

$^{64}\text{Zn}(^{36}\text{Ar}, 2\text{p}2\text{n}\gamma)$ **1989AI05**

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	D. Abriola(a), A. A. Sonzogni		NDS 109, 2501 (2008)	1-Apr-2008

Measured: γ , $\gamma\gamma$, $\gamma(\theta)$, $\gamma(\theta, \text{H}, \text{t})$, $\gamma(\text{t})$.

 ^{96}Pd Levels

E(level) [‡]	J ^π [†]	T _{1/2} [#]	Comments
0.0	0 ⁺		
1415	2 ⁺		
2099	(4 ⁺)		
2424	(6 ⁺)	7.5 ns 10	
2530	(8 ⁺)	2.2 μs 3	g=+1.371 7 (1983Gr01)
2648	(5 ⁻)		
3783	(10 ⁺)		
4573	(12 ⁺)		
6728	(13 ⁺)		
7039	(15 ⁺)	35 ns 4	g=+0.83 5 (1989AI05)

[†] Adopted values.

[‡] From E γ values.

[#] From $\gamma(\text{t})$ in [1989AI05](#).

 $\gamma(^{96}\text{Pd})$

463 γ and 662 γ populate level 4573 and belong to γ -spectra from γ -decay of 7039 isomer with T_{1/2}=35 ns.

E γ	E _i (level)	J ^π _i	E _f	J ^π _f	Mult.	$\alpha^{\dagger}$	Comments
106	2530	(8 ⁺)	2424	(6 ⁺)	[E2]	1.134	
224	2648	(5 ⁻)	2424	(6 ⁺)			
311	7039	(15 ⁺)	6728	(13 ⁺)	[E2]	0.0263	
325	2424	(6 ⁺)	2099	(4 ⁺)	[E2]	0.0227	
^x 463							
549	2648	(5 ⁻)	2099	(4 ⁺)			
^x 662							
684	2099	(4 ⁺)	1415	2 ⁺			
790	4573	(12 ⁺)	3783	(10 ⁺)	(E2)		Mult.: A ₂ =+0.25 3 if A ₄ =0.0.
1253	3783	(10 ⁺)	2530	(8 ⁺)	(E2)		Mult.: A ₂ =+0.17 4 if A ₄ =0.0.
1415	1415	2 ⁺	0.0	0 ⁺			
2155	6728	(13 ⁺)	4573	(12 ⁺)			

[†] Total theoretical internal conversion coefficients, calculated using the BrIcc code ([2008Ki07](#)) with Frozen orbital approximation based on γ -ray energies, assigned multipolarities, and mixing ratios, unless otherwise specified.

^x γ ray not placed in level scheme.

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Level Scheme

