

## Publikationen

(2020): Octopus: A simple and effective tool for polishing slurry monitoring. In: Proceedings of SPIE Optical Engineering + Applications (24 August - 04 September, 20208; Optical Manufacturing and Testing XIII; online conference), San Diego, United States, vol. 11487. DOI: 10.1117/12.2567952.

(2018): Enlarging process window of ductile mode machining of WC molds. In: Proceedings of EOSAM 2018 (European Optical Society Biennial Meeting; October 2018; Delft, The Netherlands): Optical System Design, Tolerancing, and Fabrication.

(2018): First experiences with Filled-Up-Microscopy (FUM) to evaluate the depth of sub-surface damages on ground surfaces. In: Proceedings of EOSAM 2018 (European Optical Society Biennial Meeting; October 2018; Delft, The Netherlands): Optical System Design, Tolerancing, and Fabrication.

(2018): Standardized evaluation of grinding tools for brittle and ductile mode grinding. Invited Paper. In: Proceedings of EOSAM 2018 (European Optical Society Biennial Meeting; October 2018; Delft, The Netherlands): Optical System Design, Tolerancing, and Fabrication.

(2018): Closed-loop laser polishing of glass. In: LaP 2018 - 3rd Conference on Laser Polishing, Aachen.

(2018): In situ monitoring of laser polishing. In: DGaO-Proceedings 2018.

(2018): Load controlled process window analysis of feed controlled CNC grinding. In: PROCEEDINGS VOLUME 10692 SPIE OPTICAL SYSTEMS DESIGN, 14-17 MAY 2018 Optical Fabrication, Testing, and Metrology VI, Frankfurt, Germany. DOI: 10.1117/12.2315336.

(2018): Ductile grinding of tungsten carbide applying standard CNC machines: a process analysis. In: Proceedings of SPIE 10692: SPIE Optical Systems Design/Optical Fabrication, Testing, and Metrology VI (14.-17.05.2018; Frankfurt /Main). DOI: 10.1117/12.2315338.

(2018): Filled-Up-Microscopy (FUM): a non-destructive method for approximating the depth of sub-surface damage on ground surfaces. In: Proceedings of SPIE 10829 (Fifth European Seminar on Precision Optics Manufacturing [April 10-11, 2018; Teisnach]). DOI: 10.1117/12.2318576.

(2018): Ductile mode single point diamond turning (SPDT) of binderless tungsten carbide molds. In: Proceedings of SPIE Optical Engineering + Applications (19-23 August, 2018; Optical Manufacturing and Testing XII; San Diego, CA, USA), San Diego, United States, vol. 10742. DOI: 10.1117/12.2323244.

(2018): From turning to grinding: ductile machining with gPVA. In: Proceedings of SPIE Optical Engineering + Applications (19-23 August, 2018; Optical Manufacturing and Testing XII; San Diego, CA, USA), San Diego, United States, vol. 10742. DOI: 10.1117/12.2323246.

(2018): Ductile grinding of tungsten carbide molds applying standard CNC machines. In: Proceedings of SPIE Optical Engineering + Applications (19-23 August, 2018; Optical Manufacturing and Testing XII; San Diego, CA, USA), San Diego, United States, vol. 10742. DOI: 10.1117/12.2323245.

(2018): Closed-loop next generation laser polishing. In: Proceedings of SPIE 10829 (Fifth European Seminar on Precision Optics Manufacturing [April 10-11, 2018; Teisnach]). DOI: 10.1117/12.2318749.

(2018): SPDT and standard CNC-grinding of tungsten carbide molds for precision glass molding: an experimental process analysis. In: Proceedings of SPIE 10829 (Fifth European Seminar on Precision Optics Manufacturing [April 10-11, 2018; Teisnach]). DOI: 10.1117/12.2318710.

- (2018): gPVA: a system for the classification of grinding tools. In: Proceedings of SPIE 10829 (Fifth European Seminar on Precision Optics Manufacturing [April 10-11, 2018; Teisnach]). DOI: 10.1117/12.2318695.
- (2018): Standardized evaluation of grinding tools for brittle and ductile mode grinding. In: European Optical Society Biennial Meeting (EOSAM) 2018, Delft, Niederlande.
- (2018): In situ laser monitoring of laser polishing. In: 119. Jahrestagung der Deutschen Gesellschaft für angewandte Optik (DGaO), Technische Hochschule Aalen.
- (2018): grinding Process Validation Approach (gPVA). Posterpräsentation. In: 5. Tag der Forschung, Deggendorf.
- (2018): Closed-loop laser polishing using in-process surface finish metrology. In: Applied Optics, vol. 57, no. 4, pp. 834-838. DOI: 10.1364/AO.57.000834.
- (2017): Wear detection of brass bond diamond grinding wheel by spectral coherence of grinding forces. In: Proceedings of the 17th International Conference of the European Society for Precision Engineering and Nanotechnology [euspen] (May 29 - June 2, 2017; Hanover, Germany).
- (2017): Grinding Process Validation Approach (gPVA). In: Journal of Physical Science and Application, vol. 7, no. 5. DOI: 10.17265/2159-5348/2017.05.004.
- (2017): Setting-up high-end cnc grinding processes: a Preston-based approach. In: Proceedings of EOS Optical Technologies Conferences at the World of Photonics Congress (WPC 2017) [Munich, Germany; June 26-29, 2017].
- (2017): Three wagons Approach Applied to Optimization of Industrial Grinding Processes. In: Optical Fabrication and Testing part of Optical Design and Fabrication: 9-13 July 2017, Denver, Colorado, United States, Washington, D.C., USA. DOI: 10.1364/OFT.2017.OTu2B.2.
- (2017): In situ laser polishing optimization method: Control of LASer Surface Optimisation (C-Lasso). In: Proceedings of EOS Optical Technologies Conferences at the World of Photonics Congress (WPC 2017) [Munich, Germany; June 26-29, 2017].
- (2017): Force-controlled analysis tool for optimization of precision CNC grinding processes. In: Proceedings of SPIE 10326 (Fourth European Seminar on Precision Optics Manufacturing, 1032601 [April 4th-5th 2017, Teisnach]). DOI: 10.1117/12.2272713.
- (2016): Prediction of grinding tool wear and lifetime by using a test bench. In: Proceedings of SPIE 10009 (Third European Seminar on Precision Optics Manufacturing, 100090Y [April 12th 2016, Teisnach]).
- (2015): Dependency between removal characteristics and defined measurement categories of pellets. In: Proceedings of SPIE 9573. DOI: 10.1117/12.2189987.
- (2014): A Study on Elastic Grinding Tools. In: Proceedings of the International Optical Design Conference, Washington, DC. DOI: 10.1364/OFT.2014.OTu3B.3.
- (2014): A study on elastic grinding tools. In: Optical Fabrication and Testing (OF&T), Kohala Coast, HI, USA.
- (2013): Grinding Processes for Silicon Carbide (SiC) Materials. In: Proceedings of the 13th International Conference of the European Society for Precision Engineering & Nanotechnology, Berlin.
- (2013): Dressing and Selfsharpening of Conventional Tools. In: Proceedings of the 13th International Conference of the European Society for Precision Engineering & Nanotechnology, Berlin.
- (2013): AFJP – A review of a sub-aperture polishing technology. In: EOS Conferences at the World of Photonics Congress, München.
- (2011): Modellierung und Bearbeitung optischer Flächen mittels CAD/CAM-Software. In: Proceedings zur 112. Jahrestagung der DGaO (Technische Universität Ilmenau; 14.-18. Juni 2011).
- (2011): An Experimental Study on a Flexible Grinding Tool. In: Advanced Materials Research, vol. 325, pp. 91-96. DOI: 10.4028/www.scientific.net/AMR.325.91.



- (2011): Physical marker based stitching process of circular and non-circular interferograms. In: Proc. SPIE 8083, Modeling Aspects in Optical Metrology III (SPIE Optical Metrology; May 2012; Munich, Germany). DOI: 10.1117/12.889491.
- (2010): Freiformen aus Advanced Materials. In: Forschungsbericht der Fachhochschule Deggendorf 2010, Deggendorf.
- (2010): Investigations on Grinding Tools for Silicon Carbide Based Advanced Materials. In: International Optical Design Conference 2010 (13-17 June 2010, Jackson Hole, WY, USA), Bellingham, vol. Vol. 7652.
- (2010): Investigations on Magnetorheological Finishing of High-Quality Optical Surfaces with Varying Influence Function (Proceedings of Optical Fabrication and Testing 2010; Jackson Hole, WY, USA; June 13-17, 2010). In: Optical Fabrication and Testing on CD-ROM, Washington, DC, USA. DOI: 10.1364/OFT.2010.OWD3.
- (2010): Relationship between influence function accuracy and polishing quality in magnetorheological finishing. In: Proceedings of the 5th International Symposium on Advanced Optical Manufacturing and Testing Technologies: Advanced Optical Manufacturing Technologies (Dalian, China; April 26-29, 2010), vol. 7655. DOI: 10.1117/12.865508.
- (2010): Effects of mechanical inaccuracies on the measurement result in metrology systems. In: Proceedings of the 5th International Symposium on Advanced Optical Manufacturing and Testing Technologies: Optical Test and Measurement Technology and Equipment, vol. 7656.
- (2010): ELID supported grinding of thin sapphire wafers. In: Proceedings of SPIE: 5th International Symposium on Advanced Optical Manufacturing and Testing Technologies: Advanced Optical Manufacturing Technologies, Volume 7655.
- (2010): Vibration errors caused by tactile measurements. In: 1st International Euspen Challenge, Jena.
- (2010): Effects of mechanical inaccuracies on the measurement result in metrology systems. In: SPIE Conference, Dalian, China.
- (2009): Strategies for grinding optical free-forms using ball-shaped grinding wheels. In: SPIE Optifab, Rochester, NY, USA.
- (2009): Strategies for grinding optical free forms using ball shaped grinding wheels. In: Optifab 2009: Conference TD06, Rochester, NY, USA.
- (2008): Ultraschallunterstütztes Schleifen von Linsen. In: Siebtes Symposium - Zukunft Glas - von der Tradition zum High-Tech-Produkt, Zwiesel.
- (2008): Precision finishing of aspherical optical components using ELID grinding. In: Siebtes Symposium - Zukunft Glas - von der Tradition zum High-Tech-Produkt, Zwiesel.
- (2008): Ultraschallunterstütztes Schleifen von Linsen. In: Siebtes Symposium - Zukunft Glas - von der Tradition zum High-Tech-Produkt.
- (2008): Precision finishing of aspherical optical components using ELID grinding. In: Siebtes Symposium - Zukunft Glas - von der Tradition zum High-Tech-Produkt.
- (2008): Forces acting between polishing tool and workpiece surface in magnetorheological finishing. In: Proceedings of SPIE, Volume 7060, Current Developments in Lens Design and Optical Engineering IX (Optical Engineering + Applications, San Diego, CA, USA; August 10-14, 2008). DOI: 10.1117/12.794196.
- (2008): Magnetorheological Finishing of silicon nitride moulds. In: Proceedings of the 10th Anniversary International Conference of the European Society of Precision Engineering and Nanotechnology, Zürich, Schweiz, Volume 2.