Special Issue

Materials for Solar Energy Conversion and Solar Cells

Message from the Guest Editor

In the past few decades, extensive efforts have been employed to synthesize new materials to develop clean energy technologies that satisfy the growing energetic demand and reduce the economic and environmental impacts due to the use of fossil fuels. The aim of this Special Issue is to address new insights into solar energy conversion and, in particular, solar cell applications, thanks to the advanced studies led in the material science field, which covers all the subjects related to physics phenomena comprehension, chemistry application and device fabrication. Particular interest is devoted to solar cells, their component analysis, individual cells and/or complete photovoltaic modules, including their economic aspects and scale-up possibilities. Also photothermal, photochemical and electrochemical devices are highly welcomed, due to the great impact that their applications can imply in reaching the goal of renewable materials exploitation and application. To reach this goal, a synergistic work has to be done by coupling experimental and theoretical approaches. Cutting-edge experimental techniques in combination with theoretical modelling are needed.

Guest Editor

Dr. Micaela Castellino

1. Department of Applied Science and Technology, Politecnico di Torino, 10129 Torino, Italy
2. Center for Sustainable Future Technologies—CSFT@POLITO, Istituto Italiano di Tecnologia—IIT, 10144 Torino, Italy

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

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Message from the Editor-in-Chief

Energies is an international, open access journal in energy engineering and research. The journal publishes original papers, review articles, technical notes, and letters. Authors are encouraged to submit manuscripts which bridge the gaps between research, development and implementation. The journal provides a forum for information on research, innovation, and demonstration in the areas of energy conversion and conservation, the optimal use of energy resources, optimization of energy processes, mitigation of environmental pollutants, and sustainable energy systems.

Editor-in-Chief

Prof. Dr. Enrico Sciubba
Department of Mechanical and Industrial Engineering, University Niccolò Cusano, 00166 Roma, Italy

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