

Gabor Stepan

List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

272
papers

7,073
citations

42
h-index

77
g-index

296
ext. papers

7,891
ext. citations

2.9
avg, IF

6.43
L-index

#	Paper	IF	Citations
272	Routh reducibility and controllability of unstable mechanical systems. <i>Acta Mechanica</i> , 2022 , 233, 905-920	3.1	2
271	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	0
270	Delayed oscillator model of pressure relief valves with outlet piping. <i>Journal of Sound and Vibration</i> , 2022 , 117016	3.9	1
269	Role of Delayed Feedback in Human Balancing 2022 , 3063-3068		
268	Stability of the Furuta pendulum with delayed digital controller. <i>IFAC-PapersOnLine</i> , 2021 , 54, 204-208	0.7	1
267	The State-space Model of Micro-chaos. <i>International Journal of Mathematical Models and Methods in Applied Sciences</i> , 2021 , 15, 184-189	0	
266	Stability charts of a delayed model of vehicle towing. <i>IFAC-PapersOnLine</i> , 2021 , 54, 64-69	0.7	1
265	Time delay model of pressure relief valves. <i>IFAC-PapersOnLine</i> , 2021 , 54, 47-51	0.7	1
264	Evaluation of contact force distribution along a curve, based on measured electric potentials. <i>Acta Mechanica</i> , 2021 , 232, 853-879	2.1	3
263	Motion control of a two-wheeled inverted pendulum with uncertain rolling resistance and angle constraint based on slow-fast dynamics. <i>Nonlinear Dynamics</i> , 2021 , 104, 2185-2199	5	1
262	Nonlinear dynamics of a basketball rolling around the rim. <i>Nonlinear Dynamics</i> , 2021 , 104, 3013	5	
261	Response to perturbation during quiet standing resembles delayed state feedback optimized for performance and robustness. <i>Scientific Reports</i> , 2021 , 11, 11392	4.9	2
260	Machining of slender workpieces subjected to time-periodic axial force: stability and chatter suppression. <i>Journal of Sound and Vibration</i> , 2021 , 504, 116114	3.9	3
259	Parametric continuation algorithm for time-delay systems and bifurcation caused by multiple characteristic roots. <i>Nonlinear Dynamics</i> , 2021 , 103, 3241-3253	5	6
258	Why is it hard to identify the onset of chatter? A stochastic resonance perspective. <i>CIRP Annals - Manufacturing Technology</i> , 2021 , 70, 329-332	4.9	0
257	Essential chaotic dynamics of chatter in turning processes. <i>Chaos</i> , 2020 , 30, 053108	3.3	2
256	Experimental analysis and numerical modelling of contact damping. <i>Journal of Sound and Vibration</i> , 2020 , 484, 115544	3.9	1

255	Pseudospectral method for assessing stability robustness for linear time-periodic delayed dynamical systems. <i>International Journal for Numerical Methods in Engineering</i> , 2020 , 121, 3505-3528	2.4	5
254	Effects of Varying Dynamics of Flexible Workpieces in Milling Operations. <i>Journal of Manufacturing Science and Engineering, Transactions of the ASME</i> , 2020 , 142,	3.3	8
253	Chatter Stability of Machining Operations. <i>Journal of Manufacturing Science and Engineering, Transactions of the ASME</i> , 2020 , 142,	3.3	28
252	Vehicle Shimmy Modeling With Pacejka's Magic Formula and the Delayed Tire Model. <i>Journal of Computational and Nonlinear Dynamics</i> , 2020 , 15,	1.4	3
251	Approximated Dynamics of Chatter in Turning Processes 2020 , 463-470		
250	Tuneable clamping table for chatter avoidance in thin-walled part milling. <i>CIRP Annals - Manufacturing Technology</i> , 2020 , 69, 313-316	4.9	10
249	Robust stability of milling operations based on pseudospectral approach. <i>International Journal of Machine Tools and Manufacture</i> , 2020 , 149, 103516	9.4	16
248	Nonlinearities of hardware-in-the-loop environment affecting turning process emulation. <i>International Journal of Machine Tools and Manufacture</i> , 2020 , 157, 103611	9.4	5
247	In-Process Monitoring of Changing Dynamics of a Thin-Walled Component During Milling Operation by Ball Shooter Excitation. <i>Journal of Manufacturing and Materials Processing</i> , 2020 , 4, 78	2.2	0
246	On the nonsmooth dynamics of towed wheels. <i>Meccanica</i> , 2020 , 55, 2523-2540	2.1	1
245	Bifurcations in basic models of delayed force control. <i>Nonlinear Dynamics</i> , 2020 , 99, 99-108	5	3
244	Bifurcation analysis of wheel shimmy with non-smooth effects and time delay in the tyre-ground contact. <i>Nonlinear Dynamics</i> , 2019 , 98, 841-858	5	15
243	Theoretical and experimental study on the nonlinear dynamics of wheel-shimmy. <i>Nonlinear Dynamics</i> , 2019 , 98, 2581-2593	5	2
242	Numerical and experimental investigation of contact length during orthogonal cutting. <i>Materials Today: Proceedings</i> , 2019 , 12, 329-334	1.4	3
241	On stability of emulated turning processes in HIL environment. <i>CIRP Annals - Manufacturing Technology</i> , 2019 , 68, 405-408	4.9	11
240	Stochastic semi-discretization for linear stochastic delay differential equations. <i>International Journal for Numerical Methods in Engineering</i> , 2019 , 119, 879-898	2.4	14
239	Nonsmooth analysis of three-dimensional slipping and rolling in the presence of dry friction. <i>Nonlinear Dynamics</i> , 2019 , 97, 1799-1817	5	15
238	Combined effects of sampling and dry friction on position control. <i>Nonlinear Dynamics</i> , 2019 , 98, 3001-3007		

237	Experimental observations on unsafe zones in milling processes. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2019 , 377, 20180125	3	12
236	Experimental investigation of dynamic chip formation in orthogonal cutting. <i>International Journal of Machine Tools and Manufacture</i> , 2019 , 145, 103429	9.4	17
235	Closed-form estimations of the bistable region in metal cutting via the method of averaging. <i>International Journal of Non-Linear Mechanics</i> , 2019 , 112, 49-56	2.8	9
234	Symmetry breaking in milling dynamics. <i>International Journal of Machine Tools and Manufacture</i> , 2019 , 139, 37-59	9.4	33
233	Bifurcation analysis of nonlinear time-periodic time-delay systems via semidiscretization. <i>International Journal for Numerical Methods in Engineering</i> , 2018 , 115, 57-74	2.4	8
232	Saturation limits the contribution of acceleration feedback to balancing against reaction delay. <i>Journal of the Royal Society Interface</i> , 2018 , 15,	4.1	18
231	Numerical methods for the stability of time-periodic hybrid time-delay systems with applications. <i>Applied Mathematical Modelling</i> , 2018 , 57, 142-162	4.5	2
230	Numerical and experimental investigation of the applicability of pellet impacts for impulse excitation. <i>International Journal of Impact Engineering</i> , 2018 , 115, 19-31	4	6
229	Sliding and Crossing Dynamics in Extended Filippov Systems. <i>SIAM Journal on Applied Dynamical Systems</i> , 2018 , 17, 823-858	2.8	18
228	Shimmy model for electric vehicle with independent suspensions. <i>Proceedings of the Institution of Mechanical Engineers, Part D: Journal of Automobile Engineering</i> , 2018 , 232, 330-340	1.4	8
227	Experimental Fitting of Rotor Models by Using a Special Three-Node Beam Element. <i>Journal of Computational and Nonlinear Dynamics</i> , 2018 , 13,	1.4	1
226	Operational stability prediction in milling based on impact tests. <i>Mechanical Systems and Signal Processing</i> , 2018 , 103, 327-339	7.8	26
225	Stability of turning processes for periodic chip formation. <i>Advances in Manufacturing</i> , 2018 , 6, 345-353	2.7	7
224	Microchaos in human postural balance: Sensory dead zones and sampled time-delayed feedback. <i>Physical Review E</i> , 2018 , 98, 022223	2.4	14
223	Ultimate capability of variable pitch milling cutters. <i>CIRP Annals - Manufacturing Technology</i> , 2018 , 67, 373-376	4.9	22
222	Hopf bifurcation analysis of scalar implicit neutral delay differential equation. <i>Electronic Journal of Qualitative Theory of Differential Equations</i> , 2018 , 1-9	0.5	
221	Optimum Selection of Variable Pitch for Chatter Suppression in Face Milling Operations. <i>Materials</i> , 2018 , 12,	3.5	16
220	On the stability of two-wheeled vehicle balancing passive human subjects. <i>IFAC-PapersOnLine</i> , 2018 , 51, 337-342	0.7	2

219	Quantification of uncertainty in machining operations based on probabilistic and robust approaches. <i>Procedia CIRP</i> , 2018 , 77, 82-85	1.8	3
218	Gaussian noise process as cutting force model for turning. <i>Procedia CIRP</i> , 2018 , 77, 94-97	1.8	5
217	Milling stability for slowly varying parameters. <i>Procedia CIRP</i> , 2018 , 77, 110-113	1.8	5
216	Ball shooting tests for identification of modal parameter variation in rotating main spindles. <i>Procedia CIRP</i> , 2018 , 77, 481-484	1.8	5
215	High-speed camera measurements in the mechanical analysis of machining. <i>Procedia CIRP</i> , 2018 , 77, 155-188		4
214	On process damping induced by vibration-dependency of cutting direction in milling. <i>Procedia CIRP</i> , 2018 , 77, 171-174	1.8	0
213	Stability of turning process with tool subjected to compression. <i>Procedia CIRP</i> , 2018 , 77, 179-182	1.8	3
212	Stability analysis in milling by taking into account the influence of forced vibrations on the actual tool-workpiece engagement conditions. <i>Procedia CIRP</i> , 2018 , 77, 453-456	1.8	1
211	Laser scanned patterns of machined surfaces. <i>Procedia CIRP</i> , 2018 , 77, 355-358	1.8	5
210	Hardware-in-the-loop experiment of turning. <i>Procedia CIRP</i> , 2018 , 77, 675-678	1.8	4
209	Energy Distribution of a Vehicle Shimmy System with the Delayed Tyre Model. <i>IFAC-PapersOnLine</i> , 2018 , 51, 7-12	0.7	3
208	Experimental investigation of the shear angle variation during orthogonal cutting. <i>Materials Today: Proceedings</i> , 2018 , 5, 26495-26500	1.4	11
207	Balancing a wheeled inverted pendulum with a single accelerometer in the presence of time delay. <i>JVC/Journal of Vibration and Control</i> , 2017 , 23, 604-614	2	19
206	Spectral element method for stability analysis of milling processes with discontinuous time-periodicity. <i>International Journal of Advanced Manufacturing Technology</i> , 2017 , 89, 2503-2514	3.2	17
205	Robust stability analysis of machining operations. <i>International Journal of Advanced Manufacturing Technology</i> , 2017 , 88, 45-54	3.2	18
204	Nonlinear model-based parameter estimation and stability analysis of an aero-pendulum subject to digital delayed control. <i>International Journal of Dynamics and Control</i> , 2017 , 5, 629-643	1.7	12
203	Optimal Detuning of a Parallel Turning System—Theory and Experiments. <i>Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME</i> , 2017 , 139,	1.6	10
202	Nonlinear dynamics of hardware-in-the-loop experiments on stick-slip phenomena. <i>International Journal of Non-Linear Mechanics</i> , 2017 , 94, 380-391	2.8	7

201	Chatter mitigation using the nonlinear tuned vibration absorber. <i>International Journal of Non-Linear Mechanics</i> , 2017 , 91, 103-112	2.8	25
200	Effect of non-proportional damping on the dynamics and stability of multi-cutter turning systems. <i>International Journal of Machine Tools and Manufacture</i> , 2017 , 117, 23-30	9.4	6
199	Chatter avoidance in cutting highly flexible workpieces. <i>CIRP Annals - Manufacturing Technology</i> , 2017 , 66, 377-380	4.9	36
198	Extension of process damping to milling with low radial immersion. <i>International Journal of Advanced Manufacturing Technology</i> , 2017 , 89, 2545-2556	3.2	18
197	Stability of Damped Skateboards Under Human Control. <i>Journal of Computational and Nonlinear Dynamics</i> , 2017 , 12,	1.4	2
196	Algorithm for Robust Stability of Delayed Multi-Degree-of-Freedom Systems. <i>Advances in Delays and Dynamics</i> , 2017 , 141-154	0.3	0
195	Effect of wavy tool path on the stability properties of milling by the implicit subspace iteration method. <i>International Journal of Advanced Manufacturing Technology</i> , 2017 , 91, 1781-1789	3.2	2
194	Effect of dry friction on vibrations of sampled-data mechatronic systems. <i>Nonlinear Dynamics</i> , 2017 , 88, 349-361	5	5
193	Stability Analysis of the Wave Equation with Delayed Boundary Conditions. <i>Procedia IUTAM</i> , 2017 , 22, 139-145		1
192	Prediction of robust stability boundaries for milling operations with extended multi-frequency solution and structured singular values. <i>Journal of Manufacturing Processes</i> , 2017 , 30, 281-289	5	16
191	Robust controller design for turning operations based on measured frequency response functions. <i>IFAC-PapersOnLine</i> , 2017 , 50, 7103-7108	0.7	0
190	Quantization improves stabilization of dynamical systems with delayed feedback. <i>Chaos</i> , 2017 , 27, 114306	3.6	15
189	Two-Dimensional Finite Element Analysis of Turning Processes. <i>Periodica Polytechnica, Mechanical Engineering</i> , 2017 , 61, 44-54	1.8	13
188	Detailed Contact Surface Evaluation Based on Electric Field Potentials. <i>Procedia CIRP</i> , 2017 , 62, 323-328	1.8	
187	The Development of High Speed Virtual Milling Test 2017 ,		3
186	Handling Actuator Saturation as Underactuation: Case Study With Acroboter Service Robot. <i>Journal of Computational and Nonlinear Dynamics</i> , 2017 , 12,	1.4	2
185	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	2.4	14
184	Hardware-in-the-loop Experiments in Presence of Delay. <i>Procedia IUTAM</i> , 2017 , 22, 24-30		

183	Dynamics of Cutting Near Double Hopf Bifurcation. <i>Procedia IUTAM</i> , 2017 , 22, 123-130		4
182	Model Establishment and Parameter Analysis on Shimmy of Electric Vehicle with Independent Suspensions. <i>Procedia IUTAM</i> , 2017 , 22, 259-266		4
181	Structural stability of a light rotating beam under combined loads. <i>Acta Mechanica</i> , 2017 , 228, 3735-3740.1		4
180	Effect of delay combinations on stability and Hopf bifurcation of an oscillator with acceleration-derivative feedback. <i>International Journal of Non-Linear Mechanics</i> , 2017 , 94, 392-399	2.8	14
179	Experimental Determination of Dominant Multipliers in Milling Process by Means of Homogeneous Coordinate Transformation 2017 ,		1
178	A Theoretical Investigation of the Effect of the Stochasticity in the Material Properties on the Chatter Detection During Turning 2017 ,		7
177	Numerical Stability Test of Linear Time-Delay Systems of Neutral Type. <i>Advances in Delays and Dynamics</i> , 2017 , 77-91	0.3	7
176	Sliding Dynamics on Codimension-2 Discontinuity Surfaces. <i>Trends in Mathematics</i> , 2017 , 7-12	0.3	
175	Stabilizing skateboard speed-wobble with reflex delay. <i>Journal of the Royal Society Interface</i> , 2016 , 13,	4.1	10
174	Robust Stability of Machining Operations in Case of Uncertain Frequency Response Functions. <i>Procedia CIRP</i> , 2016 , 46, 151-154	1.8	3
173	Cumulative Surface Location Error for Milling Processes Based on Tool-tip Frequency Response Function. <i>Procedia CIRP</i> , 2016 , 46, 323-326	1.8	13
172	Improving the stability of multi-cutter turning with detuned dynamics. <i>Machining Science and Technology</i> , 2016 , 20, 440-459	2	11
171	Delayed digital position control of a single-DoF system and the nonlinear behavior of the act-and-wait controller. <i>JVC/Journal of Vibration and Control</i> , 2016 , 22, 481-495	2	7
170	Exact stability chart of an elastic beam subjected to delayed feedback. <i>Journal of Sound and Vibration</i> , 2016 , 367, 219-232	3.9	23
169	Spectral Properties of Milling and Machined Surface. <i>Materials Science Forum</i> , 2016 , 836-837, 570-577	0.4	5
168	Estimation of the Bistable Zone for Machining Operations for the Case of a Distributed Cutting-Force Model. <i>Journal of Computational and Nonlinear Dynamics</i> , 2016 , 11,	1.4	12
167	On the Nonlinear Kinematic Oscillations of Railway Wheelsets. <i>Journal of Computational and Nonlinear Dynamics</i> , 2016 , 11,	1.4	2
166	Multi-Baker Map as a Model of Digital PD Control. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 2016 , 26, 1650023	2	9

165	Discontinuity-induced bifurcations of a dual-point contact ball. <i>Nonlinear Dynamics</i> , 2016 , 83, 685-702	5	8
164	State-dependent distributed-delay model of orthogonal cutting. <i>Nonlinear Dynamics</i> , 2016 , 84, 1147-1156		9
163	Extension of the spectral element method for stability analysis of time-periodic delay-differential equations with multiple and distributed delays. <i>Communications in Nonlinear Science and Numerical Simulation</i> , 2016 , 35, 177-189	3.7	18
162	Tyre induced vibrations of the car/trailer system. <i>Journal of Sound and Vibration</i> , 2016 , 362, 214-227	3.9	8
161	Analytical estimations of limit cycle amplitude for delay-differential equations. <i>Electronic Journal of Qualitative Theory of Differential Equations</i> , 2016 , 1-10	0.5	7
160	Surface Error and Stability Chart of Beam-Type Workpiece in Milling Processes 2016 ,		2
159	Analytical expressions for chatter analysis in milling operations with one dominant mode. <i>Journal of Sound and Vibration</i> , 2016 , 375, 403-421	3.9	29
158	Delay-dependent stability analysis by using delay-independent integral evaluation. <i>Automatica</i> , 2016 , 70, 153-157	5.7	33
157	Estimation of Safe Chatter-free Technological Parameter Regions for Machining Operations. <i>Procedia CIRP</i> , 2016 , 46, 464-467	1.8	2
156	Chatter suppression techniques in metal cutting. <i>CIRP Annals - Manufacturing Technology</i> , 2016 , 65, 785-808	4.9	323
155	Design of self-tuneable mass damper for modular fixturing systems. <i>CIRP Annals - Manufacturing Technology</i> , 2016 , 65, 389-392	4.9	25
154	A collection on Climate dynamics: multiple scales and memory effects. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , 2015 , 471, 20150097	2.4	6
153	Experimental validation of appropriate axial immersions for helical mills. <i>International Journal of Advanced Manufacturing Technology</i> , 2015 , 84, 1295	3.2	7
152	Semi-discretization and the time-delayed PDA feedback control of human balance. <i>IFAC-PapersOnLine</i> , 2015 , 48, 93-98	0.7	3
151	Sensitivity of stability charts with respect to modal parameter uncertainties for turning operations. <i>IFAC-PapersOnLine</i> , 2015 , 48, 63-68	0.7	1
150	Semidiscretization for Time-Delayed Neural Balance Control. <i>SIAM Journal on Applied Dynamical Systems</i> , 2015 , 14, 1258-1277	2.8	18
149	Stability analysis of a two-degree-of-freedom mechanical system subject to proportional-derivative digital position control. <i>JVC/Journal of Vibration and Control</i> , 2015 , 21, 1539-1555	2	10
148	Kinematic oscillations of railway wheelsets. <i>Multibody System Dynamics</i> , 2015 , 34, 259-274	2.8	11

147	Position Control of Rolling Skateboard. <i>IFAC-PapersOnLine</i> , 2015 , 48, 286-291	0.7	1
146	Skateboard: A Human Controlled Non-Holonomic System 2015 ,		2
145	State-Dependent, Non-Smooth Model of Chatter Vibrations in Turning 2015 ,		3
144	The Effect of Non-Symmetric FRF on Machining: A Case Study 2015 ,		5
143	Investigating Multiscale Phenomena in Machining: The Effect of Cutting-Force Distribution Along the Tool Rake Face on Process Stability 2015 ,		2
142	Optimization of the Robust Stability Limit for Multi-Cutter Turning Processes 2015 ,		2
141	Regenerative delay, parametric forcing and machine tool chatter: A review. <i>IFAC-PapersOnLine</i> , 2015 , 48, 322-327	0.7	20
140	On the bistable zone of milling processes. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2015 , 373,	3	22
139	Bifurcation analysis of a two-DoF mechanical system subject to digital position control. Part I: theoretical investigation. <i>Nonlinear Dynamics</i> , 2014 , 76, 1781-1796	5	3
138	Delayed control of an elastic beam. <i>International Journal of Dynamics and Control</i> , 2014 , 2, 68-76	1.7	7
137	Cylindrical milling tools: Comparative real case study for process stability. <i>CIRP Annals - Manufacturing Technology</i> , 2014 , 63, 385-388	4.9	45
136	Nonlinear kinematic oscillations of railway wheelsets of general surface geometry. <i>Proceedings in Applied Mathematics and Mechanics</i> , 2014 , 14, 303-304	0.2	3
135	Bifurcation analysis of a two-DoF mechanical system subject to digital position control. Part II. Effects of asymmetry and transition to chaos. <i>Nonlinear Dynamics</i> , 2013 , 74, 1223-1241	5	5
134	Improved prediction of stability lobes with extended multi frequency solution. <i>CIRP Annals - Manufacturing Technology</i> , 2013 , 62, 411-414	4.9	66
133	Contact patch memory of tyres leading to lateral vibrations of four-wheeled vehicles. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2013 , 371, 20120427	3	18
132	Acceleration feedback improves balancing against reflex delay. <i>Journal of the Royal Society Interface</i> , 2013 , 10, 20120763	4.1	79
131	Nonlinear Bifurcation Analysis of a Single-DoF Model of a Robotic Arm Subject to Digital Position Control. <i>Journal of Computational and Nonlinear Dynamics</i> , 2013 , 8,	1.4	11
130	Efficient Stability Chart Computation for General Delayed Linear Time Periodic Systems 2013 ,		1

129	Stability Properties and Optimization of Multi-Cutter Turning Operations 2013 ,		4
128	Redundancy Resolution of the Underactuated Manipulator. <i>CISM International Centre for Mechanical Sciences, Courses and Lectures</i> , 2013 , 233-240	0.6	2
127	Model based reconstruction of milled surface topography from measured cutting forces. <i>International Journal of Machine Tools and Manufacture</i> , 2012 , 54-55, 25-33	9.4	27
126	Bisection method in higher dimensions and the efficiency number. <i>Periodica Polytechnica, Mechanical Engineering</i> , 2012 , 56, 81	1.8	53
125	General Milling Stability Model for Cylindrical Tools. <i>Procedia CIRP</i> , 2012 , 4, 90-97	1.8	20
124	Time-optimal computed-torque control in contact transitions. <i>Periodica Polytechnica, Mechanical Engineering</i> , 2012 , 56, 43	1.8	1
123	Stability of an elastic supported flat plate subjected to potential flow. <i>Periodica Polytechnica, Mechanical Engineering</i> , 2012 , 56, 99	1.8	
122	Analytical investigation of single and double Neimark-Sacker bifurcations. <i>Periodica Polytechnica, Mechanical Engineering</i> , 2012 , 56, 13	1.8	2
121	Optimization of material removal rate for orthogonal cutting with vibration limits. <i>Periodica Polytechnica, Mechanical Engineering</i> , 2012 , 56, 91	1.8	3
120	The Effect of Helix Angle Variation on Milling Stability. <i>Journal of Manufacturing Science and Engineering, Transactions of the ASME</i> , 2012 , 134,	3.3	47
119	Micro-shimmy of towed structures in experimentally uncharted unstable parameter domain. <i>Vehicle System Dynamics</i> , 2012 , 50, 1613-1630	2.8	21
118	Case studies for computed torque control of constrained underactuated systems. <i>Periodica Polytechnica, Mechanical Engineering</i> , 2012 , 56, 73	1.8	1
117	Equations with Advanced Arguments in Stick Balancing Models. <i>Lecture Notes in Control and Information Sciences</i> , 2012 , 161-172	0.5	2
116	State Dependent Regenerative Effect in Milling Processes. <i>Journal of Computational and Nonlinear Dynamics</i> , 2011 , 6,	1.4	23
115	The Effect of Harmonic Helix Angle Variation on Milling Stability 2011 ,		2
114	Identification of cutting force characteristics based on chatter experiments. <i>CIRP Annals - Manufacturing Technology</i> , 2011 , 60, 113-116	4.9	38
113	Computed torque control of an under-actuated service robot platform modeled by natural coordinates. <i>Communications in Nonlinear Science and Numerical Simulation</i> , 2011 , 16, 2205-2217	3.7	18
112	On the global dynamics of chatter in the orthogonal cutting model. <i>International Journal of Non-Linear Mechanics</i> , 2011 , 46, 330-338	2.8	68

111	Sampling and round-off, as sources of chaos in PD-controlled systems 2011 ,		4
110	The ACROBOTER Platform [Part 1: Conceptual Design and Dynamics Modeling Aspects. <i>IUTAM Symposium on Cellular, Molecular and Tissue Mechanics</i> , 2011 , 3-10	0.3	
109	The ACROBOTER Platform - Part 2: Servo-Constraints in Computed Torque Control. <i>IUTAM Symposium on Cellular, Molecular and Tissue Mechanics</i> , 2011 , 11-18	0.3	
108	Semi-Discretization for Time-Delay Systems. <i>Applied Mathematical Sciences (Switzerland)</i> , 2011 ,	0.9	220
107	Full Characterization of Act-and-wait Control for First-order Unstable Lag Processes. <i>JVC/Journal of Vibration and Control</i> , 2010 , 16, 1209-1233	2	22
106	On the dimension reduction of systems with feedback delay by act-and-wait control. <i>IMA Journal of Mathematical Control and Information</i> , 2010 , 27, 457-473	1.1	15
105	DIGITAL CONTROL AS SOURCE OF CHAOTIC BEHAVIOR. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 2010 , 20, 1365-1378	2	19
104	Feasibility Study of Optical Detection of Chatter Vibration During Milling. <i>International Journal of Optomechanics</i> , 2010 , 4, 195-214	3.5	7
103	Period Doubling Bifurcation and Center Manifold Reduction in a Time-periodic and Time-delayed Model of Machining. <i>JVC/Journal of Vibration and Control</i> , 2010 , 16, 1169-1187	2	11
102	Influence of Control Valve Delay and Dead Zone on the Stability of a Simple Hydraulic Positioning System. <i>Mathematical Problems in Engineering</i> , 2010 , 2010, 1-15	1.1	8
101	Delayed feedback of sampled higher derivatives. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2010 , 368, 469-82	3	18
100	Traffic jams: dynamics and control. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2010 , 368, 4455-79	3	221
99	. <i>IEEE/ASME Transactions on Mechatronics</i> , 2010 , 15, 291-298	5.5	17
98	Experimental and Theoretical Study of Distributed Delay in Machining. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2010 , 43, 109-113		
97	Balancing using accelerometers and equations with advanced arguments. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2010 , 43, 103-108		
96	Comparison of Time Delayed Tyre Models. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2010 , 43, 114-119		0
95	The effect of serration on mechanics and stability of milling cutters. <i>International Journal of Machine Tools and Manufacture</i> , 2010 , 50, 511-520	9.4	96
94	Motion Control of an Under-Actuated Service Robot Using Natural Coordinates. <i>CISM International Centre for Mechanical Sciences, Courses and Lectures</i> , 2010 , 331-338	0.6	4

93	Act-and-Wait Control Concept for a Force Control Process with Delayed Feedback 2009 , 133-142		1
92	Experiments on Quasiperiodic Wheel Shimmy. <i>Journal of Computational and Nonlinear Dynamics</i> , 2009 , 4,	1.4	23
91	Delay effects in shimmy dynamics of wheels with stretched string-like tyres. <i>European Journal of Mechanics, A/Solids</i> , 2009 , 28, 516-525	3.7	46
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