

$^{238}\text{U}(\alpha, \text{F}\gamma)$  2007St19

Type	History		Literature Cutoff Date
	Author	Citation	
Full Evaluation	Balraj Singh	ENSDF	30-Jun-2017

2007St19: E=30 MeV. Measured  $\gamma$ , lifetimes,  $\gamma\gamma$ ,  $\gamma$ (fission fragments) coin using the Gammasphere array spectrometer for  $\gamma$  rays and the CHICO (highly-segmented  $4\pi$  heavy-ion detector) array for fission fragments.

 $^{120}\text{Pd}$  Levels

E(level) <sup>†</sup>	J <sup><math>\pi</math></sup>
0 <sup>‡</sup>	0 <sup>+</sup>
438.0 <sup>‡</sup> 10	2 <sup>+</sup>
1056.5 <sup>‡</sup> 15	4 <sup>+</sup>
1794.5 <sup>‡</sup> 18	(6 <sup>+</sup> )
2589.5 <sup>‡</sup> 20	(8 <sup>+</sup> )
3413.5? 23	(10 <sup>+</sup> )
3470.5? 25	(10 <sup>+</sup> )

<sup>†</sup> From E $\gamma$  data, assuming  $\Delta(E\gamma)=1$  keV for each  $\gamma$  ray.

<sup>‡</sup> Band(A): g.s. band.

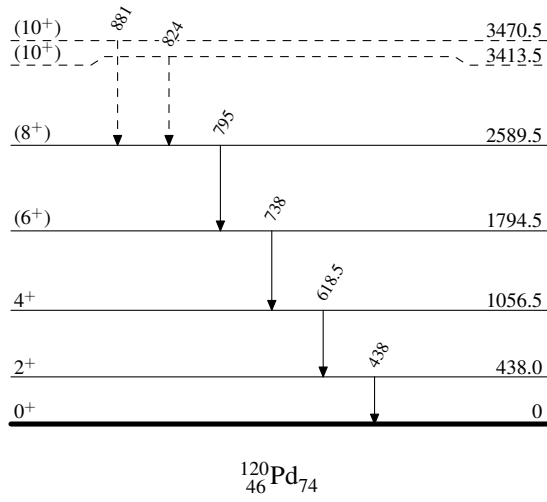
 $\gamma(^{120}\text{Pd})$ 

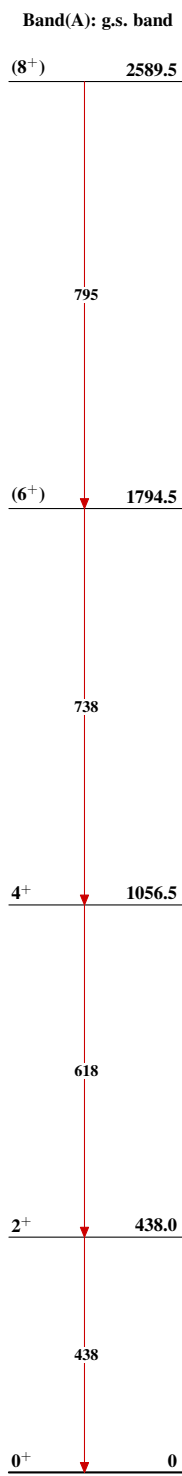
E $\gamma$	E <sub>i</sub> (level)	J <sub>i</sub> <sup><math>\pi</math></sup>	E <sub>f</sub>	J <sub>f</sub> <sup><math>\pi</math></sup>
438	438.0	2 <sup>+</sup>	0	0 <sup>+</sup>
618.5	1056.5	4 <sup>+</sup>	438.0	2 <sup>+</sup>
738	1794.5	(6 <sup>+</sup> )	1056.5	4 <sup>+</sup>
795	2589.5	(8 <sup>+</sup> )	1794.5	(6 <sup>+</sup> )
824 <sup>†</sup>	3413.5?	(10 <sup>+</sup> )	2589.5	(8 <sup>+</sup> )
881 <sup>†</sup>	3470.5?	(10 <sup>+</sup> )	2589.5	(8 <sup>+</sup> )

<sup>†</sup> Placement of transition in the level scheme is uncertain.

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Legend

Level Scheme-----►  $\gamma$  Decay (Uncertain) $^{120}_{46}\text{Pd}_{74}$

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