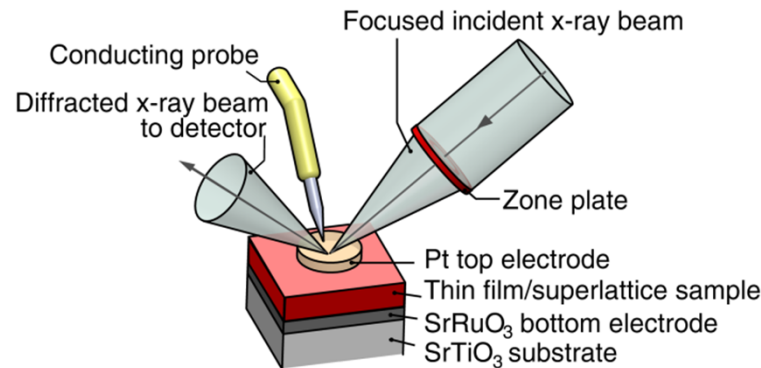


Perovskite dielectrics in high electric fields and at large strains

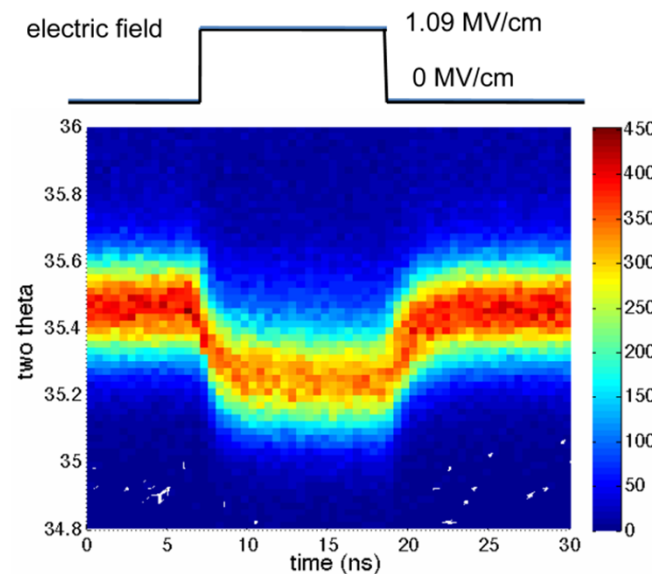
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OISE-0844424

- Complex oxide materials in non-equilibrium conditions: high electric fields and large piezoelectric strains
- Phase transitions driven by large electric fields
- Evolution of the strain and symmetry in the component layers of superlattices
- Electrostriction
- National laboratory and international collaborative activities



In situ x-ray microdiffraction probes for complex oxide capacitors.



Time-resolved diffraction with a BiFeO₃ thin film. The 2θ angle of is decreased by piezoelectric electric expansion during the 12 ns electric field pulse.

