Special Issue

Advanced Energy Materials and Batteries Technology

Message from the Guest Editors

The development of lithium-ion batteries has had a transformative impact on our society. Among all feasible rechargeable battery technologies developed so far, lithium-ion batteries have been found to have the highest energy density, which has led to the widespread adoption of hybrid electric and plug-in electric automobiles. Some countries have set a goal for the complete transition to electric vehicles within the next ten years.

Carbon materials, such as graphene, carbon nanotubes, activated carbon, and porous carbon, provide controllable transmission channels for ions and electrons by virtue of their 2D and 3D porous structures, which increase the material conductivity and ion diffusion speed. In the last few years, with the development of advanced science and technology, more and more attention has been paid to biomass carbon materials and green and renewable resources. They have the advantages of structural diversity, adjustable physical and chemical properties, low price, huge reserves, environmental friendliness, and considerable economic value, which is used as an electrode material and electrode material additive and is widely used in the battery industry.

Guest Editors

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I encourage you to contribute a research or comprehensive review article for consideration for publication in *Sustainability*, an international Open Access journal which provides an advanced forum for research findings in areas related to sustainability and sustainable development. *Sustainability* publishes original research articles, review articles and communications. I am confident you will find the journal contributes to enhancing understanding of sustainability and fostering initiatives and applications of sustainability-based measures and activities.

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