^{25}Al β^+ decay 1982Al27

History			
Type	Author	Citation	Literature Cutoff Date
Full Evaluation	R. B. Firestone	NDS 110, 1691 (2009)	1-Feb-2008

Parent: ^{25}Al: E=0; $J^\pi=5/2^+$; $T_{1/2}=7.183$ s *12*; Q(β^+)=4276.7 *5*; %β^+ decay=100.0
Source produced by ^{24}Mg(d,p) E=2.8 MeV (1982Al27), E=7.1 MeV (1980Wi13).
Other reference: 1971Mo23.

^{25}Mg Levels

E(level)	J^π[†]	$T_{1/2}$
0.0	$5/2^+$	stable
585.042 *21*	$1/2^+$	
974.749 *24*	$3/2^+$	
1611.767 *11*	$7/2^+$	

[†] From Adopted Levels, Gammas.

ε,β^+ radiations

E(decay)	E(level)	Iβ^+[†]	Iε[†]	Log *ft*	I($\varepsilon+\beta^+$)[†]	Comments
(2664.9 *5*)	1611.767	0.783 *21*	0.00485 *13*	4.36	0.788 *21*	av Eβ= 700.06 *23*; εK=0.0056318 *21*; εL=0.00049016 *18* I($\varepsilon+\beta^+$): Weighted average of 0.84 7 (1971Ju03), 0.776 28 (1980Wi13), and 0.794 35 (1977Az01).
(3302.0 *5*)	974.749	0.047 *6*	1.08×10^{-4} *14*	6.20	0.047 *6*	av Eβ= 996.38 *24*; εK= 0.0020967 *6*; εL= 1.8245×10^{-046} Iβ^+: From 1976Ma14.
(4276.7 *5*)	0.0	99.03 *8*	0.07841 *6*	3.57	99.11 *8*	av Eβ=1460.76 *24*; εK=0.00072409 *17* Iβ^+: From 1976Ma14.

[†] Absolute intensity per 100 decays.

$\gamma(^{25}Mg)$

E_γ[†]	I_γ[‡#]	E_i(level)	J_i^π	E_f	J_f^π	Mult.	δ	Comments
389.710 *35*	0.022 *3*	974.749	$3/2^+$	585.042	$1/2^+$	M1+E2	+0.13 *3*	
585.028 *30*	0.022 *3*	585.042	$1/2^+$	0.0	$5/2^+$	E2		
974.742 *35*	0.025 *3*	974.749	$3/2^+$	0.0	$5/2^+$	M1+E2	+0.36 *2*	
1611.708 *11*	0.788 *21*	1611.767	$7/2^+$	0.0	$5/2^+$	M1+E2	−0.189 *12*	E_γ: From 1982Al27.

[†] From Adopted Gammas except as noted.
[‡] From Adopted γ-ray branchings and experimental beta feedings.
[#] Absolute intensity per 100 decays.

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Decay Scheme

Intensities: I_γ per 100 parent decays