



## DISSERTATIONEN AN DER TU GRAZ

1. Mai bis 31. Oktober 2019 (soweit bekannt gegeben)

### Fakultät für Bauingenieurwissenschaften

- Buchegger, Blasius:** Flanking sound transmission in coupled panels of cross-laminated-timber  
**Füger, Anja:** Calibration of elemental and isotope proxies by inorganic precipitation experiments  
**Novak, Friedrich:** Simplified remaining service life calculation of orthotropic steel decks at road bridges and strengthening with concrete  
**Pichler, Patrick:** Numerical analysis of the influence of initial hydraulic boundary conditions on the infiltration behaviour and stability of unsaturated soil slopes

### Fakultät für Maschinenbau und Wirtschaftswissenschaften

- Albert, Johannes:** Entwicklung und Untersuchung einer Absorptionskältemaschine für die Nutzung der Abwärme einer Brennstoffzelle  
**Arnitz, Alexander:** Experimentelle und simulationsgestützte Analyse einer thermisch angetriebenen Lösungsmittelpumpe für NH<sub>3</sub>/H<sub>2</sub>O-Absorptionskälteanlagen  
**Aßmus, Kevin:** Vorauslegung und Analyse eines pilotstrahlgezündeten Gas-Diesel-Brennverfahrens mit Hochdruck-Gas-Direkt-einblasung für schnelllaufende Großmotoren  
**Friessnig, Matthias:** The role of the Maker Movement in start-up product creation  
**Grüneberger, Patrick:** Analysis methods for Irregular Combustion events in SI engines  
**Hackl, Andreas:** Enhanced Tyre Modelling for Vehicle Dynamics Control Systems  
**Hiesmayr, Johannes:** Experimental Investigation and Simulation of Gaseous Emissions and Fuel Consumption in Real World Driving Scenarios for Two-Wheeler-Applications  
**Irrenfried, Christoph:** DNS and experimentally based modelling of convective turbulent near wall heat transfer at high Prandtl numbers  
**Malin, Maximilian:** Control Strategies for Highly Transient Dual Fuel Engine Operation  
**Piasecki, Conrad:** Evaluation of Mobile Emission Measurement Technology in the Motorcycle Segment: A Novel Approach in the Field of Emission Simulation with Inventory Models  
**Schacht, Hans-Juergen:** Entwurf und Untersuchung eines neuartigen elektrischen Antriebs mit VKM-Unterstützung für ein Zweirad-Stadtfahrzeug  
**Tilz, Anton:** Auswirkung wesentlicher Zündparameter auf die Verbrennung in Großgasmotoren  
**Vystejn, Jan:** Increasing numerical simulation accuracy through modular architecture automation  
**Weinländer, Christof:** Processing Biogas for the Use in Solid Oxide Fuel Cells  
**Zinner, Christian:** Downsizing of 4-stroke high speed engines in recreation vehicles

### Fakultät für Elektrotechnik und Informationstechnik

- Grubmüller, Michael:** Voltage Probe Circuit Technology for Measurements in Power Electronics  
**Hackl, Herbert:** On the Simulation of Radiated Emission of Integrated Circuits According to the CISPR 25 ALSE Test  
**Kalcher, Michael:** Fully Integrated Mixed-Signal RF-Domain Transmitter-Induced Self-Interference Cancellation for Advanced Wireless Cellular Mobile Transceivers  
**Kaltenbacher, Stefan:** Water Distribution Networks: Modeling, Observation, Roughness Identification and Its Application  
**Kleindienst, Martin:** Control Concepts for Silicon Wafer Stripping and Cleaning Equipment  
**Kranawetter, Klemens:** Modelling, Simulation and Control of Highly Dynamic Automotive Test Bed Components  
**Leitner, Mario:** Praxisnahe Resilienzsteigerung der Mittelspannungsebene in bestehenden urbanen und ländlichen Netzen  
**Plank, Hannes:** Location-aware optical communication with Time-of-Flight sensors  
**Rumetshofer, Johannes:** Model-based Control of Dedicated Hybrid Drivetrains  
**Steffan, Christoph:** Monolithic Ultra-Low Power Solar Harvester with High Dynamic MPPT Algorithm  
**Zöhrer, Matthias:** Speech enhancement using deep neural beamformers



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### Fakultät für Mathematik, Physik und Geodäsie

<b>Dohr, Stefan:</b>	Distributed and Preconditioned Space-Time Boundary Element Methods for the Heat Equation
<b>Hüning, Svenja:</b>	Geometric and algebraic analysis of subdivision processes
<b>Lendl, Stefan:</b>	Generalizations of Classic Combinatorial Optimization Problems on Graphs and Matroidal Structures: Algorithms and Complexity
<b>Moder, Thomas:</b>	Techniques for Calibrating Pedestrian Dead Reckoning Parameters using Smartphones
<b>Omerovic, Sanela:</b>	Fitting Mixtures of Generalized Nonlinear Models
<b>Preischl, Michael Julius:</b>	Progress in Risk Theory and Dependence Modeling
<b>Schlager, Christoph:</b>	Generation of high-resolution wind fields from WegenerNet data and a spatial evaluation of regional climate models

### Fakultät für Technische Chemie, Verfahrenstechnik und Biotechnologie

<b>Bergna, Alessandro:</b>	Understanding the structure and function of tomato plant endophytes across generations
<b>Blesl, Julia:</b>	Synthesis and Biological Characterization of Teraryl-based alpha-Helix Mimetics
<b>Hanghofer, Isabel:</b>	Lithium-ion Dynamics in Highly Conductive Solid Electrolytes
<b>Hörmann, Theresa Ruth:</b>	Development of a Continuous Manufacturing Line for the Tableting of Hot-Melt Extruded Pellets
<b>Lepak, Alexander:</b>	Elucidation of glycosyltransferase specificities for biocatalysis
<b>Lunghammer, Sarah:</b>	Kernresonanzuntersuchungen zur Diffusion von Na-Ionen
<b>Obermeier, Melanie Maria Gisela:</b>	Prospecting the Sphagnum microbiome for agriculture and medicine
<b>Posch, Patrick:</b>	Ion Dynamics in Oxide-Type Solid Electrolytes and Electrode Materials
<b>Reinisch, Tristan:</b>	Combustion Generated Particle Measurement: Morphology, Methods and Harsh Environments
<b>Schmallegger, Max:</b>	Radicals in Photochemical Transformations: Models for Biological Pathways and Intermediates in Chemical Synthesis
<b>Stadler, Eduard Maximilian:</b>	Investigation of Light Induced Processes with In-Situ Irradiation in NMR and UV-Vis Spectroscopy
<b>Sulzer, Philipp:</b>	Preparation and Characterization of Optical Chemical Sensor Systems for use in Organic Solvents
<b>Toplak, Marina:</b>	Flavin-dependent reactions in carbohydrate metabolism and mitochondrial electron transport
<b>Wagner, Bernhard:</b>	Process development on a continuous production system for direct filling of hard gelatin capsules
<b>Weißl, Michael:</b>	Cellulose xanthate for advanced cellulose (nano)materials

### Fakultät für Informatik und Biomedizinische Technik

<b>Ali, Zulfiqar:</b>	Mobile Application Testing Using Behavior-Driven Development Based Specifications for Android Platform
<b>Geymayer, Thomas:</b>	Exploring the information worker's space
<b>Ramacher, Sebastian:</b>	Cryptographic Schemes with Enhanced Security Properties and Post-Quantum Instantiations
<b>Riffnaller-Schiefer, Andreas:</b>	A subdivision approach to isogeometric analysis
<b>Schranner, Stefan:</b>	Pattern Recognition in Analog Wafer Test Data – A Health Factor for Process Patterns
<b>Sharif, Nauman:</b>	Knowledge Discovery in E-Learning with Social Media
<b>Wachtler, Josef:</b>	Interaction-based Support of Selective Attention in Online Courses