



Efficient and Ecofriendly Chemical Synthesis of Advanced Materials for Energy and Environment

Guest Editors:

Dr. Francesca Deganello

Institute for the Study of
Nanostructured Materials (ISMN)
—Italian National Research
Council (CNR), Via Ugo La Malfa
153, 90146 Palermo, Italy

Dr. Maria Luisa Testa

Institute for the Study of
Nanostructured Materials (ISMN)
—Italian National Research
Council (CNR), Via Ugo La Malfa
153, 90146 Palermo, Italy

Dr. Sergio Gonzalez-Cortes

Inorganic Chemistry Laboratory,
University of Oxford, South Parks
Road, Oxford OX1 3QR, UK

Deadline for manuscript
submissions:

closed (31 October 2023)

Message from the Guest Editors

This Special Issue aims to give an integral perspective on the various synthesis methods of advanced materials, as well as their mechanistic features, advantages, challenges, and utilizations for energy production and environmental protection.

Sustainable chemical synthesis should take into consideration the overall process, from the feedstocks to the materials application, following the principles of a circular chemistry.

Chemists are encouraged to propose their sustainable methodologies for the synthesis of advanced materials for energy- and environment-related applications, considering at least one of the following aspects:

- eco-friendly procedures and the use of non toxic reagent and solvents
- use of waste-derived precursors in the synthesis
- improvement of the reproducibility of the synthesis, as well as its scale up, at least at a laboratory scale
- improvement of the efficiency, in terms of cost, energy and time saving, selectivity and yield.
- waste reduction in the whole synthetic process
- ethical and safety issues in the advanced materials synthesis





an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Matthew Jones
Department of Chemistry,
University of Bath, Claverton
Down, Bath BA2 7AY, UK

Message from the Editor-in-Chief

There are many issues facing society, such as energy/food/water security, plastic pollution, antibiotic resistance, global warming. To solve these (and other issues), scientists and engineers need to work together to tackle these imminent dangers. The field of Green (or Sustainable) Chemistry has been transformed in the last 30 years since Paul T. Anastas and John C. Warner pioneered the now famous “12 Principles of Green Chemistry”. The journal, Sustainable Chemistry (published by MDPI), aims to be one of the go-to journals in the area, publishing cutting-edge research in the area more broadly. The open access model allows our work to reach a broad base of readers from all corners of the world.

Author Benefits

Open Access:— free for readers, with [article processing charges \(APC\)](#) paid by authors or their institutions.

High Visibility: indexed within [ESCI \(Web of Science\)](#), [CAPlus / SciFinder](#), [FSTA](#), and [other databases](#).

Rapid Publication: manuscripts are peer-reviewed and a first decision is provided to authors approximately 31.2 days after submission; acceptance to publication is undertaken in 3.5 days (median values for papers published in this journal in the first half of 2024).

Contact Us

Sustainable Chemistry Editorial
Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/suschem
suschem@mdpi.com
[X@Suschem_MDPI](#)