

$^{173}\text{Yb}(^{24}\text{Mg}, \text{F}\gamma)$  2002Fo03

| Type            | Author                                   | History | Citation             | Literature Cutoff Date |
|-----------------|------------------------------------------|---------|----------------------|------------------------|
| Full Evaluation | S. K. Basu, G. Mukherjee, A. A. Sonzogni |         | NDS 111, 2555 (2010) | 30-Jun-2009            |

E=134.5 MeV. Measured  $E\gamma$ ,  $I\gamma$ ,  $\gamma\gamma$ ,  $\gamma(\text{Mo fragments})$  coin using GAMMASPHERE array with 92 Compton-suppressed HPGe detectors.

 $^{95}\text{Zr}$  Levels

| E(level) <sup>†</sup> | $J^{\pi\ddagger}$    | E(level) <sup>†</sup> | $J^{\pi\ddagger}$    | E(level) <sup>†</sup> | E(level) <sup>†</sup> |
|-----------------------|----------------------|-----------------------|----------------------|-----------------------|-----------------------|
| 0                     | $5/2^+$              | 2629.1 3              | (13/2)               | 3398.7 4              | 4661.5 5              |
| 1676.32 19            | (9/2 <sup>+</sup> )  | 2837.2 3              | (15/2 <sup>-</sup> ) | 3954.9 4              | 4932.2 7              |
| 1792.2 3              | (11/2 <sup>-</sup> ) | 3078.0 4              | (15/2 <sup>-</sup> ) | 4057.9 5              |                       |
| 2021.6 3              | (11/2 <sup>-</sup> ) | 3180.6 6              |                      | 4236.0 6              |                       |

<sup>†</sup> From least-squares fit to  $E\gamma$ 's, assigning 0.2 keV uncertainty for  $I\gamma > 20$ , 0.4 keV for  $I\gamma = 10-20$  and 0.7 keV for  $I\gamma < 10$  based on general comment by 2002Fo03.

<sup>‡</sup> Tentative assignments based on systematics and shell model calculations.

 $\gamma(^{95}\text{Zr})$ 

| $E\gamma$ | $I\gamma$ | $E_i(\text{level})$ | $J_i^{\pi}$          | $E_f$   | $J_f^{\pi}$          |
|-----------|-----------|---------------------|----------------------|---------|----------------------|
| 103.0 2   | 20 8      | 4057.9              |                      | 3954.9  |                      |
| 115.9 2   | 100       | 1792.2              | (11/2 <sup>-</sup> ) | 1676.32 | (9/2 <sup>+</sup> )  |
| 177.9 4   | 10 4      | 4236.0              |                      | 4057.9  |                      |
| 208.1 2   | 30 6      | 2837.2              | (15/2 <sup>-</sup> ) | 2629.1  | (13/2)               |
| 229.4 2   | 71 5      | 2021.6              | (11/2 <sup>-</sup> ) | 1792.2  | (11/2 <sup>-</sup> ) |
| 240.8 2   | 28 5      | 3078.0              | (15/2 <sup>-</sup> ) | 2837.2  | (15/2 <sup>-</sup> ) |
| 270.7 4   | 13 3      | 4932.2              |                      | 4661.5  |                      |
| 425.3 4   | 10 3      | 4661.5              |                      | 4236.0  |                      |
| 556.2 4   | 19 5      | 3954.9              |                      | 3398.7  |                      |
| 561.4 2   | 24 6      | 3398.7              |                      | 2837.2  | (15/2 <sup>-</sup> ) |
| 603.6 2   | 24 4      | 4661.5              |                      | 4057.9  |                      |
| 607.5 2   | 24 8      | 2629.1              | (13/2)               | 2021.6  | (11/2 <sup>-</sup> ) |
| 774.3 7   | 6.8 20    | 3954.9              |                      | 3180.6  |                      |
| 815.4 4   | 16 3      | 2837.2              | (15/2 <sup>-</sup> ) | 2021.6  | (11/2 <sup>-</sup> ) |
| 836.8 2   | 22 4      | 2629.1              | (13/2)               | 1792.2  | (11/2 <sup>-</sup> ) |
| 877.0 4   | 13 3      | 3954.9              |                      | 3078.0  | (15/2 <sup>-</sup> ) |
| 1045.3 4  | 16 3      | 2837.2              | (15/2 <sup>-</sup> ) | 1792.2  | (11/2 <sup>-</sup> ) |
| 1056.4 7  | 6.0 10    | 3078.0              | (15/2 <sup>-</sup> ) | 2021.6  | (11/2 <sup>-</sup> ) |
| 1159.0 7  | 6.2 20    | 3180.6              |                      | 2021.6  | (11/2 <sup>-</sup> ) |
| 1676.3 2  | 80 10     | 1676.32             | (9/2 <sup>+</sup> )  | 0       | $5/2^+$              |
| 1792.3 7  | 9 3       | 1792.2              | (11/2 <sup>-</sup> ) | 0       | $5/2^+$              |

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## Level Scheme

Intensities: Relative  $I_\gamma$ 

## Legend

- $I_\gamma < 2\% \times I_\gamma^{\max}$
- $I_\gamma < 10\% \times I_\gamma^{\max}$
- $I_\gamma > 10\% \times I_\gamma^{\max}$

