

Publication List

A) Contribution to books

- (1) A. Devaux, F. Cucinotta, S. Kehr, L. De Cola*, **(2010)**: Functionalization and Assembling of Inorganic Nanocontainers for Optical and Bio-medical Applications in Functional Supramolecular Architectures for Organic Electronics and Nanotechnology. Germany. Wiley VCH.

B) Articles in journals

- (34) N. S. Kehr*, A. Motealleh, A. H. Schäfer, "Cell Growth on ("Janus") Density Gradients of Bifunctional Zeolites L", **2016**, submitted.
- (33) A. Motealleh, N. S. Kehr*, "Nanocomposite Hydrogels and Their Applications in Tissue Engineering", *Adv. Healthcare Mater.* **2016**, accepted, (invited review article).
- (32) B. Ergün, L. De Cola, H.-J. Galla, N. S. Kehr*, "Surface Mediated Stimuli Responsive Organic Molecules Delivery from Porous Carrier to Adhered Cells", *Adv. Healthcare Mater.* **2016**, 5, 1588 – 1592.
- (31) N. S. Kehr*, "Enantiomorphous Periodic Mesoporous Organosilica based Nanocomposite Hydrogel Scaffolds for Cell Adhesion and Cell Enrichment", *Biomacromolecules*, **2016**, 17, 1117 – 1122.
- (30) N. S. Kehr*, K. Riehemann, "Controlled Cell Growth and Cell Migration in PMOs/Alginate Nanocomposite Hydrogels", *Adv. Healthcare Mater.* **2016**, 5, 193 – 197.
- (29) N. S. Kehr*, H.-J. Galla, K. Riehemann, H. Fuchs, "Self-assembled monolayers of enantiomerically functionalized periodic mesoporous organosilicas and the effect of surface chirality on cell adhesion behaviour", *RSC Adv.* **2015**, 5, 5704 – 5710.
- (28) N. S. Kehr*, S. Atay, B. Ergün, "Self-assembled Monolayers and Nanocomposite Hydrogels of Functional Nanomaterials for Tissue Engineering Applications" *Macromol. Biosci.* **2015**, 15, 445 – 463 (invited review article).
- (27) N. S. Kehr*, B. Ergün, H. Lülff, L. De Cola*, "Spatial controlled channel entrances functionalisation of zeolites L", *Adv. Mater.* **2014**, 26, 3248 – 3252.
- (26) K. Benson, H.-J. Galla, N. S. Kehr*, "Cell adhesion behaviour in 3D hydrogel scaffolds functionalized with D- or L-aminoacids" *Macromol. Biosci.* **2014**, 14, 793 – 798.
- (25) M. Mauro*, A. Aliprandi, D. Septiadi, N. S. Kehr, L. De Cola*, "When self-assembly meets biology: luminescent platinum complexes for imaging applications" *Chem Soc. Rev.* **2014**, 43, 4144 – 4166.
- (24) C. Glotzbach, U. Kauscher, J. Voskuhl, N. S. Kehr, M. C. A. Stuart, R. Fröhlich, H. J. Galla, B. J. Ravoo, K. Nagura, S. Saito, S. Yamaguchi*, E.-U. Würthwein*, "Fluorescent Modular Boron Systems Based on NNN- and ONO-Tridentate Ligands: Self-Assembly and Cell Imaging" *J. Org. Chem.* **2013**, 78, 4410 – 4418.
- (23) N. S. Kehr*, E. A. Prasetyanto, K. Benson, B. Ergün, A. Galstyan, H.-J. Galla, "Periodic Mesoporous Organosilica-Based Nanocomposite Hydrogels as Three-Dimensional Scaffolds" *Angew. Chem. Int. Ed.*, **2013**, 52, 1156 - 1160.
- (22) K. Benson, Y. E. A. Prasetyanto, H.-J. Galla, N. S. Kehr*, "Bifunctional periodic mesoporous organosilicas and their self-assembled monolayers as biocompatible surfaces" *Soft Matter*, **2012**, 5, 10845 - 10852.
- (21) F. Versluis, J. Voskuhl, M.C.A Stuart, N. S. Kehr, B. J. Ravoo*, A. Kros*, "Power Struggles between oligopeptides and Cyclodextrin Vesicles" *Soft Matter*, **2012**, 8, 8770 - 8777.
- (20) A. J. Ruiz-Sanchez, M. I. Montañez, C. Mayorga, M. J. Torres, N. S. Kehr, Y. Vida, D. Collado, F. Najera, L. De Cola, E. Perez-Inestrosa*, "Dendrimer-Modified Solid Supports: Nanostructured Materials with Potential Drug Allergy Diagnostic Applications", *Current Medical Chem.*, **2012**, 19, 4952 - 4954.
- (19) O. Z. Fisher, B. L. Larson, D. Graupner, M. T. Nguyen-Kim, N. S. Kehr, L. De Cola, R. Langer*, D. G. Anderson*, "Melanin-like Hydrogels Derived From Gallic Macromers" *Adv. Mater.* **2012**, 24, 3032-3036.

- (18) J. El-Gindi, K. Benson, L. De Cola, H.-J. Galla, N. S. Kehr*, "Cell Adhesion Behaviour on Enantiomerically Functionalized Zeolite L Monolayers" *Angew. Chem. Int. Ed.*, **2012**, 51, 3716-3720.
- (17) N. S. Kehr*, J. El-Gindi, H. J. Galla, L. De Cola*, "Click Chemistry on Self-assembled Monolayer of Zeolite L Crystals by Microcontact Printing - Applications in Nanobiotechnology" *Mic. Mes. Mater.*, **2011**, 144, 9-14.
- (16) N. S. Kehr*, K. Riehemann, J. El-Gindi, A. Schäfer, H. Fuchs, H. J. Galla, L. De Cola*, "Cell Adhesion and Cellular Patterning on a Self-Assembled Monolayer of Zeolite L Crystals" *Adv. Funct. Mater.*, **2010**, 20, 2248-2254.
- (15) N. S. Kehr*, A. Schäfer, B. J. Ravoo, L. De Cola*, "Asymmetric printing of molecules and zeolites on self assembled monolayers" *Nanoscale*, **2010**, 2, 601-605.
- (14) F. Verluis, I. Tomatsu, S. Kehr, C. Fregonese, M. Stuart, B. J. Ravoo*, R. Koning, A. Kros*, "Shape and Release Control of a Peptide Decorated Vesicle through pH Sensitive Orthogonal Supramolecular Interactions" *J. Am. Chem. Soc.*, **2009**, 131, 13186-13187.
- (13) K. Nienkemper, G. Kehr, S. Kehr, R. Fröhlich, G. Erker*, "(N-Arylaminomethyl)pyridine-N-oxides: Synthesis and characterization of potential ligand systems and the formation of their N,O-chelate aluminum complexes" *J. Org. Chem.*, **2008**, 18, 3063- 3073.
- (12) K. Spanhoff, G. Kehr, S. Kehr, R. Fröhlich, G. Erker*, "Functionalized phosphorus analogues of the β -diketiminato ligand systems: bis(N-arylphosphinimino)acetonitrile-derived complexes of rhodium and iridium" *Dalton Trans.*, **2008**, 25, 3339-3344.
- (11) K. Nienkemper, G. Kehr, S. Kehr, R. Fröhlich, G. Erker*, "(Amidomethyl)pyridine zirconium and hafnium complexes: Synthesis and structural characterization" *J. Org. Chem.*, **2008**, 693, 1572-1589.
- (10) H. Lange, K. Bergander, R. Fröhlich, S. Kehr, S. Nakamura, N. Shibata, T. Toru, D. Hoppe*, "Highly enantioselective reactions of configurationally labile epimeric diamine complexes of lithiated S-benzyl thiocarbamates" *Chem. Asian J.*, **2008**, 3, 88-101.
- (9) P. Spies, G. Kehr, S. Kehr, R. Fröhlich, G. Erker*, "Formation and Structural and Dynamic Features of Atropisomeric η^2 -Iminoacyl Zirconium Complexes" *Organometallics*, **2007**, 26, 5612-5620.
- (8) S. Kehr, H. Luftmann*, "Polymer characterization by electrospray-mass-spectrometry - shifting the upper mass limit" *e-Polymers*, **2007**, 10.
- (7) S. Ünalı, R. Fröhlich, D. Hoppe*, "Synthesis of enantioenriched and diastereomerically pure cis-fused bicyclic α -oxy-substituted γ -lactones via epoxidation of optically active homoaldol products" *Synthesis*, **2005**, 15, 2507-2520.
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- (4) M. Özlügedik, S. Ünalı, B. Wibbeling, D. Hoppe*, "Synthesis of enantioenriched trans-fused bicyclo[4.4.0]-dec-3-enes and bicyclo[4.3.0]non-3-enes bearing a 1,5-lactone bridge" *Adv. Synth. Cat.*, **2005**, 347, 1627-1631.
- (3) S. Ünalı, R. Fröhlich, R. Aumann*, "Organic synthesis via transition metal complexes, part 120. C-C insertion: Insertion of an alkyne into the C-C single bond between the carbene-carbon atom and the $\square$ -carbon atom of a Fischer carbene complex by an unprecedented metalla(di- $\square$ -methane) skeletal rearrangement" *Chem. Eur. J.*, **2003**, 9, 3000-3009.
- (2) R. Altundas, A. Dastan, Arif, S. Ünalı, K. Guven, O. Uzun, M. Balci*, "The di- π -methane photorearrangement of 2,3-Disubstituted benzobarrelenes and benzonorbornadiene - substituent effects in regioselectivity" *Eur. J. Org. Chem.*, **2002**, 3, 526-533.
- (1) S. Ünalı, M. Balci*, "Substituent effect on regioselectivity in the di- π -methane rearrangement: synthesis of disubstituted benzobarrelene derivatives and their photochemistry" *Tetrahedron Lett.*, **2001**, 42, 8365-8367.