

$^{192}\text{Pt}(n,\gamma)$  E=res    1968Sa13

Type	History		
	Author	Citation	Literature Cutoff Date
Full Evaluation	M. Shamsuzzoha Basunia	NDS 143, 1 (2017)	31-Mar-2017

1968Sa13: E(n)=47 eV, 54 eV; natural Pt targets; measured  $E\gamma$ ,  $I\gamma$  for primary  $\gamma$ 's (Ge(Li), FWHM=5 keV at 1 MeV).

1969De09: from neutron time-of-flight measurements in transmission and absorption experiments, observed five resonances, whose energies and widths, in eV and meV respectively, are: 47, 47 2; 54, 17 1; 130, 225 12; 145, 170 10; 389, 308 27.

 $^{193}\text{Pt}$  Levels

E(level)	J $^\pi$ <sup>†</sup>	Comments
0.0	1/2 $^-$ ,3/2 $^-$	J $^\pi$ : adopted 1/2 $^-$ .
186	1/2 $^-$ ,3/2 $^-$	J $^\pi$ : adopted 3/2 $^-$ .
440?		
461?		
544	1/2 $^-$ ,3/2 $^-$	
700	1/2 $^-$ ,3/2 $^-$	
1591	1/2 $^-$ ,3/2 $^-$	
S(n)+x <sup>‡</sup>	1/2 $^+$	E(level): x =E(res)=47 eV and 54 eV. J $^\pi$ : 1/2 $^+$ for both resonances (1969De09).

<sup>†</sup> From population by E1  $\gamma$  from J $^\pi$ =1/2 $^+$  resonances.

<sup>‡</sup> Adopted S(n)=6262.5 23 (2017Wa10). From  $E\gamma$ (to g.s.)=6247 (1968Sa13) it appears that there is a calibration error of  $\approx$ -13 keV in the data of 1968Sa13.

 $\gamma(^{193}\text{Pt})$ 

$E_\gamma$	$E_i$ (level)	$J_i^\pi$	$E_f$	$J_f^\pi$	Mult. <sup>†</sup>
4656	S(n)+x	1/2 $^+$			E1
5547	S(n)+x	1/2 $^+$			E1
5703	S(n)+x	1/2 $^+$			E1
5786 <sup>‡#</sup>	S(n)+x	1/2 $^+$			
5807 <sup>‡#</sup>	S(n)+x	1/2 $^+$			
6061	S(n)+x	1/2 $^+$	700	1/2 $^-$ ,3/2 $^-$	E1
6247	S(n)+x	1/2 $^+$	544	1/2 $^-$ ,3/2 $^-$	E1

<sup>†</sup> Inferred from comparison of radiative widths with those for known E1 transitions in other Pt isotopes.

<sup>‡</sup> Existence of  $\gamma$  uncertain.

# Placement of transition in the level scheme is uncertain.

$^{192}\text{Pt}(n,\gamma) E=\text{res} \quad 1968\text{Sa13}$ Level Scheme