



Electrode Materials for Electrochemical Supercapacitors

Guest Editors:

Dr. John Anthuvan Rajesh

School of Chemical Engineering,
Yeungnam University, Gyeongsan
712-749, Republic of Korea

Dr. Aravindha Raja Selvaraj

Information Material & Device
Laboratory (IMDL), Advanced
Materials Science & Engineering,
Sungkyunkwan University
(SKKU), Suwon-si 16419,
Gyeonggi-do, Republic of Korea

Deadline for manuscript
submissions:

closed (15 January 2024)

Message from the Guest Editors

Dear Colleagues,

Energy storage is a vital component of the energy system due to the enormous energy requirements of modern society. Three primary energy storage devices that can store energy include batteries, fuel cells, and supercapacitors. Of these, supercapacitors (SCs) or electrochemical capacitors have great potential in portable electronics, power grids, hybrid electric vehicles, and so on. Generally, electrochemical supercapacitors' performance relies on the physical and electrochemical properties of their electrode materials. Given the increasing demand for supercapacitors, developing corresponding electrode materials that are richer in faradaic reactions, valence states, longstanding stability, and earth abundance is necessary. Therefore, this Special Issue focuses on new electrode materials preparation and their application in electrochemical supercapacitors. Potential topics include, but are not limited to:

- Electrical double layer capacitor-type electrode materials;
- Pseudocapacitor-type electrode materials;
- Battery-type electrode materials;
- Asymmetric/Hybrid supercapacitors;
- Hierarchical materials for supercapacitors.





an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Karim Zaghib

Department of Chemical and
Materials Engineering, Concordia
University, Montréal, QC H3G
1M8, Canada

Message from the Editor-in-Chief

Take the opportunity to publish your original scientific work or a review paper concerning battery materials, battery technology or battery application within this new open access journal. Along with material science, the journal also addresses engineering and multidisciplinary research topics, such as cell and system design or storage system integration. Publishing proffers visibility for the benefit of other experts and facilitates discussion of the research results within the field. You are invited to publish your work, read published papers and to participate in topical discussions.

Author Benefits

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

High Visibility: indexed within [Scopus](#), [SCIE \(Web of Science\)](#), [Inspec](#), [Ei Compendex](#), [CAPlus / SciFinder](#), and [other databases](#).

Journal Rank: JCR - Q2 (Electrochemistry) / CiteScore - Q2 (Electrical and Electronic Engineering)

Contact Us

Batteries Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

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

mdpi.com/journal/batteries
batteries@mdpi.com
[X@batteriesmdpi](#)