

$^{42}\text{Ca}(^{16}\text{O}, ^{15}\text{N})$  [1973Ko01](#)

| Type            | Author                                 | History | Citation          | Literature Cutoff Date |
|-----------------|--|---------|-------------------|------------------------|
| Full Evaluation | Balraj Singh and Jun Chen <sup>#</sup> |         | NDS 126, 1 (2015) | 31-Mar-2015            |

[1973Ko01](#): E=48 MeV  $^{16}\text{O}$  beam was produced from the Argonne FN tandem accelerator with intensity of 200-500 nA. Target of isotopically enriched  $100\text{ }\mu\text{g}/\text{cm}^2$  thick  $^{42}\text{Ca}$  foil on  $20\text{ }\mu\text{g}/\text{cm}^2$  carbon backings. The ejectiles were identified and detected by up to six  $\Delta\text{E-E}$  counter telescopes of  $\approx 15\text{--}\mu\text{m}$  and  $\approx 100\text{--}\mu\text{m}$  silicon surface barrier detectors, FWHM $\approx 250$  keV. Measured  $\sigma(\theta)$ .

Deduced levels, J,  $\pi$ , L from DWBA analysis. Absolute cross sections are accurate to 15%.

[1975EiZT](#): E=56 MeV. Measured  $\sigma(\theta)$ .

 $^{43}\text{Sc}$  Levels

| E(level) | J $\pi$ <sup>†</sup> | L | $d\sigma/d\Omega$ (max) (mb/sr) |
|----------|----------------------|---|---------------------------------|
| 0        | $7/2^-$              | 4 | 0.98                            |
| 470      | $3/2^-$              | 2 | 0.08                            |
| 1180     | $3/2^-$              | 2 | 0.12                            |
| 1810     | $3/2^-$              | 2 | 0.10                            |

<sup>†</sup> From Adopted Levels.