Special Issue

Advanced Nanomaterials for Photocatalytic Applications

Message from the Guest Editors

Rapid industrialization and human activities have led over the last few decades to severe environmental pollution which has affected a large part of our planet. Nanomaterials-based photocatalytic processes have shown high potential in disinfection of aqueous media by a large number of pollutants, such as dyes. pesticides, pharmaceuticals, toxins, and so on. This special issue aspires to collect regular and review articles focusing on the use of nanomaterials and nanotechnology to advance techniques able to combat against various types of pollutions, based on photocatalytic approaches that are efficient, reliable, environmentally friendly and cost effective. Contributions should include narrow and wide bandgap semiconductors exploiting visible and UV light, as well as new concepts for advancing immobilized photoreactors. Topics include but are not limited to: synthesis and characterization of nanomaterials and hybrid nanostructures (i.e. core/shell) of various dimensionalities; applications of nanomaterials for water disinfection from various type of pollutants (dyes, pharmaceuticals, etc.); slurry and immobilized photocatalysts, etc.

Guest Editors

Dr. Rajkumar Patel

Integrated Science Engineering Division, Energy & Environmental Science and Engineering, Underwood International College, Yonsei University, 85 Songdogwahak-ro, Yeonsu-gu, Incheon, Republic of Korea

Prof. Dr. Spyros N. Yannopoulos

Department of Chemistry, University of Patras, 26500 Patras, Greece

Deadline for manuscript submissions

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

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Editor-in-Chief

Prof. Dr. Angelo Maria Taglietti

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

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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).

