A parallel-displaced directly linked 21-carba-23-thiaporphyrin dimer incorporating a dihydrofulvalene motif.

Autorzy

Anna Berlicka

Michał J. Białek

Lechosław Latos-Grażyński

Rok wydania

2016

Czasopismo

Angewandte Chemie - International Edition

Numer woluminu

55

Strony

11231-11236

DOI

10.1002/anie.201606298

Kolekcja

Naukowa

Język

Angielski

Typ publikacji

Artykuł

Streszczenie

In the search of porphyrin arrays with a unique geometry, the efficient synthesis of a directly linked 21-carba-23-thiaporphyrin dimer with the distinctive dihydrofulvalene bridging motif has been developed. This compound acquires an uncommon parallel-displaced arrangement of two carbaporphyrin planes. The dimer undergoes an acid-triggered cleavage to create of the asymmetric carbathiaporphyrin–carbathiachlorin dyad or 2,3-dihalo-21-carba-23-thiachlorin depending on choice of acid. A formation of a reactive carbocation intermediate is postulated to account for mechanism of cleavage.

Adres publiczny

http://dx.doi.org/10.1002/anie.201606298

Strona internetowa wydawcy

onlinelibrary.wiley.com