

Zoltan Dombovari

List of Publications by Year in descending order

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55
papers

1,710
citations

361413

20
h-index

276875

41
g-index

55
all docs

55
docs citations

55
times ranked

785
citing authors

#	ARTICLE	IF	CITATIONS
1	Chatter suppression techniques in metal cutting. CIRP Annals - Manufacturing Technology, 2016, 65, 785-808.	3.6	474
2	Chatter stability of milling in frequency and discrete time domain. CIRP Journal of Manufacturing Science and Technology, 2008, 1, 35-44.	4.5	243
3	The effect of serration on mechanics and stability of milling cutters. International Journal of Machine Tools and Manufacture, 2010, 50, 511-520.	13.4	113
4	On the global dynamics of chatter in the orthogonal cutting model. International Journal of Non-Linear Mechanics, 2011, 46, 330-338.	2.6	78
5	The Effect of Helix Angle Variation on Milling Stability. Journal of Manufacturing Science and Engineering, Transactions of the ASME, 2012, 134, .	2.2	57
6	Prediction of multiple dominant chatter frequencies in milling processes. International Journal of Machine Tools and Manufacture, 2011, 51, 457-464.	13.4	56
7	Estimates of the bistable region in metal cutting. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2008, 464, 3255-3271.	2.1	49
8	Cylindrical milling tools: Comparative real case study for process stability. CIRP Annals - Manufacturing Technology, 2014, 63, 385-388.	3.6	48
9	Identification of cutting force characteristics based on chatter experiments. CIRP Annals - Manufacturing Technology, 2011, 60, 113-116.	3.6	42
10	Receptance coupling for tool point dynamic prediction by fixed boundaries approach. International Journal of Machine Tools and Manufacture, 2014, 78, 18-29.	13.4	38
11	Analytical expressions for chatter analysis in milling operations with one dominant mode. Journal of Sound and Vibration, 2016, 375, 403-421.	3.9	34
12	Ultimate capability of variable pitch milling cutters. CIRP Annals - Manufacturing Technology, 2018, 67, 373-376.	3.6	34
13	INTERACTION BETWEEN MULTIPLE MODES IN MILLING PROCESSES. Machining Science and Technology, 2013, 17, 165-180.	2.5	32
14	Design of self-tuneable mass damper for modular fixturing systems. CIRP Annals - Manufacturing Technology, 2016, 65, 389-392.	3.6	32
15	Stability analysis of milling with irregular pitch tools by the implicit subspace iteration method. International Journal of Dynamics and Control, 2014, 2, 26-34.	2.5	27
16	On the effective Young's modulus of metal matrix syntactic foams. Materials Science and Technology, 2017, 33, 2283-2289.	1.6	26
17	On the bistable zone of milling processes. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2015, 373, 20140409.	3.4	24
18	Delayed feedback control for chatter suppression in turning machines. Mechatronics, 2019, 63, 102276.	3.3	23

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19	General Milling Stability Model for Cylindrical Tools. <i>Procedia CIRP</i> , 2012, 4, 90-97.	1.9	22
20	On the analysis of the double Hopf bifurcation in machining processes via centre manifold reduction. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , 2017, 473, 20170502.	2.1	20
21	Optimum Selection of Variable Pitch for Chatter Suppression in Face Milling Operations. <i>Materials</i> , 2019, 12, 112.	2.9	20
22	Tuneable clamping table for chatter avoidance in thin-walled part milling. <i>CIRP Annals - Manufacturing Technology</i> , 2020, 69, 313-316.	3.6	20
23	FRF Estimation through Sweep Milling Force Excitation (SMFE). <i>Procedia CIRP</i> , 2016, 46, 504-507.	1.9	19
24	Fixed Boundaries Receptance Coupling Substructure Analysis for Tool Point Dynamics Prediction. <i>Advanced Materials Research</i> , 2011, 223, 622-631.	0.3	18
25	Experimental observations on unsafe zones in milling processes. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2019, 377, 20180125.	3.4	16
26	Dominant modal decomposition method. <i>Journal of Sound and Vibration</i> , 2017, 392, 56-69.	3.9	14
27	Bifurcation analysis of nonlinear timeâ€periodic timeâ€delay systems via semidiscretization. <i>International Journal for Numerical Methods in Engineering</i> , 2018, 115, 57-74.	2.8	12
28	Milling stability for slowly varying parameters. <i>Procedia CIRP</i> , 2018, 77, 110-113.	1.9	11
29	Monitoring the failure states of a metal matrix syntactic foam by modal analysis. <i>Materials Letters</i> , 2019, 257, 126733.	2.6	10
30	Analysis of the beating frequencies in dressing and its effect in surface waviness. <i>CIRP Annals - Manufacturing Technology</i> , 2019, 68, 353-356.	3.6	8
31	In-process impulse response of milling to identify stability properties by signal processing. <i>Journal of Sound and Vibration</i> , 2022, 527, 116849.	3.9	8
32	Upgraded Kalman Filtering of Cutting Forces in Milling. <i>Sensors</i> , 2020, 20, 5397.	3.8	7
33	Stability properties of regenerative cutting processes, based on impulse response functions expressed in the impulse dynamic subspace. <i>International Journal of Machine Tools and Manufacture</i> , 2021, 162, 103691.	13.4	7
34	Implicit subspace iteration as an efficient method to compute milling stability lobe diagrams. <i>International Journal of Advanced Manufacturing Technology</i> , 2015, 77, 597-607.	3.0	6
35	Self-Tuning Algorithm for Tuneable Clamping Table for Chatter Suppression in Blade Recontouring. <i>Applied Sciences (Switzerland)</i> , 2021, 11, 2569.	2.5	6
36	Chatter formation during milling due to stochastic noise-induced resonance. <i>Mechanical Systems and Signal Processing</i> , 2021, 161, 107987.	8.0	6

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37	Bi-stability induced by motion limiting constraints on boring bar tuned mass dampers. Journal of Sound and Vibration, 2022, 517, 116538.	3.9	6
38	Bistability and delayed acceleration feedback control analytical study of collocated and non-collocated cases. Nonlinear Dynamics, 2022, 108, 2075-2096.	5.2	6
39	Experimental Study on Free Vibratory Behavior of Nonlinear Structure. Periodica Polytechnica, Mechanical Engineering, 2019, 63, 91-99.	1.4	5
40	Optimal cutting condition selection for high quality receptance measurements by sweep milling force excitation. International Journal of Machine Tools and Manufacture, 2022, 176, 103873.	13.4	5
41	Dynamics of Cutting Near Double Hopf Bifurcation. Procedia IUTAM, 2017, 22, 123-130.	1.2	4
42	The Effect of Geometry on Harmonically Varied Helix Milling Tools. Journal of Manufacturing Science and Engineering, Transactions of the ASME, 2020, 142, .	2.2	4
43	Improvement of boring operations by means of mode coupling effect. CIRP Journal of Manufacturing Science and Technology, 2022, 37, 633-644.	4.5	4
44	The Effect of Harmonic Helix Angle Variation on Milling Stability. , 2011, , .		3
45	The Basics of Time-Domain-Based Milling Stability Prediction Using Frequency Response Function. Journal of Manufacturing and Materials Processing, 2020, 4, 72.	2.2	3
46	The influence of radial engagement and milling direction for thin wall machining: a semi-analytical study. Procedia CIRP, 2021, 102, 180-185.	1.9	3
47	On the robustness of stable turning processes. International Journal of Machining and Machinability of Materials, 2008, 4, 320.	0.1	2
48	Prediction of the dynamic stiffness of boring bars. IOP Conference Series: Materials Science and Engineering, 2021, 1193, 012007.	0.6	2
49	Experimental and Theoretical Study of Distributed Delay in Machining. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2010, 43, 109-113.	0.4	1
50	On Basic Modeling of the Dynamics of Axles Rolling Process. IFAC-PapersOnLine, 2018, 51, 282-287.	0.9	1
51	Damping in ram based vertical lathes and portal machines. CIRP Annals - Manufacturing Technology, 2022, 71, 369-372.	3.6	1
52	Dynamics of Drill Bits With Cutting Edges of Varying Parameters. , 2013, , .		0
53	Application of machine drive oscillations for chip breaking in heavy duty turning operations. Procedia CIRP, 2021, 101, 110-113.	1.9	0
54	Optimization of Edge Geometry of Cylindrical Milling Tools to Enhance Dynamic Stability. , 2019, , .		0

#	ARTICLE	IF	CITATIONS
55	Modeling and Stability of Milling Processes With Active Damping. , 2019, , .		0