

<sup>193</sup>Ir(<sup>12</sup>C,5nγ)    [1972Ha73](#)

| Type            | Author       | History<br>Citation | Literature Cutoff Date |
|-----------------|--------------|---------------------|------------------------|
| Full Evaluation | F. G. Kondev | NDS 192,1 (2023)    | 1-Aug-2023             |

Beam: E(<sup>12</sup>C)=81–MeV pulsed beam; Detectors: Ge(Li); Measured: γ(t), excitation functions, Eγ, Iγ; Deduced: T<sub>1/2</sub>, J<sup>π</sup> of the isomer.

<sup>200</sup>Bi Levels

| E(level) | J <sup>π</sup> <sup>†</sup> | T <sub>1/2</sub> <sup>†</sup> | Comments                                                      |
|----------|-----------------------------|-------------------------------|---------------------------------------------------------------|
| 0        | 7 <sup>+</sup>              | 36.4 min 5                    |                                                               |
| 428.2 1  | 10 <sup>-</sup>             | 0.40 s 5                      | T <sub>1/2</sub> : From 428γ(t) in <a href="#">1972Ha73</a> . |

<sup>†</sup> From Adopted Levels, unless otherwise stated.

γ(<sup>200</sup>Bi)

| E <sub>γ</sub> <sup>‡</sup> | I <sub>γ</sub> <sup>‡</sup> | E <sub>i</sub> (level) | J <sub>i</sub> <sup>π</sup> | E <sub>f</sub> | J <sub>f</sub> <sup>π</sup> | Mult. <sup>†</sup> | Comments                                                            |
|-----------------------------|-----------------------------|------------------------|-----------------------------|----------------|-----------------------------|--------------------|---------------------------------------------------------------------|
| <sup>x</sup> 253.0 1        | 50 <sup>‡</sup> 2           |                        |                             |                |                             |                    |                                                                     |
| <sup>x</sup> 286.1 1        | 44 <sup>‡</sup> 2           |                        |                             |                |                             |                    |                                                                     |
| 428.2 1                     | 100 4                       | 428.2                  | 10 <sup>-</sup>             | 0              | 7 <sup>+</sup>              | E3                 | Mult.: α(K)exp=0.09 5 from K x ray/Iγ ( <a href="#">1972Ha73</a> ). |
| <sup>x</sup> 630.3 2        | 56 <sup>‡</sup> 5           |                        |                             |                |                             |                    |                                                                     |
| <sup>x</sup> 644.2 2        | 37 <sup>‡</sup> 4           |                        |                             |                |                             |                    |                                                                     |

<sup>†</sup> From [1972Ha73](#).

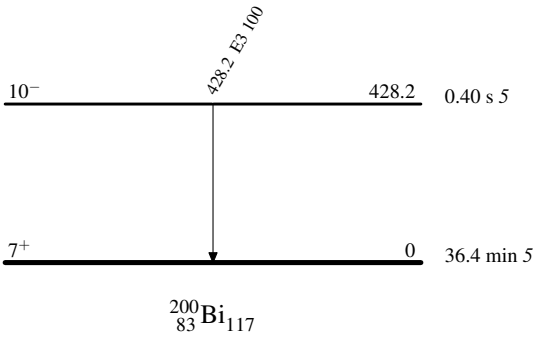
<sup>‡</sup> Transitions are delayed with respect to the beam on period with T<sub>1/2</sub>=46 ns 4.

<sup>x</sup> γ ray not placed in level scheme.

$^{193}\text{Ir}(^{12}\text{C},5\text{n}\gamma) \quad 1972\text{Ha73}$

Level Scheme

Intensities: Relative  $I_\gamma$



$^{200}_{83}\text{Bi}_{117}$