^{187}Re(γ,γ') 1967La15

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

Other measurements: 1964La02, 1964Sh23, 1973KaYR.

^{187}Re Levels

E(level)[†]	J$^\pi$[‡]	$T_{1/2}$[#]	Comments
0.0	$5/2^+$		
134.0 *15*	$7/2^+$		
206.0 *15*	$9/2^-$		
512.0 *10*	$1/2^+$	17 ps *6*	
589.0 *10*	$3/2^+$	>1.4 ps	
618.0 *10*	$3/2^+$	9.7 ps *8*	$T_{1/2}$: other values: 9.1 ps *15* (1973KaYR), 11.5 ps *14* (1964La02).
625.0 *10*	$(1/2^+)$	>1.5 ps	
686.0 *10*	$5/2^-$	6.1 ps *3*	$T_{1/2}$: for 686γ. Other values: 6.0 ps *8* (480γ), 6.0 ps *9* (552γ), 6.0 ps *5* (1964La02) and 4.3 ps *7* (1973KaYR).
773.0 *10*	$(3/2^+,5/2^+)$	0.17 ps *2*	$T_{1/2}$: other value: 0.17 ps *2* (1964La02).
865.0 *10*	$3/2^+$	1.5 ps *5*	
880.0 *10*	$(5/2^+)$	0.27 ps *9*	

[†] From a least-squares adjustment from the γ-ray energies, assuming $\Delta E=1$ keV for all γ-rays.
[‡] From Adopted Levels.
[#] Recalculated from the adopted branching intensity and the $g_2\Gamma(0)\Gamma(\gamma)/g_1\Gamma$ values assuming indicated spin given by 1967La15.

γ(^{187}Re)

$\Gamma(\gamma)$, $\Gamma(0)$, and Γ are the partial widths for γ transition observed, γ to g.s., and total level Γ; g_2 and g_1 are the statistical factors of excited and g.s., respectively.

E_γ	E_i(level)	J_i^π	E_f	J_f^π	Comments
480	686.0	$5/2^-$	206.0	$9/2^-$	$\Gamma(0)\Gamma(\gamma)g_2/g_1\Gamma=1.52\times10^{-5}$ eV *20*.
512	512.0	$1/2^+$	0.0	$5/2^+$	$\Gamma(0)\Gamma(\gamma)g_2/g_1\Gamma=0.9\times10^{-5}$ eV *3*.
552	686.0	$5/2^-$	134.0	$7/2^+$	$\Gamma(0)\Gamma(\gamma)g_2/g_1\Gamma=0.35\times10^{-5}$ eV *5*.
589	589.0	$3/2^+$	0.0	$5/2^+$	$\Gamma(0)\Gamma(\gamma)g_2/g_1\Gamma<8\times10^{-5}$ eV.
618	618.0	$3/2^+$	0.0	$5/2^+$	$\Gamma(0)\Gamma(\gamma)g_2/g_1\Gamma=2.5\times10^{-5}$ eV *2*.
625	625.0	$(1/2^+)$	0.0	$5/2^+$	$\Gamma(0)\Gamma(\gamma)g_2/g_1\Gamma<1\times10^{-5}$ eV.
686	686.0	$5/2^-$	0.0	$5/2^+$	$\Gamma(0)\Gamma(\gamma)g_2/g_1\Gamma=1.84\times10^{-5}$ eV *10*.
773	773.0	$(3/2^+,5/2^+)$	0.0	$5/2^+$	$\Gamma(0)\Gamma(\gamma)g_2/g_1\Gamma=170\times10^{-5}$ eV *12*.
865	865.0	$3/2^+$	0.0	$5/2^+$	$\Gamma(0)\Gamma(\gamma)g_2/g_1\Gamma=6\times10^{-5}$ eV *2*.
880	880.0	$(5/2^+)$	0.0	$5/2^+$	$\Gamma(0)\Gamma(\gamma)g_2/g_1\Gamma=24\times10^{-5}$ eV *8*.

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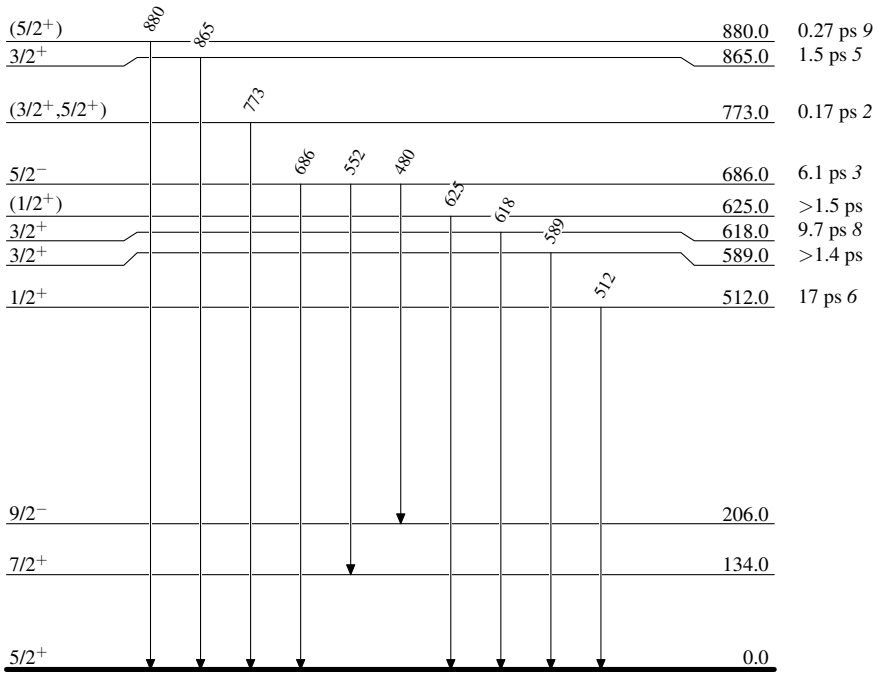
Level Scheme



$^{187}_{75}Re_{112}$