

^{208}Rn α decay 1971Go35

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	C. J. Chiara and F. G. Kondev		NDS 111,141 (2010)	1-Oct-2009

Parent: ^{208}Rn : $E=0.0$; $J^\pi=0^+$; $T_{1/2}=24.35$ min 14; $Q(\alpha)=6260.7$ 17; $\% \alpha$ decay=62 7

 ^{204}Po Levels

E(level) [†]	J^π [†]
0.0	0^+
684.341 10	2^+

[†] From Adopted Levels.

 α radiations

E_α	E(level)	I_α ^{†#}	HF [‡]	Comments
5469.1 18	684.341	0.047 4	1.25 18	E_α : Value deduced from $Q(\alpha)=6260.7$ 17 and $E(\text{level})=684.341$ 10. $E_\alpha=5470$ keV has been measured by 1971Go35.
6140.1 17	0.0	99.953 4	1.000	E_α : From $Q(\alpha)$ (2003Au03). Measured energies are $E_\alpha=6145$ keV (1953As40), 6148 keV 4 (1955Mo69), 6144 keV 8 (1971Ho01), 6139 keV 3 (1971Go35), and 6138.1 keV 25 (1993Wa04). $E_\alpha=6143.8$ 21 is recommended by 1991Ry01.

[†] From 1971Go35.

[‡] $r_0(^{204}\text{Po})=1.476$ 5 is calculated from $Hf(6140.1\alpha)=1.0$.

[#] For absolute intensity per 100 decays, multiply by 0.62 7.