^{235}U(n,Fγ)   **2009Ur02**

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	S. K. Basu, G. Mukherjee, A. A. Sonzogni	NDS 111, 2555 (2010)	30-Jun-2009

2009Ur02: ^{235}U(n,Fγ), E-thermal; measured γ rays using detection system consisting of an ion chamber, three Ge detectors, two clover detectors, and a 60% Gamma-X detector at LOHENGRIN fission-fragment separator at ill, Grenoble; measured $T_{1/2}$ using digital electronics with a 40 MHz clock.

1969Wa29: ^{235}U,^{239}Pu; fast neutrons. Measured delayed γ's; NaI(Tl) detectors.

1976MoZJ,1976SeZN: ^{235}U; thermal neutrons. Measured delayed fragment-γ(t); Ge(Li), as reported in 1983Lu03.

1982Pr01: Eγ=50 MeV, bremsstrahlung. Measured γ(t); rotating target, Ge(Li).

^{95}Y Levels

E(level)[†]	J$^{\pi}$[‡]	T$_{1/2}$	Comments
0.0	1/2$^-$		
685.7 *2*	3/2$^-$		E(level): observed only in 2009Ur02.
826.8 *2*	5/2$^-$		
1087.5 *3*	9/2$^+$	52.6 μs *12*	T$_{1/2}$: weighted average of 51.2 μs *9* (2009Ur02), 58 μs *8* (1982Pr01), 56.8 μs *20* (1976SeZN), 60 μs *5* (1976MoZJ), and 54.0 μs *25* (1969Wa29), from γ(t).

[†] From least-squares fit to Eγ's assuming 0.3 keV uncertainty for each γ.

[‡] From the Adopted Levels.

γ(^{95}Y)

E$_\gamma$[†]	I$_\gamma$[†]	E$_i$(level)	J$^{\pi}_i$	E$_f$	J$^{\pi}_f$
141.0	0.5 *1*	826.8	5/2$^-$	685.7	3/2$^-$
260.7	100 *3*	1087.5	9/2$^+$	826.8	5/2$^-$
401.8	1.1 *1*	1087.5	9/2$^+$	685.7	3/2$^-$
685.7	1.5 *2*	685.7	3/2$^-$	0.0	1/2$^-$
826.8	98 *3*	826.8	5/2$^-$	0.0	1/2$^-$

[†] From 2009Ur02.

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Level Scheme

Intensities: Relative I_γ

Legend

→	$I_\gamma < 2\% \times I_\gamma^{max}$
→	$I_\gamma < 10\% \times I_\gamma^{max}$
→	$I_\gamma > 10\% \times I_\gamma^{max}$

9/2⁺ .... 1087.5   52.6 μs 12

401.8 1.1   260.7 100   826.8 98   141.0 0.5   685.7 1.5

5/2⁻ 826.8

3/2⁻ 685.7

1/2⁻ 0.0

$^{95}_{39}\text{Y}_{56}$