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Ferromagnetic and Ferroelectric Materials: Synthesis, Applications, and Techniques (Second Edition)

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Message from the Guest Editor

The aim of this Special Issue, “Ferromagnetic and Ferroelectric Materials: Synthesis, Applications, and Techniques”, is to provide updated information regarding novel preparation techniques of ferroelectric and ferromagnetic systems and to understand the physics of ferroelectric and ferromagnetic surfaces in conjunction with emerging theoretical models. Another purpose is to explore the relationship between charge transfer and screening, compensation mechanisms, interface band alignment, and spin ground state and the ferroelectric as well as ferromagnetic order. We will discuss theoretical and experimental aspects of different mechanisms and disclose their impacts on device functionality. We will focus on the challenges involving material modeling, process engineering, and application in conventional and organic–inorganic multiferroic systems. Theoretical perspectives, together with novel preparation and investigation approaches of one-, two-, and three-dimensional ferroic materials, including powders, thin films, heterostructures, ceramics, and composites, are welcomed.



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Special issue



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Message from the Editor-in-Chief

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