

$^{104}\text{Pd}(^{63}\text{Cu},\text{p}2\text{n}\gamma)$ **1991Si08**

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	Balraj Singh and Jun Chen [#]		NDS 147, 1 (2018)	30-Nov-2017

1991Si08: E=285 MeV. Measured E_γ , I_γ , $\gamma\gamma$, $\gamma\gamma(\theta)$ (DCO).

^{164}W Levels

E(level) [†]	J^π [‡]	E(level) [†]	J^π [‡]	E(level) [†]	J^π [‡]	E(level) [†]	J^π [‡]
0.0 [#]	0 ⁺	2118.2 [#]	8 ⁺	4342.6 [#]	16 ⁺	6907.4 [#]	24 ⁺
332.7 [#]	2 ⁺	2833.3 [#]	10 ⁺	4907.5 [#]	18 ⁺	7672.5 [#]	26 ⁺
823.7 [#]	4 ⁺	3441.3 [#]	12 ⁺	5529.2 [#]	20 ⁺	8471.7 [#]	28 ⁺
1431.5 [#]	6 ⁺	3834.0 [#]	14 ⁺	6196.1 [#]	22 ⁺	9296.7? [#]	(30 ⁺)

[†] From E_γ data.

[‡] As proposed by 1991Si08, based on $\gamma\gamma(\theta)$ (DCO) data.

[#] Band(A): g.s. band.

$\gamma(^{164}\text{W})$

E_γ	I_γ	E_i (level)	J^π_i	E_f	J^π_f	Mult. [†]	Comments
332.7	100	332.7	2 ⁺	0.0	0 ⁺	(E2)	DCO(2)=0.91 1
392.7	34.2 15	3834.0	14 ⁺	3441.3	12 ⁺	(E2)	DCO(1)=1.01 5; DCO(2)=1.05 3
491.0	89.0 23	823.7	4 ⁺	332.7	2 ⁺	(E2)	DCO(1)=1.02 4; DCO(2)=0.96 2
508.6	25.3 9	4342.6	16 ⁺	3834.0	14 ⁺	Q	DCO(1)=1.06 3; DCO(2)=1.06 4
564.9	17.0 11	4907.5	18 ⁺	4342.6	16 ⁺	Q	DCO(1)=1.29 5
607.8		1431.5	6 ⁺	823.7	4 ⁺	Q	DCO(1)=0.93 3; DCO(2)=0.95 2
608.0		3441.3	12 ⁺	2833.3	10 ⁺	Q	DCO(1)=0.93 3; DCO(2)=0.95 2
621.7	12.2 6	5529.2	20 ⁺	4907.5	18 ⁺	Q	DCO(1)=1.10 5; DCO(2)=1.08 5
666.9	10.9 9	6196.1	22 ⁺	5529.2	20 ⁺	Q	DCO(1)=0.96 6; DCO(2)=0.86 10
686.7	51.2 18	2118.2	8 ⁺	1431.5	6 ⁺	Q	DCO(1)=0.96 4; DCO(2)=0.98 3
711.3		6907.4	24 ⁺	6196.1	22 ⁺		
715.1		2833.3	10 ⁺	2118.2	8 ⁺		
765.1	4.3 5	7672.5	26 ⁺	6907.4	24 ⁺	Q	DCO(1)=0.84 7
799.2	2.1 4	8471.7	28 ⁺	7672.5	26 ⁺	Q	DCO(1)=0.86 8
825.0 [‡]	≈1.0	9296.7?	(30 ⁺)	8471.7	28 ⁺		E_γ : 840.1 in 2016Jo01.

[†] Assigned by evaluators based on DCO ratios, combined with RUL (for E2 and M2) assuming level half-lives are less than 20 ns, typical resolution time in $\gamma\gamma$ -coincidence experiments. Mult=Q indicates $\Delta J=2$ transition, most likely E2.

[‡] Placement of transition in the level scheme is uncertain.

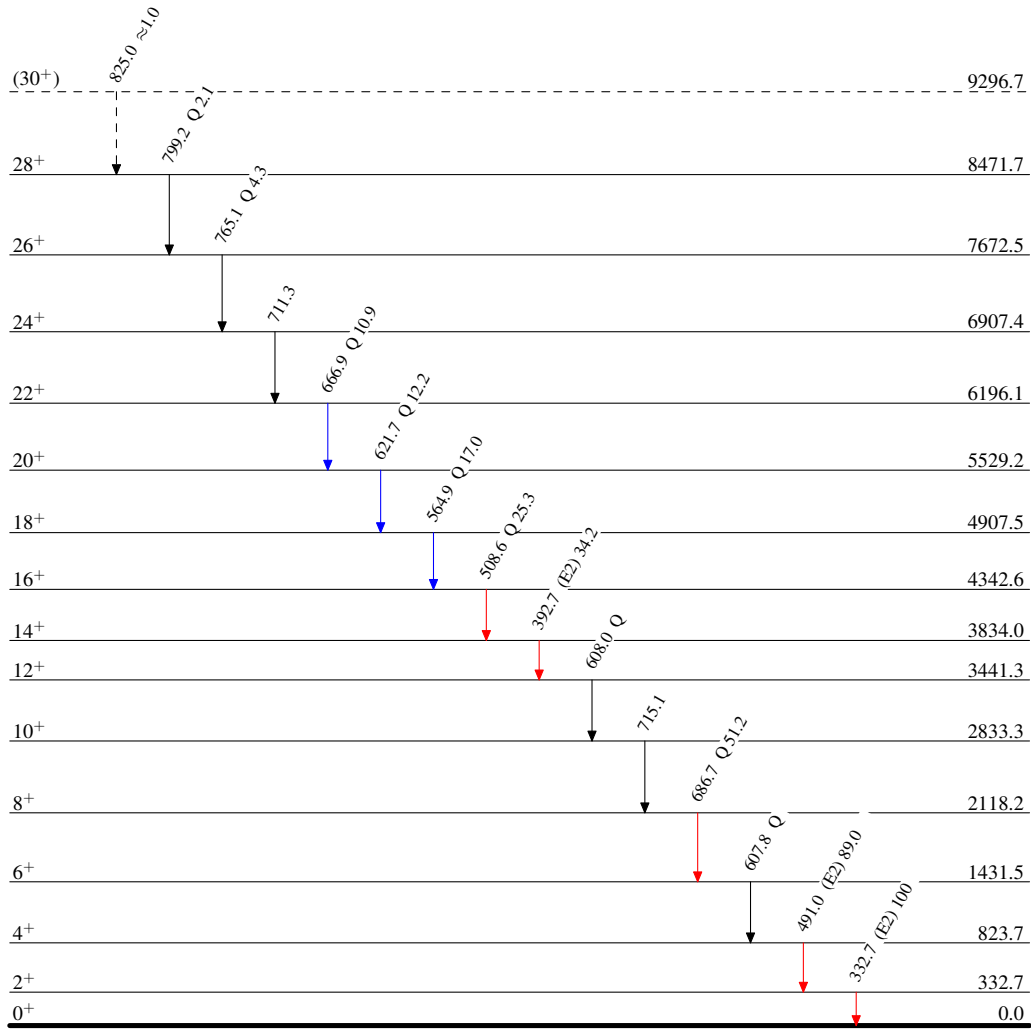
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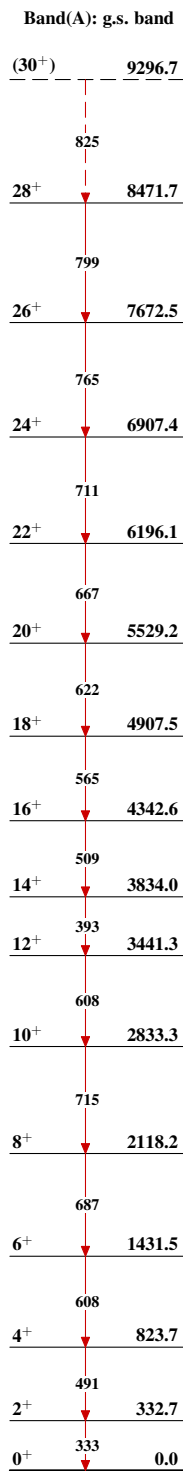
Legend

Level Scheme

Intensities: Relative I_γ

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

 $^{164}_{74}\text{W}_{90}$

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