FERROELECTRIC ENERGY STORAGE SOLID STATE DIELECTRIC

BaTi 1-x Mg x O 3, x = 0.00, 0.03, 0.05, 0.07, 0.10 ceramics have been synthesized by the solid-state reaction method.The effect of Mg substitution on the structural, dielectric, ???

High-entropy perovskite ferroelectric ceramics have excellent temperature stability, low dielectric loss, good dielectric properties, and simple structure, and currently have good ???

The study of dielectric behavior is very significant because of its potential application in the field of ferroelectric industries and energy storage devices. The dielectric constant and ???

By optimizing x values via high energy storage densities, the compositions of x = 0 and x = 0.3 were chosen and their dielectric, ferroelectric, and energy storage properties were investigated ???

Dielectric, ferroelectric and energy storage properties of lead-free (1-x)Ba 0.9 Sr 0.1 TiO 3-xBi(Zn 0.5 Zr 0.5) (Zn 0.5 Zr 0.5)O 3 (BST-xBZZ) solid solutions, which were ???

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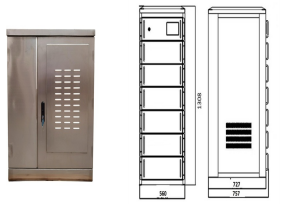

Electrostatic dielectric capacitors with ultrahigh power densities are sought after for advanced electronic and electrical systems owing to their ultrafast charge-discharge capability. However, low energy density resulting from low ???

A multiscale regulation strategy has been demonstrated for synthetic energy storage enhancement in a tetragonal tungsten bronze structure ferroelectric. Grain refining and second ???

Specifically, using high-throughput second-principles calculations, we engineer PbTiO 3 /SrTiO 3 superlattices to optimize their energy storage performance at room temperature (to maximize density and release efficiency) ???

The improvement in energy storage performance of ferroelectric (FE) materials requires both high electric breakdown strength and significant polarization change. The phase-field method can ???

The introduction of linear dielectrics (such as SrTiO 3 and CaTiO 3, abbreviated as STO and CTO, respectively) is an effective method to enhance the dielectric energy storage ???

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Dielectric, ferroelectric, and energy storage properties of BNBTA-xSLZT lead-free ceramics. Author links open overlay panel Han-li Lian a, Meng Shi a, Sha Lv a, Li-na Liu b, Xiao-ming ???

The ferroelectric, energy storage, piezoelectric, and electrostrictive properties of the Ba 1-x Sr x TiO 3 (BST) ceramic system for different Sr contents was synthesized using the ???

The (Ba 1-x Li x)TiO 3 lead-free energy-storage ceramics (x = 0.01, 0.02, 0.04, 0.06, 0.08, 0.10) were synthesized by conventional solid-state method, and the microstructure, ???