^{69}Zn β^- decay (13.756 h) 1969Zo01,1970Ra08

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	C. D. Nesaraja	NDS 115, 1 (2014)	31-Jul-2013

Parent: ^{69}Zn: E=438.636 *18*; $J^\pi=9/2^+$; $T_{1/2}$=13.756 h *2*; Q(β^-)=910.2 *15*; %β^- decay=0.033 *3*

^{69}Zn-%β^- decay: from Iγ(438.6) in IT decay and Iγ(574.3) in β^- decay (1970Ra08).

1970Ra08: Measured Eγ, Iγ with GeLi detectors (FWHM=2.5 keV at 1333 keV).

1969Zo01: Measured Eγ, Iγ and $T_{1/2}$ with GeLi (FWHM=2.8 keV at 1332 keV) and NaI detectors (FWHM=7.0 keV at 1332 keV).

Other: 1969Zo05.

^{69}Ga Levels

E(level)[†]	J^π[‡]
0	$3/2^-$
573.9 *2*	$5/2^-$

[†] From measured Eγ.
[‡] From Adopted Levels.

β^- radiations

E(decay)	E(level)	Iβ^-[†]	Log *ft*	Comments
(774.9 *15*)	573.9	100	9.25^{1u} *4*	av Eβ= 290.3 *12*

[†] For absolute intensity per 100 decays, multiply by 0.00033 *3*.

$\gamma(^{69}Ga)$

Iγ normalization: zero g.s. feeding assumed on the basis of large spin change.

E_γ[†]	I_γ[#]	E_i(level)	J_i^π	E_f	J_f^π	Mult.[‡]	δ[‡]
573.9 *2*	100	573.9	$5/2^-$	0	$3/2^-$	M1+E2	−0.06 *1*

[†] From 1969Zo01.
[‡] From adopted gammas.
[#] For absolute intensity per 100 decays, multiply by 0.00033 *3*.

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Decay Scheme

Intensities: $I_{(\gamma+ce)}$ per 100 parent decays