^{151}Gd α decay 1965Si06

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	N. Nica and B. Singh	NDS 181, 1 (2022)	9-Mar-2022

Parent: ^{151}Gd: E=0.0; $J^\pi=7/2^-$; $T_{1/2}$=123.9 d *10*; Q(α)=2652.2 *29*; %α decay≈8.0×10^{-7}

^{151}Gd-E,J^π,$T_{1/2}$: From ^{151}Gd Adopted Levels in 2009Si01.

^{151}Gd-Q(α): from 2021Wa16.

^{151}Gd-%α decay: from Iα/I(K x ray)=0.8×10^{-8} *+8−4* (1965Si06).

^{147}Sm Levels

E(level)	J^π	$T_{1/2}$	Comments
0.0	$7/2^-$	1.073×10^{11} y *10*	%α=100 J^π,$T_{1/2}$,%α: from Adopted Levels.

α radiations

Eα	E(level)	Iα‡	HF†	Comments
2600 *30*	0.0	100	≈0.45	Eα: from 1965Si06.

† The nuclear radius parameter $r_0(^{147}Sm)$=1.5745 *66* is deduced from interpolation (or unweighted average) of radius parameters of the adjacent even-even nuclides.

‡ For absolute intensity per 100 decays, multiply by ≈0.8×10^{-8}.