

## Special Issue

# Applications of Photovoltaic Systems for Sustainable Development Using Highly Efficient Materials, Models, and Intelligent Hybrid Systems

### Message from the Guest Editors

The Special Issue aims to cover a wide range of themes and topics, including, but not limited to:

- Energy-efficient sustainable photovoltaic systems;
- Energy security, policy issues, and mathematical problem solutions for sustainable development;
- Intelligent novel hybrid systems;
- PV-based electric vehicles and drones;
- Hardware implementation of AI-based controllers and their complexity;
- Decision support systems for smart grids;
- PV system mathematical modeling and forecasting applications;
- Novel mathematical theories and intelligent hybrid system modeling methods for photovoltaic systems;
- Multiobjective optimization and its complexity;
- AI-based power converter and MPPT;
- Smart batteries and their complexity;
- Deep and reinforcement learning in renewable energy systems;
- Nature-inspired methods and algorithms in photovoltaic systems;
- High-performance computing in sustainable development;
- Mathematical complexity, prospects, and future perspectives in photovoltaic systems.

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### Guest Editors

Dr. Manoharan Madhwaran  
Prof. Dr. Daniel Tudor Cotfas  
Prof. Dr. Petru Adrian Cotfas

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### Deadline for manuscript submissions

closed (30 June 2023)



## Applied Sciences

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*Applied Sciences*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[applsci@mdpi.com](mailto:applsci@mdpi.com)

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## 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.

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### Editor-in-Chief

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

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