

^{186}Au α decay (10.7 min) [1990Ak04](#)

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	Balraj Singh	NDS 130, 21 (2015)	15-Jul-2015

Parent: ^{186}Au : $E=0$; $J^\pi=3^-$; $T_{1/2}=10.7$ min 5; $Q(\alpha)=4912$ 14; $\% \alpha$ decay=0.0008 2

^{186}Au -E, J^π , $T_{1/2}$: From Adopted Levels of ^{186}Au in the ENSDF database.

^{186}Au - $Q(\alpha)$: From [2012Wa38](#) evaluation, which is based on input measured $E_\alpha=4653$ 15 ([1990Ak04](#)) and suggestion by [1995Sa42](#) from configuration assignments to the parent and daughter levels that the α transition feeds a 152.3, 3^- level. In a recent ^{182}Pt decay study by [2007Ho20](#) (same group as [1995Sa42](#)), the 152.3 level is assigned $J^\pi=1^-,2^-$ and another 152.5 level is assigned 4^- . The evaluators treat this placement as uncertain since no γ rays were seen by [1990Ak04](#).

^{186}Au - $\% \alpha$ decay: $\% \alpha=0.0008$ 2 ([1990Ak04](#),[1995Bi01](#)).

[1990Ak04](#) (also [1995Bi01](#)): Measured E_α , I_α , deduced hindrance factor.

 ^{182}Ir Levels

E(level)	J^π
0	3^+
152.3?	$(1,2)^-$

 α radiations

E_α	E(level)	I_α^\dagger	HF	Comments
4653 ‡ 15	152.3?	100	2	HF: from 1995Bi01 .

† For absolute intensity per 100 decays, multiply by 8×10^{-6} 2.

‡ Existence of this branch is questionable.