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## Electrochemistry and Lithium Batteries

Guest Editors:

**Dr. Francesca De Giorgio**

National Research Council of Italy—Institute for the Study on Nanostructured Materials (CNR—ISMN), Via Piero Gobetti 101, 40129 Bologna, Italy

**Dr. Morteza Rahmanipour**

Manz Italy Srl, Via S. Lorenzo, 19, 40037 Sasso Marconi (BO), Italy

Deadline for manuscript submissions:

**closed (25 February 2022)**

### Message from the Guest Editors

Lithium batteries are one of the most important enabling technologies for the green energy transition that contribute enormously to numerous UN Sustainable Development Goals.

The huge battery demand calls for next-generation (Gen 3b, Gen 4 and Gen 5) lithium-ion (LIBs), lithium-metal and solid-state batteries that exhibit higher performances than commercial LIBs in terms of improved safety, sustainability, energy and power density and lower costs.

Electrochemistry plays a fundamental role in the entire battery value chain, from raw materials to recycling, for the development of new electrode materials, electrolytes, cell components (e.g., binders, conductive agents, separators), study of the electrode/electrolyte interface, modelling and multiscale simulations, sustainable electrode manufacturing and recycling processes, characterisation techniques, diagnostic tools, and new cell designs of future batteries.

This Special Issue will collect the most recent developments and emerging trends in the field of next-generation lithium battery technologies.



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# Special Issue



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## 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.

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*Energies* Editorial Office  
MDPI, St. Alban-Anlage 66  
4052 Basel, Switzerland

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