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16 reference(s) found :

Keynumber: 1998MOZT

Reference: Proc.Intern.Symposium on Nuclear Astrophysics, Nuclei in the Cosmos V, Volos, Greece, July 6-11, 1998, N.Prantzos, S.Harissopoulos, Eds., Editions Frontieres, Paris, p.192 (1998)

Authors: P.Mohr, H.Beer, H.Oberhummer, P.V.Sedyshev, Y.P.Popov, W.Rochow

Title: Neutron Capture of ^{46}Ca , ^{48}Ca , and ^{50}Ti at Stellar Energies

Keyword abstract: NUCLEAR REACTIONS $^{46, 48}\text{Ca}$, $^{50}\text{Ti}(n,\gamma)$, $E < 200$ keV; measured capture σ ; deduced direct capture, resonance contributions.

Keynumber: [1997MO17](#)

Reference: Phys.Rev. C56, 1154 (1997)

Authors: P.Mohr, H.Oberhummer, H.Beer, W.Rochow, V.Kolle, G.Staudt, P.V.Sedyshev, Yu.P.Popov

Title: Direct Neutron Capture of ^{48}Ca at $kT = 52$ keV

Keyword abstract: NUCLEAR REACTIONS ^{48}Ca , $^{197}\text{Au}(n,\gamma)$, $E < 0.1$ MeV; measured $E\gamma, I\gamma$; deduced neutron capture σ . Direct capture model. Activation technique.

Keynumber: 1997GO34

Reference: Astron.Astrophys. 325, 414 (1997)

Authors: S.Goriely

Title: Direct Neutron Captures and the r-Process Nucleosynthesis

Keyword abstract: NUCLEAR REACTIONS $^{48}\text{Ca}(n,\gamma)$, $E < 1$ MeV; calculated direct capture σ . Several models compared. Comparison with data.

Keyword abstract: NUCLEAR STRUCTURE $A=60-210$; calculated astrophysical r-process abundances; deduced direct neutron capture role.

Keynumber: [1996KR01](#)

Reference: Phys.Rev. C53, 469 (1996)

Authors: E.Krausmann, W.Balogh, H.Oberhummer, T.Rauscher, K.-L.Kratz, W.Ziegert

Title: Direct Neutron Capture for Magic-Shell Nuclei

Keyword abstract: NUCLEAR REACTIONS $^{48}\text{Ca}(n,\gamma)$, $E \leq 1$ MeV; calculated capture, Maxwellian-averaged $\sigma(E)$. Also evaluated $^{50}\text{Ca}(n,\gamma)$ reaction σ .

Keynumber: [1996BE53](#)

Reference: Phys.Rev. C54, 2014 (1996)

Authors: H.Beer, C.Coceva, P.V.Sedyshev, Yu.P.Popov, H.Herndl, R.Hofinger, P.Mohr, H.Oberhummer

Title: Measurement of Neutron Capture on ^{48}Ca at Thermal and Thermonuclear Energies

Keyword abstract: NUCLEAR REACTIONS $^{48}\text{Ca}(n,\gamma)$, $E=25.3$ meV, 25-218 keV; measured capture $\sigma, E\gamma, I\gamma$. ^{49}Ca levels deduced spectroscopic factors. Direct capture model, Saxon-Woods potential, folding potential, nuclear Ramsauer effect.

Keynumber: 1995MO40

Reference: Aust.J.Phys. 48, 125 (1995)

Authors: A.J.Morton, D.G.Sargood

Title: Thermonuclear Reactions Rates for Reactions Leading to $N = 28$ Nuclei

Keyword abstract: NUCLEAR REACTIONS $^{44, 46}\text{K}$, $^{46, 47, 48}\text{Ca}$, $^{45, 47, 48, 49, 50}\text{Sc}$, $^{46, 47, 48, 49, 50}\text{Ti}$, $^{47, 48, 49, 50, 51}\text{V}$, $^{48, 49, 50, 51, 52}\text{Cr}$, $^{51, 52, 53}\text{Mn}$, $^{52, 53, 54}\text{Fe}$, $^{55}\text{Co}(n,\gamma)$, (n,p) , (n,α) , (p,γ) , (p,n) , (p,α) , (α,γ) , (α,n) , (α,p) , E not given; $^{56}\text{Ni}(n,\gamma)$, (n,p) , (n,α) , (α,γ) , (α,n) , (α,p) , E not given; ^{46}Ar , $^{45, 47}\text{K}$ (p,γ) , (p,n) , (p,α) , (α,γ) , (α,n) , (α,p) , E not given; calculated stellar reaction rates vs temperature. Statistical model calculations, optical-model potential.

Keynumber: [1987KA28](#)

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 $^{40, 42, 44, 46, 48}\text{Ca}(n,\gamma)$, E=thermal; calculated direct capture σ . $^{41, 43, 45, 47, 49}\text{Ca}$ deduced resonance parameters. Optical model.

Keynumber: 1987CA11

Reference: Nucl.Phys. A465, 274 (1987)

Authors: R.F.Carlton, J.A.Harvey, R.L.Macklin, C.H.Johnson, B.Castel

Title: Nuclear Structure of ^{49}Ca above 5 MeV Excitation from $n + ^{48}\text{Ca}$ and Astrophysics for 30 keV Neutrons

Keyword abstract: NUCLEAR REACTIONS $^{48}\text{Ca}(n,n)$, (n,γ) , (n,X) , E <2 MeV; measured total, capture $\sigma(E)$, transmission. ^{49}Ca deduced levels, J, π , $(g\Gamma_n G\gamma/\Gamma)$, Γ_n, Γ_γ . R-matrix formalism.

Keynumber: 1985KA12

Reference: Astrophys.J. 291, 319 (1985)

Authors: F.Kappeler, G.Walter, G.J.Mathews

Title: Stellar Neutron Capture Rates for ^{46}Ca and ^{48}Ca

Keyword abstract: NUCLEAR REACTIONS $^{46, 48}\text{Ca}(n,\gamma)$, E ≤ 97 keV; measured $E\gamma, I\gamma$, capture $\sigma(E)$; deduced stellar neutron capture rates.

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 $^{20, 21, 22}\text{Ne}$, ^{23}Na , $^{24, 25, 26}\text{Mg}$, ^{27}Al , $^{28, 29, 30}\text{Si}$, ^{31}P , $^{32, 33, 34, 36}\text{S}$, $^{35, 37}\text{Cl}$, $^{36, 38, 40}\text{Ar}$, $^{39, 40, 41}\text{K}$, $^{40, 42, 43, 44, 46, 48}\text{Ca}$, ^{45}Sc , $^{46, 47, 48, 49, 50}\text{Ti}$, $^{50, 51}\text{V}$, $^{50, 52, 53, 54}\text{Cr}$, ^{55}Mn , $^{54, 56, 57, 58}\text{Fe}$, ^{59}Co , $^{58, 60, 61, 62, 64}\text{Ni}$, $^{63, 65}\text{Cu}$, $^{64, 66, 67}\text{Zn}(n,\gamma)$, (n,p) , (n,α) , (p,γ) , (p,n) , (p,α) , (α,γ) , (α,n) , (α,p) , $^{70}\text{Zn}(p,\gamma)$, (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: 1983MAZD

Reference: Bull.Am.Phys.Soc. 28, No.7, 988, DB9 (1983)

Authors: G.J.Mathews, F.Kaeppler, G.Walter

Title: Stellar Neutron Capture Cross Sections for $^{46, 48}\text{Ca}$

Keyword abstract: NUCLEAR REACTIONS $^{46, 48}\text{Ca}(n,\gamma)$, E \approx stellar energies; measured Maxwellian $\langle\sigma(\text{capture})\rangle$ deduced s-process inadequacy for $^{48}\text{Ca}/^{46}\text{Ca}$ abundance ratio.

Keynumber: 1982MEZU

Coden: REPT KfK-3452,Mengoni

Keyword abstract: NUCLEAR REACTIONS $^{42}, ^{48}\text{Ca}$, $^{136}\text{Xe}(n,\gamma)$, E=thermal; calculated σ (capture). Lane-Lynn model.

Keynumber: 1980PIZN

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

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

Keynumber: 1971ARZJ

Coden: CONF Legnaro(1f_{7/2} Nuclei),P251

Keyword abstract: NUCLEAR REACTIONS ^{36}Ar , ^{40}Ar , ^{40}K , $^{40}, ^{42}, ^{44}, ^{46}, ^{48}\text{Ca}$, ^{47}Ti , ^{55}Mn , ^{57}Fe , $^{59}\text{Co}(n,\gamma)$, E=thermal; surveyed E γ , I γ , $\gamma\gamma$ -coin, $\gamma\gamma(\theta)$, γ -polarization data. ^{37}Ar , ^{41}Ar , ^{41}K , $^{41}, ^{43}, ^{45}, ^{47}, ^{49}\text{Ca}$, ^{48}Ti , ^{56}Mn , ^{58}Fe , ^{60}Co deduced levels, J, π , γ -mixing.

Keynumber: 1968BO53

Reference: Program and Theses, Proc.18th Ann.Conf.Nucl.Spectroscopy and Struct.At.Nuclei, Riga, p.34 (1968)

Authors: A.P.Bogdanov, L.N.Bystrov, E.A.Rudak, E.I.Firsov

Title: Spectrum of γ -Rays from $^{48}\text{Ca}(n,\gamma)^{49}\text{Ca}$ by Slow Neutrons

Keyword abstract: NUCLEAR REACTIONS $^{48}\text{Ca}(n,\gamma)$, E = thermal; measured E γ , I γ , $\gamma\gamma$ -coin. ^{49}Ca deduced γ -multipolarity, γ -branching.

Keynumber: 1967CS01

Reference: Nucl.Phys. A95, 229(1967)

Authors: J.Csikai, G.Peto, M.Buczko, Z.Miligy, N.A.Eissa

Title: Radiative Capture Cross Sections for 14.7 MeV Neutrons

Keyword abstract: NUCLEAR REACTIONS ^{27}Al , ^{30}Si , ^{31}P , ^{45}Sc , ^{48}Ca , ^{50}Ti , ^{51}V , ^{89}Y , ^{123}Sb , ^{139}La , $^{209}\text{Bi}(n,\gamma)$, E = 14.7 MeV; measured σ . ^{23}Na , ^{55}Mn , ^{103}Rh , ^{141}Pr , ^{165}Ho , $^{208}\text{Pb}(n,\gamma)$, E = 13.4-15.0 MeV; measured $\sigma(E)$. $^{103}\text{Rh}(n,\gamma)$, E = 13.4-15.0 MeV; measured $\sigma(g)/\sigma(M)$; deduced spin cutoff parameter. Enriched ^{30}Si , ^{48}Ca targets.