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Education:

The University of Melbourne Ph.D. 1999 Theoretical Physics
The University of Melbourne B.S. (Honors) 1994 Theoretical Physics
The University of Melbourne B.S. 1993 Physics

Professional Experience:

2018-present	R&D Staff, Center for Nanophase Materials Sciences, Oak Ridge National Laboratory
2015-2018	R&D Staff, Materials Science & Technology Division, Oak Ridge National Laboratory
2008-2015	Research Associate Professor, Department of Physics and Astronomy, Vanderbilt University, Nashville, TN.
2005-2008	Postdoctoral Research Associate, Oak Ridge National Laboratory
2002-2004	A.R.C. Research Fellow, School of Physics, The University of Melbourne
1999- 2001	Research Fellow Grade 1 (Level A), School of Physics, The University of Melbourne

Professional Memberships:

Microscopy Society of America

Selected Peer-Reviewed Publications:

Li, X., Dyck, O.E, Oxley, M.P., Lupini, A.R., McInnes, L., Healy, J., Jesse, S., and Kalinin S.V., “Manifold Learning of Four-dimensional Scanning Transmission Electron Microscopy,” *njp Computational Materials* **5** (2019).

Oxley, M.P., Lupini A.R., and Pennycook, S.J., “Ultrahigh-resolution Electron Microscopy,” *Reports on Progress in Physics* **80** 026101 (2017).

Kapetanakis, M.D., Oxley, M.P., Zhou, W., Pennycook, S.J., Idrobo, J.C., and Pantelides, S.T., “Signatures of Distinct Impurity Configurations in Atomic-resolution Valence Electron-energy-loss Spectroscopy: Application to Graphene,” *Physical Review B* **94** 155449 (2016).

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Oxley, M.P., Kapetanakis, M.D., Prange, M.P., Varela, M., Pennycook, S.J., and Pantelides, S.T., “Simulation of Probe Position-dependent Electron Energy-loss Fine Structure,” *Microscopy & Microanalysis* **20** 784-797 (2014).

Li, C., Wu, Y., Poplawsky, J., Pennycook, T.J., Paudel, N., Yin, W., Haigh, S.J., Oxley, M.P., Lupini, A.R., Al-Jassim, M., Pennycook, S.J., and Yan, Y., “Grain-boundary-enhanced Carrier Collection in CdTe Solar Cells,” *Physical Review Letters* **112**, 156103 (2014).

Prange, M.P., Oxley, M.P., Varela, M., Pennycook, S.J., and Pantelides, S.J., “Simulation of Spatially Resolved Electron Energy Loss Near-edge Structure for Scanning Transmission Electron Microscopy,” *Physical Review Letters* **109** 246101 (2012).

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Witte, C., Findlay, S.D., Oxley, M.P., Rher, J.J., and Allen, L.J., “Theory of Dynamical Scattering in Near-edge Electron Energy Loss Spectroscopy,” *Physical Review B* **80** 184108 (2009).

Findlay, S.D., Oxley, M.P., and Allen, L.J., “Modelling Atomic-resolution Scanning Transmission Electron Microscopy Images,” *Microscopy & Microanalysis* **14**, 48-59 (2008).

Allen, L.J., Findlay, S.D., Oxley, M.P., Witte, C., and Zaluzec, N.J., “Channeling Effects in High-angular-resolution Electron Spectroscopy,” *Physical Review B* **73** 094104 (2006).

Collaborators:

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