

${}^{79}\text{Br}(p,2n\gamma)$  1979Yo03

| Type            | Author                          | History | Citation             | Literature Cutoff Date |
|-----------------|---------------------------------|---------|----------------------|------------------------|
| Full Evaluation | Ameenah R. Farhan, Balraj Singh |         | NDS 110, 1917 (2009) | 30-Jun-2009            |

1979Yo03: E=17-28 MeV. Measured  $E\gamma$ ,  $I\gamma$ ,  $\gamma\gamma$ ,  $\gamma(\theta)$ .

Other: 1974Sa23:  ${}^{81}\text{Br}(p,4n\gamma)$  E=55 MeV. Measured  $\gamma$  and ce.

 ${}^{78}\text{Kr}$  Levels

| E(level) <sup>†</sup>   | $J\pi^{\ddagger}$ |
|-------------------------|-------------------|
| 0.0 <sup>#</sup>        | 0 <sup>+</sup>    |
| 455.0 <sup>#</sup> 3    | 2 <sup>+</sup>    |
| 1119.3 <sup>#</sup> 3   | 4 <sup>+</sup>    |
| 1147.78 <sup>@</sup> 24 | 2 <sup>+</sup>    |
| 1564.8 <sup>@</sup> 3   | 3 <sup>+</sup>    |
| 1872.6 <sup>@</sup> 3   | 4 <sup>+</sup>    |
| 1977.5 <sup>#</sup> 5   | 6 <sup>+</sup>    |
| 2299.9 <sup>@</sup> 4   | 5 <sup>+</sup>    |

<sup>†</sup> From least-squares fitting to  $E\gamma$ 's.

<sup>‡</sup> From 'Adopted Levels'. The  $\gamma(\theta)$  data reported by 1979Yo03 are consistent with these assignments.

<sup>#</sup> Band(A): g.s. band.

<sup>@</sup> Band(B):  $\gamma$  band.

 $\gamma({}^{78}\text{Kr})$ 

| $E\gamma$ | $I\gamma$ | $E_i(\text{level})$ | $J_i^\pi$      | $E_f$   | $J_f^\pi$      | Mult. | Comments                        |
|-----------|-----------|---------------------|----------------|---------|----------------|-------|---------------------------------|
| 416.8 3   | 2 1       | 1564.8              | 3 <sup>+</sup> | 1147.78 | 2 <sup>+</sup> |       | $A_2=+0.138$ 30, $A_4=-0.03$ 5. |
| 455.1 3   | 100       | 455.0               | 2 <sup>+</sup> | 0.0     | 0 <sup>+</sup> | Q     | $A_2=+0.099$ 4, $A_4=-0.027$ 8. |
| 664.3 3   | 57 6      | 1119.3              | 4 <sup>+</sup> | 455.0   | 2 <sup>+</sup> | (Q)   | $A_2=+0.171$ 25, $A_4=-0.03$ 4. |
| 692.6 3   | 13 2      | 1147.78             | 2 <sup>+</sup> | 455.0   | 2 <sup>+</sup> |       |                                 |
| 724.8 3   | 6 2       | 1872.6              | 4 <sup>+</sup> | 1147.78 | 2 <sup>+</sup> |       | $A_2=+0.30$ 8, $A_4=-0.01$ 16.  |
| 734.8 3   | 6 2       | 2299.9              | 5 <sup>+</sup> | 1564.8  | 3 <sup>+</sup> |       | $A_2=+0.20$ 23, $A_4=-0.2$ 5.   |
| 752.9 3   | 5 2       | 1872.6              | 4 <sup>+</sup> | 1119.3  | 4 <sup>+</sup> |       | $A_2=-0.02$ 13, $A_4=-0.08$ 22. |
| 858.2 3   | 25 3      | 1977.5              | 6 <sup>+</sup> | 1119.3  | 4 <sup>+</sup> | Q     | $A_2=+0.25$ 2, $A_4=-0.07$ 5.   |
| 1109.5 3  | 12 2      | 1564.8              | 3 <sup>+</sup> | 455.0   | 2 <sup>+</sup> |       | $A_2=+0.189$ 7, $A_4=+0.290$ 8. |
| 1147.7 3  | 6 2       | 1147.78             | 2 <sup>+</sup> | 0.0     | 0 <sup>+</sup> |       | $A_2=-0.02$ 8, $A_4=-0.21$ 15.  |
| 1181.0 3  | 3 1       | 2299.9              | 5 <sup>+</sup> | 1119.3  | 4 <sup>+</sup> |       |                                 |
| 1418.0 3  | 1.0 3     | 1872.6              | 4 <sup>+</sup> | 455.0   | 2 <sup>+</sup> |       |                                 |

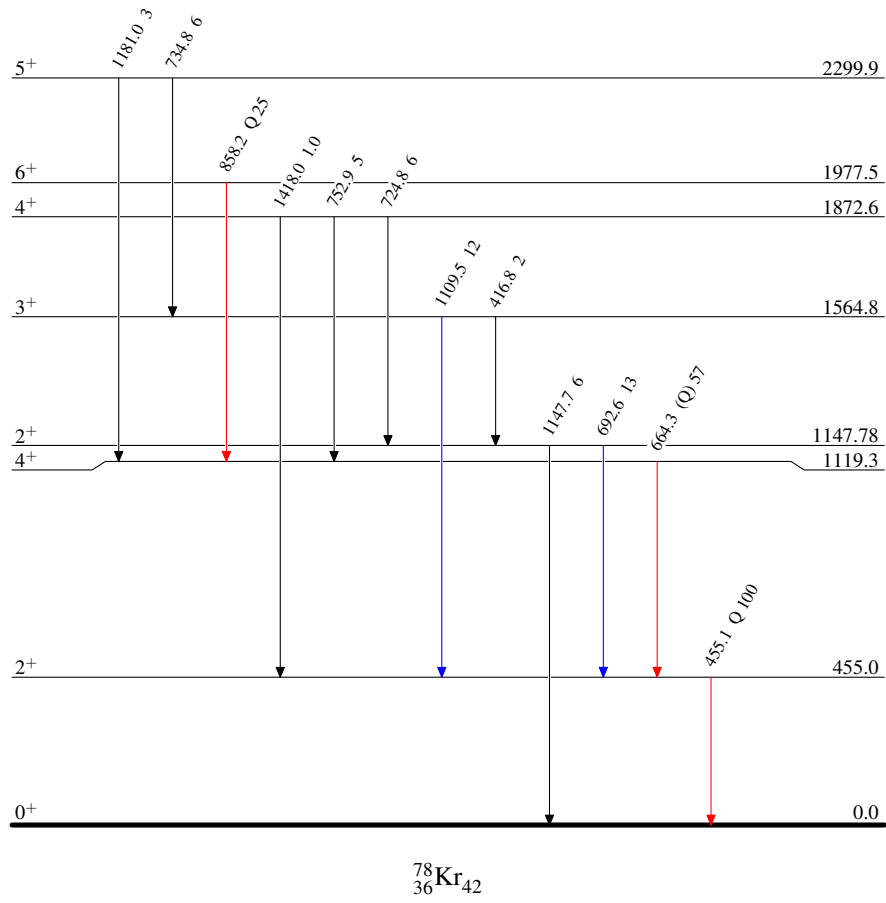
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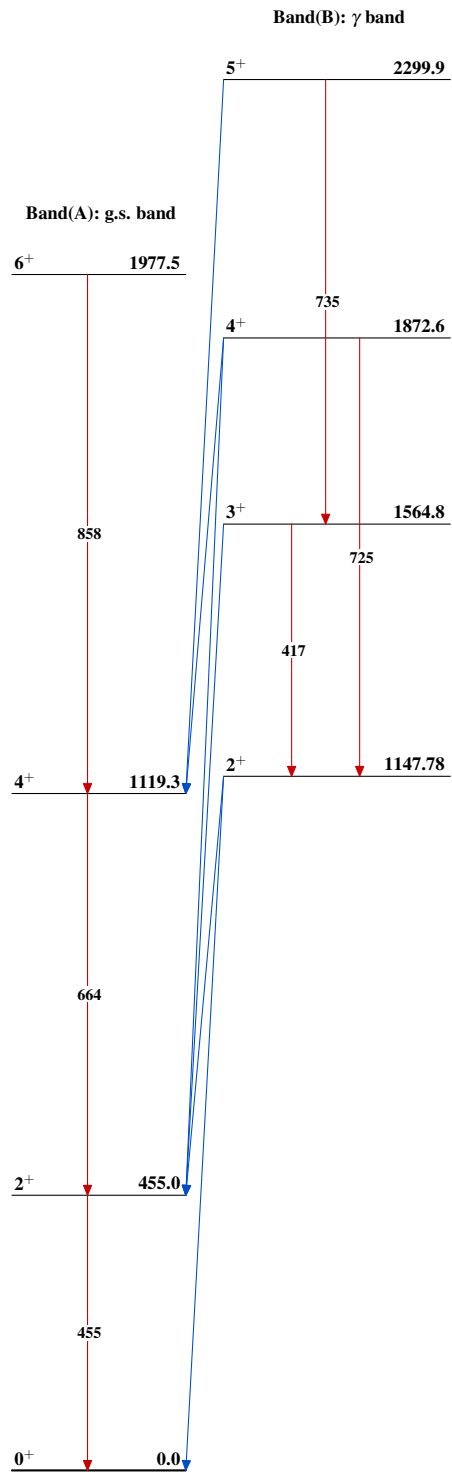
## Level Scheme

Intensities: Relative  $I_\gamma$ 

## Legend

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



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