

연구 발표 초록

초청강연(Plenary Lecture)

(PL-1)

Fabrication of Anodic Aluminum Oxide Membrane and Phase Transitions of Template Synthesized PbTiO₃ Nano-structures

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We will report on ⁽¹⁾the fabrication of anodic aluminum oxide membrane and on ⁽²⁾the application of sol-gel template synthesis to the investigation of size-induced ferroelectric phase transitions in the lead titanate (PbTiO₃) nanotubes and nanofibers. The phase transition was monitored through the comparison of bulk powders and the nanostructured materials using electron diffraction, X-ray diffraction, Raman spectroscopy, differential scanning calorimetry, and second harmonic generation (SHG).