Special Issue

Advances in Superconducting Materials: Characterization, Properties and Applications (Second Edition)

Message from the Guest Editor

The discovery of superconductivity in cuprates and iron-based superconductors has led to significant improvements driven by the quest for higher and higher superconducting transition temperatures. In the early stages of development, there was tremendous excitement in both physical science and engineering. However, the complexity of the new material on the one hand and the absence of a viable theory on the other made further development even more difficult. Therefore, the excitement of the initial period has given way to a more systematic and detailed form of studying when it comes to all aspects of superconductivity. This Special Issue is intended to provide an opportunity to review the current progress in selected superconducting fields. Emphasis is placed on experimental and theoretical studies of new superconductors, advances in theoretical understanding, advances in flux pinning and vortex dynamics studies affecting critical currents, and the development of new methods for material synthesis.

Guest Editor

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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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