Special Issue

Advances in Cuprates and Iron-Based Superconductors: Physics, Properties, and Applications

Message from the Guest Editors

The discovery of superconductivity in cuprates was received with great enthusiasm due to the fact that Tc can exceed the temperature of liquid nitrogen in many cases. Nevertheless, due to issues such as high anisotropy values, superconductor–insulator–superconductor (SIS) grain boundary junction, etc., materials like YBCO or BSCCO have never been fully exploited for superconductivity power applications. Nevertheless, the interest in these materials has always existed. Furthermore, despite having a lower Tc than cuprates, iron-based superconductors (IBSs) exhibit higher Jc and Hc2 values along with lower values of anisotropy and superconductor–normal–superconductor (SNS) grain boundary junction, and thus have been proposed as a valid alternative to cuprates. For more details, please see the Special Issue website at:
https://www.mdpi.com/journal/materials/special_issues/LHCEP6X9XQ

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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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