

Adopted Levels, Gammas

| Type            | Author                          | History | Citation          | Literature Cutoff Date |
|-----------------|---------------------------------|---------|-------------------|------------------------|
| Full Evaluation | H. Iimura, J. Katakura, S. Ohya |         | NDS 180, 1 (2022) | 1-Oct-2021             |

$Q(\beta^-) = -1681$  16;  $S(n) = 8332$  13;  $S(p) = 4440$  10;  $Q(\alpha) = -696$  12    [2021Wa16](#)

Isotope shift: [1978Hu08](#), [1981Th06](#).

Mass measurement: [1999Am05](#): Mass excess = -84349 12 keV.

 $^{126}\text{Cs}$  LevelsCross Reference (XREF) Flags

**A**  $^{126}\text{Ba}$   $\varepsilon$  decay  
**B** (HI,xn $\gamma$ )

| E(level) <sup>†</sup>  | $J^\pi$ <sup>‡</sup>                             | $T_{1/2}$ <sup>#</sup> | XREF      | Comments                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|------------------------|--------------------------------------------------|------------------------|-----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 0.0                    | 1 <sup>+</sup>                                   | 1.643 min 17           | <b>AB</b> | $\% \varepsilon + \% \beta^+ = 100$<br>$\mu = +0.776$ 4; $Q = -0.64$ 3<br>$\mu$ from laser spectroscopy ( <a href="#">1981Th06,2019StZV</a> ). Others: 0.779 8 ( <a href="#">1977Ek02</a> ).<br>$Q$ from laser spectroscopy ( <a href="#">1981Th06,2021StZZ</a> ).<br>$J^\pi$ : $J=1$ in atomic beam magnetic resonance ( <a href="#">1977Ek02</a> ). $\log ft = 5.5$ from 0 <sup>+</sup><br>$^{126}\text{Ba}$ g.s.<br>$T_{1/2}$ : from <a href="#">1969Ch18</a> . Other: 1.6 min 2 ( <a href="#">1954Ka33</a> ).<br>$J^\pi$ : $J=0,1$ from $\log ft = 6.45$ 12 from 0 <sup>+</sup> . <a href="#">1993KoZP</a> reported $J=1^+$ from $\gamma(\theta)$<br>and linear polarization in (HI,xn $\gamma$ ). However, these assignments are<br>inconsistent with $\gamma$ from (4) <sup>-</sup> 272 keV level and $\gamma$ sequences from (9 <sup>+</sup> ) 760<br>keV level. |
| 217.87 10              |                                                  |                        | <b>AB</b> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| 233.63 8               | 1 <sup>+</sup>                                   |                        | <b>A</b>  | $J^\pi$ : $\log ft = 5.49$ 5 from 0 <sup>+</sup> .                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| 241.00 9               | 0 <sup>-</sup> , 1 <sup>-</sup> , 2 <sup>-</sup> |                        | <b>AB</b> | $J^\pi$ : E1 to 1 <sup>+</sup> .                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| 257.60 8               | 0 <sup>+</sup> , 1 <sup>+</sup>                  |                        | <b>A</b>  | $J^\pi$ : M1, E2 $\gamma$ to 1 <sup>+</sup> ; $\log ft = 6.45$ 17 from 0 <sup>+</sup> .                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| 272.44 <sup>d</sup> 25 | (4) <sup>-</sup>                                 | $\geq 1 \mu\text{s}$   | <b>B</b>  | $J^\pi$ : From Gallagher-Moszkowski coupling rule for expected Nilsson orbitals<br>( <a href="#">2003Li30</a> ). This assignment is supported from B(M1)/B(E2) ratios of bands 5<br>and 6 measured in (HI,xn $\gamma$ ) ( <a href="#">2007Wa09</a> ).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| 281.20 12              | 0, 1, 2, 3 <sup>+</sup>                          |                        | <b>A</b>  | $J^\pi$ : $\gamma$ to 1 <sup>+</sup> .                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| 328.28 13              | 0, 1, 2, 3 <sup>+</sup>                          |                        | <b>A</b>  | $J^\pi$ : $\gamma$ to 1 <sup>+</sup> .                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| 334.94 24              |                                                  |                        | <b>B</b>  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| 345.8 7                |                                                  |                        | <b>B</b>  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| 347.83 20              |                                                  |                        | <b>AB</b> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| 372.3 <sup>c</sup> 3   | (5) <sup>-</sup>                                 |                        | <b>B</b>  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| 402.87 23              |                                                  |                        | <b>B</b>  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| 421.8 6                |                                                  |                        | <b>B</b>  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| 454.7 3                |                                                  |                        | <b>A</b>  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| 457.11 16              | 0, 1                                             |                        | <b>A</b>  | $J^\pi$ : $\log ft = 6.96$ 23 from 0 <sup>+</sup> .                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| 457.4 <sup>f</sup> 3   | (5) <sup>-</sup>                                 |                        | <b>B</b>  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| 482.7 <sup>d</sup> 3   | (6) <sup>-</sup>                                 |                        | <b>B</b>  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| 489.41 13              | 1, 0 <sup>-</sup>                                |                        | <b>A</b>  | $J^\pi$ : $\log ft = 5.97$ 6 from 0 <sup>+</sup> .                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| 495.8 6                |                                                  |                        | <b>B</b>  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| 508.50 21              |                                                  |                        | <b>A</b>  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| 513.3 6                |                                                  |                        | <b>B</b>  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| 538.88 17              | 1, 0 <sup>-</sup>                                |                        | <b>A</b>  | $J^\pi$ : $\log ft = 6.30$ 9 from 0 <sup>+</sup> .                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| 542.67 11              | 0, 1, 2, 3 <sup>+</sup>                          |                        | <b>A</b>  | $J^\pi$ : $\gamma$ to 1 <sup>+</sup> .                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| 552.9 3                |                                                  |                        | <b>B</b>  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| 574.7 9                |                                                  |                        | <b>B</b>  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| 585.6 <sup>e</sup> 3   | (6) <sup>-</sup>                                 |                        | <b>B</b>  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| 589.45 21              |                                                  |                        | <b>A</b>  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |

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Adopted Levels, Gammas (continued) $^{126}\text{Cs}$  Levels (continued)

| E(level) <sup>†</sup>      | J <sup>π</sup> <sup>‡</sup> | T <sub>1/2</sub> <sup>#</sup> | XREF | Comments                                                                                                                                                       |
|----------------------------|-----------------------------|-------------------------------|------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 595.0 8                    |                             | 171 $\mu\text{s}$ 14          | B    |                                                                                                                                                                |
| 625.7 6                    |                             |                               | B    |                                                                                                                                                                |
| 634.7 <sup>j</sup> 3       | (6) <sup>-</sup>            |                               | B    |                                                                                                                                                                |
| 643.8 <sup>c</sup> 3       | (7) <sup>-</sup>            |                               | B    |                                                                                                                                                                |
| 675.7 5                    |                             |                               | B    |                                                                                                                                                                |
| 681.84 12                  | 1 <sup>+</sup>              |                               | A    | J <sup>π</sup> : log ft=5.66 6 from 0 <sup>+</sup> .                                                                                                           |
| 709.53 17                  | 1,0 <sup>-</sup>            |                               | A    | J <sup>π</sup> : log ft=6.06 11 from 0 <sup>+</sup> .                                                                                                          |
| 710.7 9                    |                             |                               | B    |                                                                                                                                                                |
| 725.2 <sup>g</sup> 3       | (6) <sup>-</sup>            |                               | B    |                                                                                                                                                                |
| 738.1 <sup>f</sup> 3       | (7) <sup>-</sup>            |                               | B    |                                                                                                                                                                |
| 759.7 <sup>b</sup> 13      | (9 <sup>+</sup> )           |                               | B    | J <sup>π</sup> : From systematics of doubly odd Cs isotopes (1998Li36). 1993Ko25 reported J=5 <sup>+</sup> from $\gamma(\theta)$ and DCO in (HI,xn $\gamma$ ). |
| 776.6 3                    | 0,1                         |                               | A    | J <sup>π</sup> : log ft=6.84 15 from 0 <sup>+</sup> .                                                                                                          |
| 781.51 22                  | 0,1                         |                               | A    | J <sup>π</sup> : log ft=6.86 20 from 0 <sup>+</sup> .                                                                                                          |
| 797.2 <sup>d</sup> 3       | (8) <sup>-</sup>            |                               | B    |                                                                                                                                                                |
| 811.8 <sup>h</sup> 3       | (7) <sup>-</sup>            |                               | B    |                                                                                                                                                                |
| 818.9 <sup>i</sup> 3       | (7) <sup>-</sup>            |                               | B    |                                                                                                                                                                |
| 841.92 18                  | 1,0 <sup>-</sup>            |                               | A    | J <sup>π</sup> : log ft=6.19 16 from 0 <sup>+</sup> .                                                                                                          |
| 876.9 3                    | 1,0 <sup>-</sup>            |                               | A    | J <sup>π</sup> : log ft=6.22 9 from 0 <sup>+</sup> .                                                                                                           |
| 900.4 <sup>a</sup> 14      | (10 <sup>+</sup> )          |                               | B    |                                                                                                                                                                |
| 903.5 3                    | 1,0 <sup>-</sup>            |                               | A    | J <sup>π</sup> : log ft=6.32 9 from 0 <sup>+</sup> .                                                                                                           |
| 915.7 <sup>e</sup> 3       | (8) <sup>-</sup>            |                               | B    |                                                                                                                                                                |
| 955.3 <sup>g</sup> 3       | (8) <sup>-</sup>            |                               | B    |                                                                                                                                                                |
| 1028.3 <sup>j</sup> 3      | (8) <sup>-</sup>            |                               | B    |                                                                                                                                                                |
| 1097.48 13                 | 1 <sup>+</sup>              |                               | A    | J <sup>π</sup> : log ft=5.19 6 from 0 <sup>+</sup> .                                                                                                           |
| 1126.3 <sup>f</sup> 3      | (9) <sup>-</sup>            |                               | B    |                                                                                                                                                                |
| 1140.5 3                   | 1,0 <sup>-</sup>            |                               | A    | J <sup>π</sup> : log ft=5.86 9 from 0 <sup>+</sup> .                                                                                                           |
| 1166.7 <sup>h</sup> 3      | (9) <sup>-</sup>            |                               | B    |                                                                                                                                                                |
| 1180.8 <sup>c</sup> 3      | (9) <sup>-</sup>            |                               | B    |                                                                                                                                                                |
| 1210.75 15                 | 1 <sup>+</sup>              |                               | A    | J <sup>π</sup> : log ft=5.13 7 from 0 <sup>+</sup> .                                                                                                           |
| 1221.2 <sup>i</sup> 3      | (9) <sup>-</sup>            |                               | B    |                                                                                                                                                                |
| 1234.33 11                 | 1 <sup>+</sup>              |                               | A    | J <sup>π</sup> : log ft=4.67 6 from 0 <sup>+</sup> .                                                                                                           |
| 1237.9 <sup>b</sup> 14     | (11 <sup>+</sup> )          |                               | B    |                                                                                                                                                                |
| 1241.63 16                 | 1 <sup>+</sup>              |                               | A    | J <sup>π</sup> : log ft=5.09 8 from 0 <sup>+</sup> .                                                                                                           |
| 1293.01 12                 | 1 <sup>+</sup>              |                               | A    | J <sup>π</sup> : log ft=4.56 7 from 0 <sup>+</sup> .                                                                                                           |
| 1336.4 <sup>d</sup> 3      | (10) <sup>-</sup>           |                               | B    |                                                                                                                                                                |
| 1397.1 <sup>@</sup> 14     | (11 <sup>+</sup> )          |                               | B    |                                                                                                                                                                |
| 1429.7 <sup>g</sup> 3      | (10) <sup>-</sup>           |                               | B    |                                                                                                                                                                |
| 1477.7 <sup>e</sup> 4      | (10) <sup>-</sup>           |                               | B    |                                                                                                                                                                |
| 1492.7 <sup>a</sup> 14     | (12 <sup>+</sup> )          |                               | B    |                                                                                                                                                                |
| 1595.5 <sup>j</sup> 4      | (10) <sup>-</sup>           |                               | B    |                                                                                                                                                                |
| 1687.9 <sup>k</sup> 4      | (10) <sup>-</sup>           |                               | B    |                                                                                                                                                                |
| 1696.3 <sup>f</sup> 4      | (11) <sup>-</sup>           |                               | B    |                                                                                                                                                                |
| 1730.9 <sup>h</sup> 4      | (11) <sup>-</sup>           |                               | B    |                                                                                                                                                                |
| 1759.1 <sup>&amp;</sup> 14 | (12 <sup>+</sup> )          |                               | B    |                                                                                                                                                                |
| 1814.0 <sup>i</sup> 4      | (11) <sup>-</sup>           |                               | B    |                                                                                                                                                                |
| 1888.3 <sup>b</sup> 14     | (13 <sup>+</sup> )          |                               | B    |                                                                                                                                                                |
| 1893.2 <sup>c</sup> 4      | (11) <sup>-</sup>           |                               | B    |                                                                                                                                                                |
| 2044.9 <sup>d</sup> 4      | (12) <sup>-</sup>           |                               | B    |                                                                                                                                                                |
| 2086.2 <sup>@</sup> 14     | (13 <sup>+</sup> )          |                               | B    |                                                                                                                                                                |

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**Adopted Levels, Gammas (continued)** $^{126}\text{Cs}$  Levels (continued)

| <u>E(level)<sup>†</sup></u> | <u>J<sup>π</sup><sup>‡</sup></u> | <u>T<sub>1/2</sub><sup>#</sup></u> | <u>XREF</u> |
|-----------------------------|----------------------------------|------------------------------------|-------------|
| 2099.1 <sup>g</sup> 4       | (12) <sup>-</sup>                |                                    | B           |
| 2205.4 <sup>e</sup> 4       | (12) <sup>-</sup>                |                                    | B           |
| 2231.6 <sup>a</sup> 14      | (14 <sup>+</sup> )               | 0.86 ps 22                         | B           |
| 2283.1 17                   |                                  |                                    | B           |
| 2305.0 <sup>k</sup> 4       | (12) <sup>-</sup>                |                                    | B           |
| 2342.1 <sup>j</sup> 4       | (12) <sup>-</sup>                |                                    | B           |
| 2419.5 <sup>f</sup> 4       | (13) <sup>-</sup>                |                                    | B           |
| 2430.5 <sup>&amp;</sup> 14  | (14 <sup>+</sup> )               | 0.56 ps 12                         | B           |
| 2476.2 <sup>h</sup> 4       | (13) <sup>-</sup>                |                                    | B           |
| 2574.0 <sup>i</sup> 4       | (13) <sup>-</sup>                |                                    | B           |
| 2695.1 <sup>b</sup> 14      | (15 <sup>+</sup> )               | 0.47 ps +17-13                     | B           |
| 2745.6 <sup>c</sup> 4       | (13) <sup>-</sup>                |                                    | B           |
| 2857.2 <sup>@</sup> 14      | (15 <sup>+</sup> )               | 0.74 ps +28-21                     | B           |
| 2864.1 20                   |                                  |                                    | B           |
| 2890.9 <sup>d</sup> 4       | (14) <sup>-</sup>                |                                    | B           |
| 2934.1 <sup>g</sup> 4       | (14) <sup>-</sup>                |                                    | B           |
| 3052.3 <sup>k</sup> 4       | (14) <sup>-</sup>                |                                    | B           |
| 3081.6 <sup>e</sup> 5       | (14) <sup>-</sup>                |                                    | B           |
| 3110.4 <sup>a</sup> 14      | (16 <sup>+</sup> )               | 0.53 ps +13-11                     | B           |
| 3203.1 <sup>j</sup> 5       | (14) <sup>-</sup>                |                                    | B           |
| 3280.5 <sup>f</sup> 5       | (15) <sup>-</sup>                |                                    | B           |
| 3331.9 <sup>&amp;</sup> 14  | (16 <sup>+</sup> )               | 0.51 ps +15-14                     | B           |
| 3341.7 <sup>h</sup> 4       | (15) <sup>-</sup>                |                                    | B           |
| 3413.5 <sup>i</sup> 4       | (15) <sup>-</sup>                |                                    | B           |
| 3515.4 4                    |                                  |                                    | B           |
| 3606.0 <sup>b</sup> 14      | (17 <sup>+</sup> )               | 0.58 ps 14                         | B           |
| 3651.1 <sup>c</sup> 5       | (15) <sup>-</sup>                |                                    | B           |
| 3772.2 <sup>g</sup> 4       | (16) <sup>-</sup>                |                                    | B           |
| 3793.3 <sup>@</sup> 14      | (17 <sup>+</sup> )               | 0.54 ps 12                         | B           |
| 3858.6 <sup>d</sup> 5       | (16) <sup>-</sup>                |                                    | B           |
| 4071.1 <sup>a</sup> 14      | (18 <sup>+</sup> )               | 0.35 ps 7                          | B           |
| 4081.9 <sup>e</sup> 6       | (16) <sup>-</sup>                |                                    | B           |
| 4085.6 <sup>j</sup> 6       | (16) <sup>-</sup>                |                                    | B           |
| 4149.6 <sup>h</sup> 4       | (17) <sup>-</sup>                |                                    | B           |
| 4262.2 <sup>f</sup> 6       | (17) <sup>-</sup>                |                                    | B           |
| 4345.0 <sup>&amp;</sup> 14  | (18 <sup>+</sup> )               |                                    | B           |
| 4568.1 <sup>c</sup> 6       | (17) <sup>-</sup>                |                                    | B           |
| 4578.7 <sup>g</sup> 4       | (18) <sup>-</sup>                |                                    | B           |
| 4599.0 <sup>b</sup> 14      | (19 <sup>+</sup> )               | 0.29 ps +11-9                      | B           |
| 4801.0 <sup>@</sup> 14      | (19 <sup>+</sup> )               | 0.69 ps +20-18                     | B           |
| 4826.7 <sup>d</sup> 6       | (18) <sup>-</sup>                |                                    | B           |
| 4981.8 <sup>h</sup> 5       | (19) <sup>-</sup>                |                                    | B           |
| 5096.9 <sup>e</sup> 6       | (18) <sup>-</sup>                |                                    | B           |
| 5116.5 <sup>a</sup> 14      | (20 <sup>+</sup> )               | 0.47 ps 12                         | B           |
| 5294.5 <sup>f</sup> 7       | (19) <sup>-</sup>                |                                    | B           |
| 5391.3 <sup>&amp;</sup> 14  | (20 <sup>+</sup> )               |                                    | B           |
| 5443.2 <sup>g</sup> 5       | (20) <sup>-</sup>                |                                    | B           |
| 5523.9 <sup>c</sup> 7       | (19) <sup>-</sup>                |                                    | B           |

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**Adopted Levels, Gammas (continued)** $^{126}\text{Cs}$  Levels (continued)

| E(level) <sup>†</sup>      | J <sup>π</sup> <sup>‡</sup> | T <sub>1/2</sub> <sup>#</sup> | XREF | Comments                                                                                                                                                                                                                  |
|----------------------------|-----------------------------|-------------------------------|------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 5671.0 <sup>b</sup> 14     | (21 <sup>+</sup> )          | 0.35 ps 10                    | B    |                                                                                                                                                                                                                           |
| 5844.7 <sup>d</sup> 7      | (20) <sup>-</sup>           |                               | B    |                                                                                                                                                                                                                           |
| 5867.0 <sup>@</sup> 14     | (21 <sup>+</sup> )          |                               | B    |                                                                                                                                                                                                                           |
| 5897.3 <sup>h</sup> 5      | (21) <sup>-</sup>           |                               | B    |                                                                                                                                                                                                                           |
| 6251.7 <sup>a</sup> 14     | (22 <sup>+</sup> )          |                               | B    |                                                                                                                                                                                                                           |
| 6389.7 <sup>g</sup> 5      | (22) <sup>-</sup>           |                               | B    |                                                                                                                                                                                                                           |
| 6455.7 <sup>&amp;</sup> 14 | (22 <sup>+</sup> )          |                               | B    |                                                                                                                                                                                                                           |
| 6819.3 <sup>b</sup> 14     | (23 <sup>+</sup> )          |                               | B    |                                                                                                                                                                                                                           |
| 6902.1 <sup>h</sup> 5      | (23) <sup>-</sup>           |                               | B    |                                                                                                                                                                                                                           |
| 6973.8 <sup>@</sup> 15     | (23 <sup>+</sup> )          |                               | B    |                                                                                                                                                                                                                           |
| 7420.1 <sup>g</sup> 6      | (24) <sup>-</sup>           |                               | B    |                                                                                                                                                                                                                           |
| 7450.2 <sup>a</sup> 15     | (24 <sup>+</sup> )          |                               | B    |                                                                                                                                                                                                                           |
| 7967.3 <sup>b</sup> 15     | (25 <sup>+</sup> )          |                               | B    |                                                                                                                                                                                                                           |
| 8687.2 <sup>a</sup> 18     |                             |                               | B    |                                                                                                                                                                                                                           |
| 0.0+x <sup>m</sup>         | (8) <sup>-</sup>            |                               | B    | Additional information 1.<br>E(level): no connection to any other levels is observed.<br>J <sup>π</sup> : From comparison of B(M1)/B(E2) ratios measured in (HI,xnγ) with those expected for Nilsson orbitals (2007Wa09). |
| 224.32+x <sup>l</sup> 24   | (9) <sup>-</sup>            |                               | B    |                                                                                                                                                                                                                           |
| 498.28+x <sup>m</sup> 24   | (10) <sup>-</sup>           |                               | B    |                                                                                                                                                                                                                           |
| 839.4+x <sup>l</sup> 3     | (11) <sup>-</sup>           |                               | B    |                                                                                                                                                                                                                           |
| 1226.3+x <sup>m</sup> 3    | (12) <sup>-</sup>           |                               | B    |                                                                                                                                                                                                                           |
| 1650.8+x <sup>l</sup> 4    | (13) <sup>-</sup>           |                               | B    |                                                                                                                                                                                                                           |
| 2107.3+x <sup>m</sup> 4    | (14) <sup>-</sup>           |                               | B    |                                                                                                                                                                                                                           |
| 2593.8+x <sup>l</sup> 4    | (15) <sup>-</sup>           |                               | B    |                                                                                                                                                                                                                           |
| 3105.3+x <sup>m</sup> 5    | (16) <sup>-</sup>           |                               | B    |                                                                                                                                                                                                                           |
| 3630.8+x <sup>l</sup> 5    | (17) <sup>-</sup>           |                               | B    |                                                                                                                                                                                                                           |

<sup>†</sup> From a least-squares fit to the E(γ's).<sup>‡</sup> From band structure, DCO, and γ-ray angular distribution ratio in (HI,xnγ), unless otherwise noted.<sup>#</sup> From (HI,xnγ), unless otherwise noted.<sup>@</sup> Band(A): Band 1, signature partner of band 2. Possible configuration is ((π h<sub>11/2</sub>)(ν h<sub>11/2</sub>)).<sup>&</sup> Band(B): Band 2, signature partner of band 1. Possible configuration is ((π h<sub>11/2</sub>)(ν h<sub>11/2</sub>)).<sup>a</sup> Band(C): Band 3, signature partner of band 4, Configuration=((π h<sub>11/2</sub>)(ν h<sub>11/2</sub>)).<sup>b</sup> Band(D): Band 4, signature partner of band 3, Configuration=((π h<sub>11/2</sub>)(ν h<sub>11/2</sub>)).<sup>c</sup> Band(E): Band 5, signature partner of band 6. Possible configuration is ((π d<sub>5/2</sub>)(ν h<sub>11/2</sub>)).<sup>d</sup> Band(F): Band 6, signature partner of band 5. Possible configuration is ((π d<sub>5/2</sub>)(ν h<sub>11/2</sub>)).<sup>e</sup> Band(G): Band 7, signature partner of band 8. Possible configuration is ((π g<sub>7/2</sub>)(ν h<sub>11/2</sub>)).<sup>f</sup> Band(H): Band 8, signature partner of band 7. Possible configuration is ((π g<sub>7/2</sub>)(ν h<sub>11/2</sub>)).<sup>g</sup> Band(I): Band 9, signature partner of band 10. Possible configuration is ((π h<sub>11/2</sub>)(ν g<sub>7/2</sub>)).<sup>h</sup> Band(J): Band 10, signature partner of band 9. Possible configuration is ((π h<sub>11/2</sub>)(ν g<sub>7/2</sub>)).<sup>i</sup> Band(K): Band 11. Possible configuration is ((π h<sub>11/2</sub>)(ν d<sub>3/2</sub>)).<sup>j</sup> Band(L): Band 12. Possible configuration is ((π h<sub>11/2</sub>)(ν s<sub>1/2</sub>)).<sup>k</sup> Band(M): Band 13.<sup>l</sup> Band(N): Band 14, signature partner of band 15. Possible configuration is ((π g<sub>9/2</sub>)(ν h<sub>11/2</sub>)).<sup>m</sup> Band(O): Band 15, signature partner of band 14. Possible configuration is ((π g<sub>9/2</sub>)(ν h<sub>11/2</sub>)).

**Adopted Levels, Gammas (continued)**

| $\gamma(^{126}\text{Cs})$ |                                                |                         |                     |        |                                                |                    |            |
|---------------------------|------------------------------------------------|-------------------------|---------------------|--------|------------------------------------------------|--------------------|------------|
| $E_i(\text{level})$       | $J_i^\pi$                                      | $E_\gamma^\dagger$      | $I_\gamma^\dagger$  | $E_f$  | $J_f^\pi$                                      | Mult. <sup>b</sup> | $\alpha^c$ |
| 217.87                    |                                                | 217.9 1                 | 100                 | 0.0    | 1 <sup>+</sup>                                 |                    |            |
| 233.63                    | 1 <sup>+</sup>                                 | 233.6 1                 | 100                 | 0.0    | 1 <sup>+</sup>                                 | M1,E2              | 0.092 7    |
| 241.00                    | 0 <sup>-</sup> ,1 <sup>-</sup> ,2 <sup>-</sup> | 241.0 1                 | 100                 | 0.0    | 1 <sup>+</sup>                                 | E1                 | 0.0194     |
| 257.60                    | 0 <sup>+</sup> ,1 <sup>+</sup>                 | 257.6 1                 | 100                 | 0.0    | 1 <sup>+</sup>                                 | M1,E2              | 0.069 3    |
| 272.44                    | (4) <sup>-</sup>                               | 31.0 <sup>‡</sup>       |                     | 241.00 | 0 <sup>-</sup> ,1 <sup>-</sup> ,2 <sup>-</sup> |                    |            |
|                           |                                                | 55 <sup>‡</sup>         |                     | 217.87 |                                                |                    |            |
| 281.20                    | 0,1,2,3 <sup>+</sup>                           | 281.2 2                 | 100                 | 0.0    | 1 <sup>+</sup>                                 |                    |            |
| 328.28                    | 0,1,2,3 <sup>+</sup>                           | 94.5 3                  | 12 4                | 233.63 | 1 <sup>+</sup>                                 |                    |            |
|                           |                                                | 328.3 2                 | 100 10              | 0.0    | 1 <sup>+</sup>                                 |                    |            |
| 334.94                    |                                                | 94.1 <sup>‡</sup>       |                     | 241.00 | 0 <sup>-</sup> ,1 <sup>-</sup> ,2 <sup>-</sup> |                    |            |
| 345.8                     |                                                | 128 <sup>‡</sup>        |                     | 217.87 |                                                |                    |            |
| 347.83                    |                                                | 130.0 2                 | 100 20              | 217.87 |                                                |                    |            |
|                           |                                                | 347.6 <sup>&amp;e</sup> |                     | 0.0    | 1 <sup>+</sup>                                 |                    |            |
| 372.3                     | (5) <sup>-</sup>                               | 99.5 <sup>‡</sup>       | 100 <sup>#</sup>    | 272.44 | (4) <sup>-</sup>                               |                    |            |
| 402.87                    |                                                | 68.0 <sup>‡</sup>       |                     | 334.94 |                                                |                    |            |
|                           |                                                | 162.1 <sup>‡</sup>      |                     | 241.00 | 0 <sup>-</sup> ,1 <sup>-</sup> ,2 <sup>-</sup> |                    |            |
| 421.8                     |                                                | 74 <sup>d‡</sup>        |                     | 347.83 |                                                |                    |            |
|                           |                                                | 204 <sup>d‡</sup>       |                     | 217.87 |                                                |                    |            |
| 454.7                     |                                                | 106.9 2                 | 100                 | 347.83 |                                                |                    |            |
| 457.11                    | 0,1                                            | 239.3 5                 | 65 18               | 217.87 |                                                |                    |            |
|                           |                                                | 457.2 2                 | 100 18              | 0.0    | 1 <sup>+</sup>                                 |                    |            |
| 457.4                     | (5) <sup>-</sup>                               | 85.2 <sup>‡</sup>       | <33 <sup>#</sup>    | 372.3  | (5) <sup>-</sup>                               |                    |            |
|                           |                                                | 184.8 <sup>‡</sup>      | 100 <sup>#</sup> 22 | 272.44 | (4) <sup>-</sup>                               |                    |            |
| 482.7                     | (6) <sup>-</sup>                               | 110.5 <sup>‡</sup>      | 100 <sup>#</sup> 14 | 372.3  | (5) <sup>-</sup>                               |                    |            |
|                           |                                                | 210.4 <sup>‡</sup>      | <10 <sup>#</sup>    | 272.44 | (4) <sup>-</sup>                               |                    |            |
| 489.41                    | 1,0 <sup>-</sup>                               | 208.2 2                 | 18 4                | 281.20 | 0,1,2,3 <sup>+</sup>                           |                    |            |
|                           |                                                | 231.7 3                 | 31 4                | 257.60 | 0 <sup>+</sup> ,1 <sup>+</sup>                 |                    |            |
|                           |                                                | 489.3 2                 | 100 10              | 0.0    | 1 <sup>+</sup>                                 |                    |            |
| 495.8                     |                                                | 74 <sup>d‡</sup>        |                     | 421.8  |                                                |                    |            |
|                           |                                                | 148 <sup>‡</sup>        |                     | 347.83 |                                                |                    |            |
|                           |                                                | 150 <sup>‡</sup>        |                     | 345.8  |                                                |                    |            |
|                           |                                                | 278 <sup>‡</sup>        |                     | 217.87 |                                                |                    |            |
| 508.50                    |                                                | 290.8 3                 | 100 23              | 217.87 |                                                |                    |            |
|                           |                                                | 508.7 <sup>@e</sup>     |                     | 0.0    | 1 <sup>+</sup>                                 |                    |            |
| 513.3                     |                                                | 165 <sup>‡</sup>        |                     | 347.83 |                                                |                    |            |
|                           |                                                | 295 <sup>‡</sup>        |                     | 217.87 |                                                |                    |            |
| 538.88                    | 1,0 <sup>-</sup>                               | 538.9 2                 | 100                 | 0.0    | 1 <sup>+</sup>                                 |                    |            |
| 542.67                    | 0,1,2,3 <sup>+</sup>                           | 284.9 3                 | 45 14               | 257.60 | 0 <sup>+</sup> ,1 <sup>+</sup>                 |                    |            |
|                           |                                                | 308.9 3                 | 36 9                | 233.63 | 1 <sup>+</sup>                                 |                    |            |
|                           |                                                | 542.5 2                 | 100 18              | 0.0    | 1 <sup>+</sup>                                 |                    |            |
| 552.9                     |                                                | 150.1 <sup>‡</sup>      |                     | 402.87 |                                                |                    |            |
|                           |                                                | 218.0 <sup>‡</sup>      |                     | 334.94 |                                                |                    |            |
| 574.7                     |                                                | 153 <sup>‡</sup>        |                     | 421.8  |                                                |                    |            |
| 585.6                     | (6) <sup>-</sup>                               | 103.0 <sup>‡</sup>      |                     | 482.7  | (6) <sup>-</sup>                               |                    |            |
|                           |                                                | 128.1 <sup>‡</sup>      | 72 <sup>#</sup> 9   | 457.4  | (5) <sup>-</sup>                               |                    |            |
|                           |                                                | 213.4 <sup>‡</sup>      | 100 <sup>#</sup> 18 | 372.3  | (5) <sup>-</sup>                               |                    |            |
| 589.45                    |                                                | 348.5 2                 | 100                 | 241.00 | 0 <sup>-</sup> ,1 <sup>-</sup> ,2 <sup>-</sup> |                    |            |
| 595.0                     |                                                | 112 <sup>‡</sup>        |                     | 482.7  | (6) <sup>-</sup>                               |                    |            |

Continued on next page (footnotes at end of table)

**Adopted Levels, Gammas (continued)** $\gamma(^{126}\text{Cs})$  (continued)

| $E_i(\text{level})$ | $J_i^\pi$         | $E_\gamma^\dagger$    | $I_\gamma^\dagger$ | $E_f$  | $J_f^\pi$                                      |
|---------------------|-------------------|-----------------------|--------------------|--------|------------------------------------------------|
| 595.0               |                   | 223 $^{\ddagger}$     |                    | 372.3  | (5) <sup>-</sup>                               |
| 625.7               |                   | 51 $^{\ddagger}$      |                    | 574.7  |                                                |
|                     |                   | 112 $^{\ddagger}$     |                    | 513.3  |                                                |
|                     |                   | 204 $d^{\ddagger}$    |                    | 421.8  |                                                |
|                     |                   | 408 $^{\ddagger}$     |                    | 217.87 |                                                |
| 634.7               | (6) <sup>-</sup>  | 82.0 $^{\ddagger}$    |                    | 552.9  |                                                |
|                     |                   | 152.0 $^{\ddagger}$   | <40 $^\#$          | 482.7  | (6) <sup>-</sup>                               |
|                     |                   | 232.0 $^{\ddagger}$   |                    | 402.87 |                                                |
|                     |                   | 262.3 $^{\ddagger}$   | 100 $^\#$ 20       | 372.3  | (5) <sup>-</sup>                               |
| 643.8               | (7) <sup>-</sup>  | 161.0 $^{\ddagger}$   | 100 $^\#$ 14       | 482.7  | (6) <sup>-</sup>                               |
|                     |                   | 271.5 $^{\ddagger}$   | 14 $^\#$ 5         | 372.3  | (5) <sup>-</sup>                               |
| 675.7               |                   | 162 $^{\ddagger}$     |                    | 513.3  |                                                |
|                     |                   | 180 $^{\ddagger}$     |                    | 495.8  |                                                |
|                     |                   | 328 $^{\ddagger}$     |                    | 347.83 |                                                |
|                     |                   | 330 $^{\ddagger}$     |                    | 345.8  |                                                |
|                     |                   | 458 $^{\ddagger}$     |                    | 217.87 |                                                |
| 681.84              | 1 <sup>+</sup>    | 192.5 $@$ 5           |                    | 489.41 | 1,0 <sup>-</sup>                               |
|                     |                   | 353.5 3               | 12 3               | 328.28 | 0,1,2,3 <sup>+</sup>                           |
|                     |                   | 400.6 2               | 26 4               | 281.20 | 0,1,2,3 <sup>+</sup>                           |
|                     |                   | 441.0 5               | 9 2                | 241.00 | 0 <sup>-</sup> ,1 <sup>-</sup> ,2 <sup>-</sup> |
|                     |                   | 681.8 2               | 100 10             | 0.0    | 1 <sup>+</sup>                                 |
| 709.53              | 1,0 <sup>-</sup>  | 201.1 2               | 41 11              | 508.50 |                                                |
|                     |                   | 475.5 3               | 22 5               | 233.63 | 1 <sup>+</sup>                                 |
|                     |                   | 709.8 3               | 100 22             | 0.0    | 1 <sup>+</sup>                                 |
| 710.7               |                   | 35 $^{\ddagger}$      |                    | 675.7  |                                                |
|                     |                   | 85 $^{\ddagger}$      |                    | 625.7  |                                                |
| 725.2               | (6) <sup>-</sup>  | 90.4 $^{\ddagger}$ 10 | <40 $^\#$          | 634.7  | (6) <sup>-</sup>                               |
|                     |                   | 172.3 $^{\ddagger}$   |                    | 552.9  |                                                |
|                     |                   | 242.5 $^{\ddagger}$   | <30 $^\#$          | 482.7  | (6) <sup>-</sup>                               |
|                     |                   | 352.5 $^{\ddagger}$   | 100 $^\#$ 14       | 372.3  | (5) <sup>-</sup>                               |
| 738.1               | (7) <sup>-</sup>  | 152.5 $^{\ddagger}$   | 100 $^\#$ 19       | 585.6  | (6) <sup>-</sup>                               |
|                     |                   | 255.5 $^{\ddagger}$   | 25 $^\#$ 6         | 482.7  | (6) <sup>-</sup>                               |
|                     |                   | 280.7 $^{\ddagger}$   | 31 $^\#$ 6         | 457.4  | (5) <sup>-</sup>                               |
| 759.7               | (9 <sup>+</sup> ) | 49 $^{\ddagger}$      |                    | 710.7  |                                                |
| 776.6               | 0,1               | 535.4 3               | 100                | 241.00 | 0 <sup>-</sup> ,1 <sup>-</sup> ,2 <sup>-</sup> |
| 781.51              | 0,1               | 781.5 3               | 100                | 0.0    | 1 <sup>+</sup>                                 |
| 797.2               | (8) <sup>-</sup>  | 153.4 $^{\ddagger}$   | 100 $^\#$ 16       | 643.8  | (7) <sup>-</sup>                               |
|                     |                   | 314.2 $^{\ddagger}$   | 47 $^\#$ 5         | 482.7  | (6) <sup>-</sup>                               |
| 811.8               | (7) <sup>-</sup>  | 86.5 $^{\ddagger}$    | 100 $^\#$ 20       | 725.2  | (6) <sup>-</sup>                               |
|                     |                   | 177.0 $^{\ddagger}$   |                    | 634.7  | (6) <sup>-</sup>                               |
|                     |                   | 439.5 $^{\ddagger}$   |                    | 372.3  | (5) <sup>-</sup>                               |
| 818.9               | (7) <sup>-</sup>  | 93.5 $^{\ddagger}$    | 60 $^\#$ 20        | 725.2  | (6) <sup>-</sup>                               |
|                     |                   | 184.5 $^{\ddagger}$   | 100 $^\#$ 20       | 634.7  | (6) <sup>-</sup>                               |
|                     |                   | 336.5 $^{\ddagger}$   |                    | 482.7  | (6) <sup>-</sup>                               |
| 841.92              | 1,0 <sup>-</sup>  | 303.4 5               | 12 4               | 538.88 | 1,0 <sup>-</sup>                               |
|                     |                   | 561.1 5               | 27 12              | 281.20 | 0,1,2,3 <sup>+</sup>                           |
|                     |                   | 608.5 $a$ 5           | 38 8               | 233.63 | 1 <sup>+</sup>                                 |

Continued on next page (footnotes at end of table)

**Adopted Levels, Gammas (continued)** $\gamma(^{126}\text{Cs})$  (continued)

| $E_i(\text{level})$ | $J_i^\pi$          | $E_\gamma^\dagger$    | $I_\gamma^\dagger$  | $E_f$  | $J_f^\pi$                                      |
|---------------------|--------------------|-----------------------|---------------------|--------|------------------------------------------------|
| 841.92              | 1,0 <sup>-</sup>   | 841.6 5               | 100 19              | 0.0    | 1 <sup>+</sup>                                 |
| 876.9               | 1,0 <sup>-</sup>   | 548.7 3               | 100 19              | 328.28 | 0,1,2,3 <sup>+</sup>                           |
|                     |                    | 876.8 5               | 44 13               | 0.0    | 1 <sup>+</sup>                                 |
| 900.4               | (10 <sup>+</sup> ) | 140.8 <sup>‡</sup>    | 100 <sup>#</sup>    | 759.7  | (9 <sup>+</sup> )                              |
| 903.5               | 1,0 <sup>-</sup>   | 685.6 3               | 100 18              | 217.87 |                                                |
|                     |                    | 903.5 5               | 55 18               | 0.0    | 1 <sup>+</sup>                                 |
| 915.7               | (8) <sup>-</sup>   | 177.5 <sup>‡</sup>    | 100 <sup>#</sup> 13 | 738.1  | (7) <sup>-</sup>                               |
|                     |                    | 271.8 <sup>‡</sup>    |                     | 643.8  | (7) <sup>-</sup>                               |
|                     |                    | 330.0 <sup>‡</sup>    | 50 <sup>#</sup> 13  | 585.6  | (6) <sup>-</sup>                               |
| 955.3               | (8) <sup>-</sup>   | 136.5 <sup>‡</sup>    | 19 <sup>#</sup> 6   | 818.9  | (7) <sup>-</sup>                               |
|                     |                    | 143.5 <sup>‡</sup>    | 100 <sup>#</sup> 13 | 811.8  | (7) <sup>-</sup>                               |
|                     |                    | 230.0 <sup>‡</sup>    |                     | 725.2  | (6) <sup>-</sup>                               |
| 1028.3              | (8) <sup>-</sup>   | 231.2 <sup>‡</sup>    |                     | 797.2  | (8) <sup>-</sup>                               |
|                     |                    | 384.5 <sup>‡</sup>    |                     | 643.8  | (7) <sup>-</sup>                               |
|                     |                    | 393.9 <sup>‡</sup>    |                     | 634.7  | (6) <sup>-</sup>                               |
| 1097.48             | 1 <sup>+</sup>     | 320.5 5               | 5.6 28              | 776.6  | 0,1                                            |
|                     |                    | 415.5 3               | 42 8                | 681.84 | 1 <sup>+</sup>                                 |
|                     |                    | 558.5 5               | 8 3                 | 538.88 | 1,0 <sup>-</sup>                               |
|                     |                    | 608.5 <sup>ae</sup> 5 | 28 6                | 489.41 | 1,0 <sup>-</sup>                               |
|                     |                    | 640.6 3               | 39 6                | 457.11 | 0,1                                            |
|                     |                    | 643.1 5               | 25 6                | 454.7  |                                                |
|                     |                    | 839.5 5               | 33 8                | 257.60 | 0 <sup>+</sup> ,1 <sup>+</sup>                 |
|                     |                    | 856.5 3               | 50 8                | 241.00 | 0 <sup>-</sup> ,1 <sup>-</sup> ,2 <sup>-</sup> |
|                     |                    | 863.9 2               | 100 19              | 233.63 | 1 <sup>+</sup>                                 |
|                     |                    | 1097.5 5              | 47 11               | 0.0    | 1 <sup>+</sup>                                 |
| 1126.3              | (9) <sup>-</sup>   | 210.4 <sup>‡</sup>    | 100 <sup>#</sup> 25 | 915.7  | (8) <sup>-</sup>                               |
|                     |                    | 329.0 <sup>‡</sup>    |                     | 797.2  | (8) <sup>-</sup>                               |
|                     |                    | 388.4 <sup>‡</sup>    | 42 <sup>#</sup> 17  | 738.1  | (7) <sup>-</sup>                               |
|                     |                    | 482.5 <sup>‡</sup>    |                     | 643.8  | (7) <sup>-</sup>                               |
| 1140.5              | 1,0 <sup>-</sup>   | 551.2 3               | 100 17              | 589.45 |                                                |
|                     |                    | 899.2 5               | 28 11               | 241.00 | 0 <sup>-</sup> ,1 <sup>-</sup> ,2 <sup>-</sup> |
| 1166.7              | (9) <sup>-</sup>   | 211.4 <sup>‡</sup>    | 100 <sup>#</sup> 14 | 955.3  | (8) <sup>-</sup>                               |
|                     |                    | 354.7 <sup>‡</sup>    | 36 <sup>#</sup> 7   | 811.8  | (7) <sup>-</sup>                               |
|                     |                    | 369.7 <sup>‡</sup>    |                     | 797.2  | (8) <sup>-</sup>                               |
|                     |                    | 522.8 <sup>‡</sup>    |                     | 643.8  | (7) <sup>-</sup>                               |
| 1180.8              | (9) <sup>-</sup>   | 383.5 <sup>‡</sup>    | 100 <sup>#</sup> 13 | 797.2  | (8) <sup>-</sup>                               |
|                     |                    | 537.0 <sup>‡</sup>    | 38 <sup>#</sup> 13  | 643.8  | (7) <sup>-</sup>                               |
| 1210.75             | 1 <sup>+</sup>     | 667.8 3               | 16 7                | 542.67 | 0,1,2,3 <sup>+</sup>                           |
|                     |                    | 882.5 5               | 16 4                | 328.28 | 0,1,2,3 <sup>+</sup>                           |
|                     |                    | 929.6 5               | 33 7                | 281.20 | 0,1,2,3 <sup>+</sup>                           |
|                     |                    | 977.2 2               | 35                  | 233.63 | 1 <sup>+</sup>                                 |
|                     |                    | 1210.8 3              | 100 20              | 0.0    | 1 <sup>+</sup>                                 |
| 1221.2              | (9) <sup>-</sup>   | 193.0 <sup>‡</sup>    |                     | 1028.3 | (8) <sup>-</sup>                               |
|                     |                    | 266.0 <sup>‡</sup>    | 71 <sup>#</sup> 14  | 955.3  | (8) <sup>-</sup>                               |
|                     |                    | 402.5 <sup>‡</sup>    | 100 <sup>#</sup> 14 | 818.9  | (7) <sup>-</sup>                               |
| 1234.33             | 1 <sup>+</sup>     | 392.5 2               | 32 7                | 841.92 | 1,0 <sup>-</sup>                               |
|                     |                    | 452.8 3               | 7.5 33              | 781.51 | 0,1                                            |
|                     |                    | 691.6 2               | 33 3                | 542.67 | 0,1,2,3 <sup>+</sup>                           |
|                     |                    | 744.5 3               | 23 3                | 489.41 | 1,0 <sup>-</sup>                               |
|                     |                    | 905.9 5               | 15 3                | 328.28 | 0,1,2,3 <sup>+</sup>                           |

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**Adopted Levels, Gammas (continued)** $\gamma(^{126}\text{Cs})$  (continued)

| $E_i(\text{level})$ | $J_i^\pi$          | $E_\gamma^\dagger$ | $I_\gamma^\dagger$ | $E_f$  | $J_f^\pi$                                      |
|---------------------|--------------------|--------------------|--------------------|--------|------------------------------------------------|
| 1234.33             | 1 <sup>+</sup>     | 953.1 3            | 20 5               | 281.20 | 0,1,2,3 <sup>+</sup>                           |
|                     |                    | 976.8 2            | 73 7               | 257.60 | 0 <sup>+</sup> ,1 <sup>+</sup>                 |
|                     |                    | 993.4 3            | 100 17             | 241.00 | 0 <sup>-</sup> ,1 <sup>-</sup> ,2 <sup>-</sup> |
|                     |                    | 1000.8 5           | 10 3               | 233.63 | 1 <sup>+</sup>                                 |
|                     |                    | 1234.4 3           | 80 15              | 0.0    | 1 <sup>+</sup>                                 |
| 1237.9              | (11 <sup>+</sup> ) | 337.5 $\ddagger$   | 100 <sup>#</sup> 8 | 900.4  | (10 <sup>+</sup> )                             |
|                     |                    | 478.1 $\ddagger$   | <4 <sup>#</sup>    | 759.7  | (9 <sup>+</sup> )                              |
| 1241.63             | 1 <sup>+</sup>     | 698.6 3            | 25 7               | 542.67 | 0,1,2,3 <sup>+</sup>                           |
|                     |                    | 702.6 5            | 7 4                | 538.88 | 1,0 <sup>-</sup>                               |
|                     |                    | 913.5 5            | 39 7               | 328.28 | 0,1,2,3 <sup>+</sup>                           |
|                     |                    | 984.2 3            | 100 21             | 257.60 | 0 <sup>+</sup> ,1 <sup>+</sup>                 |
|                     |                    | 1008.0 5           | 43 7               | 233.63 | 1 <sup>+</sup>                                 |
|                     |                    | 1241.8 3           | 93 18              | 0.0    | 1 <sup>+</sup>                                 |
| 1293.01             | 1 <sup>+</sup>     | 583.5 3            | 11 3               | 709.53 | 1,0 <sup>-</sup>                               |
|                     |                    | 611.2 5            | 13 2               | 681.84 | 1 <sup>+</sup>                                 |
|                     |                    | 750.5 5            | 3 1                | 542.67 | 0,1,2,3 <sup>+</sup>                           |
|                     |                    | 835.9 5            | 4 2                | 457.11 | 0,1                                            |
|                     |                    | 964.4 5            | 5.5 22             | 328.28 | 0,1,2,3 <sup>+</sup>                           |
|                     |                    | 1011.8 5           | 20 4               | 281.20 | 0,1,2,3 <sup>+</sup>                           |
|                     |                    | 1035.4 3           | 44 9               | 257.60 | 0 <sup>+</sup> ,1 <sup>+</sup>                 |
|                     |                    | 1052.0 2           | 33 5               | 241.00 | 0 <sup>-</sup> ,1 <sup>-</sup> ,2 <sup>-</sup> |
|                     |                    | 1059.4 5           | 11 2               | 233.63 | 1 <sup>+</sup>                                 |
|                     |                    | 1293.0 3           | 100 11             | 0.0    | 1 <sup>+</sup>                                 |
| 1336.4              | (10) <sup>-</sup>  | 155.5              | 24 6               | 1180.8 | (9) <sup>-</sup>                               |
|                     |                    | 539.3              | 100 12             | 797.2  | (8) <sup>-</sup>                               |
| 1397.1              | (11 <sup>+</sup> ) | 496.5              | 100 12             | 900.4  | (10 <sup>+</sup> )                             |
|                     |                    | 637.5              | 41 6               | 759.7  | (9 <sup>+</sup> )                              |
| 1429.7              | (10) <sup>-</sup>  | 208.7              | 30 10              | 1221.2 | (9) <sup>-</sup>                               |
|                     |                    | 262.7              | 100 10             | 1166.7 | (9) <sup>-</sup>                               |
|                     |                    | 474.5              | 80 10              | 955.3  | (8) <sup>-</sup>                               |
|                     |                    | 514.0              |                    | 915.7  | (8) <sup>-</sup>                               |
|                     |                    | 632.2              |                    | 797.2  | (8) <sup>-</sup>                               |
| 1477.7              | (10) <sup>-</sup>  | 297.0              |                    | 1180.8 | (9) <sup>-</sup>                               |
|                     |                    | 351.5              | 100 25             | 1126.3 | (9) <sup>-</sup>                               |
|                     |                    | 561.8              | 100 25             | 915.7  | (8) <sup>-</sup>                               |
| 1492.7              | (12 <sup>+</sup> ) | 95.5               | 9.3 23             | 1397.1 | (11 <sup>+</sup> )                             |
|                     |                    | 254.8              | 84 7               | 1237.9 | (11 <sup>+</sup> )                             |
|                     |                    | 592.5              | 100 9              | 900.4  | (10 <sup>+</sup> )                             |
| 1595.5              | (10) <sup>-</sup>  | 258.7              |                    | 1336.4 | (10) <sup>-</sup>                              |
|                     |                    | 567.5              |                    | 1028.3 | (8) <sup>-</sup>                               |
| 1687.9              | (10) <sup>-</sup>  | 521.1              |                    | 1166.7 | (9) <sup>-</sup>                               |
| 1696.3              | (11) <sup>-</sup>  | 218.4              | 27 9               | 1477.7 | (10) <sup>-</sup>                              |
|                     |                    | 360.0              |                    | 1336.4 | (10) <sup>-</sup>                              |
|                     |                    | 570.1              | 100 18             | 1126.3 | (9) <sup>-</sup>                               |
| 1730.9              | (11) <sup>-</sup>  | 301.1              | 63 6               | 1429.7 | (10) <sup>-</sup>                              |
|                     |                    | 564.3              | 100 13             | 1166.7 | (9) <sup>-</sup>                               |
| 1759.1              | (12 <sup>+</sup> ) | 361.9              | 37 5               | 1397.1 | (11 <sup>+</sup> )                             |
|                     |                    | 521.1              | 100 11             | 1237.9 | (11 <sup>+</sup> )                             |
| 1814.0              | (11) <sup>-</sup>  | 384.2              |                    | 1429.7 | (10) <sup>-</sup>                              |
|                     |                    | 593.0              | 100 13             | 1221.2 | (9) <sup>-</sup>                               |
| 1888.3              | (13 <sup>+</sup> ) | 395.7              | 100 8              | 1492.7 | (12 <sup>+</sup> )                             |
|                     |                    | 650.5              | 16 3               | 1237.9 | (11 <sup>+</sup> )                             |
| 1893.2              | (11) <sup>-</sup>  | 557.0              | 100 20             | 1336.4 | (10) <sup>-</sup>                              |
|                     |                    | 712.5              | <60                | 1180.8 | (9) <sup>-</sup>                               |
| 2044.9              | (12) <sup>-</sup>  | 152.0              |                    | 1893.2 | (11) <sup>-</sup>                              |

Continued on next page (footnotes at end of table)



**Adopted Levels, Gammas (continued)** $\gamma(^{126}\text{Cs})$  (continued)

| $E_i(\text{level})$ | $J_i^\pi$          | $E_\gamma^\dagger$ | $I_\gamma^\dagger$ | $E_f$  | $J_f^\pi$          | Comments                                |
|---------------------|--------------------|--------------------|--------------------|--------|--------------------|-----------------------------------------|
| 2044.9              | (12) <sup>-</sup>  | 708.5              | 100 9              | 1336.4 | (10) <sup>-</sup>  |                                         |
| 2086.2              | (13 <sup>+</sup> ) | 327.1              | 46 15              | 1759.1 | (12 <sup>+</sup> ) |                                         |
|                     |                    | 593.5              | 46 15              | 1492.7 | (12 <sup>+</sup> ) |                                         |
|                     |                    | 689.3              | 100 15             | 1397.1 | (11 <sup>+</sup> ) |                                         |
|                     |                    | 847.8              | 18 6               | 1237.9 | (11 <sup>+</sup> ) |                                         |
| 2099.1              | (12) <sup>-</sup>  | 285.0              |                    | 1814.0 | (11) <sup>-</sup>  |                                         |
|                     |                    | 368.2              | 88 25              | 1730.9 | (11) <sup>-</sup>  |                                         |
|                     |                    | 669.3              | 100 13             | 1429.7 | (10) <sup>-</sup>  |                                         |
|                     |                    | 762.5              |                    | 1336.4 | (10) <sup>-</sup>  |                                         |
| 2205.4              | (12) <sup>-</sup>  | 509.1              |                    | 1696.3 | (11) <sup>-</sup>  |                                         |
|                     |                    | 727.8              | 100 30             | 1477.7 | (10) <sup>-</sup>  |                                         |
| 2231.6              | (14 <sup>+</sup> ) | 145.4              | <9                 | 2086.2 | (13 <sup>+</sup> ) | B(M1)(W.u)=0.31 +15-4 if M1 (2011Gr12). |
|                     |                    | 343.2              | 23 3               | 1888.3 | (13 <sup>+</sup> ) | B(M1)(W.u)=0.08 +4-1 if M1 (2011Gr12).  |
|                     |                    | 739.2              | 100 9              | 1492.7 | (12 <sup>+</sup> ) | B(E2)(W.u)=60 +29-8 if E2 (2011Gr12).   |
| 2283.1              |                    | 524                |                    | 1759.1 | (12 <sup>+</sup> ) |                                         |
| 2305.0              | (12) <sup>-</sup>  | 574.0              |                    | 1730.9 | (11) <sup>-</sup>  |                                         |
|                     |                    | 617.0              |                    | 1687.9 | (10) <sup>-</sup>  |                                         |
| 2342.1              | (12) <sup>-</sup>  | 297.3              |                    | 2044.9 | (12) <sup>-</sup>  |                                         |
|                     |                    | 746.5              |                    | 1595.5 | (10) <sup>-</sup>  |                                         |
| 2419.5              | (13) <sup>-</sup>  | 214.0              |                    | 2205.4 | (12) <sup>-</sup>  |                                         |
|                     |                    | 723.1              | 100 13             | 1696.3 | (11) <sup>-</sup>  |                                         |
| 2430.5              | (14 <sup>+</sup> ) | 344.4              | 31 6               | 2086.2 | (13 <sup>+</sup> ) | B(M1)(W.u)=0.09 +3-1 if M1 (2011Gr12).  |
|                     |                    | 542.5              | 100 11             | 1888.3 | (13 <sup>+</sup> ) | B(M1)(W.u)=0.17 +6-2 if M1 (2011Gr12).  |
|                     |                    | 671.1              | 33 11              | 1759.1 | (12 <sup>+</sup> ) | B(E2)(W.u)=34 +13-6 if E2 (2011Gr12).   |
|                     |                    | 937.8              | 6.7 22             | 1492.7 | (12 <sup>+</sup> ) |                                         |
| 2476.2              | (13) <sup>-</sup>  | 377.1              |                    | 2099.1 | (12) <sup>-</sup>  |                                         |
|                     |                    | 745.2              | 100 14             | 1730.9 | (11) <sup>-</sup>  |                                         |
| 2574.0              | (13) <sup>-</sup>  | 475.0              |                    | 2099.1 | (12) <sup>-</sup>  |                                         |
|                     |                    | 760.0              | 100 20             | 1814.0 | (11) <sup>-</sup>  |                                         |
| 2695.1              | (15 <sup>+</sup> ) | 264                | ≤10                | 2430.5 | (14 <sup>+</sup> ) | B(M1)(W.u)≤0.1 if M1 (2011Gr12).        |
|                     |                    | 463.5              | 100 11             | 2231.6 | (14 <sup>+</sup> ) | B(M1)(W.u)=0.26 +15-4 if M1 (2011Gr12). |
|                     |                    | 807.0              | 50 11              | 1888.3 | (13 <sup>+</sup> ) | B(E2)(W.u)=28 +17-5 if E2 (2011Gr12).   |
| 2745.6              | (13) <sup>-</sup>  | 700.7              |                    | 2044.9 | (12) <sup>-</sup>  |                                         |
|                     |                    | 852.5              | <100               | 1893.2 | (11) <sup>-</sup>  |                                         |
| 2857.2              | (15 <sup>+</sup> ) | 426.5              | 100 12             | 2430.5 | (14 <sup>+</sup> ) | B(M1)(W.u)=0.14 +9-3 if M1 (2011Gr12).  |
|                     |                    | 626                | ≤18                | 2231.6 | (14 <sup>+</sup> ) | B(M1)(W.u)≤0.006 if M1 (2011Gr12).      |
|                     |                    | 771.0              | 47 6               | 2086.2 | (13 <sup>+</sup> ) | B(E2)(W.u)=22 +14-4 if E2 (2011Gr12).   |
|                     |                    | 968.9              | 18 6               | 1888.3 | (13 <sup>+</sup> ) | B(E2)(W.u)=3.8 +26-8 if E2 (2011Gr12).  |
| 2864.1              |                    | 581                |                    | 2283.1 |                    |                                         |
| 2890.9              | (14) <sup>-</sup>  | 846.2              | 100                | 2044.9 | (12) <sup>-</sup>  |                                         |
| 2934.1              | (14) <sup>-</sup>  | 360.2              |                    | 2574.0 | (13) <sup>-</sup>  |                                         |
|                     |                    | 457.7              | <33                | 2476.2 | (13) <sup>-</sup>  |                                         |
|                     |                    | 835.0              | 100 17             | 2099.1 | (12) <sup>-</sup>  |                                         |
|                     |                    | 889.4              |                    | 2044.9 | (12) <sup>-</sup>  |                                         |
| 3052.3              | (14) <sup>-</sup>  | 576.3              |                    | 2476.2 | (13) <sup>-</sup>  |                                         |
|                     |                    | 747.1              |                    | 2305.0 | (12) <sup>-</sup>  |                                         |
| 3081.6              | (14) <sup>-</sup>  | 661.9              |                    | 2419.5 | (13) <sup>-</sup>  |                                         |
|                     |                    | 876.4              |                    | 2205.4 | (12) <sup>-</sup>  |                                         |
| 3110.4              | (16 <sup>+</sup> ) | 253.0              | 50 5               | 2857.2 | (15 <sup>+</sup> ) | B(M1)(W.u)=0.45 +19-8 if M1 (2011Gr12). |
|                     |                    | 415.5              | 10 18              | 2695.1 | (15 <sup>+</sup> ) | B(M1)(W.u)≤0.02 if M1 (2011Gr12).       |
|                     |                    | 679.8              | <9                 | 2430.5 | (14 <sup>+</sup> ) | B(E2)(W.u)=11 +5-2 if E2 (2011Gr12).    |
|                     |                    | 879.0              | 100 9              | 2231.6 | (14 <sup>+</sup> ) | B(E2)(W.u)=37 +14-6 if E2 (2011Gr12).   |
| 3203.1              | (14) <sup>-</sup>  | 861.0 <sup>d</sup> |                    | 2342.1 | (12) <sup>-</sup>  |                                         |
| 3280.5              | (15) <sup>-</sup>  | 861.0 <sup>d</sup> | 100                | 2419.5 | (13) <sup>-</sup>  |                                         |
| 3331.9              | (16 <sup>+</sup> ) | 475                | ≤33                | 2857.2 | (15 <sup>+</sup> ) | B(M1)(W.u)≤0.04 if M1 (2011Gr12).       |

Continued on next page (footnotes at end of table)

**Adopted Levels, Gammas (continued)** $\gamma(^{126}\text{Cs})$  (continued)

| $E_i(\text{level})$ | $J_i^\pi$          | $E_\gamma^\dagger$ | $I_\gamma^\dagger$ | $E_f$  | $J_f^\pi$          | Comments                                 |
|---------------------|--------------------|--------------------|--------------------|--------|--------------------|------------------------------------------|
| 3331.9              | (16 <sup>+</sup> ) | 637.0              | 100 17             | 2695.1 | (15 <sup>+</sup> ) | B(M1)(W.u)=0.11 +6-2 if M1 (2011Gr12).   |
|                     |                    | 901.5              | <33                | 2430.5 | (14 <sup>+</sup> ) | B(E2)(W.u)=13 +8-2 if E2 (2011Gr12).     |
|                     |                    | 1100.0             | 20 7               | 2231.6 | (14 <sup>+</sup> ) |                                          |
| 3341.7              | (15) <sup>-</sup>  | 407.8              |                    | 2934.1 | (14) <sup>-</sup>  |                                          |
|                     |                    | 865.4              | 100 11             | 2476.2 | (13) <sup>-</sup>  |                                          |
| 3413.5              | (15) <sup>-</sup>  | 479.1              |                    | 2934.1 | (14) <sup>-</sup>  |                                          |
|                     |                    | 839.4              |                    | 2574.0 | (13) <sup>-</sup>  |                                          |
| 3515.4              |                    | 941.5              |                    | 2574.0 | (13) <sup>-</sup>  |                                          |
| 3606.0              | (17 <sup>+</sup> ) | 274                | ≤25                | 3331.9 | (16 <sup>+</sup> ) | B(M1)(W.u)≤0.12 if M1 (2011Gr12).        |
|                     |                    | 495.8              | 100 13             | 3110.4 | (16 <sup>+</sup> ) | B(M1)(W.u)=0.13 +6-2 if M1 (2011Gr12).   |
|                     |                    | 910.8              | 88 13              | 2695.1 | (15 <sup>+</sup> ) | B(E2)(W.u)=21 +10-3 if E2 (2011Gr12).    |
| 3651.1              | (15) <sup>-</sup>  | 905.5              |                    | 2745.6 | (13) <sup>-</sup>  |                                          |
| 3772.2              | (16) <sup>-</sup>  | 430.5              |                    | 3341.7 | (15) <sup>-</sup>  |                                          |
|                     |                    | 838.0              |                    | 2934.1 | (14) <sup>-</sup>  |                                          |
|                     |                    | 881.5              | 100 30             | 2890.9 | (14) <sup>-</sup>  |                                          |
| 3793.3              | (17 <sup>+</sup> ) | 461.1              | <25                | 3331.9 | (16 <sup>+</sup> ) | B(M1)(W.u)=0.06 +3-1 if M1 (2011Gr12).   |
|                     |                    | 683                | ≤13                | 3110.4 | (16 <sup>+</sup> ) | B(M1)(W.u)≤0.01 if M1 (2011Gr12).        |
|                     |                    | 936.1              | 100 13             | 2857.2 | (15 <sup>+</sup> ) | B(E2)(W.u)=31 +12-4 if E2 (2011Gr12).    |
| 3858.6              | (16) <sup>-</sup>  | 967.7              |                    | 2890.9 | (14) <sup>-</sup>  |                                          |
| 4071.1              | (18 <sup>+</sup> ) | 277.5              | <21                | 3793.3 | (17 <sup>+</sup> ) | B(M1)(W.u)=0.55 +21-11 if M1 (2011Gr12). |
|                     |                    | 465                | ≤14                | 3606.0 | (17 <sup>+</sup> ) | B(M1)(W.u)≤0.04 if M1 (2011Gr12).        |
|                     |                    | 960.7              | 100 14             | 3110.4 | (16 <sup>+</sup> ) | B(E2)(W.u)=40 +13-6 if E2 (2011Gr12).    |
| 4081.9              | (16) <sup>-</sup>  | 1000.3             |                    | 3081.6 | (14) <sup>-</sup>  |                                          |
| 4085.6              | (16) <sup>-</sup>  | 882.5              |                    | 3203.1 | (14) <sup>-</sup>  |                                          |
| 4149.6              | (17) <sup>-</sup>  | 377.5              |                    | 3772.2 | (16) <sup>-</sup>  |                                          |
|                     |                    | 634.2              |                    | 3515.4 |                    |                                          |
|                     |                    | 735.7              |                    | 3413.5 | (15) <sup>-</sup>  |                                          |
|                     |                    | 808.0              | 100 25             | 3341.7 | (15) <sup>-</sup>  |                                          |
| 4262.2              | (17) <sup>-</sup>  | 981.7              |                    | 3280.5 | (15) <sup>-</sup>  |                                          |
| 4345.0              | (18 <sup>+</sup> ) | 739.0              | 100 25             | 3606.0 | (17 <sup>+</sup> ) |                                          |
|                     |                    | 1013.3             | 25 9               | 3331.9 | (16 <sup>+</sup> ) |                                          |
| 4568.1              | (17) <sup>-</sup>  | 917.0              |                    | 3651.1 | (15) <sup>-</sup>  |                                          |
| 4578.7              | (18) <sup>-</sup>  | 429.2              |                    | 4149.6 | (17) <sup>-</sup>  |                                          |
|                     |                    | 806.5              |                    | 3772.2 | (16) <sup>-</sup>  |                                          |
| 4599.0              | (19 <sup>+</sup> ) | 527.7              | 100 20             | 4071.1 | (18 <sup>+</sup> ) | B(M1)(W.u)=0.19 +13-4 if M1 (2011Gr12).  |
|                     |                    | 993.0              | 100 20             | 3606.0 | (17 <sup>+</sup> ) | B(E2)(W.u)=25 +17-5 if E2 (2011Gr12).    |
| 4801.0              | (19 <sup>+</sup> ) | 1007.6             | 100                | 3793.3 | (17 <sup>+</sup> ) | B(E2)(W.u)=19 +9-3 if E2 (2011Gr12).     |
| 4826.7              | (18) <sup>-</sup>  | 968.1              |                    | 3858.6 | (16) <sup>-</sup>  |                                          |
| 4981.8              | (19) <sup>-</sup>  | 403.0              |                    | 4578.7 | (18) <sup>-</sup>  |                                          |
|                     |                    | 832.2              |                    | 4149.6 | (17) <sup>-</sup>  |                                          |
| 5096.9              | (18) <sup>-</sup>  | 1015.0             |                    | 4081.9 | (16) <sup>-</sup>  |                                          |
| 5116.5              | (20 <sup>+</sup> ) | 315.5              | 27 7               | 4801.0 | (19 <sup>+</sup> ) |                                          |
|                     |                    | 518                | ≤14                | 4599.0 | (19 <sup>+</sup> ) | B(M1)(W.u)≤0.04 if M1 (2011Gr12).        |
|                     |                    | 1045.5             | 100 30             | 4071.1 | (18 <sup>+</sup> ) | B(E2)(W.u)=23 +11-3 if E2 (2011Gr12).    |
| 5294.5              | (19) <sup>-</sup>  | 1032.3             |                    | 4262.2 | (17) <sup>-</sup>  |                                          |
| 5391.3              | (20 <sup>+</sup> ) | 791.8              | 100 30             | 4599.0 | (19 <sup>+</sup> ) |                                          |
|                     |                    | 1046.5             | 18 6               | 4345.0 | (18 <sup>+</sup> ) |                                          |
| 5443.2              | (20) <sup>-</sup>  | 461.5              |                    | 4981.8 | (19) <sup>-</sup>  |                                          |
|                     |                    | 864.5              |                    | 4578.7 | (18) <sup>-</sup>  |                                          |
| 5523.9              | (19) <sup>-</sup>  | 955.8              |                    | 4568.1 | (17) <sup>-</sup>  |                                          |
| 5671.0              | (21 <sup>+</sup> ) | 554.5              | <80                | 5116.5 | (20 <sup>+</sup> ) | B(M1)(W.u)=0.10 +10-4 if M1 (2011Gr12).  |
|                     |                    | 1072.2             | 100 50             | 4599.0 | (19 <sup>+</sup> ) | B(E2)(W.u)=18 +18-4 if E2 (2011Gr12).    |
| 5844.7              | (20) <sup>-</sup>  | 1018.0             |                    | 4826.7 | (18) <sup>-</sup>  |                                          |
| 5867.0              | (21 <sup>+</sup> ) | 1066.0             | 100                | 4801.0 | (19 <sup>+</sup> ) |                                          |
| 5897.3              | (21) <sup>-</sup>  | 454.0              |                    | 5443.2 | (20) <sup>-</sup>  |                                          |
|                     |                    | 915.5              |                    | 4981.8 | (19) <sup>-</sup>  |                                          |

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**Adopted Levels, Gammas (continued)** $\gamma(^{126}\text{Cs})$  (continued)

| $E_i(\text{level})$ | $J_i^\pi$          | $E_\gamma^\dagger$ | $I_\gamma^\dagger$ | $E_f$    | $J_f^\pi$          | $E_i(\text{level})$ | $J_i^\pi$         | $E_\gamma^\dagger$ | $E_f$    | $J_f^\pi$         |
|---------------------|--------------------|--------------------|--------------------|----------|--------------------|---------------------|-------------------|--------------------|----------|-------------------|
| 6251.7              | (22 <sup>+</sup> ) | 1135.2             | 100                | 5116.5   | (20 <sup>+</sup> ) | 498.28+x            | (10) <sup>-</sup> | 498.4              | 0.0+x    | (8) <sup>-</sup>  |
| 6389.7              | (22) <sup>-</sup>  | 492.2              |                    | 5897.3   | (21) <sup>-</sup>  | 839.4+x             | (11) <sup>-</sup> | 341.0              | 498.28+x | (10) <sup>-</sup> |
|                     |                    | 946.7              |                    | 5443.2   | (20) <sup>-</sup>  |                     |                   | 614.9              | 224.32+x | (9) <sup>-</sup>  |
| 6455.7              | (22 <sup>+</sup> ) | 785.0              |                    | 5671.0   | (21 <sup>+</sup> ) | 1226.3+x            | (12) <sup>-</sup> | 387.0              | 839.4+x  | (11) <sup>-</sup> |
|                     |                    | 1064.2             | 100 40             | 5391.3   | (20 <sup>+</sup> ) |                     |                   | 728.3              | 498.28+x | (10) <sup>-</sup> |
| 6819.3              | (23 <sup>+</sup> ) | 1148.3             | 100                | 5671.0   | (21 <sup>+</sup> ) | 1650.8+x            | (13) <sup>-</sup> | 424.8              | 1226.3+x | (12) <sup>-</sup> |
| 6902.1              | (23) <sup>-</sup>  | 512.4              |                    | 6389.7   | (22) <sup>-</sup>  |                     |                   | 811.0              | 839.4+x  | (11) <sup>-</sup> |
|                     |                    | 1004.8             |                    | 5897.3   | (21) <sup>-</sup>  | 2107.3+x            | (14) <sup>-</sup> | 456.5              | 1650.8+x | (13) <sup>-</sup> |
| 6973.8              | (23 <sup>+</sup> ) | 1106.8             | 100                | 5867.0   | (21 <sup>+</sup> ) |                     |                   | 881.0              | 1226.3+x | (12) <sup>-</sup> |
| 7420.1              | (24) <sup>-</sup>  | 1030.4             |                    | 6389.7   | (22) <sup>-</sup>  | 2593.8+x            | (15) <sup>-</sup> | 486.5              | 2107.3+x | (14) <sup>-</sup> |
| 7450.2              | (24 <sup>+</sup> ) | 1198.5             | 100                | 6251.7   | (22 <sup>+</sup> ) |                     |                   | 943.0              | 1650.8+x | (13) <sup>-</sup> |
| 7967.3              | (25 <sup>+</sup> ) | 1148.0             | 100                | 6819.3   | (23 <sup>+</sup> ) | 3105.3+x            | (16) <sup>-</sup> | 511.5              | 2593.8+x | (15) <sup>-</sup> |
| 8687.2              |                    | 1237               |                    | 7450.2   | (24 <sup>+</sup> ) |                     |                   | 998.0              | 2107.3+x | (14) <sup>-</sup> |
| 224.32+x            | (9) <sup>-</sup>   | 224.2              |                    | 0.0+x    | (8) <sup>-</sup>   | 3630.8+x            | (17) <sup>-</sup> | 525.5              | 3105.3+x | (16) <sup>-</sup> |
| 498.28+x            | (10) <sup>-</sup>  | 274.0              |                    | 224.32+x | (9) <sup>-</sup>   |                     |                   | 1037.0             | 2593.8+x | (15) <sup>-</sup> |

<sup>†</sup> Except where noted otherwise, the data are from  $^{126}\text{Ba}$   $\varepsilon$  decay up to the 1293-keV level and from (HI,xn $\gamma$ ) for the higher levels.

<sup>‡</sup> From (HI,xn $\gamma$ ).

# From (HI,xn $\gamma$ ).

@ Weak  $\gamma$  ray in  $^{126}\text{Ba}$   $\varepsilon$  decay; no intensity data are available.

& Unresolved doublet in  $^{126}\text{Ba}$   $\varepsilon$  decay.

<sup>a</sup> Multiply placed in  $^{126}\text{Ba}$   $\varepsilon$  decay; upper limit of  $I_\gamma$  is given.

<sup>b</sup> From  $\alpha(\text{exp})$  in  $^{126}\text{Ba}$   $\beta^-$  decay.

<sup>c</sup> Total theoretical internal conversion coefficients, calculated using the BrIcc code (2008Ki07) with Frozen orbital approximation based on  $\gamma$ -ray energies, assigned multipolarities, and mixing ratios, unless otherwise specified.

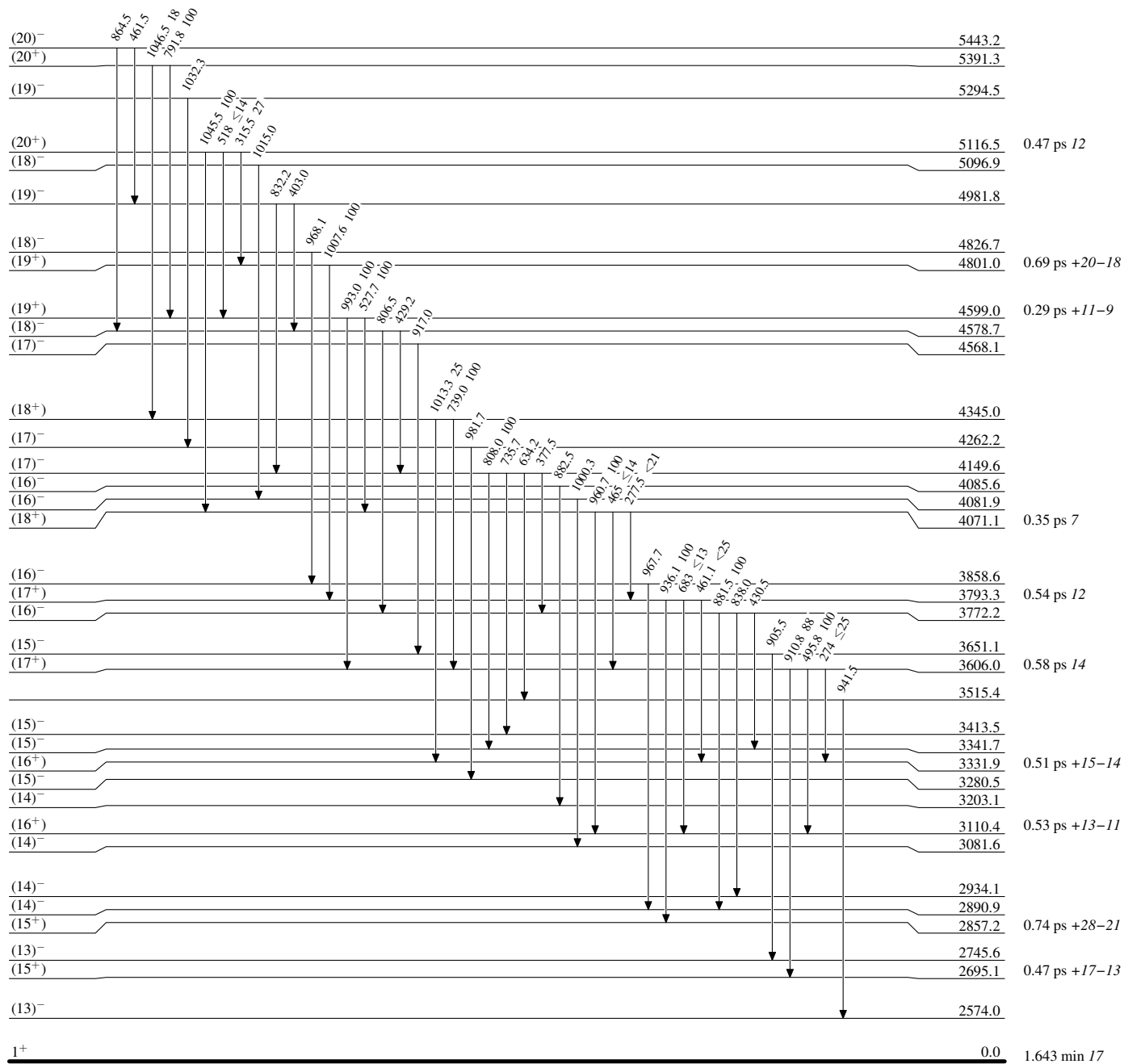
<sup>d</sup> Multiply placed.

<sup>e</sup> Placement of transition in the level scheme is uncertain.



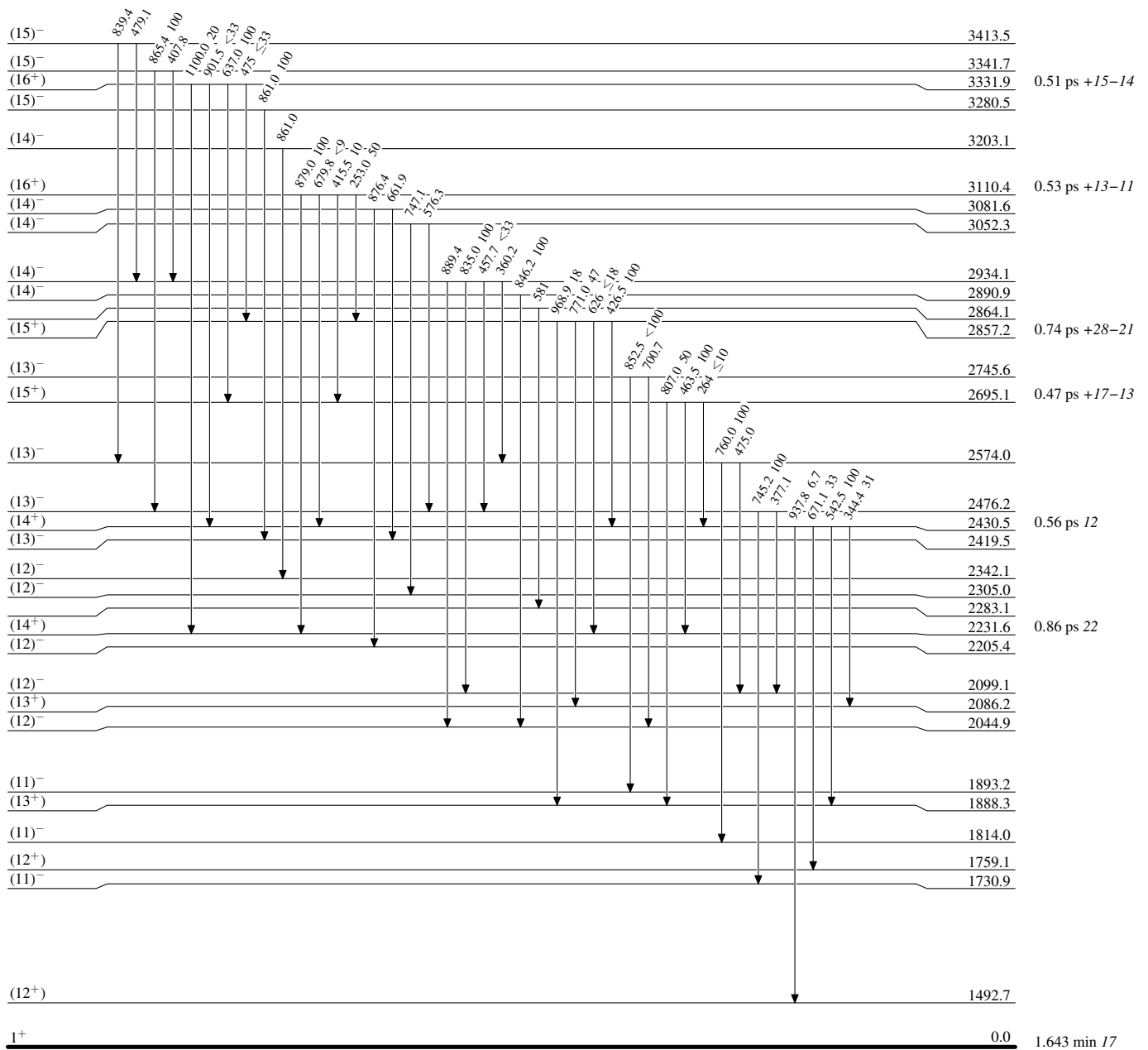
**Adopted Levels, Gammas****Level Scheme (continued)**

Intensities: Relative photon branching from each level



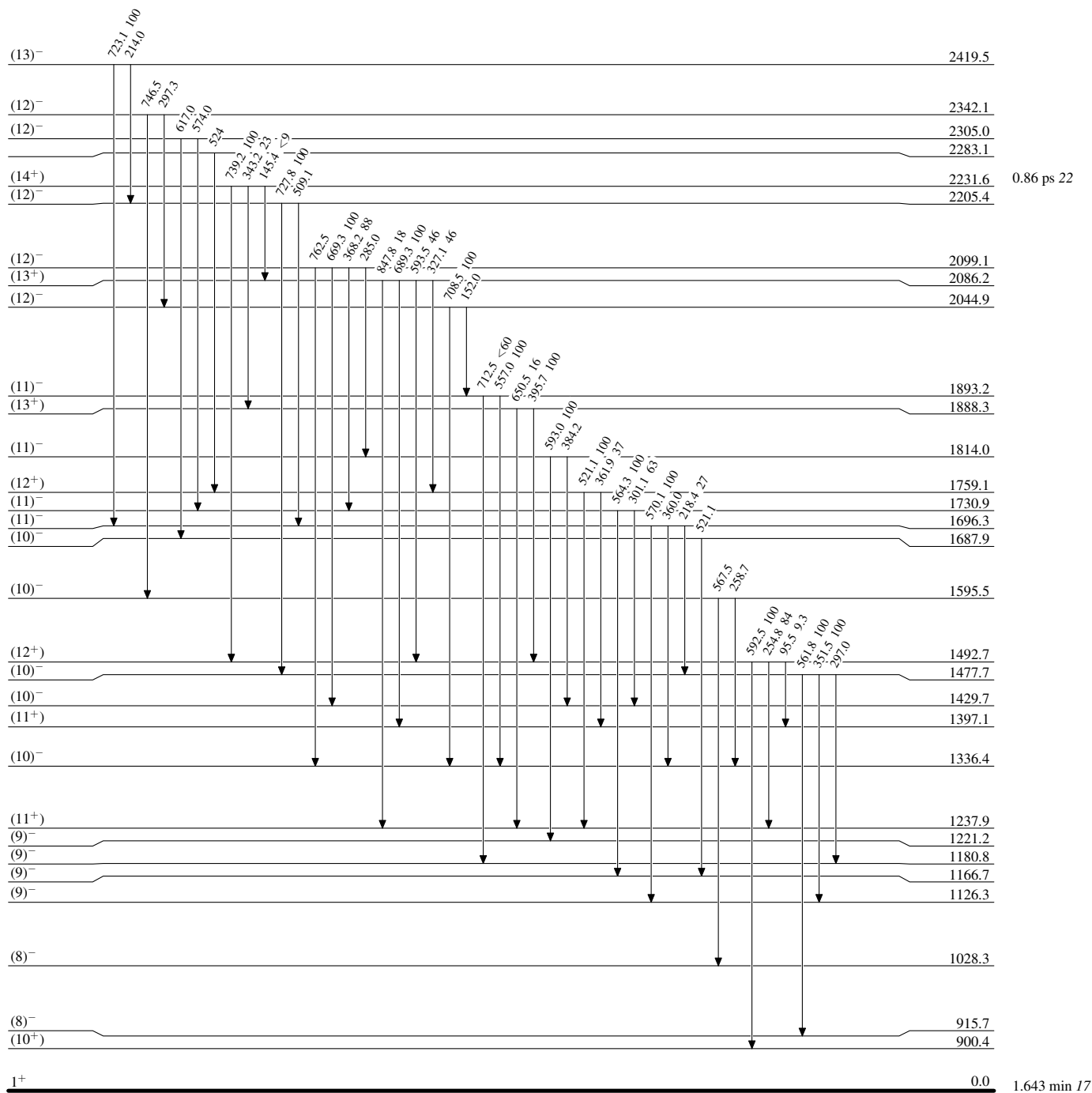
**Adopted Levels, Gammas****Level Scheme (continued)**

Intensities: Relative photon branching from each level



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

Intensities: Relative photon branching from each level



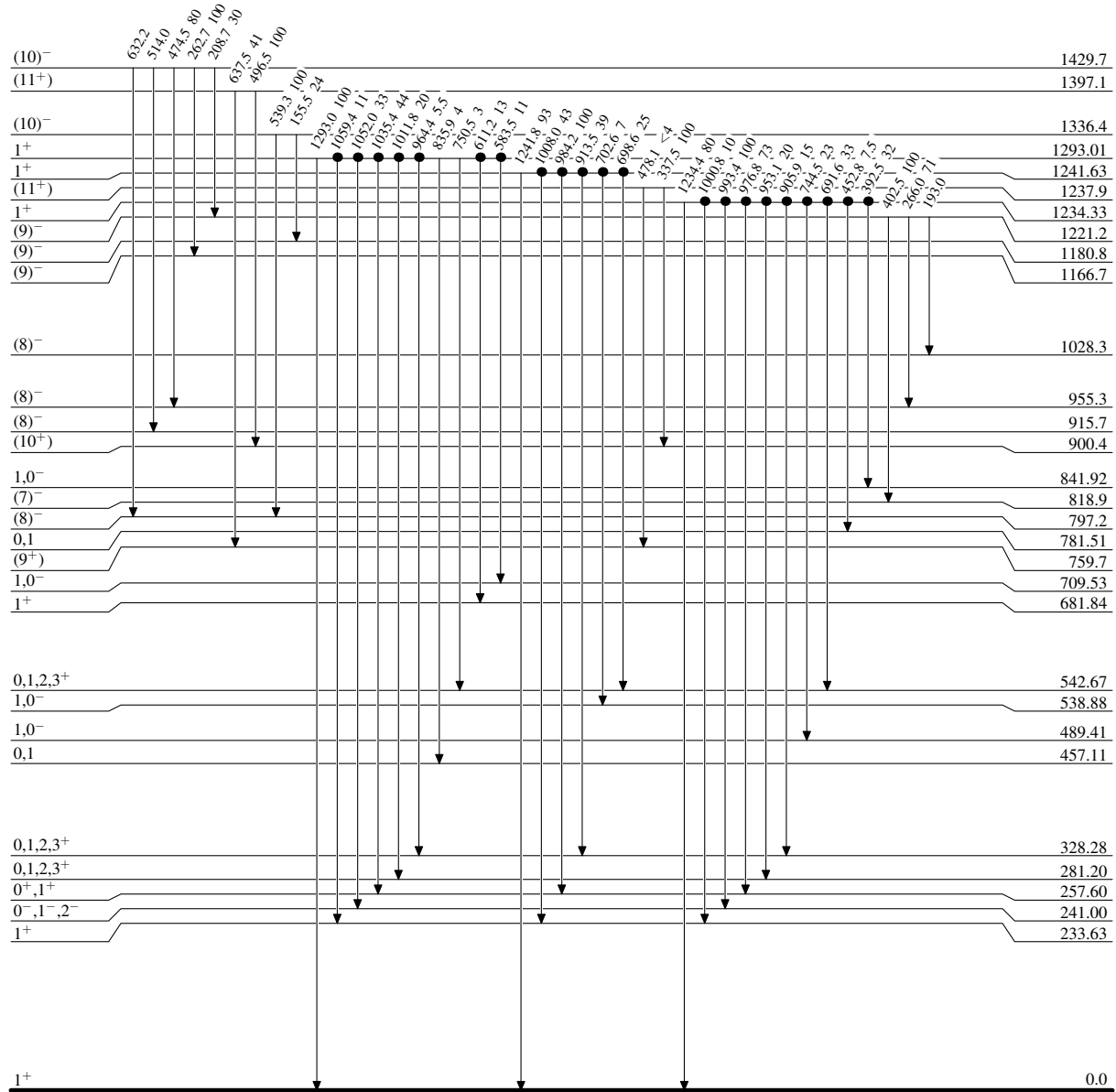
**Adopted Levels, Gammas**

Legend

**Level Scheme (continued)**

Intensities: Relative photon branching from each level

● Coincidence



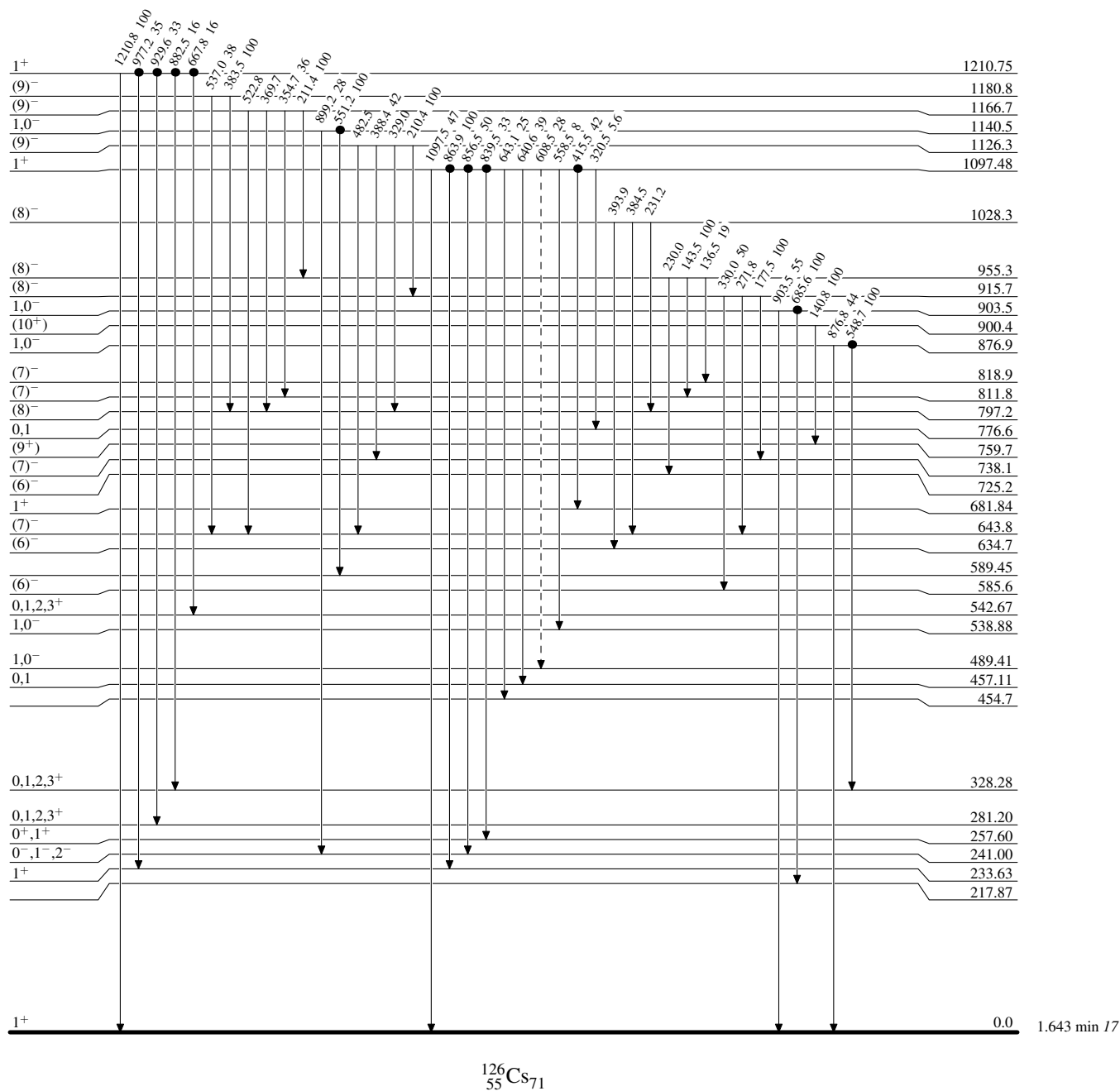


## Adopted Levels, Gammas

Legend

## Level Scheme (continued)

Intensities: Relative photon branching from each level

----->  $\gamma$  Decay (Uncertain)  
● Coincidence

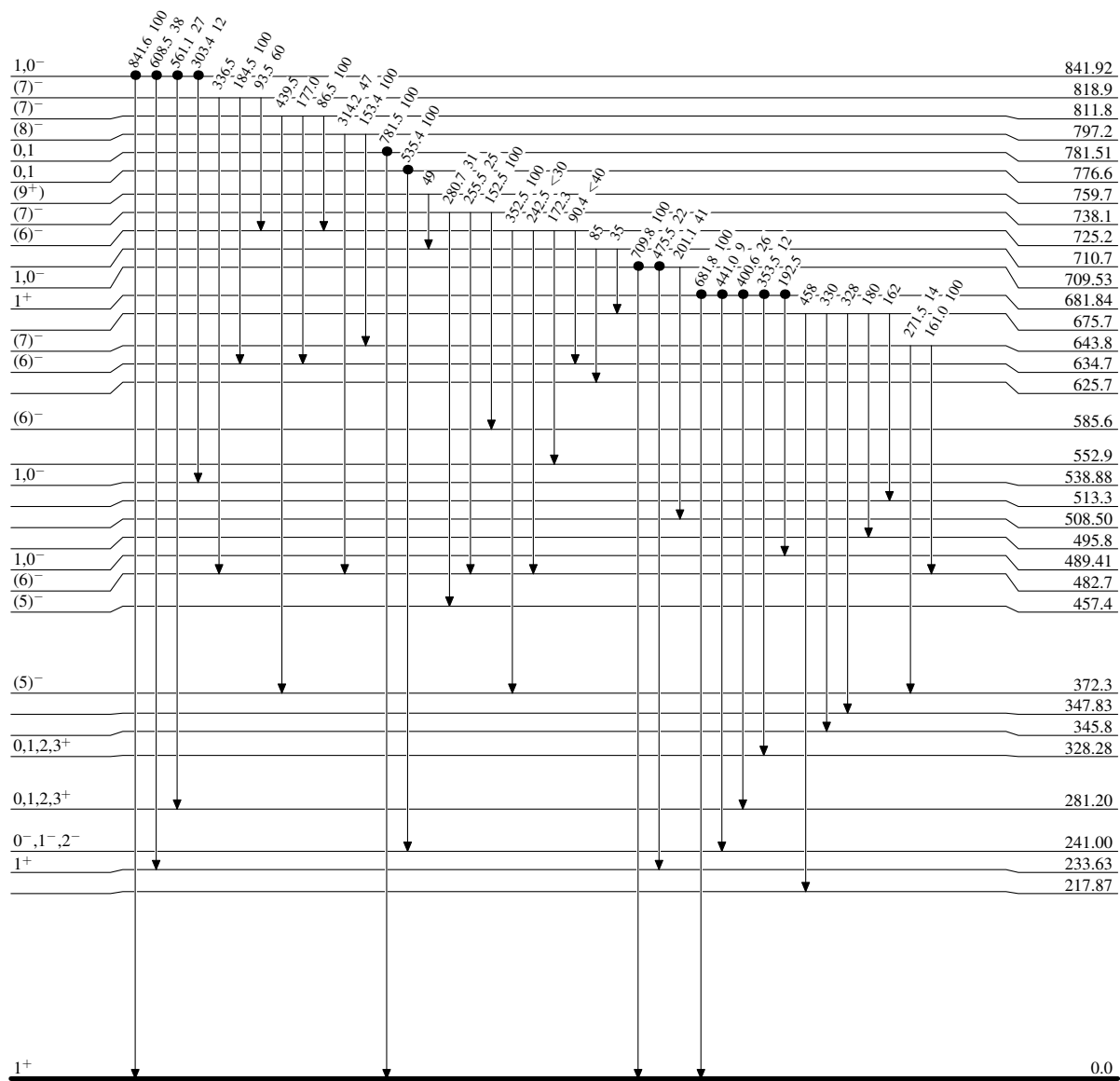
Adopted Levels, Gammas

Legend

Level Scheme (continued)

Intensities: Relative photon branching from each level

● Coincidence

 $^{126}_{55}\text{Cs}_{71}$ 

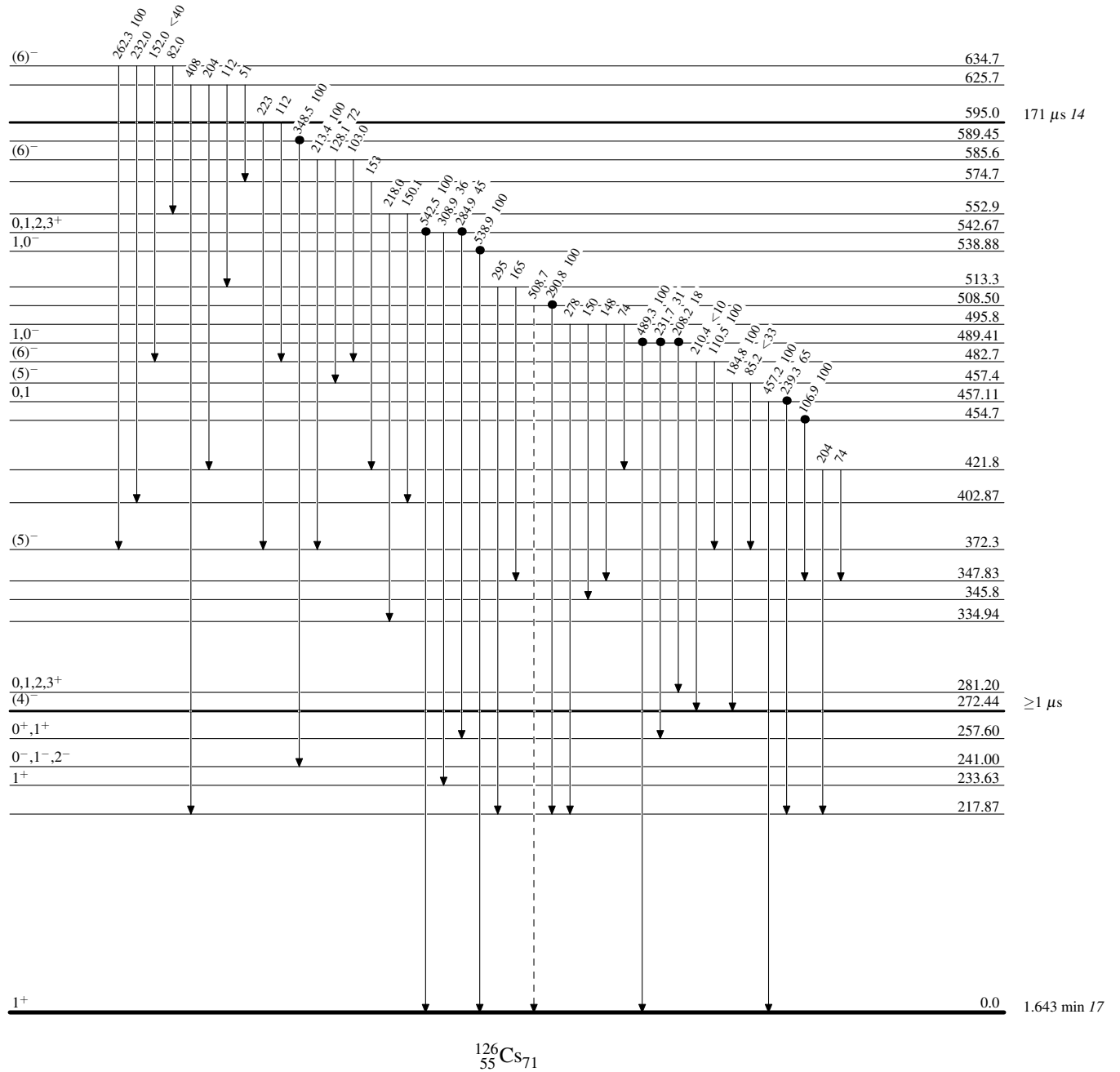
1.643 min 17

## Adopted Levels, Gammas

Legend

## Level Scheme (continued)

Intensities: Relative photon branching from each level

-----►  $\gamma$  Decay (Uncertain)  
● Coincidence

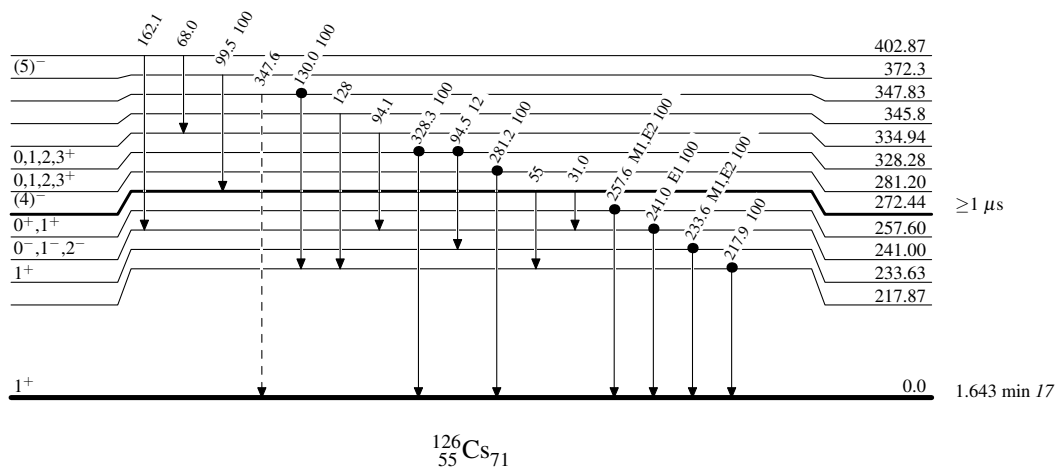
# Adopted Levels, Gammas

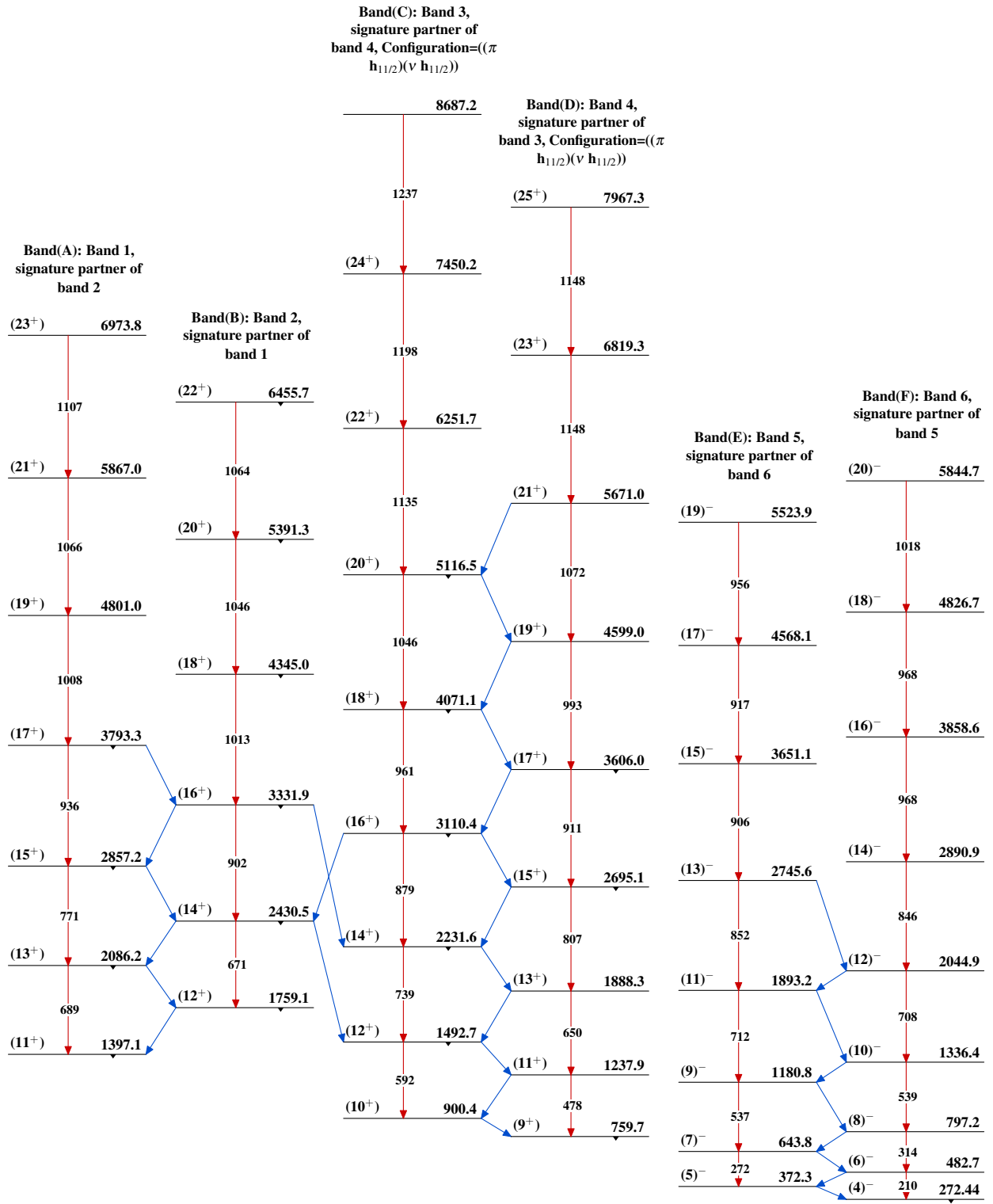
Legend

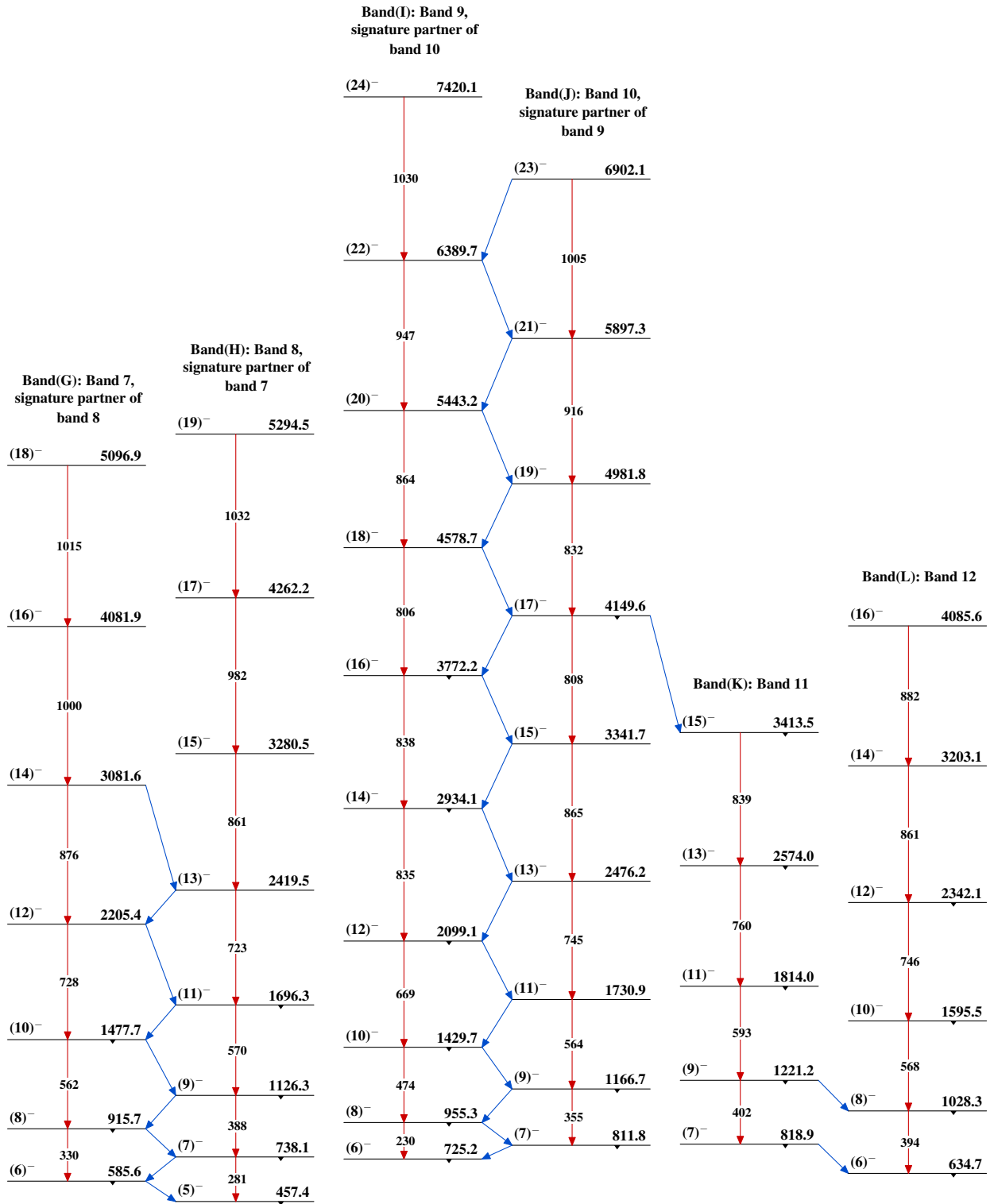
## Level Scheme (continued)

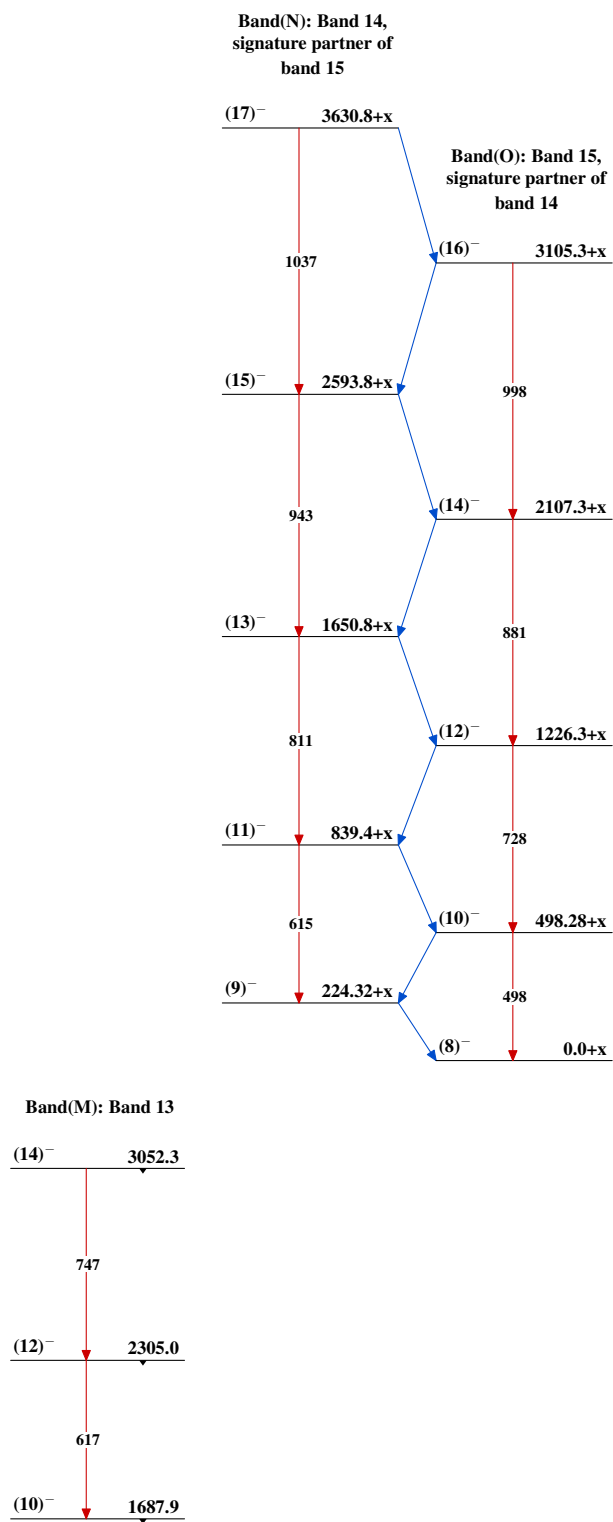
Intensities: Relative photon branching from each level

-----►  $\gamma$  Decay (Uncertain)  
● Coincidence



**Adopted Levels, Gammas**

**Adopted Levels, Gammas (continued)**

Adopted Levels, Gammas (continued) $^{126}_{55}\text{Cs}_{71}$