^{154}Yb α decay 1996Pa01

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	S. K. Basu, A. A. Sonzogni	NDS 114, 435 (2013)	1-Apr-2013

Parent: ^{154}Yb: E=0.0; $J^\pi=0^+$; $T_{1/2}$=0.409 s *2*; Q(α)=5474.2 *17*; %α decay=92.6 *12*

^{150}Er Levels

E(level)	J^π
0.0	0^+

α radiations

Eα	E(level)	Iα[‡]	HF[†]	Comments
5330.9 *17*	0.0	100	1.0	Eα: recommended by 1991Ry01. Eα=5331 *4*, recently measured by 1996Pa01, agrees well with the recommended energy. Iα: only one α group was observed. An upper limit of 1.9×10^{-7}% of α decay is calculated for an unobserved 3793-keV α to the 2^+ state at 1578.87 keV in ^{150}Er by requiring Hf(3793α) larger than 1.

[†] $r_0(^{150}Er)$=1.5570 *25* is calculated from Hf(5330.9α)=1.0.
[‡] For absolute intensity per 100 decays, multiply by 0.926 *12*.