Recent papers by IBM authors

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- *Papers are listed alphabetically by author.*

A

J. A. Aboaf (IBM Corporation, P.O. Box 218, Yorktown Heights, NY 10598), T. R. McGuire, S. R. Herd, and E. Klokholm, **Magnetic, Transport, and Structural Properties of Iron Platinum Thin Films**, *IEEE Transactions on Magnetics* **MAG-20,** No. 5, 1642–1644 (1984).

G. Aeppli (AT&T Bell Laboratories, Murray Hill, NJ 07974) and R. Bruinsma, **Hexatic Order and Liquid Density Fluctuations,** *Physical Review Letters* **53,** No. 22, 2133–2136 (1984).

K. Y. Ahn (IBM Corporation, P.O. Box 218, Yorktown Heights, NY 10598) and S. Basavaiah, **A Critical Comparison of Silicide Film Deposition Techniques,** *Thin Solid Films* **118,** No. 2, 163–170 (1984).

A. Anzaloni (IBM Corporation, 5600 Cottle Road, San Jose, CA 95193) and L. C. Barbosa, **The Average Power Density Spectrum of the Readback Voltage from Particulate Media,** *IEEE Transactions on Magnetics* **MAG-20,** No. 5, 693–697 (1984).

T. C. Arnoldussen (IBM Institute of Magnetic Recording, San Jose, CA 95193), E. M. Rossi, A. Ting, A. Brunsch, J. Scheider, and G. Trippel (IBM Corporation, 5600 Cottle Road, San Jose, CA 95193), **Obliquely Evaporated Iron Cobalt and Iron Cobalt Chromium Thin Film Recording Media,** *IEEE Transactions on Magnetics* **MAG-20,** No. 5, 821–823 (1984).

B

Z. Barzilai (IBM Corporation, P.O. Box 218, Yorktown Heights, NY 10598), L. M. Huisman, G. M. Silberman, D. T. Tang, and D. T. Wools, **Fast Pass Transistor Simulation for Custom MOS Circuits,** *IEEE Transactions on Design Technology* **1,** No. 1, 71–81 (1984).

K. W. Blazey (IBM Corporation, Zurich Research Laboratory, Saumerstrasse 4, CH-8803 Rüschlikon, Switzerland), T. L. Estle, E. Holzschuh, P. F. Meier, B. D. Patterson, and M. Richner, **The Electronic G-Factor Anisotropy Determined from Measurements Near the Magic Field of Anomalous Muonium in Silicon and Germanium,** *Hyperfine Interactions* **18,** No. 1/4, 595–598 (1984).

K. W. Blazey (IBM Corporation, Zurich Research Laboratory, Saumerstrasse 4, CH-8803 Rüschlikon, Switzerland), T. L. Estle, E. Holzschuh, W. Odermatt, and B. D. Patterson, **Temperature Dependence of the Hyperfine Parameters of Anomalous Muonium in Germanium,** *Hyperfine Interactions* **18,** No. 1/4, 619–622 (1984).

H. F. Budd (IBM Europe, Tour Pascal Cedex 40, F-92075, Paris La Defense, France), **European Computer Network,** *Science* **226,** No. 4677, 911 (1984).

C

L. F. Chaparro (University of Pittsburgh, Department of Electrical Engineering, Pittsburgh, PA 15261) and R. Bournas, **Sufficient Conditions for Minimum Phase Two-Dimensional PLSIS,** *IEEE Transactions on Acoustics, Speech, and Signal Processing* **ASSP-32,** No. 4, 916–918 (1984).

M. S. Choi (IBM Corporation, East Fishkill Facility, Hopewell Junction, NY 12533) and E. W. Hearn, **Stress Effects in Boron Implanted Polysilicon Films,** *Journal of the Electrochemical Society* **131,** No. 10, 2443–2446 (1984).

N. J. Chou (IBM Corporation, P.O. Box 218, Yorktown Heights, NY 10598), D. W. Dong, J. Kim, and A. C. Liu, **An XPS and TEM Study of Intrinsic Adhesion Between Polyimide and CR Films,** *Journal of the Electrochemical Society* **131,** No. 10, 2335–2340 (1984).

W. J. Cody (Argonne National Laboratory, Argonne, IL 60439), J. T. Coonen, D. M. Gay, K. Hanson, D. Hough, W. Kahan, R. Karpinski, J. Palmer, F. N. Ris, and D. Stevenson, **A Proposed Radix Independent and Word Length Independent Standard for Floating Point Arithmetic,** *IEEE Micro* **4,** No. 4, 86–100 (1984).

H. Coufal (IBM Corporation, 5600 Cottle Road, San Jose, CA 95193), F. Trager, T. J. Chuang, and A. C. Tam, **High Sensitivity Photothermal Surface Spectroscopy with Polarization Modulation,** *Surface Science* **145,** No. 2/3, L504–L508 (1984).

D. C. Cronemeyer (IBM Corporation, P.O. Box 218, Yorktown Heights, NY 10598), C. C. Chi, A. Davidson, and N. F. Pedersen, **Chaos, Noise, and Tails on the IV Curve Steps of RF-Driven Josephson Junctions,** *Physical Review B* **31,** No. 5, 2667–2674 (1985).

D

F. M. d'Heurle (IBM Corporation, P.O. Box 218, Yorktown Heights, NY 10598) and S. A. Cohen, **Short Time Annealing of Coevaporated Tungsten Silicide Films,** *Journal of the Electrochemical Society* **131,** No. 10, 2446–2451 (1984).

K. L. Damico (Brookhaven National Laboratory, Upton, NY 11973), D. E. Moncton, E. D. Specht, R. J. Birgeneau, S. E. Nagler, and P. M. Horn, **Rotational Transition of Incommensurate Kr Monolayers on Graphite,** *Physical Review Letters* **53,** No. 23, 2250–2253 (1984).

R. H. Dennard (IBM Corporation, P.O. Box 218, Yorktown Heights, NY 10598), **Evolution of the MOSFET Dynamic RAM: A Personal View,** *IEEE Transactions on Electron Devices* **ED-31,** No. 11, 1549–1555 (1984).

L. N. Dunn (IBM Corporation, 1133 Westchester Avenue, White Plains, NY 10601), **IBM's Engineering Design System Support for VLSI Design and Verification,** *IEEE Transactions on Design* **1,** No. 1, 30–40 (1984).

E

M. Elizenberg (IBM Corporation, P.O. Box 218, Yorktown Heights, NY 10598), K. N. Tu, C. J. Palmstrom, and J. W. Mayer, **Two-Step Al/Ti Metallization to PtSi/Si Structures,** *Applied Physics Letters* **45,** No. 8, 905–907 (1984).

T. L. Estle (Rice University, Houston, TX 77251), K. W. Blazey, C. Borkema, and R. H. Heffner, **Muon Spin Rotation Experiments on a Silicon Crystal Doped with ^{13}C,** *Hyperfine Interactions* **18,** No. 1/4, 615–617 (1984).

T. L. Estle (Rice University, Houston, TX 77251), S. L. Rudaz, E. Holzschuh, R. F. Kiefl, B. D. Patterson, W. Kundig, and K. W. Blazey, **Low Field Anomalous Muonium Depolarization in Isotopically Enriched Germanium,** *Hyperfine Interactions* **18,** No. 1/4, 623–627 (1984).

F

E. J. Farrell (IBM Corporation, P.O. Box 218, Yorktown Heights, NY 10598), R. Zappulla, and W. C. Yang, **Color 3D Imaging of Normal and Pathologic Intracranial Structures,** *IEEE Computer Graphics and Applications* **4,** No. 9, 5–17 (1984).

R. Feder (IBM Corporation, P.O. Box 218, Yorktown Heights, NY 10598), V. Banton, D. Sayre, J. Costa, M. Baldini, and B. Kim, **Direct Imaging of Live Human Platelets by Flash X-Ray Microscopy,** *Science* **227,** No. 4682, 63–64 (1984).

R. Feder (IBM Corporation, P.O. Box 218, Yorktown Heights, NY 10598), J. S. Pearlman, J. C. Riordan, and J. L. Costa, **Flash X-Ray Microscopy with a Gas Jet Plasma Source,** *Journal of Microscopy, Oxford* **135,** 347–351 (1984).

J. A. Fejer (Arecibo Observatory, P.O. Box 995, Arecibo, PR 00612), F. T. Djuth, and C. A. Gonzales, **Bragg Backscatter from Plasma Inhomogeneities Due to a Powerful Ionospherically Reflected Radio Wave,** *Journal of Geophysical Research, Space Physics* **89,** 9145–9147 (1984).

J. F. Fernandez (Instituto de Venezolano Investigaçiones Científicas, Caracas 1010A, Venezuela) and E. Pytte, **Numerical Results for the Random-Field Ising Model and the Dilute Antiferromagnetic Ising Model in a Uniform Field,** *Physical Review B* **31,** No. 5, 2886–2891 (1985).

D. J. Frank (IBM Corporation, P.O. Box 218, Yorktown Heights, NY 10598), **A Circuit Oriented Quiteron Analysis,** *Journal of Applied Physics* **56,** No. 9, 2553–2557 (1984).

G

R. J. Gambino (IBM Corporation, P.O. Box 218, Yorktown Heights, NY 10598) and T. R. McGuire, **Spontaneous Hall Effect of Non-S-State Rare Earths in Amorphous GdAu,** *IEEE Transactions on Magnetics* **MAG-20,** No. 5, 1341–1343 (1984).

R. Ghez (IBM Corporation, P.O. Box 218, Yorktown Heights, NY 10598), G. S. Oehrlein, T. O. Sedgwick, F. F. Morehead, and Y. H. Lee, **Exact Description and Data Fitting of Ion Implanted Dopant Profile Evolution During Annealing,** *Applied Physics* **45,** No. 8, 881–883 (1984).

M. C. Golumbic (IBM Israel, Scientific Center, Haifa, Israel), C. L. Monma, and W. T. Trotter, **Tolerance Graphs,** *Discrete Applied Mathematics* **9,** No. 2, 157–170 (1984).

I. S. Gopal (IBM Corporation, P.O. Box 218, Yorktown Heights, NY 10598) and J. M. Jaffe, **Point-to-Multipoint Communication over Broadcast Links,** *IEEE Transactions on Communications* **COM-32,** No. 9, 1034–1044 (1984).

J. D. Gould (IBM Corporation, P.O. Box 218, Yorktown Heights, NY 10598) and C. Lewis, **Designing for Usability: Key Principles and What Designers Think,** *Communications of the ACM* **28,** No. 3, 300–311 (1985).

R. L. Greene (IBM Corporation, 5600 Cottle Road, San Jose, CA 95193) and G. B. Street, **Conducting Organic Materials,** *Science* **226,** No. 4675, 651–656 (1984).

H

F. W. Hahn (IBM Corporation, Tucson AZ 85744), **Head Wear as a Function of Isolated Asperities on the Surface of Magnetic Tape,** *IEEE Transactions on Magnetics* **MAG-20,** No. 5, 918–920 (1984).

M. K. Haynes (IBM Corporation, Tucson, AZ 85744), **Density Response and Modulation Noise Testing of Digital Magnetic Recording Tapes,** *IEEE Transactions on Magnetics* **MAG-20,** No. 5, 845–847 (1984).

P. Heidelberger (IBM Corporation, P.O. Box 218, Yorktown Heights, NY 10598) and S. S. Lavenberg, **Computer Performance Evaluation Methodology,** *IEEE Transactions on Computers* **C-33,** No. 12, 1195–1220 (1984).

D. Henderson (IBM Corporation, 5600 Cottle Road, San Jose, CA 95193) and W. Schmickler, **Some Semiempirical Correlations Involving the Inner Layer Capacitance of Metal Liquid Electrolyte Interfaces,** *Journal of the Electrochemical Society* **175,** No. 1/2, 317–320 (1984).

H. Hiraoka (IBM Corporation, 5600 Cottle Road, San Jose, CA 95193), **Low Energy Proton Beam Lithography with a Thin Oxygen Etch Barrier Layer,** *Journal of the Electrochemical Society* **131,** No. 12, 2938–2944 (1984).

R. F. Hoyt (IBM Corporation, 5600 Cottle Road, San Jose, CA 95193) and H. Sussner, **Precise Side Writing Measurements Using a Single Recording Head,** *IEEE Transactions on Magnetics* **20,** No. 5, 909–911 (1984).

P. Y. Hu (IBM Corporation, Tucson, AZ 85744), W. Hollman, and A. J. Argumedo, **Tension Gradient Measurement of Magnetic Tape,** *IEEE Transactions on Magnetics* **MAG-20,** No. 5, 921–923 (1984).

I

B. R. Iyer (IBM Corporation, P.O. Box 218, Yorktown Heights, NY 10598) and J. B. Sinclair, **Dynamic Memory Interconnections for Rapid Access,** *IEEE Transactions on Computers* **C-33,** No. 10, 923–977 (1984).

J

R. C. Jaeger (Auburn University, Department of Electrical Engineering, Auburn, AL 36849) and F. H. Gaensslen, **Anomalous MOS Capacitance Behavior in Depletion Mode Structures,** *IEEE Transactions on Electron Devices* **ED-31,** No. 12, 1916–1918 (1984).

K

J. H. Kaufman (IBM Corporation, 5600 Cottle Road, San Jose, CA 95193), K. K. Kanazawa, and G. B. Street, **Gravimetric Electrochemical Voltage Spectroscopy: In Situ Mass Measurements During Electrochemical Doping of the Conducting Polymer Polypyrrole,** *Physical Review Letters* **53,** No. 26, 2461–2464 (1984).

R. Kelly (IBM Corporation, P.O. Box 218, Yorktown Heights, NY 10598), **On the Role of Gibbsian Segregation in Causing Preferential Sputtering,** *Surface and Interface Analysis* **7,** No. 1, 1–7 (1985).

W. Kent (IBM Corporation, 555 Bailey Avenue, San Jose, CA 95150), **The Universal Relation Revisited,** *ACM Transactions on Database Systems* **8,** No. 4, 644–648 (1984).

W. Kim (IBM Corporation, P.O. Box 218, Yorktown Heights, NY 10598), D. Gajski, and D. J. Kuck, **A Parallel Pipelined Relational Query Processor,** *ACM Transactions in Database Systems* **9,** No. 2, 214–242 (1984).

R. M. Kloepper (IBM Corporation, Tucson, AZ 85744), B. Finkelstein, and D. P. Braunstein, **Time Decay of Magnetization in Particulate Media,** *IEEE Transactions on Magnetics* **MAG-20,** No. 5, 757–759 (1984).

S. W. Koch (University of Frankfurt, D-6000 Frankfurt 70, Federa Republic of Germany), W. E. Rudge, and F. F. Abraham, **The Commensurate Incommensurate Transition of Krypton on Graphite: A Study via Computer Simulation,** *Surface Science* **145,** No. 2/3, 329–344 (1984).

K. Kohler (Max Planck Institute for Festkorperforschung, Heisenbergstrasse 1, D-7000 Stuttgart, 80, Federal Republic of Germany), J. W. Coburn, D. E. Horne, E. Kay, and J. H. Keller, **Plasma Potentials of 13.56-MHZ RF Argon Glow-Discharges in a Planar System,** *Journal of Applied Physics* **57,** No. 1, 59–66 (1985).

E. Korach (IBM Israel, Scientific Center, IL-3200, Haifa, Israel), D. Rotem, and N. Santoro, **Distributed Algorithms for Finding Centers and Medians in Networks,** *ACM Transactions on Programming Languages and Systems* **6,** No. 3, 380–401 (1984).

H. F. Korth (University of Texas, Department of Computer Science, Austin, TX 78712), G. M. Kuper, J. Feignbaum, A. Vangelder, and J. D. Ullman, **System/U: A Database System Based on the Universal Relation Assumption,** *ACM Transactions on Database Systems* **9,** No. 3, 331–347 (1984).

D. T. Kuan (FMC Corporation, Santa Clara, CA 95052), A. A. Sawchuk, T. C. Strand, and P. Chavel, **Adaptive Noise Smoothing Filter for Images with Signal Dependent Noise,** *IEEE Transactions on Pattern Analysis and Machine Intelligence* **PAMI-7,** No. 2, 165–177 (1985).

L

Y. Lassailly (Institute of Max Von Laul Paul Langevin, F-38042, Grenoble, France), C. Vettier, F. Holtzberg, A. Benoit, and J. Flouquet, **Magnetic Ordering in TMTE,** *Solid State Communications* **52,** No. 8, 717–719 (1984).

Y. H. Lee (IBM Corporation, P.O. Box 218, Yorktown Heights, NY 10598), M. M. Chen, K. Y. Ahn, and A. A. Bright, **Reactive Etching Mechanism of Tungsten Silicide in CF_4-O_2 Plasma,** *Thin Solid Films* **118,** No. 2, 149–154 (1984).

R. E. Lennon (IBM Corporation, Neighborhood Road, Kingston, NY 12401), S. M. Matyas, and C. H. Meyer, **Cryptography in Data Processing,** *Data Processing* **26,** No. 7, 36–38 (1984).

D. Levine (University of Pennsylvania, Philadelphia, PA 19104) and P. J. Steinhart, **Quasicrystals: A New Class of Ordered Structures,** *Physical Review Letters* **53,** No. 26, 2477–2480 (1984).

M. S. Lin (IBM Corporation, P.O. Box A, Essex Junction, VT 05452), **Quantum Effects of Electrons and Holes in the MOSFET Inversion Layer,** *IEEE Electron Device Letters* **EDL-5,** No. 11, 487–490 (1984).

M

J. H. Magerlein (IBM Corporation, P.O. Box 218, Yorktown Heights, NY 10598), J. M. Baker, G. R. Proto, K. R. Grebe, S. P. Klepner, M. J. Palmer, and A. J. Warnecke, **Low Defect Density Insulating Films Deposited on Room Temperature Substrates,** *Journal of Vacuum Science and Technology B* **2,** No. 4, 636–640 (1984).

D. Maier (Oregon Graduate Center, Beaverton, OR 97006), J. D. Ullman, and M. Y. Vardi, **On the Foundations of the Universal Relation Model,** *ACM Transactions on Database Systems* **9,** No. 2, 283–308 (1984).

A. Malhotra (IBM Corporation, P.O. Box 218, Yorktown Heights, NY 10598), H. M. Markowitz, and D. P. Pazel, **EAS-E: An Integrated Approach to Application Development,** *ACM Transactions on Database Systems* **8,** No. 4, 515–542 (1984).

A. Manenschijn (Delft University of Technology, Department of Applied Physics, 2600 GA Delft, Netherlands), M. J. Duijvestijn, J. Smidt, R. A. Wind, C. S. Yannoni, and T. C. Clarke, **Determination of the Orientation of the ^{13}C Chemical Shift Tensor of Undoped Trans-Polyacetylene,** *Chemical Physics Letters* **112,** No. 1, 99–102 (1984).

G. Markovits (IBM Corporation, P.O. Box A, Essex Junction, VT 05452), E. E. Hearn, M. V. Kulkarni, and B. J. Elliott, **Prediction of Spatial Patterns of Oxygen Precipitation in Silicon,** *Journal of the Electrochemical Society* **131,** No. 12, 2918–2923 (1984).

A. Mauger (University of California, Department of Physics, Irvine, CA 92717), G. Zribi, and D. L. Mills (IBM Corporation, P.O. Box 218, Yorktown Heights, NY 10598), **Substrate Induced Orientational Order in the Isotropic Phase of Liquid Crystals,** *Physical Review Letters* **53,** No. 26, 2485–2488 (1984).

T. R. McGuire (IBM Corporation, P.O. Box 218, Yorktown Heights, NY 10598), J. A. Aboaf, and E. Klokholm, **Negative Anisotropic Magnetoresistance in 3D Metals and Alloys Containing Iridium,** *IEEE Transactions on Magnetics* **MAG-20,** No. 5, 972–974 (1984).

B. McNutt (IBM Corporation, 5600 Cottle Road, San Jose, CA 95193), **A Technique for Approximating the Capacity Outage Table Based on the Modeling of Unit Outage Size,** *IEEE Transactions on Power Apparatus and Systems* **103,** No. 10, 2891–2897 (1984).

B. S. Meyerson (IBM Corporation, P.O. Box 218, Yorktown Heights, NY 10598) and W. Olbricht, **Phosphorus Doped Polycrystalline Silicon via LPCVD. I. Process Characterization,** *Journal of the Electrochemical Society* **131,** No. 10, 2361–2365 (1984).

B. S. Meyerson (IBM Corporation, P.O. Box 218, Yorktown Heights, NY 10598) and M. L. Yu, **Phosphorus Doped Polycrystalline Silicon via LPCVD. II. Surface Interactions of the Silane Phosphine Silicon System,** *Journal of the Electrochemical Society* **131,** No. 10, 2366–2368 (1984).

R. D. Miller (IBM Corporation, 5600 Cottle Road, San Jose, CA 95193) and R. Hassig, **Eliminative Deoxygenation: The Facile Formation of α-Trimethylsilyl Vinyl Sulfides from Sulfoxides,** *Tehrahedron Letters* **25,** No. 47, 5351–5354 (1984).

D. K. Miu (University of California, Department of Mechanical Engineering, Berkeley, CA 94720), G. Bouchard, D. B. Bogy, and F. E. Talke, **Dynamic Response of a Winchester Type Slider Measured by Laser Doppler Interferometry,** *IEEE Transactions on Magnetics* **MAG-20,** No. 5, 927–929 (1984).

J. E. Monson (Harvey Mudd College, Claremont, CA 91711), K. P. Ash, R. E. Jones, and D. E. Heim, **Self-Heating Effects in Thin Film Heads,** *IEEE Transactions on Magnetics* **MAG-20,** No. 5, 845–847 (1984).

P. M. Mooney (IBM Corporation, P.O. Box 218, Yorktown Heights, NY 10598) and T. A. Kennedy, **Correlations Between DLTS and EPR Measurements of the Ga Vacancy in GaP,** *Journal of Physics C* **17,** No. 34, 6277–6285 (1984).

T. N. Morgan (IBM Corporation, P.O. Box 218, Yorktown Heights, NY 10598), **Outstanding Questions Concerning the Oxygen Defect in Gallium Phosphide,** *Journal of Physics C* **17,** No. 34, 6147–6159 (1984).

N

A. Nadas (IBM Corporation, P.O. Box 218, Yorktown Heights, NY 10598), **Estimation of Probabilities in the Language Model of the IBM Speech Recognition System,** *IEEE Transactions on Acoustics, Speech, and Signal Processing* **ASSP-32,** No. 4, 859–861 (1984).

D. Nguyen (IBM Corporation, Tucson, AZ 85744) and M. Sathe, **Calculator Predicts DC-DC Stability,** *EDN Magazine* **29,** No. 21, 336–337 (1984).

V. S. Nguyen (IBM Corporation, P.O. Box A, Essex Junction, VT 05452), S. Burton, and P. Pan, **The Variation of Physical Properties of Plasma Deposited Silicon Nitride and Oxynitride with Their Compositions,** *Journal of the Electrochemical Society* **131,** No. 10, 2348–2358 (1984).

L. L. Nunnelley (IBM Corporation, 5600 Cottle Road, San Jose, CA 95193), **Media Noise Considerations: Determination of Particle Noise Limit from Particulate Disk Coatings,** *IEEE Transactions on Magnetics* **MAG-20,** No. 5, 763–764 (1984).

O

H. Ofek (IBM Corporation, 5600 Cottle Road, San Jose, CA 95193), **Design Automation,** *IEEE Transactions on Design Technology* **1,** No. 1, 16–17 (1984).

G. Y. Onoda (IBM Corporation, P.O. Box 218, Yorktown Heights, NY 10598) and J. A. Casey, **Completely Reversible Oxide Water Interfaces,** *Journal of Colloid and Interface Science* **103,** No. 2, 590–593 (1985).

P

D. C. Palmer (IBM Corporation, Rochester, MN 55901) and T. W. McDaniel, **Spurious Signal Pickup from the Outer Rails of a Ferrite Recording Head,** *IEEE Transactions on Magnetics* **MAG-20,** No. 5, 912–914 (1984).

B. D. Patterson (IBM Corporation, Zurich Research Laboratory, Saumerstrasse 4, CH-8803 Rüschlikon, Switzerland), E. Holzschuh, R. F. Kiefl, K. W. Blazey, and T. L. Estle, **Low Temperature Muonium Depolarization in Si and Ge,** *Hyperfine Interactions* **18,** No. 1/4, 599–602 (1984).

P. A. Psaras (IBM Corporation, P.O. Box 218, Yorktown Heights, NY 10598), M. Eizenberg, and K. N. Tu, **Sequential Silicide Formation Between Vanadium and Amorphous Silicon Thin Film Bilayers,** *Journal of Applied Physics* **56,** No. 12, 3439–3444 (1984).

R

K. J. Rao (GE Research Division, Schenectady, NY 12301), J. Wong, and M. W. Shafer, **Nature of TH-F Bonding in Crystalline and Glassy States Using EXAFS and XANES,** *Journal of Solid State Chemistry* **55,** No. 1, 110–115 (1984).

E. B. Rigby (IBM Corporation, Tucson, AZ 85744), **Diffusion Bonding of NiZn Ferrite and Nonmagnetic Materials,** *IEEE Transactions on Magnetics* **MAG-20,** No. 5, 1503–1505 (1984).

E. B. Rigby (IBM Corporation, Tucson, AZ 85744), W. D. Kehr, and C. B. Meldrum, **Preparation of Coprecipitated NiZn Ferrite,** *IEEE Transactions on Magnetics* **MAG-20,** No. 5, 1506–1508 (1984).

H. Rudin (IBM Corporation, Zurich Research Laboratory, Saumerstrasse 4, CH-8803 Rüschlikon, Switzerland), **International Symposium on the Performance of Computer Communications Systems,** *IEEE Communications Magazine* **22,** No. 10, 42 (1984).

R. L. Russo (IBM Corporation, P.O. Box 218, Yorktown Heights, NY 10598), **Ready for Field Test,** *IEEE Transactions on Design Technology* **1,** No. 1, 8–9 (1984).

S

E. S. Schlig (IBM Corporation, P.O. Box 218, Yorktown Heights, NY 10598) and S. G. Chamberlain, **Output Structure for Buried Channel CCD,** *IEEE Transactions on Electron Devices* **ED-31,** No. 12, 1907–1908 (1984).

T. Schneider (IBM Corporation, Zurich Research Laboratory, Saumerstrasse 4, CH-8803 Rüschlikon, Switzerland), M. Zannetti, and R. Badii, **Stochastic Simulation of Quantum Systems and Critical Dynamics,** *Physical Review B* **31,** No. 5, 2941–2951 (1985).

T. Schneider (IBM Corporation, Zurich Research Laboratory, Saumerstrasse 4, CH-8803 Rüschlikon, Switzerland), M. Zannetti, R. Badii, and H. R. Jauslin, **Stochastic Simulation of Quantum Systems and Critical Dynamics,** *Physical Review Letters* **53,** No. 23, 2191–2194 (1984).

P. Siegel (IBM Corporation, 5600 Cottle Road, San Jose, CA 95193) and B. Marcus, **Worst Case Code Patterns for Magnetic Buried Servos,** *IEEE Transactions on Magnetics* **MAG-20,** No. 5, 906–908 (1984).

E. M. Stuve (Stanford University, Department of Chemical Engineering, Stanford, CA 94305), R. J. Madix, and C. R. Brundle, **CO Oxidation on Pd(100): A Study of the Coadsorption of Oxygen and Carbon-Monoxide,** *Surface Science* **146,** No. 1, 155–178 (1984).

T

A. C. Tam (IBM Corporation, 5600 Cottle Road, San Jose, CA 95193) and W. P. Leung, **Measurement of Small Elastic Anisotropy in Solids Using Laser Induced Ultrasonic Pulses,** *Applied Physics Letters* **45,** No. 10, 1040–1042 (1984).

D. T. Tang (IBM Corporation, P.O. Box 218, Yorktown Heights, NY 10598) and C. L. Chen, **Logic Test Pattern Generation Using Linear Codes,** *IEEE Transactions on Computers* **C-33,** No. 9, 845–850 (1984).

D. M. Taub (IBM United Kingdom Laboratories Ltd., Winchester SO21 2JN, Hants, England), **Arbitration and Control Acquisition in the Proposed IEEE-896 Futurebus,** *IEEE Micro* **4,** No. 4, 28–41 (1984).

N. N. Tendolkar (IBM Corporation, P.O. Box 390, Poughkeepsie, NY 12602) and C. R. Hartmann, **Generalization of Chase Algorithms for Soft Decision Decoding of Binary Linear Codes,** *IEEE Transactions on Information Theory* **IT-30,** No. 5, 714–721 (1984).

C. Y. Ting (IBM Corporation, P.O. Box 218, Yorktown Heights, NY 10598), M. Wittmer, S. S. Iyer, and S. B. Brodsky, **Interaction Between Ti and SiO_2,** *Journal of the Electrochemical Society* **131,** No. 12, 2934–2938 (1984).

H. C. Tong (IBM Corporation, 5600 Cottle Road, San Jose, CA 95193), R. Ferrier, P. Chang, J. Tzeng, and K. L. Parker, **The Micromagnetics of Thin Film Disk Recording Tracks,** *IEEE Transactions on Magnetics* **MAG-20,** No. 5, 1831–1833 (1984).

F. Turini (IBM Corporation, 5600 Cottle Road, San Jose, CA 95193), **$MAGMA_2$: A Language Oriented Toward Experiments in Control,** *ACM Transactions on Programming Languages and Systems* **6,** No. 4, 468–486 (1984).

V

A. W. Vinal (IBM Corporation, Research Triangle Park, NC 27709), **Considerations for Applying Solid State Sensors to High Density Magnetic Disk Recording,** *IEEE Transactions on Magnetics* **MAG-20,** No. 5, 681–686 (1984).

W

Z. A. Weinberg (IBM Corporation, P.O. Box 218, Yorktown Heights, NY 10598), D. R. Young, J. A. Calise, S. A. Cohen, J. C. Deluca, and V. R. Deline, **Reduction of Electron and Hole Trapping in SiO_2 by Rapid Thermal Annealing,** *Applied Physics Letters* **45,** No. 11, 1204–1206 (1984).

C. W. White (Oak Ridge National Laboratory, Oak Ridge, TN 37830), G. Farlow, J. Narayan, G. J. Clark, and J. E. E. Baglin, **Ion Beam Mixing of Metal Films on SiO_2,** *Materials Letters* **2,** No. 5A, 367–372 (1984).

T. W. Williams (IBM Corporation, Boulder, CO 80302), **VLSI Testing,** *Computer* **17,** No. 10, 126–136 (1984).

J. W. Wong (University of Waterloo, Department of Computer Science, Waterloo N2L 3G7, Ontario, Canada) and W. Bux, **Analytic Modeling of an Adapter to Local Area Networks,** *IEEE Transactions on Communications* **COM-32,** No. 10, 1111–1117 (1984).

Y

K. Yakushi, L. J. Lauchlan, G. B. Street (IBM Corporation, 5600 Cottle Road, San Jose, CA), and J. L. Brédas, **Optical Study of Poly-β,β'-Dimethylpyrrole Perchlorate: Evidence for Bipolarons,** *Journal of Chemical Physics* **81,** No. 9, 4133–4137 (1984).

S. Yamada (Hiroshima University, Hiroshima 724, Japan), M. Ohba, and S. Osaki, **S-Shaped Reliability Growth Modeling for Software Error Detection,** *IEEE Transactions on Reliability* **R-32,** No. 5, 475 (1984).