

$^{24}\text{Mg}(t, ^3\text{He})$ 2008Ho10,1976Pe10

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	M. Shamsuzzoha Basunia, Anagha Chakraborty		NDS 186, 2 (2022)	31-Mar-2022

2008Ho10: The triton beam, $E=115$ MeV/nucleon, was produced in the fragmentation of ^{16}O beam at 150 MeV/nucleon. Thick (9.86 mg/cm²) and isotopically enriched (99.92% enrichment) target of ^{24}Mg was used. A1900 fragment separator, S800 focal plane detector. Measured ^3He spectra in the angle range from $0^\circ < \theta(\text{c.m.}) < 4.6^\circ$. FWHM=190 to 220 keV. Deduced Gamow-Teller strengths from cross section data.

1976Pe10: $E=24$ MeV; measured $\sigma(E(^3\text{He}),\theta)$. QSD spectrometer, counter-telescope. Deduced levels, DWBA calculations, transition strengths.

All data are from **2008Ho10**, except where otherwise noted.

 ^{24}Na Levels

E(level)	B(GT)	Comments
472 [†]	0.08 1	Ratio absolute $\alpha^2 = (11.0 \pm 2.2) \times 10^4$, observed cross sections to DWBA predictions using a collective model, is the strength of a transition with kinematic and Q-value effects removed (1976Pe10).
1347 [†]	0.67 3	Ratio absolute $\alpha^2 < 62 \times 10^4$, observed cross sections to DWBA predictions using a collective model, is the strength of a transition with kinematic and Q-value effects removed (1976Pe10).
3.54×10^3 [‡] 40	0.41 5	E(level): Based on the reported range of 3140-3940 in 2008Ho10 .
6.8×10^3 [‡] 3	0.17 4	E(level): Based on the reported range of 6500-7100 in 2008Ho10 .

[†] Energy from Adopted Levels.

[‡] Centroid value of the listed energy range in comments. Not adopted.