

Structure and properties of tetra- μ -ethanimidamidato - $\kappa N:\kappa N'$ -dirhodium(1+) complexes.Autorzy

Florian P. Pruchnik

Hanna Pruchnik

Andrzej Kochel

Rok wydania

2009

Czasopismo

Polyhedron

Numer woluminu

28

Strony

769-774

DOI

10.1016/j.poly.2008.12.037

Kolekcja

Naukowa

Język

Angielski

Typ publikacji

Artykuł

Streszczenie

Rhodium complexes containing Rh²⁵⁺ core with ethanimidamidato ligands [Rh₂(μ -HN(HN)CCH₃)₄(H₂O)₂]Cl·H₂O (1) and [Rh₂(μ -HN(HN)CCH₃)₄(DMSO)₂]Cl (2) have been obtained and characterized with IR, EPR and UV–Vis spectroscopic methods. X-ray structure of compound 2 reveals two independent dinuclear ions in which Rh–N bonds are slightly different. The Rh–Rh bond is longer than that in other amidine complexes with Rh²⁵⁺ core. DFT calculations and EPR spectra showed that δ RhRh* is SOMO orbital. Electronic and EPR spectra depend on the ligands coordinated along the Rh–Rh axis.

Słowa kluczowe

Dirhodium, Ethanimidamidate, X-ray structure, Dinuclear complexes, Amidate

Adres publiczny

<https://doi.org/10.1016/j.poly.2008.12.037>

Strona internetowa wydawcy

<http://www.elsevier.com>