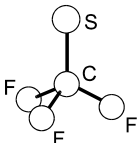


47 LIF	CF₃S	Trifluoromethylthio		C_{3v} F ₃ C–S·
		State	$\tilde{X}^2E_{3/2}$ \tilde{A}^2A_1	
		Energy [eV]	0.00 3.272	
		$r_0(\text{C–S})$ [Å]	1.828 ^{a)} 1.949 ^{a)}	
		$r_0(\text{C–F})$ [Å]	1.327 ^{b)} 1.327 ^{b)}	
		$\theta_0(\text{F–C–F})$ [deg]	109.5 ^{a)} 109.4 ^{a)}	

CF₃S molecules were produced by passing (CF₃S)₂ diluted with helium through a high pressure

pulsed valve, after which it was photolyzed by a 248 nm excimer laser. The $\tilde{A}^2A_1 - \tilde{X}^2E_{3/2}$ transition was studied by laser-induced fluorescence excited by a pulse-amplified frequency-doubled CW dye laser.

The molecular parameters were obtained from the *A*- and *B*-rotational constants, by assuming the value for $r_0(\text{C–F})$ from related molecules.

^{a)} Error limits were not given in the original paper.

^{b)} Assumed.

Yang, M.-C., Williamson, J.M., Miller, T.A.: J. Mol. Spectrosc. **186** (1997) 1.