

Accordingly, work to exploit multilayer ceramic capacitor (MLCC) with high energy-storage performance should be carried in the very near future. Finding an ideal dielectric material with ...

Enhancing the energy storage properties of dielectric polymer capacitor films through composite materials has gained widespread recognition. Among the various strategies ...

Abstract Dielectric capacitors have garnered significant attention in recent decades for their wide range of uses in contemporary electronic and electrical power systems. The integration of a ...

Our study provides a new and widely applicable platform for designing high-performance dielectric energy storage with the strategy exploring the boundary among different ...

Recently various ferroelectrics have been studied to meet the requirements of dielectric energy storage [6] and TTB are regarded as promising candidates [7], [8], [9]. The ...

A polymer with high breakdown strength, low dielectric loss, great scalability, and reliability is a preferred dielectric material for dielectric capacitors. However, their low ...

Abstract Dielectric capacitors with a high operating temperature applied in electric vehicles, aerospace and underground exploration require dielectric materials with high ...

It should be noticed that as the other crucial factor for energy density, the dielectric permittivity is also vital on the performance of energy-storing devices in particular at ...

Developing dielectric capacitors with robust energy storage capabilities across a broad temperature range, especially in high-temperature environments, remains a formidable ...

