

$^{142}\text{Nd}(\text{e},\text{e}')$ 1991Sa27

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	T. D. Johnson, D. Symochko(a), M. Fadil(b), and J. K. Tuli		NDS 112, 1949 (2011)	1-Jun-2010

1991Sa27: E=112-450 MeV. Measured $\sigma(\text{E},\theta)$. FWHM=12-30.

E=40, 60 MeV (1971Ma27), 15.9-29 MeV (1977Sa15) E=15.9-29 MeV (1977Sa15), 50, 64.3 MeV (1975Sc03); see 1976Mo21.

Measured: $\sigma(\text{E},\theta)$; deduced β_L (1977Hi07).

 ^{142}Nd Levels

E(level)	J^π [‡]	B(EL)	Comments
1575 4	2 ⁺		
2083 6	3 ⁻	2.620×10 ⁵ 15	
2098	4 ⁺	41×10 ⁵	B(EL): B(E4)=45×10 ⁵ using quasiparticle-phonon model density.
2210 40	6 ⁺	9.4×10 ⁹ 20	
2385 8	2 ⁺	309 17	
2438 20	4 ⁺	2.1×10 ⁵ 8	
2584 18	(4 ⁺)	7×10 ⁴ [†]	
2739 12	5 ⁻	1.21×10 ⁸ 12	
2845 6	2 ⁺	498 20	
2893	(6 ⁺)	8×10 ⁷ [†]	
2976 6	0 ⁺	88 41	B(EL): in units of e ² fm ⁴ .
3008			
3045			
3080 7	4 ⁺	6.2×10 ⁵ 19	
3135			
3246 6	7 ⁻	2.5×10 ¹¹ 4	
3319 8	4 ⁺	11.4×10 ⁵ 17	
3413 12	(6 ⁺)	2×10 ⁹ [†]	
3494 9	(9 ⁻)	2×10 ¹⁵	
3580 16	3 ⁻	1×10 ⁴ [†]	

[†] Using standard density.

[‡] From deduced L, transition charge densities.