



Superconducting Materials: Properties and Applications

Guest Editor:

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Message from the Guest Editor

Today, 109 years after the discovery of superconductivity in mercury, the list of known superconductors consists already of thousands of systems, belonging to a variety of structural and chemical families. Even with such extended empirical knowledge, the prediction and design of new superconductors is, at best, challenging, especially in the case of high- T_c materials.

The goal of this Special Issue is to present the recent advances in the understanding of superconducting materials: from the structure–property relationship, ab initio modelling of superconductors, and the prediction of the occurrence of superconductivity, through examples of new materials and families, to the processing and application of superconductors in electrical and electronic devices.

Keywords

- structure–property relationship
- ab initio studies of superconductors and prediction of superconductivity
- processing and applications of superconducting materials
- topological superconductivity and interfacial phenomena
- coexistence and competition of superconductivity with other types of order





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Message from the Editor-in-Chief

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