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Artificial Intelligence Techniques in Hydrology and Water Resources Management

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Message from the Guest Editors

We seek to gather the latest developments in AI techniques to collate the knowledge about various hydrological processes, improve their prediction, and promote water resource management. Submissions of theoretical studies and state-of-the-art AI practical applications are welcome. Potential topics of interest include, but are not limited to:

- 1. Reviewing AI techniques in hydrology and/or water resources management;
- 2. Introducing new AI techniques that account for the spatial and temporal structure of hydrological data;
- 3. Hydrological process forecasting (e.g., flood, drought, groundwater, evapotranspilation, water temperature, water quality, etc.);
- 4. Solving problems of watershed hydrology, considering either the quantity or quality or both aspects of water;
- 5. Improving water and environmental systems;
- 6. Promoting urban water-energy-food nexus synergies;
- 7. Nowcasting hydrologic time series;
- 8. Modelling flood inundation and risks;
- 9. Reducing computational resources required for field-scale simulations;
- 10. Quantifying uncertainty of hydrological modelling and water quality modelling.







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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 scientific domains and and to interdisciplinary approaches of the water cycles. We ensure a critical review process and a quick turnaround between submission and final decision

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