



### CSTIC 2023 Summary

June 26-July 27, 2023

Shanghai, China

www.semiconchina.org/cstic v.semi.org.cn/cstic







### SEMICON® CHINA

### Plenary Session and Award Winners















# Plenary Speakers













Spintronics for Greener Digital Technologies and Prospects Far Beyond

Prof. Albert Fert

Research Director, Unité Mixte de Physique, Nobel Laureate in 2007

**Innovations Boost Integrated Circuit** 

**Prof. Ming Liu** 

Academician of CAS, Fudan University

Advanced Packaging Technology Challenges: an Equipment Supplier's Perspective

Dr. Yang Pan

Corporate Vice President, Lam Research

Endless Technological Innovation in IC Equipment

Mr. Jinrong Zhao

Chairman of the Executive Committee, Beijing
NAURA Technology Group

From Legacy to Leading Edge: Broadband Wafer Optical Inspection for Process Control

**Dr. Yalin Xiong** 

Senior Vice President and General Manager, KLA Corporation

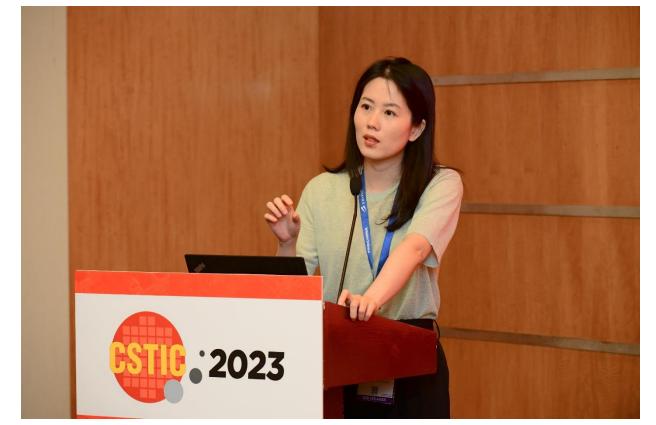


### SEMICON® CHINA

### >170 Oral Presentations and >180 Posters





















## 9 Symposia with 100 Invited Speakers

Symp I: Device Engineering and Memory Technology

Symp. II: Lithography and Patterning

Symp. III: Dry &Wet Etch and Cleaning

Symp. IV: Thin Film, Plating and Process Integration

Symp. V: CMP and Post CMP Cleaning

Symp. VI: Metrology, Reliability and Testing

Symp. VII: Packaging and Assembly

Symp. VIII: MEMS, Sensors and Emerging Semiconductor

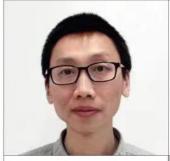
**Technologies** 

Symp. IX: Design and Automation of Circuits and Systems

Virtual Conference: June 29-July 26 v.semi.org.cn/cstic







Zhongrui Wang University of Hong Kong



Mario Lanza King Abdullah University of Science and Technology (KAUST)



Toru Fujimori **FUJIFILM Corporation** 





Yunlong Li

ASML Netherlands B.V.



JSR Corporation



2023 中国半导体技术大会



Yan Sun Beijing NAURA Microelectronics Equipment Co., Ltd



Technology (Shanghai) Co., Ltd



InvenTech Materials



Huawei Li Technology, Chinese Academy of Sciences





Alan Wang



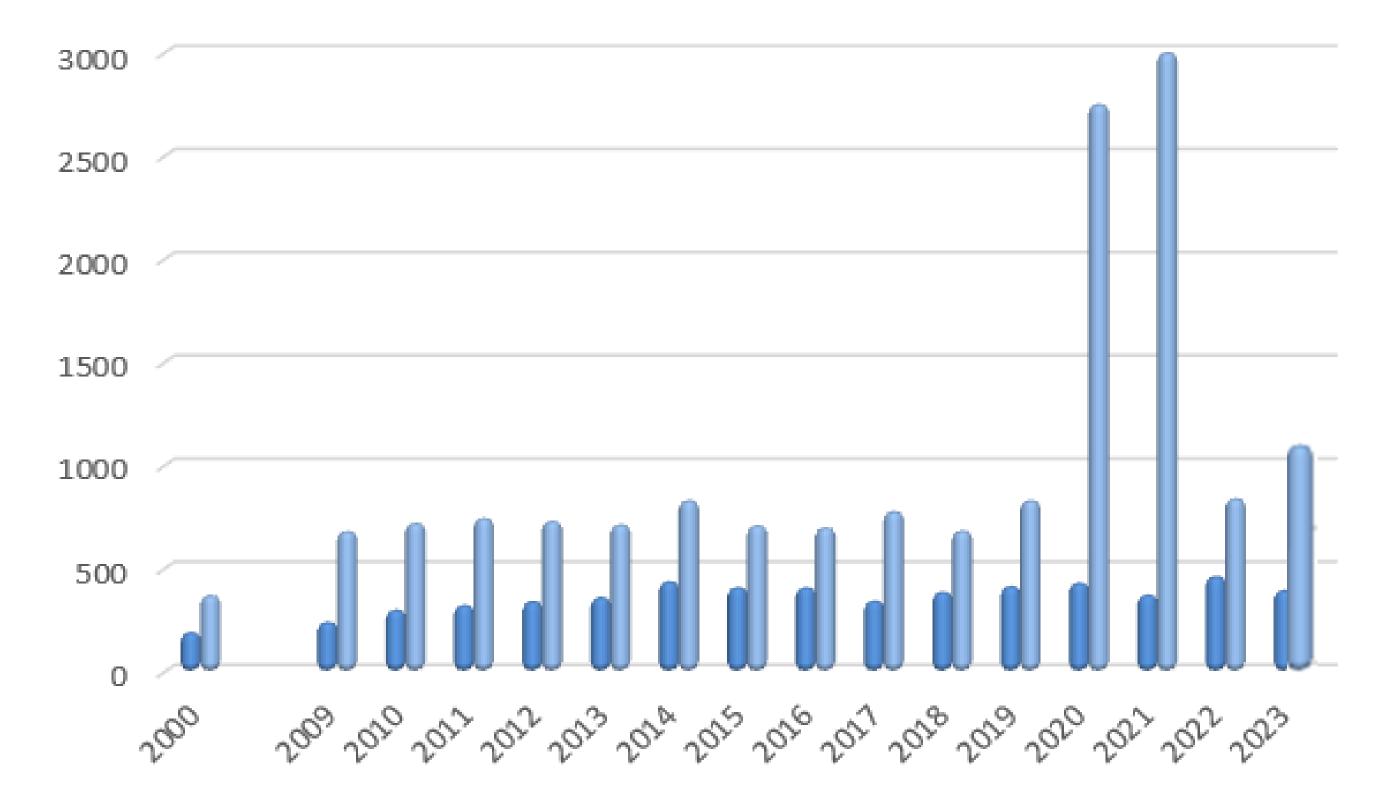
Zhen Zhang Uppsala University





### **CSTIC 2023**

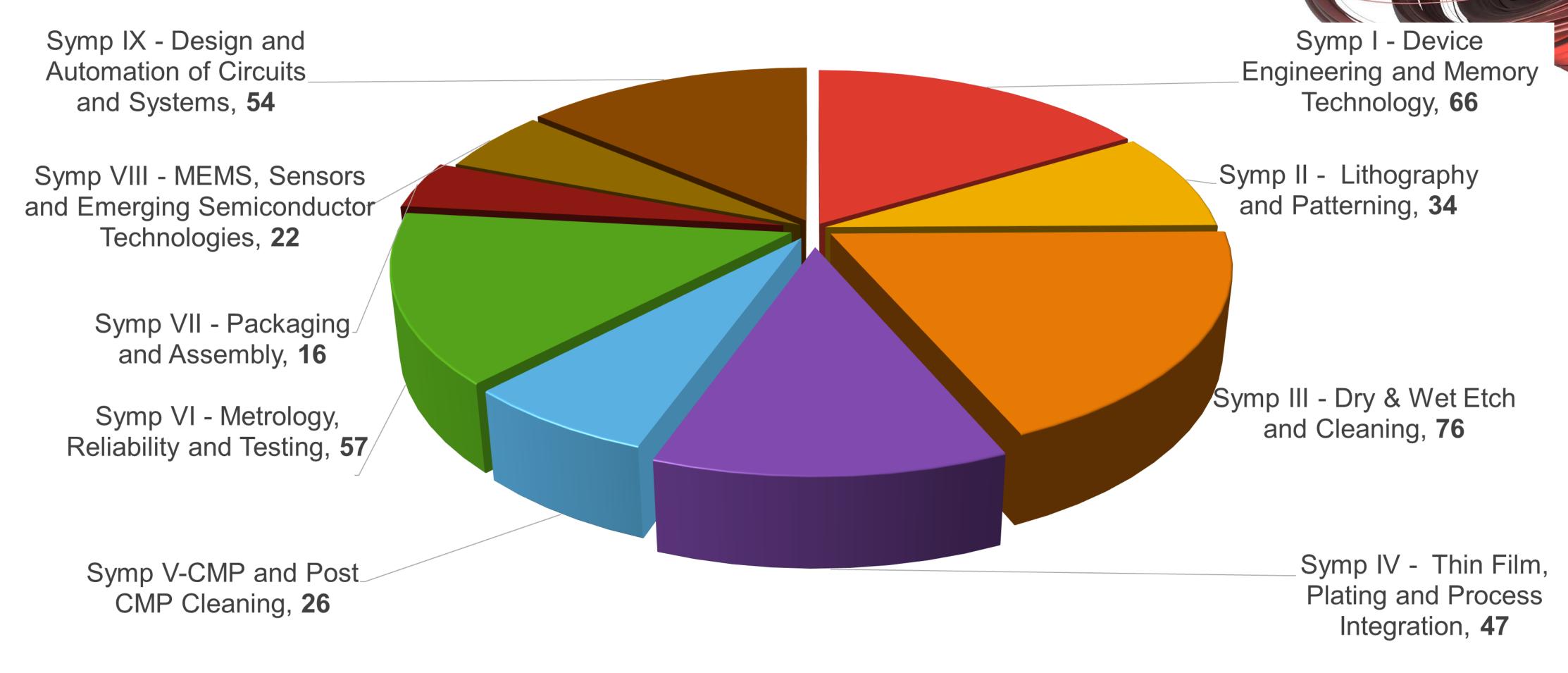
- ·Largest and most comprehensive, influential annual industrial semiconductor technology conference in China and Asia
- •403 abstract submissions have been collected. **724 registered attendees joined the onsite conference**, while **online registration is 1061**, including oversea attendees from US, Israel, Japan, Korea, Germany, Sweden, Switzerland, Singapore, UK, Russia, Canada, France, Saudi Arabia, Taiwan China, HK China and etc.







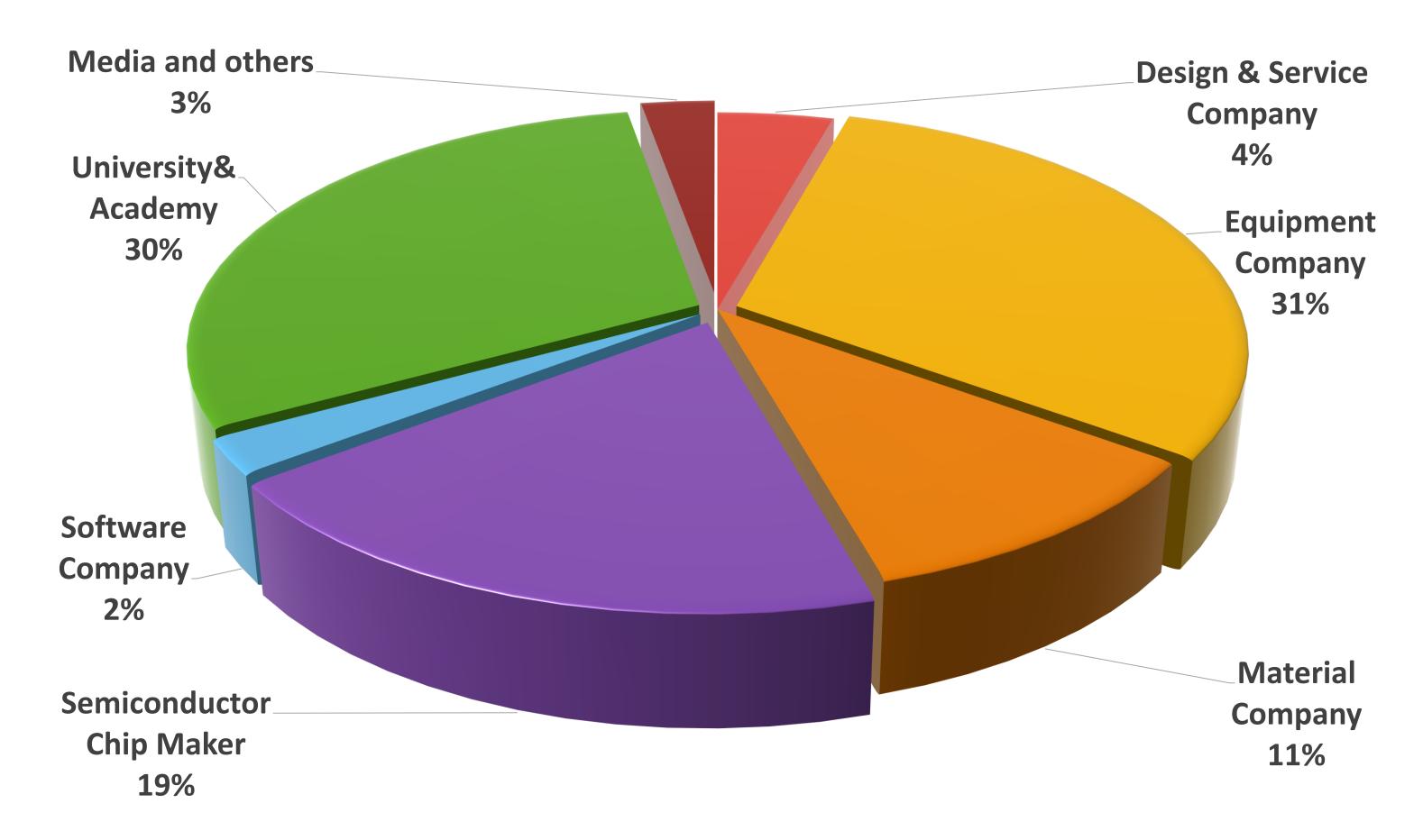
### **CSTIC Symposium Abstract Submission**







# Industry and Academy Cooperation 67% Attendees from Industry





- 67% attendees from industry
- 30% attendees from academy
- Attendees were from around 190 different companies or institutes
- Chip companies like SMIC, HLMC, HHGrace, JCET, CXMT, CXMC, NXP, Wuhan Xinxin, Intel, AMD and etc. joined the conference



### 190 Participating Companies

5N Plus China

AAA

**ACM** 

**ADVANTEST** 

Air Liquide

Air Products

AMD

**AMEC** 

Ancu Technology

Anji

**Applied Materials** 

ASM

**ASML** 

**Axcelis** 

**BDA** 

**Beihang University** 

Beihang University Hefei Research Institute

Beijing Integrated Circuit Equipment Innovation Cente

**Beijing Jiaotong University** 

Beijing Naura

Beijing NeuCloud

Beijing Sunrise Technology

Beijing Superstring Memory Research Institute

Beijing University of Chemical Technology

**Bobei Chemical** 

**Bonotec Electronic Materials** 

Canon

CanSemi Technology

China University of Mining & Technology

China University of Politics and Law

**CXMT** Cymer

D2S Inc.

DJEL (Beijing)

**DuPont** Edwards

**Embassy of Canada** 

Fraunhofer Institute for Electronic Nano Systems ENAS

French institute for Scientific Research

**Fudan University** 

Fujian Jinhua Integrated Circuit

Fujifilm Fujimi Giga-da **GIICS** 

Global Research & Innovative Solutions Co.,Ltd.

Guangdong University of Technology Guangdong University of Technology

Haohua Gas

Hebei University of Technology

**HFC Semiconductor** 

**HHGrace HIKMICRO** Hitachi High-tech

HLMC

Hong Kong Polytechnic University

Huahong Semiconductor Huangshan University

Huawei

Huazhong University of Science and Technology

Hwatsing Technology

**IBM** ICT, CAS

Ideal Energy Sunflower

**IMECAS** 

Indium corporation Infinitesima Ltd

Intel **JCET** 

Jiangsu Leadmicro Nano Technology

Jinan Shengquan Group Jinhua Integrated Circuit

JSR Kioxia KLA

Lam Research

Lanzhou University of Technology

Leuven Instruments

**Liverpool John Moores University** 

Mayair

**Mentor Graphics** Nanjing Universitiy

Nanjing University of Posts and Telecommunications

**National Central University** National Institute of Metrology

Ningbo University

Nova Ltd NXP ONTO Panasonic

PARC S.R.L. LLC







### 190 Participating Companies

**Peking University** 

Pengxinwei Semiconductor

Piotech

Quanyi Mask Optoelectronics Technology

Radiant Shore

Raintree Scientific Instruments (Shanghai) Corporation

S.Y.Technology Engineering&Construction

Sanechips Technology

School of Integrated Circuits, Chinese Academy of

Sciences

Shandong Shengquan New Materials

Shanghai Institute of IC Materials

Shanghai Jiao Tong University

Shanghai United Imaging Healthcare

Shanghai University

Shanghaitech University

Shenzhen China Star Optoelectronics Semiconductor

Display Technology

Shenzhen University

Shinko Control Technology

Siemens

Sky Semiconductor

**SMIC** 

**SMNC** 

Southwest Jiaotong University

STIC

SUSTECH

Suzhou Runbang

SuZhou STR Software Technology

Suzhou TZTEK Technolog

2023 2023 Synopsys

**Taiwan Central University** 

TCL

The University of Hong Kong

Tokyo Electron

TRUMPF Hüttinger GmbH + Co. KG

Truth Memory Corp. Tsinghua university

**UC** Berkeley

**Uppsala University** 

US Consulate General in Shanghai

Westen Digital Wintech-nano

Wuhan National Research Center for Optoelectronics

Xiamen Industrial Technology Research Institute

XMC

ZengSemi

Zhejiang Hikstor Technology

Zhejiang University

爱发科 (苏州) 技术研究开发有限公司

昂图(上海)贸易有限公司

半导体产业纵横 半导体行业观察

北京寄云鼎城科技有限公司

北京日扬弘创科技有限公司

电巢

多场低温科技(北京)有限公司

广东省大湾区集成电路与系统应用研究院

广东粤财基金管理有限公司 广州天极电子科技股份有限公司

海康微影传感技术有限公司

合肥安德科铭半导体科技有限公司

嘉庚创新实验室

江苏山水半导体科技有限公司

金融街资本 南方科技大学

南京埃米仪器科技有限公司

南京高科新浚投资管理有限公司

内蒙大全半导体

青雾科技

擎方科技有限公司

深圳蓝动精密有限公司

深圳鹏进高科技有限公司

深圳鹏芯微集成电路制造有限公司

深圳平湖实验室

深圳市鹏进高科技有限公司

深圳市昇维旭技术有限公司

深圳市兴美科电脑设计有限公司

深圳市众望丽华微电子材料有限公司

深圳新视智科技术有限公司

盛吉盛 (宁波) 半导体科技有限公司

世源科技工程有限公司

台達電子

添鴻科技股份有限公司

添鴻科技股份有限公司

万宝盛华 微太中心

潍坊星泰克微电子材料有限公司

武汉华星光电

西安瑞联新材料股份有限公司

芯恩 (青岛) 集成电路公司 徐州博康信息化学品有限公司

源码资本

中科院上海微系统与信息技术研究所

紫光国微



SEMICON® CHINA

# WFD Training Courses

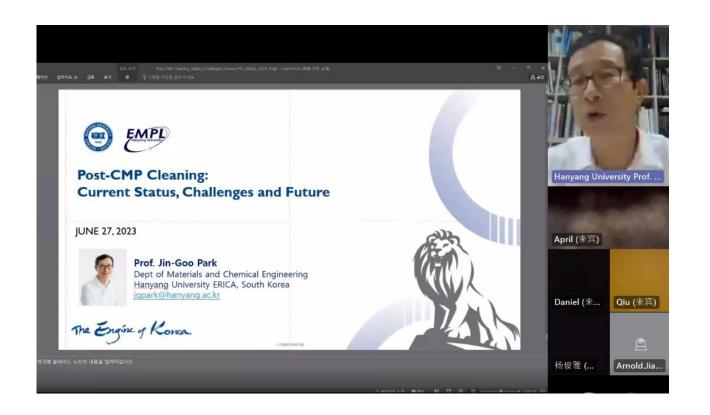
Lithography process and key technical aspects in exposure tools, materials, and the future development roadmap

Dr. Qiang Wu, Professor of the School of Microelectronics of Fudan University



Dr. Jin-Goo Park, Professor of Hanyang University, Korea









### Attendees to Plenary Session and 9 Symposia

CSTIC 2023 Attendee Number	724
Plenary Session	605
Symp I - Device Engineering and Memory Technology	250
Symp II-III Joint Session	199
Symp II - Lithography and Patterning	235
Symp III - Dry & Wet Etch and Cleaning	314
Symp IV - Thin Film, Plating and Process Integration	389
Symp V - CMP and Post-Polish Cleaning	157
Symp VI - Metrology, Reliability and Testing	143
Symp VII - Packaging and Assembly	77
Symp VIII - MEMS, Sensors and Emerging Semiconductor Technologies	52
Symp IX - Design and Automation of Circuits and Systems	129





## Conference Chair and Co-Chairs



Dr. Hanming Wu Conference Chair



Prof. Ru Huang Prof. Cor Claeys

Conference Co-Chair Conference Co-Chair



Dr. Beichao Zhang
Conference Executive
Co-Chair



Dr. Steve X. Liang Conference Co-Chair



Dr. Qinghuang Lin Conference Co-Chair





# Symposium Chairs



Dr. Ru Huang

Symp-I Chair,
Conference Co-Chair
Professor of Peking
University,
President of Southeast
University,
Academician of Chinese
Academy of Sciences



Dr. Linyong (Leo) Pang Symp-II Chair Vice President, D2S Inc., USA



Dr. Ying Zhang Symp-III Chair Consultant



Dr. Xiaowei Li Symp-VI Chair, Deputy Director, ICT, CAS, China



Dr. Xiaoping Shi Symp-IV Chair CTO, Beijing Naura Microelectronics, China



Dr. Steve X. Liang Symp-VII Chair



Dr. Xinping Qu Symp-V Chair Professor, Fudan University, China



Dr. Qinghuang Lin Symp-VIII Chair Director, Lam Research, USA



Prof. Weikang Qian

Symp-IX Chair
Assistant Professor,
University of MichiganShanghai Jiao Tong
University Joint Institute,

China



Dr. Hsiang-Lan Lung
Poster Chair
Director, MXIC, Taiwan,
China





# Special Thanks to Sponsors and Co-organizers

Sponsors:

























**Organizers:** 





Co-organizers:





Co-sponsors:





**Proceedings Publication:** 









### **CSTIC 2024**

Time: March 17 ~ 18, 2024

CSTIC 2024 call for papers and manuscript deadlines:

Abstract Due: Sep. 30, 2023 Author Notification: Oct. 15, 2023

Manuscript Due: Dec. 26, 2023

**Copyright Due: Presentation Due:** 

Conference Date: Mar. 1

Feb. 10, 2024

Feb. 20, 2024

Mar. 17-18, 2024











