

$^{197}\text{Au}(^{12}\text{Be},\gamma^{12}\text{Be})$ 2009Im01

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	J. H. Kelley, J. E. Purcell and C. G. Sheu		NP A968, 71 (2017)	1-Jan-2017

2009Im01: The authors used Coulomb excitation and the DSAM method to measure the lifetimes of $^{12}\text{Be}(2^+ \rightarrow 0^+_{\text{g.s.}})$ and $^{12}\text{Be}(1^- \rightarrow 0^+_{\text{g.s.}})$. $E_{\text{beam}}=43$ MeV/nucleon.

 ^{12}Be Levels

E(level)	J^π	$T_{1/2}$	Comments
0	0^+		
2107 3	2^+	1.7^\dagger ps 6	$M_n=10.1$ fm ² 14; $M_p=6.3$ fm ² 9 are deduced.
2693 5	1^-	<1.04 ps	

† Mean lifetime $\tau_m=2.5$ ps 7(stat) 3(syst).

 $\gamma(^{12}\text{Be})$

E_γ	$E_i(\text{level})$	J_i^π	E_f	J_f^π	Comments
2107	2107	2^+	0	0^+	$B(E2)(\text{W.u.})=4.9$ 14
2693	2693	1^-	0	0^+	$B(E2)(\text{W.u.})=4.9$ 13(stat) 5(syst) (2009Im01).

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