

Todd J. Kaiser

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Electrical and Computer Engineering
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A. Professional Preparation

Montana State University, Bozeman, MT	Physics	B.S., 1981
Oregon State University, Corvallis, OR	Physics	M.S., 1984
Georgia Institute of Technology, Atlanta, GA	Electrical Engineering	Ph.D., 2000

B. Appointments

Associate Professor 7/07-present	Montana State University Department of Electrical & Computer Engineering Bozeman, MT 59717
Assistant Professor 8/00–6/07	Montana State University Department of Electrical & Computer Engineering Bozeman, MT 59717
Sr. Project Engineer 10/94–6/00	Milli Sensor Systems & Actuators 93 Border St. West Newton, MA 02165
Staff Physicist 6/85-9/94	C. S. Draper Laboratory 555 Technology Square Cambridge, MA 02139

C. Selected Journal Publications

- “A Wireless Sensor Interrogation Design for Passive Resonant Frequency Sensors using Frequency Modulation Spectroscopy,” Brian Peterson, Andrew Olson, Todd Kaiser, IEEE Sensors Journal, Accepted for Publication 2010.
- “Passive Telemetric Readout System,” Sajeeda, Todd J. Kaiser, IEEE Sensors Journal, Vol. 6, No. 5, pp. 1340-5, Oct. 2006.
- “Model of a MEMS Sensor using a Common Gate MOSFET Differential Amplifier,” David Coe, Jennifer English, Robert Lindquist, Todd Kaiser, Journal of Physics D, Applied Physics, Vol. 39, No.20, pp. 4353-8, Oct. 21, 2006.
- “Design of a MEMS Accelerometer using Integrated Common Gate Differential MOSFET Amplifier,” David Coe, Jennifer English, Todd Kaiser, Robert Lundquist, Sensor Letters, Vol. 4, No. 3, pp. 215-21, Sept. 2006.
- “A Pendulous Oscillating Gyroscopic Accelerometer Fabricated Using Deep Reactive Ion Etching,” Todd Kaiser and Mark Allen, IEEE J. of Microelectromechanical Systems, Vol. 12, No. 1, pp 21-28, Feb. 2003.
- “Large Area Molded Silicon Nitride Micro Mirrors,” B. Jeffrey Lutzenberger, D. L. Dickensheets, T. J. Kaiser, IEEE Photonics Letters, Vol. 15, No. 10, pp 1407-09, Oct. 2003.

D. Selected Conference Publications

- “Inspiring Future Electrical Engineers through Science Teachers,” Todd Kaiser, Peggy Taylor, Carolyn Plumb, Howard Tenenbaum, Seth Hodges, Proceedings of 2010 American Society for Engineering Conference, Louisville, KY, 2010
- “MEMS Fabrication as a Multidisciplinary Laboratory,” Todd Kaiser, Matt Leone, Andrew Lingley, Brad Pierson, Proceedings of 2007 American Society for Engineering Education Conference, Honolulu, HI, 2007.
- “Design of a Microelectronic Manufacturing Laboratory,” Todd Kaiser, Stilson Applin, Proceedings of 2006 American Society for Engineering Education Conference, Chicago IL, 2006.
- “Large Area Molded Silicon Nitride Torsion Mirrors,” D. L. Dickensheets, B. Jeffrey Lutzenberger, T.J. Kaiser, P. A. Himmer, Proceedings of the 2002 IEEE/LEOS International Conference on Optical MEMS, pp 47-48, August 2002.
- “Silicon Nitride Biaxial Pointing Mirrors with Stiffening Ribs,” T. J. Kaiser, B. Jeffery Lutzenberger, R. A. Friholm, P. A. Himmer, D. L. Dickensheets, Proceedings of the 2001 SPIE Conference on Micromachining and Microfabrication, Vol. 4561, pp 277-282, 2001.
- “Micromachined Pendulous Oscillatory Groscopic Accelerometer,” T. J. Kaiser and M. G. Allen, 2000 Solid-State Sensors and Actuators Workshop, pp 85-88, June 2000.

E. Selected Invited Presentations

- “Solar Cell Basics for Teachers,” Todd Kaiser, Optical Science & Engineering Conference, Montana State University Optical Technology Center, Bozeman, MT, 20 August, 2009.
- "Radiation Tolerant Computing for the Europa Jupiter System Mission", Robert Ray (NASA-ESMD), Brock LaMeres, Todd Kaiser, Ross Snider, David Andrews (U of Alabama), Europa Jupiter Systems Mission (EJSM) Instrument Workshop - Radiation Capabilities Session, July 15-17, 2009, Johns Hopkins Applied Physics Laboratory, Laurel, MD.
- “Inductively Coupled Flexural Plate Wave Resonator Sensing,” Todd Kaiser, Brian Peterson, Jennifer English, David Coe, Jim Shaeffel, 2007 NSF ECCS Grantees Workshop to Broaden Diversity Participation, Reno NV, 2007