

8th	October	2019	Afternoon	Registration & Distribution of Conference Materials (Berkesy Residence & Yonghe Nobel International Hotel)
9th	October	2019	Morning 8:30-9:00	Registration & Distribution of Conference Materials & Communication (Yonghe Nobel International Hotel)

Paris Room 9th October 2019 Morning Opening Ceremony		
Facilitator		
Name: Yuhuai Liu		
School of Information Engineering, Zhengzhou University, China		
9:00-9:10	Jiongtian Liu	President of Zhengzhou University
9:10-9:20	Qinglei Zhou	Dean of School of Information Engineering
9:20-9:30	Chongxin Shan	Dean of School of Physics and Engineering
9:30-9:40	Yafei Lv	Government Representative
9:40-9:50	J. J. Liou	School of Information Engineering
9:50-10:10 Group Photo		
10:10-10:30 Tea Break		
10:30-11:15	Siegfried Selberherr (<i>keynote Speaker</i>)	CMOS Technology Compatible Magnetic Memories
11:15-12:00	Xiaoqing Wen (<i>keynote Speaker</i>)	LSI Testing: A Core Technology to a Successful Semiconductor Industry
12:00-13:30 Buffet Lunch Time		

Luxembourg Room 9th October 2019 Afternoon Session 1 Nano-Electronic Devices(一)

Session Chair

Lining Zhang

Shenzhen University

13:30-14:00	Kin Leong Pey (Invited Speaker)	New Physics of Breakdown in 2D Dielectrics and its Potential Applications
14:00-14:30	Lining Zhang (Invited Speaker)	High Performance MoS ₂ N-Channel MOSFETs
14:30-15:00	Xinnan Lin (Invited Speaker)	Compact Modeling for Double-Gate Junctionless MOSFET
15:00-15:20	Huiquan Qin	Influence of Roughness on Nondestructive Characterization of Interconnect Film Mechanical Properties by Surface Acoustic Wave

15:20-15:40 Tea Break

Luxembourg Room 9th October 2019 Afternoon Session 2 Nano-Electronic Devices(二)

Session Chair

Hei Wong

City University of Hong Kong

15:40-16:10	Hei Wong (Invited Speaker)	On the Issues of Subnanometer EOT Gate Dielectric Scaling
16:10-16:40	Mingxiang Wang (Invited Speaker)	The spontaneous degradation of flexible LTPS thin-film transistors under dynamic bending stress
16:40-17:00	Yi Liang	Influence of Oxygen Plasma Treatment on the Amorphous IGZO Thin Film Transistors
17:00-17:20	Nagaraj Lakshmana Prabhu	Exploring the Power – Prediction Accuracy Trade-Off in a Deep Learning Neural Network using Wide Compliance RRAM Device

Athens Room 9th October 2019 Afternoon Session 3 Photoelectron (一)

Session Chair

Horng-Show, Frank, Koo

Minghsin University of Science and Technology

13:30-14:00	Francisco J. García-Sánchez (<i>Invited Speaker</i>)	Equivalent Circuit Models for Next Generation Photovoltaic Devices with S-shaped I-V Curves
14:00-14:30	Fushan Li (<i>Invited Speaker</i>)	Inkjet printed quantum dot luminant thin films and their applications
14:30-15:00	Frank Koo (<i>Invited Speaker</i>)	TCAD Simulation for Optoelectronic Devices and Its Application
15:00-15:20	SanaMoin	Simulation based IV Characteristics Analysis of GaAs and InP Solar Cell

15:20-15:40 Tea Break

Athens Room 9th October 2019 Afternoon Session 4 Photoelectron (二)

Session Chair

Xiaohong Sun

Zhengzhou University

15:40-16:10	Xiaohong Sun (<i>Invited Speaker</i>)	Graded Photonic Crystals
16:10-16:40	Shien-Kuei Liaw (<i>Invited Speaker</i>)	Design and implementation of 1064 nm laser sources
16:40-17:00	Guancong Liu	Performance Evaluation of Photovoltaic System under Harsh Field Conditions
17:00-17:20	Qingge Huo	Improve the performance of deep ultraviolet semiconductor lasers by optimizing the electron blocking layer

Berlin Room 9th October 2019 Afternoon Session 5 Circuit and System

Session Chair

Xiaonan Yang

Zhengzhou University

13:30-14:00	Wei Zhang (Invited Speaker)	High Level Synthesis For AI Electronics
14:00-14:30	Adam W. Skorek (Invited Speaker)	High Performance Computing in Nanoelectronics
14:30-14:50	Raven C. Tabiongan	Chat Box: Two-way Schemed Communication Device for Speech and Hearing Impairment
14:50-15:10	Nikko Ardel P. Floretes	Wireless Detector for Illicit CATV Tapping

15:10-15:30 Tea Break

Berlin Room 9th October 2019 Afternoon Session 6 Analog Circuit

Session Chair

Chua-Chin Wang

National Sun Yat-sen University

15:30-16:00	Chua-Chin Wang (Invited Speaker)	2.5 GHz Data Rate 2xVDD Digital Output Buffer Design Realized by 16-nm FinFET CMOS
16:00-16:30	Chih-Wen Lu (Invited Speaker)	A 10-Bit DAC for LCD Column Driver Ics
16:30-16:50	Mingyang Gong	A Self-adaption Power Switch Circuit For Battery Supplied NFC Chip
16:50-17:10	Bing Xie	Two-stage Energy Storage Power Converter with Coordinated Control

17:30 Shuttle service

Luxembourg Room 10th October 2019 Morning Session 7 Semiconductor Technology

Session Chair

Mu-Chun Wang

Mingsin University of Science and Technology

8:30-9:00	Mu-Chun Wang (Invited Speaker)	Nano-node n-type Gate Dielectric Integrity and Uniformity Correlated to Frontend Nitridation Processes
9:00-9:30	Mansun Chan (Invited Speaker)	Ultra-low-k dielectric for Post-Moore Interconnect Technology
9:30-10:00	Yuhuai Liu (Invited Speaker)	Epitaxial growth of hexagonal boron nitride films for future electronics

10:00-10:20 Tea Break

Luxembourg Room 10th October 2019 Morning Session 8 Microelectronic reliability

Session Chair

Xiaozong Huang

Chongqing Acoustic-optic-electronic Co. Ltd. & 24 Institute of CETC

10:20-10:50	Teruo Suzuki (Invited Speaker)	Consideration of CDM measurement using bare dies and wafers
10:50-11:20	Xiaozong Huang (Invited Speaker)	Brief Overview of Diode Design Solutions for ESD Protection
11:20-11:50	Zhaonian Yang (Invited Speaker)	Tunnel Field-Effect Transistors in Electrostatic Discharge Protection
11:50-12:10	Kai Yang	LVTSCR with High Holding Voltage for ESD Protection in 55nm CMOS Process

12:10-13:30 Buffet Lunch Time

Athens Room 10th October 2019 Morning Session 9 High frequency electronic devices & circuits(一)

Session Chair

Chong li

University of Glasgow

8:30-9:00	Chong li (Invited Speaker)	An overview of latest development of terahertz solid-state electronic sources
9:00-9:30	Benqing Guo (Invited Speaker)	A 0.2-3.3 GHz 2.4 dB NF 45 dB Gain Current-Mode Front-End for SAW-less Receivers in 180 nm CMOS
9:30-9:50	Hao Sun	Scalable Modeling for the Coplanar Waveguide Step Discontinuity at Frequency up to 150 GHz
9:50-10:10	Chen Yi	Broadband Doherty-Outphasing RF Power Amplifier for S-Band

10:10-10:30 Tea Break

Athens Room 10th October 2019 Morning Session 10 High frequency electronic devices & circuits(二)

Session Chair

Fuchang Chen

South China University of Technology

10:30-11:00	Fuchang Chen (Invited Speaker)	Dual-Band Cavity Filter Using Multi-Mode Resonators
11:00-11:30	Cheng Guo (Invited Speaker)	3-D printing of waveguide devices from 1-100GHz: Challenges and opportunities
11:30-11:50	Feng Jiaqi	An Integrated Patch Antenna Array with Perfect Electromagnetic Immunity and Low RCS Property
11:50-12:10	Zhao Zhang	A novel active inductor with high self-resonance frequency high Q factor and independent adjustment of inductance

12:10-13:30 Buffet Lunch Time

Luxembourg Room 10th October 2019 Afternoon Session 11 Semiconductor Power Devices

Session Chair

Guo Qixin

Saga University

13:30-14:00	Qixin Guo (<i>Invited Speaker</i>)	Characteristics of gallium oxide based wide bandgap semiconductors
14:00-14:30	Ibrahim Abdel-Motaleb (<i>Invited Speaker</i>)	Cooling techniques for high power, high density 3D Integrated circuits; an overview
14:30-14:50	Wang Zeheng	A LED-Compatible Current Regulator with Integrated Electrically Adjustable Sensor
14:50-15:10	XukunZhang	Low Switch Loss and High Current Density Superjunction IGBT Based upon Deep Trench Technology
15:10-15:30	Liu Meihua	Positive Shift Suppression in Threshold Voltage of AlGaIn/GaN MIS-HEMTs

15:30-15:50 Tea Break

15:50-18:00 Poster

18:30-21:30 Banquet

Athens Room 10th October 2019 Afternoon Session 12 Biomedical Electronics

Session Chair

Ron-han Wei

Zhengzhou University

13:30-14:00	Ron-han Wei/ (Invited Speaker)	Magnetic Micro-Electro-Mechanical Systems for bio applications
14:00-14:20	Yajun Yang	Electrical and viscoelastic measurement of cancer cells in epithelial-mesenchymal transition process on a microfluidic device
14:20-14:40	Leung FuShing	Design of a Programmable Biomedical Front-End Amplifier with Pseudo Resistors
14:40-15:00	Zhaoyang Ge	ECG-Signal Classification Using SVM with Multi-feature
15:00-15:20	Xiaoda Liu	Classification of Polyps and Adenomas Using Deep Learning Model in Screening Colonoscopy

15:20-15:40 Tea Break

15:40-18:00 Poster

18:30-21:30 Banquet