^{187}Hg α decay (1.9 min) 1970Ha18

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	Coral M. Baglin	NDS 134, 149 (2016)	15-Apr-2015

Parent: ^{187}Hg: E=0.0; $J^{\pi}=3/2^{(-)}$; $T_{1/2}$=1.9 min *3*; Q(α)=5230 *14*; %α decay>0.012

^{187}Hg-%α decay: %α=0.00017 *5* from simultaneous counting of α's and K x-rays (1970Ha18). given As limit because x-ray intensity not corrected for internal conversion and not divided between isomer and ground state decays.

1970Ha18 report a 5035α and a 4870α with respective half-lives of 1.9 min *3* and 2.4 min *3*, and I(5035α)/I(4870α)=2.1 *3*. Those α's are presumed to arise from the decay of $3/2^-$ and $13/2^{(+)}$ levels of ^{187}Hg.

For this decay scheme, QxBR=0.628 *2*.

Additional information 1.

^{183}Pt Levels

E(level)	J^{π}[†]
84.73 *7*	$3/2^-$

[†] From Adopted Levels.

α radiations

Eα	E(level)	Iα[‡]	HF[†]	Comments
5035 *20*	84.73	100	0.77 *14*	this Eα implies Q(α)=5230 *20* cf. 5230 *14* from 2012Wa38.

[†] If r_0=1.493 *12* (unweighted average of $r_0(^{182}Pt)$=1.504 *27* and $r_0(^{184}Pt)$=1.481 *28* (1998Ak04)).

[‡] For absolute intensity per 100 decays, multiply by >0.00012.