

Special Issue

Modeling, Control and Optimization for Smart Water Systems

Message from the Guest Editor

With the rise of the Water 4.0 approach, water systems are made smart, thanks to the spread of advanced sensors and actuators throughout the whole plant, as well as their integration in the Industrial Internet of Things network. This unlocks access to a previously inaccessible amount of data, as well as to unprecedented communication capabilities, thus opening up a new range of possibilities for research and development. This Special Issue aims at collecting cutting-edge contributions proposing ways to effectively and efficiently exploit the advantages offered by smart water systems, with the final goal of making water management more sustainable. Both methodological and case-study contributions are welcome. A list of possible topics includes, but is not limited to:

- Optimal design of Smart Water Systems;
- Hydraulic and data driven modeling of Smart Water Systems;
- Development and use of Smart Water Systems digital twins;
- Analysis and modeling of water demand;
- Real time control;
- Pump scheduling;
- Energy recovery;
- Monitoring and control of water quality;
- Leakage detection;
- Fault detection, isolation and recovery;
- Decision support systems.

Guest Editor

Dr. Giacomo Galuppini

Department of Electrical, Computer and Biomedical Engineering,
University of Pavia, 27100 Pavia, Italy

Deadline for manuscript submissions

closed (1 December 2024)



Sustainability

an Open Access Journal
by MDPI

Impact Factor 3.3
CiteScore 7.7



mdpi.com/si/175661

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

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





Sustainability

an Open Access Journal
by MDPI

Impact Factor 3.3
CiteScore 7.7



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



About the Journal

Message from the Editor-in-Chief

I encourage you to contribute a research or comprehensive review article for consideration for publication in Sustainability, an international open access journal which provides an advanced forum for research findings in areas related to sustainability and sustainable development. The journal publishes original research articles, reviews, conference proceedings (peer reviewed full articles) and communications. I am confident you will find the journal contributes to enhancing understanding of sustainability and fostering initiatives and applications of sustainability-based measures and activities.

Editor-in-Chief

Prof. Dr. Steve W. Lyon

School of Environment and Natural Resources, Ohio State University,
Columbus, OH 43210, USA

Author Benefits

Open Access:

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

High Visibility:

indexed within Scopus, SCIE and SSCI (Web of Science), GEOBASE, GeoRef, Inspec, RePEc, CAPlus / SciFinder, and other databases.

Journal Rank:

JCR - Q2 (Environmental Studies) / CiteScore - Q1
(Geography, Planning and Development)