^{9}Be(^{238}U,Fγ): isomer 2012Ka36

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	Zoltan Elekes and Janos Timar	NDS 129, 191 (2015)	28-Feb-2015

^{238}U beam at E=345 MeV/nucleon provided by the RIBF accelerator complex at RIKEN facility. Fission fragments were separated and analyzed by BigRIPS separator, transported to focal plane of ZeroDegree spectrometer and finally implanted in an aluminum stopper. Particle identification was achieved by ΔE-tof-Bρ method. Delayed γ rays from microsecond isomers were detected by three clover-type HPGe detectors. Measured Eγ, Iγ, $\gamma\gamma$-coincidence, isomer half-life. Deduced levels, J, π. Comparison with previous studies.

Level scheme from 2009Ca02.

^{128}Cd Levels

E(level)	J$^{\pi}$	T$_{1/2}$	Comments
0	0$^+$		
644.9 *5*	(2$^+$)		
1429.0 *6*	(4$^+$)		
1868.4 *6*	(5$^-$)		
2105.9 *8*	(7$^-$)		
2642.7 *10*	(8$^+$)		
2711.5 *11*	(10$^+$)	3.76 μs *+44−37*	T$_{1/2}$: from γ(t) method.

γ(^{128}Cd)

E$_\gamma$	E$_i$(level)	J$_i^{\pi}$	E$_f$	J$_f^{\pi}$
68.8 *5*	2711.5	(10$^+$)	2642.7	(8$^+$)
237.5 *5*	2105.9	(7$^-$)	1868.4	(5$^-$)
439.2 *5*	1868.4	(5$^-$)	1429.0	(4$^+$)
536.8 *5*	2642.7	(8$^+$)	2105.9	(7$^-$)
644.9 *5*	644.9	(2$^+$)	0	0$^+$
783.9 *5*	1429.0	(4$^+$)	644.9	(2$^+$)
1223.7 *5*	1868.4	(5$^-$)	644.9	(2$^+$)

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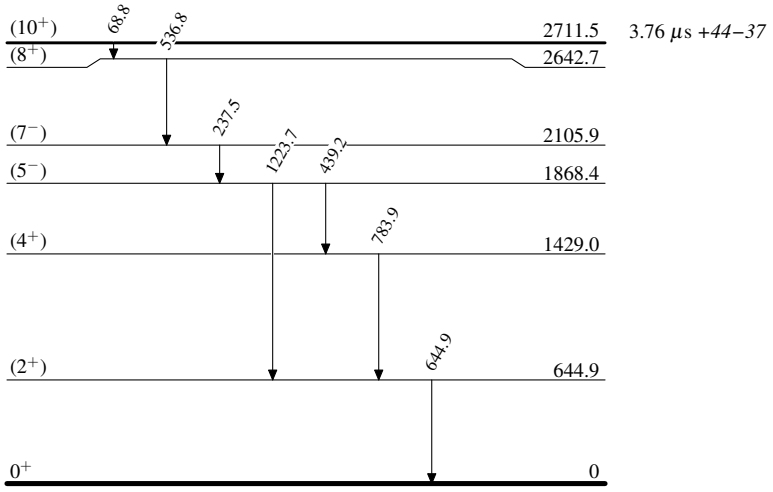
Level Scheme



$^{128}_{48}Cd_{80}$