



DISSERTATIONEN AN DER TU GRAZ

1. November 2017 bis 30. April 2018 (soweit bekannt gegeben)

Fakultät für Architektur

Hofbauer, Christian Kersten: Public-private-Partnership in der Stadtentwicklung. Möglichkeiten der Anwendung von PPP bei der Konversion von Brachflächen in Österreich

Fakultät für Bauingenieurwissenschaften

Ausweger, Georg Michael: Influences of Water Level Changes on the Behaviour of a Slow Moving Landslide – In-situ Measurements, Model Tests and Numerical Analyses
Bernoulli, Thomas Eduard: Flexibilität durch Modularität: ein Framework für sensorbasierte Positionierungssysteme
Grengg, Cyrill: Microbial induced acid corrosion in sewer environments
Krenn, Harald: Ein Beitrag zur Stahlblech-Holz-Zuglaschenverbindung mit geneigt angeordneten selbstbohrenden Holzschrauben
Poganski, Joshua: Numerical Modelling of Dynamic Cone Penetration into Martian Subsurface
Volkman, Guenther: Function, Design, and Specifications for Pipe Umbrella Systems
Wall, Johannes: Lebenszyklusorientierte Modellierung von Planungs-, Ausschreibungs- und Vergabeprozessen

Fakultät für Maschinenbau und Wirtschaftswissenschaften

Breitfuß, Christoph: Analyse mechanischer Vorgänge in Li-Ionen-Pouchzellen unter Crashbelastung und deren Modellbildung in einer Finite-Elemente-Software
Brugger, Julia Birgit: How to Handle Demand Fulfillment in an Uncertain Environment. A Study of Humanitarian and Corporate Organizations and Their Cross-Learning Potentials
Buchmayr, Markus: Experimental and numerical studies on deep-air-staging in small-scale biomass boilers with an emphasis on a fast-solving CFD approach
Fasching, Paul Johann: Natural Gas as Fuel for Monovalent and Dual Fuel Combustion Engines – an Experimental and Numerical Study
Gächter, Jens: Evaluation of Rotor Position Sensor Characteristics and Impact on Control Quality of Permanent Magnet Synchronous Machines
Hopfgartner, Johann Wilfried: Untersuchung von Verbesserungspotentialen hermetischer Kolbenkompressoren mit Hilfe numerischer Methoden
Martin, Michael: Systematic method for quantifying measures to decrease the CO₂ emissions of a vehicle fleet
Mayr-Mittermüller, Bernhard: Verfahren zur Bestimmung der Thoracic-Spine-Trajektorie eines H111 50th Crashtest-Dummys im Frontalcrash basierend auf der Fusion von elektrischer Messtechnik und Finite-Elemente-Simulationsmodellen
Moser, Jörg: Industrial Platforms and Modular Design. A Theoretical Consideration Verified in Praxis
Nuber, Michael: Thermodynamic Influence of the Lubrication Oil in Hermetic Reciprocating Compressors
Posch, Stefan: Entwicklung eines Erdgas-Diesel-Dual-Fuel-Brennverfahrens zur signifikanten CO₂-Reduktion bei Pkw-Motoren
Sprenger, Florian: Machine-Tool for Research in Synchronous Grinding
Steffan, Matthias: Simulation-aided analysis and optimization of a gas driven absorption heat pump with special focus on the rectifier
Wechsler, Roman: Thermal Investigation of Snowmobiles and the Applicability of CFD in the Development Process
Wurm, Johannes:

Fakultät für Elektrotechnik und Informationstechnik

Coelho, César: A Software Framework for Nanosatellites based on CCSDS Mission Operations Services with Reference Implementation for ESA's OPS-SAT Mission
Connaughton, Alexander: Secondary Side Flyback Converter
Enzinger, Harald: Behavioral Modeling and Digital Predistortion of Radio Frequency Power Amplifiers
Forstinger, Martin: Modelling, Simulation, and Control of Power Train Test Beds
Freiberger, Karl: Measurement Methods for Estimating the Error Vector Magnitude in OFDM Transceivers
Freidl, Philipp Franz: MMID – Milli-Meter wave revolution beyond UHF RFID
Freistätter, Markus: Modellierung und Regelung verfahrenstechnischer Prüfstände
Karaca, Timucin: Integrated Filterless Class-D Audio Amplifiers – Investigations on Circuit Design, Electromagnetic Compatibility and Power Efficiency
Plasser, René: Numerical Computation of Nonlinear 3-Dimensional Time-Periodic Electromagnetic Field Problems by the Finite Element Method
Romanenko, Aleksei: Study of inverter-induced bearing damage monitoring in variable-speed-driven motor systems
Wipfler, Martin: Regelungstechnische Methoden zur Dämpfung von Drehschwingungen bei Prüfständen
Zöschner, Lukas: Analog Front-Ends for HF/UHF Dual Band RFID Transponders

Fakultät für Mathematik, Physik und Geodäsie

Auer-Berger, Manuel: Improving the External Quantum Efficiency of Organic Light Emitting Diodes by Enhanced Charge Injection and Improved Light Extraction



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Auer-Berger, Manuel:	Improving the External Quantum Efficiency of Organic Light Emitting Diodes by Enhanced Charge Injection and Improved Light Extraction
Chim, Kwok Chi:	Linear forms in logarithms and applications to Diophantine problems
Christian, Paul:	Polymer Thin Films by initiated Chemical Vapor Deposition: From Proton Conduction to the Encapsulation of Pharmaceuticals
Ehrhart, Matthias:	Applications of image-assisted total stations: Concepts, experiments, results and calibration
Holzmann, Markus:	Spectral Analysis of Transmission and Boundary Value Problems for Dirac Operators
Kloas, Judith:	Reflected and stopped random walks and the distinguishing number of graphs
Kraberger, Gernot Johannes:	Development of a full matrix ab-initio scheme for materials with strong spin-orbit coupling and Coulomb interactions: Application to selected iridates and osmates
Schabus, Stefan:	Indoor Geography in the Production Environment – How Location and Time can support Smart Manufacturing
Turner, Marlene:	First Observation of the Seeded Proton Bunch Self-Modulation in Plasma
Verwüster, Elisabeth:	Modeling the Impact of Imperfections on Prototypical Self-Assembled Monolayers
Winkler, Robert:	Fabrication of Functional and Freestanding 3D Nano-Architectures via Focused Electron Beam Induced Deposition
Zingl, Manuel Johannes:	Mott physics and transport properties of BaMn ₂ As ₂ and LaMnAsO

Fakultät für Technische Chemie, Verfahrenstechnik und Biotechnologie

Flitsch, Julius:	Characterization of the flow resistance and deformation relationship of wood fiber mats
Fritzsche, Eva:	Optimization and Application of an Optical Carbon Dioxide Sensor for Marine Environments
Goetsch, Thomas:	Model Development for Isomer Separation Processes
Heckenbichler, Kathrin:	Reductive C-C Bond Formations Using Engineered Ene-Reductases
Hojnik, Cornelia:	Exploration of the Amadori Rearrangement for Bioconjugation of Carbohydrates
Kljajic, Marko:	Synthesis of Small Molecules for Activity-Based Protein Profiling of Oxidoreductases
Korber, Martina:	Regulation of steryl ester metabolism in the yeast <i>Saccharomyces cerevisiae</i>
Lehofer, Bernhard:	Impact of high hydrostatic pressure on the structure and molecular dynamics of low-density lipoprotein particles
Mayr, Melanie:	Fines Characterization and their Impact on Technological Properties in Paper-Making Applications
Municchi, Federico:	Coarse grained models for momentum, heat and mass transfer in dense gas-particle suspensions from particle-resolved direct numerical simulation
Niederhauser, Johannes:	Smart Enzyme Engineering: From Structure-Function Relationships towards Redesign of Mononuclear Nonheme Fe(II) Enzymes
Pichler, Christian Marco:	Surface casted metal oxides as catalysts for the conversion of renewable resources and Synthesis of dumbbell shaped fullerene assemblies
Proßnigg, Florian:	Binary lipid model system of <i>Staphylococcus aureus</i> : Characterization of biophysical parameters
Retschitzegger, Stefan:	High-temperature corrosion in biomass-fired fixed bed boilers
Schafzahl, Bettina:	The Aprotic Lithium-Oxygen Battery Fighting the Detrimental Impacts of Oxygen
Schafzahl, Lukas:	Parasitic and Interphase Chemistries in Li-ion Batteries and Beyond
Sun, Shiwen:	Applications of integrated optical sensors for pH and Oxygen monitoring in micro(bio)reactor
Zoidl, Manuel:	Synthesis of C-Glycosyl Type Iminosugar Building Blocks via a Multicomponent Reaction Strategy

Fakultät für Informatik und Biomedizinische Technik

Dobraunig, Christoph Erwin:	On the Security and Design of Authenticated Encryption
Kandlhofer, Martin:	Development and Evaluation of Innovative Concepts in Educational Robotics and Education in Artificial Intelligence
Kappel, David:	Bayesian Models for Self-organization and Rewiring in Recurrent Networks of Spiking Neurons
Mauthner, Thomas:	Learning Activity Recognition from Weakly Labeled Data
Mühlbacher, Clemens:	Achieving Dependability of High-Level Robot Programs by using Belief Management
Neumayer, Bernhard:	NMR techniques for the characterisation of tissue remodelling
Niestrawska, Justyna Anna:	Experimental and Computational Analyses of Pathological Soft Tissues – Towards a Better Understanding of the Pathogenesis of Abdominal Aortic Aneurysms
Nussbaumer, Alexander:	Competence-based Strategies for Personalising the Learning Experience in Virtual Environments
Riegler, Gernot Erich:	Deep Learning for 2.5D and 3D
Röck, Franz:	Building Bridges between Formal Verification and Testing with Automatic Test Generation
Schinko, Christoph:	Shape Processing for Content Generation
Unterluggauer, Thomas:	Side-Channel Resistance and Pairing-Based Cryptography for the Internet of Things