

2024 IEEE International Reliability Physics Symposium - Tutorial & Year-in-Review Program-at-a-Glance

April 14-18 | Dallas, Texas, USA | All Times in Central Daylight Time (CDT)

Sunday • April 14			Monday • April 15				
Time	Int. I & II	Int. III & IV	Time	Int. I & II	Int. III & IV	Cap Rock I, II & III	Becker I & II
9:00 AM	TUT 1 Reliability Aspects of Nanowire, Nanosheet and Forksheet Devices <i>Erik Bury, imec</i>	TUT 2 GaN Power Device Technology and Reliability <i>Davide Bisi, Transphorm Inc.</i>	8:30 AM	TUT 9 Reliability of Nanoelectronics based on Two-Dimensional Materials <i>Theresia Knobloch, TU Wien</i>	TUT 10 SiC Device Reliability and Failure Analysis <i>Donald Gajewski, Wolfspeed, Inc.</i>	TUT 11 Interconnect Reliability for Chip Design <i>Baozhen Li, IBM Infrastructure</i>	TUT 12 Identifying Material Features & Operation Conditions Targeting Device Neuromorphic Applications <i>Gennadi Bersuker, M2D Solutions</i>
	Break • International Foyer			Break • International Foyer			
11:00 AM	TUT 3 Introduction to Statistics for Reliability <i>Kristof Croes, imec</i>	TUT 4 Threshold-Voltage Instability in SiC MOSFETs <i>Aivars Lelis, Army Research Laboratory</i>	10:30 AM	TUT 13 Hot-carrier Degradation in MOS Transistors <i>Michiel Vandemaele, imec</i>	TUT 14 GaN RFOLT for 5G/6G Applications <i>Elias Reese, Qorvo</i> From Fabrication to Field: The Importance of Semiconductor Reliability Testing... <i>Roland Shaw, STAr/Accel-RF Instruments Corporation</i>	TUT 15 Plasma Induced Damage (PID): From Basics to Complex Well Charging <i>Andreas Martin, Infineon Technologies AG</i>	TUT 16 Electrical Chip-Package-Board Reliability of 2.5D/3D Heterogeneously Integrated Systems <i>Muhammad Ashraf Alam, Purdue University</i>
	Lunch • Windfall			Lunch • Windfall			
1:30 PM	TUT 5 Reliability of RRAM Technology in the Context of Neuromorphic Applications <i>Cristian Zambelli, University of Ferrara</i>	TUT 6 Defect Localization Methods for Device Characterization and Yield Management <i>Greg Johnson, Carl Zeiss Microscopy</i>	1:00 PM	TUT 17 Effect of OFF-State Stress on CMOS Devices <i>Xavier Federspiel, STMicroelectronics</i>	TUT 18 New Industrial Radiation Paradigms for LEO Satellite Constellations, Full Autonomous Car Driving and Sovereign 3D Chiplelets <i>Phillippe Roche, STMicroelectronics</i>	TUT 19 Silicon Health & Lifecycle Management, for Data Center and Automotive <i>Jyotika Athavale & Yervant Zorian, Synopsys</i>	TUT 20 Reliability Challenges of 3D NAND Flash Memory in Harsh Environments <i>Biswajit Ray, Colorado State University</i>
	Break • International Foyer			Break • International Foyer			
3:30 PM	TUT 7 Understanding and modeling Time-Dependent Dielectric Breakdown <i>Robin Degraeve, imec</i>	TUT 8 TCAD for Reliability <i>Karim El Sayed, Synopsys</i>	Year-in-Review • International III & IV				
	Adjourn		3:00 PM	YIR 1 - From the Mathematical Foundations to the Physical Models: A Year in Review of Neuromorphic Reliability <i>Brian Hoskins, NIST</i>			
5:00 PM	Adjourn		3:50 PM	YIR 2 - Dielectric Breakdown: Advances in Characterization Techniques and Extrapolation to Use Conditions for Low and High-Voltage FETs <i>Bonnie E. Weir, Broadcom</i>			
	Adjourn		4:40 PM	YIR 3 - The Exciting Era of Compact Electronics with Gallium Nitride Technology <i>Srabanti Chowdhury, Stanford University</i>			
5:00 PM	Adjourn		5:30 PM	Adjourn			