



an Open Access Journal by MDPI

# **High-Capacity Cells and Batteries for Electric Vehicles**

Guest Editors:

### Prof. Dr. Lluc Canals Casals

Department of Project and Construction Engineering, Universitat Politècnica de Catalunya (UPC), 08034 Barcelona, Spain

### Prof. Dr. Marcel Macarulla Marti

Group of Research and Innovation in Construction (GRIC), Department of Project and Construction Engineering, Universitat Politècnica de Catalunya (UPC), 08034 Barcelona, Spain

### Dr. Alberto Gómez Núñez

Eurecat - Centre Tecnològic de Catalunya, Unit of Waste, Energy and Environmental Impact, Av. Universitat Autònoma, 23, 08290, Cerdanyola Del Vallès, Spain

Deadline for manuscript submissions: closed (28 May 2021)



mdpi.com/si/55576

### Message from the Guest Editors

This Special Issue aims to evaluate several issues concerning high-capacity batteries, and papers are welcome if they analyze one or more of these topics or respond to these questions:

- Upcoming battery technologies: analyzing their relevant benefits but also presenting their shortage or less performant issues;
- From cell tests to battery;
- New packaging strategies and configurations;
- Weight versus consumption and overall performance of electric vehicles;
- The role of battery management systems in maximizing the capacity of batteries;
- Ageing and lifespan analysis. Higher capacity means fewer cycles and, thus, longer lifespan in real applications;
- End of life;
- Beyond the electric vehicle:
  - Circular economy strategies and battery second life;
  - Recycling;
- Environmental impact;
- Avoiding the use of critical and/or toxic materials;
- When will capacities stop increasing?
- The charge of high capacity electric vehicle batteries;

ecla.sue

• Reviews and comparatives of technologies.

Prof. Dr. Lluc Canals Casals Prof. Dr. Marcel Maca.

Dr. Alberto Gómez Nu





an Open Access Journal by MDPI

# **Editor-in-Chief**

#### Prof. Dr. Enrico Sciubba

Department of Mechanical and Aerospace Engineering, University of Roma Sapienza, Via Eudossiana 18, 00184 Roma, Italy

### 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.

# **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)

## **Contact Us**

*Energies* Editorial Office MDPI, Grosspeteranlage 5 4052 Basel, Switzerland Tel: +41 61 683 77 34 www.mdpi.com mdpi.com/journal/energies energies@mdpi.com X@energies\_mdpi