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RCA TECHNICAL PAPERS

(1956-1960)

INDEX

Volume IV

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RCA TECHNICAL PAPERS

(1956-1960)

INDEX

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INDEX

Volume IV

This index, together with Volume I (1919-1945), Volume II (1946-1950), and Volume III (1951-1955), lists substantially all published technical papers on subjects in the radio, electronics and related fields, the authors of which were associated with Radio Corporation of America (including its various divisions and subsidiary companies) at the time of the paper's preparation or at the time the work described in the paper was performed.

This volume covers the period 1956-1960. It includes all listings contained in subvolumes IV(a), (b), (c) and (d), and supersedes these subvolumes.

The chronological index is followed by a section arranged alphabetically by authors and a subject classification section.

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The Manager, RCA Review

RCA TECHNICAL PAPERS

(1956-1960)

INDEX, Volume IV

CONTENTS

ABBREVIATIONS	vi
CHRONOLOGICAL INDEX	1
AUTHOR INDEX	60
SUBJECT INDEX	69

ABBREVIATIONS

Elec. Eng.—*Electrical Engineering*

Jour. Acous. Soc. Amer.—*Journal of the Acoustical Society of America*

Jour. Amer. Cer. Soc.—*Journal of the American Ceramic Society*

Jour. Appl. Phys.—*Journal of Applied Physics*

Jour. Aud. Eng. Soc.—*Journal of Audio Engineering Society*

Jour. Chem. Phys.—*Journal of Chemical Physics*

Jour. Electrochem. Soc.—*Journal of the Electrochemical Society*

Jour. S.M.P.T.E.—*Journal of the Society of Motion Picture &
Television Engineers*

Phys. Rev.—*Physical Review*

Phys. Rev. Letters—*Physical Review Letters*

Proc. I.R.E.—*Proceeding of the Institute of Radio Engineers*

Rev. Mod. Phys.—*Review of Modern Physics*

Rev. Sci. Instr.—*Review of Scientific Instruments*

Trans. ASME—*Transactions of the American Society of Mechanical
Engineers*

Trans. I.R.E.—*Transactions of the Institute of Radio Engineers*

RCA TECHNICAL PAPERS

(1956-1960)

CHRONOLOGICAL INDEX

No.		Year
3865	"Demagnetizing the RCA-21AXP22 Color Kinescope," <i>RCA Application Note AN-163</i> , Tube Division, Radio Corporation of America, Harrison, N. J. (January)	1956
3866	"A Developmental Wide-Band, 100-Watt, 20 DB, S-Band Traveling-Wave Amplifier Utilizing Periodic Permanent Magnets," W. W. Siekanowicz and F. Sterzer, <i>Proc. I.R.E.</i> (January)	1956
3867	"Diversity Reception with Correlated Signals," H. Staras, <i>Jour. Appl. Phys.</i> (Letter to the Editor) (January)	1956
3868	"Electromechanical Filters for 100-Kc Carrier and Sideband Selection," R. W. George, <i>Proc. I.R.E.</i> (January).....	1956
3869	"The Electron Microscope (New Tools for Research)," G. B. Chapman, <i>Modern Medicine</i> (January)	1956
3870	"Gas Tubes Protect High-Power Transmitters," W. N. Parker and M. V. Hoover, <i>Electronics</i> (January)	1956
3870a	"An Investigation by Photographic Simulation of One Type of Bandwidth Reduction of Television Signals," W. C. Morrison, K. Karstad, and J. W. Tuska, <i>Trans. I.R.E. PGBTS</i> (January)	1956
3871	"Kink-Bands in Germanium," F. D. Rosi, <i>Acta Metallurgica</i> (January)	1956
3871a	"Multiple Antenna System for Television Broadcasting With Antennas of Equal Height," L. J. Wolf, <i>Trans. I.R.E. PGBTS</i> (January)	1956
3872	"Neck-Shadow Problems in Kinescopes," <i>RCA Application Note AN-162</i> , Tube Division, Radio Corporation of America, Harrison, N. J. (January)	1956
3873	"New Beam Power Tubes for UHF Service," W. P. Bennett, <i>Trans. I.R.E. PGED</i> (January)	1956
3874	"Noise Reduction in CW Magnetrons," R. L. Krulee and J. A. Mullen, <i>Proc. I.R.E.</i> (January) (Letter to the Editor)....	1956
3875	"Plasma Oscillations at Extremely High Frequencies," M. A. Lampert, <i>Jour. Appl. Phys.</i> (January)	1956
3876	"A Step-Type, Broadband, X-Band Ceramic Waveguide Window," H. K. Jenny and F. E. Vaccaro, <i>Trans. I.R.E. PGED</i> (January)	1956
3877	"A Transmission Line Taper of Improved Design," R. W. Klopfenstein, <i>Proc. I.R.E.</i> (January)	1956
3878	"Frequency Stability of Point-Contact Transistor Oscillators," C. C. Cheng, <i>Proc. I.R.E.</i> (February)	1956
3879	"How to Make Live Commercials Using RCA 3-V Color Film Chain," S. L. Bendell, H. N. Kozanowski, and T. J. Shipferling, <i>Broadcast News</i> (February)	1956
3880	"New Expandable Consolette," E. J. Meehan, <i>Broadcast News</i> (February)	1956
3881	"New Signal Handling Techniques Simplify Control Operations for Color TV," I. Bosinoff, A. C. Luther, F. W. Millspaugh, and H. M. Potter, <i>Broadcast News</i> (February)	1956
3882	"The Polarguide—A Constant Resistance Waveguide Filter," R. W. Klopfenstein and J. Epstein, <i>Proc. I.R.E.</i> (February)	1956

No.		Year
3883	"Remote TV-Control Tuning System Circuitry," S. Wlasuk and J. H. Fisher, <i>Service</i> (February)	1956
3884	"A Technique for Evaluating Various Cathode Materials," C. K. Morehouse and R. Glicksman, <i>Jour. Electrochem. Soc.</i> (February)	1956
3885	"Transistor Fabrication by the Melt-Quench Process," J. I. Pankove, <i>Proc. I.R.E.</i> (February)	1956
3886	"Photoelectromagnetic Effect in Insulating CdS," H. S. Sommers, Jr., R. E. Berry, and I. Sochard, <i>Phys. Rev.</i> (February 1)	1956
3887	"Photovoltaic Effect in GaAs p-n Junctions and Solar Energy Conversion," D. A. Jenny, J. J. Loferski, and P. Rappaport, <i>Phys. Rev.</i> (Letter to the Editor) (February 1)	1956
3888	"Antennas, Transmission Lines and Distribution Systems for Color TV," J. D. Callaghan, <i>Service</i> (March)	1956
3889	"Automatic-Frequency Control of Television Receivers Using Junction Diodes," W. Y. Pan and O. Romanis, <i>Transistors I</i> , RCA Laboratories (March)	1956
3890	"Bandwidth Requirements of SW Radio Telegraphy," J. B. Moore, <i>Tele-Tech</i> (March)	1956
3891	"Basic Transistor Device Concepts," H. Johnson, <i>Transistors I</i> , RCA Laboratories (March)	1956
3892	"Calculations of Alloying Depth of Indium in Germanium," L. Pensak, <i>Transistors I</i> , RCA Laboratories (March)....	1956
3893	"Cataphoretic Deposition of Thoria on Tantalum," C. P. Hadley, <i>Rev. Sci. Instr.</i> (Laboratory and Shop Notes) (March)	1956
3894	"Color Television Receiver Design—A Review of Current Practice," M. O. Pyle, Co-author, <i>Proc. I.R.E.</i> (March)..	1956
3895	"Conversion Factors for Tube Characteristics," <i>RCA Application Note AN-164</i> (March)	1956
3896	"Continuous-Process Apparatus for Growing Single-Crystal Germanium," H. Nelson, <i>Transistors I</i> , RCA Laboratories (March)	1956
3897	"Coupled Cavity Tunes X-Band Magnetron," W. F. Beltz, <i>Electronics</i> (March)	1956
3898	"Cross-Modulation in Transistor R-F Amplifiers," D. D. Holmes, <i>Transistors I</i> , RCA Laboratories (March)	1956
3899	"Design Considerations in Class-B Complementary Symmetry Circuits," T. O. Stanley and T. M. Scott, <i>Transistors I</i> , RCA Laboratories (March)	1956
3900	"A Determination of 1/f Noise Sources in Semiconductor Diodes and Triodes," W. H. Fonger, <i>Transistors I</i> , RCA Laboratories (March)	1956
3901	"The Drift Transistor," H. Kroemer, <i>Transistors I</i> , RCA Laboratories (March)	1956
3902	"Electron Microscopy of Ultra-Thin Sections of Bacteria II. Sporulation of <i>Bacillus megaterium</i> and <i>Bacillus cereus</i> ," G. B. Chapman, <i>Journal of Bacteriology</i> (March)	1956
3903	"The Electron-Voltaic Effect in Germanium and Silicon P-N Junctions," P. Rappaport, J. J. Loferski, and E. G. Linder, <i>RCA Review</i> (March)	1956
3904	"Equipment for Measuring Junction Temperature of an Operating Transistor," J. Ollendorf and K. E. Loofbourrow, <i>Transistors I</i> , RCA Laboratories (March)	1956
3905	"Evaluation of Transistors for Class-B Power Amplifiers," W. Hasenberg, <i>Transistors I</i> , RCA Laboratories (March). .	1956
3906	"Exchange Between Adsorbed and Dissolved Sulfate Ions," C. V. King and B. Levy, <i>Jour. Phys. Chem.</i> (Notes) (March)	1956
3907	"Guided Missiles—Maintenance," S. F. Kennedy, <i>Rad. and Tele. News</i> (March)	1956

No.		Year
3908	"Ham-Band Charts—Useful Data on Ham Bands from 1.8 to 148 Mc," <i>RCA Ham Tips</i> (March)	1956
3909	"A High-Frequency Measuring Equipment for Transistors," W. F. Sands, <i>Transistors I</i> , RCA Laboratories (March) . .	1956
3909a	"How Can Industry Use Television?," H. F. Schneider, <i>Trans. I.R.E. PGIE</i> (March)	1956
3910	"A Junction-Transistor Counter with High-Speed Carry," T. P. Bothwell, G. W. Booth, and E. P. English, <i>Transistors I</i> , RCA Laboratories (March)	1956
3911	"Junction Transistor Designed for Iterative Operation at Low Frequencies," L. J. Giacoletto, <i>Transistors I</i> , RCA Laboratories (March)	1956
3912	"Junction Transistor Switching Characteristics," D. E. Deutch, <i>Transistors I</i> , RCA Laboratories (March)	1956
3913	"Measurement of Aluminum Film Thickness," C. P. Hadley, <i>Rev. Sci. Instr.</i> (Laboratory and Shop Notes) (March) . .	1956
3914	"Microscopic Examination of Germanium Crystals and Transistors," S. G. Ellis, <i>Transistors I</i> , RCA Laboratories (March)	1956
3915	"Miniature Loudspeakers for Personal Radio Receivers," J. C. Bleazey, J. Preston, and E. G. May, <i>RCA Review</i> (March)	1956
3916	"Modulated Transistor Oscillators and Their Applications," H. C. Lin, <i>Transistors I</i> , RCA Laboratories (March)	1956
3917	"Noise Considerations of P-N-P Junction Transistors," J. W. Englund, <i>Transistors I</i> , RCA Laboratories (March)	1956
3918	"The Noise Factor of Junction Transistors," L. J. Giacoletto, <i>Transistors I</i> , RCA Laboratories (March)	1956
3919	"A Novel Ring Counter Using Junction Transistors," D. E. Deutch, <i>Transistors I</i> , RCA Laboratories (March)	1956
3920	"The Omniguide Antenna—An Omnidirectional Waveguide Array for UHF-Television Broadcasting," O. M. Woodward, Jr. and J. J. Gibson, <i>RCA Review</i> (March)	1956
3921	"Optical Multiplexing in Television Film Equipment," A. H. Lind and B. F. Melchionni, <i>Jour. S.M.P.T.E.</i> (March)	1956
3922	"Performance of a Radio-Frequency Alloy Junction Transistor in Different Circuits," L. J. Giacoletto, <i>Transistors I</i> , RCA Laboratories (March)	1956
3923	"Phase Angle Distortion in Traveling-Wave Tubes," W. R. Beam and D. J. Blattner, <i>RCA Review</i> (March)	1956
3924	"P-N-P Transistors Using High-Emitter-Efficiency Alloy Materials," L. D. Armstrong, C. L. Carlson, and M. Bentivegna, <i>RCA Review</i> (March)	1956
3925	"The Preparation of Single and Multiple P-N Junctions in Single Crystals of Germanium," A. R. Moore, <i>Transistors I</i> , RCA Laboratories (March)	1956
3926	"Recent Advances in Power Junction Transistors," B. N. Slade, <i>Transistors I</i> , RCA Laboratories (March)	1956
3927	"Resistivity Studies of Various Leclanche Cathode Materials," R. Glicksman and C. K. Morehouse, <i>Jour. Electrochem. Soc.</i> (March)	1956
3928	"Salvaging Valuable Components from Brazed Assemblies," M. B. Lemeshka, <i>Electrical Manufacturing</i> (March)	1956
3929	"A Silicon N-P-N Junction Transistor by the Alloy Process," H. Nelson, <i>Transistors I</i> , RCA Laboratories (March)	1956
3930	"Some Aspects of Thermal Conversion in Germanium," H. Kroemer, <i>Transistors I</i> , RCA Laboratories (March)	1956
3931	"Stability Considerations in Transistor I-F Amplifiers," D. D. Holmes and T. O. Stanley, <i>Transistors I</i> , RCA Laboratories (March)	1956
3932	"Stud Welder Used in Assembling Thyratrons," N. R. Goldstein, <i>Electronics</i> (Production Techniques) (March)	1956

No.		Year
3933	"Surface Treatment of Silicon for Low Recombination Velocity," H. Nelson and A. R. Moore, <i>RCA Review</i> (March) ..	1956
3934	"A Switched-Zone Furnace for Germanium Purification," P. G. Herkart and S. M. Christian, <i>Transistors I</i> , RCA Laboratories (March)	1956
3935	"Temperature Effects in Circuits Using Junction Transistors," H. C. Lin and A. A. Barco, <i>Transistors I</i> , RCA Laboratories (March)	1956
3936	"A Test Set for Transistor Performance Measurement at 455 Kilocycles," D. D. Holmes, L. A. Freedman, and T. M. Scott, <i>Transistors I</i> , RCA Laboratories (March)	1956
3937	"The Transfluxor," J. A. Rajchman and A. W. Lo, <i>Proc. I.R.E.</i> (March)	1956
3938	"Transistor Audio Amplifiers," A. I. Aronson, <i>Transistors I</i> , RCA Laboratories (March)	1956
3939	"Transistorized Vertical Deflection for Television Receivers," M. B. Finkelstein, <i>Transistors I</i> , RCA Laboratories (March)	1956
3940	"Uniform Planar Alloy Junctions for Germanium Transistors," C. W. Mueller and N. H. Ditrick, <i>RCA Review</i> (March) ..	1956
3941	"Use of the RCA-2N109 P-N-P Junction Transistor in Class B Audio Applications," <i>RCA Application Note AN-165</i> , Semiconductor Division, Radio Corporation of America, Harrison, N. J. (March)	1956
3942	"A Variable-Capacitance Germanium Junction Diode for UHF," J. H. O'Connell and L. J. Giacoletto, <i>RCA Review</i> (March)	1956
3943	"A 20-Watt Transistor Audio Amplifier," H. C. Lin, <i>Transistors I</i> , RCA Laboratories (March)	1956
3944	"Comparison of Surface-Excited and Volume-Excited Photoconduction in Cadmium Sulfide Crystals," R. H. Bube, <i>Phys. Rev.</i> (March 15)	1956
3944a	"Designing a UHF TV Sweep-Frequency Generator," H. F. Hanthorn, <i>Electronic Design</i> (March 15)	1956
3945	"Colorimetry, Film Requirements and Masking Techniques for Color Television," H. N. Kozanowski and S. L. Bendell, <i>Jour. S.M.P.T.E.</i> (April)	1956
3946	"Correction Circuits for Color TV Transmitters," K. E. Mullenger and R. H. McMann, Jr., <i>Electronics</i> (April)	1956
3946a	"Diffraction of Electromagnetic Waves Caused by Apertures in Absorbing Plane Screens," H. E. J. Neugebauer, <i>Trans. I.R.E. PGAP</i> (April)	1956
3947	"Intensity Markers Aid Television Alignment," L. W. Dixon, <i>Electronics</i> (Production Techniques) (April)	1956
3948	"A Mobile Unit for Color Television Broadcasting and Closed-Circuit Applications," H. H. Klerx, <i>Broadcast News</i> (April) ..	1956
3949	"Servicing Printed-Wiring TV Chassis," A. Lytel, <i>Service</i> (April)	1956
3949a	"Simple Production Methods for Dynamic Testing of Horizontal-Deflection Tubes," M. B. Knight, <i>Trans. I.R.E. PGRQC</i> (April)	1956
3949b	"The Soul of an Organization," E. A. Laport, <i>Trans. I.R.E. PGEM</i> (April)	1956
3950	"Transistorized Intercom," A. L. Cleland, <i>Rad. and Tele. News</i> (April)	1956
3951	"Spectral Distribution of Photoconductivity," H. B. DeVore, <i>Phys. Rev.</i> (April 1)	1956
3952	"Electroluminescence from Boron Nitride," S. Larach and R. E. Shrader, <i>Phys. Rev.</i> (April 15) (Letter to the Editor)...	1956
3953	"Incidence of an Electromagnetic Wave on a 'Cerenkov Electron Gas'," M. A. Lampert, <i>Phys. Rev.</i> (April 15)	1956

No.		Year
3954	"Graphic Arts Techniques in the Deposition of Phosphor Screens for Color Television Tubes," H. Rosenthal, <i>Proceedings of the Eighth Annual Meeting of the Technical Association of the Graphic Arts</i> (May)	1956
3955	"Luminescence Properties of Zinc-Inter-Chalcogenides. I. Zinc Sulfo-Telluride Phosphors," S. Larach, W. H. McCarroll, and R. E. Shrader, <i>Jour. Phys. Chem.</i> (May)	1956
3955a	"Reliability Measurement and Prediction," C. M. Ryerson, <i>Trans. I.R.E. PGCS</i> (May)	1956
3956	"Toroidal Transformers Pass Video Bandwidths," G. W. Gray, <i>Electronics</i> (May)	1956
3957	"Transistor Circuits for Digital Computers," D. E. Deutch, <i>Electronics</i> (May)	1956
3958	"Preparation and Properties of a Ceramic Magnet," I. Gordon, <i>American Ceramic Society Bulletin</i> (May 15)	1956
3959	"Series-String Applications of Electron Tubes—(Commercial and Military)," R. G. Rauth, <i>Proc. RETMA Symposium on Reliable Applications of Electron Tubes</i> (May 21 and 22)	1956
3960	"Color-TV Receiver Servicing," R. C. Janzow, <i>Service</i> (June)	1956
3961	"Compression and Dialog Equalization in Motion Picture Sound Recording," E. P. Ancona, Jr., <i>Audio</i> (June)	1956
3962	"Contact Arcing Factors to 100,000 Feet," M. R. Alexy, <i>Electrical Manufacturing</i> (June)	1956
3963	"Effect of Magnetic Deflection on Electron Beam Convergence," P. E. Kaus, <i>RCA Review</i> (June)	1956
3964	"Electrolytic Transport Phenomena in the Oxide Cathode," R. H. Plumlee, <i>RCA Review</i> (June)	1956
3965	"The Electron Donor Centers in the Oxide Cathode," R. H. Plumlee, <i>RCA Review</i> (June)	1956
3966	"Equivalent R-Z Chart," H. E. Goldstine, <i>Electronics</i> (Reference Sheet) (June)	1956
3967	"How to Convert Color TV Receivers for Video Drive," E. R. Klingeman, <i>Broadcast News</i> (June)	1956
3968	"Increasing the Sensitivity of a Commercial Spectroradiometer," A. E. Hardy and G. P. Kirkpatrick, <i>Rev. Sci. Instr.</i> (Notes) (June)	1956
3969	"Kinescope Electron Guns for Producing Noncircular Spots," R. C. Knechtli and W. R. Beam, <i>RCA Review</i> (June)	1956
3970	"Mobile Unit for Color TV Broadcasting," H. H. Klerx, <i>Tele-Tech & Electronic Industries</i> (June)	1956
3971	"Modern Turntable Design Considerations," E. J. Meehan, <i>Broadcast News</i> (June)	1956
3972	"New Lightweight Weather-Mapping Radar," G. Daggy, <i>Broadcast News</i> (June)	1956
3973	"New RCA Automatic Turntable," R. H. Barnaby, <i>Broadcast News</i> (June)	1956
3974	"Pedestal Processing Amplifier for Television Studio Operation," R. C. Kennedy, <i>RCA Review</i> (June)	1956
3975	"Principal Electron Donors in the Oxide Cathode," R. H. Plumlee, <i>Jour. Appl. Phys.</i> (Letter to the Editor) (June)	1956
3976	"Recent Improvements in the 21AXP22 Color Kinescope," R. B. Janes, L. B. Headrick, and J. Evans, <i>RCA Review</i> (June)	1956
3976a	"Transistors in Current-Analog Computing," B. P. Kerfoot, <i>Trans. I.R.E. PGEC</i> (June)	1956
3977	"Galvanomagnetic Effects in a Semiconductor with Two Sets of Spheroidal Energy Surfaces," M. Glicksman, <i>Phys. Rev.</i> (June 15)	1956
3978	"Color TV Lighting Survey and Report," G. F. Rester, <i>Jour. S.M.P.T.E.</i> (July)	1956
3979	"Form and Thickness of Trap-Dominated Space-Charge Layers," A. Rose, <i>Helvetica Physica Acta</i> (July)	1956

No.		Year
3980	"Low-Power Binary Counter," W. E. Hostetler and H. J. Wolkstein, <i>Tele-Tech and Electronic Industries</i> (July)...	1956
3981	"Molecular Ringing," S. Bloom, <i>Jour. Appl. Phys.</i> (July)....	1956
3982	"Q' Calculations for High Frequency Inductors," R. J. Schulte, <i>Tele-Tech and Electronic Industries</i> (July).....	1956
3982a	"Technical Standards for Color Television," J. W. Wentworth, <i>Trans. I.R.E. PGBTS</i> (July)	1956
3983	"Theoretical Considerations Governing the Choice of the Optimum Semiconductor for Photovoltaic Solar Energy Conversion," J. J. Loferski, <i>Jour. Appl. Phys.</i> (July).....	1956
3984	"Topological Properties of Telecommunication Networks," Z. Prihar, <i>Proc. I.R.E.</i> (July)	1956
3985	"Versatile Modulator," P. Koustas, <i>RCA Ham Tips</i> (July-August)	1956
3986	"Color Television for Medical and Dental Applications," L. L. Lewis, <i>Broadcast News</i> (August)	1956
3987	"Color Test Equipment and Test Procedures," J. Wentworth, <i>Broadcast News</i> (August)	1956
3988	"Color-TV IF Amplifiers," S. Wlasuk, <i>Service</i> (August).....	1956
3989	"Electronic Masking for Improved TV Reproduction of Color Film," H. N. Kozanowski and S. L. Bendell, <i>Broadcast News</i> (August)	1956
3990	"Magnetize for Fun and Utility," R. Samuel, <i>Popular Electronics</i> (August)	1956
3991	"Magnetron Tester Detects Lost Pulses," P. Koustas and D. D. Mawhinney, <i>Electronics</i> (August)	1956
3992	"The Optimum Tapered Transmission Line Matching Section," R. W. Klopfenstein, <i>Proc. I.R.E.</i> (August) (Letter to the Editor)	1956
3993	"The Statistics of Combiner Diversity," H. Staras, <i>Proc. I.R.E.</i> (August) (Letter to the Editor)	1956
3993a	"The Background of Reliability," T. A. Smith, <i>Trans. I.R.E. PGRQC</i> (September)	1956
3994	"Camera Matching and Illumination Control for Color TV," E. P. Bertero, <i>Jour. S.M.P.T.E.</i> (September)	1956
3995	"Color-Purity and White-Uniformity Adjustment Procedure for the RCA-21AXP22-A Color Kinescope," <i>RCA Application Note AN-167</i> , RCA Tube Division, Harrison, N. J. (September)	1956
3996	"CRT Power Supply Uses Transistor Oscillator," P. M. Toscano and J. B. Heffner, <i>Electronics</i> (September)	1956
3996a	"Designing for Reliability," S. A. Meltzer, <i>Trans. I.R.E. PGRQC</i> (September)	1956
3997	"Electronic Control of Noise, Vibration, and Reverberation," H. F. Olson, <i>Jour. Acous. Soc. Amer.</i> (September).....	1956
3997a	"Engineers and Music," C. H. Chandler, <i>Trans. I.R.E. PGA</i> (September-October)	1956
3998	"Fields in Imperfect Electromagnetic Anechoic Chambers," R. F. Kolar, <i>RCA Review</i> (September)	1956
3999	"High-Resolution Flying-Spot Scanner for Graphic Arts Color Applications," L. Shapiro and H. E. Haynes, <i>RCA Review</i> (September)	1956
3999a	"High-Speed Shift Registers Using One Core Per Bit," V. L. Newhouse, Co-author, <i>Trans. I.R.E. PGEC</i> (September) ..	1956
4000	"Image Orthicon for Pickup at Low Light Levels," A. A. Rotow, <i>RCA Review</i> (September)	1956
4000a	"Logic Circuits for a Transistor Digital Computer," G. W. Booth and T. P. Bothwell, <i>Trans. I.R.E. PGEC</i> (September)	1956
4001	"A Magnetic Tape System for Recording and Reproducing Standard FCC Color Television Signals," H. F. Olson, W. D. Houghton, A. R. Morgan, M. Artzt, J. A. Zenel, and J. G. Woodward, <i>RCA Review</i> (September)	1956

No.		Year
4002	"The Make-Your-Own Microphone," G. D. Hanchett, <i>RCA Ham Tips</i> (September)	1956
4003	"New Alignment Techniques," J. R. Meagher, <i>PF Reporter</i> (September)	1956
4003a	"On Optimum Non-Linear Extraction and Coding Filters," A. V. Balakrishnan and R. Drenick, <i>Trans. I.R.E. PGIT</i> (September)	1956
4004	"Optical and Photoelectric Analog of the Eye," O. H. Schade, Sr., <i>Jour. Opt. Soc. Amer.</i> (September)	1956
4005	"Performance and Design of Low-Noise Guns for Traveling-Wave Tubes," R. C. Knechtli and W. R. Beam, <i>RCA Review</i> (September)	1956
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No.		Year
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No.		Year
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No.		Year
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No.		Year
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No.		Year
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No.		Year
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No.		Year
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No.		Year
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No.		Year
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No.		Year
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No.		Year
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No.		Year
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No.		Year
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No.		Year
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No.		Year
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4668	"Fine Structure, Hyperfine Structure and Relaxation Times of Cr ³⁺ in TiO ₂ (Rutile)," H. J. Gerritsen, S. E. Harrison H. R. Lewis, and J. P. Wittke, <i>Phys. Rev. Letters</i> (February 15)	1959
4669	"TV Sound Detector Uses Drift Transistor," M. Meth, <i>Electronics</i> (February 20)	1959
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No.		Year
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4674	"Improving Stability of AM Directional Antenna Systems," G. H. Brown, <i>Elec. Eng.</i> (March)	1959
4675	"The Influence of Firing Conditions, Composition, and Screening Media on the Zeta Potentials of ZnS Phosphors as Related to Adherence to Glass Surfaces," B. Levy, <i>Jour. Electrochem. Soc.</i> (March)	1959
4676	"Introduction to Junction Transistors, Part II," R. N. Hurst, <i>Broadcast News</i> (March)	1959
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4686	"The Physical Principles of a Negative-Mass Amplifier," H. Krömer, <i>Proc. I.R.E.</i> (March)	1959
4687	"Preparation and Properties of the Systems LaFe _x Cr _{1-x} O ₃ and LaFe _x Co _{1-x} O ₃ ," W. Croft and Coauthor, <i>Jour. Phys. Chem.</i> (March) (Notes)	1959
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4689	"RCA Automation Equipment for TV Stations," R. P. Major, <i>Broadcast News</i> (March)	1959
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4694	"Time Multiplexing as Applied to Analog Computation," E. Rawdin, <i>Trans. I.R.E. PGEC</i> (March)	1959

No.		Year
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4696	"Transistorized Switching Systems Type TS-40, Part I," J. W. Wentworth, C. R. Monro, and A. C. Luther, Jr., <i>Broadcast News</i> (March)	1959
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4703	"Magnetic Susceptibility of Photogenerated Current Carriers in Germanium," J. O. Kessler and A. R. Moore, <i>Phys. Rev. Letters</i> (March 15)	1959
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4706	"Grinding L-Shaped Bevels," V. E. Califano, <i>American Machinist</i> (March 23) (Reference Book Sheet)	1959
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No.		Year
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4718	"The Use of Miniature Tubes in Class C Circuits," A. Dzik, <i>Trans. I.R.E. PGVC</i> (April)	1959
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4726	"Micromodules Make Their Bow," J. W. Knoll and H. J. Laiming, <i>Astronautics</i> (May)	1959
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No.		Year
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4744	"The Effect of Several Variables on Phosphor-Dot Size in Color Picture Tubes," N. R. Goldstein, <i>RCA Review</i> (June)	1959
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4747	"5-Band Mobile Transmitter," G. D. Hanchett, <i>RCA Ham Tips</i> (June)	1959
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No.		Year
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4771	"Voltage Tunable Millimeter-Wave Oscillators," D. J. Blattner and F. Sterzer, <i>Electronics</i> (June 19)	1959
4772	"Semiconductor Devices for Microminiaturization," J. T. Wallmark and S. M. Marcus, <i>Electronics</i> (June 26)	1959
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No.		Year
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No.		Year
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4838	"Comments on 'Some Notes on Strip Transmission Line and Waveguide Multiplexers,'" R. M. Kurzrok, <i>Trans. I.R.E. PGMTT</i> (October) (Correspondence)	1959
4839	"Design Calculations for UHF Ferrite Circulators," H. Boyet, S. Weisbaum, and I. Gerst, <i>Trans. I.R.E. PGMTT</i> (October) (Correspondence)	1959
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4843	"Transistorized Preamplifier Design," H. J. Paz, <i>Electronic Industries</i> (October)	1959
4844	"Two-Carrier Space-Charge-Limited Current in a Trap-Free Insulator," R. H. Parmenter and W. Ruppel, <i>Jour. Appl. Phys.</i> (October)	1959
4845	"A Unified Analysis of Range Performance of CW Pulse, and Pulse Doppler Radar," J. J. Busgang, P. Nesbeda, and H. Safran, <i>Proc. I.R.E.</i> (October)	1959

No.		Year
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4847	"Switching Mechanism in Triglycine Sulfate and Other Ferroelectrics," E. Fatuzzo and W. J. Merz, <i>Phys. Rev.</i> (October 1)	1959
4848	"Theoretical Model for Tetragonal-to-Cubic Phase Transformations in Transition Metal Spinel," P. J. Wojtowicz, <i>Phys. Rev.</i> (October 1)	1959
4849	"Tube Parts Welded Semiautomatically," J. F. Stewart, <i>Electronics</i> (October 9)	1959
4850	"High-Field Effect in Boron-Doped Silicon," R. D. Larrabee, <i>Phys. Rev.</i> (October 15)	1959
4851	"New Parallel Photoelectromagnetic Effect," A. Amith, <i>Phys. Rev.</i> (October 15)	1959
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4853	"The C-Stellarator, a New Research Tool for Hydrogen-Fusion Control Studies," L. B. Headrick, <i>Yale Scientific Magazine</i> (November)	1959
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4855	"Infrared Studies of Birefringence in Silicon," S. R. Lederhandler, <i>Jour. Appl. Phys.</i> (November)	1959
4856	"Jersey Engineers Steer Students Toward Science," R. E. Brown, <i>IRE Newsletter</i> (November)	1959
4857	"Medical Electronics Center—Interdisciplinary Coordination," V. K. Zworykin, <i>Proc. I.R.E.</i> (November)	1959
4858	"Scanning Microscopy in Medicine and Biology," L. E. Flory, <i>Proc. I.R.E.</i> (November)	1959
4859	"7-Transistor Pocket Radio," H. Wittlinger, <i>Radio-Electronics</i> (November)	1959
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4862	"Finding Radio-Frequency Interference Levels," J. G. Arnold, <i>Electronics</i> (November 27)	1959
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4863a	"Applying Military Reliability Research to Industrial Electronics," H. L. Wuerffel, <i>Trans. I.R.E. PGIE</i> , (December)	1959
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4866	"Determining Screen Grid Dissipation in 'Ultra-Linear' Amplifiers," L. Kaplan, <i>Audio</i> (December)	1959
4867	"Electroluminescence of Polycrystallites," S. Larach and R. W. Shrader, <i>RCA Review</i> (December)	1959
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4869	"Electronic Countermeasures—The Art of Jamming," D. J. Blattner, <i>Electronics World</i> (December)	1959
4870	"Electronic Hardware," L. H. Henschel, <i>Electronic Industries</i> (December)	1959

No.		Year
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4872	"How to Get Top Performance from the TVM-1A Microwave Equipment," <i>Broadcast News</i> (December)	1959
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4874	"The Indeterminacy of Measurements Performed by Radar Equipment," R. Madden, <i>Trans. I.R.E. PGANE</i> (December)	1959
4875	"Infrared Photoconductive Detectors Using Impurity-Activated Germanium-Silicon Alloys," G. A. Morton, M. L. Schultz and W. E. Harty, <i>RCA Review</i> (December)	1959
4876	"New 'B' Series Traveling Wave Antenna," M. S. Siukola, <i>Broadcast News</i> (December)	1959
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4881	"A Review of 'Electrofax' Behavior," J. A. Amick, <i>RCA Review</i> (December)	1959
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4889	"Turning Engineers Into Authors," W. A. Murphy, <i>Trans. I.R.E. PGEWS</i> (December)	1959
4890	"A Volume-Charge Capacitor Model for 'Electrofax' Layers," J. A. Amick, <i>RCA Review</i> (December)	1959
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No.		Year
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4895b	"The Application of Mass Spectrometry to the Study of Surfaces by Sputtering," R. E. Honig, <i>Advances in Mass Spectrometry</i> , Pergamon Press, London	1959
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4896	"A Broad Band Circularly Polarized C-Band Monopulse Antenna," R. M. Smith, <i>Proc. National Electronics Conference, 1958</i> , Vol. XIV, p. 123, Rogers Printing Co., Chicago, Ill. (March)	1959
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4897	"The Development of Automatic Machinery for Making Electron-Tube Stems," M. M. Bell, <i>I.R.E. Convention Record, Part 6, Component Parts, Industrial Electronics, Production Techniques, Reliability and Quality Control, Ultrasonics Engineering</i>	1959
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4900	"Fast Microwave Logic Circuits," D. J. Blattner and F. Sterzer, <i>I.R.E. Convention Record, Part 4, Automatic Control, Electronic Computers, Information Theory</i>	1959
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4901a	"Ferroelectric Properties of Mixed Crystals of Triglycine Sulfate Selenate," E. Fatuzzo and R. Nitsche, <i>Zeitschrift fur Elektrochemie</i> , Vol. 63	1959
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4905	"An Industrial Dynamic Approach to the Management of Research and Development," A. Katz, <i>I.R.E. Wescon Convention Record, Part 8, Instrumentation, Medical Electronics, Nuclear Science, Engineering Management</i>	1959

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4906	"Industrial Electronics—The Growing Servant of Mankind," T. A. Smith, <i>I.R.E. Convention Record, Part 6, Component Parts, Industrial Electronics, Production Techniques, Reliability and Quality Control, Ultrasonics Engineering</i>	1959
4907	"Intermetallic Semiconductors Containing Alkali Metals," W. E. Spicer and A. H. Sommer, <i>Journal of the Physics and Chemistry of Solids</i> , Vol. 8	1959
4907a	"Intermodulation Distortion and Efficiency Analysis of Multi-carrier Repeaters," F. Assadourian, <i>Fifth National Communications Symposium, Convention Record</i>	1959
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4910b	"Message Protection in an Automatic Switching Center," A. S. Rettig, and H. P. Guerber, <i>Proc. of the National Electronics Conference</i> , Rogers Printing Co., Chicago	1959
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No.		Year
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4926	"Electrostatic Imaging and Recording," E. C. Hutter, J. A. Inslee, and T. H. Moore, <i>Jour. S.M.P.T.E.</i> (January)....	1960
4927	"Hi-Fi Applications of New Triode-Pentode," W. Austin, <i>Electronics World</i> (January)	1960
4928	"Image Sensors and Space Environment," M. Ritter and M. H. Mesner, <i>Jour. S.M.P.T.E.</i> (January)	1960
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4930	"Miniature High-Frequency Magnetic Amplifiers for Magnetic Memory Sensing," G. R. Briggs and K. C. Hu, <i>Communication and Electronics</i> (January)	1960
4931	"Nomographs Simplify Electron Tube Design (Part I)," R. D. Reichert, <i>Electronic Industries</i> (January)	1960
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No.		Year
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4934	"Pictorial Data Transmission from a Space Vehicle," J. F. Baumunk and S. H. Roth, <i>Jour. S.M.P.T.E.</i> (January)...	1960
4935	"Progress Report of Panel 1 of the National Stereophonic Radio Committee," C. J. Hirsch, <i>Jour. Aud. Eng. Soc.</i> (January)	1960
4936	"Rectangular Hysteresis Loop Ferrites with Large Barkhausen Steps," A. P. Greifer and W. J. Croft, <i>Jour. Appl. Phys.</i> (January)	1960
4937	"Root Locus Properties and Sensitivity Relations in Control Systems," H. Ur, <i>Trans. I.R.E. PGAC</i> (January)	1960
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4949	"Pictorial Data Transmission from a Space Vehicle," J. F. Baumunk and S. H. Roth, <i>Elec. Eng.</i> (February)	1960
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4951	"TM Waves in Submillimetric Region," C. A. Martin, <i>Proc. I.R.E.</i> (February) (Correspondence)	1960
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4953	"Vapor-Zone Refining," L. R. Weisberg and F. D. Rosi, <i>Rev. Sci. Instr.</i> (February) (Notes)	1960
4954	"Variation in Ear Protector Attenuation as Measured by Different Methods," L. Weinreb and M. L. Touger, <i>Jour. Acous. Soc. Amer.</i> (February)	1960
4956	"Origin of the Photomagnetism Anomaly in Germanium," A. R. Moore and J. O. Kessler, <i>Phys. Rev. Letters</i> (February 1)	1960
4957	"Ferroelectricity in Tetramethylammonium - Trichloro - Mercurate," E. Fatuzzo and R. Nitsche, <i>Phys. Rev.</i> (February 15)	1960
4958	"All New Monochrome Studio Camera, Type TK-12," J. H. Roe, <i>Broadcast News</i> (March)	1960
4959	"Application of the Sampling Function to Circuit Analysis of Modulators and Demodulators using Diodes," A. Feller, <i>RCA Review</i> (March)	1960

No.		Year
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4963	"Design Considerations for Integrated Electronic Devices," J. T. Wallmark, <i>Proc. I.R.E.</i> (March)	1960
4964	"Double-System Recording and Editing with Video Tape," O. F. Wick, <i>Jour. S.M.P.T.E.</i> (March)	1960
4965	"Effect of Temperature on Photovoltaic Solar Energy Conversion," J. J. Wysocki and P. Rappaport, <i>Jour. Appl. Phys.</i> (March)	1960
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4971	"The Influence of Magnetic Tape on the Field of a Recording Head," E. Della Torre, <i>RCA Review</i> (March)	1960
4972	"Intermodulation Distortion and Efficiency Analysis of Multi-carrier Repeaters," <i>Trans. I.R.E. PGCS</i> (March)	1960
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No.		Year
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No.		Year
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AUTHOR INDEX

(1956-1960)

Numbers refer to Chronological Index

A

Abeles, B., 4924, 5103
Abrahams, M. S., 5200, 5223
Abramson, P., 4719
Ackerland, E., 4098, 4308
Ackerman, H. J., 4347
Adawi, I., 4095, 4233, 4604, 4830, 5148
Ahrons, R. W., 4732, 4892, 5156
Alexy, M. R., 3962
Allen, W. C., 4789
Allwine, H. S., 4065c
Almond, J., 4216
Amenija, H., 4912
Amick, J. A., 4794, 4881, 4890
Amith, A., 4851, 4861
Amodei, J. J., 5064
Ancona, E. P., Jr., 3961
Angel, K. W., 4528, 5030
Anzalone, P. J., 4173
Armstrong, L. D., 3924, 4921
Arnold, J. G., 4862
Aronson, A. I., 3938, 4284
Arthur, G. R., 4846
Artzt, M., 4001
Assadourian, F., 4720, 4904a
Atwood, J. B., 4523
Aurand, J. A., 4682, 4977
Aurick, L., 4573, 4682
Austin, W., 4927, 5094
Avins, J., 4364, 5106, 5153

B

Babcock, W. E., 4531
Bachynski, M. P., 4340, 4512, 4538, 4752, 4966
Bailey, J. M., Jr., 5182
Bain, D., 4682
Baker, R. H., 4919a
Balakrishnan, A. V., 4003a, 4066b
Balchaitis, A. V., 5001
Baltzer, P. K., 4273, 4376, 4713
Barco, A. A., 3935
Barnaby, R. H., 3973
Barnette, W. E., 4109, 4679
Barton, D. K., 4241, 4895, 4923
Barton, L. A., 4470, 4863
Barton, L. E., 4403
Batsel, C. N., 4631

Batsel, M. C., 4116
Baumunk, J. F., 4934, 4949
Baybick, S., 4326
Beadle, C. W., 5068
Beam, W. R., 3923, 3969, 4005, 4119, 4127, 4186, 4763
Beard, A. D., 4065g
Beaulieu, D. E., 4310, 4319
Beck, F. X., 4634
Becken, W. L., 4053
Beckhart, G. H., 5218
Beers, D. S., 5103
Beers, G. L., 4161
Beers, R. A., 5016
Behrend, W. L., 4053, 4090, 4762, 5050
Belar, H., 4030, 4188, 4925a, 4967, 5025
Bell, M. M., 4025, 4897
Belohoubek, E., 4450, 5122
Beltz, W. F., 3897, 4065a
Benbenek, J. E., 5004
Bendell, S. L., 3879, 3945, 3989, 4287, 4293, 4384, 4489, 4960, 5000
Benner, A. H., 4137
Bennett, W. P., 3873
Benoliel, I., 4912c
Bensky, L. S., 4065g
Bentivegna, M., 3924
Berghammer, J., 4982, 5123
Bergman, R. H., 4584, 5186
Bernstein, J. L., 4576, 4780
Berry, R. E., 3886
Berry, T. F., 4789
Bertero, E. P., 3994, 4092
Bertin, E. P., 4317
Bess, L., 4477
Beun, J. A., 5134
Bischof, W. F., 4837
Black, O. D., 4547
Black, R. D., 4083
Blattner, D. J., 3923, 4602, 4618, 4644, 4654, 4771, 4797, 4807, 4869, 4900, 5077, 5119, 5212
Bleazey, J. C., 3915, 4042
Bliss, W. H., 4280, 4891
Block, F. G., 5154
Bloom, B. H., 4917
Bloom, S., 3981, 4178, 4239, 4299, 4389, 4466, 4624, 4982
Bly, D. A., 4598
Bogush, A. J., Jr., 5201

- Boivan, P., 4573
 Booth, G. W., 3910, 4000a, 4100
 Borkan, H., 4377, 4990, 5068
 Bosinoff, I., 3881
 Bossard, B., 5081
 Bothwell, T. P., 3910, 4000a, 4100
 Bott, A. H., 4546, 4980
 Boyet, H., 4839, 5074
 Brady, T., 4364
 Braunstein, R., 4207, 4371, 4393, 4479, 4908, 5223
 Briggs, G. R., 4575, 4930
 Brown, G. H., 4486, 4674, 4812, 4813, 5092, 5197
 Brown, G. H., Jr., 4274
 Brown, H. W., Jr., 4007a
 Brown, R. E., 4856
 Brumbaugh, J. M., 4237
 Brustman, J. A., 4065e, 5076
 Bube, R. H., 3944, 4019, 4024a, 4120, 4148, 4200, 4217, 4459, 4470, 4650, 4829, 4832, 4863, 4883, 4918, 4948, 5049, 5080, 5128, 5178, 5194, 5202, 5210
 Buchman, A. S., 4548
 Bullock, J. S., 4755
 Burkart, D. P., 4310
 Burns, J. L., 4564
 Burns, L. L., 4732
 Bush, W. R., 4987
 Bussgang, J. J., 4845, 5116
 Butler, W. H., 4820
 Byloff, R. W., 4578, 4608, 4659
 Byram, R. E., 4181

C

- Cadra, V. J., 4638
 Califano, V. E., 4706
 Callaghan, J. D., 3888
 Calyo, C., 5179
 Campopiano, C. N., 5170
 Caprarola, L. J., 4347
 Cardona, M., 5139
 Carlson, C. L., 3924
 Carlson, D. J., 4136, 4460, 4501
 Carrell, R. M., 4048, 4535
 Cashen, J. F., 4699, 4733
 Castleberry, J., 4710
 Chandler, C. H., 3997a
 Chang, K. K. N., 4057, 4071, 4259, 4299, 4378, 4389, 4466, 4514, 4624, 4645, 4739, 4775, 4932, 5013, 5018, 5024
 Chapman, G. B., 3869, 3902, 4072, 4203
 Charton, S., 5219
 Cheetham, R. R., 4617
 Chen, T. S., 4068, 4215, 4446, 4984, 5110
 Cheng, C. C., 3878
 Cherry, W. H., 4577, 5222
 Chiabrando, J. C., 4816

- Chien, K. L., 4065e
 Chin, T. N., 5044
 Chong, C. F., 4284
 Christian, S. M., 3934, 4065
 Christensen, R. W., 4886
 Chu, J. T., 5215a
 Cleland, A. L., 3950, 4135
 Cody, G. D., 5103
 Cohen, F., 4016
 Cohen, R. M., 5120
 Colasanto, D., 4351, 5166
 Coleman, J. W., 5172
 Comfort, H. F., 4190
 Connor, J. A., 4069
 Conrad, Doris, 4141
 Conrad, G., 5013
 Cook, H. L., 5071
 Cook, W. W., 4010, 4021, 4047
 Cooperman, M., 4655
 Cope, A. D., 4050
 Corey, C. P., 4162
 Corregan, F. H., 5154
 Corrington, M.S., 4025a, 4219, 4455, 4636
 Crane, H. D., 4102
 Croft, W. J., 4687, 4716, 4888, 4936
 Crowley, J. C., 4693
 Cucci, C. L., 4785, 4807, 4911, 4968, 5038, 5048, 5072
 Cunningham, D. H., 4315
 Cunningham, J., 4035
 Cunningham, O. B., 4632a
 Curtin, W. A., 4038
 Curtiss, A. N., 4156
 Cutler, L. H., 4547

D

- Daggy, G., 3972
 Dak, B. V., 4632a
 Danheiser, E. L., 5193
 Darling, D. C., 4065c
 Davidson, J. J., 4246, 4321, 4665a, 4997
 Davidson, R. A., 4487
 Davis, R. E., 4895f
 DeBacker, L. P. A., 4482
 Della Torre, E., 4933, 4971
 Demmy, R. C., 4509, 4536
 Deutch, D. E., 3912, 3919, 3957, 4221
 DeVore, H. B., 3951, 4673
 Dingwall, A. G. F., 4096
 Dion, D. F., 4427
 Dismukes, J. P., 5052
 DiTaranto, R. A., 4553
 Ditrick, N. H., 3940, 4103
 Dixon, L. W., 3947
 Dobson, D. B., 4277, 4910a, 5088
 Donahue, V. M., 4987
 Doner, C. E., 5172a
 Dordick, H. S., 4113, 4309
 Douma, T., 4065h, 4630a, 4919

- Dousmanis, G. C., 4077, 4106, 4132, 4480, 4561, 4579, 4603, 4661, 5206
 Drake, R., 4945
 Dreeben, A. B., 4832
 Drenick, R., 4003a
 Dreyer, K., 5086a, 5187
 Dronick, H. S., 4066d
 Drowart, J., 4183
 Dugundji, J., 4098
 Dunaief, C., 5198a
 Duncan, R. C., 4579, 4603
 Dutka, J., 4295, 4592, 4921a
 Dzik, A., 4718

E

- Eastman, G. Y., 5154
 Ebal, J. I., 5112
 Edelman, F., 4126
 Eichenbaum, A. L., 4671
 Ekstrom, L., 5200
 Elkind, J. I., 5112
 Elliott, H. M., 4333, 4456
 Ellis, S. G., 3914, 4249, 4268, 4398, 4748
 Enander, B. N., 4018
 English, E. P., 3910
 Englund, J. W., 3917, 4312, 4639
 Engstrom, E. W., 4009, 4091, 4416, 4731, 5032
 Engstrom, R. W., 4029, 4179, 4598, 4658
 Epstein, J., 3882, 4049
 Erdman, R. G., 4227, 4736
 Erikson, W. H., 4318
 Ersin, G. E., 4697
 Eshelman, C. R., 4346
 Evans, A. G., 4810, 4916
 Evans, J., 3976

F

- Fatuzzo, E., 4471, 4847, 4901a, 4957, 5034, 5097, 5133
 Feller, A., 4959
 Fendley, J. R., 5154, 5176
 Feyerherm, M. P., 4075, 4158, 5211
 Ficcki, R. F., 4961
 Filipczak, J. M., 5188
 Fine, R. S., 4117, 4265, 4600
 Finkelstein, M. B., 3939
 First, W., 4492
 Fischer, E., 4179, 4885, 5054
 Fisher, J. H., 3883
 Fisher, W. F., 4534
 Flacco, A. F., 4461
 Flasterstein, A. H., 5138
 Flechtner, D., 4065e
 Fleddermann, R. G., 4798
 Fleri, D., 5069, 5071
 Flory, L. E., 4059, 4074, 4089, 4616, 4635, 4709, 4858, 5056, 5062

- Foldes, P., 4652, 4996, 5115
 Fomin, M., 5184
 Fonger, W. H., 3900, 4390
 Forgue, S. V., 4802
 Forman, J. M., 4560, 4761
 Fournier, R. V., 4428, 4873, 4904
 Francis, G. W., 5161
 Fredenhall, G. L., 5050
 Freedman, L. A., 3936, 4154, 4313, 5106
 Frei, A. H., 5082
 Fulroth, W. H., 4011, 4014, 4550

G

- Gallo, J. E., 4588
 Gallup, J., 4096
 Gardels, M. C., 4521
 Gaskins, F. J., 4568, 4612, 4868
 Geiger, C. S., 5070
 Genetta, T. L., 4895c
 George, R. W., 3868, 4153
 Gerritsen, H. J., 4201, 4206, 4266, 4268, 4668, 4985, 5100, 5105, 5208
 Gerst, I., 4839
 Ghose, R. N., 4180
 Giacoletto, L. J., 3911, 3918, 3922, 3942, 4078, 4143, 4182, 4438
 Gibson, J. J., 3920
 Gibson, W. G., 5060
 Gihring, H. E., 4551, 4804, 5195
 Gilmore, J. P., 4910c
 Gittleman, J., 4577, 5222
 Glenn, A. B., 4728, 4896a, 5035
 Glicksman, M., 3977, 4065, 4257, 4328, 4458, 4476, 4540, 4585, 4621, 4769, 4840, 4898, 4903, 4910, 5007
 Glicksman, R., 3884, 3927, 4257, 4328, 4338, 4443, 4445, 4485, 4566, 4571, 4657, 4711, 4729, 4803, 5017, 5073, 5104, 5113, 5135
 Gloystein, E. E., 4300, 4395
 Gold, R. D., 4582, 4759, 5036, 5175
 Goldin, P. J., 4751
 Goldsmith, A. N., 4375, 4488
 Goldsmith, G. J., 4854, 5134
 Goldstein, B., 4131, 4157, 4279, 4349, 4662, 4794, 5027
 Goldstein, N. R., 3932, 4744
 Goldstine, H. E., 3966, 4056
 Gonzalez, C., 4814, 5102
 Goodale, E. D., 4237
 Goodman, A. M., 4995
 Goodrich, H. C., 4226
 Gordon, G. D., 5157, 5162
 Gordon, I., 3958
 Gordon, N. L., 5138
 Graham, J. J., 4099
 Grasberg, A. G., 4680, 4765
 Gray, G. W., 3956, 4059, 4074, 4089, 5056, 5062
 Gray, S., 4818, 5068

Greenblatt, M. H., 4448, 4495, 4581,
4722
Greenmeyer, P. A., 4167, 4725
Greifer, A. P., 4716, 4936
Greig, W. J., 5111
Grever, J. L., 4410
Grim, E. D., 4436
Griswold, D. M., 4638
Gross, D. T., 4895d
Grossman, H. W., 4570
Guerber, H. P., 4910b
Guy, R. F., 4619

H

Hadley, C. P., 3893, 3913, 4026, 4473,
4885, 4886, 5054
Hadlock, W. O., 4337
Haeseler, L. W., 4793
Hammel, D., 4677
Hammerton, J. C., 4123, 4502
Hanchett, G. D., 4002, 4080, 4747,
5144
Hansell, G. E., 4056
Hanthorn, H. F., 3944a
Hardy, A. E., 3968
Harel, A., 4699, 4733
Harmon, H. D., 4921
Harris, W. A., 4066c, 4795
Harrison, S. E., 4668, 5105
Harsh, M. D., 5131, 5145
Harty, W. E., 4875
Hasenberg, W., 3905, 4431
Hassett, W. A., 4789
Hawley, M. E., 4034, 4386, 4916a,
5164
Haynes, H. E., 3999, 4533
Headrick, L. B., 3976, 4240, 4853
Heffner, J. B., 3996
Hegyí, I. J., 4278
Heilmeier, G. H., 4792, 5018, 5075,
5089
Helbig, W. A., 4350, 4522
Helman, D., 4066f
Henderson, C. W., 4065c
Henderson, R. A., 4834, 4865
Henderson, W. G., 5070
Henschel, L. H., 4796, 4870
Herkart, P. G., 3934
Herman, F., 4114, 4327, 4328, 4344,
4371, 4398, 4734, 4909
Hermeling, G. C., 5159
Hernqvist, K. G., 4015, 4370, 4380,
4454, 4781, 5014, 5029, 5043, 5154
Herold, E. W., 4212, 4256, 4263, 4341,
4432, 4441, 4817
Herold, P. G., 4304
Herrmann, F. J., 4721
Herscher, M. B., 4424
Hershenov, B., 5083
Herzfeld, F., 4580
Herzog, G. B., 4735

Hilibrand, J., 4345, 4763, 4823, 5036,
5109
Hillier, J., 4605a, 5190
Hills, E. J., 5154
Hipskind, G. S., 4231
Hirsch, C. J., 4935, 5155
Hittle, C., 4261, 4806, 5126
Hocking, E. F., 5052, 5099
Hoger, D. T., 4533
Hollander, M., 4622
Holmes, D. B., 4565
Holmes, D. D., 3898, 3931, 3936, 4330,
4439
Holt, F. R., 5106
Honig, R. E., 4172, 4183, 4394, 4895b,
5004, 5127, 5227
Hook, H. O., 4062, 4879, 5127
Hoover, M. V., 3870
Horne, R. A., 4670, 4842, 4888, 5002
Horsting, C. W., 4646
Hostetler, W. E., 3980
Houck, R. D., 4130
Houghton, W. D., 4001
Hoyler, C. N., 4385, 4738
Hu, K. C., 4930
Hughes, R. D., 4127, 5013
Hurford, W. L., 4082, 4740
Hurst, R. N., 4543, 4676, 4705, 4750,
5224
Hutter, E. C., 4926
Hyman, H. M., 4633, 5143

J

Jackson, A. E., 4130
Jackson, J. R., 4289
Jacobs, R. M., 4640, 4641, 4649, 4665
Janes, R. B., 3976
Janzow, R. C., 3960
Jenny, D. A., 3887, 4301, 4393, 4408,
4453, 4860
Jenny, H. K., 3876, 5149
Jensen, R. V., 5051
Joffe, I., 4065f
Johnson, B. A., 4776
Johnson, E. O., 4044, 4132, 4264, 4276,
4294, 4475, 4692, 5183
Johnson, F. M., 4999
Johnson, H., 3891, 4368
Johnson, R. R., 4282, 4727
Johnson, S. W., 4506
Johnson, W. C., 4807, 5038
Johnston, L. B., 4732
Johnston, T. W., 4809, 4966, 5167,
5185
Jordan, R. O., 4035
Jose, R. S., 4286, 4541

K

Kanefsky, M., 4454
Kanter, L., 4626

- Kaplan, L., 4429, 4866
 Karstad, K., 3870a
 Katz, A., 4800, 4905
 Kaufman, J. W., 5001
 Kaufman, M. M., 4388, 4559, 4910d,
 5226
 Kaus, P. E., 3963, 4402, 4545
 Kazan, B., 4243, 4252, 4391, 4418,
 4508, 4530, 4643, 4746
 Keenan, C. E., 4712
 Keiser, B. E., 4753
 Keizer, E. O., 4275
 Kell, R. D., 4237
 Kellaway, N. P., 4300, 4395
 Kelly, R. B., 4987
 Kennedy, H. W., Jr., 5211
 Kennedy, R. C., 3974, 4058, 4140,
 4568, 4868, 4991, 5053, 5098, 5217
 Kennedy, S. F., 3907
 Kerfoot, B. P., 3976a
 Kern, R. J., 5196
 Kersey, Y., 4842
 Kessler, J. O., 4145, 4146, 4703, 4956
 Kestenbaum, A. L., 4103, 4312
 Kidd, M. C., 4228
 Kihn, H., 4109, 4679, 4824, 5045
 Kilberg, H., 5005
 Kinaman, E. W., 4434
 King, C. V., 3906
 Kirkpatrick, G. P., 3968, 4761
 Kissenger, R. W., 4065a
 Klensch, R. J., 4824, 5045
 Klerx, H. H., 3948, 3970, 4087, 4690
 Klingeman, E. R., 3967, 4342
 Klopfenstein, R. W., 3877, 3882, 3992,
 4017a, 4177, 4993
 Knauer, A. W., 4539
 Knechtli, R. C., 3969, 4005, 4119,
 4315a, 4406, 4539
 Knight, M. B., 3949a, 4036, 5008, 5046
 Knoll, M., 4062
 Knoll, J. W., 4726, 5022
 Kolar, R. F., 3998, 4707
 Kolodkin, S. S., 4693
 Komlos, S. G., 4996
 Kornfield, N. R., 4559
 Korsen, M., 5193
 Kosonocky, W. F., 4811
 Koustas, P., 3985, 3991
 Kovack, L., 4215
 Kozanowski, H. N., 3879, 3945, 3989,
 4027, 4125, 4197, 4489
 Kraner, H. W., 4026
 Kret, D. B., 4193
 Krevsky, S., 5023
 Kroemer, H., 3901, 3930, 4041, 4222,
 4269, 4399, 4686
 Kroll, A. J., 4072
 Krugman, L. M., 4537, 5171
 Krulee, R. L., 3874
 Kuhlman, R., 4088
 Kumpf, G. A., 4133
 Kunsman, D. H., 4544, 4779
 Kurshan, J., 4691, 5177
 Kurzrock, R. M., 4838, 5011
- L
- Laiming, H. J., 4726
 Lamb, J. J., 4553
 Lampert, M. A., 3875, 3953, 4103,
 4469, 4605, 4672, 4701, 4702, 4734,
 4884, 4922
 Lamont, H. R. L., 4124
 Lane, R., 5132
 Langberg, E., 4474
 Langevin, J. L., 4478
 Lapart, E. A., 3949b, 4970
 Larach, S., 3952, 3955, 4012, 4024,
 4028, 4211, 4272, 4278, 4867
 Larrabee, R. D., 4743, 4841, 4850,
 4974, 5117
 Lasky, J. M., 4895e
 Law, H. B., 4065c, 5095
 Lawson, J. Q., 4168
 Lederhandler, S. R., 4855
 Lee, J. G., 4952, 4969
 Leigh, L. O., 4037
 Lemenshka, M. B., 3928
 Lessoff, H., 4842
 Levin, M. J., 4986, 5174
 Levy, B., 3906, 4675
 Levy, D. T., 5209
 Lewin, M. H., 4912a
 Lewis, H. R., 4668, 4985, 5100, 5105,
 5208
 Lewis, L. L., 3986
 Li, C. H., 4423
 Libbey, R. L., 4025a
 Lin, H. C., 3916, 3935, 3943, 4007
 Lind, A. H., 3921, 4048, 4353, 4415,
 4819
 Lind, E. L., 4120, 4459, 4829, 5128
 Lindenblad, N. E., 4526
 Linder, E. G., 3903
 Lindsay, J. E., 4213, 4510
 Lo, A. W., 3937, 4575, 4811
 Loebner, E. E., 4398, 4887, 5213
 Loferski, J. J., 3887, 3903, 3983, 4335,
 4390, 4481, 4583, 4786, 4787, 5028
 Lohman, R. D., 4314, 4727
 Loofbourrow, K. E., 3904
 Lorber, H. W., 5162
 Lowe, M. H., 4627
 Lowery, J. M., 4306
 Lozier, G. S., 4149, 4485, 5104
 Lubash, I. H., 4975
 Luddy, E. N., 4877, 4978
 Luedicke, E., 4518, 4723
 Lundgren, D. L., 4046
 Luther, A. C., 3881, 4696, 4925
 Lyons, W., 4939, 4950
 Lytel, A., 3949

M

- Machum, B. R., 4822
 Mack, A., 4632
 MacKimmie, G. B., 4523
 Madden, R., 4874
 Magid, M., 4434
 Maine, R. E., 4534
 Major, R. P., 4689, 4878
 Malcarney, A. L., 4210, 4343
 Maloff, I. G., 4281, 4462
 Marcus, S. M., 4749, 4772, 5189
 Mark, J. T., 4400, 5070, 5086a, 5187
 Martin, C. A., 4951
 Mason, D. R., 4484, 4808
 Matheson, R. M., 4208, 4581
 Mathwich, H. R., 4031, 4913a
 Mattison, V. S., 4755
 Matty, W. M., 5130
 May, E. G., 3915
 May, J. A., 4011, 4014, 4235, 4557
 Mawhinney, D. D., 3991
 Mazer, W. M., 5055
 McCarrroll, W. H., 3955, 4918, 5160
 McClure, D. S., 4134a, 5199
 McCoy, D. S., 5129a
 McElwee, E. M., 4497, 4714, 5204
 McIntyre, R. J., 4216
 McMann, R. H., Jr., 3946
 McNicol, F. R., 5033
 Meagher, J. R., 4003, 4191, 4244, 4555
 Meehan, E. J., 3880, 3971
 Melchionni, B. F., 3921, 4352, 4483
 Meltzer, S. A., 3996a
 Mengle, L. I., 4556
 Merz, W. J., 4202, 4398, 4549, 4847, 5020, 5216
 Mesner, M. H., 4928
 Meth, M., 4669
 Meuller, C. W., 4823
 Meyer, R. J., 4921a
 Meyerhoff, A., 4632
 Meyerhoff, D., 5051
 Michel, R. E., 5021
 Miller, A., 4708, 4894
 Miller, A. M., 4756
 Miller, L. D., 4373, 4382
 Mills, J. W., 4262
 Millspaugh, F. W., 3881
 Milwitt, W., 4519
 Minton, R., 4195, 4232, 4311, 4366, 4770
 Mohan, J., 4660
 Monroe, C. R., 4696, 4925
 Montiji, R. E., 4326, 4503, 4631
 Moor, J. C., 4209
 Moore, A. R., 3925, 3933, 4247, 4371, 4703, 4956
 Moore, J. B., 3890, 4329, 4962
 Moore, T. H., 4926
 Morehouse, C. K., 3884, 3927, 4199, 4245, 4338, 4435, 4443, 4445, 4566, 4571, 4711, 4803, 5017, 5073, 5104, 5113
 Morgan, A. R., 4001
 Morgan, J. M., 4059, 4074, 4089, 5056, 5062
 Morgan, W. L., 4741
 Morrell, A. M., 4509, 4536
 Morrison, W. C., 3870a, 4405
 Morton, G. A., 4032a, 4433, 4581, 4801, 4802, 4875, 5205
 Mosner, P., 5039
 Mott, T. H., Jr., 5037
 Moule, W. N., 4421
 Mudgett, W. L., 5116
 Mueller, C. W., 3940, 4150, 4345, 5175
 Mueller, R. E., 4791
 Mulle, W. A., 4617
 Mullen, J. A., 3874
 Mullenger, K. E., 3946
 Munson, I. K., 4187
 Murakami, T., 4097, 4455, 4511, 4636, 4642, 4826, 4989
 Murphy, W. A., 4889

N

- Napoleon, J., 4911
 Nash, T. E., 4065b
 Neely, W. J., 4384, 4740
 Nelson, D. E., 5225
 Nelson, H., 3896, 3929, 3933, 4449, 4767
 Nelson, R. J., 4814, 5102
 Nergaard, L. S., 4208, 4288, 4684, 4768, 5168
 Nesbeda, P., 4845
 Nessler, T. G., 4507, 4790
 Nettleton, D. L., 4065g
 Neubauer, J. R., 4324, 4465
 Neugebauer, H. E. J., 3946a, 4020, 4107, 4512, 4538
 Neuhauser, R. D., 5146
 Neuhauser, R. G., 4043, 4234, 4373, 4778
 Newhouse, V. L., 3999a, 4271, 4388, 4559
 Newton, I. T., Jr., 4248
 Nicoll, F. H., 4128, 4252, 4381, 4880, 5165
 Nilssen, O. K., 4175
 Nishino, H. H., 4825
 Nitsche, R., 4322, 4463, 4901a, 4957, 5020
 Nodelman, H. M., 4066
 Norko, R. J., 4379
 Norman, F. H., 4454, 5014
 Norton, L. E., 4236
 Novik, J., 4160, 4413, 4683, 4756
 Nowogrodski, M., 4614

O

Oates, W. L., 4607
 Ochs, S. A., 4392, 5068, 5181
 O'Connell, J. H., 3942, 4591, 5106
 O'Donnell, J. J., 4290
 Olden, R., 4225
 Ollendorf, J., 3904
 Olmstead, J. A., 4166
 Olson, H. F., 3997, 4001, 4030, 4042, 4188, 4307, 4419, 4520, 4569, 4615, 4773, 4925a, 4940, 4967, 5015, 5025, 5191
 O'Neill, J. W., 4412
 Onyshkevych, L. S., 4811
 Owings, J. L., 4895c

P

Page, J. F., 4895c
 Painter, R. R., 4727
 Palmer, H. L., 4598
 Palmer, J. E., 4290, 5207
 Palmquist, J. F., 4411
 Pan, W. Y., 3889, 4040, 4175, 4460, 4501, 4828
 Pankove, J. I., 3885, 4214, 4630, 4760, 4943, 4945, 5026, 5084
 Parker, W. N., 3870
 Parmenter, R. H., 4023, 4328, 4653, 4844, 4893, 5061
 Paschke, F., 4163, 4517, 4587, 4757, 4983
 Passera, A. L., 5169
 Patterson, T. T., 4882
 Paull, J., 4417, 5129
 Paz, H. J., 4221, 4831, 4843, 4913
 Peless, Y., 4097
 Pensak, L., 3892, 4348, 4662, 4759
 Perry, S. V., 4025a
 Peter, R. W., 4671
 Peterson, D. W., 4049, 4457, 4595, 4704, 4758
 Peterson, F. W., 4623
 Peterson, R. N., 4795
 Pettai, R., 5081
 Phillips, H. W., 4396
 Pierstorff, B. C., 5112
 Pike, W. S., 4059, 4074, 4089, 4738, 5056, 5062
 Plumlee, R. H., 3964, 3965, 3975, 4208, 4253
 Poch, W. J., 5019
 Podell, E. J., 4622
 Polk, C., 5058, 5085
 Poor, E. W., Jr., 4783
 Poorte, G. E., 4065g
 Pores, E. B., 4061, 4554
 Porter, J. H., 5152
 Posner, J. S., 5151
 Potter, H. M., 3881
 Potts, J. B., 4921c

Powell, J. B., 4929
 Powell, W. H., 4262
 Powers, K. H., 4223, 5091
 Prager, H. J., 5018
 Preisig, J. O., 5106
 Preston, J., 3915, 4042, 4529
 Prihar, Z., 3984, 4076, 4111, 4112, 4452
 Printon, Jane, 4383
 Privett, F., 4913a
 Propster, C. H., Jr., 4290, 4310, 4319
 Pusey, S. F., 4283
 Pyle, M. O., 3894

R

Rainboth, R. A., 5121
 Rajchman, J. A., 3937, 4102, 4108, 4224, 4575, 4678, 4921b
 Ramberg, E. G., 4065c, 4601, 4635, 5095, 5173
 Rao, G. V., 4988
 Rapaport, H., 4339
 Rappaport, P., 3887, 3903, 4390, 4148a, 4481, 4583, 4719, 4786, 4787, 4815, 4965, 5028
 Rauth, R. G., 3959
 Rawdin, E., 4694
 Reboul, T. T., 5162
 Recorr, K. H., 4499, 5101
 Reeves, T. C., 4742
 Reichert, R. D., 4931, 4947
 Reisz, A., 4740
 Rester, G. F., 3978
 Rettig, A. S., 4910b
 Rettinger, M., 4054, 4144, 4185, 4242, 4777, 5126
 Rhodes, R. N., 5106
 Ritter, M., 4928
 Rizzoni, E. M., 4946
 Robinson, H. A., 4045
 Roe, J. H., 4490, 4958
 Roetschi, H., 5067
 Rogers, B. F., 4641
 Roloff, H. A., 4297, 5057
 Romanis, O., 3889
 Romero, E. L., 5198
 Rose, A., 3979, 4198, 4201, 4206, 4258, 4266, 4320, 4325, 4590, 4628, 4629, 4672, 4692, 4701, 4702, 4883, 4922, 5118
 Rose, Arnold S., 4515
 Rosen, B. H., 4487, 5125
 Rosenthal, H., 3954, 4065c
 Rosi, F. D., 3871, 4073, 4142, 4513, 4574, 4953, 5051, 5052, 5223
 Ross, R. T., 4022
 Roth, M., 4166
 Roth, S. H., 4934, 4949
 Roth, W. C., 4754
 Rotow, A. A., 4000
 Roundy, R. F., 4130, 4165

Royce, M. R., 4026
 Rudy, W. G., 4473
 Ruedy, J. E., 5205
 Rumble, W. G., 4350, 4610
 Ruppel, W., 4201, 4206, 4258, 4266,
 4472, 4637, 4844, 4864, 4869a, 5139
 Ruth, L., 4401
 Rydz, J., 4506
 Ryerson, C. M., 3955a, 4468, 4611

S

Sadashige, K., 4287, 4293, 4960, 5000
 Safran, H., 4845
 Samuel, R., 3990, 4067, 4070, 4174,
 4196, 4230, 4280a, 4296, 4303, 4357,
 4362, 4407, 4491
 Sander, S., 4625
 Sands, W. F., 3909
 Santilli, R. A., 4613, 4835, 4871, 4901,
 5042, 5087
 Sarnoff, D., 4063, 4138, 4291, 4365
 Scattergood, R., 4262
 Schade, O. H., 4004, 4065d, 4516, 4593,
 4594
 Schindler, M. J., 5144
 Schlegelmilch, H. K., 4175
 Schmeltzer, R. A., 4764, 4973
 Schneider, A. M., 4693, 4827
 Schneider, H. F., 3909a
 Schock, R. E., 4056
 Schrader, E. R., 4170, 4374
 Schrader, R. W., 4867
 Schroeder, A. C., 5060, 5147
 Schroeder, J. O., 4060
 Schulte, R. J., 3982
 Schultz, J. B., 5031
 Schultz, R. J., 4360
 Schultz, M. L., 4875
 Schwartz, A. J., 4305
 Schwartz, B. R., 4425, 4426, 4562,
 5215
 Schwartz, G. A., 5162
 Schwartz, H., 5003, 5086
 Schwartz, J. W., 4118, 4447, 4545,
 4563, 4582, 4606
 Scott, C. R., 4820
 Scott, T. M., 3899, 3936, 4591
 Shabbender, R. A., 4584, 4915
 Shapiro, L., 3999
 Shavlack, R., 4609
 Sheffield, B., 4052
 Shelton, C. T., 4467
 Shipferling, T. J., 3879, 4125, 4197,
 4489
 Shipley, D. G., 4523
 Shipman, C., 4261
 Shkarofsky, I. P., 4538, 4966
 Shrader, R. E., 3952, 3955, 4012,
 4024, 4211, 4272, 4278
 Sie, J., 4914, 5065, 5069
 Siekanowicz, W. W., 3866, 4104, 4685,
 5163
 Simon, A. H., 5045
 Simon, R. E., 5090, 5093
 Simonton, D. P., 4656
 Singer, G. A., 4122
 Singer, K., 4171, 5126
 Sinnott, C. M., 5221
 Siukola, M. S., 4133, 4250, 4254, 4334,
 4876
 Sklansky, J., 4066e, 4164, 4356, 4387,
 5035a, 5040
 Skarbak, I., 4683, 4979
 Skinner, R. E., 4730
 Slade, B. N., 3926, 4383
 Small, H. E., 4361, 4414, 4681
 Smith, A. L., 5079
 Smith, C. P., 4509, 4536, 5137
 Smith, F., 4364
 Smith, F. W., Jr., 4066
 Smith, E. M., 4220
 Smith, H. R., 4917
 Smith, L. B., 4888
 Smith, R. M., 4896
 Smith, R. W., 4094, 4688, 4864, 4922
 Smith, T. A., 3993a, 4257, 4906
 Smuckler, E. J., 4631
 Sochard, A. L., 3886
 Soderquist, G. W., 4944
 Solet, I. S., 4336, 4648
 Solomon, A. H., 4039, 4648, 5078
 Sommer, W. G., 5130
 Sommers, A. H., 4028a, 4205, 4372,
 4572, 4784, 4907
 Sommers, H. S., Jr., 3886, 4101, 4782
 Sonnenfeldt, R. W., 4511, 4642, 4826
 Sparks, S., 4032
 Spaulding, S. W., 4941
 Spicer, W. E., 4147, 4558, 4589, 4784,
 4821, 4907, 5090, 5093, 5180
 Sprague, L. T., 5112
 Stacey, I. F., 4317
 Stanley, T. O., 3899, 3931
 Stanko, E., 4152, 4218
 Staras, H., 3867, 3993, 4121, 4223,
 4397, 4651, 4774, 4993, 5047
 Starner, C. J., 4552
 Steeg, C. W., 4270
 Steele, M. C., 4192, 4458, 4574, 4734,
 4759, 4769, 4840, 4903, 5007, 5117
 Stern, H. A., 5198
 Sternberg, S., 4938, 5006
 Sternberg, T. A., 4646
 Sterner, J. F., 5121
 Sterzer, F., 3866, 4104, 4115, 4542,
 4597, 4602, 4648, 4715, 4771, 4788,
 4797, 4900, 5078, 5225
 Stewart, H. W., 4467
 Stewart, J. F., 4849
 Stocker, C. F., 4272, 5109
 Stoekert, A. J., 4473
 Stokes, I., 4241

- Stone, R. P., 4062
 Stoudenheimer, R. G., 4029, 4598, 5161
 Strang, R. C., 4409
 Striednig, L. J., 5063
 Struck, C. W., 4398
 Sussman, A., 5165
 Szekely, M. E., 5189
 Sziklai, G. C., 4008
- T
- Tall, M. M., 4430, 4524, 5142
 Talmage, F. E., 4017
 Taylor, P., 4647
 Taylor, T., Jr., 5130
 Terry, J. E., 1eB., 4724, 4805
 Thanos, H., 5087
 Theriauet, G. E., 4155
 Thomas, J. J., 4603
 Thomas, L. P., 4033
 Thomas, H., 4639
 Thompson, H. C., 5068
 Thompson, L. E., 4913a
 Thompson, R. D., 4902
 Thorne, D., 4873, 4904
 Timmens, J., 4967
 Toscano, P. M., 3996
 Touger, M. L., 4954
 Townsend, C. L., 4298, 4527
 Troxel, D. I., 5195
 Turkevich, J., 4028
 Turkington, R. E., 4567
 Turnbull, J. C., 4525
 Turner, A. H., 4081
 Turner, C. R., 4833, 4836
 Tuska, J. W., 3870a
- U
- Uhler, K. W., 4529
 Ur, H., 4937
- V
- Vaccaro, F. E., 3876, 4644, 4654, 4685, 4807, 5077
 Vance, H. C., 4992
 Veith, F. S., 4292, 5150
 Veloric, H. S., 5111
 Verwys, G., 5219
 Vine, B. H., 4382, 4710
 Vose, A. W., 4440
 Von Urff, C. A., 4892
- W
- Wagner, R. J., 4280, 4891
 Wallmark, J. T., 4129, 4159, 4189, 4282, 4620, 4749, 4772, 4899, 4963, 5189, 5200a
 Walter, C. E., 4255
 Walther, G. C., 4347
 Wambolt, H., 4895a
 Ward, A. K., 4852
 Warfield, G., 4354, 4442
 Warren, C. S., 4350, 4610
 Washburn, E. M., 4942
 Wasson, H. M., 4086, 4139, 4155, 4238
 Watts, W. W., 5010
 Weaver, J. L., 4658, 5140, 5141
 Weilenmann, G. C., 4367, 4493, 4698
 Weimer, P. K., 4377, 4392, 4451, 4818, 5068, 5220
 Weinreb, L., 4954
 Weisbaum, S., 4839, 4914, 5081
 Weisberg, L. R., 4540, 4663, 4953
 Weiser, K., 4084, 4134, 4355, 4369, 4585, 4898
 Weisz, A. Z., 5112
 Wentworth, J. W., 3982a, 3987, 4008a, 4022, 4251, 4323, 4696, 4705, 4925, 5107, 5221, 5224
 Werner, R. E., 4085, 4105, 4464, 4535
 West, C. A., 4260, 4420
 Westwood, D. H., 4895a
 Wheatley, C. F., 4366, 4500, 4532, 4835, 4871, 4901, 5042
 Wheeler, A. J., 4079
 Whitaker, H., 4521
 White, J. G., 4376, 4398, 4754, 4784, 4854, 5099
 Wick, O. F., 4964
 Wickizer, G. S., 4280, 4523, 4891
 Widmaier, W., 4029, 4599
 Wilhelm, J. F., 5071
 Williams, R. C., 4603, 4998, 5009, 5049
 Wilson, F. V., 4440
 Witchey, A. L., 4745
 Wittke, J. P., 4110, 4184, 4285, 4668, 5203
 Wittlinger, H., 4829, 4967, 5012, 5136
 Wlasuk, S., 3883, 3988, 4229
 Wojtowicz, P. J., 4194, 4713, 4717, 4848
 Wolff, L. L., 3871a, 5088
 Wolkstein, H. J., 3980, 4444, 4911, 5108
 Woll, H. J., 4510
 Woodward, J. G., 4001, 4933
 Woodward, O. M., Jr., 3920, 4176
 Woolston, J. R., 4540
 Wuerffel, H. L., 4863a, 5195
 Wysocki, J. J., 4860, 4965, 5028, 5124
- Y
- Yin, H. B., 4238, 4737, 5031, 5065a
 Young, J. E., 5041
- Z
- Zenel, J. A., 4001, 5158
 Zworykin, K. A., 4203
 Zworykin, V. K., 4066a, 4331, 4332, 4404, 4437, 4616, 4635, 4709, 4799, 4867, 4920

SUBJECT INDEX

Numbers refer to Chronological Index

A

- Ablating Surface: 4798
Acoustics: 3997, 4048, 4411, 4419,
4548, 4925, 4840, 5015, 5191
Acoustoelectronic Auditorium: 4773
Acoustoelectric Effect: 4653
Adder, Binary-Full: 5189
AGC Circuit: 4033, 4060
Airborne Equipment: 4007a, 4045,
4440, 4461, 4614, 4631, 4895a, 4911
Aircraft Steering Display: 5112
Air-Defense Systems: 4916a
Air Filters: 4790
Air Flow Loudspeaker: 4745
Air, High Temp.: 4966
Air Traffic Control: 4895d
Alignment Techniques: 3947, 4003
Alkali-Antimony: 4558, 4572, 5180
Alkali Metals: 4907
Alloying Depth: 3892
Alloy Junctions: 4515
Alloy Process: 3924, 3929
Aluminum Cell Anode: 4729
Aluminum Films: 3913
Amplification—Modern Trends: 5168
Amplifiers:
 A-C, transistor: 4997
 Audio: 3938, 3941, 3943, 4064, 4358,
 4366, 4424, 4429, 4500, 4666, 4770,
 5012
 Broadcast Band: 4504
 Chart Calculations: 4865
 Class-B Power: 3905
 Computer: 4038
 Common Emitter: 4427
 Direct Coupling: 4510
 I-F: 3931, 3988, 4401
 Magnetic: 4930
 Modern Trends: 5168
 Negative Mass: 4399, 4686
 Negative Resistance: 5031
 Nomographs: 4537
 Nonlinear-Capacitance: 4684
 Power: 4913, 5172a
 Quasi-Complimentary: 4007
 R-F: 3898, 5172a
 Stereo: 4600, 5129a
 TV Transmitter: 4541
 Transmission Line: 5024
 Ultra-Linear: 4866
Amplifier Devices: 4692
“Amphiphase” Transmitter: 4552,
4756
AM Rejection: 4360
AM Stereo System: 5106, 5153
AM Transmitters: 4413, 4498, 4529,
4683, 4979
Analog Computation: 4694, 4719 (See
also *Computers*)
Analog Triode: 4864a
Anechoic Chamber: 3998, 4025a, 4707
Angle Diversity: 5047
Annealing: 4525
Anodic Dissolution: 4657
Antennas:
 AM Directional: 4486, 4674
 Aperature: 5085
 Broadband FM: 4492
 C-Band Monopulse: 4896
 Color TV: 3888
 Dipole: 5023
 Fresnel Region: 5201
 Helical Beam: 4625
 Paraboloid: 4996
 Pattern Synthesis: 4812, 4813
 Rhombic: 4970
 Taso Experiments: 5059
 Telemetry: 5057
 TV Broadcast: 3871a, 3920, 4422,
 4592, 4704, 4758, 4804, 5092, 5192,
 5197
 TV Test Facilities: 4551
 Traveling Wave: 4359, 4652, 4697,
 4876
 Vertically Polarized: 5115
Antenna Null: 4774
Antimony: 4670
Appliance Checker: 4929
Arc-Discharge Plasma: 5043
Aromatic Nitro Compounds: 4443,
4445, 4566, 4571
Asymmetric Sideband Signals: 4511,
4642, 4826
Audio Amplifiers (See *Amplifiers*)
Audio Driver: 4873
Audio Tube Types: 4036
Audio Systems: 4520, 4925
Automatic Machinery: 4025, 4895e,
4897
Automatic Switching: 4895c, 4910b
Automation: 4066d, 4415
Automobile Receivers: 4613, 4835,
4871, 4901, 5042
Autopilot: 5152

B

Backward-Wave Oscillator: 4602
 Bacteriology: 3902
 Band Pass Filter: 4066f
 Band Structure: 4344
 Barium Orthosilicate: 4026
 Batteries: 4338, 4435, 4443, 4445, 4485, 4566, 4729, 5001, 5073, 5104, 5135, 5171
 Beam-Deflection Tube: 4992, 5046
 Beam-Power Tubes: 3873, 4358, 4623
 Binary Coded Transmission: 5035, 5170
 Binary Counter: 3980, 5040
 Birefringence in Silicon: 4855
 Bismuth: 4670
 Bizmac: 4065e, 4065g
 Bleeder Networks: 4560
 BMEWS: 4919a, 5193
 Boat Equipment: 4712
 Boltzmann's Equation: 5167
 Boron Nitride: 3952, 4024
 Brazed Assemblies: 3928
 Broadcasting
 "Ampliphase" Transmitter: 4552
 AM Stereo: 5106
 AM Transmitters: 4413, 4498, 4683, 4979
 Antennas (See *Antennas*)
 Closed Circuit: 3948
 Color TV: 3948, 3881, 3970, 4043, 4058
 Control Room: 4411
 FM Transmitters: 4546, 4682, 4977, 4980
 Mobile Units: 3948, 3970
 Power Supply: 4022
 Television: 4049, 4053, 4061, 4595, 4689, 4704, 4804, 4808
 Transistor: 4705, 5224
 Transmitter Amplifier: 4541
 Video Switching: 4061, 4925
 VHF Transmitter: 4017, 4681

C

Cadmium Selenide: 4381, 4470, 4880
 Cadmium Sulfide: 3886, 3944, 4019, 4650, 4832, 4863, 4885, 4998, 5049, 5054, 5202
 Cadmium Sulfide Analog Diode: 4864
 Cadmium Sulfide Analog Triode: 4864a
 Cadmium Telluride: 4349
 Calcium Fluoride Window: 4495
 Camera Tubes (See *Television and Vidicon*)
 Camera-Tube Microscope: 4601
 Carnot Cycle: 5518
 Carrier Lifetime: 4861
 Cataphoretic Deposition: 3893
 Cathode, Low-Wattage: 5044

Cathode, Oxide: 3964, 3965, 3975 4374
 Cathode Materials: 3884, 3927, 4435, 4443, 4473
 Cathode Ray Tube: 3996, 5131
 Cells, Electric: 5104
 Ceramics: 3876, 3958, 4789
 Cesium Gold: 4784
 Cesium Plasma Diode: 4999
 Chemical Synthesis: 5079
 "Cherenkov" Electron Gas: 3953
 Chroma Key: 4612
 Circuits (See *type, i.e., Horizontal Deflection, Oscillator, etc.*)
 Class-B Circuit: 3899, 3941, 4500, 4532
 Class-C Circuit: 4718
 Coaxial Stub, Resonant: 4988
 Co-channel Interference: 4053, 4405, 4484, 4762
 Coding Filters: 4003a
 Cold Cathode Arcs: 4370
 Cold-Junction Error: 4336
 Color Film: 3879, 4020
 Color TV
 Antennas: 3888
 Cameras: 3994, 4043, 4489, 4990, 5068
 Chassis: 4011, 4014
 Closed Circuit: 3948, 4496
 Convergence Circuit: 4051
 Demodulator: 4655
 Film: 3945, 4384
 I-F Amplifier: 3988, 4401
 Image Quality: 4593, 4594
 Installation: 4047
 Kinescopes: 3865, 3954, 3976, 3995, 4006, 4051, 4065c, 4509, 4536, 4744, 4761
 Land Experiments: 5155
 Lighting: 3978, 3994, 4027
 Medical: 3986
 Mobile Units: 3948, 3970
 Monitor: 4395
 Printed Wiring: 4011
 Receivers: 3894, 3967, 3988, 4342, 4401, 4550
 Service: 3960, 3995, 4006, 4014, 4047, 4342, 4544, 4550, 4555, 4660
 Signal Handling: 3881
 Special Effects: 4991, 5098, 5217
 Standards: 3982a
 Tape Recorder: 4001, 4353, 4902
 Test Equipment: 3987, 4058
 Transmitter: 3946
 Tricolor Vidicon: 4990, 5068
 Combiner, Diversity: 3993
 Commercials: 3879
 Common-Emitter Amplifiers: 4427
 Communications (General): 4731
 Communications Equipment: 4439, 5022

Communications Network: 4719
 Communications Switching System: 4503
 Compatible Stereo System: 5106, 5153
 Compatible SSB Transmission: 5091
 Complementary Symmetry: 3899
 Computers
 Amplifiers: 4038
 Analog: 4694, 4719
 Binary Coding: 5035
 Binary Counter: 3980, 5040
 Bizmac: 4065e, 4065g
 Circuits: 3957, 4000a, 4580, 4797, 4910d, 4912a
 Conditional-Sum Logic: 5035a
 Current Analog: 3976a
 Data System: 4728
 Digital: 3957, 4000a, 4741, 4788, 4811, 4912a, 5076, 5132
 Fabrication: 4580
 Ferrite Plates: 4610
 Magnetics for: 4678, 4930
 Medical: 5132
 Microwave: 4797, 4823, 4900, 4921b
 Military: 4570
 Real-Time Data: 4820
 Sampling: 4066e, 4677
 Shift Register: 3999a
 Switching Circuits: 5215a
 Truth Functions: 5037
 Tunnel-Diode Logic: 5186
 Tunnel-Diode Memory: 5226
 Conduction Band: 4055
 Consolette: 3880
 Constant Ratio Code: 4962
 Contact Arcing: 3962
 Contact Potential: 4041
 Contamination Gauge: 4044
 Continuous Process Apparatus: 3896
 Control Knobs: 4507
 Convergence: 4051, 4545
 Conversion Factors: 3895
 Converters (d-c/d-c): 4833, 4836
 Cooling Rates: 4646
 Copper Beryllium: 4372
 Copper Diffusion (GaAs): 5051
 Copper, Etching: 4547
 Correction Circuits: 3946
 Countermeasures: 4869
 Counters: 3910, 3919, 3980
 Coupled Cavity: 3897, 4450
 Creative Engineering: 4375, 4691
 Crossed-Field Amplifiers: 5083
 Cross Modulation: 3898, 4826
 Cross-Track Errors: 4993
 Cryogenic Circuits: 4945
 Crystallography: 4376, 4922, 4948, 5148
 C-Stellarator: 4853, 5066, 5070, 5086a, 5187

Current Mobilities: 4469
 Cyclotron Frequency Devices: 5048
 Cyclotron Resonance: 4480

D

Dark Emission: 4598
 Data Processing (See Computer, Counter, Binary, etc.)
 Data System: 4728
 Data Transmission (Pictorial): 4934, 4949
 Data Transmission System: 4820, 4896a
 db, dbm: 4576
 D-C/D-C Converter: 4833, 4836
 Decomposition Method: 4355, 4369
 Defect Level: 4589
 Defense: 4343
 Deflection Oscillator: 4723
 Degaussing: 4006
 Delay Lines: 4517
 Demodulator: 4655, 4959
 Department Store Sound System: 4852
 Design: 4632a, 4641, 4656, 4895a, 4961
 Detector: 4360, 4364, 4511, 4642, 4669, 4826, 4873, 5116
 Dielectric Constant: 4026, 5067
 Diffusion Techniques: 4449, 5027
 Digital Computer: 3957, 4000a, 5076, 5132
 Digital-Hydraulic Servos: 4617
 Digital Magnetic Circuits: 4741
 Diodes: 3889, 4408, 4763, 4999, 5069
 Diode-Loaded Helix: 5013
 Dipole Antenna: 5023
 Direct-Coupled Amplifiers: 4510
 Disc Recording: 4455, 4493, 4636
 Discrete Systems: 4387
 Disordered Alloys: 4023
 Displacement Thresholds: 4786
 Display Characteristics: 4987
 Display Storage Tubes: 4062, 4596
 Diversity Reception: 3867
 Doppler Radar: 4845
 Drift Transistors (See Transistors)
 Drone Surveillance: 4478
 Dry Cells: 4566, 5073
 Dual-Dubbing Reproducer: 4806
 Dynamical Analogies: 4615
 Dynodes: 4372

E

Ear Protector: 4945
 Editorial: 4063, 4343, 4365, 4416, 4564, 4635, 4681, 4731, 4765, 4906, 5010
 Education: 4856
 Effective-Mass-Particle Complexes: 4605
 Electrode Potential: 5135
 "Electrofax": 4506, 4881, 4890

- Electroluminescence: 3952, 4867
 Electroluminescent Display Panels: 4575
 Electroluminescent Transitions: 4783
 Electromagnetic Waves: 3946a, 3953, 4966
 Electromechanical Filter: 3868, 4046
 Electron Beams: 3963, 4057, 4233, 4406, 4446, 4587, 4757, 4809, 4982, 5083
 Electron Cooling: 4539
 Electron Donors: 3965, 3975
 Electron Gun: 3969, 4005, 4446, 4447, 4563, 4582, 4606, 4671, 4809, 5108, 5123
 Electron Lenses: 4406
 Electron Microscope: 3869, 3902, 4721
 Electron Mobility: 4476, 4540, 4585
 Electron-Spin Lattice: 5021
 Electron Tubes: 3959, 3895, 4065d, 4336, 4374, 4531, 4573, 4604, 4664, 4927, 4931, 4947, 5008, 5030, 5094
 Electron Tube Fabrication: 4849, 4897
 Electron-Voltaic Effect: 3903
 Electric Field Effect: 4458
 Electronic Composites: 4568
 Electronic Hardware: 4796, 4870
 Electronic Masking: 3989
 Electronic Music: 4738, 4967
 Electronic Packaging: 5198a
 Electronics: 4899, 5010
 Electroscopic Powders: 4794
 Electrostatic Deflection: 4722
 Electrostatic Focusing: 4378, 4685, 4807, 5038, 5122, 5163
 Electrostatic Imaging: 4926
 Electrostatic Microphone: 4569
 Empretron: 5014
 Energy-Band Structure: 4344
 Energy Levels: 4023
 Engineering Creativity: 4375, 4432
 Engineers and Music: 3997a
 Envelope Delay Measuring: 4816, 4877, 4978
 Equalizer: 4988
 Error-Correcting Techniques: 4592, 5207
 Estiatron: 4618, 4654
 Etching Copper: 4547
 Exchange Ions: 3906
 Exciter, SSB: 4992
 Exponential Gun: 4671
 Expandable Console: 3880
- F**
- Facsimile: 4891
 Feedback System, Linear: 5055
 Ferrite Circulator: 4839
 Ferrite Frequency Separator: 4339
 Ferrite Isolator: 4018
 Ferrite Modulator: 4648
 Ferrite Plates: 4559
 Ferrite Plate Apertures: 4388, 4610
 Ferrites: 4936, 4984
 Ferrite Systems: 4716
 Ferroelectric Colemanite: 5034
 Ferroelectric Crystals: 4463, 4901a
 Ferroelectrics: 4039, 4847, 4957
 File Processor: 4502
 Filter, Light: 4020
 Flight Data System: 4631
 Flight Trainer: 4825
 Fluoroscope: 4391, 4418
 Flying Spot Microscope: 4601
 Flying-Spot Scanner: 3999
 FM Carrier Deviation: 4975
 FM Detectors: 4360
 FM Deviation: 4925
 FM Receivers: 4639
 FM Transmitter: 4546, 4682, 4977, 4980
 Forced-Air Cooling: 4742
 Fresnel Region: 5201
 Frequency Converter: 4505
 Frequency Division Multiplex: 4946
 Fusion Control Studies: 4853
- G**
- Gain Control: 4873
 Gallium Arsenide
 Alloy Properties: 5223
 Band Structure: 4908
 Copper Diffusion: 5051
 Crystals: 4748, 4754, 4948
 Diffusion in: 5027
 Dislocations: 5200
 Electron Mobilities: 4540
 —*Ge Mixtures*: 4393
 Magnetoresistance: 4910
 Microwave Diode: 4408
 Optical Absorption: 4479
 Photovoltaic Effect: 3887
 Reactance: 5089
 Thermal Conversion: 5124
 Gallium Phosphide: 4783
 Gallium Selenide: 4829
 Gallium Sulfo-Selenide: 5128
 Galvanomagnetic Effects: 3977
 Gamma Function: 5138
 Gases: 5127
 Gas Tubes: 3870, 4363, 4604
 Gaussian Time Series: 5174
 Germanium
 Applied-Field Effect: 5139
 Crystals: 3896, 3914, 3925, 4513
 Diode: 3942
 Drift Velocity: 4743
 Electron-Voltaic Effect: 3903
 Impact Ionization: 4759

Germanium (continued)

Impurity Layers: 5111
Indium Alloy: 3892
Kink Bands: 3871
Lattice: 4909
Magneto-resistivity: 4621
Optical Absorption: 5026
Photoemission: 5093
Photogenerated Current Carriers:
 4703
Photomagnetism: 4956
Photovoltage: 4475
Purification: 3934
Radiation Damage: 4481
Radiative Surface Effect: 4630
Recombination Centers: 4787,
 4924, 4943
Silicon Alloy: 4065, 4371, 4476,
 4521, 4574, 4875
Thermal Conductivity: 4760
Thermal Conversion: 3930
Transistors: 3940, 4383

Getter-Ion Pumps: 5176
 Glass Coating: 4525
 Glass-Metal Seals: 4525
 Glow Discharge: 4380
 Government Contract Reports: 4341
 Graphic Arts: 3999
 Graphic Scaler: 5071
 Gravitation Field: 4693
 Grid-Dip Meter: 4420
 Guanadine Aluminum Sulfate
 Hexahydrate: 5097
 Guided Missiles: 3907
 Gyro: 5039

H

Hall Effect: 4840
 Ham-Band Charts: 3908
 Ham Circuits: 4667, 5144, 5188
 Ham Shack: 4280a, 4357
 Harmonic Generation: 4514
 HBR-16: 5188
 Heat Exchange: 4539
 Helical Beam Antenna: 4625
 Helix Support: 5077
 Hi-Fi Amplifier: 5012
 Hi-Fi Triode Pentode: 4927
 High-Altitude Equipment: 3962
 High-Fidelity Sound: 5015
 Hole Ionization Energy: 4832
 Horizontal Deflection Circuits:
 3949a, 4989, 5156
 Hot Electrons: 4604
 Human Engineering: 4554, 4791,
 4799

I

ICBM Controls: 4588
 I-F Amplifier: 3931, 3988
 Image-Display Devices: 4516
 Image Distribution: 5036

Image Intensifier: 4886, 5165
 Image Orthicon: 4000
 Image Orthicon Target: 5181
 Image Sensors: 4928, 4938
 Image Storage: 4381
 Image Transducer (Solid State):
 5213
 Impact Ionization: 4759
 Impulse Noise: 4518, 4986
 Indium: 5143
 Indium Alloys: 4633, 5223
 Indium Antimonide: 4458, 4769,
 4903, 5007
 Indium Phosphide: 4355, 4369, 4585,
 4898, 4910
 Indium Sulfide: 4918
 Induction Heating: 4065b
 Inductors: 3982
 Industrial Electronics: 4906
 Inertial Navigation: 4827
 Infrared Photoconductive Detectors:
 4875
 Infrared Photoconductors: 4821
 Infrared Photoemission: 4801
 Infrared Pickup Tube: 4802
 Insulators: 4590, 4844
 Intelligibility Testing: 5164
 Intensifier Orthicon: 5205
 Intensity Markers: 3947
 Intercom: 3950
 Intermetallic Semiconductors: 4907
 Intermodulation Distortion: 4907a,
 4972
 International Telegraph: 4055
 Interstitial States: 4402
 Integrated Devices: 4620, 4749, 4963
 Iridium Tellurium: 5099
 ISB Systems: 4939, 4950

J

Jamming: 4869
 Junction Diode: 3889, 5036
 Junction Transistors (See Transis-
 tors, Junction)

K

Kinescopes
Color: 3865, 3976, 4006, 4051, 4065c,
 4509, 4536, 4744, 4761
Convergence: 4051, 4545
Neck Shadow: 3872
Noncircular Spots: 3969
Phosphor Screens: 3954, 4744, 4761
Reflected Beam: 5095
Tutorial: 5137
 Kink Bands: 3871

L

Lag Compensation: 4377
 Land's Color Experiments: 5155
 Lapping Techniques: 4449

Lead-Wire Inductance: 4795
 Levitation Melting: 4663
 Lifetime Determination: 4861
 Light Absorption: 4998
 Light Amplifier: 4880, 4883
 Light-Amplifier Panel: 4643
 Limiter Amplifier: 5129a
 Linear-Feedback System: 5055
 Loaded-Q: 4834
 Local Oscillator: 4040, 4460, 4501, 4828
 Lorentzian Gas: 4604
 Loudspeakers: 3915, 4464, 4535, 4745
 Low-Cost Amplifier: 4429
 Low-Plate-Potential Tubes: 4814, 5102
 L-Shaped Bevels: 4706
 Luminescence: 3955, 4024, 5194
 Lunar Exploration: 4941

M

Machining: 4347, 4706, 5129
 Magnesium Alloys: 4657
 Magnesium-Bismuth Oxide: 4338
 Magnesium Cell Anode: 4729
 Magnetic Amplifiers: 4930
 Magnetics for Computers: 4678, 4930
 Magnetic Deflection: 3963
 Magnetic Reproduce Heads: 4054
 Magnetic Susceptibility (Ge): 4703
 Magnetic Tape: 4933
 Magnetic Tape Recording (See Tape Recording, Television and Color TV)
 Magnetoresistivity: 4621, 4910
 Magnetrons: 3874, 3897, 3991, 4065a, 4785, 4968
 Magnets: 3866, 3958, 3990, 5114
 Maintainability: 4910a, 5211
 Management: 3949b, 4456, 4800, 4905, 5177, 5190
 Marine Equipment: 4712
 Marker-Beacon Receiver: 4736
 Masers: 4985, 5208
 Maser Materials: 5105
 Masking, Electronic: 3989
 Mass Spectrometer: 4895b, 5227
 Matching Network Nomograph: 4737
 Mathematics: 4066, 4387, 4622
 Mechanical Connectors: 5001
 Medical Electronics: 3902, 3989, 4066a, 4404, 4457, 4601, 4857, 4858, 4920, 4954, 5132
 Megacoder: 4679
 Melt-Quench Process: 3885
 Memory: 4350, 4388, 4559, 4910d, 4930
 Memory Sensing: 4930
 Mercury Pool Arcs: 4015
 Mercury Pool Arc Tube: 5014
 Mercury Vapor Tube: 4380
 Merit Rating: 4680

Message Switching: 4895c, 4910b
 Metallography: 4515
 Meteor-Burst Communication: 4522, 4891
 Metronome: 5136
 Microminiaturization: 4772
 Micromodules: 4620, 4726, 4910c
 Micromodule Lab: 5209
 Microphones: 4002, 4035, 4042, 4048, 4386, 4412, 4569, 4647, 4981
 Microscopic Examination: 3914
 Microwave Amplifier: 5013
 Microwave Circuits: 4339, 4399, 4913a
 Microwave Communications: 4031, 4752, 4755
 Microwave Diodes: 4408
 Microwave Equipment: 4872, 5096
 Microwave Ferrite Modulator: 4648
 Microwave Logic: 4797, 4900
 Microwave Relay: 4913a
 Military Communications: 4921a
 Miniature Tubes: 4718, 4795
 Minority Carrier Sweep Out: 4841
 Missile Components: 4567
 Missile Guidance: 4459a, 5152
 Missile Interference: 5005
 Missile Maintenance: 3907
 Missile Test: 5088
 Mobile Communication: 4814, 5016
 Mobile Receiver: 5102
 Mobile Transmitter: 4747
 Mobile Units (for Color TV): 3948, 3970
 Modulators: 3985, 4048, 4959
 Molded Nickel Cathode: 4773
 Molecular Ringing: 3981
 Monitor Amplifier: 4831
 Monopulse Radar: 4895
 Moscow Impressions: 5019
 Motion Picture Sound Equipment: 3961, 4054
 Motion Picture Cameras: 4351
 Motor Vehicle Control: 4616, 4706
 Multicarrier Repeater: 4907a, 4972
 Multiplant Supplier Rating: 4751
 Multiple Sequential Feedback: 4468
 Multiplex: 4546
 Multiplier Photo Tube: 4029, 4448, 4599
 Music Synthesizer: 4967

N

Navigation System: 4631, 4993
 Neck Shadow: 3872
 Negative-Effective-Mass Effect: 5206
 Negative-Impedance Amplifier: 4535
 Negative-Mass Amplifier: 4399, 4686
 Negative-Mass Carriers: 4603
 Negative-Resistance Amplifier: 5024, 5031, 5125
 Neutron Group Representation: 4730

- Nickel-Cadmium Cells: 5171
 Nickel Cathode: 4473
 Nickel-Ferrous Oxide: 4376
 Nitroalkanes: 4711
 Nitro Compounds (Heterocyclic):
 5113
 Noise
 Additive, Stationary: 4626
 Distributed Noise Generator: 5024
 Electron Beam: 4005, 4406, 4982
 Electronic Control: 3997
 Impulse Response: 4986
 Magnetrons: 3874
 Microphones: 4386
 Parametric Amplifier: 4914
 Speech Communication: 4034
 Transistors: 3900, 3917, 3918, 4665a
 Tube Chart: 4482
 Tunnel Diode: 4932
 Noise-Level Reduction (Highway):
 4777
 Nomographs: 4537, 4737, 4931, 4947,
 5063
 Nondestructive Measure: 4915
 Nonlinear-Capacitance Amplifier:
 4684
 Nonlinear Reactance: 4512
 Nonmetallic Solids: 4605
 Nonreciprocal Microwave Devices:
 4776
 Nuclear Radiation: 4335
 Null Method: 4810, 4916
 Nuvistor: 5159
- O**
- Ohmic Contact: 4702
 Ohms Law: 4830
 Omniguide Antenna: 3920
 One-Carrier Currents: 4469
 Optical Absorption: 4371, 5026
 Optical Analog: 4004
 Optical Multiplexing: 3921
 Optoelectronics: 4887
 Orbit Program: 4917
 Organic Cathode Materials: 4435
 Organic Compounds: 4445, 4571,
 4711, 4803, 5113
 Organization: 3949b
 Oscillator (CRT): 3996
 Oscillator Circuits: 3878, 3916, 3996,
 4040, 4436, 4460, 4501
 Oscillistor: 5117
 Oscilloscope: 4407, 5064, 5121
 Oxides, Groups VI-VIII: 5017
- P**
- Paraboloid Antenna: 4992
 Paramagnetic Resonance: 5100
 Parametric Amplification: 5069
 Parametric Amplifiers: 4389, 4466,
 4624, 4645, 4739, 4792, 4914, 5048,
 5069, 5074
 Parametric Diodes: 4823
 Parametric PLO: 4811
 Parametric Subharmonic Oscillators:
 4763, 4788, 5078
 Parametric Up-Converter: 5081
 Parametric Wave Generator: 5075
 Particle Suspension Technique: 4548
 Pattern Recognition: 4987
 Patterns by Evaporation: 4818
 Pedestal Processing Amplifier: 3974
 Periodic Field: 4057
 Periodic Magnets: 3866, 5114
 Phase Angle Distortion: 3925
 Phonetic Typewriter: 4030
 Phonograph Amplifier: 4064, 4600
 Phonon Emission: 4734
 Phosphor: 4012, 4024a, 4028, 4477,
 5161
 Phosphor Dot Size: 4744
 Phosphor Screens: 3954, 4744, 4761
 Photocathode: 4028a
 Photoconductive Decay: 4688
 Photoconductive Devices: 4377, 4650,
 4701, 4863, 4885, 5054
 Photoconductive Material: 4024a,
 4880
 Photoconductivity: 3944, 3951, 4019,
 4459, 4470, 4672, 4673, 4829, 4918,
 5020, 5128, 5178, 5194, 5210
 Photocurrent Saturation: 5080
 Photoelectric NaKSb System: 5160
 Photoelectromagnetic Effect: 3886,
 4851
 Photoelectronic Analysis: 4948, 5202
 Photoemitters: 4572, 4589, 4598, 5049
 5090, 5093, 5180
 Photography: 4362
 Photo Multipliers: 4581, 5141
 Photosensitive Devices: 5032
 Photo Tube: 5140
 Photovoltaic Converters: 3983, 4965,
 5028
 Photovoltaic Effect: 3887, 4348, 4349,
 4398, 4475, 4549, 4662, 4815, 4965,
 5009, 5049, 5118
 Pick-Up Tube: 4467
 Pin Keys: 4417
 Plasmas: 3875, 4999, 5043, 5162, 5185
 Plasma Pinch Effect: 4769
 Plate Dissipation: 5030
 Plate Materials: 4646
 Platform Poise: 4379
 Pocket Radio: 4859, 4976
 Point-Contact Oscillator: 3878
 Point-to-Point Service: 4056
 Polarguide: 3882
 Pole Tip Caps: 4054
 Polycrystallites: 4867
 Portable Radio: 4859, 4976, 5087
 Portable TV: 4010, 4021
 Powder, Electroscopic: 4794
 Powders, Microcrystalline: 5178

Power Amplifier: 4913
 Power Dissipation: 4532
 Power Fault Protection: 4400
 Power Pentodes: 4666
 Preamplifiers: 4367, 4843
 Printed Wiring: 4011, 4607, 4779
 Professional Groups: 4714, 4882
 Projectors: 4534
 Propagation: 4340, 4397, 4512, 4538,
 4584, 4651, 4752, 4951
 Propagation Test: 4031
 Publications: 4627
 Public Service: 4009
 Pulse Amplifier: 4597
 Pulse Amplification: 4759
 Pulse Code Modulation: 5196
 Pulse Emission: 4363
 Pulse-Forming Network: 4499
 Pulse Modulated Radar: 4609
 PPI Scan Generator: 4596
 Pulse-Position Modulator: 5045
 Pulse Signalling System: 4824
 Pulsed RC Network: 4066c
 Pulse Transformers: 4065h

Q

Q Calculations: 3982, 4834
 Quadrature Alignment: 4793
 Quality Control: 4524, 4761
 Quantum Mechanics: 5203, 5206
 Quasi-Complimentary Amplifier:
 4007
 Quick-Selection Chart: 4664
 Quinone Compounds: 4803

R

Radar: 3972, 4409, 4440, 4609, 4617,
 4845, 4874, 4895, 4923, 5219
 Radar Display Tubes: 5150
 Radiation: 4335, 4481, 4487
 Radio, Automobile: 5042
 Radio-Electronics Fundamentals:
 4619
 Radio, Mobile: 5016
 Radio, Portable: 5087, 5120
 Radio Receivers: 3915, 4504, 4873,
 4904, 4976
 Radio Reception: 4340
 Radio Relay: 4632, 4946, 5119, 5212
 Radio Telegraphy: 3890, 4939, 4950
 Radio, Transoceanic: 4962
 Railroad Communication: 4052
 Random-Number Generator: 4715
 Rate Gyro Data: 5039
 Receiving Tubes: 4065d, 4374, 5008
 Receptor Mechanism: 5147
 Recombination: 4477, 4661, 4787,
 4924, 4943
 Recording Head: 4810, 4916, 4971
 Recording, Magnetic Film: 5126
 Recording Tape: 4054, 4933 (See also
 Tape Recording, TV and Color TV)

Rectifier Tubes and Circuits: 4664
 Reflected Beam Kinescope: 5095
 Reflex Receivers: 4428
 Regenerative Receivers: 4942
 Reliability: 3955a, 3959, 3993a,
 3996a, 4430, 4452, 4468, 4611, 4640,
 4649, 4863a, 5142, 5195, 5215, 5218
 Reliability Engineer: 5218
 Remote Control: 4557
 Reproduce Heads: 4054
 Research and Development: 4341,
 4453, 4800, 4905
 Research Laboratory: 4605a, 5215
 Research Services: 5177
 Resistivity Studies: 3927
 Resistor Reliability: 5215
 Reverberation: 4940
 R-F Amplifier: 3898, 5172a
 R-F Interference: 4862
 R-F Monitor: 5121
 Rhombic Antenna: 4970
 Ring Counter: 3919
 Ringing: 4989
 Rise-Time Sampling: 5064
 Ruby: 5021
 Rutile: 4668
 R-Z Chart: 3966

S

Salvaging Components: 3928
 Sampled-Data Control: 4356
 Sampling: 4677
 Sampling Function: 4959
 Satellites: 4350, 4459a, 4822, 4934,
 4949, 5169
 Scanning Microscopy: 4858
 Scientists: 4519
 Scintillation Counters: 4029, 4433,
 4599, 4658
 Screen-Grid Dissipation: 4866
 Screen Persistence: 4761
 Security: 4564
 Selenide: 4019, 4650
 Semiconductor Devices: 5183 (See
 also Transistors, Diodes, etc.)
 Semiconductor Junctions: 4794, 4860
 Semiconductor Materials: 5052
 Semiconductor Physics: 3977, 4402,
 4438, 4453, 4561, 4579, 4661, 4734,
 4786, 5082, 5194
 Semiconductor Properties
 (Measure): 4974
 Sensitivity Control: 4960, 5000
 Series String: 3959
 Service
Ham Equipment: 4280a, 4357
Printed Circuits: 3949, 4779
Television: (See Color TV and
 Television)
Test Equipment: 4555
Tube Effects: 4531

Shift Register: 3999a
 Shop Practice: 4347
 Short-Wave Receiver: 4573
 Signal Detection: 4511
 Silicon: 3903, 3929, 3933, 4065, 4371,
 4476, 4481, 4521, 4621, 4855, 4875,
 5090
 Silicon, Boron Doped: 4850
 Silicon-Ge Alloys: 4521
 Silicon Power Transistors: 4921
 Silver Magnesium: 4372
 Skin Effect: 5082
 Slow-Scanning: 4467
 Slow-Wave Structures: 4450, 5122
 Sodium-Potassium-Antimony: 5160
 Solar-Energy Conversion: 3887, 3983,
 4148a, 4583, 4965
 Soldering Machine: 4607
 Sound Recording: 3961
 Sound Reproduction: 4520
 Space-Charge Effect: 5123
 Space-Charge Layers: 3979, 4438,
 4579
 Space-Charge Limited Currents:
 4013, 4472, 4688, 4701, 4844, 4883,
 4884, 4922, 4974
 Spacecraft: 5130
 Space Environment: 4553, 4798,
 4846, 4917, 4928, 4938
 Space Navigation: 4459a, 4693
 Speaking: 4379, 4497, 4647
 Special-Effects Systems: 4878, 5098,
 5217
 Spectral Distribution: 4012
 Spectral Response: 5032
 Spectrographic Analysis: 4521, 4633,
 5143
 Spectroradiometer: 3968
 Spectrum Conservation: 4533
 Speech Communication: 4034
 Speech Recognition Machine: 5025
 Spinel: 4134a, 4708, 4713, 4717, 4848,
 4894
 Sputnik II: 4923
 Sputtering: 4394, 4474
 Square-Law Approx.: 5116
 SSB: 4045, 4046, 4055, 4056, 4720,
 4939, 4950, 4992, 5091
 Stainless-Steel/Glass Seal: 5004
 Statistics: 4356
 Stellarator: 4853, 5066, 5070, 5086a,
 5187
 Stereo Radio: 4935, 5153
 Stereo Recording: 4035, 4455, 4636
 Stereo Sound: 4419
 Stop-Go Scanning: 4533
 Storage Light Intensifier: 4879
 Storage Tube: 5145
 Stratoscope I: 5056, 5062
 Strip Transmission Line: 4838
 Stresses: 4915
 Stud Welder: 4932
 Sulfate Ions: 3906

Superconducting Contacts: 5061,
 5084
 Superconducting Wires: 4577
 Superconductivity: 4893, 5222
 Surface Studies: 3944, 3977, 4561,
 4630, 4661
 Sweep-Frequency Generator: 3949a
 Switched-Zone Furnace: 3934
 Switching: 3912, 4503, 4695, 5215a
 Switching Systems: 4696
 Switching Times: 4727
 Sync Separator: 4518
 System Design: 4524, 4961

T

Talos: 4396, 4565, 4634
 Tantalum: 3893
 Tape Recording (See also Television
 and Color TV)
Azimuth Alignment: 4810, 4916
Recording Head: 4971
Recording Tape: 4933
Reproduce Heads: 4054
Tape Transport: 4952, 4969
 Target Drone: 4735
 Taso Experiments: 5059
 Teaching Device: 4451, 4725
 Telecommunications: 3984, 4032,
 4452
 Telefocus Grid Cap: 5172
 Telegraphy: 4055, 4939, 4950
 Telemetry: 5057

Television

Antennas: 3920, 4422, 4451, 4758,
 5059, 5092, 5192, 5197
Asymmetric Sideband Signals:
 4511, 4642, 4826
Automatic Frequency Control:
 3889
Automatic Gain Control: 4033,
 4060
Automation: 4608, 4578, 4659,
 4689, 5033, 5214
Brightness-Control: 4732
Broadcasting: (See Broadcasting)
Cameras: 4059, 4382, 4407, 4490,
 4778, 4958, 5068, 5146, 5220
Closed Loop: 4461
Cochannel Interference: 4053,
 4405, 4484, 4762
Color: (See Color TV)
Contrast Control: 4732
Deflection Oscillator: 4723
Detector: 4364, 4669
Editorial: 4009
Electronic Composites: 4568, 4868
Exciter: 4361
Film Equipment: 3921, 3989, 4352,
 4534, 4483, 4740, 4958, 4460, 5000
Flat Picture Tube: 5173
Ghosting: 4457

- Television (continued)
- Horizontal Deflection*: 4989, 5156
 - Impulse Noise*: 4518
 - Kinescopes*: (See Kinescopes)
 - Microwave Equipment*: 5096, 5214
 - Monitor Amplifier*: 4994
 - Picture Area Losses*: 4527
 - Picture Carriers*: 4053, 4760
 - Picture Quality*: 5050
 - Portable*: 4010, 4021
 - Programming*: 4415
 - Quantum Limitations*: 4628, 4629
 - Receivers*: 3894, 3939, 3947, 4364, 4723, 5221
 - Remote Tuning*: 3883
 - Ringling*: 4989
 - Service*: 3865, 3949, 4003, 4010, 4021
 - Sine-Wave Spectrum*: 4516
 - Slow Scanning*: 4467
 - Space*: 4941, 5056, 5062
 - Special-Effects Amplifier*: 5098, 5217
 - Station Coverage*: 4049
 - Stereo*: 4725
 - Studio Equipment*: 3880, 3945, 3974, 3978, 4061, 4384, 4395, 4554, 4608, 4689, 4963, 4991
 - Sync Separator*: 4518
 - System Analysis*: 5053
 - Tape Recorder*: 4001, 4353, 4410, 4494, 4578, 4659, 4690, 4780, 4793, 4819, 4952, 4963, 4969, 5158
 - Transmitters*: 4017, 4414, 4541, 4681, 4808, 5041
 - Vertical-Aperature Equalizer*: 5060
 - Vertical Deflection*: 3939, 4528, 4700
 - Video Switching*: 4061, 4925
 - 3-Dimensional*: 4556
- Tellurium: 4670
- Terminal Guidance: 5169
- Ternary Compounds: 5020
- Tetramethylammonium: 4957
- Thermal Diffusivity: 5103
- Thermal Emissivity: 5157
- Thermionic Converter: 4454, 4781, 5029, 5154
- Thermionic Emitter: 4768
- Thermistor: 4425, 4426, 4562
- Thermocouple: 4336
- Thermoelectric Heat Pumping: 4526
- Thermoelectric Power: 4574, 4670, 5002, 5052
- Thermoelectric Properties of Oxides: 4842
- Thermoelectric Thermostat: 4888
- Thermonuclear Fusion: 4354, 4441, 4442, 4817
- Thermostat: 4016, 4888
- Thin Films: 4349
- Thiouria: 4039, 4854, 5179
- Thoria: 3893
- Thyratrons: 3932
- Thyristor: 4345, 4403
- Time Averaged Effects: 5185
- Tiros: 5006
- Titania, Chromium Doped: 5208
- Titanium Oxide: 5100, 5105
- Tolerances: 5166
- Transfluxor: 3937, 4575
- Transformers: 3956
- Transistors
- Basic Concepts*: 3891, 4368, 4692
 - Broadcasting*: 4705, 5224
 - Characteristics*: 4591, 4695, 4699, 4733
 - Circuits*: (See type of circuit, i.e., Amplifier, Converter, etc.)
 - Drift Type*: 3901, 4504, 4505, 4638, 4639, 4669, 4901, 5042, 5087
 - Fabrication*: 3885, 3924, 3940, 4355, 4369, 4449, 4767, 4921
 - Gain Stabilization*: 4764
 - Junctions*: 3892, 3904, 3914, 3940, 4041, 4390, 4860
 - Junction Type*: 3911, 3912, 3917, 3918, 3919, 3922, 3924, 3926, 3929, 3935, 3941, 4038, 4064, 4543, 4676, 4699, 4750, 4973
 - Materials*: (See Germanium, Silicon, etc.)
 - Measurements*: 3904, 3909, 3936, 4346, 4727, 5591
 - Noise*: 3900, 4390, 4665a
 - Point-Contact Oscillator*: 3878
 - Power*: 4065f, 4383, 4462, 4921
 - Radiation*: 4335, 4390
 - Reliability*: 5120
 - Switching*: 3912, 4965, 4727
 - Temperature Effect*: 3935, 4065f
 - Terminology*: 4753
 - Test Set*: 3936, 4431
 - Thyristor*: 4345, 4403
 - Transconductance*: 4733
 - Unipolar*: 5189
- Transition-Metal Cations: 4134a
- Transition-Metal Ions: 5199
- Transmission Lines: 3877, 3992, 4421, 4912, 5024, 5058, 5110
- Transmitters: 3870, 3946, 4017, 4413, 4415, 4498, 4681, 4682, 4977, 4979, 4980, 5024
- Transmitting Tubes: 4586
- Transoceanic Radio: 4962
- Transport Phenomenon: 3964
- Travel: 5019
- Traveling Wave Antenna: 4359, 4652, 4697, 4876

Traveling-Wave Tube:

Airborne: 4614, 4911
Efficiency: 4444, 4542
Electrostatic Focus: 4378, 4618, 4654, 4807, 5038, 5122, 5163
Environment: 5151
Focusing: 4644
General: 5149
Grid Controlled: 5108
Helix Support: 5077
Light Weight: 5072
Low-Noise Guns: 4005, 4434, 4671
Periodic Focus: 3866, 5114
Phase Angle: 3923

Tri-Glycine Sulfate: 4471, 4847, 4901a, 5133

Triode Pentode: 4927, 5094

Tropospheric Scatter: 4397, 4523, 4651, 4774, 4921c

Truth Functions: 5037

Tube Testing: 3949a

Tubes Types: 4573

Tunable Cavity: 4919

Tunnel Diode: 4872, 4932, 4995, 5107

Tunnel-Diode Amplifier: 4775, 5065

Tunnel-Diode Down-Converter: 5018

Tunnel-Diode Logic: 5186

Tunnel-Diode Memory: 5226

Tunnel-Diode Oscillator: 5225

Turntables: 3971, 3973, 4367, 4698

U

UHF: 3873, 3920, 3944a

Ultrasonic Cleaning: 5198

Ultrasonic Waves: 4584

Ultraviolet Light: 4601

Uniaxial Microphones: 4042, 4412

Unipolar Logic: 4749

V

Vacuum Measurements: 5003, 5227

Vacuum Pumping: 5086

Vacuum Seals: 5066

Vacuum System (C-Stellarator): 5070, 5086a, 5187

Value Engineering: 4640, 4665

Vapor Pressure Data: 5127

Vapor Zone Refining: 4953

Varactor Diodes: 3942, 5109, 5175

Vehicular Communication: 4465

Vehicular Control: 4616, 4706

Velocity Microphone: 4981

Vertical-Aperture Equalizer: 5060

Vertical Deflection: 3939, 4528, 4700

Vertical Polarization: 4457

VHF Measurements: 5184

VHF Reception: 4724, 4805

Video Drive: 3967

Video Switching: 4061, 4925

Vidicon, Tricolor: 5068

Vidicons: 4050, 4059, 4373, 4382,

4392, 4487, 4490, 4710, 4740, 4990

Visual Perception: 4008, 5147

Voice Control Circuit: 4037

Voltage Measurements: 5101

Voltage-Tunable Oscillator: 4771

VTVM: 4067

W

Wave Generator: 4892, 5075

Waveguide Filter: 3882

Waveguide Multiplexer: 4838

Waveguides: 3876, 3920, 3992, 4017a,

4450, 4984, 5011

Weather Radar: 3972, 4065a, 4409,

4440

Welding: 4849

Wienbridge Oscillator: 4436

Window Seal: 4495

Wireless Wizard: 4557

Wire Size: 5129

Worksheet: 4423

Writing: 4337, 4385, 4488, 4491,

4622, 4889, 5204

X, Y, Z

X-Ray Amplifier: 4510, 4530, 4746

X-Ray Diffraction: 4888

Zinc Cell Anode: 4729

Zinc-Inter-Calcogenides: 3955

Zinc Oxide Powders: 4637

Zinc Selenide: 4459

Zinc Sulfide Crystals: 4398, 4472,

4549, 5134, 5216

Zinc Sulfide Phosphors: 4012, 4028,

4675

