

$^{144}\text{Nd}(\text{p},\text{t})$ **1996Po12**

| Type | Author | History | Citation | Literature Cutoff Date |
|-----------------|--|---------|----------------------|------------------------|
| Full Evaluation | T. D. Johnson, D. Symochko(a), M. Fadil(b), and J. K. Tuli | | NDS 112, 1949 (2011) | 1-Jun-2010 |

E=35.6 MeV, measured $\sigma(E,\theta)$, s FWHM=20-25 keV; DWBA and coupled-channel analysis ([1996Po12](#)).E=31 MeV FWHM≈18 keV ([1969Ba45](#)); others: 51.7 MeV ([1969Ya07](#)), 22 MeV ([1979Ya09](#),[1981Ku05](#)).Measured: $\sigma(E,\theta)$ ([1969Ba45](#),[1969Ya07](#)), analyzing power on 0^+ levels ([1979Ya09](#),[1981Ku05](#)), DWBA analysis.

J: from DWBA analysis.

 ^{142}Nd Levels

| E(level) | J $^\pi$ | E(level) | J $^\pi$ | E(level) | J $^\pi$ | E(level) | J $^\pi$ |
|----------|-------------|----------|-------------|----------|-----------|----------|-------------|
| 0.0 | 0^+ | 2980 3 | (0^+) | 3872 5 | 3^- | 4480 6 | (5^-) |
| 1576 2 | 2^+ | 3010 4 | (3^-) | 3896 5 | 2^+ | 4497 6 | (2^+) |
| 2083 2 | 3^- | 3046 4 | (2^+) | 3918 5 | $2^+,5^-$ | 4557 7 | 2^+ |
| 2099 2 | $(3^-,4^+)$ | 3078 4 | | 3983 5 | 6^+ | 4615 7 | 2^+ |
| 2217 2 | 0^+ | 3134 4 | 0^+ | 4004 6 | (4^+) | 4682 7 | (6^+) |
| 2384 2 | (2^+) | 3242 4 | 7^- | 4062 6 | (5^-) | 4712 7 | $(1^-,2^+)$ |
| 2438 2 | (4^+) | 3298 4 | $(4^+,5^-)$ | 4096 6 | 4^+ | 4735 7 | (3^-) |
| 2529 3 | | 3319 4 | 1^- | 4146 6 | 5^- | 4793 7 | (3^-) |
| 2583 3 | (1^+) | 3361 4 | (5^-) | 4169 6 | 2^+ | 4818 7 | $(2^+,3^-)$ |
| 2656 3 | 0^+ | 3413 4 | 5^- | 4189 6 | 1^- | 4837 7 | |
| 2757 3 | (1^-) | 3469 4 | 2^+ | 4260 6 | 4^+ | 4888 7 | (4^+) |
| 2846 3 | (2^+) | 3578 5 | 3^- | 4286 6 | 4^+ | | |
| 2873 3 | (4^+) | 3600 5 | 5^- | 4403 6 | (4^+) | | |
| 2958 3 | 0^+ | 3704 5 | 5^- | 4423 6 | (3^-) | | |