^{159}Lu α decay 1992Ha10,1980Al14

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	N. Nica	NDS 160, 1 (2019)	21-Oct-2019

Parent: ^{159}Lu: E=0.0; $T_{1/2}$=12.1 s *10*; Q(α)=4490 *40*; %α decay≈0.1

^{159}Lu-%α decay: From the calculated α and $\varepsilon+\beta^+$ half-lives (18200 s and 18 s, respectively) from 1997Mo25. 1992Ha10 report %α=0.15 *3*, from Iα/Iγ(151γ). However, this value assumes that the 151 γ corresponds to 100% of the ^{159}Lu decays. Thus, this value represents an upper limit for the %α value.

Additional information 1.

Source produced in 1-GeV proton-induced spallation reaction followed by mass separation. Measured Iα(t).

Decay identified by measurement of Yb K x rays from mass-separated sources.

^{155}Tm Levels

E(level)	J^π	$T_{1/2}$	Comments
41 *6*	$1/2^+$	45 s *4*	E(level),J^π,$T_{1/2}$: from Adopted Levels; it is not clear which of the two isomers in ^{155}Tm is the one populated by the 4419 α transition.

α radiations

Eα	E(level)	Comments
4419 *10*	41	Eα: weighted average of 4417 *10* (1992Ha10) and 4420 *10* (1980Al14).