

$^{187}\text{Re}[+75] \beta^-$ decay (32.9 y) 1996Bo37

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	M. S. Basunia	NDS 110,999 (2009)	1-Nov-2008

Parent: ^{187}Re : $E=0.0$; $J^\pi=5/2^+$; $T_{1/2}=32.9$ y 20; $Q(\beta^-)=2.469$ 4; $\% \beta^-$ decay=100

^{187}Re -E: g.s. of ^{187}Re ion (75^+ charge state).

^{187}Re - $Q(\beta^-)$ for K-shell bound-state decay=+72.97 keV (1996Bo37).

Others: 1997No07, 1997We08, 1996Ki23.

1996Bo37: Bound state β^- decay of $^{187}\text{Re}^{75+}$ ion with $T_{1/2}=32.9$ y 20,

$T_{1/2}$ measured by storing ^{187}Re , fully-stripped (75^+ charge state) ions, in an experimental storage ring.

$T_{1/2}=32.9$ y 20 (1996Bo37); Others: 33 y 2 (1997No07), 31.2 y +30-25 (1997We08), and 33 y 6 (1996Ki23).

 ^{187}Os Levels

E(level)	J^π	$T_{1/2}$	Comments
0	$1/2^-$	stable	ion=+75
0	$1/2^-$	stable	ion=+75
9.75	$3/2^-$		ion=+75

 β^- radiations

E(decay)	E(level)	Log ft^\dagger
	9.75	7.87 3
(2.5 14)	0	
(2.5 14)	0	11.0

† Deduced by 1996Bo37 from the measured $T_{1/2}$. The $^{187}\text{Re}[+75] \beta^-$ decay into the L shell is about 4 orders of magnitude less probable (1996Bo37).