

$^{48}\text{Ca}(^3\text{He}, ^7\text{Be})$ 1976Cr03

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	Jun Chen and Balraj Singh		NDS 190,1 (2023)	20-Jun-2023

1976Cr03: E(^3He)=70 MeV ^3He beam produced from the Michigan State University isochronous cyclotron. Targets of 200 $\mu\text{g}/\text{cm}^2$ 97.16% enriched ^{48}Ca onto gold and silver backings. Reaction products analyzed by an Enge split-pole magnetic spectrograph, FWHM=66 keV and detected in the focal plane by a plastic scintillator behind a gas proportional counter. Measured $\sigma(E(^7\text{Be}),\theta)$. Deduced levels.

 ^{44}Ar Levels

E(level)	J^π [†]	$d\sigma/d\Omega$ ($\mu\text{b}/\text{sr}$) [‡]
0	0^+	1.0
750 30	0^+	2.0
1610 30	2^+	1.0
3480 30		1.3
3980 50		0.7
4430 40		0.8

[†] Predicted from Shell model calculations. See also the thesis by [1975StZH](#).

[‡] Measured at $\theta=7^\circ$.