

$^{57}\text{Fe}(\text{p},\gamma)$ 1975Er07,1970Er03

Type	History	Citation	Literature Cutoff Date
Full Evaluation	Author C. D. Nesaraja and B. Singh	ENSDF	31-Oct-2015

Includes resonance data.

1970Er03, 1975Er07: E(p)=1.175 to 1.675 MeV (1970Er03), 1.580 to 2.125 MeV (1975Er07).

Measured: E γ , I γ for decay of the resonances E(p)=1.583, 1.602, 1.611, 1.626, 1.674, 1.685, 1.700 MeV (1975Er07); 1.467, 1557, 1583, 1626 MeV (1970Er03).

Other: 1969Se01: E(p)=0.8 to 1.5 MeV.

Additional information 1.

 ^{58}Co Levels

E(level) [‡]	J π [†]	T _{1/2} [†]	E(p)(lab)	Comments
0.0	2 ⁺	70.86 d 6		
25.0 1	5 ⁺	9.10 h 9		%IT=100
52.8 1	4 ⁺	10.5 μ s 3		%IT=100
111.4 1	3 ⁺			Additional information 2.
365.6 2	3 ⁺			
457.5 2	4 ⁺			
1040.0 2	3 ⁺			
1044.1 2	(3 ⁺ ,4 ⁺)			
1050.0 2	1 ⁺			
1236.6 2	2 ⁺			
1353.4 2	(2) ⁺			
1376.4 3	1 ⁺			
1435.5 2	1 ⁺			
1523.3 2				
1606.5 5	3 ⁺			
1669.9 10	3 ⁺			
1729.9 5	1 ⁺			
1741 & 4				J π : L-values in several particle transfer reactions strongly suggest 1 ⁺ assignment for a level near 1867 keV. However, in (p, γ) experiment, 1975Er07 suggest 2 ⁺ based on 1814.9 γ placed from this level to 53, 4 ⁺ level. Note that the 1814.9 γ was not reported in $^{56}\text{Fe}(^3\text{He},\text{p}\gamma)$ reaction where the 1867 level was populated.
1750.5 5	(3,4) ⁺			
1867.7 5	1 ⁺			
1978.8 10	3 ⁺			
2105 # 3				
2248.8 10	1 ⁺			
2335.3 10	1 ⁺ ,2 ⁺ ,3 ⁺			
2478? &				
2534.4 10	1 ⁺			
2614? &				
2625? 5				
2640.7? 10				
3011 # 5	2 ⁺			
3107 # 5				
3427 # 5	3 ⁺			
3512 # 5	(1) ⁺			
8125.3 23			1191 ^a 2	
8127.3 23			1193 ^a 2	
8138.3 23			1204 ^a 2	

Additional information 3.

Additional information 4.

Additional information 5.

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$^{57}\text{Fe}(\text{p},\gamma)$ [1975Er07,1970Er03](#) (continued) ^{58}Co Levels (continued)

E(level) [‡]	E(p)(lab)	Comments
8144.3 23	1210 ^a 2	Additional information 6.
8148.2 23	1215 2	
8159.0 23	1226 2	
8161.9 23	1229 2	
8164.9 23	1232 2	
8168.8 23	1236 2	
8172.8 23	1240 2	
8175.7 23	1243 2	
8182.6 23	1250 2	
8190.4 23	1258 2	
8196.3 23	1264 2	
8199.3 23	1267 2	
8203.2 23	1271 2	
8208.1 23	1276 2	
8210.1 23	1278 2	
8214.0 23	1282 2	
8217.0 23	1285 2	
8218.9 23	1287 2	
8227.8 23	1296 2	
8229.7 23	1298 2	
8232.7 23	1301 2	
8241.5 23	1310 2	
8244.5 23	1313 2	
8248.4 23	1317 2	
8253.3 23	1322 2	
8256.3 23	1325 2	
8263.2 23	1332 2	
8265.1 23	1334 2	
8272.0 23	1341 2	
8274.9 23	1344 2	
8278.9 23	1348 2	
8283.8 23	1353 2	
8289.7 23	1359 2	
8295.6 23	1365 2	
8299.5 23	1369 2	
8309.3 23	1379 2	
8312.3 23	1382 2	
8315.2 23	1385 2	
8319.2 23	1389 2	
8327.0 23	1397 2	
8335.9 23	1406 2	
8336.9 23	1407 2	
8343.7 23	1414 2	
8348.6 23	1419 2	
8352.6 23	1423 2	
8354.5 23	1425 2	
8362.4 23	1433 2	
8366.3 23	1437 2	
8371.2 23	1442 2	
8376.2 23	1447 2	
8378.1 23	1449 2	
8387.9 23	1459 2	
8389.9 23	1461 2	
8395.8 23	1467 2	
		Unassigned γ rays in 1970Er03 : 1974.5 10 (4.0% 5), 1477.7 10 (4.0% 5), 911.1 5; not reported in 1975Er03 .
8397.8 23	1469 2	
8405.6 23	1477 2	

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$^{57}\text{Fe}(\text{p},\gamma)$ [1975Er07](#),[1970Er03](#) (continued) ^{58}Co Levels (continued)

E(level) [‡]	E(p)(lab)	Comments
8409.6 23	1481 2	
8413.5 23	1485 2	
8415.5 23	1487 2	
8418.4 23	1490 2	
8420.4 23	1492 2	
8422.3 23	1494 2	
8427.3 23	1499 2	
8429.2 23	1501 2	
8431.2 23	1503 2	
8434.1 23	1506 2	
8437.1 23	1509 2	
8440.0 23	1512 2	
8445.9 23	1518 2	
8449.9 23	1522 2	
8451.8 23	1524 2	
8456.7 23	1529 2	
8459.7 23	1532 2	
8464.6 23	1537 2	
8469.5 23	1542 2	
8473.4 23	1546 2	
8476.4 23	1549 2	
8478.3 23	1551 2	
8483.3 23	1556 2	
8484.2 23	1557 2	
8486.2 23	1559 2	
8487.2 23	1560 2	
8490.1 23	1563 2	
8495.1 23	1568 2	
8500.0 23	1573 2	
8501.9 23	1575 2	
8506.8 23	1580 2	
8509.8 23	1583 2	An 8395 3 γ with $I_\gamma=0.5$ 2 and a 6769 4 γ with $I_\gamma=2.0$ 5 from 1970Er03 are omitted since 1975Er07 did not confirm a 116 level in ^{58}Co and the 6769 γ proposed in 1970Er03 .
8515.7 23	1589 2	
8520.6 23	1594 2	
8528.5 23	1602 2	
8537.3 23	1611 2	
8541.2 23	1615 2	
8549.1 @ 23	1623 2	
8552.0 @ 23	1626 2	An 8439 4 γ with $I_\gamma=1.0$ 5 from 1970Er03 is omitted since 1975Er07 did not confirm a 116 level in ^{58}Co proposed in 1970Er03 .
8558.9 23	1633 2	
8565.8 23	1640 2	
8573.7 23	1648 2	
8582.5 23	1657 2	
8588.4 23	1663 2	
8599.2 23	1674 2	
8605.1 23	1680 2	
8610.0 23	1685 2	
8616.9 23	1692 2	
8624.8 @ 23	1700 2	
8627.7 @ 23	1703 2	
8635.6 23	1711 2	
8643.4 23	1719 2	
8650.2 23	1726 2	
8653.2 23	1729 2	

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$^{57}\text{Fe}(\text{p},\gamma)$ **1975Er07,1970Er03** (continued) ^{58}Co Levels (continued)

<u>E(level)[‡]</u>	<u>E(p)(lab)</u>	<u>E(level)[‡]</u>	<u>E(p)(lab)</u>	<u>E(level)[‡]</u>	<u>E(p)(lab)</u>	<u>E(level)[‡]</u>	<u>E(p)(lab)</u>
8668.0 23	1744 2	8687.6 23	1764 2	8706.3 23	1783 2	8721.1 23	1798 2
8672.9 23	1749 2	8694.5 23	1771 2	8709.3 23	1786 2	8725.0 23	1802 2
8677.8 23	1754 2	8699.4 23	1776 2	8715.2 23	1792 2		

[†] From Adopted Levels.

[‡] From **1975Er07**, except where noted otherwise. The energies of the unbound levels deduced from proton resonances are deduced from S(p)+E(p)(c.m.), S(p)=6954.3 *II* (**2012Wa38**). **1970Er03** and **1975Er03** used S(p)=6952 *3*, thus the quoted excitation energies are systematically lower than the ones given here. Resonances with E(p)=1590, 1597, 1606, 1619, 1641, 1650, 1658, 1663, 1666, 1669 in **1970Er03** are omitted here since not listed in authors' later work **1975Er07**.

From **1970Er03**.

@ 8549.4+8552.3 and 8625.1+8628.0 doublets are possible candidates for analog states of the 2782, 1⁺ and 2876, 2⁺ levels, respectively, in ^{58}Fe .

& Level only in **1970Er03**, not confirmed in **1975Er07**, thus considered as uncertain. A level of similar energy has been seen in other reactions and included in the Adopted Levels.

^a E(p) deduced in the lab system from value quoted by **1970Er03** which seems to be in c.m. system.

 $\gamma(^{58}\text{Co})$

Secondary gamma rays from 1970Er03 ($\Delta(E\gamma)=1.0$ keV when not stated)				
E(level)	8396 level (Ep=1467) E γ , I γ	8484 level (Ep=1557) E γ , I γ	8510 level (Ep=1583) E γ , I γ	8552 level (Ep=1626) E γ , I γ
112			57.5 5	
116 a			65.5 5	
366			366.0 5;43 2	
1048	931.2 5;1.0 5 b	932.0 5;3.0 5 b	933.0 5;2.5 5 b	931.0 5;5 1 b
1048	936.7 5;6.0 5	936.0 5;12.0 5	937.5 5;4.5 5	936.0 5;14.0 5
1048	1048.9 5;6 1	1048.1 5;17 1	1048.9 5;5.5 5	1047.9 5;18 1
1236	1236.2 5;14 1 m	1236.7 5;10 1	1235.7 5;3 1	1233.4 5;4.0 5
1352	986.1 5;3.0 5	986.3 5;3.0 5	984.7 5;17 1	985.3 5;5 1
1352	1236.2 (?) m			
1352	1239.2;w	1239.0 5;6 1	1239.5 5;16 1	1239.0 5;w
1352	1352.1;w	1351.4;1.0 5	1352.0 5;5.5 10	
1377	1376.5 5;8 1	1376.5 5;7 1	1376.8 5;7.5 10	1376.7 5;9 1
1434	1433.0 5;5.0 2	1434.4 5;2.0 5	1434.0 5;10 1	1433.5 5;13 1
1522	1157.8 5;4.0 5	1155.3 5;3.0 5	1155.3 5;5.0 5	
1522	1410.6 5;6.0 5	1411.1 5;3.0 5	1410.3 5;7.5 10	
1730	1730.5;5.0 5	1729.9;3.0 5	1730.3;1.0 2	1730.2;24 1
1743 a	1630.4;28 2 c	1628.1;12.0 5 c	1631.8;21 1 c	1631.2;246 7 c
1982	934.4 5;1.0 5	933.4 5;6.0 5	934.6 5;1.5 2	934.4 5;4.0 5
1982	1864.8;4.0 5 b	1863.1;2.0 5 b	1864.6;1.5 5 b	1865.2;7 1 b
2253			2246.5;1.0 5	2246.3;5 1
2478 a	2106.5;6 1 d			
2532			1177.8;w	
2614 a	1236.2 5 (?) m			
2642	1590.8;2.0 5 n	1590.8;2.0 5 n	1590.1;3.0 5 n	1590.4;2 1 n

a: level not reported in **1975Er07**

b: 931 γ and 1864 γ to 116 level reassigned in **1975Er07** to decay from 1044 and 1867 levels, respectively.

c: γ not reported in **1975Er07**, but the level and 1628 γ known in another reaction

d: unassigned γ ray near this energy in **1975Er07**

m: triple placement of 1236.2 γ in only one resonance, placements from 2614 and 1352 levels not given in **1975Er07**

n: γ not reported in **1975Er07**, but the level is kept based on

a possible primary transition
w: weak γ ray, no intensity available

Unplaced secondary gamma rays from [1970Er03](#)

($\Delta(E_\gamma)=1.0$ keV when not stated)

8396 level (Ep=1467) E_γ, I_γ	8484 level (Ep=1557) E_γ, I_γ	8510 level (Ep=1583) E_γ, I_γ	8552 level (Ep=1626) E_γ, I_γ
		326.5 5;4.5 5 e	
		432.6 5;3.5 5 e	
		495.4 5;5.0 5 f	
		841.4 5 g	843.0 5 g
911.1 5 f	908.4 5 f		907.8 5 f
1043.3 5;16 1 e	1042.6 5;18 1 e	1043.9 5;12 1 e	1041.5 5;20 1 e
1124.2 5;11 1 e	1124.2 5;5 1 e	1122.2 5;4.0 5 e	1121.1 5;8.0 5
1233.9 5;4 1 f			
1363.7;3.0 5 e	1363.3;2 1 e		
1477.7;4.0 5 f			
		1613.2 f	
		1777.4;2.0 5 f	1777.1;4.0 5 f
	1813.1;3.0 5 e	1813.6;1.5 5 e	
1974.5;4.0 5 h			
		2832 2;2.0 5 f	
		2989 2;2.0 5 f	
			3289.1;6 1 f

e: γ assigned in [1975Er07](#)

f: γ not reported in [1975Er07](#)

g: γ assigned to an impurity in [1975Er07](#)

h: γ unassigned in [1975Er07](#)

$E_i(\text{level})$	J_i^π	E_γ	$I_\gamma^\dagger$	E_f	J_f^π	Comments
365.6	3 ⁺	365.6 1		0.0	2 ⁺	
457.5	4 ⁺	432.6 2	100	25.0	5 ⁺	
1040.0	3 ⁺	583.0 [‡] 2		457.5	4 ⁺	
		674.5 [‡] 2		365.6	3 ⁺	
		1040.0 2		0.0	2 ⁺	
1044.1	(3 ⁺ ,4 ⁺)	932.7 2	19 2	111.4	3 ⁺	
		1044.0 1	81 2	0.0	2 ⁺	
1050.0	1 ⁺	938.6 1	49 2	111.4	3 ⁺	
		1050.0 1	51 2	0.0	2 ⁺	
1236.6	2 ⁺	1125.2 1	47 5	111.4	3 ⁺	
		1236.5 2	53 5	0.0	2 ⁺	
1353.4	(2) ⁺	987.9 1	46 3	365.6	3 ⁺	
		1241.5 2	39 3	111.4	3 ⁺	
		1353.3 2	15 3	0.0	2 ⁺	
1376.4	1 ⁺	326.0 2		1050.0	1 ⁺	
		1376.0 5		0.0	2 ⁺	E_γ : partly or entirely due to $^{56}\text{Fe}(p,\gamma)^{57}\text{Co}$.
1435.5	1 ⁺	1435.5 2	100	0.0	2 ⁺	
1523.3		1157.6 1	45 5	365.6	3 ⁺	
		1412.1 2	55 5	111.4	3 ⁺	
1606.5	3 ⁺	1494.9 3	100	111.4	3 ⁺	
1669.9	3 ⁺	619.9 2	100	1050.0	1 ⁺	

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$^{57}\text{Fe}(\text{p},\gamma)$ **1975Er07,1970Er03 (continued)** $\gamma(^{58}\text{Co})$ (continued)

$E_i(\text{level})$	J_i^π	E_γ	$I_\gamma^\dagger$	E_f	J_f^π	Mult.	Comments
1729.9	1 ⁺	1363.6 2 1730.7 3	43 5 57 5	365.6 0.0	3 ⁺ 2 ⁺		
1741		1630.4 [#] 10	100 [#]	111.4	3 ⁺		Additional information 7.
1750.5	(3,4) ⁺	1698.3 3	100	52.8	4 ⁺		
1867.7	1 ⁺	1814.9 ^a 3	40 10	52.8	4 ⁺	[M3]	In view of high and unlikely multipolarity of M3 implied for this transition, evaluators consider this placement, proposed only in (p, γ), uncertain.
		1867.7 3	60 10	0.0	2 ⁺		
1978.8	3 ⁺	934.7 2	100	1044.1	(3 ⁺ ,4 ⁺)		
2248.8	1 ⁺	2247.6 5	100	0.0	2 ⁺		
2335.3	1 ⁺ ,2 ⁺ ,3 ⁺	2334.9 5	100	0.0	2 ⁺		
2478?		2107.5 ^a 3		365.6	3 ⁺		E_γ : unassigned in 1975Er03, placed from 2478 level in 1970Er03 in the decay of 8396 level with 6% I branching.
2534.4	1 ⁺	1181.0 2	100	1353.4	(2) ⁺		
2640.7?		1590.8 ^a 10		1050.0	1 ⁺		E_γ : from 1970Er03, $I_\gamma=2.0$ 5 in the decay of 8396 level.
8395.8		4881 [#] 3 4965 [#] 3 5285 [#] 3 5381 [#] 3 5914 ^{#a} 3 6048 ^{#a} 3 6663 [#] 3 6868 [#] 3 6956 [#] 3 7014 [#] 4 7039 [#] 4 7155 [#] 3 7347 [#] 3 8395 [#] 3	1.0 [#] 3 14 [#] 1 28 [#] 2 3.0 [#] 5 2.0 [#] 5 6 [#] 1 8 [#] 1 10 [#] 1 2.0 [#] 5 5 [#] 1 6 [#] 1 5 [#] 1 6 [#] 1 5 [#] 1	3512 3427 3107 3011 2478? 2335.3 1729.9 1523.3 1435.5 1376.4 1353.4 1236.6 1050.0 0.0	(1) ⁺ 3 ⁺ 2 ⁺ 1 ⁺ ,2 ⁺ ,3 ⁺ 1 ⁺ 1 ⁺ 2 ⁺ 2 ⁺ 1 ⁺ 2 ⁺ 2 ⁺		Additional information 8. E_γ : poor fit in level scheme.
8484.2		5835 [#] 3 5851 [#] 3 5867 ^{#a} 3 6740 ^{#a} 3 6955 [#] 3 7105 [#] 3 7130 [#] 4 7249 [#] 4 7432 [#] 3 8482 [#] 3	2.0 [#] 5 3.0 [#] 5 2.0 [#] 5 10 [#] 1 3.0 [#] 5 13 [#] 1 3 [#] 1 5 [#] 1 23 [#] 2 34 [#] 2	2640.7? 2625? 2614? 1741 1523.3 1376.4 1353.4 1236.6 1050.0 0.0	 1 ⁺ 2 ⁺ 2 ⁺ 1 ⁺ 2 ⁺		Additional information 9. Additional information 10.
8509.8		5872 [@] 3 5890 [@] 3 5979 [@] 3 6407 [@] 3 6530 [@] 3 6987 [@] 2 7076 [@] 2	<2 [@] <2 [@] <2 [@] <2 [@] <2 [@] 16 [@] 2 6 [@] 1	2640.7? 2625? 2534.4 2105 1978.8 1523.3 1435.5	 1 ⁺ 3 ⁺ 1 ⁺		Additional information 11. Additional information 12. Additional information 13. Additional information 14. Additional information 15. Additional information 16. Additional information 17.

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$^{57}\text{Fe}(\text{p},\gamma)$ **1975Er07,1970Er03** (continued) $\gamma(^{58}\text{Co})$ (continued)

$E_i(\text{level})$	J_i^π	E_γ	$I_\gamma^\dagger$	E_f	J_f^π	Comments
8509.8		7138@ 3	<2@	1376.4	1 ⁺	Additional information 18.
		7157@ 2	45@ 3	1353.4	(2) ⁺	Additional information 19.
		7273@ 2	6@ 1	1236.6	2 ⁺	Additional information 20.
		7461@ 2	11@ 1	1050.0	1 ⁺	Additional information 21.
		8145@ 3	3@ 1	365.6	3 ⁺	Additional information 22.
		8400@ 3	5@ 1	111.4	3 ⁺	Additional information 23.
		8459@ 3	4@ 1	52.8	4 ⁺	Additional information 24.
		8485& 3	3& 1	25.0	5 ⁺	
		8512@ 3	2.0@ 5	0.0	2 ⁺	Additional information 25.
8528.5		6778& 11	& 1	1750.5	(3,4) ⁺	
		7176& 29	& 2	1353.4	(2) ⁺	
		7292& 6	& 1	1236.6	2 ⁺	
		7485& 21	& 2	1044.1	(3 ⁺ ,4 ⁺)	
		8418& 5	& 1	111.4	3 ⁺	
		8476& 5	& 1	52.8	4 ⁺	
		8529& 24	& 2	0.0	2 ⁺	
8537.3		6808& 13	& 1	1729.9	1 ⁺	
		6868& 9	& 1	1669.9	3 ⁺	
		6931& 9	& 1	1606.5	3 ⁺	
		7102& 16	& 1	1435.5	1 ⁺	
		7162& 7	& 1	1376.4	1 ⁺	
		7301& 2.0	& 5	1236.6	2 ⁺	
		7494& 13	& 1	1044.1	(3 ⁺ ,4 ⁺)	
		8427& 7	& 1	111.4	3 ⁺	
		8538& 25	& 2	0.0	2 ⁺	
8552.0		6300& 3	9& 1	2248.8	1 ⁺	
		6824& 2	31& 2	1729.9	1 ⁺	
		7120& 3	7& 1	1435.5	1 ⁺	
		7319& 3	9& 1	1236.6	2 ⁺	
		7502# 3	31# 2	1050.0	1 ⁺	Additional information 26.
		7508& <5	& 1	1044.1	(3 ⁺ ,4 ⁺)	
		8190& 4	4& 1	365.6	3 ⁺	
		8443& 4	2.0& 5	111.4	3 ⁺	
		8553& 3	6& 1	0.0	2 ⁺	
8599.2		6732& 8	& 1	1867.7	1 ⁺	
		7077& <2	& 1	1523.3		
		7164& <2	& 1	1435.5	1 ⁺	
		7226& 14	& 1	1376.4	1 ⁺	
		7247& 15	& 1	1353.4	(2) ⁺	
		7363& <2	& 1	1236.6	2 ⁺	
		7556& 31	& 2	1044.1	(3 ⁺ ,4 ⁺)	
		8600& 32	& 2	0.0	2 ⁺	
		6275& 9	& 1	2335.3	1 ⁺ ,2 ⁺ ,3 ⁺	
8610.0		6361& 4	& 1	2248.8	1 ⁺	
		6505& 9	& 1	2105		

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$^{57}\text{Fe}(\text{p},\gamma)$ 1975Er07,1970Er03 (continued) $\gamma(^{58}\text{Co})$ (continued)

$E_i(\text{level})$	J_i^π	E_γ	$I_\gamma^\dagger$	E_f	J_f^π	$E_i(\text{level})$	J_i^π	E_γ	$I_\gamma^\dagger$	E_f	J_f^π
8610.0		6631 ^{&}	4 ^{&†} 1	1978.8	3 ⁺	8610.0		8610 ^{&}	15 ^{&†} 1	0.0	2 ⁺
		6742 ^{&}	11 ^{&†} 1	1867.7	1 ⁺	8624.8		6757 ^{&}	16 ^{&†} 1	1867.7	1 ⁺
		6859 ^{&}	<2 ^{&}	1750.5	(3,4) ⁺			6875 ^{&}	38 ^{&†} 2	1750.5	(3,4) ⁺
		6880 ^{&}	<2 ^{&}	1729.9	1 ⁺			6895 ^{&}	<2 ^{&}	1729.9	1 ⁺
		7087 ^{&}	<2 ^{&}	1523.3				6955 ^{&}	23 ^{&†} 2	1669.9	3 ⁺
		7175 ^{&}	12 ^{&†} 1	1435.5	1 ⁺			7189 ^{&}	<2 ^{&}	1435.5	1 ⁺
		7234 ^{&}	22 ^{&†} 1	1376.4	1 ⁺			7272 ^{&}	<2 ^{&}	1353.4	(2) ⁺
		7257 ^{&}	9 ^{&†} 1	1353.4	(2) ⁺			7388 ^{&}	<2 ^{&}	1236.6	2 ⁺
		7373 ^{&}	<2 ^{&}	1236.6	2 ⁺			7581 ^{&}	22 ^{&†} 1	1044.1	(3 ⁺ ,4 ⁺)
		7566 ^{&}	18 ^{&†} 1	1044.1	(3 ⁺ ,4 ⁺)			8625 ^{&}	21 ^{&†} 1	0.0	2 ⁺

[†] Uncertainty assigned as 5% to 30% for primary transitions in 1975Er07, according to a general statement by the authors. For some of the transitions taken from 1970Er03, minimum uncertainty is also assigned (by the evaluators) as 5%.

[‡] Authors place these as tentative because of competing $E_\gamma=583$ from ^{208}Tl (in room background) and $E_\gamma=673$ from $^{56}\text{Fe}(\text{p},\gamma)^{57}\text{Co}$. However, their existence in ^{58}Co is established from other work.

From 1970Er03.

@ E_γ from 1970Er03, I_γ from 1975Er07, value from 1970Er03, given under comments, is considered by the evaluators as superseded in authors' 1975Er07 work.

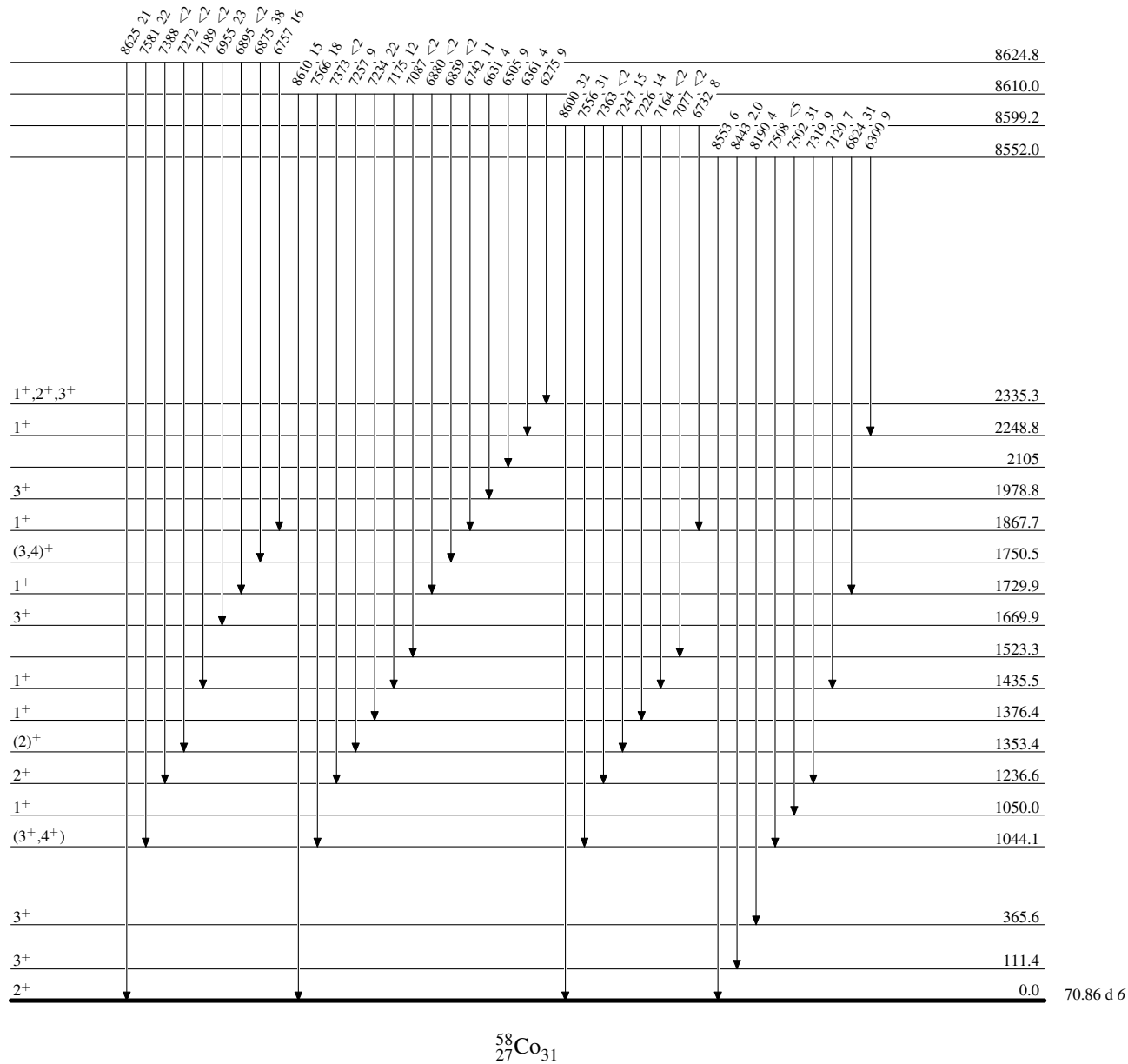
& From 1975Er07, E_γ is from difference of level energies. Uncertainty of 1 or 0.5 keV is assigned by the evaluators based on those quoted in authors' earlier work 1970Er03.

^a Placement of transition in the level scheme is uncertain.

$^{57}\text{Fe}(\text{p},\gamma)$ 1975Er07,1970Er03

Level Scheme

Intensities: % photon branching from each level

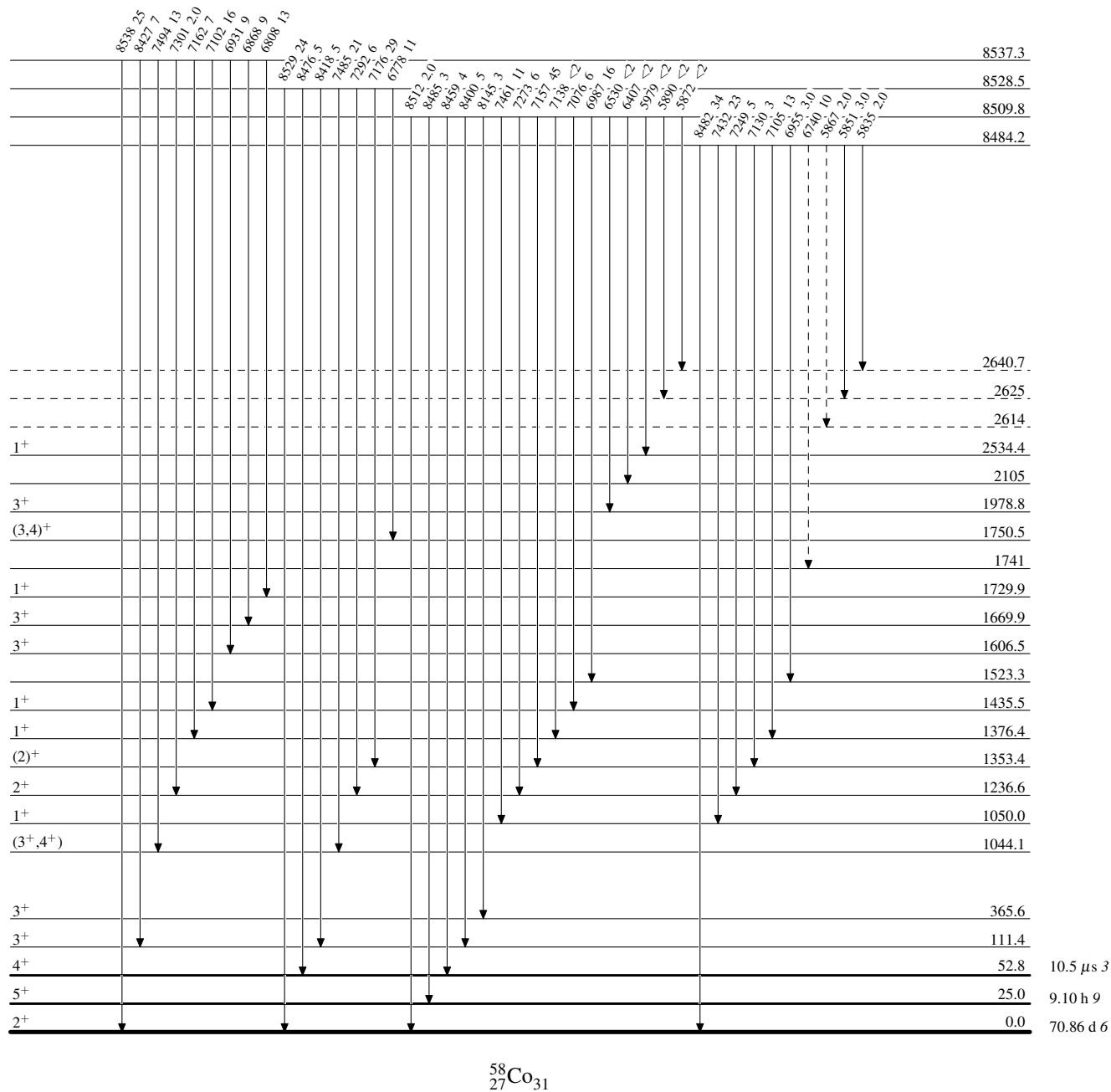


$^{57}\text{Fe}(\text{p},\gamma)$ 1975Er07,1970Er03

Legend

Level Scheme (continued)

Intensities: % photon branching from each level

-----► γ Decay (Uncertain)

$^{57}\text{Fe}(\text{p},\gamma)$ 1975Er07,1970Er03

Legend

Level Scheme (continued)

Intensities: % photon branching from each level

-----► γ Decay (Uncertain)