## Category

Synthesis of Materials and Unnatural Products

## **Key words**

divergent synthesis biselenophenes

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Synthesis and Molecular Properties of Tricyclic Biselenophene-Based Derivatives with Nitrogen, Silicon, Germanium, Vinylidene, and Ethylene Bridges

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## **Divergent Synthesis of Tricyclic Biselenophene-Based Derivatives**

**Significance:** While tricyclic bithiophene-based materials have been extensively studied as an important class of organic semiconductors, the corresponding biselenophene-based analogues have not been reported. Cheng and co-workers demonstrate for the first time that biselenophene 1 can be utilized as starting material for the synthesis of a new class of both sp<sup>3</sup>-bridged and sp<sup>2</sup>-bridged tricyclic biselenophene-based materials.

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**Comment:** The six brominated molecules highlighted above can be used as monomers to create a new class of p- or n-type polymers for exploring biselenophene-based materials in various optoelectronic applications, such as organic field-effect transistors and polymer solar cells.