

^{179}Hg α decay **1971Ha03,1979Ha10,2002Ko09**

Type	Author	History Citation	Literature Cutoff Date
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Parent: ^{179}Hg : $E=0.0$; $J^\pi=7/2^-$; $T_{1/2}=1.05$ s 3; $Q(\alpha)=6340$ 30; $\% \alpha$ decay ≈ 53.0

^{179}Hg - $\% \alpha$ decay: $\% \alpha=53$, estimated by [1971Ha03](#), [1979Ha10](#). Other value: 0.55 25 ([1982HeZM](#)).

[1971HA03,1979HA10](#): Activity produced by protons on Pb. Measured $E\alpha$. Detector: Surface Barrier Silicon Detector ([1971Ha03,1979Ha10](#)).

$T_{1/2}=3.5$ s 4 α -activity ($E\alpha=6076$ 2) produced by ^{40}Ar on ^{147}Sm was probably ^{180}Hg or ^{181}Hg .

 ^{175}Pt Levels

E(level)	J^π	Comments
0.0	$7/2^-$	J^π : From Adopted Levels.

 α radiations

$E\alpha$	E(level)	$I\alpha^\ddagger$	HF	Comments
6285 3	0.0	100	$\approx 0.83^\dagger$	$E\alpha$: Weighted average of 6286 4 (2002Ko09), 6275 9 (1996Pa01), 6288 5 (1979Ha10), and 6270 15 (1971Ha03). $E\alpha$ leads to a Q value of 6429 3 for ^{179}Hg , the reason for the difference with 6344 30 (2003Au03) is unknown.

† $r_0=1.539$, (average value from $r_0(^{174}\text{Pt})=1.545$ 10, and $r_0(^{176}\text{Pt})=1.533$ 8 ([1998Ak04](#))); $T_{1/2}(^{179}\text{Hg})=1.05$ s 3 (weighted average of 1.00 s 5 ([2002Ko09](#)), 1.08 s 9 ([2002Ro17](#)), 0.93 s 11 ([1996Pa01](#)), and 1.09 s 4 ([1971Ha03](#))).

‡ For absolute intensity per 100 decays, multiply by ≈ 0.53 .