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OF

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VOLUME 2

15 SEPTEMBER 1969

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LINCOLN LABORATORY

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Volume 2 of Unclassified Publications of Lincoln Laboratory lists unclassified reports published from 15 September 1966 to 15 September 1969. In addition, it includes older reports that have become unclassified through the system for automatic downgrading and declassification of classified information.

Unclassified Publications of Lincoln Laboratory, 15 September 1966, which lists unclassified reports issued from 1951 to 1966, should be retained. Its Supplements 1, 2, and 3, dated 15 April 1967, 15 November 1967, and 15 September 1968, may be destroyed, since all the material therein is contained in Volume 2.

All reports listed herein, including Journal Articles and Meeting Speeches which are followed by DDC numbers, have been deposited with the Defense Documentation Center, Cameron Station, Building 5, Alexandria, Virginia 22314, and are available to authorized users upon request.

Accepted for the Air Force
Franklin C. Hudson
Chief, Lincoln Laboratory Office

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| 2 | Some Mathematical Remarks on the Boolean Machine | I. S. Reed | 19 Dec. 1951 | ATI-165903 |
| 3 | Use of a Delay-Line Memory to Reduce Radar Pulse-Type Interference (Wildcatting) | T. F. Rogers L. A. Ames J. A. Dumanian | 21 Feb. 1952 | ATI-165380 |
| 4 | A Moving-Coordinate Radar Display: Operator Limitations | F. R. Naka B. B. Welles | 20 Mar. 1952 | ATI-165374 |
| 5 | Multiplexing a Radio Teletype System Using a Random Carrier and Correlation Detection | B. J. Pankowski | 16 May 1952 | ATI-168857 |
| 6 | Echo-Box Pulse Doppler Radar | L. D. Smullin R. H. Fox | 6 May 1952 | ATI-172738 |
| 52 | Project Phoenix: A Rapid Data-Transmission System | J. M. Jarema J. L. Breitbord J. F. Leary | 16 July 1954 | AD-53351 |
| 53 | An Application of Aural Presentation: Preliminary Report of Project Buzz Saw | A. S. Soltes J. I. Elkind P. H. Baldwin W. H. Huggins J. C. R. Licklider | 30 July 1954 | AD-42958 |
| 66 | Digital Detection of Signal in Noise | I. S. Reed G. P. Dinneen | 10 Sept. 1954 | AD-52554 |
| 87 | Flight Tests of the Ground-Wave Radar | C. A. Stutt S. J. Fricker M. L. Stone R. P. Ingalls W. T. Quinn | 31 Aug. 1956 | AD-98864 |
| 88 | Performance of the Lincoln F9C Radioteletype System | P. E. Green, Jr. | 28 Oct. 1955 | AD-80345 |
| 90 | Final Report on the Development of SAGE Height-Finder Remoting Equipment | P. B. Sebring | 4 Aug. 1955 | AD-82489 |
| 94 | A Frequency-Shift Teletype System for Ionospheric Scatter Circuits | J. Granlund D. J. Gray W. E. Morrow, Jr. | 25 Aug. 1955 | AD-82490 |
| 96 | Height Finding Over the Sea with UHF Radar Using Multipath Propagation | N. I. Durlach J. Freedman M. A. Herlin M. M. Kessler J. Margolin | 29 Aug. 1955 | AD-79412 |
| 97 | Miss-Distance Measurements on the Test Firing of the Porcupine I-A System | E. W. Pike | 7 Oct. 1955 | AD-82488 |

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| 105 | Porcupine Low-Altitude Weapons System | Division 4 | 7 Dec. 1955 | AD-94715 |
| 109 | Model Studies on Predicted-Fire Antiaircraft Systems | E. W. Pike J. H. Hurvitz | 8 Mar. 1956 | AD-99322 |
| 118 | A VHF Gas-Tube Duplexer for Long-Range Radar Application | J. W. Meyer E. S. Rosenblum | 4 May 1956 | AD-100290 |
| 122 | Cross Polarization of Radar Targets at X-Band | W. J. Jones J. Margolin | 31 Aug. 1956 | AD-98865 |
| 125 | A Low-Altitude Radar System | M. D. Rubin | 11 Apr. 1957 | AD-147493 |
| 126 | Phase One of Joint Lincoln Laboratory - Ordnance Corps Tests of T-49 Radar and Computer. | J. R. Sandison S. H. Wright R. L. Segal W. J. Wollenberg | 7 Mar. 1957 | AD-147499 |
| 127 | A Comparison of Selected ICBM Early-Warning Radar Configurations | G. H. Pettengill D. E. Dustin | 13 Aug. 1956 | AD-98862 |
| 128 | A Long-Range Radar Warning System for the Detection of Intercontinental Ballistic Missiles | M. I. Skolnik | 15 Aug. 1956 | AD-98863 |
| 131 | An Approach to the Data-Processing Problem for an ICBM Warning System | P. B. Sebring | 23 Jan. 1957 | AD-110013 |
| 140 | Status Report - Lincoln Laboratory AICBM Program | | 2 Jan. 1957 | AD-150861 |
| 147 | An Automatic Pulse-Doppler Radar for Detecting and Tracking Low-Altitude Targets | J. G. Barry | 30 Jan. 1957 | AD-137713 |
| 148 | UHF Auroral Observations | S. J. Fricker R. P. Ingalls M. L. Stone S. C. Wang | 13 Feb. 1957 | AD-137714 |
| 149 | Clutter-Locked MTI for Ship-board Radar | J. Margolin D. H. Griffin B. H. Labitt | 18 Feb. 1957 | AD-137715 |
| 207 | A Method of Pulse Compression Employing Nonlinear Frequency Modulation | E. L. Key E. N. Fowle R. D. Haggarty | 13 Aug. 1959 | AD-235293 |
| 231 | Sequential Encoding and Decoding for the Discrete Memoryless Channel | B. Reiffen | 12 Aug. 1960 | AD-247612 |
| 257 | Secondary Emission Characteristics of High-Power Microwave-Tube Surfaces | A. Vierstra R. C. Butman | 20 Feb. 1962 | AD-274554 |

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| 294 | Photo-Ionized Cloud as Source for Decrease in Backscatter Cross Section of Re-entering Body | E. L. Murphy | 17 Jan. 1963 | AD-401310 |
| 307 | The Measurement of Electron Density in the Wake of a Hypervelocity Pellet Over a Six-Magnitude Range | M. Labitt | 15 Apr. 1963 | AD-407965 |
| 351 | Beam Pulse Heating | E. Silverman | 13 Apr. 1964 | AD-443662 |
| 402 | Scattering of Electromagnetic Waves: A Lincoln Laboratory Symposium | J. W. Meyer G. F. Pippert R. T. Prosser J. Rheinstein S. L. Borison P. C. Fritsch B. Reiffen J. Ruze A. J. Bogush, Jr. T. Hagfors R. D. Kodis J. V. Evans J. H. Chisholm | 27 Sept. 1965 | AD-487898 |
| 403 | Effect of Electron Irradiation on Electronic Devices | A. G. Stanley | 3 Nov. 1965 | AD-489617 |
| | Supplement | | 3 Nov. 1965 | AD-483434L |
| 409 | Switched-Beam Antenna System for LES-1 and LES-2 | R. N. Assaly J. B. Rankin L. J. Ricardi | 16 Dec. 1965 | AD-489413 |
| 410 | X-Band Receiving Antenna for LES-4 | M. L. Rosenthal | 22 Dec. 1965 | AD-482651 |
| 411 | Theory and Design Data for Uniformly Dissipative, Doubly Terminated Bandpass and Lowpass Filters | J. W. Craig | 24 Feb. 1966 | AD-642747 |
| 414 | Backscatter from Spheres: Short Pulse View | J. Rheinstein | 27 Apr. 1966 | AD-642547 |
| 415 | X-Band Transmitting Antenna for LES-4 | J. B. Rankin | 28 Apr. 1966 | AD-801329 |
| 416 | Experimental Study of Sub-reflector Support Structures in a Cassegrainian Antenna | F. I. Sheftman | 23 Sept. 1966 | AD-646225 |
| 418 | Electronic Instrumentation of the M.I.T. Gamma-Ray Telescope for the Orbiting Solar Observatory | W. G. Schmidt D. H. Galvin, Jr. R. W. Rasche J. K. Roberge F. W. Sarles, Jr. | 9 May 1966 | |

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| 419 | Radar Scattering from a Low-Cross-Section Shape | J. H. Pannell | 27 May 1966 | AD-489778 |
| 420 | Application of Transversal Equalizer to Radar Receiver with Emphasis on Doppler Sensitivity | R. C. Yost E. B. Smith | 23 June 1966 | AD-640892 |
| 421 | Large Aperture Seismic Array Capabilities | P. E. Green, Jr. R. V. Wood, Jr. | 12 July 1966 | AD-639197 |
| 422 | Radar Location for Complete Coverage of Representative Threat-Volumes | S. D. Ewing, Jr. D. Caldwell | 15 Aug. 1966 | AD-644826 |
| 424 | Mutual Coupling in Array Antennas | J. L. Allen B. L. Diamond | 4 Oct. 1966 | AD-648153 |
| 425 | General Relativity and Its Effects on Planetary Orbits and Interplanetary Observations | M. J. Tausner | 7 Oct. 1966 | AD-650730 |
| 426 | Microwave Scattering Parameters for New England Rain | R. K. Crane | 3 Oct. 1966 | AD-647798 |
| 428 | A Theoretical Analysis and Experimental Confirmation of the Optimally Loaded and Over-driven RF Power Amplifier | D. M. Snider | 7 Nov. 1966 | AD-647799 |
| 429 | Theory, Design and Performance of a Ring Circulator | S. D. Ewing, Jr. J. A. Weiss | 17 Jan. 1967 | AD-650582 |
| 430 | Millstone Hill Thomson Scatter Results for 1964 | J. V. Evans | 15 Nov. 1967 | AD-668436 |
| 431 | The Lincoln Experimental Terminal | J. W. Craig W. R. Crowther P. R. Drouilhet, Jr. J. N. Harris F. E. Heart B. H. Hutchinson I. L. Lebow P. G. McHugh B. E. Nichols P. Rosen S. B. Russell J. Tierney | 21 Mar. 1967 | AJ-661577 |
| 432 | Automatic Satellite Geosynchronization | A. A. Braga-Illa | 21 Mar. 1967 | AD-815344 |
| 433 | Radiation Characteristics of Loop Antennas Excited by Transients | A. R. Dion | 14 Apr. 1967 | AD-656345 |
| 435 | LCAO Secular Determinant Program | D. Esterling | 12 June 1967 | AD-659749 |

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| 436 | Short-Pulse Scattering by a Hemisphere | S. D. Weiner | 18 July 1967 | AD-658836 |
| 437 | Decision-Feedback Equalization for Digital Communications Over Dispersive Channels | M. E. Austin | 11 Aug. 1967 | AD-664926 |
| 438 | LES-5 Triplexer | A. Sotiropoulos | 31 Aug. 1967 | AD-823174 |
| 440 | Design of Transmission Lines and Waveguide Structures Using the Maximum Principle | J. Burchfiel | 5 June 1968 | AD-675145 |
| 441 | Spectral Line Interferometry and Interferometer Noise Analysis | A. E. E. Rogers | 16 Jan. 1968 | AD-666038 |
| 442 | Time Optimal Control for a Class of Common Random Disturbances | N. P. Smith | 2 Feb. 1968 | AD-667521 |
| 443 | Charged Particle Radiation Environment in Synchronous Orbit | A. G. Stanley J. L. Ryan | 15 May 1968 | AD-677284 |
| 444 | A Radar Interferometer Study of Venus at 3.8 cm | A. E. E. Rogers T. Hagfors R. A. Brockelman R. P. Ingalls J. I. Levine G. H. Pettengill F. S. Weinstein | 14 Feb. 1968 | AD-670167 |
| 445 | Design Studies for a 440-Foot-Diameter Radio and Radar Telescope | H. G. Weiss | 20 Feb. 1968 | AD-668474 |
| 446 | A Shallow-Cavity UHF Crossed-Slot Antenna | C. A. Lindberg | 8 Mar. 1968 | AD-672763 |
| 447 | Parallel Channels Without Crosstalk | J. Max | 9 Apr. 1968 | AD-673479 |
| 450 | The Lincoln Satellite Technology Program Through 1 January 1968 - An Annotated Bibliography | H. Sherman D. C. MacLellan P. Waldron | 12 June 1968 | AD-679559 |
| 451 | Antenna System for LES-5 | M. E. Devane D. J. Frediani B. F. LaPage M. L. Rosenthal A. Sotiropoulos | 18 July 1968 | AD-684167 |
| 454 | Optical Communication Through Multiple-Scattering Media | H. M. Heggstad | 22 Nov. 1968 | |

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| 455 | Theory of Active Nonreciprocal Networks | W. M. Libbey | 4 Feb. 1969 | AD-691435 |
| 456 | Reflection Properties of Venus at 3.8 cm | R. P. Ingalls R. A. Brockelman J. V. Evans J. I. Levine G. H. Pettengill L. P. Rainville A. E. E. Rogers F. S. Weinstein | 6 Sep. 1968 | AD-681467 |
| 457 | The Microwave System of the Haystack Planetary Radar | C. W. Jones | 23 Oct. 1968 | AD-685696 |
| 459 | LES-6 Triplexer | D. R. Bold A. Sotiropoulos | 2 Dec. 1968 | AD-686418 |
| 464 | Effect of Diffusion on Gain Saturation in CO ₂ Lasers | H. A. Haus C. Freed C. P. Christensen | 7 Feb. 1969 | AD-689397 |
| 465 | LES-6 Antenna System | R. N. Assaly M. E. Devane E. F. LaPage M. L. Rosenthal A. Sotiropoulos | 10 Mar. 1969 | AD-693197 |

GROUP REPORTS

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| 1964-29 | A Study of Radar Clutter in TRADEX | G. R. Curry | 25 May 1964 | AD-441068 |
| 1965-6 | Design Aspects of Minimal-Power Digital Circuitry | W. G. Schmidt D. E. Chace | 9 Feb. 1965 | AD-612769 |
| 1965-12 | El Campo Solar Radar Antenna Modification | M. E. Devane | 8 Feb. 1965 | AD-612150 |

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| 1965-41 | Some Practical Considerations for Reducing the Surface Resistivity of X-Band Components | A. H. Kessler | 13 June 1966 | AD-635472 |
| 1966-12 | Lincoln Accelerator Laboratory | C. L. Mack, Jr. | 2 Sept. 1966 | AD-639962 |
| 1966-15 | Haystack Pointing System: Digital Equipment Organization | P. D. Smith | 10 Oct. 1966 | AD-641641 |
| 1966-17 | High Speed Tunnel Diode Transistor Micrologic Circuits | Y. Cho | 20 July 1966 | AD-637815 |
| 1966-18 | Topics on the Calculation of Atmospheric Ionization Following Nuclear Explosions | F. L. Ek | 8 Feb. 1966 | AD-488430 |
| 1966-20 | A Concise Representation of Certain Types of Signal Processing in Communications Satellites | J. U. Beusch B. Reiffen | 2 Mar. 1966 | AD-479434 |
| 1966-23 | A Computer Signal-Processing Approach for the Shapiro Fourth Test of the General Theory of Relativity | E. Gehrels L. G. Kraft | 2 Sept. 1966 | AD-639733 |
| 1966-24 | Haystack Display Translator | S. B. Russell | 10 Oct. 1966 | AD-640914 |
| 1966-26 | Solar Plasma Measurements | J. D. McCarron | 21 July 1966 | AD-637998 |
| 1966-32 | Cross Sections of Two Independently Observed Randomly Oriented Dipoles | J. C. Fielding | 6 July 1966 | AD-487439 |
| 1966-33 | Lincoln Experimental Terminal Timing and Frequency Control | N. L. Daggett | 4 Aug. 1966 | AD-638198 |
| 1966-34 | "Matched" Polynomial Least-Squares Fitting and Application to Real-Time Ballistic Coefficient Estimation | H. Schneider | 26 July 1966 | AD-637669 |
| 1966-35 | Prediction of Ballistic Cloud Trajectories from Radar Maps | F. C. Schweppe H. K. Knudsen | 20 July 1966 | AD-487241 |
| 1966-38 | A Study of the Capability of a LASA to Aid the Identification of a Seismic Source | H. W. Briscoe R. M. Sheppard | 11 July 1966 | AD-637283 |

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| 1966-40 | General-Purpose I/O Channel and Interface for Haystack 490 Computer | J. E. Gillis A. F. Dockrey S. B. Russell | 10 Oct. 1966 | AD-641640 |
| 1966-41 | The Quality of the Lincoln Calibration Sphere | M. L. Burrows | 22 Aug. 1966 | AD-638442 |
| 1966-44 | Anti-Jam Effectiveness and System Complexity | J. Max | 15 Aug. 1966 | AD-489779 |
| 1966-46 | Navigation with High-Altitude Satellites: A Study of Ranging Errors | T. J. Goblick, Jr. | 26 Aug. 1966 | AD-643851 |
| 1966-47 | A Model of Radar Scattering from the Cone-Sphere | S. D. Weiner | 20 Oct. 1966 | AD-646853 |
| 1966-48 | An Investigation of the Parameters Affecting Microwave Breakdown in the Upper Atmosphere | A. B. Gschwendtner | 9 Sept. 1966 | AD-489843 |
| 1966-49 | Maximum Likelihood Trajectory Determination from Radar Data | A. R. Warwas S. C. Wang | 27 Oct. 1966 | AD-642334 |
| 1966-50 | Signal Processing Characteristics of the Peripheral Auditory System | T. J. Goblick, Jr. R. R. Pfeiffer | 30 Sept. 1966 | AD-645781 |
| 1966-52 | Directivity of an Array of Slots on the Surface of a Cylinder | L. J. Ricardi | 10 Oct. 1966 | AD-641959 |
| 1966-53 | Survey on Earth Albedo | L. P. Whitehill | 11 Oct. 1966 | AD-643649 |
| 1966-54 | A Preliminary Study of Klystron Distortion in a CHIRP Radar System | H. M. Heggestad | 28 Dec. 1966 | AD-646346 |
| 1966-55 | Haystack Pointing System: Scan | W. R. Crowther | 1 Nov. 1966 | AD-643171 |
| 1966-56 | Haystack Pointing System: Radar Coordinate Correction | C. A. Clarke | 24 Oct. 1966 | AD-641603 |
| 1966-59 | Noise Temperature of Airborne Antennas at UHF | G. Ploussios | 6 Dec. 1966 | AD-644829 |
| 1966-61 | Autotracking of Satellites from the Ground Through the 8 - 12 μ m Atmospheric Window | P. R. Longaker J. H. Dennis R. J. Keyes | 7 Dec. 1966 | AD-805353 |
| 1966-61 Supp. 1 | Autotracking of Satellites from the Ground Through the 8 - 12 μ m Atmospheric Window | P. R. Longaker J. H. Dennis R. J. Keyes | 13 July 1967 | AD-819117 |
| 1966-63 | Coherent Pulse Transmission Through Rain | R. K. Crane | 27 Dec. 1966 | AD-646623 |

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| 1966-64 | Observations of Inner and Outer Zone Electrons Since December 1965 | J. L. Ryan V. J. Sferrino | 28 Dec. 1966 | AD-649139 |
| 1967-1 | Planar Representations of Complex Graphs | R. M. Baecker | 6 Feb. 1967 | AD-646133 |
| 1967-2 | Three Fortran Programs That Perform the Cooley-Tukey Transform | N. M. Brenner | 28 July 1967 | AD-657019 |
| 1967-3 | FASTABUL (A Fast Automatic STAtion BULletin Program) | P. L. Fleck, Jr. | 6 Jan. 1967 | AD-646207 |
| 1967-4 | Magnetic Film Memory Evaporation System | C. G. Ryan | 6 Jan. 1967 | AD-647209 |
| 1967-6 | On the Equivalence of Linearized Kalman Filters | M. Athans | 11 Jan. 1967 | AD-646550 |
| 1967-7 | Monte Carlo Simulation of the Flow of a Rarefied Gas Around a Cylinder | A. W. Starr | 18 Jan. 1967 | AD-647124 |
| 1967-8 | An Approach to Target Tracking | M. Gruber | 10 Feb. 1967 | AD-654272 |
| 1967-9 | Vocoded Speech in the Absence of the Laryngeal Frequency | A. J. Goldberg B. Gold, Editor | 3 Apr. 1967 | AD-651253 |
| 1967-10 | Operational Low-Power, Low-to High-Frequency Digital Circuit Elements: Refinements, Characteristics and Developments | D. E. Chace | 24 Jan. 1967 | AD-650779 |
| 1967-11 | Navigation with High-Altitude Satellites: A Study of Errors in Position Determination | D. L. Snyder | 6 Feb. 1967 | AD-648828 |
| 1967-12 | VITAL Compiler - Compiler System Reference Manual | L. F. Mondshein | 8 Feb. 1967 | AD-649140 |
| 1967-13 | Revision of the Kwajalein Atmospheric Model | J. E. Salah | 8 Feb. 1967 | AD-808876 |
| 1967-14 | Kwajalein Standard Atmosphere | J. E. Salah | 14 Feb. 1967 | AD-808686 |
| 1967-15 | A Theorem on Spin-Eigenfunctions | T. A. Kaplan W. H. Kleiner | 24 May 1967 | AD-652840 |
| 1967-16 Rev. 1 | Stable Equilibrium Orientation of a Spacecraft Which Contains a Momentum Wheel | J. U. Beusch | 10 May 1968 | AD-669806 |
| 1967-17 | Survey of Satellite Communication Antennas | A. R. Dion | 18 May 1967 | AD-661578 |

Technical Notes

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|---------------|--|--|--------------|----------------|
| 1967-18 | Navigation with High-Altitude Satellites: A Study of the Effects of Satellite-User Geometry on Position Accuracy | C. D. Sullivan | 24 Feb. 1967 | AD-651863 |
| 1967-19 | An Associative Processing System for Conventional Digital Computers | P. D. Rovner J. A. Feldman | 21 Apr. 1967 | AD-655810 |
| 1967-20 | Electron Irradiation of P-Channel Junction FETs | A. G. Stanley | 13 Apr. 1967 | AD-651760 |
| 1967-21 | Wave Optical Aspects of Lorentz Microscopy | M. S. Cohen | 10 May 1967 | AD-652497 |
| 1967-24 | Project MAPOLE (Magnetic Dipole Spark Transmitter) | M. P. Fraser | 22 May 1967 | AD-656706 |
| 1967-25 | Trajectory Equations of Motion in Radar Polar Coordinates | S. F. Catalano | 24 May 1967 | AD-652841 |
| 1967-26 | Design of Seismic Arrays for Efficient On-Line Beamforming | J. Capon R. J. Greenfield R. T. Lacoss | 27 June 1967 | AD-655142 |
| 1967-27 | Micropower Error-Correcting Redundant Circuit Design | R. E. McMahon N. B. Childs | 23 Aug. 1967 | AD-659750 |
| 1967-29 | Earth Coverage from a Circularly Symmetric Shaped-Beam Antenna on a Synchronous Satellite | J. B. Rankin | 27 June 1967 | AD-656707 |
| 1967-30 | Response of Seismic Arrays to Wide-Band Signals | E. J. Kelly | 29 June 1967 | AD-656344 |
| 1967-31 | Cooperative Scattering by Dielectric Spheres | R. K. Crane | 6 July 1967 | AD-657328 |
| 1967-33 | Electroreflectance Study of Interband Magneto-Optical Transitions in InAs and InSb at 1.5°K | S. B. Groves J. Feinleib C. R. Pidgeon | 6 Sept. 1967 | AD-658835 |
| 1967-34 | Identification of Systems in Terms of the Wiener Model | C. R. Arnold | 22 Aug. 1967 | AD-659159 |
| 1967-35 | Biased Velocity Estimates Due to Phase-Center Motion | S. L. Borison | 27 Aug. 1967 | AD-659817 |
| 1967-44 | Values of LASA Time Station Residuals, Velocity and Azimuth Errors | R. M. Sheppard, Jr. | 8 Sept. 1967 | AD-662004 |
| 1967-45 | A Resynchronization Technique for a Sequential Decoder | G. Blustein | 24 Oct. 1967 | AD-660865 |

| <u>TN No.</u> | | | | <u>Technical Notes</u> |
|---------------|---|--|---------------|------------------------|
| | | | | <u>DDC No.</u> |
| 1967-47 | X-Band Cylindrical Lens Antenna | A. Sotiropoulos | 26 Oct. 1967 | AD-664570 |
| 1967-48 | A Trajectory Analysis Program (TRAP) | A. Bertolini | 29 Sept. 1967 | AD-663227 |
| 1967-50 | Long-Period Signal Processing Results for Large Aperture Seismic Array | J. Capon R. J. Greenfield R. T. Lacoss | 15 Nov. 1967 | AD-663429 |
| 1967-51 | The Givens-Householder Method for Finding Eigenvalues and Eigenvectors of Real Symmetric Matrices | D. C. Walden | 26 Oct. 1967 | AD-661277 |
| 1967-52 | Present Status of Cadmium Sulfide Thin Film Solar Cells | A. G. Stanley | 13 Dec. 1967 | AD-667519 |
| 1967-54 | Tables of Hemisphere Scattering Amplitude for Nose-On Incidence | S. D. Weiner | 29 Nov. 1967 | AD-662866 |
| 1967-55 | Scattering Patterns and Statistics of a Long Wire | S. Hong | 26 Dec. 1967 | AD-666472 |
| 1967-58 | Application of Large Aperture Array Techniques to Tsunami Warning | P. E. Green, Jr. R. J. Greenfield | 29 Dec. 1967 | AD-828319 |
| 1968-3 | Some Observations of Weak Japanese Earthquakes at the Montana LASA | R. M. Sheppard E. J. Kelly H. W. Briscoe | 5 Jan. 1968 | AD-665122 |
| 1968-4 | Preliminary Design of a Long-Period Seismic Array for Norway | R. T. Lacoss J. Capon R. J. Greenfield | 24 Jan. 1968 | AD-665424 |
| 1968-5 | Short-Term Oscillator Stability Specifications for Phase-Locked Loops | T. S. Seay | 29 Apr. 1968 | AD-669090 |
| 1968-7 | Haystack Antenna Reflector Surface Improvement Program | D. G. Stuart | 29 Jan. 1968 | AD-667518 |
| 1968-8 | A Study of Two Short-Period Discriminants | E. J. Kelly | 12 Feb. 1968 | AD-666701 |
| 1968-10 | Synchronous Satellite Station-keeping Simulation | M. C. Crocker E. H. Swenson | 15 May 1968 | AD-672960 |
| 1968-11 | Dipole High-Power Breakdown Experiments | G. B. Morse | 8 Aug. 1968 | AD-841035 |
| 1968-12 | A Digitally Controlled Satellite Frequency Synthesizer | J. B. Connolly | 9 Apr. 1968 | AD-670854 |
| 1968-13 | Thick Film Layout Considerations | R. E. McMahon H. H. Pichler | 12 Apr. 1968 | AD-670573 |

Technical Notes

| <u>TN No.</u> | | | | <u>DDC No.</u> |
|---------------|--|--|--------------|----------------|
| 1968-14 | A Seismic Data Analysis Console | P. L. Fleck | 19 June 1968 | AD-671961 |
| 1968-15 | Investigation of Long Period Noise at LASA | J. Capon | 3 June 1968 | AD-671509 |
| 1968-16 | Improved Ferrimagnetic Single-Crystal Sphere Orienter | G. F. Dionne P. S. Crocker J. F. Smith | 17 July 1968 | AD-673355 |
| 1968-17 | Pressure Distributions on Sphere-Cone Radomes in Uniform and Gradient Flows | R. D'Amato W. R. Fanning | 2 May 1968 | AD-670168 |
| 1968-18 | Lincoln Experimental Satellite-5 (LES-5) Transponder Performance in Orbit | W. W. Ward B. E. Nichols | 1 Nov. 1968 | AD-686421 |
| 1968-19 | LESTR-2 Telemetry Ground System | J. H. Helfrich | 17 June 1968 | AD-672959 |
| 1968-20 | Design Procedure and Measured Performance of the LES-6 UHF Transmitter | R. E. Dolbec | 19 July 1968 | AD-679691 |
| 1968-21 | RLC Realizations of Approximations to Matched Filters for a Rectangular Pulse | J. W. Craig | 30 July 1968 | AD-673883 |
| 1968-23 | Determination of LASA Detection and Location Ability Using Kurile Islands Events | R. M. Sheppard, Jr. | 1 Oct. 1968 | AD-678515 |
| 1968-24 | Numerical Simulation of the Attitude Equations of a Satellite Containing Damping Rotors and a Reaction Wheel | R. W. Brockett N. M. Brody | 15 Nov. 1968 | AD-679992 |
| 1968-25 | Semiconductor Processing Applied to Integrated Circuit Fabrication | R. A. Cohen R. W. Mountain | 26 Aug. 1968 | AD-679560 |
| 1968-26 | Practical Designs for RC Active Filters Using Operational Amplifiers | J. W. Craig | 21 Aug. 1968 | AD-674599 |
| 1968-27 | A High-Field Hysteresigraph | J. A. Weiss | 24 July 1968 | AD-678077 |
| 1968-29 | A Concept for Air Traffic Control | H. G. Weiss | 17 Oct. 1968 | AD-678060 |
| 1968-30 | Measurements of Electromagnetic Pulse Propagation in Various Soils | M. L. Burrows | 20 Aug. 1968 | AD-675292 |

Technical Notes

| <u>TN No.</u> | | | | <u>DDC No.</u> |
|---------------|---|--|---------------|----------------|
| 1968-31 | Numerical Integration of Differential Equations by Three Methods - Equations for, Description of Computer Routines, Discussion of Results | W. B. Smith | 21 Aug. 1968 | AD-674593 |
| 1968-32 | Small Obstacle and Aperture Theory | J. M. Ruddy | 29 Aug. 1968 | AD-678078 |
| 1968-33 | Simultaneous Radar and Radiometer Measurements of Rain Shower Structure | R. K. Crane | 18 Sept. 1968 | AD-678079 |
| 1968-34 | Monostatic and Bistatic Scattering from Thin Turbulent Layers in the Atmosphere | R. K. Crane | 18 Sept. 1968 | AD-678061 |
| 1968-36 | Microsound Components, Circuits, and Applications | E. Stern | 30 Oct. 1968 | AD-680786 |
| 1968-38 | Experimental Study of the Low Frequency Operation of a Cassegrainian Antenna | F. I. Sheftman | 10 Dec. 1968 | AD-686065 |
| 1969-2 | Pulsed Electron-Beam Heating | M. S. Cohen R. C. Johnston | 10 Jan. 1969 | AD-681473 |
| 1969-3 | A Model for Estimating Fatalities from Nuclear Bursts over U. S. Cities | E. J. Roberts S. D. Weiner | 10 Apr. 1969 | AD-851959 |
| 1969-4 | TATS - The Tactical Transmission System (Summary) | P. R. Drouilhet | 15 Jan. 1969 | AD-846426 |
| 1969-5 | Initial Experiments on the Effects of System Delay on On-Line Problem-Solving | M. A. Morfield R. A. Wiesen M. Grossberg D. B. Yntema | 24 June 1969 | AD-691815 |
| 1969-6 | Optimal Mismatched Filter Design for Radar Ranging and Resolution | R. J. McAulay J. R. Johnson | 8 May 1969 | AD-690994 |
| 1969-7 | Experimental Results of a $\sin x/x$ Tapped-Delay-Line Matched Filter | C. M. Steinmetz | 28 Jan. 1969 | AD-685212 |
| 1969-8 | Dipoles with Lossy Stub Matching Networks | A. Sotiropoulos | 16 Apr. 1969 | AD-687101 |
| 1969-10 | Preliminary Long-Period Discrimination Results from NORSAR | R. W. Ward | 13 Feb. 1969 | AD-686419 |
| 1969-12 | Signal-to-Noise Ratios for Television Transmission | L. D. Collins | 14 Mar. 1969 | AD-685697 |

Technical Notes

| <u>TN No.</u> | | | | <u>DDC No.</u> |
|---------------|---|---|--------------|----------------|
| 1969-13 | On Minimum Time Exoatmospheric Interception with Fuel Constraints: A Closed Loop Solution | M. Athans | 16 Apr. 1969 | AD-690525 |
| 1969-15 | Feasibility of Low Data Rate Mobile Troposcatter Communication Systems | D. P. White | 30 Apr. 1969 | AD-690995 |
| 1969-16 | Bayes Ambiguity Functions: Some Simple Applications to Resolution and Radar Countermeasures | D. Middleton | 13 Feb. 1969 | AD-686420 |
| 1969-17 | Pointing Accuracy of Lincoln Laboratory 28-Foot Millimeter-Wave Antenna | T. R. Gull J. J. G. McCue | 14 Feb. 1969 | AD-687477 |
| 1969-18 | Preliminary Analysis of ELF Noise | J. E. Evans | 26 Mar. 1969 | AD-691814 |
| 1969-19 | Block-Floating-Point Realization of Digital Filters | A. V. Oppenheim | 20 Mar. 1969 | AD-685698 |
| 1969-20 | Barankin Bounds on Parameter Estimation Accuracy Applied to Communications and Radar Problems | R. J. McAulay E. M. Hofstetter | 13 Mar. 1969 | AD-686742 |
| 1969-21 | Haystack Pointing System: Moon with Offsets | H. E. Frachtman P. P. Crowther, Editor | 28 Mar. 1969 | AD-686747 |
| 1969-23 | On a Class of Orthogonal Sequences | B. E. White | 4 June 1969 | AD-689552 |
| 1969-24 | A Large-Population LASA Discrimination Experiment | R. T. Lacoss | 8 Apr. 1969 | AD-687478 |
| 1969-27 | A LES-5 Beacon Receiver | T. S. Seay A. H. Huntoon | 1 May 1969 | AD-692437 |
| 1969-28 | Interferometric Phase and Amplitude Fluctuation Measurements Over a 7-km Atmospheric Path | E. Gehrels | 13 May 1969 | AD-692438 |
| 1969-31 | The Mode Spectrum of Avalanche Diodes | H. Berger | 3 June 1969 | AD-690996 |
| 1969-42 | Some FORTRAN Subprograms Used in Astronomy | J. A. Ball | 16 July 1969 | AD-691816 |

JOURNAL ARTICLES

JA No.

- | | | | |
|-------|---|-----------------------------|---|
| 2186 | A More General Property Than Dominance for Sets of Probability Measures | T. S. Pitcher | Pacific J. Math., <u>15</u> , Pt. 2 (1965) |
| 2314 | A Spectral Analysis of Central Force Motion | R. T. Prosser | Accepted J. Math. Phys. |
| 2355 | The Bandwidth of the Abrupt-Junction Varactor-Frequency Doubler | A. I. Grayzel | IEEE Trans. Circuit Theory <u>CT-13</u> , 52 (1966), DDC AD-641001 |
| 2466 | An Integral Expression for the Log Likelihood Ratio of Two Gaussian Processes | T. S. Pitcher | J. SIAM Appl. Math. <u>14</u> , 228 (1966), DDC AD-642214 |
| 2473 | Adsorption Theory from the Viewpoint of Order-Disorder Theory | J. M. Honig | Chap. 11, <u>The Solid Gas Interface</u> , E. A. Flood, Ed. (Marcel Dekker, New York, 1967) |
| 2484 | The Packaged and Mounted Diode as a Microwave Circuit | W. J. Getsinger | IEEE Trans. Microwave Theory Tech. <u>MTT-14</u> , 58 (1966), DDC AD-641005 |
| 2508 | Photograph Emulsions as Ion Detectors in Quantitative Mass Spectrography | E. B. Owens | <u>Mass Spectrometric Analysis of Solids</u> (Elsevier, Amsterdam, 1966), DDC AD-642162 |
| 2509 | Properties of Mercury Chalcogenides | T. C. Harman | <u>Physics and Chemistry of II-VI Compounds</u> (North-Holland, Amsterdam, 1967), DDC AD-653688 |
| 2514A | A Per Letter Converse to the Channel Coding Theorem | B. Reiffen | IEEE Trans. Inform. Theory <u>IT-12</u> , 475 (1966), DDC AD-651721 |
| 2518 | Free Carrier Magneto-optical Effects | E. D. Palik G. B. Wright | <u>Semiconductors and Semimetals</u> , Vol. 3 (Academic, New York, 1967) |
| 2525 | Interband Magneto-optical Effects | B. Lax J. G. Mavroides | <u>Semiconductors and Semimetals</u> , Vol. 3 (Academic, New York, 1967) |
| 2570 | Space-Time Symmetry of Transport Coefficients | W. H. Kleiner | Phys. Rev. <u>142</u> , 318 (1966), DDC AD-635328 |
| 2576 | Random Sampling of Random Processes: Impulse Processes | O. A. Z. Leneman | Inform. and Control <u>9</u> , 347 (1966), DDC AD-644540 |
| 2577 | Random Sampling of Random Processes: Optimum Linear Interpolation | O. A. Z. Leneman | J. Franklin Inst. <u>281</u> , 302 (1966), DDC AD-641008 |
| 2580 | Particle Sizes of Clay Minerals by Small-Angle X-Ray Scattering | R. J. Arnott | Am. Mineralogist <u>50</u> , 1563 (1965), DDC AD-630370 |
| 2581 | Magnetic Quantum Effects | P. N. Argyres L. M. Roth | <u>Semiconductors and Semimetals</u> , Vol. 1 (Academic, New York, 1967) |
| 2583 | Structural Analysis of the Haystack Antenna | W. R. Fanning | J. Struct. Div. ASCE <u>92</u> , No. ST 1, 431 (1966), DDC AD-633180 |

Journal Articles

JA No.

- | | | | |
|-------|---|-----------------------------------|--|
| 2587 | A Multidimensional Sampling Theorem | R. T. Prosser | J. Math. Anal. Appl. <u>16</u> , 574 (1966), DDC AD-646480 |
| 2591 | Properties of InAs Lasers | I. Melngailis | J. Appl. Phys. <u>37</u> , 899 (1966), DDC AD-642173 |
| 2592 | Random Sampling of Random Processes: Stationary Point Processes | F. J. Beutler O. A. Z. Leneman | Inform. and Control <u>9</u> , 325 (1966), DDC AD-644541 |
| 2594A | Reduction of the Electromagnetic Vector Potential to the Irreducible Representations of the Inhomogeneous Lorentz Group and Manifestly Covariant Quantization with a Positive-Definite Metric for the Hilbert Space | H. E. Moses | Nuovo Cimento <u>42A</u> , 757 (1966), DDC AD-641006 |
| 2600 | Partial Pressure of Se ₂ and Optical Density of Selenium Vapor in the Visible and Ultraviolet | R. F. Brebrick | J. Chem. Phys. <u>43</u> , 3031 (1965), DDC AD-626893 |
| 2602 | Introduction to the Theory of Exciton States in Semiconductors | J. O. Dimmock | <u>Semiconductors and Semimetals</u> , Vol. 3 (Academic, New York, 1967) |
| 2605 | Electrical Properties of Metal Oxides Which Have "Hopping" Charge Carriers | J. M. Honig | J. Chem. Educ. <u>43</u> , 76 (1966), DDC AD-642218 |
| 2608 | Determinable Classes of Channels | R. T. Prosser W. L. Root | J. Math. and Mech. <u>16</u> , 365 (1966), DDC AD-646473 |
| 2612 | Digital Filter Design Techniques in the Frequency Domain | C. M. Rader B. Gold | Proc. IEEE <u>55</u> , 149 (1967), DDC AD-651530 |
| 2613A | Automatic Potentiometric EDTA and Redox Titrations for Determinations of Stoichiometry | M. C. Gardels J. C. Cornwell | Anal. Chem. <u>38</u> , 774 (1966), DDC AD-642169 |
| 2620 | A Volumetric Determination of Arsenic and Antimony in Mixed Manganese Arsenide, Antimonide and Phosphide Compounds | E. R. Whipple D. H. Ridgley | Anal. Chim. Acta <u>35</u> , 499 (1966), DDC AD-641009 |
| 2628 | On "Mean-Square Reconstruction Error" | O. A. Z. Leneman J. B. Lewis | IEEE Trans. Automat. Control <u>AC-11</u> , 324 (1966), DDC AD-642192 |
| 2632 | Mean-Square Error of Step-Wise Interpolation for Various Sampling Schemes | O. A. Z. Leneman J. B. Lewis | J. Franklin Inst. <u>282</u> , 108 (1966), DDC AD-644544 |
| 2633 | A Note Concerning the Temperature Profile Within a Thermomagnetic Energy Converter | T. C. Harman J. M. Honig | Adv. Energy Conversion <u>6</u> , 127 (1966), DDC AD-642211 |
| 2635 | Cross Coupling in High Speed Digital Systems | J. B. Connolly | IEEE Trans. Electron. Computers <u>EC-15</u> , 323 (1966), DDC AD-642194 |

| JA No. | | | |
|--------|---|---|---|
| 2637 | Non-Stoichiometry in Binary Semiconductor Compounds, $M_{1/2-\delta}N_{1/2+\delta}^{(c)}$ | R. F. Brebrick | <u>Progress in Solid State Chemistry</u> , Vol. 3 (Pergamon, New York, 1966), DDC AD-651723 |
| 2638 | Absolute Instabilities with Drifted Helicons | A. L. McWhorter A. Bers | Phys. Rev. Letters, <u>15</u> , 755 (1965) |
| 2643 | Large Aperture Seismic Array Signal Handling System | R. V. Wood R. G. Enticknap C. S. Lin R. M. Martinson | Proc. IEEE <u>53</u> , 1844 (1965), DDC AD-632146 |
| 2645 | Second-Order Statistics of Alternated Stepwise Processes | O. A. Z. Leneman | SIAM J. Appl. Math. <u>15</u> , 88 (1967), DDC AD-653670 |
| 2646 | Analog Source Digitization: A Comparison of Theory and Practice | T. J. Goblick J. L. Holsinger | IEEE Trans. Inform. Theory <u>IT-13</u> , 323 (1967), DDC AD-658776 |
| 2647 | Maximizing the Longitudinal Magneto-Optical Transmission-Scattering from Multilayer Magnetic and Dielectric Films | D. O. Smith | Optica Acta <u>13</u> , 121 (1966), DDC AD-642191 |
| 2649 | Data Recording and Processing for the Experimental Large Aperture Seismic Array | H. W. Briscoe P. L. Fleck | Proc. IEEE <u>53</u> , 1852 (1965), DDC AD-632147 |
| 2650 | Optimum Rate Allocation for Encoding Sets of Analog Messages | L. M. Goodman | Proc. IEEE (Correspondence) <u>53</u> , 1776 (1965), DDC AD-630374 |
| 2651 | Principles of an Experimental Large Aperture Seismic Array (LASA) | P. E. Green, Jr. R. A. Frosch C. F. Romney | Proc. IEEE <u>53</u> , 1821 (1965), DDC AD-632150 |
| 2652 | Electron Recombination in Laser-Produced Hydrogen Plasma | M. M. Litvak D. F. Edwards | J. Appl. Phys. <u>37</u> , 4462 (1966), DDC AD-646476 |
| 2653 | Resistance Heated Crystal Puller for Operation at 2000°C | T. B. Reed R. E. Fahey | Rev. Sci. Instr. <u>37</u> , 59 (1966), DDC AD-633183 |
| 2655 | Irreducible Representations of the Rotation Group in Terms of the Axis and Angle of Rotation | H. E. Moses | Ann. Phys. <u>37</u> , 224 (1966), DDC AD-642174 |
| 2656 | Testing General Relativity with Radar | I. I. Shapiro | Phys. Rev. <u>141</u> , 1219 (1966), DDC AD-636372 |
| 2658 | Optical Scattering from Cubic Electro-Optical Films | D. O. Smith | Optica Acta <u>13</u> , 195 (1966), DDC AD-651537 |
| 2662 | Content-Addressed Memory Using Magneto- or Electro-Optical Interrogation | D. O. Smith K. J. Harte | IEEE Trans. Electron. Computers <u>EC-15</u> , 123 (1966), DDC AD-642193 |
| 2663 | Solar Rotation and Planetary Orbits | I. I. Shapiro | Icarus <u>4</u> , 549 (1965), DDC AD-631165 |

Journal Articles

JA No.

| | | | |
|-------|---|--|---|
| 2666 | The Performance of Sequential Decoding in Conjunction with Efficient Modulation | K. L. Jordan, Jr. | IEEE Trans. Commun. Tech. <u>COM-14</u> , 283 (1966), DDC AD-641003 |
| 2668 | Polaron Energy Spectrum | D. M. Larsen | Phys. Rev. <u>144</u> , 697 (1966), DDC AD-642204 |
| 2672 | Pseudobinary InSb-InTe System | A. J. Strauss M. D. Banus M. C. Finn | J. Electrochem. Soc. <u>113</u> , 458 (1966), DDC AD-640531 |
| 2673 | Computation of the Performance of the Abrupt Junction Varactor Doubler | A. I. Grayzel | IEEE Trans. Microwave Theory Tech. <u>MTT-14</u> , 239 (1966), DDC AD-642197 |
| 2677 | Radar Astronomy at Millimeter and Submillimeter Wavelengths | J. W. Meyer | Proc. IEEE <u>54</u> , 484 (1966), DDC AD-640532 |
| 2678 | Antenna Tolerance Theory - A Review | J. Ruze | Proc. IEEE <u>54</u> , 633 (1966), DDC AD-642205 |
| 2683 | Effect on Electron Irradiation on N-Channel MOS Transistors | A. G. Stanley | Proc. IEEE (Correspondence) <u>53</u> , 2150 (1965), DDC AD-632152 |
| 2685 | On Nonlinear Binary Sequential Circuits and Their Inverses | B. Reiffen H. Yudkin | IEEE Trans. Electron. Computers <u>EC-15</u> , 586 (1966), DDC AD-649350 |
| 2693A | A Note on the Large-Signal Varactor Upper-Sideband Up-converter | A. I. Grayzel | Proc. IEEE (Correspondence) <u>54</u> , 1013 (1966), DDC AD-642199 |
| 2694 | On Some New Results in Shot-Noise | O. A. Z. Leneman | Proc. IEEE (Correspondence) <u>53</u> , 2130 (1965), DDC AD-631167 |
| 2697 | Bulk GaAs Microwave Amplifiers | A. G. Foyt T. M. Quist | IEEE Trans. Electron Devices <u>ED-13</u> , 199 (1966), DDC AD-634858 |
| 2698 | Structure of Equations Specifying Operating Characteristics of Energy Converters Constructed of Anisotropic Materials | J. M. Honig T. C. Harman | Adv. Energy Conversion <u>6</u> , 149 (1966), DDC AD-642219 |
| 2701 | Radar Echo Variations of a Large Rough Sphere | M. L. Burrows | IEEE Trans. Antennas Propag. <u>AP-14</u> , 455 (1966), DDC AD-642195 |
| 2702 | On Some Results in Random Pulse Trains | O. A. Z. Leneman | IEEE Trans. Automat. Control <u>AC-11</u> , 331 (1966), DDC AD-642198 |
| 2705 | A Diplexer Using Hybrid Junctions | L. J. Ricardi | IEEE Trans. Microwave Theory Tech. <u>MTT-14</u> , 364 (1966), DDC AD-648762 |
| 2706A | Nonreciprocal Remanence Phase Shifters in Rectangular Waveguide | W. J. Ince E. Stern | IEEE Trans. Microwave Theory Tech. <u>MTT-15</u> , 87 (1967), DDC AD-654852 |

Journal Articles

| JA No. | | | |
|--------|---|--|--|
| 2708 | Photoelectron Statistics Produced by a Laser Operating Below the Threshold of Oscillation | C. Freed H. A. Haus | Phys. Rev. Letters <u>15</u> , 943 (1965), DDC AD-630504 |
| 2709 | Capacity for a Class of Unknown Channels | I. G. Stiglitz | Inform. and Control <u>11</u> , 497 (1967) |
| 2710 | Ross-Schiff Analysis of a Proposed Test of General Relativity: A Critique | I. I. Shapiro | Phys. Rev. <u>145</u> , 1005 (1966), DDC AD-642228 |
| 2713 | Three Signaling Systems for Double Access to an Active Satellite | F. Jelinek | IEEE Trans. Commun. Tech. <u>COM-14</u> , 140 (1966), DDC AD-640537 |
| 2717 | Some Remarks on "Spectrums of Modulated Pulse Trains" | O. A. Z. Leneman | Proc. IEEE (Correspondence) <u>54</u> , 793 (1966), DDC AD-640534 |
| 2719 | Partial Pressures of $\text{Te}_2(\text{g})$ in Equilibrium with $\text{Ge}_{1/2-\delta}\text{Te}_{1/2+\delta}(\text{c})$ from Optical Density Data | R. F. Brebrick | J. Phys. Chem. Solids <u>27</u> , 1495 (1966), DDC AD-644545 |
| 2720 | Optimum Sampling and Quantizing Rates | L. M. Goodman | Proc. IEEE (Correspondence) <u>54</u> , 90 (1966), DDC AD-636371 |
| 2721 | Note on the Effect of Shadowing on the Backscattering of Waves from a Random Rough Surface | R. A. Brockelman T. Hagfors | IEEE Trans. Antennas Propag. <u>AP-14</u> , 621 (1966), DDC AD-646482 |
| 2723 | Single Crystal Growth and Electrical Transport Properties of Intermediates in the Spinel System $\text{Co}_{1+\delta}\text{V}_{2-\delta}\text{O}_4$ | D. B. Rogers A. Ferretti W. Kunnmann | J. Phys. Chem. Solids <u>27</u> , 1445 (1966), DDC AD-644546 |
| 2725 | Thermodynamic Aspects of the Temperature-Pressure Phase Diagram of InTe | M. D. Banus P. M. Robinson | J. Appl. Phys. <u>37</u> , 3771 (1966), DDC AD-648763 |
| 2726 | Random Sampling of Random Processes: Mean-Square Comparison of Various Interpolators | O. A. Z. Leneman J. B. Lewis | IEEE Trans. Automat. Control <u>AC-11</u> , 396 (1966), DDC AD-646488 |
| 2727 | Photoelectron Statistics Produced by a Laser Operating Below and Above the Threshold of Oscillation | C. Freed H. A. Haus | IEEE J. Quant. Electron. <u>QE-2</u> , 190 (1966), DDC AD-649272 |
| 2728A | Gallium Arsenide Injection Laser Radar | B. S. Goldstein G. F. Dalrymple | Proc. IEEE <u>55</u> , 181 (1967) |
| 2729 | Pole-Shared Linear-Phase Band-Pass Filter Bank | P. R. Drouilhet, Jr. L. M. Goodman | Proc. IEEE (Correspondence) <u>54</u> , 701 (1966), DDC AD-642206 |
| 2730 | Some Designs of N_L -Band Diode Switches | H. N. Assaly | IEEE Trans. Microwave Theory Tech. <u>MTT-14</u> , 553 (1966), DDC AD-648054 |

Journal Articles

| JA No. | | | |
|--------|--|--|--|
| 2731 | Comparative Data on CdS Transducers from 14 Mc/s to 70 Gc/s | R. Weber | Proc. IEEE (Correspondence) <u>54</u> , 333 (1966), DDC AD-641002 |
| 2732 | Large Cross-Linked Polystyrene Slab Suffers Thermal Fatigue | E. B. Murphy | SPE J. <u>22</u> , No. 4, 53 (1966), DDC AD-642227 |
| 2734 | A Theoretical Study of a Multi-Element Scanning Feed System for a Parabolic Cylinder | R. N. Assaly L. J. Ricardi | IEEE Trans. Antennas Propag. <u>AP-14</u> , 604 (1966), DDC AD-646491 |
| 2736 | The Augmented Plane Wave Method and the Electronic Properties of Rare-Earth Metals | A. J. Freeman J. O. Dimmock R. E. Watson | <u>Theory of Atoms, Molecules and Solids</u> (Academic, New York, 1966) |
| 2739 | Oscillatory Faraday Rotation of the Indirect Transition in Germanium at 1.7°K | J. Halpern | J. Phys. Chem. Solids <u>27</u> , 1505 (1966), DDC AD-649183 |
| 2740 | Phonon Generation, Propagation, and Attenuation at 70 GHz | J. B. Thaxter P. E. Tannenwald | IEEE Trans. Sonics and Ultrasonics <u>SU-13</u> , 61 (1966), DDC AD-644781 |
| 2741 | A Note on Reconstruction for Randomly Sampled Data | O. A. Z. Leneman J. B. Lewis | IEEE Trans. Automat. Control <u>AC-11</u> , 626 (1966), DDC AD-649353 |
| 2744 | Radar Scattering from Blunted Cone Tips | S. D. Weiner S. L. Borison | IEEE Trans. Antennas Propag. <u>AP-14</u> , 774 (1966), DDC AD-646486 |
| 2747 | Space-Time Symmetry Restrictions on Transport Coefficients. II. Two Theories Compared | W. H. Kleiner | Phys. Rev. <u>153</u> , 726 (1967), DDC AD-653408 |
| 2748 | The Effect of Mercury Contamination of the Work Function of Gold | E. E. Huber, Jr. | Appl. Phys. Letters <u>8</u> , 169 (1966), DDC AD-642170 |
| 2749 | Absorption Near the Fundamental Edge | E. J. Johnson | <u>Semiconductors and Semimetals</u> , Vol. 3 (Academic, New York, 1967) |
| 2750 | A Coding Theorem for a Class of Unknown Channels | I. G. Stiglitz | IEEE Trans. Inform. Theory <u>IT-13</u> , 247 (1967), DDC AD-658778 |
| 2751 | Trial Spacing in Instrumental Running | J. L. Fozard | Psychol. Reports <u>18</u> , 623 (1966), DDC AD-641007 |
| 2754 | Large Radar Shield Fabricated at Ground Level | P. Stetson | Civil Eng. (ASCE) <u>42</u> (June 1966), DDC AD-642223 |
| 2755 | Asymptotically Optimum Pre-Emphasis and De-Emphasis Networks for Sampling and Quantizing | L. M. Goodman P. R. Drouilhet, Jr. | Proc. IEEE (Correspondence) <u>54</u> , 795 (1966), DDC AD-642231 |
| 2757 | Electron-Beam Pumped Lasers of CdSe and CdS | C. E. Hurwitz | Appl. Phys. Letters <u>8</u> , 121 (1966), DDC AD-642201 |

Journal Articles

| JA No. | | | |
|--------|--|--|--|
| 2758 | RF Generated Shock Waves | H. M. Weigand | Proc. IEEE (Correspondence) <u>54</u> , 1485 (1966), DDC AD-649352 |
| 2760 | Polaron Induced Anomalies in the Interband Magnetoabsorption of InSb | E. J. Johnson D. M. Larsen | Phys. Rev. Letters <u>16</u> , 655 (1966), DDC AD-641004 |
| 2761 | Effects of Electron Irradiation of Metal-Nitride-Semiconductor Insulated Gate Field-Effect Transistors | A. G. Stanley H. A. R. Wegener | Proc. IEEE (Correspondence) <u>54</u> , 784 (1966), DDC AD-640529 |
| 2762 | Electron Bombardment Technique for Deposition of CdS Film Transducers | R. Weber | Rev. Sci. Instr. <u>37</u> , 955 (1966), DDC AD-642217 |
| 2763 | Oblique-Incidence Magnetic Anisotropy in Codeposited Alloy Films | M. S. Cohen | J. Appl. Phys. <u>38</u> , 860 (1967), DDC AD-654854 |
| 2765 | Study of Radio Echoes from the Moon at 23 Centimeters Wavelength | J. V. Evans T. Hagfors | J. Geophys. Res. <u>71</u> , 4871 (1966) |
| 2766 | Spontaneous and Coherent Photoluminescence in $Cd_xHg_{1-x}Te$ | I. Melngailis A. J. Strauss | Appl. Phys. Letters <u>8</u> , 179 (1966), DDC AD-642208 |
| 2768 | Anomaly in the X-Ray Scattering of ZnSe | P. M. Raccach R. J. Arnett A. Wold | Phys. Rev. <u>148</u> , 904 (1966), DDC AD-642216 |
| 2770 | Interleaving of Pseudorandom Sequences for Synchronization | L. I. Bluestein | IEEE Trans. Aerospace Electron. Syst. <u>AES-4</u> , 551 (1968) |
| 2773 | Aural Pulse Compression by Bats and Humans | J. J. G. McCue | J. Acoust. Soc. Am. <u>40</u> , 545 (1966), DDC AD-648764 |
| 2774 | Generalization of the Ruderman-Kittel-Kasuya-Yosida Interaction for Nonspherical Fermi Surfaces | L. M. Roth H. J. Zeiger T. A. Kaplan | Phys. Rev. <u>149</u> , 519 (1966), DDC AD-648765 |
| 2775 | The Cutoff Frequency of a Varactor Diode with Variable Series Resistance | A. I. Grayzel | Proc. IEEE (Correspondence) <u>54</u> , 875 (1966), DDC AD-642168 |
| 2776 | Efficient Visible Lasers of CdS_xSe_{1-x} by Electron-Beam Excitation | C. E. Hurwitz | Appl. Phys. Letters <u>8</u> , 243 (1966), DDC AD-642200 |
| 2778 | Equilibrium Spin Configuration and Resonance Behavior of $RbMnF_3$ | P. H. Cole W. I. Ince | Phys. Rev. <u>150</u> , 377 (1966), DDC AD-648263 |
| 2779 | Conic Display Generator Using Multiplying Digital-Analog Converters | L. G. Roberts | IEEE Trans. Electron. Computers <u>EC-16</u> , 369 (1967), DDC AD-658796 |

Journal Articles

| <u>JA No.</u> | | | |
|---------------|--|--|---|
| 2780 | Design of Composite Magnetic Circuits for Temperature Stabilization of Microwave Ferrite Devices | E. Stern W. J. Ince | IEEE Trans. Microwave Theory Tech. <u>MTT-15</u> , 295 (1967), DDC AD-658786 |
| 2781 | Work Function Changes Due to the Chemisorption of Water and Oxygen on Aluminum | E. E. Huber, Jr. C. T. Kirk | Surface Sci. <u>5</u> , 447 (1966), DDC AD-646492 |
| 2782 | Recursive, Complex Fourier Analysis for Real-Time Applications | J. M. Halberstein | Proc. IEEE (Correspondence) <u>54</u> , 903 (1966), DDC AD-642222 |
| 2783 | Operating Characteristics from Yes-No and Forced-Choice Procedures | A. I. Schulman R. R. Mitchell | J. Acoust. Soc. Am. <u>40</u> , 473 (1966), DDC AD-642221 |
| 2784 | Comments on "A Large Signal Analysis Leading to Intermodulation Distortion Prediction in Abrupt Junction Varactor Up-Converters" | A. I. Grayzel | IEEE Trans. Microwave Theory Tech. <u>MTT-15</u> , 183 (1967) |
| 2785 | The Earth's Dust Belt: Fact or Fiction? | I. I. Shapiro D. A. Lautman G. Colombo | J. Geophys. Res. <u>71</u> , 5695 (1966), DDC AD-652115 |
| 2786A | Generalized Surface Harmonics | H. E. Moses | Ann. Phys. <u>41</u> , 166 (1967), DDC AD-651625 |
| 2787A | Integration of the Infinitesimal Generators of the Inhomogeneous Lorentz Group and Application to the Transformation of the Wave Function | H. E. Moses | Ann. Phys. <u>41</u> , 158 (1967), DDC AD-651534 |
| 2788 | Reduction of the Electromagnetic Vector Potential to the Irreducible Representations of the Inhomogeneous Lorentz Group. II. Quantization of the Electromagnetic Vector Potential in an Angular Momentum Basis | H. E. Moses | Nuovo Cimento <u>48A</u> , 43 (1967), DDC AD-655314 |
| 2790 | Finite Temperature Theory for Attenuation of Quasi-Particle Excitations in Real Metals | R. W. Davies | J. Phys. Chem. Solids <u>28</u> , 1001 (1967) |
| 2793 | The ϵ -Entropy and ϵ -Capacity of Certain Time-Varying Channels | R. T. Prosser | J. Math. Anal. Appl. <u>16</u> , 553 (1966), DDC AD-646472 |
| 2794 | High-Temperature Expansions - The Classical Heisenberg Model | H. E. Stanley T. A. Kaplan | Phys. Rev. Letters <u>16</u> , 981 (1966), DDC AD-642220 |
| 2795 | Radar Ground-Clutter Shields | J. Ruze F. I. Sheftman D. A. Cahlander | Proc. IEEE <u>54</u> , 1171 (1966), DDC AD-648766 |

Journal Articles

| JA No. | | | |
|--------|---|--|---|
| 2796 | Comparison of the Theoretical O^{--} Form Factors with Experiment | P. M. Raccach R. J. Arnott | Phys. Rev. 153 , 1028 (1967), DDC AD-651719 |
| 2797 | Radar Observations of Venus at 3.8-cm Wavelength | J. V. Evans R. P. Ingalls L. P. Rainville R. R. Silva | Astron. J. 71 , 902 (1966), DDC AD-653360 |
| 2798 | A Model for Shifts in the Gate Turn-On Voltage of Insulated-Gate Field-Effect Devices Induced by Ionizing Radiation | A. G. Stanley | IEEE Trans. Electron Devices ED-14 , 134 (1967), DDC AD-654856 |
| 2802 | Observation of the Interaction of Plasmons with Longitudinal Optical Phonons in GaAs | A. Mooradian G. B. Wright | Phys. Rev. Letters 16 , 999 (1966), DDC AD-642230 |
| 2804 | Coherent Pulse Transmission Through Rain | R. K. Crane | IEEE Trans. Antennas Propag. AP-15 , 252 (1967), DDC AD-654939 |
| 2805 | Spin Waves in Paramagnetic Fermi Gases | L. L. VanZandt | Phys. Rev. 162 , 399 (1967), DDC AD-663684 |
| 2806 | Laser Properties of a Vapor-Grown Ruby | J. R. O'Connor P. S. Schaffer R. A. Bradbury | Appl. Phys. Letters 8 , 336 (1966), DDC AD-642171 |
| 2807 | The Last of the West Ford Dipoles | I. I. Shapiro | Science 154 , 1445 (1966), DDC AD-653675 |
| 2808 | Failure-Erasure Circuitry: A Duplicative Technique of Failure-Masking Systems | J. B. Connolly W. G. Schmidt | IEEE Trans. Electron. Computers EC-16 , 82 (1967), DDC AD-653674 |
| 2809 | A Sequential Decoding Technique and Its Realization in the Lincoln Experimental Terminal | I. L. Lebow P. G. McHugh | IEEE Trans. Commun. Tech. COM-15 , 477 (1967) |
| 2811 | Superconducting Transition Temperature and Electronic Structure in the Pseudobinary Nb_3Al-Nb_3Sn and Nb_3Sn-Nb_3Sb | F. J. Bachner J. B. Goodenough H. C. Gatos | J. Phys. Chem. Solids 28 , 889 (1967) |
| 2815 | The Rotation of the Planet Mercury | G. Colombo I. I. Shapiro | Astrophys. J. 145 , 296 (1966), DDC AD-642209 |
| 2816 | Band Structure and Laser Action in $Pb_xSn_{1-x}Te$ | J. O. Dimmock I. Melngailis A. J. Strauss | Phys. Rev. Letters 16 , 1193 (1966), DDC AD-642225 |
| 2818 | Improved Method of Optimizing Longitudinal Magneto-Optical Transmission-Scattering in Thin Magnetic Films | D. O. Smith K. J. Harte | Optica Acta 14 , 351 (1967), DDC AD-667871 |

Journal Articles

JA No.

- | | | | |
|-------|--|---|--|
| 2819 | Aperture Feed for a Spherical Reflector | M. L. Burrows L. J. Ricardi | IEEE Trans. Antennas Propag. <u>AP-15</u> , 227 (1967), DDC AD-654859 |
| 2822 | Electroreflectance in Metals | J. Feinleib | Phys. Rev. Letters <u>16</u> , 1200 (1966), DDC AD-642224 |
| 2823B | Directivity of an Array of Slots on the Surface of a Cylinder | L. J. Ricardi | Electron. Eng. <u>39</u> , 578 (1967), DDC AD-668239 |
| 2824 | Incoherent Source Optical Pumping of Visible and Infrared Semiconductor Lasers | R. J. Phelan, Jr. | Proc. IEEE (Correspondence) <u>54</u> , 1119 (1966), DDC AD-642196 |
| 2825 | Efficient Coding of Vocoder Channel Signals Using Linear Transformation | W. R. Crowther C. M. Rader | Proc. IEEE (Correspondence) <u>54</u> , 1594 (1966), DDC AD-646471 |
| 2827 | Efficient Ultraviolet Laser Emission in Electron-Beam-Excited ZnS | C. E. Hurwitz | Appl. Phys. Letters <u>9</u> , 116 (1966), DDC AD-648761 |
| 2832 | First Order Raman Effect in III-V Compounds | A. Mooradian G. B. Wright | Solid State Commun. <u>4</u> , 431 (1966), DDC AD-649186 |
| 2833 | Computer Control of the Haystack Antenna | F. E. Heart A. A. Mathiasen | Proc. IEEE <u>54</u> , 1742 (1966), DDC AD-654277 |
| 2834 | Multidimensional Maximum-Likelihood Processing of a Large Aperture Seismic Array | J. Capon R. J. Greenfield R. J. Kolker | Proc. IEEE <u>55</u> , 192 (1967), DDC AD-651722 |
| 2836 | Stokes Parameters for 1665-Megacycles-per-Second Emission from OH near Source W3 | M. L. Meeks J. A. Ball J. C. Carter R. P. Ingalls | Science <u>153</u> , 978 (1966), DDC AD-644783 |
| 2837 | Low Temperature Crystallographic and Magnetic Study of LaCo ₃ | N. Menyuk K. Dwight P. M. Racciah | J. Phys. Chem. Solids <u>28</u> , 549 (1967), DDC AD-653689 |
| 2840 | Radar Observations of Venus at 23 cm in 1965/1966 | J. V. Evans R. A. Brockelman E. N. Dupont L. B. Hanson W. A. Reid | Astron. J. <u>71</u> , 897 (1966), DDC AD-648056 |
| 2843 | High Speed Electromagnetic Shutter | J. S. Pirroni R. R. Stevens | Rev. Sci. Instr. <u>38</u> , 382 (1967), DDC AD-654851 |
| 2847 | Maser Model for Interstellar OH Microwave Emission | M. M. Litvak A. L. McWhorter M. L. Meeks H. J. Zeiger | Phys. Rev. Letters <u>17</u> , 821 (1966), DDC AD-648050 |
| 2848 | Measurement of Absorption-Line Profiles with a Fabry-Perot Interferometer | R. J. Hull L. C. Bradley | J. Opt. Soc. Am. <u>57</u> , 11 (1967), DDC AD-653410 |

Journal Articles

| JA No. | | | |
|--------|--|--|--|
| 2849 | Comparison of MOS and Metal-Nitride-Semiconductor Insulated Gate Field-Effect Transistors Under Electron Irradiation | A. G. Stanley | IEEE Trans. Nucl. Sci. <u>NS-13</u> , 248 (1967), DDC AD-652058 |
| 2850 | High-Temperature Expansions for the Classical Heisenberg Model. I. Spin Correlation Function | H. E. Stanley | Phys. Rev. <u>158</u> , 537 (1967), DDC AD-658762 |
| 2851 | An Optimal Singular Solution for the Sounding Rocket with Altitude-Dependent Parameters | K. Kresa | J. Spacecraft <u>4</u> , 124, (1967), DDC AD-651528 |
| 2852 | High Pressure Synthesis of Arsenopyrite-Type Ternary Compounds | M. D. Banus M. C. Lavine | Materials Res. Bull. <u>1</u> , 3 (1966), DDC AD-646477 |
| 2853 | Possibility of a Phase Transition for the Two-Dimensional Heisenberg Model | H. E. Stanley T. A. Kaplan | Phys. Rev. Letters <u>17</u> , 913 (1966), DDC AD-646485 |
| 2857 | Unusual Crystal-Field Energy Levels and Efficient Laser Properties of $YVO_4:Nd$ | J. R. O'Connor | Appl. Phys. Letters <u>9</u> , 407 (1966), DDC AD-653372 |
| 2858 | Interferometric Study of Cosmic Line Emission at OH Frequencies | A. E. E. Rogers J. M. Moran P. P. Crowther B. F. Burke M. L. Meeks J. A. Ball G. M. Hyde | Phys. Rev. Letters <u>17</u> , 450 (1966), DDC AD-645681 |
| 2863 | Electromagnetic Noise Environment in the 200 MHz to 400 MHz Band on Board Aircraft | G. Ploussios | Proc. IEEE (Correspondence) <u>54</u> , 2017 (1966), DDC AD-651529 |
| 2867 | Comment on Paper by A. K. Fung and R. K. Moore "The Correlation Function in Kirchhoff's Method of Solution of Scattering of Waves from Statistically Rough Surfaces" | T. Hagfors | J. Geophys. Res. <u>71</u> , 6150 (1966), DDC AD-648640 |
| 2869 | Infrared Magnetoelctroreflectance in Ge, GaSb, and InSb | S. H. Groves C. R. Pidgeon J. Feinleib | Phys. Rev. Letters <u>17</u> , 643 (1966), DDC AD-645038 |
| 2870B | A Reformulated Boundary Perturbation Theory in Electromagnetism and Its Application to a Sphere | M. L. Burrows | Can. J. Phys. <u>45</u> , 1729 (1967), DDC AD-655316 |
| 2871 | Reduction of Reducible Representations of the Infinitesimal Generators of the Proper, Orthochronous, Inhomogeneous Lorentz Group | H. E. Moses J. S. Lomont | J. Math. Phys. <u>8</u> , 837 (1967), DDC AD-658764 |

Journal Articles

JA No.

- | | | | |
|------|---|---|--|
| 2872 | A First-Order Localized Electron \rightleftharpoons Collective-Electron Transition | P. M. Raccah J. B. Goodenough | Phys. Rev. <u>155</u> , 932 (1967), DDC AD-658906 |
| 2873 | Hartree-Fock Theory: Slater Determinants of Minimum Energy | T. A. Kaplan W. H. Kleiner | Phys. Rev. <u>156</u> , 1 (1967), DDC AD-658907 |
| 2875 | Virial Theorem for the Homogeneous Electron Gas | P. N. Argyres | Phys. Rev. <u>154</u> , 410 (1967). DDC AD-653396 |
| 2878 | Low Temperature Absolute Reflection Measurements of Small Samples | J. Feinleib B. Feldman | Rev. Sci. Instr. <u>38</u> , 32 (1967), DDC AD-653673 |
| 2879 | Electrooptic Effect in Trigonal Selenium at 10.6 μm | M. C. Teich T. A. Kaplan | IEEE J. Quant. Electron. <u>QE-2</u> , 702 (1966), DDC AD-653412 |
| 2880 | Communications via Several Satellites Using the Lincoln Experimental Terminal | I. L. Lebow | <u>Progress in Astronautics and Aeronautics</u> , Vol. 19 (Academic Press, New York, 1966) |
| 2883 | Electron Temperature and Ion Composition in the F ₁ Region | J. V. Evans | J. Geophys. Res. <u>72</u> , 3343 (1967), DDC AD-658912 |
| 2884 | Midlatitude F-Region Densities and Temperatures at Sunspot Minimum | J. V. Evans | Planet. Space Sci. <u>15</u> , 1387 (1967) |
| 2885 | Some New Power-Frequency Inequalities for Nonlinear Capacitative Harmonic Multipliers | W. L. Black | Proc. IEEE (Correspondence) <u>54</u> , 1995 (1966), DDC AD-651524 |
| 2886 | Stimulated Brillouin and Raman Scattering in Quartz at 2.1° to 293° Kelvin | P. E. Tannenwald J. B. Thaxter | Science <u>154</u> , 1319 (1966), DDC AD-646489 |
| 2887 | Spark-Source Mass Spectroscopy | E. B. Owens | Appl. Spectroscopy <u>21</u> , 1 (1967), DDC AD-653414 |
| 2889 | Stimulated Four-Photon Interaction and Its Influence on Stimulated Rayleigh-Wing Scattering | R. Y. Chiao P. L. Kelley E. Garmire | Phys. Rev. Letters <u>17</u> , 1158 (1966), DDC AD-653362 |
| 2890 | Interband Magneto-optical Studies of Semiconductors and Semimetals | B. Lax J. G. Mavroides | Appl. Optics <u>6</u> , 647 (1967), DDC AD-653672 |
| 2891 | New Phase Transformation in InSb at High Pressure and High Temperature | M. D. Banus M. C. Lavine | J. Appl. Phys. <u>38</u> , 2042 (1967), DDC AD-658915 |
| 2892 | On the Design of Optimum Radar Waveforms for Clutter Rejection | D. F. DeLong, Jr. E. M. Hofstetter | IEEE Trans. Inform. Theory <u>IT-13</u> , 454 (1967), DDC AD-667873 |

Journal Articles

| JA No. | | | |
|--------|---|---|--|
| 2893 | Astronomical Constants and Planetary Ephemerides Deduced from Radar and Optical Observations | M. E. Ash I. I. Shapiro W. B. Smith | Astron. J. <u>72</u> , 338 (1967), DDC AD-658914 |
| 2894 | Bulk GaAs Negative Conductance Amplifiers | A. L. McWhorter A. G. Foyt | Appl. Phys. Letters <u>9</u> , 300 (1966), DDC AD-648048 |
| 2897 | Photovoltaic Effect in $Pb_xSn_{1-x}Te$ Diodes | I. Melngailis A. R. Calawa | Appl. Phys. Letters <u>9</u> , 304 (1966), DDC AD-648772 |
| 2899 | Radar Determination of the Rotations of Venus and Mercury | R. B. Dyce G. H. Pettengill I. I. Shapiro | Astron. J. <u>72</u> , 351 (1967), DDC AD-658774 |
| 2900 | Quantum Kinetic Equations for Electrons in Random Impurities | P. N. Argyres E. S. Kirkpatrick | Ann. Phys. <u>42</u> , 513 (1967), DDC AD-658909 |
| 2901 | Ring Circulator Theory, Design, and Performance | S. D. Ewing, Jr. J. A. Weiss | IEEE Trans. Microwave Theory Tech. <u>MTT-15</u> , 623 (1967), DDC AD-667877 |
| 2903 | Excitation Spectra of Group III Impurities in Germanium Under Uniaxial Stress | D. H. Dickey J. O. Dimmock | J. Phys. Chem. Solids <u>28</u> , 529 (1967), DDC AD-653671 |
| 2905 | Radar Verification of the Doppler Formula | I. I. Shapiro M. E. Ash M. J. Tausner | Phys. Rev. Letters <u>17</u> , 933 (1966), DDC AD-646487 |
| 2906 | A High-Speed, Low Power Complementary Flip-Flop | D. E. Chace | Electron. Communicator <u>1</u> , 5 (1966) |
| 2907 | High-Temperature Expansions for the Classical Heisenberg Model. II. Zero-Field Susceptibility | H. E. Stanley | Phys. Rev. <u>158</u> , 546 (1967), DDC AD-658766 |
| 2908A | The Lincoln Experimental Satellite Program (LES-1, -2, -3, -4) | H. Sherman | J. Spacecraft <u>4</u> , 1448 (1967), DDC AD-663685 |
| 2909 | High Pressure Study of the First-Order Phase Transition in MnAs | J. B. Goodenough J. A. Kafalas | Phys. Rev. <u>157</u> , 389 (1967), DDC AD-661147 |
| 2910 | Irreducible Representations of the Rotation Group in Terms of the Axis and Angle of Rotation. II. Orthogonality Relations Between Matrix Elements and Representations of Rotations in the Parameter Space | H. E. Moses | Ann. Phys. <u>42</u> , 343 (1967), DDC AD-654860 |
| 2911 | Application of Nanosecond Light Pulses to Ballistic Range Measurements | W. G. Clay R. E. Slattery A. J. Ferdinand D. R. Kilcline | AIAA J. <u>5</u> , 364 (1966), DDC AD-653498 |

Journal Articles

JA No.

- | | | | |
|-------|--|--|--|
| 2912 | Optimum Heterodyne Detection at $10.6 \mu\text{m}$ in Photoconductive Ge:Cu | M. C. Teich R. J. Keyes R. H. Kingston | Appl. Phys. Letters <u>9</u> , 357 (1966), DDC AD-651538 |
| 2913 | A Simple Model for Mutual Coupling Effects on Patterns for Unequally Spaced Arrays | J. L. Allen | IEEE Trans. Antennas Propag. <u>AP-15</u> , 530 (1967), DDC AD-661151 |
| 2914 | Asymptotic Theory of Electromagnetic and Acoustic Diffraction by Smooth Convex Surfaces of Variable Curvature | S. Hong | J. Math. Phys. <u>8</u> , 1223 (1967) |
| 2916 | Heat Flow in High-Temperature Crystal Growth | T. B. Reed | J. Phys. Chem. Solids Suppl., <u>39</u> (1967) |
| 2917 | Reduction of Relativistic Wave Functions to the Irreducible Representations of the Inhomogeneous Lorentz Group. I. Nonzero Mass Components | H. E. Moses | J. Math. Phys. <u>8</u> , 1134 (1967), DDC AD-662289 |
| 2918 | Semiconductor-to-Metal Transitions in Transition-Metal Compounds | D. Adler J. Feinleib H. Brooks W. Paul | Phys. Rev. <u>155</u> , 851 (1967) |
| 2920 | Semiconductor-to-Metal Transition in V_2O_3 | J. Feinleib W. Paul | Phys. Rev. <u>155</u> , 841 (1967) |
| 2921 | On the Thermodynamic Properties of Several Solid Phases of the Compound InSb | A. K. Jena M. B. Bever M. D. Banus | Trans. Met. Soc. AIME <u>239</u> , 725 (1967), DDC AD-662173 |
| 2922A | A Theoretical Analysis and Experimental Confirmation of the Optimally Loaded and Overdriven RF Power Amplifier | D. M. Snider | IEEE Trans. Electron Devices <u>ED-14</u> , 851 (1967), DDC AD-670764 |
| 2923 | Diode Lasers of $\text{Pb}_{1-y}\text{Sn}_y\text{Se}$ and $\text{Pb}_{1-x}\text{Sn}_x\text{Te}$ | J. F. Butler A. R. Calawa T. C. Harman | Appl. Phys. Letters <u>9</u> , 427 (1966), DDC AD-653367 |
| 2926 | The Positions and Angular Extent of OH Emission Associated with the R II Regions W3, W24, W49, and NGC 6334 | A. E. E. Rogers J. M. Moran P. P. Crowther B. F. Burke M. L. Meeks J. A. Ball G. M. Hyde | Astrophys. J. <u>147</u> , 369 (1967), DDC AD-649278 |
| 2927 | Polaron Effects in the Cyclotron Resonance Absorption of InSb | D. H. Dickey E. J. Johnson D. M. Larsen | Phys. Rev. Letters <u>18</u> , 599 (1967), DDC AD-658789 |
| 2928A | Temperature-Modulated Reflectance of Gold from 2 to 10 eV | W. J. Scouler | Phys. Rev. Letters <u>18</u> , 445 (1967), DDC AD-655328 |

Journal Articles

| JA No. | | | |
|--------|---|---|---|
| 2931 | Bistatic Scattering Cross Section of a Randomly-Oriented Dipole | S. L. Borison | IEEE Trans. Antennas Propag. <u>AP-15</u> , 320 (1967), DDC AD-655329 |
| 2932 | High Power and Efficiency in CdS Electron Beam Pumped Lasers | C. E. Hurwitz | Appl. Phys. Letters <u>9</u> , 420 (1966), DDC AD-653364 |
| 2937 | Donor Level Associated with (100) Conduction Band in S-Doped GaSb | B. B. Kosicki W. Paul A. J. Strauss G. W. Iseler | Phys. Rev. Letters <u>17</u> , 1175 (1966) |
| 2939 | Fourier Expansion for the Electronic Energy Bands in Silicon and Germanium | G. F. Dresselhaus M. S. Dresselhaus | Phys. Rev. <u>160</u> , 649 (1967), DDC AD-662302 |
| 2940 | Channel Encoders | L. M. Goodman | Proc. IEEE (Correspondence) <u>55</u> , 127 (1967), DDC AD-653413 |
| 2941 | Retrograde Solubility in n-Type PbS | A. J. Strauss | Trans. Met. Soc. AIME <u>239</u> , 794 (1967), DDC AD-661148 |
| 2942 | Observation of Degenerate Stimulated Four-Photon Interaction and Four-Wave Parametric Amplification | R. L. Carman R. Y. Chiao P. L. Kelley | Phys. Rev. Letters <u>17</u> , 1281 (1966), DDC AD-658792 |
| 2943 | A Study of the Depolarization of Lunar Radar Echoes | T. Hagfors | Radio Sci. <u>2</u> , 445 (1967) |
| 2945 | Data Considerations for Planetary Space Science Photography | L. R. Malling | IEEE Trans. Commun. Tech. <u>COM-15</u> , 665 (1967) |
| 2946 | InSb MOS Infrared Detector | R. J. Phelan, Jr. J. O. Dimmock | Appl. Phys. Letters <u>10</u> , 55 (1967), DDC AD-653365 |
| 2948 | The Electrical Properties and Band Structure of Doped LaInO_3 | D. B. Rogers J. M. Honig J. B. Goodenough | Materials Res. Bull. <u>2</u> , 223 (1967), DDC AD-652116 |
| 2951 | Measurement of Multipath Effects in Satellite-Aircraft UHF Link | K. L. Jordan, Jr. | Proc. IEEE (Correspondence) <u>55</u> , 1117 (1967), DDC AD-658917 |
| 2955 | Photo and Thermal Effects in Compensated Zinc Doped Germanium | R. J. Keyes | J. Appl. Phys. <u>38</u> , 2619 (1967), DDC AD-661153 |
| 2959 | Varactor Multiplier Arrays for Increased Power Handling Capability | D. Parker A. I. Grayzel | Proc. IEEE (Correspondence) <u>55</u> , 437 (1967), DDC AD-654863 |
| 2961 | Micropower Redundant Circuits Correct Errors Automatically | R. E. McMahon N. B. Childs | Electronics <u>40</u> , No. 3, 66 (1967), DDC AD-655313 |
| 2962 | The GaAs-InSb Graded-Gap Heterojunction | E. D. Hinkley R. H. Rediker | Solid-State Electron. <u>10</u> , 671 (1967) |

Journal Articles

JA No.

- | | | | |
|-------|--|--|---|
| 2963A | Inversion of Conduction and Valence Bands in $Pb_{1-x}Sn_xSe$ Alloys | A. J. Strauss | Phys. Rev. <u>157</u> , 608 (1967), DDC AD-658771 |
| 2964 | Temperature Dependence, Orientation Correlation, and Molecular Fields in Second-Harmonic Light Scattering from Liquids and Gases | D. L. Weinberg | J. Chem. Phys. <u>47</u> , 1307 (1967), DDC AD-664441 |
| 2965 | Identification of the Fundamental Vibrational Modes of Trigonal, α -Monoclinic and Amorphous Selenium | G. Lucovsky A. Mooradian W. Taylor G. B. Wright R. C. Keezer | Solid State Commun. <u>5</u> , 113 (1967) |
| 2966 | The Insertion Loss of Transmission Lines Used in Matching Networks | L. J. Ricardi | IEEE Trans. Microwave Theory Tech. <u>MTT-16</u> , 189 (1968), DDC AD-671290 |
| 2967 | Landau Damping of Magnetoplasma Waves for General Closed Fermi Surfaces | A. L. McWhorter J. N. Walpole | Phys. Rev. <u>158</u> , 719 (1967), DDC AD-661149 |
| 2968 | Nonlocal Effects in Low-Field Helicon Propagation in PbTe | J. N. Walpole A. L. McWhorter | Phys. Rev. <u>158</u> , 708 (1967), DDC AD-661150 |
| 2970 | Discussion of Paper by F. L. Scarf, "Effect of Coherent Density Fluctuations on the Radar Determination of Total Electron Content" | T. Hagfors | J. Geophys. Res. <u>72</u> , 4595 (1967) |
| 2971 | The Negative Gamma Varactor | A. I. Grayzel | Proc. IEEE (Correspondence) <u>55</u> , 469 (1967), DDC AD-655317 |
| 2972 | A Direct Derivation of the Optimal Linear Filter Using the Maximum Principle | M. Athans E. Tse | IEEE Trans. Automat. Control <u>AC-12</u> , 690 (1967), DDC AD-673596 |
| 2973 | The Crystal Structure of Neodymium Monotelluroxide- Nd_2O_2Te | P. M. Raccach J. M. Longo H. A. Eick | Inorg. Chem. <u>6</u> , 1471 (1967), DDC AD-658765 |
| 2975 | Kyoto: the Physics of Semiconductors | B. Lax J. G. Mavroides | Phys. Today <u>20</u> , No. 5, 101 (1967) |
| 2976 | A Binary Linear Transformation for Redundancy Reduction | L. M. Goodman | Proc. IEEE (Correspondence) <u>55</u> , 467 (1967), DDC AD-653668 |
| 2977 | Interband Magnetoreflexion and Band Structure of HgTe | S. H. Groves R. N. Brown C. R. Pidgeon | Phys. Rev. <u>161</u> , 779 (1967) |
| 2978 | Magnetoplasma Cyclotron Absorption in PbSe | S. Bermon | Phys. Rev. <u>158</u> , 723 (1967), DDC AD-658770 |

Journal Articles

| JA No. | | | |
|--------|--|--|--|
| 2980 | Scattering by Infinite Cylinders of Arbitrary Cross-Section by the Method of Finite Differences | M. L. Burrows | Electron. Letters <u>3</u> , 119 (1967), DDC AD-654866 |
| 2981 | Reduction of Relativistic Wavefunctions to the Irreducible Representations of the Inhomogeneous Lorentz Group. II. Zero Mass Components | H. E. Moses | J. Math. Phys. <u>9</u> , 16 (1968), DDC AD-673600 |
| 2982 | On Finite Pulsewidth Sampling | O. A. Z. Leneman | IEEE Trans. Commun. Tech. <u>COM-15</u> , 718 (1967), DDC AD-662174 |
| 2983 | An Analog Comparator as a Pseudo-Light Pen for Computer Displays | K. H. Konkle | IEEE Trans. Computers <u>C-17</u> , 54 (1968), DDC AD-670770 |
| 2986 | Comment on "Content-Addressed Memory Using Magneto- or Electro-Optical Interrogation" | D. O. Smith K. J. Harte | IEEE Trans. Electron. Computers <u>EC-16</u> , 372 (1967), DDC AD-661146 |
| 2987 | Extraterrestrial Life | W. B. Smith | Science <u>155</u> , 852 (1967), DDC AD-653411 |
| 2988 | Raman Scattering from Donor and Acceptor Impurities in Silicon | G. B. Wright A. Mooradian | Phys. Rev. Letters <u>18</u> , 608 (1967), DDC AD-653363 |
| 2989 | A Thermodynamic Investigation of the Compounds In_3SbTe_2 , InSb and InTe | A. K. Jena M. B. Bever M. D. Banus | Trans. Met. Soc. AIME <u>239</u> , 1232 (1967) |
| 2990 | Note on "Secant Correction for Tracking Pedestals" | F. L. Bacchialoni | IEEE Trans. Automat. Control <u>AC-12</u> , 475 (1967), DDC AD-663689 |
| 2991 | Effect of Electron Irradiation on Carrier Mobilities in Inversion Layers of Insulated Gate Field Transistors | A. G. Stanley | IEEE Trans. Nuclear Sci. <u>NS-14</u> , 266 (1967), DDC AD-668184 |
| 2992 | Correlation Function and Power Spectrum of Randomly Shaped Pulse Trains | O. A. Z. Leneman | IEEE Trans. Aerospace Electron. Syst. <u>AES-3</u> , 774 (1967), DDC AD-662172 |
| 2993 | Magnetic and Structural Study of the Spinel MnYb_2S_4 | J. M. Longo P. M. Raccach | Materials Res. Bull. <u>2</u> , 541 (1967), DDC AD-657032 |
| 2994A | Stability Measurements of $\text{CO}_2\text{-N}_2\text{-He}$ Lasers at $10.6\ \mu\text{m}$ Wavelength | C. Freed | IEEE J. Quant. Electron. <u>QE-3</u> , 203 (1967), DDC AD-658783 |
| 2996 | Automatic Channel Equalization Algorithm | C. A. Niessen | Proc. IEEE (Correspondence) <u>55</u> , 698 (1967) |
| 2997 | Arc Techniques for Materials Research | T. B. Reed | Materials Res. Bull. <u>2</u> , 349 (1967) |

Journal Articles

| JA No. | | | |
|--------|---|--|---|
| 2998 | Hall Coefficient and Transverse Magnetoresistance in HgTe at 4.2°K and 77°K | T. C. Harman J. M. Honig P. H. Trent | J. Phys. Chem. Solids <u>28</u> , 1995 (1967), DDC AD-658089 |
| 2999 | Effects of Parameter Quantization on the Poles of a Digital Filter | C. M. Rader B. Gold | Proc. IEEE (Correspondence) <u>55</u> , 688 (1967), DDC AD-658784 |
| 3002 | Redistribution of Electrons in Secondary Emission Devices | A. A. Braga-Illa | Alta Frequenza <u>36</u> , No. 5 (1967) |
| 3003 | Van Allen Belt Simulation | C. L. Mack | J. Spacecraft <u>4</u> , 819 (1967), DDC AD-658780 |
| 3004 | The Oxidation of Aluminum Films in Low-Pressure Oxygen Atmospheres | C. T. Kirk, Jr. E. E. Huber, Jr. | Surface Sci. <u>9</u> , 217 (1968), DDC AD-668306 |
| 3006 | City Noise and Its Effect Upon Airborne Antenna Noise Temperatures at UHF | G. Ploussios | IEEE Trans. Aerospace Electron. Syst. <u>AES-4</u> , 41 (1968), DDC AD-668492 |
| 3011A | New Method for the Detection of Light Deflection by Solar Gravity | I. I. Shapiro | Science <u>157</u> , 806 (1967), DDC AD-663681 |
| 3013 | Iterative Sequential Decoding | I. G. Stiglitz | Accepted IEEE Trans. Inform. Theory |
| 3018 | Growth of Single Ti ₂ O ₃ Crystals from the Melt | T. B. Reed R. E. Fahey J. M. Honig | Materials Res. Bull. <u>2</u> , 561 (1967) |
| 3019 | Scattering by Edges: The Hemisphere | S. D. Weiner | IEEE Trans. Antennas Propag. <u>AP-15</u> , 709 (1967), DDC AD-664442 |
| 3020 | Mounted Diode Equivalent Circuits | W. J. Getsinger | IEEE Trans. Microwave Theory Tech. <u>MTT-15</u> , 650 (1967), DDC AD-667874 |
| 3021 | Localized versus Collective d Electrons and Néel Temperatures in Perovskite and Perovskite-Related Structures | J. B. Goodenough | Phys. Rev. <u>164</u> , 785 (1967), DDC AD-668715 |
| 3022 | A Coding Theorem for Time-Discrete Analog Data Sources | T. J. Goblick, Jr. | IEEE Trans. Inform. Theory <u>IT-15</u> , 401 (1969), DDC AD-693665 |
| 3023 | Laser Emission from Electron Beam Excited ZnTe | C. E. Hurwitz | IEEE J. Quant. Electron. <u>QE-3</u> , 333 (1967), DDC AD-664445 |
| 3024 | Plasmas for High Temperature Chemistry | T. B. Reed | <u>Advances in High Temperature Chemistry</u> , Vol. 1 (Academic Press, New York, 1967) |
| 3025 | InSb-GaAsP Infrared to Visible Light Converter | R. J. Phelan, Jr. | Proc. IEEE (Correspondence) <u>55</u> , 1501 (1967), DDC AD-662175 |

Journal Articles

| JA No. | | | |
|--------|--|--|--|
| 3026 | Stimulated Raman Scattering in an Infrared Active, Nontotally Symmetric Vibration of λ -Quartz | P. E. Tannenwald D. L. Weinberg | IEEE J. Quant. Electron. <u>QE-3</u> , 334 (1967), DDC AD-664447 |
| 3027 | Experimental Results of a Frequency Doubler Using a Varactor Array | D. Parker A. I. Grayzel | Proc. IEEE (Correspondence) <u>55</u> , 715 (1967), DDC AD-658769 |
| 3028 | New Variational Approach in the Transport Theory of the Coupled Electron-Phonon System | R. W. Davies | Phys. Rev. <u>162</u> , 621 (1967), DDC AD-664448 |
| 3029 | Resolution and Frequency Response in Secondary Emission Devices | A. A. Braga-Ilia | IEEE Trans. Electron Devices <u>ED-14</u> , 829 (1967) |
| 3031 | Backscatter from Spheres: A Short Pulse View | J. Rheinstejn | IEEE Trans. Antennas Propag. <u>AP-16</u> , 89 (1968), DDC AD-670444 |
| 3032 | Adaptive Combining of Wide-band Array Data for Optimal Reception | R. T. Lacos | IEEE Trans. Geosci. Electron. <u>GE-6</u> , 78 (1968), DDC AD-673599 |
| 3033 | Observations of OH Emission in the H II Region W3 with a 74400 λ Interferometer | J. M. Moran A. H. Barrett A. E. E. Rogers B. F. Burke B. Zuckerman H. Penfield M. L. Meeks | Astrophys. J. <u>148</u> , L69 (1967), DDC AD-652914 |
| 3038 | Long-Term Operation of a Sealed CO ₂ Laser | R. J. Carbone | IEEE J. Quant. Electron. <u>QE-3</u> , 373 (1967), DDC AD-668195 |
| 3039 | Wave-Optical Aspects of Lorentz Microscopy | M. S. Cohen | J. Appl. Phys. <u>38</u> , 4966 (1967), DDC AD-668727 |
| 3041A | Design of Mutually Matching Multiple-Varactor Array for Power | D. D. Tang | Proc. IEEE (Correspondence) <u>55</u> , 1756 (1967), DDC AD-663686 |
| 3044 | Optical Properties of the Metal ReO ₃ from 0.1 to 22 eV | J. Feinleib W. J. Scouler A. Ferretti | Phys. Rev. <u>165</u> , 765 (1968), DDC AD-668716 |
| 3046A | Night Sky Photometry of [OI] λ 5577 and λ 6300 Inside the Southern Auroral Zone | M. A. Gordon | Planet. Space Sci. <u>16</u> , 297 (1968) |
| 3047 | Magnetic Films and Optics in Computer Memories | D. O. Smith | IEEE Trans. Magnetics <u>MAG-3</u> , 433 (1967), DDC AD-663682 |
| 3048 | Performance Characteristics of Thermomagnetic Devices Involving Graded Mass and Gap. I. Generators | J. M. Honig B. Lax | J. Appl. Phys. <u>39</u> , 3549 (1968), DDC AD-678983 |

Journal Articles

| <u>JA No.</u> | | | |
|---------------|---|---|--|
| 3049 | Characterization and Structure of $\text{La}_4\text{Re}_6\text{O}_{19}$, a New Metal Cluster Compound | J. M. Longo A. W. Sleight | Inorg. Chem. <u>7</u> , 108 (1968), DDC AD-668730 |
| 3050 | Ferrite-Metal Thermal Conductances by a Transient Technique | S. D. Ewing, Jr. | IEEE Trans. Parts, Materials & Packaging <u>PMP-3</u> , 142 (1967), DDC AD-670451 |
| 3051 | Intermodulation Products Generated by a p-i-n Diode Switch | R. L. Sicotte R. N. Assaly | Proc. IEEE (Letters) <u>56</u> , 74 (1968), DDC AD-668721 |
| 3052 | Low-Energy Interband Transitions and Band Structure in Nickel | J. Hanus J. Feinleib W. J. Scouler | Phys. Rev. Letters <u>19</u> , 16 (1967), DDC AD-658919 |
| 3053 | Solid-State RF Noise Source | A. J. Yakutis | Proc. IEEE (Letters) <u>56</u> , 228 (1968), DDC AD-670442 |
| 3054 | Atmospheric Measurements at Kwajalein Using Hypersonic Spheres | J. E. Salah | J. Geophys. Res. <u>72</u> , 5389 (1967), DDC AD-663687 |
| 3056 | Systems for Compressing the Bandwidth of Speech | B. Gold C. M. Rader | IEEE Trans. Audio Electroacoust. <u>AU-15</u> , 131 (1967), DDC AD-670450 |
| 3057 | Resonance Rotation of Venus | I. I. Shapiro | Science <u>157</u> , 423 (1967), DDC AD-661145 |
| 3058 | Proposal for a Magnetic-Film Memory Accessed by Combined Photon and Electron Beams | D. O. Smith | IEEE Trans. Magnetics <u>MAG-3</u> , 593 (1967), DDC AD-670776 |
| 3060 | Polarization and Intensity of Raman Scattering from Plasmons and Phonons in Gallium Arsenide | A. Mooradian A. L. McWhorter | Phys. Rev. Letters <u>19</u> , 849 (1967), DDC AD-668193 |
| 3061 | Phase Measurement Accuracy with Modulated Sounding Signals | D. Arnstein | IEEE Trans. Commun. Tech. <u>COM-16</u> , 419 (1968) |
| 3062 | On the Measurement of a Bifilar Complementary Helical Antenna | P. R. Wu | IEEE Trans. Antennas Propag. <u>AP-15</u> , 700 (1967) |
| 3063 | Books and Conference Proceedings | K. J. Harte D. O. Smith | <u>Magnetism and Magnetic Materials Digest</u> (Academic, New York, 1967) |
| 3064 | Observation of the 94α and 148δ Hydrogen and 94α Helium Emission Lines in the Orion Nebula | M. A. Gordon M. L. Meeks | Astrophys. J. <u>149</u> , L21 (1967), DDC AD-658911 |
| 3065 | Self-Steepening of Light Pulses | F. DeMartini C. H. Townes T. K. Gustafson P. L. Kelley | Phys. Rev. <u>164</u> , 312 (1967), DDC AD-668731 |

| <u>JA No.</u> | | | |
|---------------|--|--|--|
| 3066 | Magnetic Interactions and Spiral Ground States in Spinel, with Application to $ZnCr_2Se_4$ | K. Dwight N. Menyuk | Phys. Rev. <u>163</u> , 435 (1967), DDC AD-668194 |
| 3068 | Theory of the Magnetic Properties of the Ilmenites $MTiO_3$ | J. B. Goodenough J. J. Stickler | Phys. Rev. <u>164</u> , 768 (1967), DDC AD-668712 |
| 3069 | Magnetic Resonance and Susceptibility of Several Ilmenite Powders | J. J. Stickler S. Kern A. Wold G. S. Heller | Phys. Rev. <u>164</u> , 765 (1967), DDC AD-668729 |
| 3070 | Tetrahedral-Site Copper in Chalcogenide Spinel | J. B. Goodenough | Solid State Commun. <u>5</u> , 577 (1967), DDC AD-658027 |
| 3071 | Short-Period Signal Processing Results for the Large Aperture Seismic Array | J. Capon R. J. Greenfield R. J. Kolker R. T. Lacoss | Geophysics <u>33</u> , 452 (1968), DDC AD-674830 |
| 3073 | Short-Pulse Scattering by a Cone - Direct and Inverse | S. Hong S. L. Borison | IEEE Trans. Antennas Propag. <u>AP-16</u> , 98 (1968), DDC AD-670763 |
| 3074 | A 10.6-Micron Four-Port Circulator Using Free Carrier Rotation in InSb | J. H. Dennis | IEEE J. Quant. Electron. <u>QE-3</u> , 416 (1967), DDC AD-668728 |
| 3076 | Spark Source Mass Spectroscopy | E. B. Owens | <u>McGraw-Hill Yearbook of Science and Technology</u> (1968) |
| 3078 | Infrared Heterodyne Detection | M. C. Teich | Proc. IEEE <u>56</u> , 37 (1968), DDC AD-668713 |
| 3080 | Current Runaway and Avalanche Effects in n-CdTe | M. R. Oliver A. L. McWhorter A. G. Foyt | Appl. Phys. Letters <u>11</u> , 111 (1967), DDC AD-662292 |
| 3082 | Symmetry of the Ground Level of a Hamiltonian | W. H. Kleiner T. A. Kaplan | J. Math. Phys. <u>10</u> , 236 (1969), DDC AD-688031 |
| 3083 | Changes in the Work Function of Aluminum During and Following Low Pressure Oxidation at Room Temperature | E. E. Huber, Jr. C. T. Kirk, Jr. | Surface Sci. <u>8</u> , 458 (1967) |
| 3085 | Observation of Exciton Fine Structure in the Interband Magnetoabsorption of InSb and Germanium | E. J. Johnson | Phys. Rev. Letters <u>19</u> , 352 (1967), DDC AD-662293 |
| 3086 | The Gunn Effect in n-CdTe | M. R. Oliver A. G. Foyt | IEEE Trans. Electron Devices <u>ED-14</u> , 617 (1967), DDC AD-668186 |
| 3087 | Inversion Asymmetry Effects on Oscillatory Magnetoresistance in HgSe | L. M. Roth S. H. Groves P. W. Wyatt | Phys. Rev. Letters <u>19</u> , 576 (1967), DDC AD-668198 |

Journal Articles

JA No.

- | | | | |
|-------|--|--|---|
| 3090 | New Expansion for the Classical Heisenberg Model and Its Similarity to the $S = 1/2$ Ising Model | H. E. Stanley | Phys. Rev. 164 , 709 (1967), DDC AD-669216 |
| 3091 | Electroreflectance Study of Inter-band Magneto-Optical Transitions in InAs and InSb at 1.5°K | C. R. Pidgeon S. H. Groves J. Feinleib | Solid State Commun. 5 , 677 (1967), DDC AD-658835 |
| 3093 | The Channel Vocoder | B. Gold C. M. Rader | IEEE Trans. Audio Electroacoust. AU-15 , 148 (1967), DDC AD-679147 |
| 3095A | Computer-Design of Diode-Using Microwave Components, and a Computer-Dimensioned, X-Band Parametric Amplifier | W. J. Getsinger A. H. Kessler | Microwave J. 12 , No. 3, 119 (1969), DDC AD-688041 |
| 3097 | Perturbation Calculation of Band-Structure Effects in Low-Field Helicon Propagation | A. L. McWhorter J. N. Walpole | Phys. Rev. 163 , 618 (1967), DDC AD-669221 |
| 3098 | Spectral Line Interferometry with Independent Time Standards at Stations Separated by 845 Kilometers | J. M. Moran P. P. Crowther B. F. Burke A. H. Barrett A. E. E. Rogers J. A. Ball J. C. Carter C. C. Bare | Science 157 , 676 (1967), DDC AD-661152 |
| 3100 | Magnetostriction Effects on Ferrite Material Parameters of Importance in Remanence Devices | R. Epstein R. Germann J. Sohn D. H. Temme | IEEE Trans. Microwave Theory Tech. MTT-16 , 54 (1968), DDC AD-670792 |
| 3102 | Observations of λ Hz Continuum and Hydrogen Recombination Lines in the Orion Nebula | M. A. Gordon M. L. Meeks | Astrophys. J. 152 , 417 (1968), DDC AD-671288 |
| 3103 | Theory of Magnetization Ripple in Ferromagnetic Films | K. J. Harte | J. Appl. Phys. 39 , 1503 (1968), DDC AD-671275 |
| 3104 | Shallow Donor Levels of InSb in a Magnetic Field | D. M. Larsen | J. Phys. Chem. Solids 29 , 271 (1968), DDC AD-664919 |
| 3107 | Mode Pulling in a Stimulated Raman Oscillator | P. E. Tannenwald | J. Appl. Phys. 38 , 4788 (1967), DDC AD-669220 |
| 3108 | Magnetic Properties of $\text{La}_{0.5}\text{Sr}_{0.5}\text{CoO}_3$ near Its Curie Temperature | N. Menyuk P. M. Raccach K. Dwight | Phys. Rev. 166 , 510 (1968), DDC AD-670445 |
| 3109 | Observations of Hysteresis Damping in a Spinning Satellite | W. B. Smith I. i. Shapiro | J. Spacecraft 5 , 337 (1968), DDC AD-670786 |
| 3110 | A New, Widely and Continuously Tunable, High-Power Pulsed Laser Source | R. L. Carman J. G. C. Hanus D. L. Weinberg | Appl. Phys. Letters 11 , 250 (1967), DDC AD-667875 |

Journal Articles

| JA No. | | | |
|--------|---|--|--|
| 3111 | Resolution and the Equivalent Filter Secondary Emission Devices | A. A. Braga-Ilia | Alta Frequenza <u>37</u> , 47E-153 (1968) |
| 3113 | Stationkeeping a 24-Hr Satellite Using Solar Radiation Pressure | W. L. Black M. C. Crocker E. H. Swenson | J. Spacecraft <u>5</u> , 335 (1968), DDC AD-670781 |
| 3116 | Aperture Synthesis in Radar Astronomy and Some Applications to Lunar and Planetary Studies | T. Hagfors B. Nanni K. Stone | Radio Sci. <u>3</u> , 491 (1968) |
| 3119 | Tellurium Vapor Pressure and Optical Density at 370-615°C | R. F. Brebrick | J. Phys. Chem. <u>72</u> , 1032 (1968), DDC AD-670793 |
| 3120 | Gas-Density Fluctuations in the Wakes from Hypersonic Spheres | J. Herrmann W. G. Clay R. E. Slattery | Phys. Fluids <u>11</u> , 954 (1968), DDC AD-673463 |
| 3121 | Ferromagnetism in Films | M. S. Cohen | Chap. 10, <u>Thin Film Phenomena</u> (McGraw-Hill, New York, 1969) |
| 3126 | Electron-Hole Pair Effects on Landau Levels in InSb | D. M. Larsen | Phys. Rev. Letters <u>19</u> , 1128 (1967), DDC AD-669248 |
| 3128 | Theory of the Radar Determination of Planetary Rotations | I. I. Shapiro | Astron. J. <u>72</u> , 1309 (1967), DDC AD-670441 |
| 3132 | Reduction of Reducible Representations of the Poincaré Group to Standard Helicity Representations. | H. E. Moses | J. Math. Phys. <u>9</u> , 2039 (1968), DDC AD-693702 |
| 3134A | Epitaxial Gallium Arsenide for High-Efficiency Gunn Oscillators | C. M. Wolfe A. G. Foyt W. T. Lindley | Electrochem. Technol. <u>6</u> , 208 (1968), DDC AD-673592 |
| 3136 | A High-Power Waveguide Tuner | C. E. Muehe | IEEE Trans. Microwave Theory Tech. <u>MTT-16</u> , 882 (1968), DDC AD-685689 |
| 3137 | Metallurgical and Electronic Properties of $Pb_{1-x}Sn_xTe$, $Pb_{1-x}Sn_xSe$, and Other IV-VI Alloys | A. J. Strauss | Trans. Met. Soc. AIME <u>242</u> , 354 (1968), DDC AD-678982 |
| 3138 | Sunrise Behavior of the F Layer at Midlatitudes | J. V. Evans | J. Geophys. Res. <u>73</u> , 3489 (1968), DDC AD-673605 |
| 3139 | Evidence for Electron-TO-Phonon Interaction in InSb | D. H. Dickey D. M. Larsen | Phys. Rev. Letters <u>20</u> , 65 (1968), DDC AD-669206 |
| 3140 | Crystal Growth, Annealing, and Diffusion of Lead-Tin Chalcogenides | A. R. Calawa T. C. Harman M. C. Finn P. Youtz | Trans. Met. Soc. AIME <u>242</u> , 374 (1968), DDC AD-678986 |
| 3141 | A Radar Study of the Lunar Crater Tycho at 3.8-cm and 70-cm Wavelengths | G. H. Pettengill T. W. Thompson | Icarus <u>8</u> , 457 (1968) |

Journal Articles

JA No.

- | | | | |
|------|--|---|---|
| 3142 | Suboptimal State Estimation for Continuous-Time Nonlinear Systems from Discrete Noisy Measurements | M. Athans R. P. Wishner A. Bertolini | IEEE Trans. Automat. Control <u>AC-13</u> , 504 (1968), DDC AD-688042 |
| 3143 | Use of Crossed Cylinder Lens in Photographic Lens Evaluation | B. Howland | Appl. Optics <u>7</u> , 1587 (1968), DDC AD-677855 |
| 3145 | Observations of Galactic OH Emission | J. A. Ball M. L. Meeks | Astrophys. J. <u>153</u> , 577 (1968), DDC AD-677846 |
| 3146 | Resonant Cavity Measurements of Ionized Wakes | W. M. Kornegay | IEEE Trans. Aerospace Electron. Syst. <u>AES-4</u> , 184 (1968), DDC AD-671291 |
| 3147 | Range Contamination and Its Effect on Measurements | R. E. Slattery W. G. Clay W. C. Worthington | IEEE Trans. Aerospace Electron. Syst. <u>AES-4</u> , 187 (1968), DDC AD-671285 |
| 3148 | Imaging and Storage with a Uniform MOS Structure | R. J. Phelan, Jr. J. O. Dimmock | Appl. Phys. Letters <u>11</u> , 359 (1967), DDC AD-669211 |
| 3149 | Magnon-Phonon Coupling in Metallic Films | R. Weber | Phys. Rev. <u>169</u> , 451 (1968), DDC AD-673598 |
| 3150 | Spin-Wave Resonance | R. Weber | IEEE Trans. Magnetism <u>MAG-4</u> , 28 (1968), DDC AD-670788 |
| 3153 | Variations in the Radar Cross Section of Venus | J. V. Evans | Astron. J. <u>73</u> , 125 (1968), DDC AD-673462 |
| 3154 | Magnetic Ordering and the Electronic Properties of the Heavy Rare-Earth Metals | R. E. Watson A. J. Freeman J. O. Dimmock | Phys. Rev. <u>167</u> , 497 (1968) |
| 3155 | Analysis of Tellurides of Lead and Tin by Automatic Titrations | J. C. Cornwell K. L. Cheng | Anal. Chim. Acta <u>42</u> , 189 (1968), DDC AD-674786 |
| 3156 | Critical Properties of Isotropically Interacting Classical Spins Constrained to a Plane | H. E. Stanley | Phys. Rev. Letters <u>20</u> , 150 (1968), DDC AD-669213 |
| 3158 | Automatic Satellite Station-Keeping | A. A. Braga-Illa | J. Spacecraft <u>6</u> , 430 (1969) |
| 3159 | Utilization of Contextual Constraints in Automatic Speech Recognition | R. Alter | IEEE Trans. Audio Electroacoust. <u>AU-16</u> , 6 (1968), DDC AD-673464 |
| 3160 | Origin of the Crystal Field in Ti^{3+} -Substituted Alums | G. F. Dionne J. A. MacKinnon | Phys. Rev. <u>172</u> , 325 (1968), DDC AD-678985 |
| 3161 | Growth of Single Crystals of $ZnTe$ and $ZnTe_{1-x}Se_x$ by Temperature Gradient Solution Zoning | J. Steininger R. England | Trans. Met. Soc. AIME <u>242</u> , 444 (1968), DDC AD-678981 |
| 3162 | Design and Short-Term Stability of Single-Frequency CO_2 Lasers | C. Freed | IEEE J. Quant. Electron. <u>QE-4</u> , 404 (1968), DDC AD-678987 |

| <u>JA No.</u> | | | |
|---------------|---|---|---|
| 3164 | Short-Pulse Scattering by a Long Wire | S. Hong S. L. Borison D. P. Ford | IEEE Trans. Antennas Propag. <u>AP-16</u> , 338 (1968), DDC AD-674789 |
| 3165 | Rotation of Venus | I. I. Shapiro | Science <u>159</u> , 1124 (1968), DDC AD-670446 |
| 3166 | Recent Developments in Lorentz Electron Microscopy | M. S. Cohen | IEEE Trans. Magnetics <u>MAG-4</u> , 48 (1968), DDC AD-670790 |
| 3168 | Discrepancies Between Radar Data and the Lunar Ephemeris | C. R. Smith G. H. Pettengill I. I. Shapiro F. S. Weinstein | Science <u>160</u> , 876 (1968), DDC AD-685690 |
| 3169 | Intense Mercury-Vapor Green-Band Emission | R. J. Carbone M. M. Litvak | J. Appl. Phys. <u>39</u> , 2413 (1968), DDC AD-673593 |
| 3171 | Adaptive Equalizer for Pulse Transmission | C. W. Niessen D. K. Willim | Accepted IEEE Trans. Commun. Technol. |
| 3172 | Bistatic Short-Pulse Scattering by a Hemisphere | S. D. Weiner | IEEE Trans. Antennas Propag. <u>AP-16</u> , 371 (1968), DDC AD-674828 |
| 3173A | Statistical Thermodynamics of Nonstoichiometry in Nonmetallic Binary Compounds | R. F. Brebrick | J. Solid State Chem. <u>1</u> , 88 (1969) |
| 3174 | Quartz Raman Laser | P. E. Tannenwald F. H. Perry | Laser Focus <u>3</u> , 17 (1967) |
| 3176 | Dependence of Critical Properties on Dimensionality of Spins | H. E. Stanley | Phys. Rev. Letters <u>20</u> , 589 (1968), DDC AD-670762 |
| 3177 | Biography of the Third ICMF | D. O. Smith | IEEE Trans. Magnetics <u>MAG-4</u> , 3 (1968) |
| 3178 | Interplanetary Plasma Densities Deduced from Radar Observations of the Moon | W. B. Smith K. L. Bowles I. I. Shapiro | <u>Moon and Planets II</u> (North-Holland, Amsterdam, 1968), DDC AD-673604 |
| 3179 | The Effect of Surface Impedance Variation on Surface Wave Propagation Along a Rod Waveguide | G. N. Tsandoulas | IEEE Trans. Microwave Theory Tech. <u>MTT-16</u> , 886 (1968), DDC AD-685691 |
| 3183 | Radar Astronomy | G. H. Pettengill | Accepted <u>Radar Handbook</u> (McGraw-Hill, New York) |
| 3185 | Self-Trapping in Media with Saturation of the Nonlinear Index | T. K. Gustafson P. L. Kelley R. Y. Chiao R. G. Brewer | Appl. Phys. Letters <u>12</u> , 165 (1968), DDC AD-670789 |
| 3186 | Light Scattering from Single-Particle Electron Excitations in Semiconductors | A. Mooradian | Phys. Rev. Letters <u>20</u> , 1102 (1968), DDC AD-671287 |

Journal Articles

JA No.

- | | | | |
|-------|--|--|--|
| 3187 | Isotope Effect in Superconducting Rhenium | E. Maxwell M. Strongin T. B. Reed | Phys. Rev. <u>166</u> , 457 (1968) |
| 3190 | Surface Potential of a Free Electron Metal in the RPA | R. W. Davies | Surface Sci. <u>11</u> , 419 (1968), DDC AD-679340 |
| 3191 | Continuous Operation of a Long-Lived CO ₂ Laser Tube | R. J. Carbone | IEEE J. Quant. Electron. <u>QE-4</u> , 102 (1968), DDC AD-673595 |
| 3192 | Spin-Orbit-Coupling Effects in Transition-Metal Compounds | J. B. Goodenough | Phys. Rev. <u>171</u> , 466 (1968), DDC AD-677856 |
| 3193 | Long-Period Signal Processing Results for the Large Aperture Seismic Array | J. Capon R. J. Greenfield R. T. Lacoss | Geophysics <u>34</u> , 305 (1969) |
| 3194 | Ferromagnetic Properties of Films | M. S. Cohen | Accepted <u>Handbook of Thin Film Technology</u> (McGraw-Hill, New York) |
| 3195 | Electrical Properties of Ti ₂ O ₃ Single Crystals | J. M. Honig T. B. Reed | Phys. Rev. <u>174</u> , 1020 (1968), DDC AD-685692 |
| 3196 | Comments on "Standing Spin-Wave Resonance in 'Flash-Evaporated' Permalloy Films" | P. E. Tannenwald R. Weber | Phys. Rev. Letters <u>20</u> , 918 (1968), DDC AD-670638 |
| 3197 | ReO ₃ Band Structure in the Tight-Binding Approximation | J. M. Honig J. O. Dimmock W. H. Kleiner | J. Chem. Phys. <u>50</u> , 5232 (1969), DDC AD-694140 |
| 3198 | Absorption of Radar Signals by the Atmosphere of Venus | J. V. Evans R. P. Ingalls | J. Atmos. Sci. <u>25</u> , 555 (1968), DDC AD-678988 |
| 3199 | The 18-cm Flux of the Unresolved Component of 3C 273 | J. M. Moran B. F. Burke A. H. Barrett A. E. E. Rogers J. C. Carter J. A. Ball D. D. Cudaback | Astrophys. J. <u>151</u> , L99 (1968), DDC AD-670636 |
| 3205 | Orbit Determination from the Satellite | A. A. Braga-Illa | J. Spacecraft <u>6</u> , 232 (1969) |
| 3206 | Partial Pressure of Se ₂ (g) in Selenium Vapor | R. F. Brebrick | J. Chem. Phys. <u>48</u> , 5741 (1968), DDC AD-681588 |
| 3207 | Planetary Radar Astronomy | I. I. Shapiro | IEEE Spectrum <u>5</u> , No. 3, 70 (1968); <u>Moon and Planets</u> (North-Holland, Amsterdam, 1967), DDC AD-655315 |
| 3208A | Improved Ferrimagnetic Single Crystal Sphere Orienter | G. F. Dionne P. S. Crocker J. F. Smith | Rev. Sci. Instr. <u>39</u> , 1759 (1968), DDC AD-685693 |

JA No.

- | | | | |
|------|--|---|--|
| 3210 | Si-Te System: Partial Pressures of Te ₂ and SiTe and Thermodynamic Properties from Optical Density of the Vapor Phase | R. F. Brebrick | J. Chem. Phys. <u>49</u> , 2584 (1968), DDC AD-688551 |
| 3211 | Methods for Improving the Signal-to-Noise Ratio of Photon and Electron Beam Accessed Magnetic-Film Memory Systems | D. O. Smith | IEEE Trans. Magnetics <u>MAG-4</u> , 634 (1968), DDC AD-688567 |
| 3213 | Time Dependence in the Thermal Blooming of Laser Beams | R. L. Carman P. L. Kelley | Appl. Phys. Letters <u>12</u> , 241 (1968), DDC AD-671283 |
| 3214 | Indirect Experimental Evidence for the Existence of Hall and Pedersen Currents in the Auroral E Region | R. E. Newell W. G. Abel | Nature <u>218</u> , 454 (1968), DDC AD-673602 |
| 3215 | High-Power, Microwave Power Combiner Using a Series-Parallel Array of Diodes | W. J. Getsinger | Proc. IEEE (Letters) <u>56</u> , 1217 (1968), DDC AD-681585 |
| 3217 | A Useful Form of the Barankin Lower Bound and Its Application to PPM Threshold Analysis | R. J. McAulay L. P. Seidman | IEEE Trans. Inform. Theory <u>IT-15</u> , 273 (1969), DDC AD-692978 |
| 3218 | Band Model for Transition-Metal Chalcogenides Having Layer Structures with Occupied Trigonal-Bipyramidal Sites | J. B. Goodenough | Materials Res. Bull. <u>3</u> , 409 (1968), DDC AD-671274 |
| 3219 | Tuning of PbSe Lasers by Hydrostatic Pressure from 8 to 22 μ | J. M. Besson A. R. Calawa W. Paul | Phys. Rev. <u>173</u> , 699 (1968), DDC AD-681626 |
| 3220 | Type Conversion and p-n Junctions in n-CdTe Produced by Ion Implantation | J. P. Donnelly A. G. Foyt E. D. Hinkley W. T. Lindley J. O. Dimmock | Appl. Phys. Letters <u>12</u> , 303 (1968), DDC AD-673606 |
| 3223 | Upper and Lower Bounds for the Intermediate-Coupling Polaron Ground-State Energy | D. M. Larsen | Phys. Rev. <u>172</u> , 967 (1968), DDC AD-681584 |
| 3225 | Tri-Arc Furnace for Czochralski Growth with a Cold Crucible | T. B. Reed E. R. Pollard | J. Cryst. Growth <u>2</u> , 243 (1968), DDC AD-681586 |
| 3226 | Hot-Electron Transport in Al-Al ₂ O ₃ Triodes Produced by Plasma Oxidation | E. E. Huber, Jr. F. L. Johnston, Jr. C. T. Kirk, Jr. | J. Appl. Phys. <u>39</u> , 5104 (1968), DDC AD-688552 |
| 3227 | Radiation from Elliptic Current Rings | G. N. Tsandoulas | IEEE Trans. Antenna Propag. <u>AP-17</u> , 31 (1969), DDC AD-692976 |
| 3230 | Linear- \vec{k} Valence-Band Splitting in InSb | C. R. Pidgeon S. H. Groves | Phys. Rev. Letters <u>20</u> , 1003 (1968), DDC AD-670787 |

Journal Articles

JA No.

- | | | | |
|------|--|---|---|
| 3231 | A Generalized Approach to the Analysis of Infinite Planar Array Antennas | B. L. Diamond | Proc. IEEE <u>56</u> , 1837 (1968), DDC AD-688032 |
| 3233 | The Feasibility of Locating Waveguide Arcs by Sound Ranging | A. Browne | IEEE Trans. Microwave Theory Tech. <u>MTT-16</u> , 894 (1968) |
| 3235 | Discrete Fourier Transforms When the Number of Data Samples Is Prime | C. M. Rader | Proc. IEEE (Letters) <u>56</u> , 1107 (1968), DDC AD-677950 |
| 3236 | Estimation of Seismic Noise Structure Using Arrays | R. T. Lacoss E. J. Kelly M. N. Toksoz | Geophysics <u>34</u> , 21 (1969), DDC AD-688564 |
| 3237 | Observation of Interband Transitions in Arsenic | M. Maltz M. S. Dresselhaus | Phys. Rev. Letters <u>20</u> , 919 (1968), DDC AD-671289 |
| 3238 | Magnetic Devices | J. I. Raffel | Accepted <u>Handbook of Thin Film Technology</u> (McGraw-Hill, New York) |
| 3239 | Copper-Doped Germanium Detectors | T. M. Quist | Proc. IEEE (Letters) <u>56</u> , 1212 (1968), DDC AD-681590 |
| 3240 | Long-Wavelength Infrared Pb _{1-x} Sn _x Te Diode Lasers | J. F. Butler T. C. Harman | Appl. Phys. Letters <u>12</u> , 347 (1968), DDC AD-673601 |
| 3241 | A Concise Method for Reducing Photographic Spectrograph Calibrations | L. A. Jacobson | Appl. Optics <u>7</u> , 2210 (1968), DDC AD-688566 |
| 3242 | Nonlinear Filtering of Multiplied and Convolved Signals | A. V. Oppenheim R. W. Schafer T. G. Stockham | Proc. IEEE <u>56</u> , 1264 (1968) |
| 3243 | Fourth Test of General Relativity: Preliminary Results | I. I. Shapiro G. H. Pettengill M. E. Ash M. L. Stone W. B. Smith R. P. Ingalls R. A. Brockelman | Phys. Rev. Letters <u>20</u> , 1265 (1968), DDC AD-673608 |
| 3245 | The Case for the Radar Radius of Venus | M. E. Ash D. B. Campbell R. B. Dyce R. P. Ingalls R. Jurgens G. H. Pettengill I. I. Shapiro M. A. Slade W. B. Smith T. W. Thompson | Science <u>160</u> , 985 (1968); J. Atmos. Sci. <u>25</u> , 560 (1968), DDC AD-677724 |
| 3247 | Surface Tolerance of a Radar Calibration Sphere | M. L. Burrows | IEEE Trans. Antennas Propag. <u>AP-16</u> , 718 (1968), DDC AD-688565 |

| <u>JA No.</u> | | | |
|---------------|---|--|--|
| 3249 | Effect of Pressure on the Structure and Magnetic Properties of RbNiF_3 | J. A. Kafalas J. M. Longo | Materials Res. Bull. <u>3</u> , 501 (1968), DDC AD-674785 |
| 3251 | Detection and Parameter Estimation in an Amplitude-Comparison Monopulse Radar | E. M. Hofstetter D. F. DeLong | IEEE Trans. Inform. Theory <u>IT-15</u> , 22 (1969), DDC AD-689885 |
| 3253 | Cone Tip Scattering: Endfire Region | S. D. Weiner | IEEE Trans. Antennas Propag. <u>AP-17</u> , 78 (1969), DDC AD-692971 |
| 3255 | Intermediate-Coupling Polaron Effective Mass | D. M. Larsen | Phys. Rev. <u>174</u> , 1046 (1968), DDC AD-689021 |
| 3256 | Location of Electron and Hole Carriers in Graphite from Laser Magnetoreflexion Data | P. R. Schroeder M. S. Dresselhaus A. Javan | Phys. Rev. Letters <u>20</u> , 1292 (1968), DDC AD-673603 |
| 3257 | A Map of M-42 and M-43 at a Wavelength of 1.94 CM | M. A. Gordon | Australian J. Phys. <u>22</u> , 201 (1969), DDC AD-692975 |
| 3258 | An Electromagnetic Attitude Control System for a Synchronous Satellite | W. L. Black B. Howland E. A. Vrablok | J. Spacecraft <u>6</u> , 795 (1969) |
| 3259 | The Structure of the OH Source in W3 | J. M. Moran B. F. Burke A. H. Barrett A. E. E. Rogers J. C. Carter J. A. Ball D. D. Cudaback | Astrophys. J. <u>152</u> , L97 (1968), DDC AD-670637 |
| 3260 | Band Antiferromagnetism and the New Perovskite CaCrO_3 | J. B. Goodenough J. M. Longo J. A. Kafalas | Materials Res. Bull. <u>3</u> , 471 (1968), DDC AD-674792 |
| 3262 | The LEAP Language and Data Structure | P. D. Rovner J. A. Feldman | Accepted Commun. ACM |
| 3263 | Classification of OH Radio Emission Sources | J. A. Ball D. H. Staelin | Astrophys. J. <u>153</u> , L41 (1968), DDC AD-674787 |
| 3264 | Magneto-Optical Properties | J. G. Mavroides | Accepted <u>Optical Properties of Solids</u> , F. Abeles, Ed. (North-Holland, Amsterdam) |
| 3266 | Growth of CdSe Single Crystals by Temperature Gradient Solution Zoning in Excess Se | J. M. Steininger | Materials Res. Bull. <u>3</u> , 595 (1968), DDC AD-674790 |
| 3267 | Spherical Model as the Limit of Infinite Spin Dimensionality | H. E. Stanley | Phys. Rev. <u>176</u> , 718 (1968), DDC AD-688035 |

Journal Articles

JA No.

- | | | | |
|------|--|---|--|
| 3268 | Measurements of the Afternoon Radio Aurora at 1295 MHz | W. G. Abel R. E. Newell | J. Geophys. Res. <u>74</u> , 231 (1969), DDC AD-688553 |
| 3269 | Diagnosis of Single-Gate Failures in Combinational Circuits | G. D. Hornbuckle R. N. Spann | IEEE Trans. Computers <u>C-18</u> , 216 (1969) |
| 3270 | Microwave Acoustic Amplification in n-InSb at 9 GHz | K. W. Nill | Phys. Rev. Letters <u>21</u> , 82 (1968), DDC AD-674788 |
| 3271 | Icarus: Further Confirmation of the Relativistic Perihelion Precession | I. I. Shapiro M. E. Ash W. B. Smith | Phys. Rev. Letters <u>20</u> , 1517 (1968), DDC AD-673607 |
| 3272 | Conditions for Parametric Oscillations in an Abrupt Junction Non-Overdriven Varactor Doubler | A. I. Grayzel D. Parker | Proc. IEEE (Letters) <u>56</u> , 1589 (1968), DDC AD-681627 |
| 3273 | Optical Heterodyne Detection at 10.6 μm of the Beat Frequency Between a Tunable $\text{Pb}_{0.88}\text{Sn}_{0.12}\text{Te}$ Diode Laser and a CO_2 Gas Laser | E. D. Hinkley T. C. Harman C. Freed | Appl. Phys. Letters <u>13</u> , 49 (1968), DDC AD-677847 |
| 3274 | Magnetic Resonance | R. Weber | <u>Magnetism and Magnetic Materials - 1968 Digest</u> (Academic Press, New York, 1968) |
| 3275 | Descriptions of Outer d Electrons in Thiospinels | J. B. Goodenough | J. Phys. Chem. Solids <u>30</u> , 261 (1969), DDC AD-688569 |
| 3276 | Far-Infrared Photoconductivity in High-Purity Epitaxial GaAs | G. E. Stillman C. M. Wolfe I. Melngailis C. D. Parker P. E. Tannenwald J. O. Dimmock | Appl. Phys. Letters <u>13</u> , 83 (1968), DDC AD-681589 |
| 3277 | RMS Error in Radiometric Measurements When a Photographic Emulsion Is Used as a Detector | F. S. Weinstein | J. Opt. Soc. Am. <u>59</u> , 108 (1969), DDC AD-688570 |
| 3278 | Thin Films. I. Introduction. II. Magnetization. III. Uniaxial Anisotropy | M. S. Cohen K. J. Harte D. O. Smith | <u>Magnetism and Magnetic Materials - 1968 Digest</u> (Academic Press, New York, 1968) |
| 3280 | Pressure-Induced Structural Changes in the System $\text{Ba}_{1-x}\text{Sr}_x\text{RuO}_3$ | J. M. Longo J. A. Kafalas | Materials Res. Bull. <u>3</u> , 687 (1968), DDC AD-674791 |
| 3281 | Crystallographic and Magnetic Properties of Perovskite and Perovskite-Related Compounds | J. B. Goodenough J. M. Longo | Accepted <u>Landolt-Bornstein Tabellen</u> (Springer-Verlag) |
| 3283 | Feasibility of Lorentz Readout of a High-Density Fast Magnetic Memory | M. S. Cohen | IEEE Trans. Magnetics <u>MAG-4</u> , 639 (1968), DDC AD-688576 |

JA No.

- | | | | |
|------|---|---|--|
| 3284 | Non-Metals | N. Menyuk | <u>Magnetism and Magnetic Materials - 1968 Digest</u> (Academic Press, New York, 1968) |
| 3285 | Excitation of a Grounded Dielectric Slab by a Horizontal Dipole | G. N. Tsandoulas | IEEE Trans. Antennas Propag. <u>AP-17</u> , 156 (1969) |
| 3286 | Homogeneity Ranges and Te ₂ -Pressure Along the Three-Phase Curves for Bi ₂ Te ₃ (c) and a 55-58 at.% Te, Peritectic Phase | R. F. Brebrick | J. Phys. Chem. Solids <u>30</u> , 719 (1969), DDC AD-688027 |
| 3287 | Scattering Properties of Venus at 3.8 cm | R. P. Ingalls J. V. Evans | Astron. J. <u>74</u> , 258 (1969) DDC AD-689901 |
| 3289 | Determination of Magnetic Anisotropy and Porosity from the Approach to Saturation of Polycrystalline Ferrites | G. F. Dionne | J. Appl. Phys. <u>40</u> , 1839 (1969) |
| 3290 | The Pointing Calibration of the Haystack Antenna | M. L. Meeks J. A. Ball A. B. Hull | IEEE Trans. Antennas Propag. <u>AP-16</u> , 746 (1968), DDC AD-688043 |
| 3291 | The Design of Clutter-Resistant Radar Waveforms with Limited Dynamic Range | D. F. DeLong, Jr. E. M. Hofstetter | IEEE Trans. Inform. Theory <u>IT-15</u> , 376 (1969), DDC AD-694142 |
| 3292 | On Digital Filtering | C. M. Rader | IEEE Trans. Audio Electroacoust. <u>AU-16</u> , 303 (1968), DDC AD-688554 |
| 3293 | Radiation from Microstrip Resonators | E. J. Denlinger | IEEE Trans. Microwave Theory Tech. <u>MTT-17</u> , 235 (1969), DDC AD-694143 |
| 3294 | Parameters of Microstrip Transmission Lines and of Coupled Pairs of Microstrip Lines | T. G. Bryant J. A. Weiss | IEEE Trans. Microwave Theory Tech. <u>MTT-16</u> , 1021 (1969), DDC AD-688037 |
| 3295 | Low Level Coherent and Incoherent Detection in the Infrared | R. J. Keyes T. M. Quist | Accepted <u>Semiconductors and Semimetals</u> , Vol. 7 (Academic Press, New York) |
| 3296 | Photoconductivity in Single-Crystal Pb _{1-x} Sn _x Te | I. Melngailis T. C. Harman | Appl. Phys. Letters <u>13</u> , 180 (1968), DDC AD-688024 |
| 3298 | Space-Filling Curves and Their Application to Bandwidth Reduction | T. Bially | Accepted IEEE Trans. Inform. Theory |
| 3299 | Characteristics of a Single-Frequency Sealed-Off CO ₂ Amplifier | R. J. Carbone | IEEE J. Quant. Electron. <u>QE-5</u> , 48 (1969), DDC AD-692969 |
| 3300 | Metallic Inclusions and Cellular Substructure in Pb _{1-x} Sn _x Te Single Crystals | J. F. Butler T. C. Harman | J. Electrochem. Soc. <u>116</u> , 260 (1969), DDC AD-688556 |

Journal Articles

JA No.

- | | | | |
|-------|--|--|---|
| 3301 | Effective-Mass Theory for Polarons in External Fields | D. M. Larsen | Phys. Rev. <u>180</u> , 919 (1969) |
| 3302 | Scientific Uses of Pulsars | C. C. Counselman I. I. Shapiro | Science <u>162</u> , 352 (1968), DDC AD-689022 |
| 3303 | Quenchable Effects of High Pressures and Temperatures on the Cubic Monoxide of Titanium | M. D. Banus | Materials Res. Bull. <u>3</u> , 723 (1968), DDC AD-677839 |
| 3304 | Self-Modulation, Self-Steepening, and Spectral Development of Light in Small-Scale Trapped Filaments | T. K. Gustafson J. P. Taran H. A. Haus J. R. Lifshitz P. L. Kelley | Phys. Rev. <u>177</u> , 306 (1969), DDC AD-688036 |
| 3305 | A Note on Digital Filter Synthesis | B. Gold K. L. Jordan, Jr. | Proc. IEEE (Letters) <u>56</u> , 1717 (1968), DDC AD-688555 |
| 3306 | Band Structure and Electrical Conductivity of NiO | J. Feinleib D. Adler | Phys. Rev. Letters <u>21</u> , 1010 (1968), DDC AD-681587 |
| 3307 | A Direct Search Procedure for Designing Finite Duration Impulse Response Filters | B. Gold K. L. Jordan, Jr. | IEEE Trans. Audio Electroacoust. <u>AU-17</u> , 33 (1969), DDC AD-694141 |
| 3308 | Conditions for Microwave Radiations from Excited OH Λ -Doublet States | M. M. Litvak B. Zuckerman D. F. Dickinson | Astrophys. J. <u>156</u> , 875 (1969), DDC AD-692970 |
| 3311 | Effects of Pressure on the Magnetic Properties of MnAs | N. Menyuk J. A. Kafalas K. Dwight, Jr. J. B. Goodenough | Phys. Rev. <u>177</u> , 942 (1969), DDC AD-689025 |
| 3312 | Effect of the Molecular Interaction Between Anisotropic Molecules on the Optical Kerr Effect: Field-Induced Phase Transition | J. Hanus | Phys. Rev. <u>178</u> , 420 (1969), DDC AD-688994 |
| 3313 | Exact Solution for a Linear Chain of Isotropically Interacting Classical Spins of Arbitrary Dimensionality | H. E. Stanley | Phys. Rev. <u>179</u> , 570 (1969), DDC AD-692923 |
| 3316 | Preparation of $\{A_3^{2+}\}[\text{Te}_2](B^{2+})$ -Garnets | H. M. Kasper | Materials Res. Bull. <u>3</u> , 765 (1968), DDC AD-677840 |
| 3317A | The Fermi Surface and Optical Properties of Copper | G. F. Dresselhaus | Solid State Commun. <u>7</u> , 419 (1969), DDC AD-689898 |
| 3320 | Single Crystal Lead-Tin Chalcogenides | I. Melngailis T. C. Harman | Accepted <u>Semiconductors and Semimetals</u> , Vol. 7 (Academic Press, New York) |
| 3322 | On the Doppler Effect in Plane Wave Scattering by Moving Conducting Bodies | G. N. Tsandoulas | Proc. IEEE (Letters) <u>56</u> , 1749 (1968), DDC AD-689575 |

| JA No. | | | |
|--------|---|--|---|
| 3323 | Covariant Space-Time Operators, Infinite-Component Wavefunctions, and Proper-Time Schrödinger Equations | H. E. Moses | Ann. Phys. <u>52</u> , 444 (1969), DDC AD-692924 |
| 3325 | Radar Measurements of Martian Topography | G. H. Pettengill C. C. Counselman L. P. Rainville I. I. Shapiro | Astron. J. <u>74</u> , 461 (1969) |
| 3326 | Characterization of Phases in the 50-60 at.% Te Region of the Bi-Te System by X-Ray Powder Diffraction Patterns | R. F. Brebrick | J. Appl. Crystal. <u>1</u> , 241 (1968), DDC AD-689897 |
| 3328 | Polymorphism in Silver Telluride at High Pressures and Temperatures | M. D. Banus M. C. Finn | J. Electrochem. Soc. <u>116</u> , 91 (1969), DDC AD-688038 |
| 3329 | Isolation of Junction Devices in GaAs Using Proton Bombardment | A. G. Foyt W. T. Lindley C. M. Wolfe J. P. Donnelly | Solid State Electron. <u>12</u> , 209 (1969), DDC AD-694145 |
| 3333 | Generation of High Microwave Power Using Arrays of Varactor Diodes | D. Parker A. I. Grayzel | J. Spacecraft <u>5</u> , 1368 (1968), DDC AD-688039 |
| 3334 | Speech Analysis-Synthesis System Based on Homomorphic Filtering | A. V. Oppenheim | J. Acoust. Soc. Am. <u>45</u> , 458 (1969), DDC AD-689574 |
| 3335 | Transport Equation for a Fermi Liquid in Random Scattering Centers. I. A Quasiparticle Description in the Macroscopic and Low-Temperature Limit | J. L. Sigel P. N. Argyres | Phys. Rev. <u>178</u> , 1016 (1969), DDC AD-689899 |
| 3336 | Epitaxially Grown Guard Rings for GaAs Diodes | C. M. Wolfe W. T. Lindley | J. Electrochem. Soc. <u>116</u> , 276 (1969), DDC AD-688571 |
| 3338 | A Cross LPD Array Antenna on a Conducting Cone | P. R. Wu | IEEE Trans. Antennas Propag. <u>AP-17</u> , 100 (1969), DDC AD-692972 |
| 3340 | Infrared Pumping of Interstellar OH | M. M. Litvak | Astrophys. J. <u>156</u> , 471 (1969), DDC AD-689902 |
| 3342 | X-Band Gas-Tube Pulsed Attenuator for Maser Protection | A. A. L. Browne C. E. Muehe | Accepted IEEE Trans. Electron Devices |
| 3343 | Effect of Pore Size on Remanence Ratios of Magnetic Materials | G. F. Dionne | J. Appl. Phys. <u>40</u> , 431 (1969), DDC AD-688572 |
| 3344 | SHF Tunnel Diode Switching-Mode Frequency Divider | R. H. Domnitz | Proc. IEEE <u>57</u> , 216 (1969), DDC AD-688028 |
| 3345 | Optical Properties of Mg ₂ Si, Mg ₂ Ge and Mg ₂ Sn from 0.6 to 11.0 eV at 77°K | W. J. Scouler | Phys. Rev. <u>178</u> , 1353 (1969), DDC AD-689884 |

Journal Articles

JA No.

- | | | | |
|------|---|---------------------------------|--|
| 3346 | A New Series of Rare Earth Garnets $\text{Ln}^{3+}_3\text{M}_2\text{Li}^+_3\text{O}_{12}$ (M = Te, W) | H. M. Kasper | Inorg. Chem. <u>8</u> , 1000 (1969), DDC AD-693662 |
| 3347 | Exchange Interactions and Raman Scattering from Spin Excitations in RbNiF_3 | S. R. Chinn H. J. Zeiger | Phys. Rev. Letters <u>21</u> , 1589 (1968), DDC AD-688025 |
| 3348 | Temperature Dependence of Raman Linewidth and Shift in α -Quartz | A. S. Pine P. E. Tannenwald | Phys. Rev. <u>178</u> , 1424 (1969), DDC AD-689882 |
| 3350 | The P-T Phase Diagram of InSb at High Temperatures and Pressures | M. D. Banus M. C. Lavine | J. Appl. Phys. <u>40</u> , 409 (1969), DDC AD-688029 |
| 3351 | Magnetic Anisotropy and Magnetostriction Constants of Substituted Lithium Ferrites at 300°K | G. F. Dionne | Accepted Phys. Rev. |
| 3353 | LnCrTeO_6 - A New Series of Compounds Based on the PbSb_2O_6 Structure | H. M. Kasper | Materials Res. Bull. <u>4</u> , 33 (1969), DDC AD-688573 |
| 3356 | A Millimeter-Wave Lunar Radar | J. J. G. McCue E. A. Crocker | Microwave J. <u>11</u> , 59 (1968), DDC AD-688568 |
| 3358 | Boltzmann-Equation Study of Hot-Electron Relaxation in Metals | R. W. Davies | Phys. Rev. <u>181</u> , 1118 (1969) |
| 3359 | Performance of Cadmium Sulfide Thin Film Solar Cells in a Space Environment | A. G. Stanley | Proc. IEEE <u>57</u> , 692 (1969) |
| 3362 | Theory and Practice of Ionosphere Study by Thomson Scatter Radar | J. V. Evans | Proc. IEEE <u>57</u> , 496 (1969) |
| 3363 | A Note on the Mean-Square Behavior of a First-Order Random Sampling System | O. A. Z. Leneman | IEEE Trans. Automat. Control <u>AC-13</u> , 450 (1968), DDC AD-689023 |
| 3364 | Random Sampling of Random Processes: Mean-Square Behavior of a First-Order Closed-Loop System | O. A. Z. Leneman | IEEE Trans. Automat. Control <u>AC-13</u> , 429 (1968), DDC AD-688033 |
| 3365 | Photoluminescence of Metals | A. Mooradian | Phys. Rev. Letters <u>22</u> , 185 (1969), DDC AD-688030 |
| 3367 | Tropical Air Density Below 80 km from Hypersonic Sphere Measurements | J. E. Salah | J. Appl. Meteorol. <u>8</u> , 711 (1969) |
| 3369 | Inversion Asymmetry and Warping Induced Interband Magneto-Optical Transition in InSb | C. R. Pidgeon S. H. Groves | Accepted Phys. Rev. |

Journal Articles

| JA No. | | | |
|--------|--|--|---|
| 3371 | Bismuth Doped $Pb_{1-x}Sn_xTe$ Diode Lasers with Low-Threshold Currents | J. F. Butler T. C. Harman | IEEE J. Quant. Electron. <u>QE-5</u> , 50 (1969), DDC AD-693663 |
| 3373 | Interstellar Sulfur Hydride: A Search for the 111-Megahertz Lines | M. L. Meeks M. A. Gordon M. M. Litvak | Science <u>163</u> , 173 (1969), DDC AD-688550 |
| 3374 | Dispersion Characteristics of an Open Interdigital-Line Structure | P. R. Wu | IEEE Trans. Microwave Theory Tech. <u>MTT-17</u> , 159 (1969) |
| 3376 | A Radar Study of the III Region Orion B | M. A. Gordon | Accepted Astrophys. J. |
| 3379 | Beam Lead Substrate Assembly Techniques and Applications | R. E. McMahon R. A. Cohen | Electronics <u>41</u> , No. 25, 95 (1968) |
| 3380 | Partial Pressures of Zn and Te_2 over ZnTe up to 917 °C | R. F. Brebrick | J. Electrochem. Soc. <u>116</u> , 1274 (1969) |
| 3381 | Transmitted Power Maximization in Communication Satellites | A. Braga-Illa D. M. Snider | J. Spacecraft <u>6</u> , 173 (1969), DDC AD-670453 |
| 3383 | Comparison of the Independent Grain and Dipole Narrowing Theories of Ferrimagnetic Resonance Linewidth | G. F. Dionne | J. Appl. Phys. <u>40</u> , 3061 (1969) |
| 3386 | Transient and Steady State Thermal Self-Focusing | R. L. Carman A. Mooradian P. L. Kelley A. Tufts | Appl. Phys. Letters <u>14</u> , 136 (1969) |
| 3387 | Infrared Transmission, Magnetic Birefringence, and Faraday Rotation in EuO | J. O. Dimmock C. E. Hurwitz T. B. Reed | Appl. Phys. Letters <u>14</u> , 49 (1969), DDC AD-689886 |
| 3388 | A Bound on the Output of a Circular Convolution with Application to Digital Filtering | A. V. Oppenheim C. Weinstein | IEEE Trans. Audio Electroacoust. <u>AU-17</u> , 120 (1969) |
| 3389 | Gain Saturation and Diffusion in CO_2 Lasers | C. P. Christensen C. Freed H. A. Haus | IEEE J. Quant. Electron. <u>QE-5</u> , 276 (1969) |
| 3390 | A Shallow-Cavity UHF Crossed-Slot Antenna | C. A. Lindberg | IEEE Trans. Antennas Propag. <u>AP-17</u> , 558 (1969) |
| 3391 | High Power Varactor Package for Multichip Application | D. D. Tang | Proc. IEEE (Letters) <u>57</u> , 799 (1969) |
| 3392 | High-Resolution Frequency-Wavenumber Spectrum Analysis | J. Capon | Proc. IEEE <u>57</u> , 1408 (1969) |
| 3393 | Silicon Dioxide Thermally Grown in a Silicon Nitride Ambient | R. A. Cohen R. Wheeler | J. Electrochem. Soc. <u>116</u> , 506 (1969), DDC AD-688574 |

Journal Articles

| JA No. | | | |
|--------|--|---|--|
| 3394 | Far Infrared and Submillimeter Impact Ionization Modulator | I. Melngailis P. E. Tannenwald | Proc. IEEE (Letters) <u>57</u> , 806 (1969) |
| 3397 | The Chirp z-Transform Algorithm | L. R. Rabiner R. W. Schafer C. M. Rader | Bell Syst. Tech. J. <u>48</u> , 1249 (1969); IEEE Trans. Audio Electroacoust. <u>AU-17</u> , 86 (1969) |
| 3400 | Magnetoreflexion Studies in Arsenic | M. Maltz M. S. Dresselhaus | Phys. Rev. <u>182</u> , 741 (1969) |
| 3404 | Magnetic Anisotropy and Magnetostriction of $Y_3Mn_{0.1}Fe_{4.9}O_{12}$ at 300°K | G. F. Dionne P. J. Pauli | Materials Res. Bull. <u>4</u> , 171 (1969), DDC AD-688282 |
| 3406 | Method for Fabricating High Frequency Surface Wave Transducers | H. I. Smith | Rev. Sci. Instr. <u>40</u> , 729 (1969) |
| 3411 | Report on International Conference on Silicon Carbide | J. R. O'Connor | J. Cryst. Growth <u>5</u> , 152 (1969) |
| 3412A | Experimental Comparison of Hartree-Fock and Slater Exchange Potentials in Aluminum from the Charge Density Point of View | P. M. Raccach V. E. Henrich | Accepted J. Quant. Chem. |
| 3414 | Reports On Recent Foreign Conferences: A Summary Report on Recent Foreign Conferences on Magnetism | D. O. Smith | J. Appl. Phys. <u>40</u> , 1428 (1969) |
| 3417 | Space-Time Symmetry Restrictions on Transport Coefficients. III. Thermogalvanomagnetic Coefficients | W. H. Kleiner | Phys. Rev. <u>182</u> , 705 (1969) |
| 3421 | Nuclear Linewidth Measurements of Mn^{55} in Antiferromagnetic $CsMnF_3$ and $RbMnF_3$ | R. Weber M. H. Seavey | Solid State Commun. <u>7</u> , 619 (1969), LDC AD-689983 |
| 3422 | Remarks on the Fast Fourier Transform | C. M. Rader | IEEE Trans. Audio Electroacoust. <u>AU-17</u> , 72 (1969) |
| 3423 | Brillouin Scattering Study of Acoustic Attenuation in Fused Quartz | A. S. Pine | Accepted Phys. Rev. |
| 3426 | GaAs Schottky Barrier Avalanche Photodiodes | W. T. Lindley R. J. Phelan, Jr. C. M. Wolfe A. G. Foyt | Appl. Phys. Letters <u>14</u> , 197 (1969) |
| 3427 | Homodyne Detection of Infrared Radiation from a Moving Diffuse Target | M. C. Teich | Proc. IEEE <u>57</u> , 786 (1969) |

Journal Articles

| JA No. | | | |
|--------|---|---|--|
| 3428 | A Comparison of Roundoff Noise in Floating Point and Fixed Point Digital Filter Realizations | C. Weinstein A. V. Oppenheim | Proc. IEEE (Letters) <u>57</u> , 1181 (1969) |
| 3430 | Low-Frequency Diffraction by Moving Conducting Strips | G. N. Tsandoulas | J. Opt. Soc. Am. <u>59</u> , 1357 (1969) |
| 3431 | Some Problems in the Theory of Guided Microsonic Waves | R. A. Waldron | Accepted IEEE Trans. Microwave Theory Tech. |
| 3433 | Parallel Processing Techniques for Estimating Pitch Periods of Speech in the Time Domain | B. Gold L. Rabiner | J. Acoust. Soc. Am. <u>46</u> , 442 (1969) |
| 3434 | A Simulation of Stationkeeping for Synchronous Satellites | M. C. Crocker, II | J. Spacecraft <u>6</u> , 616 (1969) |
| 3436 | Pb ₂ M ₂ O _{7-x} (M = Ru, Ir, Re) - Preparation and Properties of Oxygen Deficient Pyrochlores | J. M. Longo P. M. Raccach J. B. Goodenough | Materials Res. Bull. <u>4</u> , 191 (1969), DDC AD-693666 |
| 3437 | The Effect of Pressure and B-Cation Size on the Crystal Structure of CsBF ₃ Compounds (B = Mn, Fe, Co, Ni, Zn, Mg) | J. M. Longo J. A. Kafalas | J. Solid State Chem. <u>1</u> , 103 (1969) |
| 3441A | Magnetoreflexion Studies on the Band Structure of Bismuth-Antimony Alloys | E. J. Tichovolsky J. G. Mavroides | Solid State Commun. <u>7</u> , 927 (1969), DDC AD-693671 |
| 3442 | Effects of Light on the Charge State of InSb-MOS Devices | W. E. Krag R. J. Phelan, Jr. J. O. Dimmock | J. Appl. Phys. <u>40</u> , 3661 (1969) |
| 3445 | Experimental Techniques in Raman Spectroscopy | A. Mooradian | SPEX Speaker Ramalogs <u>2</u> (1969) |
| 3447 | Polymorphism in Selenospinel - A High Pressure Phase of CdCr ₂ Se ₄ | M. D. Banus M. C. Lavine | J. Solid State Chem. <u>1</u> , 109 (1969) |
| 3449 | Magnetoemission Experiments in Pb _{1-x} Sn _x Te | J. F. Butler | Solid State Commun. <u>7</u> , 909 (1969) |
| 3453 | A Comparison of Three Non-linear Filters | R. P. Wishner J. A. Tabaczynski M. A. S. S. | Accepted Automatica |
| 3456 | Equivalence of the Rayleigh Solution and the Extended-Boundary-Condition Solution for Scattering Problems | M. L. Burrows | Electron. Letters <u>5</u> , 277 (1969) |
| 3460 | Metallic Oxides | J. B. Goodenough | Accepted <u>Progress in Solid State Chemistry</u> (Pergamon, New York) |

Journal Articles

JA No.

- | | | | |
|------|--|--|--|
| 3463 | Temperature and Compositional Dependence of Laser Emission in $Pb_{1-x}Sn_xSe$ | T. C. Harman A. R. Calawa I. Melngailis J. O. Dimmock | Appl. Phys. Letters <u>14</u> , 333 (1969), DDC AD-694136 |
| 3465 | The Strange Story of the OH Molecule in Interstellar Space | J. M. Moran | Accepted Science J. |
| 3467 | Absolute Experimental X-Ray Form Factor of Aluminum | P. M. Raccach V. E. Heinrich | Accepted Phys. Rev. |
| 3468 | Magneto spectroscopy of Shallow Donors in GaAs | G. E. Stillman C. M. Wolfe J. O. Dimmock | Solid State Commun. <u>7</u> , 921 (1969) |
| 3470 | Spin-Polarized Splittings in the Temperature-Dependent Reflectance of EuO | J. Feinleib W. J. Scouler J. O. Dimmock J. Hanus T. B. Reed C. R. Pidgeon | Phys. Rev. Letters <u>22</u> , 1385 (1969) |
| 3474 | Polaron Zeeman Effect in AgBr | R. C. Brandt D. M. Larsen P. P. Crooker G. B. Wright | Phys. Rev. Letters <u>23</u> , 240 (1969), DDC AD-694139 |
| 3476 | Direct Observation of the Lorentzian Line Shape as Limited by Quantum Phase Noise in a Laser above Threshold | E. D. Hinkley C. Freed | Phys. Rev. Letters <u>23</u> , 277 (1969), DDC AD-694147 |
| 3485 | Velocity and Attenuation of Hypersonic Waves in Liquid Nitrogen | A. S. Pine | Accepted J. Chem. Phys. |
| 3486 | A Beam Lead Substrate Package for a Six Stage TTL Shift Register | F. Bachner R. A. Cohen R. Mountain R. E. McMahon | Accepted <u>Microelectronics and Reliability</u> , Vol. 8 (Pergamon, New York) |
| 3489 | Venus: Mapping the Surface Reflectivity by Radar Interferometry | A. E. E. Rogers R. P. Ingalls | Science <u>165</u> , 797 (1969) |
| 3490 | Hydroxyl and Water Masers in Protostars | M. M. Litvak | Science <u>165</u> , 855 (1969) |
| 3491 | Perturbation of the Refractive Index of Absorbing Media by a Pulsed Laser Beam | P. R. Longaker M. M. Litvak | Accepted J. Appl. Phys. |
| 3493 | Water Vapor: Observations of Galactic Sources | M. L. Meeks J. C. Carter A. H. Barrett P. R. Schwartz J. W. Waters W. E. Brown, III | Science <u>165</u> , 180 (1969) |

Journal Articles

| JA No. | Title | Author(s) | Journal Reference |
|--------|--|--|---|
| 3497 | New Electron Spin Waves in Nonmagnetic Conductors | F. A. Blum | Phys. Rev. Letters <u>23</u> , 73 (1969), DDC AD-694146 |
| 3507 | Magnetic Field Dependence of Laser Emission in $Pb_{1-x}Sn_xSe$ Diodes | A. R. Calawa J. O. Dimmock T. C. Harman I. Melngailis | Phys. Rev. Letters <u>23</u> , 7 (1969), DDC AD-694137 |
| 3542 | An Algol-Based Associative Language | J. A. Feldman P. D. Rovner | Commun. ACM <u>12</u> , 439 (1969) |

MEETING SPEECHES

| <u>MS No.</u> | | | |
|---------------|--|---|--|
| 703 | Time-Optimal Velocity Control of a Spinning Space Body | M. Athans P. L. Falb R. T. Lacoss | Trans. IEEE, Appl. and Indust. <u>82</u> , 206 (1963), DDC AD-659542 |
| 710 | Minimum-Fuel Control of Second-Order Systems with Real Poles | M. Athans | Trans. IEEE, Appl. and Indust. <u>83</u> , 148 (1964), DDC AD-658998 |
| 895 | Rapid-Freeze Method for Growth of Bismuth Single Crystals | S. Fischler | Trans. Met. Soc. AIME <u>230</u> , 340 (1964), DDC AD-614318 |
| 946 | Effects of High-Pressure, High-Temperature Treatment on the Properties of Electronic Materials | E. P. Warekois | Special Technical Publication No. 374, ASTM (1965), DDC AD-618452 |
| 989 | The Phase Transition Region of $\text{PrO}_{1.5}$ | D. S. Chapin M. C. Finn J. M. Honig | Proc. Fourth Rare Earth Conf., Tempe, Arizona, Apr. 1964, DDC AD-642212 |
| 1110A | Principles of Injection Lasers | R. H. Rediker | Chpt. 13 of <u>Optical and Electro-Optical Information Processing</u> (MIT Press, Cambridge, 1965) |
| 1126 | Separation of Gyromagnetic from Gyroelectric Optical Effects in Ferromagnets | D. O. Smith | Proc. Intl. Conf. on Magnetism, Nottingham, Sept. 1964 |
| 1128 | Static and Dynamic Theory of Magnetic Fine Structure in Thin Films | K. J. Harte | Proc. Intl. Conf. on Magnetism, Nottingham, Sept. 1964 |
| 1156A | Application of Planetary Measurements to Planetary Radius and Rotation Rate Determinations | I. I. Shapiro | Trans. Intl. Astron. Union <u>12B</u> , 615 (1966) |
| 1176 | Magnetic Properties of MnCr_2S_4 | N. Menyuk K. Dwight A. Wold | J. Appl. Phys. <u>36</u> , 1088 (1965), DDC AD-616439 |
| 1240 | Experiments on Systems | J. L. Morey D. B. Yntema | Proc. Second Congress on Information System Sciences, Hot Springs, Nov. 1964, DDC AD-628558 |
| 1293 | Spin-Orbit Interaction in Graphite | G. F. Dresselhaus M. S. Dresselhaus J. G. Mavroides | Carbon <u>4</u> , 433 (1966), DDC AD-648677 |
| 1294 | Energy Band Parameter Determination in Graphite | M. S. Dresselhaus J. G. Mavroides | Carbon <u>3</u> , 465 (1966), DDC AD-642210 |
| 1330 | Radar Observations of Meteor Deceleration | J. V. Evans | Proc. Meteor Orbits and Dust Symp., Cambridge, Aug. 1965; NASA Sp-135, SCA Vol. 11 (1967) |

Meeting Speeches

MS No.

- | | | | |
|-------|---|--|---|
| 1353 | Scattering and Transmission of Electromagnetic Waves at a Statistically Rough Boundary Between Two Dielectric Media | T. Hagfors | <u>Electromagnetic Wave Theory</u> (Pergamon, New York, 1967) |
| 1354 | Radar Studies of the Moon | J. V. Evans | Radio Sci. <u>69D</u> , 1637 (1965) |
| 1394 | Magneto-Optical Effects in Solids | G. F. Dresselhaus | Estratto Rend. E. Fermi School <u>34</u> , 198 (1966) |
| 1404 | A Comparison of Seismic Array Processing Methods | P. E. Green, Jr. E. J. Kelly M. J. Levin | Geophys. J. R. Astr. Soc. <u>11</u> , 67 (1966), DDC AD-649184 |
| 1422 | Theory of the Method of Kinetic Equations for Quantum Systems | P. N. Argyres | <u>Lectures in Theoretical Physics</u> , Vol. 8A (Univ. of Colorado Press, 1966) |
| 1443 | Coding for a Class of Unknown Channels | I. G. Stiglitz | IEEE Trans. Inform. Theory <u>IT-12</u> , 189 (1966), DDC AD-642215 |
| 1451 | Magnetoreflexion Studies in the Band Structure of Antimony | M. S. Dresselhaus J. G. Mavroides | <u>Optical Properties and Electronic Structure of Metals and Alloys</u> (North-Holland, Amsterdam, 1966), DDC AD-642213 |
| 1457 | Dynamics of Orbiting Dust Particles | I. I. Shapiro | Proc. Meteor. Orbits and Dust Symp., Cambridge, Aug. 1965; NASA Sp-135, SCA Vol. 11 (1967) |
| 1459 | Ferromagnetism in CdCr_2Se_4 and CdCr_2S_4 | N. Menyuk K. Dwight R. J. Arnott A. Wold | J. Appl. Phys. <u>37</u> , 1387 (1966), DDC AD-642203 |
| 1463 | Reduced Manganese Moment in Manganese Chromite | K. Dwight N. Menyuk J. Feinleib A. Wold | J. Appl. Phys. <u>37</u> , 962 (1966), DDC AD-640999 |
| 1464 | Single-Crystal Growth and Properties of the Perovskites LaVO_3 and YVO_3 | D. B. Rogers A. Ferretti D. H. Ridgley R. J. Arnott J. B. Goodenough | J. Appl. Phys. <u>37</u> , 1431 (1966), DDC AD-642229 |
| 1467 | Theory of Large-Angle Ripple in Magnetic Films | K. J. Harte | J. Appl. Phys. <u>37</u> , 1295 (1966), DDC AD-640536 |
| 1468A | Origin of Quadrature Flux in Magnetic Films | K. J. Harte M. S. Cohen G. P. Weiss D. O. Smith | Phys. Stat. Sol. <u>15</u> , 225 (1966), DDC AD-642176 |
| 1469 | Antiferromagnetic Resonance in RbMnF_3 Below the Spin-Flop Transition | W. J. Ince | J. Appl. Phys. <u>37</u> , 1132 (1966), DDC AD-640527 |

| <u>MS No.</u> | | | |
|---------------|---|---|--|
| 1470 | Sensitive Pulsed Magneto-resistive Measurement of Magnetic Film H_k | R. C. Johnston | J. Appl. Phys. <u>37</u> , 1466 (1966), DDC AD-640533 |
| 1472 | Measured Relaxation Times for the Uniaxial-Anisotropy Spectrum in Nonmagnetostrictive Permalloy Films | D. O. Smith G. P. Weiss K. J. Harte | J. Appl. Phys. <u>37</u> , 1464 (1966), DDC AD-640535 |
| 1473 | Temperature Stabilization of Unsaturated Microwave Ferrite Devices | E. Stern W. J. Ince | J. Appl. Phys. <u>37</u> , 1075 (1966), DDC AD-641010 |
| 1474 | Temperature Variation of the Spin-Wave Dispersion Relation | R. Weber P. E. Tannenwald | J. Appl. Phys. <u>37</u> , 1058 (1966), DDC AD-642207 |
| 1475 | Covalency Criterion for Localized vs Collective Electrons in Oxides with the Perovskite Structure | J. B. Goodenough | J. Appl. Phys. <u>37</u> , 1415 (1966), DDC AD-640998 |
| 1477 | Crystallographic Study of Several Chromium Spinel | P. M. Raccach R. J. Bouchard A. Wold | J. Appl. Phys. <u>37</u> , 1436 (1966), DDC AD-641000 |
| 1481 | Description of Transition-Metal Compounds: Application to Several Sulfides | J. B. Goodenough | Proc. Colloque Intl. Derives Semimetalliques, Paris, Sept. 1965 |
| 1484 | Radar Signatures of the Planets | J. V. Evans | Ann. N. Y. Acad. Sci. <u>140</u> , 196 (1966) |
| 1501 | Saturable Shielding - A Technique for Nonlinear Coupling in Magnetic Circuits | R. Berger T. S. Crowther J. I. Raffel | J. Appl. Phys. <u>37</u> , 1359 (1966), DDC AD-642175 |
| 1518 | A Digital System for On-Line Studies of Dynamical Systems | T. C. Bartee J. B. Lewis | Proc. Spring Joint Computer Conf., Boston, Apr. 1966, DDC AD-642172 |
| 1551 | A Real-Time Computing System for LASA | H. W. Briscoe P. L. Fleck, Jr. | Proc. Spring Joint Computer Conf., Boston, Apr. 1966, DDC AD-642202 |
| 1554 | Spectroscopic Studies of Laser-Produced Hydrogen Plasma | M. M. Litvak D. F. Edwards | IEEE J. Quant. Electron. <u>QE-2</u> , 486 (1966), DDC AD-653676 |
| 1558 | Possibility of Self-Focusing Due to Intensity Dependent Anomalous Dispersion | A. Javan P. L. Kelley | IEEE J. Quant. Electron. <u>QE-2</u> , 470 (1966), DDC AD-651532 |
| 1559 | Statistical Properties of Random Pulse Trains | O. A. Z. Leneman | IEEE Intl. Conv. Record, Pt. 6 (1966), DDC AD-642226 |

Meeting Speeches

MS No.

- | | | | |
|-------|--|---|---|
| 1572 | A Switching Circulator: S-Band; Stripline; Remanent; 15 kilowatts; 10 microseconds; Temperature-Stable | F. Betts D. H. Temme J. A. Weiss | IEEE Trans. Microwave Theory Tech. <u>MTT-14</u> , 665 (1966), DDC AD-653499 |
| 1573A | Performance of a Ring Circulator Designed by a Synthesis Technique | S. D. Ewing, Jr. J. A. Weiss | NEREM Record (1966), DDC AD-653500 |
| 1608 | Oscillatory Magneto-Absorption in the Direct Transition in the Layer Compound Gallium Selenide at 1.5°K | J. Halpern | J. Phys. Soc. Japan <u>21S</u> , 180 (1966), DDC AD-646483 |
| 1609 | Polaron Induced Anomalies in InSb | D. M. Larser E. J. Johnson | J. Phys. Soc. Japan <u>21S</u> , 443 (1966), DDC AD-646484 |
| 1610 | Sulfur Donors in Silicon: Infrared Transitions and Effects of Calibrated Uniaxial Stress | W. E. Krag W. H. Kleiner H. J. Zeiger S. Fischler | J. Phys. Soc. Japan <u>21S</u> , 230 (1966), DDC AD-646490 |
| 1611 | Magneto-Piezo-Optical Experiments in Semiconductors | J. G. Mavroides M. S. Dresselhaus R. L. Aggarwal G. F. Dresselhaus | J. Phys. Soc. Japan <u>21S</u> , 184 (1966), DDC AD-646479 |
| 1612 | Magneto-Acoustic Effects in n-InSb at 9GHz | K. W. Nill A. L. McWhorter | J. Phys. Soc. Japan <u>21S</u> , 755 (1966), DDC AD-646478 |
| 1629A | Narrow Band Electrons in Transition-Metal Oxides | J. B. Goodenough | Czech. J. Phys. <u>B17</u> , 304 (1967), DDC AD-667872 |
| 1657 | Single Crystal Growth and Electrical Transport Properties of the Spinel MgV ₂ O ₄ | A. Ferretti D. B. Rogers | J. Phys. Chem. Solids Suppl., 471 (1967), DDC AD-648676 |
| 1658 | Planetary Radar Astronomy | I. I. Shapiro | <u>Moon and Planets</u> (North-Holland, Amsterdam, 1967), DDC AD-655315 |
| 1695 | The Lincoln Wand | L. G. Roberts | Proc. Fall Joint Computer Conf., San Francisco, Nov. 1966, DDC AD-669209 |
| 1697 | Effect of Space Radiation Environment on Micro-Power Circuits Using Bipolar, Junction-Gate and Insulated-Gate Field Effect Transistors | A. G. Stanley | NEREM Record (1966), DDC AD-649363 |
| 1702 | Optical and Laser Properties of Nd ³⁺ - and Eu ³⁺ -Doped YVO ₄ | J. R. O'Connor | Trans. Met. Soc. AIME <u>239</u> , 362 (1967) |
| 1718 | The Design and Performance of "Punch Through" Varactor Upper Sideband Up-Converters | A. I. Grayzel | NEREM Record (1966), DDC AD-651521 |

| MS No. | | | |
|---------|--|--|--|
| 1719 | Maser Emission at 18 cm from Interstellar OH | M. M. Litvak A. L. McWhorter M. L. Meeks H. J. Zeiger | NEREM Record (1966), DDC AD-649359 |
| 1726 | Electron Beam Pumped Semiconductor Lasers | C. E. Hurwitz | NEREM Record (1966), DDC AD-648055 |
| 1731 | Losses in Microstrip Transmission Systems for Integrated Microwave Circuits | J. D. Welch H. J. Pratt | NEREM Record (1966), DDC AD-651522 |
| 1741 | Response Selection in Keeping Track of Several Things at Once | D. B. Yntema G. M. Schulman | Acta Psychol. <u>27</u> , 316 (1967), DDC AD-658900 |
| 1746 | Dependence of Critical Properties of Heisenberg Magnets on Spin and Lattice | H. E. Stanley T. A. Kaplan | J. Appl. Phys. <u>38</u> , 977 (1967), DDC AD-655327 |
| 1747 | On the Possible Phase Transition for Two-Dimensional Heisenberg Models | H. E. Stanley T. A. Kaplan | J. Appl. Phys. <u>38</u> , 975 (1967), DDC AD-655326 |
| 1764 | Parallel Oblique-Incidence Anisotropy in NiFe Films | T. S. Crowther M. S. Cohen | J. Appl. Phys. <u>38</u> , 1352 (1967), DDC AD-655325 |
| 1765 | Language Structure and Graphical Man-Machine Communication | W. R. Sutherland | Proc. Third Cong. Information System Science and Technology, Buckhill Falls, Nov. 1966, DDC AD-664440 |
| 1766 | Hysteresis Evaluation of Microwave Ferrites at Audio Frequency with Large Dynamic Range | J. A. Weiss F. Betts | J. Appl. Phys. <u>38</u> , 1397 (1967), DDC AD-658899 |
| 1777 | Spin-Wave Locking of the Uniform-Rotational Switching Mode in Magnetic Thin Films | K. J. Harte | J. Appl. Phys. <u>38</u> , 1341 (1967) |
| 1791 | Spontaneous Band Magnetism | J. B. Goodenough | J. Appl. Phys. <u>38</u> , 1054 (1967), DDC AD-658905 |
| 1814-I | Characterization of d Electrons in Solids by Structure. I. Localized vs Collective Electrons | J. B. Goodenough | Materials Res. Bull. <u>2</u> , 37 (1967), DDC AD-652117 |
| 1814-II | Characterization of d Electrons in Solids by Structure. II. Spontaneous Crystallographic Distortions | J. B. Goodenough | Materials Res. Bull. <u>2</u> , 165 (1967), DDC AD-653691 |
| 1815 | Experimental Techniques with General Applicability for the Study of Magnetic Phenomena | K. Dwight | J. Appl. Phys. <u>38</u> , 1505 (1967), DDC AD-658768 |
| 1847 | Radar Properties of the Moon | T. Hagfors | Physics of the Moon, Vol. 13, AAS Science & Technology Series (1967) |

Meeting Speeches

MS No.

- | | | | |
|-------|--|---|---|
| 1857 | An Effective Hamiltonian for the Optical Properties of Silicon and Germanium | G. F. Dresselhaus M. S. Dresselhaus | Intl. J. Quant. Chem. <u>1S</u> , 595 (1967), DDC AD-670774 |
| 1859B | The Virial Theorem for a System of Interacting Particles Under External Forces and Constraints | P. N. Argyres | Intl. J. Quant. Chem. <u>1S</u> , 699 (1967), DDC AD-670452 |
| 1914 | Theory of the Axial Rotations of Mercury and Venus | E. Bellomo G. Colombo I. I. Shapiro | <u>Mantles of the Earth and Terrestrial Planets</u> (Inter-science, New York, 1967), DDC AD-663683 |
| 1920 | Conic Display Generator Using Multiplying Digital-Analog Decoders | H. Blatt | Proc. Fall Joint Computer Conf., Anaheim, Nov. 1967, DDC AD-669207 |
| 1923 | The Internal Radiation Environment of Cylindrical Spacecraft | C. L. Mack | IEEE Trans. Nuclear Sci. <u>NS-14</u> , 204 (1967), DDC AD-668199 |
| 1934 | Recent Results from the Large-Aperture Seismic Array | J. Capon P. E. Green, Jr. | Nuovo Cimento Suppl. Ser. 1, <u>6</u> , 82 (1968), DDC AD-688026 |
| 1935 | Recent Experiments with a Large Aperture Seismic Array | P. E. Green, Jr. | Proc. Intl. Union of Geodesy and Geophysics General Assembly, Special ASPEI Session on Arrays, Zurich, Oct. 1967, DDC AD-688281 |
| 1943 | Analysis of Distant-Neighbor Interactions in Cubic Spinel | K. Dwight N. Menyuk | J. Appl. Phys. <u>39</u> , 660 (1968), DDC AD-670771 |
| 1945 | Nuclear Magnetic Resonance Magnetization Studies of CdCr_2Se_4 | G. H. Stauss M. Rubinstein J. Feinleib K. Dwight N. Menyuk A. Wold | J. Appl. Phys. <u>39</u> , 667 (1968) |
| 1947 | High-Resolution Lorentz Microscopy | M. S. Cohen | J. Appl. Phys. <u>39</u> , 1149 (1968), DDC AD-670769 |
| 1948 | Excitation of Uniaxial-Anisotropy Relaxation Processes in Magnetic Films by a Rotating Magnetic Anneal | K. J. Harte D. O. Smith R. M. Anderson R. C. Johnston | J. Appl. Phys. <u>39</u> , 749 (1968), DDC AD-670759 |
| 1954 | Localized vs Collective Descriptions of Magnetic Electrons | J. B. Goodenough | J. Appl. Phys. <u>39</u> , 403 (1968), DDC AD-670760 |
| 1955 | Magnetic Properties of SrRuO_3 and CaRuO_3 | J. M. Longo P. M. Racciah J. B. Goodenough | J. Appl. Phys. <u>39</u> , 1327 (1968), DDC AD-670761 |
| 1956 | A Localized-Electron to Collective-Electron Transition in the System (La, Sr) CoO_3 | P. M. Racciah J. B. Goodenough | J. Appl. Phys. <u>39</u> , 1209 (1968), DDC AD-670784 |

| MS No. | | | |
|--------|---|---|---|
| 1958 | Resistivity and Magnetic Order in Ti_2O_3 | L. L. VanZandt J. M. Honig J. B. Goodenough | J. Appl. Phys. <u>39</u> , 594 (1968), DDC AD-670778 |
| 1959 | Band Structure of Nickel and Low-Energy Optical Transitions | J. Hanús J. Feinleib W. J. Scouler | J. Appl. Phys. <u>39</u> , 1272 (1968), DDC AD-670783 |
| 1961 | Observation of Ferri- and Antiferromagnetic Resonance in Insulating Magnetic Spiral Structures | J. J. Stickler H. J. Zeiger | J. Appl. Phys. <u>39</u> , 1021 (1968), DDC AD-670449 |
| 1990 | Seismic Data Collection | P. E. Green, Jr. | Proc. IBM Scientific Computing Symp. on Environmental Sciences, Yorktown Heights, Nov. 1966, DDC AD-661154 |
| 2009 | Homogeneity Range and Concentration-Pressure Isothermus of HgSe | R. F. Brebrick A. J. Strauss | Proc. Intl. Conf. II-VI Semiconducting Compounds, Brown Univ., Sept. 1967 |
| 2010 | Homomorphic Analysis of Speech | A. V. Oppenheim R. W. Schafer | IEEE Trans. Audio Electroacoust. <u>AU-16</u> , 221 (1968), DDC AD-678238 |
| 2022 | Analysis of Digital and Analog Formant Synthesizers | B. Gold L. R. Rabiner | IEEE Trans. Audio Electroacoust. <u>AU-16</u> , 81 (1968), DDC AD-673594 |
| 2023 | Electron Band Structure Studies Using Differential Optical Techniques and High Magnetic Fields | J. G. Mavroides | Chpt. 8 of <u>Physics of Solids in Intense Magnetic Fields</u> (Plenum, New York, 1969) |
| 2039 | Critical Phenomena in Heisenberg Models of Magnetism | H. E. Stanley | Chpt. 14 of <u>Solid State Physics, Nuclear Physics and Particle Physics</u> (W. A. Benjamin, Inc., New York, 1968) |
| 2049 | $Pb_{1-x}Sn_x$ -Salt Infrared Diode Lasers | J. F. Butler | NEREM Record (1967), DDC AD-669223 |
| 2051 | The Application of Generalized Linearity to Automatic Gain Control | T. G. Stockham | IEEE Trans. Audio Electroacoust. <u>AU-16</u> , 267 (1968), DDC AD-677848 |
| 2055 | High Power High Efficiency Transistor RF Amplifiers | D. M. Snider | NEREM Record (1967), DDC AD-670443 |
| 2057 | Interferometric Spectral-Line Observations | J. M. Moran A. E. E. Rogers | NEREM Record (1967), DDC AD-670447 |
| 2073 | Sampling Theory, Noise and Instrumentation Demodulator, Including the Linear Diode Feedback Demodulator | L. R. Malling | IEEE Trans. Aerospace Electron. Syst. <u>AES-3</u> , Suppl. 57 (1967), DDC AD-664438 |

Meeting Speeches

MS No.

| | | | |
|-------|--|---|--|
| 2101 | The Lincoln Experimental Communications Satellite and Terminal Program | W. E. Morrow, Jr. | Proc. AIAA Second Communications Satellite Systems Conf., San Francisco, Apr. 1968, DDC AD-670454 |
| 2103 | Transmitted Power Maximization in Communication Satellites | A. Braga-Illa D. M. Snider | Proc. AIAA Second Communications Satellite Systems Conf., San Francisco, Apr. 1968, DDC AD-670453 |
| 2105 | The Generation of High Microwave Power Using Arrays of Varactor Diodes | D. Parker A. I. Grayzel | Proc. AIAA Second Communications Satellite Systems Conf., San Francisco, Apr. 1968, DDC AD-670455 |
| 2144 | Large Area, High-Density Precision Etched Wiring | E. A. Guditz T. O. Herndon W. J. Landoch G. P. Gagnon | Proc. Electronics Components Conf., Washington, May 1968, DDC AD-670448 |
| 2145 | A Progress Report on Large Capacity Magnetic Film Memory Development | J. I. Raffel A. H. Anderson T. S. Crowther T. O. Herndon C. E. Woodward | Proc. AFIPS Conf., Atlantic City, Apr - June 1968, DDC AD-671284 |
| 2178 | An Image Intensifier System for High Speed Spectrography | P. Kafalas | <u>High Speed Photography, Proc. Eighth Intl. Cong. High-Speed Photography</u> (Wiley, New York, 1968) |
| 2185 | Demagnetizing Fields of Planar Magnetic Film Structures with One Infinite Dimension | R. Berger | IEEE Trans. Magnetics <u>MAG-4</u> , 506 (1968), DDC AD-685680 |
| 2186 | Specifications and Yields of Composite Magnetic Films for a High-Density Memory | T. S. Crowther | IEEE Trans. Magnetics <u>MAG-4</u> , 529 (1968), DDC AD-685685 |
| 2221 | Influence of the Molecular Interaction on the Ac Kerr Effect Possibility of a Field-Induced Phase Transition | J. Hanus | IEEE J. Quant. Electron. <u>QE-4</u> , 753 (1968), DDC AD-688040 |
| 2228 | Interpolation Methods for Phonon Spectra in Crystals | G. Dresselhaus M. S. Dresselhaus | Intl. J. Quant. Chem. <u>II S</u> , 333 (1968), DDC AD-688575 |
| 2236A | Raman Scattering from Magneto-plasma Waves in Semiconductors | A. L. McWhorter P. N. Argyres | <u>Light Scattering Spectra of Solids, Proc. Int. Conf. Light Scattering Spectra of Solids</u> (Springer-Verlag, New York, 1969) |
| 2240 | Measured Properties of the Wakes of Hypersonic Cones | J. Herrmann R. E. Slattery W. G. Clay | Proc. AIAA Fluid and Plasma Dynamics Conf., Los Angeles, June 1968, DDC AD-673597 |

Meeting Speeches

| MS No. | | | |
|--------|---|---|---|
| 2249 | Ultraviolet and Infrared Pumping of OH Molecules | M. M. Litvak | <u>Interstellar Ionized Hydrogen</u> (W. A. Benjamin, Inc., New York, 1968) |
| 2272 | Electron Irradiation of NPN Bipolar Transistors with Silicon Nitride Passivation | A. G. Stanley | IEEE Trans. Nucl. Sci. <u>NS-15</u> , 168 (1968), DDC AD-689024 |
| 2279 | The Case for the Radar Radius of Venus | M. E. Ash D. B. Campbell R. B. Dyce R. P. Ingalls R. Jurgens G. H. Pettengill I. I. Shapiro M. A. Slade W. B. Smith T. W. Thompson | J. Atmos. Sci. <u>25</u> , 560 (1968), DDC AD-677724 |
| 2282 | Interpolation Methods for Phonon Spectra in Crystals | G. F. Dresselhaus M. S. Dresselhaus | Accepted Intl. J. Quant. Chem. |
| 2306 | Instrumentation System Evaluation with Pseudo-Noise | L. R. Malling | EASCON Record (1968), DDC AD-679339 |
| 2307 | Diffusion and Convection in Vapor Crystal Growth | T. B. Reed W. J. LaFleur A. J. Strauss | J. Cryst. Growth <u>3</u> , <u>4</u> , 115 (1968), DDC AD-688034 |
| 2336 | Light Scattering from Plasmons in Semiconductors | A. L. McWhorter | <u>Electronic Structures in Solids</u> (Plenum, New York, 1969) |
| 2340 | Tin Doping of Epitaxial Gallium Arsenide | C. M. Wolfe G. E. Stillman W. T. Lindley | Proc. 1968 Symp. on GaAs, Dallas, Oct. 1968 |
| 2348 | Strain Sensitivity of the Wall Coercive Force in Magnetic Films | T. S. Crowther | J. Appl. Phys. <u>40</u> , 1457 (1969), DDC AD-692912 |
| 2349 | Deviations from Stoichiometry and Lattice Defects in IV-VI Compounds and Their Alloys. General Features and Experimental Methods. | A. J. Strauss R. F. Brebrick | J. de Physique <u>29</u> , C4-21 (1968), DDC AD-692973 |
| 2359 | Far Infrared Impact Ionization Modulators | I. Me' gailis P. E. Tannenwald | NEREM Record (1968), DDC AD-685686 |
| 2362A | High-Pressure Forms of CsNiF ₃ | J. M. Longo J. A. Kafalas | J. Appl. Phys. <u>40</u> , 1601 (1969), DDC AD-692916 |
| 2368 | Possible Experiments with Long-Baseline Interferometers | I. I. Shapiro | NEREM Record (1968), DDC AD-685687 |

Meeting Speeches

MS No.

- | | | | |
|------|--|--|--|
| 2374 | Distant-Neighbor B-B Interactions in Cobalt Chromite | K. Dwight, Jr. N. Menyuk | J. Appl. Phys. <u>40</u> , 1156 (1969), DDC AD-692911 |
| 2380 | Pressure-Effect Measurements Using a Vibrating-Coil Magnetometer | N. Menyuk J. A. Kafalas K. Dwight, Jr. J. B. Goodenough | J. Appl. Phys. <u>40</u> , 1324 (1969), DDC AD-692913 |
| 2383 | Interferometric Observations of Interstellar Hydroxyl Clouds of Extremely Small Size | J. M. Moran, Jr. | NEREM Record (1968), DDC AD-685688 |
| 2385 | Optical Studies and Band Structure of Cu-Ni Alloys | J. Feinleib W. J. Scouler J. Hanus | J. Appl. Phys. <u>40</u> , 1400 (1969), DDC AD-692915 |
| 2388 | Determination of Domain Wall Profiles in Magnetic Films | K. J. Harte M. S. Cohen | J. Appl. Phys. <u>40</u> , 1218 (1969), DDC AD-692919 |
| 2389 | Raman Scattering by Magnetic Excitations in RbNiF_3 | S. R. Chinn H. J. Zeiger J. R. O'Connor | J. Appl. Phys. <u>40</u> , 1603 (1969), DDC AD-692920 |
| 2433 | Graphics in Time-Sharing: A Summary of the TX-2 Experience | W. R. Sutherland J. W. Forgie M. V. Morello | Proc. AFIPS Conf., Boston, May 1969, DDC AD-692974 |
| 2437 | Some Critical Properties of Quantum-Mechanical Heisenberg Ferro- and Antiferromagnets | H. E. Stanley | J. Appl. Phys. <u>40</u> , 1546 (1969), DDC AD-692977 |
| 2438 | Critical Indices for a System of Spins of Dimensionality Situated on a Lattice of Arbitrary Dimensionality | H. E. Stanley | J. Appl. Phys. <u>40</u> , 1272 (1969), DDC AD-692921 |
| 2440 | Picture-Driven Animation | R. M. Baecker | Proc. AFIPS Conf., Boston, May 1969, DDC AD-693664 |
| 2444 | Radar Surveys of the Solar System | J. V. Evans | Proc. Am. Phil. Soc. <u>113</u> , 203 (1969) |
| 2511 | Preliminary Report on the Orbital Operation of the Automatic Stationkeeping System of LES-6 | A. Braga-Illa | AIAA Guidance, Control, and Flight Mechanics Conf., Princeton, August 1969 |

LINCOLN MANUALS

| <u>LM No.</u> | | | <u>DDC No.</u> |
|---------------|--|--------------|------------------------|
| 48 | STAIR (Structural Analysis Interpretive Routine) Instruction Manual | 8 Mar. 1962 | AD-400280 |
| 51 | Millstone Hill Observatory, Vols. 1 and 2 | Apr. 1964 | AD-443421 AD-443422 |
| 53 | Millstone L-Band Monopulse Radar Antenna System Preventive and Corrective Maintenance Procedures | 3 Dec. 1963 | AD-443480 |
| 54 | TRADEX Data Evaluation | 1 Apr. 1964 | AD-443423 |
| 56 | PRESS Ground Optics Digital Pointing and Control System | Aug. 1964 | AD-453854 |
| 60 | LLAPS: Lincoln Laboratory Analyses of Paraboloidal Shells | 12 Nov. 1964 | AD-614818 |
| 64-1 | Large Aperture Seismic Array Subarray Electronic Module (SEM) | Jan. 1966 | AD-823038 |
| 64-2 | Large Aperture Seismic Array Timing System | Apr. 1966 | AD-823039 |
| 64-3 | Large Aperture Seismic Array Phone-Line Input System | May 1966 | AD-823040 |
| 64-4 | Large Aperture Seismic Array Maintenance Display Console | Apr. 1966 | AD-823041 |
| 64-5 | Large Aperture Seismic Array Digital-to-Analog Converter | Apr. 1966 | AD-823042 |
| 78 | Lincoln Laboratory Multi-Programming Supervisor | 6 Jan. 1967 | AD-650190 |

LINCOLN LABORATORY LIBRARY REFERENCE BIBLIOGRAPHIES

| <u>No.</u> | | | <u>DDC No.</u> |
|------------|--|--------------|----------------|
| 15-2 | Radomes, Part II (1949 - November 1962) | 28 Feb. 1963 | AD-403145 |
| 23 | Attitude Perturbations and Control of Artificial Earth Satellites (1957 - December 1964) | 26 Jan. 1966 | AD-482398 |
| 26 | Scattering and Attenuation by Precipitation Particles | 11 Aug. 1965 | AD-628200 |
| 30 | Electronically Controlled Microwave Devices (1960 - March 1966) | 7 Oct. 1966 | AD-805508 |
| 31 | Calibration of the Atmosphere (1956 - February 1966) | | |
| 33 | Properties of the Compounds $RbMnF_3$, $KMnF_3$ and $CsMnF_3$ | 8 Aug. 1968 | AD-677285 |
| 36 | Millstone and Haystack Scientific and Technical Publications | 9 Apr. 1968 | AD-668435 |

LINCOLN LABORATORY PUBLICATIONS

| | | | |
|--|-----------------------------|------|--------------------------------------|
| Thermoelectric and Thermomagnetic Effects and Applications | T. C. Harman J. M. Honig | 1967 | McGraw-Hill Book Co., Inc., New York |
| Radar Astronomy | J. V. Evans T. Hagfors | 1968 | McGraw-Hill Book Co., Inc., New York |
| Switching Theory | P. E. Wood, Jr. | 1968 | McGraw-Hill Book Co., Inc., New York |
| Digital Processing of Signals | B. Gold C. M. Rader | 1969 | McGraw-Hill Book Co., Inc., New York |

INDEX OF AUTHORS

- Abel, W. G., JA-3214, JA-3268
 Adler, D., JA-2918, JA-3306
 Aggarwal, R. L., MS-1611
 Allen, J. L., TR-424; JA-2913
 Alter, R., JA-3159
 Ames, L. A., TR-3
 Anderson, A. H., MS-2145
 Anderson, R. M., MS-1948
 Argyres, P. N., JA-2581, JA-2875, JA-2900,
 JA-3335; MS-1422, MS-1859B, MS-2236A
 Arnold, C. R., TN-1967-34
 Arnott, R. J., JA-2580, JA-2768, JA-2796;
 MS-1459, MS-1464
 Arnstein, D., JA-3061
 Ash, M. E., JA-2893, JA-2905, JA-3243,
 JA-3245, JA-3271; MS-2279
 Assaly, R. N., TR-409, TR-465; JA-2730,
 JA-2734, JA-3051
 Athans, M., TN-1967-6, TN-1969-13; JA-2972,
 JA-3142, JA-3453; MS-703, MS-710
 Austin, M. E., TR-437
- Bacchialoni, F. L., JA-2990
 Bachner, F. J., JA-2811, JA-3486
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 Baldwin, P. H., TR-53
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 JA-2926, JA-3098, JA-3145, JA-3199,
 JA-3259, JA-3263, JA-3290
 Banus, M. D., JA-2672, JA-2725A, JA-2852,
 JA-2891, JA-2921, JA-2989, JA-3303,
 JA-3328, JA-3350, JA-3447
 Bare, C. C., JA-3098
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 Barry, J. G., TR-147
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 Berger, H., TN-1969-31
 Berger, R., MS-1501, MS-2185
 Bermon, S., JA-2978
 Bers, A., JA-2638
- Bertolini, A., TN-1967-48; JA-3142
 Besson, J. M., JA-3219
 Betts, F., MS-1572, MS-1766
 Beusch, J. U., TN-1966-20, TN-1967-16 Rev. 1
 Beutler, F. J., JA-2592
 Bever, M. B., JA-2921, JA-2989
 Bially, T., JA-3298
 Black, W. L., JA-2885, JA-3113, JA-3258
 Blatt, H., MS-1920
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 Bogush, A. J., Jr., TR-402
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 JA-2931, JA-3073, JA-3164
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 JA-3111, JA-3158, JA-3205, JA-3381;
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 JA-3119, JA-3172A, JA-3206, JA-3210,
 JA-3286, JA-3326, JA-3380; MS-2009,
 MS-2349
 Breitbord, J. L., TR-52
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 Brewer, R. G., JA-3185
 Briscoe, H. W., TN-1966-38, TN-1968-3;
 JA-2649; MS-1551
 Brockelman, R. A., TR-444, TR-456; JA-2721,
 JA-2840, JA-3243
 Brockett, R. W., TN-1968-24
 Brody, N. M., TN-1968-24
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Author Index

- Burke, B. F., JA-2858, JA-2926, JA-3033,
JA-3098, JA-3199, JA-3259
- Burrows, M. L., TN-1966-41, TN-1968-30;
JA-2701, JA-2819, JA-2870B, JA-2980,
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- Butler, J. F., JA-2923, JA-3240, JA-3300,
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- Butman, R. C., TR-257
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- Caldwell, D., TR-422
- Campbell, D. B., MS-2279
- Capon, J., TN-1967-26, TN-1967-50,
TN-1968-4, TN-1968-15; JA-2834,
JA-3071, JA-3193, JA-3392; MS-1934
- Carbone, R. J., JA-3038, JA-3169, JA-3191,
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- Carman, R. L., JA-2942, JA-3110, JA-3213,
JA-3386
- Carter, J. C., JA-2836, JA-3098, JA-3199,
JA-3259, JA-3493
- Catalano, S. F., TN-1967-25
- Chace, D. E., GR-1965-6; TN-1967-10;
JA-2906
- Chapin, D. S., MS-989
- Cheng, K. L., JA-3155
- Chiao, R. Y., JA-2889, JA-2942, JA-3185
- Childs, N. B., TN-1967-27; JA-2961
- Chinn, S. R., JA-3347; MS-2389
- Chisholm, J. H., TR-402
- Cho, Y., TN-1966-17
- Christensen, C. P., TR-464; JA-3389
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