^{176}Lu ε decay (3.635 h) 1978He06

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	M. S. Basunia	NDS 107, 791 (2006)	15-Sep-2005

Parent: ^{176}Lu: E=123.0 *14*; $J^{\pi}=1^{-}$; $T_{1/2}$=3.635 h *3*; Q(ε)=106.8 *16*; %ε decay=0.095 *16*
^{176}Lu-%ε decay: deduced in 1978He06 from Iγ(Yb K x ray) relative to Iγ(88.4γ) in ^{176}Hf.

^{176}Yb Levels

E(level)	J^{π} †	$T_{1/2}$	Comments
0.0	0^+		
82.1	2^+	1.76 ns *5*	$T_{1/2}$: from Adopted Levels.

† From Adopted Levels.

ε radiations

E(decay)	E(level)	Iε †	Log *ft*	Comments
(147.7 *21*)	82.1	0.057 *11*	6.49 *9*	εK=0.661 *5*; εL=0.254 *3*; εM+=0.0852 *12*
(229.8 *21*)	0.0	0.038 *11*	7.19 *13*	εK=0.7457 *12*; εL=0.1924 *9*; εM+=0.0619 *4*

† Absolute intensity per 100 decays.

γ(^{176}Yb)

E_γ	I_γ †	E_i(level)	J_i^{π}	E_f	J_f^{π}	Mult.	α ‡	Comments
82.1	7.4 *15*	82.1	2^+	0.0	0^+	E2	7.07	I_γ: deduced by evaluator from %ε=0.057 *11* to 82.1 level, given by authors, and α(82.1γ, E2)=7.07.

† For absolute intensity per 100 decays, multiply by 0.00095 *16*.
‡ Total theoretical internal conversion coefficients, calculated using the BrIcc code (2008Ki07) with Frozen orbital approximation based on γ-ray energies, assigned multipolarities, and mixing ratios, unless otherwise specified.

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Decay Scheme

Intensities: $I_{(\gamma+ce)}$ per 100 parent decays