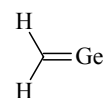


**100**  
LIF**CH<sub>2</sub>Ge****Germylidene**  
Methylenegermylene**C<sub>2v</sub>**

State	$\tilde{X}^1A_1$	$\tilde{B}^1B_2$
Energy [eV]	0.00	3.389
$r_0(\text{Ge}=\text{C})$ [Å]	1.7908(2)	1.914(4)
$r_0(\text{C}-\text{H})$ [Å]	1.1022(5)	1.082(9)
$\theta_0(\text{H}-\text{C}-\text{H})$ [deg]	115.05(5)	139.3(11)

$\text{H}_2\text{C}^{74}\text{Ge}$  and  $\text{D}_2\text{C}^{74}\text{Ge}$  were produced in a pulsed-jet discharge using isotopically enriched tetramethylgermane and tetramethylgermane- $d_{12}$  as precursors. The  $\tilde{B}^1B_2 - \tilde{X}^1A_1$  spectra were studied by laser-induced fluorescence. Zero-point structures for the two electronic states were deduced from the rotational constants.

Hostutler, D.A., Smith, T.C., Li, H., Clouthier, D.J.: J. Chem. Phys. **111** (1999) 950.