

Special Issue

Novel Optoelectronic Applications of Amorphous and Nanocrystalline Semiconductors

Message from the Guest Editors

It is well known that the electronic and optical properties of the films are strongly influenced by deposition techniques and conditions. While these techniques have reached a stable maturity and quality, due to the large investment in the mass production of a-Si:H solar cells and thin film transistors for active matrix flat panel displays, the same technology has also been demonstrated to be successful in producing new micro/nanocrystalline materials, paving the way for a wide range of novel materials and applications. Micro- and nanocrystalline semiconductors, which are not limited to amorphous silicon and group IV elements but also include alloys, chalcogenide glasses, oxide semiconductors and hybrid perovskites, represent a key technology for low-cost optoelectronic devices for the future, enabling the integration of LEDs, photovoltaic cells, sensors, thin film transistors and other optoelectronic and photonic structures into the future IoT technology paradigm.

Our Special Issue is to present an insight into the recent advances in amorphous and nanocrystalline materials for novel optoelectronic applications. It is our pleasure to invite you to submit a manuscript.

Guest Editors

Prof. Dr. Alessandro Fantoni

1. Centre of Technology and Systems (UNINOVA-CTS) FCT Campus, 2829-516 Caparica, Portugal
2. Instituto Superior de Engenharia de Lisboa (ISEL), R. Conselheiro Emídio Navarro 1, 1959-007 Lisboa, Portugal

Dr. Heinz Christoph Neitzert

Department of Industrial Engineering, University of Salerno, 84084 Fisciano, Italy

Deadline for manuscript submissions

closed (20 October 2022)



Applied Sciences

an Open Access Journal
by MDPI

Impact Factor 2.5
CiteScore 5.5



mdpi.com/si/82255

Applied Sciences
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
appls-ci@mdpi.com

[mdpi.com/journal/
appls-ci](https://mdpi.com/journal/appls-ci)





Applied Sciences

an Open Access Journal
by MDPI

Impact Factor 2.5
CiteScore 5.5



[mdpi.com/journal/
applsci](https://mdpi.com/journal/applsci)



About the Journal

Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

Editor-in-Chief

Prof. Dr. Giulio Nicola Cerullo
Dipartimento di Fisica, Politecnico di Milano, Piazza L. da Vinci 32,
20133 Milano, Italy

Author Benefits

Open Access:

free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility:

indexed within Scopus, SCIE (Web of Science), Ei Compendex, Inspec, CAPlus / SciFinder, and other databases.

Journal Rank:

JCR - Q2 (Engineering, Multidisciplinary) / CiteScore - Q1 (General Engineering)