

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

### 11 reference(s) found :

**Keynumber:** 1999ZHJM

**Reference:** INDC(CPR)-049/L, p.76 (1999)

**Authors:** C.Zhou

**Title:** Prompt  $\gamma$ -Ray Data Evaluation of Thermal-Neutron Capture for  $A = 1 \text{--} 25$

**Keyword abstract:** NUCLEAR REACTIONS  $^1, ^2\text{H}$ ,  $^6, ^7\text{Li}$ ,  $^{9}\text{Be}$ ,  $^{12}, ^{13}\text{C}$ ,  $^{14}\text{N}$ ,  $^{16}, ^{17}\text{O}$ ,  $^{19}\text{F}$ ,  $^{20}, ^{21}$ ,  $^{22}\text{Ne}$ ,  $^{23}\text{Na}$ ,  $^{24}, ^{25}\text{Mg}$ (n, $\gamma$ ), E=thermal; compiled, evaluated prompt  $\gamma$ -ray data.

**Keynumber:** 1988WI14

**Reference:** Astrophys.J. 329, 943 (1988)

**Authors:** R.R.Winters, R.L.Macklin

**Title:** Resonance Neutron Capture by  $^{20}, ^{22}\text{Ne}$  in Stellar Environments

**Keyword abstract:** NUCLEAR REACTIONS  $^{20}, ^{22}\text{Ne}$ (n, $\gamma$ ), E=2.5-200 keV; measured resonance capture yield vs E; deduced effective  $\sigma(E)$ , Maxwellian averaged  $\sigma$ .  $^{21}, ^{23}\text{Ne}$  deduced resonances,  $\Gamma\gamma$ , (g $\Gamma$ n).

**Keynumber:** 1986PR05

**Reference:** Z.Phys. A325, 321 (1986)

**Authors:** W.V.Prestwich, T.J.Kennett, J.-S.Tsai

**Title:** The Thermal Neutron Capture Gamma-Ray Spectrum of Neon

**Keyword abstract:** NUCLEAR REACTIONS  $^{20}, ^{21}, ^{22}\text{Ne}$ (n, $\gamma$ ), E=thermal; measured  $E\gamma, I\gamma$ .  $^{21}, ^{22}, ^{23}\text{Ne}$  deduced transitions, neutron separation energies. Natural target, pair spectrometer.

**Keynumber:** 1986CA15

**Reference:** Phys.Rev. C34, 408 (1986)

**Authors:** B.Castel, Y.K.Ho

**Title:** Direct E2 Neutron Capture in Light Nuclei

**Keyword abstract:** NUCLEAR REACTIONS  $^{20}\text{Ne}$ ,  $^{25}\text{Mg}$ (n, $\gamma$ ), E=thermal; calculated E1,E2 capture  $\sigma$  (E); deduced effective neutron charge multipolarity dependence, particle-core coupling differences role.

**Keynumber:** 1984PR05

**Reference:** Phys.Rev. C30, 392 (1984)

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

**Title:** Possibility of Direct E2 Capture in  $^{21}\text{Ne}$

**Keyword abstract:** NUCLEAR REACTIONS  $^{20}\text{Ne}$ (n, $\gamma$ ), E=thermal; calculated partial radiative capture  $\sigma$ ; deduced capture mechanism.  $^{21}\text{Ne}$  deduced E2 transition character.

**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.

---

**Keynumber:** 1983ALZS

**Reference:** NEANDC(E)-242U, Vol.V, p.1 (1983)

**Authors:** J.Almeida, F.Kappeler

**Title:** Isotopic Neon Cross Sections for a Study of Neutron Balance and Temperature During s-Process Nucleosynthesis

**Keyword abstract:** NUCLEAR REACTIONS  $^{20}, ^{21}, ^{22}\text{Ne}(n,\gamma), E=5-400 \text{ keV}$ ; measured capture  $\sigma$  ( $E, \sigma$ ); deduced Maxwellian averaged  $\sigma, s\text{-process}$  temperature lower limit.

---

**Keynumber:** 1982ALZU

**Coden:** REPT KfK-3347,Almeida

**Keyword abstract:** NUCLEAR REACTIONS  $^{20}, ^{21}, ^{22}\text{Ne}(n,\gamma), E=5-200 \text{ keV}$ ; measured  $\sigma(\text{capture})$  vs  $E$ .  $^{20}, ^{21}, ^{22}\text{Ne}(n,X), E=5-800 \text{ keV}$ ; measured  $\sigma(\text{total})$  vs  $E$ ; deduced Maxwellian  $\langle\sigma\rangle$  average s-process temperature.

---

**Keynumber:** 1977RI14

**Reference:** Nucl.Instrum.Methods 144, 323 (1977)

**Authors:** M.Riihonen, J.Keinonen

**Title:** Measurements of Absolute Resonance Strengths in  $(p,\gamma)$  Reactions on Rare or Gaseous Nuclei

**Keyword abstract:** NUCLEAR REACTIONS  $^{20}, ^{21}, ^{22}\text{Ne}, ^{54}, ^{56}, ^{57}, ^{58}\text{Fe}(n,\gamma)$ ; measured yields.  $^{55}, ^{57}, ^{58}, ^{59}\text{Co}$  deduced resonance strength.

---

**Keynumber:** 1971BE34

**Reference:** Atomkernenergie 17, 145 (1971)

**Authors:** D.Bellman

**Title:** Strahlungsubergange vom Stickstoff und natürlichen Neon nach Einfang thermischer Neutronen

**Keyword abstract:** NUCLEAR REACTIONS  $^{14}\text{N}, ^{20}, ^{21}, ^{22}\text{Ne}(n,\gamma), E=\text{thermal}$ ; measured  $E\gamma, I\gamma$ ; deduced  $Q$ .  $^{15}\text{N}, ^{21}, ^{22}, ^{23}\text{Ne}$  deduced transitions.

---

**Keynumber:** 1970JAZN

**Coden:** REPT PH-7,J Jafar

**Keyword abstract:** NUCLEAR REACTIONS  $^{20}\text{Ne}, ^{24}\text{Mg}, ^{30}\text{Si}, ^{32}\text{S}, ^{34}\text{S}, ^{36}\text{Ar}, ^{40}\text{Ca}, ^{27}\text{Al}$  ( $n,\gamma$ ),  $E=\text{thermal}$ ; surveyed,analyzed  $E\gamma, I\gamma$  data.  $^{21}\text{Ne}, ^{25}\text{Mg}, ^{31}\text{Si}, ^{33}, ^{35}\text{S}, ^{37}\text{Ar}, ^{41}\text{Ca}, ^{28}\text{Al}$  deduced levels, $\gamma$ -branching.

---