A) Publications:

- 1. "Electromigration study in SnAg3.8Cu0.7 Solder Joints on Ti/Cr-Cu/Cu Under Bump Metallization", YC Hsu, TL Shao, CJ Yang, Chih Chen, J. Elec. Mat., 32, 11,
- 2. "Threshold Current Density of Electromigration in Eutectic SPb Solder", YT Yeh, CK Chou, YC Hsu, Chih Chen, King-Ning Tu, Appl. Phys. Lett., 86
- 3. "Electromigration in Pb-free SnAg3.8CuO.7 Solder Stripes", YC Hsu, CK Chou, PC Liu, Chih Chen, DJ Yao, T Chou, King-Ning Tu, J. Appl. Phys., 98, 033523
- 4. "Measurement of Electromigration Parameters of Lead-free SnAg3.5 Solder Using V-groove Lines", ", YC Hsu, DS Chen, PC Liu, Chih Chen, J. Mater. Res.,
- 5. "Interfacial Reaction and Shear Strength of Pb-free SnAg2.5Cu0.8Sb0.5 and SnAg3.0Cu0.5Sb0.2 Solder Bumps on Au/Ni(P) Metallization", YC Hsu, YM Huang, Chih Chen, Henry Wang, J. Alloy and Compound, 417, 180 (2006).
- 6. Study of electromigration in eutectic SPb solder stripes using the edge displacement method, CK Chou, YC Hsu Chih Chen. Journal of Electronic Materials 35(8):1655-

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(B) Industrial Cooperation:

- 1. Lam Research universities research collaboration:
- Highly (111)-oriented Nanotwinned Cu for Redistribution Lines in InFO with High Electromigration Resistance. National Chiao Tung University, Materials Science and Engineering. Pro. Chih Chen and YC Hsu, 2019.
- 2. Federated Learning for Predictive Semiconductor Chambers Maintenance under IP-Protection Guarantees. National Yang-Ming Chiao Tung University. Electronic and Computer Engineering. Pro. Stefano Rini, Jay Chang and YC HSU, 2023.
- 3. Lam Research and Nanya Technology collaboration:

• Low Temperature and Fine Pitch Nanocrystalline Cu/SiCN Wafer-to-Wafer Hybrid Bonding. Electronic Component Technology Conference (ECTC) 2023.