

${}^6\text{Li}({}^{35}\text{Cl}, \text{d}\gamma)$ [1972Bo36](#)

<u>Type</u>	<u>Author</u>	<u>History Citation</u>	<u>Literature Cutoff Date</u>
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[1972Bo36](#): E=68 MeV ${}^{35}\text{Cl}$ beam was produced from the Stanford University FN tandem Van de Graaff. Target was a 250 $\mu\text{g}/\text{cm}^2$ LiF film on a 400 $\mu\text{g}/\text{cm}^2$ nickel foil. γ rays were detected with a 55-cm³ Ge(Li) crystal. Measured E_γ , I_γ , recoil-distance Doppler shift. Deduced $T_{1/2}$, transition strengths.

 ${}^{39}\text{K}$ Levels

<u>E(level)[†]</u>	<u>J^π[‡]</u>	<u>$T_{1/2}$[#]</u>
0	$3/2^+$	
2815 <i>I</i>	$7/2^-$	56 ps 6
3598 <i>I</i>	$9/2^-$	41 ps 3

[†] From E_γ .

[‡] From Adopted Levels.

[#] From recoil-distance Doppler-shift method in [1972Bo36](#).

 $\gamma({}^{39}\text{K})$

<u>$E_i(\text{level})$</u>	<u>J_i^π</u>	<u>E_γ[†]</u>	<u>I_γ[†]</u>	<u>E_f</u>	<u>J_f^π</u>
2815	$7/2^-$	2815 <i>I</i>		0	$3/2^+$
3598	$9/2^-$	783 <i>I</i>	39	2815	$7/2^-$
		3598 <i>I</i>	61	0	$3/2^+$

[†] From [1972Bo36](#).

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Level Scheme

Intensities: % photon branching from each level

