Special Issue

Silicon and Graphene Based Materials and Related Devices

Message from the Guest Editors

Silicon-based solar cell devices and modules currently occupy a lion's share of the PV market, and it has been forecasted that this trend will continue in the foreseeable future. At the same time, graphene has emerged as a promising material for a wide range for energy applications, such as batteries and supercapacitors, which can be attributed to its extremely high surface area to volume ratio. We invite researchers to contribute research articles and review articles. The topic includes, but is not restricted to,

- Passivation materials and passivated contacts for very high-efficiency silicon solar cells;
- Advanced material characterization of silicon PV materials and devices using XRD, SEM, EDS, EELS, TEM, HAADF-STEM, SIMS, RBS, etc.;
- Silicon PV modules: degradation, losses, and reliability study;
- Device simulations to help improve efficiency of silicon solar cells;
- Graphene-based materials for energy storage, such as batteries and supercapacitors;
- Graphene for various energy applications, such as solar panels, fuel cell catalysts, fuel rods for nuclear reactors, and so on.

Guest Editors

Dr. Haider Ali

Dr. Shahzada Qamar Hussain

Dr. Archana Sinha

Dr. Michelle Vaqueiro Contreras

Dr. Anamaria Moldovan

Dr. Hisham Nasser

Deadline for manuscript submissions

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Crystals
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
crystals@mdpi.com

mdpi.com/journal/crystals

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About the Journal

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.

Editor-in-Chief

Prof. Dr. Alessandra Toncelli
Department of Physics, University of Pisa, 56126 Pisa, PI, Italy

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