Coulomb excitation 1971Fo17

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	A. M. Mattera, S. Zhu, A. B. Hayes, E. A. Mccutchan	NDS 172, 543 (2021)	1-Jan-2021

^{252}Cf(α,α'), Eα=17 MeV and $\alpha'(\theta)$ = 150°; Target: Isotopically enriched ^{252}Cf implanted on a Ni backing with 20 μg/cm^2 thickness; α detection: PPAC at the focal plane of an Enge split-pole spectrograph (1971Fo17).

^{252}Cf Levels

E(level)	J^π	$T_{1/2}$	Comments
0.0	0^+		
44.0 *5*	2^+	92 ps *6*	B(E2)↑=16.7 *11* (1971Fo17) The intrinsic quadrupole moment, Q(0)=12.9 *4*, was calculated by 1971Fo17 from B(E2)↑ of 16.7 *11* with rigid rotor assumption. $T_{1/2}$=92 ps *6* is calculated from B(E2)↑=16.7 e^2b^2 *11* with α(45.72γ)=917. E(level): deduced from Eα'; no γ ray measured (1971Fo17). J^π: from systematics of even-even nuclei (1971Fo17).