Helicene and Double Helicene

Significance: A high-yield synthesis of three novel helicene compounds (3, 5, and 6) was developed. X-ray single-crystal structure analysis revealed multiple intermolecular short contacts and UV/Vis spectra indicate significant π-delocalization in double helicene 6, indicating potential in organic functional materials.

Comment: The efficient synthesis of 1 can be achieved in a total yield of 28% from 3-bromo-thiophene (J. Org. Chem. 2009, 74, 408).

SYNFACTS Contributors: Timothy M. Swager, Brett VanVeller

Synfacts 2010, 4, 0411-0411  Published online: 22.03.2010
DOI: 10.1055/s-0029-1219602; Reg-No.: S01710SF