Special Issue

Emerging Technologies in Nanodevices and Energy Generation Applications

Message from the Guest Editor

Clean energy generation and efficient consumption are becoming significantly important for a sustainable future. Recent research on nanomaterials has enabled the realization of high-performance, energy-efficient nanodevices. Owning to their low dimensionality, extraordinary electrical, optical, thermal, and mechanical properties, nanodevices based on nanomaterials have shown their great potentials in various energy applications. In this Special Issue, emerging nanodevices using novel nanomaterials and their corresponding energy applications are discussed. This includes novel transistor structures, photonic nanodevices, emerging and optimized solar cells, innovative sensors at the nanoscale, emerging nanomaterial synthesis techniques, nanomaterial characterizations, nanodevice simulations and optimizations, and integrated nanodevices and systems. It is my pleasure to invite you to submit a manuscript for this Special Issue. Full papers, communications, and reviews are all welcome.

Guest Editor

Prof. Moh R. Amer

Electrical Engineering Department, University of California Los Angeles, Center of Excellence for Green Nanotechnologies, King Abdulaziz City for Science and Technology, USA

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

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Message from the Editor-in-Chief

Materials (ISSN 1996-1944) was launched in 2008. The journal covers twenty-five comprehensive topics: biomaterials, energy materials, advanced composites, advanced materials characterization, porous materials, manufacturing processes and systems, advanced nanomaterials and nanotechnology, smart materials, thin films and interfaces, catalytic materials, carbon materials, materials chemistry, materials physics, optics and photonics, corrosion, construction and building materials, materials simulation and design, electronic materials, advanced and functional ceramics and glasses, metals and alloys, soft matter, polymeric materials, quantum materials, mechanics of materials, green materials, general. *Materials* provides a unique opportunity to contribute high quality articles and to take advantage of its large readership.

Editor-in-Chief

Prof. Dr. Maryam Tabrizian
1. Department of Biomedical Engineering, Faculty of Medicine and Health Sciences, McGill University, Montreal, QC H3A 2B6, Canada
2. Faculty of Dentistry and Oral Health Sciences, McGill University, 3640 Rue University, Montreal, QC H3A 0C7, Canada

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