Z. WANG, J. SHI, J. WANG, C. LI, X. TIAN, Y. CHENG,* H. WANG* (HENAN UNIVERSITY, KAIFENG, LUOYANG NORMAL UNIVERSITY AND CHANGCHUN INSTITUTE OF APPLIED CHEMISTRY, P. R. OF CHINA)

Syntheses and Crystal Structure of Benzo[hexathia[7]helicene and Naphthalene Cored Double Helicene

Org. Lett. **2010**, *12*, 456-459.

Helicene and Double Helicene

Category

Synthesis of
Materials and
Unnatural Products

Key words

helicenes

naphthalenes

McMurry reaction

thiophenes

SYNFACT
of the month

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-bromothiophene (*J. Org. Chem.* **2009**, *74*, 408).

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