^{214}Rn α decay (0.27 μs) 1970To07,1970Va13

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	M. Shamsuzzoha Basunia	NDS 121, 561 (2014)	31-Mar-2014

Parent: ^{214}Rn: E=0.0; $J^\pi=0^+$; $T_{1/2}$=0.27 μs *2*; Q(α)=9208 *9*; %α decay=100.0

1970To07: ^{214}Rn was obtained from the decay of ^{222}Th, produced in bombardments of ^{208}Pb targets with ^{16}O. Measured Eα.

1970Va13: ^{214}Rn was obtained from the decay of ^{222}Th, produced in bombardments of ^{208}Pb targets with different heavy ions. Measured Eα.

^{210}Po Levels

E(level)	J^π	$T_{1/2}$
0.0	0^+	138.376 d *2*

α radiations

Eα	E(level)	HF[†]	Comments
9036 *9*	0.0	1.0	Eα: Weighted average of 9040 *20* (1970To07) and 9035 *10* (1970Va13). The Q(α) of 9208 *9* yields Eα=9036 *9*. Iα: no α to excited states has been observed. Intensity of a 7876.6α to the 2^+, 1181.40 level is estimated as <0.089% by assuming its hindrance factor to be greater than 1. Probable α transitions to other excited states are neglected. Iα(9036α to g.s.)=99.95 *5* is used for the calculation of r_0.

[†] $r_0(^{210}Po)$=1.532 *6* is computed from Hf(9036α)=1.0 (1998Ak04).