

PUBLICATIONS AND REPORTS

MEETING PAPERS PRESENTED

Joint Colloquium of the Division of Engineering and Applied Physics and the Department of Physiology, Harvard University, Cambridge, Massachusetts

October 15-16, 1968

P. Demko, Jr., Experimental and Computational Research on the Electrical Behavior of Nerve Membrane (invited)

T. F. Weiss, The Hodgkin-Huxley Model for Excitation of Nerve Membrane (invited)

Blind Professionals Society, Boston, Massachusetts

January 20, 1969

K. R. Ingham, Management Information Services with Voice Responses (invited)

Symposium on Instabilities in Semiconductors (sponsored by IBM and the American Physical Society), IBM Research Center, Yorktown Heights, New York

March 20-21, 1969

E. V. George and G. Bekefi, The Effect of Contacts on the Low-Field RF Emission from InSb

D. A. Platts and A. Bers, Surface Wavelength Measurements of Microwave Emission from InSb

Symposium of the Division of Solid State Physics, American Physical Society, Philadelphia, Pennsylvania

March 26, 1969

C. A. Nanney and E. V. George, Coherent Microwave Radiation from BiSb Alloys

C. A. Nanney and E. V. George, Microwave Emission from BiSb Alloys

Seventh Annual Symposium on Biomathematics and Computation Science in the Life Sciences, University of Texas, Houston, Texas

March 26-27, 1969

R. R. Archer and J. A. Lockhart, Nonuniform Growth of a Continuum in Relation to an Imbedded Flow Network

Society for Research in Child Development Meeting, Santa Monica, California

March 26-29, 1969

Paula Menyuk, Child's Categorization of Speech Sound Stimuli

Symposium on Electrohydrodynamics, Cambridge, Massachusetts

March 31 - April 2, 1969

H. A. Haus and P. Penfield, Jr., Force in a Magnetic Fluid with Viscosity and Hysteresis as an Example of the Principle of Virtual Power

P. Penfield, Jr. and H. A. Haus, Techniques for Finding Force Expressions for Novel Media

MEETING PAPERS PRESENTED (continued)

International Symposium on Computer Processing in Communications, Polytechnic Institute of Brooklyn, New York

April 8-10, 1969

D. Spencer and T. Huang, Bit-Plane Encoding of Continuous-Tone Pictures

77th Meeting, Acoustical Society of America, Philadelphia, Pennsylvania

April 8-11, 1969

J. J. Guinan, S. S. Guinan, and B. E. Norris, Single Auditory Units Recorded in the Medial Nucleus of the Trapezoid Body (MNTB) of Anesthetized Cats

A. W. F. Huggins, Just-Noticeable Differences for Phoneme Duration in Natural Speech

A. W. F. Huggins, The Perceived Rate of Dichotically Alternated Clicks

R. H. Katyl and U. Ingard, Light Scattering from Thermal Fluctuations of a Liquid-Liquid Interface

N. Y. S. Kiang, T. Baer, E. M. Marr, and D. Demont, Discharge Rates of Single Auditory-Nerve Fibers as Functions of Tone Level

D. H. Klatt and K. N. Stevens, An Acoustic Feature Analysis of Several Arabic Consonants

R. A. Levine, E. C. Moxon, and N. Y. S. Kiang, Responses of Single Auditory-Nerve Fibers in Cochleas Damaged by Ototoxic Drugs

M. Medress, Computer Recognition of Single-Syllable English Words

Paula Menyuk, Studying Children's Acquisition of Phonology (invited)

W. T. Peake, H. S. Sohmer, and T. F. Weiss, Microelectrode Recordings of Intracochlear Potentials

R. M. Sachs and D. H. Klatt, Vowel Identification in Isolation and in Word Context

K. N. Stevens, Evidence for Quantal Vowel Articulations

T. F. Weiss, W. T. Peake, and H. S. Sohmer, Intracochlear Responses to Tones

J. J. Wolf, Acoustic Measurements for Speaker Recognition

IEEE Information Theory Group Chapter, Massachusetts Institute of Technology

April 9, 1969

E. V. Hoversten, Optical Communication - A Status Report (invited)

Bio-Math and Living Systems Symposium, Houston, Texas

April 18, 1969

K. R. Ingham, Speech Generation by Computers

1969 USNC-URSI Spring Meeting, Washington, D. C.

April 21-24, 1969

J. I. Glaser, The Use of the Lorentz Reciprocity Theorem for the Design and Evaluation of Feeds for Reflectors

Annual Meeting of the American Geophysical Union, Washington, D. C.

April 21-25, 1969

S. J. Bless, High-Pressures Experiments with a Magnetic Pinch

MEETING PAPERS PRESENTED (continued)

Laboratory for Sensory Communications, Syracuse University, Syracuse, New York
April 28-29, 1969

T. F. Weiss, Intracochlear Potentials (invited)

T. F. Weiss, Membrane Noise (invited)

Purdue University Centennial Symposium on Information Sciences, Lafayette, Indiana
April 28-30, 1969

G. B. Anderson and T. S. Huang, Picture Bandwidth Compression by Piecewise Fourier Transformation (invited)

23rd Annual Frequency Control Symposium, Atlantic City, New Jersey
May 6-8, 1969

S. Ezekiel, Laser Frequency Stabilization Using a Primary Frequency Reference

Symposium in Honor of Henry Margenau, Yale University, New Haven, Connecticut
May 9, 1969

S. C. Brown, Forty Years of Collisions with Henry Margenau (invited)

Open Meeting of the Cosmic Dust Panel, COSPAR Meeting, Prague, Czechoslovakia
May 11-23, 1969

G. Fiocco and G. Grams, Motion of Aerosols in the Upper Atmosphere

Spring Joint Computer Conference, Boston, Massachusetts
May 14-16, 1969

G. B. Anderson and T. S. Huang, Errors in Frequency-Domain Processing of Images

Tactile Displays Conference, Stanford Research Institute, Stanford, California
May 14-16, 1969

R. M. Strong and D. E. Troxel, An Electrotactile Display (invited)

General Electric Company, Saratoga Springs, New York
May 15-16, 1969

W. M. Siebert, Modern Engineering Course (invited lectures)

Isenberg Memorial Lecture Series, Michigan State University, East Lansing, Michigan
May 16, 1969

W. S. McCulloch, Of Minding and Mattering (invited)

7th National Biomedical Sciences Instrumentation Symposium, "Imagery in Medicine,"
University of Michigan, Ann Arbor, Michigan
May 19-21, 1969

O. J. Tretiak and C. L. Seitz, Microscopy with Computer Graphics

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)

- C. P. Christensen, C. Freed, and H. A. Haus, Gain Saturation and Diffusion in CO_2 Lasers (J. Quantum Electronics)
- N. I. Durlach and L. D. Braida, Intensity Perception. I. Preliminary Theory of Intensity Resolution (J. Acoust. Soc. Am.)
- J. D. Ellett, Jr. and J. S. Waugh, The Chemical Shift Concertina (J. Chem. Phys.)
- J. H. Fertel and C. H. Perry, Optical Phonons in $\text{KCl}_{1-x}\text{Br}_x$ and $\text{K}_{1-x}\text{Rb}_x\text{I}$ Mixed Crystals (Phys. Rev.)
- O. Franzén and K. Offenloch, Evoked Response Correlates of Psychophysical Magnitude Estimates for Tactile Stimulation in Man (Exp. Brain Res.)
- J. W. Gadzuk, Theory of Dielectric Screening of an Impurity at the Surface of an Electron Gas (J. Phys. Chem. Solids)
- U. Haeberlen and J. S. Waugh, Spin-Lattice Relaxation in Periodically Perturbed Systems (Phys. Rev.)
- M. Halle, How not to measure length of lexical representations and other matters (J. Linguistics)
- R. P. Lowndes, J. F. Parrish, and C. H. Perry, Optical Phonons and Symmetry of Tysonite Lanthanide Fluorides (Phys. Rev.)
- W. S. McCulloch, Regenerative Loop [for Lawrence G. Kubie Festschrift] (J. Nerv. Mental Disease)
- C. H. Perry and N. E. Tornberg, Optical Phonons in Mixed Sodium Potassium Tantalates (Phys. Rev.)
- Shardanand, Experimental Evidence for Xe_2 Molecules (Phys. Rev.)
- D. S. Shupe and R. E. Stickney, Thermodynamics of the Solubility and Permeation of Hydrogen in Metals at High Temperature and Low Pressure (J. Chem. Phys.)
- K. N. Stevens, A. M. Liberman, M. Studdert-Kennedy, and S. E. G. Öhman, Crosslanguage Study of Vowel Perception (Lang. and Speech)

LETTERS TO THE EDITOR ACCEPTED FOR PUBLICATION

- S. A. Cohen and J. G. King, Search for Hydrogen Appearing in Mercury (Nature)
- E. V. George and G. Bekefi, Effect of Contacts on the Emission from Indium Antimonide (Appl. Phys. Letters)
- J. G. King and W. R. Bigas, The Molecular Scanner, A New Instrument (Nature)
- R. R. Parker and K. I. Thomassen, Feedback Stabilization of a Drift-type Instability (Phys. Rev. Letters)
- J. F. Parrish, R. P. Lowndes, and C. H. Perry, Far Infrared Electronic and Vibronic Transitions of Nd^{3+} in the Tysonite Lanthanide Fluorides (Phys. Letters A)

LETTERS TO THE EDITOR ACCEPTED FOR PUBLICATION (continued)

- T. T. Wilheit, Jr. and A. H. Barrett, The Microwave Spectrum of Molecular Oxygen (Phys. Rev. (Comments and Addenda))

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)

- 470 Richard Lewis Greenspan, Error Bounds for Digital Communication over Spatially Modulated Channels
- 472 Harold M. Heggstad, Optical Communication through Multiple-Scattering Media (also Lincoln Laboratory Technical Report 454)
- 473 J. Clair Batty and Robert E. Stickney, Thermodynamics and Kinetics of Heterogeneous Reactions

SPECIAL PUBLICATIONS

- K. Ingham, Braille Outputs from Reading Machines (Proc. Conference on New Processes for Braille Manufacture, American Printing House for the Blind, Louisville, Kentucky, February 8-9, 1968)
- W. S. McCulloch, Of I and It (in Perspectives in Biology and Medicine, Summer 1969)
- W. S. McCulloch, RAGNA RÖKR (Burg Wartenstein Symposium No. 40, July 16 - July 25, 1968, Wenner-Gren Foundation for Anthropological Research)
- W. S. McCulloch, This Superfluity of Naughtiness (Burg Wartenstein Symposium No. 41, Summer 1969)
- W. F. Pickard, On Polylogarithms (Publicationes Mathematicae, Institut Mathématique de l'Université, Debrecen, Hongrie, T. 15, Fasc. 1-4, 33-43, 1968)