Special Issue

Emerging Nuclear Materials

Message from the Guest Editors

More extreme conditions in future nuclear energy systems, such as Gen IV fission reactors, fusion reactors, and charged particle accelerators, require materials to operate under higher temperatures, higher dpa, and more corrosive environments than those in current Gen II or Gen III systems. This requires significant improvements in the thermal, chemical, and radiation stability of nuclear materials. As a response to these requirements, advanced nuclear materials are emerging, and some of them have been deemed to be promising options for structural materials and fuels in advanced reactors and LWRs operating with extended lifetimes.

This Special Issue, entitled “Emerging Nuclear Materials”, aims to collect original research articles and reviews focusing on novel developments and new processing methodologies in the fabrication of nuclear materials, as well as its performance characterization in nuclear applications. Experimental, theoretical, and computational aspects of either the fundamental or applied nature of the emerging nuclear materials are welcome.

Guest Editors

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Message from the Editor-in-Chief

Welcome to *Crystals*, the journal dedicated to the fascinating world of crystallographic research! Crystals are more than mere decorative elements; they hold the key to understanding the fundamental structure of matter. Our mission is to explore the crucial significance of this research across various fields. From medicine to technology, chemistry to geology, crystals play a vital role. Their structure provides insights into new advanced materials, innovative drugs, and groundbreaking technologies. Through *Crystals*, we delve into the microscopic world to discover solutions that will shape the future. Join us on a journey through the *Crystals*, where science merges with beauty and innovation.

Editor-in-Chief

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