

Daniel Bachrathy

List of Publications by Year in descending order

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papers

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25
g-index

46
all docs

46
docs citations

46
times ranked

438
citing authors

#	ARTICLE	IF	CITATIONS
1	Improved prediction of stability lobes with extended multi frequency solution. CIRP Annals - Manufacturing Technology, 2013, 62, 411-414.	1.7	84
2	Bisection method in higher dimensions and the efficiency number. Periodica Polytechnica, Mechanical Engineering, 2012, 56, 81.	0.8	71
3	SURFACE PROPERTIES OF THE MACHINED WORKPIECE FOR HELICAL MILLS. Machining Science and Technology, 2009, 13, 227-245.	1.4	53
4	Chatter avoidance in cutting highly flexible workpieces. CIRP Annals - Manufacturing Technology, 2017, 66, 377-380.	1.7	47
5	Operational stability prediction in milling based on impact tests. Mechanical Systems and Signal Processing, 2018, 103, 327-339.	4.4	40
6	State Dependent Regenerative Effect in Milling Processes. Journal of Computational and Nonlinear Dynamics, 2011, 6, .	0.7	34
7	Model based reconstruction of milled surface topography from measured cutting forces. International Journal of Machine Tools and Manufacture, 2012, 54-55, 25-33.	6.2	33
8	Experimental investigation of dynamic chip formation in orthogonal cutting. International Journal of Machine Tools and Manufacture, 2019, 145, 103429.	6.2	32
9	Extension of process damping to milling with low radial immersion. International Journal of Advanced Manufacturing Technology, 2017, 89, 2545-2556.	1.5	23
10	Prediction of robust stability boundaries for milling operations with extended multi-frequency solution and structured singular values. Journal of Manufacturing Processes, 2017, 30, 281-289.	2.8	21
11	Synchronization in networks with heterogeneous coupling delays. Physical Review E, 2018, 97, 012311.	0.8	20
12	On the global dynamics of connected vehicle systems. Nonlinear Dynamics, 2019, 96, 1865-1877.	2.7	18
13	Cumulative Surface Location Error for Milling Processes Based on Tool-tip Frequency Response Function. Procedia CIRP, 2016, 46, 323-326.	1.0	17
14	Stochastic semi-discretization for linear stochastic delay differential equations. International Journal for Numerical Methods in Engineering, 2019, 119, 879-898.	1.5	17
15	Improving the stability of multi-cutter turning with detuned dynamics. Machining Science and Technology, 2016, 20, 440-459.	1.4	16
16	On stability of emulated turning processes in HIL environment. CIRP Annals - Manufacturing Technology, 2019, 68, 405-408.	1.7	15
17	Experimental investigation of the shear angle variation during orthogonal cutting. Materials Today: Proceedings, 2018, 5, 26495-26500.	0.9	14
18	Stochastic modeling of the cutting force in turning processes. International Journal of Advanced Manufacturing Technology, 2020, 111, 213-226.	1.5	12

#	ARTICLE	IF	CITATIONS
19	Optimal Detuning of a Parallel Turning System—Theory and Experiments. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2017, 139, .	0.9	11
20	Effects of Varying Dynamics of Flexible Workpieces in Milling Operations. Journal of Manufacturing Science and Engineering, Transactions of the ASME, 2020, 142, .	1.3	11
21	On the moment dynamics of stochastically delayed linear control systems. International Journal of Robust and Nonlinear Control, 2020, 30, 8074-8097.	2.1	10
22	Spectrum design using distributed delay. International Journal of Dynamics and Control, 2014, 2, 234-246.	1.5	9
23	Numerical and experimental investigation of the applicability of pellet impacts for impulse excitation. International Journal of Impact Engineering, 2018, 115, 19-31.	2.4	9
24	Experimental validation of appropriate axial immersions for helical mills. International Journal of Advanced Manufacturing Technology, 2015, 84, 1295.	1.5	8
25	A Theoretical Investigation of the Effect of the Stochasticity in the Material Properties on the Chatter Detection During Turning. , 2017, , .		8
26	In-process impulse response of milling to identify stability properties by signal processing. Journal of Sound and Vibration, 2022, 527, 116849.	2.1	8
27	Stability of turning processes for periodic chip formation. Advances in Manufacturing, 2018, 6, 345-353.	3.2	7
28	Chatter formation during milling due to stochastic noise-induced resonance. Mechanical Systems and Signal Processing, 2021, 161, 107987.	4.4	6
29	Gaussian noise process as cutting force model for turning. Procedia CIRP, 2018, 77, 94-97.	1.0	5
30	High-speed camera measurements in the mechanical analysis of machining. Procedia CIRP, 2018, 77, 155-158.	1.0	5
31	Laser scanned patterns of machined surfaces. Procedia CIRP, 2018, 77, 355-358.	1.0	5
32	In-Process Monitoring of Changing Dynamics of a Thin-Walled Component During Milling Operation by Ball Shooter Excitation. Journal of Manufacturing and Materials Processing, 2020, 4, 78.	1.0	5
33	Hardware-in-the-loop experiment of turning. Procedia CIRP, 2018, 77, 675-678.	1.0	4
34	Numerical and experimental investigation of contact length during orthogonal cutting. Materials Today: Proceedings, 2019, 12, 329-334.	0.9	4
35	Certifying Safety for Nonlinear Time Delay Systems via Safety Functionals: A Discretization Based Approach. , 2021, , .		4
36	The Development of High Speed Virtual Milling Test. , 2017, , .		3

#	ARTICLE	IF	CITATIONS
37	Stochastic semidiscretization method: Second moment stability analysis of linear stochastic periodic dynamical systems with delays. Applied Mathematical Modelling, 2020, 88, 933-950.	2.2	3
38	Optimization of the Robust Stability Limit for Multi-Cutter Turning Processes. , 2015, , .		2
39	Surface Error and Stability Chart of Beam-Type Workpiece in Milling Processes. , 2016, , .		2
40	Effect of wavy tool path on the stability properties of milling by the implicit subspace iteration method. International Journal of Advanced Manufacturing Technology, 2017, 91, 1781-1789.	1.5	2
41	Experimental Determination of Dominant Multipliers in Milling Process by Means of Homogeneous Coordinate Transformation. , 2017, , .		2
42	On process damping induced by vibration-dependency of cutting direction in milling. Procedia CIRP, 2018, 77, 171-174.	1.0	2
43	Why is it hard to identify the onset of chatter? A stochastic resonance perspective. CIRP Annals - Manufacturing Technology, 2021, 70, 329-332.	1.7	2
44	VALIDATION OF CUTTING FORCE CHARACTERISTIC FOR COMPLEX TOOLPATH. Acta Polytechnica CTU Proceedings, 2016, 3, 78-81.	0.3	0
45	Optimization of Edge Geometry of Cylindrical Milling Tools to Enhance Dynamic Stability. , 2019, , .		0
46	Bifurcations analysis in implicit maps through the dynamics of cumulated surface errors in milling. Nonlinear Dynamics, 0, , 1.	2.7	0