

$^{63}\text{Cu}(p,\gamma)$ E=2.1-3.1 MeV 1980Er05

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	Balraj Singh and Jun Chen		NDS 178, 41 (2021).	12-Nov-2021

Average resonance capture.

1980Er05: E(p)=2.1-3.1 MeV. Measured E_γ , I_γ values of primary γ rays. Deduced E1 γ -ray strength functions. See also 1980Er08 from the same group for secondary transitions from $^{63}\text{Cu}(p,\gamma)$, E(p)=2050 keV.

 ^{64}Zn Levels

E(level)	J^π [†]	Comments
0	0 ⁺	
991	2 ⁺	
1799	2 ⁺	
1910	0 ⁺	
2306	4 ⁺	
2609	0 ⁺	
2736	4 ⁺	
2793	2 ⁺	
2980	3 ⁺	
3078	4 ⁺	
3094	(3) ⁺	
3425	1 ⁺	
3597		
3627	(0 ⁺ ,6 ⁻)	
3796	1 ⁺	
3819		
3898		
3925	5 ⁻	
4205	(4,3) ⁺	
10.31×10 ³ 50		E(level): from E(p)=2.1-3.1 MeV range in the c.m. system and S(p)(^{64}Zn)=7713.1 keV 6 (2021Wa16).

[†] From the Adopted Levels for selected levels for which the the J^π assignments are limited to at the most two choices.

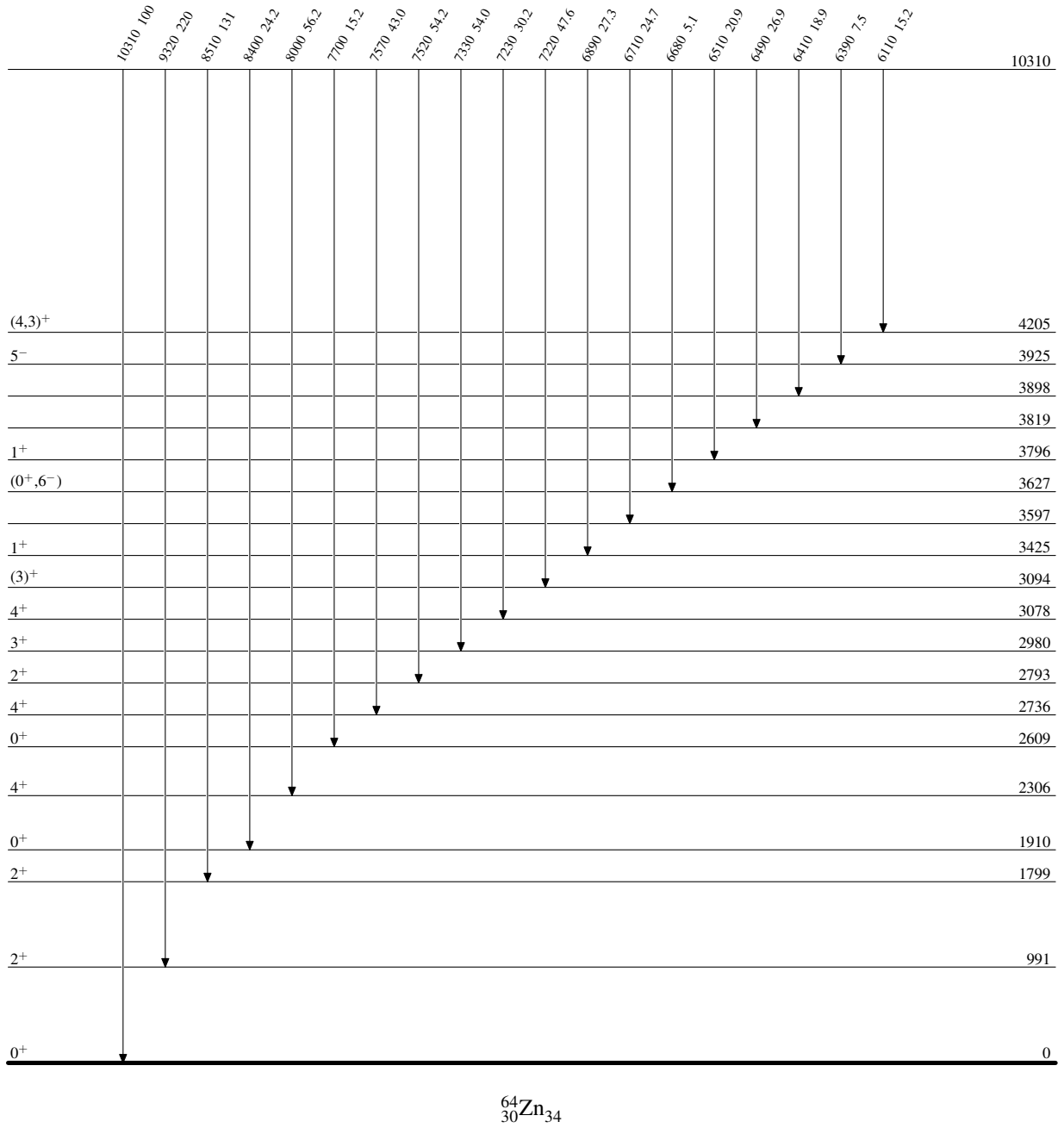
 $\gamma(^{64}\text{Zn})$

$E_i(\text{level})$	E_γ	I_γ	E_f	J_f^π	$E_i(\text{level})$	E_γ	I_γ	E_f	J_f^π
10.31×10 ³	6110	15.2 26	4205	(4,3) ⁺	10.31×10 ³	7330	54.0 77	2980	3 ⁺
	6390	7.5 23	3925	5 ⁻		7520	54.2 72	2793	2 ⁺
	6410	18.9 31	3898			7570	43.0 58	2736	4 ⁺
	6490	26.9 35	3819			7700	15.2 25	2609	0 ⁺
	6510	20.9 42	3796	1 ⁺		8000	56.2 73	2306	4 ⁺
	6680	5.1 19	3627	(0 ⁺ ,6 ⁻)		8400	24.2 38	1910	0 ⁺
	6710	24.7 37	3597			8510	131 16	1799	2 ⁺
	6890	27.3 42	3425	1 ⁺		9320	220 27	991	2 ⁺
	7220	47.6 81	3094	(3) ⁺		10310	100 13	0	0 ⁺
	7230	30.2 77	3078	4 ⁺					

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Level Scheme

Intensities: Relative photon branching from each level

 $^{64}_{30}\text{Zn}_{34}$