

# Volker Wittstock

## List of Publications by Year in descending order

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45  
papers

439  
citations

933447

10  
h-index

752698

20  
g-index

47  
all docs

47  
docs citations

47  
times ranked

439  
citing authors

#	ARTICLE	IF	CITATIONS
1	Comparing immersive virtual reality and powerpoint as methods for delivering safety training: Impacts on risk perception, learning, and decision making. Safety Science, 2019, 111, 271-286.	4.9	110
2	Modellierung des Aufschwimmverhaltens hydrodynamischer LinearfÄ¼hrungen bei konstanter Geschwindigkeit. Forschung Im Ingenieurwesen/Engineering Research, 2019, 83, 267-272.	1.6	1
3	Modelling and Numerical Analysis of Workpiece Clamping for Vertical Turning Regarding to the Clamping Safety. , 2019, , 208-217.		0
4	Weak Point Analysis of Human Machine Interactions at Clamping of Turning Workpieces on Milling Machines. , 2019, , .		1
5	Monitoring concept for structural integration of PZT-fiber arrays in metal sheets: a numerical and experimental study. International Journal of Smart and Nano Materials, 2018, 9, 56-67.	4.2	1
6	Identification of modal parameters of machine tools during cutting by operational modal analysis. Procedia CIRP, 2018, 77, 473-476.	1.9	14
7	Evaluation of thermo-energetic behavior for demand-oriented operating of machine tool cooling systems. Procedia Manufacturing, 2018, 21, 213-220.	1.9	6
8	Advanced Micro Structuring and Joining Technologies for Direct Integration of Piezo Fibers into Metallic Materials. Advanced Engineering Materials, 2018, 20, 1800472.	3.5	2
9	High Volume Production of PZT Fiber Arrays for Direct Functional Integration PZT into Metal Structures. Advanced Engineering Materials, 2018, 20, 1800410.	3.5	2
10	ECR plasma deposited a-SiCN:H as insulating layer in piezoceramic modules. Vacuum, 2018, 155, 118-126.	3.5	4
11	SIMULATION FOR INSTABLE FLOATING OF HYDRODYNAMIC GUIDES DURING ACCELERATION AND AT CONSTANT VELOCITY. Journal of Machine Engineering, 2018, 18, 5-15.	1.8	5
12	Extended bisection method for parameter identification of the transient heat conduction equation for thermo-elastic deformations during drilling. International Journal of Advanced Manufacturing Technology, 2017, 88, 1279-1288.	3.0	1
13	Evaluation of Measures for Thermo-sensitive Design and Operating of Machine Tool Structures. Procedia CIRP, 2017, 60, 14-19.	1.9	2
14	Methodology for Process-independent Energetic Assessment of Machine Tools. Procedia Manufacturing, 2017, 8, 254-261.	1.9	7
15	Simulation Method for the Floating of Hydrodynamic Guides. Procedia CIRP, 2017, 62, 346-350.	1.9	1
16	Energy Visualization Techniques for Machine Tools in Virtual Reality. Procedia CIRP, 2016, 41, 329-333.	1.9	16
17	CAD to VR â€œ A Methodology for the Automated Conversion of Kinematic CAD Models to Virtual Reality. Procedia CIRP, 2016, 41, 358-363.	1.9	46
18	Investigation of the Time-invariance and Causality of a Machine Tool for Performing Operational Modal Analysis. Procedia CIRP, 2016, 46, 400-403.	1.9	6

#	ARTICLE	IF	CITATIONS
19	Condition Monitoring of Piezoceramic Fibers During Joining by Forming. Procedia Technology, 2016, 26, 144-151.	1.1	1
20	Risk Analysis (Assessment) Using Virtual Reality Technology - Effects of Subjective Experience: An Experimental Study. Procedia CIRP, 2016, 50, 490-495.	1.9	7
21	Simulation-based thermal investigation of the cutting tool in the environment of single-phase fluxes. International Journal of Advanced Manufacturing Technology, 2016, 83, 117-122.	3.0	2
22	Numerical modelling and analysis of the influence of an air cooling system on a milling machine in virtual environment. International Journal of Advanced Manufacturing Technology, 2016, 86, 1853-1864.	3.0	16
23	BROADBAND EXCITATION OF MACHINE TOOLS BY CUTTING FORCES FOR PERFORMING OPERATIONAL MODAL ANALYSIS. MM Science Journal, 2016, 2016, 1473-1481.	0.4	7
24	Variance-Based Sensitivity Analysis for the Design of Thermal Systems. Applied Mechanics and Materials, 2015, 794, 371-378.	0.2	1
25	Influence of surface processing on the fracture strength of structurally integrated PZT fibers in shaped sheet metal parts. Proceedings of SPIE, 2015, , .	0.8	0
26	VIRTUAL REALITY BASED DESIGN AND CALCULATION TOOL FOR IMPROVING DYNAMICS OF MACHINE TOOLS. MM Science Journal, 2015, 2015, 654-658.	0.4	1
27	Mobile Augmented Reality Based Monitoring of Assembly Lines. Procedia CIRP, 2014, 23, 246-251.	1.9	44
28	Structural Integration of PZT Fibers in Deep Drawn Sheet Metal for Material-integrated Sensing and Actuation. Procedia Technology, 2014, 15, 658-667.	1.1	9
29	Smart metal sheets by direct functional integration of piezoceramic fibers in microformed structures. Microsystem Technologies, 2014, 20, 1131-1140.	2.0	20
30	Joining by forming of piezoceramic macro-fiber arrays within micro-structured surfaces of aluminum sheets. Production Engineering, 2014, 8, 195-205.	2.3	11
31	Thermal deformations of cutting tools: measurement and numerical simulation. Production Engineering, 2014, 8, 543-550.	2.3	17
32	Immersive Presentations: Enabling Engaging Virtual Reality Based Training and Teaching by Merging Slide-Based and VR-Based Elements. , 2014, , 125-130.		1
33	Untersuchungen zur thermisch bedingten Werkstoffverformung. ZWF Zeitschrift Fuer Wirtschaftlichen Fabrikbetrieb, 2014, 109, 521-525.	0.3	2
34	Real NC Control Unit and Virtual Machine to Improve Operator Training. Procedia Computer Science, 2013, 25, 98-107.	2.0	7
35	Applications of a Modular Interaction Framework for Virtual Reality Testing in a Smart Environment. Procedia CIRP, 2013, 9, 35-39.	1.9	1
36	Intuitivere Produkt-FMEA mittels Virtual Reality. ZWF Zeitschrift Fuer Wirtschaftlichen Fabrikbetrieb, 2013, 108, 215-219.	0.3	2

#	ARTICLE	IF	CITATIONS
37	Fields of Application of Coupling a Real NC Control Unit With Virtual Reality Technology. , 2012, , .		3
38	A Framework for User Tests in a Virtual Environment. Lecture Notes in Computer Science, 2012, , 358-367.	1.3	8
39	Mehrmaschinensysteme. , 2012, , 253-287.		0
40	VR tools for the development of energy-efficient products. CIRP Journal of Manufacturing Science and Technology, 2011, 4, 208-215.	4.5	16
41	Virtual-Reality-Based Simulation of NC Programs for Milling Machines. , 2011, , 697-703.		6
42	Control concept for piezo-based actuator-sensor-units for uniaxial vibration damping in machine tools. Production Engineering, 2010, 4, 413-419.	2.3	8
43	Adaptive spindle support for improving machining operations. CIRP Annals - Manufacturing Technology, 2008, 57, 395-398.	3.6	18
44	In-Process Monitoring of Joining Operations for Piezoceramic Elements. Key Engineering Materials, 0, 742, 800-806.	0.4	4
45	Influence of Electrode Layers on the Fracture Strength of PZT Ceramics. Solid State Phenomena, 0, 260, 187-193.	0.3	2