

$^{28}\text{Si}(\mu^{-},\nu p\gamma)$ 2007Me18

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	M. Shamsuzzoha Basunia		NDS 112, 1875 (2011)	30-Nov-2010

The μ^{-} beam was obtained from decay of a π^{-} beam at 90 MeV/c; Measured γ -ray yields using two HPGe detectors at TRIUMF facility.

 ^{27}Mg Levels

E(level) [†]	J^{π} [‡]
0.0	1/2 ⁺
984.92	3/2 ⁺
1698.63	5/2 ⁺
1940.35	5/2 ⁺
3109.4	(7/2 ⁺)

[†] From a least-squares fit to the γ -ray energies.

[‡] From Adopted Levels.

 $\gamma(^{27}\text{Mg})$

E_{γ} [†]	I_{γ} [‡]	$E_i(\text{level})$	J_i^{π}	E_f	J_f^{π}	Comments
955.41	0.22 4	1940.35	5/2 ⁺	984.92	3/2 ⁺	
984.90	1.4 3	984.92	3/2 ⁺	0.0	1/2 ⁺	
1169.0	0.14 7	3109.4	(7/2 ⁺)	1940.35	5/2 ⁺	I_{γ} : may be contaminated by Mn muonic-x ray.
1698.57	0.62 12	1698.63	5/2 ⁺	0.0	1/2 ⁺	
1940.28	0.23 6	1940.35	5/2 ⁺	0.0	1/2 ⁺	

[†] From Adopted Gammas. 2007Me18 quoted γ -ray energy from a previous evaluation.

[‡] % yield/muon capture.

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Level Scheme

Intensities: % γ -ray yield/muon capture

Legend

- \longrightarrow $I_\gamma < 2\% \times I_\gamma^{max}$
- \longrightarrow $I_\gamma < 10\% \times I_\gamma^{max}$
- \longrightarrow $I_\gamma > 10\% \times I_\gamma^{max}$

