

# 2024 IEEE International Reliability Physics Symposium (IRPS) & International Electrostatic Discharge Workshop (IEW)

*Technical Program-at-a-Glance*

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

## TUESDAY • APRIL 16

### *International I-IV*

8:00 AM  
8:15 AM  
8:25 AM  
8:35 AM  
9:20 AM  
10:05 AM  
10:35 AM  
10:40 AM  
11:05 AM  
11:30 AM  
11:55 AM  
12:20 PM  
1:30 PM  
1:35 PM  
2:00 PM  
2:25 PM  
2:50 PM  
3:10 PM  
3:40 PM  
3:45 PM  
4:10 PM  
4:35 PM  
5:00 PM  
5:20 PM  
6:00 PM  
7:30 PM  
8:30 PM  
8:45 PM  
9:45 PM

<b>General Chairs Welcome &amp; Introduction</b>				
<b>Program Chair: Overview of Technical Program</b>				
<b>Awards</b>				
<b>Keynote 1: Shinichi Takagi, <i>The University of Tokyo, Japan</i></b>				
<b>Keynote 2: Su Jin Ahn, <i>Samsung, Korea</i></b>				
<b>BREAK &amp; EXHIBITS • International Foyer</b>				
<i>International I &amp; II</i>	<i>International III &amp; IV</i>	<i>Cap Rock I, II &amp; III</i>	<i>IEW - Spicewood I, II &amp; III</i>	
2A Intro	2B Intro	2C Intro	10:35am-12:00pm IEW Opening IEW Keynote 1 & Workshop: 2.5D/3D-IC Die-to-Die ESD Design Optimization, <i>Tzu-Heng Chang, TSMC</i>	
Gate/MOL Dielectrics	Reliability Testing	GaN Devices		
Authors' Corner				
<b>12:00 PM - 1:30 PM • LUNCH • Windfall</b>				
3A Intro	3B Intro	3C Intro	Outdoor Networking Activities  <i>Options 1, 2 &amp; 3</i>	
Memory Reliability	SiC Devices	Product Reliability		
Authors' Corner				
<b>BREAK &amp; EXHIBITS • International Foyer</b>				
4A Intro	4B Intro	4C Intro		
Transistors	RF/mmW/5G	Circuit Reliability & Aging		
Authors' Corner				
<b>Adjourn</b>				
<b>Workshop Reception • <i>Bonnie &amp; Clyde Pavilion</i> • Sponsored by University of Texas at Dallas</b>				
<b>Workshops 1-5</b>				
<b>BREAK • <i>International Foyer</i></b>				
<b>Workshops 6-10</b>				
<i>*workshops available to on-site attendees only</i>				

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<b>WEDNESDAY • APRIL 17</b>				
<i>International I-IV</i>				
8:00 AM	Keynote 3: Rajeev Malik, <i>IBM, USA</i>			
8:45 AM	<b>BREAK &amp; EXHIBITS • International Foyer</b>			
	<i>International I &amp; II</i>	<i>International III &amp; IV</i>	<i>Cap Rock I, II &amp; III</i>	<i>IEW - Spicewood I, II &amp; III</i>
9:15 AM	5A Intro	5B Intro	5C Intro	IEW Intro
9:20 AM	Process Integration	RF/mmW/5G	System Electronics Reliability	IEW + IRPS Posters & IEW Plenary 1
9:45 AM				
10:05 AM				
10:35 AM	<b>Authors' Corner • BREAK &amp; EXHIBITS • International Foyer</b>			
	6A Intro	6B Intro	6C Intro	11:00am-12:30pm Seminar / Workshop
11:05 AM	Transistors	GaN Devices	Neuromorphic Computing Reliability	
11:10 AM				
11:35 AM				
12:00 PM	<b>Authors' Corner</b>			
12:25 PM	<i>12:30 PM - 2:00 PM • LUNCH • Windfall</i>			
	7A Intro	7B Intro	7C Intro	IEW Keynote 2 & Workshop: Gallium Nitride FETs: Technology, Degradation Processes and ESD Failures, <i>Matteo Meneghini, University of Padova</i>
2:00 PM	Emerging Memory	SiC Devices	Circuit Reliability & Aging	
2:05 PM				
2:30 PM	<b>Authors' Corner • BREAK &amp; EXHIBITS • International Foyer</b>			
2:55 PM	Emerging Memory <i>Cont'd</i>	Transistors		Seminar/ Workshop: ESD: Past, Present, Future <i>Charvaka Duvvury, James Miller, Shudong Huang + 1 more</i>
3:20 PM		Authors' Corner		
3:45 PM				
4:15 PM	<b>Authors' Corner</b>			
4:40 PM	<b>Adjoin</b>			
5:05 PM	<b>Adjoin</b>			
5:25 PM	<b>Adjoin</b>			
6:00 PM	<b>Taste of Texas Poster Dinner • Austin Ranch</b>			
9:00 PM	<b>Sponsored by Qualcomm</b>			

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## THURSDAY • APRIL 18

### International I-IV

8:00 AM

Keynote 4: Sameer Pendharkar, *Texas Instruments, USA*

8:45 AM

**BREAK & EXHIBITS • International III & IV**

*International I & II*

*International III & IV*

*Cap Rock I, II & III*

*IEW - Spicewood I, II & III*

9:15 AM

8A Intro

8B Intro

8C Intro

9:20 AM

9:45 AM

Reliability Testing

Packaging &  
2.5/3D Assembly

ESD and Latchup

10:10 AM

10:35 AM

**Authors' Corner • BREAK & EXHIBITS • International Foyer**

11:00 AM

9A Intro

9C Intro

9B Intro

11:30 AM

Gate/MOL Dielectrics

Product Reliability  
*\*updated location*

Memory Reliability  
*\*updated location*

IEW + IRPS Posters  
IEW Plenary 2

12:00 PM

12:25 PM

12:50 PM

Authors' Corner

*12:30 PM - 2:00 PM • LUNCH • Windfall*

2:00 PM

10A Intro

10B Intro

10C Intro

2:05 PM

2:30 PM

Metallization/  
BEOL Reliability

Failure Analysis

Radiation Effect Reliability

Seminar: ESD in Ferroelectric Memory  
Technologies  
*Prof. Khan, Georgia Tech*

2:55 PM

3:20 PM

3:45 PM

Workshop: Can Machine Learning Take  
us into the Next Generation of IC  
Reliability Assessment? *Mehrdad  
Nourani, UT-Dallas) & Charvaka  
Duvvury & IEW Closing*

4:10 PM

**Authors' Corner • BREAK & EXHIBITS • International Foyer**

*International I-IV*

4:40 PM

**Closing Ceremony, Prize Drawing & 2025 Introduction**

5:05 PM

Adjourn