

Papers by Bell Laboratories Authors

BIOLOGY

Linear Electric Field Effects in Electron Paramagnetic Resonance for Two Bis Imidazole Heme Complexes, Model Compounds for B and H Hemichromes of Hemoglobin. W. B. Mims, J. Peisach, *Biochem. J.*, **16** (1977), pp. 2795-2799.

CHEMISTRY

Sub-Picosecond Relaxation of Large Organic Molecules in Solution. C. V. Shank, E. P. Ippen, and O. Teschke, *Chem. Phys. Lett.*, **45**, No. 2 (January 15, 1977), pp. 291-294.

Comment on Host Nuclear Resonance in a Spin Glass: CuMn. D. A. Levitt, R. E. Walstedt, *Phys. Rev. Lett.*, **38**, No. 4 (January 24, 1977), pp. 178-181.

Evidence for Crystalline Electric Field and Spin-Orbit Splittings for Co Impurities in Au. R. Dupress, R. E. Walstedt, W. W. Warren, Jr., *Phys. Rev. Lett.*, **38**, No. 11 (March 14, 1977), pp. 612-615.

^{23}Na Nuclear Relaxation in $\text{Na}\beta\text{-Alumina: Barrier Height Distributions and the Diffusion Process.}$ R. E. Walstedt, R. R. Dupree, J. P. Remeika, A. Rodrigues, *Phys. Rev. B*, **15**, No. 7 (April 1, 1977), pp. 3442-3454.

Scanning Electron Microscopy of Liquid Mercury-Solid Metal Interactions. J. E. Bennett, *Microstructural Sci.*, ed. by J. D. Braun, H. W. Arrowsmith, J. L. McCall, Elsevier North-Holland, Inc., **5** (1977), pp. 395-402.

^{77}Se Nuclear Magnetic Resonance in TiSe_2 . R. Dupree, W. Warren, F. J. DiSalvo, *Bull. Amer. Phys. Soc.*, **22** (March 1977), p. 281.

COMPUTING

Algorithms and Computational Complexity. Alfred V. Aho, *Acta Crystallgr.*, **33** (1977), pp. 5-12.

Code Generation for Expressions with Common Subexpressions. A. V. Aho, S. C. Johnson, J. D. Ullman, *J. Ass. Comput. Mach.*, **24**, No. 1 (January 1977), pp. 146-160.

MATERIALS SCIENCE

Correlation Between Leaking Glass/Metal Seals and Wire Defects in Dry Reed Contacts. M. R. Pinnel, J. E. Bennett, F. E. Bader, *J. Test. Eval.*, **5** (January 1977), pp. 30-42.

Corrosion of Solder-Coated TiPdAu Thin Film Conductors in a Moist Chlorine Atmosphere. F. N. Fuss, C. T. Hartwig, J. M. Morabito, *Thin Solid Films*, **43** (1977), pp. 189-213.

Effect of Surface Stress on the Natural Frequency of Thin Crystals. M. E. Gurtin, X. Markenscoff, R. N. Thurston, *Appl. Phys. Lett.*, **29** (1976), pp. 529-530.

Effects of Hydrostatic Pressure on the Magnetic Properties of Disordered Monosilicide $\text{Fe}_x\text{Co}_{1-x}\text{Si}$ Alloys. J. Beille, D. Bloch, V. Jaccarino, J. H. Wernick, G. K. Wertheim, *J. Phys. (Paris)*, **38** (March 1977), pp. 339-343.

Electrical Characterization of Vapor-Phase-Epitaxially Grown Large Area n-AlAs/p-GaAs Heterojunctions. W. D. Johnston, *IEEE Trans. Electron. Dev.*, **ED-24** (February 1977), pp. 135-138.

The Electron Stimulated Interaction of H₂O with a Nickel Surface. H. G. Tompkins, *Surf. Sci.*, 62 (January 1977), pp. 293-302.

Empirical Electron Backscatter Model for Thin Resist Films on a Substrate. R. D. Heidenreich, *J. Appl. Phys.*, 48 (April 1977), pp. 1418-1425.

Epitaxial Growth of High T_c Superconducting Nb₃Ge on Nb₃Ir. A. H. Dayem, T. H. Geballe, R. B. Zubeck, A. B. Hallak, G. W. Hull, *Appl. Phys. Lett.*, 30, No. 10 (May 15, 1977), pp. 541-543.

Growth and Properties of Liquid-Phase Epitaxial GaAs_{1-x}Sb_x. R. E. Nahory, M. A. Pollack, J. C. DeWinter, K. M. Williams, *J. Appl. Phys.*, 48 (April 1977), pp. 1607-1614.

Low Noise and High Power GaAs Microwave Field-Effect-Transistors Prepared by Molecular Beam Epitaxy (MBE). A. Y. Cho, J. V. DiLorenzo, B. S. Hewitt, W. C. Niehaus, W. O. Schlosser, C. Radice, *J. Appl. Phys.*, 48 (January 1977), pp. 346-349.

Low Temperature Heat Capacity of Alkali and Silver β -Aluminas. D. B. McWhan, C. M. Varma, F. L. S. Hsu, J. P. Remeika, *Phys. Rev. Lett.*, B15 (January 15, 1977), pp. 553-560.

Nuclear Modulation of the Electron Spin Echo Envelope in Glassy Materials. W. B. Mims, J. Peisach, J. L. Davis, *J. Chem. Phys.*, 66, No. 12 (June 15, 1977), pp. 5536-5550.

Preparation of CdS/InP Solar Cells by Chemical Vapor Deposition of CdS. M. Bettini, K. J. Bachmann, J. L. Shay, S. Wagner, *J. Appl. Phys.*, 48 (April 1977), pp. 1603-1606.

Solution Decomposition Behavior of Chemically Modified Poly(vinyl chloride). I. M. Plitz, R. A. Willingham, W. H. Starnes, Jr., *Macromolecules*, 10 (March/April 1977), pp. 499-500.

Spherulitic Crystallization in Blends of Poly(vinylidene fluoride) and Poly(methyl methacrylate). T. T. Wang, T. Nishi, *Macromolecules*, 10 (March 1977), pp. 421-425.

Transistors with Boron Bases Predeposited by Ion Implantation and Annealed in Various Oxygen Ambients. T. E. Seidel, R. S. Payne, R. A. Moline, W. R. Costello, J. C. C. Tsai, K. R. Gardner, *IEEE Trans. Electron. Dev.*, ED-24, No. 6 (June 1977), pp. 717-722.

Water Tree Growth in Polyethylene Under DC Voltage Stress. E. A. Franke, J. R. Stauffer, E. Czekaj, *IEEE Trans. Elec. Insul.*, EI-12 (June 1977), pp. 218-223.

GENERAL MATHEMATICS AND STATISTICS

Solution of "Solvable Model of a Spin Glass." D. J. Thouless, P. W. Anderson, R. G. Palmer, *Phil. Mag.*, 35 (1977), pp. 593.

The Spanning Subgraphs of Eulerian Graphs. F. Boesch, C. Suffel, R. Tindell, *J. Graph. Theory.*, 1, No. 1 (April 1977), pp. 79-84.

ELECTRICAL AND ELECTRONIC ENGINEERING

Experimental Fiber-Optic Transmission System for Interoffice Trunks. T. L. Maione, D. D. Sell, *IEEE Trans. Commun.*, COM-25, No. 5 (May 1977), pp. 517-523.

A Model for Advanced Reservations for Intercity Visual Conferencing Services. Hanan Luss, *Oper. Res. Quart.*, 28 (May 1977), pp. 275-284.

A Multi-Microphone Signal Processing Technique to Remove Room Reverberation from Speech Signals. J. Allen, D. Berkley, J. Blauert, *J. Acoust. Soc. Amer.* (October 1977).

Optimal Reception of Digital Data Over the Gaussian Channel with Unknown Delay and Phase Jitter. D. D. Falconer, J. Salz, IEEE Trans. Inform. Theory, IT-23, No. 1 (January 1977), pp. 117-126.

PHYSICS

Determination of the Valence Band Structure of InSe by Angle-Resolved Photoemission Using Synchrotron Radiation. P. K. Larsen, S. Chiang, N. V. Smith, Phys. Rev. Lett., B15 (March 15, 1977), pp. 3200-3210.

Discovery of Optical Emission in Radio Lobes of Double Radio Galaxies. W. C. Saslaw, J. A. Tyson, P. Crane, Astron. Astrophys., 59 (July 15, 1977), pp. L15-L16.

Evidence for Crystalline Electric Field and Spin-Orbit Splittings for Co Impurities in Au. R. Dupree, R. E. Walstedt, W. W. Warren, Jr., Phys. Rev. Lett., 38 (March 14, 1977), pp. 612-615.

Frequency-Frequency Correlations of Ocean Ambient Noise Levels. R. H. Nichols, C. E. Sayer, J. Acoust. Soc. Amer., 61 (May 1977), pp. 1188-1190.

Intensity Calibration of Millimeter-Wave Spectrometers. P. S. Henry, Astrophys. Lett., 18 (February 1977), pp. 75-78.

Miniature Plane Mirror Analyzer Suitable for Angle-Resolved Photoelectron Spectroscopy. N. V. Smith, P. K. Larsen, M. M. Traum, Rev. Sci. Instrum., 48 (April 1977), pp. 454-459.

A New Opto-Acoustic Cell with Improved Performance. C. K. N. Patel, R. J. Kerl, Appl. Phys. Lett., 30, No. 11 (June 1, 1977), pp. 578-579.

NMR in Liquid Selenium to High Temperature and Pressure. W. Waren, R. Dupree, Bull. Amer. Phys. Soc., 22 (March 1977), pp. 385.

Nonlinear Optical Response of Metal-Barrier-Metal Junctions. B. Fan, S. M. Faris, T. K. Gustafson, T. J. Bridges, Appl. Phys. Lett., 30, No. 4 (February 15, 1977), pp. 177-179.

A Study of the Optical Emission from an RF Plasma during Semiconductor Etching. W. R. Harshbarger, R. A. Porter, T. A. Miller, P. Norton, Appl. Spectrosc., 31 (May/June 1977), pp. 201-207.

Synchrotron Radiation Photoemission Spectroscopy of III-VI Compounds. G. Margaritondo, J. E. Rowe, S. B. Christman, Phys. Rev. B, 15 (April 15, 1977), pp. 3844-3854.

Textures and NMR in Superfluid $^3\text{He(B)}$. H. Smith, W. F. Brinkman, S. Engelsberg, Phys. Rev. Lett., 35, No. 1 (January 1, 1977), pp. 199-213.

A Time Dispersion Tuned Fiber Raman Oscillator. R. H. Stolen, C. Lin, R. K. Jain, Appl. Phys. Lett., 30, No. 7 (April 1, 1977), pp. 340-342.

SYSTEMS ENGINEERING AND OPERATIONAL RESEARCH

Inspection Policies for a System Which is Inoperative During Inspection Periods. H. Luss, AIIE Trans., 9 (June 1977), pp. 189-194.

