



Characterization of a mixed-valence Ru(II)/Ru(III) ion-pair complex. Unexpected high-frequency electron paramagnetic resonance evidence for Ru(III)–Ru(III) dimer coupling.

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Streszczenie

In this contribution, we report the synthesis and full characterization of the first mixed-valence Ru(II)/Ru(III) ion-pair complex, $[\text{RuII}(\text{bipy})_2(\text{pic})]+[\text{cis-RuIII}(\text{Cl})_2(\text{pic})_2]^-$, in the solid state and in aqueous solution, where bipy = 2,2'-bipyridine and pic = picolinate. In addition, unexpected high-frequency electron paramagnetic resonance evidence for interactions between two neighboring Ru(III) ions, resulting in a triplet state, $S = 1$, was found.

Słowa kluczowe

Crystals, X-rays, Ligands, Ions, Electron paramagnetic resonance spectroscopy

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