Adopted Levels, Gammas

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	Huo Junde, Huo Su, Yang Dong	NDS 112,1513 (2011)	29-Oct-2009

Q(β^-)=−4566.6 *5*; S(n)=11197.10 *23*; S(p)=10183.67 *16*; Q(α)=−7613.3 *4* 2012Wa38
Note: Current evaluation has used the following Q record −4566.0 2011197.302510183.7417-7613.3 *4* 2003Au03.

^{56}Fe Levels

Cross Reference (XREF) Flags

A	^{56}Mn β^- decay	M	^{56}Fe(e,e′)	Y	^{58}Ni(^{14}C,^{16}O)
B	^{56}Co ε decay	N	^{56}Fe(n,n′γ)	Z	^{55}Mn(α,t),(^{3}He,d)
C	(HI,xnγ)	O	^{52}Cr(^{6}Li,d)	Others:	
D	^{56}Fe(p,p′),(pol p,p′)	P	^{54}Cr(^{3}He,n)	AA	^{60}Ni(^{3}He,^{7}Be)
E	^{56}Fe(p,p′γ)	Q	^{56}Fe(d,d′)	AB	^{59}Ni(n,α) E=thermal
F	^{54}Fe(t,p)	R	^{56}Fe(^{3}He,^{3}He′)	AC	Ni(π^+,xγ), (π^-,Xγ), (K$^-$,x rayγ)
G	^{54}Fe(α,2pγ)	S	^{56}Fe(α,$\alpha'\gamma$)	AD	^{60}Ni(p,Xγ), (e,e′$\alpha\gamma$), (γ,α)
H	^{57}Fe(d,t), (pol d,t), (^{3}He,α)	T	Coulomb excitation	AE	^{56}Fe(π,π')
I	^{55}Mn(p,p), (p,γ) E=res: IAR	U	^{54}Fe(α,2p)	AF	^{58}Ni(μ^-,νpnγ)
J	^{56}Fe(n,n′)	V	^{56}Fe(α,α')	AG	Gd(^{56}Fe,^{56}Fe′γ)
K	^{59}Co(p,α)	W	^{54}Fe(α,^{2}He)		
L	^{56}Fe(γ,γ'), (pol γ,γ')	X	^{58}Fe(p,t)		

E(level)[†]	J$^\pi$	T$_{1/2}$[k]	XREF	Comments
0.0	0$^+$	stable	ABCDEFGHIJKLMNOPQRSTUVWXYZ	XREF: Others: AA, AB, AC, AD, AE, AF, AG
846.7778[‡] *19*	2$^+$	6.07 ps *23*	ABCDEFGHIJKLMNO QRST V XYZ	XREF: Others: AA, AB, AC, AD, AE, AF, AG Q=−0.19 *8* (2005St24) μ=1.22 *16* (2005St24) g=+0.504 *63* (2009Ea01) XREF: F(850)J(850)K(840)M(850)R(850)X(850)Y (840). J$^\pi$: E2 γ to 0$^+$ g.s. T$_{1/2}$: from Coul. ex. Others: 5.5 ps *9* from RDM (HI,xnγ), 6.8 ps *14* (γ,γ') and 6.9 ps *4* (e,e′). Q: Other: −0.23 *3* (1989Ra17). μ: IMPAC measurement in Coulomb excitation. Others: +1.3 *4* in ^{56}Fe(γ,γ'), +1.1 *5* in ^{56}Co ε decay.
2085.1045[‡] *25*	4$^+$	0.64 ps *12*	ABCDEFGHIJK NO Q S V X Z	XREF: Others: AA, AB, AC, AE, AF, AG XREF: F(2090)J(2090)K(2078)X(2100)Z(2090). T$_{1/2}$: from midpoint of overlap region of 0.7 ps *+4−2* in (p,p′γ), 0.59 ps *+17−14* (n,n′γ), 0.66 ps *+24−14* (HI,xnγ); ΔT$_{1/2}$ from difference between the midpoint and maximum value of overlap region. J$^\pi$: J=4 from $\gamma(\theta)$ of 1238γ to 2$^+$ 846 in ^{54}Fe(α,2pγ) and π=+ from L(t,p)=4.
2657.5894[‡] *25*	2$^+$[e]	21 fs *1*	AB DEF HIJK MNO QR V Z	XREF: Others: AB, AE, AF XREF: M(2650)R(2650). T$_{1/2}$: others: 28 fs *7* (p,p′γ), 0.58 ps *+21−13* (e,e′).
2941.50 *3*	0$^+$	0.45 ps *+21−12*	DEF HI K N	XREF: Others: AB, AE XREF: F(2950). T$_{1/2}$: other: 0.15 ps *+8−6* (p,p′γ).

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Adopted Levels, Gammas (continued)

^{56}Fe Levels (continued)

E(level)[†]	Jπ	$T_{1/2}$[k]	XREF	Comments
				Jπ: J=0 from γγ(θ) of 2094γ (to 2+) and 846γ (to 0+) in ^{56}Fe(p,p′γ) and π=+ from L(t,p)=0.
2959.972[‡] *4*	2+[e]	28 fs *3*	AB DEF HIJK MNO Q Z	XREF: Others: AB, AE, AG XREF: O(2950)Z(2970). $T_{1/2}$: others: 27 fs *9* (p,p′γ), 12 fs *6* (e,e′).
3076.2 *4*	(3−)[e]		HI M VW	XREF: Others: AA, AC XREF: M(3100)W(3100).
3120.11 *5*	(1+)[e]	19 fs *1*	DE IJ N	XREF: Others: AE $T_{1/2}$: other: 24 fs *+11−10* (p,p′γ).
3122.970[‡] *3*	4+[e]	47 fs *12*	ABCDEFGHI K NO Q S V Z	XREF: Others: AA, AC, AE XREF: Z(3150). Jπ: other: L=(5,6) in ^{54}Fe(t,p). $T_{1/2}$: others: 0.13 ps *6* (HI,xnγ), 0.05 ps *+5−3* (p,p′γ).
3369.95[‡] *7*	2+[e]	17 fs *3*	AB DEF HIJK MN Q	XREF: Others: AC, AE, AG XREF: K(3375). $T_{1/2}$: others: 18 fs *7* (p,p′γ) and 23 fs *6* (e,e′).
3388.55 *5*	6+	2.9 ps *2*	CD GHI K N S V Z	XREF: Others: AC, AD XREF: Z(3400). $T_{1/2}$: from RDM in (HI,xnγ). Others: >1.4 ps (α,2pγ), >0.55 ps (n,n′γ). Jπ: γ(θ) of E2 1303γ to 4+ 2085 in (HI,xnγ).
3445.348[‡] *3*	3+	29 fs *5*	AB DEF HI N	$T_{1/2}$: other: <28 fs (p,p′γ). Jπ: J=3 from γ(θ) of 2598γ to 2+ 847 in ^{56}Fe(n,n′γ) and π=+ from L(d,t)=1(+3). L(t,p)=2 is not consistent with $J^{\pi}=3^{+}$.
3448.41 *6*	1+	8 fs *3*	DE HI KL N	$T_{1/2}$: other: <13 fs (p,p′γ). 1.5 fs *4* from $\Gamma^2_{\gamma 0}/\Gamma$=0.077 eV *12* (γ,γ′) with adopted branching. 3.7 fs *6* with Γ(0)/Γ=0.79 *2* from (γ,γ′). Jπ: γ to 0+ and 2+. γ(0) in (γ,γ′).
3600.21 *7*	(1,2+)[g]	<59 fs	DEF HIJ	XREF: Others: AA, AE $T_{1/2}$: from DSA (p,p′γ).
3605.69 *6*	2+[e]	0.15 ps *4*	DE I KLMN Q	XREF: Others: AE E(level): 3605 level from ^{56}Fe(p,p′γ) and 3601 level from ^{56}Fe(n,n′γ) are the same levels because of the same γ transitions and J^{π}. $T_{1/2}$: others: 0.12 ps *+7−5* (p,p′γ), 17 fs *6* from $\Gamma^2_{\gamma 0}/\Gamma$=0.011 eV *2* (γ,γ′) and 0.18 ps *8* from B(E2) in ^{56}Fe(e,e′).
3610.21 *19*	0(+)[g]	52 fs *21*	I N	
3744.13 *24*	2+[e]		D HI	
3755.57 *4*	6+	0.13 ps *2*	C G I K N S V	Jπ: γ(θ) of E2 1670γ to 4+ 2085 in (HI,xnγ). $T_{1/2}$: from DSA in ^{54}Fe(α,2pγ). Others: 0.14 ps *3* (HI,xnγ) and 0.13 ps *5* (n,n′γ).
3759.6? *10*			D I Z	XREF: Others: AC, AG XREF: Z(3780).
3829.77 *9*	2+[e]	39 fs *5*	DEF HIJK MN Q	$T_{1/2}$: others: 43 fs *14* (p,p′γ) and 37 fs *19* from B(E2) (e,e′).
3856.495[‡] *3*	3+	25 fs *3*	B DE HI N	$T_{1/2}$: other: 23 fs *13* (p,p′γ). Jπ: 3009γ to 2+ 847 and 1771γ to 4+ 2085 are M1+E2.
4048.888[‡] *6*	3+	7 fs *3*	B DEF HI K N Z	XREF: Others: AD

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Adopted Levels, Gammas (continued)

^{56}Fe Levels (continued)

E(level)[†]	Jπ	$T_{1/2}$[k]	XREF	Comments
				XREF: Z(4080). Jπ: 1963γ to 4+ 2085 and 3201γ to 2+ 847 are M1+E2.
4085.93 *17*	(1,2+)[g]		I	
4100.363[‡] *3*	4+[e]	43 fs *5*	B D F HI K N Q	$T_{1/2}$: other: 55 fs *25* in ^{56}Co ε decay.
4119.936[‡] *3*	3+	0.14 ps *4*	B D HIJK N	XREF: Others: AE Jπ: 3273γ to 2+ 847 and 2034γ to 4+ 2085 are M1+E2.
4298.096[‡] *3*	4+	110 fs *50*	B D F HI K N	$T_{1/2}$: from DSA in ^{56}Co ε decay. Jπ: γγ(θ) of 1175γ-(2276γ)–847γ in ^{56}Co ε decay.
4302.0[#] *10*	0+[i]		F N	
4320	2+		I	
4368.13? *25*	3−[e]		I V	
4394.93[‡] *5*	3+	35 fs *17*	B D HI K N	Jπ: 3547γ to 2+ 847 is M1+E2 and log *ft*=7.284 *20* from 4+.
4401.27 *5*	2+[i]	56[m] fs *+48–22*	D F IJ N Z	XREF: Others: AB, AD, AE XREF: Z(4420).
4447.7[‡] *4*			B	
4458.532[‡] *11*	4+[e]	26 fs *+12–8*	B D F HI K N	
4509.56 *8*	3−[e]	83 fs *28*	D F HIJK MNO QR V	XREF: Others: AC, AD, AE XREF: O(4530). $T_{1/2}$: Other: 37 fs *+10–7* (^{55}Mn(p,p), (p,γ) E=res: IAR).
4539.5 *6*	1+,2+	25 fs *+20–14*	D HI K NO	XREF: Others: AC, AD, AE XREF: O(4530). Jπ: L=1 in ^{57}Fe(d,t) gives J=0,1,2 and π=+; observed 4539γ (to 0+ g.s.) rules out J=0.
4554.77 *9*	4+[g]	94[m] fs *+43–24*	HI N	
4608.56 *11*	2+[g]	47[m] fs *+33–18*	I	
4610.82 *18*	4+[e]	27[m] fs *+45–15*	D F HI K N	
4620[&] *4*			D	
4658.26 *7*	2+,3+,4+[f]	49[m] fs *+8–7*	D HI K N	
4673.41 *19*			D I	
4683.04 *5*	(2+),3+[g]	66[m] fs *+63–25*	D HI K N	XREF: Others: AE
4692.32 *4*	4+[g]	33[m] fs *+10–7*	I	
4700.63 *13*	7+	0.083 ps *+82–14*	C G I S	$T_{1/2}$: from DSA in ^{54}Fe(α,2pγ). Other: 0.09 ps *3* (HI,xnγ). Jπ: γ(θ) of M1+E2 1312γ to 6+ 3388 in (HI,xnγ).
4728.14 *18*	2+[e]	63 fs *+57–20*	D I M	XREF: Others: AE Jπ: from L=2 in ^{56}Fe(e,e′). $T_{1/2}$: from (e,e′). E(level): the 4729.9 *10* level in ^{56}Fe(n,n′γ) probably corresponds to one of 4728 and 4730 levels.
4730.0[#] *10*	0+[i]		F N P	
4737.33 *4*	2+[g]	32[m] fs *+7–6*	D HI K N Z	
4784.12 *25*	(1,2+)[g]		I	
4802[&] *5*			D	

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Adopted Levels, Gammas (continued)

^{56}Fe Levels (continued)

E(level)[†]	Jπ	$T_{1/2}$[k]	XREF	Comments
4812.68 *10*	4+,5+[g]		I	
4820[b]			F H K	
4847.9 *3*	(2+)[g]	64[n] fs *27*	I L	XREF: Others: AA $T_{1/2}$: from $\Gamma^2_{\gamma 0}/\Gamma$=0.0071 eV *30* in ^{56}Fe(γ,γ′).
4866.52 *3*	(1,2+)[g]	9.7[m] fs *20*	D I	
4878.0 *6*	2+[i]		D F HI K N	XREF: Others: AE
4881.7 *6*			I	
4887.1[#] *12*			K N	
5023.49 *3*	(1,2)+[g]	6[m] fs *3*	D I N	
5026.7 *8*			D I K	
5033.02 *7*	(4,5)+[g]	10[m] fs *+3−2*	I	
5038.49 *12*	4+[e]	78[m] fs *+36−22*	D F HI M V	XREF: Others: AE XREF: F(5050).
5055.87 *8*	4+,(3+)[g]	66[m] fs *+63−25*	HI	XREF: Others: AB, AE, AF XREF: H(5062).
5122.11[#] *10*	5−[e]		D N W	XREF: Others: AE XREF: W(5080).
5131.66 *10*	3+,4+,(2+)[g]	73[m] fs *+28−17*	D I K	
5149.54[#] *11*	2+[g]		F K N	XREF: Others: AA, AE, AF XREF: K(5156).
5184.3[@] *6*	8(+)[j]		CD	
5186.82 *10*	2+		D F I NO R Z	XREF: Others: AB, AE XREF: O(5200)Z(5200). Jπ: from L=2 in ^{52}Cr(^{6}Li,d).
5194.80 *18*	(1,2+)[g]		I	
5219?[&] *10*			D	
5227.3[a] *20*	1[h]	12.3 fs *20*	D L	$T_{1/2}$: $\Gamma^2_{\gamma 0}/\Gamma$=0.037 eV *6* in ^{56}Fe(γ,γ′).
5232.57 *6*	2+,(3+)[g]	8[m] fs *+6−5*	I K MN	$T_{1/2}$: Other: 20 fs *+20−10* from (e,e′).
5235.89 *8*	4+[g]	104[m] fs *+55−28*	I	
5249[&] *5*	4+[e]		D	
5255.7[@] *4*	8+	0.35 ps *4*	C G S	Jπ: γ(θ) of E2 1868γ to 6+ in ^{54}Fe(α,2pγ) and (HI,xnγ). $T_{1/2}$: from DSA in ^{54}Fe(α,2pγ). Other: 0.31 ps *+12−6* in (HI,xnγ).
5256.9 *3*	2+[h]	20[n] fs *4*	F I KL	$T_{1/2}$: from $\Gamma^2_{\gamma 0}/\Gamma$=0.023 eV *4* in ^{56}Fe(γ,γ′).
5283.90 *20*			D I	
5296[&] *5*	0+[i]		D F K	
5302.94 *6*	4+[g]	28[m] fs *+15−9*	I	
5307.81 *22*			I K N	
5386[@] *7*	0+[i]		D	
5402.3[#] *10*	≥1	17[n] fs *4*	F L N P	$T_{1/2}$: from $\Gamma^2_{\gamma 0}/\Gamma$=0.027 eV *6* in ^{56}Fe(γ,γ′). Jπ: J>0 on the basis of an observed transition to 0+.
5451.60 *8*	4+[g]	98[m] fs *+40−28*	D I K	XREF: Others: AD, AE XREF: K(5455).
5479.15 *11*	(4+)[g]	25[m] fs *+24−9*	D F I	
5488.24 *10*	2,3,4[g]	3[m] fs *2*	D I K	

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Adopted Levels, Gammas (continued)

^{56}Fe Levels (continued)

E(level)[†]	Jπ	$T_{1/2}$[k]	XREF	Comments
5502.94 *6*	(2,3,4)+[g]	5[m] fs *2*	D I	
5511.6 *10*	2+[ei]		D F I K N	
5528[&] *5*			D	
5538.07 *18*	(1,2+)[g]		I	
5562.38 *10*			D I K	
5573.51 *11*	2+[i]		D F I K	XREF: Others: AA, AE XREF: K(5591).
5590.06 *21*	1+,2,3+[g]		I	
5618.36 *10*	4+[g]	76[m] fs *+51−24*	D F I	XREF: Others: AE
5623.86 *10*	(4,5)+[g]	19[m] fs *+14−10*	I	
5626.84 *16*	8+	0.069 ps *+21−14*	CD G I K S	XREF: Others: AA, AB, AE, AF XREF: D(5621). Jπ: γ(θ) of E2 1871γ to 6+ 3756 in ^{54}Fe(α,2pγ), γ(θ) of M1+E2 926γ to 7+ 4701 in ^{54}Fe(α,2pγ). $T_{1/2}$: from (α,2pγ).
5661.18 *17*		<14[m] fs	D I	
5670.33 *8*	(2,3,4)+[g]	16[m] fs *+8−6*	D I K	
5684[&] *5*			D	
5697.98 *13*	(2+)[g]	85[m] fs *+42−33*	D F K	
5705.43 *7*	2+[g]	3[m] fs *2*	I	
5725[&] *5*			D	
5737[&] *10*			D K	
5774.00 *13*	(4+)[e]	12[m] fs *+9−6*	D I	XREF: Others: AE, AF, AG XREF: D(5768).
5795.2[#] *10*			D K N	XREF: Others: AD, AE, AG XREF: D(5784).
5801.34 *18*			I	
5806.3 *4*			I	
5817.22 *17*			D F I	
5824.3? *8*			I K	
5853?[a] *2*		19[n] fs *5*	L	$T_{1/2}$: from $\Gamma^2_{\gamma 0}/\Gamma$=0.024 eV *6* in ^{56}Fe(γ,γ′).
5861.5 *4*	4+[e]	[m]	D F I	
5871.26 *11*	(2,3,4)[g]	12[m] fs *+27−10*	I K N	XREF: Others: AA
5874.1 *5*			I	
5882.7 *8*			I	
5913.51 *12*	2+[g]		D I	
5914.53 *14*	(2,3,4)+[g]	22[m] fs *+14−8*	I	
5921.4 *8*			I K	
5936.17 *10*	2+[i]		D F I	
5941.48 *19*			D I K	
5965.81 *20*			D F I	XREF: Others: AE, AG XREF: F(5970). Jπ: L=2,3 in ^{54}Fe(t,p).
5986.86 *15*	(1+ to 3+)		D I K N	
6002[&] *7*			D	
6013[&] *10*			D K	
6021.11 *10*			D I	
6031.68 *20*			I	
6041[&] *8*	(7−)		D K U W	Jπ: based on σ(θ) DWBA calculation and

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Adopted Levels, Gammas (continued)

^{56}Fe Levels (continued)

E(level)[†]	Jπ	$T_{1/2}$[k]	XREF	Comments
				excited two neutron configuration=((ν $f_{5/2}$)(ν $g_{9/2}$)) in ^{54}Fe(α,2p).
6047.53 *13*			I	
6055[&] *8*	2+[i]		D F	
6061.79 *6*	4+[g]		I	
6071.6 *6*	6+[e]		D I K	
6078?[a] *3*		16[n] fs *3*	L	$T_{1/2}$: from $\Gamma^2_{\gamma 0}/\Gamma$=0.028 eV *5* in ^{56}Fe(γ,γ′).
6092.2 *6*	(3−)[i]		D F K N	XREF: Others: AF XREF: F(6080).
6102.21 *15*	(0 to 3+)[g]		I	
6110.6 *4*			F I	
6115.7[@] *7*			CD	
6131.24 *10*	2+[g]	5[m] fs +*4*−*3*	D F I K	
6146.35 *13*			I	
6174[&] *7*			D	
6201[&] *10*			D K	
6219?[a] *3*		13[n] fs *3*	D KL	$T_{1/2}$: from $\Gamma^2_{\gamma 0}/\Gamma$=0.034 eV *8* in ^{56}Fe(γ,γ′).
6250.78 *24*	1[g]	8.1[n] fs *15*	D F I L	$T_{1/2}$: from $\Gamma^2_{\gamma 0}/\Gamma$=0.056 eV *13* in ^{56}Fe(γ,γ′).
6265[&] *8*	4+[e]		D F K	XREF: Others: AB, AC, AF, AG XREF: K(6273).
6289[&] *10*			D	
6312.75 *20*			D I	
6316[&] *8*			D K	
6327.6 *6*			F I	
6351[&] *8*			D	
6363[&] *7*			D F K	
6386.99 *18*			D I	
6397[&] *8*			D K	Jπ: L=(3,4) in ^{56}Fe(p,p′).
6434.8 *4*			D F I K	
6437.08 *16*			I	
6439.50 *25*			I	
6442.91 *20*			I	
6446.92 *20*	2+,3+[g]	11[m] fs +*7*−*4*	D I	
6454.4 *3*			D I K	
6472.5 *5*			I	
6489[&] *10*	(2+)[e]		D	
6512.4 *4*	0+		D I K P	Jπ: L(^{3}He,n)=0.
6527[&] *10*			D	
6543[&] *10*			D	
6555[&] *10*			D K	
6566.81 *25*	0+[i]		D F I	
6593[&] *12*			D	
6613[&] *10*			D F K	
6621.94 *23*			I	
6625.10 *18*	(0 to 3+)[eg]		D I	
6652[&] *10*			D	
6666.62 *15*	3−[i]		D F I	
6670[&] *12*			D K	

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Adopted Levels, Gammas (continued)

^{56}Fe Levels (continued)

E(level)[†]	Jπ	$T_{1/2}$[k]	XREF	Comments
6698[a] *1*	1[h]	0.65[n] fs *10*	D L	$T_{1/2}$: from $\Gamma^2_{\gamma 0}/\Gamma$=0.70 eV *11* in ^{56}Fe(γ,γ′).
6700[&] *12*	0+[i]		D F	
6715.90 *21*			D I K	
6725[&] *15*			D	
6742[&] *15*			D K	
6767.41 *21*			D I	
6781 *15*	3−[i]		D F K	
6800[&] *15*	0+[i]		D F	
6807.8 *5*			D I K	XREF: Others: AB, AC, AF XREF: K(6823).
6843[&] *15*			D	
6850.9[@] *6*	9(+)[f]		CD K	XREF: Others: AE, AF XREF: D(6856)K(6855).
6854.67 *20*			I	
6869.73 *17*	(3−)[e]		D F I K P	XREF: Others: AF, AG XREF: F(6870).
6883.13 *16*			I	
6889.98 *22*			I	
6916[&] *15*			D	
6926[a] *2*	1−[h]	1.10[l] eV *29*	D L	
6940[&] *15*			D F K	Jπ: L=(1,2) in ^{54}Fe(t,p).
6978.0 *4*			D I K	
6981.68 *20*	(0 to 3+)[g]		D F I	
6994[&] *15*			D	
7008.00 *25*			I	
7010.8 *4*	(>3−)[g]		D I K	
7029.8 *4*	(>3−)[g]		D I	
7055[&] *15*			D K	
7061.6 *4*	1+[h]	0.41[n] fs *8*	F I L	$T_{1/2}$: from $\Gamma^2_{\gamma 0}/\Gamma$=0.11 eV *2* in ^{56}Fe(γ,γ′).
7071.37 *22*			D I K	Jπ: L=(3,4) in ^{56}Fe(p,p′).
7084.6[@] *12*			C	
7090?[&] *15*			D	
7102[&] *15*			D K	
7124[&] *15*	0+[i]		D F W	
7135[a] *3*	1[h]	8.1[n] fs *15*	L	$T_{1/2}$: from $\Gamma^2_{\gamma 0}/\Gamma$=0.056 eV *10* in ^{56}Fe(γ,γ′).
7154[&] *15*			D	
7167.27 *24*	1[h]	5.1[n] fs *9*	D f I KL	$T_{1/2}$: from $\Gamma^2_{\gamma 0}/\Gamma$=0.089 eV *15* in ^{56}Fe(γ,γ′).
7177.2[@] *16*	(10+)[j]		C	
7178.1 *5*			I	
7198.5 *4*			D I K	Jπ: L=(3,4) in ^{56}Fe(p,p′).
7204[&] *15*			D	
7211.5 *20*	1[h]	0.77[l] eV *22*	D I L	
7220	0+[i]		F I K	
7248[a] *2*	1[h]	2.3[n] fs *3*	D L	$T_{1/2}$: from $\Gamma^2_{\gamma 0}/\Gamma$=0.20 eV *3* in ^{56}Fe(γ,γ′).
7254.19 *20*	0+[i]		F I	XREF: Others: AB, AG

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Adopted Levels, Gammas (continued)

^{56}Fe Levels (continued)

E(level)[†]	Jπ	$T_{1/2}$[k]	XREF	Comments
				XREF: F(7290).
7285.8? *4*		1.6[n] fs *7*	D I L	$T_{1/2}$: from $\Gamma^2_{\gamma 0}/\Gamma$=0.29 eV *12* in ^{56}Fe(γ,γ′).
7312[&] *15*			D	Jπ: L=(3,4) in ^{56}Fe(p,p′).
7398.5 *4*			F I	Jπ: L=(2,3) in ^{54}Fe(t,p).
7422.67 *22*	(1,2+)[g]		F I	
7446.5[a] *20*	1[h]	2.7[n] fs *8*	L	$T_{1/2}$: from $\Gamma^2_{\gamma 0}/\Gamma$=0.17 eV *5* in ^{56}Fe(γ,γ′).
7468.5 *20*	1[h]	2.5[n] fs *4*	I L	$T_{1/2}$: from $\Gamma^2_{\gamma 0}/\Gamma$=0.18 eV *3* in ^{56}Fe(γ,γ′).
7475[&] *15*	(3−)[e]		D F	
7503.6[@] *6*	9(+)[j]		C	
7541.29 *23*			I	
7580[b]			F	Jπ: L=2,3 in ^{54}Fe(t,p).
7630[b]	3−[i]		F	
7670[b]			F	
7720[b]			F	
7768.61 *19*			F I	Jπ: L=2,3 in ^{54}Fe(t,p).
7820.6[@] *6*	10(+)[f]		C F	XREF: Others: AD, AG XREF: F(7840).
7875.8 *3*	2+[i]		F I	
7886.54 *23*	(1,2+)[g]	1.6[n] fs *3*	I L	$T_{1/2}$: from $\Gamma^2_{\gamma 0}/\Gamma$=0.28 eV *5* in ^{56}Fe(γ,γ′).
8050[b]			F	
8110[d] *30*	0+[i]		P	
8120[b]	2+[i]		F	
8128[a] *2*	1[h]	3.55[l] eV *74*	J L	
8138.22 *26*			I	
8219[a] *4*		1.8[n] fs *3*	L	$T_{1/2}$: from $\Gamma^2_{\gamma 0}/\Gamma$=0.26 eV *5* in ^{56}Fe(γ,γ′).
8239.7 *20*	1[h]	5.75[l] eV *92*	F IJ L	
8247.76 *29*	(0 to 3+)[g]		I	
8309.59 *24*	(1,2+)[g]	1.9[n] fs *6*	I L	$T_{1/2}$: from $\Gamma^2_{\gamma 0}/\Gamma$=0.24 eV *8* in ^{56}Fe(γ,γ′).
8329.65 *18*			I	
8414.8[@] *7*	(10+)[j]		C	
8447.87 *23*	(0 to 3+)[g]		I	
8535.95 *22*	1[h]	4.92[l] eV *95*	IJ L	
8679.9[@] *7*	11(+)[j]		C	
8758.47 *19*	(0 to 3+)[g]		I	
8767[a] *3*		1.1[n] fs *2*	J L	XREF: J(8800). $T_{1/2}$: from $\Gamma^2_{\gamma 0}/\Gamma$=0.41 eV *8* in ^{56}Fe(γ,γ′).
8879[a] *4*		1.5[n] fs *4*	J L	XREF: J(8800). $T_{1/2}$: from $\Gamma^2_{\gamma 0}/\Gamma$=0.30 eV *8* in ^{56}Fe(γ,γ′).
8909.9 *3*	(1,2+)[g]	0.97[n] fs *21*	I L	$T_{1/2}$: from $\Gamma^2_{\gamma 0}/\Gamma$=0.47 eV *10* in ^{56}Fe(γ,γ′).
8962[a] *4*		1.2[n] fs *2*	L	$T_{1/2}$: from $\Gamma^2_{\gamma 0}/\Gamma$=0.38 eV *7* in ^{56}Fe(γ,γ′).
8989[a] *4*		1.5[n] fs *3*	L	$T_{1/2}$: from $\Gamma^2_{\gamma 0}/\Gamma$=0.31 eV *7* in ^{56}Fe(γ,γ′).
9107[a] *4*		0.53[n] fs *11*	L	Jπ: from $\Gamma^2_{\gamma 0}/\Gamma$=0.86 eV *18* in ^{56}Fe(γ,γ′).
9140.3[a] *6*	1−[h]	1.28[l] eV *17*	L	
9154[a] *4*		0.47[n] fs *15*	L	$T_{1/2}$: from $\Gamma^2_{\gamma 0}/\Gamma$=0.98 eV *31* in ^{56}Fe(γ,γ′).
9200[d] *30*	0+[i]		P	

Continued on next page (footnotes at end of table)

Adopted Levels, Gammas (continued)

^{56}Fe Levels (continued)

E(level)[†]	Jπ	$T_{1/2}$[k]	XREF	Comments
9280 *50*	(8+)		U W	E(level): From ^{54}Fe(α,2p). Jπ: based on σ(θ) DWBA calculation and excited two neutron configuration=((ν g9/2)(ν g9/2)) in ^{54}Fe(α,2p).
9287[a] *3*		0.61[n] fs *14*	L	T1/2: from $\Gamma^2_{\gamma 0}/\Gamma$=0.75 eV *17* in ^{56}Fe(γ,γ′).
9311[a] *4*		0.71[n] fs *14*	L	T1/2: from $\Gamma^2_{\gamma 0}/\Gamma$=0.64 eV *13* in ^{56}Fe(γ,γ′).
9322[a] *4*		0.70[n] fs *15*	L	T1/2: from $\Gamma^2_{\gamma 0}/\Gamma$=0.65 eV *14* in ^{56}Fe(γ,γ′).
9344.7[@] *7*	(11+)[j]		C	
9378.2[@] *7*	(11+)[j]		C	
9402[a] *3*		0.70[n] fs *16*	L	T1/2: from $\Gamma^2_{\gamma 0}/\Gamma$=0.65 eV *15* in ^{56}Fe(γ,γ′).
9557.62 *21*	(1,2+)[g]	1.2[n] fs *4*	I L	T1/2: from $\Gamma^2_{\gamma 0}/\Gamma$=0.39 eV *14* in ^{56}Fe(γ,γ′).
9666?[a] *5*			L	
9737[a] *5*		0.48[n] fs *13*	L	T1/2: from $\Gamma^2_{\gamma 0}/\Gamma$=0.95 eV *25* in ^{56}Fe(γ,γ′).
9768?[a] *4*		1.0[n] fs *3*	J L	XREF: J(9800). T1/2: from $\Gamma^2_{\gamma 0}/\Gamma$=0.48 eV *13* in ^{56}Fe(γ,γ′).
9895?[a] *5*		1.1[n] fs *3*	J L	XREF: J(9800). T1/2: from $\Gamma^2_{\gamma 0}/\Gamma$=0.41 eV *12* in ^{56}Fe(γ,γ′).
9900 *50*	(6+)		U W	E(level): From ^{54}Fe(α,2p). Jπ: based on σ(θ) DWBA calculation and excited two neutron configuration=((ν g9/2)(ν 2d5/2))6+ in ^{54}Fe(α,2p).
9948[a] *5*		0.61[n] fs *14*	L	T1/2: from $\Gamma^2_{\gamma 0}/\Gamma$=0.75 eV *20* in ^{56}Fe(γ,γ′).
9969?[a] *5*		1.5[n] fs *5*	L	T1/2: from $\Gamma^2_{\gamma 0}/\Gamma$=0.31 eV *10* in ^{56}Fe(γ,γ′).
10060[a] *5*		0.81[n] fs *23*	J L	XREF: Others: AA, AB XREF: J(10200). T1/2: from $\Gamma^2_{\gamma 0}/\Gamma$=0.56 eV *16* in ^{56}Fe(γ,γ′).
10094.4[@] *7*	(12+)[j]		C	
10497[a] *3*	1[h]	3.44[l] eV *64*	J L	XREF: Others: AA, AB XREF: J(10200).
10563.1[@] *8*	(12+)[j]		C	
10898.9[@] *10*	(13+)[j]		C	
11133[a] *3*	1[h]	2.08[l] eV *52*	L	
11503.7 *3*	3+		I	E(level): IAR of 3+ g.s. in ^{56}Mn.
11593.53 *23*	1+		I	E(level): IAR of 1+ 110 in ^{56}Mn.
11598.65 *18*	1+		I	IAR of 1+ 110 in ^{56}Mn.
11603.64 *19*	1+		I	IAR of 1+ 110 in ^{56}Mn.
11609.56 *20*			I	
11612.93 *18*	1+		I	IAR of 1+ 110 in ^{56}Mn.
11617.71 *20*			I	
11638.0 *3*	3(−)[g]		I	
11640.7 *3*	3(−)[g]		I	
11644.0 *3*	3(−)[g]		I	
11664.0 *3*	3(−)[g]		I	
11678.0 *4*	4+[g]		I	E(level): IAR of 4+ 212 in ^{56}Mn.
11680.6 *3*	4+[g]			E(level): IAR of 4+ 212 in ^{56}Mn.
11688.2 *3*	4+[g]		I	E(level): IAR of 4+ 212 in ^{56}Mn.
11692.1 *3*	2+[g]	≈9[m] keV	I	Γp=2.0 keV *2* E(level): IAR of 2+ 215 in ^{56}Mn.
11832.8 *3*	3+[g]	≈17[m] keV	I	Γp=1.0 keV *2* E(level): IAR of 3+ 341 in ^{56}Mn.

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Adopted Levels, Gammas (continued)

^{56}Fe Levels (continued)

E(level)[†]	J$^\pi$	T$_{1/2}$[k]	XREF	Comments
11840.8 *3*	3$^+$[g]		I	E(level): IAR of 3$^+$ 341 in ^{56}Mn.
11850.0 *5*	3$^+$[g]		I	E(level): IAR of 3$^+$ 341 in ^{56}Mn.
11879.6 *3*	(5$^+$)[g]		I	
11886.8 *4*	(5$^+$)[g]		I	
11913.3 *6*	(4$^+$)[g]		I	
11925.2 *3*	3$^+$[g]	≈11[m] keV	I	Γ_p=1.0 keV *1* E(level): IAR of 3$^+$ 454 in ^{56}Mn.
11947.7 *3*	(4$^-$)[g]		I	
11952.6 *3*	4$^+$[g]		I	
11958.1 *3*	3$^+$[g]	≈11[m] keV	I	Γ_p=1.0 keV *1* E(level): IAR of 3$^+$ 486 in ^{56}Mn.
11964?[@] *3*	(13$^+$)[j]		C	
12440[c] *30*			J	
12520[c] *30*			J	

[†] From ^{55}Mn(p,p), (p,γ) E=res: IAR, except as noted. For resonance states E(level) are calculated by using E(level)=S(p)+0.9824×E(p), where E(p) is incident proton energy in lab system and S(p)=10183.74 *17* (2003Au03); States of E(level)>13000 are unplaced in Adopted Levels, see ^{56}Fe(e,e′), (^{3}He,^{3}He′), (α,α′), and ^{60}Ni(p,Xγ),(e,e′$\alpha\gamma$),(γ,α).

[‡] From ^{56}Co ε decay.

[#] From ^{56}Fe(n,n′γ).

[@] From (HI,xnγ).

[&] From ^{56}Fe(p,p′), (pol p,p′).

[a] From ^{56}Fe(γ,γ′), (pol γ,γ′).

[b] From ^{54}Fe(t,p).

[c] From ^{56}Fe(n,n′).

[d] From ^{54}Cr(^{3}He,n).

[e] From angular momentum transfer in ^{56}Fe(d,d′), or ^{56}Fe(p,p′), or ^{56}Fe(α,α′), or ^{56}Fe(e,e′).

[f] From angular momentum transfer in ^{57}Fe(d,t).

[g] From ^{55}Mn(p,p′), (p,γ) E=res: IAR based on reasonable assumption of the multipolarity of observed γ-transitions and application of corresponding selection rules, or analyses of IAR state in ^{56}Mn.

[h] Based on γ resonance ex. measurements in ^{56}Fe(γ,γ′), (pol γ,γ′).

[i] From angular momentum transfer in ^{54}Fe(t,p), or ^{54}Fe(^{3}He,n).

[j] From $\gamma\gamma$-coin and $\gamma(\theta)$ in (HI,xnγ).

[k] From DSA measurement in ^{56}Fe(n,n′γ), except as noted.

[l] From ^{56}Fe(γ,γ′), (pol γ,γ′) assuming 100% transition to g.s.

[m] From ^{55}Mn(p,p), (p,γ) E=res: IAR.

[n] Upper limit based upon the assumption that $\Gamma_{\gamma 0}/\Gamma$=1.

Adopted Levels, Gammas (continued)

γ(^{56}Fe)

E_i(level)	J_i^π	E_γ[†]	I_γ[d]	E_f	J_f^π	Mult.	δ	Comments
846.7778	2^+	846.7638[#] *19*	100[#]	0.0	0^+	E2[‡]		B(E2)(W.u.)=16.8 *7*
2085.1045	4^+	1238.2736[#] *22*	100[#] *2*	846.7778	2^+	E2[‡]		B(E2)(W.u.)=24 *5*
2657.5894	2^+	1810.757[‡] *4*	100.0[#] *3*	846.7778	2^+	M1+E2	−0.18[#] *1*	B(M1)(W.u.)=0.166 *8*; B(E2)(W.u.)=3.3 *4* δ: others: −0.19 *2* (p,p′γ), −0.17 *3* in ^{56}Co ε decay.
		2657.527[‡] *4*	3.1[#] *3*	0.0	0^+			I_γ: %Branching=5.4 *21* from B(E2)=0.0037 *10* (e,e′) and adopted $T_{1/2}$; %Branching=5 *3* in ^{56}Fe(p,p′γ).
2941.50	0^+	2094.9 *3*	100	846.7778	2^+	[E2]		B(E2)(W.u.)=2.4 *+7−12*
		(2941)		0.0	0^+			E_γ: 2939 reported in (p,p′γ).
2959.972	2^+	2113.135[‡] *5*	100[#] *2*	846.7778	2^+	M1+E2	+0.27 *3*	B(M1)(W.u.)=0.076 *9*; B(E2)(W.u.)=2.5 *6* δ: from ^{56}Co ε decay and ^{56}Mn β^- decay. Other: −0.20 *4* (p,p′γ).
		2959.92[#] *1*	2.16[#] *8*	0.0	0^+			
3076.2	(3^-)	991.51[c] *3*	47[c] *13*	2085.1045	4^+			
		2229[c]	100[c] *13*	846.7778	2^+			
3120.11	(1^+)	462[c]	<1.05[c]	2657.5894	2^+			
		2273.2[c]	100.0[c] *7*	846.7778	2^+			
		3120[c]	4.82[c] *7*	0.0	0^+			
3122.970	4^+	1037.8333[#] *24*	100.0[‡] *4*	2085.1045	4^+	M1(+E2)[‡]	0.00[‡] *5*	B(M1)(W.u.)=(0.42 *11*)
		2276.131[‡] *4*	0.85[‡] *5*	846.7778	2^+	E2[‡]		B(E2)(W.u.)=0.13 *4*
3369.95	2^+	2523.06[#] *5*	100.0[#] *9*	846.7778	2^+	M1+E2	+0.25[#] *15*	B(M1)(W.u.)=0.065 *13*; B(E2)(W.u.)=1.3 *+15−13*
		3369.84[#] *4*	17[#] *1*	0.0	0^+			
3388.55	6^+	265.5[a] *2*	1.3[a] *3*	3122.970	4^+			
		1303.4[a] *1*	100[a] *4*	2085.1045	4^+	E2[a]		B(E2)(W.u.)=4.0 *4*
3445.348	3^+	787.743[‡] *5*	1.83[‡] *2*	2657.5894	2^+	M1+E2[‡]	+0.85[‡] *35*	B(M1)(W.u.)=0.013 *5*; B(E2)(W.u.)=30 *16*
		1360.212[‡] *4*	25.63[‡] *8*	2085.1045	4^+	M1+E2[‡]	−0.11[‡] *1*	B(M1)(W.u.)=0.060 *11*; B(E2)(W.u.)=0.79 *20*
		2598.500[‡] *4*	100.0[‡] *4*	846.7778	2^+	M1+E2[‡]	−0.28[‡] *2*	B(M1)(W.u.)=0.031 *6*; B(E2)(W.u.)=0.74 *16* δ: other: −0.27 *+9−12* in ^{56}Mn β^- decay.
3448.41	1^+	790[c]	<0.7[c]	2657.5894	2^+			
		2601[c]	33[c] *3*	846.7778	2^+			
		3448[c]	100[c] *3*	0.0	0^+			
3600.21	$(1,2^+)$	942[c]	<2.4[c]	2657.5894	2^+			
		1515[c]	<2.4[c]	2085.1045	4^+			
		2753[c]	20[c] *4*	846.7778	2^+			
		3600[c]	100[c] *4*	0.0	0^+			
3605.69	2^+	948[c]	14.2[c] *20*	2657.5894	2^+			
		1521[c]	<1.4[c]	2085.1045	4^+			
		2759[c]	100[c] *5*	846.7778	2^+			

$^{56}_{26}Fe_{30}$-11

Adopted Levels, Gammas (continued)

γ(^{56}Fe) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[d]	E_f	J_f^π	Mult.	δ	α[f]	Comments
3605.69	2+	3606[c]	56[c] 5	0.0	0+				
3610.21	0(+)	952[c]	<1.5[c]	2657.5894	2+				
		1525[c]	<0.7[c]	2085.1045	4+				
		2763[c]	100.0[c]	846.7778	2+				
		3610[c]	<7.0[c]	0.0	0+				
3744.13	2+	2897[c]	100[c]	846.7778	2+				
3755.57	6+	367.0[a] 1	22[a] 1	3388.55	6+	M1+E2[a]	+0.07[a] 12	0.00141 8	α(K)=0.00125 7; α(L)=0.00012 B(M1)(W.u.)=0.61 10; B(E2)(W.u.)=4.E+1 +16−4
		632.6[ah]	≤2[a]	3122.970	4+				
		1670.8[a] 4	100[a] 4	2085.1045	4+	E2			B(E2)(W.u.)=21 4
3829.77	2+	1172[c]	58[c] 10	2657.5894	2+				
		2983[c]	100[c] 10	846.7778	2+				
		3830[c]	35[c] 4	0.0	0+				
3856.495	3+	411.145[‡] 4	0.17[‡] 1	3445.348	3+				
		486.55[‡] 11	0.38[‡] 2	3369.95	2+				
		733.514[‡] 4	1.24[‡] 3	3122.970	4+	M1[‡]			B(M1)(W.u.)=0.025 4
		896.510[‡] 6	0.46[‡] 1	2959.972	2+				
		1198.888[‡] 5	0.28[‡] 2	2657.5894	2+				
		1771.357[‡] 4	100.0[‡] 3	2085.1045	4+	M1(+E2)[‡]	−0.004[‡] +5−2		B(M1)(W.u.)=(0.145 18); B(E2)(W.u.)=(0.0015 +38−15)
		3009.645[‡] 4	6.42[‡] 14	846.7778	2+	M1+E2[‡]	+0.065[‡] 5		B(M1)(W.u.)=0.00190 24; B(E2)(W.u.)=0.0018 4
4048.888	3+	1088.894[‡] 9	1.7[‡] 1	2959.972	2+	M1+E2[‡]	+0.43[‡] 12		B(M1)(W.u.)=0.028 13; B(E2)(W.u.)=9 6
		1963.741[‡] 8	22.0[‡] 1	2085.1045	4+	M1+E2[‡]	+0.22[‡] 3		B(M1)(W.u.)=0.07 3; B(E2)(W.u.)=1.8 9
		3202.029[‡] 8	100.0[‡] 4	846.7778	2+	M1+E2[‡]	+0.50[‡] 1		B(M1)(W.u.)=0.06 3; B(E2)(W.u.)=3.1 14
4085.93	(1,2+)	3239[c]	100[c] 8	846.7778	2+				
		4086[c]	33[c] 8	0.0	0+				
4100.363	4+	655.003[‡] 5	0.45[‡] 10	3445.348	3+				
		977.372[‡] 5	18.05[‡] 9	3122.970	4+	M1(+E2)[‡]	+0.07[‡] +3−2		B(M1)(W.u.)=(0.061 8); B(E2)(W.u.)=(0.6 6)
		1140.368[‡] 6	1.68[‡] 5	2959.972	2+				
		1442.746[‡] 6	2.29[‡] 5	2657.5894	2+				
		2015.215[‡] 5	38.3[‡] 5	2085.1045	4+	M1+E2[‡]	+0.68[‡] 5		B(M1)(W.u.)=0.0102 13; B(E2)(W.u.)=2.3 4
		3253.503[‡] 4	100.0[‡] 4	846.7778	2+	E2[‡]			B(E2)(W.u.)=1.76 21
4119.936	3+	263.434[‡] 5	0.30[‡] 3	3856.495	3+				
		674.579[‡] 5	0.45[‡] 6	3445.348	3+				
		996.948[‡] 5	1.50[‡] 8	3122.970	4+	M1+E2[‡]			B(E2)(W.u.)=3.8 11

$^{56}_{26}Fe_{30}$-12

Adopted Levels, Gammas (continued)

γ(^{56}Fe) (continued)

E_i(level)	J_i^π	E_γ [†]	I_γ [d]	E_f	J_f^π	Mult.	δ	Comments
4119.936	3+	1159.944‡ *6*	1.14‡ *4*	2959.972	2+	M1+E2‡	+0.064‡ *+16−36*	B(M1)(W.u.)=0.0010 *3*; B(E2)(W.u.)=0.006 *4*
		1462.322‡ *6*	1.00‡ *1*	2657.5894	2+			
		2034.791‡ *5*	100.0‡ *4*	2085.1045	4+	M1+E2‡	−0.073‡ *5*	B(M1)(W.u.)=0.015 *5*; B(E2)(W.u.)=0.038 *12*
		3273.079‡ *4*	23.97‡ *12*	846.7778	2+	M1+E2‡	+0.420‡ *4*	B(M1)(W.u.)=0.00068 *20*; B(E2)(W.u.)=0.023 *7*
4298.096	4+	852.732‡ *4*	2.18‡ *13*	3445.348	3+			
		1175.101‡ *4*	100.0‡ *4*	3122.970	4+	M1+E2‡	+0.14‡ *4*	B(M1)(W.u.)=0.07 *4*; B(E2)(W.u.)=2.1 *16*
		1640.475‡ *5*	2.76‡ *9*	2657.5894	2+			
		2212.948‡ *4*	17.1‡ *2*	2085.1045	4+	M1+E2‡	−3.0‡ *10*	B(M1)(W.u.)=0.00019 *15*; B(E2)(W.u.)=0.7 *4*
		3451.232‡ *4*	41.9‡ *3*	846.7778	2+	E2‡		B(E2)(W.u.)=0.21 *10*
4302.0	0+	3455.0	100	846.7778	2+			
4394.93	3+	1271.92‡ *6*	10.3‡ *4*	3122.970	4+			
		3548.05‡ *6*	100.0‡ *8*	846.7778	2+	M1+E2‡	−0.30‡ *2*	B(M1)(W.u.)=0.012 *6*; B(E2)(W.u.)=0.17 *9*
4401.27	2+	955.8	46[c] *3*	3445.348	3+			
		1031[c]	<2.0[c]	3369.95	2+			
		1441[c]	11.7[c] *23*	2959.972	2+			
		1459.3	7.7	2941.50	0+			
		2316[c]	<6.3[c]	2085.1045	4+			
		3554.2	100[c] *3*	846.7778	2+			
4447.7		3600.8‡ *4*	100‡	846.7778	2+			
4458.532	4+	1335.40‡ *3*	100.0‡ *13*	3122.970	4+			
		2373.24‡ *3*	64‡ *5*	2085.1045	4+			
		3611.53‡ *3*	6.8‡ *3*	846.7778	2+			
4509.56	3−	754.35[c] *18*	<21[c]	3755.57	6+			
		1064.6	6 *4*	3445.348	3+			
		1139.66[c] *10*	39[c] *17*	3369.95	2+			
		1386.3[c] *3*	28[c] *15*	3122.970	4+			
		1852.09[c] *4*	100[c]	2657.5894	2+			
		2424.93[c] *15*	20[c] *8*	2085.1045	4+			
		3662.67[c] *10*	98[c] *18*	846.7778	2+			
4539.5	1+,2+	1579.5	100 *14*	2959.972	2+			
		1881.9	52.6 *88*	2657.5894	2+			
		4539.5	22.8 *53*	0.0	0+			
4554.77	4+	799.02[c] *5*	14[c] *5*	3755.57	6+			
		810.60[c] *8*	10[c] *6*	3744.13	2+			
		1108.6	10 *6*	3445.348	3+			
		1165.74[c] *11*	16[c] *4*	3388.55	6+			
		1431.58[c] *5*	34[c] *8*	3122.970	4+			

$^{56}_{26}Fe_{30}$-13

Adopted Levels, Gammas (continued)

γ(^{56}Fe) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[d]	E_f	J_f^π	Mult.	δ	Comments
4554.77	4+	1897.8[c] *3*	11[c] *4*	2657.5894	2+			
		2469.71[c] *3*	100[c]	2085.1045	4+			
		3708.6[c] *5*	7[c] *3*	846.7778	2+			
4608.56	2+	1485.60[c] *5*	19[c] *8*	3122.970	4+			
		1667.07[c] *15*	10[c] *5*	2941.50	0+			
		1949.9[c] *5*	9[c] *4*	2657.5894	2+			
		2523.09[c] *12*	100[c]	2085.1045	4+			
		3761.5[c] *4*	47[c] *7*	846.7778	2+			
4610.82	4+	756.2[c] *4*	<7[c]	3856.495	3+			
		781.20[c] *11*	35[c] *8*	3829.77	2+			
		1651.0[c] *4*	15[c] *8*	2959.972	2+			
		1954.11[c] *16*	33[c] *8*	2657.5894	2+			
		2525.75[c] *23*	77[c] *28*	2085.1045	4+			
		3763.4[c] *4*	100[c]	846.7778	2+			
4658.26	2+,3+,4+	1213[c]	<3.3[c]	3445.348	3+			
		1288[c]	<3.3[c]	3369.95	2+			
		1698[c]	<5[c]	2959.972	2+			
		2000[c]	<3.3[c]	2657.5894	2+			
		2573[c]	100[c] *5*	2085.1045	4+			
		3811[c]	67[c] *5*	846.7778	2+			
		4658[c]	<3.3[c]	0.0	0+			
4683.04	(2+),3+	1312.58[c] *4*	<48[c]	3369.95	2+			
		1559.53[c] *11*	24[c] *10*	3122.970	4+			
		1724.7		2959.972	2+			
		2525.75[c] *23*	77[c] *28*					
		3836.21[c] *11*	100[c]	846.7778	2+			
4692.32	4+	936.58[c] *4*	25[c] *4*	3755.57	6+			
		948.6[c] *4*	3[c] *1*	3744.13	2+			
		1569.42[c] *8*	16[c] *5*	3122.970	4+			
		2034.76[c] *2*	51[c] *13*	2657.5894	2+			
		2607.22[c] *3*	100[c]	2085.1045	4+			
		3844.0[c] *4*	17[c] *3*	846.7778	2+			
4700.63	7+	944.7[&] *2*	19[&] *2*	3755.57	6+			
		1312.2[&] *1*	100[&] *5*	3388.55	6+	M1+E2[@]	−0.08 *8*	B(M1)(W.u.)=0.0981 *13*; B(E2)(W.u.)=0.7 *+15−7* δ: From (HI,xnγ).
4728.14	2+	3881[c]	100[c] *3*	846.7778	2+			
		4728[c]	11[c] *3*	0.0	0+			
4730.0	0+	3883.1	100	846.7778	2+			

$^{56}_{26}Fe_{30}$-14

Adopted Levels, Gammas (continued)

γ(^{56}Fe) (continued)

E_i(level)	J_i^π	E_γ †	I_γ [d]	E_f	J_f^π
4737.33	2+	617.36 [c] *8*	18 [c] *7*	4119.936	3+
		1616.6	25	3120.11	(1+)
		2079.80 [c] *3*	100 [c]	2657.5894	2+
		3889.6 [c] *3*	27 [c] *6*	846.7778	2+
		4736.3 [c] *6*	40 [c] *15*	0.0	0+
4784.12	(1,2+)	1664 [c]	22 [c] *6*	3120.11	(1+)
		3937 [c]	100 [c] *9*	846.7778	2+
		4784 [c]	96 [c] *9*	0.0	0+
4812.68	4+,5+	692.65 [c] *14*		4119.936	3+
		1057.8 [c] *3*		3755.57	6+
		1368.3 [c] *3*		3445.348	3+
4847.9	(2+)	2190.0 [c] *4*		2657.5894	2+
		2763.24 [c] *19*		2085.1045	4+
		4847 [b] *3*		0.0	0+
4866.52	(1,2+)	1267 [c]	1.0 [c] *4*	3600.21	(1,2+)
		1419 [c]	16.0 [c] *6*	3448.41	1+
		1422 [c]	1.8 [c] *6*	3445.348	3+
		1497 [c]	7.8 [c] *4*	3369.95	2+
		1747 [c]	2.2 [c] *6*	3120.11	(1+)
		1907 [c]	54.9 [c] *16*	2959.972	2+
		2209 [c]	6 [c] *1*	2657.5894	2+
		2782 [c]	<0.78 [c]	2085.1045	4+
		4020 [c]	100.0 [c] *23*	846.7778	2+
		4867 [c]	5 [c] *1*	0.0	0+
4878.0	2+	1918.0	58	2959.972	2+
		2793 [c]	81 [c] *12*	2085.1045	4+
		4031 [c]	100 [c] *16*	846.7778	2+
		4878 [c]	57 [c] *16*	0.0	0+
4887.1		1055.0	100	3829.77	2+
5023.49	(1,2)+	903 [c]	7.9 [c] *24*	4119.936	3+
		1191.7		3829.77	2+
		1575 [c]	63.5 [c] *24*	3448.41	1+
		1653 [c]	66 [c] *3*	3369.95	2+
		1903 [c]	<2.65 [c]	3120.11	(1+)
		2063 [c]	100 [c] *4*	2959.972	2+
		2365 [c]	<2.12 [c]	2657.5894	2+
		4176 [c]	7.1 [c] *13*	846.7778	2+
		5023 [c]	19.6 [c] *21*	0.0	0+
5033.02	(4,5)+	1277.00 [c] *10*	32 [c] *8*	3755.57	6+
		1643.9 [c] *5*	<17 [c]	3388.55	6+
		2947.86 [c] *11*	100 [c]	2085.1045	4+
		4188.2 [c] *5*	42 [c] *28*	846.7778	2+
5038.49	4+	1915.10 [c] *18*		3122.970	4+
5055.87	4+,(3+)	757.75 [c] *6*	100 [c]	4298.096	4+
		2971.04 [c] *16*	68 [c] *22*	2085.1045	4+
5122.11	5−	3036.9	100	2085.1045	4+
5131.66	3+,4+,(2+)	673.02 [c] *8*	30 [c] *8*	4458.532	4+
		1082.83 [c] *12*	23 [c] *6*	4048.888	3+
		1686.41 [c] *5*	100 [c]	3445.348	3+
		2008.80 [c] *11*	60 [c] *7*	3122.970	4+
		4284.6 [c] *3*	39 [c] *7*	846.7778	2+
5149.54	2+	2026.6 [c] *3*	27 [c] *15*	3122.970	4+
		3064.04 [c] *8*	100 [c]	2085.1045	4+
5184.3	8(+)	1427.8 [@] *3*	100 [@] *5*	3755.57	6+
5186.82	2+	1137.5		4048.888	3+
		3101.2 [c] *13*		2085.1045	4+
5194.80	(1,2+)	1585 [c]	23 [c] *5*	3610.21	0(+)
		2075 [c]	23 [c] *5*	3120.11	(1+)
		2253 [c]	46 [c] *5*	2941.50	0+
		2537 [c]	64 [c] *5*	2657.5894	2+
		4348 [c]	100 [c] *8*	846.7778	2+
5227.3	1	5227 [b] *2*		0.0	0+
5232.57	2+,(3+)	1132.13 [c] *16*	9 [c] *2*	4100.363	4+
		1183.39 [c] *6*	29 [c] *10*	4048.888	3+
		1783.4 [c] *3*	6 [c] *2*	3448.41	1+
		1787.18 [c] *11*	28 [c] *3*	3445.348	3+
		3147.7 [c] *3*	16 [c] *2*	2085.1045	4+
		4385.87 [c] *9*	100 [c]	846.7778	2+
5235.89	4+	543.39 [c] *6*	17 [c] *6*	4692.32	4+
		777.14 [c] *5*	23 [c] *3*	4458.532	4+
		936.58 [c] *4*	16 [c] *3*	4320	2+
		1135.68 [c] *10*	34 [c] *4*	4100.363	4+
		1186.29 [c] *25*	6 [c] *2*	4048.888	3+
		1480.4 [c] *3*	5 [c] *2*	3755.57	6+
		1790.44 [c] *13*	17 [c] *3*	3445.348	3+
		1847.49 [c] *6*	33 [c] *5*	3388.55	6+

$^{56}_{26}Fe_{30}$-15

Adopted Levels, Gammas (continued)

γ(^{56}Fe) (continued)

E_i(level)	J_i^π	E_γ [†]	I_γ [d]	E_f	J_f^π	Mult.	Comments
5235.89	4+	2276.3[c] *3*	<12[c]	2959.972	2+		
		2578.56[c] *9*	<25[c]	2657.5894	2+		
		3150.70[c] *9*	100[c]	2085.1045	4+		
5255.7	8+	1499.5[@] *3*	39[@] *2*	3755.57	6+	E2[@]	B(E2)(W.u.)=4.7 *7*
		1866.8[@] *3*	100[@] *5*	3388.55	6+	E2[@]	B(E2)(W.u.)=4.0 *6*
5256.9	2+	4410[c]	100[c] *20*	846.7778	2+		
		5257[b] *3*	100[c] *20*	0.0	0+		
5302.94	4+	757.75[c] *4*	<28[c]				
		1005.1[c] *3*	18[c] *9*	4298.096	4+		
		1915.10[c] *18*	40[c] *10*	3388.55	6+		
		2180.12[c] *6*	27[c] *7*	3122.970	4+		
		3217.61[c] *10*	100[c]	2085.1045	4+		
		4456.9[c] *8*	<40[c]	846.7778	2+		
5307.81		1010		4298.096	4+		
		1919.69[c] *6*		3388.55	6+		
		3220		2085.1045	4+		
5402.3	≥1	2460.3	100	2941.50	0+		
		5404[gb] *3*	[g]	0.0	0+		
5451.60	4+	1151.84[c] *16*	57[c] *16*	4320	2+		
		1153.78[c] *25*	57[c] *16*	4298.096	4+		
		1402.79[c] *17*	41[c] *20*	4048.888	3+		
		1696.17[c] *16*	100[c]	3755.57	6+		
		2063.25[c] *8*	96[c] *30*	3388.55	6+		
		4604.9[c] *4*	10[c] *6*	846.7778	2+		
5479.15	(4+)	3394.10[c] *19*		2085.1045	4+		
5488.24	2,3,4	1120.27[c] *4*	46[c] *11*	4368.13?	3−		
		1368.41[c] *9*	<50[c]	4119.936	3+		
		2042.65[c] *6*	69[c] *18*	3445.348	3+		
		3401.2[c] *4*	100[c]	2085.1045	4+		
5502.94	(2,3,4)+	1101.80[c] *6*	<20[c]	4401.27	2+		
		1402.79[c] *17*	25[c] *15*	4100.363	4+		
		2058.2[c] *4*	<30[c]	3445.348	3+		
		2133.13[c] *13*	54[c] *16*	3369.95	2+		
		2845.96[c] *16*	67[c] *9*	2657.5894	2+		
		3418.69[c] *11*	100[c]	2085.1045	4+		
5511.6	2+	2141.8	100	3369.95	2+		
5538.07	(1,2+)	2168[c]	34[c] *5*	3369.95	2+		
		2880[c]	71[c] *5*	2657.5894	2+		

$^{56}_{26}Fe_{30}$-16

Adopted Levels, Gammas (continued)

γ(^{56}Fe) (continued)

E_i(level)	J_i^π	E_γ †	I_γ [d]	E_f	J_f^π	Mult.	δ	Comments
5538.07	(1,2$^+$)	4691[c]	58[c] *5*	846.7778	2$^+$			
		5538[c]	100[c] *8*	0.0	0$^+$			
5573.51	2$^+$	4726.1 *4*		846.7778	2$^+$			
5590.06	1$^+$,2,3$^+$	2142[c]	50[c] *10*	3448.41	1$^+$			
		2145[c]	33[c] *10*	3445.348	3$^+$			
		2220[c]	28[c] *8*	3369.95	2$^+$			
		2932[c]	100[c] *10*	2657.5894	2$^+$			
		4743[c]	40[c] *10*	846.7778	2$^+$			
5618.36	4$^+$	1223.46[c] *5*	<12[c]	4394.93	3$^+$			
		2173.89[c] *7*	<100[c]	3445.348	3$^+$			
		2230.0[c] *3*	15[c] *10*	3388.55	6$^+$			
		2658.19[c] *11*	27[c] *15*	2959.972	2$^+$			
		3535.0[c] *5*	88[c] *30*	2085.1045	4$^+$			
		4772.5[c] *4*	100[c]	846.7778	2$^+$			
5623.86	(4,5)$^+$	1523.26[c] *22*	54[c] *28*	4100.363	4$^+$			
		1575.21[c] *6*	<15[c]	4048.888	3$^+$			
		1867.89[c] *25*	83[c] *27*	3755.57	6$^+$			
		2500.52[c] *25*	36[c] *11*	3122.970	4$^+$			
		3539.14[c] *21*	100[c]	2085.1045	4$^+$			
5626.84	8$^+$	926.2[a] *1*	100[a] *2*	4700.63	7$^+$	M1+E2[a]	+0.25[a] *10*	B(M1)(W.u.)=0.332 *16*; B(E2)(W.u.)=5.E+1 *4*
		1871.3[a]	5[a] *5*	3755.57	6$^+$	E2[a]		B(E2)(W.u.)=1.2 *12*
		2238[a] *2*	9[a] *2*	3388.55	6$^+$	E2[a]		B(E2)(W.u.)=0.9 *+3−4*
5661.18		5661.2[c] *6*		0.0	0$^+$			
5670.33	(2,3,4)$^+$	2711.0[c] *4*	40[c] *12*	2959.972	2$^+$			
		3585.25[c] *14*	100[c]	2085.1045	4$^+$			
		4822.9[c] *4*	48[c] *7*	846.7778	2$^+$			
5697.98	(2$^+$)	1293.73[c] *12*						
5705.43	2$^+$	977.29[c] *5*	<27[c]	4728.14	2$^+$			
		2259.92[c] *11*	74[c] *20*	3445.348	3$^+$			
		2584.73[c] *25*	35[c] *15*	3120.11	(1$^+$)			
		2744.88[c] *17*	60[c] *20*	2959.972	2$^+$			
		3619.6[c] *5*	100[c]	2085.1045	4$^+$			
		4857.4[c] *6*	88[c] *26*	846.7778	2$^+$			
5774.00	(4$^+$)	1326.2[c] *3*	34[c] *11*	4447.7				
		3116.2[c] *3*	100[c]	2657.5894	2$^+$			
5795.2		4948.2	100	846.7778	2$^+$			
5801.34		1972.8[c] *4*		3829.77	2$^+$			
		2859.4[c] *4*		2941.50	0$^+$			

$^{56}_{26}Fe_{30}$-17

Adopted Levels, Gammas (continued)

γ(^{56}Fe) (continued)

E_i(level)	J_i^π	E_γ [†]	I_γ [d]	E_f	J_f^π
5806.3		4958.2[c] *4*		846.7778	2^+
5817.22		2447.5[c] *5*		3369.95	2^+
5853?		5853[bh] *2*		0.0	0^+
5861.5	4^+	2902.6[c] *5*		2959.972	2^+
5871.26	(2,3,4)	1551.2[c] *3*		4320	2^+
		2127.34[c] *24*		3744.13	2^+
		2750		3120.11	(1^+)
		3786.4[c] *6*		2085.1045	4^+
5914.53	$(2,3,4)^+$	1222.38[c] *25*	15[c] *6*	4692.32	4^+
		1312.42[c] *8*	<30[c]	4620	
		1455.5[c] *3*	<17[c]	4458.532	4^+
		1519.6[c] *4*	12[c] *9*	4394.93	3^+
		1615.91[c] *16*	24[c] *12*	4298.096	4^+
		2058.2[c] *4*	<29[c]	3856.495	3^+
		2792.65[c] *16*	<39[c]	3122.970	4^+
		2794.13[c] *16*	<39[c]	3120.11	(1^+)
		3829.64[c] *14*	100[c]	2085.1045	4^+
		5068.0[c] *8*	67[c] *21*	846.7778	2^+
5936.17	2^+	2080[c]	49[c] *3*	3856.495	3^+
		5089[c]	100[c] *3*	846.7778	2^+
5965.81		2359.8 *4*		3605.69	2^+
5986.86	$(1^+$ to $3^+)$	1447[c]	42[c] *6*	4539.5	$1^+,2^+$
		2542[c]	100[c] *6*	3445.348	3^+
		5140[c]	67[c] *8*	846.7778	2^+
6021.11		5174.6[c] *5*		846.7778	2^+
6047.53		1508.31[c] *12*		4539.5	$1^+,2^+$
		5200.8[c] *8*		846.7778	2^+
6061.79	4^+	1612.96[c] *18*	46[c] *25*	4447.7	
		1667.07[c] *15*	<20[c]	4394.93	3^+
		1842.53[c] *13*	56[c] *24*		
		2305.6[c] *5*	25[c] *14*	3755.57	6^+
		2460.2[c] *3*	42[c] *16*	3600.21	$(1,2^+)$
		3101.22[c] *13*	<30[c]	2959.972	2^+
		3975.4[c] *3*	100[c]	2085.1045	4^+
		5214.6[c] *8*	52[c] *25*	846.7778	2^+
6078?		6078[bh] *3*		0.0	0^+
6092.2	(3^-)	2643.0		3448.41	1^+
		2722.1		3369.95	2^+

$^{56}_{26}Fe_{30}$-18

Adopted Levels, Gammas (continued)

γ(^{56}Fe) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[d]	E_f	J_f^π	Comments
6092.2	(3⁻)	4007.2		2085.1045	4⁺	
6102.21	(0 to 3⁺)	2496[c]	54[c] *6*	3605.69	2⁺	
		2654[c]	100[c] *6*	3448.41	1⁺	
		5255[c]	38[c] *8*	846.7778	2⁺	
6110.6		4026.3[c] *5*		2085.1045	4⁺	
6115.7		860.0 *5*	100	5255.7	8⁺	
6131.24	2⁺	2010.77[c] *25*	67[c] *25*	4119.936	3⁺	
		3171.0[c] *4*	43[c] *20*	2959.972	2⁺	
		5284.61[c] *25*	100[c]	846.7778	2⁺	
6219?		6219[bh] *3*		0.0	0⁺	
6250.78	1	5404[b] *3*	64[c] *27*	846.7778	2⁺	
		6251[b] *3*	100[c] *27*	0.0	0⁺	
6312.75		1863.83[c] *11*		4447.7		
6386.99		2286.5[c] *4*		4100.363	4⁺	
6446.92	2⁺,3⁺	2618[c]	22[c] *10*	3829.77	2⁺	
		2842[c]	30[c] *10*	3605.69	2⁺	
		2848[c]	59[c] *10*	3600.21	(1,2⁺)	
		3328[c]	100[c] *19*	3120.11	(1⁺)	
6454.4		5607.8[c] *5*		846.7778	2⁺	
6472.5		2352.2[c] *3*		4119.936	3⁺	
6625.10	(0 to 3⁺)	3025[c]	100[c] *11*	3600.21	(1,2⁺)	
		3180[c]	47[c] *7*	3445.348	3⁺	
		3665[c]	76[c] *11*	2959.972	2⁺	
6698	1	5853[bh] *2*		846.7778	2⁺	
		6698[b] *3*		0.0	0⁺	
6850.9	9(+)	1221.7[@] *3*	100[@] *5*	5626.84	8⁺	Additional information 1.
6854.67		1798.62[c] *13*		5055.87	4⁺,(3⁺)	
6889.98		3949.0[c] *6*		2941.50	0⁺	
6926	1⁻	6926[b] *2*	(100)	0.0	0⁺	
6981.68	(0 to 3⁺)	4324[c]	86[c] *19*	2657.5894	2⁺	
		6135[c]	100[c] *19*	846.7778	2⁺	
7008.00		4923.8[c] *7*		2085.1045	4⁺	
7010.8	(>3⁻)	3935.3[c] *4*		3076.2	(3⁻)	
7071.37		4986.8 *4*		2085.1045	4⁺	
7084.6		968.9[@]	100[@]	6115.7		
7135	1	7135[b] *3*		0.0	0⁺	
7167.27	1	6320[c]	54[c] *12*	846.7778	2⁺	

$^{56}_{26}Fe_{30}$-19

Adopted Levels, Gammas (continued)

γ(^{56}Fe) (continued)

E_i(level)	J_i^π	E_γ †	I_γ d	E_f	J_f^π	Comments
7167.27	1	7167 b 3	100 c 12	0.0	0^+	
7177.2	(10^+)	1920.9 @ 15	100 @ 23	5255.7	8^+	
7211.5	1	6364 c	100 c	846.7778	2^+	
		7211 e		0.0	0^+	
7220	0^+	3619 c	84 c 23	3600.21	$(1,2^+)$	
		6372 c	100 c 23	846.7778	2^+	
7248	1	7248 b 2		0.0	0^+	
7254.19	0^+	3643.8 c 4		3610.21	$0^{(+)}$	
7422.67	$(1,2^+)$	6576 c	100 c 17	846.7778	2^+	
		7423 c	17 c 8	0.0	0^+	
7446.5	1	7446 b 2		0.0	0^+	
7468.5	1	7468 b 2		0.0	0^+	
7503.6	$9^{(+)}$	2247.1 @ 7	16.3 @ 23	5255.7	8^+	
		2319.3 @ 3	100 @ 5	5184.3	$8^{(+)}$	
7768.61		3086.2 4		4683.04	$(2^+),3^+$	
		5683.2 5		2085.1045	4^+	
7820.6	$10^{(+)}$	969.6 @ 3	62 @ 4	6850.9	$9^{(+)}$	Additional information 2.
		2564.4 @ 4	14 @ 2	5255.7	8^+	
7886.54	$(1,2^+)$	1951 c	43 c 14	5936.17	2^+	
		7887 c	100 c 14	0.0	0^+	
8128	1	8128 b 2	(100)	0.0	0^+	
8219		8219 b 4		0.0	0^+	
8239.7	1	8239 b 2	(100)	0.0	0^+	
8247.76	(0 to 3^+)	7401 c	100 c	846.7778	2^+	
8309.59	$(1,2^+)$	7463 c	100 c 11	846.7778	2^+	
		8310 c	35 c 11	0.0	0^+	
8414.8	(10^+)	2785.7 @ 4	86 @ 6	5626.84	8^+	
		3158.2 @ 14	14 @ 2	5255.7	8^+	
8447.87	(0 to 3^+)	7601 c	100 c	846.7778	2^+	
8679.9	$11^{(+)}$	265.1 @ 3	14 @ 1	8414.8	(10^+)	
		859.2 @ 3	86 @ 4	7820.6	$10^{(+)}$	Additional information 3.
8758.47	(0 to 3^+)	3974 c	91 c 46	4784.12	$(1,2^+)$	
		5158 c	100 c 46	3600.21	$(1,2^+)$	
		5388 c	91 c 46	3369.95	2^+	
8767		8767 b 3		0.0	0^+	

$^{56}_{26}Fe_{30}$-20

Adopted Levels, Gammas (continued)

$\gamma(^{56}Fe)$ (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[d]	E_f	J_f^π	Mult.	Comments
8879		8879[b] *4*		0.0	0^+		
8909.9	$(1,2^+)$	8910[ch]	100[c]	0.0	0^+		
8962		8962[b] *4*		0.0	0^+		
8989		8989[b] *4*		0.0	0^+		
9107		9107[b] *4*		0.0	0^+		
9140.3	1^-	9139.5[b] *6*		0.0	0^+	E1[b]	B(E1)(W.u.)=0.0016983 *4*
9154		8307[b] *4*		846.7778	2^+		
		9154[b] *5*		0.0	0^+		
9287		9287[b] *3*		0.0	0^+		
9311		9311[b] *4*		0.0	0^+		
9322		9322[b] *4*		0.0	0^+		
9344.7	(11^+)	1841.1 *3*	100 *7*	7503.6	$9^{(+)}$		
9378.2	(11^+)	963.4[@] *3*	100[@] *6*	8414.8	(10^+)		
9402		9402[b] *3*		0.0	0^+		
9557.62	$(1,2^+)$	9558[bh] *4*		0.0	0^+		
9666?		9666[bh] *5*		0.0	0^+		
9737		9737[b] *5*		0.0	0^+		
9768?		9768[bh] *4*		0.0	0^+		
9895?		9895[bh] *5*		0.0	0^+		
9948		9948[b] *5*		0.0	0^+		
9969?		9969[b] *5*		0.0	0^+		
10060		10060[b] *5*		0.0	0^+		
10094.4	(12^+)	1414.5[@] *3*	100[@] *5*	8679.9	$11^{(+)}$		
10497	1	10497[b] *3*		0.0	0^+		
10563.1	(12^+)	1184.9[@] *3*	100[@] *6*	9378.2	(11^+)		
10898.9	(13^+)	1554.2[@] *7*	100[@] *15*	9344.7	(11^+)		
11133	1	11133[b] *3*	(100)	0.0	0^+		
11964?	(13^+)	1401[@h] *3*	100[@] *7*	10563.1	(12^+)		

[†] From ^{56}Fe(n,n′γ), except as noted. For resonance states primary γ′s are unplaced in Adopted Levels, see ^{55}Mn(p,p), (p,γ) E=res: IAR.
[‡] From ^{56}Co ε decay.
[#] From ^{56}Mn β^- decay.

$^{56}_{26}Fe_{30}$-21

Adopted Levels, Gammas (continued)

$\gamma(^{56}Fe)$ (continued)

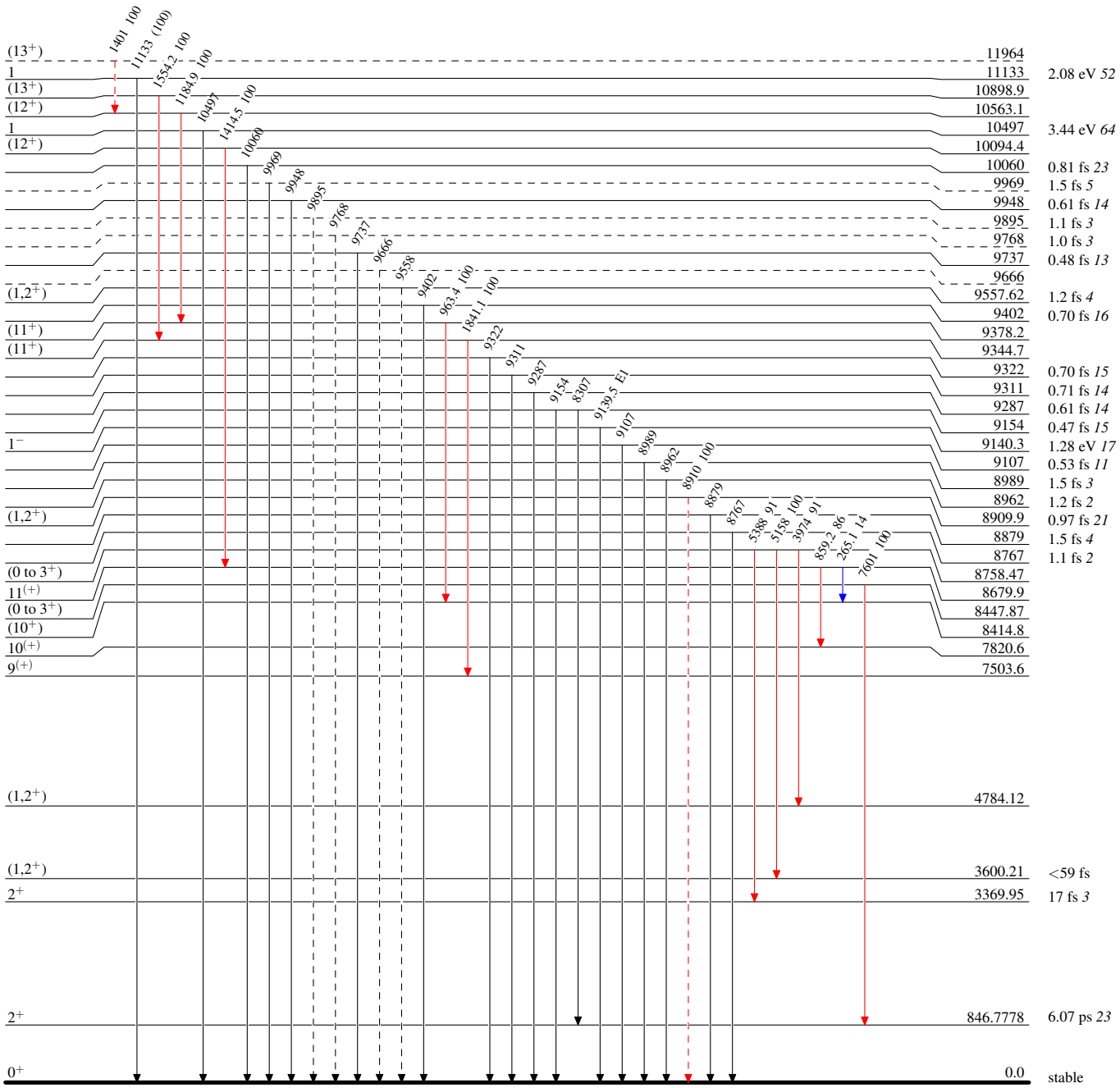
@ From (HI,xnγ).
& From ^{56}Fe(p,p$'\gamma$).
a From ^{54}Fe(α,2pγ).
b From ^{56}Fe(γ,γ'), (pol γ,γ').
c From ^{55}Mn(p,p), (p,γ) E=res: IAR.
d Relative photon branching from each level renormalized to 100 for the strongest branching; values from ^{56}Fe(n,n$'\gamma$), except as noted.
e Iγ unknown.
f Total theoretical internal conversion coefficients, calculated using the BrIcc code (2008Ki07) with Frozen orbital approximation based on γ-ray energies, assigned multipolarities, and mixing ratios, unless otherwise specified.
g Multiply placed with undivided intensity.
h Placement of transition in the level scheme is uncertain.

$^{56}_{26}Fe_{30}$-22

Adopted Levels, Gammas

Level Scheme

Intensities: Type not specified

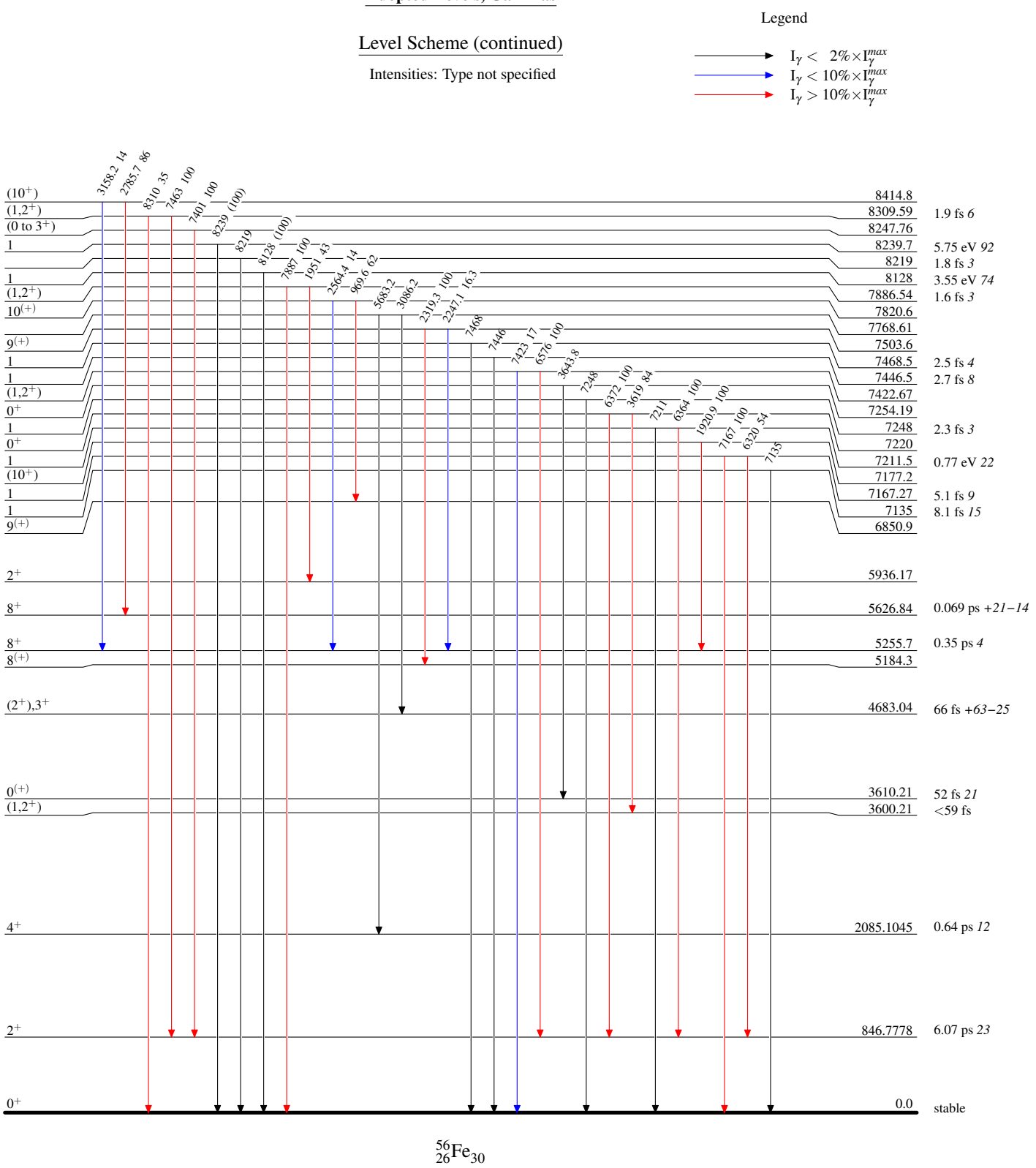


$^{56}_{26}Fe_{30}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Type not specified

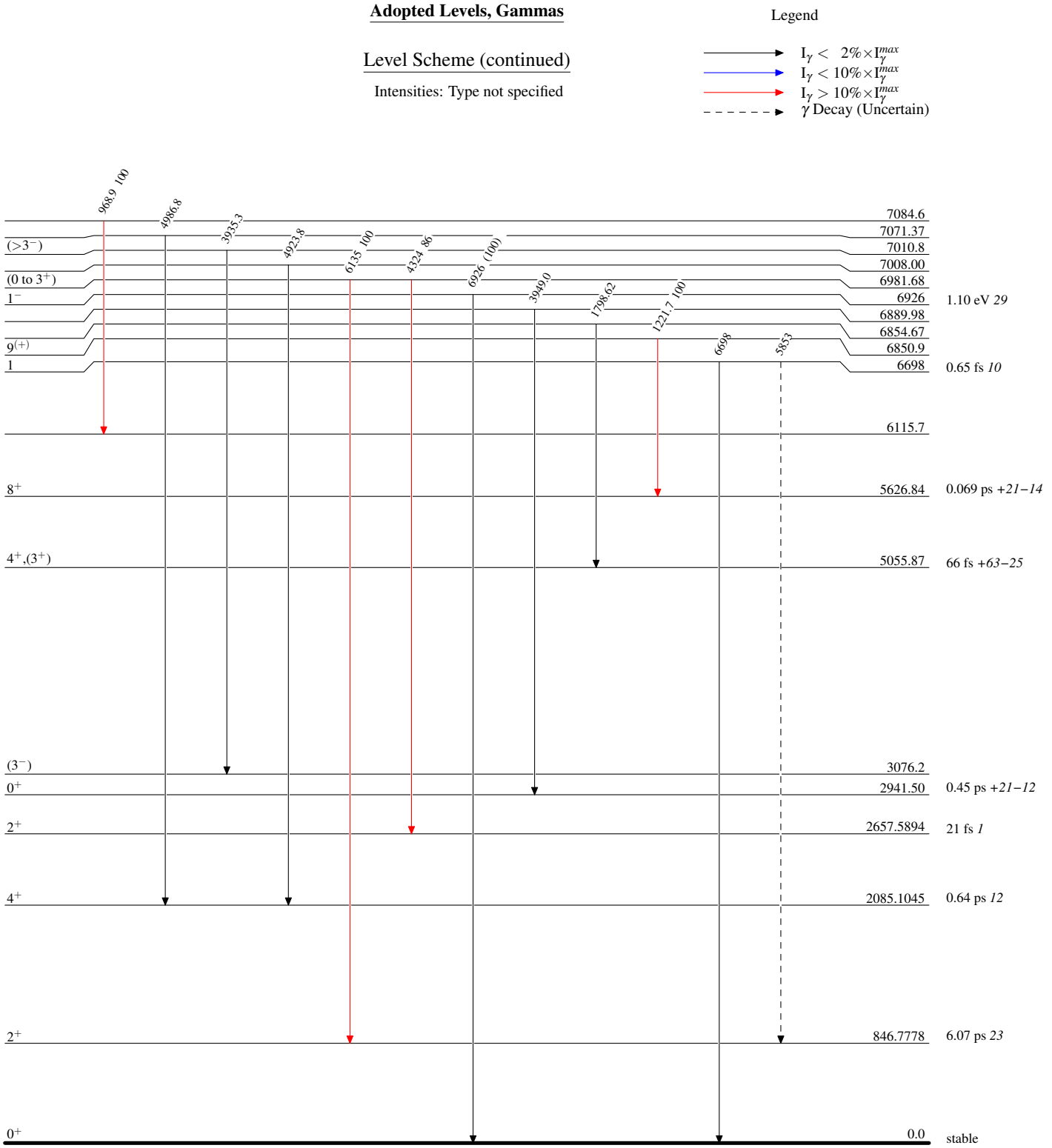


$^{56}_{26}Fe_{30}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Type not specified

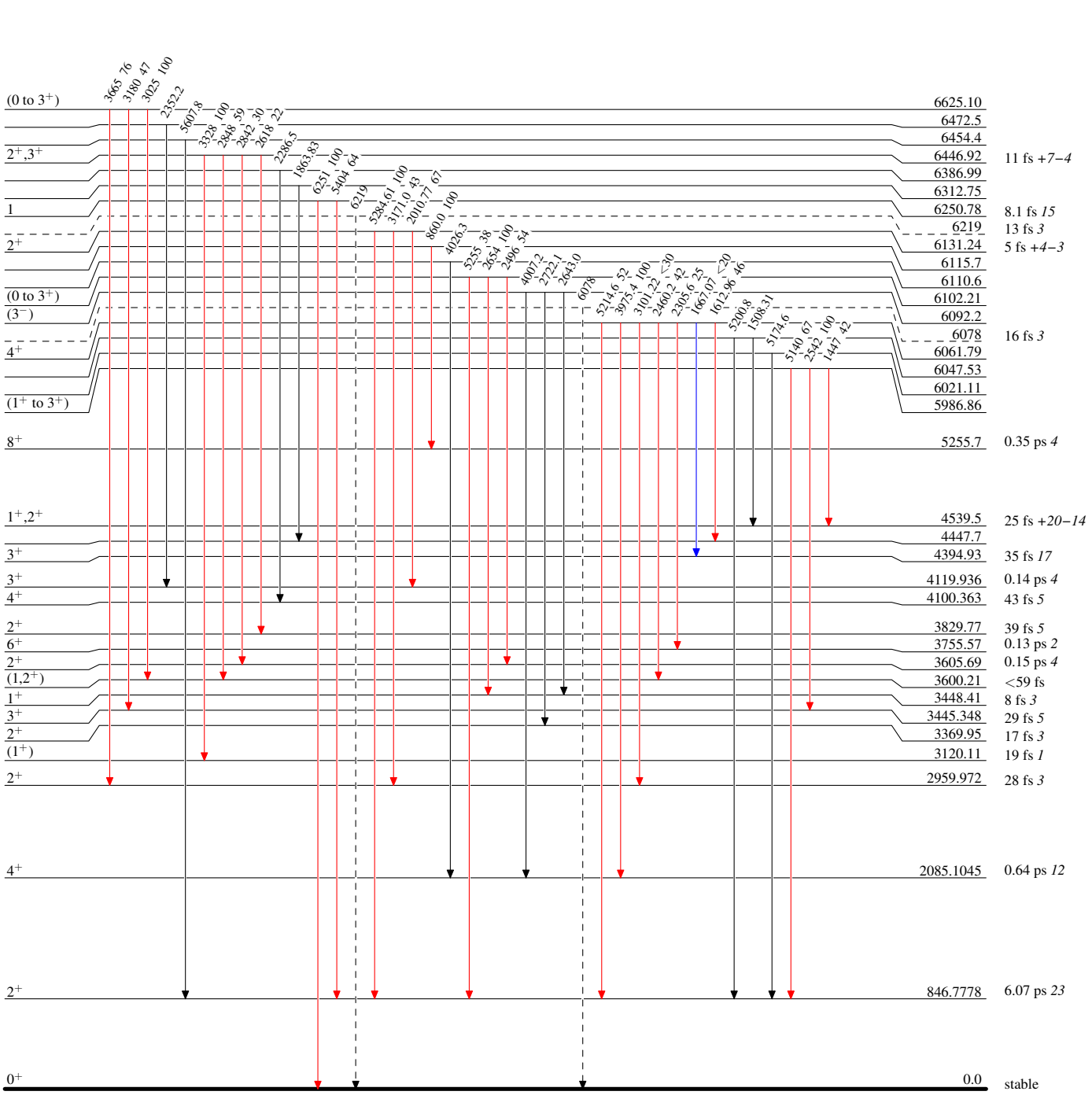


$^{56}_{26}Fe_{30}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Type not specified

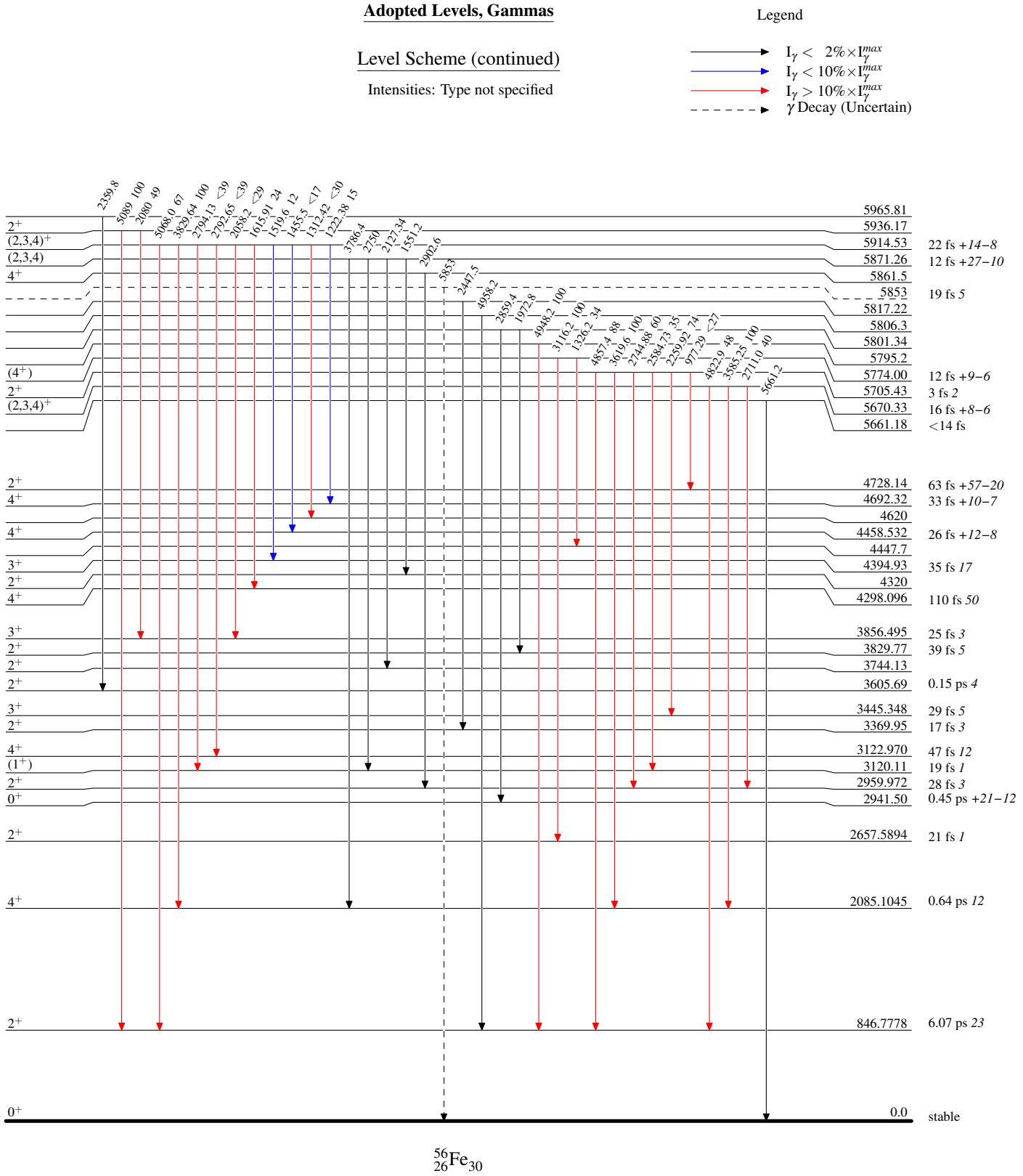


$^{56}_{26}Fe_{30}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Type not specified

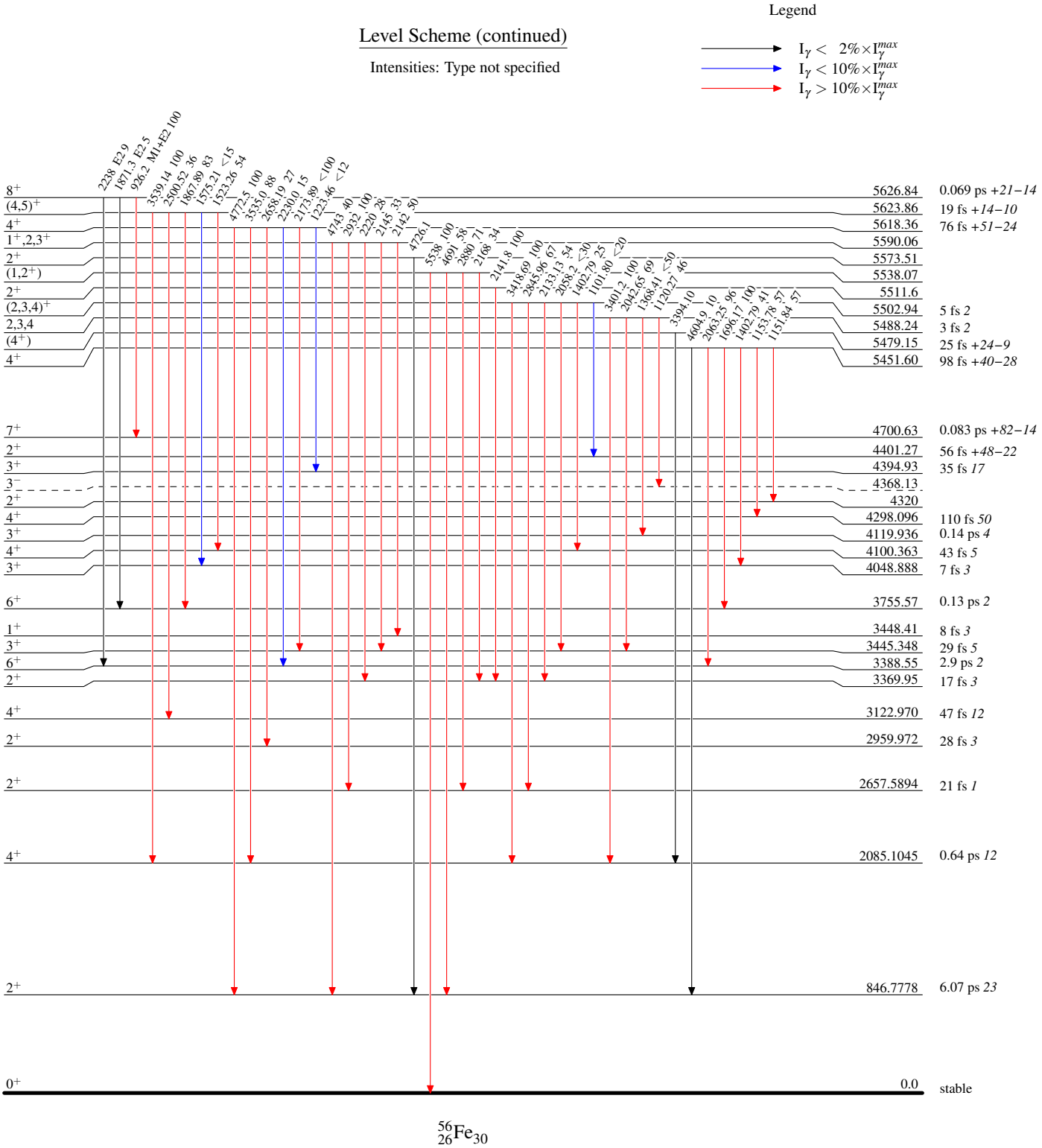


$^{56}_{26}Fe_{30}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Type not specified

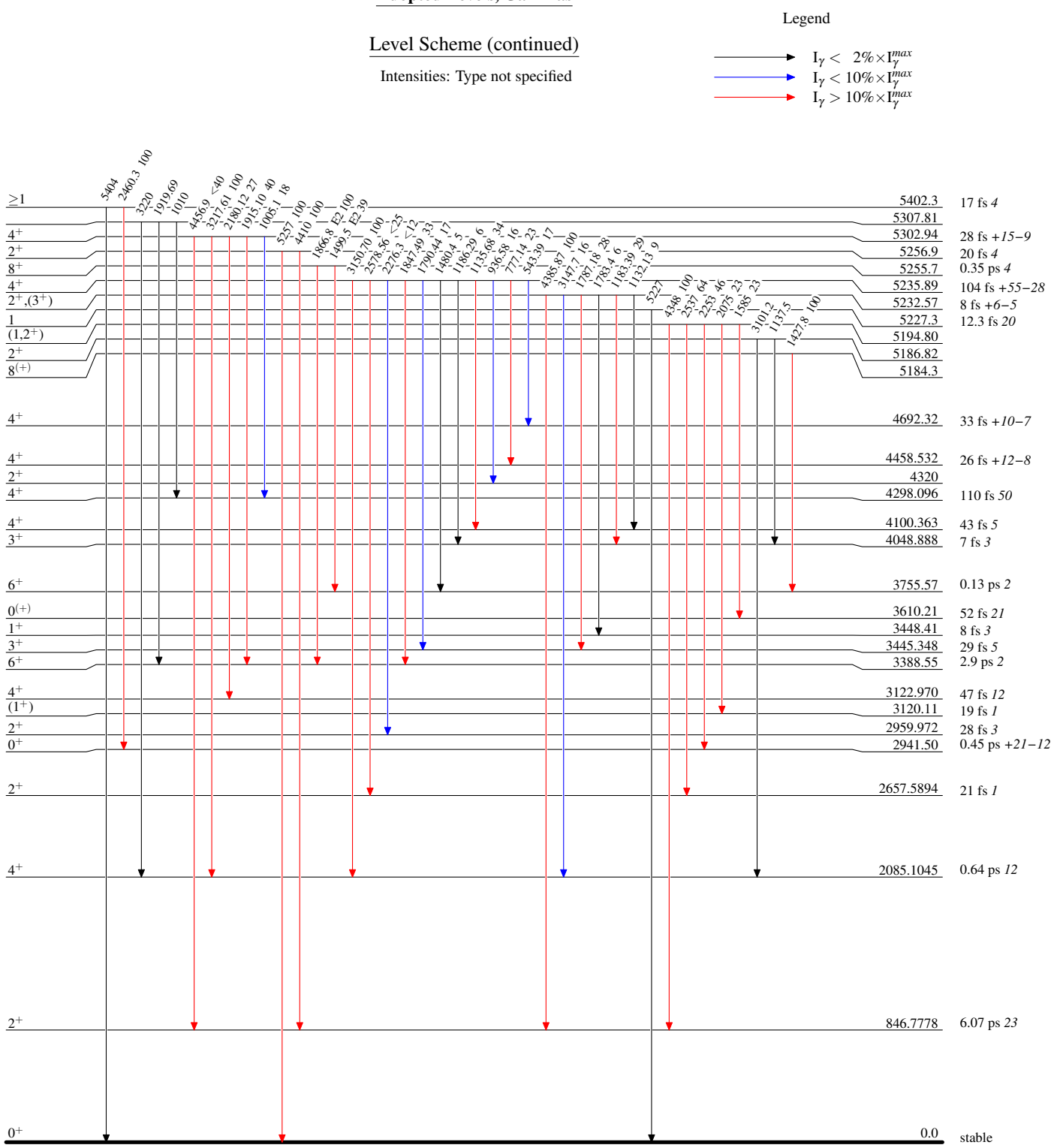


$^{56}_{26}Fe_{30}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Type not specified

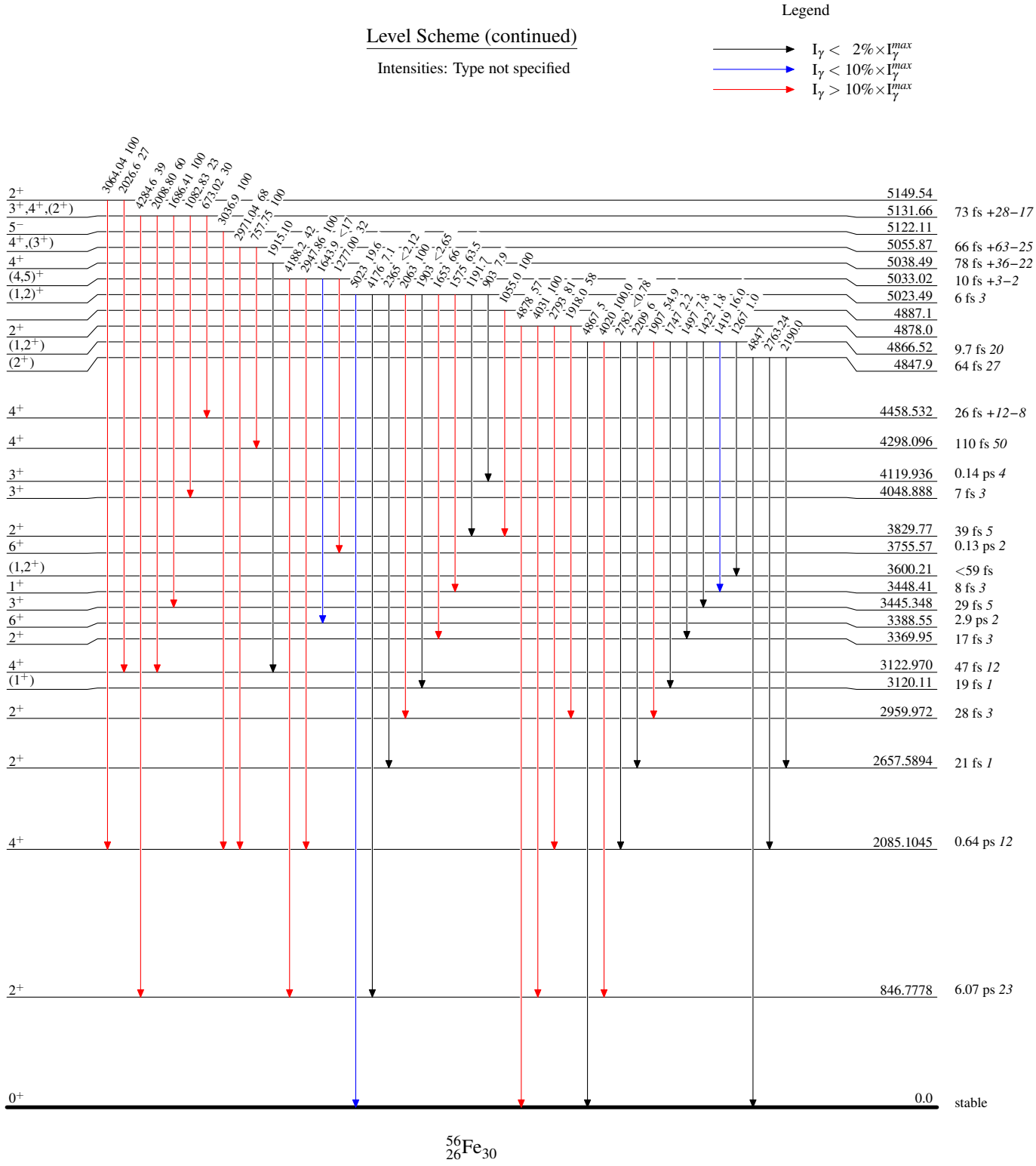


$^{56}_{26}Fe_{30}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Type not specified

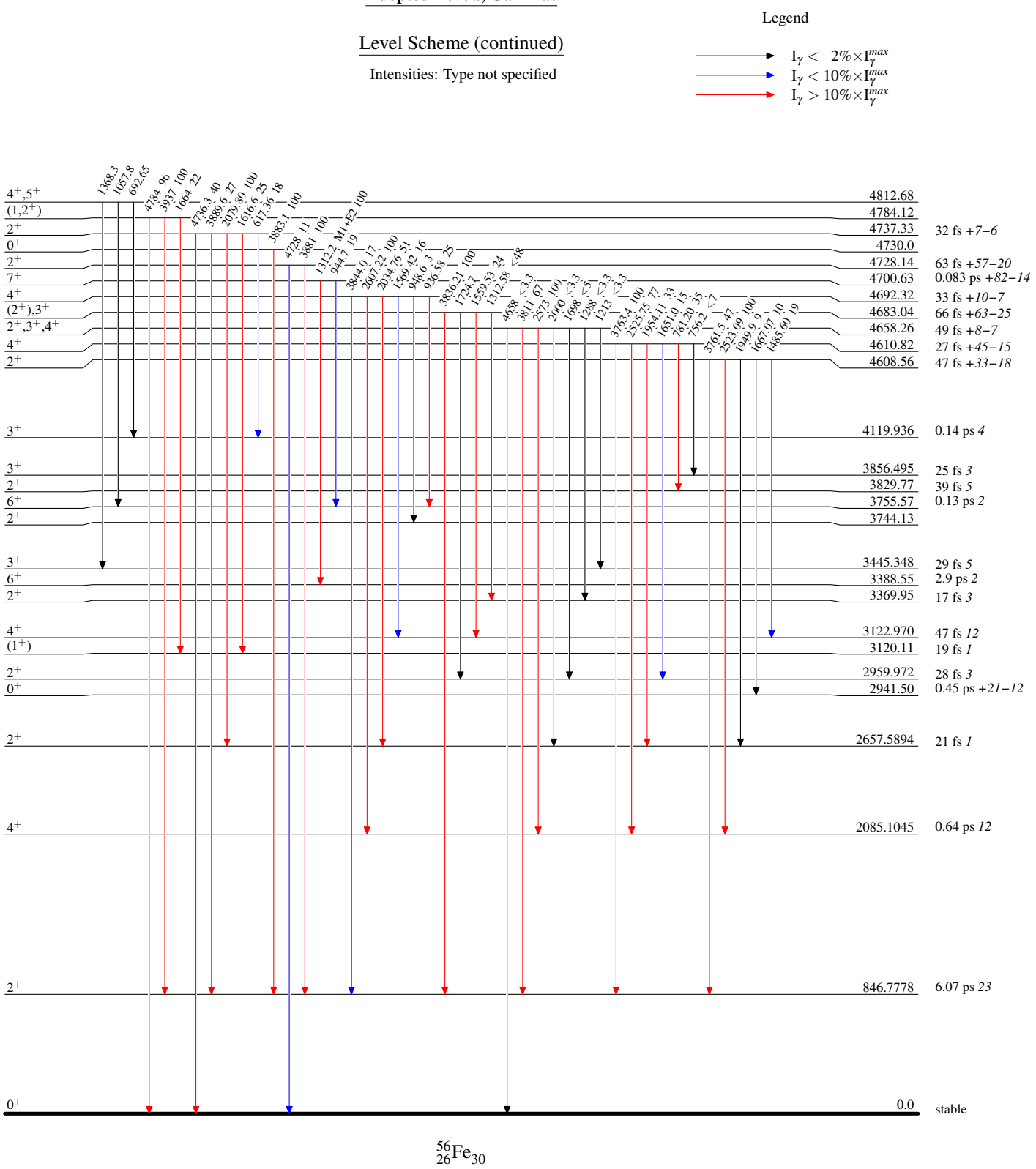


$^{56}_{26}Fe_{30}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Type not specified



$^{56}_{26}Fe_{30}$

Adopted Levels, Gammas

Level Scheme (continued)

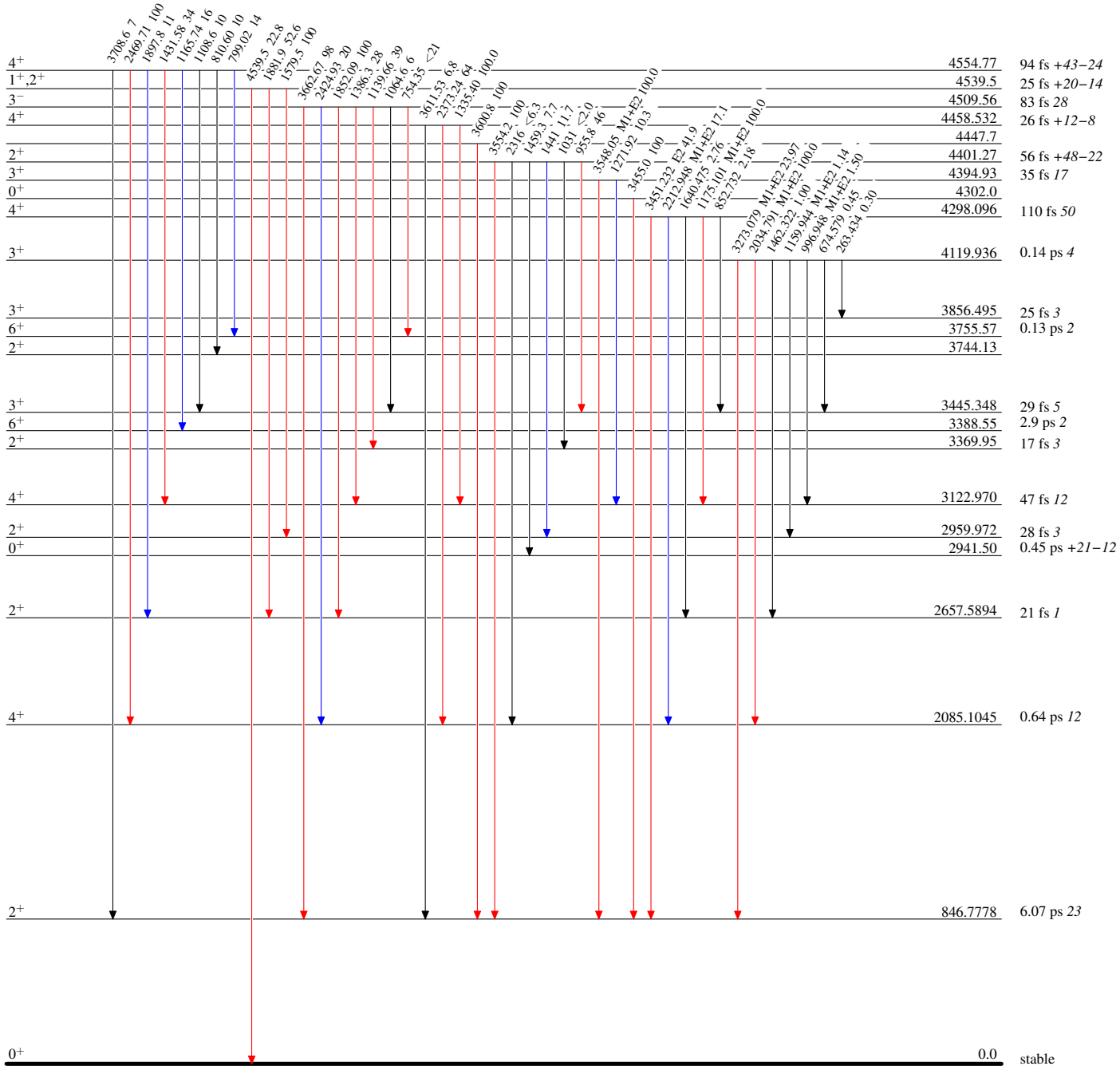
Intensities: Type not specified

Legend

$I_\gamma < 2\% \times I_\gamma^{max}$

$I_\gamma < 10\% \times I_\gamma^{max}$

$I_\gamma > 10\% \times I_\gamma^{max}$

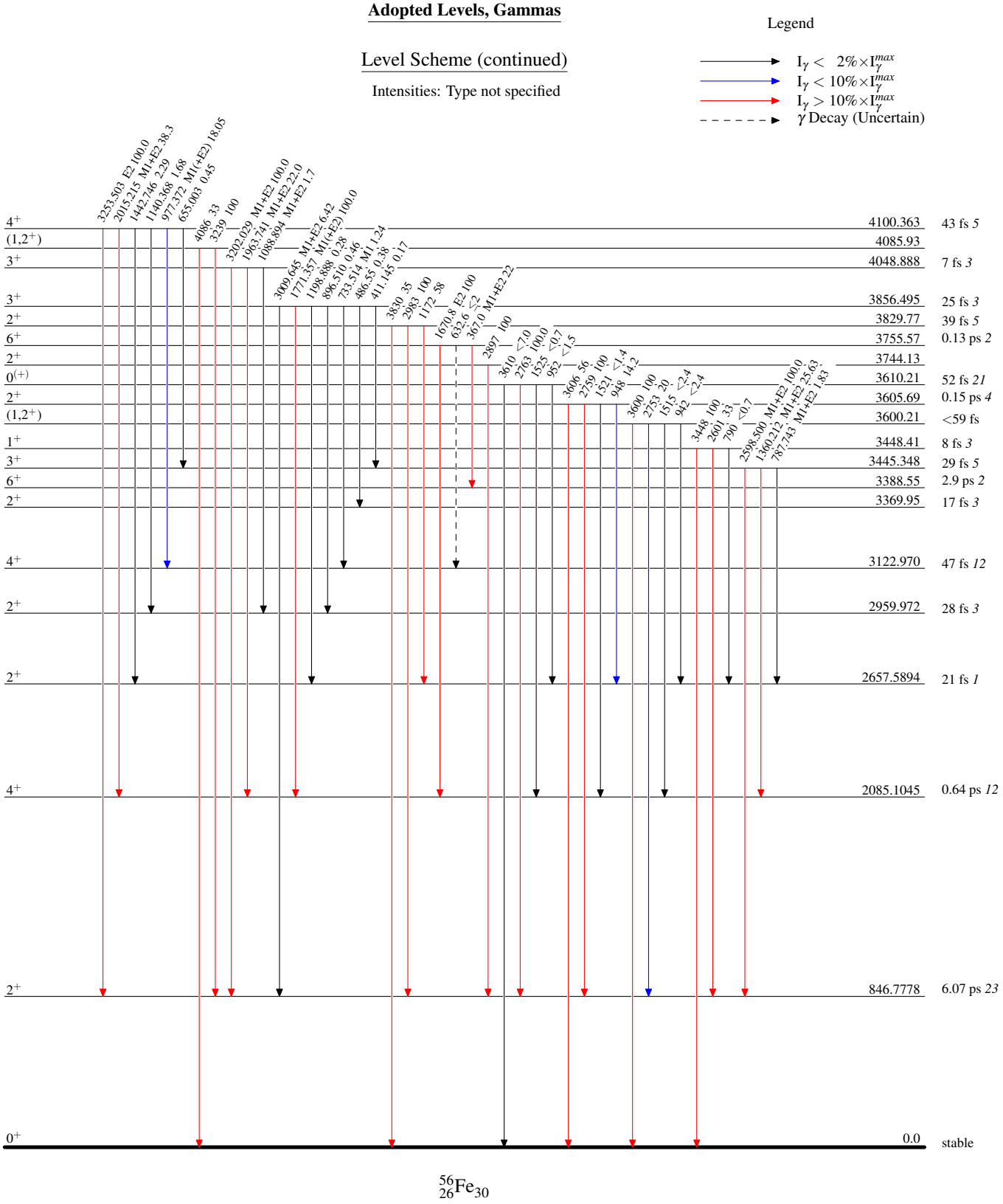


$^{56}_{26}Fe_{30}$

Adopted Levels, Gammas

Level Scheme (continued)

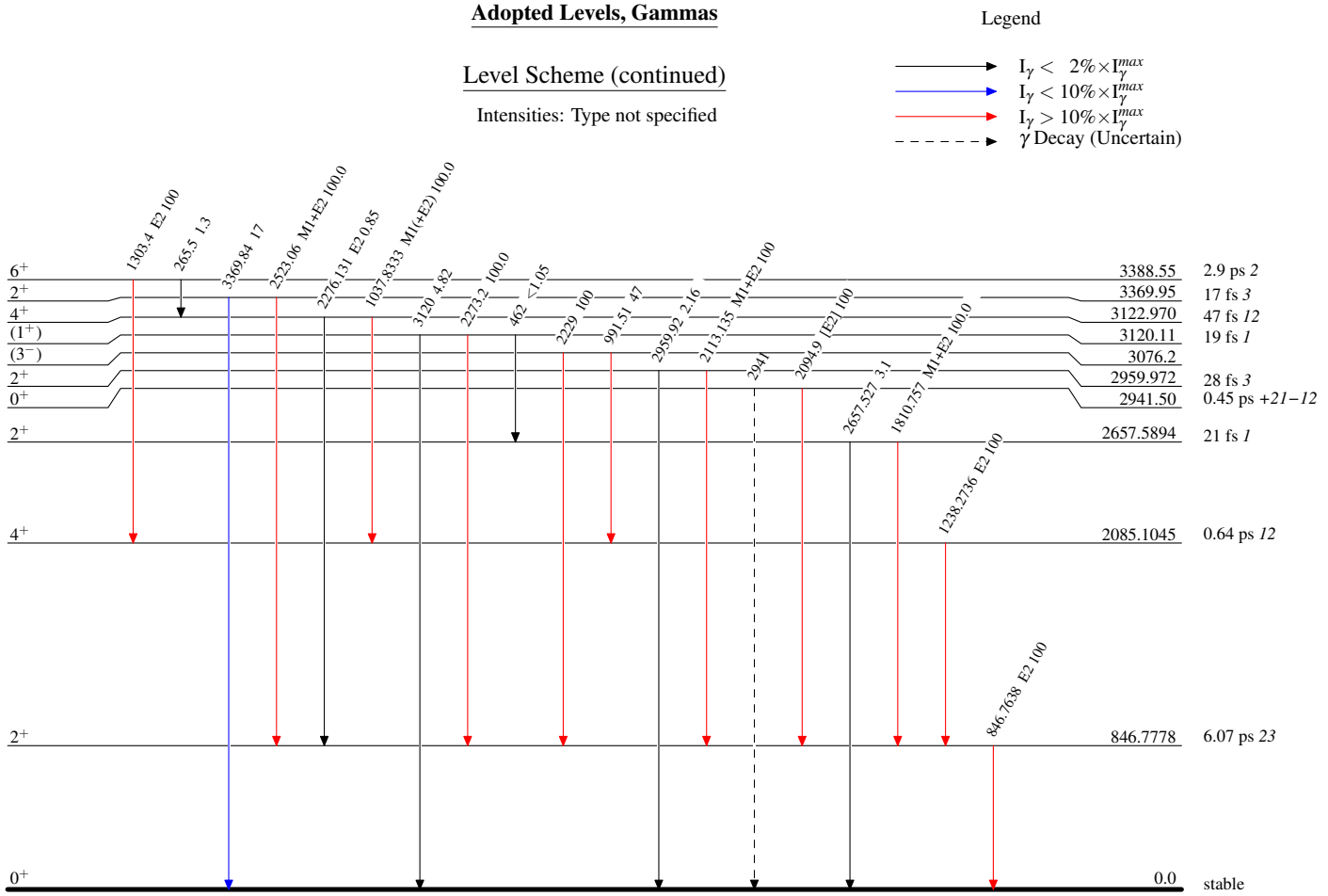
Intensities: Type not specified



Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Type not specified



$^{56}_{26}Fe_{30}$