

$^{235}\text{U}(\alpha,3n\gamma)$     **1983Ha31**

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	Shaofei Zhu	NDS 182, 2 (2022).	1-Apr-2022

**1983Ha31:**  $^{236}\text{Pu}$  high-spin states populated by  $^{235}\text{U}(\alpha,3n)$  reaction with  $E(\alpha)=35$  MeV. In-beam ce measured by orange magnetic spectrometer;  $\gamma$  by Ge(Li), and measured ce- $\gamma$  coin.

 $^{236}\text{Pu}$  Levels

$E(\text{level})^{\dagger}$	$J^{\pi\ddagger}$
0	$0^+$
44.63 10	$2^+$
147.45 10	$4^+$
305.80 11	$6^+$
515.70 23	$8^+$
773.5 3	$10^+$
1074.3 4	$12^+$
1413.6 4	$14^+$
1786.0 5	$16^+$

$\dagger$  From  $E\gamma$ 's.

$\ddagger$  From g.s. band assignment.

 $\gamma(^{236}\text{Pu})$ 

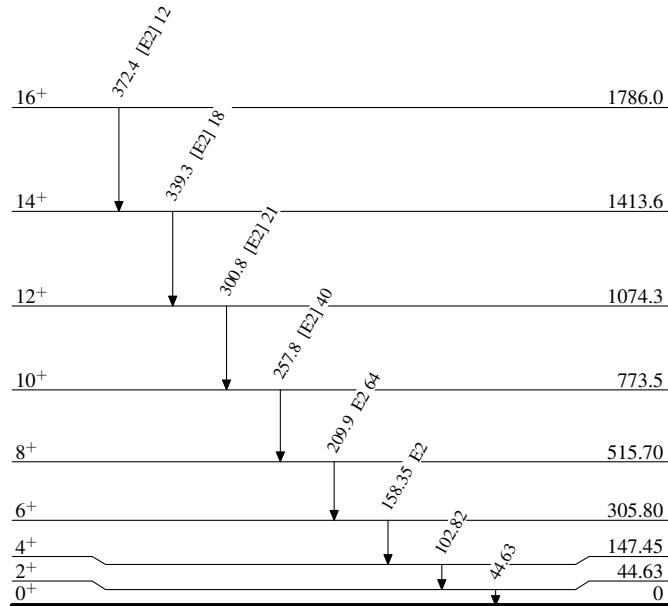
$E_{\gamma}^{\circledast}$	$E_i(\text{level})$	$J_i^{\pi}$	$E_f$	$J_f^{\pi}$	Mult.	$I_{(\gamma+ce)}^{\#}$	Comments
44.63 <sup>‡</sup> 10	44.63	$2^+$	0	$0^+$			
102.82 <sup>‡</sup> 2	147.45	$4^+$	44.63	$2^+$			
158.35 <sup>‡</sup> 2	305.80	$6^+$	147.45	$4^+$	$E2^{\dagger}$		$E_{\gamma}$ : other: 158.5 keV 1 (1983Ha31).
209.9 2	515.70	$8^+$	305.80	$6^+$	$E2^{\dagger}$	64 6	
257.8 2	773.5	$10^+$	515.70	$8^+$	[E2]	40 5	
300.8 2	1074.3	$12^+$	773.5	$10^+$	[E2]	21 4	
339.3 2	1413.6	$14^+$	1074.3	$12^+$	[E2]	18 4	
372.4 3	1786.0	$16^+$	1413.6	$14^+$	[E2]	12 4	

$\dagger$  From L2/L3 ratios.

$\ddagger$  From Adopted Gammas.

# Relative to  $I(\gamma+ce)=40$  for the  $10^+$  to  $8^+$  transition; deduced from theoretical ce  $\alpha$  (1978Ro21) and measured  $I\gamma$  by 1983Ha31.

$\circledast$  From 1983Ha31, unless otherwise noted.

$^{235}\text{U}(\alpha, 3n\gamma) \quad 1983\text{Ha31}$ Level Scheme $^{236}_{94}\text{Pu}_{142}$