

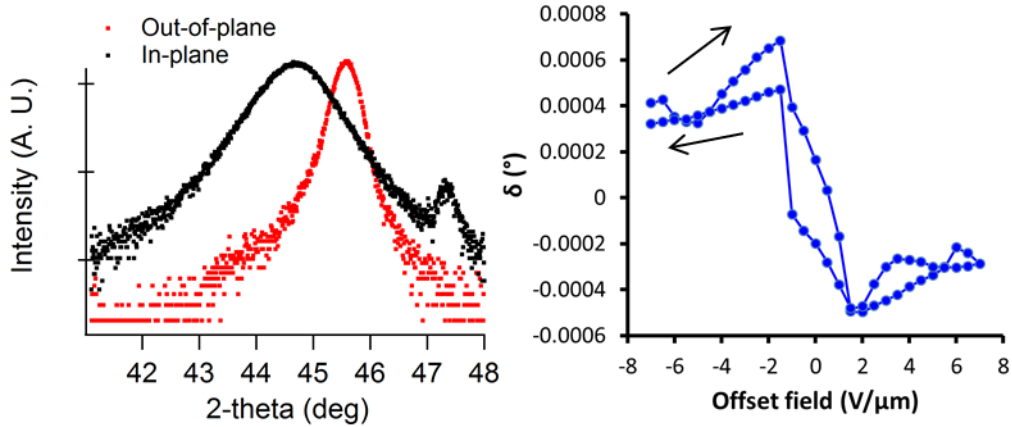
Atomic Layer Deposition of Electro-optically Active Ferroelectric Barium Titanate Films

Edward L. Lin,¹ J. Elliot Ortmann,² Stefan Abel,³ Agham B. Posadas,² Jean Fompeyrine,³ Alexander A. Demkov,² John G. Ekerdt¹

¹Department of Chemical Engineering, The University of Texas at Austin, Austin, Texas 78712, USA

²Department of Physics, The University of Texas at Austin, Austin, Texas 78712, USA

³IBM Research – Zurich, CH-8803 Rueschlikon, Switzerland



Left: in-plane and out-of-plane XRD scans of a 40-nm BTO film. Results indicated an in-plane *c*-axis oriented BTO film. **Right:** the results from electro-optical measurement of the same BTO film, plotted as rotation in polarization of light transmitted through the BTO film (δ) with respect to electric field applied to the film. Arrows indicate voltage sweep directions.