

PAPERS BY BELL LABORATORIES AUTHORS

COMPUTING SCIENCES

- Benevit C. A., Cassard J. M., Dimmiller K. J., Dumbri A. C., Mound M. G., Procyk F. J., Rosenzweig W., Yanof A. W., **256K Dynamic Random-Access Memory.** ISSCC Diges 25:76-77, 1982.
- Covington, W. O. et al., **A Test Data Synthesizer for Telephone Company Accounting Office Processing of Call Data.** Software 12(6):505-516, 1982.
- Joy D. C., **Microcomputer Control of a Stem.** Ultramicros 8(3):301-308, 1982.
- Levendel Y. H., Menon, P. R., **Test-Generation Algorithms for Computer Hardware Description Languages.** IEEE Comput 31(7):577-588, 1982.
- Lund J. C., Ordun M. R., Wojcik R. J., **Implementation of the Calling Card Service Capability—Application of a Software Methodology.** IEEE Commun 30(6):1297-1303, 1982.
- McConkey J., **Report on the Symposium on Small Computers in the Arts (Editorial).** Comput Mus 6(2):61-64, 1982.
- Utter D. F., **Writing Requirements for Interfaces Between Computers.** IEEE Commun 30(6):1276-1280, 1982.
- White P. E., Feay M. R., **A Software-Development System for Reliable Applications.** IEEE Commun 30(6):1363-1368, 1982.
- Yannakakis M., **A Theory of Safe Locking Policies in Database-Systems.** J ACM 29(3):718-740, 1982.

ENGINEERING

- Alles D. S., **Accuracy in Lithography (Editorial).** Sol St Tech 25(5):47, 1982.
- Anthony P. J. et al., **Device Characteristics of (Al, Ga)As Lasers With Ga(As, Sb) Active Layers.** IEEE J Q El 18(7):1094-1100, 1982.
- Bechtel J. H., Chraplyvy A. R., **Laser Diagnostics of Flames, Combustion Products, and Sprays.** P IEEE 70(6):658-677, 1982.
- Bergland G. D., Cheung R. C., **Special Issue on Communication Software—Prologue (Editorial).** IEEE Commun 30(6):1265-1275, 1982.
- Beuscher H. J., **No. 5 ESS Maintenance Software.** IEEE Commun 30(6):1386-1392, 1982.
- Brown M. K., Rabiner L. R., **An Adaptive, Ordered, Graph Search Technique for Dynamic Time Warping for Isolated Word Recognition.** IEEE Acoust 30(4):535-544, 1982.
- Chu T. S., Legg W. E., **Gain of Corrugated Conical Horns.** IEEE Antenn 30(4):698-703, 1982.
- Cohen L. G., Stone J., **Interferometric Measurements of Minimum Dispersion Spectra in Short Lengths of Single-Mode Fiber.** Electr Lett 18(13):564-566, 1982.
- Cohen M. I., **The Special Issue on Laser Applications (Editorial).** P IEEE 70(6):531-532, 1982.
- Cowan M. J., **Mask Limitations to VLSI—Overlay Accuracy and Linewidth Variation.** Sol St Tech 25(5):55-59, 1982.
- Davis P. C., Crigler F. W., Spires D. A., Aull D. W., **A Hybrid Integrated Trunk and Subscriber Line Interface.** ISSCC Diges 25:204+, 1982.
- Derr M. A., Wright C. E., Coriell A. S., **A Satellite System for Controlling Real-Time Experiments.** Behav Res M 14(2):264-271, 1982.
- Duncan T., Huen W. H., **Software Structure of No-5 ESS—A Distributed Telephone Switching-System.** IEEE Commun 30(6):1379-1385, 1982.
- Duttweiler D. L., **Adaptive Filter Performance With Nonlinearities in the Correlation Multiplier.** IEEE Acoust 30(4):578-586, 1982.
- Erickson R. E., Halfin S., Luss H., **Optimal Sizing of Records When Divided Messages Can Be Stored in Records of Different Sizes.** Operat Res 30(1):29-39, 1982.

- Fleischer P. E. et al., **A Single-Chip Dual-Tone and Dial-Pulse Signaling Receiver.** ISSCC Diges 25:212+, 1982.
- Gagnepain J. J., et al., **Special Issue on Piezoelectricity—Guest Editorial (Editorial).** Ferroelectr 43(1-2):R 3-R 6, 1982.
- Ginsparg, J. M., Gordon R. D., **Automatic Programming of Communications Software via Nonprocedural Descriptions.** IEEE Commun 30(6):1343-1347, 1982.
- Gordon R. D., **Providing Multiple-Channel Communication Using The Experimental Digital Switch.** IEEE Commun 30(6):1409-1416, 1982.
- Greenstein L. J. et al., **Performance Comparisons Among Digital Radio Techniques Subjected to Multipath-Fading..** IEEE Commun 30(5):1184-1197, 1982.
- Helfand E., Pearson D. S., **Calculation of the Non-Linear Stress of Polymers in Oscillatory Shear Fields.** J Pol Sc PP 20(7):1249-1258, 1982.
- Honeyman P., **Testing Satisfaction of Functional-Dependencies.** J ACM 29(3):668-677, 1982.
- Hornbach B. H., **MML—CCITT Man-Machine Language.** IEEE Commun 30(6):1329-1336, 1982.
- Huppert D., Rand S. D., Reynolds A. H., Rentzepis P. M., **Intersystem Crossing and Predissociation of Haloaromatics.** J Chem Phys 77(3):1214-1224, 1982.
- Johnson R. E., Brown W. L., **Electronic Mechanisms for Sputtering of Condensed-Gas Solids by Energetic Ions.** Nucl Instru 198(1):103-118, 1982.
- Johnson R. E., Lanzerotti L. J., Brown W. L., **Planetary Applications of Ion-Induced Erosion of Condensed-Gas Frosts.** Nucl Instru 198(1):147-157, 1982.
- Kant R., **The Elastostatic Problem of an Infinite Strip Containing a Periodic Row of Line Cracks.** Int J Eng S 20(9):1057-1070, 1982.
- Kardontchik J. E., **Mode Reflectivity of Narrow Stripe-Geometry Double Heterostructure Lasers.** IEEE J Q El 18(8):1279-1286, 1982.
- Kardontchik J. E., **Far Field Asymmetry in Narrow Stripe Gain-Guided Lasers.** IEEE J Q El 18(8):1287-1294, 1982.
- Kodama Y., Hasegawa A., **Amplification and Reshaping of Optical Solitons in Glass-Fiber. 2.** Optics Lett 7(7):339-341, 1982.
- Kopp W., Fischer R., Thorne R. E., Su S. L., Drummond T. J., Morkoc H., Cho A. Y., **A New Al_{0.3}Ga_{0.7}As GaAs Modulation-Doped FET.** Elec Dev L 3(5):109-111, 1982.
- Krambeck R. H., Lee C. M., Law H. F. S., **High-Speed Compact Circuits With CMOS.** IEEE J Soli 17(3):614-619, 1982.
- Louzon T. J., **Tensile Property Improvements of Spinodal Cu-15Ni-8Sn by Two-Phase Heat-Treatment.** J Eng Mater 104(3):234-240, 1982.
- Mayo J. S., **Technology Needs of the Information Age.** ISSCC Diges 25:50-51, 1982.
- Mucha J. A., **Standard Addition Technique for Quantitative Trace Gas-Analysis Using Derivative Infrared Diode-Laser Spectroscopy.** Appl Spectr 36(4):393-400, 1982.
- Myers C. S., Levinson S. E., **Speaker Independent Connected Word Recognition Using a Syntax-Directed Dynamic-Programming Procedure.** IEEE Acoust 30(4):561-565, 1982.
- Nair V. N., **Some Extensions of ANOVA Techniques to Location-Scale Models.** Comm Stat A 11(14):1551-1570, 1982.
- Ogawa K., Vodhanel R. S., **Measurements of Mode Partition Noise of Laser-Diodes.** IEEE J Q El 18(7):1090-1093, 1982.
- Owen B., **PIN-GaAs FET Optical Receiver With a Wide Dynamic-Range.** Electr Lett 18(14):626-627, 1982.
- Paulikas G. A., Lanzerotti L. J., **Impact of Geospace on Terrestrial Technology (Review or Bibliography).** Astro Aeron 20(7-8):42+, 1982.
- Russell D. L., **Alternative Strategies for Managing Virtual Circuit Failure and Recovery in Local Area Computer-Networks.** IEEE Commun 30(6):1450-1454, 1982.
- Rustako A. J., **Rain Attenuation and Depolarization Over an Earth Space Path at 12 GHz—Experimental Results Using the CTS Beacon.** IEEE Antenn 30(4):720-725, 1982.
- Saunders T. E., **Wafer Flatness Utilizing the PIN-Recess Chuck.** Sol St Tech 25(5):73-76, 1982.

- Shakespeare W. J., Laminar Boundary-Layer Near the Rotating End Wall of a Confined Vortex.** J Fluid Eng 104(2):171-177, 1982.
- Sinha A. K., Metallization Technology for Very-Large-Scale Integration Circuits.** Thin Sol Fi 90(3):271-285, 1982.
- Smith E. R., Miller F. D., Latent-Variable Models of Attributional Measurement.** Pers Soc PS 8(2):221-225, 1982.
- Smith G. E., Boyle W. S., Citation Classic—Coupled Semiconductor-Devices.** CC/Eng Tech 1982(29):18, 1982.
- Stolen R. H., Bjorkholm J. E., Parametric Amplification and Frequency-Conversion in Optical Fibers.** IEEE J Q El 18(7):1062-1072, 1982.
- Swartz R. G., Wooley B. A., Voshchenkov A. M., Archer V. D., Chin G. M., A Monolithic Laser Driver for Optical Communications.** ISSCC Diges 25:162-163, 1982.
- Thompson J. S., Tewksbury S. K., LSI Signal Processor Architecture for Telecommunications Applications.** IEEE Acoust 30(4):613-631, 1982.
- Thompson R. A., Experimental Multiple-Channel Circuit-Switched Communications.** IEEE Commun 30(6):1399-1409, 1982.
- Whitt W., Approximating a Point Process by a Renewal Process. 1. Two Basic Methods.** Operat Res 30(1):125-147, 1982.
- Williams G. F., Wide-Dynamic-Range Fiber Optic Receivers.** ISSCC Diges 25:160-161, 1982.
- Wood O. R., Silfvast W. T., Electron-Density and Energy Output Limits of Plasma-Recombination Lasers.** Appl Phys L 41(2):121-123, 1982.
- Yue O. C., Maximum-Likelihood Combining for Noncoherent and Differentially Coherent Frequency-Hopping Multiple-Access Systems.** IEEE Info T 28(4):631-639, 1982.

MANAGEMENT/ECONOMICS

- Perry M. K., Vertical Integration by Competitive Firms—Uncertainty and Diversification.** S Econ J 49(1):201-208, 1982.

MATHEMATICS

- Exoo G., Harary F., The Smallest Cubic Multigraphs with Prescribed Bipartite, Block, Hamiltonian and Planar Properties.** I J PA Math 13(3):309-312, 1982.
- Fishburn P. C., Aspects of Semi-Orders Within Interval Orders.** Discr Math 40(2-3):181-191, 1982.
- Fishburn P. C., Dominant Strategies and Restricted Ballots With Variable Electorate.** Math Soc Sc 2(4):383-395, 1982.
- Kantor W. M., Strongly Regular Graphs Defined by Spreads.** ISR J Math 41(4):298-312, 1982.
- Monma C. L., Linear-Time Algorithms for Scheduling on Parallel Processors.** Operat Res 30(1):116-124, 1982.

PHYSICAL SCIENCES

- Allara D. L., Swalen J. D., An Infrared Reflection Spectroscopy Study of Oriented Cadmium Arachidate Monolayer Films on Evaporated Silver.** J Phys Chem 86(14):2700-2704, 1982.
- Aspnes D. E., High-Efficiency Concave-Grating Monochromator With Wavelength-Independent Focusing Characteristics.** J Opt Soc 72(8):1056-1061, 1982.
- Aspnes D. E., Local-Field Effects and Effective-Medium Theory—A Microscopic Perspective.** Am J Phys 50(8):704-709, 1982.
- Aspnes D. E., Stucker H. J., Peroxide Etch Chemistry on -Less-Than-100-Greater-Than-In_{0.52}Ga_{0.47}As).** J Vac Sci T 21(2):413-416, 1982.
- Brown W. L. et al., Erosion and Molecule Formation in Condensed Gas Films by Electronic-Energy Loss of Fast Ions.** Nucl Instru 198(1):1-8, 1982.

- Burton R. H., Smolinsky G., **CCl₄ and Cl₂ Plasma-Etching of III-V-Semiconductors and the Role of Added O₂.** J Elchem So 129(7):1599-1604, 1982.
- Campbell J. C., Dental A. G., **InP/InGaAs Heterojunction Photo-Transistor with Integrated Light-Emitting Diode.** Appl Phys L 41(2):192-193, 1982.
- Campbell J. C., Qua G. J., Copeland J. A., Dental A. G., **Light-Activated Electroluminescent Switch With an Active Feedback-Circuit.** J Appl Phys 53(7):5182-5185, 1982.
- Carlson N. W., Geschwind S., Walker L. R., Devlin G. E., **Field-Induced Dispersion in the Amorphous Antiferromagnet.** Phys Rev L 49(2):165-168, 1982.
- Chabal Y. J., Hamann D. R., Rowe J. E., Schluter M., **Photoemission and Band-Structure Results for NiSi₂.** Phys Rev B 25(12):7598-7602, 1982.
- Chen C. H., Gibson J. M., Fleming R. M., **Microstructure in the Incommensurate and the Commensurate Charge-Density-Wave States of 2H-TASE2—A Direct Observation by Electron-Microscopy.** Phys Rev B 26(1):184-205, 1982.
- Chen C. Y., Cho A. Y., Bethea C. G., Garbinski P. A., **Bias-Free Selectively Doped Al_xGa_{1-x}As-GaAs Picosecond Photodetectors.** Appl Phys L 41(3):282-284, 1982.
- Chen C. Y., Cho A. Y., Cheng K. Y., Pearsall T. P., O'Connor P., Garbinski P. A., **Depletion Mode Modulation Doped Al_{0.48}In_{0.52}As-Ga_{0.47}In_{0.53}As Heterojunction Field-Effect Transistors.** Elec Dev L 3(6):152-155, 1982.
- Chen H. S., Fujiwara T., Waseda Y., **Structural Investigation of Boron-Containing Metallic Glasses.** J Mater Sci 17(5):1337-1347, 1982.
- Cox D. E., Cava R. J., McWhan D. B., Murphy D. W., **A Neutron Powder Diffraction Study of the Lithium Insertion Compound LiMoO₂ from 4-44OK.** J Phys Ch S 43(8):657-666, 1982.
- Cross M. C., Hohenberg P. C., Safran S. A., **Wave Number Selection in Rayleigh-Benard Convection—A Numerical Study.** Physica D 5(1):75-82, 1982.
- Cross M. C., **Boundary-Conditions on the Envelope Function of Convective Rolls Close to Onset.** Phys Fluids 25(6):936-941, 1982.
- Cullis A. G., Webber H. C., Chew N. G., Poate J. M., Baleri P., **Transitions to Defective Crystal and the Amorphous State Induced in Elemental Si by Laser Quenching.** Phys Rev L 49(3):219-222, 1982.
- Daniels P. G., Blythe P. A., Simpkins P. G., **Thermally Driven Cavity Flows in Porous-Media. 2. The Horizontal Boundary-Layer Structure.** P Roy Soc A 382(1782):135-154, 1982.
- Degani J., Leheny R. F., Nahory R. E., Shah J., **High-Field Transport Characteristics of Minority Electrons in p-In_{0.53}Ga_{0.47}As.** Thin Sol Fi 91(1):65-70, 1982.
- Diguseppe M. A., Temkin H., Bonner W. A., **Large Area LPE Growth of InGaAsP InP Double Heterostructures on InP Preserved in a Phosphorus Ambient.** J Cryst Gr 58(1):279-284, 1982.
- DiSalvo F. J., **Some Remarkable Properties of Transition-Metal Chalcogenide Compounds.** Ann Chim-Sc 7(2-3):109-118, 1982.
- Duchovic R. J., Hase W. L., Schlegel H. B., Frisch M. J., Raghavachari K., **Ab initio Potential-Energy Curve for CH Bond-Dissociation in Methane.** Chem P Lett 89(2):120-125, 1982.
- Favier J. J., Wilson L. O., **A Test of the Boundary-Layer Model in Unsteady Czochralski Growth.** J Cryst Gr 58(1):103-110, 1982.
- Fork R. L., Shank C. V., Yen R. T., **Amplification of 70-fs Optical Pulses to Gigawatt Powers.** Appl Phys L 41(3):223-225, 1982.
- Franciosi A., Weaver J. H., O'Neill D. G., Chabal Y., Rowe J. E., Poate J. M., Bisi O., Calandra C., **Chemical Bonding at the Si-Metal Interface—Si-Ni and Si-Cr.** J Vac Sci T 21(2):624-627, 1982.
- Gallagher P. K., **Kinetics of the Dissociation of InP Under Vacuum.** J Phys Chem 86(16):3246-3250, 1982.
- Geballe T. H., Rowell J. M., **Vapor-Deposited Metastable Superconductors.** Thin Sol Fi 91(1):33-43, 1982.
- Gibbs H. M. et al., **Room-Temperature Excitonic Optical Bistability in a GaAs-GaAlAs Super-Lattice Etalon.** Appl Phys L 41(3):221-222, 1982.
- Gole J. L., English J. H., Bondybey V. E., **Laser Spectroscopy of Cooled Metal Clusters—Copper Dimer.** J Phys Chem 86(14):2560-2563, 1982.
- Gooden R., Mitchell J. W., **Photochemical Production, Infrared Absorptivity, and**

Chemical-Reactions of Trichlorosilanol in Silicon Tetrachloride. J Elchem So 129(7):1619-1622, 1982.

Greywall D. S., Busch P. A., **High-Precision Specific-Heat Measurements on Normal Liquid ^3He .** Phys Rev L 49(2):146-149, 1982.

Griffiths J. E., Sunder W. A., **Raman Study of the Phase-Transitions and Ionic Motions in Dioxygenyl Hexafluoroarsenate $\text{O}_2^+\text{AsF}_6^-$.** J Chem Phys 77(3):1087-1092, 1982.

Gyorgy E. M., McWhan D. B., Dillon J. F., Walker L. R., Waszcak J. V., **Magnetic-Behavior and Structure of Compositionally Modulated Cu-Ni Thin-Films.** Phys Rev B 25(11):6739-6747, 1982.

Haight R., Feldman L. C., **Atomic-Structure at the (111) Si-SiO₂ Interface.** J Appl Phys 53(7):4884-4887, 1982.

Heller A., **Chemical Control of Recombination at Grain Boundaries and Liquid Interfaces: Electrical Power and Hydrogen Generating Photoelectrochemical Cells.** J Vac Sci T 21(2):559-561, 1982.

Jelinski L. W., Dumais J. J., Schilling F. C., Bovey F. A., **Solid-State C-13 NMR-Studies of Polyester Thermoplastic Elastomers (Review or Bibliog).** ACS Symp S 1982(191):345-360, 1982.

Johnson P. D., Smith N. V., **Inverse Photoemission Observation of an Unoccupied Surface-State on Pd(111).** Phys Rev L 49(4):290-292, 1982.

Kastalsky A., Dingle R., Cheng K. Y., Cho A. Y., **Two-Dimensional Electron-Gas at a Molecular-Beam Epitaxial-Grown, Selectively Doped, $\text{In}_{0.53}\text{Ga}_{0.47}\text{As-In}_{0.48}\text{Al}_{0.52}\text{As}$ Interface.** Appl Phys L 41(3):274-277, 1982.

Kazarinov R. F., Henry C. H., Logan R. A., **Longitudinal Mode Self-Stabilization in Semiconductor-Lasers.** J Appl Phys 53(7):4631-4644, 1982.

Kazarinov R. F., Luryi S., **Quantum Percolation and Quantization of Hall Resistance in Two-Dimensional Electron-Gas.** Phys Rev B 25(12):7626-7630, 1982.

Kazarinov R. F., Luryi S., **Majority Carrier Transistor Based on Voltage-Controlled Thermionic Emission.** Appl Phys A 28(3):151-160, 1982.

Kelley D. F. et al., **Spectroscopy and Nonradiative Relaxation of Propynal.** J Chem Phys 77(2):697-701, 1982.

Kelso S. M., **Calculation of Properties of the Electron-Hole Liquid in Uniaxially Stressed Ge and Si.** Phys Rev B 25(12):7631-7651, 1982.

Klauder J. R., **High-Temperature Expansion for Non-Renormalizable Quantum-Field Theories.** CzeC J Phys 32(5):494-498, 1982.

Kwei T. K., **Phase-Separation in Segmented Polyurethanes.** J Appl Polym 27(8):2891-2899, 1982.

Lamola A. A., Wrighton M. S., **Recommended Standards for Reporting Photochemical Data.** Pur A Chem 54(6):1251-1256, 1982.

Lee T. P., Burrus C. A., Copeland J. A., Dentai A. G., Marcuse D., **Short-Cavity InGaAsP Injection-Lasers—Dependence of Mode Spectra and Single-Longitudinal-Node Power on Cavity Length.** IEEE J Q El 18(7):1101-1113, 1982.

Levin R. M., Adams A. C., **Low-Pressure Deposition of Phosphosilicate Glass-Films.** J Elchem So 129(7):1588-1592, 1982.

Liao A. S. H., Tell B., Leheny R. F., Nahory R. E., DeWinter J. C., Martin R. J., **An $\text{In}_{0.53}\text{Ga}_{0.47}\text{As}$ p-Channel MOSFET With Plasma-Grown Native Oxide Insulated Gate.** Elec Dev L 3(6):158-160, 1982.

Liao A. S. H., Tell B., Leheny R. F., Chang T. Y., **$\text{In}_{0.53}\text{Ga}_{0.47}\text{As}$ n-Channel Native Oxide Inversion Mode Field-Effect Transistor.** Appl Phys L 41(3):280-282, 1982.

Lines M. E., **Effect of Electric-Field Gradient Sign on Iron Mossbauer-Spectra in Amorphous Materials.** J Phys Ch S 43(8):723-730, 1982.

Lundgren C. A., Rice C. E., **Electrochemistry of Silane-Derivatized Iridium.** ACS Symp S 1982(192):197-204, 1982.

Luther L. C., Lecraw R. C., Ermanis F., **Bismuth Content and Growth-Induced Anisotropy in YLuBiLG.** J Cryst Gr 58(1):95-102, 1982.

Mahajan S. et al., **Manifestations of Melt-Carry-Over in InP and InGaAsP Layers Grown by Liquid-Phase Epitaxy.** J Electrochem Soc 129(3):106, 1982.

Mahajan S., Keramidas V. G., Bonner W. A., **The Influence of Intermittent Growth Procedures on Dislocation Densities in InP Epi-Layers.** J Elchem So 129(7):1556-1559, 1982.

- McIntyre J. D., Basu S., Peck W. F., Brown W. L., Augustyniak W. M., Cation Insertion Reactions of Electrochromic Tungsten and Iridium Oxide-Films. *Phys Rev B* 25(12):7242-7254, 1982.
- Merlin R., Pinczuk A., Beard W. T., Wood C. E. E., Light-Scattering Study of Electrons Confined at Ge/GaAs Interfaces. *J Vac Sci T* 21(2):516-518, 1982.
- Miller D. C., Pernell T. L., Fluid-Flow Patterns in a Simulated Garnet Melt. *J Cryst Gr* 58(1):253-260, 1982.
- Mills A. P., Wilson R. J., Transmission of 1-6-Kev Positrons Through Thin Metal-Films. *Phys Rev A* 26(1):490-500, 1982.
- Nakahara S., Felder E. C., Generation of Grown-In Dislocations at Ni-Cu Misfit Boundaries During Three-Dimensional Nucleation and Growth. *Thin Sol Fi* 91(2):111-122, 1982.
- Nassau K., Chadwick D. L., A Survey of Some Germania-Containing Glass-Forming Compositions. *Mater Res B* 17(6):715-719, 1982.
- Nelson D. F., Transport of Broadening Charge Packets at Surfaces. *J Appl Phys* 53(7):5013-5021, 1982.
- Patterson G. D., Stevens J. R., Carroll P. J., Photon-Correlation Spectroscopy of Polystyrene Near the Glass-Transition Under High-Pressure. *J Chem Phys* 77(2):622-624, 1982.
- Sinclair J. D., Paper Extraction for Sampling Inorganic Salts on Surfaces (Review or Bibliog.). *Analyt Chem* 54(9):1529-1533, 1982.
- Smith P. W., Maloney P. J., Ashkin A., Use of a Liquid Suspension of Dielectric Spheres as an Artificial Kerr Medium. *Optics Lett* 7(8):347-349, 1982.
- Sneddon L., Cross M. C., Fisher D. S., Sliding Conductivity of Charge-Density Waves. *Phys Rev L* 49(4):292-295, 1982.
- Swaminathan V. et al., Doping of $\text{Ga}_{1-x}\text{Al}_x\text{As}$ Grown by LPE With Si and Ge. *J Elchem So* 129(7):1563-1566, 1982.
- Swaminathan V., Zilko J. L., Tsang W. T., Wagner W. R., Photo-Luminescence Study of Acceptors in $\text{Al}_x\text{Ga}_{1-x}\text{As}$. *J Appl Phys* 53(7):5163-5168, 1982.
- Swartz R. G., McFee J. H., Voshchenkov A. M., Finegan S. N., Archer V. D., O'Day P. J., Insitu Low-Energy BF_3^- Ion Doping for Silicon Molecular-Beam Epitaxy. *Elec Dev L* 3(5):138-140, 1982.
- Thiel F. A., The Phase-Relations in the Cu, In, S System and the Growth of CuInS_2 Crystals from the Melt. *J Elchem So* 129(7):1570-1571, 1982.
- Treacy M. M. J., Gibson J. M., On the Detection of Point-Defects in Crystals Using High-Angle Diffuse-Scattering in the Stem. *Inst Phys C* 1982(61):263-266, 1982.
- Truhlar D. G., Duff J. W., Blais N. C., Tully J. C., Garrett B. C., The Quenching of $\text{Na}(3^2\text{P})$ by H_2 -Interactions and Dynamics. *J Chem Phys* 77(2):764-776, 1982.
- Weber T. A., Stillinger F. H., Solvating Collisions Between Deuterons and Light-Water Octamers. *Chem P Lett* 89(2):154-158, 1982.

SOCIAL AND LIFE SCIENCES

- Cassidy M. F., Instructional-Technique—Davies, I. K. (Book Review). *ECTJ* 30(2):120-122, 1982.
- Cassidy M. F., Toward Integration—Education, Instructional Technology, and Semiotics. *ECTJ* 30(2):75-89, 1982.
- Eisinger J., Lead and Wine Gockel, Eberhard and the Colicapictorum. *Med Hist* 26(3):279+, 1982.
- Fisher D. G., Rothkopf E. Z., An Automated Eye-Movement Laboratory for On-Line Electrooculography. *Behav Res M* 14(2):113-120, 1982.
- Ondrias M. R., Rousseau D. L., Shelnutt J. A., Simon S. R., Quaternary-Transformation-Induced Changes at the Heme in Deoxyheoglobins. *Biochem* 21(14):3428-3437, 1982.
- Pregibon D., Resistant Fits for Some Commonly Used Logistic-Models With Medical Applications. *Biometrics* 38(2):485-498, 1982.
- Reed A. V., The Radio Shack Color Computer in the Experimental-Psychology Laboratory—An Evaluation. *Behav Res M* 14(2):109-112, 1982.

Rothkopf E. Z., **Principles of Instructional-Design**, 2nd Edition—Gagne R. M.,
Briggs L. J. (Book Review). Cont Psycho 27(7):552, 1982.

SPEECH AND ACOUSTICS

Weste N. H. E., Burr D. J., Ackland B. D., **A Systolic Processing Element for Speech Recognition**. ISSCC Diges 25:274-275, 1982.

