

# **2019 International Conference on Simulation of Semiconductor Processes and Devices (SISPAD 2019)**

**Udine, Italy  
4 – 6 September 2019**



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## Wednesday September 4

09.00-09.10 **Conference opening**

09.10-10.00 **Plenary invited**

*Room T9* Neuro-Inspired Computing with Nanoelectronic Devices: Experimental Progresses and Modeling Opportunities  
Shimeng Yu,  
Georgia Institute of Technology

10.00-10.20 **Coffee break**

*Room T9* **Session 1**

**Reliability of devices and interconnects**

*Chairpersons: L. Filipovic, Technische Universität Wien, Austria, F. Driussi, University of Udine*

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Linlin Cai, Wangyong Chen, Xing Zhang, Yudi Zhao, and Xiaoyan Liu  
Institute of Microelectronics, Peking University, Beijing, China
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Manzanarez Hervé, Moreau Stéphane, Cueto Olga  
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Ravi Tiwari<sup>1</sup>, Narendra Parihar<sup>1</sup>, Karansingh Thakor<sup>1</sup>, Hiu-Yung Wong<sup>2</sup>, and Souvik Mahapatra<sup>1</sup>  
<sup>1</sup>Department of Electrical Engineering, Indian Institute of Technology Bombay, Mumbai, India  
<sup>2</sup>San Jose State University, San Jose, CA, USA
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Sharang Bhagdikar and Souvik Mahapatra  
Department of Electrical Engineering, Indian Institute of Technology Bombay, Mumbai, India
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Chea-Wei Teo<sup>1,2</sup>, Kain Lu Low<sup>1</sup>, Vinod Narang<sup>2</sup>, and Aaron Voon-Yew Thean<sup>1</sup>,  
<sup>1</sup>Department of Electrical and Computer Engineering, National University of Singapore, Singapore  
<sup>2</sup>Device Analysis Lab, Advanced Micro Devices Pte Ltd, Singapore
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Y.S. Bankapalli and H. Y. Wong  
Electrical Engineering, San Jose State University, San Jose, CA, USA

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Chair of Electromagnetic Theory, RWTH Aachen University, Aachen, Germany
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Technology Development, Micron Technology Inc., Vimercate, Italy
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Shigetaka Kumashiro, Tatsuya Kamei, Akira Hiroki, Kazutosi Kobayashi  
Kyoto Institute of Technology, Matsugasaki, Sakyo-ku, Kyoto, Japan

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<sup>2</sup>School of Engineering, Electronic and Nanoscale Engineering, University of Glasgow, Glasgow, Scotland, UK  
<sup>3</sup>College of Electrical and Power Engineering, Taiyuan University of Technology, China.

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18.00-19.00 **Cocktail Reception** – Palazzo di Topo Wassermann

**Thursday September 5**

09.00-09.10	<b>Presentation of SISPAD 2020</b>	
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Room T4

**Session 13**

**Sensors and optoelectronic devices**

*Chairperson: C. Jungemann, University of Aachen, Germany*

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<sup>1</sup>DPIA, University of Udine, Udine, Italy, <sup>2</sup>DIEF, University of Modena and Reggio Emilia, Modena, Italy
- 10.50-11.10 13.2 - Investigation and Modelling of Single-Molecule Organic Transistors 347  
Fabrizio Torricelli<sup>1</sup>, Eleonora Macchia<sup>2,3</sup>, Paolo Romele<sup>1</sup>, Kyriaki Manoli<sup>2</sup>, Cinzia Di Franco<sup>4</sup>, Zsolt M. Kovacs-Vajna<sup>1</sup>, Gerardo Palazzo<sup>2,5,6</sup>, Gaetano Scamarcio<sup>4,5</sup>, Luisa Torsi<sup>2,3,6</sup>  
<sup>1</sup>Department of Information Engineering, University of Brescia, Brescia, Italy, <sup>2</sup>Dipartimento di Chimica, Università degli Studi di Bari, Italy, <sup>3</sup>The Faculty of Science and Engineering, Åbo Akademi University, Turku, Finland, <sup>4</sup>CNR, Istituto di Fotonica e Nanotecnologie, Bari, Italy, <sup>5</sup>Dipartimento InterAteneo di Fisica "M. Merlin", Università degli Studi di Bari, Italy, <sup>6</sup>CSGI (Centre for Colloid and Surface Science), Bari, Italy
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<sup>1</sup>STMicroelectronics, Crolles, France, <sup>2</sup>Lam Research, Meylan, France, <sup>3</sup>Coventor a Lam Research Company, Villebon sur Yvette, France
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<sup>1</sup>ISAE-SUPAERO, Université de Toulouse, Toulouse, France, <sup>2</sup>Airbus Defence & Space, ZI du Palais, Toulouse, France, <sup>3</sup>Direction Générale de l'Armement, Paris, France
- 12.30-13.30 **Lunch**