

### 3D Integration Publications (2010-Present)

#### Journal Articles

1. Y. Feng and S. L. Burkett, "Modeling a Copper/Carbon Nanotube (Cu/CNT) Materials System for Electronic Packaging Applications," *Computational Materials Science*, Vol. 97, pp. 1-5, 2015.
2. M. B. Jordan, Y. Feng, and S. L. Burkett, "Development of Seed Layer for Electrodeposition of Copper on Carbon Nanotube Bundles," *J. Vac. Sci. Technol. B*, Vol. 33, No. 2, pp. 021202-1-021202-8, Mar/Apr 2015.
3. Y. Feng and S. L. Burkett, "Fabrication and Electrical Performance of Through Silicon Via Interconnects Filled with a Copper/Carbon Nanotube Composite," *J. Vac. Sci. Technol. B*, Vol. 33, No. 2, pp. 022004-1-022004-7, Mar/Apr 2015.
4. A. Kamto, Y. Liu, S. Jacob, M. Glover, L. Schaper, and S. L. Burkett, "Integration of Tantalum Pentoxide Capacitors with Through-Silicon Vias (TSVs)," *IEEE Trans. Comp. Packaging Manuf. Tech.*, Vol. 1, No. 10, pp. 1508-1516, 2011.
5. S. P. Koirala, I. Awaah, M. H. Gordon, and S. L. Burkett, "Correlation of Plasma Characteristics to Etch Rate and Via Sidewall Angle in a Deep Reactive Ion Etch System using Langmuir Probe and Optical Emission Spectroscopy," *J. Vac. Sci. Technol. B*, Vol. 29, pp. 011008-1-011008-6, 2011.
6. A. Kamto, R. Divan, A. V. Sumant, and S. L. Burkett, "Cryogenic Inductively Coupled Plasma Etching for Fabrication of Tapered Through-Silicon Vias," *J. Vac. Sci. Technol. A*, Vol. 28, No. 4, pp. 719-725, Jul/Aug 2010.

#### Conference Papers (\*presenting author)

1. S. L. Burkett\*, M. B. Jordan, M. Rao, J. A. Sharpe, R. Divan, A. V. Sumant, and L. Ladani, "Growth of Carbon Nanotubes inside a Silicon Via to Enable IC Stacking Applications," *Int. Vacuum Congress (IVC-19)*, Electronic Materials poster session (EM-P3-10), 2013.
2. J. A. Sharpe\*, M. B. Jordan, M. Barkey, and S. L. Burkett, "Analyzing the Behavior and Shear Strength of Adhesives Commonly used in Temporary Wafer Bonding," *Proc. IEEE Electronic Comp. Technology Conf. (ECTC)*, pp. 94-100, 2013.
3. K. Kannan,\* S. Kannan, B. Kim, S. L. Burkett, and S. Sitaraman, "TSV Electrical and Mechanical Modeling for Thermo-Mechanical Delamination," *Proc. IEEE Electronic Comp. Technology Conf. (ECTC)*, pp. 2298-2303.
4. M. B. Jordan,\* M. Rao, A. V. Sumant, R. Divan, and S. L. Burkett, "Process Flow for Growing Aligned Carbon Nanotubes in Blind TSVs," *2<sup>nd</sup> Global Interposer Technology Workshop* Atlanta, GA, 2012.
5. M. B. Jordan,\* A. V. Sumant, R. Divan, and S. L. Burkett, "Aspect Ratio Effects on CNT growth in TSVs," *International Materials Research Congress*, Cancun, Mexico, August 2012 (third place award for best poster in poster session).
6. M. Rao,\* A. Nagabhushana, and S. L. Burkett, "Fabrication of Carbon Nanotube Filled Through Silicon Vias," *1st Global Interposer Technology Workshop*, Atlanta, GA, 2011.

7. A. Kamto,\* R. Morris, G. B. Thompson, and S. L. Burkett, "Investigating defects in through silicon via (TSV) chains by three dimensional imaging reconstruction," *TMS conference*, Seattle, WA, 2010.