

$^{48}\text{Ca}(^{48}\text{Ca},\text{X}\gamma)$ E=210 MeV 2001Br35

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	T. W. Burrows ^a	NDS 109, 1879 (2008)	14-Jul-2008

Deep inelastic. Measured $E\gamma$, $I\gamma$, $\gamma\gamma$ -coin; GASP array At the INFN Legnaro Laboratory. 1.2 mg/cm² ^{48}Ca target backed by a thick ^{208}Pb material.

 ^{49}Ca Levels

E(level) [†]	J^{π} [‡]
0.0	$3/2^{-}$
3357.3	$(9/2^{+})$
3866.8	$(1/2^{-}, 3/2^{-})^{\#}$
4017.7	$7/2^{+}, 9/2^{+}\#$
4761.0	$(5/2^{+})$
5136.8	
5684.2	

[†] From least-squares fit to $E\gamma$'s assuming $\Delta E\gamma=1$ keV (evaluator).

[‡] From the Adopted Levels.

[#] 2001Br35 quote $J^{\pi}(3867)=3/2^{-}$ and $J^{\pi}(4018)=(9/2^{+})$ from an earlier study and note that these earlier assignments have to be questioned, particularly the $3/2^{-}$ assignment.

 $\gamma(^{49}\text{Ca})$

Identification of the 660 and 3357 γ 's was based on observed cross-coincidences with ^{45}Ca , ^{46}Ca , and ^{47}Ca γ 's and an absence of any γ 's from ^{48}Ca .

E_{γ}	$E_i(\text{level})$	J_i^{π}	E_f	J_f^{π}
150.9	4017.7	$7/2^{+}, 9/2^{+}$	3866.8	$(1/2^{-}, 3/2^{-})$
547.4	5684.2		5136.8	
660.3	4017.7	$7/2^{+}, 9/2^{+}$	3357.3	$(9/2^{+})$
743.3	4761.0	$(5/2^{+})$	4017.7	$7/2^{+}, 9/2^{+}$
923.2	5684.2		4761.0	$(5/2^{+})$
1119.1	5136.8		4017.7	$7/2^{+}, 9/2^{+}$
1666.5	5684.2		4017.7	$7/2^{+}, 9/2^{+}$
3357.2	3357.3	$(9/2^{+})$	0.0	$3/2^{-}$
3866.6	3866.8	$(1/2^{-}, 3/2^{-})$	0.0	$3/2^{-}$
4017.5	4017.7	$7/2^{+}, 9/2^{+}$	0.0	$3/2^{-}$

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Level Scheme

