

Adopted Levels

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	C. D. Nesaraja	NDS 146, 387 (2017)	31-Aug-2017

$S(n)=8.490\times 10^3$  SY;  $S(p)=3070$  SY;  $Q(\alpha)=8.55\times 10^3$  SY [2017Wa10](#)

$\Delta(S(n))=290$ ,  $\Delta(S(p))=290$ ,  $\Delta(Q(\alpha))=200$  (sys, [2017Wa10](#)).

Identification:

[1967Nu01](#):  $^{244}\text{Fm}$  produced from  $^{233}\text{U}(^{16}\text{O},5n)$  reaction. Measured excitation function and SF half-life.

Systematic studies/Compilation/Evaluation:

[2017He08](#): Properties of spontaneous fission.

Theoretical studies:

[2012Zh01](#), [1995Mo29](#): Calculated deformation parameters.

[2010Ad04](#): Calculated energies of low-lying two-quasiparticle states.

[2009Sa45](#): Calculated  $\alpha$  decay half-life, and barrier penetrability.

[1997Mo25](#): Calculated nuclear ground state properties.

[1983Bo15](#): Calculated equilibrium deformations and static electric moment.

[2012Zh48](#), [2004B034](#), [2009Mo18](#), [1983Cw01](#), [1992Bh03](#): Calculated fission-barrier heights.

[1996Lo08](#), [1992Bh03](#), [1989St20](#), [1988Sa35](#), [1985St22](#), [1980Lo12](#), [1978Po09](#) [1976Ra02](#): Calculated  $T_{1/2}(\text{SF})$ .

[2017Ph01](#), [2005Zh24](#), [1997Mo25](#), [1988Sa35](#): Calculated  $T_{1/2}(\alpha)$ .

[1998Io04](#): Calculated probability for ionic-decay relative to SF decay.

[1997Po18](#): Calculated half-life from semiempirical formula.

 $^{244}\text{Fm}$  LevelsCross Reference (XREF) Flags

**A**  $^{207}\text{Pb}(^{40}\text{Ar},3n)$

E(level)	$J^\pi$	$T_{1/2}$	XREF	Comments
0.0	$0^+$	3.12 ms 8	<b>A</b>	$\%SF>97$ ; $\%\alpha<1$ ; $\%\epsilon<2$ SF, $\alpha$ decay, and $\epsilon$ branching ratios deduced by <a href="#">2008Kh10</a> . $T_{1/2}$ : From <a href="#">2008Kh10</a> . Others (from heavy ion induced reactions): 3.47 ms 26 ( <a href="#">2013SvZZ</a> ), 4.3 ms +45-16 ( <a href="#">1989II02</a> ), 3.0 ms 5 ( <a href="#">1979Ga06</a> : as recommended by <a href="#">2000Ho27</a> ), 4.0 ms 5 ( <a href="#">1975Og02</a> ), 3.3 ms 5 ( <a href="#">1967Nu01</a> ). $Q_\alpha<8.6$ MeV ( <a href="#">2008Kh10</a> ).