1D spin-crossover networks containing a $Fe^{II}(1,2,3\text{-triazol-1-yl})_4(CH_3CN)_2$-type core.

Autorzy

Agata Białońska

Robert Bronisz

Łukasz Baranowski

Rok wydania

2013

Czasopismo

European Journal of Inorganic Chemistry

Strony

720-724

DOI

10.1002/ejic.201201115

Kolekcja

Naukowa

Język

Angielski

Typ publikacji

Artykuł

Streszczenie

Bis(1,2,3-triazol-1-yl)methane (mbtr) was used to prepare 1D networks in which neighboring iron(II) ions are tethered by two semiflexible ligand molecules. [Fe(mbtr)2(CH3CN)2]X2·2CH3CN (X = BF4–, ClO4–) systems represent unique example of complexes that are based on monosubstituted 1,2,3-triazoles, in which four 1,2,3-triazole rings and two axially coordinated nitrile molecules form the first coordination sphere. Single-crystal X-ray diffraction and magnetic studies revealed that, in addition to homoleptic [Fe(1,2,3-triazol)6]-type core systems, complexes possessing the Fe(1,2,3-triazolyl)4(CH3CN)2-type core also exhibit thermally induced spin crossover.

Słowa kluczowe

Iron, N ligands, Spin crossover, Coordination modes

Adres publiczny

http://dx.doi.org/10.1002/ejic.201201115

Strona internetowa wydawcy

onlinelibrary.wiley.com