

$^{110}\text{Pd}(p,p'\gamma)$ **1973De12**

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	G. Gürdal and F. G. Kondev		NDS 113, 1315 (2012)	1-Aug-2011

$E(p)=13$ MeV. The beam was provided by ORNL tandem Van de Graff accelerator. 1.3 mg/cm² thick, 91% enriched self-supported ^{110}Pd target was used. Inelastically scattered protons were detected using a 2 mm deep surface-barrier Si detector. NaI scintillator detector was used for a γ -ray detection. Measured: $\sigma(E(p)',E\gamma)$, $E\gamma$, $I\gamma$.

Other: [1975De43](#).

 ^{110}Pd Levels

$E(\text{level})^\dagger$	J^π^\ddagger	$E(\text{level})^\dagger$	J^π^\ddagger	$E(\text{level})^\dagger$	J^π^\ddagger	$E(\text{level})^\dagger$
0.0	0 ⁺	1168 24		1713		2293
374	2 ⁺	1212	2 ⁺	1933		2446
814	2 ⁺	1401		2038	3 ⁻	2499
921	4 ⁺	1472 24		2131		
945	0 ⁺	1576		2193		

[†] From [1973De12](#), taken from (p,p') measurements by the same authors ([1969Ro30](#)).

[‡] From (p,p') measurements by the same authors ([1969Ro30](#)).

 $\gamma(^{110}\text{Pd})$

$E_i(\text{level})$	J_i^π	E_γ^\dagger	$I_\gamma^\#$	E_f	J_f^π	$E_i(\text{level})$	J_i^π	E_γ^\dagger	$I_\gamma^\#$	E_f	J_f^π
374	2 ⁺	374 20	100	0.0	0 ⁺	1933		740 20	43 12	1168	
814	2 ⁺	446 20	77 4	374	2 ⁺			983 20	57 12	921	4 ⁺
		823 20	23 4	0.0	0 ⁺	2038	3 ⁻	1234 20	12 2	814	2 ⁺
921	4 ⁺	553 [‡] 20		374	2 ⁺			1664 20	88 2	374	2 ⁺
945	0 ⁺	553 [‡] 20		374	2 ⁺	2131		924 20	30 7	1212	2 ⁺
1168		790 20	100	374	2 ⁺			2130 20	70 7	0.0	0 ⁺
1212	2 ⁺	828 20	75 10	374	2 ⁺	2193		1378 20	25 9	814	2 ⁺
		1210 20	25 11	0.0	0 ⁺			1808 20	75 9	374	2 ⁺
1401		577 20	80 8	814	2 ⁺	2293		1354 20		921	4 ⁺
		1043 20	20 8	374	2 ⁺			1915 20	30 5	374	2 ⁺
1472		685 20	43 10	814	2 ⁺			2309 20	4 1	0.0	0 ⁺
		1115 20	57 10	374	2 ⁺	2446		1521 20	67 6	921	4 ⁺
1576		649 20	40 9	921	4 ⁺			2094 20	20 5	374	2 ⁺
		756 20	24 7	814	2 ⁺			2452 20	13 7	0.0	0 ⁺
		1203 20	36 7	374	2 ⁺	2499		1664 20	34 5	814	2 ⁺
1713		800 20	21 7	921	4 ⁺			2142 20	53 6	374	2 ⁺
		876 20	48 9	814	2 ⁺			2500 20	13 4	0.0	0 ⁺
		1330 20	31 8	374	2 ⁺						

[†] From [1973De12](#), $\Delta E\gamma$ 15-20 keV was given by the authors. ± 20 keV was adopted by the evaluators.

[‡] A doublet that could not be resolved, due to the poor resolution of the NaI detector.

[#] From [1973De12](#). Branching ratios from respective levels are given.

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Level Scheme

Intensities: Relative photon branching from each level

