

$^{208}\text{Pb}(^{64}\text{Ni},\text{X}\gamma)$ [2000Wi18](#)

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	G. Gürdal, E. A. Mccutchan	NDS 136, 1 (2016)	1-Jul-2016

$E(^{64}\text{Ni})=360$ MeV. Measured $E\gamma$, $I\gamma$, $\gamma\gamma\gamma$ using Gammasphere array consisting of 83 Compton-suppressed HPGe detectors.
Similar results are given in [1997Be77](#).

 ^{70}Zn Levels

$E(\text{level})^\dagger$	$J^\pi \ddagger$	Comments
0 [#]	0 ⁺	
885.4 [#]	2 ⁺	
1787.6 [#]	4 ⁺	
2896.5 [#]	(6 ⁺)	
3039.7	5 ⁻	J^π : proposed as $J^\pi=4^+$ in 2000Wi18 .
3477.7		
3600.8		J^π : proposed as $J^\pi=(5^+)$ in 2000Wi18 .
3756.8 [#]	(8 ⁺)	J^π : proposed as $J^\pi=(6^+)$ in 2000Wi18 .
3790.1		
4937.3 [#]	(10 ⁺)	
6117.7 [#]	(12 ⁺)	

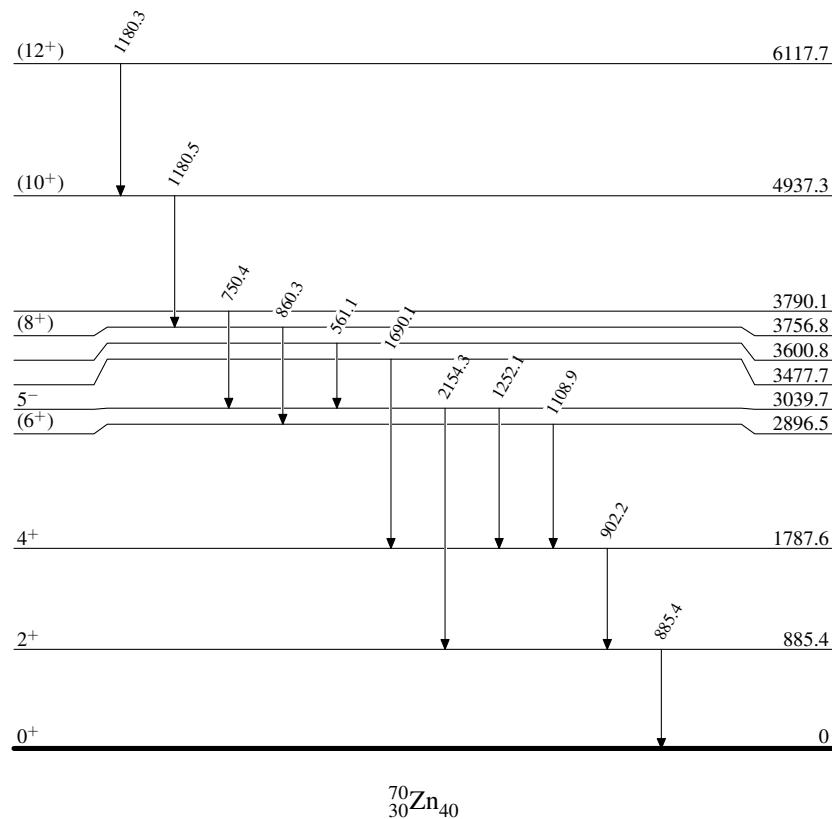
[†] From a least-squares fit to $E\gamma$, by evaluators.

[‡] From the Adopted Levels. Differences in assignments as proposed by [2000Wi18](#) are indicated in the comments.

Band(A): Yrast band.

 $\gamma(^{70}\text{Zn})$

E_γ	$E_i(\text{level})$	J_i^π	E_f	J_f^π	Comments
561.1	3600.8		3039.7	5 ⁻	
750.4	3790.1		3039.7	5 ⁻	
860.3	3756.8	(8 ⁺)	2896.5	(6 ⁺)	
885.4	885.4	2 ⁺	0	0 ⁺	
902.2	1787.6	4 ⁺	885.4	2 ⁺	
1108.9	2896.5	(6 ⁺)	1787.6	4 ⁺	
1180.3	6117.7	(12 ⁺)	4937.3	(10 ⁺)	
1180.5	4937.3	(10 ⁺)	3756.8	(8 ⁺)	
1252.1	3039.7	5 ⁻	1787.6	4 ⁺	
1690.1	3477.7		1787.6	4 ⁺	
2154.3	3039.7	5 ⁻	885.4	2 ⁺	E_γ : The adopted J^π requires E3 or M4 for this transition. This transition depopulates another level in $^{70}\text{Zn}(n,n')$ dataset. The evaluators adopted the $^{70}\text{Zn}(n,n')$ placement for this transition in Adopted Levels.

$^{208}\text{Pb}({}^{64}\text{Ni},\text{X}\gamma)$ **2000Wi18**Level Scheme

$^{208}\text{Pb}(^{64}\text{Ni},\text{X}\gamma)$ **2000Wi18****Band(A): Yrast band** (12^+) 6117.7

1180

 (10^+) 4937.3

1180

 (8^+) 3756.8

860

 (6^+) 2896.5

1109

 4^+ 1787.6

902

 2^+ 885.4

885

 0^+ 0 $^{70}_{30}\text{Zn}_{40}$