^{185}Pb α decay (4.3 s) 2002An15,1980Sc09

History			
Type	Author	Citation	Literature Cutoff Date
Full Evaluation	S. -c. Wu	NDS 106, 367 (2005)	31-Aug-2005

Parent: ^{185}Pb: E=0.0+x; $J^\pi=13/2^+$; $T_{1/2}$=4.3 s *2*; Q(α)=6695 *5*; %α decay=50 *25*

^{185}Pb-%α decay: estimated from the known α-branching ratios of the neighboring Pb isotopes (2002An15).

Others: 1987To09, 1982HeZM, 1975Ca06.

2005Va04: ^{185}Pb from ^{189}Po(α); activity of ^{189}Po produced by ^{142}Nd(^{52}Cr,5n) at 5.27 MeV/A; ^{142}Nd(^{50}Cr,3n) at 5.04 MeV/A; 99.8% enriched $^{142}Nd_2F_3$ target; Detectors: velocity filter (SHIP), 16-strip position sensitive silicon detector for α-particles; 6 silicon detectors for conversion electrons; four-fold segmented Clover detector for γ's. measured E(α), I(α), E(γ), α-γ-coin., α-e coin., α_{tot}.

2002An15: α activity produced by 1.4 GeV protons on UC_x target; Resonance ionization laser ion source; on-line mass separator; measured Eα, Eγ, $\alpha\gamma$-coin, $T_{1/2}$. ^{181}Hg deduced levels, possible J^π.

1980Sc09: α activity produced by: ^{150}Sm(^{40}Ca,5n) (1975Ca06), ^{142}Nd(^{48}Ti,5n) at E=185 MeV (1980Sc09), Pd(^{82}Kr,X) at E=4.2, 4.4 MeV/nucleon (1982HeZM), ^{147}Sm(^{40}Ca,2n) at 194 MeV (1987To09).

^{181}Hg Levels

E(level)	J^π	Comments
0.0+y	$13/2^+$	J^π: 0p2h state; populated by α-decay from the $13/2^+$ state of ^{185}Pb with HF=2.0 *10*.

α radiations

Eα[†]	E(level)	Iα[†#]	HF[‡]	Comments
6408 *5*	0.0+y	100	2.0 *10*	Eα: others: 6413 *15* (1987To09); 6397 *20* (1982HeZM); 6406 *15* (1980Sc09); 6400 *10* (1975Ca06).

[†] From 2002An15.

[‡] If r_0=1.503 *17* (based on $r_0(^{180}Hg)$=1.505 13 and $r_0(^{182}Hg)$=1.50 2 from 1998Ak04).

[#] For absolute intensity per 100 decays, multiply by 0.50 *25*.