

New Editorial Board Members



Dim-Lee Kwong is the Executive Director of Institute of Microelectronics (IME), Singapore and a Professor of Electrical and Computer Engineering at National University of Singapore. Previous to that, he was the Bransfield Endowed Professor of Electrical and Computer Engineering, The University of Texas at Austin, from 1990-2007 and Temasek Professor of

National University of Singapore from 2000-2004.

Prof. Kwong is the author of more than 430 referred archival journal and 360 referred archival conference proceedings publications, has presented more than 60 invited talks at international conferences, and has been awarded with more than 25 U.S. patents. Professor Kwong was the founder of Rapro Technology in 1986, Micro Integration Corporation in 1988 and ASECTO in 2001. He has been consultant to semiconductor IC manufacturers, and materials and equipment suppliers in US and overseas. His current areas of research interests include Si narrow-wire based CMOS nano devices and applications, Si-based ultra-sensitive biosensors and lab-on-chip, and Si micro- and nano-photonics technology. More than 50 students received their Ph.D. degrees under his supervision.

As Executive Director of IME, Professor Kwong develops and implements IME's multidisciplinary and multifaceted R&D strategy and research programs which are substantially driven by commercial applications as the end goal. He leads cross-disciplinary teams of semiconductor processing, bio-science, RF and mixed-signal IC design, MEMS, and advanced packaging/SiP technologies, together with strategic industrial partners, to develop leading-edge disruptive technologies and to transform innovative research into value added commercial products for photonics, telecommunications, optoelectronics and bio-medical industries.



Jin-Koo Rhee received the B.S. degree in Electronic Engineering from Hankook Aviation University, Seoul, Korea in 1969, and the M.S and Ph.D. degrees in Electrical and Computer Engineering from Seoul National University, Oregon State University, Oregon, USA in 1975 and 1982, respectively. During 1982 to

1985, he worked at Cray Research Inc., USA as a Research Scientist. In 1985, he joined Dongguk University as an associate professor in the department of Electronic Engineering, where he is currently a professor. From 1990 to 1991, he

worked at University of Michigan as a visiting Research Scientist. Since 1999, he has been a Director of Millimeter-wave INnovation Technology Research Center sponsored by Korea government. His teaching and research interests include the design and fabrication of MMIC's and MIMIC's. He has authored and co-authored over 150 research papers. From 2004 to 2005, he served as a President-elect and President of IEEK, and now he is dean of Engineering School, Dongguk University.



Akira Matsuzawa received B.S., M.S., and ph. D. degrees in electronics engineering from Tohoku University, Sendai, Japan, in 1976, 1978, and 1997 respectively. In 1978, he joined Matsushita Electric Industrial Co., Ltd. Since then, he has been working on research and development of analog and

Mixed Signal LSI technologies; ultra-high speed ADCs, intelligent CMOS sensors, RF CMOS circuits, digital read-channel technologies for DVD systems. From 1997 to 2003, he was a general manager in advanced LSI technology development center and responsible for the development of mixed signal technologies, low power LSI technology, and ASIC libraries. On April 2003, he joined Tokyo Institute of Technology and he is a professor on physical electronics. Currently he is researching in mixed signal technologies; RF CMOS circuit design for SDR, and high speed data converters. He served the guest editor in chief for special issue on analog LSI technology of IEICE transactions on electronics in 1992, 1997, and 2003, the vice-program chairman of International Conference on Solid State Devices and Materials (SSDM) in 1999 and 2000, the Co-Chairman for Low Power Electronics Workshop in 1995, a program committee member for analog technology in ISSCC and the guest editor for special issues of IEEE Transactions on Electron Devices. Now he serves the chairman of Silicon Analog and RF committee, the vice chairman of Integrated Circuit and Devices on IEICE, IEEE SSCS elected Adcom, and IEEE SSCS Distinguished lecturer. He received the IR100 award in 1983, the R&D100 award and the remarkable invention award in 1994, and the ISSCC evening panel award in 2003 and 2005. He is a member of the IEICE and an IEEE Fellow since 2002.



Tsu-Jae King Liu received the B.S., M.S. and Ph.D. degrees in Electrical Engineering from Stanford University in 1984, 1986 and 1994, respectively. She joined the Xerox Palo Alto Research Center as a Member of Research Staff in 1992, to research and develop polycrystalline-silicon thin-film transistor

technologies for high-performance flat-panel display and imaging applications. In August 1996 she joined the faculty of the University of California at Berkeley, where she is now Professor of Electrical Engineering and Computer Sciences (EECS). Her research activities are presently in nanoscale integrated-circuit devices and technology, and thin-film materials and devices for integrated microsystems and large-area electronics.

Dr. King is a Fellow of the IEEE, and has served on committees for many technical conferences including the Device Research Conference, the International Electron Devices Meeting, and the Symposium on VLSI Technology, and was a member of the IEEE EDS VLSI Technology and Circuits Technical Committee. From 1999 to 2004, she served as an Editor for the IEEE Electron Device Letters.



Hoi-Jun Yoo graduated from the Electronic Department of Seoul National University, Seoul, Korea, in 1983 and received the M.S. and Ph.D. degrees in electrical engineering from the Korea Advanced Institute of Science and Technology (KAIST), Daejeon, in 1985 and 1988, respectively.

From 1988 to 1990, he was with Bell Communications Research, Red Bank, NJ. In 1991, he became Manager of a DRAM design group at Hyundai Electronics and designed a family of fast-1M DRAMs and synchronous DRAMs, including 256M SDRAM. From 1995 to 1997, he was a faculty member with Kangwon National University. In 1998, he joined the faculty of the Department of Electrical Engineering at KAIST, and led a project team on RAM Processors (RAMP). In 2001, he founded System Integration and IP Authoring Research Center (SIPAC), funded to promote worldwide IP authoring and its SOC application. From 2003-2005, he served as the Project Manager for IT SoC and Post-PC in Korea Ministry of Information and Communication. His current interests are SOC design, IP authoring, high-speed and low-power memory circuits and architectures, design of embedded memory logic, optoelectronic integrated circuits, and novel devices and circuits. He is the author of the books *DRAM Design* (Seoul, Korea: Hongleung, 1996; in Korean) and *High Performance DRAM* (Seoul, Korea: Sigma, 1999; in Korean). Prof. Yoo is TPC member of ISSCC and Executive Committee Member of Symposium on VLSI and A-SSCC. He received the Electronic Industrial Association of Korea Award in 1994, Hyundai Electronics Development Award in 1995, Outstanding Design Award of 2001 ASP-DAC, the Korea Semiconductor Industry Association Award in 2002, Outstanding Design

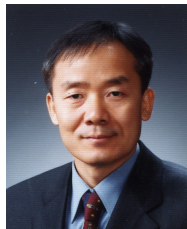
Awards in 2005 A-SSCC, 2006 A-SSCC, and Best Research of KAIST Award in 2007.



Jea-Gun Park of the Dept. of Electrical & Computer Engineering at Hanyang University, Seoul has been interested in defect engineering in semiconductor materials and nano-scale device development since he received Ph.D. at Dept. of Material Science & Engineering, the North Carolina State

University, U.S.A. His interests in defect engineering continued during a 17-year career at the Samsung Electronics Co., Semiconductor division (1985-2001) and broadened beyond defect engineering to the development of "Pure Silicon Wafer" (free of agglomerated defects in CZ Si) which has used as a standard wafer for DRAM devices. Since coming to Hanyang University in 1999 his research interests have developed "Super Silicon Wafer" (pure silicon wafer containing extremely proximity gettering effect) which has used a standard wafer for flash memory devices. Currently, his major research areas are the development of strained Si on insulator C-MOSFET beyond 45nm, nano CMP slurry (STI, Poly Si, and Cu CMP), flexible and transparent Si OLED, and Terabit polymer random access memory. Now, he is the head of Advanced Semiconductor Material and Device Development Center at Hanyang university, the National Nano SOI Laboratory (sponsored by the Korean minister of science and technology), and The National Program for 0.1 Terabit Non-volatile Memory Development (sponsored by the Korean Ministry of Commerce, Industry and Energy).

In addition, he has taught industrial short courses, published three books in Korean, published 126 papers, given 152 talks, has issued 49 patents, and has submitted 88 patents.



Tae Song Kim received a BS degree with major in electronic material and devices from Yon Sei University, and MS and Ph.D degree in material science and engineering from Korea Advanced Institute of Science and Technology (KAIST). He joined the department of electrical and computer science

engineering, Univ. of Minnesota, USA as a postdoctoral associate for the research of MEMS devices from 1997 to 1998. He started his research in 1994 in KIST. He was Head of Microsystem Research Center in KIST. He has served as a Director of Intelligent Microsystem Center (IMC), 21st Century Frontier Program supported from Ministry of Commerce, Industry & Energy, Korea. He is also Director of Micro/Nano Fabrication Center, KIST. His current research interests include biomedical or biological MEMS and Nano devices like micro biomedical tools or MEMS biosensors detecting proteins or cells for biomedical diagnosis. He has also research interests in active microfluidic components like micropump and valve, mixer, and Lab-on-a-Chip base point of care system. He has

served as a member of technical program committee for the IEEE Sensors and International Symposium on Integrated Ferroelectrics. He has also served as a member of program committee for Micro TAS conference.



Jinwook Burm received his B. S. degree in physics from Seoul National University in 1987, M. S. degree in physics from University of Michigan, Ann Arbor in 1989, and Ph. D. degree in applied physics from Cornell University in 1995. At Cornell he worked on millimeter wave circuits and GaN based

electronic devices producing the first working GaN high speed transistors. After post doctoral work at Cornell University from 1995 to 1996, he worked at Bell Labs, Murray Hill, NJ, as a postdoctoral member of technical staff designing high speed optical communication circuits. Since 1998, he has been with Dept. of Electronic Engineering at Sogang University, Seoul, Korea, where he is currently an associate professor. He consulted for Samsung Electronics for 1999-2003. His research interests includes Si, GaAs, and InP based millimeter and high speed circuits, GaN and SiC based FETs, and sensor technologies.

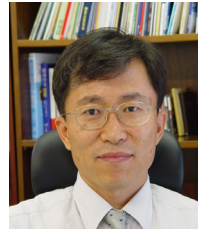


Hyungcheol Shin received the B.S. and M. S. degree in electronics engineering from Seoul National University, Seoul, Korea, in 1985 and 1987, respectively, and the Ph. D. degree in electrical engineering from the University of California, Berkeley, in 1993.

From 1994 to 1996, he was with Motorola Advanced Custom Technologies, as a Senior Device Engineer. In 1996, he joined the Department of Electrical Engineering and Computer Sciences at the Korea Advanced Institute of Science and Technology (KAIST), Taejon, in 1996 as an Assistant Professor. During his sabbatical leave from 2001 to 2002, he was with Berkana Wireless, CA, as a Staff Scientist in charge of CMOS RF modeling. In 2003, he joined the Department of Electrical Engineering and Computer Science at the Seoul National University, Seoul, as an Associate Professor, where he is a Professor. His current research interests include RF and noise characteristics in nano-scale CMOS devices and circuits. He has published over 300 technical papers in international journals and conference proceedings and also wrote a chapter in a Japanese book on plasma charging damage and a Korean book on semiconductor devices.

He has served as a committee member of several international conferences, including International Electron Devices Meeting. He is a Lifetime Member of IEEK and received the Second Best Paper Award from the American Vacuum Society in 1991. He also received the Excellent Teaching Award from the Department of Electrical Engineering and Computer Sciences at KAIST in 1998 and Seoul National University in 2005. In 1999, he received The Haedong Paper Award from the Institute

of Electronics Engineers of Korea (IEEK). He is listed in Who's Who in the World.



Hyun-Kyu Yu received his B.S., and M.S. degrees in electronics engineering from Kyungbook National University, in 1981 and 1983 respectively, and Ph.D. degree in electrical and electronics from Korea Advanced Institute of Science and Technology (KAIST) in 1994.

In 1983, he joined the Electronics and Telecommunications Research Institute (ETRI), Taejon, Korea, where he has developed device and circuit technologies such as CMOS, PSA BJT, 4M/16M/64M DRAM, SOI MOSFET modeling, and standard cell library design. Since 1996, he has led RF/Analog IC design team that successfully developed the world first CMOS based Rx/Tx chip set for the CDMA cellular and PCS phones at 1999 and 2001 respectively. Adding to his achievement, he also directed several government and industrial tasks such as digital TV tuner IC, DDFS for the military purpose, RF ICs for IEEE 802.11.a/b/g, Direct Conversion Receiver for WCDMA hand-held phone, Digital Multimedia Broadcasting RF chip, and 10Gbps mixed-mode SoC. Currently, he is director of RF Circuit Group which covers up to mm-wave applications such as 60GHz WPAN (IEEE 802.15.c), 77GHz/94GHz radar sensors on the basis of SiGe and/or compound semiconductor devices like HEMT and HBT.

Dr. Yu was a co-recipient of the Best Paper Award at the 2002 SoC Design Conference and received Technology Outstanding Achievement Award and Distinguished Medal for the contribution to the RF CMOS Technologies from IEEK in 1999 and 2003 respectively. He has found and served as chairman of RF Integrated Circuit Technology Society in Korea since 2000. From September 2002 to August 2003, he was a visiting professor of University of Florida where he studied programmable RFICs. He is the author and co-author of over 110 technical papers and 70 patents in the RF devices and integrated circuits design areas. He is a senior member of IEEE and his name is listed on *Marquis Who's Who in the World*.



Seung-Hoon Lee received the B.S. and M.S. degrees in Electronics Engineering from Seoul National University, Korea, in 1984 with honors and in 1986, respectively, and the Ph.D. degree in Electrical and Computer Engineering from the University of Illinois, Urbana-Champaign, in 1991. From 1990 to 1993, he was with Analog Devices

Semiconductor, Willington, MA, as a Senior Design Engineer. Since 1993, he has been with the Department of Electronic Engineering, Sogang University, Seoul, Korea, where he is now a Professor. His current interest is in the design and testing of high-resolution high-speed CMOS data converters, CMOS communication circuits, integrated sensors, and mixed-mode integrated systems.