

1,4-Di(1,2,3-triazol-1-yl)butane as building block for the preparation of the iron(II) spin-crossover 2D coordination polymer.

Autorzy

Robert Bronisz

Rok wydania

2005

Czasopismo

Inorganic Chemistry

Numer woluminu

44

Strony

4463-4465

DOI

10.1021/ic050449z

Kolekcja

Naukowa

Język

Angielski

Typ publikacji

Artykuł

Streszczenie

The novel bidentate ligand 1,4-di(1,2,3-triazol-1-yl)butane (bbtr) reacts with $\text{Fe}(\text{ClO}_4)_2 \cdot 6\text{H}_2\text{O}$ to form the 2D coordination polymer with (3,6) network topology. The $\{[\text{Fe}(\text{bbtr})_3](\text{ClO}_4)_2\}_\infty$ represents an example of spin-crossover material based on 1,2,3-triazole as donor group, and displays an abrupt spin transition accompanied by a thermal hysteresis loop ($T_{1/2}^\downarrow = 101 \text{ K}$ and $T_{1/2}^\uparrow = 109 \text{ K}$).

Słowa kluczowe

Coordination polymers, Ligands, Layers, Crystal structure, Quantum mechanics

Adres publiczny

<https://doi.org/10.1021/ic050449z>

Strona internetowa wydawcy

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