^{40}Ca(^{3}He,^{8}Li) 1976Be08

1976Be08: ^{35}K isotope discovery. ^{40}Ca(^{3}He,^{8}Li)^{35}K is studied using 73.7- and 75.8-MeV ^{3}He beams produced by the Michigan State University cyclotron. Targets were 370 and 190 μg/cm^2 enriched ^{40}Ca on a 20 μg/cm^2 natural carbon backing. ^{8}Li 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

E(level)	J^{π} †
0	
1560 *40*	$1/2^+$
2690 *50*	$(5/2^+)$

† As given in 1976Be08 based on mirror levels in ^{35}S.