

Adopted Levels, Gammas

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

Q(β⁻)=-3460 50; S(n)=7130 50; S(p)=5.51×10³ 11; Q(α)=3210 50 2012Wa38

¹⁸³Os Levels

Band(K) Band based on (15/2⁻), 1560. Possible configuration=ν9/2[624]π(1/2[541]+5/2[402]).

Cross Reference (XREF) Flags

| | | | |
|----------|-------------------------------------|----------|--|
| A | ¹⁸³ Os IT decay (9.9 h) | D | ¹⁷⁰ Er(¹⁸ O,5nγ) |
| B | ¹⁸³ Os IT decay (≈30 ns) | E | ¹⁸⁶ W(α,7nγ), ¹⁸⁵ Re(p,3nγ), |
| C | ¹⁸³ Ir ε decay | | |

| E(level) [†] | J ^{π‡} | T _{1/2} | XREF | Comments |
|------------------------|------------------------|------------------|--------------|--|
| 0.0 ^d | 9/2 ^{+ #} | 13.0 h 5 | ABCDE | %ε+%β ⁺ =100 μ=(-)0.794 14 (1980Ha24); Q=+3.1 3 (1985Ha41) μ: NMR on oriented nuclei; from g=(-)0.176 3. Q: From static nuclear orientation with γ detection; relative to ¹⁸⁶ Os(137). J ^π : J=9/2 from atomic beam (1975Ru06). π from comparison of μ with Nilsson prediction (-0.77) for 9/2[624] orbital. T _{1/2} : from 1960Ne03, corrected for feeding by 9.9-h isomer (1975Ar33). Other values: 13.5 h 10 (1966Be47), 14 h (1976Ka22), 15.4 h 3 (1958Fo47). |
| 96.39 ^e 7 | 11/2 ^{+ #} | | BCDE | J ^π : M1+E2 intraband 96γ to 9/2 ⁺ g.s.. |
| 170.73 ^j 7 | 1/2 ^{- &} | 9.9 h 3 | A C E | %ε+%β ⁺ =85 2; %IT=15 2 %IT from IT decay (9.9 h). J ^π : M4 171γ to 9/2 ⁺ g.s.. T _{1/2} : from 1960Ne03 in IT decay (9.9 h). Other values: 10 h 1 (1958Fo47), 9.1 h (1976Ka22). |
| 219.24 ^d 8 | 13/2 ^{+ #} | | B DE | J ^π : D+Q intraband 123γ to 11/2 ⁺ 96; stretched Q intraband 219γ to 9/2 ⁺ g.s.. |
| 258.34 ^j 8 | 3/2 ^{- &} | | CDE | J ^π : M1+E2 88γ to 1/2 ⁻ 171. |
| 273.08 ^j 8 | 5/2 ^{- &} | | CD | J ^π : intraband E2 102γ to 1/2 ⁻ 171; intraband 15γ to 3/2 ⁻ 258. |
| 375.48 ^e 8 | 15/2 ^{+ #} | | B DE | J ^π : D+Q 156γ to 13/2 ⁺ 219; stretched Q intraband 279γ to 11/2 ⁺ 96. |
| 392.52 ^g 6 | (7/2) ⁻ | | CDE | J ^π : E1 393γ to 9/2 ⁺ g.s.; band assignment. |
| 395.22 ^l 10 | 1/2 ^{- a} | | C | J ^π : M1+E2 137γ to 3/2 ⁻ 258; band assignment. |
| 453.08 ^l 8 | 3/2 ^{- a} | | C | J ^π : intraband M1+E2 58γ to 1/2 ⁻ 395; M1(+E2) 283γ to 5/2 ⁻ 273. |
| 487.04 ^j 9 | 7/2 ^{- &} | | CDE | J ^π : stretched Q intraband 229γ to 3/2 ⁻ 258; intraband 214γ to 5/2 ⁻ 273. |
| 509.91 ^j 10 | 9/2 ^{- &} | | CD | J ^π : intraband stretched E2 237γ to 5/2 ⁻ 273. |
| 512.52 ^h 6 | 7/2 ^{- @} | | CD | J ^π : E1 513γ to 9/2 ⁺ g.s.; M1(+E2) 120γ to (7/2) ⁻ 392; band assignment. |
| 513.12 ^l 8 | 5/2 ^{- a} | | C | J ^π : E2 342γ to 1/2 ⁻ 171; M1(+E2) 26γ to 7/2 ⁻ 487. |
| 541.56 ^d 9 | 17/2 ^{+ #} | | B DE | J ^π : intraband M1+E2 166γ to 15/2 ⁺ 375; intraband E2 322γ to 13/2 ⁺ 219. |
| 544.41 ⁱ 8 | 5/2 ^{- b} | | C | J ^π : E2 374γ to 1/2 ⁻ 171; M1+E2 32γ to 7/2 ⁻ 512. |
| 558.31 ^f 7 | (9/2) ^{- b} | | CDE | J ^π : M1+E2 166γ to (7/2) ⁻ 392; E1 462γ to 11/2 ⁺ 96. |
| 582.24 ^k 9 | (3/2) ^{- b} | | C | J ^π : M1 324γ to 3/2 ⁻ 258; M1 309γ to 5/2 ⁻ 273; E2(+M1) 412γ to 1/2 ⁻ 171. |
| 620.82 ^l 10 | 7/2 ^{- a} | | C | J ^π : M1+E2 348γ to 5/2 ⁻ 273; intraband 168γ to 3/2 ⁻ 453. Intraband M1(+E2) 108γ to 5/2 ⁻ 513. |
| 646.35 ^h 8 | 9/2 ^{- @} | | CD | J ^π : M1(+E2) 254γ to (7/2) ⁻ 392; intraband 134γ to 7/2 ⁻ 512.54. |
| 655.36 ⁱ 11 | (7/2) ^{- b} | | C | J ^π : E1 655γ to 9/2 ⁺ g.s.; 111γ to 5/2 ⁻ 544; band assignment. |

Continued on next page (footnotes at end of table)

Adopted Levels, Gammas (continued)

¹⁸³Os Levels (continued)

| E(level) [†] | J ^{π‡} | T _{1/2} | XREF | Comments |
|-------------------------|----------------------------|--------------------|------|--|
| 669.12 ^k 9 | (5/2) ^{-b} | | C | J ^π : E2 499γ to 1/2 ⁻ 171; M1 396γ to 5/2 ⁻ 273; band assignment. |
| 714.06 11 | 9/2 ⁺ | | C | J ^π : M1(+E2) 618γ to 11/2 ⁺ 96; M1+E2 714γ to 9/2 ⁺ g.s.; 332γ from (5/2 ⁺) 1046. |
| 731.62 ^c 10 | 7/2 ^{+b} | | C | J ^π : E2+M1 732γ to 9/2 ⁺ g.s.; (M1) 521γ from (5/2 ⁺) 1253. |
| 748.96 ^g 7 | (11/2) ⁻ | | CDE | J ^π : D+Q intraband 191γ to (9/2) ⁻ 558; Q intraband 357γ to (7/2) ⁻ 392. |
| 763.86 ^k 12 | (7/2) ^{-b} | | C | J ^π : E2(+M1) 491γ to 5/2 ⁻ 273; 253γ to 9/2 ⁻ 510; band assignment. |
| 764.07 ^e 9 | 19/2 ^{+#} | | B DE | J ^π : Q intraband 389γ to 15/2 ⁺ 375; intraband D+Q 222γ to 17/2 ⁺ 541. |
| 793.03 ^c 16 | (11/2) ^{+b} | | C | J ^π : E2 697γ to 11/2 ⁺ 96; 793γ to 9/2 ⁺ g.s.; band assignment. |
| 800.57 13 | (5/2) ⁺ | | C | J ^π : E2 800γ to 9/2 ⁺ g.s.; log ft=7.5 from 5/2 ⁻ . |
| 812.50 ^h 7 | 11/2 ^{-@} | | D | J ^π : intraband 166γ to 9/2 ⁻ 647; intraband 300γ to 7/2 ⁻ 513. |
| 832.06 10 | (3/2,5/2,7/2) ⁻ | | C | J ^π : M1 319γ to (5/2) ⁻ 513. |
| 848.24 ^j 13 | 11/2 ^{-&} | | DE | J ^π : Q intraband 361γ to 7/2 ⁻ 487. |
| 850.23 13 | (3/2,5/2,7/2) ⁻ | | C | J ^π : E2(+M1) 592γ to 3/2 ⁻ 258; E2 458γ to (7/2) ⁻ 393. |
| 879.61 ^j 12 | 13/2 ^{-&} | | D | J ^π : intraband 370γ to 9/2 ⁻ 510. |
| 896.77 14 | (7/2) ⁺ | | C | J ^π : M1+E2 897γ to 9/2 ⁺ g.s.; (M1) 356γ from (5/2 ⁺) 1253. |
| 944.35 12 | (3/2,5/2) ⁻ | | C | J ^π : E2+M1 671γ to 5/2 ⁻ 273; possible 774γ to 1/2 ⁻ 171. |
| 951.45 ^d 9 | 21/2 ^{+#} | | B DE | J ^π : intraband D+Q 187γ to 19/2 ⁺ 764; Q 410γ to 17/2 ⁺ 541. |
| 958.18 ^f 8 | (13/2) ^{-b} | | DE | J ^π : D+Q intraband 209γ to (11/2) ⁻ 749; intraband Q 400γ to (9/2) ⁻ 558. |
| 964.88 14 | (3/2,5/2) ⁻ | | C | J ^π : M1 706γ to 3/2 ⁻ 258; M1+E2 692γ to 5/2 ⁻ 273. |
| 1010.97 ^h 8 | 13/2 ^{-@} | | D | J ^π : intraband 199γ to 11/2 ⁻ 812; intraband 365γ to 9/2 ⁻ 647. |
| 1039.24 22 | (5/2,7/2,9/2) ⁻ | | C | J ^π : M1 552γ to 7/2 ⁻ 487. |
| 1045.96 12 | (5/2 ⁺) | | C | J ^π : M1+E2 932γ from (3/2) ⁺ 1978; (E2) 1046γ to 9/2 ⁺ g.s.. |
| 1054.38 14 | (5/2,7/2,9/2) ⁻ | | C | J ^π : M1 567γ to 7/2 ⁻ 487; |
| 1179.76 ^g 8 | (15/2) ⁻ | | DE | J ^π : intraband D+Q 222γ to (13/2) ⁻ 958; intraband (E2) 431γ to (11/2) ⁻ 749. |
| 1180.90 17 | (3/2,5/2) ⁻ | | C | J ^π : E2 786γ to (1/2) ⁻ 395; 728γ to 3/2 ⁻ 453. |
| 1236.77 14 | (7/2) ⁺ | | C | J ^π : M1+E2 505γ to 7/2 ⁺ 732; (M1) 523γ to 9/2 ⁺ 714; possible 1140γ to 11/2 ⁺ 96. |
| 1236.87 ^h 9 | 15/2 ^{-@} | | D | J ^π : intraband 226γ to 13/2 ⁻ 1011; intraband 425γ to 11/2 ⁻ 812. |
| 1252.97 15 | (5/2) ⁺ | | C | J ^π : M1 356γ to J _{≥7/2} 897; M1+E2 725γ from (3/2) ⁺ 1978. |
| 1255.84 ^e 9 | 23/2 ^{+#} | | B DE | J ^π : intraband Q 492γ to 19/2 ⁺ 764; intraband (M1+E2) 304γ to 21/2 ⁺ 951. |
| 1295.44 18 | (5/2) ⁺ | | C | J ^π : M1+E2 495γ to (5/2) ⁺ 801; possible 581γ to 9/2 ⁺ 714; M1 683γ from (3/2) ⁺ 1978. |
| 1324.04 ^j 17 | 15/2 ^{-&} | | DE | J ^π : intraband 476γ to 11/2 ⁻ 848. |
| 1332.61 23 | (1/2,3/2,5/2) ⁻ | | C | J ^π : M1+E2 1074γ to 3/2 ⁻ 258. |
| 1369.91 ^j 13 | 17/2 ^{-&} | | D | J ^π : intraband 490γ to 13/2 ⁻ 880. |
| 1420.91 ^f 9 | (17/2) ^{-b} | | DE | J ^π : intraband D+Q 241γ to (15/2) ⁻ 1180, intraband Q 463γ to (13/2) ⁻ 958 in (¹⁸ O,5nγ). |
| 1442.86 ^d 10 | 25/2 ^{+#} | | B DE | J ^π : D+Q intraband 187γ to 23/2 ⁺ 1256; intraband 481γ to 21/2 ⁺ 951. |
| 1482.91 ⁿ 10 | 19/2 ⁽⁺⁾ | | D | J ^π : D+Q 941γ to 17/2 ⁺ 541; stretched Q 1108γ to 15/2 ⁺ 375. |
| 1560.27 9 | (15/2) ⁻ | <3 ^s ns | D | J ^π : (D) 1185γ to 15/2 ⁺ 375 interpreted as D ΔJ=0 in (¹⁸ O,5nγ); 602γ to (13/2) ⁻ 958; 1341γ to 13/2 ⁺ 219; band assignment. |
| 1583.55 10 | (17/2) ⁻ | | D | J ^π : 1042γ to 17/2 ⁺ 541; 1208γ to 15/2 ⁺ 375; band assignment. |
| 1661.94 ^g 9 | (19/2) ⁻ | | DE | J ^π : D+Q 241γ to (17/2) ⁻ 1420; stretched Q intraband 482γ to (15/2) ⁻ 1180 in (¹⁸ O,58nγ). |
| 1665.06 10 | (19/2) ⁻ | | DE | J ^π : D 244γ to (17/2) ⁻ 1420; stretched Q 485γ to (15/2) ⁻ 1180; band assignment. |
| 1690.60 ^m 11 | 21/2 ⁽⁺⁾ | | D | J ^π : D+Q 927γ to 19/2 ⁺ 764; stretched Q 1149γ to 17/2 ⁺ 541. |
| 1779.19 9 | (21/2) ⁻ | | D | J ^π : intraband D+Q 114γ to (19/2) ⁻ 1665; intraband stretched Q 196γ to (17/2) ⁻ 1584; 523γ to 23/2 ⁺ 1256. |
| 1815.16 10 | 21/2 ⁺ | | D | J ^π : 864γ to 21/2 ⁺ 951, 1274γ to 17/2 ⁺ 542 in (¹⁸ O,5nγ); 1051γ to 19/2 ⁺ 763.97. |

Continued on next page (footnotes at end of table)

Adopted Levels, Gammas (continued)

| ^{183}Os Levels (continued) | | | | | |
|--------------------------------------|--|--------------------|------|---|--|
| E(level) [†] | J ^π [‡] | T _{1/2} | XREF | Comments | |
| 1844.38 ^e 11 | 27/2 ⁺ # | | B DE | J ^π : intraband 401γ to 25/2 ⁺ 1443; Q intraband 589γ to 23/2 ⁺ 1256. | |
| 1911.55 16 | (3/2 ⁻ ,5/2,7/2 ⁻) | | C | J ^π : 1459γ to (3/2 ⁻) 453; 1519γ to (7/2 ⁻) 392. | |
| 1921.06 23 | 1/2,3/2,5/2 ⁻ | | C | J ^π : 1526γ to (1/2 ⁻) 395; 1468γ to (3/2 ⁻) 453. | |
| 1922.11 ^f 12 | (21/2 ⁻) ^b | | D | J ^π : stretched Q 501 γ to (17/2 ⁻) 1420 in (¹⁸ O,5nγ). | |
| 1925.66 9 | (23/2 ⁻) | | D | J ^π : intraband D 146γ to (21/2 ⁻) 1779; stretched Q 264γ to (19/2 ⁻) 1662. | |
| 1925.94 ⁿ 11 | 23/2 ⁽⁺⁾ | | D | J ^π : D+Q 975γ to 21/2 ⁺ 951; stretched Q 1162γ to 19/2 ⁺ 764. | |
| 1977.92 14 | (3/2 ⁺) | | C | J ^π : M1+E2 932γ to (5/2 ⁺) 1046; 1705γ to 5/2 ⁻ 273; 1807γ to 1/2 ⁻ 171; M1 683γ to π=+ 1295. | |
| 2017.53 ^d 11 | 29/2 ⁺ # | | B DE | J ^π : Q intraband 575γ to 25/2 ⁺ 1443; intraband 173γ to 27/2 ⁺ 1844. | |
| 2083.46 23 | (1/2,3/2,5/2 ⁻) | | C | J ^π : 1688γ to (1/2 ⁻) 395. | |
| 2101.38 11 | (25/2 ⁻) | | D | J ^π : D intraband 176γ to (23/2 ⁻) 1926; stretched Q intraband 322γ to (21/2 ⁻) 1779; band assignment. | |
| 2150.58 ^g 19 | (23/2 ⁻) | | D | J ^π : stretched Q intraband 489γ to (19/2 ⁻); 1662 in (¹⁸ O,5nγ). | |
| 2175.68 ^m 10 | 25/2 ⁽⁺⁾ | | D | J ^π : D+Q 920γ to 23/2 ⁺ 1256; stretched Q 1224γ to 21/2 ⁺ 951. | |
| 2209.73 ^o 11 | (23/2 ⁺) | <3 ^S ns | D | J ^π : D+Q 1258γ to 21/2 ⁺ 951; (Q) 1446γ to 19/2 ⁺ 764; band assignment. | |
| 2219.14 23 | (5/2 ⁻ ,7/2) | | C | J ^π : 1710γ to 9/2 ⁻ 510 and 1455γ to (7/2 ⁻) 764; log ft=7.7 (log f ^{1u} t<8.5) from 5/2 ⁻ in ε decay. | |
| 2249.38 22 | (5/2 ⁺ ,7/2) | | C | J ^π : 2250γ to 9/2 ⁺ g.s.; 1857γ to (7/2 ⁻) 992; log ft=7.3 (log f ^{1u} t<8.5) from 5/2 ⁻ in ε decay. | |
| 2254.62 19 | 3/2 ⁽⁻⁾ ,5/2,7/2 ⁽⁻⁾ | | C | J ^π : 1801γ to 3/2 ⁻ 453; 1862γ to (7/2 ⁻) 392; log ft=7.1 from 5/2 ⁻ in ε decay. | |
| 2258.37 14 | (7/2) | | C | J ^π : 1544γ to 9/2 ⁺ 714; 1494γ to (7/2 ⁻) 764; log ft=6.8 from 5/2 ⁻ in ε decay; 1748γ to 9/2 ⁻ 510. | |
| 2273.83 10 | (7/2 ⁻) | | C | J ^π : E2 1653γ to (7/2 ⁻) 621; log ft=6.1 from 5/2 ⁻ (log f ^{1u} t<8.5); 2274γ to 9/2 ⁺ g.s.. | |
| 2300.06 10 | (5/2 ⁻) | | C | J ^π : E1 1063γ to (7/2 ⁺) 1237; 1905γ to (1/2 ⁻) 395; log ft=6.1 (log f ^{1u} t<8.5) from 5/2 ⁻ . | |
| 2305.17 11 | (27/2 ⁻) | | D | J ^π : Q intraband 380γ to (23/2 ⁻) 1926; intraband ΔJ=1 204γ to (25/2 ⁻) 2101. | |
| 2310.52 23 | 3/2,5/2,7/2 ⁽⁻⁾ | | C | J ^π : log ft=7.2 (log f ^{1u} t<8.5) from 5/2 ⁻ in ε decay; 1857γ to 3/2 ⁻ 453. | |
| 2338.46 10 | 25/2 ⁺ | | D | J ^π : D+Q 1083γ to 23/2 ⁺ 1256; Q 1387γ to 21/2 ⁺ 951; 896γ to 25/2 ⁺ 1442. | |
| 2402.41 ^f 16 | (25/2 ⁻) ^b | | D | J ^π : Q intraband 480γ to (21/2 ⁻) 1922. | |
| 2459.62 ⁿ 11 | (27/2 ⁺) | | D | J ^π : 615γ to 27/2 ⁺ 1844; intraband 534γ to 23/2 ⁽⁺⁾ 1926; band assignment. | |
| 2470.65 ^o 13 | (25/2 ⁺) | | D | J ^π : intraband 261γ to (23/2 ⁺) 2210. | |
| 2511.25 23 | (5/2 ⁺ ,7/2) | | C | J ^π : log ft=7.1 (log f ^{1u} t<8.5) from 5/2 ⁻ in ε decay; 1797γ to 9/2 ⁺ 714. | |
| 2521.86 ^e 12 | 31/2 ⁺ # | | B DE | J ^π : Q intraband 678γ to 27/2 ⁺ 1844. | |
| 2536.42 12 | (29/2 ⁻) | | D | J ^π : Q intraband 435γ to (25/2 ⁻) 2101; intraband ΔJ=1 231γ to (27/2 ⁻) 2305. | |
| 2599.47 ^g 20 | (27/2 ⁻) | | D | J ^π : Q intraband 449γ to (23/2 ⁻) 2151. | |
| 2674.37 ^d 13 | 33/2 ⁺ # | | B DE | J ^π : Q intraband 657γ to 29/2 ⁺ 2017. | |
| 2746.76 ^m 11 | 29/2 ⁽⁺⁾ | | D | J ^π : stretched Q 1304γ to 25/2 ⁺ 1443; 729γ to 29/2 ⁺ 2017. | |
| 2754.21 ^o 13 | (27/2 ⁺) | | D | J ^π : intraband 284γ to (25/2 ⁺) 2470; intraband 545γ to (23/2 ⁺) 2210. | |
| 2792.72 13 | (31/2 ⁻) | | D | J ^π : Q intraband 488γ to (27/2 ⁻) 2305; intraband 256γ to (29/2 ⁻) 2536. | |
| 2870.8 ^f 4 | (29/2 ⁻) ^b | | D | J ^π : Q intraband 468γ to (25/2 ⁻) 2402. | |
| 3029.11 ^g 19 | (31/2 ⁻) | | D | J ^π : Q intraband 430γ to (27/2 ⁻) 2599. | |
| 3046.00 ^o 14 | (29/2 ⁺) | | D | J ^π : intraband 292γ to (27/2 ⁺) 2754; intraband 575γ to (25/2 ⁺) 2471. | |
| 3067.32 12 | (29/2 ⁺) | | D | J ^π : D+Q 1223γ to 27/2 ⁺ 1844; 1050γ to 29/2 ⁺ 2017; 546γ to 31/2 ⁺ 2522.. | |
| 3074.99 13 | (33/2 ⁻) | | D | J ^π : Q intraband 539γ to (29/2 ⁻) 2536; intraband ΔJ=1 282γ to (31/2 ⁻) 2793. | |
| 3077.42 ⁿ 12 | (31/2 ⁺) | | D | J ^π : D+Q 1060γ to 29/2 ⁺ 2017; 1233γ to 27/2 ⁺ 1844; intraband 618γ to | |

Continued on next page (footnotes at end of table)

Adopted Levels, Gammas (continued)

| ^{183}Os Levels (continued) | | | | | |
|--------------------------------------|---|----------------------|------|---|--|
| E(level) [†] | J ^π [‡] | T _{1/2} | XREF | Comments | |
| 3094.36 <i>14</i> | | | D | (27/2 ⁺) 2459. | |
| 3278.63 ^e <i>14</i> | 35/2 ⁺ # | | B DE | J ^π : 624γ to (25/2 ⁺) 2470, 340γ to (27/2 ⁺) 2754 favor J=23/2 to J=29/2. | |
| 3340.3 ^f <i>5</i> | (33/2 ⁻) ^b | | D | J ^π : Q intraband 757γ to 31/2 ⁺ 2522. | |
| 3363.42 ^m <i>12</i> | (33/2 ⁺) | | D | J ^π : Q intraband 470γ to (29/2 ⁻) 2871. | |
| 3377.50 <i>14</i> | (35/2 ⁻) | | D | J ^π : 689γ to 33/2 ⁺ 2674; 1346γ to 29/2 ⁺ 2017; intraband 617γ to 29/2 ⁽⁺⁾ 2746; 841γ to (31/2 ⁺) 2522. | |
| 3383.42 ^r <i>16</i> | (31/2 ⁻) | | D | J ^π : Q intraband 585γ to (31/2 ⁻) 2793; intraband 303γ to (33/2 ⁻) 3075. | |
| 3404.48 ^d <i>17</i> | 37/2 ⁺ # | | B DE | J ^π : 847γ to 29/2 ⁻ 2536; band assignment. | |
| 3419.71 <i>14</i> | (29/2 ⁺ ,31/2 ⁺) | | D | J ^π : Q intraband 730γ to 33/2 ⁺ 2674. | |
| 3430.80 <i>13</i> | (29/2,31/2 ⁺) | | D | J ^π : (29/2 ⁺ ,31/2 ⁺) in table 1 and (29/2 ⁺ ,31/2 ⁻) in fig. 2 of 2001Sh41. 1575γ to 27/2 ⁺ 1844. | |
| 3505.51 ^g <i>18</i> | (35/2 ⁻) | | D | J ^π : (29/2 ⁺ ,31/2 ⁺) in table 1 and (29/2 ⁻ ,31/2 ⁺) in fig. 2 of 2001Sh41. 1586γ to 27/2 ⁺ 1844. | |
| 3707.47 <i>15</i> | (37/2 ⁻) | | D | J ^π : Q intraband 476γ to (31/2 ⁻) 3029. | |
| 3764.73 <i>15</i> | (≥25/2) | | D | J ^π : Q intraband 633γ to (33/2 ⁻) 3075; intraband 330γ to (35/2 ⁻) 3377. | |
| 3766.00 ⁿ <i>16</i> | (35/2 ⁺) | | D | J ^π : 719γ to (29/2 ⁺) 3046. | |
| 3785.82 ^p <i>12</i> | (33/2 ⁺) | <3 ^s ns | D | J ^π : 1244γ to 31/2 ⁺ 2522; intraband 689γ to (31/2 ⁺) 3077; 1092γ to 33/2 ⁺ 2674. | |
| 3876.3 ^f <i>5</i> | (37/2 ⁻) ^b | | D | J ^π : stretched Q 1768γ to 29/2 ⁺ 2017; 1111γ to 33/2 ⁺ 2674. | |
| 3884.52 ^p <i>14</i> | (35/2 ⁺) | | D | J ^π : Q intraband 536γ to (33/2 ⁻) 3340. | |
| 3986.62 ^r <i>15</i> | (35/2 ⁻) | | D | J ^π : intraband (M1) 99γ to (33/2 ⁺) 3786. | |
| 4031.17 <i>16</i> | (39/2 ⁻) | | D | J ^π : D 912γ to (33/2 ⁻) 3075; intraband 603γ to (31/2 ⁻) 3383. | |
| 4075.64 ^g <i>16</i> | (39/2 ⁻) | | D | J ^π : Q intraband 654γ to (35/2 ⁻) 3377. | |
| 4088.62 ^e <i>16</i> | 39/2 ⁺ # | | D | J ^π : Q intraband 570γ to (35/2 ⁻) 3505. | |
| 4116.79 ^p <i>13</i> | (37/2 ⁺) | | D | J ^π : Q intraband 810γ to 35/2 ⁺ 3278. | |
| 4181.78 ^d <i>19</i> | 41/2 ⁺ # | | B DE | J ^π : D intraband 232γ to (35/2 ⁺) 3884; 1442γ to 33/2 ⁺ 2674. | |
| 4181.78+x | ≥41/2 | ≈30 ns | B | J ^π : Q intraband 777γ to 37/2 ⁺ 3404. %IT=100 | |
| 4398.57 ^p <i>14</i> | (39/2 ⁺) | | D | J ^π : implied isomeric γ to 41/2 ⁺ 4182. | |
| 4422.58 <i>18</i> | (41/2 ⁻) | | D | T _{1/2} : from ¹⁸³ Os IT decay (≈30 ns). | |
| 4496.4 ^f <i>5</i> | (41/2 ⁻) ^b | | D | J ^π : D intraband 282γ to (37/2 ⁺) 4117; intraband 514γ to (35/2 ⁺) 3884. | |
| 4675.01 ^g <i>17</i> | (43/2 ⁻) | | D | J ^π : Q intraband 715γ to (37/2 ⁻) 3707. | |
| 4679.06 ^r <i>15</i> | (39/2 ⁻) | | D | J ^π : Q intraband 620γ to (37/2 ⁻) 3876. | |
| 4716.30 ^p <i>14</i> | (41/2 ⁺) | | D | J ^π : Q 644γ to (39/2 ⁻) 4031; intraband 599γ to (39/2 ⁻) 4075. | |
| 4814.14 <i>19</i> | (43/2 ⁻) | | D | J ^π : D 972γ to (37/2 ⁻) 3707; intraband 693γ to (35/2 ⁻) 3987. | |
| 4931.92 ^e <i>19</i> | 43/2 ⁺ # | | D | J ^π : D intraband 318γ to (39/2 ⁺) 4398; intraband 600γ to (37/2 ⁺) 4117. | |
| 4934.77 <i>15</i> | (41/2 ⁺) | | D | J ^π : Q 739γ to (39/2 ⁻) 4075; intraband 783γ to (39/2 ⁻) 4031. | |
| 4936.88 ^d <i>22</i> | 45/2 ⁺ # | | D | J ^π : intraband 843γ to 39/2 ⁺ 4088. | |
| 5063.63 ^p <i>15</i> | (43/2 ⁺) | | D | J ^π : 256γ to (39/2 ⁻) 4679; (E1) 133γ from J≤(43/2) 5068. | |
| 5067.68 <i>15</i> | (43/2 ⁻) | 27 ^s ns 3 | b D | J ^π : Q intraband 755γ to 41/2 ⁺ 4182. | |
| 5167.61 <i>15</i> | (43/2 ⁺) | 24 ^s ns 2 | b D | J ^π : intraband 347γ to (41/2 ⁺) 4716; intraband 665γ to (39/2 ⁺) 4399. | |
| 5192.4 ^f <i>5</i> | (45/2 ⁻) ^b | | D | J ^π : D, ΔJ=1 351γ to (41/2 ⁺) 4716; (E1) 133γ to J≤(43/2) 4935. | |
| 5192.68 <i>21</i> | (45/2 ⁻) | | D | Other T _{1/2} : ≈30 ns for this and/or 5167 level from (α,7nγ). | |
| 5386.01 ^g <i>20</i> | (47/2 ⁻) | | D | Other T _{1/2} : ≈30 ns for this and/or 5067 level from (α,7nγ). | |
| 5406.26 ^r <i>25</i> | (43/2 ⁻) | | D | J ^π : D+Q 451γ to (41/2 ⁺) 4716; 1079γ to 39/2 ⁺ 4088. | |
| 5437.63 ^p <i>18</i> | (45/2 ⁺) | | D | J ^π : Q intraband 696γ to (41/2 ⁻) 4496. | |
| 5477.92 ^q <i>18</i> | (45/2,47/2 ⁻) | | D | J ^π : (Q) intraband 770γ to (41/2 ⁻) 4423. | |
| | | | D | J ^π : intraband 711γ to (43/2 ⁻) 4675. | |
| | | | D | J ^π : intraband 727γ to (39/2 ⁻) 4679. | |
| | | | D | J ^π : intraband 374γ to (43/2 ⁺) 5063; intraband 721γ to (41/2 ⁺) 4716. | |
| | | | D | J ^π : 410γ to (43/2 ⁻) 5065. | |

Continued on next page (footnotes at end of table)

Adopted Levels, Gammas (continued) ^{183}Os Levels (continued)

| E(level) [†] | J^π [‡] | XREF | Comments |
|-------------------------|--------------------------------|------|---|
| 5542.05 18 | | D | J^π : 474 γ to (43/2 ⁻) 5068. |
| 5594.28 17 | | D | J^π : 427 γ to (43/2 ⁺) 5167. |
| 5618.04 22 | (47/2 ⁻) | D | J^π : intraband 804 γ to (43/2 ⁻) 4814. |
| 5698.08 ^d 24 | 49/2 ⁺ [#] | D | J^π : Q intraband 761 γ to 45/2 ⁺ 4936. |
| 5874.06 ^q 18 | (47/2,49/2 ⁻) | D | J^π : intraband 396 γ to (45/2,47/2 ⁻) 5478. |
| 5904.94 17 | | D | J^π : 737 γ to (43/2 ⁺) 5167. |
| 5977.7 11 | (49/2 ⁻) | D | J^π : 785 γ to (45/2 ⁻) 5193. |
| 6173.51 ^g 22 | (51/2 ⁻) | D | J^π : intraband 879 γ to (47/2 ⁻) 5386. |
| 6280.92 ^q 18 | (49/2,51/2 ⁻) | D | J^π : intraband 803 γ to (45/2,47/2 ⁻) 5478; intraband 407 γ to (47/2,49/2 ⁻) 5873. |
| 6412.24 20 | | D | J^π : 507 γ to 5905. |
| 6461.0 4 | (51/2 ⁻) | D | J^π : intraband 843 γ to (47/2 ⁻) 5618. |
| 6594.71 18 | | D | J^π : 721 γ to (47/2,49/2 ⁻) 5874; 314 γ to (49/2,51/2 ⁻) 6280. |
| 6697.49 ^q 19 | (51/2,53/2 ⁻) | D | J^π : intraband 417 γ to (49/2,51/2 ⁻) 6280. |

[†] From least-squares fit to E_γ , excluding the 441.9 γ , 782.14 γ and 1767.5 γ , all of which fit their placement particularly poorly, along with lines for which the placement is questionable; χ^2 of fit is 4.6 cf. the critical value of 1.2.

[‡] Values given without further comment are based on band structure deduced from ($^{18}\text{O},5n\gamma$).

[#] Definite J^π is assigned to members of 9/2[624] band based on smooth progression of level energies and established $J^\pi=9/2^+$ for g.s. and M1+E2 multipolarity for intraband 96 γ .

[@] Definite J^π is assigned to members of 7/2[514] band based on smooth progression of level energies and established $J^\pi=7/2^-$ for 513 level and M1(+E2) multipolarity for intraband 255 γ .

[&] $J^\pi(171)$ level) from M4 171 γ to 9/2⁺ g.s.. Definite J^π assigned to remaining band members based on energy sequence, $J^\pi(171)$ level) and on M1+E2 multipolarity for 88 γ to 3/2⁻ 258.

^a Definite J^π assigned to 1/2[510] band based on progression of level energies and independently-determined $J^\pi(513)=5/2^-$ and M1+E2 multipolarity for 59 γ connecting J=3/2 and 1/2 band members.

^b Band assignment.

^c Band(A): 7/2[633] band.

^d Band(B): 9/2[624], $\alpha=+1/2$ g.s. band. Band parameters: $E_0=-37$, $A=8.1$, $B=32.2$ (J=9/2 through 15/2).

^e Band(b): 9/2[624], $\alpha=-1/2$ g.s. band.

^f Band(C): 7/2[503], $\alpha=+1/2$ band. Band parameters: $E_0=326$, $A=19.2$, $B=-52.3$ (J=7/2 through 13/2).

^g Band(c): 7/2[503], $\alpha=-1/2$ band. See comment on signature partner band.

^h Band(D): 7/2[514] band. Band parameters: $E_0=461$, $A=14.8$, $B=7.9$ (J=7/2 through 13/2).

ⁱ Band(E): 5/2[512] band. Band parameters: $E_0=505$, $A=15.8$ (J=5/2, 7/2).

^j Band(F): 1/2[521] band. Band parameters: $E_0=175$, $A=16.6$, $a=+0.83$ (J=1/2 through 7/2).

^k Band(G): 3/2[512] band. Band parameters: $E_0=564$, $A=15.0$ (J=3/2,5/2,7/2).

^l Band(H): 1/2[510] band. Band parameters: $E_0=395$, $A=14.3$, $a=+0.12$ (J=1/2 through 7/2).

^m Band(I): Band based on 21/2⁺, $\alpha=+1/2$. $\nu_{13/2}$ coupled to γ -vibrational band.

ⁿ Band(i): Band based on 19/2⁺, $\alpha=-1/2$. $\nu_{13/2}$ coupled to γ -vibrational band.

^o Band(J): Band based on 23/2⁺.

^p Band(K): Band based on 33/2⁺.

^q Band(L): Band based on (45/2,47/2⁻).

^r Band(M): γ cascade based on (31/2⁻).

^s From ($^{18}\text{O},5n\gamma$).

Adopted Levels, Gammas (continued)

| E _i (level) | J ^π _i | γ(¹⁸³ Os) | | | | | | | Comments |
|------------------------|-----------------------------|------------------------------------|-----------------------------|----------------|-----------------------------|----------------------|-----------------------|----------------|---|
| | | E _γ [‡] | I _γ [‡] | E _f | J ^π _f | Mult. [‡] | δ [‡] | α [†] | |
| 96.39 | 11/2 ⁺ | 96.3 [#] 1 | 100 [#] | 0.0 | 9/2 ⁺ | M1+E2 | -0.39 4 | 6.11 10 | Other δ: -0.65 22 from γ(θ) in ¹⁸⁶ W(α,7nγ), Re(p,3nγ). B(M4)(W.u.)=1.03 15 Mult.: from sub-shell ratios in IT decay (9.9 h). |
| 170.73 | 1/2 ⁻ | 170.7 1 | 100 | 0.0 | 9/2 ⁺ | M4 | | 208 | |
| 219.24 | 13/2 ⁺ | 122.7 [#] 2 | 26 [#] 3 | 96.39 | 11/2 ⁺ | (M1+E2) [@] | -0.42 [@] 14 | 2.95 12 | Mult.: D+Q intraband γ from (¹⁸ O,5nγ). I _γ : other I(123γ):I(219γ)= 100:61 13 in ¹⁸⁶ W(α,7nγ),Re(p,3nγ) (but 123γ was contaminated in that reaction), and 100 11:26 3 from ¹⁸³ Os IT decay (≈30 ns). |
| 258.34 | 3/2 ⁻ | 219.3 ^{&} 2 87.5 1 | 100 11 100 | 0.0 | 9/2 ⁺ | (E2) [@] | | 0.244 | I _γ : from ¹⁸³ Os IT decay (≈30 ns). |
| 273.08 | 5/2 ⁻ | 14.7 2 102.2 1 | ≈2.5 100 15 | 170.73 | 1/2 ⁻ | E2+M1 | 0.85 +18-16 | 7.96 14 | I _γ : from I(γ+ce) and α in ε decay. |
| 375.48 | 15/2 ⁺ | 156.1 [#] 1 | 85 [#] 4 | 258.34 | 3/2 ⁻ | [M1] | | 276 12 | |
| | | | | 170.73 | 1/2 ⁻ | E2 | | 3.99 | |
| | | | | 219.24 | 13/2 ⁺ | (M1+E2) [@] | -0.42 [@] 14 | 1.46 8 | Other I _γ : 105 10 from IT decay (≈30 ns), 89 11 from (α,7nγ). Mult.: D+Q intraband γ from (¹⁸ O,5nγ). |
| | | 279.0 [#] 1 | 100 [#] 4 | 96.39 | 11/2 ⁺ | (E2) | | 0.1137 | Mult.: stretched Q intraband γ from (¹⁸ O,5nγ). |
| 392.52 | (7/2) ⁻ | 392.5 1 | 100 | 0.0 | 9/2 ⁺ | E1 | | 0.01307 | |
| 395.22 | 1/2 ⁻ | 136.8 1 | 100 | 258.34 | 3/2 ⁻ | M1+E2 | 0.4 1 | 2.16 7 | |
| 453.08 | 3/2 ⁻ | 57.9 2 | ≈1.1 | 395.22 | 1/2 ⁻ | M1+E2 | 0.4 4 | 11 11 | |
| | | 179.8 2 | 6.6 11 | 273.08 | 5/2 ⁻ | [M1+E2] | | 0.8 3 | |
| | | 194.7 1 | 32 5 | 258.34 | 3/2 ⁻ | M1 | | 0.850 | |
| | | 282.5 1 | 100 15 | 170.73 | 1/2 ⁻ | M1(+E2) | 0.11 +52-11 | 0.30 6 | |
| 487.04 | 7/2 ⁻ | 213.9 2 | 7.6 12 | 273.08 | 5/2 ⁻ | [M1+E2] | | 0.46 20 | |
| | | 228.68 7 | 100 15 | 258.34 | 3/2 ⁻ | E2 | | 0.213 | E _γ : weighted average of 228.7 1 from (¹⁸ O,5nγ), 228.6 1 from ε decay and 228.9 2 from (α,7nγ). |
| 509.91 | 9/2 ⁻ | 236.8 1 | 100 | 273.08 | 5/2 ⁻ | E2 | | 0.190 | |
| 512.52 | 7/2 ⁻ | 119.90 9 | 14.8 22 | 392.52 | (7/2) ⁻ | M1(+E2) | ≤0.52 | 3.22 14 | E _γ : weighted average of 119.9 1 from (¹⁸ O,5nγ) and 119.9 2 from ε decay. Other I _γ : 29 6 from (¹⁸ O,5nγ). |
| | | 512.66 9 | 100 13 | 0.0 | 9/2 ⁺ | E1 | | 0.00727 | E _γ : weighted average of 512.7 1 from (¹⁸ O,5nγ) and 512.5 2 from ε decay. |
| 513.12 | 5/2 ⁻ | 26.1 2 | 1.57 24 | 487.04 | 7/2 ⁻ | M1(+E2) | <0.1 | 62 12 | |
| | | 118.0 2 | ≈4.8 | 395.22 | 1/2 ⁻ | [E2] | | 2.26 | |
| | | 239.9 1 | 81 14 | 273.08 | 5/2 ⁻ | M1 | | 0.477 | |
| | | 254.9 1 | 57 9 | 258.34 | 3/2 ⁻ | M1 | | 0.403 | |
| | | 342.4 1 | 100 14 | 170.73 | 1/2 ⁻ | E2 | | 0.0622 | |
| 541.56 | 17/2 ⁺ | 166.1 [#] 1 | 46.9 [#] 21 | 375.48 | 15/2 ⁺ | M1+E2 [@] | -0.33 [@] 8 | 1.26 4 | Other I(166γ):I(322γ)=40 4:100 10 from IT decay (≈30 ns). 49 7:100 8 from (α,7nγ). |
| | | 322.4 [#] 1 | 100 [#] 4 | 219.24 | 13/2 ⁺ | E2 [@] | | 0.0739 | |

Adopted Levels, Gammas (continued)

$\gamma(^{183}\text{Os})$ (continued)

| $E_i(\text{level})$ | J_i^π | E_γ^\ddagger | I_γ^\ddagger | E_f | J_f^π | Mult. [‡] | δ^\ddagger | α^\ddagger | Comments |
|---------------------|---------------------|--|--|--|--|---|-----------------------|---|--|
| 544.41 | 5/2 ⁻ | 31.6 2 91.1 2 151.7 2 271.3 1 286.1 2 373.8 2 | 0.80 12 5.3 8 3.1 5 100 15 65 10 13.3 20 | 512.52 453.08 392.52 273.08 258.34 170.73 | 7/2 ⁻ 3/2 ⁻ (7/2) ⁻ 5/2 ⁻ 3/2 ⁻ 1/2 ⁻ | M1+E2 M1 [M1+E2] M1 M1 E2 | 0.34 +12-15 | 1.2×10 ² 7 7.35 12 1.3 5 0.340 0.294 0.0486 | |
| 558.31 | (9/2) ⁻ | 165.72 8 461.9 [#] 1 | 100 5 41.1 [#] 20 | 392.52 96.39 | (7/2) ⁻ 11/2 ⁺ | M1+E2 E1 | 0.7 4 | 1.11 18 0.00910 | E_γ : weighted average of 165.7 2 from ϵ decay, 165.7 1 from (¹⁸ O,5n γ) and 165.81 20 from (α ,7n γ). I_γ : from (¹⁸ O,5n γ). E_γ : weighted average of 461.9 2 from ϵ decay, 461.9 1 from (¹⁸ O,5n γ) and 461.8 2 from (α ,7n γ). I_γ : from (¹⁸ O,5n γ). |
| 582.24 | (3/2) ⁻ | 558.4 ^a 2 128.9 2 309.2 2 323.9 2 411.5 1 | 34 6 41 6 16 3 54 8 100 15 | 0.0 453.08 273.08 258.34 170.73 | 9/2 ⁺ 3/2 ⁻ 5/2 ⁻ 3/2 ⁻ 1/2 ⁻ | E1 M1(+E2) M1 M1 E2(+M1) | 0.4 4 | 0.00607 2.6 3 0.238 0.210 0.07 4 | |
| 620.82 | 7/2 ⁻ | 107.6 2 167.7 2 347.8 1 | 15.6 24 8.0 12 100 16 | 513.12 453.08 273.08 | 5/2 ⁻ 3/2 ⁻ 5/2 ⁻ | M1(+E2) [E2] M1+E2 | <0.11 0.9 +4-3 | 4.55 0.611 0.122 21 | |
| 646.35 | 9/2 ⁻ | 133.9 [#] 1 253.9 [#] 1 | 40 [#] 7 100 [#] 7 | 512.52 392.52 | 7/2 ⁻ (7/2) ⁻ | E1 M1(+E2) | | 0.28 13 | Other E_γ : 254.4 2 from ϵ decay. |
| 655.36 | (7/2) ⁻ | 110.8 2 168 1 655.4 2 | 15.7 21 \approx 5.7 100 15 | 544.41 487.04 0.0 | 5/2 ⁻ 7/2 ⁻ 9/2 ⁺ | [E2] [M1+E2] E1 | | 2.89 5 0.9 4 0.00437 | |
| 669.12 | (5/2) ⁻ | 124.3 2 156.2 2 181.8 2 273.8 2 276.7 2 396.1 2 410.7 2 498.5 1 | 31 5 6.9 10 14.2 22 30 4 \approx 10 16.7 25 48 8 100 15 | 544.41 513.12 487.04 395.22 392.52 273.08 258.34 170.73 | 5/2 ⁻ 5/2 ⁻ 7/2 ⁻ 1/2 ⁻ (7/2) ⁻ 5/2 ⁻ 3/2 ⁻ 1/2 ⁻ | E2(+M1) [M1+E2] [M1+E2] E2 [M1+E2] M1 [M1+E2] E2 | \geq 3.4 | 1.89 6 1.2 4 0.7 3 0.1205 0.22 11 0.1226 0.07 4 0.0230 | |
| 714.06 | 9/2 ⁺ | 617.7 2 714.1 2 | 100 15 34 5 | 96.39 0.0 | 11/2 ⁺ 9/2 ⁺ | M1(+E2) M1+E2 | 0.4 +5-4 1.0 +6-4 | 0.035 8 0.018 4 | |
| 731.62 | 7/2 ⁺ | 635.2 2 731.6 2 | 7.9 11 100 14 | 96.39 0.0 | 11/2 ⁺ 9/2 ⁺ | [E2] M1+E2 | | 0.01295 0.017 4 | |
| 748.96 | (11/2) ⁻ | 190.5 [#] 1 356.5 [#] 1 | 100 [#] 4 69 [#] 3 | 558.31 392.52 | (9/2) ⁻ (7/2) ⁻ | (M1+E2) (E2) | | 0.6 3 0.0555 | Mult.: D+Q intraband γ from (¹⁸ O,5n γ). Other E_γ (I_γ): 356.2 2 (\approx 32) from ϵ decay, 356.37 20 |

Adopted Levels, Gammas (continued)

$\gamma(^{183}\text{Os})$ (continued)

| $E_i(\text{level})$ | J_i^π | E_γ^\ddagger | I_γ^\ddagger | E_f | J_f^π | Mult. [‡] | δ^\ddagger | α^\dagger | Comments |
|---------------------|----------------------------|----------------------|----------------------|--------|--------------------|----------------------|----------------------|------------------|---|
| | | | | | | | | | from ($\alpha,7n\gamma$). |
| 748.96 | (11/2) ⁻ | 529.8 [#] 1 | 21.5 [#] 12 | 219.24 | 13/2 ⁺ | [E1] | | 0.00678 | Mult.: Q intraband γ from (¹⁸ O,5n γ). |
| | | 748.9 ^a 2 | 46 6 | 0.0 | 9/2 ⁺ | [E1] | | 0.00336 | Reported only in (¹⁸ O,5n γ). |
| 763.86 | (7/2) ⁻ | 250.7 2 | 100 14 | 513.12 | 5/2 ⁻ | [M1+E2] | | 0.29 14 | Absent in (¹⁸ O,5n γ). |
| | | 253 1 | ≈19 | 509.91 | 9/2 ⁻ | [M1+E2] | | 0.28 13 | |
| | | 276.7 2 | 13 6 | 487.04 | 7/2 ⁻ | [M1+E2] | | 0.22 11 | |
| | | 490.7 2 | 56 8 | 273.08 | 5/2 ⁻ | E2(+M1) | >2 | 0.028 5 | |
| 764.07 | 19/2 ⁺ | 222.4 [#] 1 | 33.9 [#] 15 | 541.56 | 17/2 ⁺ | (M1+E2) [@] | -0.23 [@] 5 | 0.570 12 | Other I γ : 29 7 from ($\alpha,7n\gamma$) but 67 7 from IT decay (\approx 30 ns). |
| | | 388.7 [#] 1 | 100 [#] 4 | 375.48 | 15/2 ⁺ | (E2) | | 0.0437 | Mult.: Q intraband γ from (¹⁸ O,5n γ). |
| 793.03 | (11/2) ⁺ | 137.4 2 | ≈11 | 655.36 | (7/2) ⁻ | [M2] | | 15.40 | |
| | | 696.9 2 | 100 15 | 96.39 | 11/2 ⁺ | E2 | | 0.01054 | |
| | | 792.6 ^a 2 | 61 9 | 0.0 | 9/2 ⁺ | [M1,E2] | | 0.014 7 | |
| 800.57 | (5/2) ⁺ | 800.3 2 | 100 | 0.0 | 9/2 ⁺ | E2 | | 0.00783 | |
| 812.50 | 11/2 ⁻ | 166.2 [#] 1 | 20 [#] 4 | 646.35 | 9/2 ⁻ | | | | |
| | | 254.2 [#] 1 | 100 [#] 5 | 558.31 | (9/2) ⁻ | | | | |
| | | 300.0 [#] 1 | 78 [#] 4 | 512.52 | 7/2 ⁻ | | | | |
| 832.06 | (3/2,5/2,7/2) ⁻ | 176.6 2 | 12.2 19 | 655.36 | (7/2) ⁻ | [M1+E2] | | 0.8 3 | |
| | | 211.2 2 | 30 5 | 620.82 | 7/2 ⁻ | [M1+E2] | | 0.48 20 | |
| | | 249.7 2 | 31 5 | 582.24 | (3/2) ⁻ | [M1+E2] | | 0.29 14 | |
| | | 319.1 2 | 100 16 | 513.12 | 5/2 ⁻ | M1 | | 0.219 | |
| | | 345 1 | ≈25 | 487.04 | 7/2 ⁻ | [M1+E2] | | 0.12 6 | |
| | | 379.0 2 | 27 5 | 453.08 | 3/2 ⁻ | E2+M1 | 1.7 +11-4 | 0.070 14 | |
| | | 573.8 2 | 81 13 | 258.34 | 3/2 ⁻ | (E2) | | 0.01637 | |
| 848.24 | 11/2 ⁻ | 361.2 [#] 1 | 100 [#] | 487.04 | 7/2 ⁻ | (E2) [@] | | 0.0535 | |
| 850.23 | (3/2,5/2,7/2) ⁻ | 267.7 2 | 32 5 | 582.24 | (3/2) ⁻ | [M1+E2] | | 0.24 12 | |
| | | 457.9 2 | ≈100 | 392.52 | (7/2) ⁻ | (E2) | | 0.0284 | |
| | | 592.0 2 | 92 13 | 258.34 | 3/2 ⁻ | E2(+M1) | 1.9 +24-6 | 0.021 5 | |
| 879.61 | 13/2 ⁻ | 369.7 [#] 1 | 100 [#] | 509.91 | 9/2 ⁻ | | | | |
| 896.77 | (7/2) ⁺ | 896.8 2 | 100 | 0.0 | 9/2 ⁺ | M1+E2 | 1.5 +14-5 | 0.0088 18 | |
| 944.35 | (3/2,5/2) ⁻ | 457.9 2 | ≈21 | 487.04 | 7/2 ⁻ | [M1,E2] | | 0.06 3 | |
| | | 551.5 2 | 12.7 19 | 392.52 | (7/2) ⁻ | | | | |
| | | 671.2 2 | 100 15 | 273.08 | 5/2 ⁻ | E2+M1 | 1.2 +6-4 | 0.019 4 | |
| | | 685.8 2 | 37 6 | 258.34 | 3/2 ⁻ | | | | |
| | | 773.8 ^a 2 | 24 4 | 170.73 | 1/2 ⁻ | | | | |
| 951.45 | 21/2 ⁺ | 187.3 [#] 1 | 16.4 [#] 7 | 764.07 | 19/2 ⁺ | (M1+E2) [@] | | 0.7 3 | Other I γ : 24 6 from ($\alpha,7n\gamma$) for possible doublet; 81 9 from IT decay (\approx 30 ns), presumably also for a doublet. δ : -0.27 6 from ($\alpha,7n\gamma$) for presumed doublet. |

Adopted Levels, Gammas (continued)

$\gamma(^{183}\text{Os})$ (continued)

| $E_i(\text{level})$ | J_i^π | E_γ^\ddagger | I_γ^\ddagger | E_f | J_f^π | Mult. [‡] | δ^\ddagger | α^\dagger | Comments |
|---------------------|----------------------------|----------------------|----------------------|---------|---------------------|----------------------|----------------------|------------------|--|
| 951.45 | 21/2 ⁺ | 409.9 [#] 1 | 100.0 [#] | 541.56 | 17/2 ⁺ | (E2) [@] | | 0.0379 | |
| 958.18 | (13/2) ⁻ | 209.2 [#] 1 | 54.2 [#] 25 | 748.96 | (11/2) ⁻ | (M1+E2) [@] | | 0.49 21 | |
| | | 399.9 [#] 1 | 100 [#] 4 | 558.31 | (9/2) ⁻ | (E2) [@] | | 0.0405 | |
| 964.88 | (3/2,5/2) ⁻ | 691.9 2 | 100 15 | 273.08 | 5/2 ⁻ | E2+M1 | 1.2 +7-4 | 0.018 4 | |
| | | 706.4 2 | 35 5 | 258.34 | 3/2 ⁻ | M1 | | 0.0271 | |
| | | 794.2 2 | 23 22 | 170.73 | 1/2 ⁻ | | | | |
| 1010.97 | 13/2 ⁻ | 198.5 [#] 1 | 32 [#] 7 | 812.50 | 11/2 ⁻ | | | | |
| | | 262.0 [#] 1 | 71 [#] 4 | 748.96 | (11/2) ⁻ | | | | |
| | | 364.7 [#] 1 | 100 [#] 4 | 646.35 | 9/2 ⁻ | | | | |
| 1039.24 | (5/2,7/2,9/2) ⁻ | 552.2 2 | 67 10 | 487.04 | 7/2 ⁻ | M1 | | 0.0512 | |
| | | 766.1 ^a 2 | 100 17 | 273.08 | 5/2 ⁻ | | | | |
| 1045.96 | (5/2 ⁺) | 245.2 2 | 4.9 7 | 800.57 | (5/2) ⁺ | [M1+E2] | | 0.31 14 | |
| | | 314.4 2 | 45 7 | 731.62 | 7/2 ⁺ | M1+E2 | 0.5 +4-5 | 0.20 4 | |
| | | 332.0 2 | 11.0 17 | 714.06 | 9/2 ⁺ | [E2] | | 0.0679 | |
| | | 1045.9 3 | 100 15 | 0.0 | 9/2 ⁺ | (E2) | | 0.00454 | |
| 1054.38 | (5/2,7/2,9/2) ⁻ | 544.6 2 | 6.8 10 | 509.91 | 9/2 ⁻ | | | | |
| | | 567.2 2 | 13.8 21 | 487.04 | 7/2 ⁻ | M1 | | 0.0477 | |
| | | 781.3 2 | 100 15 | 273.08 | 5/2 ⁻ | E2(+M1) | ≥1.7 | 0.0099 17 | |
| 1179.76 | (15/2) ⁻ | 221.5 [#] 1 | 20.8 [#] 10 | 958.18 | (13/2) ⁻ | (M1+E2) | | 0.42 18 | Other E _γ : 221.89 20 from (α,7n _γ). Mult.: D+Q intraband γ from ¹⁷⁰ Er(¹⁸ O,5n _γ). |
| | | 367.2 [#] 1 | 25.3 [#] 10 | 812.50 | 11/2 ⁻ | | | | |
| 1180.90 | (3/2,5/2) ⁻ | 430.8 [#] 1 | 100 [#] 4 | 748.96 | (11/2) ⁻ | (E2) | | 0.0332 | Mult.: Q intraband γ from (¹⁸ O,5n _γ). |
| | | 727.9 2 | 70 10 | 453.08 | 3/2 ⁻ | | | | |
| | | 785.6 2 | 100 15 | 395.22 | 1/2 ⁻ | E2 | | 0.00814 | |
| 1236.77 | (7/2) ⁺ | 505.1 2 | 41 6 | 731.62 | 7/2 ⁺ | M1+E2 | 1.0 +5-3 | 0.043 9 | |
| | | 522.8 2 | 100 15 | 714.06 | 9/2 ⁺ | (M1) | | 0.0590 | |
| | | 1140.2 3 | 50 47 | 96.39 | 11/2 ⁺ | | | | |
| 1236.87 | 15/2 ⁻ | 226.0 [#] 1 | 30 [#] 3 | 1010.97 | 13/2 ⁻ | | | | |
| | | 278.7 [#] 1 | 77 [#] 3 | 958.18 | (13/2) ⁻ | | | | |
| | | 424.5 [#] 1 | 100 [#] 3 | 812.50 | 11/2 ⁻ | | | | |
| 1252.97 | (5/2) ⁺ | 356.2 2 | ≈27.5 | 896.77 | (7/2) ⁺ | M1 | | 0.1628 | |
| | | 521.3 2 | 100 15 | 731.62 | 7/2 ⁺ | (M1) | | 0.0595 | |
| 1255.84 | 23/2 ⁺ | 304.4 [#] 1 | 19.2 [#] 9 | 951.45 | 21/2 ⁺ | (M1+E2) [@] | -0.18 [@] 6 | 0.244 5 | Other I _γ : 13 4 from (α,7n _γ). Mult.: Q intraband γ from (¹⁸ O,5n _γ). |
| | | 491.9 [#] 1 | 100 [#] 4 | 764.07 | 19/2 ⁺ | (E2) | | 0.0237 | |
| 1295.44 | (5/2) ⁺ | 494.9 2 | 100 16 | 800.57 | (5/2) ⁺ | E2+M1 | 1.7 +11-5 | 0.035 7 | |
| | | 581.4 ^a 2 | 18 3 | 714.06 | 9/2 ⁺ | | | | |
| 1324.04 | 15/2 ⁻ | 475.8 [#] 1 | 100 [#] | 848.24 | 11/2 ⁻ | [E2] [@] | | 0.0258 | Other E _γ : 475.39 20 from Re(p,3n _γ). |

Adopted Levels, Gammas (continued)

| $E_i(\text{level})$ | J_i^π | $\gamma(^{183}\text{Os})$ (continued) | | | | | | | Comments | |
|---------------------|----------------------------|---|---|---|---|--------------------|---------------------|-------------------|--|--|
| | | E_γ^{\ddagger} | I_γ^{\ddagger} | E_f | J_f^π | Mult. [‡] | δ^{\ddagger} | α^\dagger | | |
| 1332.61 | (1/2,3/2,5/2) ⁻ | 1059.7 3 1074.1 3 | 53 8 100 16 | 273.08 5/2 ⁻ 258.34 3/2 ⁻ | | | | | | |
| 1369.91 | 17/2 ⁻ | 490.3 [#] 1 | 100 [#] | 879.61 13/2 ⁻ | | | | | | |
| 1420.91 | (17/2 ⁻) | 241.0 [#] 1 462.8 [#] 1 | 11.6 [#] 11 100 [#] 4 | 1179.76 (15/2) ⁻ 958.18 (13/2) ⁻ | (M1+E2) [@] (E2) [@] | | | 0.33 15 0.0276 | Other E_γ : 240.63 20 from ($\alpha,7n\gamma$). Other E_γ : 462.25 20 from ($\alpha,7n\gamma$). | |
| 1442.86 | 25/2 ⁺ | 186.8 [#] 1 | 6.07 [#] 24 | 1255.84 23/2 ⁺ | (M1+E2) | | | 0.7 3 | Mult.: D+Q intraband γ from ($^{18}\text{O},5n\gamma$). δ : -0.18 6 from ($\alpha,7n\gamma$) for presumed doublet. Other I_γ : 17 4 from $^{186}\text{W}(\alpha,7n\gamma),\text{Re}(p,3n\gamma)$; 48 6 from ^{183}Os IT decay (≈ 30 ns). | |
| 1482.91 | 19/2 ⁽⁺⁾ | 491.4 [#] 1 718.9 [#] 5 941.3 [#] 1 1107.5 [#] 1 | 100 [#] 4 30 [#] 3 100 [#] 5 73 [#] 3 | 951.45 21/2 ⁺ 764.07 19/2 ⁺ 541.56 17/2 ⁺ 375.48 15/2 ⁺ | (E2) D+Q Q | | | 0.0238 | Mult.: Q intraband γ from ($^{18}\text{O},5n\gamma$). Mult.: from $^{170}\text{Er}(^{18}\text{O},5n\gamma)$. Mult.: from $^{170}\text{Er}(^{18}\text{O},5n\gamma)$. | |
| 1560.27 | (15/2 ⁻) | 602.1 [#] 1 1184.8 [#] 1 | 88 [#] 18 100 [#] 6 | 958.18 (13/2) ⁻ 375.48 15/2 ⁺ | (D) | | | | Mult.: DCO in ($^{18}\text{O},5n\gamma$) interpreted as D, $\Delta J=0$ transition. | |
| 1583.55 | (17/2 ⁻) | 1341.0 [#] 1 (23.3) 819.6 [#] 2 1042.3 [#] 1 | ≈ 6 [#] 22.9 [#] 21 100 [#] 4 | 219.24 13/2 ⁺ 1560.27 (15/2) ⁻ 764.07 19/2 ⁺ 541.56 17/2 ⁺ | | | | | E_γ : from level-energy difference. Mult.: interpreted by authors as $\Delta J=0$ transition in ($^{18}\text{O},5n\gamma$). | |
| 1661.94 | (19/2 ⁻) | 1207.6 [#] 1 240.9 [#] 1 | 27.1 [#] 21 5.5 [#] 4 | 375.48 15/2 ⁺ 1420.91 (17/2) ⁻ | (M1+E2) | | | 0.33 15 | E_γ : 243.03 20 in ($\alpha,7n\gamma$) may be for a doublet. Mult.: D+Q intraband γ from ($^{18}\text{O},5n\gamma$). | |
| 1665.06 | (19/2 ⁻) | 425.3 [#] 1 482.2 [#] 1 898.1 [#] 3 244.2 [#] 1 | 12.2 [#] 4 100 [#] 4 6.3 [#] 4 4.7 [#] 4 | 1236.87 15/2 ⁻ 1179.76 (15/2) ⁻ 764.07 19/2 ⁺ 1420.91 (17/2) ⁻ | (E2) D | | | 0.0249 | E_γ : 483.96 20 in ($\alpha,7n\gamma$) may be for a doublet. Mult.: Q intraband γ from ($^{18}\text{O},5n\gamma$). E_γ : 243.03 20 in ($\alpha,7n\gamma$) may be for a doublet. Mult.: from ($^{18}\text{O},5n\gamma$). | |
| 1690.60 | 21/2 ⁽⁺⁾ | 485.4 [#] 5 738.7 [#] 5 926.7 [#] 1 1149.0 [#] 1 | 100 [#] 4 54 [#] 4 100 [#] 4 100 [#] 4 | 1179.76 (15/2) ⁻ 951.45 21/2 ⁺ 764.07 19/2 ⁺ 541.56 17/2 ⁺ | Q D+Q Q | | | | E_γ : 483.96 20 in ($\alpha,7n\gamma$) may be for a doublet. Mult.: from ($^{18}\text{O},5n\gamma$). Mult.: from ($^{18}\text{O},5n\gamma$). | |

Adopted Levels, Gammas (continued)

$\gamma(^{183}\text{Os})$ (continued)

| $E_i(\text{level})$ | J_i^π | E_γ^\ddagger | I_γ^\ddagger | E_f | J_f^π | Mult. [‡] | δ^\ddagger | α^\dagger | Comments |
|---------------------|---|-----------------------|----------------------|---------|----------------------|--------------------|-------------------|------------------|--|
| 1779.19 | (21/2 ⁻) | 114.2 [#] 1 | 19.0 [#] 16 | 1665.06 | (19/2 ⁻) | (M1+E2) | | 3.2 7 | Mult.: D+Q intraband γ from (¹⁸ O,5n γ). Mult.: from (¹⁸ O,5n γ). Mult.: Q intraband γ from (¹⁸ O,5n γ). Mult.: interpreted by authors in (¹⁸ O,5n γ) as $\Delta J=0$ transition. Mult.: from (¹⁸ O,5n γ). |
| | | 117.3 [#] 1 | 30.2 [#] 16 | 1661.94 | (19/2 ⁻) | D+Q | | | |
| | | 195.5 [#] 1 | 100 [#] 5 | 1583.55 | (17/2 ⁻) | (E2) | | 0.359 | |
| | | 296.3 [#] 1 | 56 [#] 3 | 1482.91 | 19/2 ⁽⁺⁾ | | | | |
| | | 523.3 [#] 1 | 56 [#] 3 | 1255.84 | 23/2 ⁺ | | | | |
| | | 827.8 [#] 1 | 76 [#] 3 | 951.45 | 21/2 ⁺ | | | | |
| 1815.16 | 21/2 ⁺ | 1015.0 [#] 1 | 34.9 [#] 16 | 764.07 | 19/2 ⁺ | D | | | Mult.: from (¹⁸ O,5n γ). |
| | | 863.7 [#] 1 | 32 [#] 3 | 951.45 | 21/2 ⁺ | | | | |
| | | 1051.1 [#] 1 | 100 [#] 6 | 764.07 | 19/2 ⁺ | | | | |
| 1844.38 | 27/2 ⁺ | 1273.6 [#] 1 | 39 [#] 3 | 541.56 | 17/2 ⁺ | | | | Other E_γ : 587.8 in IT decay (≈ 30 ns), 588.2 2 from (α ,7n γ). Mult.: Q intraband γ from (¹⁸ O,5n γ). |
| | | 401.3 [#] 1 | 13.8 [#] 6 | 1442.86 | 25/2 ⁺ | | | | |
| 1911.55 | (3/2 ⁻ ,5/2,7/2 ⁻) | 588.5 [#] 1 | 100 [#] 4 | 1255.84 | 23/2 ⁺ | (E2) | | 0.01543 | |
| | | 1399.1 3 | 100 15 | 512.52 | 7/2 ⁻ | [M1,E2] | | 0.0038 12 | |
| 1921.06 | 1/2,3/2,5/2 ⁻ | 1424.1 3 | 28 4 | 487.04 | 7/2 ⁻ | | | | |
| | | 1458.8 3 | 38.0 24 | 453.08 | 3/2 ⁻ | [M1,E2] | | 0.0035 10 | |
| | | 1519.0 3 | 37 6 | 392.52 | (7/2 ⁻) | [M1,E2] | | 0.0032 9 | |
| 1922.11 | (21/2 ⁻) | 1468.0 3 | 100 15 | 453.08 | 3/2 ⁻ | | | | Mult.: Q intraband γ from (¹⁸ O,5n γ). |
| | | 1525.8 3 | 15.7 24 | 395.22 | 1/2 ⁻ | | | | |
| 1925.66 | (23/2 ⁻) | 501.2 [#] 1 | 100 [#] 4 | 1420.91 | (17/2 ⁻) | (E2) | | 0.0227 | |
| | | 552.2 [#] 1 | 26.7 [#] 13 | 1369.91 | 17/2 ⁻ | | | | |
| | | 146.3 [#] 1 | 33.3 [#] 15 | 1779.19 | (21/2 ⁻) | (M1) | | 1.90 | Mult.: D intraband γ from (¹⁸ O,5n γ). |
| | | 260.6 [#] 1 | 83 [#] 4 | 1665.06 | (19/2 ⁻) | (E2) | | 0.1404 | Mult.: Q intraband γ from (¹⁸ O,5n γ). Mult.: from (¹⁸ O,5n γ). |
| 1925.94 | 23/2 ⁽⁺⁾ | 263.8 [#] 1 | 100 [#] 4 | 1661.94 | (19/2 ⁻) | Q | | | |
| | | 669.9 [#] 1 | 15.6 [#] 7 | 1255.84 | 23/2 ⁺ | | | | |
| | | 441.9 [#] 1 | 18.9 [#] 27 | 1482.91 | 19/2 ⁽⁺⁾ | | | | E_γ : fits placement poorly. |
| | | 669.5 [#] 5 | 21.6 [#] 27 | 1255.84 | 23/2 ⁺ | | | | |
| 1977.92 | (3/2 ⁺) | 974.6 [#] 1 | 100 [#] 5 | 951.45 | 21/2 ⁺ | D+Q | | | Mult.: from (¹⁸ O,5n γ). |
| | | 1161.8 [#] 1 | 46.0 [#] 27 | 764.07 | 19/2 ⁺ | Q | | | Mult.: from (¹⁸ O,5n γ). |
| | | 682.5 2 | 22 4 | 1295.44 | (5/2 ⁺) | M1 | | 0.0296 | |
| | | 724.9 2 | 100 15 | 1252.97 | (5/2 ⁺) | M1+E2 | 0.8 +5-4 | 0.019 4 | |
| | | 931.9 2 | 71 11 | 1045.96 | (5/2 ⁺) | M1+E2 | 1.5 +15-5 | 0.0081 16 | |
| | | 1705.3 3 | 55 8 | 273.08 | 5/2 ⁻ | | | | |
| 1806.9 3 | 18 16 | 170.73 | 1/2 ⁻ | | | | | | |

二

Adopted Levels, Gammas (continued)

γ(¹⁸³O₅) (continued)

| <u>E_i(level)</u> | <u>J_i^π</u> | <u>E_γ[‡]</u> | <u>I_γ[‡]</u> | <u>E_f</u> | <u>J_f^π</u> | <u>Mult.[‡]</u> | <u>α[†]</u> | <u>Comments</u> |
|-----------------------------|--|----------------------------------|----------------------------------|----------------------|----------------------------------|--------------------------|-----------------------|--|
| 2017.53 | 29/2 ⁺ | 173.2 [#] 1 | 1.39 [#] 20 | 1844.38 | 27/2 ⁺ | | | |
| | | 574.7 [#] 1 | 100 [#] 4 | 1442.86 | 25/2 ⁺ | (E2) | 0.01631 | Mult.: Q intraband γ from (¹⁸ O,5n _γ). |
| 2083.46 | (1/2,3/2,5/2 ⁻) | 1630.8 3 | ≈100 | 453.08 | 3/2 ⁻ | | | |
| | | 1687.8 3 | 80 13 | 395.22 | 1/2 ⁻ | | | |
| 2101.38 | (25/2 ⁻) | 175.6 [#] 1 | 13.9 [#] 7 | 1925.66 | (23/2 ⁻) | (M1) | 1.135 | Mult.: D intraband γ from (¹⁸ O,5n _γ). |
| | | 322.3 [#] 1 | 100 [#] 4 | 1779.19 | (21/2 ⁻) | (E2) | 0.0740 | Mult.: Q intraband γ from (¹⁸ O,5n _γ). |
| 2150.58 | (23/2 ⁻) | 485.3 [#] 5 | 77 [#] 4 | 1665.06 | (19/2 ⁻) | Q | | Mult.: from (¹⁸ O,5n _γ). |
| | | 488.7 [#] 2 | 100 [#] 4 | 1661.94 | (19/2 ⁻) | (E2) | 0.0241 | Mult.: Q intraband γ from (¹⁸ O,5n _γ). |
| 2175.68 | 25/2 ⁽⁺⁾ | 485.2 [#] 1 | 54.8 [#] 24 | 1690.60 | 21/2 ⁽⁺⁾ | | | |
| | | 732.2 [#] 5 | 50.0 [#] 24 | 1442.86 | 25/2 ⁺ | | | |
| | | 920.0 [#] 1 | 59.5 [#] 24 | 1255.84 | 23/2 ⁺ | D+Q | | Mult.: from (¹⁸ O,5n _γ). |
| | | 1224.1 [#] 1 | 100 [#] 5 | 951.45 | 21/2 ⁺ | Q | | Mult.: from (¹⁸ O,5n _γ). |
| 2209.73 | (23/2 ⁺) | 954.1 [#] 1 | 65 [#] 4 | 1255.84 | 23/2 ⁺ | | | Mult.: interpreted by authors in (¹⁸ O,5n _γ) as ΔJ=0 transition. |
| | | 1258.2 [#] 1 | 58 [#] 4 | 951.45 | 21/2 ⁺ | D+Q | | Mult.: from (¹⁸ O,5n _γ). |
| | | 1445.5 [#] 1 | 100 [#] 4 | 764.07 | 19/2 ⁺ | (Q) | | Mult.: from (¹⁸ O,5n _γ). |
| 2219.14 | (5/2 ⁻ ,7/2) | 1455.0 3 | 77 12 | 763.86 | (7/2) ⁻ | | | |
| | | 1709.5 3 | 100 15 | 509.91 | 9/2 ⁻ | | | |
| 2249.38 | (5/2 ⁺ ,7/2) | 1517.5 3 | 46 7 | 731.62 | 7/2 ⁺ | | | |
| | | 1857.1 3 | 100 14 | 392.52 | (7/2) ⁻ | | | |
| | | 2249.8 ^a 3 | 23 3 | 0.0 | 9/2 ⁺ | | | |
| 2254.62 | 3/2 ⁽⁻⁾ ,5/2,7/2 ⁽⁻⁾ | 1404.4 3 | 33 5 | 850.23 | (3/2,5/2,7/2) ⁻ | | | |
| | | 1801.3 3 | 58 9 | 453.08 | 3/2 ⁻ | | | |
| | | 1862.3 3 | 100 16 | 392.52 | (7/2) ⁻ | | | |
| 2258.37 | (7/2) | 1494.3 3 | 28 4 | 763.86 | (7/2) ⁻ | | | |
| | | 1544.4 3 | 40 5 | 714.06 | 9/2 ⁺ | | | |
| | | 1638.0 3 | 25 4 | 620.82 | 7/2 ⁻ | | | |
| | | 1700.0 3 | 100 16 | 558.31 | (9/2) ⁻ | | | |
| | | 1747.9 3 | 23 4 | 509.91 | 9/2 ⁻ | | | |
| | | 1866.1 3 | 46 7 | 392.52 | (7/2) ⁻ | | | |
| | | 2258.7 ^a 3 | 67 11 | 0.0 | 9/2 ⁺ | | | |
| 2273.83 | (7/2) ⁻ | 1377.0 3 | 5.6 8 | 896.77 | (7/2) ⁺ | [E1] | 1.20×10 ⁻³ | |
| | | 1441.7 3 | 17 3 | 832.06 | (3/2,5/2,7/2) ⁻ | | | |
| | | 1473.7 3 | 9.4 14 | 800.57 | (5/2) ⁺ | | | |
| | | 1509.8 3 | 25 4 | 763.86 | (7/2) ⁻ | [M1] | 0.00414 | |
| | | 1542.4 3 | 7.8 12 | 731.62 | 7/2 ⁺ | [E1] | 1.12×10 ⁻³ | |
| | | 1559.5 3 | 61 9 | 714.06 | 9/2 ⁺ | | | |
| | | 1604.5 3 | 13.3 22 | 669.12 | (5/2) ⁻ | | | |

Adopted Levels, Gammas (continued)

| E _i (level) | J _i ^π | γ(¹⁸³ O ₅) (continued) | | | | | | Comments |
|------------------------|-----------------------------|--|-----------------------------|----------------------|-----------------------------|--------------------|-----------------------|---|
| | | E _γ [‡] | I _γ [‡] | E _f | J _f ^π | Mult. [‡] | α [†] | |
| 2273.83 | (7/2) ⁻ | 1618.9 3 | 16.1 22 | 655.36 | (7/2) ⁻ | E2 | 0.00202 | |
| | | 1652.8 3 | 83 13 | 620.82 | 7/2 ⁻ | | | |
| | | 1760.3 3 | 49 7 | 513.12 | 5/2 ⁻ | | | |
| | | 1763.6 3 | 12.8 17 | 509.91 | 9/2 ⁻ | | | |
| | | 1820.9 3 | 15.0 22 | 453.08 | 3/2 ⁻ | | | |
| | | 1881.8 3 | 8.3 13 | 392.52 | (7/2) ⁻ | | | |
| | | 2000.6 3 | 100 17 | 273.08 | 5/2 ⁻ | | | |
| | | 2273.6 ^a 3 | 17 3 | 0.0 | 9/2 ⁺ | | | |
| 2300.06 | (5/2) ⁻ | 1063.2 3 | 56 8 | 1236.77 | (7/2) ⁺ | E1 | 1.74×10 ⁻³ | |
| | | 1403.4 3 | 11.8 18 | 896.77 | (7/2) ⁺ | | | |
| | | 1498.8 3 | 12.4 18 | 800.57 | (5/2) ⁺ | (E2) | 0.00206 | |
| | | 1568.5 3 | 28 4 | 731.62 | 7/2 ⁺ | | | |
| | | 1630.8 3 | ≈100 | 669.12 | (5/2) ⁻ | | | |
| | | 1644.8 3 | 11.8 18 | 655.36 | (7/2) ⁻ | | | |
| | | 1717.8 3 | 25 4 | 582.24 | (3/2) ⁻ | | | |
| | | 1755.3 3 | 65 10 | 544.41 | 5/2 ⁻ | | | |
| | | 1787.0 3 | 59 9 | 513.12 | 5/2 ⁻ | | | |
| | | 1812.8 3 | 20 3 | 487.04 | 7/2 ⁻ | | | |
| | | 1848.0 3 | 14.7 24 | 453.08 | 3/2 ⁻ | | | |
| | | 1904.7 3 | 21 3 | 395.22 | 1/2 ⁻ | | | |
| | | 1907.7 3 | 65 10 | 392.52 | (7/2) ⁻ | | | |
| | | 2305.17 | (27/2) ⁻ | 203.7 [#] 1 | 12.8 [#] 7 | | | |
| 379.6 [#] 1 | 100 [#] 4 | | | 1925.66 | (23/2) ⁻ | | | |
| 2310.52 | 3/2,5/2,7/2 ⁽⁻⁾ | 1728.6 3 | 83 13 | 582.24 | (3/2) ⁻ | | | |
| | | 1857.1 3 | 100 17 | 453.08 | 3/2 ⁻ | | | |
| 2338.46 | 25/2 ⁺ | 523.3 [#] 1 | 29.5 [#] 23 | 1815.16 | 21/2 ⁺ | D+Q | | Mult.: from (¹⁸ O,5nγ). |
| | | 895.6 [#] 1 | 100 [#] 5 | 1442.86 | 25/2 ⁺ | | | |
| | | 1082.6 [#] 1 | 36.4 [#] 23 | 1255.84 | 23/2 ⁺ | | | |
| | | 1387.0 [#] 1 | 38.6 [#] 23 | 951.45 | 21/2 ⁺ | | | |
| 2402.41 | (25/2) ⁻ | 480.3 [#] 1 | 100 [#] | 1922.11 | (21/2) ⁻ | (E2) | 0.0252 | Mult.: Q intraband γ from (¹⁸ O,5nγ). |
| 2459.62 | (27/2) ⁺ | 533.7 [#] 1 | 92 [#] 4 | 1925.94 | 23/2 ⁽⁺⁾ | | | |
| | | 615.3 [#] 5 | ≈28 [#] | 1844.38 | 27/2 ⁺ | | | |
| | | 1016.7 [#] 1 | 100 [#] 4 | 1442.86 | 25/2 ⁺ | | | |
| 2470.65 | (25/2) ⁺ | 1203.8 [#] 1 | 48 [#] 4 | 1255.84 | 23/2 ⁺ | | | |
| | | 260.9 [#] 1 | 100 [#] | 2209.73 | (23/2) ⁺ | | | |

Adopted Levels, Gammas (continued)

γ(¹⁸³Os) (continued)

| <u>E_i(level)</u> | <u>J_i^π</u> | <u>E_γ[‡]</u> | <u>I_γ[‡]</u> | <u>E_f</u> | <u>J_f^π</u> | <u>Mult.[‡]</u> | <u>α[†]</u> | <u>Comments</u> |
|-----------------------------|----------------------------------|---|---|---|----------------------------------|--------------------------|---|-----------------|
| 2511.25 | (5/2 ⁺ ,7/2) | 1797.1 3 1890.5 3 | 88 12 100 16 | 714.06 9/2 ⁺ 620.82 7/2 ⁻ | | | | |
| 2521.86 | 31/2 ⁺ | 677.6 [#] 1 | 100 [#] | 1844.38 27/2 ⁺ | (E2) | 0.01121 | Mult.: Q intraband γ from (¹⁸ O,5nγ). | |
| 2536.42 | (29/2 ⁻) | 231.1 [#] 2 435.1 [#] 1 | 11.0 [#] 4 100 [#] 4 | 2305.17 (27/2 ⁻) 2101.38 (25/2 ⁻) | (E2) | 0.0324 | Mult.: interpreted by authors in (¹⁸ O,5nγ) as ΔJ=1 transition. Mult.: Q intraband γ from (¹⁸ O,5nγ). | |
| 2599.47 | (27/2 ⁻) | 448.9 [#] 1 | 100 [#] | 2150.58 (23/2 ⁻) | (E2) | 0.0299 | Mult.: Q intraband γ from (¹⁸ O,5nγ). | |
| 2674.37 | 33/2 ⁺ | 656.8 [#] 1 | 100 [#] | 2017.53 29/2 ⁺ | (E2) | 0.01202 | Mult.: Q intraband γ from (¹⁸ O,5nγ). | |
| 2746.76 | 29/2 ⁽⁺⁾ | 571.2 [#] 1 728.9 [#] 5 902.4 [#] 1 | 100 [#] 6 9 [#] 3 17 [#] 3 | 2175.68 25/2 ⁽⁺⁾ 2017.53 29/2 ⁺ 1844.38 27/2 ⁺ | | | | |
| 2754.21 | (27/2 ⁺) | 1303.9 [#] 1 283.7 [#] 1 544.5 [#] 1 | 57 [#] 3 100 [#] 6 39 [#] 6 | 1442.86 25/2 ⁺ 2470.65 (25/2 ⁺) 2209.73 (23/2 ⁺) | Q | | Mult.: from (¹⁸ O,5nγ). | |
| 2792.72 | (31/2 ⁻) | 256.3 [#] 1 487.6 [#] 1 | 8.7 [#] 4 100 [#] 4 | 2536.42 (29/2 ⁻) 2305.17 (27/2 ⁻) | (E2) | 0.0242 | Mult.: Q intraband γ from (¹⁸ O,5nγ). | |
| 2870.8 | (29/2 ⁻) | 468.4 [#] 3 | 100 [#] | 2402.41 (25/2 ⁻) | (E2) | 0.0268 | Mult.: Q intraband γ from (¹⁸ O,5nγ). | |
| 3029.11 | (31/2 ⁻) | 429.7 [#] 3 | 100 [#] | 2599.47 (27/2 ⁻) | (E2) | 0.0335 | Mult.: Q intraband γ from (¹⁸ O,5nγ). | |
| 3046.00 | (29/2 ⁺) | 291.9 [#] 1 575.2 [#] 1 | 70 [#] 10 100 [#] 10 | 2754.21 (27/2 ⁺) 2470.65 (25/2 ⁺) | | | | |
| 3067.32 | (29/2 ⁺) | 545.8 [#] 1 1049.9 [#] 1 | 25 [#] 13 100 [#] 13 | 2521.86 31/2 ⁺ 2017.53 29/2 ⁺ | | | | |
| 3074.99 | (33/2 ⁻) | 1222.8 [#] 1 282.3 [#] 1 538.6 [#] 1 | 88 [#] 13 10.2 [#] 5 100 [#] 4 | 1844.38 27/2 ⁺ 2792.72 (31/2 ⁻) 2536.42 (29/2 ⁻) | D+Q (E2) | 0.0190 | Mult.: from (¹⁸ O,5nγ). Mult.: interpreted by authors in (¹⁸ O,5nγ) as ΔJ=1 transition. Mult.: Q intraband γ from (¹⁸ O,5nγ). | |
| 3077.42 | (31/2 ⁺) | 617.8 [#] 1 1059.9 [#] 1 | 100 [#] 3 52 [#] 3 | 2459.62 (27/2 ⁺) 2017.53 29/2 ⁺ | D+Q | | Mult.: from (¹⁸ O,5nγ). | |
| 3094.36 | | 1233.2 [#] 2 340.2 [#] 1 623.7 [#] 1 | 13 [#] 3 89 [#] 11 100 [#] 11 | 1844.38 27/2 ⁺ 2754.21 (27/2 ⁺) 2470.65 (25/2 ⁺) | | | | |
| 3278.63 | 35/2 ⁺ | 756.8 [#] 1 | 100 [#] | 2521.86 31/2 ⁺ | (E2) | 0.00882 | Mult.: Q intraband γ from (¹⁸ O,5nγ). | |
| 3340.3 | (33/2 ⁻) | 469.5 [#] 3 | 100 [#] | 2870.8 (29/2 ⁻) | (E2) | 0.0267 | Mult.: Q intraband γ from (¹⁸ O,5nγ). | |
| 3363.42 | (33/2 ⁺) | 616.8 [#] 1 689.0 [#] 5 | 100 [#] 4 16 [#] 4 | 2746.76 29/2 ⁽⁺⁾ 2674.37 33/2 ⁺ | | | | |

Adopted Levels, Gammas (continued)

$\gamma(^{183}\text{Os})$ (continued)

| $E_i(\text{level})$ | J_i^π | E_γ^\ddagger | I_γ^\ddagger | E_f | J_f^π | Mult. [‡] | α^\dagger | Comments |
|---------------------|---|-----------------------|---------------------------|---------|---|--------------------|------------------|---|
| 3363.42 | (33/2 ⁺) | 841.4 [#] 1 | 72 [#] 4 | 2521.86 | 31/2 ⁺ | | | |
| | | 1345.9 [#] 1 | 84 [#] 4 | 2017.53 | 29/2 ⁺ | | | |
| 3377.50 | (35/2 ⁻) | 302.5 [#] 1 | 10.3 [#] 6 | 3074.99 | (33/2 ⁻) | | | |
| | | 584.8 [#] 1 | 100 [#] 5 | 2792.72 | (31/2 ⁻) | (E2) | 0.01566 | Mult.: Q intraband γ from (¹⁸ O,5n γ). |
| 3383.42 | (31/2 ⁻) | 847.0 [#] 1 | 100 [#] | 2536.42 | (29/2 ⁻) | | | |
| 3404.48 | 37/2 ⁺ | 730.1 [#] 1 | 100 [#] | 2674.37 | 33/2 ⁺ | (E2) | 0.00952 | Other E_γ : 729.7 2 from (α ,7n γ). Mult.: Q intraband γ from (¹⁸ O,5n γ). |
| 3419.71 | (29/2 ⁺ ,31/2 ⁺) | 1575.2 [#] 1 | 100 [#] | 1844.38 | 27/2 ⁺ | | | |
| 3430.80 | (29/2,31/2 ⁺) | 1586.2 [#] 1 | 100 [#] | 1844.38 | 27/2 ⁺ | | | |
| 3505.51 | (35/2 ⁻) | 476.4 [#] 1 | 100 [#] | 3029.11 | (31/2 ⁻) | (E2) | 0.0257 | Mult.: Q intraband γ from (¹⁸ O,5n γ). |
| 3707.47 | (37/2 ⁻) | 330.2 [#] 5 | 6.9 [#] 8 | 3377.50 | (35/2 ⁻) | | | |
| | | 632.5 [#] 1 | 100 [#] 5 | 3074.99 | (33/2 ⁻) | (E2) | 0.01308 | Mult.: Q intraband γ from (¹⁸ O,5n γ). |
| 3764.73 | (\geq 25/2) | 670.4 [#] 1 | 100 [#] 7 | 3094.36 | | | | |
| | | 718.7 [#] 1 | 100 [#] 7 | 3046.00 | (29/2 ⁺) | | | |
| 3766.00 | (35/2 ⁺) | 689.0 [#] 3 | 100 [#] 8 | 3077.42 | (31/2 ⁺) | | | |
| | | 1091.6 [#] 1 | 33 [#] 8 | 2674.37 | 33/2 ⁺ | | | I_γ : uncertainty of 0 in 2001Sh41 appears to be a misprint; it should presumably be 1 as for other transitions of comparable intensity. |
| 3785.82 | (33/2 ⁺) | 1243.8 [#] 4 | \approx 8 [#] | 2521.86 | 31/2 ⁺ | | | |
| | | (20.9) | | 3764.73 | (\geq 25/2) | | | E_γ : from level-energy difference. |
| | | 354.8 [#] 1 | 100 [#] 14 | 3430.80 | (29/2,31/2 ⁺) | | | |
| | | 365.6 [#] 2 | 79 [#] 14 | 3419.71 | (29/2 ⁺ ,31/2 ⁺) | | | |
| | | 718.8 [#] 1 | 43 [#] 14 | 3067.32 | (29/2 ⁺) | | | |
| | | 1111 [#] | \approx 14 [#] | 2674.37 | 33/2 ⁺ | | | |
| | | 1263.9 [#] 1 | 43 [#] 7 | 2521.86 | 31/2 ⁺ | | | |
| | | 1767.5 [#] 1 | 43 [#] 7 | 2017.53 | 29/2 ⁺ | Q | | E_γ : fits placement poorly. Mult.: from (¹⁸ O,5n γ). |
| 3876.3 | (37/2 ⁻) | 536.0 [#] 1 | 100 [#] | 3340.3 | (33/2 ⁻) | (E2) | 0.0192 | Mult.: Q intraband γ from (¹⁸ O,5n γ). |
| 3884.52 | (35/2 ⁺) | 98.6 [#] 1 | 100 [#] | 3785.82 | (33/2 ⁺) | (M1) | 5.86 | Mult.: from $\alpha(\text{exp})=6.0$ 7 from intensity balance in (¹⁸ O,5n γ). |
| 3986.62 | (35/2 ⁻) | 603.2 [#] 3 | 100 [#] 5 | 3383.42 | (31/2 ⁻) | | | |
| | | 911.7 [#] 1 | 55 [#] 5 | 3074.99 | (33/2 ⁻) | D | | Mult.: from (¹⁸ O,5n γ). |
| 4031.17 | (39/2 ⁻) | 526.0 [#] 3 | 17.5 [#] 16 | 3505.51 | (35/2 ⁻) | Q | | Mult.: from (¹⁸ O,5n γ). |
| | | 653.7 [#] 1 | 100 [#] 5 | 3377.50 | (35/2 ⁻) | (E2) | 0.01214 | Mult.: Q intraband γ from (¹⁸ O,5n γ). |
| 4075.64 | (39/2 ⁻) | 570.1 [#] 1 | 79 [#] 5 | 3505.51 | (35/2 ⁻) | (E2) | 0.01662 | Mult.: Q intraband γ from (¹⁸ O,5n γ). |

Adopted Levels, Gammas (continued)

| $\gamma(^{183}\text{Os})$ (continued) | | | | | | | | |
|---------------------------------------|----------------------|-----------------------|----------------------------|---------|----------------------|--------------------|------------------|--|
| $E_i(\text{level})$ | J_i^π | E_γ^{\ddagger} | I_γ^{\ddagger} | E_f | J_f^π | Mult. [‡] | α^\dagger | Comments |
| 4075.64 | (39/2 ⁻) | 698.1 [#] 1 | 100 [#] 16 | 3377.50 | (35/2 ⁻) | Q | | Mult.: from (¹⁸ O,5n γ). |
| 4088.62 | 39/2 ⁺ | 810.0 [#] 1 | 100 [#] | 3278.63 | 35/2 ⁺ | (E2) | 0.00763 | Mult.: Q intraband γ from (¹⁸ O,5n γ). |
| 4116.79 | (37/2 ⁺) | 232.4 [#] 1 | 100 [#] 5 | 3884.52 | (35/2 ⁺) | (M1) | 0.520 | Mult.: D intraband γ from (¹⁸ O,5n γ). |
| | | 1442.4 [#] 1 | 6.8 [#] 17 | 2674.37 | 33/2 ⁺ | | | |
| 4181.78 | 41/2 ⁺ | 777.3 [#] 1 | 100 [#] | 3404.48 | 37/2 ⁺ | (E2) | 0.00833 | Other E_γ : 776.6 2 in (α ,7n γ), 776.8 in ¹⁸³ Os IT decay (\approx 30 ns). Mult.: Q intraband γ from (¹⁸ O,5n γ). |
| 4181.78+x | \geq 41/2 | (x) | | 4181.78 | 41/2 ⁺ | | | From ¹⁸³ Os IT decay (\approx 30 ns). |
| 4398.57 | (39/2 ⁺) | 281.8 [#] 1 | 100 [#] 5 | 4116.79 | (37/2 ⁺) | (M1) | 0.307 | Mult.: D intraband γ from (¹⁸ O,5n γ). |
| | | 513.8 [#] 1 | 20.7 [#] 17 | 3884.52 | (35/2 ⁺) | | | |
| | | 1120.4 [#] 5 | \approx 3.4 [#] | 3278.63 | 35/2 ⁺ | Q | | Mult.: from (¹⁸ O,5n γ). |
| 4422.58 | (41/2 ⁻) | 715.1 [#] 1 | 100 [#] | 3707.47 | (37/2 ⁻) | (E2) | 0.00996 | Mult.: Q intraband γ from (¹⁸ O,5n γ). |
| 4496.4 | (41/2 ⁻) | 620.1 [#] 1 | 100 [#] | 3876.3 | (37/2 ⁻) | (E2) | 0.01368 | Mult.: Q intraband γ from (¹⁸ O,5n γ). |
| 4675.01 | (43/2 ⁻) | 599.3 [#] 1 | 42 [#] 6 | 4075.64 | (39/2 ⁻) | | | |
| | | 643.9 [#] 1 | 100 [#] 6 | 4031.17 | (39/2 ⁻) | Q | | Mult.: from (¹⁸ O,5n γ). |
| 4679.06 | (39/2 ⁻) | 692.5 [#] 1 | 44 [#] 6 | 3986.62 | (35/2 ⁻) | | | |
| | | 971.6 [#] 1 | 100 [#] 6 | 3707.47 | (37/2 ⁻) | D | | Mult.: from (¹⁸ O,5n γ). |
| 4716.30 | (41/2 ⁺) | 317.6 [#] 1 | 100 [#] 4 | 4398.57 | (39/2 ⁺) | (M1) | 0.222 | Mult.: D intraband γ from (¹⁸ O,5n γ). |
| | | 599.6 [#] 1 | 79 [#] 4 | 4116.79 | (37/2 ⁺) | | | |
| 4814.14 | (43/2 ⁻) | 738.5 [#] 1 | 100 [#] 5 | 4075.64 | (39/2 ⁻) | Q | | Mult.: from (¹⁸ O,5n γ). |
| | | 782.7 [#] 1 | 50 [#] 5 | 4031.17 | (39/2 ⁻) | | | |
| 4931.92 | 43/2 ⁺ | 843.3 [#] 1 | 100 [#] | 4088.62 | 39/2 ⁺ | | | |
| 4934.77 | (41/2 ⁺) | 255.8 [#] 1 | 100 [#] | 4679.06 | (39/2 ⁻) | [E1] | 0.0360 | |
| 4936.88 | 45/2 ⁺ | 755.1 [#] 1 | 100 [#] | 4181.78 | 41/2 ⁺ | (E2) | 0.00886 | Mult.: Q intraband γ from (¹⁸ O,5n γ). |
| 5063.63 | (43/2 ⁺) | 347.4 [#] 1 | 100 [#] 6 | 4716.30 | (41/2 ⁺) | | | |
| | | 665.0 [#] 1 | 63 [#] 6 | 4398.57 | (39/2 ⁺) | | | |
| 5067.68 | (43/2 ⁻) | 133.0 [#] 1 | 5.3 [#] 13 | 4934.77 | (41/2 ⁺) | (E1) | 0.188 | B(E1)(W.u.)= 1.6×10^{-7} 5 Mult.: I(γ +ce)(133 γ)/I(γ +ce)(256 γ) \approx 1 in (¹⁸ O,5n γ) only if mult is E2 for 256 γ and E1 for 133 γ . |
| | | 351.3 [#] 1 | 100 [#] 4 | 4716.30 | (41/2 ⁺) | D | | Mult.: from (¹⁸ O,5n γ). |
| 5167.61 | (43/2 ⁺) | 451.3 [#] 1 | 100 [#] 5 | 4716.30 | (41/2 ⁺) | D+Q | | Mult.: from (¹⁸ O,5n γ). |
| | | 1079.0 [#] 1 | 19.0 [#] 24 | 4088.62 | 39/2 ⁺ | | | Mult.: from (¹⁸ O,5n γ). |
| 5192.4 | (45/2 ⁻) | 696.0 [#] 1 | 100 [#] | 4496.4 | (41/2 ⁻) | (E2) | 0.01057 | Mult.: Q intraband γ from (¹⁸ O,5n γ). |
| 5192.68 | (45/2 ⁻) | 770.1 [#] 1 | 100 [#] | 4422.58 | (41/2 ⁻) | (E2) | 0.00849 | Mult.: (Q) intraband γ from (¹⁸ O,5n γ). |
| 5386.01 | (47/2 ⁻) | 711.0 [#] 1 | 100 [#] | 4675.01 | (43/2 ⁻) | | | |

Adopted Levels, Gammas (continued)

$\gamma(^{183}\text{Os})$ (continued)

| $E_i(\text{level})$ | J_i^π | E_γ^\ddagger | I_γ^\ddagger | E_f | J_f^π | Mult. [‡] | α^\dagger | Comments |
|---------------------|---------------------------|-----------------------|---------------------|---------|---------------------------|--------------------|------------------|---|
| 5406.26 | (43/2 ⁻) | 727.2 [#] 2 | 100 [#] | 4679.06 | (39/2 ⁻) | | | |
| 5437.63 | (45/2 ⁺) | 374.0 [#] 1 | 60 [#] 20 | 5063.63 | (43/2 ⁺) | | | |
| | | 721.3 [#] 3 | 100 [#] 20 | 4716.30 | (41/2 ⁺) | | | |
| 5477.92 | (45/2,47/2 ⁻) | 410.4 [#] 1 | 100 [#] | 5067.68 | (43/2 ⁻) | | | |
| 5542.05 | | 474.2 [#] 1 | 100 [#] | 5067.68 | (43/2 ⁻) | | | |
| 5594.28 | | 426.7 [#] 1 | 100 [#] | 5167.61 | (43/2 ⁺) | | | |
| 5618.04 | (47/2 ⁻) | 803.9 [#] 1 | 100 [#] | 4814.14 | (43/2 ⁻) | | | |
| 5698.08 | 49/2 ⁺ | 761.2 [#] 1 | 100 [#] | 4936.88 | 45/2 ⁺ | (E2) | 0.00871 | Mult.: Q intraband γ from (¹⁸ O,5n γ). |
| 5874.06 | (47/2,49/2 ⁻) | 396.2 [#] 1 | 100 [#] | 5477.92 | (45/2,47/2 ⁻) | | | |
| 5904.94 | | 310.7 [#] 1 | 100 [#] 6 | 5594.28 | | | | |
| | | 737.3 [#] 1 | 32 [#] 3 | 5167.61 | (43/2 ⁺) | | | |
| 5977.7 | (49/2 ⁻) | 785 [#] 1 | 100 [#] | 5192.68 | (45/2 ⁻) | | | |
| 6173.51 | (51/2 ⁻) | 787.5 [#] 1 | 100 [#] | 5386.01 | (47/2 ⁻) | | | |
| 6280.92 | (49/2,51/2 ⁻) | 407.1 [#] 1 | 100 [#] 7 | 5874.06 | (47/2,49/2 ⁻) | | | |
| | | 803.1 [#] 1 | 29 [#] 4 | 5477.92 | (45/2,47/2 ⁻) | | | |
| 6412.24 | | 507.3 [#] 1 | 100 [#] | 5904.94 | | | | |
| 6461.0 | (51/2 ⁻) | 843.0 [#] 3 | 100 [#] | 5618.04 | (47/2 ⁻) | | | |
| 6594.71 | | 314.0 [#] 1 | 88 [#] 6 | 6280.92 | (49/2,51/2 ⁻) | | | |
| | | 720.6 [#] 1 | 100 [#] 6 | 5874.06 | (47/2,49/2 ⁻) | | | |
| | | 1052.5 [#] 1 | 69 [#] 6 | 5542.05 | | | | |
| 6697.49 | (51/2,53/2 ⁻) | 416.7 [#] 1 | 100 [#] 8 | 6280.92 | (49/2,51/2 ⁻) | | | |
| | | 823.3 [#] 1 | 42 [#] 8 | 5874.06 | (47/2,49/2 ⁻) | | | |

[†] Additional information 1.

[‡] From ¹⁸³Ir ϵ decay, except as noted.

[#] From ¹⁷⁰Er(¹⁸O,5n γ).

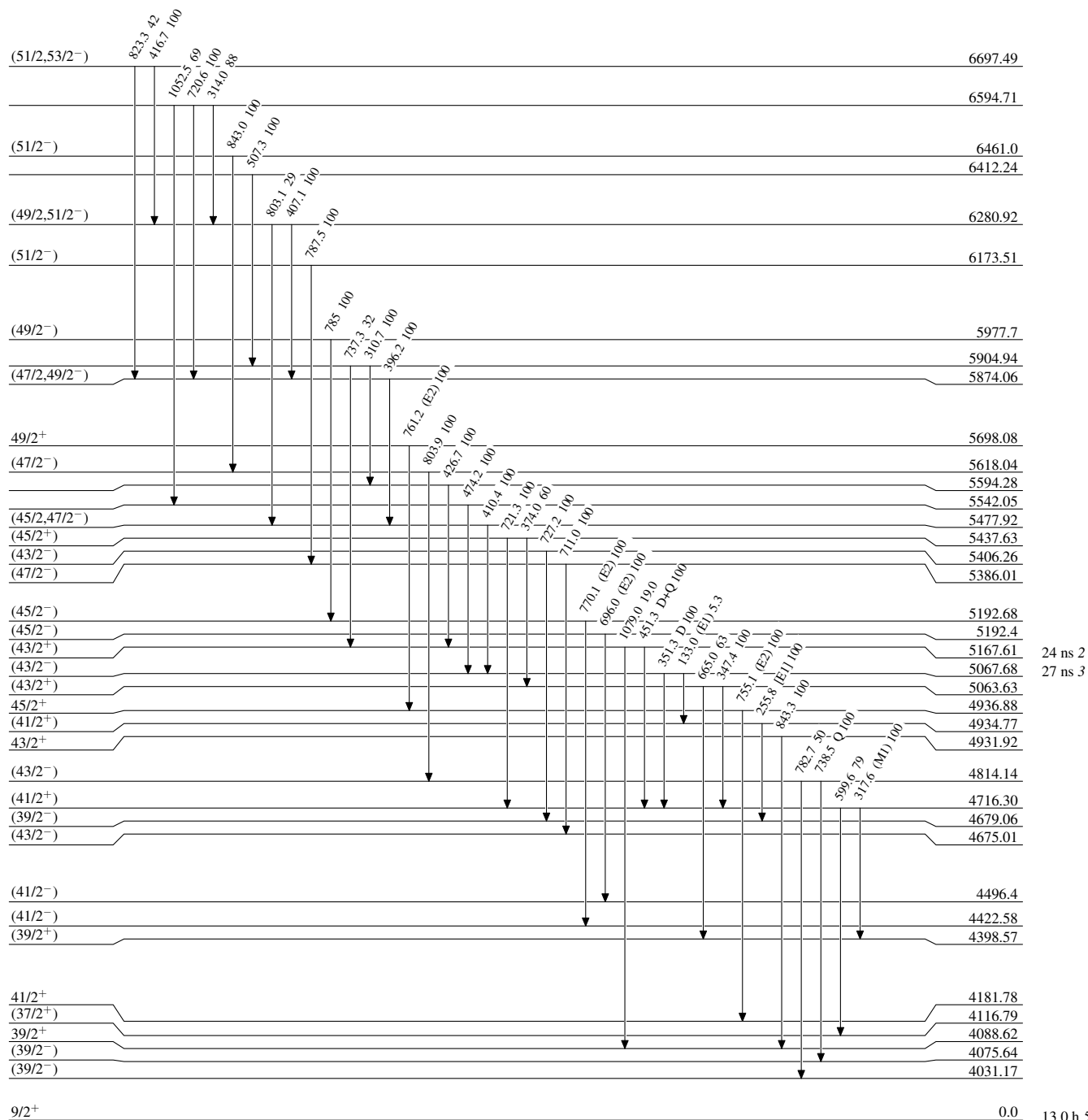
[@] From $\gamma(\theta)$ in W(α ,7n γ),Re(p,3n γ), assigning $\Delta\pi=(\text{no})$ for intraband transitions.

[&] From W(α ,xn γ),Re(p,3n γ); uncertainty unstated by authors.

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

Adopted Levels, Gammas**Level Scheme**

Intensities: Relative photon branching from each level

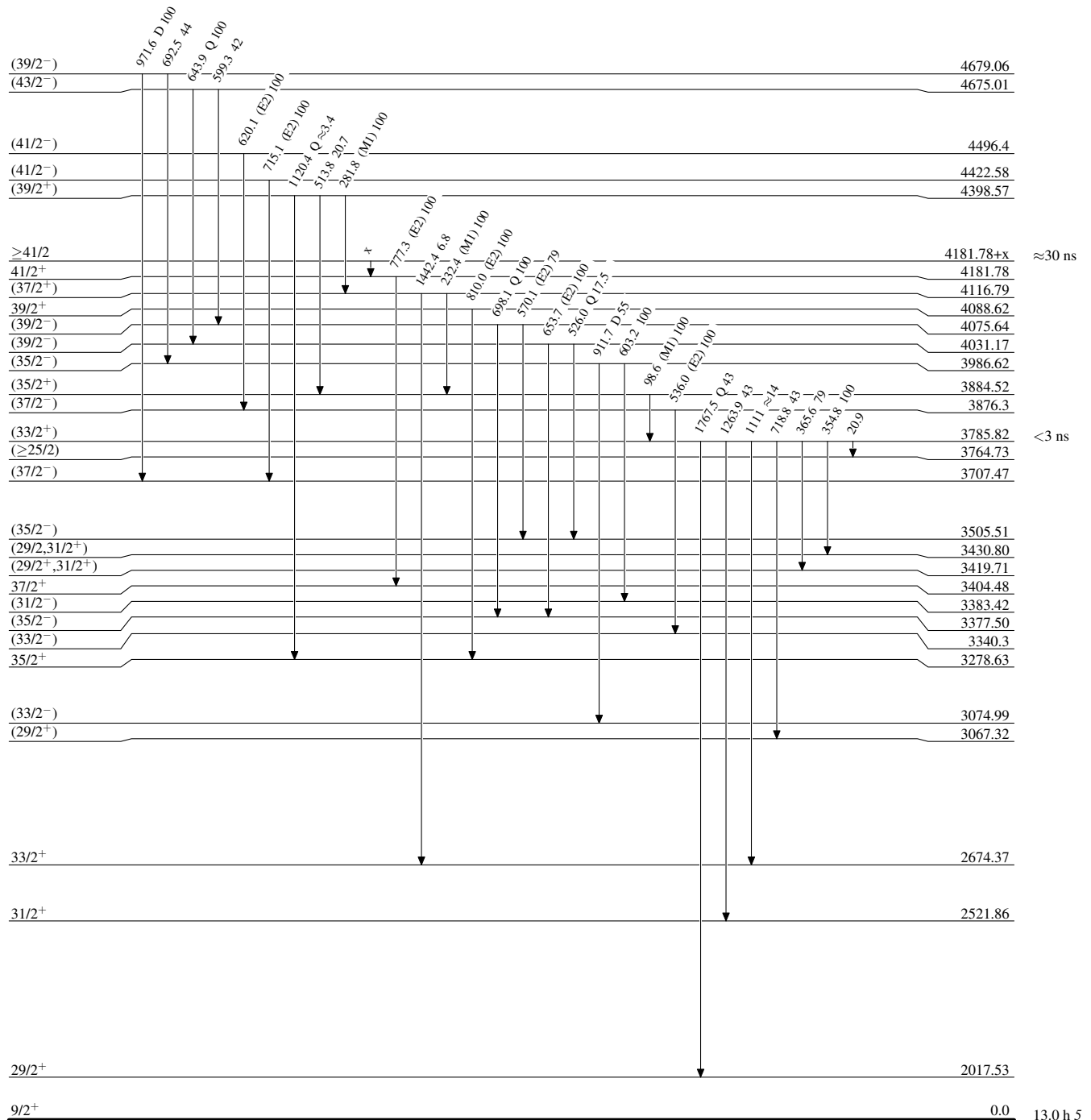
24 ns 2
27 ns 3

Adopted Levels, Gammas

Legend

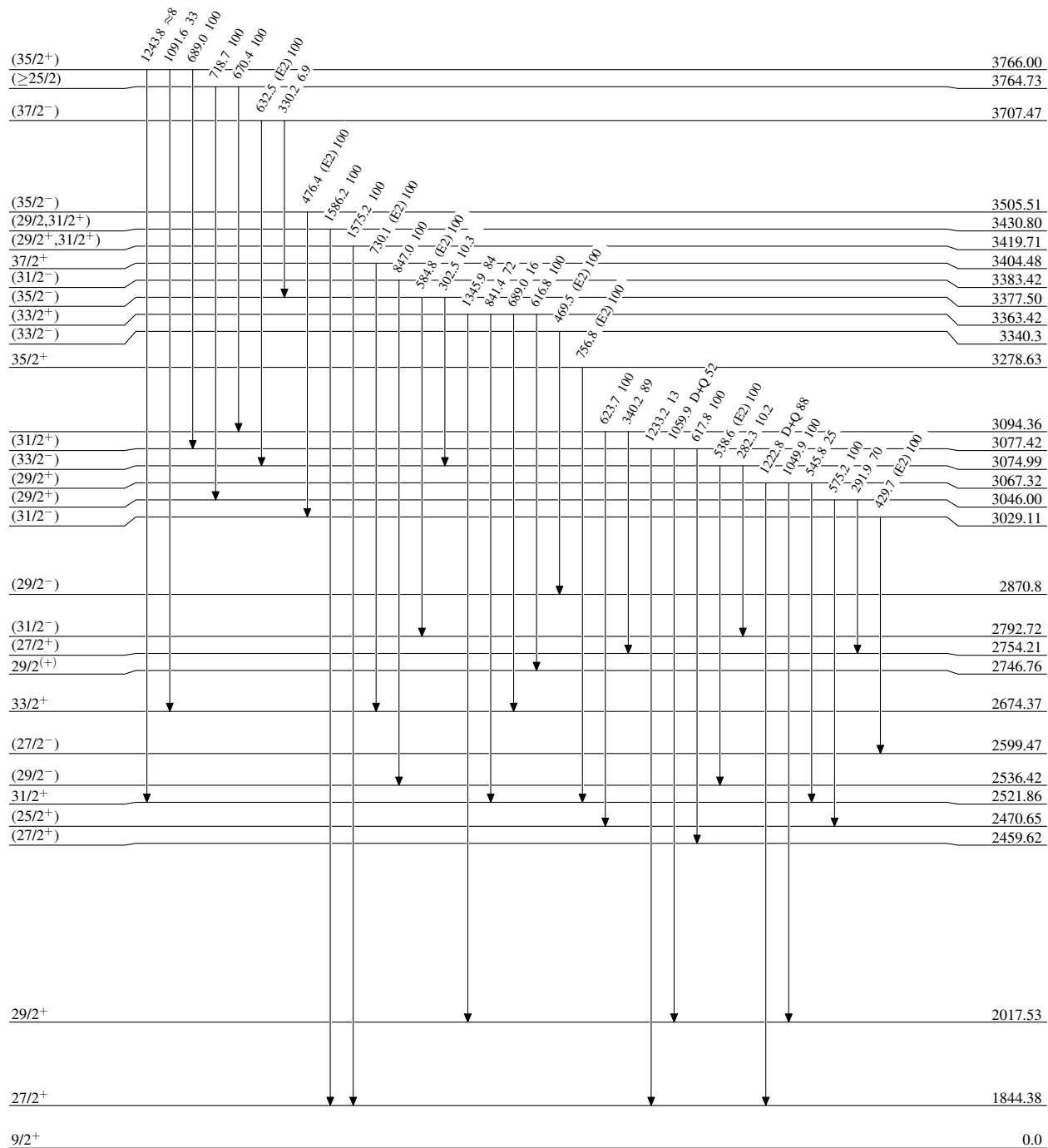
Level Scheme (continued)

Intensities: Relative photon branching from each level

-----▶ γ Decay (Uncertain) $^{183}_{76}\text{Os}_{107}$

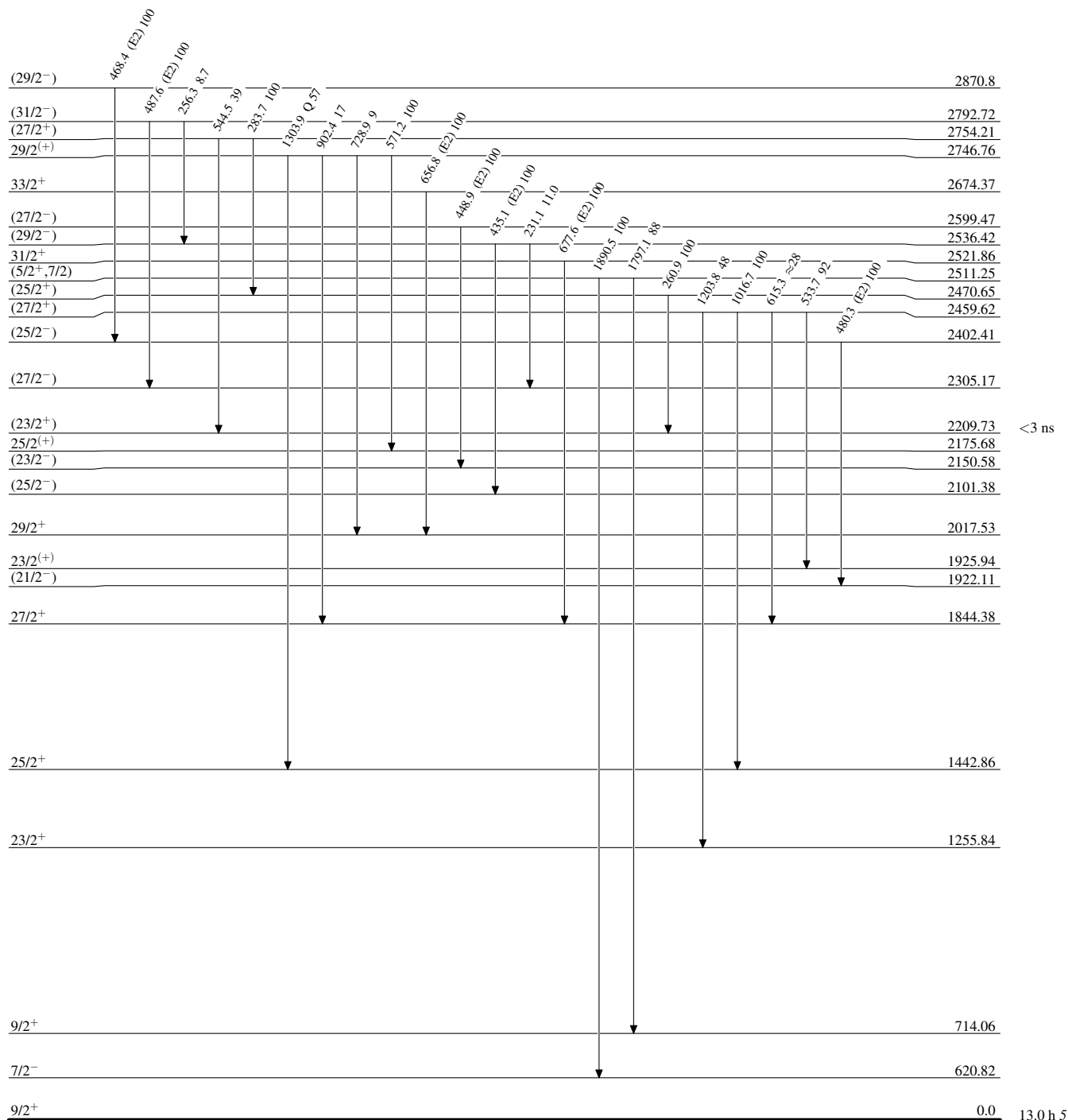
Adopted Levels, Gammas**Level Scheme (continued)**

Intensities: Relative photon branching from each level



Adopted Levels, Gammas**Level Scheme (continued)**

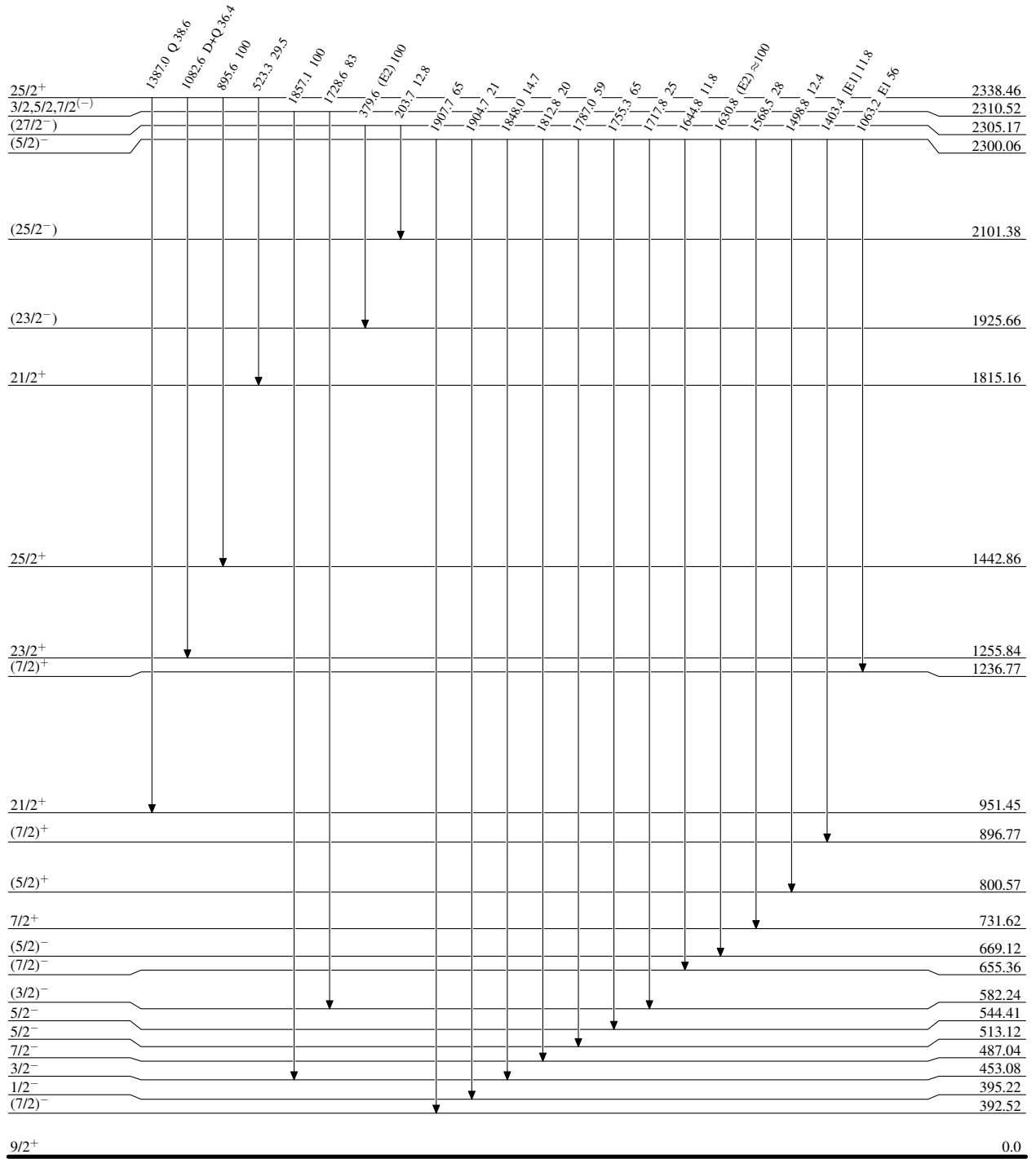
Intensities: Relative photon branching from each level



Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level



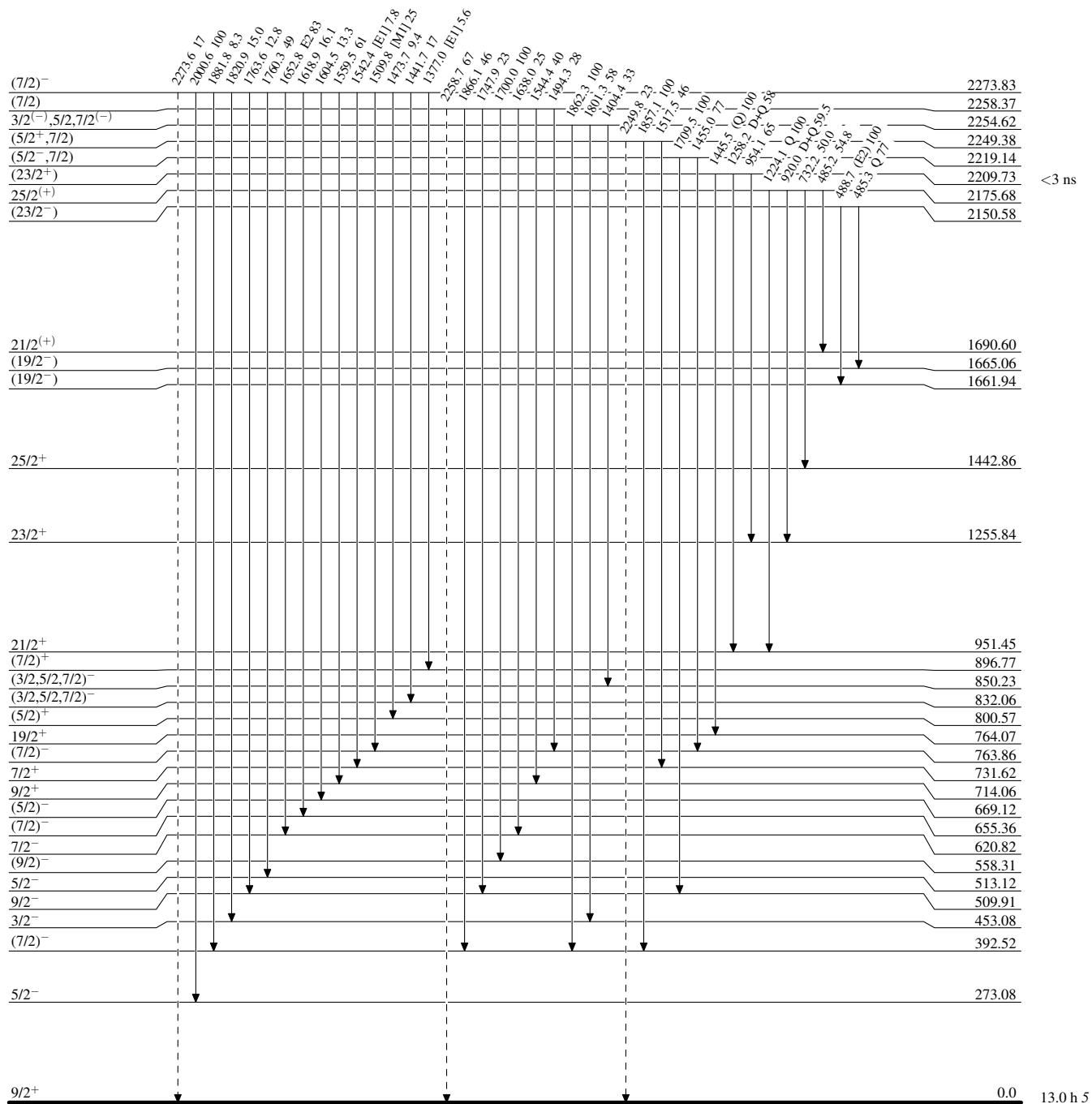
Adopted Levels, Gammas

Legend

Level Scheme (continued)

Intensities: Relative photon branching from each level

-----▶ γ Decay (Uncertain)

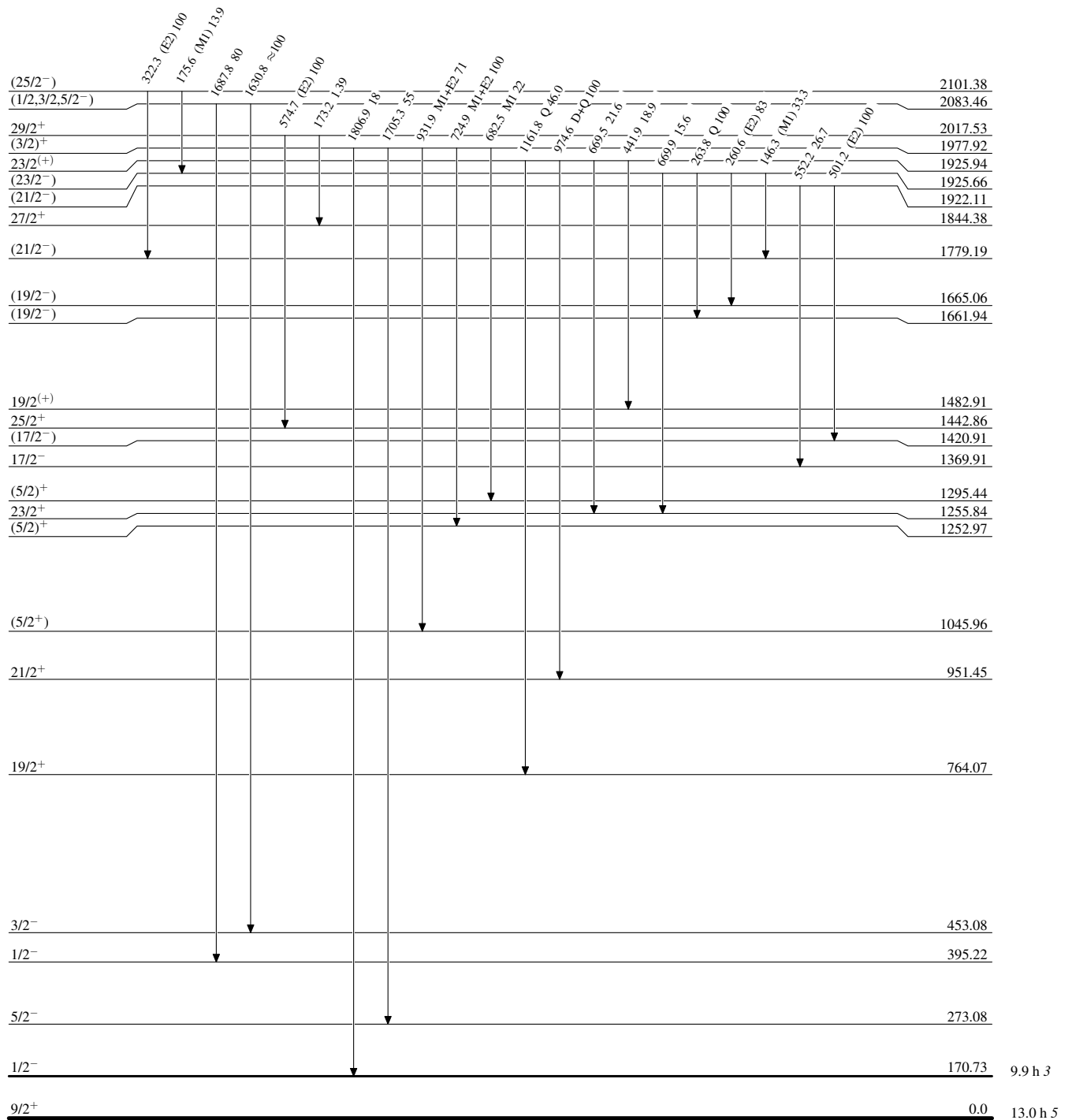


$^{183}_{76}\text{Os}_{107}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level



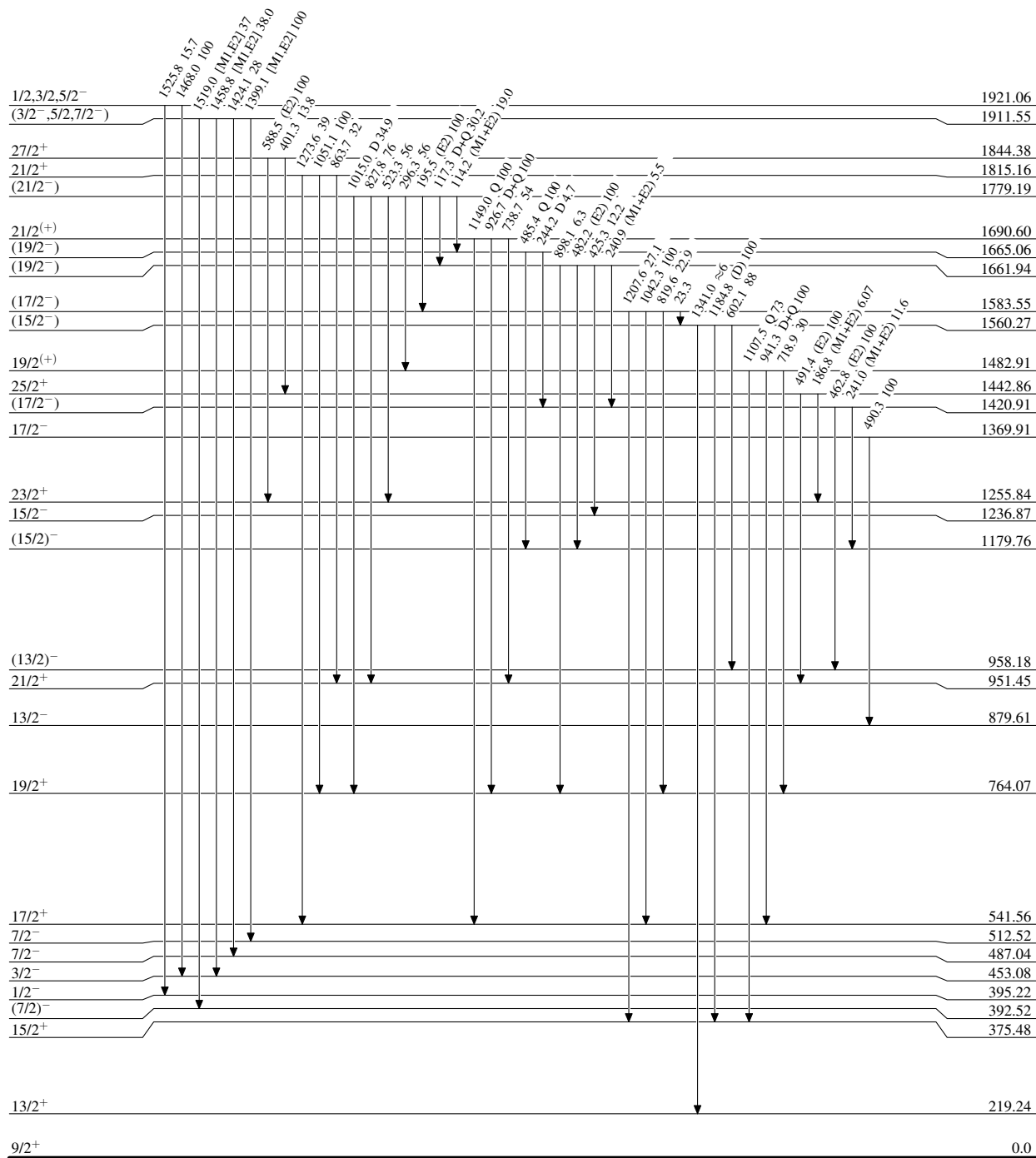
Adopted Levels, Gammas

Legend

Level Scheme (continued)

Intensities: Relative photon branching from each level

-----▶ γ Decay (Uncertain)



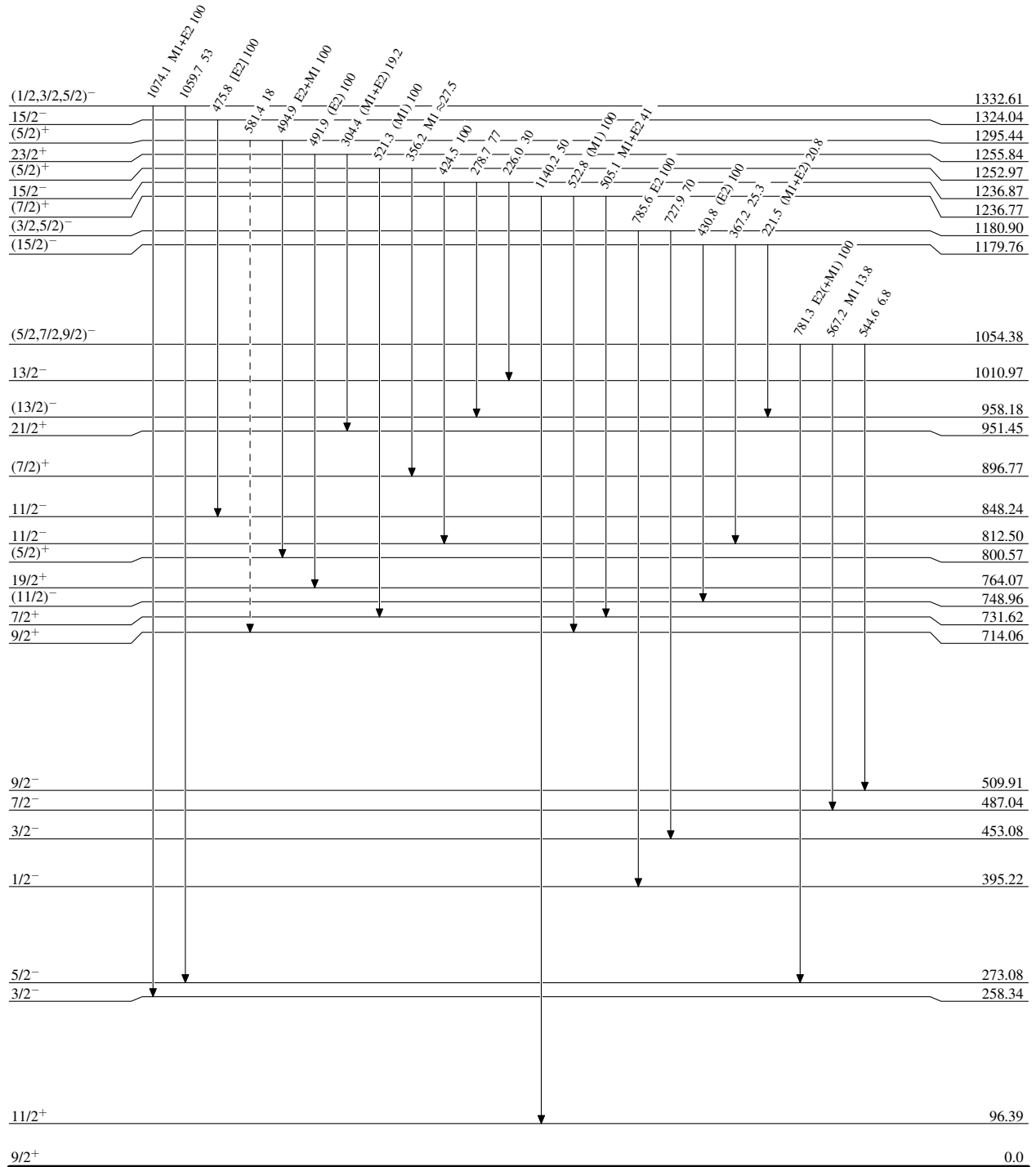
< 3 ns

Adopted Levels, Gammas

Legend

Level Scheme (continued)

Intensities: Relative photon branching from each level

-----▶ γ Decay (Uncertain) $^{183}_{76}\text{Os}_{107}$

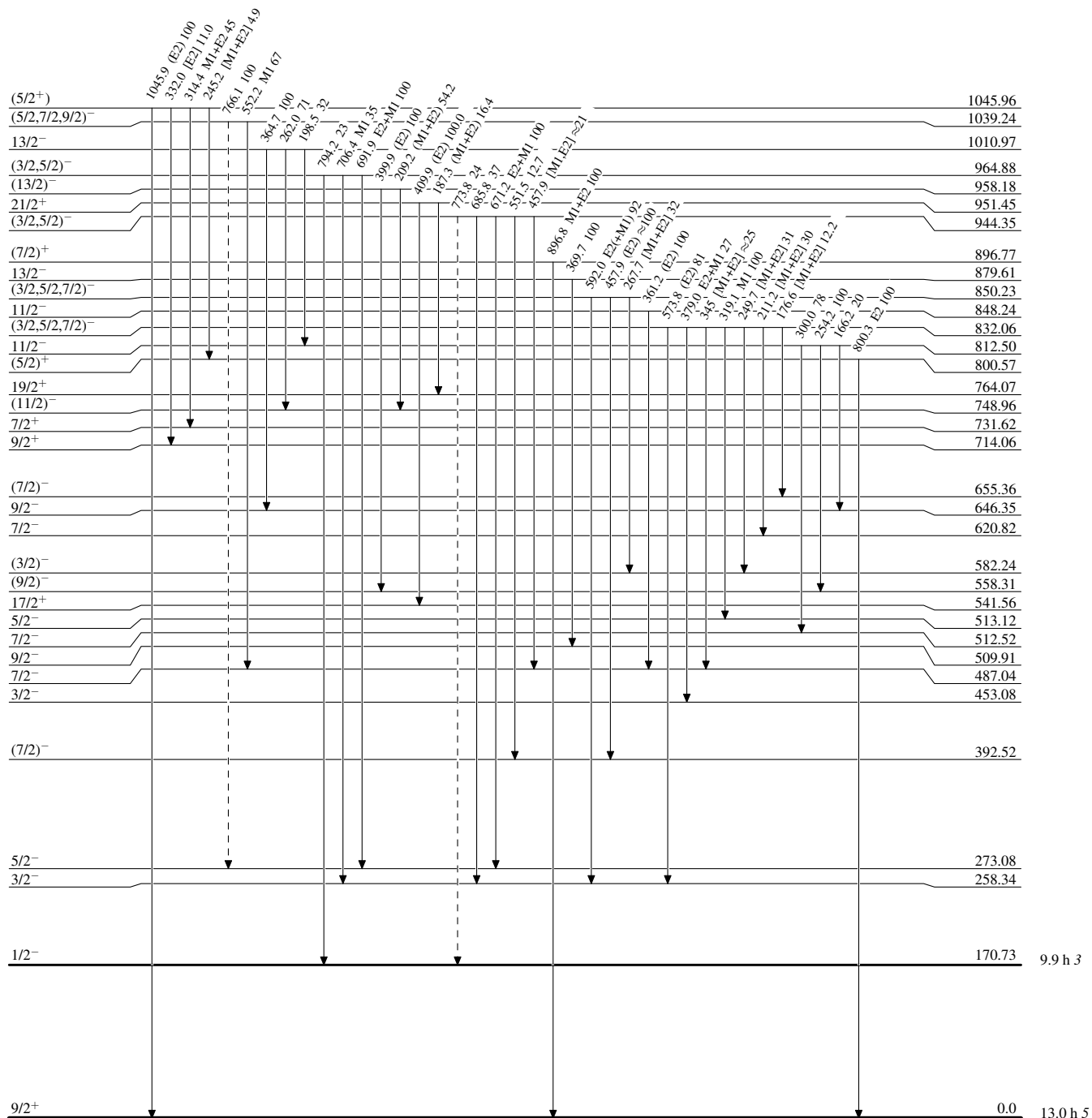
Adopted Levels, Gammas

Legend

Level Scheme (continued)

Intensities: Relative photon branching from each level

-----▶ γ Decay (Uncertain)



$^{183}_{76}\text{Os}_{107}$

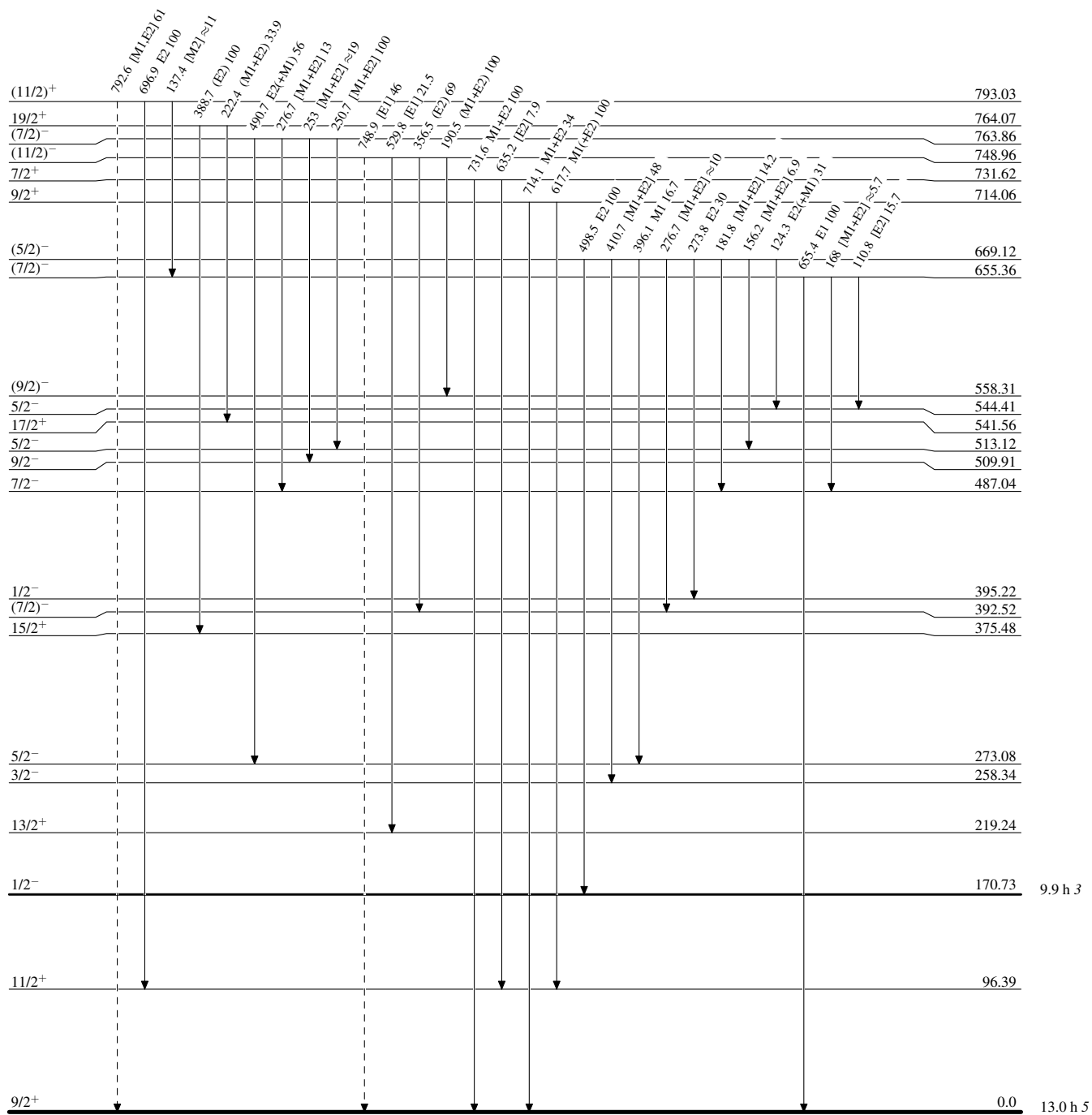
Adopted Levels, Gammas

Legend

Level Scheme (continued)

Intensities: Relative photon branching from each level

-----▶ γ Decay (Uncertain)



$^{183}_{76}\text{Os}_{107}$

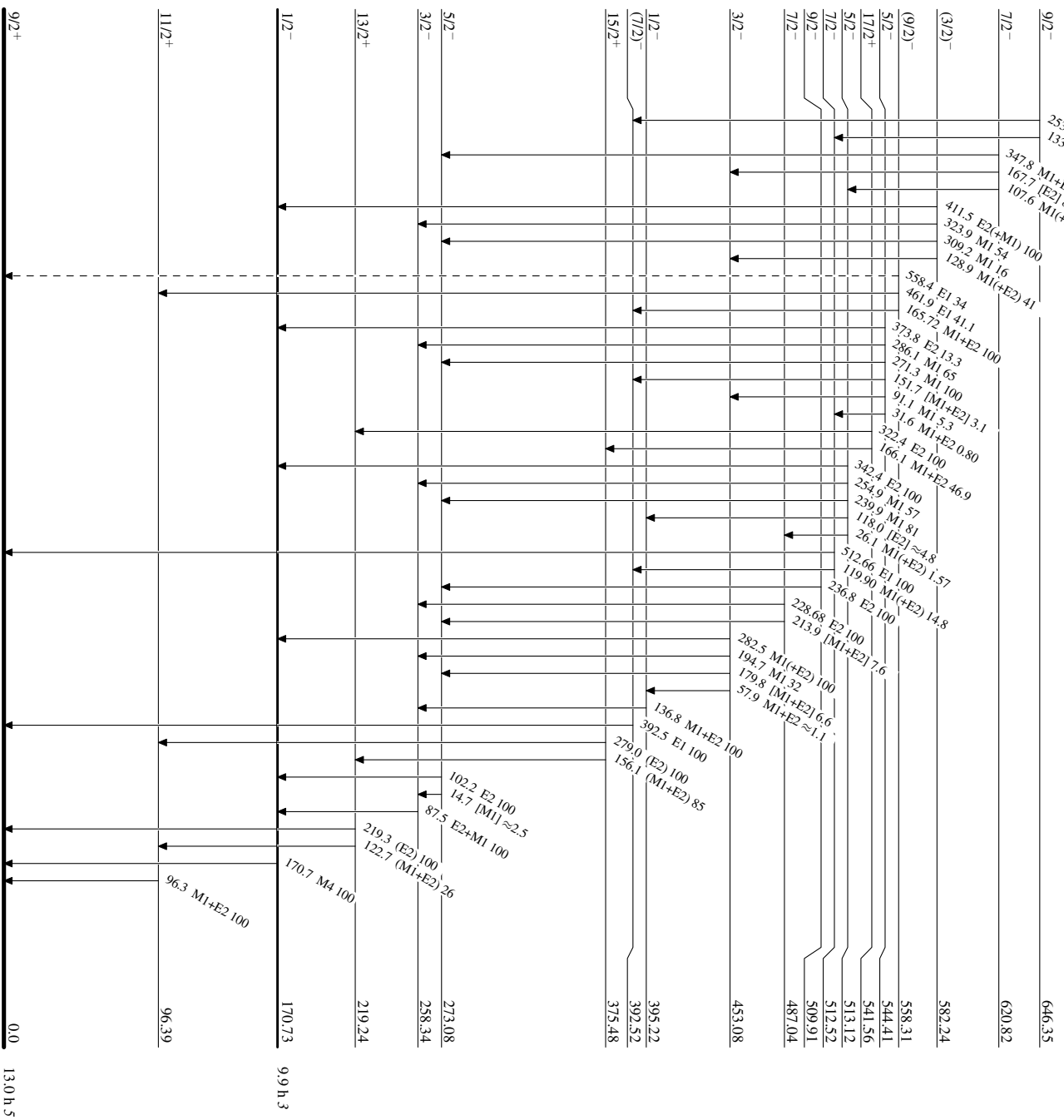
Adopted Levels, Gammas

Level Scheme (continued)

Legend

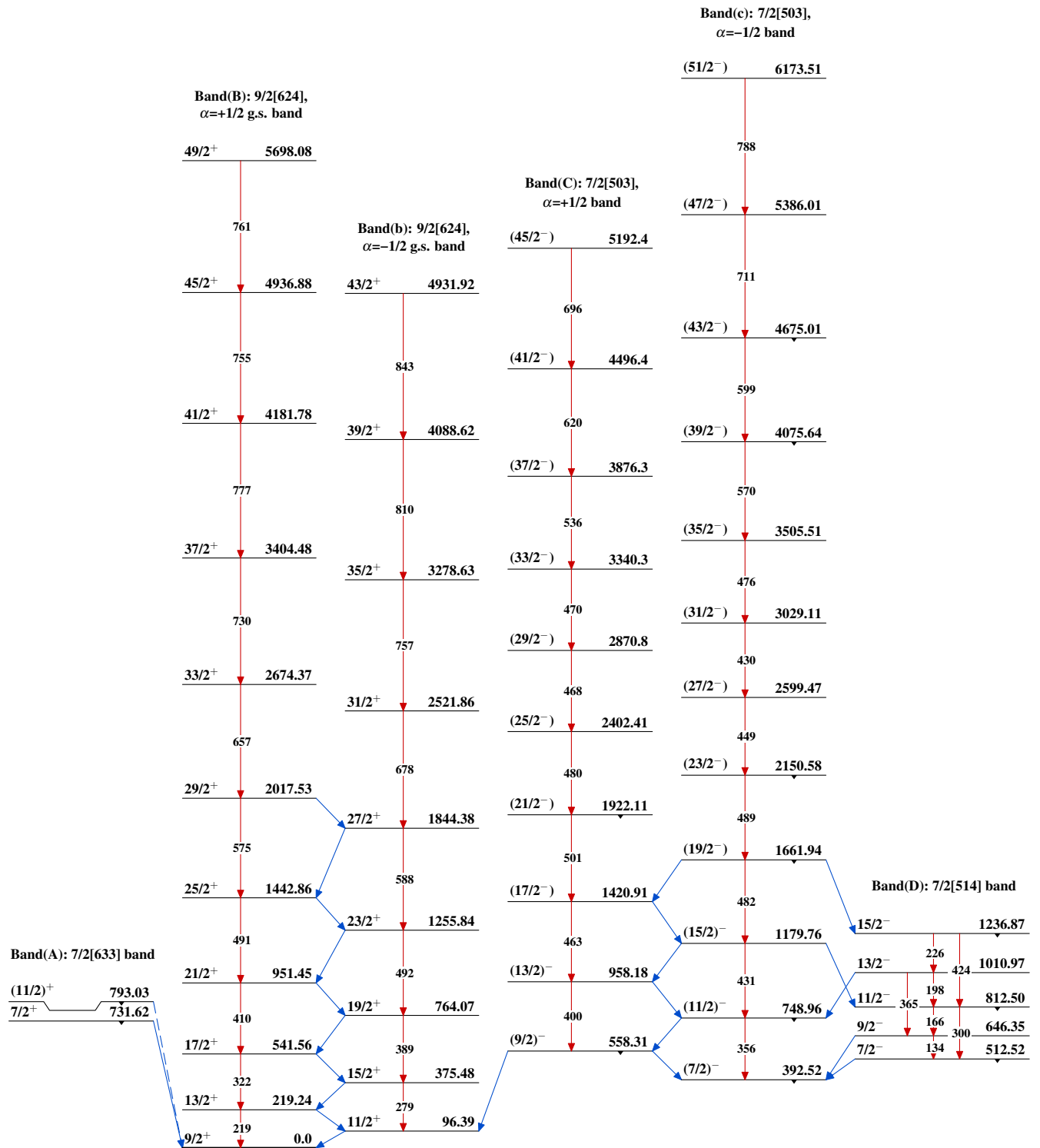
Intensities: Relative photon branching from each level

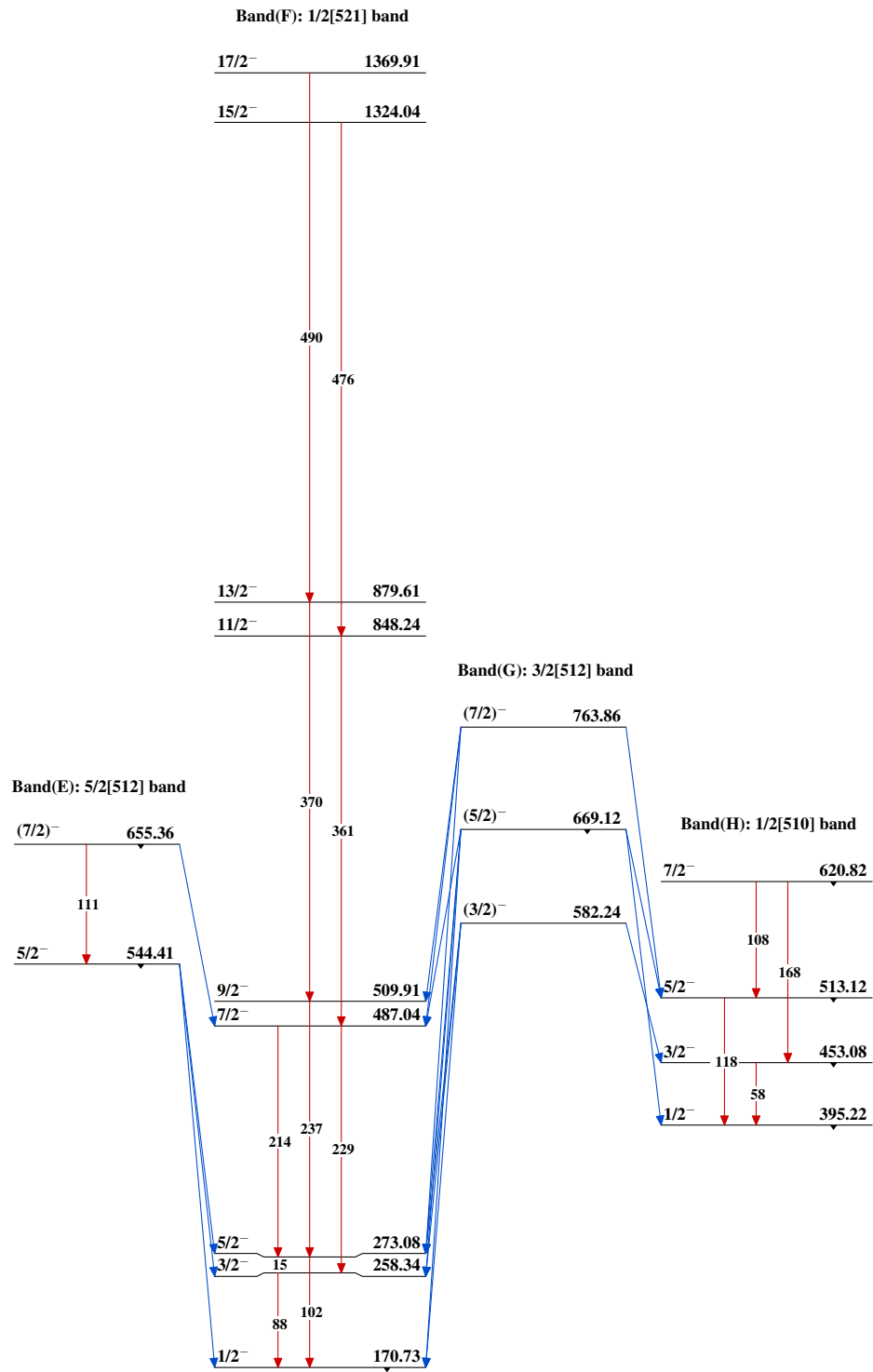
-----▶ γ Decay (Uncertain)

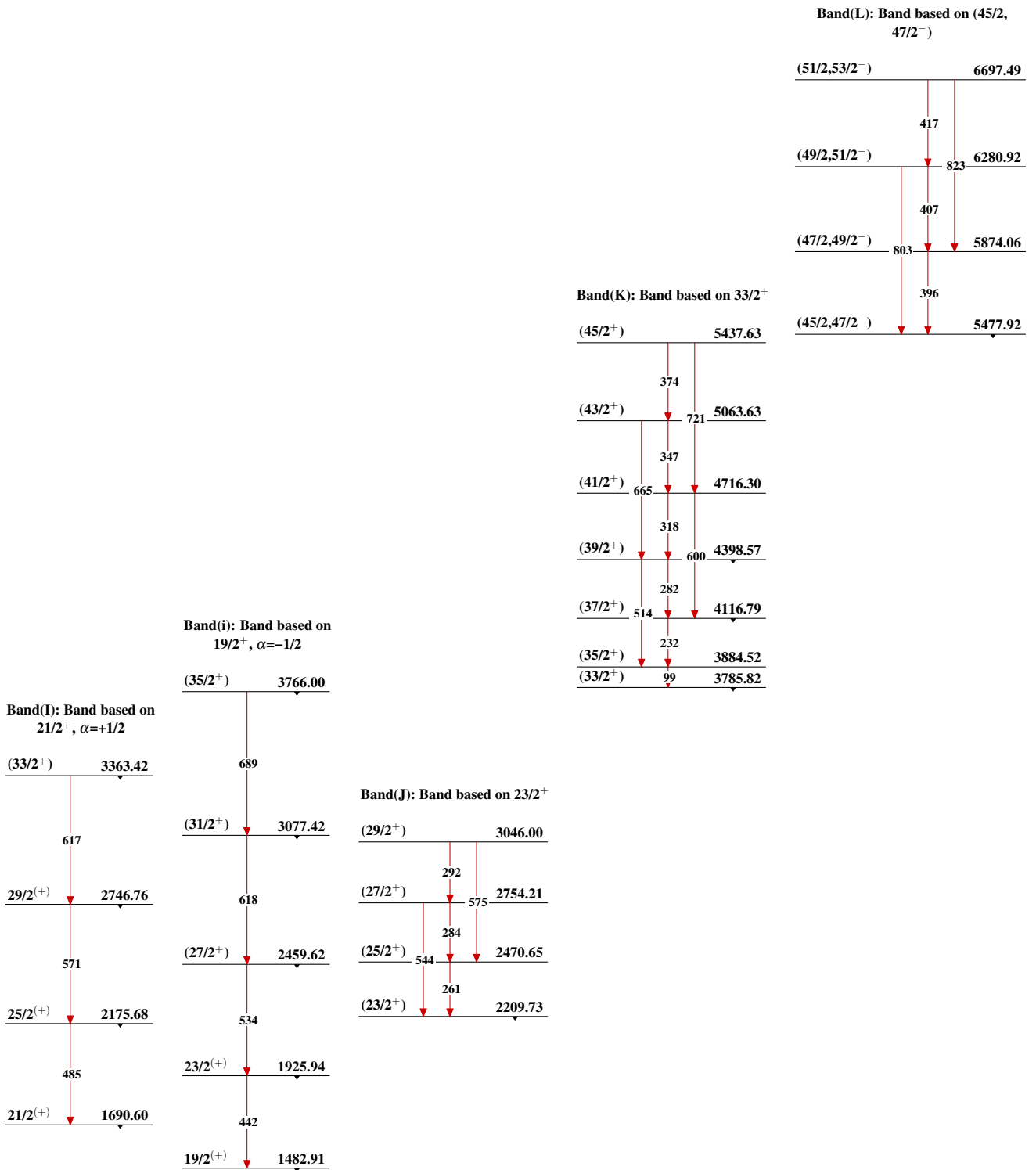


¹⁸³O_s₁₀₇

13.0 h 5

Adopted Levels, Gammas $^{183}_{76}\text{Os}_{107}$

Adopted Levels, Gammas (continued) $^{183}_{76}\text{Os}_{107}$

Adopted Levels, Gammas (continued)

Adopted Levels, Gammas (continued)