

Pyridine-fused bis(norcorrole) through Hantzsch-type cyclization : enhancement of antiaromaticity by an aromatic bridge.

Autorzy

Xiaofang Li

Yankui Meng

Pinggui Yi

Marcin Stępień

Piotr J. Chmielewski

Rok wydania

2017

Czasopismo

Angewandte Chemie -
International Edition

Numer woluminu

56

Strony

10810-10814

DOI

10.1002/anie.201705715

Kolekcja

Naukowa

Język

Angielski

Typ publikacji

Artykuł

Streszczenie

A non-catalytic condensation of Ni^{II} β-aminonorcorrole with aryl aldehydes is shown to produce a family of pyrromethane dimers that undergo deaminative cyclization to yield pyridine-fused bis(norcorrole)s comprising two antiaromatic macrocycles communicating by an aromatic moiety. The new compounds were characterized by spectroscopic, structural, and electrochemical methods supported by DFT calculations, all of which revealed unexpected antiaromaticity enhancement in the fused system.

Słowa kluczowe

antiaromaticity, dimerization, norcorrole, porphyrinoids, ring fusion

Adres publiczny

<http://dx.doi.org/10.1002/anie.201705715>

Strona internetowa wydawcy

onlinelibrary.wiley.com