

Li-Min Zhu

List of Publications by Year in descending order

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252
papers

7,409
citations

61857

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257
all docs

257
docs citations

257
times ranked

3569
citing authors

#	ARTICLE	IF	CITATIONS
1	Modeling and Control of Piezo-Actuated Nanopositioning Stages: A Survey. IEEE Transactions on Automation Science and Engineering, 2016, 13, 313-332.	3.4	453
2	A full-discretization method for prediction of milling stability. International Journal of Machine Tools and Manufacture, 2010, 50, 502-509.	6.2	451
3	A survey on dielectric elastomer actuators for soft robots. Bioinspiration and Biomimetics, 2017, 12, 011003.	1.5	323
4	Modeling and Compensation of Asymmetric Hysteresis Nonlinearity for Piezoceramic Actuators With a Modified Prandtl-Ishlinskii Model. IEEE Transactions on Industrial Electronics, 2014, 61, 1583-1595.	5.2	288
5	Motion Control of Piezoelectric Positioning Stages: Modeling, Controller Design, and Experimental Evaluation. IEEE/ASME Transactions on Mechatronics, 2013, 18, 1459-1471.	3.7	210
6	A real-time look-ahead interpolation methodology with curvature-continuous B-spline transition scheme for CNC machining of short line segments. International Journal of Machine Tools and Manufacture, 2013, 65, 88-98.	6.2	207
7	Numerical Integration Method for Prediction of Milling Stability. Journal of Manufacturing Science and Engineering, Transactions of the ASME, 2011, 133, .	1.3	161
8	Real-time inverse hysteresis compensation of piezoelectric actuators with a modified Prandtl-Ishlinskii model. Review of Scientific Instruments, 2012, 83, 065106.	0.6	149
9	Neural Network Learning Adaptive Robust Control of an Industrial Linear Motor-Driven Stage With Disturbance Rejection Ability. IEEE Transactions on Industrial Informatics, 2017, 13, 2172-2183.	7.2	126
10	Surface form error prediction in five-axis flank milling of thin-walled parts. International Journal of Machine Tools and Manufacture, 2018, 128, 21-32.	6.2	116
11	Stiffness-based pose optimization of an industrial robot for five-axis milling. Robotics and Computer-Integrated Manufacturing, 2019, 55, 19-28.	6.1	109
12	Design and control of a decoupled two degree of freedom translational parallel micro-positioning stage. Review of Scientific Instruments, 2012, 83, 045105.	0.6	94
13	Corner rounding of linear five-axis tool path by dual PH curves blending. International Journal of Machine Tools and Manufacture, 2015, 88, 223-236.	6.2	91
14	Modeling and Identification of Piezoelectric-Actuated Stages Cascading Hysteresis Nonlinearity With Linear Dynamics. IEEE/ASME Transactions on Mechatronics, 2016, 21, 1792-1797.	3.7	91
15	Parameter identification of the generalized Prandtl-Ishlinskii model for piezoelectric actuators using modified particle swarm optimization. Sensors and Actuators A: Physical, 2013, 189, 254-265.	2.0	86
16	Proxy-Based Sliding-Mode Tracking Control of Piezoelectric-Actuated Nanopositioning Stages. IEEE/ASME Transactions on Mechatronics, 2015, 20, 1956-1965.	3.7	83
17	Analytical curvature-continuous dual-Bézier corner transition for five-axis linear tool path. International Journal of Machine Tools and Manufacture, 2015, 91, 96-108.	6.2	80
18	Global optimization of tool path for five-axis flank milling with a conical cutter. CAD Computer Aided Design, 2010, 42, 903-910.	1.4	75

#	ARTICLE	IF	CITATIONS
19	Real-time contouring error estimation for multi-axis motion systems using the second-order approximation. <i>International Journal of Machine Tools and Manufacture</i> , 2013, 68, 75-80.	6.2	75
20	Runge-Kutta methods for a semi-analytical prediction of milling stability. <i>Nonlinear Dynamics</i> , 2014, 76, 289-304.	2.7	75
21	Real-time local smoothing for five-axis linear toolpath considering smoothing error constraints. <i>International Journal of Machine Tools and Manufacture</i> , 2018, 124, 67-79.	6.2	75
22	Newton-ILC Contouring Error Estimation and Coordinated Motion Control for Precision Multi-axis Systems With Comparative Experiments. <i>IEEE Transactions on Industrial Electronics</i> , 2018, 65, 1470-1480.	5.2	66
23	High-Speed Tracking of a Nanopositioning Stage Using Modified Repetitive Control. <i>IEEE Transactions on Automation Science and Engineering</i> , 2017, 14, 1467-1477.	3.4	63
24	Compensation of deformation errors in five-axis flank milling of thin-walled parts via tool path optimization. <i>Precision Engineering</i> , 2019, 55, 77-87.	1.8	62
25	Design, analysis and testing of a parallel-kinematic high-bandwidth XY nanopositioning stage. <i>Review of Scientific Instruments</i> , 2013, 84, 125111.	0.6	61
26	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> , 2004, 126, 542-554.	1.3	59
27	Modeling of rate-dependent hysteresis in piezoelectric actuators using a family of ellipses. <i>Sensors and Actuators A: Physical</i> , 2011, 165, 303-309.	2.0	58
28	Design of a cable-driven hyper-redundant robot with experimental validation. <i>International Journal of Advanced Robotic Systems</i> , 2017, 14, 172988141773445.	1.3	56
29	Motion control of piezoceramic actuators with creep, hysteresis and vibration compensation. <i>Sensors and Actuators A: Physical</i> , 2013, 197, 76-87.	2.0	55
30	An accelerated convergence approach for real-time deformation compensation in large thin-walled parts machining. <i>International Journal of Machine Tools and Manufacture</i> , 2019, 142, 98-106.	6.2	54
31	Feedforward deformation control of a dielectric elastomer actuator based on a nonlinear dynamic model. <i>Applied Physics Letters</i> , 2015, 107, .	1.5	52
32	Detecting Fatigue Status of Pilots Based on Deep Learning Network Using EEG Signals. <i>IEEE Transactions on Cognitive and Developmental Systems</i> , 2021, 13, 575-585.	2.6	51
33	Deep GRU Neural-Network Prediction and Feedforward Compensation for Precision Multi-Axis Motion Control Systems. <i>IEEE/ASME Transactions on Mechatronics</i> , 2020, , 1-1.	3.7	51
34	Stability Analysis of Milling Via the Differential Quadrature Method. <i>Journal of Manufacturing Science and Engineering, Transactions of the ASME</i> , 2013, 135, .	1.3	50
35	GRU-Type LARC Strategy for Precision Motion Control With Accurate Tracking Error Prediction. <i>IEEE Transactions on Industrial Electronics</i> , 2021, 68, 812-820.	5.2	50
36	A complete S-shape feed rate scheduling approach for NURBS interpolator. <i>Journal of Computational Design and Engineering</i> , 2015, 2, 206-217.	1.5	48

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37	Positive acceleration, velocity and position feedback based damping control approach for piezo-actuated nanopositioning stages. <i>Mechatronics</i> , 2017, 47, 97-104.	2.0	48
38	Modeling and compensating the dynamic hysteresis of piezoelectric actuators via a modified rate-dependent Prandtl–Ishlinskii model. <i>Smart Materials and Structures</i> , 2015, 24, 125006.	1.8	47
39	Development of a piezoelectrically actuated dual-stage fast tool servo. <i>Mechanical Systems and Signal Processing</i> , 2020, 144, 106873.	4.4	47
40	A steepest descent algorithm for circularity evaluation. <i>CAD Computer Aided Design</i> , 2003, 35, 255-265.	1.4	46
41	Mechanistic modeling of five-axis machining with a general end mill considering cutter runout. <i>International Journal of Machine Tools and Manufacture</i> , 2015, 96, 67-79.	6.2	46
42	Damping Control of Piezo-Actuated Nanopositioning Stages With Recursive Delayed Position Feedback. <i>IEEE/ASME Transactions on Mechatronics</i> , 2017, 22, 855-864.	3.7	46
43	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> , 2009, 131, .	1.3	45
44	Nonparametric Bayesian Prior Inducing Deep Network for Automatic Detection of Cognitive Status. <i>IEEE Transactions on Cybernetics</i> , 2021, 51, 5483-5496.	6.2	45
45	Self-Paced Dynamic Infinite Mixture Model for Fatigue Evaluation of Pilots’ Brains. <i>IEEE Transactions on Cybernetics</i> , 2022, 52, 5623-5638.	6.2	44
46	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> , 2009, 49, 199-202.	6.2	43
47	Rate-dependent hysteresis modeling and compensation of piezoelectric actuators using Gaussian process. <i>Sensors and Actuators A: Physical</i> , 2019, 295, 357-365.	2.0	43
48	An alternative time-domain index for condition monitoring of rolling element bearings’ A comparison study. <i>Reliability Engineering and System Safety</i> , 2007, 92, 660-670.	5.1	41
49	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> , 2017, 231, 2359-2371.	1.5	41
50	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> , 2020, 154, 103556.	6.2	41
51	New statistical moments for the detection of defects in rolling element bearings. <i>International Journal of Advanced Manufacturing Technology</i> , 2005, 26, 1268-1274.	1.5	40
52	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> , 2017, 64, 4139-4149.	5.2	40
53	Simultaneous optimization of tool path and shape for five-axis flank milling. <i>CAD Computer Aided Design</i> , 2012, 44, 1229-1234.	1.4	39
54	High-precision control of piezoelectric nanopositioning stages using hysteresis compensator and disturbance observer. <i>Smart Materials and Structures</i> , 2014, 23, 105007.	1.8	37

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55	Accurate three-dimensional contouring error estimation and compensation scheme with zero-phase filter. <i>International Journal of Machine Tools and Manufacture</i> , 2018, 128, 33-40.	6.2	37
56	A general, fast and robust B-spline fitting scheme for micro-line tool path under chord error constraint. <i>Science China Technological Sciences</i> , 2019, 62, 321-332.	2.0	37
57	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> , 2014, 136, .	1.3	35
58	Modified Repetitive Control Based Cross-Coupling Compensation Approach for the Piezoelectric Tube Scanner of Atomic Force Microscopes. <i>IEEE/ASME Transactions on Mechatronics</i> , 2019, 24, 666-676.	3.7	34
59	Milling stability analysis using the spectral method. <i>Science China Technological Sciences</i> , 2011, 54, 3130-3136.	2.0	33
60	High-bandwidth tracking control of piezo-actuated nanopositioning stages using closed-loop input shaper. <i>Mechatronics</i> , 2014, 24, 724-733.	2.0	33
61	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> , 2018, 94, 1677-1688.	1.5	33
62	Real-time feedrate scheduling for five-axis machining by simultaneously planning linear and angular trajectories. <i>International Journal of Machine Tools and Manufacture</i> , 2018, 135, 78-96.	6.2	33
63	Intelligent Feedforward Compensation Motion Control of Maglev Planar Motor With Precise Reference Modification Prediction. <i>IEEE Transactions on Industrial Electronics</i> , 2021, 68, 7768-7777.	5.2	33
64	A Dynamic Model of Stick-Slip Piezoelectric Actuators Considering the Deformation of Overall System. <i>IEEE Transactions on Industrial Electronics</i> , 2021, 68, 11266-11275.	5.2	33
65	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> , 2010, 53, 1904-1912.	2.0	31
66	Path Tracking of a Cable-Driven Snake Robot With a Two-Level Motion Planning Method. <i>IEEE/ASME Transactions on Mechatronics</i> , 2019, 24, 935-946.	3.7	31
67	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> , 2018, 140, .	1.3	30
68	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> , 2020, 64, 101930.	6.1	30
69	Global optimization of tool path for five-axis flank milling with a cylindrical cutter. <i>Science in China Series D: Earth Sciences</i> , 2009, 52, 2449-2459.	0.9	29
70	Arc-surface intersection method to calculate cutter-workpiece engagements for generic cutter in five-axis milling. <i>CAD Computer Aided Design</i> , 2016, 73, 1-10.	1.4	29
71	Detecting Dynamic Behavior of Brain Fatigue Through 3-D-CNN-LSTM. <i>IEEE Transactions on Systems, Man, and Cybernetics: Systems</i> , 2022, 52, 90-100.	5.9	29
72	Application of kinematic geometry to computational metrology: distance function based hierarchical algorithms for cylindricity evaluation. <i>International Journal of Machine Tools and Manufacture</i> , 2003, 43, 203-215.	6.2	28

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73	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> , 2010, 53, 2190-2197.	2.0	27
74	Chatter detection in milling processes using frequency-domain RÃ©nyi entropy. <i>International Journal of Advanced Manufacturing Technology</i> , 2020, 106, 877-890.	1.5	27
75	Rotated Sphere Haar Wavelet and Deep Contractive Auto-Encoder Network With Fuzzy Gaussian SVM for Pupil Center Detection. <i>IEEE Transactions on Cybernetics</i> , 2021, 51, 332-345.	6.2	27
76	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> , 2016, 138, .	1.3	26
77	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> , 2016, 138, .	1.3	26
78	Double Taylor Expansion-Based Real-Time Contouring Error Estimation for Multiaxis Motion Systems. <i>IEEE Transactions on Industrial Electronics</i> , 2019, 66, 9490-9499.	5.2	26
79	A closed-loop error compensation method for robotic flank milling. <i>Robotics and Computer-Integrated Manufacturing</i> , 2020, 63, 101928.	6.1	26
80	A Practical Continuous-Curvature BÃ©zier Transition Algorithm for High-Speed Machining of Linear Tool Path. <i>Lecture Notes in Computer Science</i> , 2011, , 465-476.	1.0	26
81	Design of a Distributed Multiaxis Motion Control System Using the IEEE-1394 Bus. <i>IEEE Transactions on Industrial Electronics</i> , 2010, 57, 4209-4218.	5.2	25
82	A product-of-exponential-based robot calibration method with optimal measurement configurations. <i>International Journal of Advanced Robotic Systems</i> , 2017, 14, 172988141774355.	1.3	25
83	Optimal Design of Measurement Point Layout for Workpiece Localization. <i>Journal of Manufacturing Science and Engineering, Transactions of the ASME</i> , 2009, 131, .	1.3	23
84	Integral resonant damping for high-bandwidth control of piezoceramic stack actuators with asymmetric hysteresis nonlinearity. <i>Mechatronics</i> , 2014, 24, 367-375.	2.0	23
85	Odd-harmonic repetitive control for high-speed raster scanning of piezo-actuated nanopositioning stages with hysteresis nonlinearity. <i>Sensors and Actuators A: Physical</i> , 2016, 244, 95-105.	2.0	23
86	Dynamics and Stability Prediction of Five-Axis Flat-End Milling. <i>Journal of Manufacturing Science and Engineering, Transactions of the ASME</i> , 2017, 139, .	1.3	23
87	Estimation of multi-frequency signal parameters by frequency domain non-linear least squares. <i>Mechanical Systems and Signal Processing</i> , 2005, 19, 955-973.	4.4	22
88	High-Bandwidth Control of Nanopositioning Stages via an Inner-Loop Delayed Position Feedback. <i>IEEE Transactions on Automation Science and Engineering</i> , 2015, 12, 1357-1368.	3.4	22
89	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> , 2015, 229, 1131-1143.	1.5	22
90	Prediction-Model-Based Contouring Error Iterative Precompensation Scheme for Precision Multiaxis Motion Systems. <i>IEEE/ASME Transactions on Mechatronics</i> , 2021, 26, 2274-2284.	3.7	22

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91	Cutter size optimisation and interference-free tool path generation for five-axis flank milling of centrifugal impellers. <i>International Journal of Production Research</i> , 2012, 50, 6667-6678.	4.9	21
92	On time-domain methods for milling stability analysis. <i>Science Bulletin</i> , 2012, 57, 4336-4345.	1.7	21
93	Cross-coupled controller design for triaxial motion systems based on second-order contour error estimation. <i>Science China Technological Sciences</i> , 2015, 58, 1209-1217.	2.0	21
94	Fv-SVM-Based Wall-Thickness Error Decomposition for Adaptive Machining of Large Skin Parts. <i>IEEE Transactions on Industrial Informatics</i> , 2019, 15, 2426-2434.	7.2	21
95	A Review of Recent Advances in Robotic Cell Microinjection. <i>IEEE Access</i> , 2020, 8, 8520-8532.	2.6	21
96	Accelerated Iteration Algorithm Based Contouring Error Estimation for Multiaxis Motion Control. <i>IEEE/ASME Transactions on Mechatronics</i> , 2022, 27, 452-462.	3.7	21
97	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> , 2006, 128, 167-174.	1.3	20
98	Color code identification in coded structured light. <i>Applied Optics</i> , 2012, 51, 5340.	0.9	20
99	Fabrication of microlens array on silicon surface using electrochemical wet stamping technique. <i>Applied Surface Science</i> , 2016, 364, 442-445.	3.1	20
100	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> , 2018, 140, .	1.3	20
101	Nonparametric Hierarchical Hidden Semi-Markov Model for Brain Fatigue Behavior Detection of Pilots During Flight. <i>IEEE Transactions on Intelligent Transportation Systems</i> , 2022, 23, 5245-5256.	4.7	20
102	Extraction of Periodic Signal Without External Reference by Time-Domain Average Scanning. <i>IEEE Transactions on Industrial Electronics</i> , 2008, 55, 918-927.	5.2	19
103	High precision electrochemical micromachining based on confined etchant layer technique. <i>Electrochemistry Communications</i> , 2013, 28, 135-138.	2.3	19
104	Modified Robust Dynamic Control for a Diamond Parallel Robot. <i>IEEE/ASME Transactions on Mechatronics</i> , 2019, 24, 959-968.	3.7	19
105	Triaxial Fast Tool Servo Using Hybrid Electromagneticâ€”Piezoelectric Actuation for Diamond Turning. <i>IEEE Transactions on Industrial Electronics</i> , 2022, 69, 1728-1738.	5.2	19
106	Confined spaces path following for cable-driven snake robots with prediction lookup and interpolation algorithms. <i>Science China Technological Sciences</i> , 2020, 63, 255-264.	2.0	18
107	Local asymmetrical corner trajectory smoothing with bidirectional planning and adjusting algorithm for CNC machining. <i>Robotics and Computer-Integrated Manufacturing</i> , 2021, 68, 102058.	6.1	18
108	Fatigue Detection of Pilotsâ€™ Brain Through Brains Cognitive Map and Multilayer Latent Incremental Learning Model. <i>IEEE Transactions on Cybernetics</i> , 2022, 52, 12302-12314.	6.2	18

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109	Brain-Computer Interface Using Brain Power Map and Cognition Detection Network During Flight. IEEE/ASME Transactions on Mechatronics, 2022, 27, 3942-3952.	3.7	18
110	Wholly smoothing cutter orientations for five-axis NC machining based on cutter contact point mesh. Science China Technological Sciences, 2010, 53, 1294-1303.	2.0	17
111	Tool path generation and simulation of dynamic cutting process for five-axis NC machining. Science Bulletin, 2010, 55, 3408-3418.	1.7	17
112	Tool path generation via the multi-criteria optimisation for flat-end milling of sculptured surfaces. International Journal of Production Research, 2017, 55, 4261-4282.	4.9	17
113	Fractional Repetitive Control of Nanopositioning Stages for High-Speed Scanning Using Low-Pass FIR Variable Fractional Delay Filter. IEEE/ASME Transactions on Mechatronics, 2020, 25, 547-557.	3.7	17
114	Complex Surface Reconstruction Based on Fusion of Surface Normals and Sparse Depth Measurement. IEEE Transactions on Instrumentation and Measurement, 2021, 70, 1-13.	2.4	17
115	Comparative experiments regarding approaches to feedforward hysteresis compensation for piezoceramic actuators. Smart Materials and Structures, 2014, 23, 095029.	1.8	16
116	Geometric conditions for tangent continuity of swept tool envelopes with application to multi-pass flank milling. CAD Computer Aided Design, 2015, 59, 43-49.	1.4	16
117	The modular design of trajectory compensation based on ATCF for precision motion control. Mechanical Systems and Signal Processing, 2020, 135, 106393.	4.4	16
118	Wall thickness error prediction and compensation in end milling of thin-plate parts. Precision Engineering, 2020, 66, 550-563.	1.8	16
119	Human-Exploratory-Procedure-Based Hybrid Measurement Fusion for Material Recognition. IEEE/ASME Transactions on Mechatronics, 2022, 27, 1093-1104.	3.7	16
120	ROpenPose: A Rapider OpenPose Model for Astronaut Operation Attitude Detection. IEEE Transactions on Industrial Electronics, 2022, 69, 1043-1052.	5.2	16
121	A locally optimal transition method with analytical calculation of transition length for computer numerical control machining of short line segments. Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture, 2018, 232, 2409-2419.	1.5	15
122	Generative Model-Driven Sampling Strategy for the High-Efficiency Measurement of Complex Surfaces on Coordinate Measuring Machines. IEEE Transactions on Instrumentation and Measurement, 2021, 70, 1-11.	2.4	15
123	Tool path optimisation for flank milling ruled surface based on the distance function. International Journal of Production Research, 2010, 48, 4233-4251.	4.9	14
124	A Modified Prandtl-Ishlinskii Model for Rate-dependent Hysteresis Nonlinearity Using m -th-power Velocity Damping Mechanism. International Journal of Advanced Robotic Systems, 2014, 11, 163.	1.3	14
125	A rate-dependent Prandtl-Ishlinskii model for piezoelectric actuators using the dynamic envelope function based play operator. Frontiers of Mechanical Engineering, 2015, 10, 37-42.	2.5	14
126	Integral force feedback control with input shaping: Application to piezo-based scanning systems in ECDLs. Review of Scientific Instruments, 2017, 88, 075006.	0.6	14

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127	Novel Nonlinear Approach for Real-Time Fatigue EEG Data: An Infinitely Warped Model of Weighted Permutation Entropy. IEEE Transactions on Intelligent Transportation Systems, 2020, 21, 2437-2448.	4.7	14
128	Sliding mode control with third-order contour error estimation for free-form contour following. Precision Engineering, 2020, 66, 282-294.	1.8	14
129	Development of a High-Performance Force Sensing Fast Tool Servo. IEEE Transactions on Industrial Informatics, 2022, 18, 35-45.	7.2	14
130	A Transfer Learning-Based Method for Personalized State of Health Estimation of Lithium-Ion Batteries. IEEE Transactions on Neural Networks and Learning Systems, 2024, 35, 759-769.	7.2	14
131	Design and performance testing of a dielectric elastomer strain sensor. International Journal of Intelligent Robotics and Applications, 2017, 1, 451-458.	1.6	13
132	Integration of optimized feedrate into an online adaptive force controller for robot milling. International Journal of Advanced Manufacturing Technology, 2020, 106, 1533-1542.	1.5	13
133	Analytical model and experimental verification of an elliptical bridge-type compliant displacement amplification mechanism. Review of Scientific Instruments, 2021, 92, 055109.	0.6	13
134	A Real-Time Model of Ironless Planar Motors With Stationary Circular Coils. IEEE Transactions on Magnetics, 2015, 51, 1-10.	1.2	12
135	Unified wrench model of an ironless permanent magnet planar motor with 2D periodic magnetic field. IET Electric Power Applications, 2018, 12, 423-430.	1.1	12
136	Tool path generation for five-axis machining of blisks with barrel cutters. International Journal of Production Research, 2019, 57, 1300-1314.	4.9	12
137	Time/Space-Separation-Based Gaussian Process Modeling for the Cross-Coupling Effect of a 2-DOF Nanopositioning Stage. IEEE/ASME Transactions on Mechatronics, 2021, 26, 2186-2194.	3.7	12
138	A smoothed raster scanning trajectory based on acceleration-continuous B-spline transition for high-speed Atomic Force Microscopy. IEEE/ASME Transactions on Mechatronics, 2020, , 1-1.	3.7	12
139	Five-axis flank milling of impellers: Optimal geometry of a conical tool considering stiffness and geometric constraints. Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture, 2016, 230, 38-52.	1.5	11
140	Simultaneous optimization of the feed direction and tool orientation in five-axis flat-end milling. International Journal of Production Research, 2016, 54, 4537-4546.	4.9	11
141	A spline-based method for stability analysis of milling processes. International Journal of Advanced Manufacturing Technology, 2017, 89, 2571-2586.	1.5	11
142	B-Spline-Based Corner Smoothing Method to Decrease the Maximum Curvature of the Transition Curve. Journal of Manufacturing Science and Engineering, Transactions of the ASME, 2022, 144, .	1.3	11
143	An iterative contouring error compensation scheme for five-axis precision motion systems. Mechanical Systems and Signal Processing, 2022, 178, 109226.	4.4	11
144	Synchronous Averaging of Time-Frequency Distribution With Application to Machine Condition Monitoring. Journal of Vibration and Acoustics, Transactions of the ASME, 2007, 129, 441-447.	1.0	10

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145	Accurate cutting force prediction of helical milling operations considering the cutter runout effect. International Journal of Advanced Manufacturing Technology, 2017, 92, 4133-4144.	1.5	10
146	Enhancing the metrological performance of non-raster scanning probe microscopy using Gaussian process regression. Measurement Science and Technology, 2019, 30, 095004.	1.4	10
147	Hysteresis modeling with frequency-separation-based Gaussian process and its application to sinusoidal scanning for fast imaging of atomic force microscope. Sensors and Actuators A: Physical, 2020, 311, 112070.	2.0	10
148	Visually Quantifiable Test Piece for Five-Axis Machine Tools Thermal Effects. Journal of Manufacturing Science and Engineering, Transactions of the ASME, 2022, 144, .	1.3	10
149	Design and Development of a New Piezoelectric-Actuated Biaxial Compliant Microgripper With Long Strokes. IEEE Transactions on Automation Science and Engineering, 2023, 20, 206-217.	3.4	10
150	Modeling, design and control of normal-stressed electromagnetic actuated fast tool servos. Mechanical Systems and Signal Processing, 2022, 178, 109304.	4.4	10
151	Analytical envelope surface representation of a conical cutter undergoing rational motion. International Journal of Advanced Manufacturing Technology, 2010, 47, 719-730.	1.5	9
152	A wavelet-based approach for stability analysis of periodic delay-differential systems with discrete delay. Nonlinear Dynamics, 2015, 79, 1049-1059.	2.7	9
153	Third-order chord error estimation for freeform contour in computer-aided manufacturing and computer numerical control systems. Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture, 2019, 233, 863-874.	1.5	9
154	Enhanced Odd-Harmonic Repetitive Control of Nanopositioning Stages Using Spectrum-Selection Filtering Scheme for High-Speed Raster Scanning. IEEE Transactions on Automation Science and Engineering, 2021, 18, 1087-1096.	3.4	9
155	Tracking Control of Nanopositioning Stages Using Parallel Resonant Controllers for High-Speed Nonraster Sequential Scanning. IEEE Transactions on Automation Science and Engineering, 2021, 18, 1218-1228.	3.4	9
156	CPG-Based Hierarchical Locomotion Control for Modular Quadrupedal Robots Using Deep Reinforcement Learning. IEEE Robotics and Automation Letters, 2021, 6, 7193-7200.	3.3	9
157	Online Koopman Operator Learning to Identify Cross-Coupling Effect of Piezoelectric Tube Scanners in Atomic Force Microscopes. IEEE Transactions on Industrial Informatics, 2022, 18, 1111-1120.	7.2	9
158	Parallel acceleration/deceleration feedrate scheduling for computer numerical control machine tools based on bi-directional scanning technique. Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture, 2019, 233, 937-947.	1.5	8
159	Development of a Novel Pile-Up Structure Based Nanopositioning Mechanism Driven by Piezoelectric Actuator. IEEE/ASME Transactions on Mechatronics, 2020, 25, 502-512.	3.7	8
160	Investigation of NH ₄ NO ₃ formation by air plasma and wasted ammonia. Plasma Processes and Polymers, 2021, 18, 2000223.	1.6	8
161	Autonomous Profile Tracking for Multiaxis Ultrasonic Measurement of Deformed Surface in Mirror Milling. IEEE Transactions on Instrumentation and Measurement, 2021, 70, 1-13.	2.4	8
162	High-performance control of fast tool servos with robust disturbance observer and modified \hat{z} control. Mechatronics, 2022, 84, 102781.	2.0	8

#	ARTICLE	IF	CITATIONS
163	High accuracy estimation of multi-frequency signal parameters by improved phase linear regression. <i>Signal Processing</i> , 2007, 87, 1066-1077.	2.1	7
164	On a novel approach to planning cylindrical cutter location for flank milling of ruled surfaces. <i>International Journal of Production Research</i> , 2009, 47, 3289-3305.	4.9	7
165	Indirect decoding edges for one-shot shape acquisition. <i>Journal of the Optical Society of America A: Optics and Image Science, and Vision</i> , 2011, 28, 651.	0.8	7
166	Determination of edge correspondence using color codes for one-shot shape acquisition. <i>Optics and Lasers in Engineering</i> , 2011, 49, 97-103.	2.0	7
167	Fabrication of microstructures on GaAs with pulsed electrochemical wet stamping. <i>Electrochimica Acta</i> , 2013, 111, 680-684.	2.6	7
168	Extended unified wrench model suitable for the end effect of the ironless permanent magnet planar motor. <i>IET Electric Power Applications</i> , 2019, 13, 402-409.	1.1	7
169	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> , 2021, 172, 108867.	2.5	7
170	On the mechanisms of surface microdischarge plasma treatment of onychomycosis: Penetration, uptake, and chemical reactions. <i>Plasma Processes and Polymers</i> , 2021, 18, 2000204.	1.6	7
171	Extraction and segmentation method of laser stripe in linear structured light scanner. <i>Optical Engineering</i> , 2021, 60, .	0.5	7
172	Trajectory modification method based on frequency domain analysis for precision contouring motion control systems. <i>Mechanical Systems and Signal Processing</i> , 2021, 158, 107646.	4.4	7
173	Experimental validation of the simultaneous damping and tracking controller design strategy for high-bandwidth nanopositioning – a PAVPF approach. <i>IET Control Theory and Applications</i> , 2020, 14, 3506-3514.	1.2	7
174	Scalable Gamma-Driven Multilayer Network for Brain Workload Detection Through Functional Near-Infrared Spectroscopy. <i>IEEE Transactions on Cybernetics</i> , 2022, 52, 12464-12478.	6.2	7
175	Low-Cost Volumetric 3D Printing of High-Precision Miniature Lenses in Seconds. <i>Advanced Optical Materials</i> , 2022, 10, .	3.6	7
176	Task Space Contouring Error Estimation and Precision Iterative Control of Robotic Manipulators. <i>IEEE Robotics and Automation Letters</i> , 2022, 7, 7826-7833.	3.3	7
177	Real-Time Iterative Compensation Framework for Precision Mechatronic Motion Control Systems. <i>IEEE/CAA Journal of Automatica Sinica</i> , 2022, 9, 1218-1232.	8.5	7
178	A novel curvature-based method for analyzing the second-order immobility of frictionless grasp. <i>Robotica</i> , 2012, 30, 613-625.	1.3	6
179	Discontinuity-preserving decoding of one-shot shape acquisition using regularized color. <i>Optics and Lasers in Engineering</i> , 2012, 50, 1416-1422.	2.0	6
180	Kinematic generation of ruled surface based on rational motion of point-line. <i>Science China Technological Sciences</i> , 2012, 55, 62-71.	2.0	6

#	ARTICLE	IF	CITATIONS
181	Five-axis Flank Milling Tool Path Generation with Smooth Rotary Motions. <i>Procedia CIRP</i> , 2016, 56, 161-166.	1.0	6
182	An Analytical Transition Algorithm for Real-time CNC Machining of Linear Tool Path. <i>Procedia CIRP</i> , 2016, 56, 344-348.	1.0	6
183	A highly efficient and convergent optimization method for multipoint tool orientation in five-axis machining. <i>International Journal of Advanced Manufacturing Technology</i> , 2017, 93, 2711-2722.	1.5	6
184	Fractional repetitive control of nanopositioning stages for tracking high-frequency periodic inputs with nonsynchronized sampling. <i>Review of Scientific Instruments</i> , 2019, 90, 055108.	0.6	6
185	Model-driven photometric stereo for in-process inspection of non-diffuse curved surfaces. <i>CIRP Annals - Manufacturing Technology</i> , 2019, 68, 563-566.	1.7	6
186	Learning Semantic Keypoint Representations for Door Opening Manipulation. <i>IEEE Robotics and Automation Letters</i> , 2020, 5, 6980-6987.	3.3	6
187	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> , 2020, 31, 085001.	1.4	6
188	Development of a New Compliant Active-Force Support System. <i>IEEE/ASME Transactions on Mechatronics</i> , 2022, 27, 372-382.	3.7	6
189	High-bandwidth nanopositioning via active control of system resonance. <i>Frontiers of Mechanical Engineering</i> , 2021, 16, 331-339.	2.5	6
190	Robust high-bandwidth control of nano-positioning stages with Kalman filter based extended state observer and H_∞ control. <i>Review of Scientific Instruments</i> , 2021, 92, 065003.	0.6	6
191	Flight Situation Recognition Under Different Weather Conditions. <i>IEEE Transactions on Aerospace and Electronic Systems</i> , 2021, 57, 1753-1767.	2.6	6
192	High-Bandwidth Tracking Control of Piezoactuated Nanopositioning Stages via Active Modal Control. <i>IEEE Transactions on Automation Science and Engineering</i> , 2022, 19, 2998-3006.	3.4	6
193	Phase-to-Coordinates Calibration for Fringe Projection Profilometry Using Gaussian Process Regression. <i>IEEE Transactions on Instrumentation and Measurement</i> , 2022, 71, 1-12.	2.4	6
194	Simultaneous damping and tracking control of a normal-stressed electromagnetic actuated nano-positioning stage. <i>Sensors and Actuators A: Physical</i> , 2022, 338, 113467.	2.0	6
195	Dual-Notch-Based Repetitive Control for Tracking Lissajous Scan Trajectories With Piezo-Actuated Nanoscanners. <i>IEEE Transactions on Instrumentation and Measurement</i> , 2022, 71, 1-12.	2.4	6
196	Evaluation of coded structured light methods using ground truth. , 2011, , .		5
197	Model-Data Driven Learning Adaptive Robust Control of Precision Mechatronic Motion Systems With Comparative Experiments. <i>IEEE Access</i> , 2018, 6, 78286-78296.	2.6	5
198	A Novel Compliant Nanopositioning Stage Driven by a Normal-Stressed Electromagnetic Actuator. <i>IEEE Transactions on Automation Science and Engineering</i> , 2022, 19, 3039-3048.	3.4	5

#	ARTICLE	IF	CITATIONS
199	Fractional order zero phase error tracking control of a novel decoupled 2-DOF compliant micro-positioning stage. <i>Journal of Micromechanics and Microengineering</i> , 2021, 31, 105006.	1.5	5
200	Feasibility of the Bi-Directional Scanning Method in Acceleration/deceleration Feedrate Scheduling for CNC Machining. <i>Lecture Notes in Computer Science</i> , 2017, , 171-183.	1.0	5
201	A unified approach for least-squares surface fit-ting. <i>Science in China Series G: Physics, Mechanics and Astronomy</i> , 2004, 47, 72.	0.2	4
202	Development of An Automatic Approaching System for Electrochemical Nanofabrication Using Visual and Force-Displacement Sensing. <i>Sensors</i> , 2012, 12, 8465-8476.	2.1	4
203	Operational-space wrench and acceleration capability analysis for multi-link cable-driven robots. <i>Science China Technological Sciences</i> , 2020, 63, 2063-2072.	2.0	4
204	Skeleton Curve-Guided Five-Axis Sweep Scanning for Surface With Multiple Holes. <i>IEEE Transactions on Automation Science and Engineering</i> , 2022, 19, 2471-2486.	3.4	4
205	Robust Calibration of a Color Structured Light System Using Color Correction. <i>Lecture Notes in Computer Science</i> , 2009, , 936-946.	1.0	4
206	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> , 2022, 19, e2100107.	1.6	4
207	Robot line structured light vision measurement system: light strip center extraction and system calibration. <i>Optical Engineering</i> , 2021, 60, .	0.5	4
208	Robust Repetitive Control of Nanopositioning Stages Using the Spectrum-Selection Filter With Narrow Passbands. <i>IEEE/ASME Transactions on Mechatronics</i> , 2022, 27, 4211-4216.	3.7	4
209	Real-time time-optimal continuous multi-axis trajectory planning using the trajectory index coordination method. <i>ISA Transactions</i> , 2022, 131, 639-649.	3.1	4
210	Robust adaptive control of a class of nonlinear systems with inverse compensation of unknown asymmetrical backlash nonlinearity. , 2011, , .		3
211	Spectral method for prediction of chatter stability in low radial immersion milling. , 2011, , .		3
212	Improved Forecasting Compensatory Control through Kalman Filtering. <i>Procedia CIRP</i> , 2016, 56, 349-353.	1.0	3
213	Non-Normal Dynamic Analysis for Predicting Transient Milling Stability. <i>Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME</i> , 2018, 140, .	0.9	3
214	Micro-Grinding Performance of Hard-Brittle Chip Materials in Precision Micro-Grinding Microgroove. <i>Journal of Shanghai Jiaotong University (Science)</i> , 2018, 23, 70-76.	0.5	3
215	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> , 2019, 125, 1.	1.1	3
216	Dynamics Learning With Object-Centric Interaction Networks for Robot Manipulation. <i>IEEE Access</i> , 2021, 9, 68277-68288.	2.6	3

#	ARTICLE	IF	CITATIONS
217	High performance raster scanning of atomic force microscopy using Model-free Repetitive Control. Mechanical Systems and Signal Processing, 2022, 173, 109027.	4.4	3
218	An industrial solution to object pose estimation for automatic semiconductor fabrication. International Journal of Advanced Manufacturing Technology, 2007, 32, 969-977.	1.5	2
219	Design of a decoupled 2-DOF translational parallel micro-positioning stage. , 2011, , .		2
220	A Unified Distance Function Framework for Workpiece Fixturing Modeling and Analysis. IEEE Transactions on Automation Science and Engineering, 2013, 10, 1166-1172.	3.4	2
221	A Serpentine Curve Based Motion Planning Method for Cable-Driven Snake Robots. , 2018, , .		2
222	Command-shaping based on impulse response function for dynamic-mode control of internal and external cavities in external-cavity diode laser. Review of Scientific Instruments, 2020, 91, 023101.	0.6	2
223	Reconstruction of multi-frame semi-sparse scanning probe microscopy images using dependent Gaussian process. Measurement Science and Technology, 2020, 31, 045013.	1.4	2
224	Erratum to "A Smoothed Raster Scanning Trajectory Based on Acceleration-Continuous B-Spline Transition for High-Speed Atomic Force Microscopy" [Feb 21 24-32]. IEEE/ASME Transactions on Mechatronics, 2021, 26, 1700-1700.	3.7	2
225	Rate-dependent input curve shaping of the piezoelectric actuator based optical resonator cavity displacement characteristics for an external cavity diode laser. Review of Scientific Instruments, 2021, 92, 095008.	0.6	2
226	On-Machine Calibration Method for <i>In Situ</i> Stereo Deflectometry System. IEEE Transactions on Instrumentation and Measurement, 2021, 70, 1-8.	2.4	2
227	Modeling of Piezoelectric-Actuated Nanopositioning Stages Involving with the Hysteresis. , 2016, , 183-212.		2
228	A Digital Lock-In Amplifier Based Contact Detection Technique for Electrochemical Nanolithography. Lecture Notes in Computer Science, 2012, , 313-322.	1.0	2
229	A single-pose series sphere-based calibration method for camera-projector structured light system. Optics Communications, 2022, 507, 127659.	1.0	2
230	Accuracy characterization and measurement point planning for workpiece localization. Science in China Series D: Earth Sciences, 2004, 47, 676.	0.9	1
231	Modeling piezoelectric actuator hysteresis with a family of ellipses. , 2010, , .		1
232	Alleviating the computational load of the probabilistic algorithms for circles detection using the connectivity represented by graph. Machine Vision and Applications, 2011, 22, 651-662.	1.7	1
233	Development of an electrochemical micromachining instrument for the confined etching techniques. Review of Scientific Instruments, 2014, 85, 045122.	0.6	1
234	A fractional-order active damping control approach for piezo-actuated nanopositioning stages. , 2016, , .		1

#	ARTICLE	IF	CITATIONS
235	Motion Control of the Piezoelectric Tube Scanner for Lissajous Trajectories with Modified Repetitive Control. , 2018, , .		1
236	Simultaneous Design of Positive Acceleration Velocity and Position Feedback Based Combined Damping and Tracking Control Scheme for Nanopositioners. , 2019, , .		1
237	Inverse Rate-Dependent Rayleigh Model Based Feedforward Control for Piezoelectric-Driven Mechanism. IEEE Access, 2020, 8, 194808-194819.	2.6	1
238	Focused section on advanced robotic systems for industrial automation. International Journal of Intelligent Robotics and Applications, 2020, 4, 133-135.	1.6	1
239	Model Prediction based Online Feedforward Compensation Control of Maglev Planar Motor with Comparative Investigation. , 2021, , .		1
240	A point correlation based subpixel image registration algorithm. , 0, , .		0
241	Optimal measurement point planning for workpiece localization. , 0, , .		0
242	Robust adaptive control of piezo-actuated positioning stages with an ellipse-based hysteresis model. , 2011, , .		0
243	Hierarchical Gait Generation for Modular Robots Using Deep Reinforcement Learning. , 2021, , .		0
244	Study on High Voltage Pulse Driven Air Plasma Interaction with NH3 through Direct/Indirect Manner. , 2021, , .		0
245	Precision RIC Contouring Control Method for Polar Coordinate Motion Systems. , 2021, , .		0
246	Identification of Prandtl-Ishlinskii Hysteresis Models Using Modified Particle Swarm Optimization. Lecture Notes in Computer Science, 2012, , 291-300.	1.0	0
247	Improving Tracking Precision of Piezoceramic Actuators Using Feedforward-Feedback Control. Lecture Notes in Computer Science, 2013, , 644-655.	1.0	0
248	Redistributing Controller Orders to Increase Positioning Bandwidth in Nanopositioners. IFAC-PapersOnLine, 2021, 54, 97-102.	0.5	0
249	Gravityâ€Controlled and Boundaryâ€Constrained Highâ€Throughput Fabrication of Polymeric Miniature Lens Arrays. Macromolecular Materials and Engineering, 0, , 2100840.	1.7	0
250	âŸšâ€Zâ¼â€ÇZ~â¼«âˆ€â¼â€œœçš,â¼¾â€ç»“æž,èj”éçé«~é€ÿè½ â¼%Šâˆ»æˆ: Zhongguo Kexue Jishu Kexue/Scientia Sinica Technologica, 2022, , .		0
251	Extended State Observer-Based Discrete-Time Sliding-Mode Control with Mismatched Disturbances Attenuation. Journal of Computational and Nonlinear Dynamics, 2022, , .	0.7	0
252	Spherical-Orthogonal-Symmetric Haar Wavelet for Driver's Visual Detection. IEEE Transactions on Intelligent Vehicles, 2022, , 1-11.	9.4	0