



DISSERTATIONEN AN DER TU GRAZ

1. November 2019 bis 30. April 2020 (soweit bekannt gegeben)

Fakultät für Architektur

- Giahi, Shirin:** City Clean Transport (CCT) does matter; cycling strategies evaluation in bicycle friendly cities and their application to Tehran
- Solstreif-Pirker, Christoph Walter:** Being-Together-With the World-Without-Us: Performative Investigations into the Traumatized Planetary Space
- Weiss, Tobias:** Energy-Flexible Zero-Energy Buildings. The impact of building design on energy flexibility
- Weissenböck, Renate:** ROBOTS AS DESIGN MEDIA. Exploring robotic thermoforming as an open negotiation between human, machine and material in architectural design

Fakultät für Bauingenieurwissenschaften

- Bitenc, Maja:** Rock discontinuity roughness estimation using terrestrial laser scanning
- Buyer, Andreas Anjan:** Contributions to Block Failure Analyses using Digital Joint Network Characterization
- Fabris, Carla:** Numerical Study on Pullout Tests of Ground Anchors Monitored with Fibre Optic Sensors
- Kugler, Paul:** Analyse möglicher Ansätze zur Verlängerung der rechnerischen Restlebensdauer geschweißter Eisenbahnbrücken
- Richter, Wolfgang:** Surge Tank Design for Flexible Hydropower
- Ruisinger, Ulrich:** Das hygrothermische Verhalten von Balkenköpfen bei innen gedämmten Gebäuden
- Schätzer, Markus Horst Günther:** Propagation of loaded cracks in two and three dimensions with XFEM

Fakultät für Maschinenbau und Wirtschaftswissenschaften

- Edtmayer, Josef:** Messung, Simulation und Analyse der Kolbengruppenreibung im Verbrennungsmotor mit der Floating Liner Methode
- Feurhuber, Manuel:** A novel approach for investigating important phenomena of steam sterilization processes using CFD
- Forstner, Thomas:** Induktionsfügen von thermoplastischen Faserverbundwerkstoffen
- Nageler, Peter:** Novel Automated Methods for GIS-based Dynamic Simulations of District Energy Systems
- Basso, Riccardo:** Experimental Investigation on the Use of In-Cylinder Ion Current for Small Two-Stroke Engine Diagnosis
- Bittermann, Andreas:** Entwicklung einer neuartigen Methode zur Optimierung des Emissionsverhaltens von Diesel-Pkw im Rahmen der Europäischen Real Driving Emissions (RDE)-Gesetzgebung
- Fritsch, Rudolf:** Ejektorwirkung Vertikale Kaplan turbine mit im Grundriss gekrümmtem Saugrohr
- Kreis, Alexander:** Tailored Data Exchange Processes for Automotive Body Development
- Painsi, Walter:** Zur Praxis von zertifizierten Managementsystemen auf Basis der ISO 9001 in österreichischen Ingenieurbüros. Eine qualitative Studie zum Thema Qualitätsmanagement nach der ISO 9000 Normenreihe
- Rumplmayr, Peter Karl:** Gesamtsystembetrachtung eines Dieselmotors mit Beschichtung des Brennraums zur Reduktion der Wandwärmeverluste

Fakultät für Elektrotechnik und Informationstechnik

- Ajanovic, Zlatan:** Towards SuperHuman Autonomous Vehicles
- Breitegger, Philipp:** Optoacoustic Methods for Low-Cost Air Quality Monitoring
- Flatscher, Matthias:** Versatile Impedance Measurement Front-End for Industrial Applications
- Huber, Thomas:** Multi-Decade GaN Power Amplifiers in Common-Source and Cascode Topology
- Knoll, Christian:** Understanding the Behavior of Belief Propagation
- Kupper, Martin:** Harsh Environment Particle Sensing
- Mauroner, Fabian:** mosartMCU: An Operating System-Aware Microcontroller for Embedded Real-Time Multi-Core Systems
- Muratovic, Redzo:** Wechselseitige niederfrequente induktive Beeinflussung von Kabelsystemen
- Nigitz, Thomas:** Synchronization of product gas generation and its utilization in industrial dual fluidized bed gasification plants
- Pirker, Alexander:** Messung und Darstellung von Teilladungen bei Gleichspannung zur Identifikation von Defekten gasisolierter Systeme
- Raith, Johannes:** Risk Assessment of Power Transformers under the Influence of Geomagnetically Induced Currents (GIC)
- Saad, Kmeid:** Automotive Camera Modeling and Integration With Standardized Interfaces
- Schwalt, Lukas:** Lightning Phenomena in the Alpine Region of Austria
- Tranninger, Markus:** Advanced State Estimation Methods for Complex Dynamical Systems
- Ulz, Thomas:** Towards Trustworthy Smart Sensors



DISSERTATIONEN AN DER TU GRAZ

1. November 2019 bis 30. April 2020 (soweit bekannt gegeben)

Fakultät für Mathematik, Physik und Geodäsie

| | |
|-------------------------------------|--|
| Krammer, Markus Stephan: | Charge Transport in Organic Semiconductor Devices |
| Kvas, Andreas: | Estimation of high-frequency mass variations from satellite data in near real-time |
| Leitner, Matthias: | Density of Liquid High-Melting Metals and the Estimation of Critical Point Data |
| Nigmatov, Arnur: | Comparison of topological summaries |
| Nille, Dirk Joachim: | Bayesian Inference of Heat Load Patterns in ASDEX Upgrade |
| Orthacker, Angelina: | Developing Methods for 3D STEM to Reveal Atomic-Scale Spinodal Decomposition |
| Pachler, Michael: | Synergistic Activity of Antimicrobial Peptides |
| Rumetshofer, Michael: | Quantum transport simulations of strongly correlated molecules |
| Thaler, Bernhard: | Ultrafast Photoinduced Dynamics of Atoms and Dimer Molecules inside Helium Nanodroplets |
| Wimmer-Teubenbacher, Robert: | Development of Metal Oxide Nanomaterials for the Integration on Complementary Metal-Oxide-Semiconductor Gas Sensor Devices |

Fakultät für Technische Chemie, Verfahrenstechnik und Biotechnologie

| | |
|---------------------------------|---|
| Alkan, Hamza Furkan: | Aspartat metabolism bei Krebs |
| Beichel, David: | Tuneable Redox-Active Polymer Networks for Organic Batteries |
| Grabner, Bianca: | Novel Concepts of Heterogeneous (Bio-)Catalysis for the Synthesis of Active Pharmaceutical Ingredients |
| Hofstadler, Petra: | Acryl amides and methacrylamides in bonding formulations |
| Krainer, Sarah: | Investigation of Liquid Penetration and Wetting on Paper in the High Speed Inkjet Field |
| Krug, Lisa: | Harnessing nature for sustainable algal biotechnology |
| Kusstatscher, Peter: | Exploring the postharvest microbiome of sugar beet for increased storability |
| Migglausch, Anna: | Development of inhibitors of human adipose triglyceride lipase (hATGL) |
| Payerl, Claudia: | Sorption-induced creep of pulp fibers |
| Petit, Yann Kevin: | Singlet oxygen in metal-air batteries: origins, consequences, and mitigation |
| Pfeifer, David: | Highly photostable red-emitting pH Indicators for Optical Sensors |
| Philipp, Martin: | Ionic and Electronic Conduction in Oxides, Fluorides, and Hydrides for Li-Based Batteries |
| Ragger, Iris Anna Maria: | Flavor analysis of heritage apple varieties |
| Taffner, Julian: | Secret collaborations: How plant-associated archaea interact with their hosts |
| Telzerow, Aline: | Widening the substrate scope of transaminases by protein engineering |
| Toth, Andreas: | Emulsion-Enhanced Biphasic Esterification: Applied Reactive Separations for Valorization of Dilute Carboxylic Acids |

Fakultät für Informatik und Biomedizinische Technik

| | |
|-----------------------------------|--|
| Bödenler, Markus: | Nuclear Magnetic Relaxation Dispersion Contrast for MRI at 3T |
| De Parada, Irene Maria: | On straight-line and topological drawings of graphs in the plane |
| Isop, Werner Alexander: | Extended Reality Interfaces for Teleoperation of Aerial Robots |
| Könighofer, Bettina: | Shield Synthesis – Runtime Enforcement for Reactive Systems |
| Krnjic, Vesna: | Usable Security and Privacy |
| Lasnig, Alexander: | Model based evaluation of integrated care and health economic outcome in heart failure treatment |
| Ofner, Patrick: | Evaluation of low-frequency EEG signals as an intuitive movement control signal for BCIs |
| Pinegger, Andreas: | Development of an event-related potential based brain-computer interface following user-centered design principles |
| Schwarz, Michael: | Software-based Side-Channel Attacks and Defenses in Restricted Environments |
| Sherifova, Selda Mitatova: | Mechanical Testing and Modeling of Human Thoracic Aortic Tissues in Health and Disease |
| Tappler, Martin: | Learning-Based Testing in Networked Environments in the Presence of Timed and Stochastic Behaviour |
| Tran, Thi Ngoc Trang: | Recommendation and Decision Support Techniques for Groups |
| Tschaikner, Mathias: | Development and Evaluation of a Single-Site device for Conjoined Glucose Sensing and Insulin Infusion in Diabetes Patients |
| Varughese, Joshua Cherian: | Wave Oriented Swarm Paradigm: Unification of common swarm behaviors using minimalistic communication |