

$^{84}\text{Kr}(t,p)$     1976Fl02

| Type            | Author                         | History | Citation          | Literature Cutoff Date |
|-----------------|--------------------------------|---------|-------------------|------------------------|
| Full Evaluation | Alexandru Negret, Balraj Singh |         | NDS 124, 1 (2015) | 30-Nov-2014            |

1976Fl02: E=17 MeV, FWHM 45 keV to 50 keV. Measured  $\sigma(\theta)$  for  $\theta=12^\circ-55^\circ$ . DWBA analysis.

| Cross section data |                                    |       |                                    |
|--------------------|------------------------------------|-------|------------------------------------|
| Level              | $d\sigma/d\Omega$<br>at $18^\circ$ | Level | $d\sigma/d\Omega$<br>at $18^\circ$ |
| 0                  | 0.034                              | 4708  | 0.043                              |
| 1563               | 0.008                              | 4826  | 0.093                              |
| 2248               | 0.002                              | 4948  | 0.105                              |
| 2355               | 0.015                              | 4991  | 0.019                              |
| 2733               | 0.006                              | 5438  | 0.034                              |
| 3109               | 0.018                              | 5496  | 0.110                              |
| 3542               | 0.045                              | 5707  | 0.091                              |
| 3832               | 0.006                              | 5801  | 0.074                              |
| 3959               | 0.046                              | 5865  | 0.156                              |
| 4072               | 0.019(36°)                         | 5981  | 0.212                              |
| 4111               | 0.293                              | 6118  | 0.069                              |
| 4194               | 0.130                              | 6222  | 0.118                              |
| 4298               | 0.020                              | 6318  | 0.045                              |
| 4668               | 0.043                              | 6397  | 0.075                              |

 $^{86}\text{Kr}$  Levels

| E(level)        | L <sup>†</sup> | Enhancement factors <sup>‡</sup> | Comments  |
|-----------------|----------------|----------------------------------|---|
| 0               | 0              | 0.38                             |   |
| 1563 <i>J0</i>  | 2              | 0.018                            |   |
| 2248 <i>J0</i>  | 3,4            | 0.015                            |   |
| 2355 <i>J0</i>  | 2              | 0.028                            |   |
| 2733 <i>J0</i>  | 0              | 0.092                            |   |
| 3109 <i>J0</i>  | 3,4            | 0.046                            |   |
| 3542 <i>J0</i>  | 0              | 0.48                             |   |
| 3832 <i>J0</i>  | 0              | 0.087                            |   |
| 3959 <i>J0</i>  | 3,4            | 0.12,0.11                        |   |
| 4072 <i>J0</i>  |                |                                  | L: $\sigma(\theta)$ consistent with L=5, but 1976Fl02 point out that $\sigma(\theta)$ distribution is incomplete.                     |
| 4111 <i>J0</i>  | 2              | 0.47                             |   |
| 4194 <i>J0</i>  | 2              | 0.21                             |   |
| 4298 <i>J0</i>  | 3,4            | 0.041,0.038                      |   |
| 4668 <i>J0</i>  | 3,4            | 0.10,0.087                       |   |
| 4708 <i>J0</i>  |                |                                  | J <sup>π</sup> : this level may have high spin since $\sigma(\theta)$ pattern is not characteristic of any other observed L-transfer. |
| 4826 <i>J0</i>  | (2)            | 0.14                             |   |
| 4948 <i>J0</i>  | (2)            | 0.20                             |   |
| 4991 <i>J0</i>  |                |                                  |   |
| 5438 <i>J0</i>  |                |                                  |   |
| 5496 <i>J0</i>  |                |                                  |   |
| 5637? <i>J0</i> |                |                                  |   |
| 5707 <i>J0</i>  |                |                                  |   |
| 5801 <i>J0</i>  |                |                                  |   |
| 5865 <i>J0</i>  |                |                                  |   |
| 5981 <i>J0</i>  |                |                                  |   |
| 6118 <i>J0</i>  |                |                                  |   |
| 6222 <i>J0</i>  |                |                                  |   |

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 **$^{84}\text{Kr}(\text{t},\text{p}) \quad \text{1976FI02 (continued)}$**  **$^{86}\text{Kr}$  Levels (continued)**

E(level)

6318 *I0*

6397 *I0*

<sup>†</sup> Deduced from DWBA analysis of angular distributions.

<sup>‡</sup> Enhancement factor=[(d $\sigma$ /d $\Omega$ )exp]/N[(d $\sigma$ /d $\Omega$ )DWBA], where N=218.