Special Issue

Water Resource Management in Artificial Intelligence and Big Data Analytics

Message from the Guest Editor

The water resources scarcity problem is still challenging due to anthropogenic activities and climate change. Massive water infrastructures, as evidenced by reservoir and inter-basin water transfer, have been built to tackle the temporal–spatial differences of water resources across the world. However, how to operate these complex systems still remains an issue when using the traditional approaches. The innovations of information communication technologies (ICT) have helped in this regard. Monitoring, data analytics, and artificial intelligence are the promising technologies in engineering planning, design, operation, and maintenance management. Innovative technologies could lower the capital and operational cost, secure infrastructure operation, and mitigate greenhouse gas emissions. This Special Issue will explore Big data, AI applications to water supply systems, water transfer systems, and reservoirs, etc, utilizing a cross-discipline approach to ICT and water engineering. This Special Issue will provide valuable information to the readership of *Water*.

Guest Editor

Prof. Dr. Haixing Liu

School of Civil & Hydraulic Engineering, Dalian University of Technology, Dalian 116024, China

Deadline for manuscript submissions

closed (10 April 2025)

Water

an Open Access Journal by MDPI

Impact Factor 3.0
CiteScore 6.0

mdpi.com/si/174263

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

mdpi.com/journal/water

Water

an Open Access Journal by MDPI

Impact Factor 3.0
CiteScore 6.0

mdpi.com/journal/water

About the Journal

Message from the Editor-in-Chief

In the context of global changes, the sustainable management of water cycles, going from global and regional water cycles to urban, industrial and agricultural water cycles, plays a very important role on the water resources and on their relationships with food, energy, biodiversity, ecosystem functioning and human health. *Water* invites authors to provide innovative original full articles, critical reviews and timely short communications and to propose special issues devoted to new technological and scientific domains and to interdisciplinary approaches of the water cycles. We ensure a critical review process and a quick turnaround between submission and final decision.

Editor-in-Chief

Dr. Jean-Luc PROBST
Centre de Recherche sur la Biodiversité l'Environnement (CRBE) UMR CNRS/UPS/INPT/IRD, Centre National de la Recherche Scientifique (CNRS), University of Toulouse, Campus ENSAT, Auzeville Tolosane, Toulouse, France

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, GEOBASE, GeoRef, PubAg, AGRIS, CAPlus / SciFinder, Inspec, and other databases.

Journal Rank:

JCR - Q2 (Water Resources) / CiteScore - Q1 (Aquatic Science)

MDPI