### \* 陳始明教授

所有發表期刊論文

# **PUBLICATION LIST**

### BOOKS

- 1. C. M. Tan, W. Li, Z. Gan, and Y. Hou. *Applications of finite element methods for reliability studies on ULSI Interconnections*. UK: Springer Verlag, 2011.
- 2. C. M. Tan. *Electromigration in ULSI Interconnections*. New York: World Scientific, 2010.
- 3. C. M. Tan. *Simulated Annealing*. Vienna, Austria: IN-TECH Publishing, 2008.
- 4. C. M. Tan and F. He. *Electromigration Modeling at Circuit Layout Level*. SpringerBrief on Reliability, 2013.

### **BOOK CHAPTERS**

- 1. C. M. Tan. "Reliability Assessment of Integrated Circuits and its Misconception," in *Integrated Circuits, Photodiodes and Organic Field Effect Transistors*. New York, United States: Nova Scientific Publishing, 2009, pp. 45-68.
- 2. C. M. Tan and N. Raghavan. "Simulated Annealing for Mixture Distribution Analysis and its Applications to Reliability Testing" in *Simulated Annealing*. Vienna, Austria: IN-TECH Publishing, 2008, pp.227-256.
- 3. Tan Cher Ming and Hou Yuejin. "Changing Reliability Physics of Interconnect from Micro- to Nanotechnology", in *Ceramic Integration and Joining Technologies: From Macro to Nanoscale,* John Wiley, 2010
- 4. Cher Ming Tan, "Component Level Reliability: Physical models and testing regulations" in "Handbook of Advanced Lighting Technology", Springer-Verlag GmbH, Germany, 2014.

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### **Interconnects Reliability**

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- 6. C. M. Tan, W. Li, and Z. Gan. "Applications of Finite element Methods for Reliability Study of ULSI Interconnections," *Microelectronics Reliability*, vol. 52, no. 8, pp. 1539-1545, Aug. 2012.
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### **LED Reliability**

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# **LED Reliability**

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- 2. Cher Ming Tan, "Extrapolation of lifetime of high power LED under temperature-humidity conditions", Invited talk in IEEE EDSSC, Chengdu, China, 2014
- 3. Lan Song and Cher Ming Tan, "Reliability Evaluation and Improvement for High Power LED Driver", to be presented in International Conference on Materials for advanced Technologies, 2013
- 4. C. M. Tan. "Study of humidity reliability of solid state lighting (Invited Talk)," in *LED Display and Lighting System Symp.*, Shenzhen, China, 18-19th Jul. 2012.
- 5. S. H. Chen, C. M. Tan, and G. H. Tan. "Degradation behaviour of high power light emitting diode under high frequency switching," in 23rd European Symp. on Reliability of Electron Devices, Failure Physics and Analysis, Cagliari, Italy, 1st-5th Oct. 2012.
- 6. S. H. Chen, C. M. Tan, and E. Chen. "Ensuring Accuracy in Optical and Electrical Measurement of Ultra-Bright LEDs during Reliability Test," presented at *Int. Conf. on Materials for Advanced Technologies*, Singapore, Jan. 2011.
- C. M. Tan, B. K. Chen, and M. Xiong. "Study of humidity reliability of high power LEDS (invited)," in *IEEE Int. Conf. on Solid-State and Integrated Circuit Technology*, Shanghai, 2010, pp. 1592-1595.

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# Quality

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- C. M. Tan. "Identifying key parameters for risk based inspections (RBI) and failure mode effect analysis (FMEA) (invited)," presented at Int. Quality and Process control Conf., Bangkok, Jan. 2004.
- 3. T. K. Neo and C. M. Tan. "QFD implementation in a discrete semiconductor industry," in *IEEE Annual Reliability and Maintainability Symp.*, 2002, pp. 484-489.
- 4. C. M. Tan and G. Zhang. "A new quality control parameter in wafer fabrication for wire bonding integrity," in *SPIE on Microelectronic Yield, Reliability and Advanced Packaging*, 2000.
- 5. T. K. Neo and C. M. Tan. "Integrating device modeling in QFD implementation for power electronics applications," in *IEEE Canadian Conf. on Electrical and Computing Engineering*, 2000, pp. 1187-1191.
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## Remanufacturing

1. F. He and C. M. Tan, "Monte Carlo simulation of fatigue crack initiation at elevated temperature," in *13th Int. Conf. on Fracture*, Beijing, China, 16th-21st Jun. 2013.

## Battery

 Feng Leng, Cher Ming Tan, Raghavendra Arunachala, Andreas Jossen, "Real Time Monitoring and Characterizing of Li-ion Batteries Aging", Advanced Energy Technology Congress, San Diego, USA, 2013  Feng Leng and Cher Ming Tan, "A methodology for studying the effect of overcharge on the safety of lithium-ion batteries", Invited talk, 5<sup>th</sup> Annual Battery Safety Conference, Washington, USA

### Others

- Cher Ming Tan, "Product Reliability Assurance The manifestation of the Core Values of Chinese Culture", (invited talk) 2<sup>nd</sup> Chinese Quality Forum, Hong Kong, 2014
- 2. J. Zhang, X. Y. Zhang, Z. L. Chen, K. Y. See, C. M. Tan, and S. S. Chen. "On-chip RF energy harvesting circuit for image sensor," in *Int. Symp. on Integrated Circuits*, 2011, pp. 420-423.
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- 13. C. M. Tan and Z. Gan. "Building empirical model through simulation a case study," in *Int. Conf. on Engineering Management*, 2004, pp. 1090-1094.
- 14. C. M. Tan, Y. H. Sng, and H. K. Tang "Industry-university R&D collaboration: expectation and reality," in *Int. Conf. on Engineering Management*, 2004, pp. 626-629.
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