



Europium(II) complexes with unsubstituted crown ethers.

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Polyhedron

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Artykuł

Streszczenie

Three Eu(II) complexes with crown ethers were obtained by electrochemical reduction. The complex with 12-crown-4 contains Eu bonded to four O crown atoms, three water molecules and a chloride anion, and shows luminescence at 429 nm at room temperature and at 410 nm at 77 K. The bis(15-crown-5)europium(II) cation has a sandwich structure with 10-coordinate metal ion. Its luminescence has the maximum at 433 nm at room temperature and at 417 nm at 77 K. The weakly luminescing (411.5 nm at 77 K) bisperchlorato(18-crown-6)europium(II) is also 10-coordinate; both perchlorate anions are bonded in a chelating bidentate fashion. The luminescence lifetimes and the excitation spectra are discussed.

Słowa kluczowe

Divalent europium, Lanthanides, Crown ethers, Structures, Luminescence

Adres publiczny

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