Further recent high impact publications by CeNTech scientists:

2015

C. Riethmuller, M. A. McAleer, S. A. Koppes, R. Abdayem, J. Franz, M. Haftek, L. E. Campbell, S. F: MacCallum, W. H. McLean, A. D. Irvine, S. Kezic.
Filaggrin breakdown products determine corneocyte conformation in patients with atopic dermatitis.
J Allergy Clin Immunol. 2015 Jun 11. pii: S0091-6749(15)00649-1. doi: 10.1016/j.jaci.2015.04.042. [Epub ahead of print] PubMed PMID: 26071937.

Harry Mönig, Diego R. Hermoso, Oscar Díaz Arado, Milica Todorovíc, Alexander Timmer, Simon Schüler, Gernot Langewisch, Rubén Pérez, and Harald Fuchs
Submolecular Imaging by Noncontact Atomic Force Microscopy with an Oxygen Atom Rigidly Connected to a Metallic Probe
ACS Nano, DOI: 10.1021/acsnano.5b06513

F. S. Ielasi, M. Hirtz, Sekula-Neuner, T. Laue, H. Fuchs, R. G. Willaert
Dip-pen nanolithography-assisted protein crystallization
J. Am. Chem. Soc. 137, 154-157 (2015)

D. Ji, Y. Wang, L. F. Chi, H. Fuchs
Enhanced Charge Injection Through Nanostructured Electrodes for Organic Field Effect Transistors
Adv. Funct. Mater. , 5pp (2015)

Kim, J. H.; Gensch, T.; Z., Dongbing; Stegemann, L.; Strassert, C. A.; Glorius, F;
Rh(III)-Catalyzed C–H Activation with Pyridotriazoles: Direct Access to Fluorophores for Metal Ion Detection.
Angewandte Chemie International Edition 2015

Z., Dongbing; Kim, J. H.; Stegemann, L.; Strassert, C. A.; Glorius, F.;
Co(III)-Catalyzed Directed C–H Coupling with Diazo Compounds: Straightforward Access toward Novel Extended π-Systems.
Angewandte Chemie International Edition 2015, DOI: 10.1002/anie.201411994

Sanning, J.; Ewen, P.; Stegemann, L.; Schmidt, J.; Daniliuc, C. G.; Koch, T.; Doltsinis, N. L.; Wegner, D.; Strassert, C. A;
Scanning-Tunneling-Spectroscopy-Directed Design of Tailored Deep-Blue Emitters.
Angewandte Chemie International Edition 2015, 54, 786

2014

M. Feldmann, D. Dietzel, H. Fuchs, A. Schirmeisen
Influence of contact aging on nanoparticle friction kinetics
Physical Review Letters 112, 155503-(5pp) (2014)

Bünz, J., Brink, T., Tsuchija, K., Meng, F., Wilde, G., Albe, K.
Low temperature heat capacity of a severely deformed metallic glass
Physical Review Letters 112 (2014) 135501

Mitrofanov, Y.P., Peterlechner, M., Divinski, S.V., Wilde, G.
Impact of Plastic Deformation and ShearBand Formation on the Boson Heat Capacity Peak of Metallic Glass
Physical Review Letters 112 (2014) 135901

Zastrau, U., P. Sperling, M. Harmand, A. Becker, T. Bornath, R. Bredow,S. Dziarzhytski, T. Fennel, L.B. Fletcher, E. Förster, S. Göde, G. Gregori,V. Hilbert, D. Hochhaus, B. Holst, T. Laarmann, H.J. Lee, T. Ma, J.P. Mithen, R. Mitzner, C.D. Murphy, M. Nakatsutsumi, P. Neumayer, A. Przystawik, S. Roling, M. Schulz, B. Siemer, S. Skruszewicz, J. Tiggesbäumker, S. Toleikis, T. Tschentscher, T. White, M. Wöstmann, H. Zacharias, T. Döppner, S.H. Glenzer, R. Redmer;
Resolving ultrafast heating of dense cryogenic hydrogen
Physical Revue Letters 112, 105002 (2014)

L. Jiang, X. Chen, N. Lu, L. F. Chi
Spatially confined assembly of nanoparticles
Acc. Chem. Res. 47, 3009–3017 (2014)

H.-Y. Gao, P. A. Held, M. Knor, C. Mück-Lichtenfeld, J. Neugebauer, A. Studer, H. Fuchs
Decarboxylative polymerization of 2,6-naphthalenedicarboxylic acid at surfaces
J. Am. Chem. Soc. 136, 9658–9663 (2014)

J. Y. Huang, Y. K. Lai, F. Pan, L. Yang, H. Wang, K. Q. Zhang, H. Fuchs, L. F. Chi
Multifunctional superamphiphobic TiO 2 nanostructure surfaces with facile wettability and adhesion engineering
Small 10, 4865–4873 (2014)

U. Bog, F. Brinkmann,, H. Kalt, C. Koos, T. Mappes, M. Hirtz,H. Fuchs, S. Köber
Large-scale parallel surface functionalization of goblet-type whispering gallery mode microcavity arrays for biosensing applications
Small 10, 3863–3868 (2014)

H. Wang, W. Wang, L. Li, M. Hirtz, C. G. Wang, Y. Wang, Z. Xie, H. Fuchs, L. F. Chi
Tunable organic hetero-patterns via molecule diffusion control
Small 10, 3045–3049 (2014)

H. Wang, W. Wang, L. Li, J. Zhu, W. Wang, D. Zhang, Z. Xie, H. Fuchs, Y. Lei, L. F. Chi
Surface microfluidic patterning and transporting organic small molecules
Small 10, 2549-2552 (2014)

X. Zhang, J. Zhu, X. Huang, Q. Qian, Y. He, L. F. Chi, Y. Wang
Controllable and facile fabrication of gold nanostructures for selective metal-assisted etching of silicon
Small 10, 2451–2458 (2014)

E. Oppong, P. N. Hedde, S. Sekula-Neuner, L. Yang, F. Brinkmann, R. M. Dörlich, M. Hirtz, H. Fuchs, G. U. Nienhaus, A. C. B. Cato
Localization and dynamics of glucocorticoid receptor at the plasma membrane of activated mast cells
Small 10, 1991–1998 (2014)

H. Zhang, J.-H. Franke, D. Zhong, Y. Li, A. Timmer, O. Díaz Arado, H. Mönig, H. Wang, L. F. Chi, Z. Wang, K. Müllen, H. Fuchs
Surface supported gold–organic hybrids: On-surface synthesis and surface directed orientation
Small 10, 1361–1368 (2014)

D. Zhong, T. Blömker, C. Mück-Lichtenfeld, H. Zhang, G. Kehr, G. Erker,H. Fuchs, L. F. Chi
Thymine and adenine tetrads formed on anisotropic metal surfaces
Small 10, 265–270 (2014)

E. Oppong, P. N. Hedde, S. Sekula-Neuner, L. Yang, F. Brinkmann, R. M. Dörlich, M. Hirtz, H. Fuchs, G. U. Nienhaus, A. C. B. Cato
Localization and dynamics of glucocorticoid receptor at the plasma membrane of activated mast cells
Small 10, 1991–1998 (2014)

H. Wang, W. Wang, L. Li, M. Hirtz, C. G. Wang, Y. Wang, Z. Xie, H. Fuchs, L. F. Chi
Tunable organic hetero-patterns via molecule diffusion control
Small, 5pp (2014)

H. Zhang, J.-H. Franke, D. Zhong, Y. Li, A. Timmer, O. Díaz Arado,H. Mönig, H. Wang, L. F. Chi, Z. Wang, K. Müllen, H. Fuchs
Surface supported gold–organic hybrids: On-surface synthesis and surface directed orientation
Small 10, 1361–1368 (2014)

D. Zhong, T. Blömker, C. Mück-Lichtenfeld, H. Zhang, G. Kehr, G. Erker, H. Fuchs, L. F. Chi;
Thymine and adenine tetrads formed on anisotropic metal surfaces
Small 10, 265–270 (2014)

2013

Y. Hua, A. Woehler, M. Kahms, V. Haucke, E. Neher E, J. Klingauf
Blocking endocytosis enhances short-term synaptic depression under conditions of normal availability of vesicles
Neuron 80, 343-349 (2013)

L. Li, P. Gao, M. Baumgarten, K. Müllen, N. Lu, H. Fuchs, L. F. Chi
High performance field-effect ammonia sensors based on a structured ultrathin organic semiconductor film
Adv. Mater. 25, 3419–3425 (2013)

W. Wang, C. Du, L. Li, H. Wang, C. Wang, Y. Wang, H. Fuchs, L. F. Chi
Addressable organic structure by anisotropic wetting
Adv. Mater. 25, 2018-2023 (2013)

Y. Lai, F. Pan, C. Xu, H. Fuchs, L. F. Chi
In situ surface-modification-induced superhydrophobic patterns with reversible wettability and adhesion
***Adv. Mater.** 25, 1682-1686 (2013)*

Cristina Cebrián, Matteo Mauro, Dimitrios Kourkoulos, Pierluigi Mercandelli, Dirk Hertel, Klaus Meerholz, Cristian A. Strassert and Luisa De Cola
Luminescent Neutral Platinum Complexes Bearing an Asymmetric N^N^N Ligand for High-Performance Solution-Processed OLEDs
Advanced Materials, Special Issue: Gated Systems for Multifunctional Optoelectronic Devices, Volume 25, Issue 3, pages 437–442, January 18, 2013

L. Li, P. Gao, W. Wang, K. Müllen, H. Fuchs, L. F. Chi
Growth of ultrathin organic semiconductor microstripes with thickness control in the monolayer precision
Angew. Chem. Int. Ed. 52, 12530–12535 (2013)
Angew. Chem. 125, 12762–12767 (2013)

H.-Y. Gao, H. Wagner, D. Zhong, J.-H. Franke, A. Studer, H. Fuchs
Glaser coupling at metal surfaces
Angew. Chem. Int. Ed. 52, 4024-4028 (2013)
Angew. Chem. 125, 4116-4120 (2013)

D. Wegner, R. Yamachika, X. Zhang, Y. Wang, M. F. Crommie, and N. Lorente
Adsorption site determination of a molecular monolayer via inelastic tunneling
Nano Letters 13, 2346 (2013)

H. Mönig, M. Todorovic, M. Z. Baykara, T. C. Schwendemann, L. Rodrigo,E. I. Altman, R. Perez, U. D. Schwarz
Understanding scanning tunneling microscopy contrast mechanisms on metal oxides: A case study
ACS Nano 7, 10233–10244 (2013)

O. Díaz Arado, H. Mönig, H. Wagner, J.-H. Franke, G. Langewisch, P. Held, A. Studer, H. Fuchs
On-surface azide-alkyne cycloaddition on Au (111)
ACS Nano 7, 8509–8515 (2013)

D. Mishra, T.Z. Markus, R. Naaman, M. Kettner, B. Göhler, H. Zacharias, N. Friedman, M. Sheves, C. Fontanesi
Spin-dependent electron transmission through bacteriorhodopsin embedded in purple membrane
Proc. Nat. Acad. Sci. 110,14872 (2013)

P. R. Ewen, J. Sanning, N. L. Doltsinis, M. Mauro, C. A. Strassert, and D. Wegner
Unraveling Orbital Hybridization of Triplet Emitters at the Metal-Organic Interface
Physical Review Letters 111, 267401 (2013)

D. Dietzel, M. Feldmann, U. D. Schwarz, H. Fuchs, A. Schirmeisen
Scaling laws of structural lubricity
Phys. Rev. Lett. 111, 235502-(5pp) (2013)

G. Langewisch, J. Falter, H. Fuchs, A. Schirmeisen
Forces during the controlled displacement of organic molecules
Phys. Rev. Lett. 110, 036101-(5pp) (2013)

F. Brinkmann, M. Hirtz, A. M. Greiner, M. Weschenfelder, B. Waterkotte, M. Bastmeyer, H. Fuchs
Interdigitated multicolored bioink micropatterns by multiplexed polymer pen lithography
Small 9, 3266–3275 (2013)

Y. Lai, L. Lin, F. Pan, J. Huang, R. Song, Y. Huang, C. Lin, H. Fuchs, L. F. Chi
Bioinspired patterning with extreme wettability contrast on TiO2 nanotube array surface: A versatile platform for biomedical applications
Small 9, 2945–2953 (2013)

Z. Li, J. Hüve, C. Krampe, G. Luppi, M. Tsotsalas, J. Klingauf, L. De Cola, K. Riehemann
Internalization pathways of anisotropic disc-shaped zeolite l nanocrystals with different surface properties in hela cancer cells
Small 9, 1809–1820 (2013)

Á. Barroso, M. Woerdemann, A. Vollmer, G. von Bally, B. Kemper, and C. Denz
Three-Dimensional Exploration and Mechano- Biophysical Analysis of the Inner Structure of Living Cells
Small 9, 885-893 (2013)

H. Zhang, J.-H. Franke, D. Y. Zhong, Y. Li, A. Timmer, O. Díaz Arado, H. Mönig, H. Wang, L. F. Chi, Z. H. Wang, K. Müllen, and H. Fuchs
Surface supported gold-organic hybrids: on-surface synthesis and surface directed orientation
Small 10, 1361-1368 (2013)

2012

S. Sengupta, D. Ebeling, S. Patwardhan, X. Zhang, H. von Berlepsch, C. Böttcher, V. Stepanenko, S. Uemura, C. Hentschel, H. Fuchs, F. C. Grozema, L. D. A. Siebbeles, A. R. Holzwarth, L.F. Chi, F. Würthner
Biosupramolecular nanowires from chlorophyll dyes with exceptional charge-transport properties
Angew. Chem. 124, 6484-6488 (2012)

L. Li, K. Meise-Gresch, L. Jiang, C. Du, W. Wang, H. Fuchs, L. F. Chi;
The electrode's effect on the stability of organic transistors and circuits
Adv. Mater. 24, 3053-3058 (2012)

L. Li, L. Jiang, W. Wang, C. Du, H. Fuchs, W. P. Hu, L. F. Chi
High performance and stable organic transistors and circuits with patterned polypyrrole electrodes
Adv. Mater. 24, 2159-2164 (2012)

C. Höppener, Z. J. Lapin, P. Bharadwaj, L. Novotny;
Self-similar gold-nanoparticle antennas for a cascaded enhancement of the optical field
Phys. Rev. Lett. 109, 017402-(4pp) (2012)

S. Linden, D. Zhong, A. Timmer, N. Aghdassi, J.-H. Franke, H. Zhang,
X. Feng, K. Müllen, H. Fuchs, L. F. Chi, H. Zacharias;
Electronic structure of spatially aligned graphene nanoribbons on Au(788)
Phys. Rev. Lett. 108, 216801-(5pp) (2012)

K. Riehemann;
Nanotoxicity: How the body develops a way to reduce the toxicity of carbon nanotubes
Small 8, 1970–1972 (2012)

G. Langewisch, W. Kaminski, D. Braun, R. Möller, H. Fuchs, A. Schirmeisen, R. Pérez
Understanding dissipative tip–molecule interactions with submolecular resolution on an organic adsorbate
Small 8, 602-611 (2012)
S. Sekula-Neuner, J. Maier, E. Oppong, A. Cato, M. Hirtz, H. Fuchs
Allergen arrays for antibody screening and immune cell activation profiling generated by parallel lipid dip-pen nanolithography
Small 8, 585-591 (2012)

D.K. Bhowmick, S. Linden, A. Devaux, L. De Cola, and H. Zacharias
Functionalization of Amorphous SiO2 and 6H-SiC(0001) Surfaces with Benzo[ghi]perylene-1,2-dicarboxylic Anhydride via an APTES Linker
Small 8, 592 (2012) (back cover)

X. Yang, G. Zhang, L. Li, D. Zhang, L. F. Chi, D. Zhu
Self-assembly of a dendron-attached tetrathiafulvalene: Gel formation and modulation in the presence of chloranil and metal ions
Small 8, 578-584 (2012)

C. Schulz, S. Nowak, R. Fröhlich, and B.J. Ravoo
Covalent layer-by-layer assembly of redoxactive molecular multilayers on silicon (100) by photochemical thiol-ene chemistry.
Small 8, 569 (2012)

Y. Liu, M. He, Q. Meng, Z. Tang, L. Li, W. Hu
Mass-production of single-crystalline device arrays of an organic charge-transfer complex for its memory nature
Small 8, 557-560 (2012)

J. Liu, K. Ditte, W. Jiang, Z.H. Wang, and C. Denz;
Dipolar-Modulated Charge-Doped Trilayer Organic Semiconductor n-n Heterojunction.
Small 8, 546 (2012)

S. Oberhansl, M. Hirtz, A. Lagunas, R. Eritja, E. Martinez, H. Fuchs, J. Samitier;
Facile modification of silica substrates provides a platform for direct-writing surface click chemistry
Small 8, 541-545 (2012)

D. Zhong, L. F. Chi, H. Guo, D. Shi, H. Fuchs
Molecular cloisonné: Multicomponent organic alternating nanostructures at vicinal surfaces with tunable length scales
Small 8, 535-540 (2012)

H.P. Xu, M. Schönhoff, and X. Zhang
Unconventional Layer-by-Layer Assembly: Surface Molecular Imprinting and its Applications
Small 8, 517 (2012)

W. Yang, Yo. Li, H. Liu L. F. Chi, Yu. Li
Design and assembly of rotaxane-based molecular switches and machines
Small 8, 504-516 (2012)

L. Li, M. H. Köpf, S. V. Gurevich, R. Friedrich, L. F. Chi
Structure formation by dynamic self-assembly
Small 8, 488-503 (2012)

H. Fuchs, X. Zhang, L. F. Chi, D. Zhang
TRR 61, The "Interplay" between Münster and Beijing for Promoting Research on Multilevel Molecular Assemblies: Structure, Dynamics, and Functions
Small 8, 479-480 (2012)

2011

R. Sinha, S. Ahmed, R. Jahn, J. Klingauf
Two synaptobrevin molecules are sufficient for vesicle fusion in central nervous system synapses
Proc. Nat. Acad Sci 108(34), 14318-23 (2011)

Lei, Y., Yang, S., Wu, M., Wilde, G.;
Surface Patterning using Templates: Concept, Properties and Device Applications
Chemical Society Reviews, 40, 1247-1258 (2011)

T. Sun, G. Qing, B. Su, L. Jiang;
Functional biointerface materials inspired from nature
Chemical Society Reviews, 40, 2909–2921 (2011)

C. A. Strassert, C.-H. Chien, M. D. Galvez Lopez, D. Kourkoulos, D. Hertel, K. Meerholz, L. De Cola; *Switching on luminescence by the self-assembly of a Pt(II) complex into gelating nanofibers and electroluminescent films*
Angewandte. Chemie International Edition, 50, 946 – 950 (2011)

D. Zhong, F. L. Sousa, A. Müller, L. F. Chi, H. Fuchs
A nanosized molybdenum oxide wheel with a unique electronic- necklace structure: STM study with submolecular resolution
Angewandte Chemie 123, 7156-7159 (2011)

Yang, S.K., Xu, F., Ostendorp, S., Wilde, G., Zhao, H., Lei, Y.;
Template-Confined Dewetting Process to Surface Nanopatterns: Fabrication, Structural Tunability, and Structure-Related Properties
Advanced Functional Materials, 21 (2011) 2446-2455

J.M. Fernández-Hernández, C.-H. Yang, J. Beltrán, V. Lemaur, F. Polo, R. Frölich, J. Cornil, L. De Cola;
Control of the mutual arrangement of cyclometalated ligands in cationic iridium(III) complexes. Synthesis, spectroscopy and electroluminescence of the different isomers
Journal American Chemical Society, 133 (27), 10543-10558 (2011)

2010

Nermin Seda Kehr, Kristina Riehemann, Jehad El-Gindi, Andreas Schaefer, Harald Fuchs, Hans-Joachim Galla , Luisa De Cola
Cell Adhesion and Cellular Patterning on a Self-Assembled Monolayer of Zeolite L Crystals
Advanced Functional Materials 2010, *20*, 2248-2254. DOI:10.1002/adfm.201000205

M. Mauro, K. C. Schuermann, R. Prétôt, A. Hafner, P. Mercandelli, A. Sironi, L. De Cola
Complex Ir (III) Salts. A New Class of Luminescent Porous Crystalline Materials
Angewandte Chemie International Edition, 49, 1222-1226 (2010)

K. V. S. Ranganath, J. Kloesges, A. H. Schäfer, F. Glorius
Asymmetric Nanocatalysis: N-Heterocyclic Carbenes as Chiral Modifiers of Fe3O4/Pd Nanoparticles
Angewandte Chemie International Edition, 49, Iss.42, p. 7786–7789 (2010)

B. Schulte, M. Tsotsalas, M. Becker, A. Studer, L. De Cola;
Dynamic and Reversible Micro Crystal Assembly via Nitroxide Exchange Reactions
Angewandte Chemie International Edition, 49, 6881–6884 (2010)

Strassert, C. A.; Chien, C.-H.; Galvez-Lopez, M. D.; Kourkoulos, D.; Hertel, D.; Meerholz, K.; De Cola, L.
Switch-on luminescence by self-assembly of a Pt(II) complex into gelating nanofibers and electroluminescent films
Angewandte Chemie International Edition, 50, 946 (2010)

L. Li, M. Hirtz, W. Wang, C. Du, H. Fuchs, L. F. Chi
Patterning of polymer electrodes by nanoscratching
Advanced Materials, 22, 1374-1378 (2010)

W. Wang, C. Du, H. Bi, Y. Sun, Y. Wang, C. Mauser, E. Da Como H. Fuchs, L. F. Chi
Tunable multicolor ordered patterns with two dye molecules
Advanced Materials, 22, 2764–2769 (2010)

M. Woerdemann, S. Gläsener, F. Hörner, A. Devaux, L. De Cola, C. Denz
Dynamic and reversible organization of zeolite L crystals induced by holographic optical tweezers
Advanced Materials, 22, 4176-4179 (2010)

M. M. Tsotsalas, K. Kopka, G. Luppi, S. Wagner, M. Law, M. Schäfers, L. De Cola
Encapsulating 111In in Nanocontainers for Scintigraphic Imaging: Synthesis, Characterization and In Vivo Biodistribution
ACS Nano, 4, 342-348 (2010)

D. Zhong, K. Wedeking, T. Blömker, G. Erker, H. Fuchs, L. F. Chi
Multilevel supramolecular architectures self-assembled on metal surfaces
ACS Nano 4, 1997-2002 (2010)

H.-Y. Chen, M. Hirtz, X. Deng, T. Laue, H. Fuchs, J. Lahann
Substrate-independent dip-pen nanolithography based on reactive coatings
Journal American Chemical Society 132, 18023–18025 (2010)

D. Jiang, F. Seela;
Oligonucleotide Duplexes and Multi-Strand Assemblies with 8-Aza-2'-deoxyisoguanosine: A Fluorescent isoGd Shape Mimic Expanding the Genetic Alphabet and Forming Ionophores
Journal American Chemical Society 132, 4016 (2010)

L. Li, P. Gao, K. C. Schuermann, S. Ostendorp, W. Wang, C. Du, Y. Lei, H. Fuchs, L. De Cola, K. Müllen, L. F. Chi
Controllable growth and field-effect property of monolayer to multilayer microstripes of an organic semiconductor
Journal American Chemical Society 132, 8807–8809 (2010)
E. Quartapelle Procopio, M. Mauro, M. Panigati, D. Donghi, P. Mercandelli, A. Sironi, G. D´Alfonso, L. De Cola
Highly Emitting Concomitant, and Interconvertible Polymorphic Crystals of a Dinuclear Rhenium Complex
Journal American Chemical Society 132, 14397-14399 (2010)

G. Qing, H. Xiong, F. Seela, T. Sun
Spatially controlled DNA nanopatterns by "click" chemistry using oligonucleotides with different anchoring sites
Journal American Chemical Society 132, 15228–15232 (2010)

I. Barel, M. Urbakh, L. Jansen, A. Schirmeisen
Multibond dynamics of nanoscale friction: The role of temperature
Physical Review Letters 104, 066104-(4pp) (2010)

R. Frigge, T. Hoger, B. Siemer, H. Witte, M. Silies, H. Zacharias, T. Olsen, J. Schiøtz
Site specificity in femtosecond laser desorption of neutral H atoms from graphite (0001)
Physical Review Letters 104, 256102 (2010)

L. Jansen, H. Hölscher, H. Fuchs, A. Schirmeisen
Temperature dependence of atomic-scale stick-slip friction
Physical Review Letters 104, 256101-(4pp) (2010)

2009

H. Gan, K. Tang, T. Sun, M. Hirtz, Y. Li, L. F. Chi, S. Butz, H. Fuchs;
Selective adsorption of DNA on chiral surfaces: Supercoiled or relaxed conformation
Angewandte Chemie International Edition 48, 5282 (2009)

A. Guerrero-Martinez, S. Fibikar, I. Pastoriza-Santos, L. M. Liz-Marzán, L. De Cola
Microcontainers with Fluorescent Anisotropic Zeolite L Cores and Isotropic Silica Shells
Angewandte Chemie International Edition, 48, 1266-1270 (2009) (Cover of the issue)

K. Riehemann, S. W. Schneider, T. A. Luger, B. Godin, M. Ferrari, H. Fuchs;
Nanomedizin – Herausforderung und Perspektiven
Angewandte Chemie 121, 886 (2009)
Nanomedicine — challenge and perspectives
Angewandte Chemie Int. Ed. 48, 872 (2009)

C. Strassert, M. Otter, R. Albuquerque, A. Höne, Y. Vida, B. Maier, L. De Cola
Photoactive hybrid nanomaterials for targeting, labeling and killing antibiotic resistant bacteria
Angewandte Chemie International Edition, 48, 7928-7931 (2009) (VIP Paper).

C. Tao, J. Sun, X, Zhang, R. Yamachika, D. Wegner, Y. Bahri, G. Samsonidze, M. L. Cohen, S. G. Louie, T. D. Tilly, R. A. Siegalman, and M. F. Crommie;
Spatial resolution of a type II heterojunction in a single bipolar molecule,
Nano Letters 9, 3963 (2009).

D. Zhong, T. Blömker, K. Wedeking, L. F. Chi, G. Erker, H. Fuchs;
Surface-Mounted molecular rotors with variable functional groups and rotation radii
Nano Letters 9, 4387-4391 (2009)

D. Y. Zhong, J. Franke, T. Blömker, G. Erker, L. F. Chi, H. Fuchs;
Manipulating surface diffusion ability of single molecules by scanning tunneling microscopy
Nano Letters 9, 132-136 (2009)

F. Cucinotta, Z. Popovic, E. Weiss, G. Whitesides, L. De Cola
Micro-Contact Transfer Printing of Zeolite Monolayers
Advanced Materials, 21, 1142-1145 (2009)

W. Wang C. Du, D. Zhong, M. Hirtz, Y. Wang, N. Lu, L. Wu, D. Ebeling, L. Li, H. Fuchs, L. F. Chi;
Control over patterning of organic semiconductors: step edge induced area selective growth
Advanced Materials, 21, 4721 (2009)

B. B. Zhang, Y.-Y. Weng, X.-P. Huang, M. Wang, R.-W. Peng, N.-B. Ming, B. Yang, N. Lu, L. F. Chi
Creating in-plane metallic-nanowire arrays by corner-mediated electrodeposition
Advanced Materials, 21, 3576 (2009)

G. Qing, X. Wang, H. Fuchs, T. Sun
Nucleotide-responsive wettability on a smart polymer surface
Journal American Chemical Society 131, 8370 (2009)

L. Jansen, A. Schirmeisen, J. L. Hedrick, M. A. Lantz, A. Knoll, R. Cannara, B. Gotsmann
Nanoscale frictional dissipation into shear-stressed polymer relaxations
Physical Review Letters 102, 236101-(4pp) (2009)

D. Wegner, R. Yamachika, X. Zhang, Y. Wang, T. Baruah, M. R. Pederson, B. M. Bartlett, J. R. Long, and M. F. Crommie
Tuning Molecule-Mediated Spin Coupling in Bottom-Up Fabricated Vanadium-TCNE Nanostructures
Physical Review Letters 103, 087205 (2009)

2008

M. Busby, C. Blum, M. Tibben, S. Fibikar, G. Calzaferri, V. Subramaniam, L. De Cola
Time, Space and Spectrally Resolved Studies on J-Aggregate Interactions in Zeolite-L Nanochannels
J. Am. Chem. Soc., 130, 10970-10976 (2008)

K. Tang, Y. Li, H. Gun, L. F. Chi, T. Sun, H. Fuchs
Stereoselective Interaction between DNA and Chiral Surfaces
Journal American Chemical Society 130, 11284 (2008)

K. Tang, J. Zhang, W. Yan, Z. Li, Y. Wang, W. Yang, Z. Xie, T. Sun, H. Fuchs
One-step controllable synthesis for high-quality ultrafine metal oxide semiconductor nanocrystals via a separated two-phase hydrolysis reaction
Journal American Chemical Society 130, 2676 (2008)

D. Wegner, R. Yamachika, Y. Wang, V. W. Brar, B. M. Bartlett, J. R. Long,
and M. F. Crommie
Single-Molecule Charge Transfer and Bonding at an Organic/Inorganic Interface: Tetracyanoethylene on Noble Metals,
Nano Letters 8, 131 (2008).

M. Busby, H. Kerschbaumer, G. Calzaferri, L. De Cola
Orthogonally Bi-Functional Fluorescent Zeolite-L Micro-Crystals
Advanced Materials, 20, 1614-1618 (2008)

S. Bedwani, D. Wegner, M. F. Crommie, and A. Rochefort
Strongly reshaped organic-metal interfaces: Tetracyanoethylene on Cu(100)
Physical Review Letters 101, 216105 (2008)

D. Dietzel, C. Ritter, T. Mönninghoff, H. Fuchs, A. Schirmeisen, U. D. Schwarz
Frictional duality observed during nanoparticle sliding
Physical Review Letters 101, 125505 (2008)

H. Hölscher, D. Ebeling, U. D. Schwarz
Friction at atomic-scale surface steps: Experiment and theory
Physical Review Letters 101, 246105 (2008)

M. Konopka, R. Turansky, J. Reichert, H. Fuchs, D. Marx, I. Stich
Mechanochemistry and thermochemistry are different: Stress-induced strengthening of chemical bonds
Physical Review Letters 100, 115503 (2008)

K. Ruschmeier, A. Schirmeisen, R. Hoffmann
Atomic scale force vector fields
Physical Review Letters 101, 156102 (2008)

2007

Z. Popovic, M. Busby, S. Huber, G. Calzaferri, L. De Cola
Assembling Micro Crystals via Cooperative Coordinative Interactions
Angewandte Chemie International Edition, 46, 8898-8902 (2007)

Z. Popovic, M. Otter, G. Calzaferri, L. De Cola
Self-assembling living systems with functional nanomaterials
Angewandte Chemie International Edition, 46, 6188-6191 (2007)

X. Chen, S. Lenhert, M. Hirtz, N. Lu, H. Fuchs, L. F. Chi
Langmuir-Blodgett Patterning: A bottom-up Way to build Mesostructures over large Areas
Accounts of Chemical Research, 40, 393 (2007)

X. Chen, M. Hirtz, A. L. Rogach, D. V. Talapin, H. Fuchs, L. F. Chi
Correlating dynamics and selectivity in adsorption of semiconductor nanocrystals onto a self-organized pattern
Nano Letters 7, 3483 (2007)

W. Hu, N. Lu, H. Zhang, Y. Wang, N. Kehagias, V. Reboud, C. M. Sotomayor Torres, J. Hao, W. Li, H. Fuchs, L. F. Chi
Multicolor emission on prepatterned substrates using a single dye species
Advanced Materials 19, 2119 (2007)

I.V. Avilov, P. Minoofar, J. Cornil, L. De Cola
Influence of substituents on the energy and nature of the lowest excited states of heteroleptic phosphorescent Ir(III) complexes: A joint theoretical and experimental study
Journal American Chemical Society 129, 8247-8258 (2007)

K. O. Siegenthaler, A. Schäfer, A. Studer
Chemical surface modification via radical C-C bond-forming reactions
Journal American Chemical Society 129, 5826 (2007).

T. Sun, D. Han, K. Riehemann, L. F. Chi, H. Fuchs
Stereospecific interaction between immune cells and chiral surfaces
Journal American Chemical Society 129, 1496 (2007)

A. Schirmeisen, A. Taskiran, H. Fuchs, H. Bracht, S. Murugavel, B. Roling
Fast interfacial ionic conduction in nanostructured glass ceramics
Physical Review Letters 98, 225901 (2007)

W. C. Wang, D. Y. Zhong, J. Zhu, F. Kalischewski, R. F. Dou, K. Wedeking, Y. Wang, A. Heuer, H. Fuchs, G. Erker, L. F. Chi
Patterned nucleation control in vacuum deposition of organic molecules
Physical Review Letters 98, 225504 (2007)

Lei, Y., Cai, W.P. and Wilde, G.
Highly ordered nanostructures with tunable size, shape and properties: a new way to surface nano-patterning with a non-lithographic method.
Progress in Materials Science, 52, 465-539 (2007)