## Publications & Presentations authored or co-authored by Dr. Wallace:

- V.I. Gorokhovsky, P.E. Gannon, J. Wallace, D. VanVorous, C. Bowman, M.C. Deibert, & R.J. Smith, "Evaluation of SOFC Interconnects Made of Ferritic Steels with Nano-Structured Oxi-Ceramic Protective Coatings Deposited by the LAFAD Process." *Journal of the Electrochemical Society*, Vol. 158, No. 5, pp. B526 B535 (2011).
- V. Gorokhovsky, C. Bowman, J. Wallace, J. O'Keefe, V. Champagne, M. Pepi, and W. Tabakoff, "LAFAD Hard Ceramic and Cermet Coatings for Erosion and Corrosion Protection of Turbomachinery Components." Presented at the ASME Turbo Expo-2009, Orlando, FL. (June 8 12, 2009).
- V. Gorokhovsky, C. Bowman, D. VanVorous, and J. Wallace, "Deposition of Various Nitride and Oxiceramic Coatings by an Industrial-Scale LAFAD Process." Presented at the 55<sup>th</sup> International Symposium of the American Vacuum Society, Boston, MA (Oct. 22, 2008); and also published in the *Journal of Vacuum Science & Technology A: Vacuum, Surfaces & Films*, Vol.27, No.4, pp.1080-1095, (2009).
- V. Gorokhovsky, J. Wallace, C. Bowman, P.E. Gannon, J. O'Keefe, V. Champagne, and M. Pepi, "Large Area Filtered Arc and Hybrid Coating Deposition Technologies for Erosion and Corrosion Protection of Aircraft Components." Proceedings of the 32<sup>nd</sup> International Conference & Exposition on Advanced Ceramics & Composites, Daytona Beach, FL. (Jan. 27 Feb. 01, 2008).
- M.R. Govindaraju and J. Wallace, "The Barkhausen Effect." Plant Services, Vol. 22, #8, (Aug. 2001).
- M. Govindaraju, J. Wallace, C. Duffer, and R. Tilley, "Detection and Evaluation of Corrosion-Fatigue Cracks in Waterwall Boiler Tubes by an Innovative Nondestructive Evaluation Technology based on Ultrasonic Guided Waves." *Proceedings of the Conference on Boiler Tube Failures and HRSG Tube Failures and Inspection*, Phoenix,AZ (Nov. 6-8, 2001).
- G. Katragadda, D. Lewis, J. Wallace, and J. Si., "Swept Frequency Eddy Current Material Profiling using Radial Basis Function Neural Networks for Inversion", *Materials Evaluation*, Vol. 58, #1, (Jan. 2000), pp. 70-73.
- M.R. Govindaraju, G. Katragadda, and J.L. Wallace. "Finite element analysis of a magnetic sensor to detect permeability changes due to residual stresses in ferromagnetic material", *SPIE Conference on NDE Technologies for Aging Infrastructure and Manufacturing '98 Symposium*, San Antonio, Texas, March 1998. Published in *Proceedings of the SPIE*, Vol. 3396, (March 1998), pp. 47-55.
- G. Katragadda, J. Wallace, J. Lee, and S. Nair, "Neural Network Inversion for Thickness Measurements and Conductivity Profiling", 23<sup>rd</sup> Annual Review of progress in Quantitative Nondestructive Evaluation, vol. 16A, Symposium held in Brunswick, Maine, (July 28 Aug. 2, 1996), Proceedings © 1997, pp. 781-788.
- R. Castro-Rodgriguez, J. L. Peña, A. Zapata-Navarro, M. Zapata-Torres, and J. L. Wallace. "Large Grain size CdTe Films Grown on Glass Substrates at Low Temperature." *Journal of Vacuum Science & Technology-A*, Vol. 13, No. 6 (Nov./Dec. 1995), pp. 2994-2996.
- F.J. Espinosa-Faller, and J. L. Wallace. "A Vibrating Reed Magnetometer, Based on an Inchworm® Motor and a Tunneling-Tip Sensor." *Measurement Science & Technology*, Vol. 6, No. 8 (Aug. 1995), pp. 1221-1224.
- J.L. Wallace, "Corrosion Behaviour of Sputtered Amorphous Magnetic Thin Films, with and without Protective Overlayers." *Journal of Vacuum Science & Technology-A*, Vol. 12, No. 6 (Nov./Dec. 1994), pp. 3146-3148.
- F.J. Espinosa-Faller, E. A. Mijangos, A. I. Oliva, J. L. Peña., and J. L. Wallace. "Analisis Teoretico-Experimental de un Sistema de Amortiguacion Neumatico para bajas Frecuencias." Presented at the Eighth Latin American Congress on Surface Science and its Applications, Cancun, Mexico (Sep. 19-23, 1994).
- J.L. Wallace, "An Extremely Low-Cost Interface Between an Inchworm® Motor and a Personal Computer." *Measurement Science & Technology.*, Vol. 5, No. 7 (July 1994), pp. 861-863.

- J.L. Wallace, "Applications of Sputtered Thin Films of Magnetoelastic Amorphous Alloys." *Materials & Design*, Vol. 14, No. 5 (1993), pp. 285-289.
- J.L. Wallace, "Broadband Magnetic Microwave Absorbers Fundamental Limitations." *IEEE Transactions on Magnetics*, Vol. 29, No. 6 (Nov. 1993), pp. 4209-4214.
- J.L. Wallace, "Magnetoelastic Thin Films of Amorphous Alloys, Sputtered onto Silicon Wafers." *Journal of Applied Physics*, Vol. 73, No. 10 (May 15, 1993), pp. 5360-5362.
- J.L. Wallace, "Fast Fourier Transform Analysis of M-H Hysteresis Loops." *Journal of Applied Physics*, Vol. 73, No. 10 (May 15, 1993), pp. 6849-6851.
- R.C. Fenn, M. J. Gerver, R. L. Hockney, B. G. Johnson, and J. L. Wallace. "Microfabricated Magnetometer Using Young's Modulus Changes in Magnetoelastic Materials." *S.P.I.E. Proceedings*, Vol. 1694 (1992), pp. 132-143.
- R.C. Fenn, M. J. Gerver, R. L. Hockney, B. G. Johnson, and J. L. Wallace. "A Magnetometer Using Tunnel Sensing of Resonant Magnetoelastic Beam Position." Presented at the JPL Tunnel Sensors Workshop, Pasadena, CA (July 1992).
- J.L. Wallace, "Amorphous Fe-B-Si Magnetic Films by Reactive Sputtering from a Pure Iron Source." *Journal of Applied Physics*, Vol. 64, No. 19 (Nov. 15, 1988), p. 6053.
- J.L. Wallace, "Microlaminated Ferromagnetic Composites for Magnetic Switching." *Proceedings of the 6th IEEE Pulsed Power Conference* (1987), p. 17.
- J.A. Calviello, J.,J. Taub, D.I. Breitzer, E.H. Kramer, and J.L. Wallace, "Advanced Devices and Components for the Millimeter and Submillimeter Systems." Presented at the AGARD Electro-Magnetic Wave Propagation Panel Symp., Munich, (Sept., 1978).
- J.A. Calviello, J.L. Wallace, and P.R. Bie, "High-Performance GaAs Beam-Lead Mixer Diodes for Millimetre and Submillimetre Applications." *Electronics Letters*, Vol. 15, #17, (Aug. 16, 1979), pp. 509-510.
- J.A. Calviello and J.L. Wallace, "Performance and Reliability of an Improved High-Temperature GaAs Schottky Junction with Native Oxide Passivation." *IEEE Trans. Electron Devices,* Vol. ED-24, #6, (June 1977), pp.698-704.
- J.A. Calviello and J.L. Wallace, "Novel GaAs Metallized Diode Configurations to Reduce Skin-Effect Contributions at High Frequency." *IEEE Elect. Letters* (Nov. 25, 1976).
- J.A. Calviello, J.L. Wallace, and P.R. Bie, "An Improved High Temperature GaAs Schottky Junction." Presented at the: Conference on Active Semiconductor Devices for MM-Waves and Integrated Optics, Cornell University, Ithaca, NY (Aug. 1975).
- J.A. Calviello, J.L. Wallace, and P.R. Bie, "High Performance GaAs Quasi-Planar Varactors for Millimeter Waves." *IEEE Trans. Electron Devices*. Vol.21 No. 10 (Oct.1974). pp. 624-630.
- J.L. Wallace and D.L. Goodstein, "He<sup>4</sup> on Copper; Some Effects of Preadsorbed Noble Gas Layers." *Journal of Low Temperature Physics*, Vol.3, #3, (Sept. 1970), pp.283-300.