

$^{153}\text{Eu}(t,p)$ 1976Bu03

| Type | Author | History Citation | Literature Cutoff Date |
|-----------------|---------|-------------------|------------------------|
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$E(t)=15$ MeV. Eu_2O_3 targets, enriched to 98.76% in ^{153}Eu and having a thickness of $\approx 40\mu\text{g}/\text{cm}^2$. Reaction products analyzed in a Q3D type II magnetic spectrometer and recorded in a helical-cathode position-sensitive proportional counter. $\text{FWHM}\approx 15$ keV, estimated by the evaluator from authors' spectrum.

$J^\pi(^{153}\text{Eu})=5/2^+$.

 ^{155}Eu Levels

| E(level) [‡] | L [†] | S#@& | Comments |
|-----------------------|----------------|---------------|-----------------------------------|
| 0.0 | 0 | 392 | Configuration= $(\pi 5/2[413])$. |
| 78 | 2 | 11 | |
| 180 | 2 | 4.8 | |
| ≈ 300 | | ≈ 2.8 | |
| ≈ 980 | 0 | 8.0 | |
| 1067 | 0 | 24 | |
| 1230 | 0 | 21 | |
| ≈ 1480 | 0 | ≈ 4.1 | |

[†] Listed values were deduced by 1976Bu03 from comparison of measured proton angular distributions with DWBA calculations.

[‡] For the strongly populated states, the energies agree with previously reported values to within 2-3 keV.

Label= $d\sigma/d\Omega(\mu\text{b}/\text{sr})$.

@ Values at $\theta=30^\circ$.

& Relative cross section values within a given spectrum have a probable uncertainty of $\approx 15\%$, while the absolute values are subject to a larger uncertainty ($\approx 25\%$).