

Adopted Levels

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	Balraj Singh	ENSDF	31-Dec-2016

$Q(\beta^-) = -9860$ SY; $S(n) = 12290$ SY; $S(p) = 60$ SY; $Q(\alpha) = 3350$ SY [2012Wa38](#)

$\Delta Q(\beta^-) = 450$, $\Delta S(n) = 360$, $\Delta S(p) = \Delta Q(\alpha) = 280$ ([2012Wa38](#)).

$S(2n) = 23050$ 360, $S(2p) = 3320$ 200, $Q(\epsilon p) = 5300$ 200 (syst, [2012Wa38](#)).

[1989Vi04](#): ^{135}Eu produced in the reaction $^{92}\text{Mo}(^{46}\text{Ti}, p2n)$ $E = 192$ MeV and mass separated through on-line techniques. Measured x rays, γ rays, positrons and $T_{1/2}$. ^{135}Eu identified by Sm x rays and Sm x β^+ coincidences. No delayed proton activity was assigned by [1989Vi04](#), the authors state that interfering delayed protons from the daughter ^{135}Sm may have obscured a possible weak proton branch from the decay of ^{135}Eu .

Decay scheme of ^{135}Eu to ^{135}Sm is not known, except that a weak 120.8γ associated with ^{135}Eu decay was assigned ([1989Vi04](#)) from Sm x- γ coincidences.

[Additional information 1.](#)

 ^{135}Eu Levels

E(level)	$T_{1/2}$	Comments
0.0	1.5 s 2	$\% \epsilon + \% \beta^+ = 100$; $\% \epsilon p = ?$ $S(p) = 60$ 280 (syst, 2012Wa38) does not exclude proton emission. J^π : $11/2^-$ proposed from systematics (2012Au07), $5/2^+$ from calculations (1997Mo25). $T_{1/2}$: from timing of Sm x rays (1989Vi04).