Special Issue

Smart Distribution Grid Modeling

Message from the Guest Editors

Distribution systems are characterized by great diversity in Europe and worldwide. Common and shared network models are becoming essential in planning and operation studies and in many advanced applications for fully assessing the performances of distribution in response to the main trends in power systems evolution.

Models of general validity or methods for building the model of given networks are required by researchers, system operators, and other power system actors, such as aggregators, microgrid controllers etc. intent on orienting themselves into the new power system scenario.

Contributions on the following topics are welcome:

Customer behaviors
Daily curves
Clustering techniques
Distribution network representation
Use of public data
Representative networks
Synthetic networks
Spatial modeling and GIS analysis
Model aggregation
Network reduction

Guest Editors

Dr. Giuditta Pisano

University of Cagliari, via Marengo 2, 09123 Cagliari, Italy

Dr. Simona Ruggeri

Università degli Studi di Cagliari, Cagliari, Italy



Applied Sciences

an Open Access Journal by MDPI

Impact Factor 2.5 CiteScore 5.5



mdpi.com/si/35167

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

mdpi.com/journal/applsci



closed (30 November 2020)



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 multidimensional 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)

