

# Other Publications of the Schubert Group

## January to June 2022

- 1) Christian Kretzer, Blerina Shkodra, Paul Klemm, Paul M Jordan, Daniel Schröder, Gizem Cinar, Antje Vollrath, Stephanie Schubert, Ivo Nischang, Stephanie Hoepfner, Steffi Stumpf, Erden Banoglu, Frederike Gladigau, Rossella Bilancia, Antonietta Rossi, Christian Eggeling, Ute Neugebauer, **Ulrich S. Schubert**, Oliver Werz  
ETHOXY ACETALATED DEXTRAN-BASED NANOCARRIERS ACCOMPLISH EFFICIENT INHIBITION OF LEUKOTRIENE FORMATION BY A NOVEL FLAP ANTAGONIST IN HUMAN LEUKOCYTES AND BLOOD  
*Cell. Mol. Life Sci* **2022**, *79*, 40 (doi: 10.1007/s00018-021-04039-7)
- 2) Michael Zitnan, Lenka Müller, Karina Zub, **Ulrich S. Schubert**, Dušan Galusek, Lothar Wondraczek  
LOW-COST INKJET PRINTING OF THIN-FILM MULLITE STRUCTURES  
*Int. J. Appl. Glass Science* **2022**, *13*, 135 – 142 (doi: 10.1111/ijag.16537)
- 3) Anna Czapka, Christian Grune, Patrick Schädel, Vivien Bachmann, Karl Scheuer, Michael Dirauf, Christine Weber, Alexios-Leandros Skaltsounis, Klaus D. Jand, **Ulrich S. Schubert**, Dagmar Fischer, Oliver Werz  
DRUG DELIVERY OF 6-BROMOINDIRUBIN-3'-GLYCEROL-OXIME ETHER EMPLOYING POLY(D,L-LACTIDE-CO-GLYCOLIDE)-BASED NANOENCAPSULATION TECHNIQUES WITH SUSTAINABLE SOLVENTS  
*J. Nanobiotechnology* **2022**, *20*, 5 (doi: 10.1186/s12951-021-01179-7)
- 4) Philip Rohland, Eric Schröter, Oliver Nolte, Martin D. Hager, **Ulrich S. Schubert**  
REDOX-ACTIVE POLYMERS: THE MAGIC KEY TOWARDS ENERGY STORAGE – A POLYMER DESIGN GUIDELINE PROGRESS IN POLYMER SCIENCE  
*Progr. Polym. Sci.* **2022**, *125*, 101474 (doi: 10.1016/j.progpolymsci.2021.101474)
- 5) Dorothee Haas, Niklas Hauptstein, Michael Dirauf, Marc D. Driessen, Matthias Ruopp, **Ulrich S. Schubert**, Tessa Lühmann, and Lorenz Meinel  
CHEMO-ENZYMATIC PEGYLATION/POXYLATION OF MURINE INTERLEUKIN-4  
*Bioconjugate Chem.* **2022**, *33*, 97 – 104 (doi: 10.1021/acs.bioconjchem.1c00495)
- 6) Philipp S. Borchers, Johannes Elbert, Ilya Anufried, Maria Strumpf, Ivo Nischang, Martin D. Hager, **Ulrich S. Schubert**  
A VIologen POLYMER AND A COMPACT FERROCENE: COMPARISON OF SOLUTION VISCOSITIES AND THEIR PERFORMANCE IN A REDOX FLOW BATTERY WITH A SIZE EXCLUSION MEMBRANE  
*Macromol. Chem. Phys.* **2022**, *223*, 2100373 (doi: 10.1002/macp.202100373)
- 7) Zekarias Teklu Gebremichael, Shahidul Alam, Nicola Cefarin, Alessandro Pozzato, Teketel Yohannes, **Ulrich S. Schubert**, Harald Hoppe, Massimo Tormen  
CONTROLLING METAL HALIDE PEROVSKITE CRYSTAL GROWTH VIA MICROCONTACT PRINTED HYDROPHOBIC-HYDROPHILIC TEMPLATES  
*Crystal Research Technology* **2022**, *57*, 2100121 (doi: 10.1002/crat.202100121)
- 8) Mohsen Taghizadeh, Ali Taghizadeh, Mohsen Khodadadi Yazdi, Payam Zarrintaj, Florian J. Stadler, Joshua D. Ramsey, Sajjad Habibzadeh, Somayeh Hosseini Rad, Ghasem Naderi, Mohammad Reza Saeb, Masoud Mozafari, **Ulrich S. Schubert**  
CHITOSAN-BASED INKS FOR 3D PRINTING AND BIOPRINTING  
*Green Chemistry* **2022**, *24*, 62 – 101 (doi: 10.1039/D1GC01799C)
- 9) Alicia De San Luis, Maximilian Kleinsteuber, Timo Schuett, Stephanie Schubert, **Ulrich S. Schubert**  
MINIEMULSION POLYMERIZATION AT LOW TEMPERATURE: A STRATEGY FOR ONE-POT ENCAPSULATION OF HYDROPHOBIC ANTI-INFLAMMATORY DRUGS INTO POLYESTER-CONTAINING NANOPARTICLES  
*J. Colloid Interface Science* **2022**, *612*, 628 – 638 (doi: 10.1016/j.jcis.2021.12.189)
- 10) Timo Schuett, Julian Kimmig, Stefan Zechel, **Ulrich S. Schubert**  
FULLY AUTOMATED MULTI-STEP SYNTHESIS OF BLOCK COPOLYMERS  
*Polymers* **2022**, *14*, 292 (doi: 10.1016/j.jcis.2021.12.189)
- 11) Erik Schröter, Christian Stolze, Adrian Saal, Kristin Schreyer, Martin D. Hager, **Ulrich S. Schubert**  
ALL-ORGANIC REDOX TARGETING WITH A SINGLE REDOX MOIETY: COMBINING ORGANIC RADICAL BATTERIES AND ORGANIC REDOX FLOW BATTERIES  
*ACS Appl. Mater. Interfaces* **2022**, *14*, 6638 – 6648 (doi: 10.1021/acsami.1c21122)
- 12) Christian Stolze, Philip Rohland, Karina Zub, Oliver Nolte, Martin D. Hager, **Ulrich S. Schubert**  
A LOW-COST AMPEROMETRIC SENSOR FOR THE COMBINED STATE-OF-CHARGE, CAPACITY, AND STATE-OF-HEALTH MONITORING OF REDOX FLOW BATTERY ELECTROLYTES  
*Energy Conversion Management: X* **2022**, *14*, 100188 (doi: 10.1016/j.ecmx.2022.100188)

- 13) Philipp S. Borchers, Ilya Anufriev, Jürgen Vitz, Helmar Görls, Johannes Elbert, Ivo Nischang, Martin D. Hager, **Ulrich S. Schubert**  
REGAINING POTENTIAL: STUDIES CONCERNING 2-FERROCENYLETHYL METHACRYLATE, ITS POLYMERS, AND APPLICATION IN REDOX FLOW BATTERIES  
*Macromolecules* **2022**, *55*, 1576 – 1589 (doi: 10.1021/acs.macromol.1c02565)
- 14) Franka V. Gruschwitz, Franziska Hausig, Philipp Schüler, Julian Kimmig, Stephanie Hoepfener, David Pretzel, **Ulrich S. Schubert**, Sylvain Catrouillet, Johannes C. Brendel  
SHEAR-THINNING AND RAPIDLY RECOVERING HYDROGELS OF POLYMERIC NANOFIBERS FORMED BY SUPRAMOLECULAR SELF-ASSEMBLY  
*Chem. Mater.* **2022**, *34*, 2206 – 2217 (doi: 10.1021/acs.chemmater.1c03931)
- 15) Maria Küllmer, Felix Herrmann-Westendorf, Patrick Endres, Stefan Götz, Hamid Reza Rasouli, Emad Najafidehaghani, Christof Neumann, Rebecka Gläßner, David Kaiser, Thomas Weimann, Andreas Winter, **Ulrich S. Schubert**, Benjamin Dietzek, Andrey Turchanin  
TWO-DIMENSIONAL PHOTOSENSITIZER NANOSHEETS VIA LOW-ENERGY ELECTRON BEAM INDUCED CROSS-LINKING OF SELF-ASSEMBLED Ru(II) POLYPYRIDINE MONOLAYERS  
*Angew. Chem. Int. Ed.* **2022**, im Druck / in press (doi: 10.1002/anie.202204953)
- 16) Patrick Endres, Stefan Zechel, Andreas Winter, Martin D. Hager, **Ulrich S. Schubert**  
COMPARING MICROWAVE AND CLASSICAL SYNTHESIS OF OXYMETHYLENE DIMETHYL ETHERS  
*Macromol. Chem. Phys.* **2022**, im Druck / in press (doi: 10.1002/macp.202200020)
- 17) Thomas Wloka, Michael Gottschaldt, **Ulrich S. Schubert**  
FROM LIGHT TO STRUCTURE: PHOTO INITIATORS FOR RADICAL TWO-PHOTON POLYMERIZATION  
*Chem. Eur. J.* **2022**, *28*, e202104191 (doi: 10.1002/chem.202104191)
- 18) Timo Schuett, Manuel Wejner, Julian Kimmig, Stefan Zechel, Timm Wilke, **Ulrich S. Schubert**  
IMPROVEMENT OF HIGH-THROUGHPUT EXPERIMENTATION USING SYNTHESIS ROBOTS BY THE IMPLEMENTATION OF TAILOR-MADE SENSORS  
*Polymers* **2022**, *14*, 361 (doi: 10.3390/polym14030361)
- 19) Keshav Kumar Jha, Amrutha Prabhakaran, Christopher S. Burke, Marcus Schulze, **Ulrich S. Schubert**, Tia E. Keyes, Michael Jäger, Benjamin Dietzek  
TRIPLET-TRIPLET ANNIHILATION UPCONVERSION BY POLYMERIC SENSITIZERS  
*J. Phys. Chem. C* **2022**, *126*, 4057 – 4066 (doi: 10.1021/acs.jpcc.1c09897)
- 20) Aman Anand, Md Moidul Islam, Rico Meitzner, **Ulrich S. Schubert**, Harald Hoppe  
RESPONSE TO CHRISTOPHER P. MUZZILLO'S COMMENTS ON "INTRODUCTION OF A NOVEL FIGURE OF MERIT FOR THE ASSESSMENT OF TRANSPARENT CONDUCTIVE ELECTRODES IN PHOTOVOLTAICS: EXACT AND APPROXIMATE FORM"  
*Adv. Energy Mater.* **2022**, im Druck / in press (doi: 10.1002/aenm.202200828)
- 21) Igor Perevyazko, Nina Mikusheva, Alexey Lezov, Alexander Gubarev, Marcel Enke, Andreas Winter, **Ulrich S. Schubert**, Nikolay Tsvetkov  
METALLO-SUPRAMOLECULAR COMPLEXATION BEHAVIOR OF TERPYRIDINE- AND FERROCENE-BASED POLYMERS IN SOLUTION—A MOLECULAR HYDRODYNAMICS PERSPECTIVE  
*Polymers* **2022**, *14*, 944 (doi: 10.3390/polym14050944)
- 22) Alexander Kleine, **Ulrich S. Schubert**, Michael Jaeger  
EXPLOITING  $\alpha$ - $\omega$ -REACTIVITIES DURING POLYMERIZATION FOR CONTROLLED HETEROTELECHELIC POLY(CARBAZOLE)S  
*Macromolecules* **2022**, *55*, 3688 – 3698 (doi: 10.1021/acs.macromol.2c00413)
- 23) Alexander S. Gubarev, Alexey A. Lezov, Igor Y. Perevyazko, Nina G. Mikusheva, Alexandra A. Lezova, Anna S. Senchukova, Anna N. Podsevalnikova, Vyacheslav B. Rogozhin, Marcel Enke, Andreas Winter, **Ulrich S. Schubert**, Nikolay V. Tsvetkov  
HYDRODYNAMIC CHARACTERISTICS AND CONFORMATIONAL PARAMETERS OF FERROCENE-TERPYRIDINE-BASED POLYMERS  
*Polymers* **2022**, *14*, 1776 (doi: 10.3390/polym14091776)
- 24) Karina Zub, Stephanie Hoepfener, **Ulrich S. Schubert**  
INKJET PRINTING AND 3D PRINTING STRATEGIES FOR BIOSENSING, ANALYTICAL AND DIAGNOSTIC APPLICATIONS  
*Adv. Mater.* **2022**, im Druck / in press (doi: 10.1002/adma.202105015)
- 25) Leanne M. Stafast, Christine Weber, Maren T. Kuchenbrod, Stephanie Hoepfener, Mira Behnke, Stephanie Schubert, Klea Mehmetaj, Adrian T. Press, Michael Bauer, **Ulrich S. Schubert**  
POLY(2-OXAZOLINE) HOMOPOLYMERS AND DIBLOCK COPOLYMERS CONTAINING RETINOATE  $\omega$ -END GROUPS  
*ACS Appl. Polym. Mater.* **2022**, *4*, 3417 – 3425 (doi: 10.1021/acsapm.2c00037)
- 26) Josefine Meurer, Thomas Bätz, Julian Hniopek, Milena Jäger, Stefan Zechel, Michael Schmitt, Juergen Popp, Martin D. Hager, **Ulrich S. Schubert**  
SYNTHESIS AND CHARACTERIZATION OF METALLOPOLYMER NETWORKS FEATURING TRIPLE SHAPE-MEMORY ABILITY BASED ON DIFFERENT REVERSIBLE METAL COMPLEXES  
*Polymers* **2022**, *14*, 1833 (doi: 10.3390/polym14091833)

- 27) Philip Rohland, Oliver Nolte, Kristin Schreyer, Helmar Görls, Martin D. Hager, **Ulrich S. Schubert**  
STRUCTURAL ALTERATIONS ON THE TEMPO SCAFFOLD AND THEIR IMPACT ON THE PERFORMANCE AS ACTIVE MATERIALS FOR REDOX  
FLOW BATTERIES  
*Material Advances* **2022**, 3, 4278 – 4288 (doi: 10.1039/D1MA00663K)
- 28) Melisa Trejo-Maldonado, Aisha Womiloju, Steffi Stumpf, Stephanie Hoepfener, **Ulrich S. Schubert**, Luis  
E. Elizalde, Carlos Guerrero-Sanchez  
TRIAZOLE-FUNCTIONALIZED MESOPOROUS MATERIALS BASED ON POLY(STYRENE-BLOCK-LACTIC ACID): A MORPHOLOGY STUDY OF  
THIN FILMS  
*Polymers* **2022**, 14, 2231 (doi: 10.3390/polym14112231)
- 29) Rico Meitzner, Jose Prince Madalaimuthu, Shahidul Alam, Md Moidul Islam, Sebastian Peiler, Aman  
Anand, Johannes Ahner, Martin D. Hager, Ulrich S. Schubert, Yingping Zou, Frédéric Laquai, Harald  
Hoppe  
AN EFFECTIVE METHOD OF RECONNOITERING CURRENT-VOLTAGE (IV) CHARACTERISTICS OF ORGANIC SOLAR CELLS  
*J. Appl. Phys.* im Druck / in press