^{192}Os(^{7}Li,4nγ) 2012Wa06

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	Huang Xiaolong and Kang Mengxiao	NDS 121, 395 (2014)	1-Mar-2014

2012Wa06: E=44 MeV. Measured Eγ, Iγ, $\gamma\gamma$, $\gamma\gamma$(t), $\gamma\gamma(\theta)$ using an array of 12 Compton-suppressed HPGe detectors, and a LEPS detector at CIAE. Total Routhian surface calculations. Comparison with band structures in ^{189}Au, ^{191}Au and ^{193}Au.

^{195}Au Levels

E(level)[†]	J$^{\pi}$	T$_{1/2}$[‡]	Comments
318.5[#]	11/2$^-$	30.5 s *2*	%IT=100 Additional information 1.
706.50[#] *10*	15/2$^-$		Configuration=$\pi h^{-1}_{11/2}\otimes 2^+$ in ^{196}Hg core.
1365.7 *4*	(17/2$^-$)		
1425.00[#] *14*	19/2$^-$		Configuration=$\pi h^{-1}_{11/2}\otimes 4^+$ in ^{196}Hg core.
1813.01[@] *17*	21/2$^+$	8.04 ns *28*	
1979.91[@] *20*	(25/2$^+$)		
2021.4 *3*	(25/2$^+$)		
2126.1 *4*	(27/2$^+$)		
2240.3[@] *3*	(29/2$^+$)		
2244.5[#] *4*	(23/2$^-$)		Configuration=$\pi h^{-1}_{11/2}\otimes 6^+$ in ^{196}Hg core.
2347.4 *6*			
2418.0 *5*	(31/2$^+$)		Possible configuration=$\pi h^{-1}_{11/2}\otimes\nu(i^{-1}_{13/2},h^{-1}_{9/2})$ as proposed earlier for 31/2$^+$ isomers in ^{189}Au, ^{191}Au and ^{193}Au.
2461.21 *22*	(29/2$^+$)		
2526.6 *5*	(27/2$^-$)		Configuration=$\pi h_{11/2}\otimes ?i^{-2}_{13/2}$, 3qp state.
2791.8[@] *6*	(33/2$^+$)		

[†] From a least-squares fit to Eγ.
[‡] From Adopted Levels.
[#] Band(A): Sequence based on 11/2$^-$, configuration=$\pi h^{-1}_{11/2}$.
[@] Band(B): Sequence based on 21/2$^+$, Possible configuration=$\pi h^{-1}_{11/2}\otimes\nu(i^{-1}_{13/2},j)$.

γ(^{195}Au)

The directional correlation ratios R_{ADO} listed below is defined by R_{ADO}=Iγ(40° (152°))/Iγ(90°). Expected values are: >1 for ΔJ=2, quadrupole and <1 for ΔJ=0, dipole.

E$_\gamma$[†]	I$_\gamma$[†]	E$_i$(level)	J$_i^{\pi}$	E$_f$	J$_f^{\pi}$	Comments
104.6 *3*	13 *2*	2126.1	(27/2$^+$)	2021.4	(25/2$^+$)	
113.9 *5*	6 *2*	2240.3	(29/2$^+$)	2126.1	(27/2$^+$)	
146.2 *5*	2 *1*	2126.1	(27/2$^+$)	1979.91	(25/2$^+$)	
166.9 *1*	100 *5*	1979.91	(25/2$^+$)	1813.01	21/2$^+$	R_{ADO}=1.16 *16*.
177.7 *3*	24 *4*	2418.0	(31/2$^+$)	2240.3	(29/2$^+$)	R_{ADO}=0.79 *9*.
208.3 *3*	25 *4*	2021.4	(25/2$^+$)	1813.01	21/2$^+$	R_{ADO}=1.16 *12*.
219.0 *3*	11 *2*	2240.3	(29/2$^+$)	2021.4	(25/2$^+$)	R_{ADO}=1.17 *24*.
260.5 *3*	30 *5*	2240.3	(29/2$^+$)	1979.91	(25/2$^+$)	R_{ADO}=1.11 *11*.
282.3 *5*	4 *1*	2526.6	(27/2$^-$)	2244.5	(23/2$^-$)	
326.0 *5*	3 *1*	2347.4		2021.4	(25/2$^+$)	
388.0 *1*	>350	706.50	15/2$^-$	318.5	11/2$^-$	R_{ADO}=1.06 *11*.
388.0 *1*	>126	1813.01	21/2$^+$	1425.00	19/2$^-$	

Continued on next page (footnotes at end of table)

^{192}Os(^{7}Li,4nγ) 2012Wa06 (continued)

$\gamma(^{195}Au)$ (continued)

E_γ †	I_γ †	E_i(level)	J_i^π	E_f	J_f^π	Mult.	Comments
481.3 *1*	52 *3*	2461.21	$(29/2^+)$	1979.91	$(25/2^+)$		R_{ADO}=1.09 *10*.
546.5 *5*	2 *1*	2526.6	$(27/2^-)$	1979.91	$(25/2^+)$		
551.5 *5*	9 *3*	2791.8	$(33/2^+)$	2240.3	$(29/2^+)$		R_{ADO}=1.36 *16*.
659.2 *3*	17 *3*	1365.7	$(17/2^-)$	706.50	$15/2^-$		R_{ADO}=0.92 *12*.
718.5 *1*	336 *17*	1425.00	$19/2^-$	706.50	$15/2^-$		R_{ADO}=1.14 *12*.
819.6 *3*	10 *2*	2244.5	$(23/2^-)$	1425.00	$19/2^-$		R_{ADO}=1.21 *15*.
1106.5 *5*	<2	1813.01	$21/2^+$	706.50	$15/2^-$	[E3]	

† 2012Wa06 state energy uncertainty of 0.1-0.5 keV and intensity uncertainty of 5-30%. The evaluator assigned as follows: 0.1 keV and 5% for Iγ>50, 0.3 keV and 15% for Iγ=10-50, 0.5 keV and 30% for Iγ<10.

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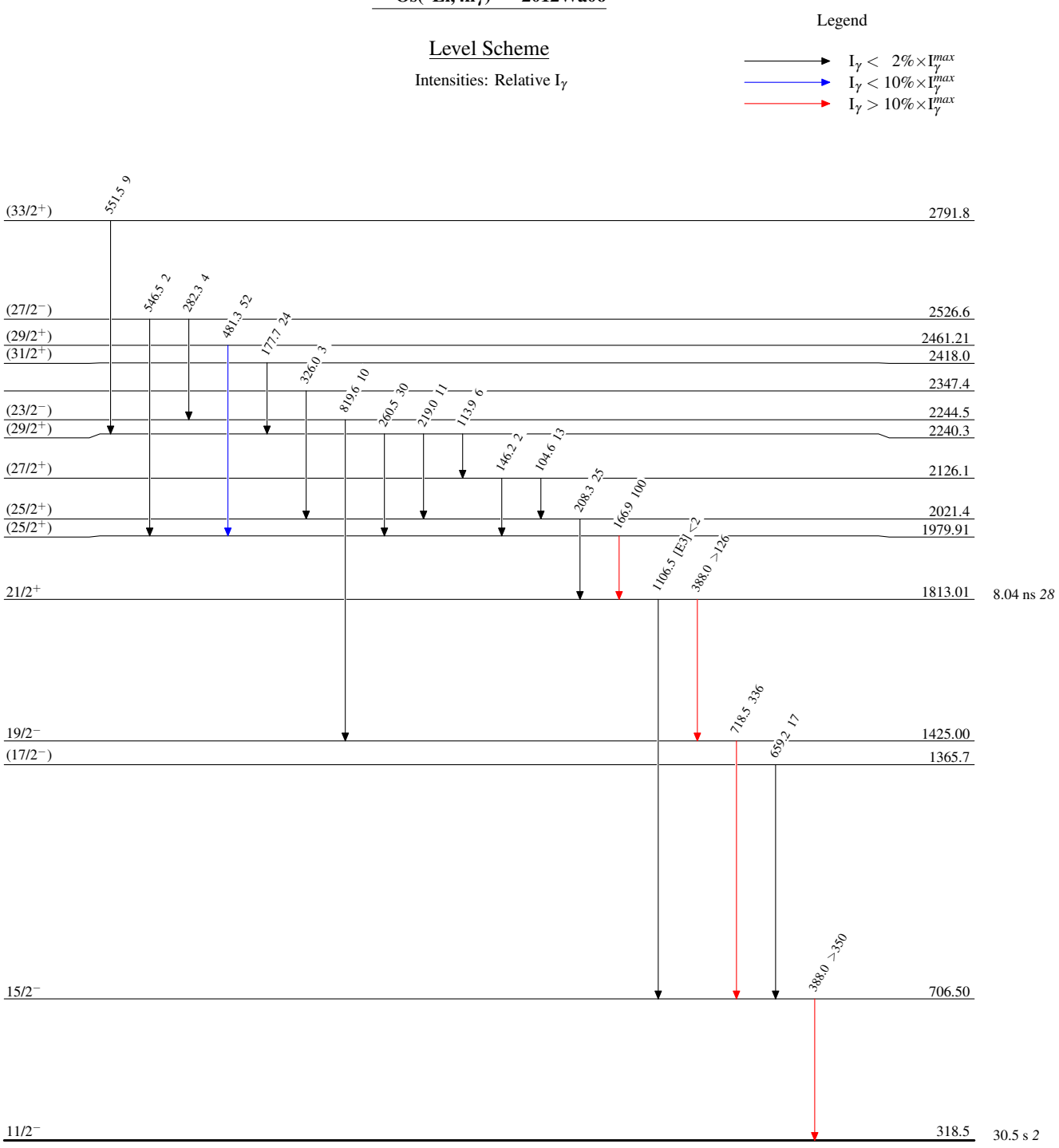
Level Scheme

Intensities: Relative I_γ



$^{195}_{79}Au_{116}$

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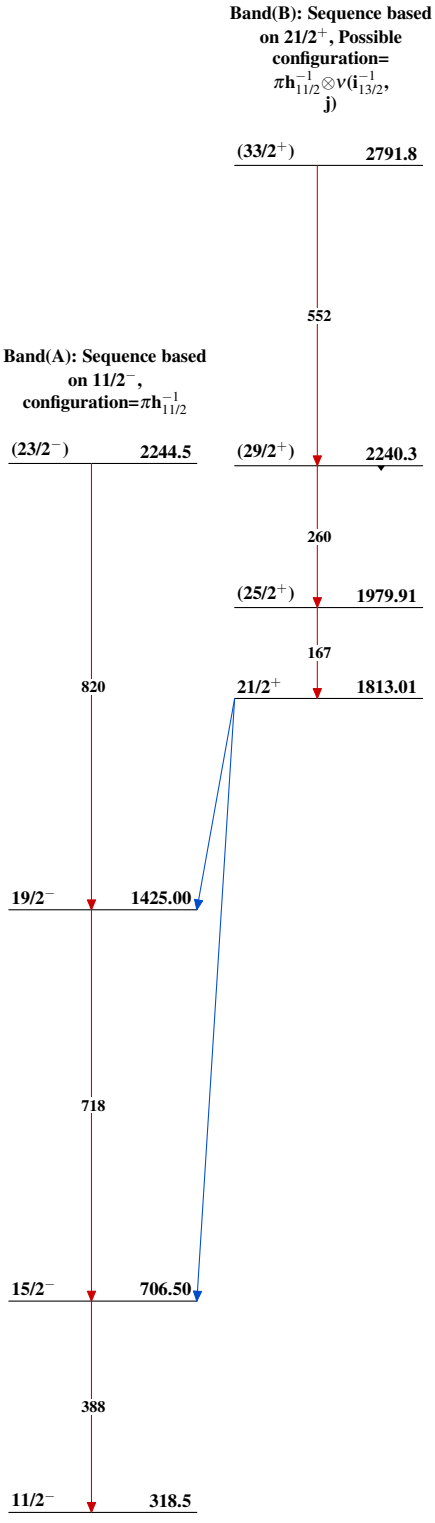

$^{195}_{79}Au_{116}$