

$^{12}\text{C}(^{63}\text{Ga}, ^{62}\text{Zn}'\gamma)$ 2023Wi05

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	Balraj Singh, Huang Xiaolong, and Wang Xianghan		NDS 204,1 (2025)	30-Jun-2023

2023Wi05: Secondary beam of ^{63}Ga produced through fragmentation of ^{78}Kr primary beam at 345 AMeV on a Be target at RIKEN. Secondary beam energy approximately 165 AMeV. Measured E_γ , I_γ $\gamma\gamma$ using the DALI2⁺ array consisting of 226 NaI(Tl) crystals. Data include inelastic scattering on natural carbon target. Comparison with the shell-model calculations with the K3BGR (GXPF1A) effective interactions.

 ^{62}Zn Levels

<u>E(level)[†]</u>	<u>Jπ[‡]</u>
0	0 ⁺
955 2	2 ⁺
1805	2 ⁺
2183	4 ⁺
2384	3 ⁺
2803	2 ⁺
3223 17	3 ⁻

[†] From E_γ .

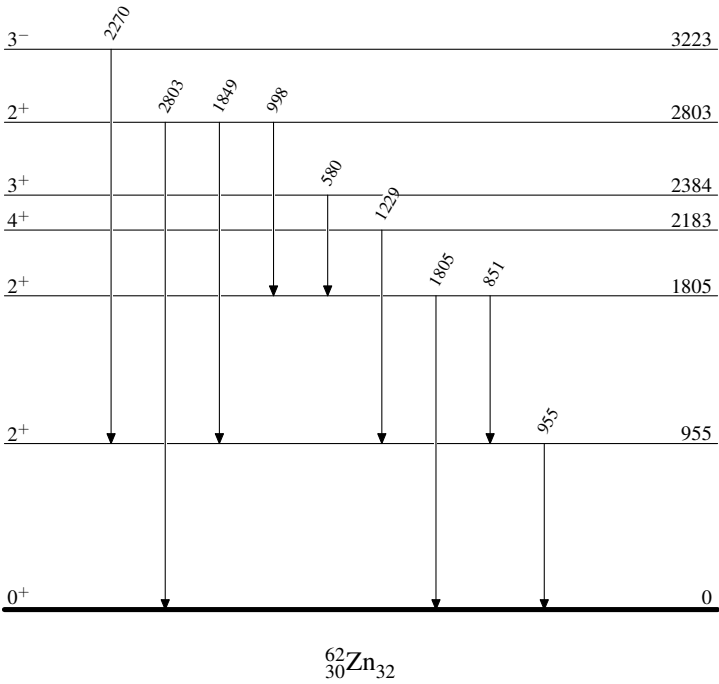
[‡] As proposed by 2023Wi05.

 $\gamma(^{62}\text{Zn})$

<u>E_γ</u>	<u>$E_i(\text{level})$</u>	<u>J_i^π</u>	<u>E_f</u>	<u>J_f^π</u>	<u>Comments</u>
580	2384	3 ⁺	1805	2 ⁺	
851	1805	2 ⁺	955	2 ⁺	
955 2	955	2 ⁺	0	0 ⁺	
998	2803	2 ⁺	1805	2 ⁺	
1229 4	2183	4 ⁺	955	2 ⁺	
1805	1805	2 ⁺	0	0 ⁺	E_γ : unresolved with the 1849 γ .
1849	2803	2 ⁺	955	2 ⁺	E_γ : unresolved with the 1805 γ .
2270 17	3223	3 ⁻	955	2 ⁺	
2803	2803	2 ⁺	0	0 ⁺	

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Level Scheme



$^{62}_{30}\text{Zn}_{32}$