^{188}Pt α decay

History			
Type	Author	Citation	Literature Cutoff Date
Full Evaluation	Coral M. Baglin	NDS 111,275 (2010)	1-Oct-2009

Parent: ^{188}Pt: E=0.0; $J^\pi=0^+$; $T_{1/2}$=10.2 d *3*; Q(α)=4008 *5*; %α decay=2.6×10^{-5} *3*

$T_{1/2}(^{188}Pt)$=10.2 d *3*, the weighted average of the measured half-lives of 10.3 d *4* (1954Na25), 10.0 d *3* (1955Sm42), 10.2 d *3* (1963Gr08) and 10.5 d *10* (1963Ka17).

%$\alpha(^{188}Pt)=2.6\times10^{-5}$ *3* is weighted average of 3.0×10^{-5}% *6* (1963Gr08), 2.2×10^{-5}% *5* (1979Ha10) and 2.8×10^{-5}% *5* (1978El11).
Other value: 5.0×10^{-5} *25* (1963Ka17).
Additional information 1.

Q(α)(^{188}Pt)=4008 *5* is recommended by 2003Au03 and 2009AuZZ.

^{184}Os Levels

E(level)	J^π
0.0	0^+

α radiations

Eα	E(level)	Iα[‡]	HF[†]	Comments
3919 *7*	0.0	95 *5*	1.0	Eα: weighted average of 3905 *15* (1979Ha10), 3915 *10* (1978El11), and 3930 *10* (1963Gr08). This Eα implies Q(α)=4004 *7* (cf. 4008 *5* from 2003Au03). Iα: only one α group has been observed. Upper limit on intensity of an unobserved 3804-keV α transition to the 2^+ state at 119.77 keV is calculated to be <10 per 100 α decays by requiring its hindrance to be greater than 1.

[†] $r_0(^{184}Os)$=1.464 *7* is calculated by requiring the hindrance factor for the 3922-keV α to be 1.0. I(3922α)=95 *5* (from Iα>90%) is used in computation.
[‡] For absolute intensity per 100 decays, multiply by 2.6×10^{-7} *3*.