

$^{66}\text{Zn}(\text{p},\gamma)$ 1979Ra12,1972Sz01

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	Huo Junde, Huang Xiaolong, J. K. Tuli		NDS 106, 159 (2005)	1-Apr-2005

1979Ra12: E=3.3 MeV; measured $\gamma(\theta)$.

1973Ne07: E=2 MeV; measured $\gamma\gamma(\theta)$.

1972Sz01: E=3.3 MeV; measured excitation function, γ asymmetry (1972Sz01).

Others: 1981Pa12, 1971Ne06, 1971MoZS, 1972BuZM.

 ^{67}Ga Levels

E(level) [†]	J ^π [‡]	Comments
0	3/2 ⁻	
167	1/2 ⁻	J=1/2 from $\gamma(\theta)$ (1973Ne07).
359	5/2 ⁻	J=5/2 from $\gamma(\theta)$ (1973Ne07).
911	5/2 ⁻	
1202	7/2 ⁻	
1413	7/2 ⁻	
1519	9/2 ⁻	
2074	9/2 ⁺	
8552 5	9/2 ⁺	$\Gamma\text{p}\Gamma\gamma/\Gamma=0.17$ eV 3 (1979Ra12); 0.32 eV 6 (1972Sz01). E(level): from E(p)=3333 5 resonance (1979Ra12). J ^π : from the identification of this resonance as the IAS of the 604 level in ^{67}Zn .
8567 5	9/2 ⁺	$\Gamma\text{p}\Gamma\gamma/\Gamma=0.06$ eV 2 (1979Ra12). E(level): from E(p)=3348 5 resonance (1979Ra12). J ^π : IAS of 604 level in ^{67}Zn .

[†] From Adopted Levels.

[‡] From Adopted Levels; supporting arguments from this reaction are indicated.

 $\gamma(^{67}\text{Ga})$

E _i (level)	J ^π _i	E _γ [†]	I _γ [‡]	E _f	J ^π _f	Mult.	δ	Comments
167	1/2 ⁻	167	100	0	3/2 ⁻			
359	5/2 ⁻	359	100	0	3/2 ⁻			
911	5/2 ⁻	911	100	0	3/2 ⁻			
1202	7/2 ⁻	843	67 8	359	5/2 ⁻			
		1202	33 8	0	3/2 ⁻			
1413	7/2 ⁻	1054	62 24	359	5/2 ⁻			
		1413	38 24	0	3/2 ⁻			
1519	9/2 ⁻	1160	100	359	5/2 ⁻			
2074	9/2 ⁺	555	58 3	1519	9/2 ⁻			
		872	42 3	1202	7/2 ⁻			
8552	9/2 ⁺	6478	73 4	2074	9/2 ⁺	(M1(+E2))	-0.09 10	Mult.: D+Q from $\gamma(\theta)$ by 1979Ra12; M1+E2 from ΔJ^{π} . δ: from 1979Ra12.
		7139	13 2	1413	7/2 ⁻			
		7350	8 2	1202	7/2 ⁻			
		7641	6 2	911	5/2 ⁻			
8567	9/2 ⁺	6493		2074	9/2 ⁺			

[†] From level energy differences.

[‡] Percent branching from each level (1979Ra12).

$^{66}\text{Zn}(p,\gamma)$ 1979Ra12,1972Sz01Level Scheme

Intensities: % photon branching from each level

