^{175}Re ε decay 1984Sz07

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	M. Shamsuzzoha Basunia	NDS 102, 719 (2004)	1-Jun-2004

Parent: ^{175}Re: E=0.0; J^π=(5/2$^-$); $T_{1/2}$=5.89 min *5*; Q(ε)=4340 *40*; %ε+%$β^+$ decay=100.0
1984Sz07: activity from ^{16}O on ^{165}Ho. Helium jet. Measured Eγ, Iγ. Detector:Ge(Li).

^{175}W Levels

E(level)	J^π	$T_{1/2}$	Comments
0.0	(1/2$^-$)	35.2 min *6*	J^π: From Adopted Levels. $T_{1/2}$: From time vs. ^{175}W decay curve using the 166.7 keV G.

γ(^{175}W)

Iγ normalization: From growth and decay of ^{175}W contained in a source with both ^{175}Re and ^{175}W activities, and normalized to an average value from the absolute intensities of 166.7γ and 270.3γ in ^{175}W ε decay.

E_γ	I_γ[†]	E_i(level)	Comments
[x]184.5	4.8 *12*		
[x]280.9	0.35 *11*		E_γ: these gammas can be associated with the transitions (11/2$^-$) to (7/2$^-$) and (7/2$^-$) to (5/2$^-$) in the 1/2[521] band, observed in ^{163}Dy(^{16}O,4nγ). The feeding of the (11/2$^-$) level may imply an assignment of 9/2 for the ground state of ^{175}Re, originating from the Nilsson orbital 9/2[514].

[†] For absolute intensity per 100 decays, multiply by 1.00 *9*.
[x] γ ray not placed in level scheme.