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78 reference(s) found:

Keynumber: 1999CV01

Reference: Nucl.Phys. A645, 262 (1999) **Authors:** F.Cvelbar, A.Likar, T.Vidmar

Title: Angular Distribution Effect on the Integrated Cross Section for Radiative Capture of 14 MeV

Neutrons

Keyword abstract: NUCLEAR REACTIONS ⁴⁰Ca, ²⁸Si, ⁸⁹Y, ²⁰⁸Pb(n,γ),E=14 MeV; calculated Iγ

 (θ) , Legendre coefficient a_2 . Consistent direct-semidirect model. Comparisons with data.

Keynumber: 1998LI21

Reference: Nucl. Phys. A635, 43 (1998)

Authors: A.Likar, T.Vidmar

Title: Integrated Cross Sections in Fast Neutron Capture in Light Nuclei

Keyword abstract: NUCLEAR REACTIONS ²⁸Si, ³²S, ⁴⁰Ca(n, γ),E=fast; calculated σ , σ (θ). Direct-

semidirect capture model. Comparison with data.

Keynumber: 1997LI03

Reference: Nucl.Phys. A615, 18 (1997)

Authors: A.Likar, T.Vidmar

Title: Neutron Optical Potential from Capture Reactions

Keyword abstract: NUCLEAR REACTIONS 40 Ca, 89 Y, 140 Ce, 208 Pb(n, γ),E \approx resonance; analyzed capture $\sigma(\theta)$, $\sigma(E)$; deduced model parameter dependence. Direct-semidirect model,optical model.

Keynumber: 1996LI04

Reference: Nucl.Phys. A598, 235 (1996)

Authors: A.Likar

Title: Nuclear Dicke States and the Direct-Semdirect Model

Keyword abstract: NUCLEAR REACTIONS 40 Ca, 208 Pb(n, γ),E \leq 20 MeV; analyzed capture $\sigma(\theta)$ vs

E; deduced nuclear Dicke state role. Modified direct semidirect model.

Keynumber: 1995LI32

Reference: Nucl. Phys. A591, 479 (1995)

Authors: A.Likar, T.Vidmar

Title: Calculation of Fore-Aft Asymmetry of γ-Rays from Fast Neutron Capture in ⁴⁰Ca

Keyword abstract: NUCLEAR REACTIONS 40 Ca(n, γ),E \approx 1-45 MeV; calculated $\sigma(\theta)$ fore-aft γ

asymmetry vs E. Direct-semidirect capture model.

Keynumber: 1992LAZW

Reference: Bull.Am.Phys.Soc. 37, No.2, 963, I7 9 (1992)

Authors: C.M.Laymon, R.O.Nelson, S.A.Wender

Title: 40 Ca(n, γ) 41 Ca Using the Los Alamos White Neutron Source

Keyword abstract: NUCLEAR REACTIONS 40 Ca(n, γ),E=8-44 MeV; measured γ (θ),asymmetry.

Keynumber: <u>1992LA20</u>

Reference: Phys.Rev. C46, 1880 (1992)

Authors: C.M.Laymon, R.O.Nelson, S.A.Wender, L.R.Nilsson

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Title: Isovector Giant Quadrupole Resonance in the 40 Ca(n, γ_0) Reaction

Keyword abstract: NUCLEAR REACTIONS 40 Ca(n, γ),E=8-44 MeV; measured $\sigma(\theta)$ vs E, γ -

asymmetry. ⁴¹Ca deduced isovector GQR parameters.

Kevnumber: 1991ZH22

Reference: Chin.J.Nucl.Phys. 13, No 2, 139 (1991)

Authors: Z.Zhao, D.Zhou

Title: Systematics of Excitation Functions for (n, γ) Reaction Above 4 MeV

Keyword abstract: NUCLEAR REACTIONS 40 Ca, 89 Y, 140 Ce, 165 Ho, 208 Pb(n, γ), $E \approx 0.5$ -20 MeV;

calculated $\sigma(E)$. Statistical theory, exciton model.

Kevnumber: 1990RU11

Reference: Nucl.Instrum.Methods Phys.Res. B52, 557 (1990)

Authors: W.Ruhm, K.Kato, G.Korschinek, H.Morinaga, A.Urban, L.Zerle, E.Nolte Title: The Neutron Spectrum of the Hiroshima A-Bomb and the Dosimetry System 1986

Keyword abstract: NUCLEAR REACTIONS 40 Ca(n, γ).E < 3 keV: measured resonance integral.

AMS, γ-spectroscopy techniques.

Keynumber: 1989GU08

Reference: Nuovo Cim. 101A, 111 (1989)

Authors: R.Guidotti, F.Saporetti, G.Maino, A.Ventura

Title: On the Distortions of Direct-Semi-Direct Model Predictions for Nucleon Radiative Capture

Keyword abstract: NUCLEAR REACTIONS 40 Ca(n, γ),E=10-13 MeV; calculated $\sigma(\theta)$ coefficients vs

E; deduced nuclear force range dependence. Direct-semidirect model.

Keynumber: 1988RA10

Reference: J.Phys.(London) G14, Supplement S223 (1988)

Authors: S.Raman, S.Kahane, J.E.Lynn **Title:** Direct Thermal Neutron Capture

Keyword abstract: NUCLEAR REACTIONS ⁹Be, ¹², ¹³C, ²⁴, ²⁵, ²⁶Mg, ³², ³⁴, ³³S, ⁴⁰, ⁴⁴Ca

 (n,γ) , E=slow; calculated capture σ .

Keynumber: 1988LI21

Reference: Chin.J.Nucl.Phys. 10, 274 (1988)

Authors: Liu Jianfeng, Ho Yukun

Title: Non-Statistical Effects in the Fast Neutron Radiative Capture Cross Sections for ⁴⁰Ca **Keyword abstract:** NUCLEAR REACTIONS 40 Ca(n, γ),E=3-15 MeV; calculated capture σ (E).

Compound, direct-semidirect reactions.

Keynumber: 1987LO02

Reference: Europhys.Lett. 3, 45 (1987)

Authors: G.Longo

Title: j-Dependence in Radiative Capture of Polarized Neutrons

Keyword abstract: NUCLEAR REACTIONS ⁴⁰, ⁴¹Ca(polarized n, γ), E=5-40 MeV; calculated

distribution fuctions B(En, $\theta\gamma$). Direct-semidirect model.

Keynumber: 1987LI05

Reference: Chin.J.Nucl.Phys. 9, 21 (1987)

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Authors: Liu Zianfeng, Ho Yukun

Title: Non-Statistical Effects in the Radiative Neutron Capture at the 3s Giant Resonance Region **Keyword abstract:** NUCLEAR REACTIONS ⁴⁰Ca, ⁴⁸Ti, ⁵²Cr, ⁵⁶Fe, ⁶⁴Ni, ⁷⁴Ge(n,γ),E=0.1-3 MeV; calculated σ(E). ⁴¹Ca. ⁴⁹Ti. ⁵³Cr. ⁵⁷Fe. ⁶⁵Ni. ⁷⁵Ge deduced neutron giant resonance strength.

Statistical, nonstatistical effects.

Keynumber: <u>1987KA28</u>

Reference: Phys.Rev. C36, 533 (1987) **Authors:** S.Kahane, J.E.Lynn, S.Raman

Title: Analysis of Primary Electric Dipole Gamma Rays from Slow-Neutron Capture by Ca Isotopes **Keyword abstract:** NUCLEAR REACTIONS ⁴⁰, ⁴², ⁴⁴, ⁴⁶, ⁴⁸Ca(n, γ),E=thermal; calculated direct

capture σ . ⁴¹, ⁴³, ⁴⁵, ⁴⁷, ⁴⁹Ca deduced resonance parameters. Optical model.

Keynumber: 1986POZU

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.144 (1986)

Authors: M.Potokar

Title: Models for Radiative Neutron Capture in Nuclear Giant Resonance Region

Keyword abstract: NUCLEAR REACTIONS ⁴⁰Ca(polarized n, γ),E=5-15 MeV; ²⁰⁸Pb(n,γ),E=5-16 MeV: 40 Ca(n, γ),E=5-28 MeV: 16 O(γ ,p),E=16-30 MeV: calculated σ (E, θ), Direct-semidirect model.

Keynumber: 1986GU21

Reference: Nuovo Cim. 96A, 323 (1986)

Authors: R.Guidotti, F.Saporetti, G.Maino, A.Ventura

Title: Nuclear Shell Effects on the Radial Coupling Form in Collective (N, γ) Processes

Keyword abstract: NUCLEAR REACTIONS 40 Ca(n, γ),E=6-18 MeV; calculated σ (E, θ); deduced

dipole.quadrupole capture $\sigma(E)$.shell effects. Direct-semi-direct model.

Keynumber: 1985UC01

Reference: Z.Phys. A320, 273 (1985) **Authors:** T.Uchiyama, H.Morinaga

Title: Disappearance of the Hindrance of E1-Transition Involving Loosely Bound Nucleon

Keyword abstract: NUCLEAR STRUCTURE ¹¹Be, ¹³C; calculated effective charges,B(E1); deduced

E1 transition hindrance diappearance. Cutoff,particle-GDR coupling models.

Keyword abstract: NUCLEAR REACTIONS 40 Ca(n, γ),E=slow; calculated capture σ ,I γ ratio. 136 Xe, ¹³⁸Ba, ¹⁴⁰Ce, ¹⁴²Nd, ¹⁴⁴Sm(n,γ),E=slow; calculated capture σ. Direct capture model.

Keynumber: 1985GU16

Reference: Nuovo Cim. 90A, 349 (1985)

Authors: R.Guidotti, F.Saporetti

Title: Influence of the Nucleon-Nucleon Interaction Range on the Effective-Charge Renormalization in

Neutron Radiative Capture

Keyword abstract: NUCLEAR REACTIONS 40 Ca(n, γ),E \approx 0-18 MeV; calculated $\sigma(\theta)$ vs E; deduced

nucleon-nucleon interaction range role. DSD model.

Keynumber: 1984LOZQ

Reference: Proc.Conf.Neutron Physics, Kiev, Vol.1, p.277 (1984)

Authors: G.Longo, F.Fabbri, C.Mazzotti

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Title: Angular Distributions of Photons following the Capture of 4-50 MeV Neutrons

Keyword abstract: NUCLEAR REACTIONS 40 Ca, 120 Sn(n, γ),E=4-50 MeV; calculated σ (E,E γ , θ).

Direct-semidirect model.

Keynumber: 1984BE25

Reference: Nucl.Phys. A419, 509 (1984)

Authors: I.Bergqvist, R.Zorro, A.Hakansson, A.Lindholm, L.Nilsson, N.Olsson, A.Likar **Title:** The Giant Isovector E2 Resonance in Calcium Observed in Radiative Neutron Capture **Keyword abstract:** NUCLEAR REACTIONS 40 Ca(n, γ),E=7-28 MeV; measured $\sigma(\theta)$ vs E, γ asymmetry. 41 Ca deduced isovector GQR parameters,E1,E2 interference. Direct-semidirect capture

moder.

Keynumber: 1984AM09

Reference: Yad.Fiz. 40, 1321 (1984); Sov.J.Nucl.Phys. 40, 839 (1984) **Authors:** M.Ya.Amusya, I.S.Gulkarov, M.B.Zhalov, T.M.Potapova

Title: Influence of Nuclear Structure on the Bremsstrahlung Spectra of Fast Nucleons

Keyword abstract: NUCLEAR REACTIONS 40 Ca(n, γ), (p, γ),E=1 GeV; calculated bremsstrahlung σ

 (θ) .

Keynumber: 1983SA30

Reference: Aust.J.Phys. 36, 583 (1983)

Authors: D.G.Sargood

Title: Effect of Excited States on Thermonuclear Reaction Rates

Keyword abstract: NUCLEAR REACTIONS,ICPND 20 , 21 , 22 Ne, 23 Na, 24 , 25 , 26 Mg, 27 Al, 28 , 29 , 30 Si, 31 P, 32 , 33 , 34 , 36 S, 35 , 37 Cl, 36 , 38 , 40 Ar, 39 , 40 , 41 K, 40 , 42 , 43 , 44 , 46 , 48 Ca, 45 Sc, 46 , 47 , 48 , 49 , 50 Ti, 50 , 51 V, 50 , 52 , 53 , 54 Cr, 55 Mn, 54 , 56 , 57 , 58 Fe, 59 Co, 58 , 60 , 61 , 62 , 64 Ni, 63 , 65 Cu, 64 , 66 , 67 Zn(n,γ), (n,p), (n,α), (p,γ), (p,n), (p,α), (α,γ), (α,n), (α,p), 70 Zn(p,γ), (p,n), (p,α), (α,γ), (α,n), (α,p), E=low; compiled target thermal distribution energy state to ground state thermonuclear reaction rate of reaction σ vs temperature. Statistical model.

Keynumber: 1983NIZZ

Reference: Tandem Accelerator Lab, Uppsala, 1982 Biennial p.48 (1983)

Authors: L.Nilsson, A.Lindholm, A.Hakansson, N.Olsson, I.Bergqvist, R.Zorro, A.Likar **Title:** The 40 Ca(n, γ) 41 Ca Reaction in the Region of the Isovector Quadrupole Resonance

Keyword abstract: NUCLEAR REACTIONS 40 Ca(n, γ),E=20-28 MeV; measured $\sigma(\theta=90^{\circ})$, γ -

anisotropy data. ⁴¹Ca deduced isovector E2 giant resonance. Direct-semidirect model.

Keynumber: 1983FIZX

Reference: Bull.Am.Phys.Soc. 28, No.4, 649, AF7 (1983) **Authors:** C.Fitzpatrick, N.R.Roberson, H.R.Weller, D.R.Tilley

Title: Radiative Capture of Neutrons by ⁴⁰Ca

Keyword abstract: NUCLEAR REACTIONS 40 Ca(polarized n, γ),E=6-17 MeV; measured $\sigma(\theta)$,A

(θ), yield vs E. ⁴¹Ca deduced isoscalar E2 resonance, direct M1 strength.

Keynumber: 1983FIZQ

Reference: Diss.Abst.Int. 44B, 1500 (1983)

Authors: C.M.Fitzpatrick

Title: Radiative Neutron Capture into the Giant Resonance Region of Calcium-41

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Keyword abstract: NUCLEAR REACTIONS 40 Ca(n, γ), (polarized n, γ),E=resonance; measured yield, $\sigma(\theta)$,analyzing power. 41 Ca deduced non-E1 effects in GDR region.

Keynumber: 1982RA32

Reference: Indian J.Pure Appl.Phys. 20, 627 (1982) **Authors:** S.K.Rathi, V.P.Varshney, H.M.Agrawal

Title: Calculations of Neutron Capture Cross-Sections for some Nuclei using Bilpuch Formula

Keyword abstract: NUCLEAR REACTIONS ⁴⁰, ⁴³Ca, ⁵², ⁵³Cr, ⁵⁴, ⁵⁶Fe, ⁸⁸Sr, ⁹⁰, ⁹¹, ⁹², ⁹⁴Zr, ⁹³Nb,

92, 94, 95, 96, 97, 98, 100 Mo, 138 Ba, 139 La, 140 Ce, 203 Tl(n, γ),E=24 keV; calculated σ (capture).

Experimental parameters, Bilpuch formula.

Keynumber: 1981SA36

Reference: Lett. Nuovo Cim. 32, 251 (1981)

Authors: F.Saporetti, R.Guidotti

Title: Semi-Direct Model Analysis of the Quadrupole Radiation in the 40 Ca(n, γ_0)Reaction

Keyword abstract: NUCLEAR REACTIONS 40 Ca(n, γ), (polarized n, γ),E=6-16 MeV; calculated $\sigma(\theta)$

vs E. Direct semi-direct model.

Keynumber: 1981HEZY

Reference: ORNL/TM-7752 (1981) **Authors:** D.M.Hetrick, C.Y.Fu

Title: A Calculation of Neutron and Gamma-Ray Production Cross Sections for Calcium from 8 to 20

MeV

Keyword abstract: NUCLEAR REACTIONS 40 Ca(n,n'), (n, γ), (n,np), (n,p), (n,2p), (n,p α), (n,2 α), (n, α), (n,

Keynumber: 1980PIZN

Coden: CONF Kiev(Neutron Physics) Proc, Part3, P270, Pisanko

Keyword abstract: NUCLEAR REACTIONS 22 , 23 Na,Mg, 24 , 25 , 26 Mg, 27 Al,Si, 28 , 29 , 30 Si, 31 P,S, 32 , 33 , 34 S,Cl, 35 , 36 , 37 Cl,Ar, 36 , 38 , 40 Ar,K, 39 , 40 , 41 K,Ca, 40 , 42 , 43 , 44 , 46 , 48 Ca, 45 , 46 Sc,Ti, 46 , 47 , 48 , 49 , 50 Ti,V, 50 , 51 V,Cr, 50 , 52 , 53 , 54 Cr,Fe, 54 , 56 , 57 , 58 Fe, 59 Co,Ni, 58 , 59 , 60 , 61 , 62 , 64 Ni,Cu, 63 , 65 Cu,Zn, 64 , 66 , 67 , 68 , 70 Zn,Ga, 69 , 71 Ga(n,γ), (n,n), (n,α),E=thermal; evaluated σ,radiative capture resonance integrals.

Kevnumber: 1980LI08

Reference: Nucl.Phys. A339, 205 (1980)

Authors: A.Lindholm, L.Nilsson, M.Ahmad, M.Anwar, I.Bergqvist, S.Joly

Title: Direct-Semidirect and Compound Contributions to Radiative Neutron Capture Cross Sections **Keyword abstract:** NUCLEAR REACTIONS ⁴⁰Ca, ⁵⁸Ni, ⁸⁹Y, ²⁰⁶Pb(n,γ),E=0.5-11 MeV; measured Eγ,Iγ. ⁴¹Ca, ⁵⁹Ni, ⁹⁰Y, ²⁰⁷Pb levels deduced production σ(E). Compound nucleus, direct-semidirect model analysis.

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,

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 44 Ca, 47 , 48 , 49 Ti, 50 , 52 , 53 Cr, 55 Mn, 54 , 56 , 57 Fe(n,γ),E=thermal; measured Eγ,Iγ. 2 H, 10 Be, 25 , 26 Mg, 28 Al, 29 , 30 Si, 33 S, 36 Cl, 41 , 45 Ca, 48 , 49 , 50 Ti, 51 , 53 , 54 Cr, 56 Mn, 55 , 57 , 58 Fe deduced Q,neutron binding energy.

------Kovnumbor: 1070LIZ

Keynumber: 1979LIZL

Coden: REPT TLU-66/79,Lindholm

Keyword abstract: NUCLEAR REACTIONS ⁴⁰Ca, ⁵⁹Ni, ⁸⁹Y, ²⁰⁶Pb(n,γ),E=2.5-11 MeV; measured

 $E\gamma I\gamma \sigma$. direct-semidirect, compound nucleus model analysis.

Keynumber: 1979KN04

Reference: Aust.J.Phys. 32, 439 (1979)

Authors: V.A.Knatko, B.A.Martsynkevich, E.A.Rudak

Title: An Analysis of the γ-Ray Decay of Weak's Resonances in ⁴⁰Ca

Keyword abstract: NUCLEAR REACTIONS 40 Ca(n, γ), E=thermal, resonance; analyzed capture data.

⁴¹Ca levels deduced S,B(M1),B(E2) for L=1,3, $\Gamma\gamma$ for L=0 captures. Core-nucleon model.

Keynumber: 1979JEZX

Coden: JOUR BAPSA 24 646,GK3,Jensen

Keyword abstract: NUCLEAR REACTIONS ⁴⁰Ca(polarized n, γ),E=7-11 MeV; measured $\sigma(\theta)$,A(θ).

⁴¹Ca deduced E2 contribution in GDR region.

Keynumber: 1979JE03

Reference: Z.Phys. A291, 609 (1979)

Authors: M.Jensen, D.R.Tilley, H.R.Weller, N.R.Roberson, S.A.Wender, T.B.Clegg

Title: Polarized-Neutron Capture in the Giant-Resonance Region of ⁴¹Ca

Keyword abstract: NUCLEAR REACTIONS ⁴⁰Ca(polarized n, γ), E=10 MeV; measured $\sigma(\theta)$, A(θ).

⁴¹Ca deduced E2 contribution in giant dipole region. Legendre polynomial analysis.

Keynumber: 1978WE11

Reference: Phys.Rev.Lett. 41, 1217 (1978)

Authors: S.A.Wender, N.R.Roberson, M.Potokar, H.R.Weller, D.R.Tillev

Title: Quadrupole Radiation in Fast-Neutron Capture on ⁴⁰Ca

Keyword abstract: NUCLEAR REACTIONS 40 Ca(n, γ),E=6-13 MeV; measured σ (E). DSD

calculations.

Keynumber: 1978WE02

Reference: Phys.Rev. C17, 1260 (1978)

Authors: H.R.Weller, R.A.Blue, P.L.Von Behren, N.R.Roberson, C.R.Gould, D.R.Tilley, S.A.Wender

Title: Angular Distribution Measurements for Radiative Capture of Fast Neutrons by ⁴⁰Ca

Keyword abstract: NUCLEAR REACTIONS 40 Ca(n, γ),E=8.0,12.0 MeV; measured $\sigma(\theta)$. DSD

calculations.

Keynumber: 1978ROZF

Coden: CONF BNL(Neutron Capt γ-Ray Spectr), Contrib, No66, Robertson

Keyword abstract: NUCLEAR REACTIONS 40 Ca(n, γ),E=6-13 MeV: measured σ (E, θ). 41 Ca deduced

evidence for giant quadrupole resonance. Extended direct-semidirect model.

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Keynumber: 1978ROYS

Coden: CONF Brookhaven(Neutron Capt γ-Ray Spectr), Proc, P731, Roberson

Keyword abstract: NUCLEAR REACTIONS 40 Ca(n, γ),E=6-13 MeV; measured σ (E, θ =90 0). 41 Ca deduced evidence for T=0,GQR. Legendre polynomial analysis. Extended direct-semidirect model.

Keynumber: 1978BEYD

Coden: REPT Uppsala, Tandem Accelerator Lab, 1978 Ann, p55, 7-4-2, Bergqvist

Keyword abstract: NUCLEAR REACTIONS ²⁸Si, ³²S, ⁴⁰Ca, ⁸⁹Y, ¹⁴⁰Ce, ²⁰⁸Pb(n,γ),E=5-15 MeV;

measured σ . direct-semidirect, compound nuclear models.

Keynumber: 1978ALZK

Coden: CONF Brookhaven(Neutron Capt γ-Ray Spectr), Proc, P535, Allen

Keyword abstract: NUCLEAR REACTIONS ⁴⁰Ca, ⁴⁵Sc, ⁵⁴, ⁵⁶, ⁵⁷Fe(n,γ),E=thermal; calculated

radiative widths, variances. Statistical, valence, door-way models.

Keynumber: 1978ALYZ

Coden: CONF BNL(Neutron Capt γ-Ray Spectr), Contrib, No5, Allen

Keyword abstract: NUCLEAR REACTIONS ⁴⁰Ca, ⁴⁵Sc, ⁵⁴, ⁵⁶, ⁵⁷Fe(n,γ); calculated L=0,1 radiative widths. ⁵⁵Fe deduced dominance of valence effects. ⁴¹Ca, ⁴⁶Sc, ⁵⁷, ⁵⁸Fe deduced evidence for doorway

components.

Keynumber: 1977VOZY

Coden: JOUR BAPSA 22 542 BE7, Vonbehren

Keyword abstract: NUCLEAR REACTIONS 40 Ca(n, γ),E=7-12 MeV; measured σ (E,E γ).

Keynumber: 1977PO01

Reference: Nucl. Phys. A277, 29 (1977)

Authors: M.Potokar, A.Likar, M.Budnar, F.Cvelbar

Title: Analysis of Fast Neutron Capture Data Based on the Refined Direct-Semidirect Model

Keyword abstract: NUCLEAR REACTIONS ²⁰⁸Pb, ⁸⁸Sr, ⁴⁰Ca, ⁸⁹Y(n, γ),E ≈ 14 MeV; calculated σ .

Keynumber: 1977MI05

Reference: Z.Phys. A282, 117 (1977) **Authors:** M.Micklinghoff, B.Castel

Title: Higher Order Processes in the Radiative Capture of Fast Neutrons

Keyword abstract: NUCLEAR REACTIONS 40 Ca(n, γ); calculated σ ; predicted single particle

resonances superimposed on broad giant resonance.

Keynumber: 1977LI08

Reference: Nucl.Phys. A280, 49 (1977) **Authors:** A.Likar, M.Potokar, F.Cvelbar

Title: Angular Distribution of γ -Rays from the Radiative Capture of Fast Nucleons

Keyword abstract: NUCLEAR REACTIONS ⁸⁸Sr, ⁴⁰Ca, ²⁰⁸Pb(n, γ),E=4-20 MeV; ³⁹K, ⁶⁴Ni(p, γ),E

<25 MeV; calculated $\gamma(\theta)$ coefficient.

Keynumber: 1976MU05

Reference: Nucl. Phys. A259, 365 (1976)

Authors: A.R.de L.Musgrove, B.J.Allen, J.W.Boldeman, D.M.H.Chan, R.L.Macklin

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Title: Resonant Neutron Capture in ⁴⁰Ca

Keyword abstract: NUCLEAR REACTIONS 40 Ca(n, γ),E=2.5-300 keV; measured σ (E,E γ); deduced

valence component. 41 Ca deduced resonance parameters,L,J, π , Γ .

Keynumber: 1976BA17

Reference: Phys.Lett. 61B, 441 (1976)

Authors: R.F.Barrett, B.J.Allen, M.J.Kenny, A.R.De L. Musgrove

Title: An Investigation of d-Wave Neutron Capture in the 40 Ca(n, γ) Reaction

Keyword abstract: NUCLEAR REACTIONS 40 Ca(n, γ), E \leq 430 keV; measured σ (E,E γ).

Keynumber: 1975LI26

Reference: Fizika 7, 157 (1975)

Authors: A.Likar, M.Potokar, F.Cvelbar

Title: Angular Distribution of Neutron Capture γ-Rays in the Semidirect Capture Model

Keyword abstract: NUCLEAR REACTIONS ⁴⁰Ca, ²⁰⁷Pb(n,γ),E <20 MeV; calculated angular

distribution in GDR region.

Keynumber: 1975AR19

Reference: Phys.Rev.Lett. 35, 914 (1975) **Authors:** E.D.Arthur, D.M.Drake, I.Halpern

Title: Fore-Aft Anisotropy in the Radiative Capture of 14-MeV Neutrons

Keyword abstract: NUCLEAR REACTIONS 10 B, 12 C, 29 Si, 40 Ca(n, γ),E=14 MeV; measured γ -

yields, Iγ(θ).

Keynumber: 1975ALZW

Coden: JOUR BAPSA 20 150 EB16

Keyword abstract: NUCLEAR REACTIONS ²⁷Al, ²⁸Si, ⁴⁰Ca, ⁴⁸Ti, ⁵²Cr, ⁹⁰Zr, ¹³⁸Ba(n, γ),E >2.5

keV; measured $\sigma(E\gamma)$.

Keynumber: 1974SIZQ

Coden: REPT USNDC-11 P67

Keyword abstract: NUCLEAR REACTIONS 40 Ca(n, γ); measured σ (E,E γ). 41 Ca resonances deduced

level-width.

Keynumber: 1974SI26

Reference: Phys.Rev. C10, 2143 (1974)

Authors: U.N.Singh, H.I.Liou, J.Rainwater, G.Hacken, W.Makofske, J.B.Garg

Title: Neutron Resonance Spectroscopy: Calcium

Keyword abstract: NUCLEAR REACTIONS 40 Ca(n,n), (n, γ),E=0-550 keV; measured σ (E). 41 Ca

resonances deduced E,level-width,S.

Keynumber: 1974NI03

Reference: Phys.Lett. 49B, 165 (1974)

Authors: L.Nilsson, J.Eriksson

Title: Isospin Effects in Fast Neutron Radiative Capture

Keyword abstract: NUCLEAR REACTIONS 40 Ca(n, γ); calculated σ (E),GDR.

Keynumber: 1974MCZF

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Coden: JOUR BAPSA 19 1077 AB10

Keyword abstract: NUCLEAR REACTIONS 40 Ca(n, γ),E=thermal; measured E γ ,I γ , $\gamma\gamma$ -coin. 41 Ca

deduced levels.

Keynumber: 1974BE55

Reference: Nucl. Phys. A231, 29 (1974)

Authors: I.Bergqvist, D.M.Drake, D.K.McDaniels **Title:** Radiative Capture of Fast Neutrons by ⁴⁰Ca

Keyword abstract: NUCLEAR REACTIONS 40 Ca(n, γ),E=6.8-18.2 MeV; measured σ (E,E γ); deduced

reaction mechanism.

Keynumber: 1974BE39

Reference: Nukleonika 19, 411 (1974)

Authors: I.Bergqvist

Title: Semidirect Capture of Neutrons

Keyword abstract: NUCLEAR REACTIONS 40 Ca(n, γ),E=14-15 MeV; 208 Pb(n, γ),E=9.2-14.7 MeV;

calculated 6.

Keynumber: 1974ARZV

Coden: JOUR BAPSA 19 497 EF9

Keyword abstract: NUCLEAR REACTIONS ¹⁰B, ²⁹Si, ⁴⁰Ca(n, γ); measured $\sigma(\theta)$.

Keynumber: 1974ALZU

Coden: PREPRINT B J Allen, 2/11/74

Keyword abstract: NUCLEAR REACTIONS 40 , 42 , 43 , 44 Ca(n, γ),E=2.5-600 keV; measured σ (E). 41 ,

⁴³, ⁴⁴, ⁴⁵Ca deduced resonances,γ-width,n-width.

Keynumber: 1973PO12

Reference: Phys.Lett. 46B, 346 (1973)

Authors: M.Potokar

Title: The Complex Coupling Interaction in the Radiative Capture of Fast Nucleons

Keyword abstract: NUCLEAR REACTIONS 40 Ca(n, γ),E=12-24 MeV; calculated σ (E).

Keynumber: 1973NIZM **Coden:** REPT TLU-21-73,mf

Keyword abstract: NUCLEAR REACTIONS 40 Ca(n,γ),E=4-20 MeV; calculated σ (E,Eγ). 41 Ca GDR

deduced isospin splitting effects.

Keynumber: 1973GEYY

Coden: REPT INDC(SEC)-35/L P6

Keyword abstract: NUCLEAR REACTIONS 40 , 42 , 43 , 44 Ca(n, γ); calculated σ (E). 41 , 43 , 44 , 45 Ca

levels deduced level-width.

Keynumber: 1973BEVG

Coden: CONF Asilomar(Photonuclear Reactions), Vol2 P945

Keyword abstract: NUCLEAR REACTIONS 40 Ca(n, γ); measured I γ , σ (E).

Keynumber: 1973ARZB

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Coden: JOUR BAPSA 18 1401 CE1

Keyword abstract: NUCLEAR REACTIONS 10 B, 29 Si, 40 Ca(n, γ); measured $\gamma(\theta)$.

Keynumber: 1972ST04

Reference: Nucl.Phys. A181, 225 (1972)

Authors: F.Stecher-Rasmussen, K.Abrahams, J.Kopecky

Title: Circular Polarization of Neutron Capture γ-Rays from Al, Ar and Ca

Keyword abstract: NUCLEAR REACTIONS ²⁷Al, ⁴⁰Ar, ⁴⁰, ⁴⁴Ca(polarized n, γ);E=thermal; measured

γ-CP. 28 Al, 41 Ar, 41 , 45 Ca levels deduced J,π. 28 Al transition deduced γ-mixing. Natural targets.

Kevnumber: 1972POZJ

Coden: CONF Budapest, Contributions, P250, 10/13/72

Keyword abstract: NUCLEAR REACTIONS ²⁸Si, ⁴⁰Ca, ⁸⁸Sr, ¹³⁸Ba, ²⁰⁸Pb(n,γ),E=14 MeV;

calculated $\sigma(E\gamma)$.

Keynumber: 1971CH56

Reference: Aust.J.Phys. 24, 671 (1971)

Authors: D.M.H.Chan, J.R.Bird

Title: Study of γ -Radiation Following keV Neutron Capture in Calcium Isotopes

Keyword abstract: NUCLEAR REACTIONS Ca, ⁴⁰, ⁴², ⁴⁴Ca(n,γ), measured Eγ,Iγ. ⁴¹, ⁴³, ⁴⁵Ca

deduced resonances, transitions.

Keynumber: 1971BIZV

Coden: REPT ORNL-TM-3379, J R Bird,9/14/71

Keyword abstract: NUCLEAR REACTIONS F,Na,Mg,Al,S, ³⁵Cl,K,Ca, ⁴⁰, ⁴², ⁴⁴Ca,Ti,V,Fe, ⁵⁴,

 56 Fe,Ni, 58 , 60 Ni, 63 Cu,Zn(n,γ),E=10-100 keV; measured Eγ,Iγ. 9 inx 12 in NaI detector.

Keynumber: 1971ARZJ

Coden: CONF Legnaro(1f₇/₂ Nuclei),P251

Keyword abstract: NUCLEAR REACTIONS 36 Ar, 40 Ar, 40 K, 40 , 42 , 44 , 46 , 48 Ca, 47 Ti, 55 Mn, 57 Fe, 59 Co(n,γ),E=thermal; surveyed Εγ,Ιγ,γγ-coin,γγ(θ),γ-polarization data. 37 Ar, 41 Ar, 41 K, 41 , 43 , 45 , 47 ,

 49 Ca, 48 Ti, 56 Mn, 58 Fe, 60 Co deduced levels,J,π,γ-mixing.

Keynumber: 1971ALYW

Coden: REPT CONF-730538-1

Keyword abstract: NUCLEAR REACTIONS 40 , 42 , 43 , 44 Ca, 134 , 135 , 136 , 137 , 138 Ba(n, γ); measured σ

(E).

Keynumber: 1970JAZN **Coden:** REPT PH-7,J Jafar

Keyword abstract: NUCLEAR REACTIONS ²⁰Ne, ²⁴Mg, ³⁰Si, ³²S, ³⁴S, ³⁶Ar, ⁴⁰Ca, ²⁷Al

 (n,γ) , E=thermal; surveyed, analyzed E γ , I γ data. ²¹Ne, ²⁵Mg, ³¹Si, ³³, ³⁵S, ³⁷Ar, ⁴¹Ca, ²⁸Al deduced

levels, γ -branching.

Keynumber: 1970CV02

Reference: Nucl.Phys. A159, 555 (1970)

Authors: F.Cvelbar, A.Hudoklin

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Title: Gamma-Ray Spectra from the Radiative Capture of 14 MeV Neutrons in ²⁸Si and ⁴⁰Ca

Keyword abstract: NUCLEAR REACTIONS ²⁸Si, ⁴⁰Ca(n, γ),E=14 MeV; calculated σ (E γ). Direct-

semidirect, statistical models.

Keynumber: 1970CV01

Reference: Nucl. Phys. A158, 251 (1970) **Authors:** F.Cvelbar, A.Hudoklin, M.Potokar

Title: Comparison between the Activation Cross Sections and Integrated Cross Sections for the

Radiative Capture of 14 MeV Neutrons

Keyword abstract: NUCLEAR REACTIONS Mg, ²⁷Al,Si, ³¹P, ³²S, ⁴⁰Ca, ⁵¹V, ⁵²Cr, ⁵⁵Mn,Fe,Cu,

Br.Se. ¹¹⁵In, ¹²⁷I,Ba(n, γ),E=14 MeV; measured σ (E γ); deduced integrated σ .

Keynumber: 1970CR04

Reference: Nucl.Phys. A153, 413 (1970)

Authors: F.P.Cranston, R.E.Birkett, D.H.White, J.A.Hughes

Title: Levels in ⁴⁷Ca and ⁴¹Ca Populated in Thermal Neutron Capture

Keyword abstract: NUCLEAR REACTIONS 40 , 46 Ca(n, γ),E=thermal; measured E γ ,I γ ; deduced Q. 41 ,

⁴⁷Ca deduced levels,γ-branching. ⁴⁴, ⁴⁵, ⁴⁹Ca, ⁴⁷, ⁴⁹Sc deduced transitions. Enriched target.

Keynumber: 1969AB03

Reference: Nucl. Phys. A124, 34 (1969) **Authors:** K.Abrahams, W.Ratynski

Title: Circular Polarization of γ-Radiation After Capture of Polarized Thermal Neutrons

Keyword abstract: NUCLEAR REACTIONS ³⁹K. ⁴⁰Ca. ⁴⁸Ti. ⁵⁹Co. ¹¹³Cd. ²⁰⁷Pb(n, γ). E=thermal: measured Pγ, Eγ. ⁴⁰K, ⁴¹Ca, ⁴⁹Ti, ⁶⁰Co, ¹¹⁴Cd, ²⁰⁸Pb, deduced levels, J, delta. Natural targets, Ge(Li)

detector.

Kevnumber: 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,γ) Reaction Q Values from Capture γ -Ray Spectra

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

measured Eγ; deduced Q. Natural targets.

Keynumber: 1967GR16

Reference: Nucl.Phys. A102, 226 (1967) **Authors:** H.Gruppelaar, P.Spilling

Title: Thermal-Neutron Capture Gamma Rays from Natural Calcium

Keyword abstract: NUCLEAR REACTIONS 40 , 44 Ca(n, γ), E=thermal; measured E γ , I γ ; deduced Q.

⁴¹, ⁴⁵Ca deduced levels, branching. Enriched ⁴⁰Ca target, Ge(Li) detector.