

Special Issue

Disorder-Driven Structure-Property Functionality in Materials: From Material Discovery to Device Development

Message from the Guest Editors

Material discoveries are an integral part of advancing technological applications of interest. Investigations that relate structure and bonding with specific physical properties of materials are key to technological advancements, in addition to adding to our fundamental knowledge base of the novel properties of materials. Moreover, by applying multiple modifications simultaneously, the physical properties of materials can result in maximum tunability. Advanced models for simulating defects and disorders are an integral part of this materials research. First-principle simulations broaden our understanding of electronic, phonon, magnetic, and other properties of materials, and the impact is greatest when combined with and corroborated by experimental results. In this Special Issue, we invite experimental and theoretical contributions from researchers involved in photovoltaic, thermoelectric, phase change, spintronics, magnetic, ceramic materials, and other related areas.

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About the Journal

Message from the Editor-in-Chief

Materials (ISSN 1996-1944) was launched in 2008. The journal covers twenty-five comprehensive topics: biomaterials, energy materials, advanced composites, advanced materials characterization, porous materials, manufacturing processes and systems, advanced nanomaterials and nanotechnology, smart materials, thin films and interfaces, catalytic materials, carbon materials, materials chemistry, materials physics, optics and photonics, corrosion, construction and building materials, materials simulation and design, electronic materials, advanced and functional ceramics and glasses, metals and alloys, soft matter, polymeric materials, quantum materials, mechanics of materials, green materials, general. *Materials* provides a unique opportunity to contribute high quality articles and to take advantage of its large readership.

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