRINT P D Miller, 5/21/74

Keyword abstract: NUCLEAR REACTIONS 1 H(n, γ); measured σ for 2γ production.

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 $n + d \rightarrow t + \gamma$

γ

Keyword abstract: NUCLEAR REACTIONS ${}^{1}H(n,\gamma)$, ${}^{2}H(n,\gamma)$, thermal neutrons; formalism for

calculating parity-nonconserving effects.

Keynumber: 1974LA31

Reference: Aust.J.Phys. 27, 637 (1975); Erratum UM-P-74/7(E) (1975)

Authors: K.R.Lassey, B.H.J.McKellar

Title: Parity-Nonconserving Effects in n-p Capture at Thermal Energies

Keyword abstract: NUCLEAR REACTIONS 1 H(n, γ); calculated polarization, asymmetry.

Keynumber: 1974DEXP

Coden: REPT Univ Paris, IPN 1974 Annual, PT20

Keyword abstract: NUCLEAR REACTIONS ${}^{1}H(n,\gamma)$; calculated polarization, $\gamma(\theta)$.

Keynumber: 1973COWZ **Coden:** REPT USNDC-7 P78

Keyword abstract: NUCLEAR REACTIONS ${}^{1}H(n,\gamma)$; measured σ .

Keynumber: 1973AR12

Reference: Phys.Rev. C8, 1179 (1973)

Authors: R.G.Arnold, B.T.Chertok, I.G.Schroder, J.L.Alberi

Title: Search for Doubly Radiative np Capture

Keyword abstract: NUCLEAR REACTIONS 1 H(n, γ),E=thermal; measured $\gamma\gamma$ -coin. Deduced capture

σ.

Keynumber: 1972RI02

Reference: Phys.Lett. 38B, 193 (1972) **Authors:** D.O.Riska, G.E.Brown

Title: Meson Exchange Effects in $n + p \rightarrow d + \gamma$

Keyword abstract: NUCLEAR REACTIONS 1 H(n, γ),E approx threshold; calculated exchange current

corrections.

Keynumber: 1972OP01

Reference: Nucl. Phys. A180, 569 (1972)

NSR Search Results Page 23 of 23

Authors: A.M.F.Op den Kamp, A.M.J.Spits

Title: Gamma Rays from Thermal-Neutron Capture in Natural and ³⁹K Enriched Potassium

Keyword abstract: NUCLEAR REACTIONS ³⁹, ⁴¹K, ¹H, ⁶Li, ¹²C, ¹⁹F, ⁴⁰Ar, ⁵⁶Fe, ²⁰⁷Pb(n,γ),E= thermal; ¹⁹F, ²⁸Si(n,n'γ),E=fast; measured Eγ,Iγ, ³⁹K(n,γ),E=thermal; measured Eγ,Iγ,γγ-coin; deduced Q. ⁴⁰, ⁴²K deduced levels,γ-branching. Ge(Li),NaI detectors.

Keynumber: 1972MA28

Reference: Phys.Rev. C5, 1807 (1972)

Authors: S.S.Malik

Title: Possible Tests on the Verification of and Departure from ${}^{1}S_{0} \rightarrow {}^{3}S_{1}$ Radiative Transition' in

Thermal n-p Capture

Keyword abstract: NUCLEAR REACTIONS 1 H(n, γ),E=thermal; proposed test of 1s₀--3s₁ transition

hypothesis.

Keynumber: 1972LO21

Reference: Nucl. Phys. A197, 241 (1972)

Authors: V.M.Lobashov, D.M.Kaminker, G.I.Kharkevich, V.A.Knyazkov, N.A.Lozovoy,

V.A.Nazarenko, L.F.Sayenko, L.M.Smotritsky, A.I.Yegorov

Title: Parity Non-Conservation in Radiative Thermal Neutron Capture by Protons

Keyword abstract: NUCLEAR REACTIONS 1 H(n, γ),E=thermal; measured γ -circular polarization.

Keynumber: 1972AD15

Reference: Phys.Rev. C6, 1964 (1972)

Authors: R.J.Adler

Title: Doubly Radiative np Capture

Keyword abstract: NUCLEAR REACTIONS ${}^{1}H(n,\gamma)$, E=thermal; calculated σ .

Keynumber: 1972AD03

Reference: Phys.Rev. C5, 615 (1972)

Authors: R.J.Adler

Title: Radiative np Capture and Polarization Effects

Keyword abstract: NUCLEAR REACTIONS 1 H(n, γ),E=thermal; calculated $\sigma(\theta(\gamma))$. polarized

beam, target.

Keynumber: 1971BR04

Reference: Nucl.Phys. A161, 337 (1971)

Authors: G.Breit, M.L.Rustgi

Title: Proposed Polarized-Target-Beam Test for 3S_1 - 3S_1 Radiative Transitions in Thermal n-p Capture

Keyword abstract: NUCLEAR REACTIONS 1 H(n, γ),E=thermal; calculated I γ (θ),P γ .

Keynumber: 1965CO17

Reference: Nucl. Phys. 74, 497 (1965)

Authors: A.E.Cox, S.A.R.Wynchank, C.H.Collie

Title: The Proton-Thermal Neutron Capture Cross Section

Keyword abstract: NUCLEAR REACTIONS ${}^{1}H(n,\gamma)$, E =thermal; measured σ . Natural target.
