Special Issue

Advanced Sensing Technologies in Hydraulic Engineering

Message from the Guest Editors

This Special Issue specifically focuses on innovative applications of advanced monitoring technologies in critical hydraulic infrastructures, including dams, underground powerhouses, and water conveyance tunnels, while exploring cutting-edge progress in artificial intelligence-driven data processing algorithms for structural damage identification, performance evaluation, and early warning prediction. Contributions are solicited in (but not limited to) the following areas:

- Advanced monitoring technologies in hydraulic engineering;
- Integrated innovation in intelligent monitoring systems for hydraulic engineering;
- Theoretical and methodological advancements in novel optical fiber sensing and electromagnetic sensing technologies;
- Environmental adaptability and spatial configuration optimization of multi-physical field coupling monitoring systems;
- Intelligent fusion and analytical approaches for heterogeneous monitoring data in hydraulic engineering;
- Early-stage damage identification mechanisms and predictive warning systems for hydraulic structures.

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Message from the Editor-in-Chief

Sensors is a leading journal devoted to fast publication of the latest achievements of technological developments and scientific research in the huge area of physical, chemical and biochemical sensors, including remote sensing and sensor networks. Both experimental and theoretical papers are published, including all aspects of sensor design, technology, proof of concept and application. Sensors organizes Special Issues devoted to specific sensing areas and applications each year.

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