Special Issue

Electrochemical Approaches to Sustainable Water Treatment: Tackling Pollution and Advancing Resource Recovery

Message from the Guest Editor

Industrialization and population growth have intensified water pollution, causing a demand for innovative solutions for sustainable water management. Electrochemical technologies, recognized for their efficiency in pollutant removal and resource recovery, are reshaping wastewater treatment paradigms. For the treatment of many environmental pollutants, such as denitrification and dehalogenation, oxygen-containing anions reduction, refractory organics degradation, heavy metal recovery, emerging pollutants removal, high salinity wastewater treatment, and so on, the electrochemical processes like electro-Fenton, electrooxidation, electroreduction, electrocoagulation, and hybrid systems are gaining traction due to their scalability and environmental compatibility. This Special Issue aims to consolidate cutting-edge research on electrochemical advancements, addressing critical challenges in water and wastewater treatment.

Guest Editor

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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

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