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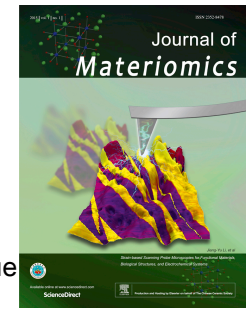

Ordered coalescence of nano-crystals in alkaline niobate ceramics with high remanent polarization

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Graphical Abstract

Ordered coalescence of nano-crystals in alkaline niobate ceramics with high remanent polarization

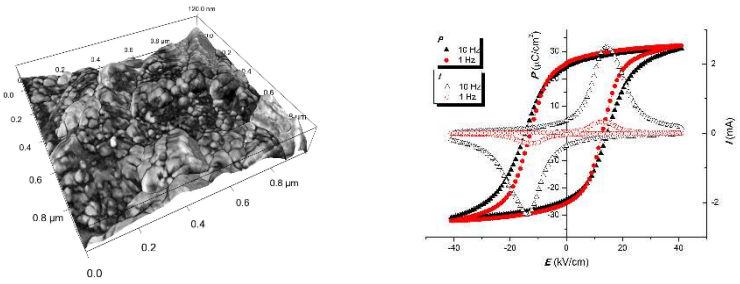
Zhijian Shen,*[a,c] Daniel Grüner,[a] Mirva Eriksson,[a] Lyubov M Belova,[b] Ce-Wen Nan[c] and Haixue Yan[d]

[a]Department of Materials and Environmental Chemistry, Arrhenius Laboratory, Stockholm University, 10691, Stockholm, Sweden

[b]Department of Materials Science and Engineering, Royal Institute of Technology, 100 44 Stockholm, Swede

[c]School of Materials Science and Engineering, Tsinghua University, Beijing 100084, China

[d]School of Engineering and Materials Science, Queen Mary University of London, Mile End Road, London, E1 4NS, UK



We report significantly enhanced ferroelectric remanent polarization (P_r), of alkaline niobite $Na_{0.5}K_{0.5}NbO_3$ (NKN) prepared by Spark Plasma Sintering (SPS). The significantly enhanced ferroelectric P_r of NKN was attributed to nanoscale sub-boundaries, which stimulated the dynamics of ferroelectric domain formation and switching.