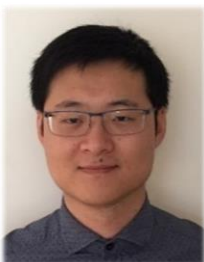


2018 Student Paper Finalists (1/3)



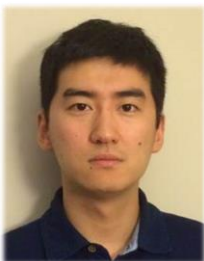
Haixin Song et al., Tsinghua University, China
“A Secure TOF-Based Transceiver with Low Latency and Sub-cm Ranging for Mobile Authentication Applications”



Zhe Chen, et al., Technische Universiteit Eindhoven, The Netherlands
“A 29–37GHz BiCMOS Low-Noise Amplifier with 28.5dB Peak Gain and 3.1–4.1dB NF”



X. Shawn Wang et al., University of California, Los Angeles, USA
“An 8.8-GS/s 8b Time-Interleaved SAR ADC with 50-dB SFDR Using Complementary Dual-Loop-Assisted Buffers in 28nm CMOS”



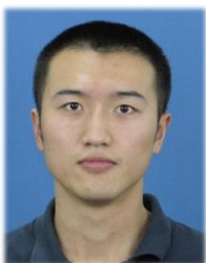
Sensen Li et al., Georgia Tech, USA
“A 28GHz Packaged Chireix Transmitter with Direct On-Antenna Outphasing Load Modulation Achieving 56%/38% PA Efficiency at Peak/6dB Back-Off Output Power”



2018 Student Paper Finalists (2/3)



[S. Lightbody](#) et al., University of British Columbia, Canada
“A -195dBc/Hz FoMT 20.8-to-28-GHz LC VCO with Transformer-Enhanced 30% Tuning Range in 65-nm CMOS”



[Tongning Hu](#) et al., University of California, Davis, USA
“A 10GHz Digital Phase Noise Filter with 14dB Noise Suppression and -127dBc/Hz Noise Sensitivity at 1MHz Offset”



[Reza Fatemi](#) et al., Caltech, USA
“A Low Power PWM Optical Phased Array Transmitter with 16° Field-of-View and 0.8° Beamwidth”



[Jian Pang](#) et al., Tokyo Institute of Technology, Japan
“A 28GHz CMOS Phased-Array Transceiver Featuring Gain Invariance Based on LO Phase Shifting Architecture with 0.1-Degree Beam-Steering Resolution for 5G New Radio”



2018 Student Paper Finalists (1/3)



Simon Ooms et al., Katholieke Universiteit Leuven, Belgium

“A Flexible Low-Latency DC-to-4 Gbit/s Link Operating from -40 to +200 °C in 28nm CMOS for Galvanically Isolated Applications”



Matthew Bajor et al., Columbia University, USA

“An 8-Element, 1–3GHz Direct Space-to-Information Converter for Rapid, Compressive-Sampling Direction-of-Arrival Finding Utilizing Pseudo-Random Antenna-Weight Modulation”



Aravind Nagulu et al., Columbia University, USA

“Fully-Integrated Non-Magnetic 180nm SOI Circulator with >1W P1dB, >+50dBm IIP3 and High Isolation Across 1.85 VSWR”



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Antenna-Weight Modulation**

at the 2018 IEEE RFIC Symposium, Philadelphia, Pennsylvania, USA

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2018 Industry Paper Finalists (1/3)



Shih Ni Ong, GlobalFoundries

“A 22nm FDSOI Technology Optimized for RF-mmWave Applications”



Dror Regev, Huawei

“A Robust Reconfigurable Front-End for Non-contiguous Multi-Channel Carrier Aggregation Receivers”



Vadim Issakov, Infineon Technologies

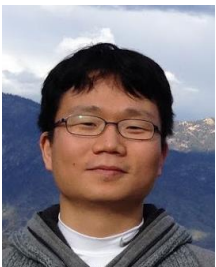
“A Dual-Core 60 GHz Push-Push VCO with Second Harmonic Extraction by Mode Separation”



Renzhi Liu, Intel

“A 264- μ W 802.15.4a-Compliant IR-UWB Transmitter in 22nm FinFET for Wireless Sensor Network Applications”

2018 Industry Paper Finalists (2/3)



Woorim Shin, Intel

“A Compact 75 GHz LNA with 20 dB Gain and 4 dB Noise Figure in 22nm FinFET CMOS Technology”



Steven Callender, Intel

“A Compact 75GHz PA with 26.3% PAE and 24GHz Bandwidth in 22nm FinFET CMOS”



Tim LaRocca, Northrop Grumman Aerospace Systems

“Q-Band CMOS Transmitter System-on-Chip for Protected Satellite Communication”



Chia-Hsin Wu, Samsung Electronics

“A 28nm CMOS Wireless Connectivity Combo IC with a Reconfigurable 2x2 MIMO WiFi supporting 80+80MHz 256-QAM, and BT 5.0”

2018 Industry Paper Finalists (3/3)



Erik Öjefors, Sivers IMA

“A 57-71 GHz Beamforming SiGe Transceiver for 802.11ad-Based Fixed Wireless Access”



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Samsung Electronics Co., Ltd.

for the paper titled

**A 28nm CMOS Wireless Connectivity Combo IC with a Reconfigurable
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Q-Band CMOS Transmitter System-on-Chip for Protected Satellite Communication

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Sivers IMA AB

for the paper titled

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