

Coulomb excitation 1986Lu06

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	Jean Blachot	NDS 108,2035 (2007)	30-Mar-2007

¹⁰⁴Pd($\alpha, \alpha' \gamma$): E=6-7 MeV (1956Te26); E=9.4-9.9 MeV (1968MiZZ); E=8.5-10 MeV (1970Ch01).

¹⁰⁴Pd(¹⁴N, ¹⁴N' γ): E=36 MeV (1962Er05); E=42 MeV (1962Va21).

¹⁰⁴Pd(p, p' γ): E=2.1, 2.4, 3.3 MeV (1958St32); E=2.1, 2.4, 2.7 MeV (1968MiZZ).

¹⁰⁴Pd(¹⁶O, ¹⁶O γ): E=45.5, 49 MeV (1968MiZZ); E=30-42 MeV (1970Ch01); E=44 MeV (1986Lu06).

See 1969He11 and 1974Hu01 for discussion of ion implantation angular distribution data.

Data of 1986Lu06 have been renormalized to B(E2) (555 γ)=10.7 (1987Ra01), instead of 10.2 given in the 1986Lu06 paper.

¹⁰⁴Pd Levels

E(level)	J $^{\pi}$	T _{1/2}	Comments
0.0	0 ⁺		
555.8 4	2 ⁺	9.9 ps 5	B(E2) \uparrow =0.535 35 (1987Ra01) B(E2) \uparrow : others: 0.46 7 (1956Te26), 0.55 4 (1958St32), 0.61 9 (1962Er05), 0.55 5 (1968MiZZ), 0.51 5 (1970Ch01). Q=-0.25 12 or +0.05 11 (1970Ch01). T _{1/2} : from B(E2).
1323.6	4 ⁺	1.5 ps 2	B(E2) \uparrow = 0.257 15 (1986Lu06) T _{1/2} : from B(E2).
1333.6	0 ⁺	5.2 ps 5	B(E2) \uparrow : other:<0.259 (1968MiZZ).
1341.7	2 ⁺	1.60 ps 4	B(E2) \uparrow =0.038 4 (1986Lu06) T _{1/2} : from B(E2).
1792.9	0 ⁺	<0.25 ps	B(E2) \uparrow =0.025 3 B(E2) \uparrow : others: 0.024 8 (1962Va21), 0.026 3 (1968MiZZ), 0.017 2 (1986Lu06). T _{1/2} : from B(E2).
1794.3	2 ⁺	<1.4 ps	B(E2) \uparrow <0.077 (1986Lu06) T _{1/2} : from B(E2).
2082.4	4 ⁺	1.2 ps 12	B(E2) \uparrow <0.01 (1986Lu06) B(E2) \uparrow =0.11 6 (1986Lu06)

$\gamma(^{104}\text{Pd})$

E _{γ} [‡]	I _{γ} [†]	E _i (level)	J _i $^{\pi}$	E _f	J _f $^{\pi}$	Mult.	Comments
555.8 4	100	555.8	2 ⁺	0.0 0 ⁺	0 ⁺	E2	B(E2)(W.u.)=37.1 19
740.7	95 5	2082.4	4 ⁺	1341.7 2 ⁺	2 ⁺	(E2)	B(E2)(W.u.)=4.E+1 4
767.8	100	1323.6	4 ⁺	555.8 2 ⁺	2 ⁺	E2	B(E2)(W.u.)=49 7
777.8	100	1333.6	0 ⁺	555.8 2 ⁺	2 ⁺	E2	B(E2)(W.u.)=13.2 13
785.8	100 6	1341.7	2 ⁺	555.8 2 ⁺	2 ⁺		
1237.2	100	1792.9	0 ⁺	555.8 2 ⁺	2 ⁺	(E2)	B(E2)(W.u.)>27
1238.0	100 6	1794.3	2 ⁺	555.8 2 ⁺	2 ⁺		
1333.6		1333.6	0 ⁺	0.0 0 ⁺	0 ⁺	E0	Mult.: $\rho^2=4.7 \times 10^{-3}$ 14.
1341.7	86 5	1341.7	2 ⁺	0.0 0 ⁺	0 ⁺		
1526.6	85 5	2082.4	4 ⁺	555.8 2 ⁺	2 ⁺	(E2)	B(E2)(W.u.)=0.9 9
1794.0	10 1	1794.3	2 ⁺	0.0 0 ⁺	0 ⁺	(E2)	B(E2)(W.u.)>0.068

[†] From Adopted Levels.

[‡] From 1986Lu06.

Coulomb excitation 1986Lu06Level Scheme

Intensities: Type not specified

Legend

- $I_\gamma < 2\% \times I_\gamma^{max}$
- $I_\gamma < 10\% \times I_\gamma^{max}$
- $I_\gamma > 10\% \times I_\gamma^{max}$

