



Kolloquium 2023



Montag 9. Oktober 2023 / FMF

09:30	Empfang		
09:45	René	Reiser	Adaptive self-reinforcing <i>all</i> -Hydrocarbon Polymers for tribological applications
10:00	Jared	Faißt	Luminescence Spectroscopy on Organic Solar Cells
10:15	Maximilian	Schmucker	Additives for silicon-based anodes in lithium ion-batteries
10:30	Sagar	Bhagwat	In Situ Actuation of Gallium Liquid Metal Alloys on Polypyrrole Coated Electrodes
10:45	Frederike	Klimm	Climbing plant tendrils as inspiration for soft robotics
11:00	Felix Lukas Henrik	Hilfinger Ernst Schuster	With Fluorinated Catalyst Materials from CO ₂ to MeOH and DME
11:20	Kaffeepause		
11:50	Silvie Klein-Franke: Leading Diverse Teams: Avoiding Grave Risks, Realizing Great Chances		
12:45	Mittagessen		
13:40	Julian	Martin	Development of Platinum/carbon catalysts for fuel cell applications
13:55	Daniel	Pfalzgraf	Modelling Diffusion in Non-Bulk Crystals
14:10	Sebastian	Useche	Initial steps toward characterizing a 5mm thick CdTe photon-counting detector for nuclear decommissioning
14:25	Grace	Vera	Rheology of supporting bath/ink for embedded 3D printing
14:40	Semra	Gemc	Investigation of chlorite containing formulations for the topical treatment of cutaneous leishmaniasis
14:55	Kaffeepause		
15:20	Sebastian	Kruppert	Bioinspirierte und biologische Emulsionen: Schnell-koagulierender Latex in <i>Campanula</i>
15:35	Clemens	Prescher	The melting curve and phase stability of diamond
15:50	Rupert	Konradi	JONAS - BASF's European University Network: Framework, Research Areas & Opportunities
16:05	Bizan Nicolas	Balzer	Adhesion Strength of Multivalent Bonds in Multifunctional Polymer Layers
16:20	Sonia	Dsoke	The effect of pre-sodiation in a Sodium-Ion full cell
16:35	Ende		
17:00	Mitgliederversammlung		
19:00	Abendessen (für angemeldete TN)		



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Dienstag 10. Oktober 2023 / FMF und FIT

09:00	Bernd	Rolauffs	Molecular effectivity and model-based importance of engineering cell geometric features for controlling human chondrocyte phenotype via micro-patterning: a multivariate modeling-based and subspace clustering analysis
09:15	David	Böcherer	COLOR3D – Multicolored 3D printing of wood composites
09:30	Franziska	Dreher	TriboChem – Chemistry of Triboelectric Materials
09:45	Sima	Heidari	Atomic Layer Deposition of Titanium Oxide over Mesoporous Nitrogen-doped Carbon
10:00	Michael	Moseler	Classical molecular dynamics of strongly driven non-equilibrium systems – from exploding nanoclusters to collapsing nanotubes
10:15	Kaffeepause		
10:30	Laura	Hartmann	Functional and adaptive polymer materials for biomedical and biotechnological applications
10:45	Aljoscha	Baumann	Atomistic analysis of volume changes in tungsten-bronze-type compounds A_xFeF_3 during intercalation of A cations (A=Li, Na, K)
11:00	Gerardo	Roque	Medipix Spectra and Spatial Resolution Simulations for Dense Breast/Implant Mammography
11:15	Isabella	Fiorello	Plant-inspired hybrid microfabricated machines
11:30	Prasanth Babu	Ganta	Wetting Effects on Rough surfaces using Molecular Dynamics Simulations
11:45	Kaffeepause		
12:00	Jürgen	Rühe	Water-Based Lubricants for Extremely Efficient Lubrication
12:15	Max	Mylo	Digital image correlation as an optical technique for strain and deformation measurements: requirements, possibilities, limitations and the possibility of underwater analysis
12:30	Luca	Bohn	Integrated reference electrodes for CO ² electrolysis cells
12:45	Anna	Fischer	Ultrahigh Mass Activity Pt Entities composed of Pt Single atoms, Clusters and Nanoparticles on Mesoporous N-doped Carbon Nanospheres for improved Hydrogen Evolution Reaction
13:00	Niloofer	Nekoonam	Photoswitchable porous substrates for on demand wetting patterns creation
13:15	Mittagessen		



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14:30	Khaled Josephine	Seteiz Häberlein	Carbon black supported Ag NPs for CO ² electrolysis to CO
14:45	Falk	Tauber	Thermoresponsive artificial Venus Flytrap demonstrators
15:00	Sebastian	Kluck	Replikative Herstellung von Metallformen für die Polymerreplikation mit geringer Oberflächenrauheit
15:15	S. Esmael	Balaghi	Application of In-situ Electrochemical Liquid (Scanning) Transmission Electron Microscopy in understanding Materials Dynamics under Electrochemical Conditions
15:30	Kaffeepause		
15:45	Gopakumar	Sivasankarapillai	Formaldehyde and Isocyanate Free 'Class A1' wood Adhesive from wood Tannin
16:00	Santiago	Franco Corredor	Binary fused silica glass-stacking system for optical waveguides
16:15	Silvio	Tisato	Material characterization and optimization for Volumetric 3D Printing
16:30	Richard	Prediger	High-resolution structuring of transparent polycrystalline spinel ceramics
16:45	Peilong	Hou	Digital Light Processing-Based Fabrication of Ligand Micropatterns on High-Density Antifouling PEG Brushes
17:00	Ende		
17:30	Direktoriumssitzung FIT		
19:00	Abendessen (für angemeldete TN)		



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Mittwoch 11. Oktober 2023 / FIT

09:00	Edoardo	Milana	Physical Control of Soft Robots
09:15	Karima	Saddedine	Bi-O-ACTUATOR: Bio-inspired Hydraulic Actuator on Wood-Basis
09:30	Joel	Monti	[2+2]-photocycloadditions of coumarin derivative as an effective tool for the reversible formation of covalent bonds – Towards the design of renewable polymer materials
09:45	Yu	Wang	LiNi _{0.6} Mn _{0.2} Co _{0.2} O ₂ (NMC622) Symmetric Cells for Mode II Integrated Photobattery
10:00	David	Schwarz	Mechanical metamaterials with incorporated capsules for advanced functionalities
10:15	Kaffeepause		
10:45	Yashika	Gupta	Development of Evaporated All-inorganic Perovskite for Tandem Solar Cell Applications
11:00	Jana	Stumpp	Mechanically-Induced Debonding of Adhesive Capsules based-Composites
11:15	Christoph	Lehmann	Gallsense: Giving materials the passive ability to sense
11:30	Sunel	de Kock	NEXAFS spectra of model sulfide chains
11:45	Mahesh	Pol	Abiotic Phosphate fueled non-equilibrium self-assembly
12:00	Mittagspause mit Snack		
12:45	Mehmet-Talha	Yapa	Photo Crosslinking Hydroxypropyl Cellulose (HPC) and Organosolv Lignin (OSL) for 3D Printing: A Comparative Kinetic Study with Chemically Modified HPC and OSL
13:00	Juliane	Borchert	Perovskite Silicon Tandem and Triple Solar Cells – Progress and Challenges
13:15	Michelle	Modert	Leaf unfolding - Similarities and differences in peltate leaves from different habitats
13:30	Cong	Tao	Computational investigation of layered halide perovskites for mode III photobatteries
13:45	Ende des Kolloquiums		