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4f-Elements-Based Materials: Design, Crystal Chemistry and Properties

Guest Editor:

Dr. Evgeny Nazarchuk

Faculty of Geology, Saint Petersburg State University, 199034 Saint Petersburg, Russia

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Message from the Guest Editor

Dear colleagues,

Natural and synthetic rare-earth and actinide compounds are attracting increasing attention due to the great variety of their significance and application. The covered areas range from catalysis to magnetism and from superporous frameworks to environmental concerns, space industry, and medicine. The most addressed properties are complex interplays of d- and f-magnetic systems and extremely high intermetallic magnetization, luminescence, and the production of neutron sources.

In this Special Issue, we invite contributions dedicated to synthesis and studies of both lanthanide- and actinidebased materials, their structural and materials chemistry, developing approaches toward their targeted synthesis, including structural design, as well as safe processing and storage of spent fuel. We also welcome papers concerning f-metal minerals, derived materials, and new ways of actinide immobilization in natural and human-made media. Of essential interest are also contributions dedicated to the comparison of various properties of actinides and their 4f-analogs, which may be relevant to the yet elusive chemistry of the latest actinide elements.









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Editor-in-Chief

Prof. Dr. Maryam Tabrizian

 Department of Biomedical Engineering, Faculty of Medicine and Health Sciences, McGill University, Montreal, QC H3A 2B6, Canada
Faculty of Dentistry and Oral Health Sciences, McGill University, 3640 Rue University, Montreal, QC H3A 0C7, Canada

Message from the Editor-in-Chief

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Materials Editorial Office MDPI, Grosspeteranlage 5 4052 Basel, Switzerland Tel: +41 61 683 77 34 www.mdpi.com mdpi.com/journal/materials materials@mdpi.com X@Materials_Mdpi