

$^{235}\text{U}(\text{n},\text{F}\gamma)$ E=th 1973Kh05,2012Mu08

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	Yu. Khazov, A. Rodionov and G. Shulyak		NDS 136, 163 (2016)	14-Jul-2016

1973Kh05: $^{235}\text{U}(\text{n},\text{F})$, E=th; measured E(fragment), E_γ , I_γ , E(ce), Ice, (fragment) γ , (fragment)ce coin. ^{146}Ba ; deduced levels,

K/L, mult. Ge(Li) with NaI(Tl) anti-Compton shield, Si(Li) detectors, magnetic spectrometer.

2012Mu08: $^{235}\text{U}(\text{n},\text{F})$, E=th; measured E_γ , $\gamma\gamma$ -coin. ^{146}Ba ; deduced levels.

 ^{146}Ba Levels

E(level)	J^π [†]
0.0	0 ⁺
181.0	10
514.0	15
822.0	17
959.0	18
1025.0	17
1350.0	20
1483.0	20
1778.0	22

[†] From ‘Adopted Levels’.

 $\gamma(^{146}\text{Ba})$

E_γ [†]	E_i (level)	J_i^π	E_f	J_f^π	Mult. [‡]	$\alpha^{\#}$	Comments
181	181.0	2 ⁺	0.0	0 ⁺	E2	0.242	$K/L \approx 2.7$ (1973Kh05) $\alpha(K)=0.184$ 3; $\alpha(L)=0.0454$ 7; $\alpha(M)=0.00974$ 14 $\alpha(N)=0.00204$ 3; $\alpha(O)=0.000283$ 4; $\alpha(P)=9.59 \times 10^{-6}$ 14 E_γ : 181.4 keV from ce measurement (1973Kh05).
203	1025.0	5 ⁻	822.0	3 ⁻			
308	822.0	3 ⁻	514.0	4 ⁺	E1	0.01065	$\alpha(K)=0.00918$ 13; $\alpha(L)=0.001175$ 17; $\alpha(M)=0.000241$ 4 $\alpha(N)=5.16 \times 10^{-5}$ 8; $\alpha(O)=7.80 \times 10^{-6}$ 11; $\alpha(P)=5.36 \times 10^{-7}$ 8
325	1350.0	7 ⁻	1025.0	5 ⁻			
333	514.0	4 ⁺	181.0	2 ⁺			E_γ : 330.0 keV from ce measurement (1973Kh05).
428	1778.0	9 ⁻	1350.0	7 ⁻			
445	959.0	6 ⁺	514.0	4 ⁺			
511	1025.0	5 ⁻	514.0	4 ⁺	E1	0.00310	$\alpha(K)=0.00267$ 4; $\alpha(L)=0.000336$ 5; $\alpha(M)=6.88 \times 10^{-5}$ 10 $\alpha(N)=1.479 \times 10^{-5}$ 21; $\alpha(O)=2.25 \times 10^{-6}$ 4; $\alpha(P)=1.603 \times 10^{-7}$ 23
524	1483.0	8 ⁺	959.0	6 ⁺			

[†] From 2012Mu08.

[‡] From 2012Mu08.

Additional information 1.

$^{235}\text{U}(\text{n},\text{F}\gamma) \text{E=th} \quad 1973\text{Kh05,2012Mu08}$ Level Scheme