^{154}Dy α decay

History

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

Parent: ^{154}Dy: E=0.0; $J^\pi=0^+$; $T_{1/2}=3.0\times10^6$ y *15*; Q(α)=2945 *5*; %α decay=100.0
$T_{1/2}(^{154}Dy)=3.0\times10^6$ y *15*, recommended by 1985HoZN and adopted by 1993He11, is used in calculations here.
%α=100. ^{154}Dy is β stable.

^{150}Gd Levels

E(level)	J^π
0.0	0^+

α radiations

Eα	E(level)	Iα[†][#]	HF[‡]	Comments
2870 *5*	0.0	100	1.000	Eα: recommended by 1991Ry01. Iα: only one α group was observed. An upper limit of 1.1×10^{-6}% is calculated for an unobserved 2249-keV α to the 2^+ state at 638.05 keV in ^{150}Gd by requiring Hf(2249α) > 1.

[†] α intensity per 100 α decays.
[‡] $r_0(^{150}Gd)=1.54$ *4* is calculated from Hf(2870α)=1.0.
[#] Absolute intensity per 100 decays.