^{68}Zn(p,p′γ) 1985Pa07

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	E. A. Mccutchan	NDS 113, 1735 (2012)	1-Mar-2012

1985Pa07: E(p)=5.9-6.9 MeV. Measured Eγ, Iγ, Ice, internal pair production spectrum, γp′-coin, pγ(t), pce(t), $T_{1/2}$.
Other:1961Va25.
α: Additional information 1.

^{68}Zn Levels

E(level)	J^π †	$T_{1/2}$ ‡
0	0^+	
1077.4	2^+	
1655.7	0^+	70 ps *35*
1883.2	2^+	
3102.5	0^+	

† From the Adopted Levels.
‡ From centroid shift measurement.

γ(^{68}Zn)

E_i(level)	J_i^π	E_γ	I_γ ‡	E_f	J_f^π	Mult.†	α	$I_{(\gamma+ce)}$	Comments
1655.7	0^+	578.3	100	1077.4	2^+	E2			
		1655.7		0	0^+	E0		3.5×10^{-2} *10*	$I_{(\gamma+ce)}$: from Ice(K)(1656)/Iγ(578γ)= 1.9×10^{-4} *6* and I(γ+ce)(1656)/Ice(K)(1656)=0.55. The authors adopt a branching of 4.2×10^{-4} *10* which is an average of their value and an earlier result from data in ^{68}Ga ε decay, to derive B(E0) and ρ^2(E0).
3102.5	0^+	1219.3	100	1883.2	2^+	[E2]	0.000199 *3*		α=0.000199 *3*; α(K)=0.0001676 *24*; α(L)=1.674×10^{-5} *24*; α(M)=2.40×10^{-6} *4*; α(N+..)=1.185×10^{-5}

† From the Adopted Gammas.
‡ Relative photon branching from each level.

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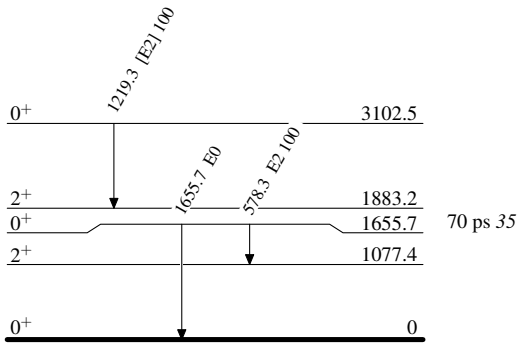
Level Scheme

Intensities: Relative photon branching from each level



$^{68}_{30}Zn_{38}$