

PUBLICATIONS AND REPORTS

MEETING PAPERS PRESENTED

Digital Signal Processing Session of the International Communications Conference,
San Francisco, California

June 8, 1970

A. V. Oppenheim, The Effect of Finite Word-Length in Digital Filters
(invited lecture)

1970 IEEE International Symposium on Information Theory, Noordwijk, The Netherlands

June 15-19, 1970

P. Elias, Some Problems of Sorting and Switching

UCLA Plasma Physics Group Summer Course, Department of Physics, University
of California, Los Angeles

June 15-26, 1970

J. E. Robinson, Quiescent Radiofrequency Plasma Experiment (invited)

Istituto di Fisica, University of Rome, Italy

June 16, 1970

M. W. P. Strandberg, Surface Magneto Impedance Variation Arising from
Specularly Reflected Electrons (invited)

Centro di Studi Nucleari Della Casaccia, Rome, Italy

June 17, 1970

M. W. P. Strandberg, Nonlinear Effects in Paramagnetic Resonance (invited)

Istituto Superiore di Sanita', Rome, Italy

June 18, 1970

M. W. P. Strandberg, An Attempt to Measure Charge Carrier Mobility in
Large Biological Molecules Using EPR Techniques (invited)

Fourth ESPRIN-ESLAB Symposium "Upper Atmosphere Models and Related
Experiments," Frascati, Italy

July 6-10, 1970

G. Fiocco and G. Grams, Origin of Noctilucent Clouds : Extraterrestrial
Dust and Trapped Water Molecules

Symposium, International Congress on Education of the Deaf, Stockholm, Sweden

August 12-14, 1970

Paula Menyuk, Some Studies of the Acquisition of Phonology

10th International Conference on the Physics of Semiconductors, Cambridge,
Massachusetts

August 17-21, 1970

A. Bers and S. R. J. Brueck, Electron-Phonon Interactions in Applied
Electric and Magnetic Fields

R. N. Wallace and A. Bers, Microwave Emission from N-InSb at 77° K

MEETING PAPERS PRESENTED (continued)

Brain Information Service of the Brain Research Institute, University of California,
Los Angeles

August 24-26, 1970

W. M. Siebert, Workshop on Neuronal Models (invited)

Fourth European Conference on Controlled Fusion and Plasma Physics, Rome, Italy

August 31 - September 4, 1970

G. Bekefi, Optical Satellites Induced in Dense Plasmas through the Action
of Intense High-Frequency Electric Fields

E. V. George and L. D. Pleasance, Optical Production of High Density
Plasmas with a Novel CO₂ Laser

B. Ya'akobi, E. V. George, M. Pawlak, and G. Bekefi, Forbidden Optical
Transitions Induced in Dense Lithium Plasmas

JOURNAL PAPERS ACCEPTED FOR PUBLICATION

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

R. Boscaino, I. Ciccarello, C. Cusumano, and M. W. P. Strandberg, Second-Harmonic
Generation and Spin Decoupling in Resonant Two-Level Spin Systems (Phys. Rev.)

A. Gabrielian, The Theory of Interacting Local Automata (Inform. Contr.)

G. A. Garosi, G. Bekefi, and M. Schulz, Response of a Weakly Ionized Plasma to
Turbulent Gas Flow (Phys. Fluids)

J. I. Glaser, Synthesis of the Primary Fields of a Transmitting Feed for a Circular
Reflector (IEEE Trans. (AP))

P. Gogan, The Startle and Orienting Reactions in Man. A Study of Their Characteristics
and Habituation (Brain Res.)

H. A. Haus, Steady-State Quantum Analysis of Linear Systems (Proc. IEEE)

E. V. Hoversten, R. O. Harger, and S. J. Halme, Communication Theory for the
Turbulent Atmosphere (Proc. IEEE)

M. Hudis and L. M. Lidsky, Directional Langmuir Probe (J. Appl. Phys.)

C. Krischer, Optical Measurements of Ultrasonic Attenuation and Reflection Losses
in Fused Silica (J. Acoust. Soc. Am.)

J. A. Kong, Biaxial Crystal Optics (J. Opt. Soc. Am.)

A. V. Oppenheim, Speech Spectrograms Using the Fast Fourier Transform
(IEEE Spectrum)

D. J. M. Poussart, Membrane Current Noise in Lobster Axon under Voltage Clamp
(Biophys. J.)

D. E. Pritchard, G. M. Carter, F. Y. Chu, and D. Kleppner, Alkali-Alkali
Differential Spin Exchange Scattering - I (Phys. Rev.)

JOURNAL PAPERS ACCEPTED FOR PUBLICATION (continued)

- D. E. Pritchard and F. Y. Chu, Alkali-Alkali Differential Spin Exchange Scattering II. Analysis (Phys. Rev.)
- D. H. Steinbrecher, Optimum Efficiency of a Cascade of Low-Gain Amplifiers (IEEE Trans. (MTT))
- B. N. Yung and M. W. P. Strandberg, Role of Specular Reflection of Electrons in the Radio-Frequency Surface Magneto Impedance of Metals (Physik kondens. Mat.)

LETTERS TO THE EDITOR ACCEPTED FOR PUBLICATION

- A. Bers and R. N. Wallace, Microwave Emission from the Bulk of n-Type Indium Antimonide (Phys. Rev. Letters)
- Jeanne H. Fertel, Further Comments on the Presence of Silicon Monoxide Bands in Some Low-Temperature Stars (Astrophys. J.)
- P. W. Hoff, H. A. Haus, and T. J. Bridges, Observation of Optical Nutation in an Active Medium (Phys. Rev. Letters)
- J. A. Kong, Reciprocity Relationships for Bianisotropic Media (Proc. IEEE (Letter))
- D. L. Lyon, E. V. George, and H. A. Haus, Observation of Spontaneous Mode Locking in a High-Pressure CO₂ Laser (Appl. Phys. Letters)
- D. L. Thacker, W. J. Wilson, and A. H. Barrett, Observations of the $^2\pi_{1/2}$, J = 1/2 State of OH (Astrophys. J. Letters)
- W. J. Wilson and A. H. Barrett, Observations of Interstellar O¹⁸H (Astrophys. Letters)

TECHNICAL REPORTS PUBLISHED

(This 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)

- 479 John L. Ramsey, Cascaded Tree Codes

SPECIAL PUBLICATIONS

- W. Henke, Preliminaries to Speech Synthesis Based upon an Articulatory Model (Paper C5 in Conference Preprints, 1967 Conference on Speech Communication and Processing, held at M.I.T., 6-8 November 1967, sponsored by Air Force Cambridge Research Laboratories, Office of Aerospace Research, U.S.A.F., and IEEE Audio and Electroacoustics Group, pp. 169-176)
- J. E. Lisman and J. E. Brown, A Linear Relationship between Light-Induced Current and Flash Intensity in Limulus Ventral Photoreceptor (Marine Biological Laboratory Biol. Bull.)
- E. Peper, Problems and Artifacts in Feedback Electroencephalography (Abstracts Third Annual Winter Conference on Brain Research, Snowmass-at-Aspen, Colorado, January 25-30, 1970)

SPECIAL PUBLICATIONS (continued)

- K. N. Stevens, Acoustic Correlates of Certain Consonantal Features (Paper C6, in Conference Preprints, 1967 Conference on Speech Communication and Processing, held at M. I. T., 6-8 November 1967, sponsored by Air Force Cambridge Research Laboratories, Office of Aerospace Research, U. S. A. F., and IEEE Audio and Electroacoustics Group, pp. 177-184)
- I. T. Young, Automated Leukocyte Recognition (Proc. Second International Tutorial on Quantitative Cytochemistry, University of Chicago, August 4-6, 1968)