



Dr. Yuji Awano

Yuji Awano was born in Tokyo, Japan, on January 11, 1958. He received the B.Sc. (with Jinbo memorial prize and RCA Award) and M.Sc. degrees in electrical engineering and the Ph.D. degree from Meiji University in 1980, 1982, and 1985, respectively. He carried out his research between 1979 and 1985 at the Electrotechnical Laboratory (ETL), AIST, MITI, where he was engaged in the theoretical research of various very small-sized high-speed compound semiconductor devices, and was the first person to apply the Monte Carlo particle simulation method to the theoretical study of ballistic electron transport and electrical properties of submicrometer-sized devices. Since 1985, he has been employed by Fujitsu Laboratories Ltd., Atsugi, Japan. From 1985 to 1991, he worked on theoretical and experimental studies of high-speed performance and short-channel properties of very short-gate HEMTs. The 0.5 μm -gate HEMTs 4K-SRAM which he reported in 1988, had held the high-speed record (the address access time of 0.5 ns) for several years. From 1991 to 1992, he was a Visiting Scientist at the Research Laboratory of Electronics, M.I.T., Cambridge, MA, where he studied high-power heterojunction FETs. Since 1995, he has been engaged in research and developments on ultra-small-sized FETs and quantum effect devices, for example, nanometer-sized MOSFETs, quantum dot memory and resonant tunneling devices. He is currently a Senior Research Fellow in Nanotechnology Research Center of Fujitsu Laboratories Ltd. and is responsible for the research and development of Carbon nanotube material and device technologies. He also serves as a Program Manager of the carbon interconnect program of Semiconductor Leading Edge Technologies (Selete), which is one of the Millennium Research for Advanced Information Technology (MIRAI) projects of NEDO, Japan.

Dr. Awano is a member of the Japan Society of Applied Physics. He served as a committee member of several international conferences, including IEDM, SSDM, IPRM, ISCS, SISPAD and IWCE.