Special Issue

Emerging Novel Carbon Technologies for Battery Systems

Message from the Guest Editor

This Special Issue presents cutting-edge advancements in carbon technologies for energy storage, with a focus on Li-ion and Zn-ion batteries. As the need for high-performance, safe, and sustainable energy solutions intensifies, carbon materials such as graphene, carbon nanotubes, carbon nanofibers, graphite, and other graphitic materials are proving essential. These materials significantly enhance conductivity, stability, and capacity. This Special Issue invites research on innovative carbon-based electrodes, hybrid materials, and mechanistic studies that advance battery performance. Future contributions may extend to emerging battery systems like Na-ion and K-ion systems, aiming to offer critical insights and propel the development of next-generation energy storage technologies.

Guest Editor

Dr. Sireesha Pedaballi

Department of Materials and Mechanical Engineering, Washington State University, Pullman, WA 99164, USA

Deadline for manuscript submissions

closed (15 April 2025)

C

an Open Access Journal by MDPI

Impact Factor 2.9
CiteScore 3.4

mdpi.com/si/213812

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

mdpi.com/journal/carbon

C

an Open Access Journal by MDPI

Impact Factor 2.9
CiteScore 3.4

mdpi.com/journal/carbon

MDPI

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).