

PUBLICATIONS AND REPORTS

Letters to the Editor

- / S. Golden¹, T. Wentink, Jr., R. E. Hillger, and M. W. P. Strandberg, "Stark Spectrum of H₂O", Phys. Rev. 73, 92 (1948).
- / M. W. P. Strandberg, T. Wentink, Jr., R. E. Hillger, G. H. Wannier², and M. L. Deutsch², "Stark Spectrum of HDO", Phys. Rev. 73, 188 (1948).
- / L. Davis, B. T. Feld, C. W. Zabel, and J. R. Zacharias, "Hyperfine Structure and Nuclear Moments of Chlorine", Phys. Rev. 73, 525 (1948).

Meeting Papers

The Institute of Radio Engineers, New York, N. Y., March 22 and 23, 1948

L. J. Chu, "Physical Limitations of Directive Radiating Systems".

H. Wallman, A. B. Macnee, and C. P. Gadsden³, "Low-Noise Amplifier".

H. E. Harris, "A Simplified Design Procedure for Iron-Core Toroids".

H. E. Harris, "A Simplified Negative Resistance Type Q Multiplier".

The American Physical Society, Washington, D. C., April 29, 30, and May 1, 1948.

P. M. Marcus, "Rigorous Expansions of the Acoustic Radiation Field of a Vibrating Piston in a Baffle".

M. W. P. Strandberg, "Microwave Rotational Absorption in D₂O".

E. Everhart and S. C. Brown, "A Method of Measuring the Complex Conductivity of an Ionized Gas at Microwave Frequencies".

M. A. Herlin and S. C. Brown, "Electrical Breakdown Between Coaxial Cylinders at Microwave Frequencies".

L. Davis, Jr. and C. W. Zabel, "The Electric Quadrupole Moments of the Chlorine Nuclei".

L. Tisza, "Irreversibility and Quantum Mechanics".

E. Maxwell, P. M. Marcus, and J. C. Slater, "Surface Impedance of Tin at 24000 Mc/sec".

J. R. Zacharias, "Molecular-Beam Experiments with Chlorine"; Symposium on Radiofrequency Spectroscopy.

F. Bitter, "Nuclear Magnetic Resonance Experiments at the Massachusetts Institute of Technology"; Symposium on Radiofrequency Spectroscopy.

M. W. P. Strandberg, "Rotational Spectra of Linear Molecules"; Symposium on Radiofrequency Spectroscopy.

The Institute of Radio Engineers (New England Section), May 22, 1948.

S. C. Brown, "Microwave Gas Discharge Counters for the Detection of Ionizing Radiation".

1. Harvard University.

2. Socony-Vacuum Laboratories, Paulsboro, New Jersey.

3. Tulane University, New Orleans, La.

Technical Reports¹

- No. 27 D. F. Winter and O. T. Fundingsland, "Applications of Fast Sweep Synchroscope to Measurement of Rapidly Rising Pulses", January 21, 1947; slightly revised version, "Design of a Fast Sweep Synchroscope and Performance Tests with a Special Pulse Generator", submitted to Rev. Sci. Inst.
- No. 32 S. Goldman, "Some Fundamental Considerations Concerning Noise Reduction and Range in Radar and Communication", December 15, 1947; also submitted to Proc. I.R.E.
- No. 33 M. V. Cerrillo, "Transients in Waveguides", January 3, 1948.
- No. 41 R. M. Fano, "Theoretical Limitations on the Broadband Matching of Arbitrary Impedances", January 2, 1948.
- No. 49 C. Kittel and J. M. Luttinger, "Crystalline Stark Splitting and Microwave Resonance Absorption in Paramagnetic Salts", September 10, 1947; also published in Phys. Rev. 73, 162 (1948).
- No. 51 J. R. Pellam, "Wave Transmission and Reflection Phenomena in Liquid Helium II", November 7, 1947; also published in Phys. Rev. 73, 608 (1948).
- No. 52 W. Roth, "Scattering of Ultrasonic Radiation in Polycrystalline Solids", November 26, 1947; also submitted to J. App. Phys.
- No. 54 R. M. Redheffer, "Design of a Circuit to Approximate a Prescribed Amplitude and Phase", November 24, 1947.
- No. 57 W. C. Galloway, "Distortion in the Frequency-Modulated Output of a Frequency-Stabilized Oscillator", February 4, 1948.
- No. 58 N. H. Frank and R. Q. Twiss, "Orbital Stability in a Proton Synchrotron", February 9, 1948.

1. The technical reports listed above may be obtained upon request from the Document Office, 20 B-221, Research Laboratory of Electronics, Massachusetts Institute of Technology, Cambridge 39, Massachusetts.

