

$^{110}\text{Pd}(^6\text{Li},3\text{n}\gamma)$ 1976TuZX

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	Jean Blachot	NDS 111, 1471 (2010)	1-May-2009

E=24 MeV. Measured $E\gamma$, $I\gamma$, $\gamma\gamma$ -coin, $\gamma(\theta)$, 1976TuZX.

For information on coin relations for unplaced γ 's, see 1976TuZX.

 ^{113}In Levels

E(level)	$J^\pi^\dagger$	$T_{1/2}^\ddagger$	E(level)	$J^\pi^\dagger$	E(level)	$J^\pi^\dagger$
0.0	$9/2^+$	stable	1566.7		2389.7 [#]	($13/2^+$)
391.7	$1/2^-$	1.6582 h 6	1570.7		2396.4	($17/2^-$)
646.9	$3/2^-$		1630.7		2442.3	($11/2, 15/2$)
1024.2	$5/2^+$		1688.8 [#]	($11/2^+$)	2466.7	
1131.7	$5/2^+$		1836.2		2654.2	($17/2$)
1173.0	$11/2^+$		2164.8		2664.0	($19/2^-$)
1191.3 [#]	($7/2^+$)		2224.7		2786.2	($19/2$)
1344.4	$13/2^+$		2233.1	($15/2^-$)	2853.6	($21/2^-$)
1472.9			2264.1	($11/2, 15/2$)	3023.2	($23/2^-$)
1509.5			2282.7	($17/2^+$)		
1536.2?			2358.8?	($15/2^+$)		

[†] J^π for levels below 1400 keV are from Adopted Levels. J^π for higher levels are suggested on the basis of directional correlation of oriented nuclei.

[‡] From Adopted Levels.

[#] Band(A): suggested members of rotational band with Nilsson Orbit $1/2^+(431)$.

 $\gamma(^{113}\text{In})$

E_γ	$I_\gamma^\dagger$	$E_i(\text{level})$	J_i^π	E_f	J_f^π
^x 91					
^x 123.0					
132.0	2.3	2786.2	($19/2$)	2654.2	($17/2$)
163.3	18.0	2396.4	($17/2^-$)	2233.1	($15/2^-$)
169.6	5.9	3023.2	($23/2^-$)	2853.6	($21/2^-$)
171.4	2.1	1344.4	$13/2^+$	1173.0	$11/2^+$
184.0	4.6	2466.7		2282.7	($17/2^+$)
189.5	9.8	2853.6	($21/2^-$)	2664.0	($19/2^-$)
^x 198.7					
212 [#]	3.0	2654.2	($17/2$)	2442.3	($11/2, 15/2$)
255.3	17.6	646.9	$3/2^-$	391.7	$1/2^-$
267.7	14.7	2664.0	($19/2^-$)	2396.4	($17/2^-$)
326.7	4.7	1836.2		1509.5	
377.3	2.1	1024.2	$5/2^+$	646.9	$3/2^-$
391.7		391.7	$1/2^-$	0.0	$9/2^+$
^x 414					
421.1	3.8	2654.2	($17/2$)	2233.1	($15/2^-$)
484.8	1.5	1131.7	$5/2^+$	646.9	$3/2^-$
497.5	20.4	1688.8	($11/2^+$)	1191.3	($7/2^+$)
670.0 [#]	3.1	2358.8?	($15/2^+$)	1688.8	($11/2^+$)
^x 673.5					
700.9	18.0	2389.7	($13/2^+$)	1688.8	($11/2^+$)
826.0	1.7	1472.9		646.9	$3/2^-$
888.7	39.5	2233.1	($15/2^-$)	1344.4	$13/2^+$

Continued on next page (footnotes at end of table)

$^{110}\text{Pd}(^6\text{Li},3\text{n}\gamma)$ **1976TuZX** (continued) $\gamma(^{113}\text{In})$ (continued)

E_γ	$I_\gamma^\dagger$	$E_i(\text{level})$	J_i^π	E_f	J_f^π	E_γ	$I_\gamma^\dagger$	$E_i(\text{level})$	J_i^π	E_f	J_f^π
889.3 ^{‡#}	3.5	1536.2?		646.9	3/2 ⁻	1131.7	10	1131.7	5/2 ⁺	0.0	9/2 ⁺
919.7	8.1	2264.1	(11/2,15/2)	1344.4	13/2 ⁺	1173.0	53.4	1173.0	11/2 ⁺	0.0	9/2 ⁺
923.8	1.0	1570.7		646.9	3/2 ⁻	1191.3	36.4	1191.3	(7/2 ⁺)	0.0	9/2 ⁺
938.3	20.5	2282.7	(17/2 ⁺)	1344.4	13/2 ⁺	1344.4	100	1344.4	13/2 ⁺	0.0	9/2 ⁺
991.8	4.9	2164.8		1173.0	11/2 ⁺	1509.5	7.9	1509.5		0.0	9/2 ⁺
1024.2	21	1024.2	5/2 ⁺	0.0	9/2 ⁺	1566.7	9	1566.7		0.0	9/2 ⁺
1051.7	6.2	2224.7		1173.0	11/2 ⁺	1630.7	8	1630.7		0.0	9/2 ⁺
1097.9	7.4	2442.3	(11/2,15/2)	1344.4	13/2 ⁺						

[†] Measured at 55°.[‡] From coin data in $^{113}\text{Cd}(\text{p},\text{n}\gamma)$, this γ deexcites the 1914-keV level and not the 1536-keV level.

Placement of transition in the level scheme is uncertain.

^x γ ray not placed in level scheme.

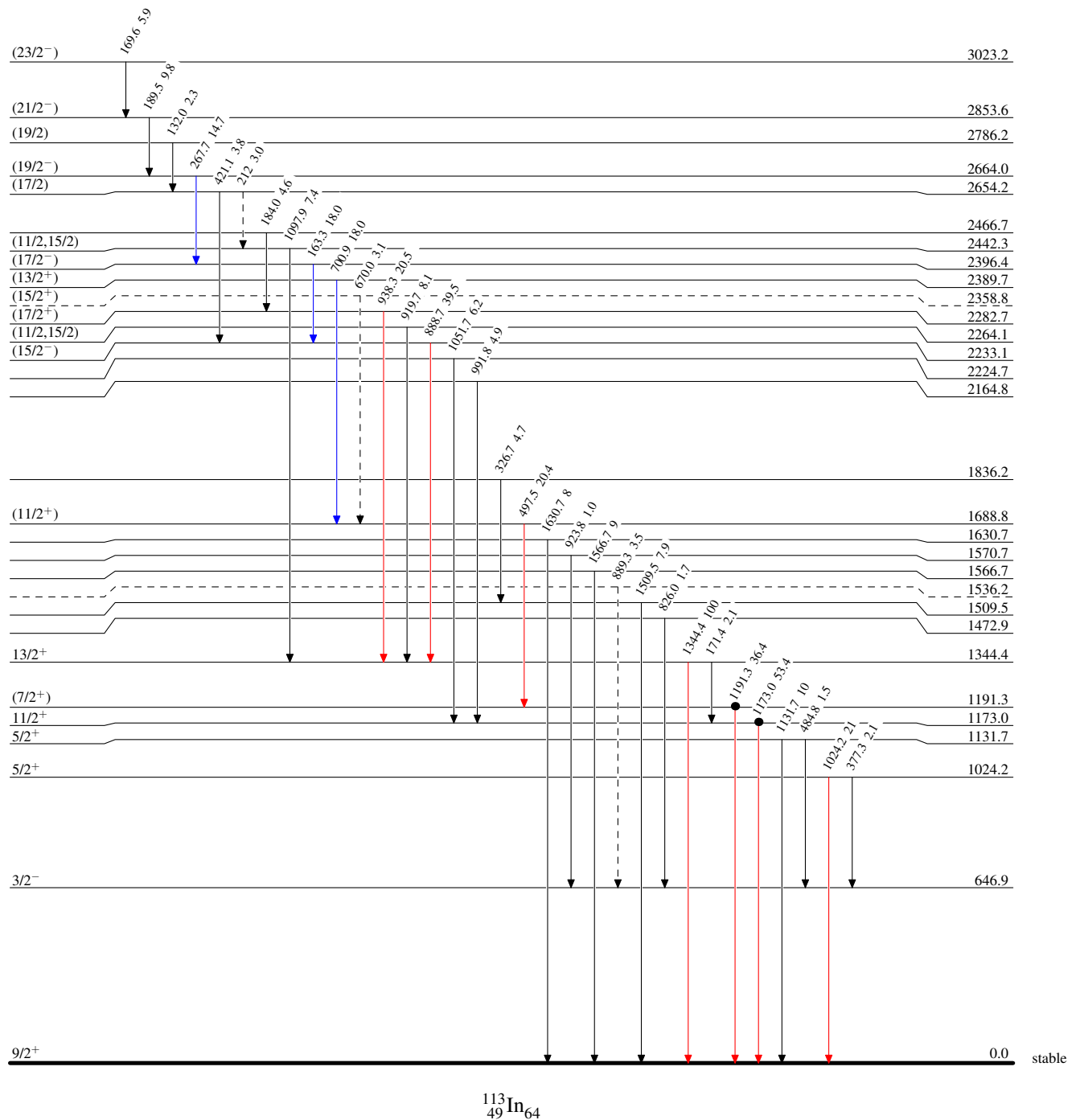
$^{110}\text{Pd}(^6\text{Li}, 3n\gamma)$ 1976TuZX

Level Scheme

Intensities: Type not specified

Legend

- ▶ $I_\gamma < 2\% \times I_\gamma^{\text{max}}$
- ▶ $I_\gamma < 10\% \times I_\gamma^{\text{max}}$
- ▶ $I_\gamma > 10\% \times I_\gamma^{\text{max}}$
- - - - -▶ γ Decay (Uncertain)
- Coincidence



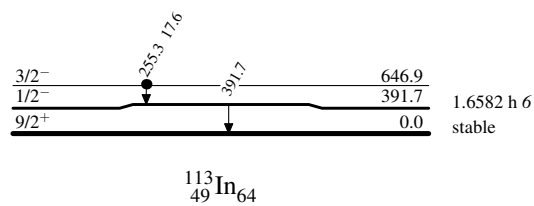
$^{110}\text{Pd}(^6\text{Li},3n\gamma)$ 1976TuZX

Legend

Level Scheme (continued)

Intensities: Type not specified

● Coincidence



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Band(A): Suggested
members of rotational
band with Nilsson Orbit
1/2+(431)

(13/2⁺) 2389.7

701

(11/2⁺) 1688.8

498

(7/2⁺) 1191.3

$^{113}_{49}\text{In}_{64}$