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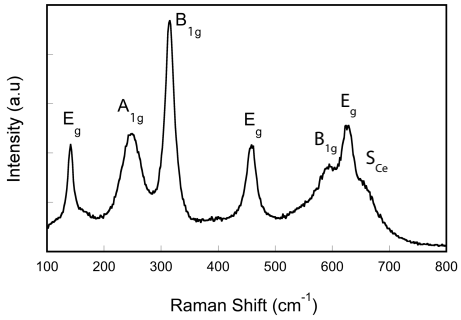
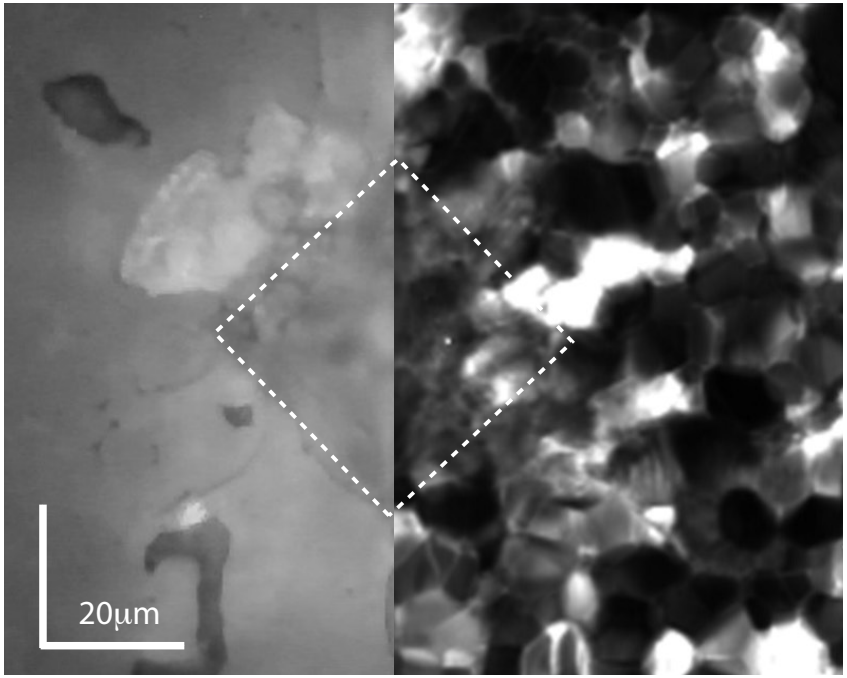
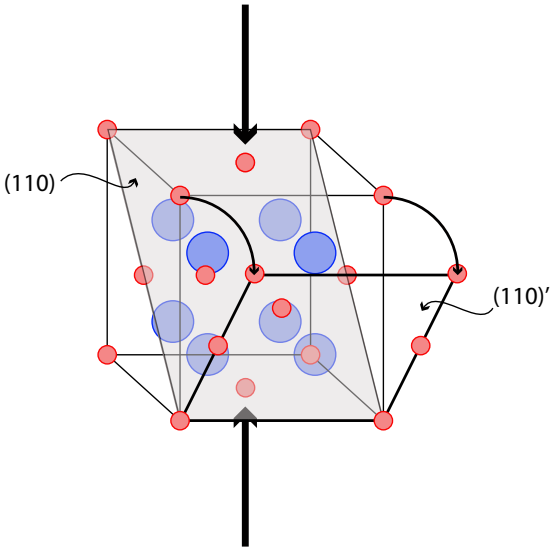
"*In situ* toughening of high temperature ceramics"



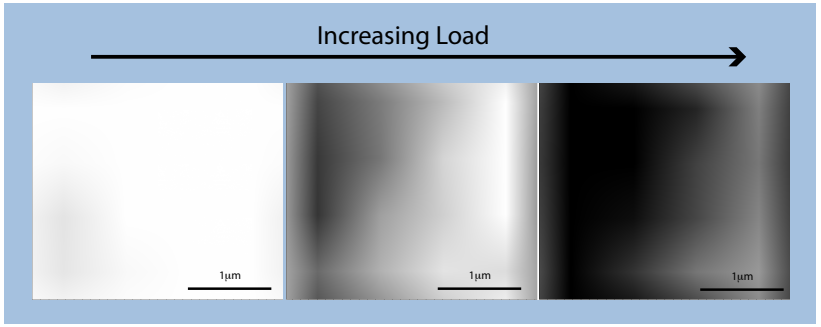
Polarized Raman spectroscopy allows us to observe ferroelastic switching nondestructively



Ferroelastic toughening is a process by which a ceramic can increase its toughenss through the formation of twin boundaries and spontaneous strains under loading.



Raman can be used to observe domain boundary motion



Polarized Raman spectroscopy provides a tool to evaluate the process of FE switching in high temperature ceramics and evaluate their effectiveness

A.M. Bolon and M.M. Gentleman, *J. Am. Ceram. Soc. 2011*