2018 25th IEEE International Conference on Electronics, Circuits and Systems (ICECS 2018)

Bordeaux, France 9-12 December 2018



IEEE Catalog Number: CFP18773-POD **ISBN:**

978-1-5386-9116-8

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IEEE Catalog Number:	CFP18773-POD
ISBN (Print-On-Demand):	978-1-5386-9116-8
ISBN (Online):	978-1-5386-9562-3

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A3L-A **Single Photon Detectors**

Monday, December 10, 2018 11:00 - 12:30 Date:

Time:

Room: Amphi B - Bordeaux

Chair(s): Nicola Massari; Fondazione Bruno Kessler

()	
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	A Triple Integration Timing Scheme for SPAD Time of Flight Imaging Sensors in 130 nm CMOS
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	A Novel Physical Layer Encryption Scheme to Counter Eavesdroppers in Wireless Communications
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Byeong Yong Kong¹, Jaehwan Jung², In-Cheol Park¹ ¹KAIST, Korea; ²Samsung Electronics, Korea

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Time: 09:30 - 11:00

Date:

Room: F1 - Sauternes

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Automated Synthesis of 1.5-5 GHz SiGe BiCMOS Differential Amplifiers Loaded Andrey Kokolov, Leonid Babak, Dmitriv Zhabin, Feodor Sheverman, Alexey Drozdov Tomsk State University of Control Systems and Radio-electronics, Russia

A Current Balanced Multi-Phase Class-D Amplifier for Wideband Supply Jiawen Hu, Liu Chen, Yifei Hu

Shanghai Exceleration Semiconductor Ltd., China

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	Challenges and Examples of in-situ Memory Content Extraction Techniques

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¹*ICube, UMR* 7357, *Université de Strasbourg and CNRS, France;* ²*NYU School of Medicine, United States;* ³*Université Claude Bernard Lyon 1 / CNRS, France;* ⁴*Université de Strasbourg / CNRS, France;* ⁵*University of Applied Sciences and Arts Northwestern, Switzerland*

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	¹ Institute of Computer Science, Foundation for Research and Technology, Greece; ² National and Kapodistrian University of Athens, Greece; ³ National Technical University of Athens, Greece	
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¹ETH Zürich, Switzerland; ²ETHZ Eidgenoessische Technische Hochschule Zuerich, Switzerland; ³Otto-von-Guericke University Magdeburg, Germany; ⁴Universitat de Valncia, Spain; ⁵University Heidelberg, Germany; ⁶University of Heidelberg, Germany; ⁷University of Leeds, United Kingdom; ⁸University of Zürich, Switzerland

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	Approximate Computing Methods for Embedded Machine Learning Ali Ibrahim ³ , Mario Osta ³ , Mohamad Alameh ³ , Moustafa Saleh ³ , Hussein Chible ¹ , Maurizio Valle ² ¹ Lebanese University, Lebanon; ² University of Genoa, Italy; ³ University of Genova, Italy	. 845

	Quality-Scalable Approximate LMS Filter. Darjn Esposito, Gennaro Di Meo, Davide De Caro, Antonio Strollo, Ettore Napoli University of Napoli Federico II, Italy	849
	Logic-in-Memory Architecture for Min/Max Search Marco Vacca ² , Yaswanth Tavva ¹ , Anupam Chattopadhyay ¹ , Andrea Calimera ² ¹ Nanyang Technological University, Singapore; ² Politecnico di Torino, Italy	853
C2L-E Date: Time: Room: Chair(s):	Bio-medical Circuits Wednesday, December 12, 2018 10:00 - 11:30 F2 - Giscours Bernabé Linares-Barranco; <i>Instituto de Microelectrónica de Sevilla</i> Sara Ghoreishizadeh; <i>Imperial College</i>	
	Advances and Open Challenges for Integrated Circuits Detecting Bio- Molecules Marco Carminati ³ , Roland Thewes ⁴ , Jacob Rosenstein ¹ , Hoi-Jun Yoo ² ¹ Brown University, United States; ² KAIST, Korea; ³ Politecnico di Milano, Italy; ⁴ Technical University Berlin, Germany	857
	A VCO-Based ADC with Relaxation Oscillator for Biomedical Applications Olaitan Olabode ¹ , Antti Ontronen ² , Vishnu Unnikrishnan ¹ , Marko Kosunen ¹ , Jussi Ryynänen ¹ ¹ Aalto University, Finland; ² Murata Electronics Oy, Finland	861
	Current Mode Communication Scheme for Subretinal Implants with 8mV RMS Wire Potential Henning Schütz ³ , Denis Djekic ² , Stefan Gambach ¹ , Hans Kaim ¹ , Raphael Steinhoff ¹ , Albrecht Rothermel ¹ ¹ Institute of Microelectronics, University of Ulm, Germany; ² Institute of Smart Sensors, University of Stuttgart, Germany; ³ University of Ulm, Germany	865
	Autonomous Readout ASIC with 169dB Input Dynamic Range for Amperometric Measurement Wei Onn Ting, Sara S. Ghoreishizadeh Imperial College London, United Kingdom	869
	A Fully Integrated Fuzzy Logic Algorithm for Ischemic Heartbeat Classification Gisela De La Fuente-Cortes ² , Jose Alejandro Diaz-Mendez ² , Victor Rodolfo Gonzalez-Diaz ¹ ¹ Benemérita Universidad Autónoma de Puebla, Mexico; ² National Institute of Astrophysics, Optics and Electronics, Mexico	873