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Fueling the Future: Chemical Engineering Approaches in Ceramic Materials for Energy Storage

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Message from the Guest Editors

Dear Colleagues,

In the pursuit of sustainable energy solutions, chemical engineering plays a crucial role in developing innovative approaches for energy storage. This special issue explores the potential of ceramic materials integrated with chemical engineering techniques for clean and efficient energy. Ceramic materials offer promising thermal and chemical stability for energy storage. Researchers optimize their composition, structure, and synthesis, and engineer surface properties to enhance performance and reliability. The combination of chemical engineering and ceramics enables exciting advancements in batteries and supercapacitors, enhancing energy storage capacity while addressing cost, safety, and environmental challenges. Fueling the future with chemical engineering approaches in ceramic materials holds the potential to revolutionize renewable energy systems, promote sustainability, and reduce fossil fuel dependence. Ongoing research and technological advancements are unlocking new horizons in clean energy storage, paving the way for a brighter, greener future.