Nanotechnology

- 1) U. Narula, C. M. Tan, E. S. Tok, "Graphene as a Reducing Agent for Electroless Plating of Metal", IEEE Nanotechnology Materials and Device Conference (NMDC), Portland, Oregon, USA, 14-17 October 2018.
- 2) U. Narula, C.M. Tan, "Improvement in Electrical and Thermal Characteristics of Copper using PVD Based Graphene", 28th International Conference on Diamond and Carbon Materials, Gothenburg, Sweden, 3-7 September 2017.
- 3) Udit Narula, Cher Ming Tan, "Engineering a PVD Based Graphene Synthesis Method", 11th IEEE Nanotechnology Materials and Devices Conference (NMDC 2016), Toulouse, France, 9th-12th October, 2016.
- 4) U. Narula, C. S. Lai and C. M. Tan, "Determination of key factors for low temperature graphene synthesis using design of experiments approach," 2016 IEEE International Nanoelectronics Conference (INEC), Chengdu, 9-11 May 2016, pp. 1-2. doi: 10.1109/INEC.2016.7589252
- 5) Udit Narula, Cher Ming Tan, Chao Sung Lai, "Design of Experiments for Determination of Key Factors for Graphene Synthesis on Copper Using Amorphous Carbona statistical approach," International Conference on Electrical, Electronics, and Optimization Techniques (ICEEOT 2016), Chennai, India, 03-05 March 2016, pp. 869-872. Doi: 10.1109/ICEEOT.2016.7754810

- 6) Udit Narula, Cher Ming Tan, Chao Sung Lai,, "Thermally Stressed Copper Induced Synthesis of Graphene using Amorphous Carbon," 8th International Conference on Materials for Advanced Technologies, Singapore, 28 June, 2015.
- 7) Udit Narula, C. S. Lai, C. M. Tan, "Copper Catalyzed Crystallization of Amorphous Carbon into Graphene," International Electron Devices and Materials Symposium, Hualian, Taiwan, November, 2014.
- 8) Cher Ming Tan and Xiangchen Chen, "ESD Degradation Modeling of Gate-All-Around Silicon Nanowire Device", (Invited Talk), to be presented in Collaborative Conference on Materials Research, Korea, 24-28

 June 2013.
- 9) Xiangchen Chen and Cher Ming Tan, "Modeling and Analysis of Gate-All-Around Silicon Nanowire FET", to be presented in International Conference on Materials for Advanced Technologies, Singapore, 30 June- 5th July 2013.
- 10) S. Cheng, C. M. Tan, T. Deng, F. He, S Zhang, and H. Su. "Investigation of work function and surface energy of aluminum an AB-Initio study," in 5th IEEE Int. Nanoelectronics Conf., Singapore, 2nd-4th Jan. 2013.
- 11) S. H. Chen, C. M. Tan, E. Tan, and J. Kong. "Effects of carbon loading on the performance of functionalized

- carbon nanotube polymer heat sink for ultra high power light-emitting diode," in 5th IEEE Int. Nanoelectronics Conf., Singapore, 2nd-4th Jan. 2013.
- 12) C. M. Tan, C. Baudot, Y. D. Han, and H. Jing. "Applications of multi-walled carbon nanotube (invited)," in IEEE Int. Nanoelectronics Conf., Taiwan, Jun. 2011.
- 13) S. H. Chen, C. M. Tan, M. H. Tan, and B. K. Chen. "Performance evaluation of covalently functionalized carbon nano-tube polymer heat sink for ultra high power LED," in IEEE Int. Nanoelectronics Conf., Taiwan, Jun. 2011.
- 14) Y. D. Han, L. Y. Xu, H. Y. Jing, C. M. Tan, S. M. L Nai, and J. Wei. "Effect of Ni-coated carbon nanotubes on the microstructure and properties of a Sn-Ag-Cu solder," in 60th IEEE Electronic Components and Technology Conf.,2010.
- 15) Y. D. Han, H. Y. Jing, S. M. L. Nai, L. Y. Xu, C. M. TAN, and J. Wei. "Effect of Ni-coated carbon nanotubes on interfacial intermetallic layer growth," in 11th Electronic Packaging Technology Conf., Singapore, 2009, pp.292-295.
- 16) C. Baudot, C. M. Tan, J. Kong, F. Buonocore, and A. Di-Mateo. "Application of FTIR for the study of functional molecules grafting on carbon nanotubes," presented at Advanced Materials for Nanotechnology, New Zealand, May2009.

- 17) S. M. L. Nai, Y. D. Han, H. Y. Jing, C. M. Tan, and J. Wei. "Using nanoparticles and carbon nanotubes to enhance the properties of a lead free solder," in 12th Nanotechnology Conf. & Expo, USA, 2009, pp. 538-541.
- 18) C. Baudot, C. M. Tan, and C. Wang. "Nano-tailoring of carbon nanotube as nano-fillers for composite materials applications," presented at IEEE Int. Nanoelectronics Conf., Shanghai, China, Mar. 2008.
- 19) M. Gu, C. Q. Sun, C. M. Tan, and S. Wang. "Methodologies for size, and temperature dependent change of materials properties," presented at IEEE Int. Nanoelectronics Conf., Shanghai, China, Mar. 2008.
- 20) A. Roy, C. M. Tan, S. OShea, and W. Hofbauer. "Room temperature observation of point defect on gold surface using thermovoltage mapping," in European Symp. on Reliability of Electron Devices, Failure physics and analysis,2007.
- 21) C. M. Tan, J. Jia, L. K. Ang, K. T. Ng, and Y. C. Foo. "Effect of high voltage annealing on the field emission of multi-walled carbon nanotube film," in 5th IEEE Conf. on Nanotechnology, 2005, pp. 638-641.
- 22) L. Huang, S. P. Lau, C. M. Tan, Z. Sun, and B. K. Tay. "Growth of carbon nanotubes using ZrFe catalyst layer and their field emission properties," in Int. Conf. on Materials for Advanced Technologies, 2003.