

## Special Issue

# Advances in Agricultural Irrigation Management and Technology

### Message from the Guest Editor

Effective water management is a cornerstone of agricultural sustainability for ensuring food security and environmental resilience. With global water resources under increasing pressure from climate change and population growth, it has become imperative to optimize irrigation efficiency. This Special Issue seeks to highlight how emerging technologies and innovative management strategies can enhance the efficiency of irrigation, reduce water wastage, and promote sustainable agricultural practices. The topics of this Special Issue include, but are not limited to, the following:

- Advanced irrigation techniques and systems;
- Smart irrigation technologies and IoT applications;
- Water use efficiency and conservation methods;
- Sustainable irrigation practices in various climatic conditions;
- Impact of irrigation management on crop yield and quality;
- Integration of remote sensing and GIS in irrigation planning;
- Innovations in water-saving irrigation methods and their applicability across different agricultural settings;
- Research and development into new water-saving and energy-efficient irrigation technologies and equipment.

---

### Guest Editor

Prof. Dr. Xingye Zhu

Research Center of Fluid Machinery Engineering and Technology,  
Jiangsu University, Zhenjiang, China

---

### Deadline for manuscript submissions

20 January 2025



## Water

---

an Open Access Journal  
by MDPI

---

Impact Factor 3.0  
CiteScore 5.8



[mdpi.com/si/209463](https://mdpi.com/si/209463)

*Water*  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[water@mdpi.com](mailto:water@mdpi.com)

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





# Water

---

an Open Access Journal  
by MDPI

---

Impact Factor 3.0  
CiteScore 5.8



[mdpi.com/journal/  
water](https://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 (Water Science and Technology)