

$^{91}\text{Zr}(\text{p},\text{n})$  IAR    [1971Ki06](#),[1970Fi02](#)

| <u>Type</u>     | <u>Author</u>   | <u>History<br/>Citation</u> | <u>Literature Cutoff Date</u> |
|-----------------|-----------------|-----------------------------|-------------------------------|
| Full Evaluation | Coral M. Baglin | NDS 113, 2187 (2012)        | 15-Sep-2012                   |

[1970Fi02](#): measured tof n spectra At 13 angles between 0° and 145° on resonances At E(p)=4.7 MeV and 5.3 MeV and At 5 energies above or below them; deduced n transmission coefficients.

[1971Ki06](#): E(p)=3.5-4.4 MeV, pulsed beam; >92% enriched  $^{91}\text{Zr}$  targets, self-supporting or thin ( $\Delta E \approx 10$  keV At 5 MeV) films on Pt; 4-16 min neutron flight paths; long counter for n detection; measured excitation functions At 30° using long counter; deduced neutron yields to individual low-lying states from integrated n angular distributions utilizing tof; measured energy and  $\Gamma$  for analog of lowest-energy  $2^+$  state In  $^{92}\text{Zr}$ .

 $^{92}\text{Nb}$  Levels

| <u>E(level)<sup>†</sup></u> | <u>J<sup>π</sup><sup>‡</sup></u> | <u><math>\Gamma</math> from <a href="#">1971Ki06</a>.</u> | <u>Comments</u>                                     |
|-----------------------------|----------------------------------|---|---|
| 9956 10                     | 2 <sup>+</sup>                   | 33 keV 2  | E(p)(lab)=4154 keV 10 ( <a href="#">1971Ki06</a> ). |
| 10.496×10 <sup>3</sup>      | 4 <sup>+</sup>                   |   | E(p)(lab)=4700 keV ( <a href="#">1970Fi02</a> ).    |
| 11.089×10 <sup>3</sup>      | 2 <sup>+</sup>                   |   | E(p)(lab)=5300 keV ( <a href="#">1970Fi02</a> ).    |

<sup>†</sup> Calculated by evaluator using S(p)=5846.8 18 ([2011AuZZ](#)) and the indicated resonance energy.

<sup>‡</sup> If quoted states are isobaric analogs of 934, 1495 and 2067 states in  $^{92}\text{Zr}$ .