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Structural Materials for Nuclear Applications

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Message from the Guest Editors

Dear Colleagues,

Nuclear energy has many advantages, including abundant reserves, high energy density, and good adaptability to harsh environments, which is an important part of the future low-carbon energy. The development of advanced nuclear energy systems with high safety and good economy is an important driving force for the long-term stable development of the global low-carbon economy. The development of structural materials suitable for high-temperature, high-radiation, and harsh corrosion environments is one of the keys to the successful implementation of advanced nuclear energy systems. In recent years, new zirconium alloys, FeCrAl, ODS alloys, advanced ceramics, and stainless steels have been rapidly developed. This Special Issue focuses on the composition, microstructure, properties, and preparation methods of such advanced structural materials for future nuclear systems.



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Special issue



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Message from the Editor-in-Chief

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