

Special Issue

Energy and New Materials for Sustainable Water and Wastewater Treatment

Message from the Guest Editors

Due to the interdependence of water and energy, a huge amount of energy is consumed to produce clean water and vice versa. Thus, further research has been focused on engineering novel materials and energy harvesting in order to achieve (i) energy sufficiency in water/wastewater treatment and membrane process and (ii) sustainable bioelectrochemical systems that can simultaneously produce bioenergy and wastewater treatment. For this, diverse approaches incorporating nanocomposite with multifunctionality have been actively employed to developing novel membrane material, water/wastewater treatment systems, and electrode material in various types of bioelectrochemical systems, such as microbial electrolysis cells.

In this regard, the Special Issue invites all the multidisciplinary studies related to water–energy nexus technologies on process design and material fabrication in energy-efficient water/wastewater treatment, membrane process, energy recovery from wastewater treatment, and bioelectrochemical systems in both academia and industry. Original research and studies with empirical, theoretical, computational works, and review papers are welcomed.

Guest Editors

Prof. Dr. Kyu-Jung Chae

Department of Environmental Engineering, Korea Maritime and Ocean University (KMOU), 727 Taejong-ro, Yeongdo-gu, Busan 49112, Republic of Korea

Dr. Jieun Lee

Department of Environmental Engineering, Korea Maritime and Ocean University (KMOU), 727 Taejong-ro, Yeongdo-gu, Busan 49112, Korea

Deadline for manuscript submissions

closed (30 June 2019)



Energies

an Open Access Journal
by MDPI

Impact Factor 3.2
CiteScore 7.3



mdpi.com/si/20592

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

[mdpi.com/journal/
energies](https://mdpi.com/journal/energies)





Energies

an Open Access Journal
by MDPI

Impact Factor 3.2
CiteScore 7.3



[mdpi.com/journal/
energies](https://mdpi.com/journal/energies)



About the Journal

Message from the Editor-in-Chief

Energies is an international, open access journal in energy engineering and research. The journal publishes original papers, review articles, technical notes, and letters. Authors are encouraged to submit manuscripts which bridge the gaps between research, development and implementation. The journal provides a forum for information on research, innovation, and demonstration in the areas of energy conversion and conservation, the optimal use of energy resources, optimization of energy processes, mitigation of environmental pollutants, and sustainable energy systems.

Editor-in-Chief

Prof. Dr. Enrico Sciubba

Department of Mechanical and Industrial Engineering, University
Niccolò Cusano, 00166 Roma, 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), Ei Compendex, RePEc, Inspec, CAPlus / SciFinder, and other databases.

Journal Rank:

CiteScore - Q1 (Control and Optimization)