Special Issue

Developing and Implementing Smart Grids: Novel Technologies, Techniques and Models

Message from the Guest Editors

Due to the rapid growth of technologies and communication systems, electricity demand must be supplied and have the highest quality and reliability. On the other hand, due to increasing concerns about the environment, sustainable energies are highly demanded. On this basis, the conventional energy systems should transition into the smart systems to meet the requirements. Novel technologies, techniques and models in the operation and planning of power systems should enable the current systems to move towards the smart grid. To this end, renewable energy resources, energy storage systems, electric vehicles and demand response are key factors of the transition in different aspects of generation, transmission and distribution levels. This Special Issue aims at encouraging researchers to address the technologies, models and solutions to facilitate and speedup the transition into smart grid.

- Power systems
- Smart grids
- Transmission and distribution network
- Renewable energy resources
- Energy storage systems
- Reliability
- Quality
- Demand response
- Flectric vehicles

Guest Editors

Prof. Dr. Pierluigi Siano

Department of Management and Innovation Systems, University of Salerno, 84084 Salerno, Italy

Dr. Miadreza Shafie-khah

Department of Electromechanical Engineering, University of Beira Interior, Calçada Fonte do Lameiro, 6201-001 Covilhã, Portugal

Deadline for manuscript submissions

closed (31 August 2018)



Applied Sciences

an Open Access Journal by MDPI

Impact Factor 2.5 CiteScore 5.5



mdpi.com/si/11542

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

mdpi.com/journal/applsci





Applied Sciences

an Open Access Journal by MDPI

Impact Factor 2.5 CiteScore 5.5



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)

