JOHN L. RENO

Staff Scientist

Center for Integrated Nanotechnologies

Sandia National Laboratories

Albuquerque, NM 87185

Phone: 505-844-9677

Fax: 505-284-7778

Email: jlreno@sandia.gov

Education

Ph.D. Physics	University of Illinois at Chicago, 1987
M.S. Physics	University of Illinois at Chicago, 1984
M.S. Applied Mathematics	Northern Illinois University, 1982
B.S. Physics & Mathematics	Wheaton College, 1978

Appointments

Principal Member of Technical Staff, Sandia National Laboratories, 2005 – Present

Senior Member of Technical Staff, Sandia National Laboratories, 1987 - 2005

Research Associate, University of Illinois at Chicago, January 1987 – July 1987

Publications

1. *Probing the microscopic structure of bound states in quantum point contacts*, Yoon, Y; Mourokh, L; Morimoto, T; Aoki, N; Ochiai, Y; Reno, JL; Bird, JP, Physical Review Letters, 99, September 28, 2009.
2. *Hot-Electron Thermocouple and the Diffusion Thermopower of Two-Dimensional Electrons in GaAs*, Chickering, WE; Eisenstein, JP; Reno, JL, Physical Review Letters, 103, July 24, 2009.
3. *Detector backaction on the self-consistent bound state in quantum point contacts*, Yoon, Y; Kang, MG; Morimoto, T; Mourokh, L; Aoki, N; Reno, JL; Bird, JP; Ochiai, Y, Physical Review B, 79, March 2009.
4. *Observation of Chiral Heat Transport in the Quantum Hall Regime*, Granger, G; Eisenstein, JP; Reno, JL, Physical Review Letters, 102, February 27, 2009.
5. *Magnetic-field-assisted terahertz quantum cascade laser operating up to 225 K*, Wade, A; Fedorov, G; Smirnov, D; Kumar, S; Williams, BS; Hu, Q; Reno, JL, Nature Photonics, 3, January 2009.
6. *Nonlinear characteristics of the hysteretic magnetoresistance of a hybrid nanomagnetic field-effect transistor*, Bae, JU; Lin, TY; Reno, JL; Bird, JP, Applied Physics Letters, 93, October 6, 2008.
7. *Tunneling spectroscopy of a ballistic quantum wire*, Ramamoorthy, A; Mourokh, L; Reno, JL; Bird, JP, Physical Review B, 78, July 2008.
8. *Terahertz response of quantum point contacts*, Song, JW; Kabir, NA; Kawano, Y; Ishibashi, K; Aizin, GR; Mourokh, L; Reno, JL; Markelz, AG; Bird, JP, Applied Physics Letters, 92, June 2, 2008.
9. *Terahertz time-domain magnetospectroscopy of a high-mobility two-dimensional electron gas*, Wang, XF; Hilton, DJ; Ren, L; Mittleman, DM; Kono, J; Reno, JL, Optics Letters, 332, July 1, 2007.
10. *Surface-emitting distributed feedback terahertz quantum-cascade lasers in metal-metal waveguides*, Kumar, S; Williams, BS; Qin, Q; Lee, AWM; Hu, Q; Reno, JL, Optics Express, 15, January 8, 2007.

Synergistic Activities

<u>Honors</u>

Employee Recognition Award for Meritorious Achievement as Part of the Terahertz Plasmon Detector Team, 2005

Employee Recognition Award for Meritorious Achievement as Part of the Center for Integrated Technology Team, 2003

Employee Recognition Award for Individual Technical Excellence, 2002