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## Dielectric Ceramics for Capacitor Energy Storage

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### Message from the Guest Editor

Dear Colleagues,

Over the past decade, extensive efforts have been devoted to the development of high-performance lead-free dielectric capacitors, including ferroelectric ceramics, composite ceramics, and multilayer capacitors. For material systems, the dimensional engineering of the grain and electrical domains played an important role. The finer the ceramic grains, the higher the breakdown strength, which brings KNN-based ceramics with submicron grains into the hotspot of research. Relaxor ferroelectric materials with nanoscale electrical domains have also occupied most of the energy storage field. Recently, the strategy of introducing relaxor ferroelectrics into antiferroelectric systems, to reduce the electric domain size and improve the energy storage performance, has also been proven to be effective. This implies great potential for the dimensional engineering of electrical domains to improve the performance of antiferroelectric systems, which could open up a new chapter in antiferroelectric ceramics for energy storage. Both academic and industry experts will be interested in this Special Issue of Crystals.



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# Special Issue



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## Message from the Editor-in-Chief

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