VLSI SINCE 1983

2023 International VLSI Symposium on Technology, Systems and Applications

April 17-20, 2023 Hsinchu, Taiwan

Joint Session | TSA Session | DAT Session

Monday, April 17

Time	Ballroom A 10th Floor	Ballroom B 10th Floor	Ballroom C 10th Floor
12:30 – 17:15	**13:30 Start** **Tutorial 1** BEOL Oxide Semiconductor Devices **14:30~14:40 Break** **15:40~15:50 Break**	**13:30 Start** **Tutorial 2** AI Fundamentals and Practices **15:00~15:20 Break**	**12:30 Start** **Tutorial 3** Data Converter Design for Emerging Applications **15:30~15:45 Break**

Tuesday, April 18

Ballroom A+B / 10th Floor

09:00 – 09:50: **Opening & Award Ceremony**

10:10 – 11:50: **J1: Plenary Session**
10:10 **J1-1**
Building a Quantum Computer
John Martinis
UC Santa Barbara

11:00 **J1-2**
Industry Scale Reuse in the Chiplet Era
Robert Munoz
Intel

12:50 – 13:40: **T1: Poster Session** (Ballroom D / 11th Floor)
Time for exchanging ideas with the poster presenters

Time	Ballroom A 10th Floor	Ballroom B 10th Floor	Ballroom C 10th Floor	Ballroom D 11th Floor	Mezzanine A+B 13th Floor
13:40 – 17:30	**T2** **Paper Session** GaN HEMT Physics and Design **15:20~15:40 Break**	**J2** **Joint Special Session** Sensors – Devices Circuit and Applications in Automotive/Drone **15:25~15:45 Break**	**D1** **Paper Session** Clocking Circuits **15:20~15:50 Break**	**T1** **Poster Session** **17:00 End**	**T3** **Paper Session** Advanced Transistor Technology **15:40 End**
	T4 **Special Session** High Power Devices		**D2** **Paper Session** Analog and Mixed Signal Techniques		

Wednesday, April 19

Ballroom B / 10th Floor

08:30 – 10:10: **J3: Plenary Session**
08:30 **J3-1**
Disruptive Approaches Towards Energy Efficient VLSI Technologies
Olivier Faynot
CEA-Leti

09:20 **J3-2**
Multimodal AI: How It's Changing Our Lives?
Frank Wang
NVIDIA

Time	Ballroom A 10th Floor	Ballroom B 10th Floor	Ballroom C 10th Floor	Ballroom D 11th Floor
10:20 – 12:20	**T5** **Paper Session** Ferro RRAM	**T6** **Special Session** Advanced Packaging Technologies	**T7** **Paper Session** New Application Opportunities on Silicon Technology	**D3** **Special Session** Compute-in-Memory: From Architecture to Devices

12:50 – 13:30: **J4: Luncheon Keynote** (Ballroom B / 10th Floor)
The Revolution of AI in Intelligent System Design
Brian Sung, Cadence

Time	Ballroom A 10th Floor	Ballroom B 10th Floor	Ballroom C 10th Floor	Ballroom D 11th Floor
13:40 – 18:05	**T8** **Special Session** Novel Channel Logic and 3D-stacked Transistors **15:10~15:30 Break**	**J5** **Joint Special Session** Heterogeneous Integration **15:25~15:45 Break**	**D4** **Paper Session** AI and Security Chips **15:00-15:30 Break**	**D5** **Paper Session** Optimized Hardware Implementation for Domain-Specific Accelerators **15:00-15:30 Break**
			D6 **Special Session** Security and Encryption	**D7** **Paper Session** New Ideas in Design Automation and Test

Thursday, April 20

Ballroom B / 10th Floor

08:30 – 10:10: **J6: Plenary Session**
08:30 **J6-1**
Neuromorphic Computing with Computation-in-Memory (CIM)
Ken Takeuchi
The University of Tokyo

09:20 **J6-2**
VLSI Design and Test View of Computer Security
Shih-Lien Lu
Warner Pacific University

Time	Ballroom A 10th Floor	Ballroom B 10th Floor	Ballroom C 10th Floor	Ballroom D 11th Floor
10:20 – 12:40	**T9** **Paper Session** Memory and Storage Technology	**T10** **Special Session** Dielectric Stacking and Interface Engineering	**D8** **Special Session** Advanced Process-induced Design Challenges and Solutions **12:05 END**	**D9** **Industrial Session** Enabling Practices of Silicon Life-cycle Management
				11:30 Start **D10** **Industrial Session** Cutting-Edge Computing Technologies from Purpose-Built Accelerators, Unified Memory Interfaces, to AI SoC Design Flows

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