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

Guest Editor:

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## Message from the Guest Editor

The discovery of superconductivity in cuprates and ironsuperconductors has based led significant to 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** placed is and theoretical studies experimental 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.













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## **Message from the Editor-in-Chief**

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