

CONFERENCE PAPERS, REPORTS, MANUALS and PATENTS

- A.R. El-Koubysi, Y. Guo, M.S.P. Lucas, "Testing the Performance of Delta-Sigma ADCs", IMTC/92, May 12-14, Meadowlands, N.J.
- M.S.P. Lucas, "An Outsider's View of System Identification," IMTC/92, May 12-14, Meadowlands, N.J.
- X. Xu and M.S.P. Lucas, "Noise Measurement Uncertainty Analysis," URSI Conference, Jan. 7, 1992, Boulder, CO.
- D. Reichle, X. Xu, M.S.P. Lucas, "Verification of Calculations Made by the ATN NP5 Noise Figure Measurement System, Automatic RF Testing Conference, Monterey, California, Nov. 1990.
- M.S.P. Lucas, "The Impact of the Personal Computer on Instrumentation and Measurements," IMTC/86 Conference, Boulder, Colorado, March 25-27, 1986.
- T.J. Sobering and M.S.P. Lucas, "Power Switched Sample-and-Hold Provides Accurate Analog Inputs for ADC in Low Power System," IMTC/86 Conference, Boulder, Colorado, March 25-27, 1986.
- M.S.P. Lucas, "Basic Functions and Architectures for Personal Instruments," Autotestcon '85, October 1985, Long Island, New York.
- M.F. Wagdy and M.S.P. Lucas, "A New Technique for Automated Vector Impedance Measurement," IMTC/85 Conference, Tampa, March 20-22, 1985.
- M.F. Wagdy and M.S.P. Lucas, "Errors in Sampled State Phase Measurement," IMTC/85 Conference, Tampa, March 20-22, 1985.
- S. Babb and M.S.P. Lucas, "A General Purpose IEEE -488 Bus Interface," IECI 1979 Conference on Industrial & Control Applications of Microprocessors, Philadelphia, Pennsylvania, March 1979.
- M.S.P. Lucas and G.L. Johnson, "A Microprocessor- Based Low Power, Data Acquisition System," IECI 1979 Conference on Industrial & Control Applications of Microprocessors, Philadelphia, Pennsylvania, March 1979.
- D. Nickel and M.S.P. Lucas, "A Minimal Z-80 Based Adaptive Digital Filter for Intruder Detection," IECI 1979 Conference on Industrial and Control Applications of Microprocessors, Philadelphia, Pennsylvania, March 1979.
- M.S.P. Lucas, "Thick Film Humidity Transducers," 23rd Midwest Solid State Conference, Manhattan, Kansas, October 24-25, 1975.
- M.S.P. Lucas, "Thick Film Technology," National Electronics Conference, Auckland, New Zealand, July/August, 1974.
- M.S.P. Lucas, M.R. Casey, R.K. Blocksome, and W.H. Dawes, "Thick Film Moisture Sensors," 24th Electronic Components Conference, Washington, D.C., May 1974.
- W.H. Dawes and M.S.P. Lucas, "A Case Study of the Design and Fabrication of a Thick Film ECG Telemetry Transmitter," Southwestern IEEE Conference & Exhibition, Houston, Texas, 1973.
- M.S.P. Lucas, "Innovative Applications of Hybrid Technology," Int. Microelectronics Symposium, Washington, D.C., October, 1972.
- M.S.P. Lucas, "The Effect of Surface Impurities upon the Resistance of Thin Specular Gold Films," Third Int. Vacuum Congress, Stuttgart, W. Germany, June 1965.
- M.S.P. Lucas and A. P. Sheppard, "Microwave Observations of Changes in Surface Scattering of Conduction Electrons," Int. Microwaves Conference, Tokyo, Japan, September 1964.
- M.S.P. Lucas, C.R. Vail, W.C. Stewart, and H.A. Owen, "A New Deposition Technique for Refractory Metal Films," Trans. of the Second Int. Congress on Vacuum Science & Technology, Pergamon Press, 1961.

RESEARCH REPORTS, TECHNICAL MEMORANDA, LABORATORY HANDBOOKS

Ying Xin, Wangsong He, Michael S.P. Lucas, Xin Fei, and Yi-Han Kao, U.S. Patent Application; "High T^c Superconductor Magnetic Shields and Method of Making Same", Serial No. 08/101,574 Filing Date 8/3/93.

Xiaochu Xu and M.S.P. Lucas, U.S. Patent Application; "Variable Sampling Rate Sigma-Delta Analog-to-Digital Converter", Serial No. 08/114,463 Filing Date 8/31/93

Y. Guo, D. Reichle, and M.S.P. Lucas, "Magnetic Shielding Properties of Thermally Cycled Thallium 2223 High T_c Superconductor in a Silver Matrix", KSU Engineering Experiment Station Report #251, March 1993.

A.R. El-Koubysi and M.S.P. Lucas, "A Magnetically Shielded Cryogenic Amplifier", KSU Experiment Station Report #252, March 1993.

Xiaochu Xu and M.S.P. Lucas, U.S. Patent Application; "Variable Sampling Rate Sigma-Delta Analog-to-Digital Converter", Serial No. 08/114,463 Filing Date 8/31/93

M.S.P. Lucas and M. van Swaay, "Resource Materials for a Process Control Laboratory," EAB, IEEE Computer Society, January 1989. (Author & Co-editor)

P. Harris, D. de Kock, and M.S.P. Lucas, "Cassette Digital Data Recording System," Physics and Engineering Laboratory, Manual No. 133, Wellington, New Zealand, March 1977.

M.S.P. Lucas, "Thick Film Humidity Sensor," Physics and Engineering Laboratory, Research Report, Wellington, New Zealand, May 1975.

M.S.P. Lucas, "An Introduction to Thick Film Technology," Physics and Engineering Laboratory, Manual No. 113, Wellington, New Zealand, February 1975.

M.S.P. Lucas, "Thick Film Sensors for Moisture Measurement in Highway Materials," Final Report to the State Highway Commission, Topeka, Kansas, January, 1974.

M.S.P. Lucas, "Capacitors and methods for their manufacture," British Provisional Patent Application 39007/66, September 1, 1966.

M.S.P. Lucas, "Trends in Microminiature Filters," Signals Research and Development Establishment Report V6611, Christchurch, England, September 65, June 5, 1965.

M.S.P. Lucas, "Improvements in or relating to filter network components," British Patent Application 27070/65, June 5, 1965.