

The 19th U.S.–Korea Forum on Nanotechnology



Distinguished Professor: Yang-Kyu Choi

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Yang-Kyu Choi received his B.S. and M.S. degrees from Seoul National University, South Korea, in 1989 and 1991, respectively. He earned his Ph.D. in Electrical Engineering from the University of California, Berkeley, in 2001. He is currently a Distinguished Professor in the School of Electrical Engineering at the Korea Advanced Institute of Science and Technology (KAIST). From January 1991 to July 1997, he worked at SK hynix Co., Ltd., in Gyeonggi-do, Korea, as a process integration engineer, where he was involved in the development of 4M, 16M, 64M, and 256M DRAM technologies. His current research interests include artificial neurons, synapses, and dendrites for neuromorphic computing; multiple-gate MOSFETs; exploratory devices; and unified memory technologies. He has also conducted extensive research on reliability physics and quantum phenomena in nanoscale CMOS devices. Professor Choi received the Sakrisson Memorial Award in 2002 for the best dissertation in the Department of Electrical Engineering and Computer Sciences at UC Berkeley. In 2006, he was recognized as Scientist of the Month by the Ministry of Science and Technology of Korea. He has authored or co-authored over 430 journal articles and 132 conference papers, including presentations at the IEEE International Electron Devices Meeting (IEDM) and the VLSI Symposia, and holds more than 30 U.S. patents. He is a full member of the Korean Academy of Science and Technology (KAST) and the National Academy of Engineering of Korea (NAEK), reflecting his distinguished contributions to the fields.