Special Issue

Photovoltaic Sensors for Wastewater Treatment

Message from the Guest Editor

The fast evolution of renewable energies, particularly solar photovoltaic (PV) technology, has led to a proliferation of PV installations worldwide. PV generation systems face challenges and new opportunities in their electronic components and applications. On the other hand, sustainable potable water production is one of the United Nations' sustainable development goals. Research is looking for alternative solutions to enhance the environmental sustainability of wastewater treatment. These facilities, with many chemical and physical parameters, are challenging to monitor and improve their performance. The field of PV sensors and their applications needs real-time monitoring processes that can be used in any location at low cost if possible. The application of the Internet of Things (IoT) can promote the use of this type of sensor. The grand challenge is developing PV sensors with the higher performance required to enable widespread penetration. The scope of the Special Issue highlights advances in materials, properties, device concepts, development, testing, and modeling of sensors based on or applied to photovoltaics for wastewater treatment.

Guest Editor

Prof. Dr. Manuel Fuentes Conde

IDEA Research Group, Electronics and Automation Engineering Department, High Polytechnic School of Linares, University of Jaén Campus Científico-Tecnológico, Avd. Universidad s/n, D-113 23700 Jaén, Spain

Deadline for manuscript submissions

15 December 2025



Sensors

an Open Access Journal by MDPI

Impact Factor 3.5 CiteScore 8.2 Indexed in PubMed



mdpi.com/si/220826

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

mdpi.com/journal/

sensors





Sensors

an Open Access Journal by MDPI

Impact Factor 3.5 CiteScore 8.2 Indexed in PubMed



sensors



About the Journal

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.

Editor-in-Chief

Prof. Dr. Vittorio M. N. Passaro

Dipartimento di Ingegneria Elettrica e dell'Informazione (Department of Electrical and Information Engineering), Politecnico di Bari, Via Edoardo Orabona n. 4, 70125 Bari, Italy

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), PubMed, MEDLINE, PMC, Ei Compendex, Inspec, Astrophysics Data System, and other databases.

Journal Rank:

JCR - Q2 (Instruments and Instrumentation) / CiteScore - Q1 (Instrumentation)