

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

22 reference(s) found :

Keynumber: 1999ZHJM

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

Authors: C.Zhou

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

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

Keynumber: [1999HE33](#)

Reference: Phys.Rev. C60, 064614 (1999)

Authors: H.Herndl, R.Hofinger, J.Jank, H.Oberhummer, J.Gorres, M.Wiescher, F.-K.Thielemann, B.A.Brown

Title: Reaction Rates for Neutron Capture Reactions to C, N, and O Isotopes to the Neutron Rich Side of Stability

Keyword abstract: NUCLEAR REACTIONS $^{13}, ^{14}, ^{15}, ^{16}\text{C}$, $^{15}, ^{16}, ^{17}, ^{18}\text{N}$, $^{18}, ^{19}, ^{20}, ^{21}\text{O}$ (n, γ), $E=\text{stellar}$; analyzed data; deduced capture rates. Comparison with previous results.

Keynumber: 1997SH29

Reference: Nucl.Phys. A621, 231c (1997)

Authors: T.Shima, F.Okazaki, T.Kikuchi, T.Kobayashi, T.Kii, T.Baba, Y.Nagai, M.Igashira

Title: Measurement of the $^{13}\text{C}(n,\gamma)^{14}\text{C}$ Cross Section at Stellar Energies

Keyword abstract: NUCLEAR REACTIONS $^{13}\text{C}(n,\gamma)$, $E=10\text{-}87\text{ keV}$; measured $E\gamma, I\gamma$; deduced σ , deviations from $1/v$ law.

Keynumber: 1993NAZU

Reference: Proc.2nd Intern.Symposium on Nuclear Astrophysics, Nuclei in the Cosmos, Karlsruhe, Germany, 6-10 July, 1992, F.Kappeler, K.Wisshak, Eds., IOP Publishing Ltd., Bristol, England, p.215 (1993)

Authors: Y.Nagai, T.Shima, K.Takeda, T.Ohsaki, T.Irie, S.Seino, M.Igashira, H.Kitazawa, S.Shibata, K.Tanaka, T.Fukuda

Title: Neutron Capture Rates of Light Nuclei and Stellar Evolution

Keyword abstract: NUCLEAR REACTIONS $^{12}, ^{13}\text{C}(n,\gamma)$, $E=10\text{-}250\text{ keV}$; measured $E\gamma, \sigma$, reaction rates. Role of neutron capture reactions discussed.

Keynumber: 1992JUZZ

Reference: Bull.Am.Phys.Soc. 37, No.2, 902, C8 3 (1992)

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

Title: Check of the Smith and Wapstra Mass Doublet Measurements

Keyword abstract: NUCLEAR REACTIONS $^{12}, ^{13}\text{C}$, $^{14}\text{N}(n,\gamma)$, $E=\text{reactor}$; measured not given. $^{13}, ^{14}\text{C}$, ^{15}N deduced neutron separation energies. Capture γ -spectroscopy. Comparison with Wapstra predictions.

Keynumber: [1990RA03](#)

Reference: Phys.Rev. C41, 458 (1990)

Authors: S.Raman, M.Igashira, Y.Dozone, H.Kitazawa, M.Mizumoto, J.E.Lynn

Title: Valence Capture Mechanism in Resonance Neutron Capture by ^{13}C

Keyword abstract: NUCLEAR REACTIONS $^{13}\text{C}(n,\gamma),E=\text{resonance}$; measured $E\gamma, I\gamma$. ^{14}C levels deduced partial, total $\Gamma\gamma$. Valence capture mechanism.

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

Keynumber: 1987LYZY

Reference: ORNL-6326, p.62 (1987)

Authors: J.E.Lynn, S.Kahane, S.Raman

Title: Analysis of Slow Neutron Capture by ^9Be , ^{12}C , and ^{13}C

Keyword abstract: NUCLEAR REACTIONS 12 , ^{13}C , $^9\text{Be}(n,\gamma),E=\text{slow}$; analyzed data; deduced model parameters, capture mechanism.

Keynumber: [1987LY01](#)

Reference: Phys.Rev. C35, 26 (1987)

Authors: J.E.Lynn, S.Kahane, S.Raman

Title: Analysis of Slow Neutron Capture by ^9Be , ^{12}C , and ^{13}C

Keyword abstract: NUCLEAR REACTIONS ^9Be , 12 , $^{13}\text{C}(n,\gamma),E=\text{thermal}$; calculated capture σ . Optical model, Lane-Lynn-Raman method.

Keynumber: 1987HO23

Reference: Chin.J.Nucl.Phys. 9, 133 (1987)

Authors: Ho Yukun

Title: E2 and E1 Radiative Neutron Valence Width and Effective Charge in ^{13}C

Keyword abstract: NUCLEAR REACTIONS $^{13}\text{C}(n,\gamma),E=0.1529\text{ MeV}$; calculated valence widths. Resonance valence capture model, effective charge.

Keynumber: [1985WR01](#)

Reference: Phys.Rev. C31, 1125 (1985)

Authors: M.C.Wright, H.Kitazawa, N.R.Roberson, H.R.Weller, M.Jensen, D.R.Tilley

Title: Polarized Neutron Capture on ^{13}C

Keyword abstract: NUCLEAR REACTIONS $^{13}\text{C}(\text{polarized } n,\gamma),E=5.6-17\text{ MeV}$; measured $\sigma(\theta=90^\circ)$ vs $E, E\gamma, I\gamma$, analyzing power vs E . ^{14}C deduced narrow M1 resonances. Direct-semidirect model, isovector dipole, isoscalar electric quadrupole components.

Keynumber: 1985WE06

Reference: Nucl.Phys. A439, 13 (1985)

Authors: W.-M.Wendler, M.Micklinghoff

Title: Fast Neutron Capture by ^{13}C

Keyword abstract: NUCLEAR REACTIONS $^{13}\text{C}(n,\gamma),E(\text{cm}) < 15\text{ MeV}$; calculated $\sigma(E), \sigma(\theta)$ vs E . ^{14}C deduced levels. Perturbative continuum treatment.

Keynumber: 1985LAZX

Reference: Phys.Can. 41, No.3, 34, p.E1 (1985)

Authors: J.R.C.Lafontaine, J.W.Jury, J.Beland, N.R.Roberson, D.R.Tilley, H.R.Weller, J.G.Woodworth

Title: Radiative Neutron Capture Reactions on ^{12}C , ^{13}C and ^{14}N

Keyword abstract: NUCLEAR REACTIONS $^{12}, ^{13}\text{C}$, $^{14}\text{N}(n,\gamma)$,E not given; measured $\sigma(\theta)$.

Keynumber: 1984WRZZ

Reference: Diss.Abst.Int. 44B, 2472 (1984)

Authors: M.C.Wright

Title: Neutron Capture in the Giant Dipole Resonance Region of ^{14}C

Keyword abstract: NUCLEAR REACTIONS $^{13}\text{C}(n,\gamma)$, (polarized n,γ),E=5.6-17 MeV; measured $\sigma(\theta)$,analyzing power vs θ . ^{14}C deduced GDR fragmentation,narrow M1 resonance evidence.

Keynumber: 1983WRZZ

Reference: Bull.Am.Phys.Soc. 28, No.4, 650, AG1 (1983)

Authors: M.C.Wright, H.Kitazawa, N.R.Roberson, H.R.Weller, M.J.Jensen, D.R.Tilley

Title: The $^{13}\text{C}(n(\text{pol}),\gamma_0)^{14}\text{C}$ Reaction

Keyword abstract: NUCLEAR REACTIONS $^{13}\text{C}(\text{polarized } n,\gamma)$,E=7.75-17 MeV; measured $\sigma(\theta)$,analyzing power vs θ ,asymmetry. ^{14}C deduced M1 resonances.

Keynumber: 1982MU14

Reference: Phys.Rev. C26, 2698 (1982)

Authors: S.F.Mughabghab, M.A.Lone, B.C.Robertson

Title: Quantitative Test of the Lane-Lynn Theory of Direct Radiative Capture of Thermal Neutrons by ^{12}C and ^{13}C

Keyword abstract: NUCLEAR REACTIONS $^{12}, ^{13}\text{C}(n,\gamma)$,E=thermal; measured $\sigma(E\gamma)$,I γ ; deduced capture mechanism. $^{12}, ^{13}\text{C}$ levels deduced S.

Keynumber: 1982JEZZ

Reference: Diss.Abst.Int. 42B, 4468 (1982)

Authors: M.J.Jensen

Title: Fast Neutron Capture by ^{13}C

Keyword abstract: NUCLEAR REACTIONS $^{13}\text{C}(n,\gamma)$,E=5.6-14 MeV; measured $\sigma(\theta)$,analyzing power vs θ . ^{14}C deduced T=0,E2 resonance. Direct-semidirect model.

Keynumber: 1981MUZU

Reference: Bull.Am.Phys.Soc. 26, No.8, 1138, CE2 (1981)

Authors: S.F.Mughabghab, M.A.Lone, B.C.Robertson

Title: Reaction Mechanism of Thermal Neutron Capture in $^{12,13}\text{C}$

Keyword abstract: NUCLEAR REACTIONS $^{12}, ^{13}\text{C}(n,\gamma)$,E=thermal; measured $\sigma(\text{capture})$,ratio. ^{14}C level deduced spectroscopic factor. Lane-Lynn theory.

Keynumber: 1980JEZZ

Coden: JOUR BAPSA 25 603,KE11,Jensen

Keyword abstract: NUCLEAR REACTIONS $^{13}\text{C}(\text{polarized } n,\gamma)$,E=5.6-14 MeV; measured $\sigma(E\gamma)$, $\gamma(\theta)$,analyzing power vs θ . ^{14}C deduced E1/M1,E1/E2 interference effects.

Keynumber: 1975SM02

Reference: Phys.Rev. C11, 1392 (1975)

Authors: L.G.Smith, A.H.Wapstra

Title: Masses of Isotopes of H, He, C, N, O, and F

Keyword abstract: ATOMIC MASSES ^3H , ^3He , ^{13}C , ^{14}C , ^{14}N , ^{15}N , ^{16}O , ^{19}F ; measured atomic mass.

Keyword abstract: NUCLEAR REACTIONS ^2H , ^3He , ^{12}C , ^{13}C , $^{14}\text{N}(n,\gamma)$; calculated quadrupole moment.

Keynumber: 1973SEZC

Coden: JOUR HPACA 46 52

Keyword abstract: NUCLEAR REACTIONS ^{13}C , $^{19}\text{F}(n,\gamma)$; measured DSA. ^{14}C , ^{20}F levels deduced $T_{1/2}$.

Keynumber: 1971AL09

Reference: Phys.Rev. C3, 1737 (1971)

Authors: B.J.Allen, R.L.Macklin

Title: Neutron Capture Cross Sections of ^{13}C and ^{16}O

Keyword abstract: NUCLEAR REACTIONS ^{13}C , $^{16}\text{O}(n,\gamma)$, E=resonance; measured $\sigma(E;E\gamma)$. ^{14}C , ^{17}O resonances deduced level-width.