Editorial Board

Byoung-Gon Yu Dr. Yu received his B.S. Degree from Physics from Department in Kyungpook National University in 1984 and the M.S. and Ph.D. degrees from the Tokyo Institute of Technology, Tokyo in 1987 and 1990 respectively, where he did many pioneering works for the analysis of electrical materials. After graduation, he worked as an Visiting Researcher in Hitachi Central Research Laboratory Ltd. , Japan from 1990 to 1991.
He joined ETRI in 1991 as a senior researcher in the Advanced Micro-electronics Technology lab., where he is now a team leader of Multi-Functional Device Team and principal member. His research interests are focused on Ferroelectric Materials and Ferroelectric Random Acess Memory for new nonvolitle memory. And recently he is interest in IR sensor and nano sensor by using MEMS technology. He is the author of the book titled, Future Memory: FRAM , 2000, SigmaPress, and The IC Card Technology by using FRAM , 2001.6.30, Daeyong Press, Korea. He is a member of IEEK and JJAP.

Dim-Lee Kwong He received his B.S. degree in Physics and M.S. degree in Nuclear Engineering, both from the National Tsing Hua University, Taiwan, in 1977 and 1979, respectively. In 1982 he received the Ph.D. degree in Electrical Engineering from Rice University and received Best Dissertation Award. He was an Assistant Professor of Electrical Engineering Department at the University of Notre Dame during the years 1982-1985. He was a Visiting Scientist at the IBM General Technology Division, Essex Junction, Vermont during the summer of 1985 working on 4 Megabit DRAM technology. He joined The University of Texas at Austin, Microelectronics Research Center and Department of Electrical and Computer Engineering in 1985 as an Assistant Professor. He was promoted to Associate Professor in 1986 and to Full Professor in 1990. He is currently with Institute of Microelectronics, Singapore as an executive director from 2005.
Dr. Kwong received numerous awards including the IBM Faculty Development Award in 1984 and the Engineering Foundation Award from The University of Texas at Austin in 1994, holds the Earl N. and Margaret Brasfield Endowed Fellowship, is the author of more than 330 referred journal and more than 280 referred conference proceeding publications, and has been awarded with more than 22 U.S. patents. His current areas of research interests include rapid thermal CVD technology for the growth and deposition of semiconductor materials compatible with ULSI processes, advanced dielectrics for logic, analog, and memory devices, metal gate electrode, shallow junctions, diffusion barrier materials and processes, and diffusion modeling of ion-implanted species during rapid thermal annealing.

In Kyeong Yoo He received his BS degree in Metallurgical Engineering from Hanyang University in Korea in 1975 and MS and Ph.D. degrees in Materials Science and Engineering from VA Tech in USA in 1986 and 1990, respectively. Yoo worked as a member of Nondestructive Testing Engineers from 1978 through 1984. Dr. Yoo joined Materials Engineering Department at VA Tech as a Research Scientist from 1991 through 1993 and joined Samsung Advanced Institute of Technology (SAIT) in 1993 as a team leader. Dr. Yoo developed several electrical failure mechanisms in ferroelectrics including breakdown mechanisms and fatigue mechanisms when he joined VA Tech from 1991 through 1993. He is an expert in electrical characterization, modeling, and reliability analysis in dielectric and ferroelectric materials. He developed world s first 1T-1C 64K PZT FRAM (Ferroelectric Random Access Memory) in 1996. Recently, he set up world s first 1:1 pyroelectric emission lithography concept. He has published more than 30 papers and filed more than 60 patents in the fields of FRAM, uncooled IR detector, and ferroelectric emission. He has been involved in 1T-1R NVRAM, pyroelectric emission lithography, FRAM, IR detector, Poly-Si TFT, and High density data storage at SAIT. His current position is a director at SAIT and is working on pyroelectric emission study for sub 100nm lithography system development and 1T-1R NVRAM for the next generation memory devices.

Stephen Campbell He is a Professor of Electrical and Computer Engineering and the Director of the Microtechnology Laboratory at the University of Minnesota. He received the Ph.D. in physics from Northwestern University in 1981 and held several staff and management positions in integrated circuit fabrication and device development at Unisys including Manager of Process Development and Manager of Silicon Research. In 1986 he joined the University of Minnesota. His research has included GeSi technology, rapid thermal processing, including thermal uniformity modeling, nanoparticle detection in low pressure systems. His current research interests include the use of nanoparticles in novel integrated structures, and high permittivity materials for deep submicron FETs. Professor Campbell is the author of The Science and Engineering of Microelectronic Fabrication (Oxford 1996, 2001), the most widely used textbook on microfabrication, several book chapters, several patents, and over 100 technical papers.

Hong June Park He received the B.S. degree from the Department of Electronic Engineering, Seoul National University, Seoul, Korea, in 1979, the M.S. degree from the Korea Advanced Institute of Science and Technology, Taejon, in 1981, and the Ph.D. degree from the Department of Electrical Engineering and Computer Sciences, University of California, Berkeley, in 1989. He was a CAD engineer with ETRI, Korea, from 1981 to 1984 and a Senior Engineer in the TCAD Department of Intel(Santa Clara California U.S.A.) from 1989 to 1991. In 1991, he joined the Faculty of Electrical Engineering, Pohang University of Science and Technology (POSTECH), Kyungbuk, Korea, where he is currently Professor. His research interests include high-speed CMOS interface circuits, signal integrity and SPICE modeling. Prof. Park is a member of IEEK, IEEE and IEICE. He wrote two books on CMOS analog and digital circuit design in Korean.

Woodward Yang Prof. Yang received B.S. degree from Dept. of Electrical Engineering and Computer Science, University of California, Berkeley in 1984, and S.M. and Ph.D. degrees from Dept. of Electrical Engineering and Computer Science, Massachusetts Institute of Technology, in 1987 and 1990, respectively. He is currently working as Gordon McKay Professor of Electrical Engineering and Computer Science at Harvard University. His research in VLSI systems addresses issues from semiconductor device physics and VLSI fabrication technology to circuit design and systems architecture. Professor Yang is interested in digital, analog, and mixed-signal integrated circuits. His research is focused on circuit design techniques and VLSI system architectures for high-performance computing and signal processing applications. He has developed a variety of special purpose image processors for high performance computer vision systems such as real-time face recognition using a heterogeneous reconfigurable VLSI processor. Research in his group is focused on Merged Memory Logic (MML) technology for the design of System-on-Chip targeted at ultra low power, mobile applications. In collaboration with Hyundai Electronics he modified a DRAM process to implement high performance digital CMOS image sensors, which are now in commercial mass production. Leveraging off these results, research in his group has demonstrated a massively parallel, SIMD image processor, which is fully compatible with digital CMOS image sensors for real-time video processing and compression. He also maintains research interests in the theoretical analysis of sigma-delta modulators used in many analog-to-digital and digital-to-analog data converter circuits and maintains a long term interest in pulse information encoding and novel pulse computing paradigms that significantly differ from traditional analog and digital computing circuitry.

Jong U. Bu He received the Ph.D. degree in Metallurgical Engineering from Korea University in 1992. He has been with LG Electronics Institute of Technology, Seoul, Korea since 1984, where he has worked on the area of silicon micromachining and microsensors. From 1995 to 1996, he has been with the Center for Integrated Sensors and Circuits, Department of Electrical Engineering and Computer Science, University of Michigan, Ann Arbor, as a visiting scholar. Currently, he is a group leader and a research fellow with Microsystem group and MEMS product group in LG Electronics Institute of Technology.
His research interests include development of microfabrication and micromachining technologies for microsystem; micro sensors, optical communication components, RF MEMS, and MEMS embedded high density data storage systems. He has published and presented more than 90 MEMS related papers and 80 patents.

Eun Sok Kim He received the B.S. (high honors), M.S., and Ph.D. degrees, all in electrical engineering, from the University of California, Berkeley, in 1982, 1987, and 1990, respectively. His doctoral dissertation was on the integrated microphone with LSI CMOS on a single chip.
In Fall 1999, he joined the University of Southern California, Los Angeles, CA, and is currently an Associate Professor in the Department of Electrical Engineering. His research interests include microelectromechanical systems (MEMS), acoustic and piezoelectric transducers, microfluidic systems, microfabrication processing technology, and materials study. From Spring 1991 to Fall 1999, he worked at the Department of Electrical Engineering in the University of Hawaii at Manoa as a faculty member. Previously, he worked at IBM Research Laboratory, San Jose, CA, NCR Corp., San Diego, CA, and Xicor Inc., Milpitas, CA as a co-op student, design engineer, and summer-student engineer, respectively.
Dr. Kim serves on the editorial board for Journal of Micromechanics and Microengineering and for Journal of Semiconductor Technology and Science. He has been awarded a Research Initiation Award (FY 91-93) and a Faculty Early Career Development (CAREER) Award (FY 95-99) by National Science Foundation. He received Outstanding EE Faculty of the Year Award (voted by UH IEEE student chapter) in May 1996.

Yogesh B. Gianchandani He received a B.S., M.S, and after some time in industry, a Ph.D. in electrical engineering, with a focus on microelectronics and MEMS. He is presently an Associate Professor in the EECS Department at the University of Michigan, Ann Arbor. Prior to this he was with the ECE Department at the University of Wisconsin, Madison. He has also held industry positions with Xerox Corporation, Microchip Technology, and other companies, working in the area of integrated circuit design. His research interests include all aspects of design, fabrication, and packaging of micromachined sensors and actuators and their interface circuits. Prof. Gianchandani is the recipient of a National Science Foundation Career Award, and he has published about 130 papers in the field of MEMS, and has about 20 patents issued or pending. Prof. Gianchandani serves on the editorial boards of *Sensors and Actuators, IOP Journal of Micromechanics and Microengineering,* and *Journal of Semiconductor Technology and Science*. He also served on the steering and technical program committees for the IEEE/ASME International Conference on Micro Electro Mechanical Systems (MEMS) for many years, and served as a General Co-Chair for this meeting in 2002. At the University of Michigan, Prof. Gianchandani serves as the director of the College of Engineering Interdisciplinary Professional Degree Program in Integrated Microsystems.

Koji Aizawa He received a B.S. degree in Electronics and Communication Engineering and a M.S. degree in Electrical Engineering from Musashi Institute of Technology, Tokyo, Japan, in 1988 and 1990, respectively.
He was a Research Associate in Precision and Intelligence Laboratory at Tokyo Institute of Technology from 1990 to 2005. He received a Dr. Eng. from Tokyo Institute of Technology in 1996. He is now an Associate Professor in the Department of Information and Communication Engineering at Kanazawa Institute of Technology.
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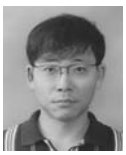
His current research interests include the design and fabrication of nanoscale CMOS, flash memories, silicon quantum devices and organic thin film transistors. He has authored and co-authored over 350 research papers and currently holds 5 U.S. patents. He has served as a committee member on several international conferences, including Microprocesses and Nanotechnology, IEEE International Electron Devices Meeting and IEEE Silicon Nanoelectronics Workshop. He is currently serving as an executive director of IEEK and the chair of IEEE EDS Korea Chapter. He received a Best Teacher Award in 1997 for his creative and passionate lectures.

Gyoyoung Jin He received the B.S, M.S and Ph.D degrees in electronics engineering from Seoul National University, Seoul, Korea in 1985, 1987 and 1994, respectively.
He had a postdoctoral research fellowship at Stanford University from 1994 to 1997. In 1997, he joined Samsung Electronics, Korea, where he has been engaged in developing DRAM process architecture for high density, high speed and low power product. From 2005, he has worked as project manager for next generation DRAM product technology development.
He has worked in the research of semiconductor device physics, modeling and simulation methodology and in the development of process integration architecture, advanced process module, refresh enhancement and reliability improvement procedure for DRAM product.
He served as a member of technical committee of Semiconductor Equipment and Materials International (SEMI) symposium, Korea from 2000 to 2003 and IEDM from 2004 to 2005.



Jae-Eung Oh Prof. Jae-Eung Oh received the B.S. degree in Electronics Engineering from Hanyang University, Seoul, Korea in 1981, and, and the M.S.E.E. and Ph.D. degrees in Electrical Engineering from The University of Nebraska, Lincoln, Nebraska, in 1984 and 1987, respectively.
From 1987 to 1989, he was a research associate at Center for High-Frequency Microelectronics in the University of Michigan, Ann Arbor, Michigan, where he worked on epitaxial growth of GaAs for microwave and optoelectronic devices, development of high-frequency devices and circuits. In the spring of 1989, he joined the Department of Electronic Engineering at Hanyang University/Ansan, where he is now a Professor of the School of Electrical and Computer Engineering. He initiated molecular beam epitaxy (MBE), compound semiconductor materials and devices programs at Hanyang University. His research group has performed studies on heterostructures, quantum wells, strained-layers, III-V selective epitaxy, high-frequency and photonic devices. Professor Oh spent his first sabbatical leave in 1999 at the LG Electronics Institute of Technology and Engineering and worked with the RF Devices and Circuits Group. He is also a technical consultant of Wavics Inc., a company for Wireless RFIC design, where he is one of the company founders.
Dr. Oh is a member of several societies, such as IEEE, AIP, JAP, KITE, and KPS.

Glenn S. Solomon He received the B.S.E and M.S.E degrees in mechanical engineering and materials science for Duke University, Durham, NC, in 1980 and 1983, respectively. The M.S.E degree in electrical engineering in 1995, and the Ph.D. degree in materials science and engineering in 1997, both from Stanford University, Stanford, CA.
From 1983 to 1989, he was a Research Engineer for Research Triangle Institute, NC. From 1996 go 1998, he was a Research Associate with Ginzton Laboratories, Stanford University. He has been President and CEO of CBL Technologies, Redwood City, CA, since 1997. Since 1999, he has been an Acting Assistant Professor in the Department of Electrical Engineering, Stanford University. His current research interests include self-assembled quantum dots, cavity quantum electrodynamics, nitride materials developments, and spin-based electronic devices.

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From 1989 to 1991, he was with Texas Instruments Inc., Dallas, TX, where he worked on the modeling and design of BiCMOS gates. He joined the faculty of the Department of Electronics Engineering and Inter-University Semiconductor Research Center, Seoul National University, as an Assistant Professor in 1991. He is currently a Professor of the School of Electrical Engineering, Seoul National University. His main research interests include Gigabit Ethernet switches, high-speed I/O circuits, and RF ICs.

Tadahiro Kuroda He received the B.S. and the Ph.D degrees in electrical engineering from the University of Tokyo, Japan. In 1982, he joined Toshiba Corp., where he was engaged in the research and development of high-speed circuits for telecommunications, and low-power circuits for multimedia, mobile and network applications. From 1988 to 1990, he was a Visiting Scholar with the University of California, Berkeley, conducting research in the field of VLSI CAD. In 2000, he moved to the Keio University, and currently he is a professor of the department of electrical engineering. His research interests include high-speed low-power circuit design for logic and memory, and CMOS RF circuit design for wireless data communications. He is a program chair of the Symposium on VLSI Circuits in 2004 and 2005, and a sub-session chair in ICCAD2003 and SSDM2003. He served as program committee members in the Symposium on VLSI Circuits, CICC, ISLPED, DAC, ASP-DAC, ICCAD, ISQED, VLSI Design, and SSDM. He is a senior member of the IEEE and a member of the IEICE.

Euisik Yoon He received the B.S. and M.S. degrees in electronics engineering from Seoul National University in 1982 and 1984, respectively, and Ph.D. degree in electrical engineering from the University of Michigan, Ann Arbor, in 1990. From 1990 to 1994 he was with the Fairchild Research Center of National Semiconductor Corp., Santa Clara, CA, where he was engaged in researches on deep submicron CMOS integration and advanced gate dielectrics. From 1994 to 1996 he was a Member of Technical Staff at Silicon Graphics Inc., Mountain View, CA, working on the design of the MIPS microprocessor R4300i and the RCP 3-D graphic coprocessor. In 1996 he joined the faculty of the Department of Electrical Engineering at Korea Advanced Institute of Science and Technology (KAIST), Taejon, Korea. His present research interests are in MEMS, integrated microsystems, and VLSI circuit design.
Dr. Yoon was the co-recipient of the Student Paper Award at the IEEE International Microwave Symposium in 1999 and 2000, respectively, concerning the topics on MEMS inductors and RF MEMS switch work. He served in various Technical Program Committees including Microprocesses and Nanotechnology Conference, International Sensor Conference and IEEE AP ASIC Conference. Currently, he is serving in IEEE ISSCC program committee, IEEE MEMS technical program committee and Transducers technical program committee.