

Special Issue

New Advance in Superconductor and Superconducting Thin Films

Message from the Guest Editor

Superconductivity in general allows for 100% current transmission without losses. This makes it super valuable resource for sustainability in many aspects. The high-temperature superconducting materials, which will be crucial for the day life applications. Superconducting magnets can be used as high field magnets that can aid in several industrial applications. On the other hand, first generation Bi-2223 tapes and second generation coated conductor (CC) films will be crucial for the development of the superconducting cables in power industry. The main objective of this volume is to summarize the recent advances in material science of high- T_c superconductors and its developments with respect to the superconducting CC thin films. In particular, the topic of interest includes but is not limited to

- Advance in Superconducting materials (Y123, RE123, MgB2, FeSe, etc.,)
- Coated Conductor (CC) tapes and wires
- Critical currents and flux pinning
- Nano-pinning centers, microstructure control
- Magnets for day to life applications
- HTSc high current cables

Guest Editor

Prof. Dr. Muralidhar Miryala
Shibaura Institute of Technology, Tokyo, Japan

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Coatings
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
coatings@mdpi.com

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About the Journal

Message from the Editorial Board

Now more than ever, research is asked to deliver knowledge and technologies to solve the major challenges faced by our society. The development of new materials and devices for (without the ambition to be exhaustive) energy, health and food technology, together with the need for establishing processes that reduce the impact on critical resources and the environment, is indeed in the spotlight of most contemporary research. Surface science and engineering play a key role in this regard, with an incredible potential in delivering new and deep scientific understanding and technical solutions essential to solve most of the major societal challenges.

Coatings is a well-established, peerreviewed, online journal dedicated to the vibrant field of surface science and engineering. Coatings publishes original research articles that report cutting-edge results and review papers that make the point on the hottest research topics.

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Prof. Dr. Wei Pan

State Key Laboratory of New Ceramics and Fine Processing, School of Materials Science & Engineering, Tsinghua University, Beijing 100084, China

Dr. Emerson Coy

NanoBioMedical Centre, Adam Mickiewicz University in Poznań, ul. Wszechnicy Piastowskiej 3, 61-614 Poznań, Poland

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