

# Li-Min Zhu

## List of Publications by Citations

**Source:** <https://exaly.com/author-pdf/8710230/li-min-zhu-publications-by-citations.pdf>

**Version:** 2024-04-25

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

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

234  
papers

4,949  
citations

35  
h-index

61  
g-index

257  
ext. papers

6,176  
ext. citations

4.4  
avg, IF

6.43  
L-index

#	Paper	IF	Citations
234	A full-discretization method for prediction of milling stability. <i>International Journal of Machine Tools and Manufacture</i> , <b>2010</b> , 50, 502-509	9.4	342
233	Modeling and Control of Piezo-Actuated Nanopositioning Stages: A Survey. <i>IEEE Transactions on Automation Science and Engineering</i> , <b>2016</b> , 13, 313-332	4.9	306
232	Modeling and Compensation of Asymmetric Hysteresis Nonlinearity for Piezoceramic Actuators With a Modified Prandtl-Ishlinskii Model. <i>IEEE Transactions on Industrial Electronics</i> , <b>2014</b> , 61, 1583-1595	8.9	232
231	A survey on dielectric elastomer actuators for soft robots. <i>Bioinspiration and Biomimetics</i> , <b>2017</b> , 12, 011003	10.8	210
230	Motion Control of Piezoelectric Positioning Stages: Modeling, Controller Design, and Experimental Evaluation. <i>IEEE/ASME Transactions on Mechatronics</i> , <b>2013</b> , 18, 1459-1471	5.5	161
229	A real-time look-ahead interpolation methodology with curvature-continuous B-spline transition scheme for CNC machining of short line segments. <i>International Journal of Machine Tools and Manufacture</i> , <b>2013</b> , 65, 88-98	9.4	159
228	Numerical Integration Method for Prediction of Milling Stability. <i>Journal of Manufacturing Science and Engineering, Transactions of the ASME</i> , <b>2011</b> , 133,	3.3	132
227	Real-time inverse hysteresis compensation of piezoelectric actuators with a modified Prandtl-Ishlinskii model. <i>Review of Scientific Instruments</i> , <b>2012</b> , 83, 065106	1.7	114
226	Neural Network Learning Adaptive Robust Control of an Industrial Linear Motor-Driven Stage With Disturbance Rejection Ability. <i>IEEE Transactions on Industrial Informatics</i> , <b>2017</b> , 13, 2172-2183	11.9	84
225	Design and control of a decoupled two degree of freedom translational parallel micro-positioning stage. <i>Review of Scientific Instruments</i> , <b>2012</b> , 83, 045105	1.7	77
224	Surface form error prediction in five-axis flank milling of thin-walled parts. <i>International Journal of Machine Tools and Manufacture</i> , <b>2018</b> , 128, 21-32	9.4	74
223	Corner rounding of linear five-axis tool path by dual PH curves blending. <i>International Journal of Machine Tools and Manufacture</i> , <b>2015</b> , 88, 223-236	9.4	71
222	Modeling and Identification of Piezoelectric-Actuated Stages Cascading Hysteresis Nonlinearity With Linear Dynamics. <i>IEEE/ASME Transactions on Mechatronics</i> , <b>2016</b> , 21, 1792-1797	5.5	69
221	. <i>IEEE/ASME Transactions on Mechatronics</i> , <b>2015</b> , 20, 1956-1965	5.5	64
220	Runge-Kutta methods for a semi-analytical prediction of milling stability. <i>Nonlinear Dynamics</i> , <b>2014</b> , 76, 289-304	5	64
219	Global optimization of tool path for five-axis flank milling with a conical cutter. <i>CAD Computer Aided Design</i> , <b>2010</b> , 42, 903-910	2.9	64
218	Parameter identification of the generalized Prandtl-Ishlinskii model for piezoelectric actuators using modified particle swarm optimization. <i>Sensors and Actuators A: Physical</i> , <b>2013</b> , 189, 254-265	3.9	61

217	Real-time contouring error estimation for multi-axis motion systems using the second-order approximation. <i>International Journal of Machine Tools and Manufacture</i> , <b>2013</b> , 68, 75-80	9.4	60
216	Analytical curvature-continuous dual-Bézier corner transition for five-axis linear tool path. <i>International Journal of Machine Tools and Manufacture</i> , <b>2015</b> , 91, 96-108	9.4	58
215	Stiffness-based pose optimization of an industrial robot for five-axis milling. <i>Robotics and Computer-Integrated Manufacturing</i> , <b>2019</b> , 55, 19-28	9.2	57
214	Design, analysis and testing of a parallel-kinematic high-bandwidth XY nanopositioning stage. <i>Review of Scientific Instruments</i> , <b>2013</b> , 84, 125111	1.7	51
213	Modeling of rate-dependent hysteresis in piezoelectric actuators using a family of ellipses. <i>Sensors and Actuators A: Physical</i> , <b>2011</b> , 165, 303-309	3.9	50
212	A Distance Function Based Approach for Localization and Profile Error Evaluation of Complex Surface. <i>Journal of Manufacturing Science and Engineering, Transactions of the ASME</i> , <b>2004</b> , 126, 542-554	3.3	46
211	Real-time local smoothing for five-axis linear toolpath considering smoothing error constraints. <i>International Journal of Machine Tools and Manufacture</i> , <b>2018</b> , 124, 67-79	9.4	45
210	Motion control of piezoceramic actuators with creep, hysteresis and vibration compensation. <i>Sensors and Actuators A: Physical</i> , <b>2013</b> , 197, 76-87	3.9	43
209	Newton-ILC Contouring Error Estimation and Coordinated Motion Control for Precision Multiaxis Systems With Comparative Experiments. <i>IEEE Transactions on Industrial Electronics</i> , <b>2018</b> , 65, 1470-1480	8.9	42
208	High-Speed Tracking of a Nanopositioning Stage Using Modified Repetitive Control. <i>IEEE Transactions on Automation Science and Engineering</i> , <b>2017</b> , 14, 1467-1477	4.9	41
207	Stability Analysis of Milling Via the Differential Quadrature Method. <i>Journal of Manufacturing Science and Engineering, Transactions of the ASME</i> , <b>2013</b> , 135,	3.3	41
206	Feedforward deformation control of a dielectric elastomer actuator based on a nonlinear dynamic model. <i>Applied Physics Letters</i> , <b>2015</b> , 107, 042907	3.4	38
205	Analytical Expression of the Swept Surface of a Rotary Cutter Using the Envelope Theory of Sphere Congruence. <i>Journal of Manufacturing Science and Engineering, Transactions of the ASME</i> , <b>2009</b> , 131,	3.3	38
204	A steepest descent algorithm for circularity evaluation. <i>CAD Computer Aided Design</i> , <b>2003</b> , 35, 255-265	2.9	38
203	Simultaneous optimization of tool path and shape for five-axis flank milling. <i>CAD Computer Aided Design</i> , <b>2012</b> , 44, 1229-1234	2.9	37
202	Formulating the swept envelope of rotary cutter undergoing general spatial motion for multi-axis NC machining. <i>International Journal of Machine Tools and Manufacture</i> , <b>2009</b> , 49, 199-202	9.4	36
201	An alternative time-domain index for condition monitoring of rolling element bearings—a comparison study. <i>Reliability Engineering and System Safety</i> , <b>2007</b> , 92, 660-670	6.3	36
200	Damping Control of Piezo-Actuated Nanopositioning Stages With Recursive Delayed Position Feedback. <i>IEEE/ASME Transactions on Mechatronics</i> , <b>2017</b> , 22, 855-864	5.5	35

199	Compensation of deformation errors in five-axis flank milling of thin-walled parts via tool path optimization. <i>Precision Engineering</i> , <b>2019</b> , 55, 77-87	2.9	35
198	Positive acceleration, velocity and position feedback based damping control approach for piezo-actuated nanopositioning stages. <i>Mechatronics</i> , <b>2017</b> , 47, 97-104	3	34
197	Mechanistic modeling of five-axis machining with a general end mill considering cutter runout. <i>International Journal of Machine Tools and Manufacture</i> , <b>2015</b> , 96, 67-79	9.4	34
196	An Integrated Model-Data-Based Zero-Phase Error Tracking Feedforward Control Strategy With Application to an Ultraprecision Wafer Stage. <i>IEEE Transactions on Industrial Electronics</i> , <b>2017</b> , 64, 4139-4149	8.9	33
195	Design of a cable-driven hyper-redundant robot with experimental validation. <i>International Journal of Advanced Robotic Systems</i> , <b>2017</b> , 14, 172988141773445	1.4	33
194	Milling stability analysis using the spectral method. <i>Science China Technological Sciences</i> , <b>2011</b> , 54, 3130-3136	3.5	31
193	Modeling and compensating the dynamic hysteresis of piezoelectric actuators via a modified rate-dependent Prandtl-Bhinskii model. <i>Smart Materials and Structures</i> , <b>2015</b> , 24, 125006	3.4	30
192	Envelope Surface Modeling and Tool Path Optimization for Five-Axis Flank Milling Considering Cutter Runout. <i>Journal of Manufacturing Science and Engineering, Transactions of the ASME</i> , <b>2014</b> , 136,	3.3	30
191	High-precision control of piezoelectric nanopositioning stages using hysteresis compensator and disturbance observer. <i>Smart Materials and Structures</i> , <b>2014</b> , 23, 105007	3.4	29
190	High-bandwidth tracking control of piezo-actuated nanopositioning stages using closed-loop input shaper. <i>Mechatronics</i> , <b>2014</b> , 24, 724-733	3	29
189	Feedrate scheduling for interpolation of parametric tool path using the sine series representation of jerk profile. <i>Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture</i> , <b>2017</b> , 231, 2359-2371	2.4	28
188	Nonparametric Bayesian Prior Inducing Deep Network for Automatic Detection of Cognitive Status. <i>IEEE Transactions on Cybernetics</i> , <b>2021</b> , 51, 5483-5496	10.2	28
187	. <i>IEEE/ASME Transactions on Mechatronics</i> , <b>2020</b> , 1-1	5.5	28
186	New statistical moments for the detection of defects in rolling element bearings. <i>International Journal of Advanced Manufacturing Technology</i> , <b>2005</b> , 26, 1268-1274	3.2	27
185	Global optimization of tool path for five-axis flank milling with a cylindrical cutter. <i>Science in China Series D: Earth Sciences</i> , <b>2009</b> , 52, 2449-2459		26
184	Third-order point contact approach for five-axis sculptured surface machining using non-ball-end tools (I): Third-order approximation of tool envelope surface. <i>Science China Technological Sciences</i> , <b>2010</b> , 53, 1904-1912	3.5	26
183	An accelerated convergence approach for real-time deformation compensation in large thin-walled parts machining. <i>International Journal of Machine Tools and Manufacture</i> , <b>2019</b> , 142, 98-106	9.4	25
182	Accurate three-dimensional contouring error estimation and compensation scheme with zero-phase filter. <i>International Journal of Machine Tools and Manufacture</i> , <b>2018</b> , 128, 33-40	9.4	25

181	A complete S-shape feed rate scheduling approach for NURBS interpolator. <i>Journal of Computational Design and Engineering</i> , <b>2015</b> , 2, 206-217	4.6	25
180	Modified Repetitive Control Based Cross-Coupling Compensation Approach for the Piezoelectric Tube Scanner of Atomic Force Microscopes. <i>IEEE/ASME Transactions on Mechatronics</i> , <b>2019</b> , 24, 666-676	5.5	24
179	Application of kinematic geometry to computational metrology: distance function based hierarchical algorithms for cylindricity evaluation. <i>International Journal of Machine Tools and Manufacture</i> , <b>2003</b> , 43, 203-215	9.4	24
178	Detecting Fatigue Status of Pilots Based on Deep Learning Network Using EEG Signals. <i>IEEE Transactions on Cognitive and Developmental Systems</i> , <b>2020</b> , 1-1	3	24
177	Self-Paced Dynamic Infinite Mixture Model for Fatigue Evaluation of Pilots' Brains. <i>IEEE Transactions on Cybernetics</i> , <b>2020</b> , PP,	10.2	24
176	Design of a Distributed Multiaxis Motion Control System Using the IEEE-1394 Bus. <i>IEEE Transactions on Industrial Electronics</i> , <b>2010</b> , 57, 4209-4218	8.9	23
175	Patterns of Regenerative Milling Chatter Under Joint Influences of Cutting Parameters, Tool Geometries, and Runout. <i>Journal of Manufacturing Science and Engineering, Transactions of the ASME</i> , <b>2018</b> , 140,	3.3	22
174	Third-order point contact approach for five-axis sculptured surface machining using non-ball-end tools (II): Tool positioning strategy. <i>Science China Technological Sciences</i> , <b>2010</b> , 53, 2190-2197	3.5	22
173	A Practical Continuous-Curvature Bézier Transition Algorithm for High-Speed Machining of Linear Tool Path. <i>Lecture Notes in Computer Science</i> , <b>2011</b> , 465-476	0.9	22
172	GRU-Type LARC Strategy for Precision Motion Control With Accurate Tracking Error Prediction. <i>IEEE Transactions on Industrial Electronics</i> , <b>2021</b> , 68, 812-820	8.9	22
171	Development of a piezoelectrically actuated dual-stage fast tool servo. <i>Mechanical Systems and Signal Processing</i> , <b>2020</b> , 144, 106873	7.8	21
170	Smooth Tool Path Optimization for Flank Milling Based on the Gradient-Based Differential Evolution Method. <i>Journal of Manufacturing Science and Engineering, Transactions of the ASME</i> , <b>2016</b> , 138,	3.3	21
169	Dynamics and Stability Prediction of Five-Axis Flat-End Milling. <i>Journal of Manufacturing Science and Engineering, Transactions of the ASME</i> , <b>2017</b> , 139,	3.3	20
168	Rate-dependent hysteresis modeling and compensation of piezoelectric actuators using Gaussian process. <i>Sensors and Actuators A: Physical</i> , <b>2019</b> , 295, 357-365	3.9	20
167	Look-ahead interpolation of short line segments using B-spline curve fitting of dominant points. <i>Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture</i> , <b>2015</b> , 229, 1131-1143	2.4	20
166	Integral resonant damping for high-bandwidth control of piezoceramic stack actuators with asymmetric hysteresis nonlinearity. <i>Mechatronics</i> , <b>2014</b> , 24, 367-375	3	20
165	Odd-harmonic repetitive control for high-speed raster scanning of piezo-actuated nanopositioning stages with hysteresis nonlinearity. <i>Sensors and Actuators A: Physical</i> , <b>2016</b> , 244, 95-105	3.9	20
164	High-Bandwidth Control of Nanopositioning Stages via an Inner-Loop Delayed Position Feedback. <i>IEEE Transactions on Automation Science and Engineering</i> , <b>2015</b> , 12, 1357-1368	4.9	19

163	Estimation of multi-frequency signal parameters by frequency domain non-linear least squares. <i>Mechanical Systems and Signal Processing</i> , <b>2005</b> , 19, 955-973	7.8	19
162	Improved forecasting compensatory control to guarantee the remaining wall thickness for pocket milling of a large thin-walled part. <i>International Journal of Advanced Manufacturing Technology</i> , <b>2018</b> , 94, 1677-1688	3.2	18
161	Real-time feedrate scheduling for five-axis machining by simultaneously planning linear and angular trajectories. <i>International Journal of Machine Tools and Manufacture</i> , <b>2018</b> , 135, 78-96	9.4	18
160	Double Taylor Expansion-Based Real-Time Contouring Error Estimation for Multiaxis Motion Systems. <i>IEEE Transactions on Industrial Electronics</i> , <b>2019</b> , 66, 9490-9499	8.9	17
159	Cross-coupled controller design for triaxial motion systems based on second-order contour error estimation. <i>Science China Technological Sciences</i> , <b>2015</b> , 58, 1209-1217	3.5	17
158	Optimal Design of Measurement Point Layout for Workpiece Localization. <i>Journal of Manufacturing Science and Engineering, Transactions of the ASME</i> , <b>2009</b> , 131,	3.3	17
157	Algorithm for Spatial Straightness Evaluation Using Theories of Linear Complex Chebyshev Approximation and Semi-infinite Linear Programming. <i>Journal of Manufacturing Science and Engineering, Transactions of the ASME</i> , <b>2006</b> , 128, 167-174	3.3	17
156	Mechanistic Modeling of Five-Axis Machining With a Flat End Mill Considering Bottom Edge Cutting Effect. <i>Journal of Manufacturing Science and Engineering, Transactions of the ASME</i> , <b>2016</b> , 138,	3.3	17
155	Fabrication of microlens array on silicon surface using electrochemical wet stamping technique. <i>Applied Surface Science</i> , <b>2016</b> , 364, 442-445	6.7	16
154	ArcSurface intersection method to calculate cutter-workpiece engagements for generic cutter in five-axis milling. <i>CAD Computer Aided Design</i> , <b>2016</b> , 73, 1-10	2.9	16
153	Wholly smoothing cutter orientations for five-axis NC machining based on cutter contact point mesh. <i>Science China Technological Sciences</i> , <b>2010</b> , 53, 1294-1303	3.5	16
152	A general, fast and robust B-spline fitting scheme for micro-line tool path under chord error constraint. <i>Science China Technological Sciences</i> , <b>2019</b> , 62, 321-332	3.5	16
151	A product-of-exponential-based robot calibration method with optimal measurement configurations. <i>International Journal of Advanced Robotic Systems</i> , <b>2017</b> , 14, 172988141774355	1.4	15
150	On time-domain methods for milling stability analysis. <i>Science Bulletin</i> , <b>2012</b> , 57, 4336-4345		15
149	Path Tracking of a Cable-Driven Snake Robot With a Two-Level Motion Planning Method. <i>IEEE/ASME Transactions on Mechatronics</i> , <b>2019</b> , 24, 935-946	5.5	14
148	A Modified Prandtl-Ishlinskii Model for Rate-dependent Hysteresis Nonlinearity Using mth-power Velocity Damping Mechanism. <i>International Journal of Advanced Robotic Systems</i> , <b>2014</b> , 11, 163	1.4	14
147	Color code identification in coded structured light. <i>Applied Optics</i> , <b>2012</b> , 51, 5340-56	1.7	14
146	Cutter size optimisation and interference-free tool path generation for five-axis flank milling of centrifugal impellers. <i>International Journal of Production Research</i> , <b>2012</b> , 50, 6667-6678	7.8	14

145	Extraction of Periodic Signal Without External Reference by Time-Domain Average Scanning. <i>IEEE Transactions on Industrial Electronics</i> , <b>2008</b> , 55, 918-927	8.9	14
144	Nonparametric Hierarchical Hidden Semi-Markov Model for Brain Fatigue Behavior Detection of Pilots During Flight. <i>IEEE Transactions on Intelligent Transportation Systems</i> , <b>2021</b> , 1-12	6.1	14
143	Fv-SVM-Based Wall-Thickness Error Decomposition for Adaptive Machining of Large Skin Parts. <i>IEEE Transactions on Industrial Informatics</i> , <b>2019</b> , 15, 2426-2434	11.9	13
142	High precision electrochemical micromachining based on confined etchant layer technique. <i>Electrochemistry Communications</i> , <b>2013</b> , 28, 135-138	5.1	13
141	An Accurate Method for Determining Cutter-Workpiece Engagements in Five-Axis Milling With a General Tool Considering Cutter Runout. <i>Journal of Manufacturing Science and Engineering, Transactions of the ASME</i> , <b>2018</b> , 140,	3.3	12
140	Tool path generation via the multi-criteria optimisation for flat-end milling of sculptured surfaces. <i>International Journal of Production Research</i> , <b>2017</b> , 55, 4261-4282	7.8	12
139	Chatter detection in milling processes using frequency-domain Rñyi entropy. <i>International Journal of Advanced Manufacturing Technology</i> , <b>2020</b> , 106, 877-890	3.2	12
138	A spline-based method for stability analysis of milling processes. <i>International Journal of Advanced Manufacturing Technology</i> , <b>2017</b> , 89, 2571-2586	3.2	11
137	Geometric conditions for tangent continuity of swept tool envelopes with application to multi-pass flank milling. <i>CAD Computer Aided Design</i> , <b>2015</b> , 59, 43-49	2.9	11
136	An error-bounded B-spline curve approximation scheme using dominant points for CNC interpolation of micro-line toolpath. <i>Robotics and Computer-Integrated Manufacturing</i> , <b>2020</b> , 64, 101930	9.2	11
135	A locally optimal transition method with analytical calculation of transition length for computer numerical control machining of short line segments. <i>Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture</i> , <b>2018</b> , 232, 2409-2419	2.4	11
134	Integral force feedback control with input shaping: Application to piezo-based scanning systems in ECDLs. <i>Review of Scientific Instruments</i> , <b>2017</b> , 88, 075006	1.7	11
133	Tool path optimisation for flank milling ruled surface based on the distance function. <i>International Journal of Production Research</i> , <b>2010</b> , 48, 4233-4251	7.8	11
132	Tool path generation and simulation of dynamic cutting process for five-axis NC machining. <i>Science Bulletin</i> , <b>2010</b> , 55, 3408-3418		11
131	A closed-loop error compensation method for robotic flank milling. <i>Robotics and Computer-Integrated Manufacturing</i> , <b>2020</b> , 63, 101928	9.2	11
130	Rotated Sphere Haar Wavelet and Deep Contractive Auto-Encoder Network With Fuzzy Gaussian SVM for Pilot's Pupil Center Detection. <i>IEEE Transactions on Cybernetics</i> , <b>2021</b> , 51, 332-345	10.2	11
129	Five-axis flank milling of impellers: Optimal geometry of a conical tool considering stiffness and geometric constraints. <i>Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture</i> , <b>2016</b> , 230, 38-52	2.4	10
128	Comparative experiments regarding approaches to feedforward hysteresis compensation for piezoceramic actuators. <i>Smart Materials and Structures</i> , <b>2014</b> , 23, 095029	3.4	10

127	Novel Nonlinear Approach for Real-Time Fatigue EEG Data: An Infinitely Warped Model of Weighted Permutation Entropy. <i>IEEE Transactions on Intelligent Transportation Systems</i> , <b>2020</b> , 21, 2437-2448	6.1	10
126	. <i>IEEE Transactions on Industrial Electronics</i> , <b>2021</b> , 68, 11266-11275	8.9	10
125	Modified Robust Dynamic Control for a Diamond Parallel Robot. <i>IEEE/ASME Transactions on Mechatronics</i> , <b>2019</b> , 24, 959-968	5.5	9
124	Simultaneous optimization of the feed direction and tool orientation in five-axis flat-end milling. <i>International Journal of Production Research</i> , <b>2016</b> , 54, 4537-4546	7.8	9
123	Unified wrench model of an ironless permanent magnet planar motor with 2D periodic magnetic field. <i>IET Electric Power Applications</i> , <b>2018</b> , 12, 423-430	1.8	9
122	Prediction Model based Contouring Error Iterative Pre-Compensation Scheme for Precision Multi-axis Motion Systems. <i>IEEE/ASME Transactions on Mechatronics</i> , <b>2020</b> , 1-1	5.5	9
121	Confined spaces path following for cable-driven snake robots with prediction lookup and interpolation algorithms. <i>Science China Technological Sciences</i> , <b>2020</b> , 63, 255-264	3.5	9
120	. <i>IEEE Access</i> , <b>2020</b> , 8, 8520-8532	3.5	9
119	Intelligent Feedforward Compensation Motion Control of Maglev Planar Motor With Precise Reference Modification Prediction. <i>IEEE Transactions on Industrial Electronics</i> , <b>2021</b> , 68, 7768-7777	8.9	9
118	Time/Space-Separation-Based Gaussian Process Modeling for the Cross-Coupling Effect of a 2-DOF Nanopositioning Stage. <i>IEEE/ASME Transactions on Mechatronics</i> , <b>2021</b> , 26, 2186-2194	5.5	9
117	Deterioration of form accuracy induced by servo dynamics errors and real-time compensation for slow tool servo diamond turning of complex-shaped optics. <i>International Journal of Machine Tools and Manufacture</i> , <b>2020</b> , 154, 103556	9.4	8
116	A wavelet-based approach for stability analysis of periodic delay-differential systems with discrete delay. <i>Nonlinear Dynamics</i> , <b>2015</b> , 79, 1049-1059	5	8
115	Local asymmetrical corner trajectory smoothing with bidirectional planning and adjusting algorithm for CNC machining. <i>Robotics and Computer-Integrated Manufacturing</i> , <b>2021</b> , 68, 102058	9.2	8
114	Fatigue Detection of Pilots' Brain Through Brains Cognitive Map and Multilayer Latent Incremental Learning Model. <i>IEEE Transactions on Cybernetics</i> , <b>2021</b> , PP,	10.2	8
113	A rate-dependent Prandtl-Ishlinskii model for piezoelectric actuators using the dynamic envelope function based play operator. <i>Frontiers of Mechanical Engineering</i> , <b>2015</b> , 10, 37-42	3.3	7
112	Design and performance testing of a dielectric elastomer strain sensor. <i>International Journal of Intelligent Robotics and Applications</i> , <b>2017</b> , 1, 451-458	1.7	7
111	. <i>IEEE Transactions on Magnetics</i> , <b>2015</b> , 51, 1-10	2	7
110	Indirect decoding edges for one-shot shape acquisition. <i>Journal of the Optical Society of America A: Optics and Image Science, and Vision</i> , <b>2011</b> , 28, 651-61	1.8	7



109	Synchronous Averaging of Time-Frequency Distribution With Application to Machine Condition Monitoring. <i>Journal of Vibration and Acoustics, Transactions of the ASME</i> , <b>2007</b> , 129, 441-447	1.6	7
108	Tracking Control of Nanopositioning Stages Using Parallel Resonant Controllers for High-Speed Nonraster Sequential Scanning. <i>IEEE Transactions on Automation Science and Engineering</i> , <b>2021</b> , 18, 1218-1228	4.9	7
107	ROpenPose: A Rapider OpenPose Model for Astronaut Operation Attitude Detection. <i>IEEE Transactions on Industrial Electronics</i> , <b>2021</b> , 1-1	8.9	7
106	Accurate cutting force prediction of helical milling operations considering the cutter runout effect. <i>International Journal of Advanced Manufacturing Technology</i> , <b>2017</b> , 92, 4133-4144	3.2	6
105	. <i>IEEE/ASME Transactions on Mechatronics</i> , <b>2020</b> , 25, 547-557	5.5	6
104	Kinematic generation of ruled surface based on rational motion of point-line. <i>Science China Technological Sciences</i> , <b>2012</b> , 55, 62-71	3.5	6
103	Fabrication of microstructures on GaAs with pulsed electrochemical wet stamping. <i>Electrochimica Acta</i> , <b>2013</b> , 111, 680-684	6.7	6
102	Determination of edge correspondence using color codes for one-shot shape acquisition. <i>Optics and Lasers in Engineering</i> , <b>2011</b> , 49, 97-103	4.6	6
101	Analytical envelope surface representation of a conical cutter undergoing rational motion. <i>International Journal of Advanced Manufacturing Technology</i> , <b>2010</b> , 47, 719-730	3.2	6
100	High accuracy estimation of multi-frequency signal parameters by improved phase linear regression. <i>Signal Processing</i> , <b>2007</b> , 87, 1066-1077	4.4	6
99	. <i>IEEE/ASME Transactions on Mechatronics</i> , <b>2020</b> , 1-1	5.5	6
98	Third-order chord error estimation for freeform contour in computer-aided manufacturing and computer numerical control systems. <i>Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture</i> , <b>2019</b> , 233, 863-874	2.4	6
97	Detecting Dynamic Behavior of Brain Fatigue Through 3-D-CNN-LSTM. <i>IEEE Transactions on Systems, Man, and Cybernetics: Systems</i> , <b>2021</b> , 1-11	7.3	6
96	Accelerated Iteration Algorithm based Contouring Error Estimation for Multi-axis Motion Control. <i>IEEE/ASME Transactions on Mechatronics</i> , <b>2021</b> , 1-1	5.5	6
95	Tri-axial Fast Tool Servo Using Hybrid Electromagnetic-Piezoelectric Actuation for Diamond Turning. <i>IEEE Transactions on Industrial Electronics</i> , <b>2021</b> , 1-1	8.9	6
94	Brain-Computer Interface Using Brain Power Map and Cognition Detection Network During Flight. <i>IEEE/ASME Transactions on Mechatronics</i> , <b>2022</b> , 1-11	5.5	6
93	Hysteresis modeling with frequency-separation-based Gaussian process and its application to sinusoidal scanning for fast imaging of atomic force microscope. <i>Sensors and Actuators A: Physical</i> , <b>2020</b> , 311, 112070	3.9	5
92	Development of a Novel Pile-Up Structure Based Nanopositioning Mechanism Driven by Piezoelectric Actuator. <i>IEEE/ASME Transactions on Mechatronics</i> , <b>2020</b> , 25, 502-512	5.5	5

91	Tool path generation for five-axis machining of blisks with barrel cutters. <i>International Journal of Production Research</i> , <b>2019</b> , 57, 1300-1314	7.8	5
90	A highly efficient and convergent optimization method for multipoint tool orientation in five-axis machining. <i>International Journal of Advanced Manufacturing Technology</i> , <b>2017</b> , 93, 2711-2722	3.2	5
89	Discontinuity-preserving decoding of one-shot shape acquisition using regularized color. <i>Optics and Lasers in Engineering</i> , <b>2012</b> , 50, 1416-1422	4.6	5
88	Evaluation of coded structured light methods using ground truth <b>2011</b> ,		5
87	On a novel approach to planning cylindrical cutter location for flank milling of ruled surfaces. <i>International Journal of Production Research</i> , <b>2009</b> , 47, 3289-3305	7.8	5
86	Sliding mode control with third-order contour error estimation for free-form contour following. <i>Precision Engineering</i> , <b>2020</b> , 66, 282-294	2.9	5
85	Parallel acceleration/deceleration feedrate scheduling for computer numerical control machine tools based on bi-directional scanning technique. <i>Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture</i> , <b>2019</b> , 233, 937-947	2.4	5
84	The modular design of trajectory compensation based on ATCF for precision motion control. <i>Mechanical Systems and Signal Processing</i> , <b>2020</b> , 135, 106393	7.8	5
83	Human Exploratory Procedures based Hybrid Measurement Fusion for Material Recognition. <i>IEEE/ASME Transactions on Mechatronics</i> , <b>2021</b> , 1-1	5.5	5
82	Fractional repetitive control of nanopositioning stages for tracking high-frequency periodic inputs with nonsynchronized sampling. <i>Review of Scientific Instruments</i> , <b>2019</b> , 90, 055108	1.7	4
81	Enhancing the metrological performance of non-raster scanning probe microscopy using Gaussian process regression. <i>Measurement Science and Technology</i> , <b>2019</b> , 30, 095004	2	4
80	Model-driven photometric stereo for in-process inspection of non-diffuse curved surfaces. <i>CIRP Annals - Manufacturing Technology</i> , <b>2019</b> , 68, 563-566	4.9	4
79	A novel curvature-based method for analyzing the second-order immobility of frictionless grasp. <i>Robotica</i> , <b>2012</b> , 30, 613-625	2.1	4
78	A unified approach for least-squares surface fit-ting <b>2004</b> , 47, 72		4
77	Experimental validation of the simultaneous damping and tracking controller design strategy for high-bandwidth nanopositioning by PAVPF approach. <i>IET Control Theory and Applications</i> , <b>2020</b> , 14, 3506-3514	2.5	4
76	Robust Calibration of a Color Structured Light System Using Color Correction. <i>Lecture Notes in Computer Science</i> , <b>2009</b> , 936-946	0.9	4
75	Integration of optimized feedrate into an online adaptive force controller for robot milling. <i>International Journal of Advanced Manufacturing Technology</i> , <b>2020</b> , 106, 1533-1542	3.2	4
74	Five-axis Flank Milling Tool Path Generation with Smooth Rotary Motions. <i>Procedia CIRP</i> , <b>2016</b> , 56, 161-166		4

73	An Analytical Transition Algorithm for Real-time CNC Machining of Linear Tool Path. <i>Procedia CIRP</i> , <b>2016</b> , 56, 344-348	1.8	4
72	Model-Data Driven Learning Adaptive Robust Control of Precision Mechatronic Motion Systems With Comparative Experiments. <i>IEEE Access</i> , <b>2018</b> , 6, 78286-78296	3.5	4
71	Trajectory modification method based on frequency domain analysis for precision contouring motion control systems. <i>Mechanical Systems and Signal Processing</i> , <b>2021</b> , 158, 107646	7.8	4
70	Operational-space wrench and acceleration capability analysis for multi-link cable-driven robots. <i>Science China Technological Sciences</i> , <b>2020</b> , 63, 2063-2072	3.5	3
69	Robust adaptive control of a class of nonlinear systems with inverse compensation of unknown asymmetrical backlash nonlinearity <b>2011</b> ,		3
68	Spectral method for prediction of chatter stability in low radial immersion milling <b>2011</b> ,		3
67	Development of an automatic approaching system for electrochemical nanofabrication using visual and force-displacement sensing. <i>Sensors</i> , <b>2012</b> , 12, 8465-76	3.8	3
66	Feasibility of the Bi-Directional Scanning Method in Acceleration/deceleration Feedrate Scheduling for CNC Machining. <i>Lecture Notes in Computer Science</i> , <b>2017</b> , 171-183	0.9	3
65	High-bandwidth nanopositioning via active control of system resonance. <i>Frontiers of Mechanical Engineering</i> , <b>2021</b> , 16, 331-339	3.3	3
64	Analytical model and experimental verification of an elliptical bridge-type compliant displacement amplification mechanism. <i>Review of Scientific Instruments</i> , <b>2021</b> , 92, 055109	1.7	3
63	Generative Model-Driven Sampling Strategy for the High-Efficiency Measurement of Complex Surfaces on Coordinate Measuring Machines. <i>IEEE Transactions on Instrumentation and Measurement</i> , <b>2021</b> , 70, 1-11	5.2	3
62	Development of a new compliant active-force support system. <i>IEEE/ASME Transactions on Mechatronics</i> , <b>2021</b> , 1-1	5.5	3
61	Profile tracking for multi-axis ultrasonic inspection of model-unknown free-form surfaces based on energy concentration. <i>Measurement: Journal of the International Measurement Confederation</i> , <b>2021</b> , 172, 108867	4.6	3
60	Complex Surface Reconstruction Based on Fusion of Surface Normals and Sparse Depth Measurement. <i>IEEE Transactions on Instrumentation and Measurement</i> , <b>2021</b> , 70, 1-13	5.2	3
59	Online Koopman Operator Learning to identify Cross-Coupling Effect of Piezoelectric Tube Scanners in Atomic Force Microscopes. <i>IEEE Transactions on Industrial Informatics</i> , <b>2021</b> , 1-1	11.9	3
58	Non-Normal Dynamic Analysis for Predicting Transient Milling Stability. <i>Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME</i> , <b>2018</b> , 140,	1.6	2
57	Dynamic mode matching of internal and external cavities for enhancing the mode-hop-free synchronous tuning characteristics of an external-cavity diode laser. <i>Applied Physics B: Lasers and Optics</i> , <b>2019</b> , 125, 1	1.9	2
56	An industrial solution to object pose estimation for automatic semiconductor fabrication. <i>International Journal of Advanced Manufacturing Technology</i> , <b>2007</b> , 32, 969-977	3.2	2

55	Modeling of Piezoelectric-Actuated Nanopositioning Stages Involving with the Hysteresis <b>2016</b> , 183-212	2
54	A Digital Lock-In Amplifier Based Contact Detection Technique for Electrochemical Nanolithography. <i>Lecture Notes in Computer Science</i> , <b>2012</b> , 313-322	0.9 2
53	Learning Semantic Keypoint Representations for Door Opening Manipulation. <i>IEEE Robotics and Automation Letters</i> , <b>2020</b> , 5, 6980-6987	4.2 2
52	On the mechanisms of surface microdischarge plasma treatment of onychomycosis: Penetration, uptake, and chemical reactions. <i>Plasma Processes and Polymers</i> , <b>2021</b> , 18, 2000204	3.4 2
51	Investigation of NH <sub>4</sub> NO <sub>3</sub> formation by air plasma and wasted ammonia. <i>Plasma Processes and Polymers</i> , <b>2021</b> , 18, 2000223	3.4 2
50	Extended unified wrench model suitable for the end effect of the ironless permanent magnet planar motor. <i>IET Electric Power Applications</i> , <b>2019</b> , 13, 402-409	1.8 2
49	Enhanced Odd-Harmonic Repetitive Control of Nanopositioning Stages Using Spectrum-Selection Filtering Scheme for High-Speed Raster Scanning. <i>IEEE Transactions on Automation Science and Engineering</i> , <b>2021</b> , 18, 1087-1096	4.9 2
48	Development of a High-Performance Force Sensing Fast Tool Servo. <i>IEEE Transactions on Industrial Informatics</i> , <b>2021</b> , 1-1	11.9 2
47	Micro-Grinding Performance of Hard-Brittle Chip Materials in Precision Micro-Grinding Microgroove. <i>Journal of Shanghai Jiaotong University (Science)</i> , <b>2018</b> , 23, 70-76	0.6 2
46	CPG-Based Hierarchical Locomotion Control for Modular Quadrupedal Robots Using Deep Reinforcement Learning. <i>IEEE Robotics and Automation Letters</i> , <b>2021</b> , 6, 7193-7200	4.2 2
45	High-Bandwidth Tracking Control of Piezoactuated Nanopositioning Stages via Active Modal Control. <i>IEEE Transactions on Automation Science and Engineering</i> , <b>2021</b> , 1-9	4.9 2
44	Simultaneous damping and tracking control of a normal-stressed electromagnetic actuated nano-positioning stage. <i>Sensors and Actuators A: Physical</i> , <b>2022</b> , 338, 113467	3.9 2
43	Dual-Notch Based Repetitive Control for Tracking Lissajous Scan Trajectories with Piezo-Actuated Nano-Scanners. <i>IEEE Transactions on Instrumentation and Measurement</i> , <b>2022</b> , 1-1	5.2 2
42	A Transfer Learning-Based Method for Personalized State of Health Estimation of Lithium-Ion Batteries. <i>IEEE Transactions on Neural Networks and Learning Systems</i> , <b>2022</b> , 1-11	10.3 2
41	Reconstruction of multi-frame semi-sparse scanning probe microscopy images using dependent Gaussian process. <i>Measurement Science and Technology</i> , <b>2020</b> , 31, 045013	2 1
40	A novel 3D radius compensation method of probe stylus tip in the free-form surface profile curve scanning measurement. <i>Measurement Science and Technology</i> , <b>2020</b> , 31, 085001	2 1
39	A fractional-order active damping control approach for piezo-actuated nanopositioning stages <b>2016</b> ,	1
38	A Unified Distance Function Framework for Workpiece Fixturing Modeling and Analysis. <i>IEEE Transactions on Automation Science and Engineering</i> , <b>2013</b> , 10, 1166-1172	4.9 1

37	Design of a decoupled 2-DOF translational parallel micro-positioning stage <b>2011</b> ,		1
36	Accuracy characterization and measurement point planning for workpiece localization. <i>Science in China Series D: Earth Sciences</i> , <b>2004</b> , 47, 676		1
35	Design and Development of a New Piezoelectric-Actuated Biaxial Compliant Microgripper With Long Strokes. <i>IEEE Transactions on Automation Science and Engineering</i> , <b>2022</b> , 1-12	4.9	1
34	Robot line structured light vision measurement system: light strip center extraction and system calibration. <i>Optical Engineering</i> , <b>2021</b> , 60,	1.1	1
33	Effect of dielectric parameters on the transformation of operation mode and the energy cost of nitrogen fixation of surface microdischarge in air. <i>Plasma Processes and Polymers</i> , e2100107	3.4	1
32	Wall thickness error prediction and compensation in end milling of thin-plate parts. <i>Precision Engineering</i> , <b>2020</b> , 66, 550-563	2.9	1
31	Extraction and segmentation method of laser stripe in linear structured light scanner. <i>Optical Engineering</i> , <b>2021</b> , 60,	1.1	1
30	Robust high-bandwidth control of nano-positioning stages with Kalman filter based extended state observer and H control. <i>Review of Scientific Instruments</i> , <b>2021</b> , 92, 065003	1.7	1
29	Improved Forecasting Compensatory Control through Kalman Filtering. <i>Procedia CIRP</i> , <b>2016</b> , 56, 349-353	1.8	1
28	Skeleton Curve-Guided Five-Axis Sweep Scanning for Surface With Multiple Holes. <i>IEEE Transactions on Automation Science and Engineering</i> , <b>2021</b> , 1-16	4.9	1
27	Motion Control of the Piezoelectric Tube Scanner for Lissajous Trajectories with Modified Repetitive Control <b>2018</b> ,		1
26	Fractional order zero phase error tracking control of a novel decoupled 2-DOF compliant micro-positioning stage. <i>Journal of Micromechanics and Microengineering</i> , <b>2021</b> , 31, 105006	2	1
25	High-performance control of fast tool servos with robust disturbance observer and modified H <sub>∞</sub> control. <i>Mechatronics</i> , <b>2022</b> , 84, 102781	3	1
24	Modeling, design and control of normal-stressed electromagnetic actuated fast tool servos. <i>Mechanical Systems and Signal Processing</i> , <b>2022</b> , 178, 109304	7.8	1
23	Low-Cost Volumetric 3D Printing of High-Precision Miniature Lenses in Seconds. <i>Advanced Optical Materials</i> , 2200488	8.1	1
22	Command-shaping based on impulse response function for dynamic-mode control of internal and external cavities in external-cavity diode laser. <i>Review of Scientific Instruments</i> , <b>2020</b> , 91, 023101	1.7	0
21	Alleviating the computational load of the probabilistic algorithms for circles detection using the connectivity represented by graph. <i>Machine Vision and Applications</i> , <b>2011</b> , 22, 651-662	2.8	0
20	Robust Repetitive Control of Nanopositioning Stages Using the Spectrum-Selection Filter With Narrow Passbands. <i>IEEE/ASME Transactions on Mechatronics</i> , <b>2022</b> , 1-6	5.5	0

19	Design and Control of a Normal-Stressed Electromagnetic Actuated Nano-positioning Stage. <i>Lecture Notes in Computer Science</i> , <b>2021</b> , 324-334	0.9	o
18	Inverse Rate-Dependent Rayleigh Model Based Feedforward Control for Piezoelectric-Driven Mechanism. <i>IEEE Access</i> , <b>2020</b> , 8, 194808-194819	3.5	o
17	. <i>IEEE Transactions on Aerospace and Electronic Systems</i> , <b>2021</b> , 57, 1753-1767	3.7	o
16	Dynamics Learning With Object-Centric Interaction Networks for Robot Manipulation. <i>IEEE Access</i> , <b>2021</b> , 9, 68277-68288	3.5	o
15	A Novel Compliant Nanopositioning Stage Driven by a Normal-Stressed Electromagnetic Actuator. <i>IEEE Transactions on Automation Science and Engineering</i> , <b>2021</b> , 1-10	4.9	o
14	Visually quantifiable test piece for five-axis machine tools thermal effects. <i>Journal of Manufacturing Science and Engineering, Transactions of the ASME</i> , 1-8	3.3	o
13	Rate-dependent input curve shaping of the piezoelectric actuator based optical resonator cavity displacement characteristics for an external cavity diode laser. <i>Review of Scientific Instruments</i> , <b>2021</b> , 92, 095008	1.7	o
12	Autonomous Profile Tracking for Multiaxis Ultrasonic Measurement of Deformed Surface in Mirror Milling. <i>IEEE Transactions on Instrumentation and Measurement</i> , <b>2021</b> , 70, 1-13	5.2	o
11	On-Machine Calibration Method for In Situ Stereo Deflectometry System. <i>IEEE Transactions on Instrumentation and Measurement</i> , <b>2021</b> , 70, 1-8	5.2	o
10	High performance raster scanning of atomic force microscopy using Model-free Repetitive Control. <i>Mechanical Systems and Signal Processing</i> , <b>2022</b> , 173, 109027	7.8	o
9	An iterative contouring error compensation scheme for five-axis precision motion systems. <i>Mechanical Systems and Signal Processing</i> , <b>2022</b> , 178, 109226	7.8	o
8	Development of an electrochemical micromachining instrument for the confined etching techniques. <i>Review of Scientific Instruments</i> , <b>2014</b> , 85, 045122	1.7	
7	Redistributing Controller Orders to Increase Positioning Bandwidth in Nanopositioners. <i>IFAC-PapersOnLine</i> , <b>2021</b> , 54, 97-102	0.7	
6	Gravity-Controlled and Boundary-Constrained High-Throughput Fabrication of Polymeric Miniature Lens Arrays. <i>Macromolecular Materials and Engineering</i> , 2100840	3.9	
5	A single-pose series sphere-based calibration method for camera-projector structured light system. <i>Optics Communications</i> , <b>2022</b> , 507, 127659	2	
4	Identification of Prandtl-Ishlinskii Hysteresis Models Using Modified Particle Swarm Optimization. <i>Lecture Notes in Computer Science</i> , <b>2012</b> , 291-300	0.9	
3	Improving Tracking Precision of Piezoceramic Actuators Using Feedforward-Feedback Control. <i>Lecture Notes in Computer Science</i> , <b>2013</b> , 644-655	0.9	
2	Erratum to A Smoothed Raster Scanning Trajectory Based on Acceleration-Continuous B-Spline Transition for High-Speed Atomic Force Microscopy[[Feb 21 24-32]. <i>IEEE/ASME Transactions on Mechatronics</i> , <b>2021</b> , 26, 1700-1700	5.5	

- 1 Phase-to-coordinates Calibration for Fringe Projection Profilometry Using Gaussian Process Regression. *IEEE Transactions on Instrumentation and Measurement*, **2022**, 1-1 5.2