Michael Storchak

List of Publications by Year
in descending order

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42	576	471477 17	713444 21
papers	citations	h-index	g-index

47	47	47	182
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Temperature calculation in cutting zones. CIRP Annals - Manufacturing Technology, 2018, 67, 61-64.	3.6	35
2	Determination of Johnsonâ€“Cook Constitutive Parameters for Cutting Simulations. Metals, 2019, 9, 473.	2.3	35
3	The influence of tool wear particles scattering in the contact zone on the workpiece surface microprofile formation in polishing quartz. Journal of Superhard Materials, 2010, 32, 415-422.	1.2	25
4	Modelling the material resistance to cutting. International Journal of Mechanical Sciences, 2017, 126, 44-54.	6.7	25
5	Modelling of orthogonal cutting processes with the method of smoothed particle hydrodynamics. Production Engineering, 2013, 7, 639-645.	2.3	24
6	Surface roughness in diamond abrasive finishing. Journal of Superhard Materials, 2009, 31, 191-195.	1.2	23
7	In situ control of roughness of processed surfaces by reflectometric method. Proceedings of SPIE, 2010, , .	0.8	23
8	Mechanical properties of subsurface layers in the machining of the titanium alloy Ti10V2Fe3Al. Journal of Mechanical Science and Technology, 2018, 32, 315-322.	1.5	23
9	Surface quality control in diamond abrasive finishing. Proceedings of SPIE, 2009, , .	0.8	22
10	Assessment of surface roughness and reflectance of nonmetallic products upon diamond abrasive finishing. Journal of Superhard Materials, 2009, 31, 338-346.	1.2	22
11	Bound-abrasive grinding and polishing of surfaces of optical materials. Optical Engineering, 2011, 50, 063401.	1.0	22
12	Bound-abrasive grinding and polishing of surfaces of optical materials. Proceedings of SPIE, 2010, , .	0.8	21
13	Thermal effects in orthogonal cutting. Production Engineering, 2013, 7, 203-211.	2.3	21
14	Experimental studies for verification of thermal effects in cutting. Production Engineering, 2011, 5, 507-515.	2.3	20
15	Effect of machining conditions on specific tangential forces. Production Engineering, 2012, 6, 621-629.	2.3	20
16	Synthesis of cylindrical gears with optimum rolling fatigue strength. Production Engineering, 2015, 9, 87-97.	2.3	18
17	Improving the friction model for the simulation of cutting processes. Tribology International, 2022, 167, 107376.	5.9	17
18	Determining mechanical characteristics of material resistance to deformation in machining. Production Engineering, 2014, 8, 679-688.	2.3	15

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19	Finite element modeling for the cutting process of the titanium alloy Ti10V2Fe3Al. Production Engineering, 2016, 10, 509-517.	2.3	15
20	Development of analytical model for orthogonal cutting. Production Engineering, 2015, 9, 247-255.	2.3	13
21	Thermomechanische Wechselwirkungen beim Zerspanen. ZWF Zeitschrift Fuer Wirtschaftlichen Fabrikbetrieb, 2009, 104, 263-272.	0.3	13
22	Refinement of temperature determination in cutting zones. Journal of Mechanical Science and Technology, 2021, 35, 3659-3673.	1.5	12
23	Determination of thermal material properties for the numerical simulation of cutting processes. International Journal of Advanced Manufacturing Technology, 2022, 118, 1941-1956.	3.0	11
24	Coatings strength evaluation of cutting inserts using advanced multi-pass scratch method. Measurement: Journal of the International Measurement Confederation, 2022, 191, 110745.	5.0	11
25	Determination of Material Resistance Characteristics in Cutting. Procedia CIRP, 2017, 58, 293-298.	1.9	10
26	Instrumented indentation study of materials edge chipping. Ceramics International, 2021, 47, 29638-29645.	4.8	10
27	Determination of the Toolâ€“Chip Contact Length for the Cutting Processes. Materials, 2022, 15, 3264.	2.9	10
28	Glass Fracture during Micro-Scratching. Surfaces, 2020, 3, 211-224.	2.3	8
29	Wear particles deposit formation on the polishing tool working surface. Journal of Superhard Materials, 2011, 33, 44-53.	1.2	7
30	Optimal configurations of the machine tool structure by means of neural networks. Production Engineering, 2011, 5, 219-226.	2.3	7
31	Bruchmodelle fÃ¼r die Modellierung von Zerspanprozessen. ZWF Zeitschrift Fuer Wirtschaftlichen Fabrikbetrieb, 2009, 104, 330-339.	0.3	7
32	Thermomechanische Materialmodelle zur Modellierung von Zerspanprozessen. ZWF Zeitschrift Fuer Wirtschaftlichen Fabrikbetrieb, 2009, 104, 482-491.	0.3	7
33	Using model based analytic cutting force prediction in CAM toolpath generation. Procedia CIRP, 2019, 82, 467-472.	1.9	6
34	Simulation of the Teeth Profile Shaping During the Finishing of Gears. Mechanisms and Machine Science, 2020, , 365-384.	0.5	4
35	Modellieren des Verzahnens mit Scheibenwerkzeugen. ZWF Zeitschrift Fuer Wirtschaftlichen Fabrikbetrieb, 2010, 105, 649-654.	0.3	4
36	Impact of different tool trajectories on the kinetic characteristics of the cutting process. Procedia CIRP, 2021, 99, 133-138.	1.9	3

#	Article	IF	Citations
37	Development of controllable spherical fluid friction hinges for exact spatial mechanisms. Production Engineering, 2011, 5, 241-250.	2.3	1
38	Optimization of Geometrical Engagement Parameters for Gear Honing. , 2019, , 35-64.		1
39	Die FEM-Modellierung als moderner Ansatz zur Untersuchung von Zerspanprozessen. ZWF Zeitschrift Fuer Wirtschaftlichen Fabrikbetrieb, 2009, 104, 604-616.	0.3	1
40	Application of the discrete element method to model cohesive materials. Proceedings in Applied Mathematics and Mechanics, 2007, 7, 4010013-4010014.	0.2	0
41	Dynamic reaction of machine tools to transient cutting conditions. Procedia CIRP, 2021, 102, 186-191.	1.9	0
42	Verfahren zur experimentellen Bestimmung von Parametern fÃ¼r Reibungsmodelle beim Zerspanen. ZWF Zeitschrift Fuer Wirtschaftlichen Fabrikbetrieb, 2010, 105, 1043-1051.	0.3	0