

RESEARCH STUDENTS IN NAN YAO'S GROUP

Name	Research Topic	Later Affiliation
Vincenzo Lordi r97, '99	Carbon nanotubes as catalytic materials	Stanford University
Bart Muthuswamy r98	Studies of nanostructured materials	University of California, Berkeley
Sang Lu '99	Synthesis of colloidal platinum nanocrystals	Accenture
Edward Hsieh '99	Interface of monazite and alumina	University of California, Los Angeles
Delia Markiewic '99	Structure and growth of abalone shell	University of California, Berkeley
Catrina Benson r99	SEM studies of biogenic materials	Air Force
Caroline Lau r99	Investigation of alumina oxide/metal interface	University of California, Berkeley
Ken Wu '00	Surface plasma excitation of fullerenes	Stanford University
Mark C. Pescatore '00	Studies of doped Bi-2212 superconductor	Merck
Peter J. Lu '00	HREM and electron diffraction of quasicrystals	Harvard University
Eileen Wojtal r00	Characterization of the orientation of abalone structure	Cornell University
Kate Dean '01	Microscopy of protein structures	Johnson & Johnson Company
Victor Taveras r01	Structure and properties of V ₂ O ₅ nanotubes	Penn State University
Eugene Kung '02	Electron microscopy of polymers	Penn State University
Timothy Chang '02	Mechanical properties of metal-polymer compo	Stanford University
Dylan Ness r02	Dual-beam focused ion beam for nano-manipulations	Imperial College, UK
Willem Van Dorp r02	Dynamics of gold nano-particles	Tufts University
Diana Chang '03	Imaging and analysis of materials	Princeton University
Chris M. Wahl '03	Property and application of carbon nanotubes	Merck Company
Alan K. Oquendo '03	Applications of V ₂ O ₅ nanotubes	Princeton University
Gabriel Mas r03	Focused ion beam system	University of Massachusetts
Jamie McHeir r03	Application of focused ion beam in nanostructured materials	Prairie View A & M University
Fei Wang '04	Imaging techniques for nanostructured materia	California Institute of Technology
Salomon Nolasco r04	The interface of abalone shell plates	Embry Riddle Aeronautical University

Erik Williamson '05	WxOy nanorods: synthesis-characterization -application	Massachusetts Institute of Technology
Megan Fikse r05	Hierarchical structure of butterfly wings	University of Pennsylvania
Alexander Epstein r05, r06	Screw dislocations and spiral growth in abalone shell nacre	Harvard University
Daniel Recht '06	Ion beam implantation of surface layers	Harvard University
Jennifer Woodby '06	Ion beam interactions with solids	Princeton University
Nathan Etesami '06	Focused ion beam system for materials applica	Boston Consulting Group
Kirk Hou '06	Nanostructure of Er ⁺³ doped silicates	University of Missouri, St. Louis
Austin Akey '06	Nanomanipulation in a FIB/SEM system	Harvard University
Xiao-Jing Zheng r07	Investigation of iron and copper contents in 18 century paper using EDX spectroscopy	College of Saint Elizabeth
Antonio Buddington r07	Analyzing thin film thickness using EELS and integration techniques	Albany State University
Franz Sauer r08	Spherical aberration correction in ion beam microscope	California Institute of Technology
Patrick Ho '08	The physics of SEM and AFM: imaging and applications	Harvard University
Wendy Liu '08	Structure and properties of organic thin film on metal oxide surface	Harvard University/MIT
Mike Garrison r08	Bioluminescence in living organisms	Liberty Science Center
Saumitra Sahi r08	Piezoelectric transducers	Princeton University
Susan Gentry r08	New materials for anticoagulant applications	Northwestern University
Quentin Kennedy r08	Z-contrast analysis of core/shell nano-particles	Carleton College
Fei Fei Chu r09	Metal oxide nanotubes for sensing device	Columbia University
David Cohen-Tanugi '09	Natural advantages of scanning helium ion microscopy	Massachusetts Institute of Technology
Katherine Barteau '09	Simulation of ion and solid interaction	California Institute of Technology
Aditya Girish r09	Surface imaging of organic molecular structure on metal oxide surface	Columbia University
Sarah Kostinski r09, r10	He ion backscattering from solid surface	Harvard University
Katie Roelofs '10	In situ microscopy of PZT nanowires	Stanford University
Cindy Lin r10	Synthesis of Ni nanowires	The College of New Jersey

Fabian Unterumsberger '10	Applied magnetic field effects on the elastic bending of a metal nanowire	Institute of Materials of the Ruhr-University Bochum, Germany
Hilary Zheng r10	Atomic force microscopy of polymer nanofiber	University of California, Berkeley
Vijay Narajan r10	Structure and property of Ni nanowires	Yale University
Anton Li '11	Determination of the Young's modulus of piezoelectric nanowires	University of Michigan
George Abyad '11	Electric and mechanical characterization of individual Ni nanowires	IBM T. J. Watson
Jane Yang '11	Nanostructural characterization of diatoms for energy-harvesting applications	Princeton University
Ming Jin r11	In-situ electrical and mechanical characterization of individual nickel nanowires	University of California, Berkeley
Hoi Fai Cheung r12	Study of electrical property of ZnO nanowire	Univ. Science and Technology, HK
Monica Ting r12	Study of light scattering in biological materials	Columbia University
Shoronia Cross r13	Electron beam-induced polarization of single-walled carbon nanotubes	John Jay College of Criminal Justice
Lokesh Lohiya r13	Raman spectroscopy of carbon nano-fibers	University of Cambridge
Clarissa Prawoto r13	Damping effect of organic and inorganic multilayer materials	Univ. Science and Technology, HK
Kirsten Paratt '13	Biomimetic significance of the nanofeatures and nanomechanical properties of organic thin films	Georgia Technology Institute
Leon Lee r14	Simulation of imaging individual atoms using STEM	University of Toronto
Lei Sun r14	Modeling of electron and atom interaction	Carnegie Mellon University
Temple Douglas '14	Quantum effect of single atom under electron	Virginia Polytechnic Institute
Edem Kokou r14, r15	Standard library for EDS and WDS analysis	Cornell University
Nicole Sato '15	Raman spectroscopy for coating analysis of Atorvastatin Calcium	Princeton University
Vivienne Tam '15	Nanomedicine as a non-invasive strategy for drug delivery across the blood brain barrier	Yale University
Hannah Smith r15	Unique platelet growth mechanisms in Abalon Nacre as bio-Inspiration for synthetic material	Princeton University
Siddhant Tripathi r15	AFM TUNA studies of screw dislocations in the organic and inorganic interface	Univ. Science and Technology, HK
Kevin Pardinas '16	Design and Implementation of an In-Situ Microplasma Cell in an ESEM	Princeton University
Animesh Jha r16	Intensity variation and movement of single atoms viewed in STEM	Univ. Science and Technology, HK

Abinitha Gourabathina r17	Analyzing and Simulating STEM Images of PMN-PT Supercells (part 1)	Princeton University
Rishi Salwi r17	Analyzing and Simulating STEM Images of PMN-PT Supercells (part 2)	Duke University
Ariel Yu r17	Prediction model on Beam-induced motion of adatoms	Columbia University
Junrong Li r18	Phase locked loop control for Q-plus non-contact atomic force microscope	Carnegie Mellon University
Christopher Catalan '19	Effects of gaseous atmosphere and container composition on tribo-charging of packed beds	Princeton University
Conor O'Brien '19	Examination of the Electroreduction of CO ₂ Using Cuprous and Intermetallic Catalysts on Carbon Solid Supports with Novel in situ TEM Imaging	Peace Corps Volunteer in Kyrgyzstan
Juno Lee r19	Investigating the Electronic Structure of Metallic Surfaces Through Computational Modeling	University of California, Berkeley
Ganesh Arunachalam r19	Investigating Crystal Properties Using WIEN2k Computational Quantum Mechanical Modeling	University of Illinois at Urbana-Champaign
Yeju Zhou r19	Computing and visualizing AFM experimental data using python program	Carnegie Mellon University
Hee Joo Choi '20	In situ liquid cell transmission electron microscopy observation of calcium oxalate in the presence of citrate	Princeton University