

$^{44}\text{Ca}(\alpha,2\alpha)$  1976Sh02

<u>Type</u>	<u>Author</u>	<u>History Citation</u>	<u>Literature Cutoff Date</u>
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**1976Sh02:** E=90 MeV alpha beam was produced from the Berkeley 88 in. cyclotron. Target was 420  $\mu\text{g}/\text{cm}^2$   $^{44}\text{Ca}$  (98.5% purity). Reaction products were detected by two telescopes of a 250- $\mu\text{m}$  phosphorus diffused Si detector and a 3-mm Si(Li) detector (FWHM=250-300 keV). Measured  $\sigma(\theta)$ . Deduced levels, spectroscopic from DWIA and PWIA analysis.

 $^{40}\text{Ar}$  Levels

<u>E(level)</u>	<u>Integrated <math>\sigma</math> (mb/sr<sup>2</sup>)</u>	<u>Comments</u>
0	0.58 12	spectroscopic factor=0.24 9 from PWIA analysis, 0.53 9 from DWIA analysis ( <a href="#">1976Sh02</a> ).
1440 50	0.027 32	
2090 90	0.052 34	
4000 <sup>†</sup> 40	0.080 44	
5750 <sup>†</sup> 70	0.026 25	

<sup>†</sup> Composite of several levels.