$^{186}\text{W}(^{82}\text{Se},^{81}\text{Se}\gamma)$ **2005Sh26**

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

Target: 98.2% enriched ^{186}W; Projectile: ^{82}Se, E=630−MeV, ^{187}W produced by one-neutron transfer reaction; Detectors: 3 HPGe detectors placed at 90° with respect to the beam direction and silicon detector; Measured: Eγ, Iγ, $\gamma\gamma$ coin, and T$_{1/2}$.

^{187}W Levels

E(level)[†]	J$^{\pi}$[‡]	T$_{1/2}$	Comments
0.0	3/2$^-$		
77.12 *16*	5/2$^-$		
201.18 *16*	7/2$^-$		
349.90 *20*	7/2$^-$		
364.1 *4*	9/2$^-$	≤15 ns	T$_{1/2}$: An upper limit determined by 2005Sh26.
409.9 *5*	11/2$^+$	1.55 μs *13*	J$^{\pi}$: 45.8γ (E1) to 9/2$^-$ state and from the systematics of the neighboring ^{183}W (K$^{\pi}$=11/2$^+$ isomer at 309 keV level) and ^{185}W (K$^{\pi}$=11/2$^+$ isomer at 197-keV level), the 11/2$^+$ assignment can be considered to be based on the 11/2$^+$[615] Nilson configuration.
			T$_{1/2}$: Quoted by the authors from an weighted average of the measured values of 1.59 μs *24* (46γ-t) and 1.53 μs *13* (273γ-t) (2005Sh26).

[†] Deduced by the evaluator from a least-squares adjustment to the γ-ray energies.
[‡] From Adopted Levels, except otherwise noted.

$\gamma(^{187}\text{W})$

E$_{\gamma}$[†]	I$_{\gamma}$[†]	E$_i$(level)	J$^{\pi}_i$	E$_f$	J$^{\pi}_f$	Mult.	α[‡]	Comments
(14)		364.1	9/2$^-$	349.90	7/2$^-$			I$_{\gamma}$: ≈0.54, deduced from the estimated ratio of Ti(287γ)/Ti(14γ)= 0.038 *26* (2005Sh26) and α(assuming 14γ M1)=264 and α(assuming 287γ E2)=0.097.
45.8 *3*	100	409.9	11/2$^+$	364.1	9/2$^-$	(E1)	0.594 *14*	Mult.: Assignment from extracted α(exp)=0.8 *1* data, assuming both the 148.8γ and 272.7γ of the M1 character (2005Sh26).
77.1 *2*	11.9 *25*	77.12	5/2$^-$	0.0	3/2$^-$			
124.1 *2*	5 *3*	201.18	7/2$^-$	77.12	5/2$^-$			
148.8 *2*	27 *18*	349.90	7/2$^-$	201.18	7/2$^-$			
201.2 *2*	14 *3*	201.18	7/2$^-$	0.0	3/2$^-$			
272.7 *2*	75 *14*	349.90	7/2$^-$	77.12	5/2$^-$			
287.0 *3*	5 *3*	364.1	9/2$^-$	77.12	5/2$^-$			

[†] From 2005Sh26.
[‡] 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.
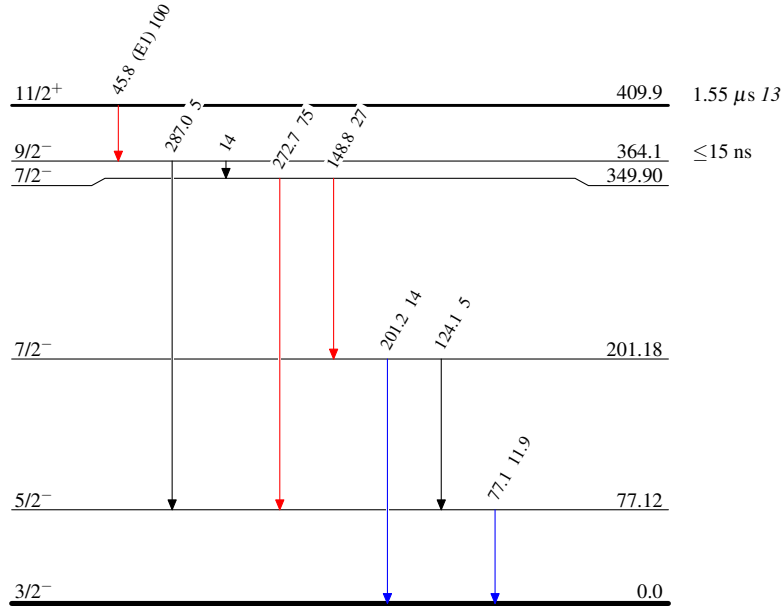
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Legend

Level Scheme

Intensities: Relative I_γ

⟶	$I_\gamma < 2\% \times I_\gamma^{max}$
⟶ (blue)	$I_\gamma < 10\% \times I_\gamma^{max}$
⟶ (red)	$I_\gamma > 10\% \times I_\gamma^{max}$
- - - ▸	γ Decay (Uncertain)

$^{187}_{74}$W$_{113}$