

Synthesis, structure and spectroscopic studies of europium complex with S(+)-mandelic acid.

Autorzy

Michał Babij

Anna Mondry

Rok wydania

2011

Czasopismo

Journal of Rare Earths

Numer woluminu

29

Strony

1188-1191

DOI

10.1016/S1002-
0721(10)60623-0

Kolekcja

Naukowa

Język

Angielski

Typ publikacji

Artykuł

Streszczenie

The Eu^{3+} complexes with S(+)-mandelic acid were synthesized in the form of powders by mixing aqueous solutions of EuCl_3 , S(+)-mandelic acid and NaOH in different molar ratios. The powders were characterized by elemental analysis, X-ray powder diffraction (XRPD) method, Fourier transform infrared (FTIR) and Raman spectroscopy, UV-vis reflectance and luminescence spectra as well as luminescence lifetime measurements. It was found that all studied powders of Eu^{3+} complexes with S(+)-mandelic acid were isostructural and crystalline and formed compounds with the formula $\text{Eu}(\text{Man})_3(\text{H}_2\text{O})_2$.

Słowa kluczowe

europium, mandelic acid, emission, FTIR spectroscopy, rare earths

Adres publiczny

[https://doi.org/10.1016/S1002-0721\(10\)60623-0](https://doi.org/10.1016/S1002-0721(10)60623-0)

Strona internetowa wydawcy

<http://www.elsevier.com>