

Simon Kelly

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Education

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| North Carolina State University | Mechanical Engineering | B.S., 1988 |
| North Carolina State University | Economics | M.S., 1990 |
| North Carolina State University | Mechanical Engineering | M.S., 1998. |
| Universiteit Leiden, The Netherlands | Physics | Ph.D., 2012. |

Professional Experience

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| 2012-p | Postdoctoral Research Associate, Oak Ridge National Laboratory. |
| 2010-2012 | Research Assistant, Indiana University, Physics Department. |
| 2005-2009 | Research Assistant, Universiteit Leiden, The Netherlands. |
| 2003-2005 | Research Assistant, North Carolina State University, Physics Department. |
| 2001-2003 | Mechanical Engineer, Parata Systems, Durham, North Carolina. |
| 1999-2001 | Mechanical Engineer, Milliken Research Corp., Spartanburg, South Carolina. |
| 1996-1998 | Research Assistant, North Carolina State University, Mechanical Engineering. |

Professional Activities

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| 2005-p | Member of Materials Research Society |
| 2005-p | Member of American Physical Society |

Research Synopsis

1. Nanoscale characterization of thermoelectric materials with scanning tunneling microscope and atomic force microscope.
2. Low-temperature scanning tunneling microscopy investigation of molecules adsorbed onto both metals and semiconductors.

Publications

1. Lakhani A. M.; Kelly S. J.; Pearl T.P., "Design and Operation of a Versatile, Ultrahigh Vacuum, Low Temperature Scanning Probe Microscope," *Rev. Sci. Inst.*, **77** 043709 (2006).
2. Kelly, S.; Galli, F.; Komissarov, I.; Aarts, J., "Correlations Between the Morphology and the Electronic Structure at the Surface of Thin Film Manganites, Investigated with STM," *Phys. Rev. B*, (cond-mat arXiv:0902.0626), submitted.
3. Kelly, S.; Galli, F.; Aarts, J.; Sharma, M.; Leighton, C., "Correlation Between Thickness and Electronic Structure at the Surface of Thin Film La_{0.5}Sr_{0.5}CoO₃ Measured with STM," *Appl. Phys. Lett.*, to be submitted.

Patents

US Patent 7,275,353 Invented robot end-effector and other contributions