

Adopted Levels

| Type | Author | History Citation | Literature Cutoff Date |
|-----------------|----------------|--------------------|------------------------|
| Full Evaluation | C. D. Nesaraja | NDS 198,449 (2024) | 31-Jul-2022 |

$Q(\beta^-) = -2370$ 90; $S(n) = 6570$ syst; $S(p) = 2860$ 90; $Q(\alpha) = 7640$ syst [2021Wa16](#)
 $\Delta S(n) = 190$, $\Delta Q(\alpha) = 100$ (syst, [2021Wa16](#)).
 $S(2n) = 14350$ 200 (syst), $S(2p) = 7470$ 90 ([2021Wa16](#)).

Theoretical structure calculations:

$Q(\alpha)$, $T_{1/2}(\alpha)$ and $T_{1/2}$ s.f.

[2022Xu04](#), [2021He09](#), [2019Sr04](#), [2017Su11](#), [2017Su11](#), [1993Bu09](#).

Deformation parameters: [1991Pa11](#).

Isomers in heavy, deformed nuclei:

[1987So10](#).

Fission isomers:

[2009Mo18](#).

Systematics of β^- - delayed fission:

[2015Gh03](#).

Fission barrier heights:

[2009Mo18](#).

 ^{246}Es LevelsCross Reference (XREF) Flags

A ^{250}Md α decay

| E(level) | $T_{1/2}$ | XREF | Comments |
|----------|-----------|----------|---|
| 0.0+x | 7.5 min 5 | A | <p>$\% \alpha = 9.9$ 18; $\% \varepsilon + \% \beta^+ = 90.1$ 18 $\% \alpha, \% \varepsilon$: From $\alpha/\varepsilon = 0.11$ 2 (1967Mi06). $\% \varepsilon - f \approx 0.003$, ε delayed fission from 1980Ga07. J^π: From single particle systematics the expected configurations are $(\nu, 5/2[622])$ (^{239}U, ^{241}Pu, ^{243}Cm) and $(\pi, 7/2[633])$ (^{249}Es, ^{253}Es) or $(\pi, 3/2[521])$ (^{245}Es, ^{251}Es). The first combination leads to $J^\pi = 6^+$ and 1^+, the second to $J^\pi = 4^-$ and 1^-. In both cases, the high spin level is expected to be lower in energy than the low spin level (Gallagher-Moszkowski rule). 1987So10 predicts the existence of 4^-, 1^- isomers in this nucleus. $T_{1/2}$: Weighted average of 6.0 min 12 (2001Sh09), 8.2 min 36 (1989Ha27) and 7.7 min 5 (1967Mi06). Other: 8 min (1980Ga07).</p> |