

Showcasing research from Professor Prof. Shaoqiang Dong and Prof. Chunyan Chi, Institute of Molecular Aggregation Science, Tianjin University, Tianjin, China and Department of Chemistry, National University of Singapore, Singapore.

Facile synthesis and characterization of aza-bridged all-benzenoid quinoidal figure-eight and cage molecules

Synthesis of conjugated compounds with unusual shapepersistent structures remains a challenge. This paper reported the synthesis of fully  $\pi$ -conjugated figure-eight and cage molecules *via* thermodynamically reversible intermolecular Friedel-Crafts alkylation. These molecules could be oxidized to their cationic species, and showed space-confined intramolecular dynamics and AIE behaviours. The synthetic strategy provides an efficient approach to synthesize potential conjugated 2D or 3D architectures with different topologies and novel optoelectronic properties.



As featured in:

See Shaoqiang Dong, Chunyan Chi *et al., Chem. Sci.*, 2024, **15**, 9087.

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