

**Curriculum Vitae for William D. Rice**  
**Assistant professor of Physics and Astronomy**  
**at the University of Wyoming**  
**wrice2@uwyo.edu**

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**Professional Preparation**

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Brown University	Providence, RI	Physics	Sc.B (with Honors), 2005
Rice University	Houston, TX	Applied Physics	Doctorate, 2012
Los Alamos National Lab	Los Alamos, NM	Physics	10/01/2012—07/31/2015

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**Appointments**

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Assistant professor of Physics and Astronomy. University of Wyoming. 08/2015 – present.

Visiting scientist. Institute for Ion Beam Physics and Materials Research (Dresden, Germany) July 2010—November 2010.

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**Five Most-Relevant Publications**

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W. D. Rice, W. Liu, T. A. Baker, N. A. Sinitsyn, V. I. Klimov, S. A. Crooker. “Revealing Giant Internal Magnetic Fields due to Spin Fluctuations in Magnetically-Doped Colloidal Nanocrystals,” *Nature Nanotechnology*. **11**, 137 (2016).

W. D. Rice, P. Ambwani, M. Bombeck, J. D. Thompson, G. Haugstad, C. Leighton, S. A. Crooker. “Persistent Optically Induced Magnetism in Oxygen-Deficient Strontium Titanate,” *Nature Materials* **13**, 481 (2014).

W. D. Rice *et al.* “Observation of Forbidden Exciton Transitions Mediated by Coulomb Interactions in Photoexcited Semiconductor Quantum Wells,” *Phys. Rev. Lett.* **110**, 137404 (2013).

W. D. Rice, P. Ambwani, J. D. Thompson, C. Leighton, S. A. Crooker. “Revealing optically induced magnetization in SrTiO<sub>3</sub> using optically coupled SQUID magnetometry and magnetic circular dichroism,” *J. Vac. Sci. Technol. B* **32**, 04E102 (2014).

W. D. Rice, H. McDaniel, V. I. Klimov, S. A. Crooker. “Magneto-Optical Properties of CuInS<sub>2</sub> Nanocrystals,” *J. Phys. Chem. Lett.* **5**, 4105 (2014).

## Five Other Publications

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W. D. Rice, R. T. Weber, P. Nikolaev, S. Arepalli, V. Berka, A.-L. Tsai, J. Kono. “Spin Relaxation Times of Single-Wall Carbon Nanotubes,” *Phys. Rev. B (Rapid Comm.)* **88**, 041401(R) (2013).

**[Book Chapter]** S. Nanot, N. A. Thompson, J-H. Kim, X. Wang, W. D. Rice, E. H. Hároz, Y. Ganesan, C. L. Pint, J. Kono. “Single-Walled Carbon Nanotubes,” in *Springer Handbook of Nanomaterials*, edited by R. Vajtai (Springer, Berlin), pp. 105-146 (2013).

W. D. Rice, R. T. Weber, A. D. Leonard, J. M. Tour, P. Nikolaev, S. Arepalli, V. Berka, A.-L. Tsai, J. Kono. “Enhancement of the Electron Spin Resonance of Single-Walled Carbon Nanotubes by Oxygen Removal,” *ACS Nano* **6**, 2165 (2012).

E. H. Hároz, J. G. Duque, W. D. Rice, C. G. Densmore, J. Kono, S. K. Doorn. “Resonant Raman spectroscopy of armchair carbon nanotubes: Absence of broad  $G'$  feature,” *Phys. Rev. B* **84**, 121403(R) (2011).

E. H. Hároz, W. D. Rice, B. Y. Lu, S. Ghosh, R. H. Hauge, R. B. Weisman, S. K. Doorn, J. Kono. “Enrichment of Armchair Carbon Nanotubes via Density Gradient Ultracentrifugation: Raman Spectroscopy Evidence,” *ACS Nano* **4**, 1955 (2010).

## Synergistic Activities

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- Presented, along with Dr. Manuel Mendes, the American Corner lectures on Optical Spectroscopy throughout Portugal in November 2016 at the invitation of the American Embassy in Lisbon.
- Developed interactive, studio physics course for Physics II (Engineers and Scientists) in the 2016, Fall semester.
- Developed an ultrafast spectroscopy course for advanced graduate students in the 2016, Spring semester.
- Reviewer for *J. Phys. Chem. Lett.*, *Nano Lett.*, *J. of Physics: Condensed Matter, Scientific Reports*, *Nature Communications*, *Optics Express*, *J. of Luminescence*, and *J. Phys. Chem.*
- Lead conference organizer for the 2016 Front-Range Advanced Magnetism Symposium.
- Committee member for 2017 Conference on Magnetism and Magnetic Materials.