

## SEMINATEC 2026

Paper ID	Title	Authors	Institution	Presentation (Session II - Thursday)
3	<i>Performance Evaluation of a Nanosheet-Based Operational Transconductance Amplifier</i>	Thainá Guimarães (USP)* Arllen Ribeiro (USP) João Martino (USP) Paula Agopian (UNESP)	USP	April, 8th
4	<i>Electroless Deposition and Characterization of Ni-P Films on Flexible Substrates</i>	Andreia de Moraes (CTI Renato Archer)* Alexander Flacker (CTI Renato Archer) Marcelo Kioshi Hirata (CTI Renato Archer) Ricardo Cotrin Teixeira (CTI Renato Archer) Jilian Nei de Freitas (CTI Renato Archer)	CTI Renato Archer	April, 9th
6	<i>Detection-Area Scaling in SiN Photonic-Molecule Refractive-Index Sensors: Sensitivity and Thermal Drift Trade-Off</i>	Marcus do Amaral Pires (UFSCar)* Luís Alberto Mijam Barêa (UFSCar) Paulo Henrique Dias Ferreira (UFSCar)	UFSCar	April, 9th
8	<i>Multiphysics TCAD impact of Titanium Silicidation Beneath Ultra-Thin Aluminum Front Electrodes in Silicon Solar Cells</i>	Allan Silveira (CTI Renato Archer)* Leandro Manera (Unicamp-FEEC) Gabriel Brasil (CTI Renato Archer) Tatiana Vello (CTI Renato Archer) Nailson Carvalho (CTI Renato Archer) Wellington Melo (CTI Renato)	CTI Renato Archer	April, 9th
10	<i>Comparative Analysis of BE and TE Operating Modes in VFET-Based Two-Stage OTAs</i>	Arllen Ribeiro (USP)* Thaina Guimarães (USP) Vanessa Venuto (USP) Joao Martino (USP) Paula Ghedini (UNESP)	USP	April, 9th
12	<i>A Low-Cost IoT-Enabled RISC-V Potentiostat with Open Architecture for Decentralized Healthcare Diagnostics</i>	Allan Silveira (CTI Renato Archer)* Gabriel Brasil (CTI Renato Archer) Nailson Carvalho (CTI Renato Archer) Wellington Melo (CTI Renato Archer) Tatiana Vello (CTI Renato Archer) Vinicius Peruzzi (CTI Renato Archer) Talita Mazon (CTI Renato Archer)	CTI Renato Archer	April, 9th
14	<i>Modernization of the LPP-ITA Cleanroom for Micro- and Nanofabrication</i>	Robert Bovadilla (ITA)* Rodrigo S. Pessoa (ITA) Douglas M G Leite (ITA) André Luis Pereira (ITA) Ursula Mengui (ITA) Argemiro S. da Silva Sobrinho (ITA)	ITA	April, 9th

16	<i>Characteristics of SOA-based Sagnac Interferometer for NOT logic gate</i>	Alan dos Reis Silva (UFPA)* Simone Cristina da Costa Tavares (UFPA) Fabio Barros de Sousa (UFPA) Jackson M. Oliveira (UFPA) Fábio S. de Araújo (UFPA) Igor R. S. Miranda (UFPA) Léo C. P. de Almeida (UFPA) Marcos Benedito Caldas Costa (UFPA)	UFPA	April, 9th
18	<i>Cryogenic Graphene-Based Phase Modulators for Quantum Information Processing</i>	Leonard Barboza Navarro (UNICAMP)* Maria Carolina Volpato (UNICAMP) Alisson Cadore (CNPq) Pierre-Louis De Assis (UNICAMP)	UNICAMP	April, 9th
20	<i>AI-Based Analysis of Radiation Test Data for Integrated Circuits in Aerospace Systems</i>	Marcelo Carlos (CTI)*	CTI Renato Archer	April, 9th
22	<i>Low-Cost FPGA TDC Family with Proposed Four-Picosecond Resolution</i>	Wellington de Melo (CTI - Renato Archer)* José Alexandre Diniz (Unicamp) Vladimir de Jesus Silva Oliveira (UNEMAT) Erlon B. Lima (CTI - Renato Archer) Allan Mariano Campos da Silveira (CTI - Renato Archer) Gabriel Teixeira Brasil (CTI - Renato Archer) Nailson Aparecido de Carvalho (CTI - Renato Archer) Tatiana Parra Vello (CTI - Renato Archer) Vinicius Vono Peruzzi (CTI - Renato Archer) Saulo Finco (CTI - Renato Archer)	CTI Renato Archer	April, 9th
24	<i>Analysis of Si/Cr/Al photodetector electrical performance under diverse light exposure</i>	Isabella Silva (UNICAMP)* Jacilene Medeiros (UNICAMP) José Diniz (UNICAMP) Fernando Rufino (UNICAMP) Antônio Zuben (UNICAMP)	UNICAMP	April, 9th
28	<i>Trade-offs in Radiation Predictability: A Comparative Analysis of ELT, TRENCH and Rectangular Transistors Layouts</i>	Paulo Garcia Junior (Centro Universitário FEI)* Marcilei Aparecida Guazzelli (Centro Universitário FEI) Renato Camargo Giacomini (Centro Universitário FEI) Alexis Cristiano Vilas Bôas (Centro Universitário FEI) Luis Seixas (CTI)	Centro Universitário FEI	April, 9th
30	<i>A Sub-1V Output Low-Power CMOS Voltage Reference Operating from 1.2 to 3.3 V Using Open-Source EDA Tools</i>	Toni Tejada (Wernher von Braun Research Center)* Fabiano Fruett (UNICAMP)	Werner von Braun	April, 9th
32	<i>Planar Dielectric Barrier Discharge Cell Using Titanium and Aluminum Thin Films on Alumina for Ozone Generation</i>	Natanael Sampaio (Unicamp)*	UNICAMP	April, 9th

34	<i>Cosmic-ray effects in superconducting qubits: terrestrial field modeling and phonon generation measurements</i>	Saulo Alberton (UNICAMP)* Claudio Federico (USP) Mauricio Pazianotto (ITA) Vinicius Barreto (UNICAMP) Francisco Rouxinol (UNICAMP)	UNICAMP	April, 9th
36	<i>Gamma-Induced Quasiparticle Bursts in Superconducting Qubits: Feasibility of Controlled <sup>137</sup>Cs Irradiation Experiments</i>	Vinicius Barreto (UNICAMP)* Saulo Alberton (UNICAMP) Francisco Rouxinol (UNICAMP)	UNICAMP	April, 9th
38	<i>The Use of Electronics for a Spectrophotometric Instrumentation</i>	Tatiana Vello (CTI)* Wellington Melo (CTI) Allan Silveira (CTI) Gabriel Brasil (CTI) Nailson Carvalho (CTI) Vinicius Peruzzi (CTI)	CTI Renato Archer	April, 9th
40	<i>Comparative TCAD Study of 4H-SiC Schottky Diodes with Constant Anode Area and Different Geometrical Segmentations</i>	Eduardo Panzo (UNICAMP)* José Alexandre Diniz (UNICAMP) Maria Glória Caño De Andrade (UNESP) Marcos Vinicius Puydinger dos Santos (UNICAMP)	UNICAMP	April, 9th
42	<i>A TCAD Simulation Study of Gain Layer Optimization in AC-LGAD</i>	Pedro Romano (Centro Universitário FEI)* Thalia Alves (Centro Universitário FEI) Leandro Santos (Centro Universitário FEI) Ana Costa (Centro Universitário FEI) Pedro Araujo (Centro Universitário FEI) Marcilei Guazzelli (Centro Universitário FEI) Renato Giacomini (Centro Universitário FEI)	Centro Universitário FEI	April, 9th
44	<i>Enhanced Split-CV method for mobility extraction minimizing VDS-effects</i>	Jaime Calcade Rodrigues (Centro Universitário FEI)*	Centro Universitário FEI	April, 9th
46	<i>Architecture of a 10-bit Hybrid Flash-TI-SAR ADC for 100 MS/s Operation</i>	Mariane Martins (Unicamp)*	UNICAMP	April, 9th
48	<i>Tactile Object Recognition in a Three-Finger Robotic Hand Using Physics-Based Simulation and Machine Learning</i>	Rafael Silva (PUC-SP)	PUC-SP	April, 9th
50	<i>Enhanced Saturation Current and Radiation Robustness in Half-Diamond nMOSFETs Under High X-Ray Total Ionizing Dose</i>	Egon Galembeck (FEI)* Denis Flandre (UCLouvain) Cor Claeys (KU Leuven) Salvador Gimenez (FEI)	Centro Universitário FEI	April, 9th
52	<i>Reliability evaluation of JNTs under different Temperatures and biases throughout the Low-Frequency Noise</i>	Everton Silva (FEI)* Renan Trevisoli (PUC-SP) Rodrigo Doria (FEI)	Centro Universitário FEI	April, 9th

54	<i>Integrated Experimental and Computational Analysis of Au Nanoparticle-Based SERS</i>	Eduardo Moreira (Federal University of Pampa)*	Unipampa	April, 9th
56	<i>Fabrication and Characterization of Back-Gated Graphene Field-Effect Transistors</i>	Vitor Oliveira (UNICAMP)*	UNICAMP	April, 9th
58	<i>Hands-On Semiconductor Microfabrication in Applied Physics Education</i>	Patrick Pucci Torrezilhas Aranda (UNICAMP)* Renan Dantas (UNICAMP) Antonio Von Zuben (UNICAMP) Vinícius de Arruda (UNICAMP) Newton Frateschi (UNICAMP) Francisco Prince (UNICAMP)	UNICAMP	April, 9th
60	<i>Gate-Tunable Multispectral Sensitivity of VOx Schottky-Barrier FETs</i>	Barbara Pralon (FEEC/UNICAMP)* José Diniz (Unicamp) Fernando Rufino (Unicamp) Ricardo Cotrin (INPE)	UNICAMP	April, 9th
62	<i>Graphene lattice simulation in circuit quantum electrodynamics</i>	Ednilson Lopes (UNICAMP)* Valentina Spohr (UNICAMP) Francisco Rouxinol (UNICAMP) Alberto Saa (UNICAMP)	UNICAMP	April, 9th
64	<i>Influence of Trace Spacing on the S-Parameter Response of a CPW Structure with Six TSVs</i>	Fernando Rufino (UNICAMP)* Francisco Brito-Filho (UFERSA) José Alexandre Diniz (UNICAMP)	UNICAMP	April, 9th
66	<i>Quantum Random Number Generation By Homodyne Balanced Detection on Fiber</i>	Renan Dantas (UNICAMP)* Newton Frateschi (UNICAMP) Francisco Prince (UNICAMP)	UNICAMP	April, 9th
68	<i>Electrical Characterization of Experimental Resistive Random-Access Memories – ReRAMs</i>	Lucas Venceslau (FEI)*	Centro Universitário FEI	April, 9th
72	<i>Statistical analysis of SAED and HRTEM-FFT images of Cu nanoparticles</i>	Jordelson Junior (UNICAMP)* Marcos Puydinger (UNICAMP) Andrei Alaferdov (UNICAMP)	UNICAMP	April, 9th
74	<i>Design Space Exploration of TMR-Based Cryptographic Modules for Nanosatellite FPGAs</i>	Rafael Nunes (CTI)*	CTI Renato Archer	April, 9th