

**Asian Solid-State Circuits Conference 2018 Reports and
SSCS Distinguished Lecturer Program (2018/12/10)**

Session Chair	Time			Title	Speaker(Affiliation)
Tetsuya Iizuka (Univ. of Tokyo)	12:30			Opening	<u>Makoto Ikeda</u> (University of Tokyo)
	12:30	12:40		Review of A-SSCC 2018	<u>Makoto Ikeda</u> (University of Tokyo)
	12:40	13:00	15-4	A Fully Standard-Cell Based on-Chip BTI and HCI Monitor with 6.2x BTI Sensitivity and 3.6x HCI Sensitivity at 7 nm Fin-FET Process	<u>Mitsuhiko Igarashi</u> (Renesas Electronics)
	13:00	13:20	11-3	Photovoltaic-Assisted Self-V _{th} -Cancellation CMOS RF Rectifier for Wide Power Range Operation	<u>Ren Usami</u> (Akita Prefectural University)
	13:20	13:40	13-3	31.3 Us/Signature-Generation 256-Bit Fp ECDSA Crypto Processor	<u>Shotaro Sugiyama</u> (University of Tokyo)
	13:40	13:50		Break	
Toshiya Mitomo (Toshiba Corp.)	13:50	14:10	12-2	8 A 6.8TOPS/W Energy Efficiency, 1.5μW Power Consumption, Pulse Width Modulation Neuromorphic Circuits for Near - Data Computing with SSD	<u>Kenta Suzuki</u> (Chuo University)
	14:10	14:30	5-1	FPGA-Based CNN Processor with Filter-Wise-Optimized Bit Precision	<u>Asuka Maki</u> (Toshiba Memory)
	14:30	14:50	2-1	A 12.4TOPS/W, 20% Less Gate Count Bidirectional Phase Domain Mac Circuit for DNN Inference Applications	<u>Yosuke Toyama</u> (Toshiba Corporation)
	14:50	15:00		Break	
Ryuichi Fujimoto (Toshiba Memory)	15:00	15:20	5-3	Hardware Architecture for Fast General Object Detection Using Aggregated Channel Features	<u>Koichi Mitsunari</u> (Osaka University)
	15:20	15:40	2-3	40-nm 64-kbit Buffer/Backup SRAM with 330 nW Standby Power at 65°C Using 3.3 V 1o Moss for PMIC Less MCU in IoT Applications	<u>Yoshisato Yokoyama</u> (Renesas Electronics)
	15:40	16:00	20-1	A Capacitance-to-Digital Converter Integrated in a 32bit Microcontroller for 3D Gesture Sensing	<u>Mitsuru Hiraki</u> (Renesas Electronics)
	16:00	16:10		Break	
Makoto Ikeda (Univ. of Tokyo)	16:10	18:10	DL	IEEE SSCS Distinguished Lecturer "Energy Efficient Computing in Nanoscale CMOS"	<u>Vivek De</u> (Intel Fellow & Director of Circuit Technology Research, Intel Labs)

University of Tokyo, Hongo Campus, Takeda Hall

