

$^{168}\text{Er}(^{19}\text{F},4n\gamma)$ **1988Ja10**

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	Coral M. Baglin	NDS 134, 149 (2016)	15-Apr-2015

1988Ja10: $E(^{19}\text{F})=85$ MeV; measured $E\gamma$, $\gamma\gamma$ coin, $\gamma(\theta)$.

 ^{183}Ir Levels

E(level) [†]	$J\pi^{\ddagger}$	E(level) [†]	$J\pi^{\ddagger}$	E(level) [†]	$J\pi^{\ddagger}$	E(level) [†]	$J\pi^{\ddagger}$
0.0 [@]	5/2 ⁻	919.0 [@] 20	21/2 ⁻	2540 [@] 3	33/2 ⁻	4441 [@] 4	45/2 ⁻
16.0 [@] 10	9/2 ⁻	1059.0 [#] 14	15/2 ⁺	2635.0 [#] 19	29/2 ⁺	4752.0 [#] 24	(43/2 ⁺)
119.0 ⁹		1262.0 [#] 15	17/2 ⁺	2909.0 [#] 19	31/2 ⁺	5052.0 [#] 24	(45/2 ⁺)
185.0 [@] 15	13/2 ⁻	1427.0 [@] 23	25/2 ⁻	3120 [@] 3	37/2 ⁻	5215 [@] 4	49/2 ⁻
307.0 [#] 9	5/2 ⁺	1475.0 [#] 16	19/2 ⁺	3181.0 [#] 20	33/2 ⁺	5434.0 [#] 25	(47/2 ⁺)
412.0 [#] 12	7/2 ⁺	1691.0 [#] 16	21/2 ⁺	3481.0 [#] 20	35/2 ⁺	6065 [@] 4	(53/2 ⁻)
494.0 [@] 18	17/2 ⁻	1916.0 [#] 17	23/2 ⁺	3746.3 [@]	41/2 ⁻	6988 [#] 4	(57/2 ⁻)
542.0 [#] 12	9/2 ⁺	1978.0 [@] 25	29/2 ⁻	3774.0 [#] 21	37/2 ⁺		
695.0 [#] 13	11/2 ⁺	2142.0 [#] 18	25/2 ⁺	4095.0 [#] 21	39/2 ⁺		
869.0 [#] 14	13/2 ⁺	2388.0 [#] 18	27/2 ⁺	4401.0 [#] 23	(41/2 ⁺)		

[†] From least-squares fit to $E\gamma$, assigning 1-keV uncertainty to all $E\gamma$ data.

[‡] Authors' suggested values based on deduced band structure.

Band(A): 5/2[402] band.

@ Band(B): 1/2[541] band.

 $\gamma(^{183}\text{Ir})$

$E\gamma^{\dagger}$	$E_i(\text{level})$	J_i^{π}	E_f	J_f^{π}	$E\gamma^{\dagger}$	$E_i(\text{level})$	J_i^{π}	E_f	J_f^{π}
(16)	16.0	9/2 ⁻	0.0	5/2 ⁻	307	307.0	5/2 ⁺	0.0	5/2 ⁻
105	412.0	7/2 ⁺	307.0	5/2 ⁺	309	494.0	17/2 ⁻	185.0	13/2 ⁻
119	119.0		0.0	5/2 ⁻	321	4095.0	39/2 ⁺	3774.0	37/2 ⁺
130	542.0	9/2 ⁺	412.0	7/2 ⁺	327	869.0	13/2 ⁺	542.0	9/2 ⁺
153	695.0	11/2 ⁺	542.0	9/2 ⁺	364	1059.0	15/2 ⁺	695.0	11/2 ⁺
169	185.0	13/2 ⁻	16.0	9/2 ⁻	393	1262.0	17/2 ⁺	869.0	13/2 ⁺
174	869.0	13/2 ⁺	695.0	11/2 ⁺	416	1475.0	19/2 ⁺	1059.0	15/2 ⁺
188	307.0	5/2 ⁺	119.0		425	919.0	21/2 ⁻	494.0	17/2 ⁻
190	1059.0	15/2 ⁺	869.0	13/2 ⁺	429	1691.0	21/2 ⁺	1262.0	17/2 ⁺
203	1262.0	17/2 ⁺	1059.0	15/2 ⁺	441	1916.0	23/2 ⁺	1475.0	19/2 ⁺
213	1475.0	19/2 ⁺	1262.0	17/2 ⁺	451	2142.0	25/2 ⁺	1691.0	21/2 ⁺
216	1691.0	21/2 ⁺	1475.0	19/2 ⁺	472	2388.0	27/2 ⁺	1916.0	23/2 ⁺
225	1916.0	23/2 ⁺	1691.0	21/2 ⁺	493	2635.0	29/2 ⁺	2142.0	25/2 ⁺
226	2142.0	25/2 ⁺	1916.0	23/2 ⁺	508	1427.0	25/2 ⁻	919.0	21/2 ⁻
235	542.0	9/2 ⁺	307.0	5/2 ⁺	521	2909.0	31/2 ⁺	2388.0	27/2 ⁺
246	2388.0	27/2 ⁺	2142.0	25/2 ⁺	546	3181.0	33/2 ⁺	2635.0	29/2 ⁺
247	2635.0	29/2 ⁺	2388.0	27/2 ⁺	551	1978.0	29/2 ⁻	1427.0	25/2 ⁻
272	3181.0	33/2 ⁺	2909.0	31/2 ⁺	562	2540	33/2 ⁻	1978.0	29/2 ⁻
274	2909.0	31/2 ⁺	2635.0	29/2 ⁺	572	3481.0	35/2 ⁺	2909.0	31/2 ⁺
283	695.0	11/2 ⁺	412.0	7/2 ⁺	580	3120	37/2 ⁻	2540	33/2 ⁻
293	3774.0	37/2 ⁺	3481.0	35/2 ⁺	593	3774.0	37/2 ⁺	3181.0	33/2 ⁺
300	3481.0	35/2 ⁺	3181.0	33/2 ⁺	614	4095.0	39/2 ⁺	3481.0	35/2 ⁺
306 [‡]	4401.0	(41/2 ⁺)	4095.0	39/2 ⁺	626	3746.3	41/2 ⁻	3120	37/2 ⁻

Continued on next page (footnotes at end of table)

$^{168}\text{Er}(^{19}\text{F},4n\gamma)$ **1988Ja10 (continued)** $\gamma(^{183}\text{Ir})$ (continued)

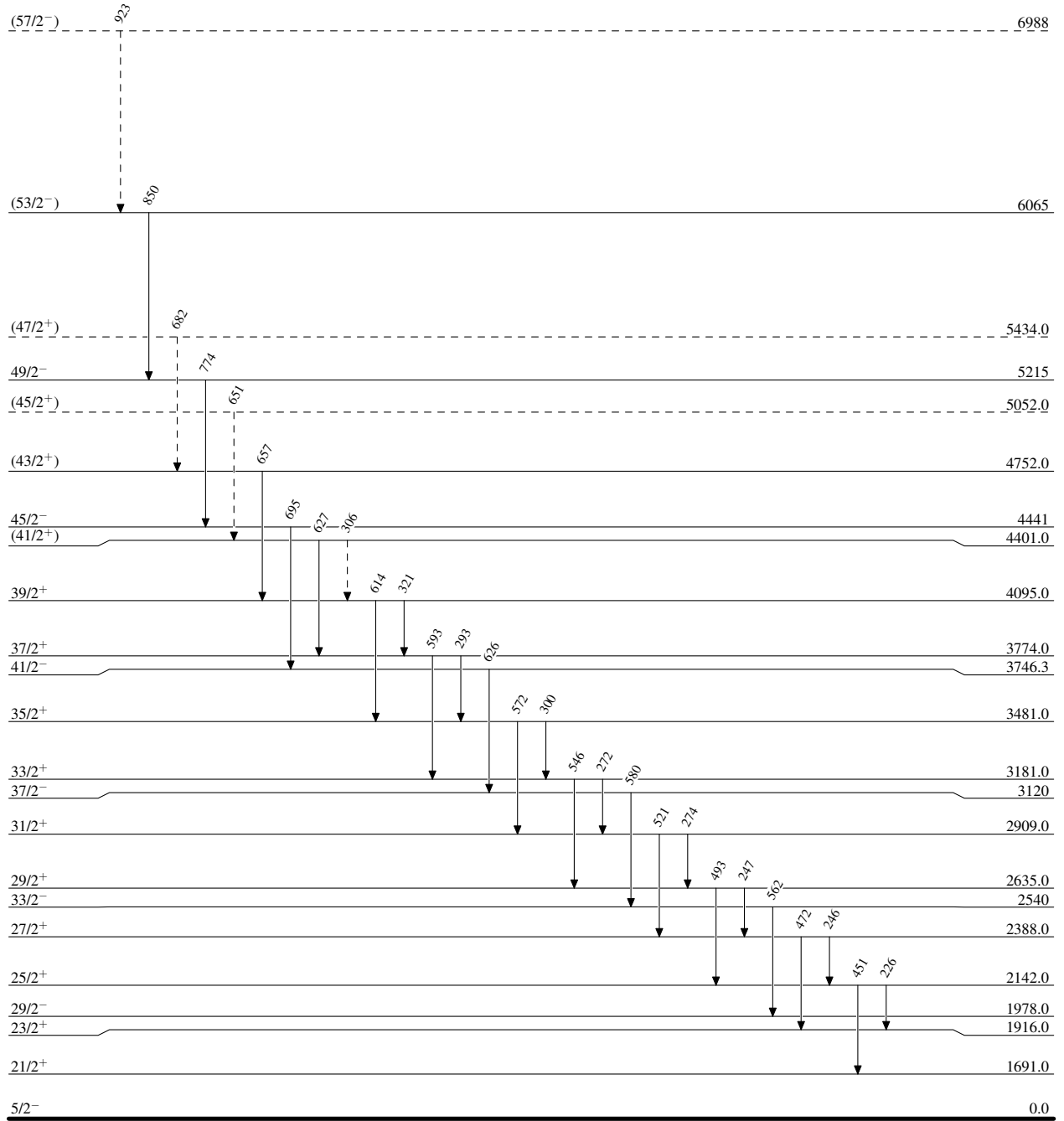
E_γ [†]	$E_i(\text{level})$	J_i^π	E_f	J_f^π	E_γ [†]	$E_i(\text{level})$	J_i^π	E_f	J_f^π
627	4401.0	(41/2 ⁺)	3774.0	37/2 ⁺	695	4441	45/2 ⁻	3746.3	41/2 ⁻
651 [‡]	5052.0?	(45/2 ⁺)	4401.0	(41/2 ⁺)	774	5215	49/2 ⁻	4441	45/2 ⁻
657	4752.0	(43/2 ⁺)	4095.0	39/2 ⁺	850	6065	(53/2 ⁻)	5215	49/2 ⁻
682 [‡]	5434.0?	(47/2 ⁺)	4752.0	(43/2 ⁺)	923 [‡]	6988?	(57/2 ⁻)	6065	(53/2 ⁻)

[†] Uncertainties unstated by authors.[‡] Placement of transition in the level scheme is uncertain.

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Legend

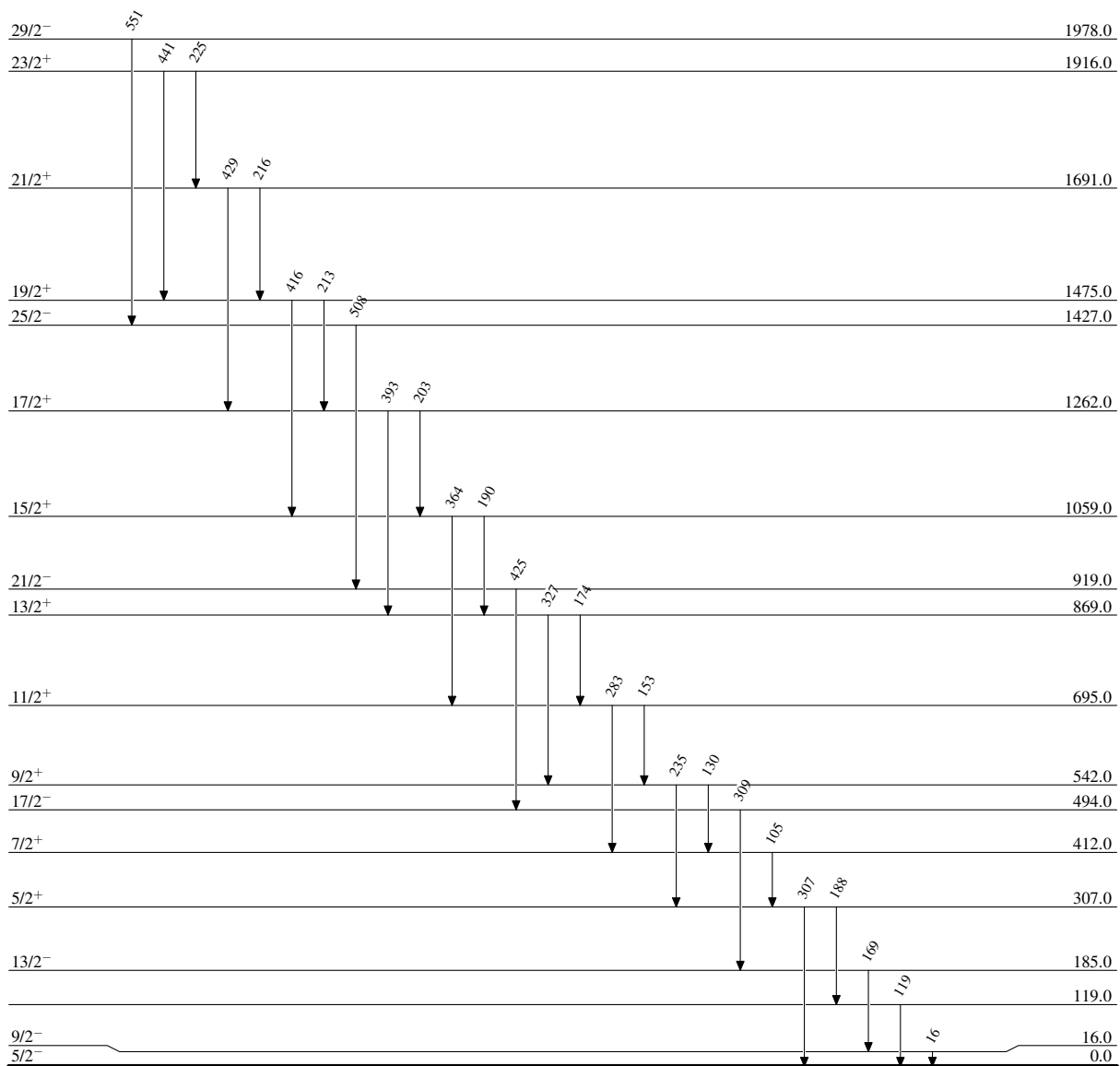
Level Scheme

-----► γ Decay (Uncertain) $^{183}_{77}\text{Ir}_{106}$

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Legend

Level Scheme (continued)

-----► γ Decay (Uncertain)

 $^{183}_{77}\text{Ir}_{106}$

