^{24}Mg(^{80}Se,4nγ) 2012An17,2011An04,2011AnZZ

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	Balraj Singh and Jun Chen	NDS 172, 1 (2021)	31-Jan-2021

2012An17, 2011An04, 2011AnZZ: E=268 MeV ^{80}Se provided by tandem van de Graaff accelerator at Yale University. Target=0.8 mg/cm^2 ^{24}Mg. Residual products were measured to recoil out of the target with a recoil velocity of v/c=5.8%. Gamma rays detected with the SPEEDY array, consisting of four Compton suppressed Ge clover detectors, and two additional clover detectors. Measured Eγ, Iγ, $\gamma\gamma$-coin, level lifetimes by Recoil-distance Doppler shift (RDDS) method using New Yale Plunger device. Deduced B(E2), Q(transition), β_2.

^{100}Pd Levels

E(level)	J$^\pi$[†]	T$_{1/2}$[‡]
0	0$^+$	
665	2$^+$	9.2 ps *6*
1416	4$^+$	1.66 ps *12*
2189	6$^+$	1.66 ps *8*
2988	8$^+$	1.75 ps *7*
3869	10$^+$	0.51 ps *6*
4761	12$^+$	1.81 ps *14*
5706	14$^+$	

[†] From the Adopted Levels.
[‡] From RDDS method (2012An17,2011An04,2011AnZZ). Values for levels above the first 2$^+$ are given only in the thesis (2011AnZZ).

γ(^{100}Pd)

E$_\gamma$[†]	E$_i$(level)	J$_i^\pi$	E$_f$	J$_f^\pi$
665	665	2$^+$	0	0$^+$
751	1416	4$^+$	665	2$^+$
773	2189	6$^+$	1416	4$^+$
799	2988	8$^+$	2189	6$^+$
881	3869	10$^+$	2988	8$^+$
892	4761	12$^+$	3869	10$^+$
945	5706	14$^+$	4761	12$^+$

[†] Rounded values from the Adopted Gammas.

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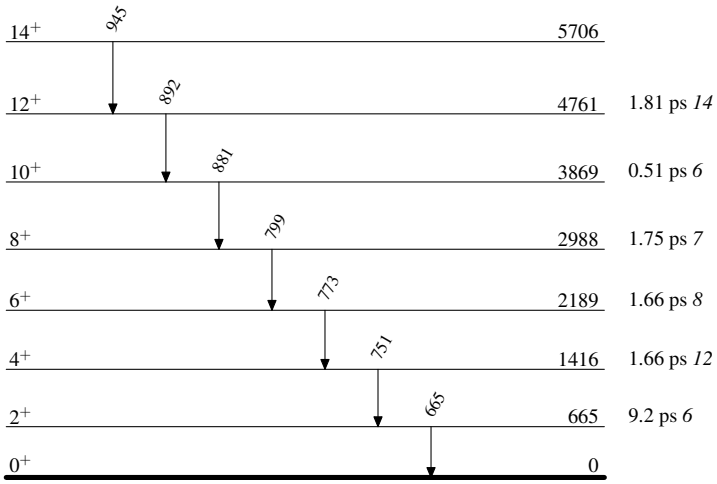
Level Scheme



$^{100}_{46}Pd_{54}$