^{151}Dy α decay (17.9 min) 1973BoXL,1974To07

History

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

Parent: ^{151}Dy: E=0.0; $J^\pi=7/2^{(-)}$; $T_{1/2}$=17.9 min *3*; Q(α)=4179.6 *26*; %α decay=5.6 *4*
1973BoXL: measured Eα.
1974To07: measured Iα, I(α(K),x-ray), Eγ, Iγ.
Others: 1953Ra02, 1964Ma19, 1965Ma51, 1967Go32, 1973Bi06.

^{147}Gd Levels

E(level)	J^π	$T_{1/2}$
0.0	$7/2^-$	38.06 h *12*

α radiations

Eα	E(level)	Iα[‡]	HF[†]	Comments
4069.4 *24*	0.0	100	1.81 *14*	Eα: from evaluation by 1991Ry01. E=4067 *3* (1973BoXL,semi) 1978Ha22 calculate HF=1.7 from data of 1974To07. 1981HoZM give HF in terms of the ^{212}Po g.s. transition as favored a transition used as the reference transition.

[†] The nuclear radius parameter $r_0(^{147}Gd)$=1.5706 *33* is deduced from interpolation (or unweighted average) of radius parameters of the adjacent even-even nuclides.
[‡] For absolute intensity per 100 decays, multiply by 0.056 *4*.