^{191}Bi α decay (125 ms) 2003Ke04,1985Co06,1981Le23

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	M. S. Basunia	NDS 110, 999 (2009)	1-Nov-2008

Parent: ^{191}Bi: E=241 *4*; J^{π}=(1/2$^+$); $T_{1/2}$=125 ms *13*; Q(α)=6778 *3*; %α decay=68 *5*

^{191}Bi-%α decay: From 2007Va21.

Parent energy from energy difference for Eα to ^{187}Tl(1/2$^+$) from ^{191}Bi g.s. and ^{191}Bi isomer.

Others: 1974Le02, 1972Ga27, 1966SiZZ.

α activity assigned to ^{191}Bi on the basis of measured threshold energies and yields for ^{141}Pr(^{56}Fe,α2n) and for ^{56}Fe on natural ce (1981Le23).

^{187}Tl Levels

E(level)	J^{π}[†]	$T_{1/2}$[†]
0.0	(1/2$^+$)	≈51 s

[†] From Adopted Levels.

α radiations

Eα	E(level)	Iα[‡]	HF[†]	Comments
6871 *3*	0.0	100	0.82 *14*	Eα: weighted average of 6870 *3* (2003Ke04), 6876 *5* (1985Co06), 6860 *20* (1981Le23), 6860 *20* (1974Le02); value recommended by 1991Ry01. Others: 1966SiZZ (6900 keV).

[†] From r_0=1.49 *3*, average of r_0(^{186}Hg)=1.462 *25* and r_0(^{188}Pb)= 1.511 *8* (1998Ak04), %α(^{191}Bi)=68 *5* (1985Co06), $T_{1/2}$(191BI)=125 ms (1981Le23), and E(^{191}Bi)=241 *7* (from energy difference for α's feeding ^{187}Tl(1/2$^+$) from ^{191}Bi(g.s.) and ^{191}Bi(125 ms isomer).

[‡] For absolute intensity per 100 decays, multiply by 0.68 *5*.