

^{175}Ir α decay 1967Si02,1986Ke03

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	Coral M. Baglin, E. A. Mccutchan		NDS 151, 334 (2018)	30-Jun-2018

Parent: ^{175}Ir : E=0.0; $J^\pi=(5/2^-)$; $T_{1/2}=9$ s 2; $Q(\alpha)=5430$ 30; % α decay=0.85 28

1967Si02: sources from ^{16}O on ^{169}Tm and ^{19}F on $^{162,164,166}\text{Er}$ (recoil collection); enriched targets; measured $E\alpha$, $I\alpha$ (silicon surface-barrier detector).

1986Ke03: sources from ^{90}Zr on Y, Zr and Mo ($E(^{90}\text{Zr})=321\text{-}390$ MeV); velocity-filter, evaporation-residue separation; enriched targets; measured $E\alpha$, $I\alpha$ (silicon surface-barrier detector).

 ^{171}Re Levels

E(level) [†]	J^π [†]	$T_{1/2}$ [†]	Comments
0.0 189.8 4	(9/2 ⁻) (5/2 ⁻)	15.2 s 4	J^π : unhindered α decay from (5/2 ⁻) ^{175}Ir .

[†] From Adopted Levels.

 α radiations

$E\alpha$	E(level)	$I\alpha$ [‡]	HF [†]	Comments
5393 5	189.8	100	0.15 7	$E\alpha$: from 1967Si02.

[†] If $r_0=1.545$ 15 (unweighted average of $r_0(^{170}\text{W})=1.53$ 4 and $r_0(^{172}\text{Os})=1.559$ 10 (1998Ak04)).

[‡] For absolute intensity per 100 decays, multiply by 0.0085 28.