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24 reference(s) found :

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 ^1H , ^{14}N , 28 , ^{29}Si , ^{56}Fe , ^{27}Al , $^{63}\text{Cu}(n,\gamma)$,E=thermal; measured E γ ,I γ .

Keyword abstract: ATOMIC MASSES 1 , ^2H , 14 , ^{15}N , 28 , 29 , 30 , 31 , ^{32}Si , 56 , ^{57}Fe ; measured neutron-induced γ spectra; deduced mass differences.

Keynumber: [1992RA19](#)

Reference: Phys.Rev. C46, 972 (1992)

Authors: S.Raman, E.T.Jurney, J.W.Starner, J.E.Lynn

Title: Thermal-Neutron Capture by Silicon Isotopes

Keyword abstract: NUCLEAR REACTIONS 28 , 29 , $^{30}\text{Si}(n,\gamma)$,E=thermal; measured E γ ,I γ following capture; deduced σ . 29 , 30 , ^{31}Si deduced neutron separation energies,transition γ -multipolarity. Direct capture interpretation.

Keynumber: [1990IS02](#)

Reference: Phys.Rev. C41, 1272 (1990)

Authors: M.A.Islam, T.J.Kennett, W.V.Prestwich

Title: Thermal Neutron Capture in Silicon

Keyword abstract: NUCLEAR REACTIONS 28 , 29 , $^{30}\text{Si}(n,\gamma)$,E=thermal; measured E γ ,I γ , σ . 29 , 30 , ^{31}Si deduced levels,neutron separation energy. Pair spectrometer,hyperpure Ge detector.

Keynumber: 1989ISZX

Reference: Phys.Can. 45, No.3, 47, FC4 (1989)

Authors: M.A.Islam, T.J.Kennett, W.V.Prestwich

Title: A Study of Gamma Rays from Thermal Neutron Capture in Silicon Isotopes

Keyword abstract: NUCLEAR REACTIONS 28 , 29 , $^{30}\text{Si}(n,\gamma)$,E=thermal; measured γ -spectra following capture. 29 , 30 , ^{31}Si deduced transitions,neutron separation energies.

Keynumber: 1988HO06

Reference: J.Phys.(London) G14, Supplement S207 (1988)

Authors: Y.K.Ho, C.Coceva

Title: Nucleon Effective Charge in E1 and E2 Radiative Transitions

Keyword abstract: NUCLEAR REACTIONS ^{25}Mg , ^{27}Al , $^{29}\text{Si}(n,\gamma)$,E not given; calculated E1 transition inhibition factors. ^{89}Y , 90 , ^{91}Zr , ^{93}Nb , 92 , 94 , 96 , ^{98}Mo , ^{136}Ba , ^{139}La , ^{141}Pr , 142 , 143 , 145 , 146 , ^{148}Nd , ^{154}Sm , ^{181}Ta , $^{184}\text{W}(n,\gamma)$,E not given; analyzed nonstatistical $\Gamma\gamma$ data; deduced neutron effective charge enhancement factor.

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, ²³Na, ^{24, 25, 26}Mg, ²⁷Al, ^{28, 29, 30}Si, ³¹P, ^{32, 33, 34, 36}S, ^{35, 37}Cl, ^{36, 38, 40}Ar, ^{39, 40, 41}K, ^{40, 42, 43, 44, 46, 48}Ca, ⁴⁵Sc, ^{46, 47, 48, 49, 50}Ti, ^{50, 51}V, ^{50, 52, 53, 54}Cr, ⁵⁵Mn, ^{54, 56, 57, 58}Fe, ⁵⁹Co, ^{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), ⁷⁰Zn(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: 1983KE11

Reference: Nucl.Instrum.Methods 215, 159 (1983)

Authors: T.J.Kennett, W.V.Prestwich, R.J.Tervo, J.S.Tsai

Title: Evaluation of a Method for the Determination of Accurate Transition Energies in the (n,γ) Reaction

Keyword abstract: NUCLEAR REACTIONS ⁹Be, ¹⁴N, ^{28, 29}Si(n,γ), E=0.5-11 MeV; measured E_γ, I_γ. ¹⁰Be, ^{29, 30}Si, ¹⁵N deduced neutron separation energy, level energies. High fidelity pulse height to energy transformation.

Keynumber: 1980PIZN

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

Keyword abstract: NUCLEAR REACTIONS ^{22, 23}Na, Mg, ^{24, 25, 26}Mg, ²⁷Al, Si, ^{28, 29, 30}Si, ³¹P, 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, ⁵⁹Co, 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.

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, 25}Mg, ²⁷Al, ^{28, 29}Si, ³²S, ³⁵Cl, ^{40, 44}Ca, ^{47, 48, 49}Ti, ^{50, 52, 53}Cr, ⁵⁵Mn, ^{54, 56, 57}Fe(n,γ), E=thermal; measured E_γ, I_γ. ²H, ¹⁰Be, ^{25, 26}Mg, ²⁸Al, ^{29, 30}Si, ³³S, ³⁶Cl, ^{41, 45}Ca, ^{48, 49, 50}Ti, ^{51, 53, 54}Cr, ⁵⁶Mn, ^{55, 57, 58}Fe deduced Q, neutron binding energy.

Keynumber: 1977CL03

Reference: Phys.Lett. 71B, 10 (1977)

Authors: C.F.Clement, A.M.Lane, J.Kopecky

Title: Correlations in M1 Neutron Capture as Evidence for a Semi-Direct Mechanism

Keyword abstract: NUCLEAR REACTIONS ¹⁹F, ²³Na, ²⁵Mg, ²⁷Al, ²⁹Si, ³¹P, ^{35, 37}Cl, ³⁹K, ⁴³Ca (n,γ), (d,p); analyzed correlations between reaction types.

Keynumber: 1976TH03

Reference: Can.J.Phys. 54, 383 (1976)

Authors: V.J.Thomson, W.V.Prestwich, T.J.Kennett

Title: Resonance Neutron Capture in Silicon

Keyword abstract: NUCLEAR REACTIONS ^{28, 29}Si(n,γ), E > 1 keV; measured σ(E_γ). ^{29, 30}Si deduced resonances, J, π.

Keynumber: 1976KE04

Reference: Nucl.Phys. A270, 164 (1976)

Authors: M.J.Kenny, B.J.Allen, J.W.Boldeman, A.M.R.Joye

Title: Resonance Neutron Capture in Silicon

Keyword abstract: NUCLEAR REACTIONS $^{28}, ^{29}\text{Si}(n, \gamma), E=31.7, 38.8, 55.9, 67.7$ keV; measured $\sigma(E, E\gamma)$. $^{29}, ^{30}\text{Si}$ deduced resonances, $\Gamma\gamma$. Natural target.

Keynumber: 1975BO36

Reference: Nucl.Phys. A252, 62 (1975)

Authors: J.W.Boldeman, B.J.Allen, A.R.de L. Musgrove, R.L.Macklin

Title: The Neutron Capture Cross Section of Natural Silicon

Keyword abstract: NUCLEAR REACTIONS $^{28}, ^{29}, ^{30}\text{Si}(n, \gamma), E=3-1500$ keV; measured $\sigma(E, E\gamma)$. $^{29}, ^{30}, ^{31}\text{Si}$ deduced resonances, J, L, n-width, γ -width, correlation coefficient, valence component. Li(n, α) reaction monitor.

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 $^{10}\text{B}, ^{12}\text{C}, ^{29}\text{Si}, ^{40}\text{Ca}(n, \gamma), E=14$ MeV; measured γ -yields, $I\gamma(\theta)$.

Keynumber: 1974SPZQ

Coden: REPT RCN-210

Keyword abstract: NUCLEAR REACTIONS $^{28}, ^{29}\text{Si}, ^{37}\text{Cl}(n, \gamma), E=\text{thermal}$; measured $E\gamma, I\gamma, \gamma(\theta), CP(\gamma), \sigma(E, E\gamma)$; deduced Q. $^{29}, ^{30}\text{Si}, ^{38}\text{Cl}$ deduced levels, γ -branching, J, π .

Keynumber: 1974SP04

Reference: Nucl.Phys. A224, 517 (1974)

Authors: A.M.J.Spits, J.de Boer

Title: Investigation of the $^{29}\text{Si}(n, \gamma)^{30}\text{Si}$ Reaction with Non-Polarized and Polarized Thermal Neutrons

Keyword abstract: NUCLEAR REACTIONS $^{29}\text{Si}(n, \gamma)$, (polarized n, γ), $E=\text{thermal}$; measured $E\gamma, I\gamma, CP(\gamma), \sigma$; deduced Q; $^{12}\text{C}, ^{14}\text{N}, ^{19}\text{F}, ^{27}\text{Al}, ^{28}\text{Si}, ^{35}\text{Cl}, ^{54}\text{Fe}, ^{56}\text{Fe}, ^{207}\text{Pb}(n, \gamma)$; measured $E\gamma$; deduced Q; $^{28}\text{Si}(n, \gamma)$; measured σ . ^{30}Si deduced levels, γ -branching, J, π .

Keynumber: 1974ARZV

Coden: JOUR BAPSA 19 497 EF9

Keyword abstract: NUCLEAR REACTIONS $^{10}\text{B}, ^{29}\text{Si}, ^{40}\text{Ca}(n, \gamma)$; measured $\sigma(\theta)$.

Keynumber: 1973SPZM

Coden: REPT RCN-203 P289

Keyword abstract: NUCLEAR REACTIONS $^{29}\text{Si}(n, \gamma), E=\text{thermal}$; measured $E\gamma, I\gamma$. ^{29}Si (polarized n, γ), $E=\text{thermal}$; measured CP. ^{30}Si levels deduced J.

Keynumber: 1973BHZU

Coden: REPT BNL-50379

Keyword abstract: NUCLEAR REACTIONS $^{28}, ^{29}, ^{30}\text{Si}(n, \gamma)$, (n, n' γ), analyzed $\sigma(E)$. $^{28}, ^{29}, ^{30}, ^{31}\text{Si}$ compiled level, γ ray properties.

Keynumber: 1973ARZB

Coden: JOUR BAPSA 18 1401 CE1

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

Keynumber: 1973ABZV

Coden: REPT EANDC(E)157-U,P118

Keyword abstract: NUCLEAR REACTIONS ^{23}Na , 64 , 66 , ^{68}Zn , ^{29}Si , ^{63}Cu , ^{72}Ge , ^{183}W (polarized n, γ); measured $E\gamma$,CP(γ ,X). 65 , 65 , ^{65}Zn , ^{30}Si , ^{64}Cu , ^{73}Ge , ^{184}W deduced levels, ^{24}Na resonance deduced J, π .

Keynumber: 1973ABZM

Coden: REPT INDC(SEC)-36/L P37

Keyword abstract: NUCLEAR REACTIONS ^{23}Na , ^{29}Si , ^{63}Cu , ^{72}Ge , 64 , 66 , ^{68}Zn , $^{183}\text{W}(\text{n},\gamma)$; measured $E\gamma$.

Keynumber: 1970SP02

Reference: Nucl.Phys. A145, 449 (1970)

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

Title: Gamma Rays from Thermal-Neutron Capture in Natural and ^{28}Si Enriched Silicon

Keyword abstract: NUCLEAR REACTIONS 28 , 29 , ^{30}Si , ^6Li , ^{14}N , ^{19}F , ^{27}Al , 54 , ^{56}Fe , $^{207}\text{Pb}(\text{n},\gamma)$, E=thermal; $^{28}\text{Si}(\text{n},\text{n}'\gamma)$, E=fast; measured $E\gamma$, $I\gamma$; deduced Q. 29 , 30 , ^{31}Si deduced levels, γ -branching. Natural, ^{28}Si enriched targets, Ge(Li) detector.

Keynumber: 1970BE48

Reference: Nucl.Phys. A157, 520 (1970)

Authors: G.B.Beard, G.E.Thomas

Title: Gamma Rays from Thermal Neutron Capture in ^{28}Si , ^{29}Si , and ^{30}Si

Keyword abstract: NUCLEAR REACTIONS 28 , 29 , $^{30}\text{Si}(\text{n},\gamma)$,En=thermal; measured $E\gamma$, $I\gamma$; deduced Q. 29 , 30 , ^{31}Si deduced levels, γ -branching. Enriched targets, Ge(Li) detector.