

**Adopted Levels, Gammas**

| Type            | Author       | History<br>Citation  | Literature Cutoff Date |
|-----------------|--------------|----------------------|------------------------|
| Full Evaluation | Jean Blachot | NDS 113, 2391 (2012) | 1-Sep-2012             |

$Q(\beta^-)=7.93\times10^3$  7;  $S(n)=4.15\times10^3$  7;  $S(p)=1.483\times10^4$  SY;  $Q(\alpha)=-8.79\times10^3$  7    [2012Wa38](#)

Note: Current evaluation has used the following Q record.

$\Delta S(p)=220$ ,  $\Delta Q(\alpha)=220$  ([2011AuZZ](#)).

$Q(\beta^-)=8.04\times10^3$  9;  $S(n)=4.05\times10^3$  9;  $S(p)=1.463\times10^4$  SY;  $Q(\alpha)=-8.55\times10^3$  SY    [2011AuZZ](#)

 **$^{115}\text{Ru}$  Levels****Cross Reference (XREF) Flags**

[A](#)     $^{238}\text{U}(\text{p},\text{X})$

| E(level) | $J^\pi$ <sup>†</sup> | T <sub>1/2</sub> | XREF              | Comments   |
|----------|----------------------|------------------|-------------------|--|
| 0.0      | (3/2 <sup>+</sup> )  | 318 ms 19        | <a href="#">A</a> | % $\beta^-$ =100; % $\beta^-$ n=?  |
|          |                      |                  |                   | $J^\pi$ : From systematics of neighboring nuclides ( <a href="#">2010Ku25</a> ).<br>T <sub>1/2</sub> : from <a href="#">2010Ku25</a> . Others : 400 ms 100 ( <a href="#">1991AyZY</a> ), 740 ms 80 ( <a href="#">1992Ay02</a> ).<br>% $\beta^-$ : the error in Q does not allow to be sure for a branching in % $\beta^-$ n. |
| 61.7     | (5/2 <sup>+</sup> )  |                  | <a href="#">A</a> | Possible $\gamma$ 3/2[431] oblate configuration.   |
| 61.7+x   | (9/2 <sup>-</sup> )  | 76 ms 6          | <a href="#">A</a> | E(level): x ≈ 20 keV ( <a href="#">2010Ku25</a> ).<br>T <sub>1/2</sub> : from the decay curve for 61.7 $\gamma$ ( <a href="#">2010Ku25</a> ).  |

<sup>†</sup> From assignments made in [2011Ri07](#).

 **$\gamma(^{115}\text{Ru})$** 

| E <sub>i</sub> (level) | $J_i^\pi$           | E <sub><math>\gamma</math></sub> | I <sub><math>\gamma</math></sub> | E <sub>f</sub> | $J_f^\pi$           | Mult. | Comments   |
|------------------------|---------------------|----------------------------------|----------------------------------|----------------|---------------------|-------|--|
| 61.7                   | (5/2 <sup>+</sup> ) | 61.7                             | 100                              | 0.0            | (3/2 <sup>+</sup> ) | M1+E2 | $\alpha(K)\exp=2.7$ 6<br>$\alpha(K)=3.1$ 21; $\alpha(L)=1.0$ 9; $\alpha(M)=0.18$ 16; $\alpha(N+..)=0.027$ 24<br>$\alpha(N)=0.027$ 24; $\alpha(O)=0.00045$ 25<br>E <sub><math>\gamma</math></sub> : this $\gamma$ seen in singles $\gamma$ only, not in $\beta$ -gated $\gamma$ spectrum. This $\gamma$ is correlated with 19.2-keV K <sub><math>\alpha</math></sub> x ray of Ru. |
| 61.7+x                 | (9/2 <sup>-</sup> ) | x                                |                                  | 61.7           | (5/2 <sup>+</sup> ) | [M2]  |  |

**Adopted Levels, Gammas****Level Scheme**

Intensities: Type not specified

