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

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#### ACCEPTED MANUSCRIPT

**Graphical Abstract** 

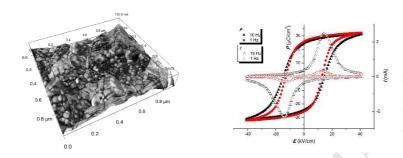
#### Ordered coalescence of nano-crystals in alkaline niobate ceramics with high remanent

#### polarization

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We report significantly enhanced ferroelectric remanent polarization ( $P_r$ ), of alkaline niobite Na<sub>0.5</sub>K<sub>0.5</sub>NbO<sub>3</sub> (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.

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