

Topical Collection

Carbon-Based Materials for Hydrogen Production, Storage and Conversion

Message from the Collection Editors

H₂ is considered to be the ideal carbon-free energy carrier for stationary, mobile, and portable applications, in addition to being the most promising alternative to fossil fuel combustion. Nanoporous carbons and novel composites thereof could play a key role in the development of H₂ technologies. Even more attractive and promising carbonaceous materials have emerged in recent years, including 0D, 1D, 2D, and 3D nanostructures and novel nanocomposites. This Special Issue will highlight the implementation of different carbons and composite structures produced in various forms for advanced applications related to H₂ generation, solid-state H₂ storage, and H₂ conversion.

Collection Editors

Dr. Nikolaos Kostoglou

Department of Materials Science, Montanuniversität Leoben, Leoben, Austria

Dr. Claus Rebholz

Department of Mechanical and Manufacturing Engineering, University of Cyprus, Nicosia, Cyprus



C

an Open Access Journal
by MDPI

Impact Factor 2.9
CiteScore 3.4



mdpi.com/si/30115

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

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





C

an Open Access Journal
by MDPI

Impact Factor 2.9
CiteScore 3.4



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



About the Journal

Message from the Editor-in-Chief

Editor-in-Chief

Prof. Dr. Craig E. Banks
Faculty of Science and Engineering, Manchester Metropolitan
University, Chester Street, Manchester M1 5GD, UK

Author Benefits

High Visibility:

indexed within ESCI (Web of Science), Scopus, CAPlus /
SciFinder, and other databases.

Journal Rank:

CiteScore - Q2 (Environmental Science (miscellaneous))

Rapid Publication:

manuscripts are peer-reviewed and a first decision is
provided to authors approximately 24.3 days after
submission; acceptance to publication is undertaken in 3.9
days (median values for papers published in this journal in
the first half of 2025).