

$^{150}\text{Nd}(\gamma, \gamma')$ [1990Pi04, 1992Fr02, 1993Ma08](#)

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	S. K. Basu, A. A. Sonzogni		NDS 114, 435 (2013)	1-Apr-2013

[1990Pi04, 1990He03, 1992Fr02, 1993Ma08](#). All references are for the same group.

E=4.1 MeV, measured γ , $\gamma(\theta)$, linear polarization.

 ^{150}Nd Levels

B(M1) values from [1993Ma08](#).

E(level) [†]	J π^d	T _{1/2} ^b	S ^c	Comments
853 [‡]	1 ⁻	3.3 14	1.21 18	B(E1) $\uparrow$ =16.1 $\times$ 10 ⁻⁵ 63 (1990Pi04)
2269 [‡]	1	2.8 13	1.0 7	
2408 [#]	1	1.7 8		
2414 [‡]	1 ⁻	14.9 20	0.73 8	B(E1) $\uparrow$ =3.0 $\times$ 10 ⁻⁵ 4 (1992Fr02)
2458 [#]	1	5.6 11		
2496 [‡]	1	7.2 16	1.6 3	B(E1) $\uparrow$ =1.3 $\times$ 10 ⁻⁵ 3 (1990Pi04)
2571 [‡]	1	3.4 12	1.3 4	B(E1) $\uparrow$ =0.57 $\times$ 10 ⁻⁵ 21 (1990Pi04)
2588 [#]	1,2 ⁺	1.5 8		
2681 [‡]	1 ⁺	7.0 14	0.68 17	B(M1) $\uparrow$ =0.09 2
2895 [‡]	1 ⁺	12.1 17	0.44 7	B(M1) $\uparrow$ =0.13 2
2920 [#]	2 ⁺ ,1	2.4 9		
2994 [‡]	1 ⁺	67. 7	0.49 4	B(M1) $\uparrow$ =0.65 7
3058 [‡]	1 ⁺	38. 4	0.42 3	B(M1) $\uparrow$ =0.35 4
3096 [‡]	1 ⁺	15. 3	0.81 16	B(M1) $\uparrow$ =0.13 3
3103 [‡]	1 ⁺	14.4 22	0.60 9	B(M1) $\uparrow$ =0.13 2
3160 [#]	1,2 ⁺	2.3 19		
3186 [#]	1,2 ⁺	3.2 14		
3221 [#]	2 ⁺	7.5 18		
3244 [#]	2 ⁺ ,1	2.1 9		
3327 [#]	1	10.1 22		
3342 [‡]	1	11.8 21	0.30 9	B(M1) $\uparrow$ =0.08 1
3375 [#]	1,2 ⁺	2.1 17		
3418 [‡]	1	14. 3	1.00 18	
3423 [#]	1,2 ⁺	8. 4		
3553 [@]	(2 ⁺)	8.3 22		
3582 [#]	2 ⁺ ,1	4.5 18		
3590 ^a	1,2 ⁺	4.0 23		
3606 [#]	1	8. 3		
3642 [‡]	1	9. 3	0.9 3	B(M1) $\uparrow$ =0.05 1
3653 [‡]	1	28. 5	1.14 15	
3672 [#]	1	19. 5		
3698 [#]	2 ⁺ ,1	3.0 13		
3706 [‡]	1	16. 5	1.6 4	B(E1) $\uparrow$ =0.9 $\times$ 10 ⁻⁵ 3 (1990Pi04)
3711 ^{&}	1	19. 4	0.74 17	B(M1) $\uparrow$ =0.10 2
3720 [‡]	1	10. 4	1.6 5	B(E1) $\uparrow$ =0.54 $\times$ 10 ⁻⁵ 20 (1990Pi04)

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$^{150}\text{Nd}(\gamma, \gamma')$ [1990Pi04](#), [1992Fr02](#), [1993Ma08](#) (continued)

^{150}Nd Levels (continued)

E(level) [†]	J ^π ^d	T _{1/2} ^b	S ^c	Comments
3737 [#]	2 ⁺ , 1	2.3 14		
3751 [‡]	1	24. 5	0.77 13	B(M1)↑=0.12 2
3768 [#]	1	9. 3		
3860 ^a	1	7. 3		
3888 [#]	1, 2 ⁺	5.6 23		

[†] Uncertainty ≈ 1 keV.

[‡] For this level branch to first excited 2⁺ state has been observed experimentally.

[#] No branch, other than to g.s., has been observed from this level.

@ Possible branch to 2⁺ level.

& Decay uncertain.

^a Treated as g.s. transition. This could also be an inelastic transition from a level 130 keV higher in energy.

^b Label = $\Gamma_{\gamma 0}$ (meV).

^c Label = $\Gamma_{\gamma 1}/\Gamma_{\gamma 0}$.

^d Parity determination from linear polarization ([1992Fr02](#)).