

$^{107}\text{Ag}(^{58}\text{Ni,p2n}\gamma)$ **1992DrZU**

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	N. Nica	NDS 195,1 (2024)	19-Sep-2023

1992DrZU (also **1992DrZW**, **1992DrZY**) ^{162}W produced in the bombardment of ^{107}Ag with 253-MeV ^{58}Ni ions. The γ rays were studied using the 21-detector array, HERA. Assignment of γ -ray transitions to a specific Z value was based on coincidences with characteristic x rays. Plot of γ rays in coincidence with the $2^+ \rightarrow 0^+$ transition in ^{162}W is shown, but no level scheme or I γ values is given. E γ values, shown only on the spectral plot are given only to the nearest keV. Level scheme given here is based on results of the high-spin structure study by **2016Jo01**, where almost all the γ rays are about the same energy as measured in **1992DrZU**.

 ^{162}W Levels

E(level) [†]	J π [‡]	E(level) [†]	J π [‡]	E(level) [†]	J π [‡]	E(level) [†]	J π [‡]
0.0	0 ⁺	2395.0 20		3123.0 25	(11 ⁻)	4837 3	(17 ⁻)
450.0 10	(2 ⁺)	2429.0 20		3446.0 25	(12 ⁺)	4853 3	(16 ⁺)
1013.0 15	(4 ⁺)	2827.0 23	(10 ⁺)	3658 3	(13 ⁻)	5566 4	
1640.0 18	(6 ⁺)	2894.0 23		4124 3	(14 ⁺)		
2270.0 20	(8 ⁺)	3050.0 25		4257 3	(15 ⁻)		

[†] From E γ data, assuming 1 keV uncertainty for each E γ value.

[‡] From Adopted Levels.

 $\gamma(^{162}\text{W})$

E γ [†]	E $_i$ (level)	J $_i$ π	E $_f$	J $_f$ π	E γ [†]	E $_i$ (level)	J $_i$ π	E $_f$	J $_f$ π
156 [‡]	3050.0		2894.0		619 [‡]	3446.0	(12 ⁺)	2827.0	(10 ⁺)
296 [‡]	3123.0	(11 ⁻)	2827.0	(10 ⁺)	627 [‡]	1640.0	(6 ⁺)	1013.0	(4 ⁺)
450	450.0	(2 ⁺)	0.0	0 ⁺	630 [‡]	2270.0	(8 ⁺)	1640.0	(6 ⁺)
499 [‡]	2894.0		2395.0		678 [‡]	4124	(14 ⁺)	3446.0	(12 ⁺)
535 [‡]	3658	(13 ⁻)	3123.0	(11 ⁻)	729 ^{#‡}	4853	(16 ⁺)	4124	(14 ⁺)
557 [‡]	2827.0	(10 ⁺)	2270.0	(8 ⁺)	729 ^{#‡}	5566		4837	(17 ⁻)
563 [‡]	1013.0	(4 ⁺)	450.0	(2 ⁺)	^x 744				
580 [‡]	4837	(17 ⁻)	4257	(15 ⁻)	755 [‡]	2395.0		1640.0	(6 ⁺)
599 [‡]	4257	(15 ⁻)	3658	(13 ⁻)	789 [‡]	2429.0		1640.0	(6 ⁺)

[†] Values as shown on the spectrum in coincidence with the 450-keV $2^+ \rightarrow 0^+$ gating transition (**1992DrZU**). Based on new data in **2016Jo01** and **2015Li24**, all the γ -rays, except for the 744 γ , can be assigned in a level scheme proposed by **2016Jo01**.

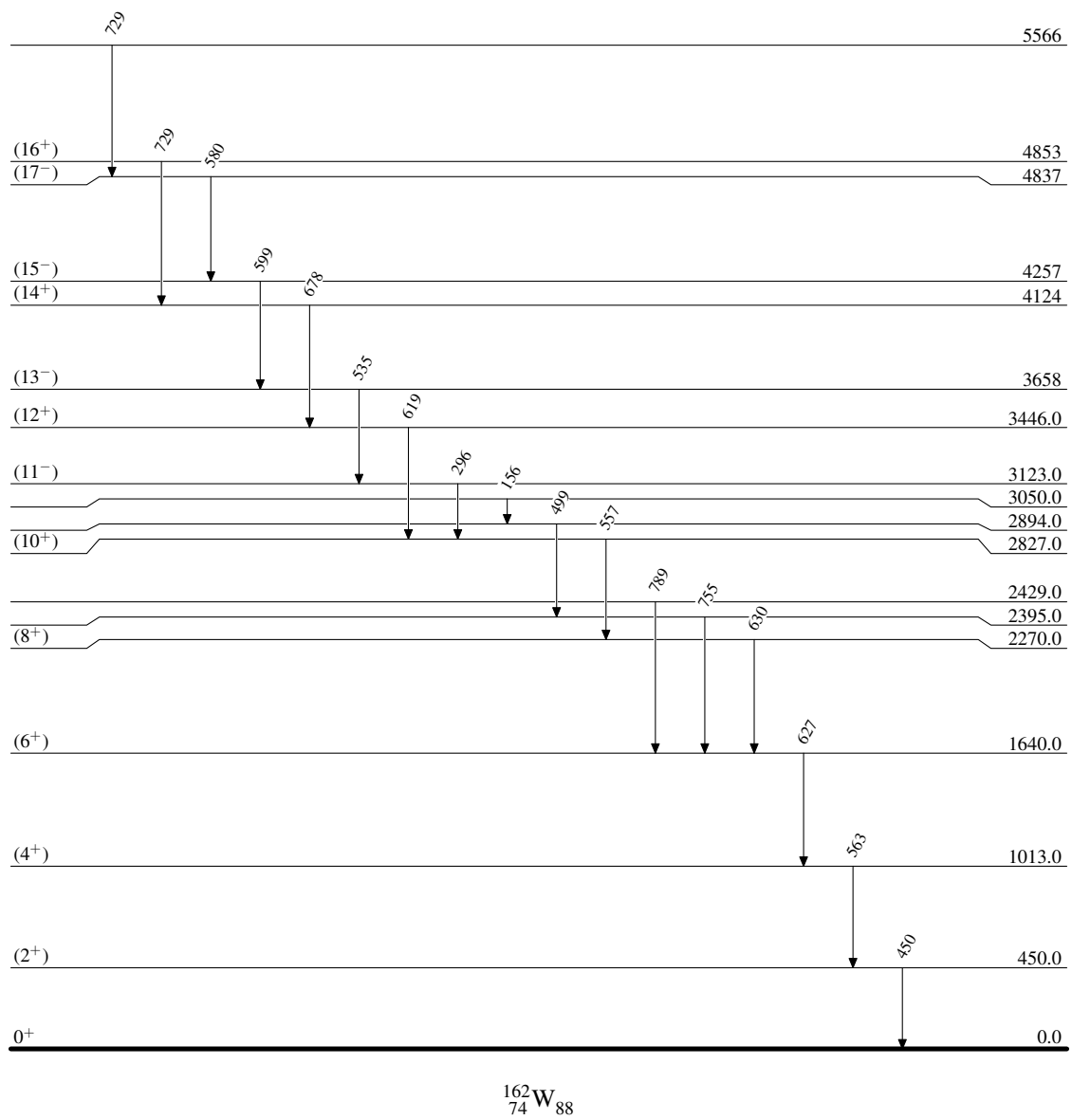
[‡] Placement of γ ray here is by the evaluator based on comparison of γ -ray energies and placements in **2016Jo01**. The γ ray was not placed by **1992DrZU**.

[#] Multiply placed.

^x γ ray not placed in level scheme.

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Level Scheme

 $^{162}_{74}\text{W}_{88}$