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Quadrannulene: A Nonclassical Fullerene Fragment

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Encircling the Square: Synthesis of Quadrannulene

Significance: The authors report the first synthesis of a [4]circulene. Quadrannulene **1** is comprised of a central four-membered ring fused together with four benzenoid units. Unlike previously reported bowl-shaped annulenes, such as coronene, this structural motif is not observed in classical graphitic structures.

Comment: Despite the highly strained central core of **1** the compound is remarkably stable suggesting that new families of arenes and fullerenes could be accessed using this methodology.

Category

Synthesis of Materials and Unnatural Products

Key words

fullerenes corannulenes



cyclotrimerization

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