

Recent publications by IBM authors

The information listed here is supplied by the Institute for Scientific Information and other outside sources. Reprints of the papers may be obtained by writing directly to the first author cited.

- Journals are listed alphabetically by title; papers are listed sequentially for each journal.

A

A Comparative Study of Static and Profile-Based Heuristics for Inlining, M. Arnold (Rutgers State University, Piscataway, NJ 08855) et al., *ACM SIGPLAN Notices* **35**, No. 7, 52–64 (2000).

Java 2 Distributed Object Middleware Performance Analysis and Optimization, M. B. Juric (University of Maribor, Smetanova 17, SI-2000 Maribor, Slovenia) et al., *ACM SIGPLAN Notices* **35**, No. 8, 31–40 (2000).

Improving the Java Memory Model Using CRF, J. W. Maessen (Massachusetts Institute of Technology, Cambridge, MA 02139) et al., *ACM SIGPLAN Notices* **35**, No. 10, 1–12 (2000).

Adaptive Optimization in the Jalapeño JVM, M. Arnold (IBM Corporation, P.O. Box 704, Yorktown Heights, NY 10598) et al., *ACM SIGPLAN Notices* **35**, No. 10, 47–65 (2000).

Quicksilver: A Quasi-Static Compiler for Java, M. Serrano (IBM Corporation, P.O. Box 218, Yorktown Heights, NY 10598) et al., *ACM SIGPLAN Notices* **35**, No. 10, 66–82 (2000).

Sealed Calls in Java Packages, A. Zaks (IBM Israel, IL-65193 Haifa, Israel) et al., *ACM SIGPLAN Notices* **35**, No. 10, 83–92 (2000).

Middleware Object Query Processing with Deferred Updates and Autonomous Sources, J. Kiernan (IBM Corporation, 650 Harry Road, San Jose, CA 95120) and M. J. Carey, *ACM SIGPLAN Notices* **35**, No. 10, 118–129 (2000).

Mapping UML Designs to Java™, W. Harrison (IBM Corporation, P.O. Box 704, Yorktown Heights, NY 10598) et al., *ACM SIGPLAN Notices* **35**, No. 10, 178–187 (2000).

Scalable Propagation-Based Call Graph Construction Algorithms, F. Tip (IBM Corporation, P.O. Box 704, Yorktown Heights, NY 10598) and J. Palsberg, *ACM SIGPLAN Notices* **35**, No. 10, 281–293 (2000).

A Study of Devirtualization Techniques for a Java™ Just-in-Time Compiler, K. Ishizaki (IBM Japan, Ltd., 1623-14 Shimotsuruma, Yamato, Kanagawa 242, Japan) et al., *ACM SIGPLAN Notices* **35**, No. 10, 294–310 (2000).

Guava: A Dialect of Java Without Data Races, D. F. Bacon (IBM Corporation, P.O. Box 704, Yorktown Heights, NY 10598) et al., *ACM SIGPLAN Notices* **35**, No. 10, 382–400 (2000).

Memories: A Programmable, Real-Time Hardware Emulation Tool for Multiprocessor Server Design, A. Nanda (IBM Corporation, P.O. Box 218, Yorktown Heights, NY 10598) et al., *ACM SIGPLAN Notices* **35**, No. 11, 37–48 (2000).

Effective Null Pointer Check Elimination Utilizing Hardware Trap, M. Kawahito (IBM Japan, Ltd., 1623-14 Shimotsuruma, Yamato, Kanagawa 242, Japan) et al., *ACM SIGPLAN Notices* **35**, No. 11, 139–149 (2000).

From Flop to Megaflops: Java for Technical Computing, J. E. Moreira (IBM Corporation, P.O. Box 218, Yorktown Heights, NY 10598) et al., *ACM Transactions on Programming Languages and Systems* **22**, No. 2, 265–295 (2000).

Context-Sensitive Synchronization-Sensitive Analysis is Undecidable, G. Ramalingam (IBM Corporation, P.O. Box 704, Yorktown Heights, NY 10598), *ACM Transactions on Programming Languages and Systems* **22**, No. 2, 416–430 (2000).

Understanding Class Hierarchies Using Concept Analysis, G. Snelling (University of Passau, Innstrasse 33, D-94032 Passau, Germany) and F. Tip, *ACM Transactions on Programming Languages and Systems* **22**, No. 3, 540–582 (2000).

State-of-the-Art in Electronic Payment Systems, N. Asokan (Nokia Research Center, Helsinki, Finland) et al., *Advances in Computers* **53**, 425–449 (2000).

An Integrated Approach to Solving Mechanical Problems on Parallel Computers, J. Y. Cognard (ENS Cachan, Antenne de Bretagne, Bruz, France) et al., *Advances in Engineering Software* **31**, No. 12, 885–899 (2000).

A Revised Taxonomy for Intrusion Detection Systems, H. Debar (IBM Corporation, Säumerstrasse 4, 8803 Rüschlikon, Switzerland) et al., *Annales des Telecommunications* **55**, No. 7–8, 361–378 (2000).

Mobile Agents and Telcos Nightmares, G. Karjoth (IBM Corporation, Säumerstrasse 4, 8803 Rüschlikon, Switzerland) and J. Posegga, *Annales des Telecommunications* **55**, No. 7–8, 388–400 (2000).

Software Development Cost Estimation Approaches: A Survey, B. Boehm (University of Southern California, Los Angeles, CA 90089) et al., *Annals of Software Engineering* **10**, 177–205 (2000).

Copper Metallization for High-Performance Silicon Technology, R. Rosenberg (IBM Corporation, P.O. Box 218, Yorktown Heights, NY 10598) et al., *Annual Review of Materials Science* **30**, 229–262 (2000).

The Properties of Ferroelectric Films at Small Dimensions, T. M. Shaw (IBM Corporation, P.O. Box 218, Yorktown Heights, NY 10598) et al., *Annual Review of Materials Science* **30**, 263–298 (2000).

SiGe Technology: Heteroepitaxy and High-Speed Microelectronics, P. M. Mooney (IBM Corporation, P.O. Box 218, Yorktown Heights, NY 10598) and J. O. Chu, *Annual Review of Materials Science* **30**, 335–362 (2000).

Advances In-Situ Ultra-High Vacuum Electron Microscopy: Growth of SiGe on Si, R. M. Tromp (IBM Corporation, P.O. Box 218, Yorktown Heights, NY 10598) and F. M. Ross, *Annual Review of Materials Science* **30**, 431–449 (2000).

Mechanisms for Enhanced Formation of the C54 Phase of Titanium Silicide Ultra-Large-Scale Integration Contacts, J. M. E. Harper (IBM Corporation, P.O. Box 218, Yorktown Heights, NY 10598) et al., *Annual Review of Materials Science* **30**, 523–543 (2000).

Synthesis and Characterization of Monodisperse Nanocrystals and Close-Packed Nanocrystal Assemblies, C. B. Murray (IBM Corporation, P.O. Box 218, Yorktown Heights, NY 10598) et al., *Annual Review of Materials Science* **30**, 545–610 (2000).

Extremely High-Density Longitudinal Magnetic Recording Media, D. Weller (Seagate Technology, Pittsburgh, PA 15203) and M. Doerner, *Annual Review of Materials Science* **30**, 611–644 (2000).

Device Innovation and Material Challenges at the Limits of CMOS Technology, P. M. Solomon (IBM Corporation, P.O. Box 218, Yorktown Heights, NY 10598), *Annual Review of Materials Science* **30**, 681–697 (2000).

Design and Performance of a Refractive Optical System that Converts a Gaussian to a Flat-top Beam, J. A. Hoffnagle (IBM Corporation, 650 Harry Road, San Jose, CA 95120) and C. M. Jefferson, *Applied Optics* **39**, No. 30, 5488–5499 (2000).

Small Silicon Memories: Confinement, Single-Electron, and Interface State Considerations, S. Tiwari (Cornell University, Ithaca, NY 14853) et al., *Applied Physics A* **71**, No. 4, 403–414 (2000).

Determination of Average Demagnetizing Fields in Longitudinal Magnetic Recording Using Nanosecond Field Pulses, A. Moser (IBM Corporation, 650 Harry Road, San Jose, CA 95120) et al., *Applied Physics Letters* **77**, No. 10, 1505–1507 (2000).

Scanning Aperture Photoemission Microscopy for Magnetic Imaging, G. M. McClelland (IBM Corporation, 650 Harry Road, San Jose, CA 95120) and C. T. Rettner, *Applied Physics Letters* **77**, No. 10, 1511–1513 (2000).

Néel “Orange-Peel” Coupling in Magnetic Tunneling Junction Devices, B. D. Schrag (Brown University, Providence, RI 02912) et al., *Applied Physics Letters* **77**, No. 15, 2373–2375 (2000).

Role of CsF on Electron Injection into a Conjugated Polymer, P. Pfromm (Cornell University, Ithaca, NY 14853) et al., *Applied Physics Letters* **77**, No. 15, 2403–2405 (2000).

Probing Capped and Uncapped Mesoporous Low-Dielectric Constant Films Using Positron Annihilation Lifetime Spectroscopy, M. P. Petkov (Washington State University, Pullman, WA 99164) et al., *Applied Physics Letters* **77**, No. 16, 2470–2472 (2000).

Dislocation Energetics in Epitaxial Strained Islands, B. J. Spencer (State University of New York, Buffalo, NY 14260) and J. Tersoff, *Applied Physics Letters* **77**, No. 16, 2533–2535 (2000).

Atomic-Beam Deposition of Lanthanum-Based and Yttrium-Based Oxide Thin Films for Gate Dielectrics, S. Guha (IBM Corporation, P.O. Box 218, Yorktown Heights, NY 10598) et al., *Applied Physics Letters* **77**, No. 17, 2710–2712 (2000).

Defect Generation in Ultrathin Silicon Dioxide Films Produced by Anode Hole Injection, D. J. DiMaria (IBM Corporation, P.O. Box 218, Yorktown Heights, NY 10598), *Applied Physics Letters* **77**, No. 17, 2716–2718 (2000).

Magnetoresistance of Self-Assembled Lateral Multilayers, E. D. Tober (Nuance Communications, 1380 Willow Road, Menlo Park, CA 94025) et al., *Applied Physics Letters* **77**, No. 17, 2728–2730 (2000).

Roughness of Molecularly Thin Perfluoropolyether Polymer Films, M. F. Toney (IBM Corporation, 650 Harry Road, San Jose, CA 95120) et al., *Applied Physics Letters* **77**, No. 20, 3296–3298 (2000).

Highly Parallel Data Storage System Based on Scanning Probe Arrays, M. I. Lutwyche (IBM Corporation, Säumerstrasse 4, 8803 Rüschlikon, Switzerland) et al., *Applied Physics Letters* **77**, No. 20, 3299–3301 (2000).

Quantitative Nanoscale Metrology Study of Cu/SiO₂ Interconnect Technology Using Transmission X-ray Microscopy, X. Su (University of Chicago, 5640 South Ellis Avenue, Chicago, IL 60637) et al., *Applied Physics Letters* **77**, No. 21, 3465–3467 (2000).

Hubble Space Telescope Observations of the Interacting Galaxies NGC-2207 and IC-2163, B. G. Elmegreen (IBM Corporation, P.O. Box 218, Yorktown Heights, NY 10598) et al., *Astronomical Journal* **120**, No. 2, 630–644 (2000).

Dust Streamers in the Virgo Galaxy M86 from Ram Pressure-Stripping of Its Companion VCC 882, D. M. Elmegreen (Vassar College, Poughkeepsie, NY 12604) et al., *Astronomical Journal* **120**, No. 2, 733–740 (2000).

Structure and Star Formation in NGC 925, D. J. Pisano (University of Wisconsin, 475 North Charter Street, Madison, WI 53706) et al., *Astronomical Journal* **120**, No. 2, 763–776 (2000).

A Pressure Anomaly for H π Regions in Irregular Galaxies, B. G. Elmegreen (IBM Corporation, P.O. Box 218, Yorktown Heights, NY 10598) and D. A. Hunter, *Astrophysical Journal* **540**, No. 2, 814–824 (2000).

C

Nonlinear Optics in Space, P. P. Sorokin (IBM Corporation, P.O. Box 218, Yorktown Heights, NY 10598) and J. H. Glowina, *Canadian Journal of Physics* **78**, No. 5–6, 461–481 (2000).

Mining and E-Business: Hoisting the Value, M. Davies (IBM Corporation, Armonk, NY 10504), *Canadian Mining Journal* **121**, No. 5, 25+ (2000).

Conversational Interfaces, J. Lai (IBM Corporation, P.O. Box 704, Yorktown Heights, NY 10598), *Communications of the ACM* **43**, No. 9, 24–27 (2000).

VoiceXML for Web-Based Distributed Conversational Applications, B. Lucas (IBM Corporation, P.O. Box 218, Yorktown Heights, NY 10598), *Communications of the ACM* **43**, No. 9, 53–57 (2000).

E-Process Design and Assurance Using Model Checking, W. L. Wang (Emory University, Atlanta, GA 30322) et al., *Computer* **33**, No. 10, 48+ (2000).

Applying Authorization to Intranets: Architectures, Issues and APIs, P. Ashley (Tivoli, Inc., 9020 Capital of Texas Highway, Austin, TX 78759) et al., *Computer Communications* **23**, No. 17, 1613–1620 (2000).

A Data Mining Analysis of RTID Alarms, S. Manganaris (IBM Corporation, 19 Lakehurst Court, Research Triangle Park, NC 27713) et al., *Computer Networks* **34**, No. 4, 571–577 (2000).

HBrowse: A Grace Tool for Browsing R-Matrix H-Files, D. W. Busby (IBM United Kingdom, Ltd., Hursley Park, Winchester, Hants SO21 2JN, United Kingdom) et al., *Computer Physics Communications* **131**, No. 3, 202–224 (2000).

Finding Consensus in Speech Recognition: Word Error Minimization and Other Applications of Confusion Networks, L. Mangu (IBM Corporation, P.O. Box 218, Yorktown Heights, NY 10598) et al., *Computer Speech and Language* **14**, No. 4, 373–400 (2000).

Cross-Flow: Cross-Organizational Workflow Management in Dynamic Virtual Enterprises, P. Grefen (University of Twente, P.O. Box 217, NL-7500 AE Enschede, Netherlands) et al., *Computer Systems Science and Engineering* **15**, No. 5, 277–290 (2000).

3-D Mesh Geometry Filtering Algorithms for Progressive Transmission Schemes, R. Balan (Siemens Corporation, 755 College Road East, Princeton, NJ 08540) and G. Taubin, *Computer-Aided Design* **32**, No. 13, 825–846 (2000).

Ticket and Challenge-Based Protocols for Timestamping, M. Peyravian (IBM Corporation, Research Triangle Park, NC 27709) et al., *Computers & Security* **19**, No. 6, 551–558 (2000).

Design, Implementation, and Evaluation of Optimizations in a Java™ Just-in-Time Compiler, I. Ishizaki (IBM Japan, Ltd., 1623-14 Shimotsuruma, Yamato, Kanagawa 242, Japan) et al., *Concurrency* **12**, 457–475 (2000).

D

Raman Spectroscopy Measurements of DC-Magnetron-Sputtered Carbon Nitride (A-C-N) Thin Films for Magnetic Hard-Disk Coatings, M. Neuhaeuser (IBM Deutschland GmbH, D-55131 Mainz, Germany) et al., *Diamond and Related Materials* **9**, No. 8, 1500–1505 (2000).

High-Level Program Development: In the Future, Programmers May Do Less Coding, B. Bloom (IBM Corporation, Armonk, NY 10504) et al., *Dr. Dobbs's Journal*, No. S, 17–21 (2000).

Measuring C++ Program Efficiency, D. Truong (IBM Corporation, Armonk, NY 10504) and A. Chan, *Dr. Dobbs's Journal* **25**, No. 10, 62+ (2000).

Multilanguage Programming, D. Wendt (IBM Corporation, Armonk, NY 10504), *Dr. Dobb's Journal* **25**, No. 11, 68+ (2000).

Strangers in the Night, W. Venema (IBM Corporation, Armonk, NY 10504), *Dr. Dobb's Journal* **25**, No. 11, 82+ (2000).

File Recovery Techniques, W. Venema (IBM Corporation, P.O. Box 704, Yorktown Heights, NY 10598), *Dr. Dobb's Journal* **25**, No. 12, 74+ (2000).

E

Concurrent Trading in Two Experimental Markets with Demand Interdependence, A. W. Williams (IBM Corporation, P.O. Box 218, Yorktown Heights, NY 10598) et al., *Economic Theory* **16**, No. 3, 511–528 (2000).

Noise Reduction is Crucial to Mixed Signal ASIC Design Success (Part I), J. Twomey (IBM Corporation, San Diego, CA), *Electronic Design* **48**, No. 22, 123+ (2000).

Dynamics of Vibrated Granular Monolayers, X. Nie (Los Alamos National Laboratory, Los Alamos, NM 87545) et al., *Europhysics Letters* **51**, No. 6, 679–684 (2000).

F

V-Shape Switching Ferroelectric Liquid Crystal for Reflective Microdisplay Applications, M. H. Lu (IBM Corporation, P.O. Box 218, Yorktown Heights, NY 10598) et al., *Ferroelectrics* **246**, No. 1–4, 1069+ (2000).

The Physical Implementation of Quantum Computation, D. P. DiVincenzo (IBM Corporation, P.O. Box 218, Yorktown Heights, NY 10598), *Fortschritte der Physik* **48**, No. 9–11, 771–783 (2000).

3-D Web Environment for Knowledge Management, R. Yoshida (IBM Japan, Ltd., 1623-14 Shimotsuruma, Yamato, Kanagawa 242, Japan) et al., *Future Generation Computer Systems* **17**, No. 1, 73–78 (2000).

I

Physically Interactive Story Environments, C. S. Pinhanez (IBM Corporation, 30 Saw Mill River Road, Hawthorne, NY 10532) et al., *IBM Systems Journal* **39**, No. 3–4, 438–455 (2000).

Applications for Data Hiding, W. Bender (Massachusetts Institute of Technology, Cambridge, MA 02139) et al., *IBM Systems Journal* **39**, No. 3–4, 547–568 (2000).

A New Structure for News Editing, D. Gruhl (IBM Corporation, 650 Harry Road, San Jose, CA 95120) and W. Bender, *IBM Systems Journal* **39**, No. 3–4, 569–588 (2000).

SuperNews: Multiple Feeds for Multiple Views, S. Elo Dean (IBM Corporation, 590 Madison Avenue, New York, NY 10022) and L. Weitzman, *IBM Systems Journal* **39**, No. 3–4, 633–645 (2000).

Design Methodology for a Large Communication Chip, R. Clauberg (IBM Corporation, Säumerstrasse 4, 8803 Rüschlikon, Switzerland) et al., *IEEE Design & Test of Computers* **17**, No. 3, 86–94 (2000).

An Electrically and Optically Gate-Controlled Schottky/2DEG Varactor, A. Anwar (Drexel University, Philadelphia, PA 19104) et al., *IEEE Electron Device Letters* **21**, No. 10, 473–475 (2000).

Policy-Based Diffserv on Internet Servers: The AIX Approach, A. Mehra (IBM Corporation, P.O. Box 218, Yorktown Heights, NY 10598) et al., *IEEE Internet Computing* **4**, No. 5, 75–80 (2000).

An 833-MHz 1.5-W 18-Mb CMOS SRAM with 1.67 Gb/s/pin, H. Pilo (IBM Corporation, Essex Junction, VT 05452) et al., *IEEE Journal of Solid-State Circuits* **35**, No. 11, 1641–1647 (2000).

1-GHz Fully Pipelined 3.7-ns Address Access Time 8 k × 1024 Embedded Synchronous DRAM Macro, O. Takahashi (IBM Corporation, Austin, TX 78758) et al., *IEEE Journal of Solid-State Circuits* **35**, No. 11, 1673–1679 (2000).

A 26.5 GHz Silicon MOSFET 2/1 Dynamic Frequency Divider, M. Wetzel (University of California, La Jolla, CA 92093) et al., *IEEE Microwave and Guided Wave Letters* **10**, No. 10, 421–423 (2000).

Tunable Passband Flattened 1-from-16 Binary-Tree Structured Add-After-Drop Multiplexer Using SiON Waveguide Technology, C. G. H. Roeloffzen (IBM Corporation, Säumerstrasse 4, 8803 Rüschlikon, Switzerland) et al., *IEEE Photonics Technology Letters* **12**, No. 9, 1201–1203 (2000).

Multisensor Tracking of a Maneuvering Target in Clutter Using IMM-PDA Fixed-Lag Smoothing, B. Chen (IBM Corporation, Route 52, Hopewell Junction, NY 12533) and J. K. Tugnait, *IEEE Transactions on Aerospace and Electronic Systems* **36**, No. 3, 983–991 (2000).

Joint Rate Control with Look-Ahead for Multi-Program Video Coding, L. Boroczky (Philips Electronics, Briarcliff Manor, NY 10510) et al., *IEEE Transactions on Circuits and Systems for Video Technology* **10**, No. 7, 1159–1163 (2000).

A Constructive Algorithm for 2-D Spectral Factorization with Rational Spectral Factors, S. Basu (IBM Corporation, P.O. Box 218, Yorktown Heights, NY 10598), *IEEE Transactions on Circuits and Systems I* **47**, No. 9, 1309–1318 (2000).

Nonuniform Temperature and Strain Fields in a Powered Package, J. Wakil (IBM Corporation, Endicott, NY 13760) and P. S. Ho, *IEEE Transactions on Components and Packaging Technologies* **23**, No. 3, 521–527 (2000).

Location Consistency: A New Memory Model and Cache Consistency Protocol, G. R. Gao (University of Delaware, Newark, DE 19716) and V. Sarkar, *IEEE Transactions on Computers* **49**, No. 8, 798–813 (2000).

Properties of Rescheduling Size Invariance for Dynamic Rescheduling-Based VLIW Cross-Generation Compatibility, T. M. Conte (North Carolina State University, Raleigh, NC 27695) and S. Sathaye, *IEEE Transactions on Computers* **49**, No. 8, 814–825 (2000).

A Novel Si/SiGe Heterojunction pMOSFET with Reduced Short-Channel Effects and Enhanced Drive Current, Q. Q. Ouyang (IBM Corporation, P.O. Box 218, Yorktown Heights, NY 10598) et al., *IEEE Transactions on Electron Devices* **47**, No. 10, 1943–1949 (2000).

Noise Modeling and SiGe Profile Design Tradeoffs for RF Applications, G. F. Niu (Auburn University, Auburn, AL 36849) et al., *IEEE Transactions on Electron Devices* **47**, No. 11, 2037–2044 (2000).

Optimal Codes for Single-Error Correction, Double-Adjacent Error Detection, M. Biberstein (IBM Israel, IL-31905 Haifa, Israel) and T. Etzion, *IEEE Transactions on Information Theory* **46**, No. 6, 2188–2193 (2000).

Separation of Random Number Generation and Resolvability, K. Visweswariah (IBM Corporation, P.O. Box 218, Yorktown Heights, NY 10598) et al., *IEEE Transactions on Information Theory* **46**, No. 6, 2237–2241 (2000).

An Approach to Active Spatial Data Mining Based on Statistical Information, W. Wang (IBM Corporation, P.O. Box 704, Yorktown Heights, NY 10598) et al., *IEEE Transactions on Knowledge and Data Engineering* **12**, No. 5, 715–728 (2000).

Dynamic Calculation of the Responsivity of Monodomain Fluxgate Magnetometers, J. G. Deak (IBM Corporation, 5600 Cottle Road, San Jose, CA 95193) et al., *IEEE Transactions on Magnetics* **36**, No. 4, 2052–2056 (2000).

Enhanced Skin Effect for Partial Element Equivalent Circuit (PEEC) Models, K. M. Coperich (University of Illinois, Urbana, IL 61801) et al., *IEEE Transactions on Microwave Theory and Techniques* **48**, No. 9, 1435–1442 (2000).

Study of Meander Line Delay in Circuit Boards, B. J. Rubin (IBM Corporation, P.O. Box 218, Yorktown Heights, NY 10598) and B. Singh, *IEEE Transactions on Microwave Theory and Techniques* **48**, No. 9, 1452–1460 (2000).

Full-Wave Analysis of MICs in Multilayer Dielectric Media in a Rectangular Waveguide, O. M. C. Pereira (IBM Corporation, Route 52, Hopewell Junction, NY 12533) and T. K. Sarkar, *IEEE Transactions on Microwave Theory and Techniques* **48**, No. 10, 1611–1622 (2000).

Voronoi Networks and Their Probability of Misclassification, K. Krishna (IBM Corporation, New Delhi 110016, India) et al., *IEEE Transactions on Neural Networks* **11**, No. 6, 1361–1372 (2000).

A Protocol to Achieve Independence in Constant Rounds, R. Gennaro (IBM Corporation, P.O. Box 704, Yorktown Heights, NY 10598), *IEEE Transactions on Parallel and Distributed Systems* **11**, No. 7, 636–647 (2000).

Distributed Multimedia Application Configuration Management, A. Hagin (Coss System Technologies AG, Badstrasse 9, D-70372 Stuttgart, Germany) et al., *IEEE Transactions on Parallel and Distributed Systems* **11**, No. 7, 669–682 (2000).

Key Agreement in Dynamic Peer Groups, M. Steiner (University of Saarbrücken, D-66123 Saarbrücken, Germany) et al., *IEEE Transactions on Parallel and Distributed Systems* **11**, No. 8, 769–780 (2000).

Implementing Multidestination Worms in Switch-Based Parallel Systems: Architectural Alternatives and Their Impact, R. Sivaram (IBM Corporation, 2455 South Road, Poughkeepsie, NY 12601) et al., *IEEE Transactions on Parallel and Distributed Systems* **11**, No. 8, 794–812 (2000).

W4: Real-Time Surveillance of People and Their Activities, I. Haritaoglu (IBM Corporation, 650 Harry Road, San Jose, CA 95120) et al., *IEEE Transactions on Pattern Analysis and Machine Intelligence* **22**, No. 8, 809–830 (2000).

A State-Space Approach to the Design of Globally Optimal FIR Energy Compaction Filters, J. Tuqan (IBM Corporation, P.O. Box 218, Yorktown Heights, NY 10598) and P. P. Vaidyanathan, *IEEE Transactions on Signal Processing* **48**, No. 10, 2822–2838 (2000).

Modeling and Analysis of Equipment Managers in Manufacturing Execution Systems for Semiconductor Packaging, F. T. Cheng (National Cheng Kung University, Tainan 70101, Taiwan) et al., *IEEE Transactions on Systems Man and Cybernetics Part B* **30**, No. 5, 772–782 (2000).

Dynamic Bend Mode in Pi-Cells, H. Nakamura (IBM Japan, Ltd., 1623-14 Shimotsuruma, Yamato, Kanagawa 242, Japan) et al., *IEICE Transactions on Electronics* **E83C**, No. 10, 1558–1564 (2000).

Ergonomic Guidelines for Using Notebook Personal Computers, S. Saito (National Institute of Industrial Health, Tama Ku, Nagao 6, Kawasaki, Kanagawa 214858, Japan) et al., *Industrial Health* **38**, No. 4, 421–434 (2000).

Human Lung Morphology Models for Particle Deposition Studies, T. B. Martonen (United States Environmental Protection Agency, 86 T.W. Alexander Drive, Research Triangle Park, NC 27711) et al., *Inhalation Toxicology* **12**, No. S4, 109–121 (2000).

A Dual Precision IEEE Floating-Point Multiplier, G. Even (Tel Aviv University, IL-69978 Tel Aviv, Israel) et al., *Integration—The VLSI Journal* **29**, No. 2, 167–180 (2000).

Supply-Chain Analysis at Volkswagen of America, N. Karabakal (IBM Corporation, 2405 Bunker Hill, Ann Arbor, MI 48105) et al., *Interfaces* **30**, No. 4, 46–55 (2000).

Anisotropic Triangulation of Parametric Surfaces Via Close Packing of Ellipsoids, K. Shimada (Carnegie Mellon University, Pittsburgh, PA 15213) et al., *International Journal of Computational Geometry & Applications* **10**, No. 4, 417–440 (2000).

Density Functional Theory Approach to Thiols and Disulfides on Gold: Au(111) Surface and Clusters, W. Andreoni (IBM Corporation, Säumerstrasse 4, 8803 Rüschlikon, Switzerland) et al., *International Journal of Quantum Chemistry* **80**, No. 4–5, 598–608 (2000).

IPVM: IT Support of Concurrent Product Development Teams, A. Coman (IBM Corporation, 1 Hermon Street, IL-65153 Tel Aviv, Israel), *International Journal of Technology Management* **20**, No. 3–4, 388–404 (2000).

J

A Pattern for Building Powerful JSPs, D. Bell (IBM Corporation, Saint Louis, MO) et al., *Java Report* **5**, No. 10, 30+ (2000).

Large-Scale Servlet Programming, K. Brown (IBM Corporation, Research Triangle Park, NC 27709) et al., *Java Report* **5**, No. 10, 36+ (2000).

The Compound Without a Name, J. Vlissides (IBM Corporation, P.O. Box 704, Yorktown Heights, NY 10598), *Java Report* **5**, No. 11, 70+ (2000).

Silicon-Induced Faceting of Vicinal GaAs(001), S. Brennan (Stanford Linear Accelerator Center, Stanford, CA 94309) et al., *Journal of Applied Physics* **88**, No. 6, 3367–3376 (2000).

Study of Interface Effects in Thermoelectric Microrefrigerators, Y. S. Ju (IBM Corporation, Austin, TX 78758) and U. Ghoshal, *Journal of Applied Physics* **88**, No. 7, 4135–4139 (2000).

Micromagnetism and High-Temperature Coercivity of MnBi/Al Multilayers, U. Rudiger (Rhein Westfal Th Aachen, D-52056 Berlin, Germany) et al., *Journal of Applied Physics* **88**, No. 7, 4221–4225 (2000).

Conformal Contact and Pattern Stability of Stamps Used for Soft Lithography, A. Bietsch (IBM Corporation, Säumerstrasse 4, 8803 Rüschlikon, Switzerland) and B. Michel, *Journal of Applied Physics* **88**, No. 7, 4310–4318 (2000).

The Microstructure of Submicrometer Wide Planar-Reactive Ion Etched Versus Trench-Damascene AlCu Lines, K. P. Rodbell (IBM Corporation, P.O. Box 218, Yorktown Heights, NY 10598) et al., *Journal of Applied Physics* **88**, No. 9, 5093–5099 (2000).

A Simple Model for Associative Desorption and Dissociative Chemisorption, A. C. Luntz (Odense University, DK-5230 Odense M, Denmark), *Journal of Chemical Physics* **113**, No. 16, 6901–6905 (2000).

Systematic and Fully Automated Identification of Protein Sequence Patterns, R. K. Hart (IBM Corporation, P.O. Box 218, Yorktown Heights, NY 10598) et al., *Journal of Computational Biology* **7**, No. 3–4, 585–600 (2000).

New Efficient and Secure Protocols for Verifiable Signature Sharing and Other Applications, D. Catalano (University of Catania, Viale A. Doria 6, I-95125 Catania, Italy) and R. Gennaro, *Journal of Computer and System Sciences* **61**, No. 1, 51–80 (2000).

Improved Algorithms Via Approximations of Probability Distributions, S. Chari (IBM Corporation, P.O. Box 704, Yorktown Heights, NY 10598) et al., *Journal of Computer and System Sciences* **61**, No. 1, 81–107 (2000).

Latent Semantic Indexing: A Probabilistic Analysis, C. H. Papadimitriou (University of California, Berkeley, CA 94720) et al., *Journal of Computer and System Sciences* **61**, No. 2, 217–235 (2000).

RSA-Based Undeniable Signatures, R. Gennaro (IBM Corporation, P.O. Box 704, Yorktown Heights, NY 10598) et al., *Journal of Cryptology* **13**, No. 4, 397–416 (2000).

The Mott Transition Field-Effect Transistor: A Nanodevice, D. M. Newns (IBM Corporation, P.O. Box 218, Yorktown Heights, NY 10598) et al., *Journal of Electroceramics* **4**, No. 2–3, 339–344 (2000).

Verification Watermarks on Fingerprint Recognition and Retrieval, M. M. Yeung (Intel Corporation, 2200 Mission College Boulevard, Santa Clara, CA 95052) and S. Pankanti, *Journal of Electronic Imaging* **9**, No. 4, 468–476 (2000).

Automatic Recovery of Invisible Image Watermarks from Geometrically Distorted Images, G. W. Braudaway (IBM Corporation, P.O. Box 218, Yorktown Heights, NY 10598) and F. Mintzer, *Journal of Electronic Imaging* **9**, No. 4, 477–483 (2000).

XPS and Ellipsometric Characterization of Zinc-BTA Complex, V. Sirtori (IBM Italy, Via Lecco 61, I-20059 Vimercate, Italy) et al., *Journal of Electronic Materials* **29**, No. 4, 463–467 (2000).

SiGe MOSFET Structures on Silicon-on-Sapphire Substrates Grown by Ultra-High Vacuum Chemical Vapor Deposition, P. M. Mooney (IBM Corporation, P.O. Box 218, Yorktown Heights, NY 10598) et al., *Journal of Electronic Materials* **29**, No. 7, 921–927 (2000).

Characterization of Electroplated Bismuth-Tin Alloys for Electrically Conducting Materials, S. K. Kang (IBM Corporation, P.O. Box 218, Yorktown Heights, NY 10598) et al., *Journal of Electronic Materials* **29**, No. 10, 1278–1283 (2000).

Elastodynamic Analysis for Slow Tectonic Loading with Spontaneous Rupture Episodes on Faults with Rate-Dependent and State-Dependent Friction, N. Lapusta (Harvard University, Cambridge, MA 02138) et al., *Journal of Geophysical Research—Solid Earth* **105**, No. 10, 3765–3789 (2000).

Presentation of Proofs in Modal Natural Deduction, E. F. de Lima (University of Stuttgart, D-70174 Stuttgart, Germany) and C. Lingenfelder, *Journal of Logic and Computation* **10**, No. 4, 527–572 (2000).

Simultaneous Soft Pulses Applied at Nearby Frequencies, M. Steffen (Stanford University, Stanford, CA 94305) et al., *Journal of Magnetic Resonance* **146**, No. 2, 369–374 (2000).

Micromagnetic Modeling of Thermal Decay in Interacting Systems, O. A. Chubykalo (IBM Corporation, 650 Harry Road, San Jose, CA 95120) et al., *Journal of Magnetism and Magnetic Materials* **221**, No. 1–2, 132–136 (2000).

Transparently Obtaining Scalability for Java Applications on a Cluster, Y. Aridor (IBM Israel, IL-31905 Haifa, Israel) et al., *Journal of Parallel and Distributed Computing* **60**, No. 10, 1159–1193 (2000).

Lightweight Object-Oriented Shared Variables for Cluster Computing in Java, J. Harris (Massachusetts Institute of Technology, Cambridge, MA 02139) and V. Sarkar, *Journal of Parallel and Distributed Computing* **60**, No. 10, 1238–1259 (2000).

Electron Interference Effects on the Conductance of Doped Carbon Nanotubes, A. Rochefort (CECRA, 5160 Boulevard Décarie, Montréal, Québec, Canada H3X 2H9) and P. Avouris, *Journal of Physical Chemistry A* **104**, No. 44, 9807–9811 (2000).

Investigation of the Radical Copolymerization and Terpolymerization of Maleic Anhydride and Norbornenes by an *In-Situ* ¹H NMR Analysis of Kinetics and by the Mercury Method: Evidence for the Lack of Charge-Transfer-Complex Propagation, H. Ito (IBM Corporation, 650 Harry Road, San Jose, CA 95120) et al., *Journal of Polymer Science Part A* **38**, No. 19, 3521–3542 (2000).

Divide-and-Conquer Approximation Algorithms Via Spreading Metrics, G. Even (Tel Aviv University, IL-69978 Tel Aviv, Israel) et al., *Journal of the ACM* **47**, No. 4, 585–616 (2000).

Effects of Cation Partial Substitution for Hg Site of Hg₁₂₂₃ on Superconducting Properties (Japanese), N. Yoshida (IBM Japan, Ltd., 1 Kirihara Cho, Fujisawa, Kanagawa 252855, Japan) et al., *Journal of the Ceramic Society of Japan* **108**, No. 11, 993–997 (2000).

Low-Temperature Chemical Vapor Deposition of ZrO₂ on Si(100) Using Anhydrous Zirconium(IV) Nitrate, R. C. Smith (University of Minnesota, Minneapolis, MN 55455) et al., *Journal of the Electrochemical Society* **147**, No. 9, 3472–3476 (2000).

Initial Stages of Growth of Heteroepitaxial Yttria-Stabilized Zirconia Films on Silicon Substrates, P. Bunt (University of Vermont, Burlington, VT 05405) et al., *Journal of the Electrochemical Society* **147**, No. 12, 4541–4545 (2000).

Nonlocal Screening Effect in Cu 4P(σ)–1S Resonant X-ray Emission Spectra in Nd₂CuO₄, T. Ide (IBM Japan, Ltd., 1623-14 Shimotsuruma, Yamato, Kanagawa 242, Japan) and A. Kotani, *Journal of the Physical Society of Japan* **69**, No. 9, 3107–3114 (2000).

Large Deviations of Local Times of Levy Processes, R. Blackburn (IBM Corporation, 522 South Road, Poughkeepsie, NY 12601), *Journal of Theoretical Probability* **13**, No. 3, 825–842 (2000).

Gas Utilization in Remote Plasma Cleaning and Stripping Applications, B. E. E. Kastenmeier (IBM Corporation, Route 52, Hopewell Junction, NY 12533) et al., *Journal of Vacuum Science & Technology A* **18**, No. 5, 2102–2107 (2000).

Low-Temperature Magnetron Sputter Deposition, Hardness, and Electrical Resistivity of Amorphous and Crystalline Alumina Thin Films, Q. Li (Northwestern University, Evanston, IL 60208) et al., *Journal of Vacuum Science & Technology A* **18**, No. 5, 2333–2338 (2000).

Etching of Xerogel in High-Density Fluorocarbon Plasmas, T. E. F. M. Standaert (IBM Corporation, Route 52, Hopewell Junction, NY 12533) et al., *Journal of Vacuum Science & Technology A* **18**, No. 6, 2742–2748 (2000).

Integration of Chemical Vapor Deposition Al Interconnects in a Benzocyclobutene Low Dielectric Constant Polymer Matrix: A Feasibility Study, H. Wickland (IBM Corporation, P.O. Box 218, Yorktown Heights, NY 10598) et al., *Journal of Vacuum Science & Technology B* **18**, No. 5, 2463–2471 (2000).

L

The Dynamic Nature of Hydridosilsequioxane Clusters on Gold Surfaces, K. T. Nicholson (University of Michigan, Ann Arbor, MI 48109) et al., *Langmuir* **16**, No. 22, 8396–8403 (2000).

Formation of Gradients of Proteins on Surfaces with Microfluidic Networks, I. Caelen (CSEM, rue Jacquet-Druz 1, CH-2007 Neuchatel, Switzerland) et al., *Langmuir* **16**, No. 24, 9125–9130 (2000).

Advances in Predictive Data Mining Methods, S. J. Hong (IBM Corporation, P.O. Box 218, Yorktown Heights, NY 10598) and S. M. Weiss, *Lecture Notes in Artificial Intelligence* **1715**, 13–20 (1999).

Practical Nonmonotonic Reasoning: Extending Inheritance Techniques to Solve Real-World Problems, L. Morgenstern (IBM Corporation, P.O. Box 704, Yorktown Heights, NY 10598), *Lecture Notes in Artificial Intelligence* **1730**, 389 (1999).

M

Adsorption of Linear and Star-Shaped Poly(Acrylic Acid) to Model Surfaces Formed by Amphiphiles at the Air/Water Interface, M. Schnitter (University of Hannover, Kleinen Felde 30, D-30167 Hannover, Germany) et al., *Macromolecular Chemistry and Physics* **201**, No. 13, 1504–1512 (2000).

New Functional Aliphatic Polyesters by Chemical Modification of Copolymers of ε-Caprolactone with γ(2-Bromo-2-Methylpropionate)-ε-Caprolactone, γ-Bromo-ε-Caprolactone, and a Mixture of β-ene-ε-Caprolactone and γ-ene-ε-Caprolactone, C. Detrembleur (University of Liege, Sart Tilman, B6, B-4000 Liege, Belgium) et al., *Macromolecules* **33**, No. 21, 7751–7760 (2000).

Use of Stable Free Radicals for the Sequential Preparation and Surface Grafting of Functionalized Macroporous Monoliths, U. Meyer (University of California, Berkeley, CA 94720) et al., *Macromolecules* **33**, No. 21, 7769–7775 (2000).

Variance Reduction Techniques for Estimating Value-at-Risk, P. Glasserman (Columbia University, New York, NY 10027) et al., *Management Science* **46**, No. 10, 1349–1364 (2000).

A Generalized Assignment Problem with Special Ordered Sets: A Polyhedral Approach, I. R. Defarias (State University of New York, 403 Bell Hall, Buffalo, NY 14260) et al., *Mathematical Programming* **89**, No. 1, 187–203 (2000).

Pica: Backside Failure Analysis of CMOS Circuits Using Picosecond Imaging Circuit Analysis, M. K. McManus (IBM Corporation, P.O. Box 218, Yorktown Heights, NY 10598) et al., *Microelectronics and Reliability* **40**, 1353–1358 (2000).

Convolution PML (CPML): An Efficient FDTD Implementation of the CFS-PML for Arbitrary Media, J. A. Roden (IBM Corporation, P.O. Box 12195, Research Triangle Park, NC 27709) and S. D. Gedney, *Microwave and Optical Technology Letters* **27**, No. 5, 334–339 (2000).

N

Universal Quantum Computation with the Exchange Interaction, D. P. DiVincenzo (IBM Corporation, P.O. Box 218, Yorktown Heights, NY 10598) et al., *Nature* **408**, No. 6810, 339–342 (2000).

Electronics Using Hybrid-Molecular and Mono-Molecular Devices, C. Joachim (National Center of Scientific Research, 29 rue J. Marvig, F-31055 Toulouse, France) et al., *Nature* **408**, No. 6812, 541–548 (2000).

O

Scalability Issues in Corporate Optical Backbone Wavelength-Division Multiplexing Add/Drop Ring Networks, A. Stavdas (National Technical University of Athens, GR-15773 Zografos, Athens, Greece) et al., *Optics Communications* **184**, No. 1–4, 127–139 (2000).

Conformational Analysis of Alkylated Biuret and Triuret: Evidence for Helicity and Helical Inversion in Oligoisocyanates, J. Roth (Pomona College, Claremont, CA 91711) et al., *Organic Letters* **2**, No. 20, 3063–3066 (2000).

P

In-Situ Transmission Electron Microscopy Studies of the Interaction Between Dislocations in Strained SiGe/Si(001) Heterostructures, A. Stach (University of California, Berkeley, CA 94720) et al., *Philosophical Magazine A* **80**, No. 9, 2159–2200 (2000).

Magnetic-Field-Induced Two-Dimensional Electron Lattice with a Conjugate Flux Lattice, F. Y. Huang (IBM Corporation, Route 52, Hopewell Junction, NY 12533), *Philosophical Magazine B* **80**, No. 11, 1893–1901 (2000).

Spectroscopic Imaging in a Narrow GaAs Quantum Well, Q. Wu (IBM Corporation, Route 52, Hopewell Junction, NY 12533) et al., *Physica Status Solidi B* **221**, No. 1, 505–509 (2000).

Bound-Free Correlation in Electron Scattering by Atoms and Molecules: Article Number 040701, R. K. Nesbet (IBM Corporation, 650 Harry Road, San Jose, CA 95120), *Physical Review A* **62**, No. 4, 701+ (2000).

Methodology for Quantum Logic Gate Construction: Article Number 052316, X. L. Zhou (Stanford University, Stanford, CA 94305) et al., *Physical Review A* **62**, No. 5, 2316+ (2000).

Charge Transport in the Normal State Electron-Doped of Hole-Doped $\text{YBa}_2\text{Cu}_3\text{O}_{7-x}$, T. Doderer (Infineon Technology AG, P.O. Box 800949, D-81609 Munich, Germany) et al., *Physical Review B* **62**, No. 9, 5984–5988 (2000).

First-Principles Calculations of Defects in Oxygen-Deficient Silica Exposed to Hydrogen, P. E. Blochl (IBM Corporation, Säumerstrasse 4, 8803 Rüschlikon, Switzerland), *Physical Review B* **62**, No. 10, 6158–6179 (2000).

Electrical Conductance of Parallel Atomic Wires, N. D. Lang (IBM Corporation, P.O. Box 218, Yorktown Heights, NY 10598) and P. Avouris, *Physical Review B* **62**, No. 11, 7325–7329 (2000).

Morphology Evolution During the Growth of Strained-Layer Superlattices, L. E. Shilkrot (Brown University, Providence, RI 02912) et al., *Physical Review B* **62**, No. 12, 8397–8409 (2000).

Probing Magnetic Anisotropy Effects in Epitaxial CrO_2 Thin Films, L. Spinu (University of New Orleans, New Orleans, LA 70148) et al., *Physical Review B* **62**, No. 13, 8931–8934 (2000).

Transport in Insulating $\text{YBa}_2\text{Cu}_3\text{O}_{7-x}$, F. P. Milliken (IBM Corporation, P.O. Box 218, Yorktown Heights, NY 10598) et al., *Physical Review B* **62**, No. 13, 9143–9147 (2000).

Optical and Magneto-optical Properties of Highly Distorted Fe(100) Thin Films, J. L. Menéndez (Instituto de Microelectrónica de Madrid, Isaac Newton 8-PTM-28760 Tres Cantos, Madrid, Spain) et al., *Physical Review B* **62**, No. 15, 10498–10503 (2000).

Switching Behavior of Fe-Pt/Ni-Fe Exchange-Spring Films Studied by Resonant Soft-X-ray Magneto-optical Kerr Effect, O. Hellwig (IBM Corporation, 650 Harry Road, San Jose, CA 95120) et al., *Physical Review B* **62**, No. 17, 11694–11698 (2000).

Thermal Roughening of a Thin Film: A New Type of Roughening Transition, J. B. Maxson (University of Wisconsin, Madison, WI 53706) et al., *Physical Review Letters* **85**, No. 10, 2152–2155 (2000).

Entanglement of Formation for Isotropic States, B. M. Terhal (IBM Corporation, P.O. Box 218, Yorktown Heights, NY 10598) and K. G. Vollbrecht, *Physical Review Letters* **85**, No. 12, 2625–2628 (2000).

Instability Wavelength in Strained-Alloy Epitaxy, J. Tersoff (IBM Corporation, P.O. Box 218, Yorktown Heights, NY 10598), *Physical Review Letters* **85**, No. 13, 2843 (2000).

Low-Frequency Magnetic Noise in Micron-Scale Magnetic Tunnel Junctions, S. Ingarsson (Brown University, Providence, RI 02912) et al., *Physical Review Letters* **85**, No. 15, 3289–3292 (2000).

Shear Response of Molecularly Thin Liquid Films to an Applied Air Stress, C. M. Mate (IBM Corporation, 650 Harry Road, San Jose, CA 95120) and B. Marchon, *Physical Review Letters* **85**, No. 18, 3902–3905 (2000).

Dislocated Epitaxial Islands, X. H. Liu (IBM Corporation, P.O. Box 218, Yorktown Heights, NY 10598) et al., *Physical Review Letters* **85**, No. 19, 4088–4091 (2000).

Comment on New Approach in Equilibrium Theory for Strained-Layer Relaxation, F. Huang (IBM Corporation, Route 52, Hopewell Junction, NY 12533), *Physical Review Letters* **85**, No. 20, 4411 (2000).

Reciprocal de Haas-van Alphen Oscillations in Two-Dimensional Electron Superlattice, F. Y. Huang (IBM Corporation, Route 52, Hopewell Junction, NY 12533), *Physics Letters A* **273**, No. 4, 252–257 (2000).

Time-Resolved Optical Characterization of Electrical Activity in Integrated Circuits, J. C. Tsang (IBM Corporation, P.O. Box 218, Yorktown Heights, NY 10598) et al., *Proceedings of the IEEE* **88**, No. 9, 1440–1459 (2000).

Imaging with Solid Immersion Lenses, Spatial Resolution, and Applications, Q. Wu (IBM Corporation, Route 52, Hopewell Junction, NY 12533) et al., *Proceedings of the IEEE* **88**, No. 9, 1491–1498 (2000).

Catalytic Tempering: A Method for Sampling Rough Energy Landscapes by Monte Carlo, G. Stolovitsky (IBM Corporation, P.O. Box 218, Yorktown Heights, NY 10598) and B. J. Berne, *Proceedings of the National Academy of Sciences of the United States of America* **97**, No. 21, 1164–1169 (2000).

S

Vibrational Promotion of Electron Transfer, Y. H. Huang (University of California, Santa Barbara, CA 93106) et al., *Science* **290**, No. 5489, 111–114 (2000).

Spin-Dependent Tunneling in Self-Assembled Cobalt Nanocrystal Superlattices, C. T. Black (IBM Corporation, P.O. Box 218, Yorktown Heights, NY 10598) et al., *Science* **290**, No. 5494, 1131–1134 (2000).

Markov Paging, A. R. Karlin (University of Washington, Seattle, WA 98195) et al., *SIAM Journal on Computing* **30**, No. 3, 906–922 (2000).

Early Detection of Message Forwarding Faults, A. Herzberg (IBM Israel, 2 Weizmann Street, IL-52960 Tel Aviv, Israel) and S. Kutten, *SIAM Journal on Computing* **30**, No. 4, 1169–1196 (2000).

On the Cholesky Factorization of the Gram Matrix of Multivariate Functions, T. N. T. Goodman (University of Dundee, Dundee DD1 4HN, Scotland) et al., *SIAM Journal on Matrix Analysis and Applications* **22**, No. 2, 501–526 (2000).

On Describing Color and Shape Information in Images, T. Syedamamhoom (IBM Corporation, 650 Harry Road, San Jose, CA 95120) and D. Petkovic, *Signal Processing—Image Communication* **16**, No. 1–2, 15–31 (2000).

MPEG-7 Videotext Description Scheme for Superimposed Text in Images and Video, N. Dimitrova (Philips Research Laboratory, Briarcliff Manor, NY 10510) et al., *Signal Processing—Image Communication* **16**, No. 1–2, 137–155 (2000).

Representation and Linking Mechanisms for Audio in MPEG-7, A. T. Lindsay (University of Lancaster, Lancaster LA1 4YR, England) et al., *Signal Processing—Image Communication* **16**, No. 1–2, 193–209 (2000).

Object-Based Multimedia Content Description Schemes and Applications for MPEG-7, A. B. Benitez (Columbia University, 500 West 120th Street, New York, NY 10027) et al., *Signal Processing—Image Communication* **16**, No. 1–2, 235–269 (2000).

Statistical Model-Based Video Segmentation and Its Application to Very Low Bit-Rate Video Coding, H. Luo (Columbia University, 500 West 12th Street, New York, NY 10027) et al., *Signal Processing—Image Communication* **16**, No. 3, 333–352 (2000).

Deep-UV Antireflective Coating: Ellipsometry and XPS Characterization, X. Boddaert (IBM Corporation, 224 Boulevard John Kennedy, F-91105 Corbeil-Essonnes, France) et al., *Surface and Interface Analysis* **30**, No. 1, 531–533 (2000).

Investigations of the Surface Morphology of La₂CuO₄ MBE-Grown Thin Films Before and After Electrochemical Oxidation, A. Daridon (University of Neuchatel, rue Jacquet Droz 1, CH-2002 Neuchatel, Switzerland) et al., *Surface Science* **465**, No. 1–2, 149–162 (2000).

T

The Wireless Web: Does the Emperor Have No Clothes? R. Darrow (Motorola, Inc., Schaumburg, IL 60196) and A. R. Harding, *Telecommunications—Americas Edition* **34**, No. 9, 39–40 (2000).

An Application of Lattice Theory to Knowledge Representation, F. J. Oles (IBM Corporation, P.O. Box 218, Yorktown Heights, NY 10598), *Theoretical Computer Science* **249**, No. 1, 163–196 (2000).

Detection of Cobalt Silicide Phase Formations by Ultrafast Optical Measurements, C. Lavoie (IBM Corporation, P.O. Box 218, Yorktown Heights, NY 10598) et al., *Thin Solid Films* **374**, No. 1, 42–48 (2000).

Optimizing Path Query Performance: Graph Clustering Strategies, Y. W. Huang (IBM Corporation, P.O. Box 704, Yorktown Heights, NY 10598) et al., *Transportation Research Part C* **8**, No. 1–6, 381–408 (2000).

Simultaneous Five-Wavelength Interferometry for Head/Tape Spacing Measurement, J. Zhu (University of California, La Jolla, CA 92093) et al., *Tribology International* **33**, No. 5–6, 409–414 (2000).

Evaporation and Flow Properties of Several Hydrocarbon Oils, T. E. Karis (IBM Corporation, 650 Harry Road, San Jose, CA 95120) and H. S. Nagaraj, *Tribology Transactions* **43**, No. 4, 758–766 (2000).

V

Pinholes in Al Thin Films: Their Effects on TFT Characteristics and a Taguchi Method Analysis of Their Origins, H. Takatsuji (IBM Japan, Ltd., 1623-14 Shimotsuruma, Yamato, Kanagawa 242, Japan) and T. Arai, *Vacuum* **59**, No. 2–3, 606–613 (2000).