

$^{188}\text{Os}(\alpha,3n\gamma), ^{191}\text{Ir}(p,3n\gamma)$ **1975Pi02,1978DaZC**

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	T. D. Johnson, Balraj Singh		NDS 142, 1 (2017)	15-Apr-2017

1975Pi02, 1976Pi03, 1978DaZC: $^{188}\text{Os}(\alpha,3n\gamma), ^{191}\text{Ir}(p,3n\gamma)$, measured prompt, delayed γ , $\gamma\gamma(t)$, $\sigma(E\gamma)$, $\gamma(\theta)$, deduced level schemes.

 ^{189}Pt Levels

E(level) [‡]	J^π [†]	$T_{1/2}$	Comments
0.0	$3/2^-$		
6.2 5	$5/2^-$		
172.6 7	$9/2^-$		
191.6 7	$13/2^+$	143 μs 5	$T_{1/2}$: from 1976Pi03 based on $\alpha, \gamma(t)$.
202.9 8	$11/2^+$		
237.6 7	$7/2^-$		J^π : $(9/2)^-$ in Adopted Levels.
356.6 7	$9/2^-$		
492.5 8	$11/2^-$		
499.7 8	$17/2^+$		
532.1 8	$15/2^+$		
609.1 7	$11/2^-$		
654.3 8	$15/2^+$		
712.5 8	$13/2^-$		
843.6 8	$13/2^-$		
902.1 10			
944.9 8	$17/2^+$		
955.5 8	$21/2^+$		
984.2 8	$19/2^+$		
1047.7 10	$(15/2^-)$		
1081.7 7	$15/2^-$		
1185.8 8	$19/2^+$		
1361.9 7	$17/2^-$		
1414.9 9			
1415.8 10	$17/2^-$		
1444.8 9	$21/2^+$		
1491.3 8	$19/2^-$		
1512.8 8	$21/2^-$		
1529.8 9	$25/2^+$		
1530.6 9	$(23/2^-)$		
1556.4 10	$(23/2^+)$		
1714.6 9	$(25/2^-)$		
1727.9 9	$(23/2^+)$		
2056.0 10	$27/2^-$		
2189.9 11	$29/2^+$		
2220.3? 11	$(27/2^+)$		
2291.9 10	$29/2^+$		
2689.4? 11	$(31/2^-)$		
2864.7 12	$33/2^+$		

[†] J^π are those assigned by **1978DaZC** on the basis of $\gamma(\theta)$, excitation functions, and comparison with the Nilsson model.

However, the excitation and angular distribution data were not presented in this report and were not published.

[‡] Energies and tentative decay scheme are from **1978DaZC**. Uncertainties are based on the assumption of 0.5 keV γ -ray energy uncertainty.

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E_γ	$E_i(\text{level})$	J_i^π	E_f	J_f^π	E_γ	$E_i(\text{level})$	J_i^π	E_f	J_f^π
(6.2 [†])	6.2	5/2 ⁻	0.0	3/2 ⁻	456.0	955.5	21/2 ⁺	499.7	17/2 ⁺
(11.4 [†])	202.9	11/2 ⁺	191.6	13/2 ⁺	460.5	1444.8	21/2 ⁺	984.2	19/2 ⁺
(17.8 [†])	1530.6	(23/2 ⁻)	1512.8	21/2 ⁻	462.7	654.3	15/2 ⁺	191.6	13/2 ⁺
(19.1 [†])	191.6	13/2 ⁺	172.6	9/2 ⁻	470.0	1414.9		944.9	17/2 ⁺
129.2	1491.3	19/2 ⁻	1361.9	17/2 ⁻	472.6	1081.7	15/2 ⁻	609.1	11/2 ⁻
150.9	1512.8	21/2 ⁻	1361.9	17/2 ⁻	484.4	984.2	19/2 ⁺	499.7	17/2 ⁺
166.4	172.6	9/2 ⁻	6.2	5/2 ⁻	487.0	843.6	13/2 ⁻	356.6	9/2 ⁻
184.0	1714.6	(25/2 ⁻)	1530.6	(23/2 ⁻)	500.1	1444.8	21/2 ⁺	944.9	17/2 ⁺
201.8	1714.6	(25/2 ⁻)	1512.8	21/2 ⁻	532.3	1185.8	19/2 ⁺	654.3	15/2 ⁺
231.4	237.6	7/2 ⁻	6.2	5/2 ⁻	536	1491.3	19/2 ⁻	955.5	21/2 ⁺
236.0	2291.9	29/2 ⁺	2056.0	27/2 ⁻	539.7	712.5	13/2 ⁻	172.6	9/2 ⁻
252.5	609.1	11/2 ⁻	356.6	9/2 ⁻	542.1	1727.9	(23/2 ⁺)	1185.8	19/2 ⁺
280.3	1361.9	17/2 ⁻	1081.7	15/2 ⁻	555.2	1047.7	(15/2 ⁻)	492.5	11/2 ⁻
290.6	944.9	17/2 ⁺	654.3	15/2 ⁺	557.2	1512.8	21/2 ⁻	955.5	21/2 ⁺
308.2	499.7	17/2 ⁺	191.6	13/2 ⁺	572.2 [‡]	1415.8	17/2 ⁻	843.6	13/2 ⁻
319.9	492.5	11/2 ⁻	172.6	9/2 ⁻	572.2 [‡]	1556.4	(23/2 ⁺)	984.2	19/2 ⁺
327.1	1512.8	21/2 ⁻	1185.8	19/2 ⁺	574.3	1529.8	25/2 ⁺	955.5	21/2 ⁺
329.2	532.1	15/2 ⁺	202.9	11/2 ⁺	577.1	2291.9	29/2 ⁺	1714.6	(25/2 ⁻)
340.5	532.1	15/2 ⁺	191.6	13/2 ⁺	633.4 [#]	2689.4?	(31/2 ⁻)	2056.0	27/2 ⁻
341.5	2056.0	27/2 ⁻	1714.6	(25/2 ⁻)	649.3	1361.9	17/2 ⁻	712.5	13/2 ⁻
350.4	356.6	9/2 ⁻	6.2	5/2 ⁻	660.1	2189.9	29/2 ⁺	1529.8	25/2 ⁺
371.5	609.1	11/2 ⁻	237.6	7/2 ⁻	663.9 [#]	2220.3?	(27/2 ⁺)	1556.4	(23/2 ⁺)
409.6 [‡]	902.1		492.5	11/2 ⁻	674.8	2864.7	33/2 ⁺	2189.9	29/2 ⁺
409.6 [‡]	1491.3	19/2 ⁻	1081.7	15/2 ⁻	686.2	1185.8	19/2 ⁺	499.7	17/2 ⁺
412.9	944.9	17/2 ⁺	532.1	15/2 ⁺	707.6	1361.9	17/2 ⁻	654.3	15/2 ⁺
445.2	944.9	17/2 ⁺	499.7	17/2 ⁺	772.4	1727.9	(23/2 ⁺)	955.5	21/2 ⁺
452.0	984.2	19/2 ⁺	532.1	15/2 ⁺	862.1	1361.9	17/2 ⁻	499.7	17/2 ⁺

[†] Transition unobserved. Energy from energy level differences.

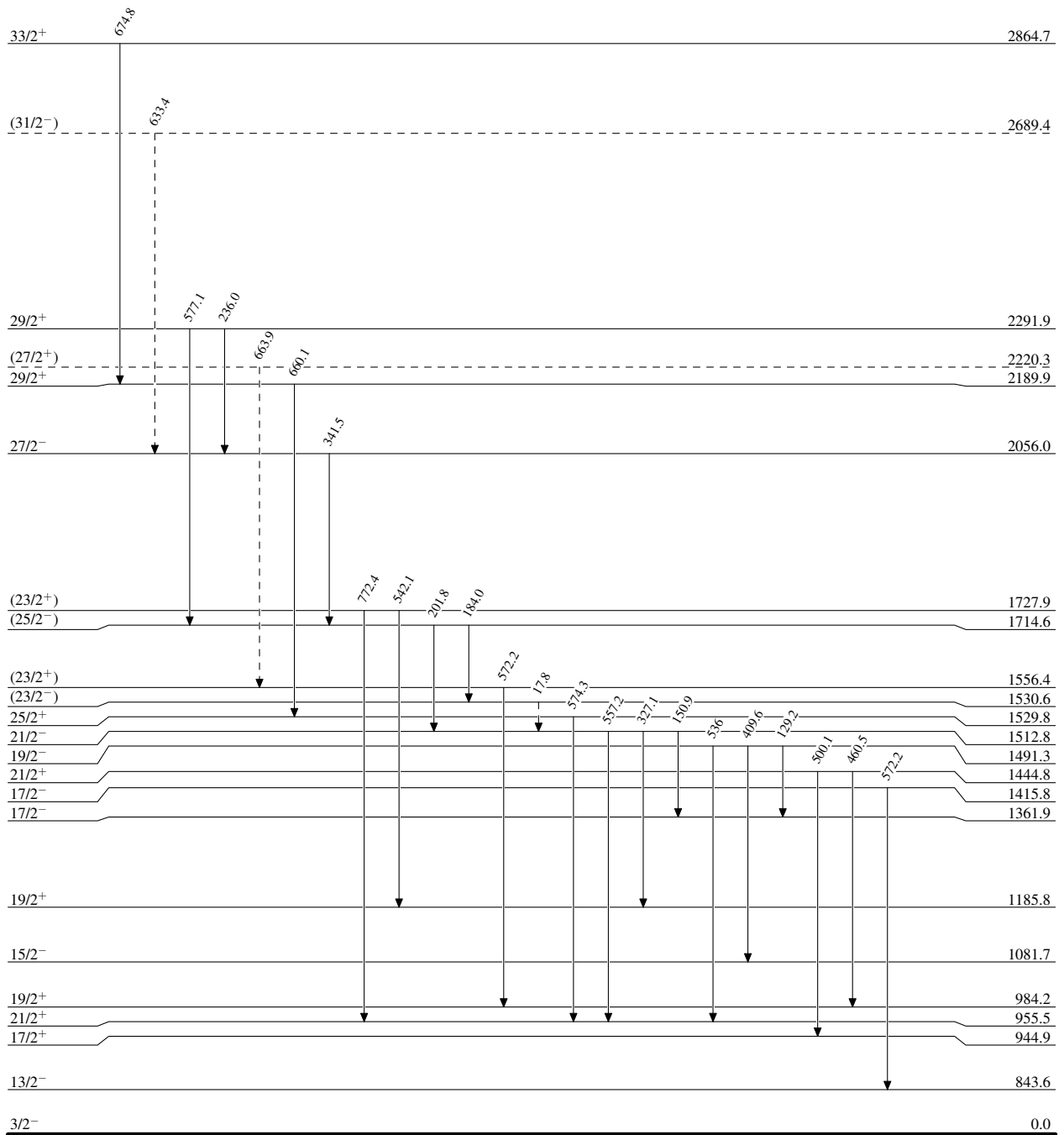
[‡] Multiply placed.

[#] Placement of transition in the level scheme is uncertain.

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Legend

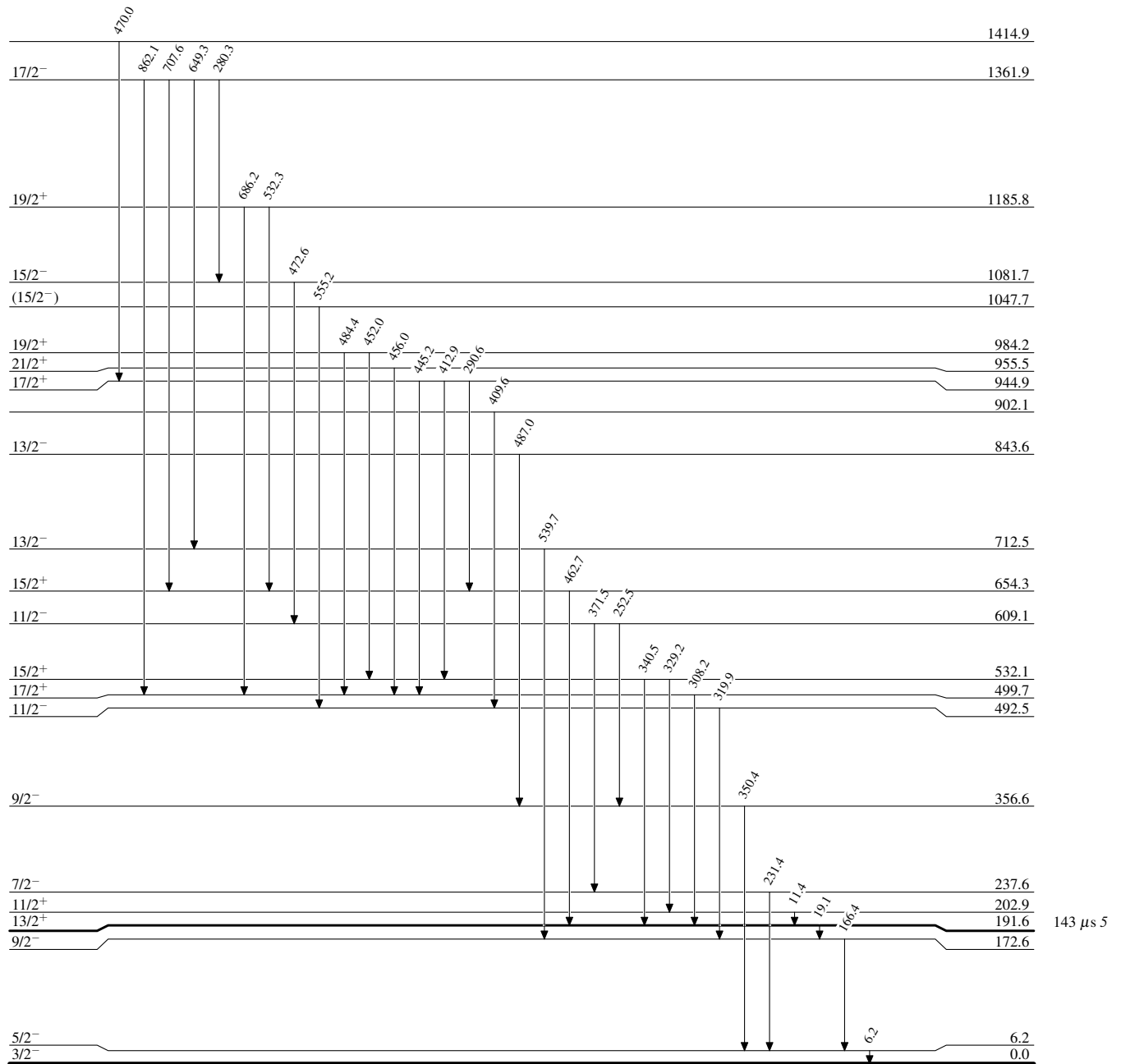
Level Scheme

-----► γ Decay (Uncertain) $^{189}_{78}\text{Pt}_{111}$

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Legend

Level Scheme (continued)

-----▶ γ Decay (Uncertain) $^{189}_{78}\text{Pt}_{111}$