

## REFERENCE

- Akturk, A. & Goldsman, N., 2008. Electron transport and full-band electron-phonon interactions in graphene. *Journal of Applied Physics*, 103(5), p.053702.
- Al Husseini, D., 2015b. Effects of Anions and Amino acids on Surface Tension of Water. *Senior Honors Projects*, Paper 67.
- Allen, M.J., Tung, V.C. & Kaner, R.B., 2010. Honeycomb Carbon: A Review of Graphene. *Chemical Reviews*, 110(1), pp.132–145.
- Avouris, P., Chen, Z. & Perebeinos, V., 2007. Carbon-based electronics. *Nature Nanotechnology*, 2(10), pp.605–615.
- Bae, S. et al., 2010. Roll-to-roll production of 30-inch graphene films for transparent electrodes. *Nature Nanotechnology*, 5(8), pp.574–578.
- Bai, H. et al., 2009. Non-covalent functionalization of graphene sheets by sulfonated polyaniline. *Chemical Communications*, (13), p.1667.
- Bonaccorso, F. et al., 2010. Graphene photonics and optoelectronics. *Nature Photonics*, 4(9), pp.611–622.
- Bose, S. et al., 2011. Electrochemical performance of a graphene-polypyrrole nanocomposite as a supercapacitor electrode. *Nanotechnology*, 22(29), p.295202.
- Burghard, M., Klauk, H. & Kern, K., 2009. Carbon-Based Field-Effect Transistors for Nanoelectronics. *Advanced Materials*, 21(25-26), pp.2586–2600.
- Castro Neto, A.H. et al., 2009. The electronic properties of graphene. *Reviews of Modern Physics*, 81(1), pp.109–162.
- Charlier, J.-C., Blase, X. & Roche, S., 2007. Electronic and transport properties of nanotubes. *Reviews of Modern Physics*, 79(2), pp.677–732.
- Chen, J.-H. et al., 2008. Charged-impurity scattering in graphene. *Nature Physics*, 4(5), pp.377–381.
- Chen, W., Yan, L. & Bangal, P.R., 2010. Preparation of graphene by the rapid and mild thermal reduction of graphene oxide induced by microwaves. *Carbon*, 48(4), pp.1146–1152.
- Choucair, M., Thordarson, P. & Stride, J.A., 2009. Gram-scale production of graphene based on solvothermal synthesis and sonication. *Nature Nanotechnology*, 4(1), pp.30–33.

- Ciesielski, A. & Samorì, P., 2014. Graphene via sonication assisted liquid-phase exfoliation. *Chem. Soc. Rev.*, 43(1), pp.381–398.
- Coleman, J., 2008. Effects of. *SPIE Newsroom*. Available at: <http://www.spie.org/x31438.xml> [Accessed April 7, 2016].
- Cui, X. et al., 2011. Liquid-phase exfoliation, functionalization and applications of graphene. *Nanoscale*, 3(5), p.2118.
- Edwards, R.S. & Coleman, K.S., 2013. Graphene synthesis: relationship to applications. *Nanoscale*, 5(1), pp.38–51.
- Geim, A.K. & Novoselov, K.S., 2007. The rise of graphene. *Nature Materials*, 6(3), pp.183–191.
- Guinea, F., Castro Neto, A.H. & Peres, N.M.R., 2006. Electronic states and Landau levels in graphene stacks. *Physical Review B*, 73(24). Available at: <http://link.aps.org/doi/10.1103/PhysRevB.73.245426> [Accessed April 7, 2016].
- Gurunathan, S. et al., 2013. Green synthesis of graphene and its cytotoxic effects in human breast cancer cells. *International Journal of Nanomedicine*, p.1015.
- Hernandez, Y. et al., 2008. High-yield production of graphene by liquid-phase exfoliation of graphite. *Nature Nanotechnology*, 3(9), pp.563–568.
- Jayasena, B. & Subbiah, S., 2011. A novel mechanical cleavage method for synthesizing few-layer graphenes. *Nanoscale Research Letters*, 6(1), p.95.
- Kim, K. et al., 2010. High-temperature stability of suspended single-layer graphene. *physica status solidi (RRL) - Rapid Research Letters*, 4(11), pp.302–304.
- Kosynkin, D.V. et al., 2009. Longitudinal unzipping of carbon nanotubes to form graphene nanoribbons. *Nature*, 458(7240), pp.872–876.
- Kuzmenko, A.B. et al., 2008. Universal Optical Conductance of Graphite. *Physical Review Letters*, 100(11). Available at: <http://link.aps.org/doi/10.1103/PhysRevLett.100.117401> [Accessed March 27, 2016].
- Liang, M. & Zhi, L., 2009. Graphene-based electrode materials for rechargeable lithium batteries. *Journal of Materials Chemistry*, 19(33), p.5871.
- Liu, J. et al., 2012. Graphene-based materials for energy applications. *MRS Bulletin*, 37(12), pp.1265–1272.
- Md. Naushad Ali, Md. Daud Ali & Farough Ali, 2013. Rectangular Graphene Synthesis by CVD Method. *Journal of Applied Sciences Research*, 9(3), pp.1277–1281.

- Morozov, S.V. et al., 2008. Giant Intrinsic Carrier Mobilities in Graphene and Its Bilayer. *Physical Review Letters*, 100(1). Available at: <http://link.aps.org/doi/10.1103/PhysRevLett.100.016602> [Accessed March 27, 2016].
- Novoselov, K.S., 2004. Electric Field Effect in Atomically Thin Carbon Films. *Science*, 306(5696), pp.666–669.
- Novoselov, K.S. et al., 2005. Two-dimensional gas of massless Dirac fermions in graphene. *Nature*, 438(7065), pp.197–200.
- Nuvoli, D. et al., 2011. High concentration few-layer graphene sheets obtained by liquid phase exfoliation of graphite in ionic liquid. *J. Mater. Chem.*, 21(10), pp.3428–3431.
- Park, S. & Ruoff, R.S., 2009. Chemical methods for the production of graphenes. *Nature Nanotechnology*, 4(4), pp.217–224.
- Qian, W. et al., 2009. Solvothermal-assisted exfoliation process to produce graphene with high yield and high quality. *Nano Research*, 2(9), pp.706–712.
- Reina, A. et al., 2009. Large Area, Few-Layer Graphene Films on Arbitrary Substrates by Chemical Vapor Deposition. *Nano Letters*, 9(1), pp.30–35.
- Roth, S. & Park, H.J., 2010. Nanocarbonic transparent conductive films. *Chemical Society Reviews*, 39(7), p.2477.
- Schwierz, F., 2010. Graphene transistors. *Nature Nanotechnology*, 5(7), pp.487–496.
- Semenoff, G.W., 1984. Condensed-Matter Simulation of a Three-Dimensional Anomaly. *Physical Review Letters*, 53(26), pp.2449–2452.
- Shams, S.S. et al., 2015. Synthesis of graphene from biomass: A green chemistry approach. *Materials Letters*, 161, pp.476–479.
- Spyrou, K. & Rudolf, P., 2014. *An Introduction to Graphene*, Wiley-VCH Verlag GmbH & Co. KGaA.
- Stankovich, S. et al., 2007. Synthesis of graphene-based nanosheets via chemical reduction of exfoliated graphite oxide. *Carbon*, 45(7), pp.1558–1565.
- Sur, U.K., 2012. Graphene: A Rising Star on the Horizon of Materials Science. *International Journal of Electrochemistry*, 2012, pp.1–12.
- Voloshina, E.N. et al., 2011. Structural and Electronic properties of the graphene/Al/Ni(111) intercalation-like system.
- Wallace, P.R., 1947. The Band Theory of Graphite. *Physical Review*, 71(9), pp.622–634.

- Wang, Z. et al., 2009. Direct Electrochemical Reduction of Single-Layer Graphene Oxide and Subsequent Functionalization with Glucose Oxidase. *The Journal of Physical Chemistry C*, 113(32), pp.14071–14075.
- Zhang, L.L., Zhou, R. & Zhao, X.S., 2010. Graphene-based materials as supercapacitor electrodes. *Journal of Materials Chemistry*, 20(29), p.5983.
- Zhou, M. et al., 2013. Few-layer graphene obtained by electrochemical exfoliation of graphite cathode. *Chemical Physics Letters*, 572, pp.61–65.