ICEPT 2024

30th Anniversary ICEPT

BEST POSTER PRESENTATION

August 7–9th, 2024 Tianjin · China

Session 1: Advanced Packaging

388 - Study on the Effect of Film Process on Interface and Interconnection Reliability in the TSV Structure

Tianjian Liu, Sheng Liu - Huazhong University of Science and Technology; Shujuan Liu, Zhen Chen, Haoyang Peng - Hubei Yangtze Memory Laboratories; Xing Hu - Hubei 3D Semiconductor Integrated Innovation Center Co., Ltd; Fang Dong - Wuhan University

Session 2: Packaging Materials & Processes

479 - Efficient synthesis and excellent performance of low-temperature sintering Cu@Ni nanoparticle materials for power electronic packaging

Xiuqi Wang, Dashi Lu, Linlin Song, Hao Pan, Yifan Li, Zikang Luo, Mingyu Li, Hongjun Ji - Harbin Institute of Technology (Shenzhen)

Session 3: Packaging Design & Modeling

544 - Finite Element Analysis of Planar Inductors with Soft Magnetic Encapsulation Materials

Jiaxuan Wang, Xiao Li, Pan Liu - Fudan University; Jiayan Zhao, Jinbing Li - Mazo Technology Company Limited; Guoqi Zhang - Delft University of Technology

Session 4: Interconnection Technologies

555 - Nano-modification fine-pitch all-copper interconnect technology based on spark ablation

Yangbin Fang, Yu Zhang, Junyu He, Ranyuan Zhang, Shangjin Zhang, Chengqiang Cui, Guannan Yang, Guanghan Huang - Guangdong University of Technology

Session 5: Advanced Manufacturing

256 - Superhydrophobic-hydrophilic interface control of laser-processed fluorine-doped graphene films for microfluidics

Huilong Liu, Litian Gan, Bin Xie, Yun Chen, Xin Chen - Guangdong University of Technology; Chingping Wong - Georgia Institute of Technology

303 - Laser processing of highly conductive graphene electrodes for micro-supercapacitors

Xiaochun Ke, Huilong Liu, Litian Gan, Xun Chen, Yun Chen, Xin Chen - Guangdong University of Technology; Shuang Xi - Nanjing Forestry University

Session 6: Quality & Reliability

150 - Defect assessment methodology of plastic encapsulated devices based on scanning acoustic microscope inspection

Yao Lei, Lin Tang, Hao He, Biyun Tong, Xiaotong Guo, Chuan Yang - Chongqing CEPREI Industrial Technology Research Institute Co., Ltd

Session 7: Power Electronics

694 - Investigation on Wafer Heterogeneous Bonding Process and Performance of CMOS Integrated Circuit on Silicon Carbide Substrate

Fenghua Lei, Weier Lu, Fanyu Liu, Bo Li, Jiajia Wang, Jiangjiang Li - Institute of Microelectronics of the Chinese Academy of Sciences

Session 8: Optoelectronics and New Display

439 - Realization of Full Spectrum PIG-LEDs Based on Low Melting Point Sn-P-F-O Glass Matrix

Tiqun Wei, Liang Yang, Junlin Xue, Taiping Han, Yan Wang, Jianwei Dao, Chunyan Cao, An Xie - Xiamen University of Technology

Session 9: MEMS, Sensors and IoT

325 - Research on multi-material property matching for 3D printing in electronic information packaging equipment

Yang Hai, Bo Yuan, XiuLi Liu, Guoyong Zhang - No.10 Institute of China Electronic Technology Corporation; Jing Zhu - Chengdu Aeronautic Polytechnic

Session 10: Emerging Technologies

564 - Plasma-etching Enhanced Dynamic Friction Polishing for Single Crystal Diamond Films

Jiarong Yu, Rongbin Xu, Daquan Yu - Xiamen University