

REFERÊNCIAS BIBLIOGRÁFICAS

ADDOU, R.; DAHAL, A.; SUTTER, P. AND BATZILL, M. **Monolayer grapheme growth on Ni(111) by low temperature chemical vapor deposition**, Appl. Phys. Lett. 100, 021601, 2012.

Agilent EEsof EDA Design & Simulation Software, **Advanced Design System (ADS)** 2009. <www.home.agilent.com>.

BALANIS, C. A. **Antenna theory - analysis and design**. Third Edition. John Wiley & Sons, Inc., Hoboken, New Jersey, 2005.

BAO Q. ET AL. **Broadband Graphene Polarizer**. Nature Photonics vol. 5, July 2011.

BARBOSA, G. M., MOSSO, M.M., FREIRE JUNIOR, F. L, MONTEIRO, F. H. R., REBELLO FILHO, R. N. **X-band microstrip antenna bandwidth enhancement using multi-walled carbon nanotubes**. 2011 SBMO/IEEE MTT-S International Microwave and Optoelectronics Conference. DOI 10.1109/IMOC.2011.6169255

BARBOSA, G. M. and MOSSO, M. M. **An 8.8 GHz resonator based in multi-walled aligned carbon nanotubes**. 2013 SBMO/IEEE MTT-S International Microwave and Optoelectronics Conference. DOI 10.1109/IMOC.2013.6646564.

BARBOSA, G. M.; MOSSO, M. M.; VILANI, C.; LARRUDÉ, D. R. G.; ROMANI E. C.; FREIRE JUNIOR, F. L. **Graphene microwave absorber: transparent, lightweight, flexible and cost-effective**. Microwave and Optical Technology Letters, Vol. 56, No. 3, March 2014. DOI 10.1002.

BHATTACHARYA, P., DAS, C.K., KALRA, S. S. **Graphene and MWCNT: Potential Candidate for Microwave Absorbing Materials**. Journal of Materials Science Research Vol. 1, No. 2, April 2012.

BLEVINS R. D. **Formulas for natural frequency and mode shape**. New York: Van Nostrand Reinhold, 1979.

CASTRO NETO ET AL. **The electronic properties of graphene**. Reviews of Modern Physics, Volume 81, 2009.

CHA ET AL. **Perspectives on Nanotechnology for RF and Terahertz Electronics**. IEEE Transactions on Microwave Theory and Techniques, Vol. 59, No. 10, October 2011.

CHEN ET AL. **Fully printed phased-array antenna for space communications**. Micro- and Nanotechnology Sensors, Systems, and Applications, edited by Thomas George, M. Saif Islam, Achyut K. Dutta, Proc. of SPIE Vol. 7318, 731814, 2009.

CLELAND, A. N. **Foundations of nanomechanics: from solid-state theory to devices applications**. Springer-Verlag, Berlin, 2003.

DAVIS, J.F. ET AL, **High-Q mechanical resonator arrays based on carbon nanotubes**. Proceedings of Third IEEE Conference on Nanotechnology, 2003. Page(s): 635 – 638 vol. 2.

DRAGOMAN, D.; DRAGOMAN, M. **Electromagnetic propagation in dense nanotube arrays.** Journal of Applied Physics 99, 076106, 2006.

DRAGOMAN ET AL, **High-Q microwave resonator based on millions of nanotube cantilevers.** Proceedings of the 38th European Microwave Conference, 2008.

DRAGOMAN, M.; NECULOIU, D.; CISMARU, A.; DRAGOMAN, D.; GRENIER K. ET AL. **High quality nanoelectromechanical microwave resonator based on a carbon nanotube array.** Applied Physics Letters 92, 2008.

DRAGOMAN, M. **Electronic Devices Based on Carbon Nanotubes and Graphene.** Proceedings of The Romanian Academy, Series A, Volume 10, Number 1, 2009.

FERRARI, A. C.; MEYER, J. C.; SCARDACI, V.; CASIRAGHI, C.; LAZZERI, M.; MAURI, F.; PISCANE, S.; JIANG, D.; NOVOSELOV, K. S.; ROTH, S.; GEIM, A. K. **Raman Spectrum of Graphene and Graphene Layers.** Phys. Rev. Lett. 2006, 97 (18), 187401–4.

FEYNMAN, R. **There's Plenty of Room at the Bottom.** Engineering and Science, Volume 23:5, February 1960, Caltech University.

GARCÍA-GANCEDO ET AL. **Fabrication of High-Q Film Bulk Acoustic Resonator (FBAR) Filters with Carbon Nanotube (CNT) electrodes.** 2010 IEEE International Ultrasonics Symposium Proceedings.

GIBSON, R.F. ET AL. **Vibrations of carbon nanotubes and their composites: a review.** Composites Science and Technology 67, 2007.

HANSON, G. W. **Dyadic Green's Functions and Guided Surface Waves for a Surface Conductivity Model of Graphene.** Journal of Appl. Phys. 103, 2008.

HANSON, G. W. **Quasi-transverse electromagnetic modes supported by a graphene parallel-plate waveguide.** Journal of Appl. Phys. 104, 2008.

HENDRY ET AL. **Coherent Nonlinear Optical Response of Graphene.** Physical Review Letters 105, 097401, 2010.

HFSS 3D Full-wave Electromagnetic Field Simulation.
<http://www.ansoft.com/products/hf/hfss/>.

HOPPE ET AL. **Arrays of Carbon Nanotubes as RF Filters in Waveguides.** NPO-30207, NASA Tech Briefs, April 2003.

HUNT ET AL. **Carbon Nanotubes as Resonators for RF Spectrum Analyzers.** NASA Tech Briefs, April 2003.

IIJIMA, S. **Helical microtubules of graphitic carbon.** Nature 354, 56-58, 1991.

ISACSSON, A. AND KINARET, J.M. **Parametric resonances in electrostatically interacting carbon nanotube arrays.** Physical Review B 79, 165418, 2009.

JENSEN ET AL. **Nanotube Radio.** Nano Letters 2007 Vol. 7, No. 11, 3508-3511

JEONG-SUN MOON. **Graphene field-effect transistor for radio-frequency applications: review.** Carbon Letters Vol. 13, No. 1, 17-22 (2012).

- JORIO, A.; DRESSELHAUS, G.; DRESSELHAUS, M. S. **Carbon Nanotubes - Advanced Topics in the Synthesis, Structure, Properties and Applications**. Springer, 2008
- KALAMKAROV ET AL. **Analytical and numerical techniques to predict carbon nanotubes properties**. International Journal of Solids and Structures 43 (2006) 6832–6854.
- KASHYAP, K.T.; PATIL, R.G. **On Young's modulus of multi-walled carbon nanotubes**. Bulletin Materials Sciences, Vol. 31, No. 2, April 2008, pp. 185–187.
- KERMANY ET AL. **Characterization of Aligned MWCNTs Array as the Sensing Element for Ionization Gas Sensor**. Journal of Applied Sciences 11 (7), 2011.
- LARRUDÉ, D. G. R. **Nanotubos de carbono decorados com partículas de cobalto**. Dissertação de Mestrado, 2007, PUC-Rio, Rio de Janeiro, Brasil.
- LEHMAN ET AL. **Evaluating the characteristics of multiwall carbon nanotubes**. Carbon 49, 2011.
- LIANG ET AL. **Electromagnetic interference shielding of graphene/epoxy composites**. Carbon 47, 2009.
- LOVAT, G. **Equivalent Circuit for Electromagnetic Interaction and Transmission Through Graphene Sheets**. IEEE Transactions on Electromagnetic Compatibility, VOL. 54, NO. 1, Feb. 2012.
- MATTEVI, C.; KIM, H.; CHHOWALLA, M., **A review of chemical vapour deposition of graphene on copper**. Journal of Mater. Chem., 21, 2011.
- MIKHAILOV, S. A.; ZIEGLER, K. **New electromagnetic mode in graphene**. Physical Review Letters, 99, 2007.
- MIKHAILOV, S. A.; ZIEGLER, K. **Nonlinear electromagnetic response of graphene: frequency multiplication and the self-consistent-field effects**. Journal of Physics Condensed Matter 20, 2008.
- MOON ET AL. **Graphene Transistors for RF Applications: Opportunities and Challenges**. ISDRS 2011, December 7-9, 2011, College Park, MD, USA.
- NAIR, R. R. ET AL. **Fine Structure Constant Defines Visual Transparency of Graphene**. Science, Vol. 320, June 2008
- NANOFORUM, **Ninth Nanoforum Report: Nanotechnology in Aerospace**, February 2007.
- NOVOSELOV ET AL. **Two-Dimensional Gas of Massless Dirac Fermions in Graphene**. Nature 438:197, 2005.
- OUAKAD H.; YOUNIS, M. I. **Nonlinear dynamics of electrically actuated carbon nanotube resonators**. Journal of Computational and Nonlinear Dynamics, Jan.2010, vol 5, 011009-1.
- RAO, A.M.; JORIO, A.; PIMENTA, M.A.; DANTAS, M.S.S.; DRESSELHAUS, G.; DRESSELHAUS, M.S. **Polarized Raman Study of Aligned Multiwalled Carbon Nanotubes**. Physical Review Letters, 84 (8), 1820-1823, 2000.
- ROMANI, E.C., LARRUDÉ, D.G., BARBOSA, G.M., DA COSTA, E.H.M., FREIRE JUNIOR, F.L., **Transfer of CVD-Grown Graphene onto silicon oxide, glasses, optical**

fibers and polymers. XXXVI Encontro Nacional de Física da Matéria Condensada, 13-17 de maio de 2013, Águas de Lindóia, SP, Brasil.

SONG, H.S., LI, S.L., MIYAZAKI, H., SATO, S., HAYASHI, K., YAMADA, A., YOKOYAMA, N. AND TSUKAGOSHI, K. **Origin of the relatively low transport mobility of graphene grown through chemical vapor deposition.** Scientific Reports 2, 2012.

STERN, F. **Polarizability of a two-dimensional electron gas.** Physical Review Letters, Vol. 18, Nr. 14, April 1967.

THOMASSIN ET AL. **Functionalized polypropylenes as efficient dispersing agents for carbon nanotubes in a polypropylene matrix; application to electromagnetic interference (EMI) absorber materials.** Polymer, 2010.

WALLACE, P. R. **Band Theory of graphite.** Physics Review 71, 622, 1947.

WELDON, J.A., ALEMAN, B., SUSSMAN, A., GANNET, W. AND ZETTL, A.K. **Sustained mechanical self-oscillations in carbon nanotubes.** Nano Letters 2010, 10, 1728-1733, 2010.

LI, X. S.; CAI, W. W.; AN, J. H.; KIM, S; NAH, J.; YANG, D. X.; PINER, R.; VELAMAKANNI, A.; JUNG, I.; TUTUC, E.; BANERJEE, S. K.; COLOMBO, L.; RUOFF, R.S. **Large-area synthesis of high-quality and uniform graphene films on copper foils.** Science 324, 2009.

ZHOU, H. ET AL. **Chemical vapour deposition growth of large single crystals of monolayer and bilayer graphene.** Nature Commun. 4, 2013.