Special Issue

Advancements and Applications of Nanomaterials for Removal of Organic Compounds in Aquatic Environments

Message from the Guest Editors

Nanotechnologies have been firmly established in private households and commercial markets for several years, and their use is becoming increasingly important. This is due to the outstanding properties of nanomaterials such as nanoparticles or nanocomposites. The benefits of nano photocatalysts are not limited to an increased specific surface area; they also exhibit modified material properties that are often more favourable than those of conventional photocatalysts. In most cases, these photocatalysts are used in advanced oxidation processes. However, nanomaterials can also be employed for advanced reduction processes to break down persistent compounds. Furthermore, nanotechnologies are becoming increasingly essential in environmental remediation approaches. This Special Issue is dedicated to the analysis of the recent developments in the field of the removal of persistent compounds from the environment by nanomaterials. Of particular interest are studies related to the development of innovative nanocatalysts and other nanomaterials for use in advanced oxidation processes and advanced reduction processes for the remediation of persistent organic pollutants.

Guest Editors

Dr. Ramona Riedel

Institute of Environmental Science and Environmental Technology, BTU Cottbus-Senftenberg, 03046 Cottbus, Germany

Prof. Dr. Giulio Malucelli

Department of Applied Science and Technology, Politecnico di Torino, I-10129 Torino. Italy

Deadline for manuscript submissions

20 August 2025



Applied Nano

an Open Access Journal by MDPI

CiteScore 4.6



mdpi.com/si/222615

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

mdpi.com/journal/applnano





Applied Nano

an Open Access Journal by MDPI

CiteScore 4.6



About the Journal

Message from the Editor-in-Chief

Editor-in-Chief

Prof. Dr. Angelo Maria Taglietti

Department of Chemistry, University of Pavia, I-27100 Pavia, Italy

Author Benefits

High Visibility:

indexed within Scopus and other databases.

Journal Rank:

CiteScore - Q2 (Materials Science (miscellaneous))

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 14.8 days after submission; acceptance to publication is undertaken in 4.2 days (median values for papers published in this journal in the first half of 2025).

