

PAPERS BY BELL LABORATORIES AUTHORS

COMPUTING/MATHEMATICS

Representations of Multivariate Normal Distributions with Special Correlation Structures. F. B. Six, Commun in Stat, A10, No. 13 (August 1981), pp 1285-96.

Summation of Second-Order Recurrence Terms and Their Squares. D. L. Russell, The Fibonacci Quarterly, 19, No. 4 (October 1981), pp 336-40.

On the VAX/VMX Time-Critical Process Scheduling. Y. T. Wang, Performance Evaluation Review, 10, No. 3 (Fall 1981), pp 11-18.

ENGINEERING

CCIS Network Performance and New Capabilities. R. F. Frerking, N. A. Marlow, M. A. McGrew, and J. M. Sebeson, Proc Int Switching Symp, 2, (September 21-25, 1981), No. 24B2.

Color Center Laser Measurements of O-H Diffusion In Optical Fiber Cores. D. L. Philen, Tech Digest of Third Int Conf Integrated Optics and Optical Fiber Commun, Paper TUG1 (April 27-29, 1981), pp 62-3.

Earthquakes and Telecommunications Lifelines. J. W. Foss, *Earthquakes and Earthquake Engineering—Eastern United States*, Vols 1 and 2, edited by J. E. Beavers, Ann Arbor, Michigan: Ann Arbor Science Publ Inc, 1, (1981), pp 475-94.

The Effects of Backdriving Digital Integrated Circuits During In-Circuit Testing. L. J. Sobotka, Proc 1981 Bell Syst Conf on Elec Testing (September 22-24, 1981), pp 114-34.

Evolution of Fault Recovery Techniques. N. O. Whittington, Proc Nat Elec Conf, 35 (October 25, 1981), pp 48-9.

An Improved Single Mode Fiber Design Exhibiting Low Loss, High Bandwidth, and Tight Mode Confinement, Simultaneously. P. D. Lazay, A. D. Pearson, P. J. Lemaire, and W. A. Reeds, Proc Conf Lasers and Electro-optics—Postdeadline Papers, (June 10, 1981), pp WG6-1-3.

Large-Area Back-Illuminated InGaAs/InP Photodiodes for Use at 1 to 1.6 μm Wavelength. C. A. Burrus, A. G. Dentai, and T. P. Lee, Optics Commun, 38, No. 2 (July 15, 1981), pp 124-6.

Modulated Barrier Photodiode: A New Majority-Carrier Photodetector. C. Y. Chen, A. Y. Cho, P. A. Garbinski, C. G. Bethea, and B. F. Levine, Appl Phys Lett, 39, No. 4 (August 15, 1981), pp 340-2.

Phasing Multitone Signals to Minimize Peak Factors. L. J. Greenstein and P. J. Fitzgerald, IEEE Trans Commun, COM-29, No. 7 (July 1981), pp 1072-4.

Required Transmit Filter Bandwidths in Digital Radio Systems. L. J. Greenstein and D. Vitello, IEEE Trans Commun, COM-29, No. 9 (September 1981), pp 1405-8.

A Single Chip CMOS PCM Codec With Filters. D. G. Marsh, B. K. Ahuja, T. Misawa, M. R. Dwarakanath, P. E. Fleischer, and V. R. Saari, IEEE J Solid State Circuits, SC-16, No. 4 (August 1981), pp 308-15.

The Structure of Quantization Noise from Sigma-Delta Modulation. J. C. Candy and O. J. Benjamine, IEEE Trans Commun, COM 29, No. 9 (September 1981), pp 1316-23.

Technology Transfer: A Case History Construction of a Multijoule Laser at Bell Labs Shows How Technology Developed for Government Programs can be Transferred to Other Organizations. R. H. Storz, Laser Focus, 17, No. 9 (September 1981), pp 65-6.

A Voiceband Codec With Digital Filtering. J. C. Candy, B. A. Wooley, and O. J. Benjamine, IEEE Trans Commun, COM-29, No. 6 (June 1981), pp 815-30.

PHYSICAL SCIENCES

- The Absence of Photochromic Switching in Semiconducting Films of Thioindigo.** S. C. Dahlberg and C. B. Reinganum, *J Chem Phys*, 75 (September 1981), pp 2429-31.
- Active Mode Locking of Double Heterostructure Lasers in an External Cavity.** J. P. van der Ziel, *J Appl Phys*, 52, No. 7 (July 1981), pp 4435-46.
- An AES Study of the Oxidation of a 97Pb-3Sn Alloy.** R. P. Frankenthal and D. J. Siconolfi, *Corrosion Sci*, 21, No. 7 (July 1981), pp 479-86.
- Alloyed Tin-Gold Ohmic Contacts on n-type InP.** P. A. Barnes and R. S. Williams, *Solid State Elec*, 24, No. 10 (1981), pp 907-13.
- CO Emission from Seyfert Galaxies.** J. H. Beiging, L. Blitz, C. J. Lada, and A. A. Stark, *Astrophys J*, 247, No. 2 (July 15, 1981), pp 443-8.
- CO in M31.** A. A. Stark, R. A. Linke, and M. A. Frerking, *Bull Astron Soc*, 13, No. 2 (1981), pp 535.
- Compensation in Ge-doped p-Type $\text{Ga}_{1-x}\text{Al}_x\text{As}$ Grown by Liquid-Phase Epitaxy.** V. Swaminathan, P. J. Anthony, J. L. Zilko, M. D. Sturge, and N. E. Schumaker, *J Appl Phys*, 52, No. 9 (1981), pp 5603-7.
- Covercoat Retardation of Permeation Through Sheet Molding Compound.** T. E. Graedel and J. P. Franey, *J Appl Polymer Sci*, 26, No. 11 (1981), pp 3933-8.
- Direct Measurement of Scattering Losses in Single-Mode and Multimode Optical Fibers.** D. L. Philen and F. T. Stone, *Phys Fiber Opt, Vol. 2: Advances in Ceramics*, edited by B. Bendow and S. Mitra, Columbus, Ohio: Amer Ceramic Soc (July 1981), pp 237-46.
- Electron Impact Ionization Cross Section of Metastable $\text{N}_2(\text{A}^3\Sigma^u)$.** P. B. Armentrout, S. M. Tarr, A. Dori, and R. S. Freund, *J Chem Phys*, 75, No. 6 (September 15, 1981), pp 2786-94.
- Extensional Flow of Linear and Star-Branched Hydrogenated Polybutadiene with Narrow Molecular Weight Distribution.** V. R. Raju, V. S. Au-Yeung, and C. W. Macosko, *J Rheology*, 25, No. 4 (August 1981), pp 445-52.
- Ferroelectric Behavior and Phase Transition at 715K in SrAlF₆.** S. C. Abrahams, J. Ravez, A. Simon, and J. P. Chaminade, *J Appl Phys*, 52, No. 7 (July 1981), pp 4740-3.
- Free-to-Bound Transitions in S-doped Epitaxial $\text{Ga}_{1-x}\text{Al}_x\text{As}$.** V. Swaminathan, M. D. Sturge, and J. L. Silko, *J Appl Phys*, 52, No. 10 (October 1981), pp 6306-11.
- $\text{Ga}_n\text{O}_3 - \text{GeO}_2 - \text{As}_2\text{O}_5$ Glasses.** W. H. Grodkiewicz, H. M. O'Bryan, L. Pressman, S. Singh, L. G. VanWitert, and G. Zydzik, *J Non-Crystalline Solids*, 44, No. 2-3 (June 1981), pp 405-8.
- Galvanic Corrosion of Metals Coupled to Carbon-Black Filled Polyethylene.** G. Schick, *Proc Int Symp Honoring Prof. H. H. Uhlig on his 75th Birthday—Corrosion and Corrosion Protection, Corrosion Div Elec Soc*, 81-8 (August 1981), pp 259-65.
- Internal Structure of Phase-Slip Centers in Superconducting Microstrips.** W. J. Skocpol and L. D. Jackel, *Physica B*, 108B-C, No. 2 (August-September 1981), pp 1021-2.
- On the Oxidation of Tin-Lead Alloys.** R. P. Frankenthal and D. J. Siconolfi, *Corrosion and Corrosion Protection*, edited by R. P. Frankenthal and F. Mansfeld, Pennington, N. J.: The Electrochemical Soc Inc, pp 276-84.
- Pulsating Output of Separate Confinement Buried Optical Guide Lasers Due to the Deliberate Introduction of Saturable Loss.** J. P. van der Ziel, W. T. Tsang, R. A. Logan, and W. M. Augustyniak, *Appl Phys Lett*, 39, No. 5 (September 1981), pp 376-8.
- Radiative Recombination in Crystalline As₂S₃.** K. Murayama and M. A. Bosch, *Phys Rev B*, 23, No. 12 (June 15, 1981), pp 21-3.
- Raman Study of Evaporated and Sputtered $\text{Ge}_x\text{Se}_{1-x}$ Glass Films.** J. E. Griffiths and W. R. Sinclair, *Appl Phys Lett*, 39, No. 7 (October 1, 1981), pp 551-3.
- The Replication, Generation, and Reduction of Dislocations During Iso-Epitaxy on InP Substrates.** S. Mahajan, V. G. Keramidas, A. K. Chin, S. N. G. Chu, W. A. Bonner, and D. D. Manchon, Jr., *Inst Phys Conf, Ser No. 59, Chapter 8* (September 8-12, 1980), pp 413-8.

- Specific Heat of the Concentrated Spin Glasses Mn_3Ge_2 and $MnGe$.** J. J. Hauser and F. S. L. Hsu, Phys Rev, 24, No. 3 (August 1, 1981), pp 1550-1.
- Velocity Field Characteristics of Minority Carriers (Electrons) in p - $In_{0.53}Ga_{0.47}As$.** J. Degani, R. F. Leheny, R. E. Nahory, and J. P. Heritage, Appl Phys Lett, 39, No. 7 (October 1, 1981), pp 569-72.

SOCIAL AND LIFE SCIENCES

- What Does Ghiselin Mean by "Individual"?** J. B. Kruskal, The Behavioral and Brain Sciences, 4, No. 2 (June 1981), pp 294-5.

