Dynamic Phenomena in Complex Oxides During Electrochemical Process

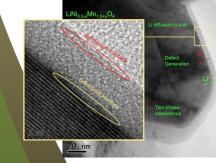
Ying Shirley Meng, Assistant Professor Department of NanoEngineering, University of California San Diego

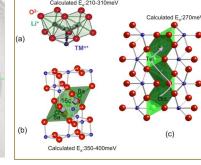
Synthesis	Modeling	Characterization
 Solution based chemistry Solid state synthesis Pulsed laser deposition 	 Ab Initio (VASP) Cluster Expansion Nudge Elastic Band (NEB) 	 Electrochemistry XRD, SEM, TEM etc. in situ UV spectroscopy
Novel ceramic materials Thin film all solid-state Nano composites	Structure – property Predicting and explanatory	<i>In situ</i> techniques under intense development

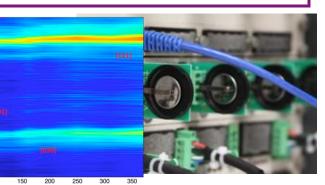
Collaborators

LESC

University of Florida: Jacob Jones – Time resolved XRD Cambridge University: Clare Grey – Solid state NMR Oak Ridge National Laboratory: Aberration corrected TEM/STEM/EELS Stanford Synchrotron Radiation Light Source: in situ X-ray Absorption Spectroscopy (XAS)







Time (s)