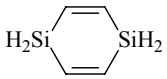
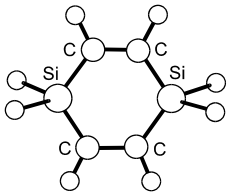
571 **$C_4H_8Si_2$** **1,4-Disilacyclohexa-2,5-diene** **D_{2h}**

ED, vibrational spectroscopy, *ab initio* and DFT calculations



r_e [a])	Å [b])	θ_e [a])	deg [b])
Si–C	1.861(2)	C–Si–C	109.9(3)
C=C	1.346(3)	H–C=C	116.7(10)
Si–H	1.498(10)	H–Si–H	107.9(10)
C–H	1.074(10)		

r_g	Å [b])
Si–C	1.869(2)
C=C	1.354(3)
Si–H	1.519(10)
C–H	1.094(10)



The nozzle was at room temperature.

[a]) Large-amplitude motion of the ring puckering, kinematic and dynamic anharmonic effects were taken into account. Diagonal quadratic and cubic force constants were calculated by MP2/6-31G(d) method.

[b]) Three times the estimated standard errors including a systematic error.

Dakkouri, M., Kochikov, I.V., Tarasov, Yu.I., Vogt, N., Vogt, J., Bitschenauer, R.: J. Mol. Struct. **607** (2002) 195.