^{72}Ge(p,p′γ)

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	D. Abriola(a), A. A. Sonzogni	NDS 111,1 (2010)	1-May-2009

(p,p′γ): E=5 MeV (1961Va25) and E=5-7 MeV (1965Mo01).
(p,p′ce): E=2.3-6.2 MeV (1962Ne02), 5.1 MeV (1971AnZV), 5 MeV (1966Br26) and 3-4.34 MeV (1982We03).

^{72}Ge Levels

E(level)	J^π[†]	$T_{1/2}$	Comments
0	0^+		
690.0 *10*	0^+	439 ns *4*	$T_{1/2}$: from 1982We03, decay curve followed for ≈9 $T_{1/2}$ $_{1/2}$′s.
833 *4*	2^+		
1466 *8*	2^+		
2066 *13*	3^+		

[†] From Adopted Levels.

γ(^{72}Ge)

E_γ[†]	I_γ[‡]	E_i(level)	J_i^π	E_f	J_f^π	Mult.	δ	Comments
600 *10*	≈5	2066	3^+	1466	2^+			
630 *10*	22 *4*	1466	2^+	833	2^+	M1+E2	−5 +*2*−*10*	δ: from 1965Mo01; phase convention not defined.
690 *1*		690.0	0^+	0	0^+	E0		ce(K)/(γ+ce)=0.897 *6* I(γγ)/Ice<6×10^{-5} (1966Br26).
832 *4*	100	833	2^+	0	0^+			
[x]1200 *10*	2.1 *4*							
1470 *10*	2.4 *3*	1466	2^+	0	0^+			
[x]1730 *20*	1.7 *3*							

[†] Mainly from 1961Va25, except for 690γ, which is taken from 1962Ne02.
[‡] Relative intensity at 5 MeV, θ(γ)=55° (1961Va25).
[x] γ ray not placed in level scheme.

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Level Scheme

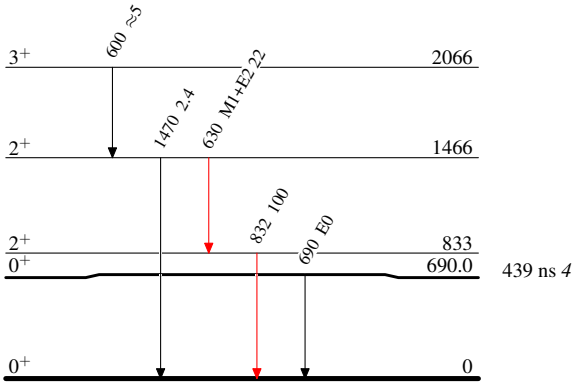
Intensities: Relative I_γ

Legend

$I_\gamma < 2\% \times I_\gamma^{max}$

$I_\gamma < 10\% \times I_\gamma^{max}$

$I_\gamma > 10\% \times I_\gamma^{max}$



$^{72}_{32}Ge_{40}$