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## Advanced Lithium-Based Battery Materials for Electric Vehicles

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### Message from the Guest Editors

The development of advanced lithium-ion batteries (LIBs) has emerged as a critical area of research due to the pressing need for sustainable and environmentally friendly energy solutions. These developments are especially true in the automotive industry, which has rapidly begun adapting green and efficient LIB technologies within the past decade. However, despite this trend, there is still an ever-increasing need to utilize higher-performing materials (typically anodes and cathodes) to meet future energy demands.

To further advance the scientific understanding of advanced LIB materials, this Special Issue will explore the following topics:

- The latest advancements in LIB technology
- The manufacturing processes used for LIB fabrication,
- The environmental impact of lithium-ion battery production
- The recycling methods of LIBs
- Safety issues related to lithium-ion batteries
- Growing trends of LIB-based electric vehicles and the challenges facing the industry in terms of scaling up production and reducing costs.
- Challenges involved in achieving a sustainable and cost-effective recycling process.
- The future of lithium-ion batteries

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## Message from the Editor-in-Chief

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