



ISSCC 2019 Awards

February 18, 2019





2018 Lewis Winner Award for Outstanding Paper

“A Fully Integrated Scalable W-Band Phased-Array Module with Integrated Antennas, Self-Alignment and Self-Test”



Shahriar Shahramian¹



Mike Holyoak²



Amit Singh¹



Bahar Jalali Farahani¹



Yves Baeyens¹

¹Bell Laboratories, New Providence, NJ

²LGS Innovations, Florham Park, NJ

The Lewis Winner Award for Outstanding Paper

Lewis Winner served ISSCC for three decades (1958 to 1988) as Editor, Publisher, and Conference Coordinator. He was responsible, in considerable part, for establishing and maintaining the high standards of ISSCC publications and presentations. The Award in his honour is based on ratings by Conference attendees in the previous year.

2018 Anantha P. Chandrakasan Award for Outstanding Distinguished-Technical-Paper

“A 16Gb 18Gb/s/pin GDDR6 DRAM with Per-Bit Trainable Single-Ended DFE and PLL-Less Clocking”



Young-Ju Kim



Hye-Jung Kwon



Su-Yeon Doo



Min-Su Ahn



Yong-Hun Kim



Yong-Jae Lee



Dong-Seok Kang



Sung-Geun Do



Chang-Yong Lee



Gun-Hee Cho



Jae-Koo Park



Jae-Sung Kim



Kyung-Bae Park



Seung-Hoon Oh



Sang-Yong Lee



Ji-Hak Yu



Ki-Hun Yu



Chul-Hee Jeon



Sang-Sun Kim



Hyun-Soo Park



Jeong-Woo Lee



Seung-Hyun Cho



Keon-Woo Park



YongJun Kim



Young-Hun Seo



Chang-Ho Shin



Chan-Yong Lee



Sam-Young Bang



YounSik Park



Seouk-Kyu Choi



Byeong-Cheol Kim



Gong-Heum Han



Seung-Jun Bae



Hyuk-Jun Kwon



Jung-Hwan Choi



Young-Soo Sohn



Kwang-II Park



Seong-Jin Jang

Samsung Electronics, Hwaseong, Korea

Anantha P. Chandrakasan Award for Outstanding Distinguished-Technical Paper

This Award is based on ITPC ratings at paper selection, as normalized at paper presentation time by members of the Awards & Recognition Committee (ARC). This year, in recognition of the many decades of contribution by Anantha Chandrakasan and his retirement as Conference Chair, this Award has now been renamed in his honor.

2018 Jan Van Vessem Award for Outstanding European Paper

“A 128-Pixel 0.56THz Sensing Array for Real-Time Near-Field Imaging in 0.13 μ m SiGe BiCMOS”



Philipp Hillger¹



Ritesh Jain¹



Janusz Grzyb¹



Laven Mavarani¹



Bernd Heinemann²



Gaëtan Mac Grogan³



Patrick Mounaix⁴



Thomas Zimmer⁵



Ullrich R. Pfeiffer¹

¹Universität Wuppertal, Wuppertal, Germany; ²IHP, Frankfurt (Oder), Germany
³Institut Bergonié, Bordeaux, France; ⁴CNRS, Talence, France; ⁵Université Bordeaux, Talence, France

The Jan Van Vessem Award for Outstanding European Paper

Jan Van Vessem served ISSCC as the first Chair of the European Program Committee from 1968 to 1974. The Award in his honour is based on ratings by Conference attendees in the previous year.

2018 Takuo Sugano Award for Outstanding Far-East Paper

“A PUF Scheme Using Competing Oxide Rupture with Bit Error Rate Approaching Zero”



Meng-Yi Wu



Tsao-Hsin Yang



Lun-Chun Chen



Chi-Chang Lin



Hao-Chun Hu



Fang-Ying Su



Chih-Min Wang



James Po-Hao Huang



Hsin-Ming Chen



Chris Chun-Hung Lu



Evans Ching-Sung Yang



Rick Shih-Jye Shen

eMemory, Hsinchu, Taiwan

The Takuo Sugano Award for Outstanding Far-East Paper

Takuo Sugano served ISSCC as an early member of what became the Far-East Program Committee, from 1967 to 1989. The Award in his honour is based on ratings by Conference attendees in the previous year.

2018 ISSCC Award for Outstanding Forum Presenter “Energy Efficient Nyquist-Rate ADCs”



Klaas Bult

Analog Design Consult B.V., Bosch en Duin, The Netherlands

The Outstanding Forum-Presenter Award

This Award is based on Forum-attendee ratings from the previous year.

2018 ISSCC Award for Outstanding Forum Presenter “RF, mm-Wave and Fiber-Optics Design in FDSOI CMOS Technologies”



Sorin P. Voinigesu

University of Toronto, Toronto, Canada

The Outstanding Forum-Presenter Award

This Award is based on Forum-attendee ratings from the previous year.

2018 Evening Session Award

“Lessons Learned – Great Circuits That Didn’t Work – (Oops, If Only I Had Known!)”

Organizers



Phillip Restle
IBM T. J. Watson Research Center
Yorktown Heights, NY



Kostas Doris
NXP
Eindhoven, The Netherlands



Vivek De
Intel
Hillsboro, Oregon



Paul Ferguson
Analog Devices
Wilmington, MA

Panelists



Moderator: Tom Lee
Stanford University
Stanford, CA



Bram Nauta
University of Twente
Enschede, The Netherlands



Nicky Lu
Etron Technology
Hsinchu, Taiwan



Shanthi Pavan
Institute of Technology, Madras
Chennai, India



David J. Allstot
University of California
Berkeley, CA



Chris Mangelsdorf
Analog Devices
San Diego, CA



Jon Strange
MediaTek Wireless
West Malling, United Kingdom

The Evening-Session Award

This Award is based on Conference-attendee ratings from the previous year.

2018 Demonstration Session Certificate of Recognition

“A 1/4-inch 3.9Mpixel Low-Power Event-Driven Back-Illuminated Stacked CMOS Image Sensor”



Oichi Kumagai

Sony Semiconductor Solutions, Atsugi, Japan

2018 Demonstration Session Certificate of Recognition

“A Multimode 76-to-81GHz Automotive Radar Transceiver with Autonomous Monitoring”



Brian P. Ginsburg¹



Adrian Ozer¹



Karthik Ramasubramanian²



Vijay Rentala¹



Venkatesh Srinivasan¹

¹Texas Instruments, Dallas, TX; ²Texas Instruments, Bangalore, India

2018 Demonstration Session Certificate of Recognition

“UNPU: A 50.6TOPS/W Unified Deep Neural Network Accelerator with 1b-to-16b Fully-Variable Weight Bit-Precision”

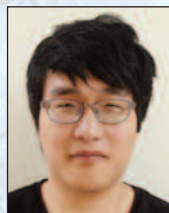


Jinmook Lee

KAIST, Daejeon, Korea

2018 Demonstration Session Certificate of Recognition

“A 9.02mW CNN-Stereo-Based Real-Time 3D Hand-Gesture Recognition Processor for Smart Mobile Devices”



Sungpill Choi

KAIST, Daejeon, Korea

Demonstration-Session Award

This Award is based on ratings provided by the Demo-Session Committee from the previous year.



Solid-State Circuits Awards

2017 Journal of Solid-State Circuits Best Paper Award

“A 28-GHz 32-Element TRX Phased-Array IC With Concurrent Dual-Polarized Operation and Orthogonal Phase and Gain Control for 5G Communications”



Bodhisatwa Sadhu¹



Yahya Tousi¹



Joakim Hallin²



Stefan Sahl⁴



Scott K. Reynolds¹



Örjan Renström³



Kristoffer Sjögren²



Olov Haapalahti³



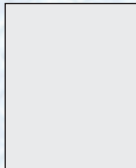
Nadav Mazor⁴



Bo Bokinge³



Gustaf Weibull²



Håkan Bengtsson³



Anders Carlinger³



Eric Westesson⁵



Jan-Erik Thillberg³



Leonard Rexberg³



Mark Yeck¹



Xiaoxiong Gu¹



Mark Ferriss



Duixian Liu



Daniel Friedman¹



Alberto Valdes-Garcia¹

¹IBM T. J. Watson Research Center, Yorktown Heights, NY; ²Ericsson, Lindholmen, Sweden
³Ericsson, Kista, Sweden; ⁴IBM Research, Haifa, Israel; ⁵Ericsson, Lund, Sweden



IEEE

IEEE Technical Field Awards

2018 IEEE Donald O. Pederson Award in Solid-State Circuits



Laurence Nagel
Omega Enterprises Consulting

“For the development and demonstration of SPICE as a tool to design and optimize electronic circuit.”



2019 Fellows



Elad Alon

University of California at Berkeley

"For contributions to mixed-signal integrated circuit design and Methodology"



Nitin Jain

Anokiwave

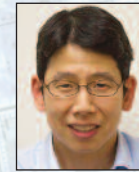
"For leadership in the development of physics-based models for mm-wave System-on-Chip ICs"



Lucien Breems

NXP Semiconductors

"For contributions to over-sampled converters using complementary metal-oxide-semiconductor technology"



Chris Hyung-II Kim

University of Minnesota

"For contributions to on-chip circuit reliability evaluation and Characterization"



Meng-fan Chang

National Tsing Hua University

"For contributions to static and nonvolatile memories for embedded Systems"



Lee-Sup Kim

KAIST

"For contributions to energy-efficient multimedia processor Architectures"



Christian Enz

Ecole Polytechnique Fédérale de Lausanne

"For contributions to low-power analog circuit design"



Farinaz Koushanfar

University of California, San Diego

"For contributions to hardware and embedded systems security and to privacy-preserving computing"



Maysam Ghovanloo

Georgia Institute of Technology

"For contributions to implantable wireless integrated circuits and Systems"



Pui-in Mak

University of Macau

"For contributions to radio-frequency and analog circuits"



Hossein Hashemi

University of Southern California

"For development of radio-frequency and optical phased-array integrated circuits"



Katsufumi Nakamura

Analog Devices

"For contributions to integrated circuits for digital imaging"



IEEE

2019 Fellows



Samar Saha
Prospicient Devices

"For contributions to compact modeling of silicon field-effect transistors"



Shaojun Wei
Tsinghua University

"For leadership in integrated circuits engineering of smart cards and reconfigurable devices"



Jared Zerbe
Apple

"For contributions to the development of high performance serial interfaces"



Lin Zhong
Rice University

"For contributions to the development of energy-efficient driver circuits for organic light-emitting diodes"

Note that all ISSCC Awards are scrutinized and vetted by a special group, the Awards and Recognition Committee (ARC) whose current members are:

Kenneth (KC) Smith, Chair (University of Toronto)
Bryan Ackland (Old Bridge, NJ)
Nicky Lu (Etron)
Willy Sansen (K.U. Leuven)
Bruce Wooley (Stanford University)