

$^{43}\text{Ca}(\text{p,t})$ 1977SeZR,1974Se04

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$J^\pi(^{43}\text{Ca g.s.})=7/2^-$.

1977SeZR (also 1974Se04): E(p)=42 MeV from the MSU cyclotron. Measurement was done with an Enge split-pole spectrometer equipped with a single-wire proportional counter. FWHM=22-35 keV. Measured $\sigma(\theta)$ and cross sections to $7/2^-$ levels and compared to 0^+ levels of ^{40}Ca from $^{42}\text{Ca}(\text{p,t})$.

 ^{41}Ca Levels

| E(level) [†] | J^π | L [‡] | Comments |
|-----------------------|---------|----------------|---|
| 0 | $7/2^-$ | 0 | |
| 1940 | | 2 | |
| 2010 | | 3+5 | |
| 2460 | | 2+4 | |
| 2570 | | 2 | E(level): 2580 (quoted in 1978En02). |
| 2610 | | 1+3 | |
| 2670 | | 3 | |
| 2880 | | 3 | |
| 2958 | $7/2^-$ | 0 | Integrated cross section is about 9% of that for g.s. (1974Se04). J^π : From 1974Se04. |
| 3050 | | | L: 2 (quoted in 1978En02, but none in 1990En08). |
| 3200 | | 3 | |
| 3370 | | 3 | |
| 3400 | | 3 | |
| 3530 | | 3 | |
| 3614 [‡] | | 3 | L: for 3613+3614. |
| 3680 | | 2 | |
| 3730 [‡] | | 3 | L: for 3730+3740. |
| 3830 | | 5 | |
| 3910 | | 3+5 | |
| 4010 | | 2 | |
| 4090 | | 3 | |
| 4280 | | 2 | |
| 4340 | | 2 | |
| 4520 | | 5 | |
| 4730 [‡] | | 3 | L: for 4728+4731. |
| 4970 | | 3(+5) | |
| 5050 [‡] | | 2 | L: for 5050+5070. |
| 5120 | | | L: 2 (quoted in 1978En02, but none in 1990En08). |
| 5220 | | 5 | |
| 5350 | | 0 | |
| 5820 | | 3+5 | |
| 5960 | | 3 | |
| 6040 [‡] | | 3 | L: for 6040+6070. |
| 6820 | | 3 | |
| 7150 | | 0 | |

[†] Data given here are taken from the evaluation by 1990En08, based on experiments of 1977SeZR (also 1974Se04).

[‡] Doublet.