

PUBLICATIONS AND REPORTS

Journal Articles

- ✓ S. Goldman, W. F. Santelmann, Jr., W. E. Vivian and D. Goldman: Traveling Waves in the Brain, Science, May 20, 1949, vol. 109, p. 524.
- ✓ R. M. Redheffer: Microwave Antennas and Dielectric Surfaces, J. A. P. 20, No. 4, 397 (1949).
- L. Davis, Jr., B. T. Feld, C. W. Zabel and J. R. Zacharias: The Hyperfine Structure and Nuclear Moments of the Stable Chlorine Isotopes; submitted to Phys. Rev.
- ✓ L. Davis, Jr., D. E. Nagle and J. R. Zacharias: Atomic-Beam Magnetic Resonance Experiments with Radioactive Elements Na²², K⁴⁰, Cs¹³⁵ and Cs¹³⁷; submitted to Phys. Rev.
- E. R. Kretzmer: An Application of Autocorrelation Analysis; submitted to Proc. I. R. E.
- ✓ Hin Lew: Hyperfine Structure of the $^2P_{3/2}$ State of Al²⁷. The Nuclear Electric Quadrupole Moment; submitted to Phys. Rev.

Meeting Papers

American Physical Society

June 16 - 18, 1949, Cambridge, Mass.

M. A. Biondi, S. C. Brown: Measurements of Electron-Ion Recombination in Diatomic Gases.

B. Lax, S. C. Brown: High-Frequency Breakdown in Magnetic Field.

L. J. Varnerin, Jr., S. C. Brown: A Method for Determining the Average Energy of Electrons in a Gas Discharge.

F. Bitter: The Optical Detection of Radio-Frequency Resonance.

R. B. Lawrence, R. L. Kuhl, M. W. P. Strandberg: Microwave Spectrum of Formaldehyde.

W. B. Nowak, J. C. Slater: Surface Impedance of Metals at 24,000 Mc/Sec.

American Institute of Electrical Engineering - Institute of Radio Engineers lecture series on Recent Developments in the Theory of Communication, March 14 - May 23, 1949, N. Y.

Y. W. Lee: Filtering and Prediction, lecture 5, May 9, 1949.

Symposium on Applications of Autocorrelation Analysis to Physical Problems, Woods Hole Oceanographic Institution, June 13 - 14, 1949, Woods Hole, Mass.

Y. W. Lee and T. P. Cheatham, Jr.: Theory and Applications of Autocorrelation Functions to Communication Problems.

American Institute of Radio Engineers

June, 1949 (Princeton Section)

E. E. David, Jr.: R-F Phase Control of Microwave Oscillators.

American Electroencephalographic Society, Atlantic City

June 9, 1949

S. Goldman, W. E. Vivian and W. F. Santelmann, Jr.: Electronic Mapping of the Activity of the Heart and Brain.

Letters To The Editor

- ✓ L. Davis, Jr., The Nuclear Spin and Magnetic Moment of Cs¹³⁷.
- ✓ M. A. Biondi, S. C. Brown: Note on The Measurements of Ambipolar Diffusion in Helium.
- ✓ W. C. Dickinson, T. F. Wimett: The Magnetic Moment of Be⁹.
- ✓ F. Bitter: Nuclear Magnetic Moments and Hyperfine Structure of the Rubidium Isotopes. Phys. Rev.
- ✓ W. P. Allis: An Error in a Paper by Landau on Coulomb Interactions in a Plasma. Phys. Rev.
- ✓ J. B. Wiesner, N. Wiener, L. Levine: Some Problems in Sensory Pro-synthesis.

Technical Reports

- No. 65 The Transmission of Information, R. M. Fano, March 17, 1949.
- No. 92 Interference Characteristics of Pulse-Time Modulation, E. R. Kretzmer, May 27, 1949.
- No. 97 Surface Impedance of Metals at 24,000 Mc/Sec, W. B. Nowak, May 27, 1949.
- No. 98 The Optical Detection of Radio-Frequency Resonance, F. Bitter, March 2, 1949; submitted to Phys. Rev.
- No. 99 Investigation of Anode Structure in a Rising-Sun Magnetron, R. R. Moats, May 18, 1949.
- No. 101 Deionization Measurements of Grid-Controlled Thyratrons: F. M. Verzuh, March 8, 1949.
- No. 102 Properties of Guided Waves on Inhomogeneous Cylindrical Structures, R. B. Adler, May 27, 1949.
- No. 104 Metal to Nonmetallic Brazing: C. S. Pearsall, P. K. Zingesser, April 5, 1949; submitted to Materials and Methods.
- No. 105 Low-Frequency Spectrum of Lock-In Amplifiers, C. A. Stutt, March 26, 1949.
- No. 106 Design of Tunable Resonant Cavities with Constant Bandwidth, L. D. Smullin, April 5, 1949; submitted to Proc. I. R. E.
- No. 108 The Admittance of High-Frequency Gas Discharges, E. Everhart, S. C. Brown, May 5, 1949; submitted to Phys. Rev.
- No. 110 Survey of Methods Used to Determine the Optical Properties of Phosphors, W. B. Nottingham, May 10, 1949; submitted to J. Opt. Soc. Am.
- No. 111 Theory of Critical Fluctuations, M. J. Klein, L. Tisza, April 29, 1949; submitted to Phys. Rev.
- No. 113 Electrons in Perturbed Periodic Lattices, J. C. Slater, May 12, 1949; submitted to Phys. Rev.
- No. 114 Theoretical Limitations on the Rate of Transmission of Information, W. G. Tuller, April 23, 1949; submitted to Proc. I. R. E.
- No. 119 Statistical Optics, II. Mueller Phenomenological Algebra, N. G. Parke III, June 15, 1949.
- No. 124 Second Sound Velocity in Liquid Helium II, R. D. Maurer, M. A. Herlin, June 13, 1949; submitted to Phys. Rev.