## **Accepted Manuscript**

Title: Structures and optical spectroscopy of lanthanide trifluoroacetates obtained from hexafluoroacetylacetone

Author: V.I. Tsaryuk A.V. Vologzhanina K.P. Zhuravlev V.A.

Kudryashova

PII: S0022-1139(17)30009-X

DOI: http://dx.doi.org/doi:10.1016/j.jfluchem.2017.03.009

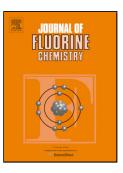
Reference: FLUOR 8959

To appear in: FLUOR

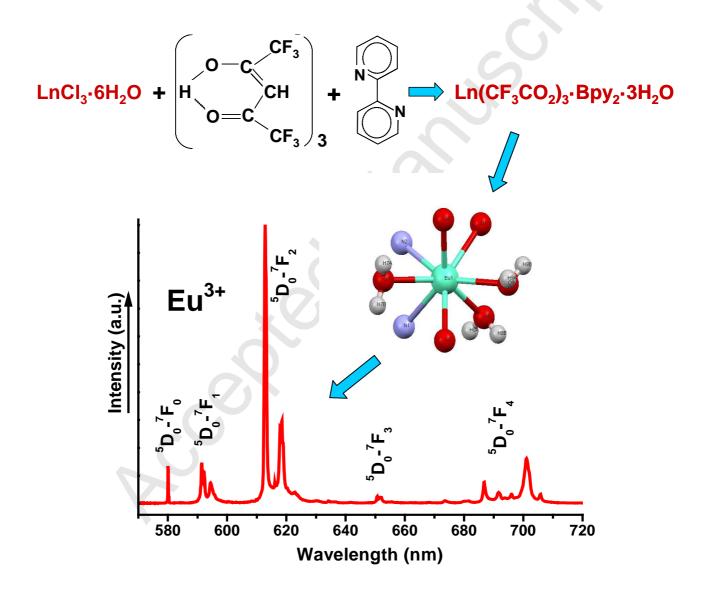
Received date: 11-1-2017 Revised date: 16-3-2017 Accepted date: 17-3-2017

Please cite this article as: V.I. Tsaryuk, A.V. Vologzhanina, K.P. Zhuravlev, V.A. Kudryashova, Structures and optical spectroscopy of lanthanide trifluoroacetates obtained from hexafluoroacetylacetone, *Journal of Fluorine Chemistry* (2017), http://dx.doi.org/10.1016/j.jfluchem.2017.03.009

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.



Lanthanide trifluoroacetates containing coordinated and outsphere heterocyclic diimine molecules were prepared in an unusual way from hexafluoroacetylacetone. A distorted square anti-prismatic coordination geometry of the  $Ln^{3+}$  luminescence center, lifetimes of the  $^5D_0$  (Eu $^{3+}$ ) and  $^5D_4$  (Tb $^{3+}$ ) emitting states, luminescence efficiencies, and excitation energy transfer processes are analysed. Spectroscopic signs of the  $Ln^{3+}$  trifluoroacetates and hexafluoroacetylacetonates are discussed.



## Download English Version:

## https://daneshyari.com/en/article/5152193

Download Persian Version:

https://daneshyari.com/article/5152193

<u>Daneshyari.com</u>