

## PUBLICATIONS AND REPORTS

### MEETING PAPERS PRESENTED

NASA/ERC Seminar on "Evaluation of Motion-Degraded Images," Cambridge, Massachusetts

December 3-5, 1968

T. S. Huang, Digital Computer Analysis of Linear Shift-Variant Systems

1969 International IEEE Symposium on Information Theory, Neville, New York

January 28-31, 1969

E. V. Hoversten and D. L. Snyder, An Application of State-Variable Estimation Techniques to Signal Detection for the Optical Cloud Channel

T. S. Huang and J. W. Woods, Picture Bandwidth Compression by Block Quantization

International Solid-State Circuits Conference, Philadelphia, Pennsylvania

February 19-21, 1969

G. Hornbuckle and R. Spann, Diagnosis of Single Gate Failures in Combinational Circuits

### JOURNAL PAPERS ACCEPTED FOR PUBLICATION

(Reprints, if available, may be obtained from the Document Room, 26-327, Research Laboratory of Electronics, Massachusetts Institute of Technology, Cambridge, Massachusetts 02139)

B. Blesser, Audio Dynamic Range Compression for Minimum Perceived Distortion (IEEE Trans. (AU))

H. A. Haus and P. Penfield, Jr., Force on a Conducting Current Loop (Physica)

T. S. Huang, Image Enhancement: A Review (Opto-Electronics)

C. Krischer, Ultrasonic Amplification in CdS with Continuous Drift Field at 20°C (J. Appl. Phys.)

P. A. Kolers and D. N. Perkins, Orientation of Letters and Errors in Their Recognition (Perception and Psychophysics)

P. A. Kolers and D. N. Perkins, Orientation of Letters and Their Speed of Recognition (Perception and Psychophysics)

M. K. Maul and M. W. P. Strandberg, Equivalent Circuit of a Superconducting Bolometer (J. Appl. Phys.)

M. K. Maul and M. W. P. Strandberg, Excess Noise in Superconducting Bolometer (Phys. Rev.)

Paula Menyuk and Suzan Anderson, Children's Identification and Reproduction of /w/, /r/, and /l/ (J. Speech Hearing Res.)

W. S. McCulloch, The Nervous System in Education (Int. J. Educ. Sci.)

S. R. Reznick and M. W. P. Strandberg, Surface Impedance and Boundary Scattering in Metals for the Conditions of the Anomalous Skin Depth (Physik kondens.)

JOURNAL PAPERS ACCEPTED FOR PUBLICATION (continued)

- M. B. Sachs, Stimulus-Response Relation for Auditory-Nerve Fibers : Two-Tone Stimuli (J. Acoust. Soc. Am.)
- T. G. Smith, W. K. Stell, and J. E. Brown, Conductance Changes Associated with Receptor Potentials in Limulus Photoreceptors (Science)
- T. G. Smith, W. K. Stell, J. E. Brown, J. A. Freeman, and G. C. Murray, A Role for the Sodium Pump in Photoreception in Limulus (Science)
- M. Schulz and U. Ingard, Acoustic Wave Propagation in a Gas Discharge (Phys. Fluids)

LETTERS TO THE EDITOR ACCEPTED FOR PUBLICATION

- J. I. Glaser, Attenuation and Guidance of Modes in Hollow Dielectric Waveguides (IEEE Trans. (MTT))
- U. Ingard, On Sound-Transmission Anomalies in the Atmosphere (J. Acoust. Soc. Am.)
- C. Krischer, Erratum : Measurement of Sound Velocities in Crystals Using Bragg Diffraction of Light and Applications to Lanthanum Fluoride [Appl. Phys. Letters, Nov. 1, 1968, p. 310] (Appl. Phys. Letters)
- S. G. Kukolich, Erratum : Hyperfine Structure in  $\text{NH}_2\text{D}$  [J. Chem. Phys. 49, 5523 (1968)] (J. Chem. Phys. (Letter))
- P. G. Mezger, B. F. Burke, E. C. Reifenstein, and T. L. Wilson, Wideband Spectroscopy of  $109\alpha$  Radio Recombination Lines (Abstract) (Astron. J.)

TECHNICAL REPORTS PUBLISHED

(These and previously published technical reports, if available, may be obtained from the Document Room, 26-327, Research Laboratory of Electronics, Massachusetts Institute of Technology, Cambridge, Massachusetts 02139)

- 466 Ronald W. Schafer, Echo Removal by Discrete Generalized Linear Filtering
- 469 C. John Moldon, Imaging of Objects Viewed through a Turbulent Atmosphere

SPECIAL PUBLICATIONS

- A. B. Baggeroer, Optimal Signal Design for Additive Colored Noise Channels via State Variables (1968 WESCON Technical Session 6, Paper 6/1) (9 pages)
- L. D. Collins, Asymptotic Approximations to the Error Probability for Detecting Gaussian Signals (1968 WESCON Technical Session 6, Paper 6/2) (6 pages)
- H. L. Van Trees, A. B. Baggeroer, and L. D. Collins, Complex State Variables : Theory and Applications (1968 WESCON Technical Session 6, Paper 6/3) (17 pages)
- B. F. Burke, H II Regions and Larger Scale Galactic Structure, in Interstellar Ionized Hydrogen, edited by Y. Terzian (W. P. Benjamin, New York, 1968), pp. 541-564

SPECIAL PUBLICATIONS (continued)

- J. A. Fodor and J. J. Katz, *The Structure of Language* (La Nuova Italia Editrice, Firenze, Italia, 1968)
- C. A. Nanney and E. V. George, *Microwave Emission from BiSb Alloys* (Abstract) (Bull. Am. Phys. Soc., Ser. II, Vol. 14, No. 3, p. 384, 1 March 1969)
- T. F. Winkler, F. G. Walther, M. T. Myint, and D. Kleppner, *A Determination of  $g_j/g_p$  in Atomic Hydrogen* (Theory of the One- and Two-Electron Atoms, North-Holland Publishing Company, Amsterdam, Netherlands, 1969)