

B1.9 (R. Krupke)

- [B1.9:1] M. Oron-Carl and R. Krupke, *Raman spectroscopic evidence for hot phonon generation in electrically biased carbon nanotubes*, [Phys. Rev. Lett. **100**, 127401 \(2008\)](#)
- [B1.9:2] * A. Vijayaraghavan, S. Blatt, C.W. Marquardt, S. Dehm, R. Wahi, F. Hennrich, and R. Krupke, *Imaging electronic structure of carbon nanotubes by voltage-contrast scanning electron microscopy*, [Nano Research **1**, 321 \(2008\)](#)
- [B1.9:3] * A. Vijayaraghavan, C. Sciascia, S. Dehm, A. Lombardo, A. Bonetti, A.C. Ferrari, and R. Krupke, *Dielectrophoretic assembly of high-density arrays of individual graphene devices for rapid screening*, [ACS Nano **3**, 1729 \(2009\)](#)
- [B1.9:4] ‡ W. Yan, N. Mechau, H. Hahn, and R. Krupke, *Ultraviolet photodetector arrays assembled by dielectrophoresis of ZnO nanoparticles*, [Nanotechnology **21**, 115501 \(2010\)](#)
- [B1.9:5] * A. Vijayaraghavan, C.W. Marquardt, S. Dehm, F. Hennrich, and R. Krupke, *Defect imaging in single-walled carbon nanotubes by voltage-contrast scanning electron microscopy*, *Carbon* **48**, 494 (2010)
- [B1.9:6] * A. Vijayaraghavan, F. Hennrich, N. Stürzl, M. Engel, M. Ganzhorn, M. Oron-Carl, C.W. Marquardt, S. Dehm, S. Lebedkin, M.M. Kappes, and R. Krupke, *Single-chirality carbon nanotube device arrays*, [ACS Nano **4**, 2748 \(2010\)](#)
- [B1.9:7] *‡ S. Essig, C.W. Marquardt, A. Vijayaraghavan, M. Ganzhorn, S. Dehm, F. Hennrich, F. Ou, A.A. Green, C. Sciascia, F. Bonaccorso, K.-P. Bohnen, H. v. Löhneysen, M.M. Kappes, P.M. Ajayan, M.C. Hersam, A.C. Ferrari, and R. Krupke, *Phonon-assisted electroluminescence from metallic carbon nanotubes and graphene*, [Nano Lett. **10**, 1589 \(2010\)](#)
- [B1.9:8] ‡ M. Kinoshita, M. Steiner, M. Engel, J.P. Small, A.A. Green, M.C. Hersam, R. Krupke, E.E. Mendez, and P. Avouris, *The polarized carbon nanotube thin film LED*, [Opt. Express **18**, 25738 \(2010\)](#)
- [B1.9:9] * C. Thiele, M. Engel, F. Hennrich, M.M. Kappes, K.-P. Johnsen, C.G. Frase, H.v. Löhneysen, and R. Krupke, *Controlled fabrication of single-walled carbon nanotube electrodes by electron-beam-induced oxidation*, *Appl. Phys. Lett.* **99**, 173105 (2011)
- [B1.9:10] * M.H.P. Pfeiffer, N. Stürzl, C.W. Marquardt, M. Engel, S. Dehm, F. Hennrich, M.M. Kappes, U. Lemmer, and R. Krupke, *Electroluminescence from chirality-sorted (9,7)-semiconducting carbon nanotube devices*, *Optics Express* **19**, A1184 (2011)
- [B1.9:11] ‡ R.S. Sundaram, M. Steiner, H.-Y. Chiu, M. Engel, A.A. Bol, R. Krupke, M. Burghard, K. Kern, and P. Avouris, *The Graphene–Gold Interface and Its Implications for Nanoelectronics*, *Nano Lett.* **11**, 3833 (2011)
- [B1.9:12] A. Vijayaraghavan, M.Y. Timmermans, K. Grigoras, A.G. Nasibulin, E.I. Kauppinen, and R. Krupke, *Imaging conduction pathways in carbon nanotube network transistors by voltage-contrast scanning electron microscopy*, *Nanotechnology* **22**, 265715 (2011)
- [B1.9:13] *‡ C. Chappaz-Gillot, P.L. Marek, B.J. Blaive, G. Canard, J. Bürck, G. Garab, H. Hahn, T. Jávorfí, L. Kelemen, R. Krupke, D. Mössinger, P. Ormos, C.M. Reddy, C. Roussel, G. Steinbach, M. Szabó, A.S. Ulrich, N. Vanthuyne, A. Vijayaraghavan, A. Zupcanova, T.S. Balaban, *Anisotropic Organization and Microscopic Manipulation of Self-Assembling Synthetic Porphyrin Microrods That Mimic Chlorosomes: Bacterial Light-Harvesting Systems*, *J. Am. Chem. Soc.* **134**, 944 (2012)

- [B1.9:14] ‡ N. Rauhut, M. Engel, M. Steiner, R. Krupke, P. Avouris, and A. Hartschuh, *Antenna-Enhanced Photocurrent Microscopy on Single-Walled Carbon Nanotubes at 30 nm Resolution*, ACS Nano **6**, 6416 (2012)
- [B1.9:15] ‡ M. Engel, M. Steiner, A. Lombardo, A.C. Ferrari, H. v. Löhneysen, P. Avouris, and R. Krupke, *Light-matter interaction in a microcavity-controlled graphene transistor*, Nature Comm. **3**, 906 (2012)
- [B1.9:16] ‡ M. Engel, M. Steiner, R. Sundaram, R. Krupke, A.A. Green, M.C. Hersam, and P. Avouris, *Spatially Resolved Electrostatic Potential and Photocurrent Generation in Carbon Nanotube Array Devices*, ACS Nano **6**, 7303 (2012)
- [B1.9:17] * D.D. Tune, B.S. Flavel, R. Krupke, and J.G. Shapter, *Carbon Nanotube-Silicon Solar Cells*, Adv. Energy Mater. **2**, 1043 (2012)
- [B1.9:18] ‡ M. Steiner, M. Engel, Y.-M. Lin, Y. Wu, K. Jenkins, D.B. Farmer, J.J. Humes, N. L. Yoder, J.-W. T. Seo, A.A. Green, M.C. Hersam, R. Krupke, and P. Avouris, *High-frequency performance of scaled carbon nanotube array field-effect transistors*, Appl. Phys. Lett. **101**, 053123 (2012)
- [B1.9:19] * A. Felten, B.S. Flavel, L. Britnell, A. Eckmann, P. Louette, J.-J. Pireaux, M. Hirtz, R. Krupke, and C. Casiraghi, *Single- and Double-Sided Chemical Functionalization of Bilayer Graphene*, Small **9**, 631 (2013)
- [B1.9:20] ‡* M. Lukas, V. Meded, A. Vijayaraghavan, L. Song, P.M. Ajayan, K. Fink, W. Wenzel, and R. Krupke, *Catalytic subsurface etching of nanoscale channels in graphite*, Nature Comm. **4**, 1379 (2013)
- [B1.9:21] * M. Oron-Carl and R. Krupke, *Enhancing Raman signals with an interferometrically controlled AFM tip*, Nanotechnology **24**, 415701 (2013)
- [B1.9:22] ‡ C. Thiele, A. Felten, T.J. Echtermeyer, A.C. Ferrari, C. Casiraghi, H. v. Löhneysen, and R. Krupke, *Electron-beam-induced direct etching of graphene*, Carbon **64**, 84 (2013)
- [B1.9:23] * A. Felten, A. Eckmann, J.-J. Pireaux, R. Krupke, and C. Casiraghi, *Controlled modification of mono- and bilayer graphene in O₂, H₂ and CF₄ plasmas*, Nanotechnology **24**, 355705 (2013)
- [B1.9:24] ‡ R.S. Sundaram, M. Engel, A. Lombardo, R. Krupke, A.C. Ferrari, Ph. Avouris, and M. Steiner, *Electroluminescence in Single Layer MoS₂*, Nano Lett. **13**, 1416 (2013)
- [B1.9:25] ‡ A. Felten, B.S. Flavel, L. Britnell, A. Eckmann, P. Louette, J.-J. Pireaux, M. Hirtz, R. Krupke, and C. Casiraghi, *Single- and Double-Sided Chemical Functionalization of Bilayer Graphene*, Small **9**, 631 (2013)

Invited Talks at International Conferences

- R. Krupke, European Material Research Society 2010 Spring Meeting, Strasbourg, June 7, 2010
- R. Krupke, Material Research Society 2010 Spring Meeting, San Francisco, April 8, 2010
- R. Krupke, Physikalisch Technische Bundesanstalt, Braunschweig, March 26, 2010
- R. Krupke, 24th. International Winterschool on Electronic Properties of Novel Materials, Kirchberg, March 12, 2010
- R. Krupke, TRR61 International Symposium, Münster, October 5, 2009

R. Krupke, Nanotech Europe 2009, Berlin, September 29, 2009

R. Krupke, European Materials Research Society 2009 Spring Meeting, Strasbourg, June 12, 2009

R. Krupke, American Physical Society March Meeting, Pittsburgh, March 17, 2009

R. Krupke, ICMS-ICMR Winter School, Bangalore, December 10, 2008

R. Krupke, Material Research Society 2008 Fall Meeting, Boston December 2, 2008

R. Krupke, Weizmann Institute of Science, Rehovot, September 15, 2008

R. Krupke, MMT-2008, Ariel University Center, Ariel, September 10, 2008

R. Krupke, 8th International Conference on the Science and Application of Carbon Nanotubes, Montpellier, July 4, 2008

R. Krupke, Ludwig-Maximilians-Universität München, München, June 11, 2008

R. Krupke, 11th International Conference on the Science and Application of Carbon Nanotubes, Montpellier, June 29, 2010

R. Krupke, GDR-GNT'11 Meeting, Dourdan, February 9, 2011

R. Krupke, APS Spring March Meeting, Dallas, March 22, 2011

R. Krupke, Joint Warsaw – Karlsruhe Workshop on Future of Nanotechnology, Warsaw, September 22, 2011

R. Krupke, Nano-Piter, St. Petersburg, June 27, 2012

R. Krupke, IEEE Nanotechnology Materials and Devices Conference, The Shilla, Korea, October 20, 2012

R. Krupke, French-German Summer School on Magnetism and Spintronics in Molecular Nanostructures; Porquerolles, September 17, 2012

R. Krupke, NANOCON 2013, Brno, October 16, 2013

R. Krupke, ICMAT 2013, Singapore, June 30, 2013