^{14}N(n,2n)

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	J. H. Kelley, C. G. Sheu and J. E. Purcell	NDS 198,1 (2024)	1-Aug-2024

1949Kn25: ^{14}N(n,2n) E_n≈90 MeV; measured activation σ.
1951Co50: ^{14}N(n,2n) E_n≈0.4-18 MeV white source; measured activation.
1961Ra06: ^{14}N(n,2n) E_n≈14.4 MeV; measured activation cross section and lifetime $T_{1/2}$=12.3 min±5.4% at Argonne.
1965Bo42: ^{14}N(n,2n) E_n=12.6-18.8 MeV; measured activation cross section and lifetime $T_{1/2}$=10.05 min *5*.
1965Eb01: ^{14}N(n,2n) E_n≈14.7 MeV; measured ^{13}N decay and deduced $T_{1/2}$=9.96 min *2*; compared with prior values.
1965Go18: ^{14}N(n,2n) E_n≈14.1 MeV; measured cross section.
1965Gr41: ^{14}N(n,2n) E_n≈14.8 MeV; measured cross section.
1967Cs02: ^{14}N(n,2n) E_n≈14.7 MeV; measured cross section.
1967Pa27: ^{14}N(n,2n) E_n≈14.7 MeV; measured cross section.
1973Ro29: ^{14}N(n,2n) E_n≈14.8 MeV; measured cross section.
1978Ry02: ^{14}N(n,2n) E_n=14.7-19.0 MeV; measured cross section via activation technique.
1989KaYR: ^{14}N(n,2n); counted 511 annihilation γ ray. Measured $T_{1/2}$=9.962 min *20*.
2001Sa27: ^{14}N(n,2n) E_n=13.4-14.9 MeV; measured cross section via activation techniques.
2011Ha04: ^{14}N(n,2n) E_n=13.4-14.9 MeV; global analysis of reaction systematics.
2023Te01: ^{14}N(n,2n) E_n=14-15 MeV; developed imperical formalism for σ in the 14≤A≤241 region.

^{13}N Levels

E(level)	$T_{1/2}$	Comments
0	9.962 min *20*	$T_{1/2}$: From (1989KaYR). See also (1961Ra06, 1965Bo42, 1965Eb01).