Special Issue

Advanced Battery Safety Technologies: From Materials to Systems

Message from the Guest Editors

The world's growing need for energy storage, fueled by electric cars and renewable energy, demands faster progress in battery technology, especially in making them safer. This Special Issue is essential to tackle this challenge. Covering everything from the basic science of materials (with a focus on safety) to how batteries are designed as systems, including how they're modeled, what makes them fail, thermal control, designing for safety, and using safe and sustainable materials, this publication will encourage experts from different fields to work together and speed up breakthroughs in battery safety. It will be a key resource for researchers, engineers, and policymakers, helping create safer, more efficient, and eco-friendly batteries. This Special Issue will showcase the latest research across the whole battery process, from making new materials with inherent safety to designing smart battery management systems with advanced control and improving manufacturing with strict safety rules. By bringing together all this safety-focused knowledge, the journal aims to inspire new ideas and guide future research, ultimately leading to a truly safe and sustainable energy future.

Guest Editors

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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.

Editor-in-Chief

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