DMR1055413 CAREER:Engineered Ferroic Superlattices for Science, Technology and Education
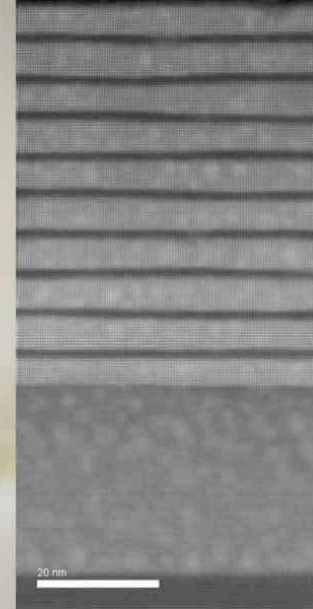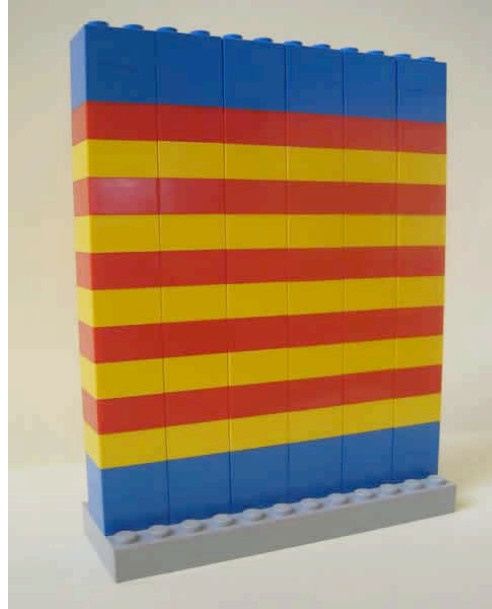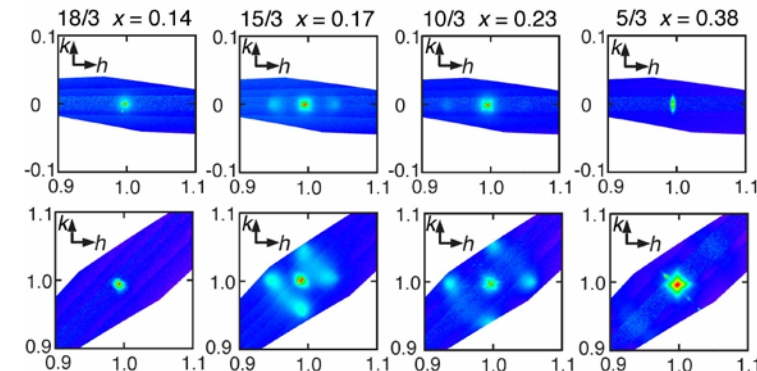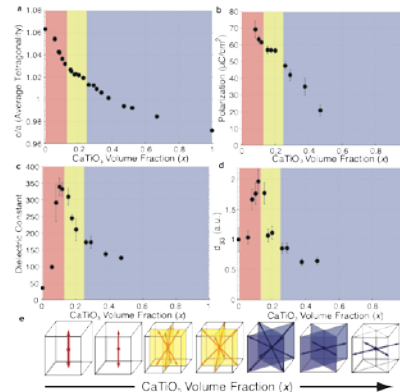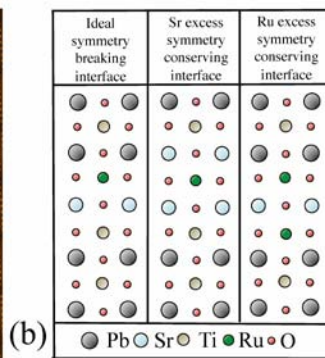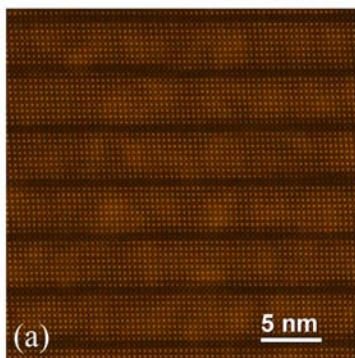

We use off-axis RF Magnetron sputtering to make very finely layered ferroelectric superlattices, which we characterize by XRD, TEM, AFM, electrical measurements, etc. We are also heavy users of the NSLS and the CFN at BNL.

Recent Research Highlights: $PbTiO_3/SrRuO_3$ superlattices with compositionally broken inversion symmetry
$PbTiO_3/CaTiO_3$ superlattices with engineered polarization rotation