^{218}Po α decay (3.097 min) 1958Wa16,1971Gr17

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	Shaofei Zhu and E. A. Mccutchan	NDS 175, 1 (2021)	1-May-2021

Parent: ^{218}Po: E=0.0; $J^\pi=0^+$; $T_{1/2}$=3.097 min *12*; Q(α)=6114.75 *9*; %α decay=99.980 *2*
^{218}Po-$T_{1/2}$: From ^{218}Po Adopted Levels (2019Si39).
^{218}Po-Q(α): From 2021Wa16.
^{218}Po-%α decay: %α=99.980 *2* based on %β^-=0.020 *2* from measurements by 1952Hi60 and 1958Wa16.

^{214}Pb Levels

E(level)	J^π	Comments
0.0	0^+	
837 *2*	(2^+)	E(level): deduced from Eα (1958Wa16).

α radiations

Eα	E(level)	Iα[†#]	HF[‡]	Comments
5181 *2*	837	0.0011	7.5	Eα: measured by 1958Wa16.
6002.55 *10*	0.0	99.9989	1	Eα: measured by 1971Gr17. Other measurements: 6002 (1958Wa16); 6000 *1* (1963Ba62).

[†] The relative α intensities were measured as Iα(5181α)/Iα(6002α)=1.1×10^{-5} (1958Wa16).
[‡] $r_0(^{214}Pb)$=1.5379 *2* is deduced from HF(6002.55α)=1.0.
[#] For absolute intensity per 100 decays, multiply by 0.99980 *2*.