Adopted Levels, Gammas

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	S. Lalkovski, F. G. Kondev	NDS 124, 157 (2015)	1-Aug-2014

Q(β^-)=3992.1 *25*; S(n)=6439 *3*; S(p)=7886 *3*; Q(α)=−3977 *14* 2012Wa38

^{112}Ag Levels

Cross Reference (XREF) Flags

A ^{112}Pd β^- decay
B ^{176}Yb(^{28}Si,Xγ)

E(level)†	J$^\pi$	$T_{1/2}$	XREF	Comments
0.0	2$^{(-)}$	3.130 h *8*	AB	%β^-=100 J$^\pi$: J=2 from atomic beam (1964Ch06); similarities to ^{110}Ag. Given the known proton and neutron orbitals near the Fermi surface, no intrinsic state with π=+ and J=2 can be expected at low energy. μ=0.0547 *5* (1964Ch06), using atomic-beam magnetic-resonance method. $T_{1/2}$: Weighted average of 3.14 h 2 (1972Wa03), 3.12 h 1 (1968RoZZ), 3.14 h 5 (1962In01) and 3.16 h 2 (1969Sa09). configuration: $\pi p_{1/2}\otimes\nu(d_{5/2}/g_{7/2})$.
18.5 *5*	(1$^+$)		A	J$^\pi$: direct feeding in ^{112}Pd β^- decay (J$^\pi$=0$^+$); similarities to ^{110}Ag. configuration: $\pi g_{9/2}\otimes\nu g_{7/2}$.
x	(6$^+$)		B	Additional information 1. E(level): X≈137 keV, using E(6$^+$)=118 keV for the same configuration in ^{110}Ag. Probably a long-lived isomeric state. J$^\pi$: 97.5γ from (6$^-$); similarities to ^{110}Ag. $T_{1/2}$: possibly a long-lived isomeric state. configuration: $\pi g_{9/2}\otimes\nu g_{7/2}$.
x+97.5‡ *3*	(6$^-$)		B	J$^\pi$: from 2011Po11, based on systematics and similarities to ^{110}Ag.
y#	(7$^-$)		B	Additional information 2. J$^\pi$: 74.6γ from (8$^-$); band member.
y+74.6‡ *5*	(8$^-$)		B	J$^\pi$: based on systematics.
y+178.1# *6*	(9$^-$)		B	J$^\pi$: 103.5γ to (8$^-$); band member.
y+565.1‡ *6*	(10$^-$)		B	J$^\pi$: 387.0γ to (9$^-$); band member.
y+889.8# *7*	(11$^-$)		B	J$^\pi$: 711.8γ to (9$^-$), 324.7γ to (10$^-$); band member.
y+1337.9‡ *7*	(12$^-$)		B	J$^\pi$: 448.1γ to (11$^-$); band member.
y+1818.9# *10*	(13$^-$)		B	J$^\pi$: 929γ to (11$^-$), 481γ to (12$^-$); band member.

† From a least-squares fit to Eγ.
‡ Band(A): Member of $\pi g_{9/2}\nu h_{11/2}$, α=+1/2 band.
# Band(a): Member of $\pi g_{9/2}\nu h_{11/2}$, α=−1/2 band.

Adopted Levels, Gammas (continued)

$\gamma(^{112}Ag)$

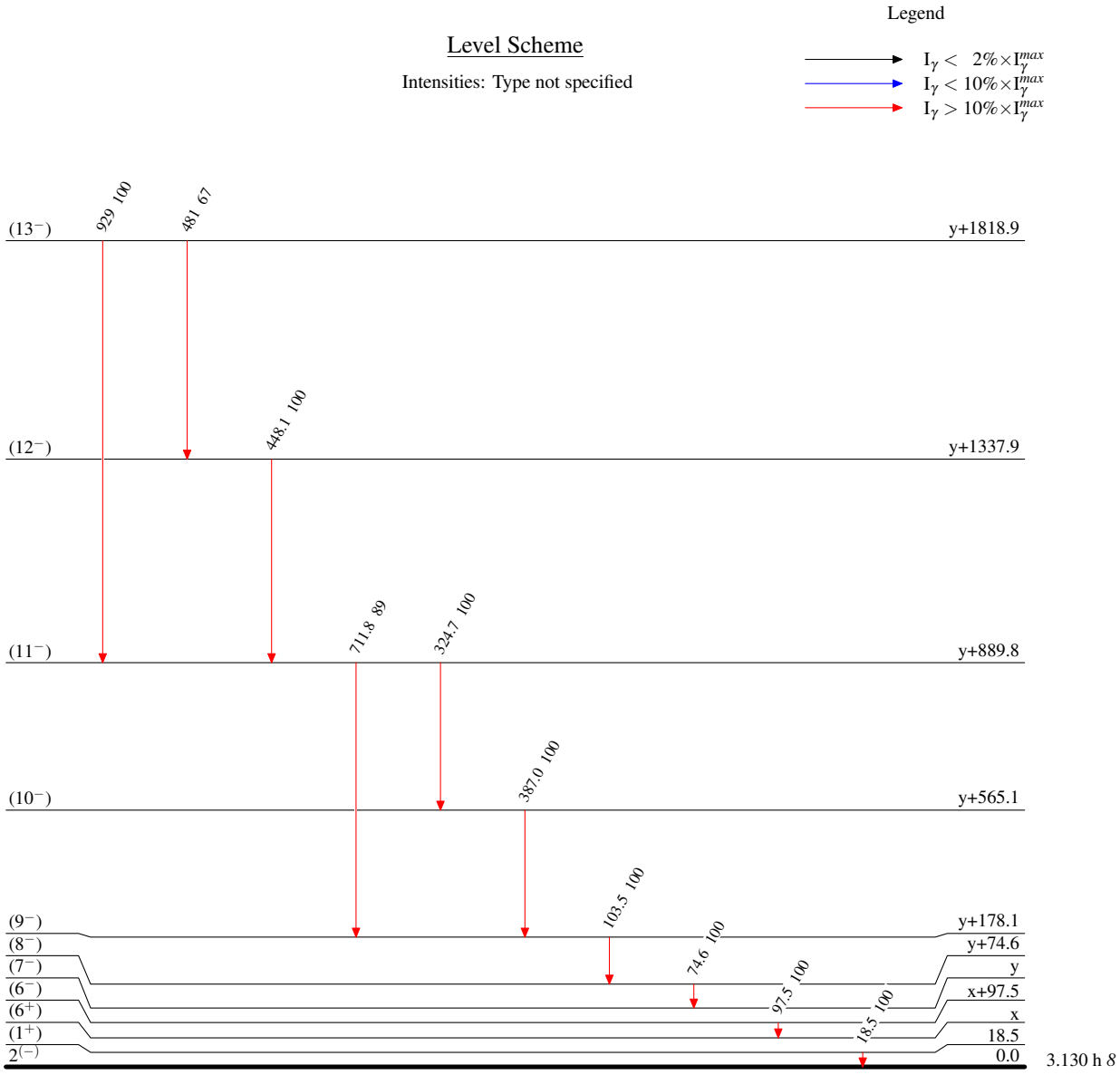
E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Comments
18.5	(1^+)	18.5 *5*	100	0.0	$2^{(-)}$	E_γ,J^π: From ^{112}Pd β-decay.
x+97.5	(6^-)	97.5 *3*	100	x	(6^+)	
y+74.6	(8^-)	74.6 *5*	100	y	(7^-)	
y+178.1	(9^-)	103.5 *2*	100	y+74.6	(8^-)	
y+565.1	(10^-)	387.0 *2*	100	y+178.1	(9^-)	
y+889.8	(11^-)	324.7 *3*	100 *15*	y+565.1	(10^-)	
		711.8 *5*	89 *15*	y+178.1	(9^-)	
y+1337.9	(12^-)	448.1 *3*	100	y+889.8	(11^-)	
y+1818.9	(13^-)	481 *1*	67 *22*	y+1337.9	(12^-)	
		929 *1*	100 *22*	y+889.8	(11^-)	

[†] From ^{176}Yb(^{28}Si,Xγ) (2002Po11), unless otherwise stated.

Adopted Levels, Gammas

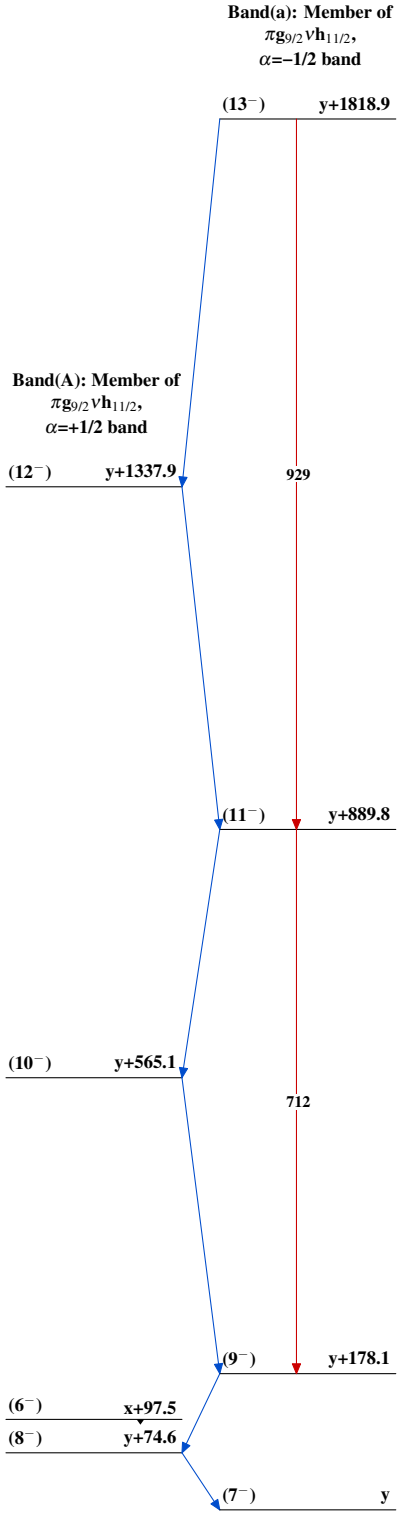
Level Scheme

Intensities: Type not specified



$^{112}_{47}Ag_{65}$

Adopted Levels, Gammas



$^{112}_{47}Ag_{65}$