

Coulomb excitation 2010Ga14

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	J. K. Tuli, E. Browne		NDS 157, 260 (2019)	1-Mar-2019

Based on [2010Ga14](#) in XUNDL, compiled by B. Singh (McMaster), July 1, 2010.

[2010Ga14](#): Intermediate energy Coulomb excitation using Au target. Includes $^9\text{Be}(^{82}\text{Ge}, ^{82}\text{Ge}\gamma)$ inelastic scattering. $E \approx 70$ MeV/nucleon ^{82}Ge beam from fragmentation of 140 MeV/nucleon ^{86}Kr beam with 256 mg/cm² thick Au targets, NSCL facility. Measured E_γ , I_γ , (fragment) γ .

[2005Pa23](#): Beam ^{82}Ge , $E=220$ MeV beam from HRIBF at Oak Ridge National Laboratory. Target enriched (99.8%) ^{48}Ti . Measured E_γ 's using an array of BaF₂ detectors.

[2005Iw03](#): beam= ^{82}Ge at ≈ 40 MeV/nucleon produced from fragmentation of ^{86}Kr beam at 63 MeV/nucleon with a ^9Be target at RIKEN facility. Particles detected by Si telescopes and γ rays by an array of 132 NaI(Tl) detectors. Deduced B(E2) for first 2⁺ state.

 ^{82}Ge Levels

E(level)	J^π	$T_{1/2}$	Comments
0.0	0 ⁺	4.0 s 7	$T_{1/2}$: From Adopted Levels.
1348	2 ⁺	0.50 ps 8	B(E2) \uparrow =0.128 22 B(E2) \uparrow : Others: 0.115 20 (2005Pa23), \approx 0.1 (2005Iw03). $T_{1/2}$: deduced from measured B(E2) \uparrow =0.128 22 (2010Ga14).
2286?	(4 ⁺)		

 $\gamma(^{82}\text{Ge})$

E_γ	$E_i(\text{level})$	J_i^π	E_f	J_f^π	Comments
938 [†]	2286?	(4 ⁺)	1348	2 ⁺	<60 counts observed, prompt background is high in inelastic scattering with ^9Be target (2010Ga14).
1348	1348	2 ⁺	0.0	0 ⁺	

[†] Placement of transition in the level scheme is uncertain.

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Legend

Level Scheme-----► γ Decay (Uncertain)