Enantiopure chiral macrocyclic lanthanide complexes derived from (*R*)-2,2'-diamino-1,1'-binaphthyl and 2,6-diformylpyridine.

Autorzy

Jerzy Lisowski

Marta Paluch

Tadeusz Lis

Rok wydania

2006

Czasopismo

Journal of Inclusion Phenomena and Macrocyclic Chemistry

Numer woluminu

55

Strony

123-129

DOI

10.1007/s10847-005-9028-3

Kolekcja

Naukowa

Język

Angielski

Typ publikacji

Artykuł

Streszczenie

The template condensation of (R)-2,2¢-diamino-1,1¢-binaphthyl and 2,6-diformylpyridine leads to lanthanide(III) complexes of the new chiral hexaaza macrocycle L that adopts highly twisted conformation in [LnL](NO3)3 complexes. The complexes have been characterised by ESI MS spectrometry and NMR spectroscopy. The analogous N2O4 chiral crown ether L2 that has the same carbon skeleton as L does not exhibit tendency to bind lanthanide(III) ions. The X-ray crystal structure of L2 exhibit squeezed conformation of the macrocycle and spatial disposition of donor atoms that does not predispose it for coordination of lanthanide(III) ions.

Słowa kluczowe

chiral macrocycles, crown ethers, lanthanide complexes, NMR, Schiff bases

Adres publiczny

https://doi.org/10.1007/s10847-005-9028-3

Strona internetowa wydawcy

http://link.springer.com