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Novel Semiconductor Materials for Optoelectronic Applications

Guest Editors:

Dr. Gang Tang

Advanced Research Institute of
Multidisciplinary Science, Beijing
Institute of Technology, Beijing,
China

Dr. Chunbao Feng

School of Science, Chongqing
University of Posts and
Telecommunications, Chongqing
400065, China

Dr. Peng Lv

International Joint Research
Laboratory of New Energy
Materials and Devices of Henan
Province, School of Physics and
Electronics, Henan University,
Kaifeng, China

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Message from the Guest Editors

Dear Colleagues,

Over the past few decades, Li-ion batteries (LIBs), Na-ion batteries (NIBs), and other types of rechargeable batteries have been extensively exploited as energy storage devices for electric and hybrid electric vehicles due to their high power density, long cycle lifetime, and environmental benignity. The introduction of nanostructured materials into next-generation rechargeable batteries has been reported to greatly improve the performance of these energy-storage devices, resulting from the higher chemically active interfaces, shortened ion-diffusion lengths, and improved in-plane carrier-/charge-transport kinetics. In this Special Issue, entitled “Nanocrystalline Battery Materials”, researchers will have the opportunity to publish their novel findings related to recent advances in the application of nanocrystalline materials in various rechargeable batteries, including materials development, device characterization, storage mechanisms, and so on.

Dr. Gang Tang
Dr. Chunbao Feng
Dr. Peng Lv
Guest Editors



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Special Issue



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Editor-in-Chief

Prof. Dr. Alessandra Toncelli

Department of Physics, University
of Pisa, 56126 Pisa, Italy

Message from the Editor-in-Chief

Welcome to *Crystals*, the journal dedicated to the fascinating world of crystallographic research! Crystals are more than mere decorative elements; they hold the key to understanding the fundamental structure of matter. Our mission is to explore the crucial significance of this research across various fields. From medicine to technology, chemistry to geology, crystals play a vital role. Their structure provides insights into new advanced materials, innovative drugs, and groundbreaking technologies. Through *Crystals*, we delve into the microscopic world to discover solutions that will shape the future. Join us on a journey through the *Crystals*, where science merges with beauty and innovation.

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Contact Us

Crystals Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

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