

Fluorescence enhancement by supramolecular sequestration of a C₅₄-nanographene trisimide by hexabenzocoronene.

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Rok wydania

2022

Czasopismo

Journal of the American
Chemical Society

Numer woluminu

144

Strony

5718-5722

DOI

10.1021/jacs.2c00142

Kolekcja

Naukowa

Język

Angielski

Typ publikacji

Artykuł

Streszczenie

A supramolecular trilayer nanographene complex consisting of a newly synthesized D_{3h} -symmetric C₅₄-nanographene trisimide (NTI **1**) and two hexabenzocoronenes (HBC) has been obtained by self-assembly. This 1:2 complex is structurally well-defined according to UV/vis and single crystal X-ray studies and exhibits high thermodynamic stability even in polar halogenated solvents. Complexation of NTI **1** by two HBC molecules protects the NTI **1** π -surface efficiently from oxygen quenching, thereby leading to a sequestration-induced fluorescence enhancement under ambient conditions.

Słowa kluczowe

Fluorescence, Crystal structure, Oligomers, Molecules,
Solvents

Adres publiczny

<http://dx.doi.org/10.1021/jacs.2c00142>

Strona internetowa wydawcy

<https://www.acs.org/content/acs/en.html>