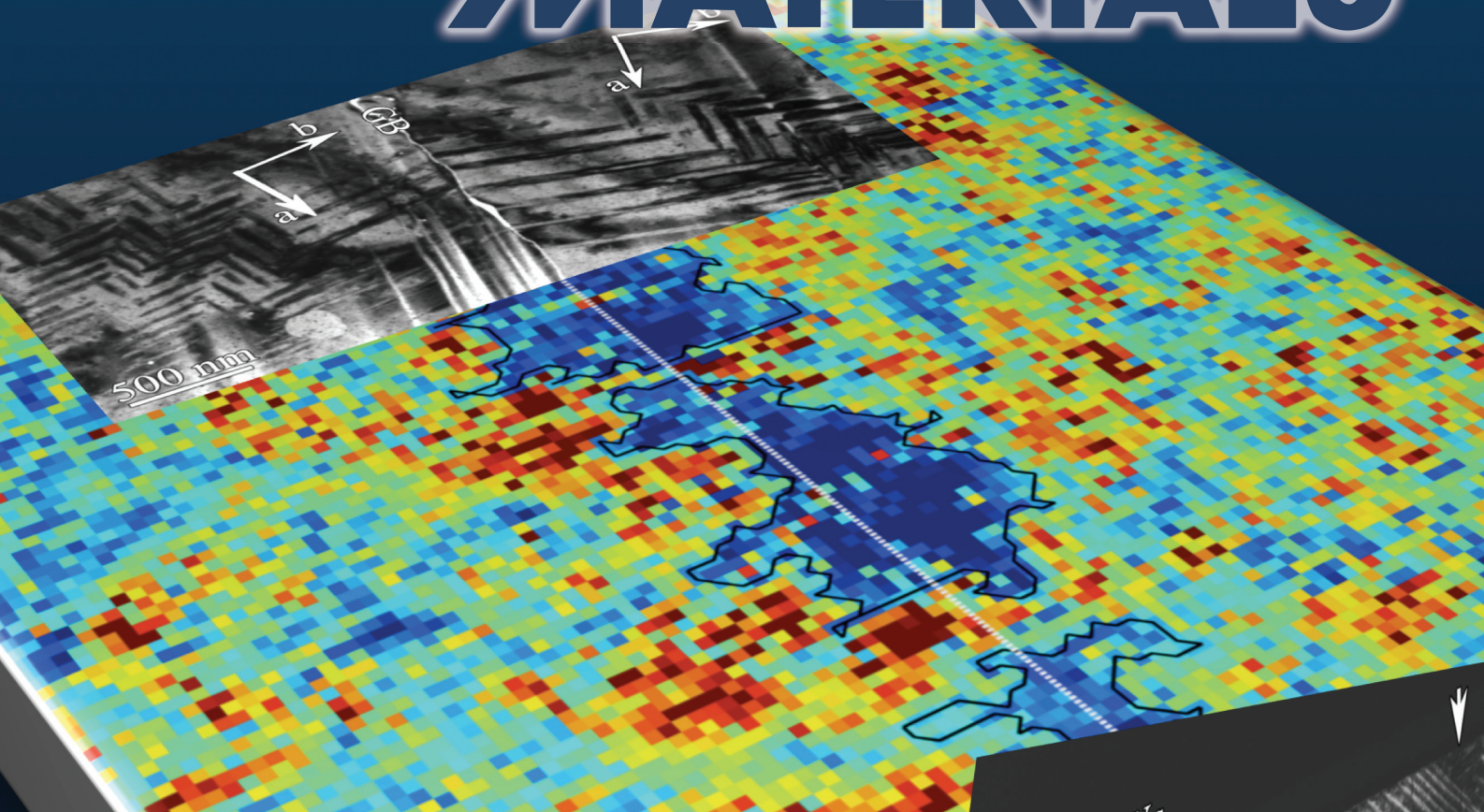


ADVANCED FUNCTIONAL MATERIALS



PIEZOELECTRICS

S. Trolier-McKinstry and co-workers investigate the interaction between domain walls and a single grain boundary by comparing measurements of the local piezoelectric nonlinearity to domain structure. The two electron micrographs show the domain structure of the film, while the colored image is a map of the piezoelectric nonlinear response across a single grain boundary in a ferroelectric film. A minimum in the nonlinearity observed at the grain boundary is correlated to a change in the domain structure.

