

## Datenblatt Veröffentlichungen

### Publikationen und evaluierte Konferenzbeiträge

| Vollständige Bibliographie                                                                                                                                                                                                                                                                                                                                                               | Thema                     | Beteiligte Arbeitsgruppen im Center | Andere Kooperationen         |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|-------------------------------------|------------------------------|
| <b>2007</b>                                                                                                                                                                                                                                                                                                                                                                              |                           |                                     |                              |
| L. Storsberg, L. Schöler, M. Walder, R.J. Püschl, B. Wenclawiak, M. Böhm, <b>"Simulation and Experimental Characterization of Plug Distorsion in Hybrid Micro Channels"</b> , <i>Microfluidics and Nanofluidics</i> , <b>2008</b> , 4, 401 – 407. doi:10.1007/s10404-007-0171-6                                                                                                          | Mikrochip - Labchip       | Böhm, Wenclawiak                    |                              |
| G. Münchow, S. Hardt, J. P. Kutter and K. S. Drese, <b>Electrophoretic partitioning of proteins in two-phase microflow</b> , <i>Lab Chip</i> <b>2007</b> , 7, 98-102.                                                                                                                                                                                                                    | Mikrofluidik - Simulation | Hardt, Drese                        | Kutter                       |
| S. Hardt, B. Schilder, D. Tiemann, G. Kolb, V. Hessel and P. Stephan, <b>Analysis of flow patterns emerging during evaporation in parallel microchannels</b> , <i>International Journal of Heat and Mass Transfer</i> , <b>2007</b> , 50, 226-239.                                                                                                                                       | Mikrofluidik – Simulation | Hardt                               |                              |
| S. Hardt, T. Baier, <b>A computational model for heat transfer in multichannel microreactors</b> , <i>AIChE Journal</i> , <b>2007</b> , 53, 1006-1016.                                                                                                                                                                                                                                   | Mikrofluidik – Simulation | Hardt                               |                              |
| G. Münchow, S. Hardt, J. P. Kutter and K. S. Drese, <b>Continuous separation of proteins and cells by two-phase electrophoresis in microchannels</b> , Proc. μTAS2007, 11th Int. Conf. Miniaturized Systems for Chemistry and Life Sciences, Paris, France, October 7-11, <b>2007</b> , 808-810.                                                                                         | Mikrofluidik – Simulation | Hardt, Drese                        | Kutter                       |
| B. Schilder, I. Zorbach, S. Hardt, P. Stephan, F. Wondra and T. Klotzbücher, <b>Experimental investigation of fuel evaporation on microstructured surfaces for microcombustion</b> , Proc. 6th Int. Conf. Enhanced, Compact and Ultra-Compact Heat Exchangers, Potsdam, Germany, September 16-21, <b>2007</b> , 143-148.                                                                 | Mikrofluidik – Simulation | Hardt                               |                              |
| S. Hardt and F. Schönfeld (Eds.), <b>Microfluidic Technologies for Miniaturized Analysis Systems</b> , Springer, New York, <b>2007</b> , 615 pages                                                                                                                                                                                                                                       | Mikrofluidik – Simulation | Hardt                               |                              |
| S. Hardt and F. Schönfeld, <b>Microfluidics: Fundamentals and Engineering Concepts</b> , in S. Hardt and F. Schönfeld (Eds.): <i>Microfluidic Technologies for Miniaturized Analysis Systems</i> , Springer, New York, <b>2007</b> , 1-58.                                                                                                                                               | Mikrofluidik - Simulation | Hardt                               |                              |
| M. Albrecht, C. Böhne, A. Granzhan, H. Ihmels, T. C. S. Pace, A. Schnurpfel, M. Waidelich, C. Yihwa, <b>Dual Emission of 2-Methoxyanthracene Derivatives</b> , <i>Journal of Physical Chemistry A</i> , <b>2007</b> , 111, 1036–1044.                                                                                                                                                    | Fluoreszenzsensorik       | Ihmels                              | Bohne (Univ. of Victoria)    |
| A. Granzhan, H. Ihmels, G. Viola, <b>9-Donor-Substituted Acridizinium Salts: Versatile Environment-Sensitive Fluorophores for the Detection of Biomacromolecules</b> , <i>Journal of the American Chemical Society</i> , <b>2007</b> , 129, 1254-1267.                                                                                                                                   | Fluoreszenzsensorik       | Ihmels                              | Viola (Univ. of Padua)       |
| R. Wang, L. Yuan, H. Ihmels, D. H. Macartney, <b>Cucurbit[8]uril/Cucurbit[7]uril Controlled Off/On Fluorescence of the Acridizinium and 9-Aminoacridizinium Cations in Aqueous Solution</b> , <i>Chem. Eur. J.</i> <b>2007</b> , 13, 6468-6473.                                                                                                                                          | Sensorik                  | Ihmels                              | Macartney (Kingston, Canada) |
| M. Schmittel, H.-W. Lin, <b>Quadruple-Channel Sensing: A Molecular Sensor with One Single Type of Receptor Site for Selective and Quantitative Multiion Analytics</b> , <i>Angewandte Chemie</i> , <b>2007</b> , 119, 911-914. <i>Angewandte Chemie International Edition</i> , <b>2007</b> , 46, 893-896. highlighted: A. P. de Silva, <i>Nature</i> <b>2007</b> , 445 (7129): 718-719. | Lab-on-a-Molecule         | Schmittel                           |                              |
| A. Listorti, A. Degli Esposti, R. S. K. Kishore, V. Kalsani, M. Schmittel, N. Armaroli, <b>1,10-Phenanthrolines with tunable luminescence upon protonation: a spectroscopic and computational study</b> , <i>Journal of Physical Chemistry A</i> , <b>2007</b> , 111, 7707-7718.                                                                                                         | Fluoreszenzsensorik       | Schmittel                           | Armaroli (Univ. Bologna)     |
| M. Schmittel, H.-W. Lin, <b>Luminescent Iridium Phenanthroline Crown Ether Complex for the Detection of Silver(I) Ions in Aqueous Media</b> , <i>Inorganic Chemistry</i> , <b>2007</b> , 46, 9139 - 9145.                                                                                                                                                                                | Lumineszenzsensorik       | Schmittel                           |                              |
| Y. Chen, A. Best, T. Haschke, W. Wiechert, H.-J. Butt, <b>Stress and Failure at Mechanical Contacts of Microspheres Under Uniaxial Compression</b> , <i>Journal of Applied Physics</i> , <b>2007</b> , 101, 084908.1-084908.                                                                                                                                                             | Mikrokörner               | Wiechert, Butt                      |                              |
| D. S. Golovko, T. Haschke, W. Wiechert, E. Bonaccorso, <b>A Nondestructive and Noncontact Method for Determining the Spring Constant of Rectangular Cantilevers: Refinement of the Cleveland Technique</b> , <i>Review of Scientific Instruments</i> , <b>2007</b> , 74, 043705.1-043705.6.                                                                                              | Cantilever                | Wiechert                            | Bonaccorso                   |
| T. Haschke, K. Graf, E. Bonaccorso, G. Li, F.-T. Suttmeier, W. Wiechert, <b>Evaporation of Solvent Microdrops on Polymer Substrates: From Well Controlled Experiments to Mathematical Models and Back</b> , <i>Nanoscale and Microscale Thermophysical Engineering</i> , <b>2007</b> , 11, 31-41.                                                                                        | Mikrotröpfchen            | Wiechert, Graf                      | Suttmeier (Univ. Siegen)     |
| R. Winz, A. de los Rios Gonzalez, E. von Lieres, M. Schmittel, W. Wiechert, <b>Simulation of a Micro-Analytical Device for Adsorbing Substances from a Fluid</b> , in: Petit, J.-M.; Squalli, O. (Herausgeber): <i>Proceedings of the European COMSOL Conference 2007</i> (Grenoble, Frankreich, 23.-24. Oktober 2007), Seiten 736-741.                                                  | Simulation                | Wiechert, von Lieres, Schmittel     |                              |

# Publikationen Forschungszentrum C<sub>μ</sub>

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|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------|-------------------|------------------------|
| M. Schmittel, R. S. K. Kishore, J. W. Bats, <b>Synthesis of Supramolecular Fullerene-Porphyrin-Cu(phen)<sub>2</sub>-Ferrocene Architectures. A Heteroleptic Approach Towards Tetrads</b> , <i>Org. Biomol. Chem.</i> <b>2007</b> , <i>5</i> , 78 - 86.                                                                                                                                               | Nanostrukturen, Nanostrukturierung | Schmittel         | Bats (Univ. Frankfurt) |
| H. Schäfer, H. Lin, M. Schmittel, M. Böhm, <b>A novel labchip with amorphous thin film diodes used for highly selective and sensitive electrochemiluminescence detection of Hg<sup>2+</sup> ions in aqueous solution</b> , <i>Proc. SPIE Microtechnologies for the New Millennium 2007</i> , Maspalomas, Spain, 2-4 May 2007.                                                                        | Lab-on-Chip                        | Böhm, Schmittel   |                        |
| M. Schmittel, V. Kalsani, C. Michel, P. Mal, H. Ammon, F. Jäckel, J. P. Rabe, <b>Towards Nanotubular Structures with Large Void. Dynamic Heteroleptic Oligophenanthroline Metallo-Nanoscaffolds and Their Solution State Properties</b> , <i>Chem. Eur. J.</i> <b>2007</b> , <i>13</i> , 6223-6237.                                                                                                  | Nanostrukturen, Nanostrukturierung | Schmittel         | Rabe (HU Berlin)       |
| O. N. Gritsenko, E. A. Gutkina, H. Ammon, M. Schmittel, A. A. Shteinman, <b>New Phenanthroline Iron Complexes: Synthesis and Catalytic Activity in Alkane Oxidation with Hydrogen Peroxide</b> , <i>Russ. J. Inorg. Chem.</i> <b>2007</b> , <i>52</i> , 92-96. ( <i>Zhurnal Neorganicheskoi Khimii</i> , <b>2007</b> , <i>52</i> , 97-102).                                                          | Complexes                          | Schmittel         | Shteinman (Russia)     |
| M. Schmittel, B. He, V. Kalsani, J. W. Bats, <b>Supramolecular Effects on the Potential of Redox Units - Nanoscaffolds Internally Functionalised with Ferrocene Units</b> , <i>Org. Biomol. Chem.</i> <b>2007</b> , <i>5</i> , 2395 - 2403.                                                                                                                                                          | Nanostrukturen, Nanostrukturierung | Schmittel         | Bats (Univ. Frankfurt) |
| <b>2008</b>                                                                                                                                                                                                                                                                                                                                                                                          |                                    |                   |                        |
| K. Seibel, L. Schöler, H. Schäfer, M. Böhm, <b>"A Programmable Planar Electroosmotic Micropump for Lab-on-a-Chip Applications"</b> , <i>Journal of Micromechanics and Microengineering</i> , <b>2008</b> , <i>18</i> , 025008. DOI: 10.1088/0960-1317/18/2/025008                                                                                                                                    | Mikrochip - Mikropumpe             | Böhm              |                        |
| L. Schöler, K. Seibel, K. Panczyk and M. Böhm, <b>"PLED Integration-Light Source for Application Specific Labon-Microchips (ALNf)"</b> , presented at 34th international Conference on Micro & Nano Engineering (MNE), Athens. Greece. Sept. 15-18. <b>2008</b> , <i>Microelectronic Engineering</i> , <b>2009</b> , <i>86</i> , 1502 -1504, DOI:10.1016/j.mee.2008.12.060                           | Mikrochip - Lichtquelle            | Böhm              |                        |
| H. Schäfer, L. Schöler, K. Seibel and M. Böhm, <b>"A Monolithically Integrated CMOS Labchip Using Sensor Devices</b> . <i>Journal of Applied Surface Science</i> , Volume 255, Issue 3, <i>11<sup>th</sup> International Conference on the Formation of Semiconductor Interfaces (ICFSI-11)</i> , November 30, <b>2008</b> , pp 646-648, ISSN 0169-4332, DOI: 10.1016/j.apsusc.2008.07.059           | Mikrochip - Labchip                | Böhm              |                        |
| H. Schäfer, H. Lin, M. Schmittel, M. Böhm, <b>A labchip for highly selective and sensitive electrochemiluminescence detection of Hg<sup>2+</sup> ions in aqueous solution employing integrated amorphous thin film diodes</b> , <i>Microsystem Technologies</i> , <b>2008</b> , <i>14</i> , 589-599. DOI: 10.1007/s00542-007-0439-5                                                                  | Mikrochip - Labchip                | Böhm, Schmittel   |                        |
| G. Münchow, F. Schöfeld, S. Hardt and K. H. Graf, <b>Protein diffusion across the interface of aqueous two-phase systems</b> , <i>Langmuir</i> <b>2008</b> , <i>24</i> , 8547-8553.                                                                                                                                                                                                                  | Protein Diffusion                  | Hardt, Graf       |                        |
| F. Schöfeld, K. Graf, S. Hardt and H. J. Butt, <b>Evaporation dynamics of sessile liquid drops in still air with constant contact radius</b> , <i>International Journal of Heat and Mass Transfer</i> , <b>2008</b> , <i>51</i> , 3696-3699.                                                                                                                                                         | Tröpfchen-verdunstung              | Hardt, Graf, Butt |                        |
| F. Schöfeld, G. Goet, K. S. Drese and S. Hardt, <b>Single-phase digital microfluidics based on isotachophoretic transport</b> , <i>Proc. μTAS2008</i> , 12th Int. Conf. Miniaturized Systems for Chemistry and Life Sciences, San Diego, CA, October 12-16, 2008, 56-58.                                                                                                                             | Isotachophorese                    | Hardt, Drese      |                        |
| B. Schilder, S. C. M. Yu, N. Kasagi, S. Hardt and P. Stephan, <b>Local measurement of forced convection heat transfer in a micro glass tube</b> , <i>Proc. 6<sup>th</sup> Int. Conf. Nanochannels, Microchannels, Minichannels</i> , Darmstadt, June 23-25, <b>2008</b> , Paper # 62054.                                                                                                             | Wärmetransport                     | Hardt             |                        |
| H.-J. Deiseroth, A. Granzhan, H. Ihmels, M. Schlosser, M. Tian, <b>Synthesis of 6-Amino-3,4-Dihydroisoquinolinium Derivatives by Ring-Opening Reactions of Acridizinium Ion</b> . <i>Organic Letters</i> , <b>2008</b> , <i>5</i> , 757-760.                                                                                                                                                         | Fluoreszenz                        | Deiseroth, Ihmels |                        |
| A. Bergen, A. Granzhan, H. Ihmels, <b>Water-soluble, pH-sensitive fluorescent probes on the basis of acridizinium ions</b> . <i>Photochemical and Photobiological Sciences</i> , <b>2008</b> , <i>7</i> , 405-407.                                                                                                                                                                                   | Fluoreszenzsensorik                | Ihmels            |                        |
| M. Schmittel, H.-W. Lin, <b>Electropolymerisable Ruthenium(II) Phenanthrolines Carrying Azacrown Ether Receptors: Metal Ion Recognition in Thin Film Redox Sensors</b> , <i>Journal of Materials Chemistry</i> , <b>2008</b> , <i>18</i> , 333 - 343.                                                                                                                                                | Redoxsensorik                      | Schmittel         |                        |
| S. Moreno-Flores, A. Kasry, H.-J. Butt, C. Vavilala, M. Schmittel, D. Pum, U. B. Sleytr, J. L. Toca-Herrera, <b>From Native to Non-native Two-Dimensional Protein Lattices through Underlying Hydrophilic/ Hydrophobic Nanoprotrusions</b> . <i>Angewandte Chemie</i> , <b>2008</b> , <i>120</i> , 4785 -4788. <i>Angewandte Chemie International Edition</i> , <b>2008</b> , <i>47</i> , 4707-4710. | Proteine auf Oberflächen           | Butt, Schmittel   | Toca-Herrera           |
| L. Kampschulte, T. L. Werblowsky, R. S. K. Kishore, M. Schmittel, W.M. Heckl, M. Lackinger, <b>Thermodynamical Equilibrium of Binary Supramolecular Networks at the Liquid-Solid Interface</b> , <i>Journal of the American Chemical Society</i> , <b>2008</b> , <i>130</i> , 8502-8507.                                                                                                             | Oberflächen-strukturierung         | Schmittel         | Heckl, Lackinger       |
| M. Schmittel, H. Lin, <b>Transformation of a Modest Luminescent Chemosensor into a Light-up Probe: The Overload Displacement Approach</b> , <i>Bulletin of the Chemical Society of Japan</i> , <b>2008</b> , <i>81</i> , 1595-1598. Selected as "highlight in the next issue" by BCSJ in 2008 (11).                                                                                                  | Lumineszenzsensorik                | Schmittel         |                        |

## Publikationen Forschungszentrum C<sub>μ</sub>

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|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|---------------------------------------|------------------------------------------------------|
| H. Payer, T. Haschke, R. Reichardt, G. Li, K. Graf, W. Wiechert, <b>Profile Analysis of Regularly Microstructured Surfaces</b> , <i>Fluid Dynamics &amp; Material Proc.</i> <b>2008</b> , 4, 61-76.                                                                                                                                                                              | Oberflächen-<br>strukturierung | Wiechert, Graf                        |                                                      |
| R. Winz, E. von Lieres, W. Wiechert, <b>Simulation of Ligands Competing for Binding Sites in a Multi-Solute System</b> , in: Proceedings of the 5 <sup>th</sup> European Congress on Computational Methods in Applied Sciences and Engineering (Venedig, Italien, 30. Juni-04. Juli, <b>2008</b> ).                                                                              | Simulation                     | von Lieres, Wiechert                  |                                                      |
| R. Winz, E. von Lieres, W. Wiechert, <b>Numerical Analysis of the Impact of Geometric Shape Patterns on the Performance of Miniaturized Chromatography Systems</b> , in: Proceedings of the European COMSOL Conference 2008 (Hannover, Deutschland, 04.-06. November <b>2008</b> ).                                                                                              | Simulation                     | von Lieres, Wiechert                  |                                                      |
| M. Schmittel, P. Mal, <b>Towards technomimetic spoked wheels: Dynamic hexakis-heteroleptic coordination at a hexakis-terpyridine scaffold</b> , <i>Chem. Commun.</i> <b>2008</b> , 960 - 962.                                                                                                                                                                                    | Nanochemie                     | Schmittel                             |                                                      |
| M. Schmittel, K. Mahata, <b>Clean formation and dynamic exchange reactions of a supramolecular equilateral triangle that is both heterometallic and heteroleptic</b> , <i>Chem. Commun.</i> <b>2008</b> , 2550-2552.                                                                                                                                                             | Nanochemie                     | Schmittel                             |                                                      |
| M. Schmittel, B. He, P. Mal, <b>Supramolecular Multi-Component Self-Assembly of Shape Adaptive Nanoprisms: Wrapping up C<sub>60</sub> with Three Porphyrin Units</b> , <i>Org. Lett.</i> <b>2008</b> , 10, 2513-2516                                                                                                                                                             | Nanochemie                     | Schmittel                             |                                                      |
| M. Schmittel, K. Mahata, <b>Diversity and Complexity Through Reversible Multiple Orthogonal Interactions in Multicomponent Assemblies</b> , <i>Angew. Chem. Int. Ed.</i> <b>2008</b> , 47, 5284-5464,<br><b>Vielfalt und Komplexität durch reversible vielfach-orthogonale Wechselwirkungen in Multikomponenten-Systemen</b> , <i>Angew. Chem.</i> <b>2008</b> , 120, 5364-5366. | Nanochemie                     | Schmittel                             |                                                      |
| M. Schmittel, B. He, <b>Void and filled supramolecular nanoprisms - Notable differences between seemingly identical construction principles</b> , <i>Chem. Commun.</i> <b>2008</b> , 4723-4725.                                                                                                                                                                                  | Nanochemie                     | Schmittel                             |                                                      |
| <b>2009</b>                                                                                                                                                                                                                                                                                                                                                                      |                                |                                       |                                                      |
| L. Schöler, K. Seibel, K. Panczyk, M. Böhm „ <b>An integrated PLED-A light source for application specific lab-on-microchips (ALM)</b> ”, <i>Microelectronic Engineering</i> , <b>2009</b> , 86, 1502-1504.                                                                                                                                                                      | Mikrochip –<br>Lichtquelle     | Böhm                                  |                                                      |
| G. Goet, T. Baier and S. Hardt, <b>Micro contactor based on isotachophoretic sample transport</b> , <i>Lab Chip</i> <b>2009</b> , 9, 3586-3593                                                                                                                                                                                                                                   | Isotachophorese                | Hardt                                 |                                                      |
| F. Schönfeld, G. Goet, T. Baier, S. Hardt, <b>Transition zone dynamics in combined isotachophoretic and electroosmotic transport</b> , <i>Physics of Fluids</i> , <b>2009</b> , 21, 092002.                                                                                                                                                                                      | Isotachophorese                | Hardt                                 |                                                      |
| F. Schönfeld, S. Hardt, <b>Dynamic contact angles in CFD simulations</b> , <i>Computers and Fluids</i> <b>2009</b> , 38, 757-764.                                                                                                                                                                                                                                                | Simulationen                   | Hardt                                 |                                                      |
| S. Hardt, S. Tiwari and A. Klar, <b>Momentum transfer to nanoobjects between isothermal parallel plates</b> , <i>Microfluidics and Nanofluidics</i> , <b>2009</b> , 6, 489-498.                                                                                                                                                                                                  | Simulationen                   | Hardt                                 |                                                      |
| T. Hahn, A. Kurz and S. Hardt, <b>Size separation of nucleic acids by electrophoretic transport across fluid boundaries</b> , Proc. $\mu$ TAS2009, 13th Int. Conf. Miniaturized Systems for Chemistry and Life Sciences, Jeju, Korea, November 1-5, <b>2009</b> , 809-811.                                                                                                       | Nukleinsäuretrennung           | Hardt                                 |                                                      |
| A. A. Donkov, S. Hardt, S. Tiwari and A. Klar, <b>Coupling of heat and momentum transfer between nanostructured surfaces</b> , Proc. ASME 2009, 2nd Micro/Nanoscale Heat & Mass Transfer International Conference, Shanghai, China, December 18-21, <b>2009</b> , paper # 18061.                                                                                                 | Wärmetransport                 | Hardt                                 |                                                      |
| H. Ihmels,* K. Schäfer, <b>Excited-State Acidity of the 8-Hydroxyacridizinium Ion - A Water-Soluble Photoacid</b> , <i>Photochemical and Photobiological Sciences</i> , <b>2009</b> , 8, 309–311.                                                                                                                                                                                | Fluoreszenzsensorik            | Ihmels                                |                                                      |
| M. Tian, H. Ihmels,* <b>Selective Ratiometric Detection of Mercury(II) Ions in Water with an Acridizinium-Based Fluorescent Probe</b> . <i>Chemical Communications</i> , <b>2009</b> , 3175–3177.                                                                                                                                                                                | Fluoreszenzsensorik            | Ihmels                                |                                                      |
| M. Tian, H. Ihmels,* <b>Synthesis of Fluorescent 9-Aryl-Substituted Benzo[b]quinolizinium Derivatives</b> . <i>Synthesis</i> , <b>2009</b> , 4226–4234.                                                                                                                                                                                                                          | Fluoreszenzsensorik            | Ihmels                                |                                                      |
| H. Zhuang, V. V. S. S. Srikanth, X. Jiang X, J. Luo, H. Ihmels, I. Aronov, B. W. Wenclawiak, M. Adlung, C. Wickleder, <b>Allylamine-mediated DNA attachment to polycrystalline diamond surface</b> , <i>Appl. Phys. Lett.</i> <b>2009</b> , 95, 143703                                                                                                                           | Oberflächen                    | Ihmels, Wenclawiak,<br>Jiang (Siegen) |                                                      |
| R. Gutzler, S. Lappe, K. Mahata, M. Schmittel, W. M. Heckl, M. Lackinger, <b>Aromatic interaction vs. hydrogen bonding in self-assembly at the liquid-solid interface</b> , <i>Chemical Communications</i> , <b>2009</b> , 680-682.                                                                                                                                              | Oberflächen-<br>strukturierung | Schmittel                             | Heckl, Lackinger<br>(München)                        |
| G. Li, S. Moreno Flores, C. Vavilala, M. Schmittel, K. Graf, <b>Evaporation Dynamics of Microdrops on Self-Assembled Monolayers of Dialkyl Disulfides</b> , <i>Langmuir</i> <b>2009</b> , 25, 13438–13447.                                                                                                                                                                       | Funktionelle<br>Oberflächen    | Graf, Schmittel                       |                                                      |
| G. Nöll, S. Trawöger, M. von Sanden-Flohe, B. Dick and M. Grininger, <b>Blue-Light Triggered Photorelease of Active Chemicals Captured by the Flavoprotein Dodecin</b> , <i>ChemBioChem</i> <b>2009</b> , 10, 834-837                                                                                                                                                            | Nanochemie                     | Nöll                                  | Dick (Regensburg),<br>Grininger (MPI<br>Martinsried) |

# Publikationen Forschungszentrum Cμ

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| F. Tasca, L. Gorton, W. Harreither, D. Haltrich, R. Ludwig, and G. Nöll, <b>Comparison of Direct and Mediated Electron Transfer for Cellobiose Dehydrogenase from <i>Phanerochaete sordida</i></b> , <i>Anal. Chem.</i> <b>2009</b> , <i>81</i> , 2791-2798                                                                                                            | Biosensorik                | Nöll           | Gorton (Lund), Harreither (Wien), Ludwig (Graz) |
| M. N. Zafar, F. Tasca, L. Gorton, E. V. Patridge, J. G. Ferry, and G. Nöll, <b>Tryptophan Repressor-Binding Proteins from <i>Escherichia coli</i> and <i>Archaeoglobus fulgidus</i> as New Catalysts for 1,4-Dihydronicotinamide Adenine Dinucleotide Dependent Amperometric Biosensors and Biofuel Cells</b> , <i>Anal. Chem.</i> <b>2009</b> , <i>81</i> , 4082-4088 | Biosensorik                | Nöll           | Gorton (Lund), Ferry (Penn State)               |
| E. Bonaccorso, D. S. Golovko, H.-J. Butt, R. Raiteri, P. Bonanno, T. Haschke, W. Wiechert, <b>Atomic Force Microscope Cantilevers Used as Sensors for Monitoring Microdrop Evaporation</b> in: <i>Applied Scanning Probe Methods XI</i> , Band 11-13, B. Bhushan, H. Fuchs, und M. Tomitori, (Hrsg.), Seiten 57-65, Springer Verlag, Heidelberg (2009).                | Mikrotröpfchen             | Wiechert, Butt | Bonaccorso                                      |
| S. Schnittert, R. Winz, E. von Lieres, <b>Development of a 3D model for packed bed liquid chromatography in micro-columns</b> , <i>Proceedings of UKSim 3rd European Symposium on Computer Modeling and Simulation</i> (IEEE Computer Society) <b>2009</b> , 193–197. <a href="http://dx.doi.org/10.1109/EMS.2009.62">http://dx.doi.org/10.1109/EMS.2009.62</a>        | Trennung                   | von Lieres     |                                                 |
| S. Schnittert, R. Winz, E. von Lieres, <b>Development of a 3D model for packed bed liquid chromatography in microcolumns</b> , in A. Gnauck, B. Luther (Eds.), <i>ASIM 2009</i> , 20. Symposium Simulationstechnik (Cottbus, September 23-25, 2009), Shaker Verlag, Aachen, <b>2009</b> , 52-53.                                                                       | Trennung                   | von Lieres     |                                                 |
| M. Schmittel, K. Mahata, <b>Multicomponent Assembly of Heterometallic Isosceles Triangles</b> , <i>Inorg. Chem.</i> <b>2009</b> , <i>48</i> , 822-824                                                                                                                                                                                                                  | Nanochemie                 | Schmittel      |                                                 |
| J. Fan, J. W. Bats, M. Schmittel, <b>Combining Dynamic Heteroleptic Complex Formation with Constitutional Dynamic Synthesis – A Facile Way to M<sub>3</sub>LL' Cage Assemblies</b> , <i>Inorg. Chem.</i> <b>2009</b> , <i>48</i> , 6338-6340.                                                                                                                          | Nanochemie                 | Schmittel      | Bats (Univ. Frankfurt)                          |
| M. Schmittel, B. He, J. Fan, J. W. Bats, M. Engeser, M. Schlosser, H.-J. Deiseroth, <b>Cap for Copper(I) Ions! Metallosupramolecular Solid and Solution State Structures on the Basis of the Dynamic Tetrahedral [Cu(phenAr<sub>2</sub>)(py)<sub>2</sub>]<sup>+</sup> Motif</b> , <i>Inorg. Chem.</i> <b>2009</b> , <i>48</i> , 8192–8200.                             | Nanostrukturen             | Schmittel      |                                                 |
| K. Mahata, M. Schmittel, <b>From Twofold Compleitive to Integrative Self-sorting: a Five-Component Supramolecular Trapezoid</b> , <i>J. Am. Chem. Soc.</i> <b>2009</b> , <i>131</i> , 16544–16554.                                                                                                                                                                     | Nanochemie                 | Schmittel      |                                                 |
| Chen, Q.; Schönherr, H.; Vancso, G. J., <b>Mechanical Properties of Block Copolymer Vesicle Membranes by Atomic Force Microscopy</b> <i>Soft Matter</i> <b>2009</b> , <i>5</i> , 4944-4950.                                                                                                                                                                            | Nanochemie, Nanostrukturen | Schönherr      | Vancso (Enschede)                               |
| Chen, Q.; Schönherr, H.; Vancso, G. J., <b>Block Copolymer Vesicles as Nanosized Reactors for Enzymatic Reactions</b> <i>Small</i> , <b>2009</b> , <i>5</i> , 1436–1445.                                                                                                                                                                                               | Nanochemie, Nanostrukturen | Schönherr      | Vancso (Enschede)                               |
| Tocha, E.; Schönherr, H.; Vancso, G. J., <b>Surface Relaxations of Poly(methyl methacrylate) Assessed by Friction Force Microscopy on the Nanoscale</b> <i>Soft Matter</i> , <b>2009</b> , <i>5</i> , 1489-1495                                                                                                                                                        | Nanochemie, Nanostrukturen | Schönherr      | Vancso (Enschede)                               |
| Chen, Q.; Groote, R.; Schönherr, H.; Vancso, G. J., <b>Probing Single Enzyme Kinetics in Real-Time</b> , <i>Chem. Soc. Rev.</i> , <b>2009</b> , <i>38</i> , 2671 - 2683                                                                                                                                                                                                | Nanochemie, Nanostrukturen | Schönherr      | Vancso (Enschede)                               |