ICEPT 2024

BEST ORAL PRESENTATION

August 7–9th, 2024 Tianjin · China

30th Anniversary ICEPT

Session 1: Advanced Packaging

431 - Research on the Signal Impedance Optimization Method on 2.5D Si-interposer Design

Ju Yang, Feng Wu, Kai Yuan, Yanru Ji, Zongwei Wang, Guangyao Li - State Key Laboratory of Mobile Network and Mobile Multimedia Technology, ZTE Corporation

Session 2: Packaging Materials & Processes

370 - Optimization of the Adhesion and Thermal Conductivity of Thermal Interface Materials for Chip Immersion Cooling via Grafting Polar Groups

Xiangchao Xie, Jianfeng Fan, Shipeng Rao, Xiaoliang Zeng, Rong Sun - Shenzhen Institute of Advanced Electronic Materials Shenzhen Institute of Advanced Technology, Chinese Academy of Sciences

Session 3: Packaging Design & Modeling

331 - Efficient and Accurate Calculation of Equivalent Thermal Conductivity of Wiring Structures in Mesoscopic Scale and Intelligent Prediction

Hao Zheng, Zhiyan Zhao, Guoshun Wan, Mengxuan Cheng, Wen Qiao, Ruiqian Zheng, Yuxi Jia - Shandong University

Session 4: Interconnection Technologies

527 - Simulation, Prediction and Verification of the Thermal and Electrical Properties of Sintered Copper Joints with Random Pore Structure for Power Electronics Packaging

Wenting Liu, Liangzheng Ji, Pan Liu - Fudan University; Jianhao Wang, Yue Gao, Jing Zhang - Heraeus Materials Technology Shanghai Ltd; Guoqi Zhang - Delft University of Technology

Session 5: Advanced Manufacturing

255 - Experimental study on femtosecond laser-induced microjet-assisted trepan drilling of silicon wafer

Pei Chen, Senyu Tu, Rui Pan, Shaowei Li, Fei Qin - Beijing University of Technology

733 - Controlling the Quality of Inkjet-Printed Quantum Dot Film by Ink-Substrate Interaction

Ning TU - The Hong Kong University of Science and Technology; S. W. Ricky LEE - The Hong Kong University of Science and Technology(GZ)

Session 6: Quality & Reliability

410 - Thermo-mechanical fatigue life prediction of SiC power device based on finite element simulation

Dao-Hang Li, Tianyi Liu, Wenjing Xu, Bowen Zhang, Yi Liu, Yunhui Mei - *Tiangong University;* Wenwen Yi - *General Motors Company*

Session 7: Power Electronics

230 - Mold Void Improvement for Stack die Overhanging Structure Inside Automotive Gate Driver Package

Xueting Wu, Jinmei Liu, Xingshou Pang - NXP Semiconductor Inc

Session 8: Optoelectronics and New Display

652 - Numerical Modeling and Validation of SiliconeType Receiving Layer for Micro-LED Laser-based Mass Transfer

Zehou Li, Yang Liu - Harbin University of Science and Technology; Liangzheng Ji, Xin Wang, Zaihuan Li, h Jing Zhang - Heraeus Materials Technology

Session 9: MEMS, Sensors and IoT

323 - Investigation of improving the uniformity of Cudishing depth in Cu-SiO2 chemical mechanical polishing

Yujia Liu, Kelaiti Xiao, Kai Zhang, Jin Zhang, Daoxiang Liu - Shanghai Institute of Microsystem and Information Technology(SIMIT)

579 - Investigation of the Output Voltage of a Piezoresistive MEMS Pressure Sensor using Finite Element Modelling

Yuqing Xia, Peng Zhou, Chunming Zhou, Yubao Zhen, Xiyao Du - Harbin Institute of Technology

Session 10: Emerging Technologies

175 - Development of Fine Pitch RDL for Large Area Interposer

Jin Zhao, Fei Qin - Beijing University of Technology; Daquan Yu - Xiamen University/ Xiamen Sky Semiconductor