^{166}Er(^{3}He,α) 1972Lo20

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	Balraj Singh and Jun Chen	NDS 194,460 (2024)	31-Oct-2022

1972Lo20: E(^{3}He)=25.5 MeV. Measured σ(E,θ) at 40° and 60° using >95% enriched targets, and broad-range magnetic spectrograph at the Niels Bohr Institute FN tandem accelerator. FWHM≈40 keV, DWBA analysis of $\sigma(\theta)$ data. Uncertainties in the cross sections range from 5% to 30%.

^{165}Er Levels

E(level)	J$^{\pi}$[#]	L[‡]	dσ/dΩ (μb/sr)[†]	Comments
98 *15*	9/2^{+}	(4)	13	ν5/2[642].
176 *15*	9/2^{-}	(5)	17	ν5/2[523]. dσ/dΩ=38 μb/sr (40°).
238 *15*	13/2^{+}	(6)	81	ν5/2[642].
372 *15*	7/2^{-}	(3)	42	ν3/2[521]. dσ/dΩ=63 μb/sr (40°).
551 *15*	11/2^{-}	(5)	89	ν11/2[505]. dσ/dΩ=112 μb/sr (40°).
1165 *15*		(5,6)	26	J$^{\pi}$: tentative assignment: (13/2^{+}) (1972Lo20). dσ/dΩ=47 μb/sr (40°).

† At 60°.
‡ From [dσ/dΩ(^{3}He,α)]/[dσ/dΩ(d,t)].
# As given in 1972Lo20 based on assignments in 1970Hj02.