Giuliano Bissacco - Research outputs - DTU Orbit (21/09/2019)

**Analysis and Characterization of Machined Surfaces with Aesthetic Functionality**
Research output: Contribution to journal › Journal article – Annual report year: 2019 › Research › peer-review

**Assessment of the inflatable core assisted paper bottle moulding process**
Research output: Contribution to journal › Conference article – Annual report year: 2019 › Research › peer-review

**A study on the feasibility of in-process compensation of cutting force induced errors using axes motors absorbed current**
Research output: Chapter in Book/Report/Conference proceeding › Conference abstract in proceedings – Annual report year: 2019 › Research › peer-review

**Effect of cutting edge micro geometry on surface generation in ball end milling**
Research output: Contribution to journal › Journal article – Annual report year: 2019 › Research › peer-review

**Micro product and process fingerprints for zero-defect net-shape micromanufacturing**
Research output: Contribution to conference › Conference abstract for conference – Annual report year: 2019 › Research › peer-review

**Offline tool trajectory compensation for cutting forces induced errors in a portable machine tool**
Research output: Contribution to journal › Journal article – Annual report year: 2019 › Research › peer-review

**Process characterization for molding of paper bottles using computed tomography and structure tensor analysis**
Research output: Contribution to journal › Conference article – Annual report year: 2019 › Research › peer-review

**Thermal characterization of a micro polishing machine and effect on path strategy compensation**
Research output: Chapter in Book/Report/Conference proceeding › Conference abstract in proceedings – Annual report year: 2019 › Research › peer-review

**Additive Manufacturing of Mould Inserts with Mirror-like Surfaces**
Research output: Contribution to journal › Conference article – Annual report year: 2018 › Research › peer-review

**A mechanistic model for the prediction of cutting forces in the face-milling of ductile spheroidal cast iron components for wind industry application**
Research output: Contribution to journal › Journal article – Annual report year: 2019 › Research › peer-review

**Applicability of Acoustic Emission monitoring to micro polishing**
Acoustic emission-based in-process monitoring of surface generation in robot-assisted polishing

A simulation of the effect of TWD (tool wear per discharge) estimation error on the depth of machined surfaces in micro-EDM milling

Comparison of cutting edge characterization techniques applied to industrial tools with sub micrometer edge radius

Computed Tomography characterization of the Green Fiber Bottle

Moulding process characterization of paper bottles using computed tomography

The effect of TWD estimation error on the geometry of machined surfaces in micro-EDM milling

Application of Functional Nano-Patterning to Polymer Medical Micro Implants

Characterization methods of nano-patterned surfaces generated by induction heating assisted injection molding

Comparison of 3 methods on fabricating micro-/nano- structured surface on 3D mold cavity

Comparison of optical methods for surface roughness characterization
Comparison of two setups for induction heating in injection molding
Research output: Contribution to journal › Journal article – Annual report year: 2015 › Research › peer-review

Development of a multisensory arm for process monitoring in Robot Assisted Polishing
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2015 › Research › peer-review

Development of a multisensory arm for process monitoring in Robot Assisted Polishing
Research output: Contribution to conference › Poster – Annual report year: 2015 › Research › peer-review

Development of on the machine process monitoring and control strategy in Robot Assisted Polishing
Pilny, L. & Bissacco, G., 2015, In : C I R P Annals. 64, 1, p. 313-316
Research output: Contribution to journal › Journal article – Annual report year: 2015 › Research › peer-review

Industrial characterization of nano-scale roughness on polished surfaces
Research output: Contribution to journal › Conference article – Annual report year: 2015 › Research › peer-review

Real time power consumption monitoring for energy efficiency analysis in micro EDM milling
Research output: Contribution to journal › Journal article – Annual report year: 2015 › Research › peer-review

Towards development of a novel online tool wear compensation method for dry micro-electrical discharge milling
Research output: Chapter in Book/Report/Conference proceeding › Conference abstract in proceedings – Annual report year: 2015 › Research › peer-review

Assessment of injection moulded nano-patterned surfaces
Research output: Chapter in Book/Report/Conference proceeding › Conference abstract in proceedings – Annual report year: 2014 › Research › peer-review

Improvement of replication fidelity in injection moulding of nano structures using an induction heating system
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2014 › Research › peer-review

Injection molding of nanopatterned surfaces in the sub-micrometer range with induction heating aid
Research output: Contribution to journal › Journal article – Annual report year: 2014 › Research › peer-review

Integrated Design, an Approach Towards DfuMA
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2014 › Research › peer-review
Micro Injection Molding of Thin Walled Geometries with Induction Heating System
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2014 › Research › peer-review

The effect of scattered light sensor orientation on roughness measurement of curved polished surfaces
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2014 › Research › peer-review

Validation of in-line surface characterization by light scattering in Robot Assisted Polishing
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2014 › Research › peer-review

Acoustic Emission Based In-process Monitoring In Robot Assisted Polishing
Research output: Contribution to conference › Paper – Annual report year: 2013 › Research › peer-review

Initial verification of an induction heating set-up for injection molding
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2013 › Research › peer-review

Optimization of Grooved Micromixer for Microengineering Technologies
Research output: Contribution to journal › Journal article – Annual report year: 2013 › Research › peer-review

Reliability of electrode wear compensation based on material removal per discharge in micro EDM milling
Research output: Contribution to journal › Journal article – Annual report year: 2013 › Research › peer-review

An investigation on the effect of surface characteristics on adhesion between polymer melts and replication tools
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2012 › Research › peer-review

A Structured Review and Classification of Demolding Issues and Proven Solutions
Research output: Contribution to journal › Journal article – Annual report year: 2012 › Research › peer-review

Feasibility of wear compensation in micro EDM milling based on discharge counting and discharge population characterization
Research output: Contribution to journal › Journal article – Annual report year: 2011 › Research › peer-review
Suspension of Water Droplets on Individual Pillars
Research output: Contribution to journal › Journal article – Annual report year: 2011 › Research › peer-review

An analytical model for force prediction in ball nose micro milling of inclined surfaces
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2010 › Research › peer-review

Assessment of electrode wear measurement in micro EDM milling
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2010 › Research › peer-review

A study of demoulding force prediction applied to periodic mould surface profiles
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2010 › Research › peer-review

Demoulding force prediction for micro polymer replication: a review of relevant literature
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2010 › Research › peer-review

Towards the effective tool wear control in micro-EDM milling
Research output: Contribution to journal › Journal article – Annual report year: 2010 › Research › peer-review

Realization and characterization of disposable polymer chips for the study of the filling of microchannels at low capillary numbers
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2009 › Research › peer-review

Anisotropy of Water Droplets on Single Rectangular Posts
Research output: Contribution to journal › Journal article – Annual report year: 2009 › Research › peer-review

Snapshot of Micro EDM technology for industry
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2009 › Research › peer-review

Tooling Process Chains and Concepts
Research output: Chapter in Book/Report/Conference proceeding › Book chapter – Annual report year: 2009 › Education › peer-review

4M Progress Report 2006-2008

**Direct dynamic calibration of dynamometers for micro milling operations**


Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2008 › Research › peer-review

**Force analysis in micro milling Al 6082 T6 in various engagement conditions**


Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2008 › Research › peer-review

**High aspect ratio micro tool manufacturing for polymer replication using mu EDM of silicon, selective etching and electroforming**


Research output: Contribution to journal › Journal article – Annual report year: 2008 › Research › peer-review

**Modelling the cutting edge radius size effect for force prediction in micro milling**


Research output: Contribution to journal › Journal article – Annual report year: 2008 › Research › peer-review

**Multidisciplinary graduate course and PhD summerschool in micromechanical system design and manufacture**


Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2008 › Research › peer-review

**Setup of a micro milling force knowledge database - a 4M cross divisional project**


Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2008 › Research › peer-review

**Tooling process chains for polymer replication of micro fluidic devices**


Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2008 › Research › peer-review

**An uncertainty model for thermal effects on axial depth of cut in micro milling**


Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2007 › Research › peer-review

**Characterization of pulses in micro EDM milling based on wear and material removal**


Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2007 › Research › peer-review
Micro tools manufacturing for polymer replication with high aspect ratio structures using µEDM of silicon, selective etching and electroforming
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2007 › Research › peer-review

Thermal behaviour of micro EDM milling machine and influence on electrode wear compensation
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2007 › Research › peer-review

A cutting force model for micromilling applications
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2006 › Research › peer-review

High–Precise Micro Bonding Process using a Focused Stream of Hot Air
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2006 › Research › peer-review

Indirect tooling based on micromilling, electroforming and selective etching
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2006 › Research › peer-review

Realization and characterization of high precision micro grooves on green ceramic
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2006 › Research › peer-review

Size Effects on Surface Generation in Micro Milling Hardened Tool Steel
Bissacco, G., Hansen, H. N. & De Chiffre, L., 2006, In : C I R P Annals. 55, 1, p. 593-596
Research output: Contribution to journal › Conference article – Annual report year: 2006 › Research › peer-review

Accuracy of axial depth of cut in micromilling operations - Simplified procedure and uncertainty model
Research output: Book/Report › Report – Annual report year: 2005 › Research › peer-review

Geometrical characterization of micro end milling tools
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2005 › Research › peer-review

Investigation on a procedure for optimal axial depth of cut accuracy in micromilling
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2005 › Research › peer-review
Manufacturing of an injection moulding mould insert with three-dimensional micro features by micromilling
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2005 › Research › peer-review

Micromilling of hardened tool steel for mould making applications
Research output: Contribution to journal › Journal article – Annual report year: 2005 › Research › peer-review

Micro product development methods - how do we focus on the right issues?
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2005 › Research › peer-review

Precision manufacturing methods of inserts for injection molding of microfluidic systems.
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2005 › Research › peer-review

Wear of micro end mills
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2005 › Research › peer-review

A software tool for simulation of surfaces generated by ball nose end milling
Research output: Book/Report › Report – Annual report year: 2004 › Research

Effect of Cutting Parameters on Microhardness in 2 mm Slot Milling Hardened Tool Steel
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2004 › Research › peer-review

Experimental characterization of micromilled surfaces by large range AFM
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2004 › Research › peer-review

Improving axial depth of cut accuracy in micromilling
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2004 › Research › peer-review

Surface Generation and Optimization in Micromilling

Accuracy of depth of cut in micro milling operations
Research output: Book/Report › Report – Annual report year: 2003 › Research
Micromilling experiments on hardened tool steel and Titanium
Research output: Book/Report › Report – Annual report year: 2003 › Research

On machine measurements of electrode wear in micro EDM milling
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2003 › Research › peer-review

Practical Metallurgy
Research output: Book/Report › Report – Annual report year: 2003 › Research

Literature Survey Concerning State of the Art and Surface Generation in High Speed Milling
Research output: Book/Report › Report – Annual report year: 2002 › Research

Preliminary Milling Tests on STAVAX ESR 52 HRC using 2 mm carbide tools in the range 20 – 200 m/min
Research output: Book/Report › Report – Annual report year: 2002 › Research

Surface Generation Modeling in Ball Nose End Milling: a review of relevant literature
Research output: Book/Report › Report – Annual report year: 2002 › Research

Surface Generation Modelling in Ball Nose End Milling: a review of relevant literature
Bissacco, G., 2002, IPL.
Research output: Book/Report › Report – Annual report year: 2002 › Research