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### Current Position

- 2014-present, Assistant Professor, Department of Materials Science and Engineering, Northwestern University

### Background

- 2011-2014, Assistant Professor, Department of Materials Science and Engineering, Drexel University
- 2010-2011, Joseph Katz Named Postdoctoral Fellow, Argonne National Laboratory
- 2010, PhD in Materials, University of California, Santa Barbara
- 2006, BS in Materials Science and Engineering, Northwestern University

### Honors

- 2016, Alfred P. Sloan Research Fellow in Physics
- 2016, Presidential Early Career Award for Scientists and Engineers
- 2016, 3M Non-Tenured Faculty Award
- 2015, National Science Foundation Faculty Early Career Development (CAREER) Award
- 2014, American Ceramic Society Ross Coffin Purdy Award
- 2012, Defense Advanced Research Projects Agency (DARPA) Young Faculty Award
- 2012, Army Research Office, Young Investigator Program (YIP) Award

### Professional Activities

- 2017, Organizer, International Workshop on Oxide Electronics (WOE-24)
- 2016, Organizer, APS March Meeting Focus Topic: Complex Oxide Interfaces & Heterostructures
- 2015, Editorial Board Member, NPJ Computational Materials
- 2015, Organizer, Fall MRS Symposium DDD: Lighting the Path Towards Non-Equilibrium Structure-Property Relationships in Complex Materials
- 2015, Member, Materials Research Society Academic Affairs Committee
- 2015, Faculty Adviser, Tau Beta Pi Engineering Honor Society at Northwestern University
- 2015, Organizer, APS March Meeting Focus Topic: Computational Discovery and Design of Novel Materials

### Goals

I have been a CNM user since 2010 working to understand electronic structure–macroscopic electronic, magnetic, and optical property relationships in complex inorganic compounds using first principles electronic structure methods. Our work utilizes the 30 TFlop high performance computing (HPC) cluster, Carbon, and our [Materials Theory and Design Group](#) frequently engages with scientists in the Theory and Modeling research group of the CNM.

My goals as a User Executive Committee member are to (1) Determine user demand for increased capacity and computational power of the HPC facilities at the CNM through, for example, novel architectures (GPUs, Co-processors, etc.); (2) Organize a (virtual) workshop series or boot camp with support from the Theory and Modeling Group, which is designed to help new and veteran CNM users improve scholarly productivity and efficiency in the areas of data analysis, data management, and data visualization; and (3) Determine ways to reduce administrative burden from the review of and reporting on CNM user proposals.