

Visit the [Isotope Explorer](#) home page!

## 24 reference(s) found :

**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  $^9\text{Be}$ ,  $^{12}$ ,  $^{13}\text{C}$ ,  $^{24}$ ,  $^{25}$ ,  $^{26}\text{Mg}$ ,  $^{32}$ ,  $^{34}$ ,  $^{33}\text{S}$ ,  $^{40}$ ,  $^{44}\text{Ca}$  (n, $\gamma$ ),E=slow; calculated capture  $\sigma$ .

**Keynumber:** 1987SH03

**Reference:** Nucl.Instrum.Methods Phys.Res. A254, 139 (1987)

**Authors:** J.F.Shriener, Jr., G.E.Mitchell, E.G.Bilpuch

**Title:** Significance Levels of Linear Correlation Coefficients

**Keyword abstract:** NUCLEAR REACTIONS  $^{42}$ ,  $^{44}\text{Ca}$ ,  $^{58}\text{Fe}$ ,  $^{136}\text{Xe}$ ,  $^{138}\text{Ba}$ (n, $\gamma$ ),E=thermal;  $^{42}$ ,  $^{44}\text{Ca}$ ,  $^{136}\text{Xe}$ ,  $^{138}\text{Ba}$ (d,p),E  $\approx$  10 MeV;  $^{50}\text{Cr}$ (p,p'),  $^{44}\text{Ca}$ (p, $\gamma$ ),E not given; calculated channel,width,amplitude correlation coefficients,significance levels,probability density functions. Bootstrap method.

**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  $\sigma$ .  $^{41}$ ,  $^{43}$ ,  $^{45}$ ,  $^{47}$ ,  $^{49}\text{Ca}$  deduced resonance parameters. Optical model.

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

**Keynumber:** 1980PIZN

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

**Keyword abstract:** NUCLEAR REACTIONS  $^{22}$ ,  $^{23}\text{Na}$ ,Mg,  $^{24}$ ,  $^{25}$ ,  $^{26}\text{Mg}$ ,  $^{27}\text{Al}$ ,Si,  $^{28}$ ,  $^{29}$ ,  $^{30}\text{Si}$ ,  $^{31}\text{P}$ ,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,  $^{40}$ ,  $^{42}$ ,  $^{43}$ ,  $^{44}$ ,  $^{46}$ ,  $^{48}\text{Ca}$ ,  $^{45}$ ,  $^{46}$ ,Sc,Ti,  $^{46}$ ,  $^{47}$ ,  $^{48}$ ,  $^{49}$ ,  $^{50}\text{Ti}$ ,V,  $^{50}$ ,  $^{51}\text{V}$ ,Cr,  $^{50}$ ,  $^{52}$ ,  $^{53}$ ,  $^{54}\text{Cr}$ ,Fe,  $^{54}$ ,  $^{56}$ ,  $^{57}$ ,  $^{58}\text{Fe}$ ,  $^{59}\text{Co}$ ,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, $\alpha$ ),E=thermal; evaluated  $\sigma$ ,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  $^1\text{H}$ ,  $^9\text{Be}$ ,  $^{14}\text{N}$ ,  $^{24}$ ,  $^{25}\text{Mg}$ ,  $^{27}\text{Al}$ ,  $^{28}$ ,  $^{29}\text{Si}$ ,  $^{32}\text{S}$ ,  $^{35}\text{Cl}$ ,  $^{40}$ ,  $^{44}\text{Ca}$ ,  $^{47}$ ,  $^{48}$ ,  $^{49}\text{Ti}$ ,  $^{50}$ ,  $^{52}$ ,  $^{53}\text{Cr}$ ,  $^{55}\text{Mn}$ ,  $^{54}$ ,  $^{56}$ ,  $^{57}\text{Fe}(n,\gamma)$ ,  $E=\text{thermal}$ ; 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.

-----  
**Keynumber:** 1978VE06

**Reference:** Nucl.Phys. A299, 429 (1978)

**Authors:** R.Vennink, W.Ratynski, J.Kopecky

**Title:** Circular Polarization of Neutron Capture  $\gamma$ -Rays from Ca, Ti, Fe and Ni

**Keyword abstract:** NUCLEAR REACTIONS  $^{42}\text{Ca}$ ,  $^{44}\text{Ca}$ ,  $^{46}\text{Ti}$ ,  $^{56}\text{Fe}$ ,  $^{58}\text{Fe}$ ,  $^{64}\text{Ni}(\text{polarized } n,\gamma)$ ,  $E=\text{th}$ ; measured  $\gamma$ -CP.  $^{43}\text{Ca}$ ,  $^{45}\text{Ca}$ ,  $^{47}\text{Ti}$ ,  $^{57}\text{Fe}$ ,  $^{59}\text{Fe}$ ,  $^{65}\text{Ni}$  levels deduced J. Enriched targets.

-----  
**Keynumber:** 1977VEZP

**Coden:** REPT INDC(SEC)-62/L,P141,Vennink

**Keyword abstract:** NUCLEAR REACTIONS  $^{44}\text{Ca}(\text{polarized } n,\gamma)$ ; measured CP  $\gamma$ .  $^{45}\text{Ca}$  levels deduced J, $\pi$ .

-----  
**Keynumber:** 1977MU02

**Reference:** Nucl.Phys. A279, 317 (1977)

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

**Title:** Odd-Even Effects in Radiative Neutron Capture by  $^{42}\text{Ca}$ ,  $^{43}\text{Ca}$  and  $^{44}\text{Ca}$

**Keyword abstract:** NUCLEAR REACTIONS  $^{42}$ ,  $^{43}$ ,  $^{44}\text{Ca}(n,\gamma)$ ,  $E > 2.5$  keV; measured  $\sigma(n,\gamma)$ .  $^{43}$ ,  $^{44}$ ,  $^{45}\text{Ca}$  deduced resonances,  $\Gamma\gamma$ ,  $\Gamma n$ .

-----  
**Keynumber:** 1974ALZU

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

**Keyword abstract:** NUCLEAR REACTIONS  $^{40}$ ,  $^{42}$ ,  $^{43}$ ,  $^{44}\text{Ca}(n,\gamma)$ ,  $E=2.5-600$  keV; measured  $\sigma(E)$ .  $^{41}$ ,  $^{43}$ ,  $^{44}$ ,  $^{45}\text{Ca}$  deduced resonances,  $\gamma$ -width,  $n$ -width.

-----  
**Keynumber:** 1973IS08

**Reference:** Nucl.Instrum.Methods 109, 493 (1973)

**Authors:** H.Ishikawa

**Title:** Measurements of Neutron Reaction Cross Sections Using a Liquid Scintillation Spectrometer

**Keyword abstract:** NUCLEAR REACTIONS  $^2\text{H}$ ,  $^{31}\text{P}$ ,  $^{34}\text{S}$ ,  $^{44}\text{Ca}$ ,  $^{62}\text{Ni}(n,\gamma)$ ; measured  $\sigma(E)$ .

-----  
**Keynumber:** 1973GEYY

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

**Keyword abstract:** NUCLEAR REACTIONS  $^{40}$ ,  $^{42}$ ,  $^{43}$ ,  $^{44}\text{Ca}(n,\gamma)$ ; calculated  $\sigma(E)$ .  $^{41}$ ,  $^{43}$ ,  $^{44}$ ,  $^{45}\text{Ca}$  levels deduced level-width.

-----  
**Keynumber:** 1972ST04

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

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

**Title:** Circular Polarization of Neutron Capture  $\gamma$ -Rays from Al, Ar and Ca

**Keyword abstract:** NUCLEAR REACTIONS  $^{27}\text{Al}$ ,  $^{40}\text{Ar}$ ,  $^{40}$ ,  $^{44}\text{Ca}(\text{polarized } n,\gamma)$ ;  $E=\text{thermal}$ ; measured  $\gamma$ -CP.  $^{28}\text{Al}$ ,  $^{41}\text{Ar}$ ,  $^{41}$ ,  $^{45}\text{Ca}$  levels deduced J, $\pi$ .  $^{28}\text{Al}$  transition deduced  $\gamma$ -mixing. Natural targets.

-----  
**Keynumber:** 1971CR02

**Reference:** Nucl.Phys. A169, 95 (1971)

**Authors:** F.P.Cranston, D.H.White

**Title:** Thermal Neutron Capture Cross Sections in Calcium

**Keyword abstract:** NUCLEAR REACTIONS Ca, <sup>42</sup>, <sup>43</sup>, <sup>44</sup>Ca(n,γ), E=thermal; measured Eγ,Iγ, integrated product IγxEγ. <sup>40</sup>, <sup>42</sup>, <sup>43</sup>, <sup>44</sup>, <sup>46</sup>, <sup>48</sup>Ca deduced σ. Enriched targets. Ge(Li), Moxon-Rae detectors.

-----  
**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, <sup>40</sup>, <sup>42</sup>, <sup>44</sup>Ca(n,γ), measured Eγ,Iγ. <sup>41</sup>, <sup>43</sup>, <sup>45</sup>Ca 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, <sup>35</sup>Cl,K,Ca, <sup>40</sup>, <sup>42</sup>, <sup>44</sup>Ca,Ti,V,Fe, <sup>54</sup>, <sup>56</sup>Fe,Ni, <sup>58</sup>, <sup>60</sup>Ni, <sup>63</sup>Cu,Zn(n,γ),E=10-100 keV; measured Eγ,Iγ. 9 inx 12 in NaI detector.

-----  
**Keynumber:** 1971BIZH

**Reference:** Thesis, Univ.California (1971); UCRL-51060 (1971)

**Authors:** R.E.Birkett

**Title:** A Study of Gamma Rays Following Thermal Neutron Capture in <sup>42</sup>Ca and <sup>44</sup>Ca

**Keyword abstract:** NUCLEAR REACTIONS <sup>42</sup>, <sup>44</sup>Ca(n,γ),E=thermal; measured Eγ,Iγ,γγ-coin; deduced Q. <sup>43</sup>, <sup>45</sup>Ca deduced levels,J,π,γ-branching. Ge(Li),NaI(Tl) detectors.

-----  
**Keynumber:** 1971ARZJ

**Coden:** CONF Legnaro(1f<sub>7/2</sub> Nuclei),P251

**Keyword abstract:** NUCLEAR REACTIONS <sup>36</sup>Ar, <sup>40</sup>Ar, <sup>40</sup>K, <sup>40</sup>, <sup>42</sup>, <sup>44</sup>, <sup>46</sup>, <sup>48</sup>Ca, <sup>47</sup>Ti, <sup>55</sup>Mn, <sup>57</sup>Fe, <sup>59</sup>Co(n,γ),E=thermal; surveyed Eγ,Iγ,γγ-coin,γγ(θ),γ-polarization data. <sup>37</sup>Ar, <sup>41</sup>Ar, <sup>41</sup>K, <sup>41</sup>, <sup>43</sup>, <sup>45</sup>, <sup>47</sup>, <sup>49</sup>Ca, <sup>48</sup>Ti, <sup>56</sup>Mn, <sup>58</sup>Fe, <sup>60</sup>Co deduced levels,J,π,γ-mixing.

-----  
**Keynumber:** 1971ALYW

**Coden:** REPT CONF-730538-1

**Keyword abstract:** NUCLEAR REACTIONS <sup>40</sup>, <sup>42</sup>, <sup>43</sup>, <sup>44</sup>Ca, <sup>134</sup>, <sup>135</sup>, <sup>136</sup>, <sup>137</sup>, <sup>138</sup>Ba(n,γ); measured σ (E).

-----  
**Keynumber:** 1970SI10

**Reference:** J.Inorg.Nucl.Chem. 32, 2839 (1970)

**Authors:** G.H.E.Sims, D.G.Juhnke

**Title:** The Thermal Neutron Capture Cross-Sections and Resonance Capture Integrals of <sup>44</sup>Ca, <sup>62</sup>Ni, <sup>168</sup>Yb, <sup>174</sup>Yb, <sup>169</sup>Tm, and <sup>203</sup>Tl

**Keyword abstract:** NUCLEAR REACTIONS <sup>44</sup>Ca, <sup>62</sup>Ni, <sup>168</sup>, <sup>174</sup>Yb, <sup>169</sup>Tm, <sup>203</sup>Tl(n,γ), E=thermal; measured σ; deduced resonance integrals.

**Keynumber:** 1969GR21

**Reference:** Nucl.Phys. A133, 545 (1969)

**Authors:** H.Gruppelaar

**Title:** Gamma-Gamma Angular-Correlation Measurements in the  $^{44}\text{Ca}(n,\gamma)^{45}\text{Ca}$  Reaction

**Keyword abstract:** NUCLEAR REACTIONS  $^{44}\text{Ca}(n,\gamma)$ , E = thermal; measured  $\gamma\gamma(\theta)$ .  $^{45}\text{Ca}$  levels deduced J,  $\gamma$ -mixing. Enriched target; Ge(Li), NaI detectors.

-----

**Keynumber:** 1969BO31

**Reference:** Yadern.Fiz. 10, 31 (1969); Soviet J.Nucl.Phys. 10, 17 (1970)

**Authors:** A.P.Bogdanov, E.A.Rudak, A.V.Soroka, V.N.Tadeush, E.I.Firsov

**Title:** Investigation of the Gamma-Gamma Coincidences in the  $\text{Ca}^{44}(n,\gamma)\text{Ca}^{45}$  Reaction

**Keyword abstract:** NUCLEAR REACTIONS  $^{44}\text{Ca}(n,\gamma)$ , E=thermal; measured  $\gamma\gamma$ -coin.  $^{45}\text{Ca}$  deduced transitions,  $\gamma$ -branching.

-----

**Keynumber:** 1968GR11

**Reference:** Nucl.Phys. A114, 463 (1968)

**Authors:** H.Gruppelaar, P.Spilling, A.M.J.Spits

**Title:** Investigation of the  $^{44}\text{Ca}(n,\gamma)^{45}\text{Ca}$  Reaction

**Keyword abstract:** NUCLEAR REACTIONS  $^{44}\text{Ca}(n,\gamma)$ , E=thermal; measured  $I\gamma$ ,  $E\gamma$ ; deduced Q.  $^{45}\text{Ca}$  deduced levels, branching, J, $\pi$ . Enriched  $^{44}\text{Ca}$  target, Ge(Li) detector.

-----

**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  $^{40,44}\text{Ca}(n,\gamma)$ , E=thermal; measured  $E\gamma$ ,  $I\gamma$ ; deduced Q.  $^{41,45}\text{Ca}$  deduced levels, branching. Enriched  $^{40}\text{Ca}$  target, Ge(Li) detector.

-----