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**17 reference(s) found :**

**Keynumber:** 1988KR07

**Reference:** J.Phys.(London) G14, Supplement S183 (1988)

**Authors:** B.Krusche, K.P.Lieb

**Title:** Gamma-Ray Flux in  $A \leq 80$  Odd-Odd Nuclei after Thermal Neutron Capture

**Keyword abstract:** NUCLEAR STRUCTURE  $^{46}\text{Sc}$ ,  $^{72}\text{Ga}$ ; analyzed capture data; deduced  $\Gamma\gamma$  vs excitation energy.

**Keyword abstract:** NUCLEAR REACTIONS  $^{41}\text{K}$ ,  $^{65}\text{Cu}(n,\gamma)$ , E not given; calculated  $E\gamma, I\gamma$ . Monte-Carlo simulation.

**Keynumber:** [1986KR16](#)

**Reference:** Phys.Rev. C34, 2103 (1986)

**Authors:** B.Krusche, K.P.Lieb

**Title:** Dipole Transition Strengths and Level Densities  $A \leq 80$  Odd-Odd Nuclei Obtained from Thermal Neutron Capture

**Keyword abstract:** NUCLEAR REACTIONS  $^{19}\text{F}$ ,  $^{23}\text{Na}$ ,  $^{27}\text{Al}$ ,  $^{31}\text{P}$ ,  $^{35}\text{Cl}$ ,  $^{39}$ ,  $^{41}\text{K}$ ,  $^{45}\text{Sc}$ ,  $^{55}\text{Mn}$ ,  $^{59}\text{Co}$ ,  $^{63}$ ,  $^{65}\text{Cu}$ ,  $^{71}\text{Ga}$ ,  $^{75}\text{As}$ ,  $^{79}\text{Br}(n,\gamma)$ , E=thermal; analyzed data.  $^{20}\text{F}$ ,  $^{24}\text{Na}$ ,  $^{28}\text{Al}$ ,  $^{32}\text{P}$ ,  $^{36}\text{Cl}$ ,  $^{40}$ ,  $^{42}\text{K}$ ,  $^{46}\text{Sc}$ ,  $^{56}\text{Mn}$ ,  $^{60}\text{Co}$ ,  $^{64}$ ,  $^{66}\text{Cu}$ ,  $^{72}\text{Ga}$ ,  $^{76}\text{As}$ ,  $^{80}\text{Br}$  deduced primary E1,M1 transition strengths, level density parameters. Bethe, constant temperature Fermi gas models.

**Keynumber:** 1985VOZV

**Reference:** Proc.AIP Conf.Capture Gamma-Ray Spectroscopy and Related Topics, Knoxville, Tenn., (1984), S.Raman, Ed., AIP, New York, p.305 (1985)

**Authors:** T.von Egidy, P.Hungerford, H.H.Schmidt, H.J.Scheerer, A.N.Behkami, G.Hlawatsch, B.Krusche, K.P.Lieb, H.G.Borner, S.A.Kerr, K.Schreckenbach

**Title:** Structural and Statistical Aspects of Extensive Level Schemes from  $(n,\gamma)$  and Transfer Reactions

**Keyword abstract:** NUCLEAR REACTIONS  $^{19}\text{F}$ ,  $^{23}\text{Na}$ ,  $^{27}\text{Al}$ ,  $^{35}\text{Cl}$ ,  $^{39}$ ,  $^{40}$ ,  $^{41}\text{K}$ ,  $^{113}\text{Cd}$ ,  $^{133}\text{Cs}$ ,  $^{154}\text{Sm}$ ,  $^{153}\text{Eu}$ ,  $^{154}\text{Gd}$ ,  $^{160}$ ,  $^{162}\text{Dy}(n,\gamma)$ ,  $(n,e)$ , E not given; measured not given.  $^{20}\text{F}$ ,  $^{24}\text{Na}$ ,  $^{28}\text{Al}$ ,  $^{36}\text{Cl}$ ,  $^{40}$ ,  $^{41}$ ,  $^{42}\text{K}$ ,  $^{114}\text{Cd}$ ,  $^{134}\text{Cs}$ ,  $^{155}\text{Sm}$ ,  $^{154}\text{Eu}$ ,  $^{155}\text{Gd}$ ,  $^{161}$ ,  $^{163}\text{Dy}$  deduced levels,  $\gamma$ -transition multipolarity, strength distribution.

**Keynumber:** 1985KR06

**Reference:** Nucl.Phys. A439, 219 (1985)

**Authors:** B.Krusche, Ch.Winter, K.P.Lieb, P.Hungerford, H.H.Schmidt, T.Von Egidy, H.J.Scheerer, S.A.Kerr, H.G.Borner

**Title:** Level Structure of  $^{42}\text{K}$  from the  $^{41}\text{K}(n,\gamma)$  and  $^{41}\text{K}(d,p)$  Reactions

**Keyword abstract:** NUCLEAR REACTIONS  $^{41}\text{K}(n,\gamma)$ , E=thermal; measured  $E\gamma, I\gamma$ .  $^{41}\text{K}(d,p)$ , E=20 MeV; measured  $\sigma(Ep), \sigma(\theta)$ .  $^{42}\text{K}$  deduced levels, L, J,  $\pi$ ,  $\gamma$ -branching, neutron binding energy, level density, primary transition relative strengths. Statistical analysis.

**Keynumber:** 1984MA40

**Reference:** Nucl.Sci.Eng. 88, 129 (1984)

**Authors:** R.L.Macklin

**Title:** Resonance Neutron Capture by  $^{39}$ ,  $^{41}\text{K}$

**Keyword abstract:** NUCLEAR REACTIONS  $^{41}\text{K}(n,\gamma)$ , E=11-9850 eV, 2.6-2000 keV;  $^{39}\text{K}(n,\gamma)$ , E  $\approx$

9.05-110 keV; measured  $\gamma$  yield vs E.  $^{40}, ^{42}\text{K}$  deduced resonances,  $J, \Gamma\gamma, (g\Gamma n), (g\Gamma n\Gamma\gamma)/\Gamma$ , Maxwellian average capture vs stellar temperatures.

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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:** 1980PIZN

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

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

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**Keynumber:** 1976SC16

**Reference:** Nucl.Phys. A264, 105 (1976)

**Authors:** O.Schwerer, M.Winkler-Rohatsch, H.Warhanek, G.Winkler

**Title:** Measurement of Cross Sections for 14 MeV Neutron Capture

**Keyword abstract:** NUCLEAR REACTIONS  $^{37}\text{Cl}, ^{41}\text{K}, ^{50}\text{Ti}, ^{51}\text{V}, ^{55}\text{Mn}, ^{71}\text{Ga}, ^{87}\text{Rb}, ^{89}\text{Y}, ^{127}\text{I}, ^{130}\text{Te}, ^{138}\text{Ba}, ^{139}\text{La}, ^{142}\text{Ce}, ^{186}\text{W}, ^{198}\text{Pt}, ^{197}\text{Au}(n,\gamma), E=14.6 \text{ MeV}$ ; measured  $\sigma$ . Natural targets.

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**Keynumber:** 1973SCYA

**Coden:** REPT INDC(SEC)-36/L P8

**Keyword abstract:** NUCLEAR REACTIONS  $^{26}\text{Mg}, ^{37}\text{Cl}, ^{41}\text{K}, ^{55}\text{Mn}, ^{71}\text{Ga}, ^{81}\text{Br}, ^{87}\text{Rb}, ^{100}\text{Mo}, ^{115}\text{In}, ^{127}\text{I}, ^{133}\text{Cs}, ^{138}\text{Ba}, ^{139}\text{La}, ^{142}\text{Ce}, ^{181}\text{Ta}, ^{198}\text{Pt}(n,\gamma)$ ; measured  $\sigma$ .

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**Keynumber:** 1973OPZZ

**Coden:** REPT RCN-184

**Keyword abstract:** NUCLEAR REACTIONS  $\text{K}, ^{39}, ^{41}\text{K}, ^{57}\text{Fe}(n,\gamma)$ ; measured  $E\gamma, I\gamma, \gamma(\theta), Q$ .  $^{40}, ^{42}\text{K}$  deduced levels,  $J, \pi, \gamma$ -branching.  $^{58}\text{Fe}$  levels deduced  $J$ .

**Keyword abstract:** RADIOACTIVITY  $^{40}, ^{42}\text{K}$ ; measured  $E\gamma, I\gamma$ .

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**Keynumber:** 1972OP01

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

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

**Title:** Gamma Rays from Thermal-Neutron Capture in Natural and  $^{39}\text{K}$  Enriched Potassium

**Keyword abstract:** NUCLEAR REACTIONS  $^{39}, ^{41}\text{K}, ^1\text{H}, ^6\text{Li}, ^{12}\text{C}, ^{19}\text{F}, ^{40}\text{Ar}, ^{56}\text{Fe}, ^{207}\text{Pb}(n,\gamma), E$ =thermal;  $^{19}\text{F}, ^{28}\text{Si}(n,n'\gamma), E$ =fast; measured  $E\gamma, I\gamma$ .  $^{39}\text{K}(n,\gamma), E$ =thermal; measured  $E\gamma, I\gamma, \gamma\gamma$ -coin; deduced  $Q$ .  $^{40}, ^{42}\text{K}$  deduced levels,  $\gamma$ -branching. Ge(Li), NaI detectors.

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**Keynumber:** 1972KI24

**Reference:** Radiochim.Acta 17, 191 (1972)

**Authors:** J.I.Kim, E.Gryntakis

**Title:** The Thermal Neutron Cross Section and the Resonance Integral of  $^{146}\text{Nd}$ ,  $^{148}\text{Nd}$ ,  $^{150}\text{Nd}$  and  $^{41}\text{K}$

**Keyword abstract:** NUCLEAR REACTIONS  $^{146, 148, 150}\text{Nd}$ ,  $^{41}\text{K}(n,\gamma)$ ;E=thermal; measured  $I\gamma$ , deduced  $\sigma$ , resonance integral.

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**Keynumber:** 1972CAYH

**Coden:** JOUR FZKAA 4 Suppl,59

**Keyword abstract:** NUCLEAR REACTIONS  $^{23}\text{Na}$ ,  $^{27}\text{Al}$ ,  $^{37}\text{Cl}$ ,  $^{55}\text{Mn}$ ,  $^{41}\text{K}$ ,  $^{127}\text{I}(n,\gamma)$ ,E=14 MeV; measured activation  $\sigma$ .

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**Keynumber:** 1971RYZZ

**Reference:** Proc.Int.Conf.Chemical Nuclear Data, Measurements and Applications, Canterbury, England, M.L.Hurrell, Ed., Institution of Civil Engineers, London, p.139 (1971)

**Authors:** T.B.Ryves

**Title:** Thermal Neutron Capture Cross Section Measurements at the NPL

**Keyword abstract:** NUCLEAR REACTIONS  $^{23}\text{Na}$ ,  $^{26}\text{Mg}$ ,  $^{27}\text{Al}$ ,  $^{30}\text{Si}$ ,  $^{37}\text{Cl}$ ,  $^{41}\text{K}$ ,  $^{50}\text{Ti}$ ,  $^{51}\text{V}$ ,  $^{58}\text{Fe}$ ,  $^{64}\text{Ni}$ ,  $^{63, 65}\text{Cu}$ ,  $^{69, 71}\text{Ga}$ ,  $^{75}\text{As}$ ,  $^{79, 81}\text{Br}$ ,  $^{89}\text{Y}$ ,  $^{107, 109}\text{Ag}$ ,  $^{115}\text{In}$ ,  $^{121, 123}\text{Sb}$ ,  $^{127}\text{I}$ ,  $^{139}\text{La}$ ,  $^{151}\text{Eu}$ ,  $^{196, 198}\text{Pt}$  (n, $\gamma$ ),E=thermal; measured  $\sigma$ .

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**Keynumber:** 1971RYZX

**Coden:** CONF Canterbury(Chem Nucl Data),P139,12/10/72

**Keyword abstract:** NUCLEAR REACTIONS  $^{23}\text{Na}$ ,  $^{26}\text{Mg}$ ,  $^{27}\text{Al}$ ,  $^{30}\text{Si}$ ,  $^{37}\text{Cl}$ ,  $^{41}\text{K}$ ,  $^{50}\text{Ti}$ ,  $^{51}\text{V}$ ,  $^{58}\text{Fe}$ ,  $^{64}\text{Ni}$ ,  $^{63, 65}\text{Cu}$ ,  $^{69, 71}\text{Ga}$ ,  $^{75}\text{As}$ ,  $^{79}\text{Br}$ ,  $^{81}\text{Br}$ ,  $^{89}\text{Y}$ ,  $^{107, 109}\text{Ag}$ ,  $^{115}\text{In}$ ,  $^{121, 123}\text{Sb}$ ,  $^{127}\text{I}$ ,  $^{139}\text{La}$ ,  $^{151}\text{Eu}$ ,  $^{196, 198}\text{Pt}$  (n, $\gamma$ ),E=thermal; measured  $\sigma$ ; deduced resonance integrals.

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**Keynumber:** 1970STZZ

**Reference:** Thesis, Virginia Poly. (1970); Diss.Abst.Int. 31B, 3638 (1970)

**Authors:** E.P.Stergagos

**Title:** Studies of Resonances in  $^{23}\text{Na}$ ,  $^{26}\text{Mg}$ ,  $^{41}\text{K}$ ,  $^{55}\text{Mn}$  and  $^{59}\text{Co}$

**Keyword abstract:** NUCLEAR REACTIONS  $^{23}\text{Na}$ ,  $^{26}\text{Mg}$ ,  $^{41}\text{K}$ ,  $^{55}\text{Mn}$ ,  $^{59}\text{Co}(n,\gamma)$ ,E=thermal;measured  $E\gamma$ , $I\gamma$ .  $^{24}\text{Na}$ ,  $^{27}\text{Mg}$ ,  $^{42}\text{K}$ ,  $^{56}\text{Mn}$ ,  $^{60}\text{Co}$  deduced resonances, level-width.

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**Keynumber:** 1970JO04

**Reference:** Can.J.Phys. 48, 1109 (1970)

**Authors:** L.V.Johnson, T.J.Kennett

**Title:** Study of Thermal Neutron Capture in Potassium

**Keyword abstract:** NUCLEAR REACTIONS  $^{39, 41}\text{K}(n,\gamma)$ , E=thermal; measured  $E\gamma$ ,  $I\gamma$ ,  $\gamma\gamma$ -coin; deduced Q.  $^{40}\text{K}$  deduced levels, J,  $\pi$ ,  $\gamma$ -branching. Ge(Li) detectors.