

Special Issue

Advanced Materials with Strong Electron Correlations

Message from the Guest Editors

Advanced materials with strong electron correlations are a fascinating area of research in condensed matter physics. These materials exhibit unique properties due to the interactions between electrons, leading to exotic phenomena such as unconventional superconductivity, giant magnetoresistance, and metal–insulator transitions. Understanding and controlling these electron correlations is crucial for the development of new technologies in fields such as electronics, energy storage, and quantum computing.

Researchers are exploring various theoretical and experimental approaches to study these materials, including using advanced spectroscopic techniques, quantum simulations, and ultrafast laser measurements.

Overall, the study of advanced materials with strong electron correlations holds great promise for both practical applications and fundamental science, opening up new avenues for technological innovation and discovery in the field of condensed matter physics.

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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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