

### C3.2 (H. Hippler / M.M. Kappes / A. Unterreiner)

- [C3.2:1] B. Concina, M. Neumaier, O. Hampe, and M.M. Kappes, *Photodetachment of Fullerene Monoanions and Dianions in a Penning Trap: Probes of Delayed Electron Emission and Associated Activation Barriers*, [Int. J. of Mass Spectrom. \*\*252\*\*, 110 \(2006\)](#)
- [C3.2:2] O. Kiowski, S. Lebedkin, and M.M. Kappes, *Photoluminescence microscopy of as-grown individual single-walled carbon nanotubes on Si/SiO<sub>2</sub> substrates*, [phys. stat. sol. \(b\) \*\*243\*\*, 3122 \(2006\)](#)
- [C3.2:3] K. Arnold, F. Hennrich, R. Krupke, S. Lebedkin, and M.M. Kappes, *Length separation studies of single walled carbon nanotube dispersions*, [phys. stat. sol. \(b\) \*\*243\*\*, 3073 \(2006\)](#)
- [C3.2:4] S. Lebedkin, K. Arnold, O. Kiowski, F. Hennrich, and M.M. Kappes, *Raman Study of Individually Dispersed Single-Walled Carbon Nanotubes under Pressure*, [Phys. Rev. B \*\*73\*\*, 094106 \(2006\)](#)
- [C3.2:5] ‡ X.-B. Wang, H.-K. Woo, X. Huang, M.M. Kappes, and L.-S. Wang, *Direct Experimental Probe of the Onsite Coulomb Repulsion in the Doubly Charged Fullerene Anion C<sub>70</sub><sup>2-</sup>*, [Phys. Rev. Lett. \*\*96\*\*, 143002 \(2006\)](#)
- [C3.2:6] \* O. Ehrler, J.-P. Yang, C. Hättig, A.-N. Unterreiner, H. Hippler, and M.M. Kappes, *Femtosecond Pump-probe Photoelectron Spectroscopy of Isolated C<sub>60</sub> Negative Ions*, [J. Chem. Phys. \*\*125\*\*, 074312 \(2006\)](#)
- [C3.2:7] \* T.S. Balaban, M.C. Balaban, S. Malik, F. Hennrich, R. Fischer, H. Rösner and M.M. Kappes, *Polyacylation of Single Walled Carbon Nanotubes under Friedel-Crafts Conditions: An Efficient Method for Functionalizing, Purifying, Decorating and Linking Carbon Allotropes*, [Adv. Mat. \*\*18\*\*, 2763 \(2006\)](#)
- [C3.2:8] N. Mirsaleh-Kohan, S. Ard, A.A. Tuinman, R.N. Compton, P. Weis, and M.M. Kappes, *Collisional Dissociation of Salt-Cluster Dianions*, [Chem. Phys. \*\*329\*\*, 239 \(2006\)](#)
- [C3.2:9] S. Giordani, S. Bergin, V. Nicolosi, S. Lebedkin, M.M. Kappes, W. Blau, and J. Coleman, *Debundling of Single-Walled Nanotubes by Dilution: Observation of Large Populations of Individual Nanotubes in Amide Solvent Dispersions*, [J. Phys. Chem B \*\*110\*\*, 15708 \(2006\)](#)
- [C3.2:10] S. Lebedkin, K. Arnold, O. Kiowski, F. Hennrich, and M.M. Kappes, *Interband Transition Energy Shifts in Photoluminescence of Single-Walled Carbon Nanotubes under Hydrostatic Pressure*, Proceedings of the International Winterschool on Electronic Properties of Novel Materials (IWEPM 2005), H. Kuzmany, J. Fink, M. Mehring and S. Roth Eds., [AIP Conference Proc. \*\*786\*\*, 124 \(2006\)](#)
- [C3.2:11] O. Kiowski, K. Arnold, S. Lebedkin, F. Hennrich, and M.M. Kappes, *Detection of Single Carbon Nanotubes in Aqueous Dispersion via Photoluminescence*, Proceedings of the International Winterschool on Electronic Properties of Novel Materials (IWEPM 2005), H. Kuzmany, J. Fink, M. Mehring and S. Roth Eds., [AIP Conference Proc. \*\*786\*\*, 139 \(2006\)](#)

- [C3.2:12] \* M. Oron, F. Hennrich, M.M. Kappes, and R. Krupke, *Correlation between Transport Measurements and Resonant Raman Spectroscopy on site-deposited Individual Carbon Nanotubes*, Proceedings of the International Winterschool on Electronic Properties of Novel Materials (IWEPNM 2005), H. Kuzmany, J. Fink, M. Mehring and S. Roth Eds., [AIP Conference Proc. 786, 574 \(2006\)](#)
- [C3.2:13] \* F. Hennrich, S. Lebedkin, K. Arnold, J. Rojas, T. Koch, T. Schimmel, R. Krupke, and M. M. Kappes, *The mechanism of cavitation-induced scission of single-walled carbon nanotubes*, [J. Phys. Chem. B 111, 1932 \(2007\)](#)
- [C3.2:14] \* O. Kiowski, S. Lebedkin, F. Hennrich, S. Malik, H. Roesner, K. Arnold, C. Suergers, and M.M. Kappes, *Photoluminescence microscopy of carbon nanotubes grown by chemical vapor deposition: influence of external dielectric screening on optical transition energies*, [Phys. Rev. B 75, 075421 \(2007\)](#)
- [C3.2:15] ‡ X.-B. Wang, H.-K. Woo, J. Yang, M.M. Kappes, and L.-S. Wang, *Photoelectron Spectroscopy of Singly and Doubly Charged Higher Fullerenes at Low Temperatures:  $C_{76}^-$ ,  $C_{78}^-$ ,  $C_{84}^-$  and  $C_{76}^{2-}$ ,  $C_{78}^{2-}$ ,  $C_{84}^{2-}$* , [J. Phys. Chem. C 111, 17684 \(2007\)](#)
- [C3.2:16] ‡ C.A. Kuntscher, K. Thirunavukkuarasu, A. Pekker, K. Kamaras, F. Hennrich, M. M. Kappes, and Y. Iwasa, *Pressure-induced phenomena in single-walled carbon nanotubes*, [phys. stat. sol. \(b\) 244, 3982 \(2007\)](#)
- [C3.2:17] O. Kiowski, K. Arnold, S. Lebedkin, F. Hennrich, and M.M. Kappes, *Direct observation of deep dark excitonic states in the photoluminescence spectra of single-walled carbon nanotubes*, [Phys. Rev. Lett. 99, 237402 \(2007\)](#)
- [C3.2:18] \* S. Blatt, F. Hennrich, H. von Löhneysen, M.M. Kappes, A. Vijayaraghavan, and R. Krupke, *Influence of Structural and Dielectric Anisotropy on the Dielectrophoresis of Single-Walled Carbon Nanotubes*, [Nano Lett. 7, 1960 \(2007\)](#)
- [C3.2:19] \* J.-P. Yang, M.M. Kappes, H. Hippler, and A.N. Unterreiner, *Femtosecond Transient Absorption Spectroscopy of Single-Walled Carbon Nanotubes and Their Ultrafast Optical Switching Behavior*, [Solid State Phenom. 121, 905 \(2007\)](#)
- [C3.2:20] S.S. Jester, O. Kiowski, S. Lebedkin, F. Hennrich, R. Fischer, N. Stürzl, J. Hawecker, and M.M. Kappes, *Combination of atomic force microscopy and photoluminescence microscopy for the investigation of individual carbon nanotubes on sapphire surfaces*, [phys. stat. sol. \(b\) 244, 3973 \(2007\)](#)
- [C3.2:21] O. Kiowski, S. Lebedkin, F. Hennrich, and M.M. Kappes, *Single-walled carbon nanotubes show stable emission and simple photoluminescence spectra with weak excitation sidebands at cryogenic temperatures*, [Phys. Rev. B 76, 075422 \(2007\)](#)
- [C3.2:22] O.T. Ehrler, J.-P. Yang, A.B. Sugiharto, A.N. Unterreiner, and M.M. Kappes, *Excited state dynamics of metastable phthalocyanine-tetrasulfonate tetraanions probed by pump/Probe photoelectron spectroscopy*, [J. Chem. Phys. 127, 184301 \(2007\)](#)
- [C3.2:23] \* F. Hennrich, K. Arnold, S. Lebedkin, A. Quintilla, W. Wenzel, and M.M. Kappes, *Diameter sorting of carbon nanotubes by gradient centrifugation: role of endohedral water*, [phys. stat. sol. \(b\) 244, 3896 \(2007\)](#)

- [C3.2:24] \* K. Pulskamp, J.M. Woerle-Knirsch, F. Hennrich, K. Kern, and H.F. Krug, *Human lung epithelial cells show biphasic oxidative burst after single-walled carbon nanotube contact*, [Carbon 45, 2241 \(2007\)](#)
- [C3.2:25] \* A. Vijayaraghavan, S. Blatt, D. Weissenberger, M. Oron-Carl, F. Hennrich, D. Gerthsen, H. Hahn, and R. Krupke, *Ultra-large-scale directed assembly of single-walled carbon nanotube devices*, [Nano Lett. 7, 1556 \(2007\)](#)
- [C3.2:26] \* J. Hartig, F. Klöwer, J. Rinck, A.-N. Unterreiner, and H. Schnöckel, *Ga<sub>24</sub>Br<sub>18</sub>Se<sub>2</sub>: a highly symmetrical metalloid cluster and its one-dimensional arrangement in the crystalline state as a model for the photoconductivity of solid GaSe*, [Angew. Chem. Int. Ed. 46, 6549 \(2007\)](#)
- [C3.2:27] ‡ T. Hertel, V. Perebeinos, J. Crochet, K. Arnold, M.M. Kappes, and P. Avouris, *Intersubband decay of 1-D exciton resonances in carbon nanotubes*, [Nano Lett. 8, 87 \(2008\)](#)
- [C3.2:28] ‡ R. Marquis, C. Greco, I. Sadokierska, S. Lebedkin, M.M. Kappes, T. Michel, L. Alvarez, J.-L. Sauvajol, S. Meunier, and C. Mioskowski, *Supramolecular discrimination of carbon nanotubes according to their helicity*, [Nano Lett. 8, 1830 \(2008\)](#)
- [C3.2:29] ‡ X.-B. Wang, K. Matheis, I.N. Ioffe, A.A. Goryunkov, J. Yang, M.M. Kappes, and L.-S. Wang, *High Resolution and Low-Temperature Photoelectron Spectroscopy of an Oxygen-Linked Fullerene Dimer Dianion: C<sub>120</sub>O<sup>2-</sup>*, [J. Chem. Phys. 128, 114307 \(2008\)](#)
- [C3.2:30] S. Lebedkin, F. Hennrich, O. Kiowski, and M.M. Kappes, *Photophysics of carbon nanotubes in organic polymer-toluene dispersions: emission and excitation satellites and relaxation pathways*, [Phys. Rev. B 77, 165429 \(2008\)](#)
- [C3.2:31] B. Concina, M. Neumaier, O. Hampe, and M.M. Kappes, *Electron emission from laser-heated fullerene dianions: Probing the repulsive Coulomb barrier*, [J. Chem. Phys. 128, 134306 \(2008\)](#)
- [C3.2:32] S. Lebedkin, I. Kareev, F. Hennrich, and M.M. Kappes, *Efficient Quenching of Singlet Oxygen via Energy Transfer to Semiconducting Single-Walled Carbon Nanotubes*, [J. Phys. Chem. C 112, 16236 \(2008\)](#)
- [C3.2:33] T. Gokus, A. Hartschuh, H. Harutyunyan, M. Allegrini, F. Hennrich, M.M. Kappes, A.A. Green, M.C. Hersam, P.T. Araujo, and A. Jorio, *Exciton decay dynamics in individual carbon nanotubes at room temperature*, [Appl. Phys. Lett. 92, 153116 \(2008\)](#)
- [C3.2:34] \* O. Schalk, H. Brands, T.S. Balaban, and A.-N. Unterreiner, *Near-Infrared Excitation of the Q-band in Free Base and Zinc Tetratolyl-porphyrins*, [J. Phys. Chem. A 112, 1719 \(2008\)](#)
- [C3.2:35] \* S. Wong, O. Kiowski, J. Lindner, F. Peiris, M. Thiel, M. Braun, M. M. Kappes, M. Wegener, G.A. Ozin, and G. v. Freymann, *Spatially localized photoluminescence at 1.5 micrometers wavelength in direct laser written 3D structures*, [Adv. Mater. 20, 1 \(2008\)](#)
- [C3.2:36] K. Matheis, L. Joly, R. Antoine, F. Lépine, C. Bordas, O.T. Ehrler, A.-R. Allouche, M.M. Kappes, and P. Dugourd, *Photoelectron Spectroscopy of*

*Gramicidin Polyanions: Competition between Delayed and Direct Emission*, [J. Am. Chem. Soc. \*\*130\*\*, 15903 \(2008\)](#)

- [C3.2:37] A. Gerasko, E.A. Mainicheva, M.I. Naumova, M. Neumaier, M.M. Kappes, S. Lebedkin, D. Fenske, and V.P. Fedin, *Sandwich-type tetranuclear lanthanide complexes with cucurbit[6]uril: from molecular compounds to coordination polymers*, [Inorg. Chem. \*\*47\*\*, 8869 \(2008\)](#)
- [C3.2:38] F. Hennrich, S. Lebedkin, and M.M. Kappes, *Improving separation techniques for single-walled carbon nanotubes: towards monodisperse samples*, [phys. stat. sol. \(b\) \*\*245\*\*, 1951 \(2008\)](#)
- [C3.2:39] J. Lindner, A.-N. Unterreiner, and P. Vöhringer, *Femtosecond spectroscopy of solvated electrons from sodium-ammonia-d3 solutions: Temperature jump versus local density jump*, [J. Chem. Phys. \*\*129\*\*, 064514 \(2008\)](#)
- [C3.2:40] ‡ X.-B. Wang, A.P. Sergeeva, X.-P. Xing, M. Massaouti, T. Karpuschkin, O. Hampe, A.I. Boldyrev, M.M. Kappes, and L.-S. Wang, *Probing the Electronic Stability of Multiply Charged Anions: the Sulfonated Pyrene Tri- and Tetra-Anions*, [J. Am. Chem. Soc. \*\*131\*\*, 9836 \(2009\)](#)
- [C3.2:41] O. Kiowski, S.-S. Jester, S. Lebedkin, Z. Jin, Y. Li, and M.M. Kappes, *Photoluminescence Spectral Imaging of Ultralong Single-Walled Carbon Nanotubes: Micromanipulation-Induced Strain, Rupture and the Determination of Handedness*, [Phys. Rev. B \*\*80\*\*, 075426 \(2009\)](#)
- [C3.2:42] N. Stürzl, F. Hennrich, S. Lebedkin, and M.M. Kappes, *Near Monochiral Single-Walled Carbon Nanotube Dispersions in Organic Solvents*, [J. Phys. Chem. C \*\*113\*\*, 14628 \(2009\)](#)
- [C3.2:43] K. Moshhammer, F. Hennrich, and M.M. Kappes, *Selective Suspension in Aqueous Sodium Dodecyl Sulfate According to Electronic Structure Type Allows Simple Separation of Metallic from Semiconducting Single-Walled Carbon Nanotubes*, [Nano Res. \*\*2\*\*, 599 \(2009\)](#)
- [C3.2:44] O. Hampe, M. Neumaier, A.D. Boese, J. Lemaire, G. Niedner-Schatteburg, and M.M. Kappes, *Infrared multiphoton electron detachment spectroscopy of  $C_{76}^{2-}$* , [J. Chem. Phys. \*\*131\*\*, 124306 \(2009\)](#)
- [C3.2:45] C. Rensing, O.T. Ehrler, J.-P. Yang, A.-N. Unterreiner, and M.M. Kappes, *Photodissociation dynamics of  $IrBr_6^{2-}$  dianions by time-resolved photoelectron spectroscopy*, [J. Chem. Phys. \*\*130\*\*, 234306 \(2009\)](#)
- [C3.2:46] S. Kyatskaya, J.R. Galán Mascarós, L. Bogani, F. Hennrich, M.M. Kappes, W. Wernsdorfer, and M. Ruben, *Anchoring of rare-earth-based single-molecule magnets on single-walled carbon nanotubes*, [J. Am. Chem. Soc. \*\*131\*\*, 15143 \(2009\)](#)
- [C3.2:47] R. Marquis, K. Kulikiewicz, S. Lebedkin, M.M. Kappes, C. Mioskowski, S. Meunier, and A. Wagner, *Axially Chiral Facial Amphiphiles with a Dihydronaphthopentaphene Structure as Molecular Tweezers for SWNTs*, [Chem. Eur. J. \*\*15\*\*, 11187 \(2009\)](#)
- [C3.2:48] O. Schalk, J.-P. Yang, A. Hertwig, H. Hippler, and A.-N. Unterreiner, *Vibrational cooling in the liquid phase studied by ultrafast investigations of cycloheptatriene*, [Mol. Phys. \*\*107\*\*, 2159 \(2009\)](#)

- [C3.2:49] C.Z. Loebick, S. Derrouiche, N. Marinkovic, C. Wang, F. Hennrich, M.M. Kappes, G.L. Haller, and L.D. Pfefferle, *Effect of Manganese Addition to the Co-MCM-41 Catalyst in the Selective Synthesis of Single Wall Carbon Nanotubes*, [J. Phys. Chem. C \*\*113\*\*, 21611 \(2009\)](#)
- [C3.2:50] N. Stürzl, S. Lebedkin, S. Malik, and M.M. Kappes, *Preparation of <sup>13</sup>C single-walled Carbon Nanotubes by pulsed Laser Vaporization*, [phys. stat. sol. \(b\) \*\*246\*\*, 2465 \(2009\)](#)
- [C3.2:51] \* A. Quintillá, F. Hennrich, S. Lebedkin, M.M. Kappes, and W. Wenzel, *Influence of endohedral water on diameter sorting of single-walled carbon nanotubes by density gradient centrifugation*, [Phys. Chem. Chem. Phys. \*\*12\*\*, 902 \(2010\)](#)
- [C3.2:52] \*‡ S. Essig, C.W. Marquardt, A. Vijayaraghavan, M. Ganzhorn, S. Dehm, F. Hennrich, F. Ou, A.A. Green, C. Scasia, F. Bonaccorso, K.-P. Bohnen, H. v. Loehneysen, M.M. Kappes, P. Ajayan, M.C. Hersam, A. Ferrari, and R. Krupke, *Phonon-assisted electroluminescence from metallic carbon nanotubes and graphene*, [Nano Lett. \*\*10\*\*, 1589 \(2010\)](#)
- [C3.2:53] \* 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, *Toward Single-Chirality Carbon Nanotube Device Arrays*, [ACS Nano \*\*4\*\*, 2748 \(2010\)](#)
- [C3.2:54] A. Stuparu, C. Stroh, F. Hennrich, and M.M. Kappes, *Dispersion of Single Walled Carbon Nanotubes using Poly(3-dodecylthiophene-2,5-diyl)*, [phys. stat. sol. \(b\) \*\*247\*\*, 2653 \(2010\)](#)
- [C3.2:55] O. Schalk and A.-N. Unterreiner, *The influence of rotational diffusion on transient anisotropy in ultrafast experiments*, [Phys. Chem. Chem. Phys. \*\*12\*\*, 655 \(2010\)](#)
- [C3.2:56] C. Nese and A.-N. Unterreiner, *Photochemical processes in ionic liquids on ultrafast timescales*, [Phys. Chem. Chem. Phys. \*\*12\*\*, 1698 \(2010\)](#)
- [C3.2:57] H. Palza, B. Reznik, M.M. Kappes, F. Hennrich, I.F.C. Naue, and M. Wilhelm, *Characterization of melt flow instabilities in polyethylene/carbon nanotube composites*, [Polymer \*\*51\*\*, 3753 \(2010\)](#)
- [C3.2:58] S. Lebedkin, C. Blum, N. Stürzl, F. Hennrich, and M.M. Kappes, *A low-wavenumber-extended confocal Raman microscope with very high laser excitation line discrimination*, [Rev. Sci. Instr. \*\*82\*\*, 013705 \(2011\)](#)
- [C3.2:59] \* N. Berton, F. Lemasson, J. Tittmann, N. Stürzl, F. Hennrich, M.M. Kappes, and M. Mayor, *Copolymer-Controlled Diameter-Selective Dispersion of Semiconducting Single-Walled Carbon Nanotubes*, [Chem. Mater. \*\*23\*\*, 2237 \(2011\)](#)
- [C3.2:60] C. Blum, N. Stuerzl, F. Hennrich, S. Lebedkin, S. Heeg, H. Dumlich, S. Reich, and M.M. Kappes, *Selective bundling of zig-zag single-walled carbon nanotubes*, [ACS Nano \*\*5\*\*, 2847 \(2011\)](#)
- [C3.2:61] \* F. Lemasson, J. Tittmann, F. Hennrich, N. Stürzl, S. Malik, M.M. Kappes, and M. Mayor, *Debundling, Selection and Release of SWNTs Using Fluorene-Based Photocleavable Polymers*, [Chem. Comm. \*\*47\*\*, 7428 \(2011\)](#)

- [C3.2:62] \* O. Hampe, T. Karpuschkin, M. Vonderach, P. Weis, Y. Yu, L. Gan, W. Klopper, and M.M. Kappes, *Heating a bowl of single-molecule-soup: structure and desorption energetics of water-encapsulated open-cage (60) fullerene anions in gas-phase*, [Phys. Chem. Chem. Phys. \*\*13\*\*, 9818 \(2011\)](#)
- [C3.2:63] \* C. Thiele, M. Engel, F. Hennrich, M.M. Kappes, H. v. Löhneysen, and R. Krupke, *Controlled fabrication of single-walled carbon nanotube electrodes by electron-beam induced oxidation*, [Appl. Phys. Lett. \*\*99\*\*, 173105 \(2011\)](#)
- [C3.2:64] H. Brands, O.T. Ehrler, M.M. Kappes, and A.-N. Unterreiner, *Relaxation Dynamics of Electronically Excited  $C_{60}^-$  in o-Dichlorobenzene and Tetrahydrofuran Solution*, [Z. Phys. Chem. \*\*255\*\*, 939 \(2011\)](#)
- [C3.2:65] \* M. Pfeiffer, N. Stürzl, C. 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 \(2011\)](#)
- [C3.2:66] \*‡ M. Mastronardi, F. Hennrich, E. Henderson, F. Maier-Flaig, C. Blum, J. Reichenbach, U. Lemmer, C. Kuebel, D. Wang, M.M. Kappes, and G. Ozin, *Preparation of Monodisperse Silicon Nanocrystals Using Density Gradient Ultracentrifugation*, [J. Am. Chem. Soc. \*\*133\*\*, 11928 \(2011\)](#)
- [C3.2:67] \* T. Wolf, J. Fischer, M. Wegener, and A.-N. Unterreiner, *Pump-probe spectroscopy on photoinitiators for stimulated-emission-depletion optical lithography*, [Opt. Lett. \*\*36\*\*, 3188 \(2011\)](#)
- [C3.2:68] O. Schalk and A.-N. Unterreiner, *Transient anisotropy in degenerate systems: A semi-classical approach*, [Z. Phys. Chem. \*\*225\*\*, 927 \(2011\)](#)
- [C3.2:69] \*‡ D. Thielemann, M. Klinger, T. Wolf, Y. Lan, W. Wernsdorfer, M. Busse, P. Roesky, A.-N. Unterreiner, A. Powell, P. Junk, and G. Deacon, *Novel Lanthanide-Based Polymeric Chains and Corresponding Ultrafast Dynamics in Solution*, [Inorg. Chem. \*\*50\*\*, 11990 \(2011\)](#)
- [C3.2:70] F. Hennrich, M.M. Kappes, M. Klinger, and A.-N. Unterreiner, *Ultrafast Dynamics of the First Excited State of Quasi Monodispersed Single-Walled (9,7) Carbon Nanotubes*, [J. Phys. Chem. C \*\*115\*\*, 23711 \(2011\)](#)
- [C3.2:71] H. Dumlich, M. Gegg, F. Hennrich, and S. Reich, *Bundle and chirality influence on properties of carbon nanotubes studied with van der Waals density functional theory*, [phys. stat. sol. \(b\) \*\*248\*\*, 2589 \(2011\)](#)
- [C3.2:72] S. Lebedkin, C. Blum, N. Stuerzl, F. Hennrich, and M.M. Kappes, *A low-wavenumber-extended confocal Raman microscope with very high laser excitation line discrimination*, [Rev. Sci. Instrum. \*\*82\*\*, 013705 \(2011\)](#)
- [C3.2:73] \* M. Ganzhorn, A. Vijayaraghavan, S. Dehm, F. Hennrich, A.A. Green, M. Fichtner, A. Voigt, M. Rapp, H. v. Löhneysen, M.C. Hersam, M.M. Kappes, and R. Krupke, *Hydrogen Sensing with Diameter- and Chirality-Sorted Carbon Nanotubes*, [ACS Nano \*\*5\*\*, 1670 \(2011\)](#)
- [C3.2:74] \* F. Lemasson, T. Strunk, P. Gerstel, F. Hennrich, S. Lebedkin, C. Barner-Kowollik, W. Wenzel, M.M. Kappes, and M. Mayor, *Selective Dispersion of Single-Walled Carbon Nanotubes with Specific Chiral Indices by Poly(N-decyl-2,7-carbazole)*, [J. Am. Chem. Soc. \*\*133\*\*, 652 \(2011\)](#)

- [C3.2:75] H. Palza, M.M. Kappes, F. Hennrich, and M. Wilhelm, *Morphological changes of carbon nanotubes in polyethylene matrices under oscillatory tests as determined by dielectrical measurements*, [Composites Science and Technology](#) **71**, 1361 (2011)
- [C3.2:76] \* F. Lemasson, N. Berton, J. Tittmann, F. Hennrich, M.M. Kappes, and M. Mayor, *Polymer Library Comprising Fluorene and Carbazole Homo- and Copolymers for Selective Single-Walled Carbon Nanotubes Extraction*, [Macromolecules](#) **45**, 713 (2012)
- [C3.2:77] N. Stuerzl, S. Lebedkin, F. Peng, Y. Li, F. Hennrich, and M.M. Kappes, *Simultaneous detection of Raman scattering and near-infrared photoluminescence in one imaging microscope*, [Rev. Sci. Instrum.](#) **83**, 063709 (2012)
- [C3.2:78] H. Telg, J. Duque, M. Staiger, X. Tu, F. Hennrich, M.M. Kappes, M. Zheng, J. Maultzsch, C. Thomsen, and S.K. Doorn, *Chiral Index Dependence of the G(+) and G(-) Raman Modes in Semiconducting Carbon Nanotubes*, [ACS Nano](#) **6**, 904 (2012)
- [C3.2:79] \* N. Berton, F. Lemasson, F. Hennrich, M.M. Kappes, and M. Mayor, *Influence of molecular weight on selective oligomer-assisted dispersion of single-walled carbon nanotubes and subsequent polymer exchange*, [Chem. Commun.](#) **48**, 2516 (2012)
- [C3.2:80] \* P. Gerstel, S. Klumpp, F. Hennrich, O. Altintas, T.R. Eaton, M. Mayor, C. Barner-Kowollik, and M.M. Kappes, *Selective dispersion of single-walled carbon nanotubes via easily accessible conjugated click polymers*, [Polym. Chem.](#) **3**, 1966 (2012)
- [C3.2:81] ‡ P.D. Dau, H.-T. Liu, J.-P. Yang, M.-O. Winghart, T.J.A. Wolf, A.-N. Unterreiner, P. Weis, Y.-R. Miao, C.-G. Ning, M.M. Kappes, and L.-S. Wang, *Resonant tunneling through the repulsive Coulomb barrier of a quadruply charged molecular anion*, [Phys. Rev. A](#) **85**, 064503 (2012)
- [C3.2:82] T.J.A. Wolf, D. Voll, C. Barner-Kowollik, and A.N. Unterreiner, *Elucidating the Early Steps in Photoinitiated Radical Polymerization via Femtosecond Pump-Probe Experiments and DFT Calculations*, [Macromolecules](#) **45**, 2257 (2012)
- [C3.2:83] C.A. Kuntscher, A. Abouelsayed, K. Thirunavukkuarasu, F. Hennrich, and Y. Iwasa, *Pressure effects on unoriented and oriented single-walled carbon nanotube films studied by infrared microscopy*, [J. Appl. Phys.](#) **111**, 112614 (2012)
- [C3.2:84] J. Laudénbach, F. Hennrich, M.M. Kappes, and J. Maultzsch, *Resonance behavior of defect-induced modes in metallic and semiconducting single-walled carbon-nanotubes*, [phys. stat. sol. \(b\)](#) **249**, 2460 (2012)
- [C3.2:85] K. Matheis, A. Eichhoefer, F. Weigend, O.T. Ehrler, O. Hampe, and M.M. Kappes, *Probing the influence of Size and Composition on the Photoelectron Spectra of Cadmium Chalcogenide Cluster Dianions*, [J. Phys. Chem. C](#) **116**, 13800 (2012)
- [C3.2:86] \* J. Pelka, H. Gehrke, A. Rechel, M.M. Kappes, F. Hennrich, C. Hartinger, and D. Marko, *DNA damaging properties of single walled carbon nanotubes in human colon carcinoma cells*, [Nanotoxicology](#) **7**, 2 (2013)

- [C3.2:87] O. Schalk, Y. Liang, and A.-N. Unterreiner, *On Ligand Binding Energies in Porphyrinic Systems*, Z. Phys. Chem. **227**, 35 (2013)
- [C3.2:88] T.J.A. Wolf, O. Schalk, R. Radloff, G. Wu, P. Lang, A. Stolow, and A.-N. Unterreiner, *Ultrafast photoinduced dynamics of halogenated cyclopentadienes: Observation of geminate charge-transfer complexes in solution*, Phys. Chem. Chem. Phys. **15**, 6673 (2013)
- [C3.2:89] \* T.J.A. Wolf, J. Fischer, D. Voll, M. Wegener, C. Barner-Kowollik, and A.-N. Unterreiner, *The interplay of different relaxation channels in the excited state dynamics of photoinitiators*, EPJ Web of Conferences **41**, 05008 (2013)
- [C3.2:90] Y. Liang, O. Schalk, and A.-N. Unterreiner, *Transient Anisotropy in Degenerate Systems: Experimental Observations in a Cd-porphyrin*, EPJ Web of Conferences **41**, 05014 (2013)
- [C3.2:91] \* T. Ehenschwender, Y. Liang, A.-N. Unterreiner, H.-A. Wagenknecht, and T.J. A. Wolf, *Fluorescence Quenching over Short Range in a Donor-DNA-Acceptor System*, ChemPhysChem **14**, 1197 (2013)
- [C3.2:92] \*Y. Liang, M. Bradler, M. Klinger, O. Schalk, M.C. Balaban, T.S. Balaban, E. Riedle, and A.-N. Unterreiner, *Ultrafast Dynamics of meso-Tetraphenylmetalloporphyrins: The Role of Dark States*, ChemPlusChem **78**, 1244 (2013)
- [C3.2:93] O. Schalk, A.E. Boguslavskiy, M.S. Schuurman, R.Y. Brogaard, A.-N. Unterreiner, A. Wrona-Piotrowicz, N.H. Werstiuk, and A. Stolow, *Substituent Effects on Dynamics at Conical Intersections: Cycloheptatrienes*, J. Phys. Chem. A **117**, 10239 (2013)
- [C3.2:94] \* J. Fischer, J.B. Mueller, J. Kaschke, T.J.A. Wolf, A.-N. Unterreiner, and M. Wegener, *Three-dimensional multi-photon direct laser writing with variable repetition rate*, Optics Express **21**, 26244 (2013)
- [C3.2:95] Y. Liang, M. Klinger, O. Schalk, and A.-N. Unterreiner, *On the origin of high transient anisotropies: An exemplification in a Cd-porphyrin*, J. Chem. Phys. **139**, 224309 (2013)
- [C3.2:96] \*‡ J.J. McDowell, F. Maier-Flaig, T.J.A. Wolf, A.-N. Unterreiner, U. Lemmer, and G. Ozin, *Synthesis and Application of Photolithographically Patternable Deep Blue Emitting Poly(3,6-Dimethoxy-9,9-dialkylsilaflourene)s*, Appl. Mater. Interfaces **6**, 83 (2014)

### Invited Talks at International Conferences

- F. Hennrich, *Separating single-walled carbon nanotubes*, International Winterschool on Novel Materials, Kirchberg, Austria, March 2007
- S. Lebedkin, *Influence of matrix effects on photoluminescence properties of single-walled carbon nanotubes*, International Workshop on Carbon Nanotube Optics, Ottawa, Canada, July, 2007

- O. Hampe, *Electron photodetachment and electron autodetachment from cluster anions*, Third International Symposium on Cluster Collisions, St. Petersburg, June 2008
- M. M. Kappes, *Dark exciton states in semiconducting single-walled carbon nanotubes*, Electrochemical Society Spring Meeting, Phoenix, USA, May 2008
- A.-N. Unterreiner, *Femtosecond pump-probe absorption spectroscopy*, SPP 1191 Winter-School Leipzig, Germany, February 2008
- M. M. Kappes, *Separation and Spectroscopy of Single-Walled Carbon Nanotubes*, International Winterschool on Novel Materials, Kirchberg, Austria, March 2009
- M. M. Kappes, *Chiral vector pure single-walled carbon nanotubes*, Electrochemical Society Spring Meeting, San Francisco, USA, May 2009
- M. M. Kappes, *Separation and Spectroscopy of Single-Walled Carbon Nanotubes*, WONTON2009, Matsushima, Japan, June 2009
- S. Lebedkin, *Fluorescence Spectromicroscopy of Single-Walled Carbon Nanotubes*, Electrochemical Society Fall Meeting, Vienna, Austria, October 2009
- M. M. Kappes, *Chiral Vector Selective Separation and Spectroscopy of Single-Walled Carbon Nanotubes*, Pacifichem 2010, Honolulu, USA, December 2010
- A.-N. Unterreiner, *Identifizierung spektroskopisch dunkler Zustände mittels zeitaufgelöster Anregungs-Abfrage-Methoden*, 2. Symposium Bildung und Innovation in Biotechnologie, Chemie und Verfahrenstechnik Dresden, Germany, February 2010
- M. M. Kappes, *Scaling up single-walled carbon nanotube separation*, Electrochemical Society Spring Meeting, Montreal, Canada, May 2011
- M. M. Kappes, *Spectroscopy of chiral vector selected single-walled carbon nanotubes*, WONTON2011, Bordeaux, France, June 2011
- A.-N. Unterreiner, *Influence of Spectroscopically Dark States on the Relaxation Pathways of Molecules*, Universität Bonn, February 2012, Colloquium of SFB 813
- A.-N. Unterreiner, *Relaxation pathways of molecules in solution on a femto- and picosecond timescale*, Universität Freiburg, November 2012, Wissenschaftliches Kolloquium des Instituts für Physikalische Chemie
- A.-N. Unterreiner, *Ultrafast relaxation dynamics of quasi monodispersed single-walled carbon nanotubes in the liquid phase*, Universität Leipzig, 30.01.2013, Fakultät für Chemie und Mineralogie.
- A.-N. Unterreiner, *Influence of Spectroscopically Dark States on the Relaxation Pathways of Molecules*, Universität Würzburg, 15.10.2013, Kolloquium der Physikalischen und Theoretischen Chemie.