Publications:

**Numerical modeling of the strand deposition flow in extrusion-based additive manufacturing**  
Publication: Research - peer-review › Journal article – Annual report year: 2018

**A performance assesment of a 2 axis scanning mirror galvanometer for powder bed fusion**  
Publication: Research - peer-review › Article in proceedings – Annual report year: 2017

**Applications of Fiber-Reinforced Polymers in Additive Manufacturing**  
Publication: Research - peer-review › Journal article – Annual report year: 2017

**A Soft Tooling process chain employing Additive Manufacturing for injection molding of a 3D component with micro pillars**  
Publication: Research - peer-review › Journal article – Annual report year: 2017

**Augmented Reality Interfaces for Additive Manufacturing**  
Publication: Research - peer-review › Article in proceedings – Annual report year: 2017

**Biological features produced by additive manufacturing processes using vat photopolymerization method**  
Publication: Research - peer-review › Article in proceedings – Annual report year: 2017

**Challenges and opportunities of fibre-reinforced polymers in additive manufacturing with focus on industrial applications**  
Publication: Research - peer-review › Article in proceedings – Annual report year: 2017

**Characterization of additive manufacturing processes for polymer micro parts productions using direct light processing (DLP) method**  
Publication: Research - peer-review › Paper – Annual report year: 2017

**Computer Vision for Additive Manufacturing**.  
Publication: Research › Ph.D. thesis – Annual report year: 2017

**Considerations on the Construction of a Powder Bed Fusion Platform for Additive Manufacturing**  
Publication: Research - peer-review › Conference article – Annual report year: 2017
Cost estimation of a specifically designed direct light processing (DLP) additive manufacturing machine for precision printing
Publication: Research - peer-review › Article in proceedings – Annual report year: 2017

Dimensional accuracy of Acrylonitrile Butadiene Styrene injection molded parts produced in a pilot produc
Publication: Research - peer-review › Paper – Annual report year: 2017

Economic Analysis of Additive Manufacturing Integration in Injection Molding Process Chain
Publication: Research - peer-review › Paper – Annual report year: 2017

Economic trade-offs of additive manufacturing integration in injection moulding process chain
Publication: Research - peer-review › Article in proceedings – Annual report year: 2017

Effects of carbon fibres on the life cycle assessment of additively manufactured injection moulding inserts for rapid prototyping
Publication: Research - peer-review › Article in proceedings – Annual report year: 2017

Evaluation of polymer micro parts produced by additive manufacturing processes using vat photopolymerization method
Publication: Research - peer-review › Article in proceedings – Annual report year: 2017

Evaluation of surface roughness and geometrical characteristic of additive manufacturing inserts for precision injection moulding
Publication: Research - peer-review › Paper – Annual report year: 2017

Publication: Research - peer-review › Paper – Annual report year: 2017

Injection Moulding Pilot Production: Performance Assessment of Tooling Process Chains Based on Tool Inserts Made from Brass and A 3d Printed Photopolymer
Publication: Research - peer-review › Article in proceedings – Annual report year: 2017

In-line 3D print failure detection using computer vision
Publication: Research - peer-review › Article in proceedings – Annual report year: 2017

Integration of Fiber-Reinforced Polymers in a Life Cycle Assessment of Injection Molding Process Chains with Additive Manufacturing
Publication: Research - peer-review › Article in proceedings – Annual report year: 2017

Life Cycle Assessment of Fiber-Reinforced Additive Manufacturing for Injection Molding Insert Production
Publication: Research - peer-review › Conference abstract in proceedings – Annual report year: 2017

Performance Simulation and Verification of Vat Photopolymerization Based, Additively Manufactured Injection Molding Inserts with Micro-Features
Publication: Research - peer-review › Article in proceedings – Annual report year: 2017

Photogrammetry for Repositioning in Additive Manufacturing
Publication: Research - peer-review › Article in proceedings – Annual report year: 2017

PicPrint: Embedding pictures in additive manufacturing
Publication: Research - peer-review › Article in proceedings – Annual report year: 2017
Rheology of high melt strength polypropylene for additive manufacturing
Publication: Research - peer-review › Journal article – Annual report year: 2017

State-of-the-art of fiber-reinforced polymers in additive manufacturing technologies
Publication: Research - peer-review › Journal article – Annual report year: 2017

Adaptive Layer Height During DLP Materials Processing
Publication: Research - peer-review › Article in proceedings – Annual report year: 2016

A Model of Parallel Kinematics for Machine Calibration
Publication: Research - peer-review › Article in proceedings – Annual report year: 2016

A self-calibrating robot based upon a virtual machine model of parallel kinematics
Publication: Research - peer-review › Journal article – Annual report year: 2016

A Self-Peeling Vat for Improved Release Capabilities During DLP Materials Processing
Publication: Research - peer-review › Article in proceedings – Annual report year: 2016

Calibration of a Numerical Model for Heat Transfer and Fluid Flow in an Extruder
Publication: Research - peer-review › Journal article – Annual report year: 2015

Comparison of conventional Injection Mould Inserts to Additively Manufactured Inserts using Life Cycle Assessment
Publication: Research - peer-review › Article in proceedings – Annual report year: 2016

Designing for Color in Additive Manufacturing
Publication: Research - peer-review › Article in proceedings – Annual report year: 2016

Distribution and Orientation of Carbon Fibers in Polylactic Acid Parts Produced by Fused Deposition Modeling
Publication: Research - peer-review › Article in proceedings – Annual report year: 2016

Evolution of Surface Texture and Cracks During Injection Molding of Fiber-Reinforced, Additively-Manufactured, Injection Molding Inserts
Publication: Research - peer-review › Article in proceedings – Annual report year: 2016

In-Situ Monitoring in Additive Manufacturing Using Contact Image Sensors
Publication: Research - peer-review › Article in proceedings – Annual report year: 2016

Investigation of digital light processing using fibre-reinforced polymers
Publication: Research - peer-review › Article in proceedings – Annual report year: 2016

Precision and Accuracy Parameters in Structured Light 3-D Scanning
Publication: Research - peer-review › Conference article – Annual report year: 2016

Rheology of High-Melt-Strength Polypropylene for Additive Manufacturing
Publication: Research - peer-review › Conference abstract for conference – Annual report year: 2017

Two process chains for creating functional surfaces on mold for 3D geometry
Publication: Research - peer-review › Conference abstract for conference – Annual report year: 2016
Additive manufacturing for the production of inserts for micro injection moulding
Publication: Research - peer-review › Article in proceedings – Annual report year: 2015

Predicting Color Output of Additive Manufactured Parts
Publication: Research - peer-review › Conference abstract in proceedings – Annual report year: 2015

Simulation of a Downsized FDM Nozzle
Publication: Research - peer-review › Article in proceedings – Annual report year: 2015

Spatial Accuracy of Embedded Surface Coloring in Color 3D Printing
Publication: Research - peer-review › Conference abstract in proceedings – Annual report year: 2015

A Comparative Performance Analysis of FDM Machines Based on a Calibration Artefact
Publication: Research - peer-review › Conference abstract in proceedings – Annual report year: 2015

Applicability of chemical vapour polishing of additive manufactured parts to meet production-quality
Publication: Research - peer-review › Article in proceedings – Annual report year: 2015

Comparability of the performance of in-line computer vision for geometrical verification of parts, produced by Additive Manufacturing
Publication: Research - peer-review › Article in proceedings – Annual report year: 2015

Development of a Parafin Wax deposition Unit for Fused Deposition Modelling (FDM)
Publication: Research - peer-review › Article in proceedings – Annual report year: 2015

Performance verification of 3D printers
Publication: Research - peer-review › Article in proceedings – Annual report year: 2015

Rendering of surface-geometries at job-generation level for camouflaging the layered nature of Additively Manufactured parts
Publication: Research - peer-review › Article in proceedings – Annual report year: 2015

Additive Manufacturing: Multi Material Processing and Part Quality Control
Publication: Research › Ph.D. thesis – Annual report year: 2013

In-process 3D geometry reconstruction of objects produced by direct light projection
Publication: Research - peer-review › Journal article – Annual report year: 2013

In-line monitoring and reverse 3D model reconstruction in additive manufacturing
Publication: Research - peer-review › Article in proceedings – Annual report year: 2010

A profiling platform at 915, 1075, and 1090nm
Publication: Research › Article in proceedings – Annual report year: 2009

Mode profiling of optical fibers at high laser powers
Publication: Research - peer-review › Article in proceedings – Annual report year: 2008

Projects:

Additive Manufacturing for marine propulsion systems
Project: PhD
Photopolymerization based Additive Manufacturing Process Chains
Project: PhD

Viscoelastic Simulation and Optimization of Filament based 3D Printing
Project: PhD

Powder Technologies for Additive Manufacturing
Project: PhD

Industry 4.0 Digital Technologies For High Added Value Zero Defect Manufacturing
Project: PhD

New production paradigms for wind turbines
Project: PhD

Computer Vision based geometrical and textural control for 3D print and injection moulding processes
Project: PhD

Advanced Process Chains for Prototyping and Pilot Production based on Additive Manufacturing
Project: PhD

Additive manufacturing technology - process and product quality control
Project: PhD