^{54}Fe(d,nγ) 1976Lo09

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	Huo Junde	NDS 109, 787 (2008)	30-Apr-2007

E=5-6 MeV, pulsed beam; enriched (97%) self-supporting target; tof method, liquid scintillator (NE213), pulse-shape discrimination, nγ-coin by a 14% Ge(Li) (FWHM=5 keV at 2.5 MeV); measured transition γ rays and excitation functions.

^{55}Co Levels

E(level)	J$^\pi$	Comments
0		
2165.7 *5*		
2565.3 *5*		
2659.3 *8*		
2919.2 *13*		
2939.4 *5*		
3302.5 *6*		
3323.2 *6*		
3642.2 *9*		
3725.0 *9*		
3941.6 *7*		
4164.5 *6*		
4720.8 *6*	3/2$^-$	E(level): IAS of g.s. (3/2$^-$) in ^{55}Fe.
4747.1 *6*	3/2$^-$	E(level): IAS of g.s. (3/2$^-$) in ^{55}Fe.
5172.4 *6*	1/2$^-$	E(level): IAS of 411 (1/2$^-$) level in ^{55}Fe.

γ(^{55}Co)

E$_\gamma$	I$_\gamma$[†]	E$_i$(level)	J$_i^\pi$	E$_f$	E$_\gamma$	I$_\gamma$[†]	E$_i$(level)	J$_i^\pi$	E$_f$
374.1 *7*	43 *7*	2939.4		2565.3	1599.2 *8*	100	4164.5		2565.3
737.2 *8*	24 *6*	3302.5		2565.3	1781.4 *14*	8 *3*	4720.8	3/2$^-$	2939.4
757.9 *8*	49 *4*	3323.2		2565.3	2087.8 *10*	23 *5*	4747.1	3/2$^-$	2659.3
773.7 *7*	57 *7*	2939.4		2165.7	2155.5 *8*	73 *4*	4720.8	3/2$^-$	2565.3
805.5 *9*	15 *3*	4747.1	3/2$^-$	3941.6	2165.7 *5*	100	2165.7		0
805.8 *16*	20[‡] *5*	3725.0		2919.2	2181.8 *8*	20 *7*	4747.1	3/2$^-$	2565.3
1022.1 *11*	8 *3*	4747.1	3/2$^-$	3725.0	2565.3 *5*	100	2565.3		0
1076.9 *10*	29 *14*	3642.2		2565.3	2581.4 *8*	33 *5*	4747.1	3/2$^-$	2165.7
1157.5 *9*	51 *4*	3323.2		2165.7	2607.1 *8*	50 *6*	5172.4	1/2$^-$	2565.3
1159.7 *10*	30[‡] *5*	3725.0		2565.3	2659.3 *8*	100	2659.3		0
1230.8 *9*	12 *4*	5172.4	1/2$^-$	3941.6	2919.2 *13*	100	2919.2		0
1376.3 *9*	100	3941.6		2565.3	3006.7 *8*	38 *6*	5172.4	1/2$^-$	2165.7
1418.3 *8*	20 *3*	4720.8	3/2$^-$	3302.5	3302.5 *6*	76 *6*	3302.5		0
1476.5 *11*	71 *14*	3642.2		2165.7	3725.0 *9*	50[‡] *5*	3725.0		0

[†] Percent branching ratio.
[‡] From 1977Er02.

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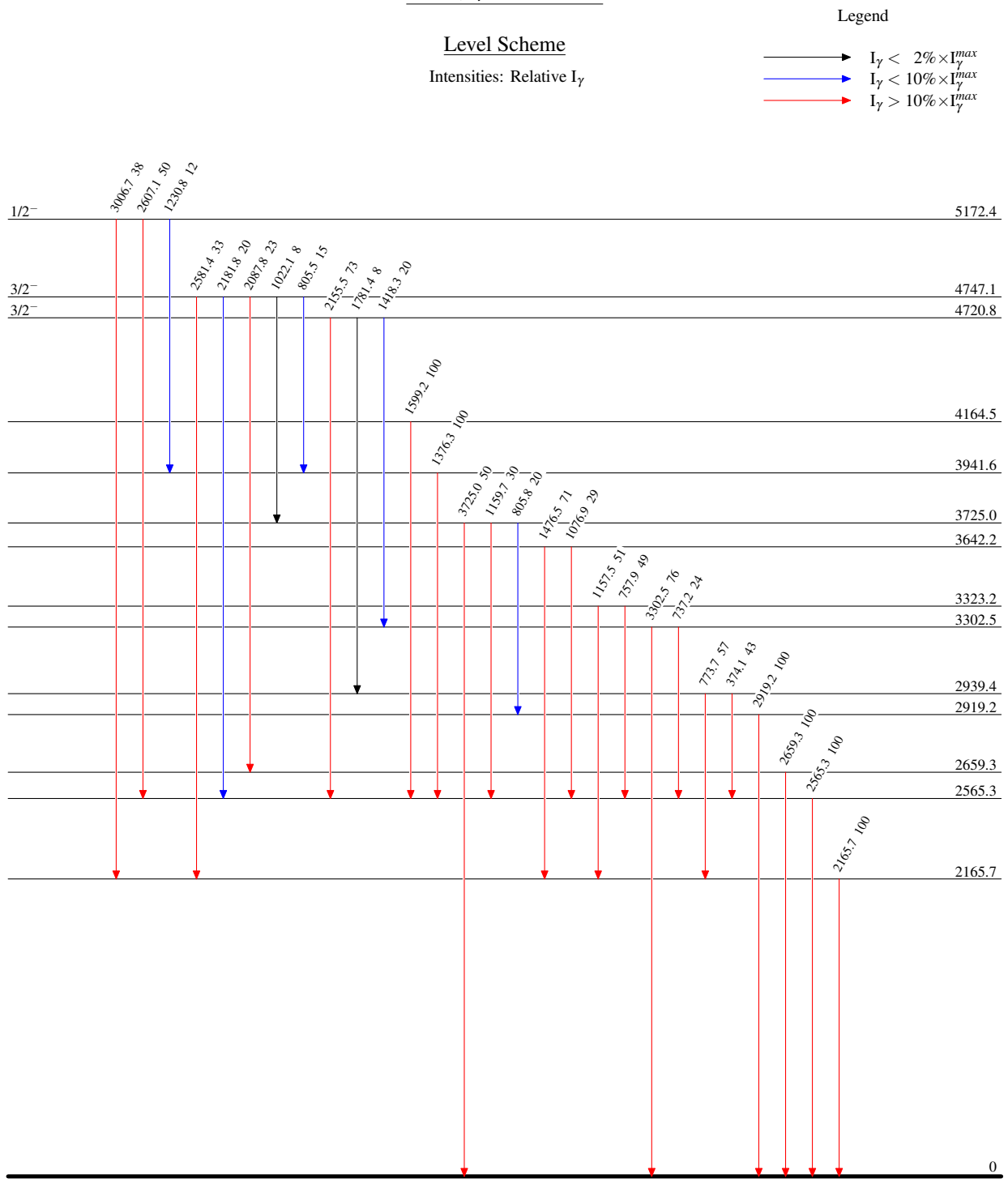
Level Scheme

Intensities: Relative I_γ



$^{55}_{27}Co_{28}$