
 $^{40}\text{Ca}(^3\text{He}, ^8\text{Li})$ [1976Be08](#)

[1976Be08](#): ^{35}K isotope discovery. $^{40}\text{Ca}(^3\text{He}, ^8\text{Li})^{35}\text{K}$ is studied using 73.7- and 75.8-MeV ^3He beams produced by the Michigan State University cyclotron. Targets were 370 and 190 $\mu\text{g}/\text{cm}^2$ enriched ^{40}Ca on a 20 $\mu\text{g}/\text{cm}^2$ natural carbon backing. ^8Li particles were detected using a scintillator-proportional counter detector system at the focal plane of the Enge split-pole spectrograph. Measured the cross section for producing ^{35}K g.s. and the mass excess of ^{35}K . Also see [1976BeXJ](#) and [1976BeZJ](#).

 ^{35}K Levels

<u>E(level)</u>	<u>J^π[†]</u>
0	
1560 40	1/2 ⁺
2690 50	(5/2 ⁺)

[†] As given in [1976Be08](#) based on mirror levels in ^{35}S .