



09-10 December, 2021  
Cape Town - South Africa



# ICECET

International Conference on Electrical,  
Computer and Energy Technologies

09 - 10 December, 2021  
Cape Town, South Africa

**IMPORTANT NOTE: All times are in Cape Town time zone. (GMT+2).**

## CONFERENCE PROGRAM

December 9 <sup>th</sup> , 2021						
Time	HALL-A	HALL-B	HALL-C	HALL-D	HALL-E	HALL-F
09:00-09:10	OPENING CEREMONY					
09:10-09:30	<p>Keynote Speaker <b>Prof. Dr. Maryline CHETTO</b> (Laboratory of digital sciences of Nantes/ Nantes, France) <i>Smart Scheduling for Real-Time Energy Harvesting Sensor Systems</i></p>					
09:30-09:50	<p>Keynote Speaker <b>Prof. Dr. Johan DEBAYLE</b> (Ecole Nationale Supérieure des Mines / Saint-Etienne, France) <i>Image Processing, Analysis and Modeling of Granular Media for Energy, Power and Chemical Engineering Systems</i></p>					
09:50-10:00	COFFEE BREAK					
10:00-12:00	Session A-I: Communications - I	Session B-I: High Voltage Engineering - I	Session C-I: PV Systems and Solar Energy Engineering- I	Session D-I: Artificial Intelligence	Session E-I: Computer and Software Engineering	Session F-I: Signal and Image Proc. - I
12:00-13:00	LUNCH					
13:00-15:00	Session A-II: Communications - II	Session B-II: High Voltage Engineering - II	Session C-II: PV Systems and Solar Energy Engineering- II	Session D-II: AI and Neural Networks	Session E-II: Comp. and Software Eng. & VLSI, MEMS, Microelect.	Session F-II: Signal and Image Proc. - II
15:00-15:15	COFFEE BREAK					
15:15-17:15	Session A-III: Mechatronics & Robotics	Session B-III: Energy Storage	Session C-III: MIXED - I	Session D-III: Neural Networks	Session E-III: VLSI, MEMS, Microelect.	Session F-III: MIXED - II
17:15-17:30	COFFEE BREAK					
17:30-19:00	Session A-IV: VLSI, MEMS, Microelect.-I	Session B-IV: PV Systems, Solar En. & Renewable En.	Session C-IV: Networks, Software Eng. & Communications	Session D-IV: MIXED - I	Session E-IV: MIXED - III	Session F-IV: MIXED - IV



## CONFERENCE PROGRAM

December 10 <sup>th</sup> , 2021						
Time	HALL-A	HALL-B	HALL-C	HALL-D	HALL-E	HALL-F
08:40-09:00	<p>Keynote Speaker <b>Prof. Dr. Thomas MAGEDANZ</b> (Fraunhofer Institute FOKUS, Berlin, Germany) <i>Getting 6G-ready – Understanding the Technology Drivers for the Evolution from 5G to 6G</i></p>					
09:00-11:00	Session A-V: Networks and Security - I	Session B-V: Renewable Energy - I	Session C-V: Machine Learning - I	Session D-V: Deep Learning	Session E-V: Human-Comp. Interaction	Session F-V: Signal, Image Process. & Power Elect.
11:00-11:15	COFFEE BREAK					
11:15-13:15	Session A-VI: Networks and Security - II	Session B-VI: Renewable Energy - II	Session C-VI: Machine Learning - II	Session D-VI: Deep Learning & Cloud Computing	Session E-VI: Robotics & RF and Microwave & Networks and Security	Session F-VI: Power Electronics
13:15-13:45	LUNCH					
13:45-15:45	Session A-VII: Networks and Security - III	Session B-VII: Renewable Energy - III	Session C-VII: Machine Learning - III	Session D-VII: IoT - I	Session E-VII: Neural Networks & Computer Eng. & Communications	Session F-VII: Artificial Intelligence & IoT & Cloud Computing
15:45-16:00	COFFEE BREAK					
16:00-18:00	Session A-VIII: Networks, Security, RF and Microwave Circuits	Session B-VIII: Renewable Energy - IV	Session C-VIII: Machine Learning - IV	Session D-VIII: IoT - II	Session E-VIII: Renewable Energy & High Voltage Eng. & Power Electronics	Session F-VIII: VLSI, MEMS, Microelect.-2
18:00-18:15	CLOSING CEREMONY					

ID	Authors	Title
61	<b>Yoshiaki Hagiwara</b>	Pinned Buried PIN Photodiode type Solar Cell
75	<b>Yoshiaki Hagiwara</b>	Invention and Historical Development Efforts of Pinned Buried Photodiode
295	<b>Takashi Hosono</b> , takahumi kamio, Souma Yamamoto, Jun-ichi Matsuda, Kouji Hirai, Shogo Katayama, Tianrui Feng, Anna Kuwana, Haruo Kobayashi, Akira Suzuki, Satoshi Yamada, Tomoyuki Kato, Ritsuko Kitakoga, Takeshi Shimamura, Gopal Adhikari, Nobuto Ono, Kazuhiro Miura	CMOS Nagata Current Sources with Self-Bias Configuration Insensitive to Supply Voltage and Temperature
471	<b>Reza Hashemian</b>	Design of Cost-Effective and Modular Analog Hearing Aides Using Nullors for Response Matching
474	<b>John Suarez</b> , Michael Shur	Terahertz Diagnostics SiGe Heterobipolar Junction Transistors
606	<b>Edoardo Barteselli</b> , Luca Sant, Richard Gaggl, Andrea Baschirotto	High Audio Band PSR and Fast Settling-Time Dual-Loop LDO Regulator Architecture for Low Power Application
619	<b>Moulaheene Fateh</b>	Chopper-stabilized Fully Differential Amplifier for Portable ECG Monitoring Systems using 90 nm Technology
694	<b>Jasmine Bajaj</b> , Babita Jajodia	Efficient Hardware Implementation of High-Speed Recursive Vedic Squaring Architecture on FPGA
171	<b>Pietro Burrascano</b>	Relevance of accurate filter design in Hammerstein model identification algorithms of nonlinear systems