^{53}Co ε decay (240 ms) 1989Ho13,1973Ko10

History			
Type	Author	Citation	Literature Cutoff Date
Full Evaluation	Huo Junde	NDS 110,2689 (2009)	31-Mar-2007

Parent: ^{53}Co: E=0.0; J^π=(7/2$^-$); $T_{1/2}$=240 ms *20*; Q(ε)=8300 *18*; %ε+%$β^+$ decay=100.0
1973Ko10: produced in ^{39}K(^{16}O,2n) at E=41 MeV, measured $β^+$.
1989Ho13: produced in ^{54}Fe(p,2n) at E=30 MeV, measured Eγ, Iγ, $T_{1/2}$.
See also 1985EsZZ, 1986EsZX, 1987HoZR, 1988HoZX.
All data are from 1989Ho13.

^{53}Fe Levels

E(level)	J^π†
0.0	7/2$^-$
1328.0 *10*	9/2$^-$

† From adopted values.

ε,$β^+$ radiations

E(decay)	E(level)	Iβ$^+$ †	Iε†	Log *ft*	I(ε+β$^+$)†	Comments
(6972 *18*)	1328.0	5.6 *17*	0.0106 *10*	4.44 *14*	5.6 *17*	av Eβ= 2781 *9*; εK=0.001681 *16*; εM+= 3.11×10^{-5} *3*
(8300 *18*)	0.0	94.4 *17*	0.09846 *5*	3.62 *4*	94.5 *17*	av Eβ= 3434 *9*; εK= 0.000927 *7*; εL= 9.81×10^{-5} *8*; εM+=1.714×10^{-5} *13*

† Absolute intensity per 100 decays.

γ(^{53}Fe)

Eγ	Iγ†	E_i(level)	J_i^π	E_f	J_f^π
1328	5.6 *17*	1328.0	9/2$^-$	0.0	7/2$^-$

† Absolute intensity per 100 decays.

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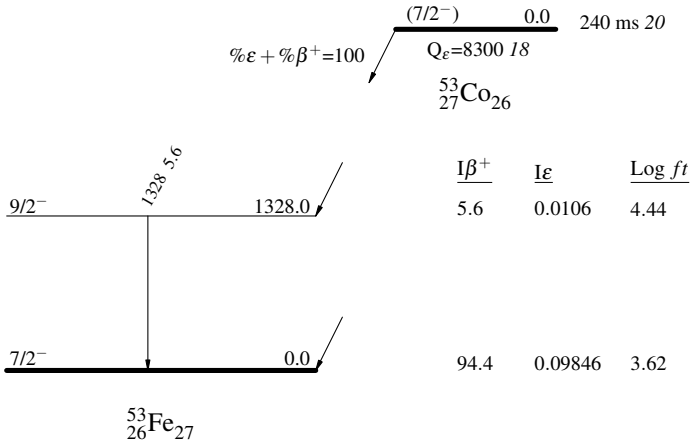
Decay Scheme

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



	Iβ+	Iε	Log *ft*
1328.0	5.6	0.0106	4.44
0.0	94.4	0.09846	3.62