

Muonic atom [1984Zu02](#)

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	E. Browne, J. K. Tuli		NDS 122, 205 (2014)	1-Feb-2014

[Additional information 1.](#)

$T_{1/2} = 50.3$ ns *10* fission fragments followed ([1980Wi06](#)). $T_{1/2} = 52.3$ ns *13* electrons followed ([1977Jo09](#)). $T_{1/2} = 49.6$ ns *6* fission fragments followed ([1980Ah02](#)). $T_{1/2} = 50.05$ ns *14* fission fragments followed ([1990Ha03](#)).

Muonic x-rays measured with Ge(Li). Muons stopped in 97.64% enriched ^{235}U target. From the analysis of L, M, N x-rays [1984Zu02](#) deduced B(E2) values and deformation parameters for a deformed-Fermi charge distribution. Good agreement with the rigid rotor model was found; a small Coriolis admixture improved the agreement between theory and experiment ([1984Zu02](#)).

 ^{235}U Levels

E(level) [†]	J^π	Comments
0	$7/2^-$	$\beta(2) = 0.2485$ <i>13</i> ; $\beta(4) = 0.091$ <i>4</i> . The quoted uncertainties are statistical only. 1984Zu02 estimated additional 0.5% and 2.0% model uncertainties for $\beta(2)$ and $\beta(4)$, respectively.
46.20 <i>5</i>	$9/2^-$	B(E2)($7/2^-$ to $9/2^-$) = 4.834 <i>16</i> .
103.35 <i>6</i>	$11/2^-$	B(E2)($7/2^-$ to $11/2^-$) = 1.19 <i>4</i> , B(E2)($9/2^-$ to $11/2^-$) = 4.65 <i>7</i> .
170.71 <i>6</i>	$13/2^-$	B(E2)($9/2^-$ to $13/2^-$) = 2.12 <i>5</i> , B(E2)($11/2^-$ to $13/2^-$) = 3.78 <i>10</i> .

[†] From Adopted Levels, B(E2)'s from [1984Zu02](#).