

Special Issue

Ferroelectric/Dielectric Materials for Energy Storage Applications

Message from the Guest Editor

Owing to the global energy crisis and environmental pollution, effective energy storage has become a hot topic being studied all over the world. Although batteries and electrochemical capacitors possess a high energy density, they suffer from low power density. In contrast, dielectric capacitors exhibit a relatively high power density, which can be used for electromagnetic catapults, military weapons, new energy vehicles and other pulsed power systems. Unfortunately, the conflicts between the polarization and the maximum applied electric field impede the improvement of energy storage performance and the applications of dielectric capacitors. Therefore, it is urgent to develop dielectric capacitors with high energy storage density and efficiency.

Guest Editor

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