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**55 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  $^{40}\text{Ca}$ ,  $^{28}\text{Si}$ ,  $^{89}\text{Y}$ ,  $^{208}\text{Pb}(n,\gamma)$ ,  $E=14$  MeV; calculated  $I_\gamma(\theta)$ , Legendre coefficient  $a_2$ . Consistent direct-semidirect model. Comparisons with data.

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**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  $^{28}\text{Si}$ ,  $^{32}\text{S}$ ,  $^{40}\text{Ca}(n,\gamma)$ ,  $E=\text{fast}$ ; calculated  $\sigma, \sigma(\theta)$ . Direct-semidirect capture model. Comparison with data.

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**Keynumber:** 1997RO26

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

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

**Title:** Prompt (n, $\gamma$ )-Spectrometry for the Isotopic Analysis of Silicon Crystals for the Avogadro Project

**Keyword abstract:** NUCLEAR REACTIONS  $^1\text{H}$ ,  $^{14}\text{N}$ ,  $^{28}$ ,  $^{29}\text{Si}$ ,  $^{56}\text{Fe}$ ,  $^{27}\text{Al}$ ,  $^{63}\text{Cu}(n,\gamma)$ ,  $E=\text{thermal}$ ; measured  $E_\gamma, I_\gamma$ .

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

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**Keynumber:** 1997KAZZ

**Reference:** Proc.9th Intern.Symposium on Capture Gamma-Ray Spectroscopy and Related Topics, Budapest, Hungary, October 1996, G.L.Molnar, T.Belgya, Zs.Revay, Eds., Vol.1, p.440 (1997)

**Authors:** T.Kahn, F.J.Hartmann, J.Ott, T.von Egidy, M.Jentschel

**Title:** Gamma-Ray Induced Doppler Shift After (n, $\gamma$ ) Reactions in Si and Ti

**Keyword abstract:** NUCLEAR REACTIONS  $^{28}\text{Si}$ ,  $^{48}\text{Ti}(n,\gamma)$ ,  $E=\text{thermal}$ ; measured  $E_\gamma, I_\gamma, \gamma$ -induced Doppler shift.  $^{49}\text{Ti}$  level deduced  $T_{1/2}$ .

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**Keynumber:** 1997KA71

**Reference:** Nucl.Instrum.Methods Phys.Res. A385, 100 (1997)

**Authors:** T.Kahn, T.von Egidy, F.J.Hartmann, J.Ott, M.Jentschel

**Title:** Gamma-Ray Induced Doppler Shift Attenuation after (n, $\gamma$ ) Reactions in Si and Ti

**Keyword abstract:** NUCLEAR REACTIONS  $^{28}\text{Si}$ ,  $^{48}\text{Ti}(n,\gamma)$ ,  $E=\text{reactor}$ ; measured  $E_\gamma, I_\gamma, \gamma$ -coin, Doppler-shifted spectra.  $^{29}\text{Si}$ ,  $^{49}\text{Ti}$  deduced levels  $T_{1/2}$ . Gamma-ray induced Doppler shift attenuation method.

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**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  $^{28, 29, 30}\text{Si}(n,\gamma), E=\text{thermal}$ ; measured  $E\gamma, I\gamma$  following capture; deduced  $\sigma$ .  $^{29, 30, 31}\text{Si}$  deduced neutron separation energies, transition  $\gamma$ -multipolarity. Direct capture interpretation.

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**Keynumber:** 1991CA18

**Reference:** Z.Phys. A339, 261 (1991)

**Authors:** B.Castel, E.R.Siciliano, Y.Okuhara

**Title:** Radiative M1 Capture in Light Nuclei

**Keyword abstract:** NUCLEAR REACTIONS  $^{28}\text{Si}(n,\gamma), E$  not given; analyzed B(M1) data; deduced reaction mechanism. Shell model.

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**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  $^{28, 29, 30}\text{Si}(n,\gamma), E=\text{thermal}$ ; measured  $E\gamma, I\gamma, \sigma$ .  $^{29, 30, 31}\text{Si}$  deduced levels, neutron separation energy. Pair spectrometer, hyperpure Ge detector.

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**Keynumber:** 1989KO53

**Reference:** Izv.Akad.Nauk SSSR, Ser.Fiz. 53, 2125 (1989); Bull.Acad.Sci.USSR, Phys.Ser. 53, No.11, 63 (1989)

**Authors:** Yu.E.Koshutsky, V.T.Kupryashkin, N.V.Strilchuk, A.I.Feoktistov, I.P.Shapovalova

**Title:** Lifetimes of Highly Excited States of the Nuclei in  $(n\gamma)$  Reactions with Thermal Neutrons

**Keyword abstract:** NUCLEAR REACTIONS  $^{28}\text{Si}, ^{32}\text{S}(n,\gamma), E=\text{thermal}$ ; measured  $\gamma\gamma$ -coin.  $^{29}\text{Si}, ^{33}\text{S}$  levels deduced  $T_{1/2}$ .

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

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**Keynumber:** [1989HO09](#)

**Reference:** Phys.Rev. C39, 1691 (1989)

**Authors:** Y.-K.Ho, Z.-S.Yuan, Y.Mi

**Title:** Strong Nonstatistical Effects in Neutron Capture at the 2p Size Resonance Region

**Keyword abstract:** NUCLEAR REACTIONS  $^{27}\text{Al}, ^{28}\text{Si}(n,\gamma), E=\text{thermal}-2\text{ MeV}$ ; calculated  $\sigma(E)$ ; deduced nonstatistical fractions, reaction mechanisms.

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**Keynumber:** 1988KI02

**Reference:** J.Phys.(London) G14, Supplement S215 (1988)

**Authors:** H.Kitazawa, M.Igashira

**Title:** Mechanism of s-Wave and p-Wave Neutron Resonance Capture in Light and Medium-Weight Nuclei

**Keyword abstract:** NUCLEAR REACTIONS  $^{16}\text{O}, ^{28}\text{Si}, ^{32}\text{S}(n,\gamma), E \approx \text{resonance}$ ; measured  $E\gamma, I\gamma$ .  $^{17}\text{O}, ^{29}\text{Si}, ^{33}\text{S}$  deduced resonance  $\Gamma\gamma$ . Valence capture model.

**Keynumber:** [1987WE07](#)

**Reference:** Phys.Rev. C36, 585 (1987)

**Authors:** H.Weigmann, P.W.Martin, R.Kohler, I.van Parijs, F.Poortmans, J.A.Wartena

**Title:** Structure of Unbound States in  $^{29}\text{Si}$  from Neutron Resonance Spectroscopy of  $^{28}\text{Si} + n$

**Keyword abstract:** NUCLEAR REACTIONS  $^{28}\text{Si}(n,n)$ ,  $(n,\gamma)$ ,  $E=30-4640$  keV; measured total,capture  $\sigma(E)$ .  $^{29}\text{Si}$  deduced resonances, $J,\pi$ ,  $(g\Gamma_n)$ ,  $(g\Gamma_n\Gamma_\gamma/\Gamma)$ ,level density,neutron strength functions, $B(\lambda)$ . Natural target. R-matrix analyses.

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**Keynumber:** 1987KI08

**Reference:** Nucl.Phys. A464, 61 (1987)

**Authors:** H.Kitazawa, M.Ohgo, T.Uchiyama, M.Igashira

**Title:** Particle-Vibrator Coupling Model Calculation of Partial Radiative Widths for  $p_{3/2}$  Wave Neutron Resonance on  $^{28}\text{Si}$

**Keyword abstract:** NUCLEAR REACTIONS  $^{28}\text{Si}(n,\gamma)$ ,  $E=565$  keV; calculated  $\Gamma_n, \Gamma_\gamma$ . Particle-vibrator coupling model.

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**Keynumber:** 1986SH11

**Reference:** Nucl.Phys. A452, 205 (1986)

**Authors:** M.Shimizu, M.Igashira, K.Terazu, H.Kitazawa

**Title:**  $\gamma$ -Ray Transitions following p-Wave Neutron Resonance Capture and Off-Resonance Capture by  $^{28}\text{Si}$

**Keyword abstract:** NUCLEAR REACTIONS  $^{28}\text{Si}(n,\gamma)$ ,  $E=485,565,802,806$  keV; measured  $\sigma(E,E\gamma)$  at  $90^0$  and  $125^0$ .  $^{29}\text{Si}$  deduced resonances, $J,\Gamma_\gamma$ . Natural target.

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**Keynumber:** 1984LI10

**Reference:** Z.Phys. A317, 149 (1984)

**Authors:** A.Lindholm, L.Nilsson, I.Bergqvist, R.Zorro, N.Olsson, B.Castel, A.Likar

**Title:** Fast Neutron Radiative Capture in Silicon

**Keyword abstract:** NUCLEAR REACTIONS  $^{28}\text{Si}(n,\gamma)$ ,  $E=3-14$  MeV; measured  $\sigma(\theta=90^0)$  vs  $E$ ; deduced reaction mechanism.  $^{29}\text{Si}$  deduced GDR,GQR interference channel dependence. Compound nucleus,direct-semidirect,continuum shell model analyses.

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**Keynumber:** 1984CA25

**Reference:** Z.Phys. A318, 31 (1984)

**Authors:** B.Castel, C.Mahaux

**Title:** On the Difference between the Effective Charges Used for Bound States of  $^{29}\text{Si}$  and for Low-Energy Neutron Radiative Capture by  $^{28}\text{Si}$

**Keyword abstract:** NUCLEAR REACTIONS  $^{28}\text{Si}(n,\gamma)$ ,  $E=560$  keV; calculated p-wave radial function; deduced external capture dominance,neutron E1 effective charge dependence of capture process.

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

(n,p), (n, $\alpha$ ), (p, $\gamma$ ), (p,n), (p, $\alpha$ ), ( $\alpha$ , $\gamma$ ), ( $\alpha$ ,n), ( $\alpha$ ,p),  $^{70}\text{Zn}(p,\gamma)$ , (p,n), (p, $\alpha$ ), ( $\alpha$ , $\gamma$ ), ( $\alpha$ ,n), ( $\alpha$ ,p), E=low; compiled target thermal distribution energy state to ground state thermonuclear reaction rate of reaction  $\sigma$  vs temperature. Statistical model.

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**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, $\gamma$ ) Reaction

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

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**Keynumber:** 1983BEZS

**Reference:** Tandem Accelerator Lab, Uppsala, 1982 Biennial, p.45 (1983)

**Authors:** I.Bergqvist, R.Zorro, N.Olsson, A.Lindholm, L.Nilsson, A.Hakansson, A.Likar, B.Castel

**Title:** Neutron Capture in Spherical Nuclei

**Keyword abstract:** NUCLEAR REACTIONS  $^{28}\text{Si}(n,\gamma)$ , E=2.5-14 MeV; measured capture  $\sigma(E)$ ,  $\gamma(\theta)$ ; deduced capture mechanism.

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**Keynumber:** 1982BA02

**Reference:** J.Phys.(London) G8, 275 (1982)

**Authors:** B.Basarragtscha, D.Hermsdorf, E.Paffrath

**Title:** An Approach for a Consistent Description of Gamma-Ray Spectra from (n,x $\gamma$ ) Reactions Induced by Fast Neutrons

**Keyword abstract:** NUCLEAR REACTIONS  $^{28}\text{Si}$ ,  $^{56}\text{Fe}(n,\gamma)$ , (n,X), E=14 MeV; calculated  $\sigma(E\gamma)$ . Statistical model, equilibrium, preequilibrium superposition.

-----  
**Keynumber:** 1981BEZU

**Reference:** Tandem Accelerator Lab, Uppsala, Ann.Rept., p.36 (1981)

**Authors:** I.Bergqvist, N.Olsson, R.Zorro, A.Lindholm, L.Nilsson, M.Saleem

**Title:** Neutron Capture in Spherical Nuclei

**Keyword abstract:** NUCLEAR REACTIONS  $^{28}\text{Si}$ ,  $^{32}\text{S}(n,\gamma)$ , E=3-14 MeV; measured  $\sigma(E)$ .

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**Keynumber:** 1980PIZN

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

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

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**Keynumber:** 1980JO02

**Reference:** Nucl.Phys. A334, 269 (1980)

**Authors:** S.Joly, G.Grenier, J.Voignier, J.W.Boldeman

**Title:** Resonance Neutron Capture Spectroscopy in  $^{28}\text{Si}$

**Keyword abstract:** NUCLEAR REACTIONS  $^{28}\text{Si}(n,\gamma)$ , E=565,813 keV; measured  $\sigma(E,E\gamma)$ .  $^{29}\text{Si}$  resonances deduced  $\Gamma\gamma$ . Natural target. Valence, shell models.

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**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  $^1\text{H}$ ,  $^9\text{Be}$ ,  $^{14}\text{N}$ ,  $^{24}$ ,  $^{25}\text{Mg}$ ,  $^{27}\text{Al}$ ,  $^{28}$ ,  $^{29}\text{Si}$ ,  $^{32}\text{S}$ ,  $^{35}\text{Cl}$ ,  $^{40}$ ,  $^{44}\text{Ca}$ ,  $^{47}$ ,  $^{48}$ ,  $^{49}\text{Ti}$ ,  $^{50}$ ,  $^{52}$ ,  $^{53}\text{Cr}$ ,  $^{55}\text{Mn}$ ,  $^{54}$ ,  $^{56}$ ,  $^{57}\text{Fe}(n,\gamma)$ ,  $E=\text{thermal}$ ; measured  $E\gamma, I\gamma$ .  $^2\text{H}$ ,  $^{10}\text{Be}$ ,  $^{25}$ ,  $^{26}\text{Mg}$ ,  $^{28}\text{Al}$ ,  $^{29}$ ,  $^{30}\text{Si}$ ,  $^{33}\text{S}$ ,  $^{36}\text{Cl}$ ,  $^{41}$ ,  $^{45}\text{Ca}$ ,  $^{48}$ ,  $^{49}$ ,  $^{50}\text{Ti}$ ,  $^{51}$ ,  $^{53}$ ,  $^{54}\text{Cr}$ ,  $^{56}\text{Mn}$ ,  $^{55}$ ,  $^{57}$ ,  $^{58}\text{Fe}$  deduced  $Q$ , neutron binding energy.

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**Keynumber:** 1980HEZD

**Coden:** CONF Gaussig,P147,Hermsdorf,ZFK-410

**Keyword abstract:** NUCLEAR REACTIONS  $^{28}\text{Si}(n,\gamma)$ ,  $(n,n)$ ,  $(n,n')$ ,  $(n,p)$ ,  $(n,\alpha)$ ,  $(n,X)$ ,  $E < 20$  MeV; analyzed  $\sigma(E)$ . Compilation.

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**Keynumber:** 1980AL19

**Reference:** J.Phys.(London) G6, 1173 (1980)

**Authors:** B.J.Allen, D.D.Cohen, F.Z.Company

**Title:** Radiative Widths of Neutron Scattering Resonances

**Keyword abstract:** NUCLEAR REACTIONS  $^{19}\text{F}$ ,  $^{24}\text{Mg}$ ,  $^{27}\text{Al}$ ,  $^{28}\text{Si}$ ,  $^{56}\text{Fe}$ ,  $^{207}\text{Pb}(n,\gamma)$ ,  $E=20-80$  keV; measured  $\sigma(E\gamma, E)$ .  $^{20}\text{F}$ ,  $^{25}\text{Mg}$ ,  $^{28}\text{Al}$ ,  $^{29}\text{Si}$ ,  $^{57}\text{Fe}$ ,  $^{208}\text{Pb}$  deduced resonances,  $\Gamma n, L, J, \pi, \Gamma\gamma$ . Moxon-Rae detectors, Monte-Carlo analysis.

-----  
**Keynumber:** 1979LI02

**Reference:** Z.Phys. A289, 229 (1979)

**Authors:** A.Lindholm, L.Nilsson, I.Bergqvist, N.Olsson

**Title:** Evidence for Neutron Capture Through Doorway States in  $^{29}\text{Si}$

**Keyword abstract:** NUCLEAR REACTIONS  $^{28}\text{Si}(n,\gamma)$ ,  $E=2.7-6.2$  MeV; measured  $\sigma(E)$ ; deduced possible evidence for doorway. Comparison with theory.

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**Keynumber:** 1978NIZX

**Coden:** CONF BNL(Neutron Capt  $\gamma$ -Ray Spectr),Contrib,No57,Nilsson

**Keyword abstract:** NUCLEAR REACTIONS  $^{28}\text{Si}(n,\gamma)$ ,  $E=2.7-6.2$  MeV; measured  $\sigma$ .  $^{29}\text{Si}$  level deduced  $\Gamma\gamma$ ,  $J, \pi$ . Evidence for p-wave doorway state.

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**Keynumber:** 1978NIZR

**Coden:** CONF Brookhaven(Neutron Capt  $\gamma$ -Ray Spectr),Proc,P704,Nilsson

**Keyword abstract:** NUCLEAR REACTIONS  $^{28}\text{Si}(n,\gamma)$ ,  $E=3-6$  MeV; measured  $E\gamma, I\gamma$ ; deduced  $\sigma$ .

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**Keynumber:** 1978MIZS

**Coden:** CONF BNL(Neutron Capt  $\gamma$ -Ray Spectr),Contrib,No52,Micklinghoff

**Keyword abstract:** NUCLEAR REACTIONS  $^{28}\text{Si}(n,\gamma)$ ,  $E=1-15$  MeV; calculated  $\sigma(E)$ . K-matrix formalism.

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**Keynumber:** 1978MIZJ

**Coden:** CONF Brookhaven(Neutron Capt  $\gamma$ -Ray Spectr),Proc,P690,Micklinghoff

**Keyword abstract:** NUCLEAR REACTIONS  $^{28}\text{Si}(n,\gamma)$ ,  $E=1-15$  MeV; calculated  $\sigma$ ; deduced doorway structure. K-matrix approach, microscopic treatment of single particle resonances.

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**Keynumber:** 1978MI14

**Reference:** Ann.Phys.(New York) 114, 452 (1978)

**Authors:** M.Micklinghoff, B.Castel

**Title:** Doorway Structures in the Radiative Capture of Neutrons by  $^{28}\text{Si}$  and  $^{32}\text{S}$

**Keyword abstract:** NUCLEAR REACTIONS  $^{28}\text{Si}$ ,  $^{32}\text{S}(n,\gamma)$ ; calculated  $\sigma$ . K-matrix formalism,microscopic treatment including single-particle resonances.

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**Keynumber:** 1978JOZT

**Coden:** CONF BNL(Neutron Capt  $\gamma$ -Ray Spectr),Contrib,No37,Joly

**Keyword abstract:** NUCLEAR REACTIONS  $^{28}\text{Si}(n,\gamma)$ ,E=0.5-3.0 MeV; measured capture  $\gamma$ -spectra,E $\gamma$ ,I $\gamma$ .  $^{29}\text{Si}$  deduced resonances, $\Gamma\gamma$ . Comparison with valence,shell models.

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**Keynumber:** 1978HA32

**Reference:** Phys.Rev. C18, 1542 (1978)

**Authors:** D.Halderson, B.Castel

**Title:** Neutron and Gamma Width Correlations in Neutron Capture Reactions: A Comparative Study

**Keyword abstract:** NUCLEAR REACTIONS  $^{28}\text{Si}(n,\gamma)$ ; calculated  $\Gamma\gamma$ .

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**Keynumber:** 1978GRZP

**Coden:** PREPRINT G Grenier,10/3/78

**Keyword abstract:** NUCLEAR REACTIONS  $^{28}\text{Si}(n,\gamma)$ ,E=565,813 keV; measured  $\gamma$ -spectra.

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**Keynumber:** 1978GRZK

**Coden:** REPT CEA-N-2037,P63,Grenier

**Keyword abstract:** NUCLEAR REACTIONS  $^{28}\text{Si}(n,\gamma)$ ,E=500 keV-1 MeV; measured E $\gamma$ ,I $\gamma$ [relative].  $^{29}\text{Si}$  resonances deduced  $\Gamma\gamma$ .

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**Keynumber:** 1978BEYD

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

**Keyword abstract:** NUCLEAR REACTIONS  $^{28}\text{Si}$ ,  $^{32}\text{S}$ ,  $^{40}\text{Ca}$ ,  $^{89}\text{Y}$ ,  $^{140}\text{Ce}$ ,  $^{208}\text{Pb}(n,\gamma)$ ,E=5-15 MeV; measured  $\sigma$ . direct-semidirect,compound nuclear models.

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**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  $^{28}$ ,  $^{29}\text{Si}(n,\gamma)$ ,E >1 keV; measured  $\sigma(E\gamma)$ .  $^{29}$ ,  $^{30}\text{Si}$  deduced resonances,J, $\pi$ .

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**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.

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**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  $^{28}$ ,  $^{29}$ ,  $^{30}$ Si(n, $\gamma$ ),E=3-1500 keV; measured  $\sigma(E,E\gamma)$ .  $^{29}$ ,  $^{30}$ ,  $^{31}$ Si deduced resonances,J,L,n-width, $\gamma$ -width,correlation coefficient,valence component. Li(n, $\alpha$ ) reaction monitor.

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**Keynumber:** 1975ALZW

**Coden:** JOUR BAPSA 20 150 EB16

**Keyword abstract:** NUCLEAR REACTIONS  $^{27}$ Al,  $^{28}$ Si,  $^{40}$ Ca,  $^{48}$ Ti,  $^{52}$ Cr,  $^{90}$ Zr,  $^{138}$ Ba(n, $\gamma$ ),E >2.5 keV; measured  $\sigma(E\gamma)$ .

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**Keynumber:** 1974SPZQ

**Coden:** REPT RCN-210

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

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**Keynumber:** 1974LO14

**Reference:** Nuovo Cim. 20A, 373 (1974)

**Authors:** G.Longo, F.Saporetti, F.Rigaud, J.L.Irigaray, G.Y.Petit

**Title:** Different Coupling Interactions in Semi-Direct Capture of 14 MeV Neutrons by Si, Sr, Ce and  $^{208}$ Pb

**Keyword abstract:** NUCLEAR REACTIONS  $^{28}$ Si,  $^{88}$ Sr,  $^{140}$ Ce,  $^{208}$ Pb(n, $\gamma$ ),E=14 MeV; calculated  $\sigma(E\gamma)$ .

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**Keynumber:** 1973RIZK

**Coden:** CONF Asilomar(Photonuclear Reactions),Vol2 P953

**Keyword abstract:** NUCLEAR REACTIONS  $^{28}$ Si,  $^{88}$ Sr,  $^{140}$ Ce,  $^{208}$ Pb(n, $\gamma$ ); measured  $\sigma(E\gamma)$ .  $^{29}$ Si,  $^{89}$ Sr,  $^{141}$ Ce,  $^{209}$ Pb deduced levels.

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**Keynumber:** 1973DIZW

**Coden:** JOUR BAPSA 18 648 GH3

**Keyword abstract:** NUCLEAR REACTIONS  $^{28}$ Si(n, $\gamma$ );  $^{29}$ Si calculated doorway states.

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**Keynumber:** 1973BHZU

**Coden:** REPT BNL-50379

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

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**Keynumber:** 1973BAUM

**Coden:** REPT INDC(SEC)-35/L P17

**Keyword abstract:** NUCLEAR REACTIONS  $^{12}$ C,  $^{28}$ Si(n, $\gamma$ ); calculated  $\sigma$ .

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**Keynumber:** 1973ALYU

**Coden:** CONF Asilomar(Photonuclear Reactions),Vol1 P291

**Keyword abstract:** NUCLEAR REACTIONS  $^{28}$ Si(n, $\gamma$ ); measured  $\sigma(E\gamma)$ .  $^{29}$ Si deduced resonances,level-width.

**Keynumber:** 1972POZJ

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

**Keyword abstract:** NUCLEAR REACTIONS  $^{28}\text{Si}$ ,  $^{40}\text{Ca}$ ,  $^{88}\text{Sr}$ ,  $^{138}\text{Ba}$ ,  $^{208}\text{Pb}(n,\gamma)$ ,  $E=14$  MeV; calculated  $\sigma(E\gamma)$ .

**Keynumber:** 1972CVZZ

**Coden:** JOUR FZKAA 4 Suppl,53

**Keyword abstract:** NUCLEAR REACTIONS  $^{28}\text{Si}(n,\gamma)$ ,  $E=14$  MeV; measured  $\sigma(E\gamma)$ .

**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  $^{28}\text{Si}$  Enriched Silicon

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

**Keynumber:** 1970CV02

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

**Authors:** F.Cvelbar, A.Hudoklin

**Title:** Gamma-Ray Spectra from the Radiative Capture of 14 MeV Neutrons in  $^{28}\text{Si}$  and  $^{40}\text{Ca}$

**Keyword abstract:** NUCLEAR REACTIONS  $^{28}\text{Si}$ ,  $^{40}\text{Ca}(n,\gamma)$ ,  $E=14$  MeV; calculated  $\sigma(E\gamma)$ . Direct-semidirect, statistical models.

**Keynumber:** 1970BE48

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

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

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

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

**Keynumber:** 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  $(n,\gamma)$  Reaction Q Values from Capture  $\gamma$ -Ray Spectra

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