

Jia-Yush Yen

List of Publications by Year in descending order

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139
papers

1,155
citations

430442

18
h-index

500791

28
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140
all docs

140
docs citations

140
times ranked

1064
citing authors

#	ARTICLE	IF	CITATIONS
1	Tracking Control of Shape-Memory-Alloy Actuators Based on Self-Sensing Feedback and Inverse Hysteresis Compensation. <i>Sensors</i> , 2010, 10, 112-127.	2.1	72
2	Multivariable robust control of a proton exchange membrane fuel cell system. <i>Journal of Power Sources</i> , 2008, 177, 393-403.	4.0	61
3	Frequency-domain identification algorithms for servo systems with friction. <i>IEEE Transactions on Control Systems Technology</i> , 2002, 10, 654-665.	3.2	56
4	Keratoconus Screening Based on Deep Learning Approach of Corneal Topography. <i>Translational Vision Science and Technology</i> , 2020, 9, 53.	1.1	52
5	A Variable-Sampling Controller for Brushless DC Motor Drives With Low-Resolution Position Sensors. <i>IEEE Transactions on Industrial Electronics</i> , 2007, 54, 2846-2852.	5.2	51
6	Adaptive nonlinear control of repulsive maglev suspension systems. <i>Control Engineering Practice</i> , 2000, 8, 1357-1367.	3.2	44
7	A decoupled path-following control algorithm based upon the decomposed trajectory error. <i>International Journal of Machine Tools and Manufacture</i> , 1999, 39, 1619-1630.	6.2	41
8	Development of an Intelligent Energy Management Network for Building Automation. <i>IEEE Transactions on Automation Science and Engineering</i> , 2004, 1, 14-25.	3.4	31
9	Relationship between acoustic aperture size and tumor conditions for external ultrasound hyperthermia. <i>Medical Physics</i> , 1999, 26, 818-824.	1.6	28
10	Biomechanical Simulation of Stress Concentration and Intraocular Pressure in Corneas Subjected to Myopic Refractive Surgical Procedures. <i>Scientific Reports</i> , 2017, 7, 13906.	1.6	28
11	Track-Following Controller Design for a Compound Disk Drive Actuator. <i>Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME</i> , 1990, 112, 391-402.	0.9	27
12	Design and Servo Control of a Single-Deck Planar Maglev Stage. <i>IEEE Transactions on Magnetics</i> , 2007, 43, 2600-2602.	1.2	24
13	Estimation of the Corneal Young's Modulus <i>In Vivo</i> Based on a Fluid-Filled Spherical-Shell Model with Scheimpflug Imaging. <i>Journal of Ophthalmology</i> , 2017, 2017, 1-11.	0.6	24
14	Optimization of power deposition and a heating strategy for external ultrasound thermal therapy. <i>Medical Physics</i> , 2001, 28, 2172-2181.	1.6	21
15	Servo parameter tuning for a 5-axis machine center based upon GA rules. <i>International Journal of Machine Tools and Manufacture</i> , 2001, 41, 1535-1550.	6.2	21
16	Facile fabrication of superporous and biocompatible hydrogel scaffolds for artificial corneal periphery. <i>Colloids and Surfaces B: Biointerfaces</i> , 2019, 175, 26-35.	2.5	21
17	Precision tracking of a piezo-driven stage by charge feedback control. <i>Precision Engineering</i> , 2013, 37, 793-804.	1.8	20
18	A corneal elastic dynamic model derived from Scheimpflug imaging technology. <i>Ophthalmic and Physiological Optics</i> , 2015, 35, 663-672.	1.0	20

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19	Active vibration isolation of a large stroke scanning probe microscope by using discrete sliding mode control. <i>Sensors and Actuators A: Physical</i> , 2005, 121, 243-250.	2.0	19
20	Dual mode control of a system with friction. <i>IEEE Transactions on Control Systems Technology</i> , 1999, 7, 306-314.	3.2	18
21	Research on three dimensional machining effects using atomic force microscope. <i>Review of Scientific Instruments</i> , 2009, 80, 065105.	0.6	18
22	Robust loop-shaping control for a nano-positioning stage. <i>JVC/Journal of Vibration and Control</i> , 2014, 20, 885-900.	1.5	18
23	Application of the continuous no-reset switching iterative learning control on a novel optical scanning system. <i>Mechatronics</i> , 2009, 19, 65-75.	2.0	17
24	Sliding mode control for active vibration isolation of a long range scanning tunneling microscope. <i>Review of Scientific Instruments</i> , 2004, 75, 4367-4373.	0.6	16
25	Minimizing abdominal wall damage during high-intensity focused ultrasound ablation by inducing artificial ascites. <i>Journal of the Acoustical Society of America</i> , 2008, 124, 674-679.	0.5	16
26	Treatment time reduction for large thermal lesions by using a multiple 1D ultrasound phased array system. <i>Physics in Medicine and Biology</i> , 2003, 48, 1173-1190.	1.6	13
27	Performance robustness and stiffness analysis on a machine tool servo design. <i>International Journal of Machine Tools and Manufacture</i> , 2004, 44, 523-531.	6.2	13
28	Variable sampling rate controller design for brushless DC motor. , 0, , .		11
29	Comparison of sensor fusion methods for an SMA-based hexapod biomimetic robot. <i>Robotics and Autonomous Systems</i> , 2010, 58, 737-744.	3.0	11
30	Focal point tracking system for concentration solar power collection. <i>Renewable and Sustainable Energy Reviews</i> , 2011, 15, 3029-3033.	8.2	11
31	BANG-BANG BASED FUZZY CONTROLLER FOR TIME OPTIMAL AND MINIMUM CHATTERING SERVO SYSTEMS. <i>Electric Power Components and Systems</i> , 1995, 23, 25-35.	0.1	10
32	Application of the least squares algorithm to the observer design for linear time-varying systems. <i>IEEE Transactions on Automatic Control</i> , 1999, 44, 1742-1745.	3.6	10
33	Using MPCA of spectra model for fault detection in a hot strip mill. <i>Journal of Materials Processing Technology</i> , 2009, 209, 4162-4168.	3.1	10
34	Precise railway alignment measurements of the horizontal circular curves and the vertical parabolic curves using the chord method. <i>Proceedings of the Institution of Mechanical Engineers, Part F: Journal of Rail and Rapid Transit</i> , 2019, 233, 537-549.	1.3	10
35	Computer Disk File Track Accessing Controller Design based upon Cell-to-Cell Mapping. , 1992, , .		9
36	Optimal configuration of multiple-focused ultrasound transducers for external hyperthermia. <i>Medical Physics</i> , 1999, 26, 2007-2016.	1.6	9

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37	Treatable domain and optimal frequency for brain tumors during ultrasound hyperthermia. International Journal of Radiation Oncology Biology Physics, 2000, 46, 239-247.	0.4	9
38	Architecture for next-generation massively parallel maskless lithography system (MPML2). Proceedings of SPIE, 2010, , .	0.8	9
39	The design of a low cost motion chair for video games and MPEG video playback. IEEE Transactions on Consumer Electronics, 1996, 42, 991-997.	3.0	8
40	Self-tuning fuzzy logic control for ultrasound hyperthermia with reference temperature based on objective functions. Medical Physics, 1999, 26, 825-833.	1.6	8
41	Stitching periodic submicron fringes by utilizing step-and-align interference lithography. Journal of Vacuum Science & Technology B, 2009, 27, 2951-2957.	1.3	8
42	Stability of PDF Controller With Stick-Slip Friction Device. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 1997, 119, 486-490.	0.9	7
43	ACTIVE VIBRATION ISOLATION FOR A LONG RANGE SCANNING TUNNELING MICROSCOPE. Asian Journal of Control, 2008, 6, 179-186.	1.9	7
44	In situ beam drift detection using a two-dimensional electron-beam position monitoring system for multiple-electron-beam direct-write lithography. Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics, 2011, 29, 041607.	0.6	7
45	Robust State and Disturbance Observer Design for Linear Non-minimum-phase Systems. Asian Journal of Control, 2016, 18, 1135-1141.	1.9	7
46	Compensation for the Residual Error of the Voltage Drive of the Charge Control of a Piezoelectric Actuator. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2018, 140, .	0.9	7
47	Novel Approach to Fuzzy-Wavelet ECG Signal Analysis for a Mobile Device. Journal of Medical Systems, 2010, 34, 71-81.	2.2	6
48	Effectiveness of external respiratory surrogates for <i>in vivo</i> liver motion estimation. Medical Physics, 2012, 39, 5293-5301.	1.6	6
49	ROBUST CONTROL FOR A PNEUMATIC MUSCLE ACTUATOR SYSTEM. Transactions of the Canadian Society for Mechanical Engineering, 2013, 37, 581-590.	0.3	6
50	Temperature Effects on the Magnetic Properties of Silicon-Steel Sheets Using Standardized Toroidal Frame. Scientific World Journal, The, 2014, 2014, 1-18.	0.8	6
51	Integrating wavelet transformation with Markov random field analysis for the depth estimation of light field images. IET Computer Vision, 2017, 11, 358-367.	1.3	6
52	A New Compensator for Servo Systems With Position Dependent Friction. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 1999, 121, 612-618.	0.9	5
53	The Application of Disturbance Response Decoupling to the Vibration Control of an Electron Beam Lithography System. Japanese Journal of Applied Physics, 2009, 48, 06FB04.	0.8	5
54	Silicon photodiodes for electron beam position and drift detection in scanning electron microscopy and electron beam lithography system. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2011, 645, 84-89.	0.7	5

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55	A Turbidity Test Based Centrifugal Microfluidics Diagnostic System for Simultaneous Detection of HBV, HCV, and CMV. <i>Advances in Materials Science and Engineering</i> , 2015, 2015, 1-8.	1.0	5
56	Effect of Static and Dynamic Stretching on Corneal Fibroblast Cell. <i>Processes</i> , 2022, 10, 605.	1.3	5
57	Servo Design for a 3-D Laser-Tracking Measurement System. <i>Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME</i> , 1996, 118, 476-481.	0.9	4
58	Specific absorption rate ratio patterns of cylindrical ultrasound transducers for breast tumors. <i>Medical Physics</i> , 1998, 25, 1041-1048.	1.6	4
59	Multivariable system identification and robust control of a proton exchange membrane fuel cell system. , 2007, , .		4
60	Sensor fusion in a SMA-based hexapod bio-mimetic robot. , 2008, , .		4
61	Robust Control Design for Vibration Isolation of an Electron Beam Projection Lithography System. <i>Japanese Journal of Applied Physics</i> , 2010, 49, 06GE04.	0.8	4
62	A novel sound-blocking structure based on the muffler principle for rib-sparing transcostal high-intensity focused ultrasound treatment. <i>International Journal of Hyperthermia</i> , 2015, 31, 507-527.	1.1	4
63	High-performance and high-precision servo control of a single-deck dual-axis PMLSM stage. <i>International Journal of Advanced Manufacturing Technology</i> , 2017, 90, 865-874.	1.5	4
64	Modeling of railway turnout geometry in the frog area with the vehicle wheel trajectory. <i>Proceedings of the Institution of Mechanical Engineers, Part F: Journal of Rail and Rapid Transit</i> , 2018, 232, 1598-1614.	1.3	4
65	Battery cell modeling and online estimation of the state of charge of a lithium-ion battery. <i>Journal of the Chinese Institute of Engineers, Transactions of the Chinese Institute of Engineers, Series A/Chung-kuo Kung Ch'eng Hsueh K'an</i> , 2018, 41, 412-418.	0.6	4
66	Functional assistance for stress distribution in cell culture membrane under periodically stretching. <i>Journal of Biomechanics</i> , 2021, 125, 110564.	0.9	4
67	Adaptive nonlinear control of repulsive Maglev suspension systems. , 0, , .		3
68	A theoretical study of cylindrical ultrasound transducers for intracavitary hyperthermia. <i>International Journal of Radiation Oncology Biology Physics</i> , 2000, 46, 1329-1336.	0.4	3
69	A novel fine track-seeking scheme for optical storage device. <i>IEEE Transactions on Consumer Electronics</i> , 2003, 49, 382-387.	3.0	3
70	Radial fine seek control with fault protection in a digital versatile disc player. <i>Mechatronics</i> , 2005, 15, 129-150.	2.0	3
71	A HEXAPOD ROBOT BASED ON SHAPE MEMORY ALLOY ACTUATORS. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2006, 39, 689-693.	0.4	3
72	Solid modeling based servo system design for a high speed micro grinding machine. <i>International Journal of Machine Tools and Manufacture</i> , 2006, 46, 208-217.	6.2	3

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73	Design of a novel 6-DOF planar maglev system. Journal of Magnetism and Magnetic Materials, 2006, 304, e386-e390.	1.0	3
74	Preliminary design of a two-dimensional electron beam position monitor system for multiple-electron-beam-direct-write lithography. Proceedings of SPIE, 2009, , .	0.8	3
75	Modified Frequency-Partitioned Spectrum Estimation for a Wireless Health Advanced Monitoring Bio-Diagnosis System. IEEE Transactions on Systems, Man and Cybernetics, Part A: Systems and Humans, 2010, 40, 611-622.	3.4	3
76	Bionic soft crystalline lens materials for MEMs applications based on self-assembling amphiphilic block copolymer/nanoparticle hybrids. Microelectronic Engineering, 2011, 88, 1737-1741.	1.1	3
77	Impacts of sensor layouts on the performance of a long-stroke nano-positioning stage. Advances in Mechanical Engineering, 2016, 8, 168781401668019.	0.8	3
78	Fabrication of large-scale micro-structures by two-photon polymerization with a long-stroke precision stage. Advances in Mechanical Engineering, 2017, 9, 168781401769575.	0.8	3
79	Precision positioning control of a long-stroke stage employing multiple switching control. Microsystem Technologies, 2020, , 1.	1.2	3
80	Featured Surface Matching Method for Liver Image Registration. IEEE Access, 2020, 8, 59723-59731.	2.6	3
81	Changes in Intraocular Pressure after Transepithelial Photorefractive Keratectomy and Femtosecond Laser In Situ Keratomileusis. Journal of Ophthalmology, 2021, 2021, 1-10.	0.6	3
82	Construction of a High Frequency and High Reflectance Shutter for a Direct Write EUV Lithography System. International Journal of Automation and Smart Technology, 2013, 3, 107-115.	0.4	3
83	THERMAL LESION FORMATION AND DETERMINATION FOR EXTERNAL ULTRASOUND THERMAL THERAPY. Biomedical Engineering - Applications, Basis and Communications, 2003, 15, 124-132.	0.3	2
84	A novel high-speed optical scanning platform. , 2005, , .		2
85	AN AFM PROBE CONTROLLER DESIGN BASED ON $\hat{1}/4$ -SYNTHESIS. Asian Journal of Control, 2008, 7, 12-19.	1.9	2
86	A bio-mimetic snake-like robot: Sensor based gait control. , 2008, , .		2
87	Development of a nano-positioning planar motion stage. , 2010, , .		2
88	Longitudinal stitching of sub-micron periodic fringes on a roller. Microelectronic Engineering, 2011, 88, 3235-3243.	1.1	2
89	Structural design and analysis of a nano-positioning planar motion stage. , 2011, , .		2
90	Ultrasound image-guided algorithms for tracking liver motion. , 2012, , .		2

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91	Image based in situ electron-beam drift detection by silicon photodiodes in scanning-electron microscopy and an electron-beam lithography system. <i>Microelectronic Engineering</i> , 2013, 103, 137-143.	1.1	2
92	A Novel Soundproof Ventilation Plant Design with High Performance and No Energy Consumption. <i>Mathematical Problems in Engineering</i> , 2015, 2015, 1-10.	0.6	2
93	Compensation of the residual error from the charge feedback control of a piezoelectric-actuated stage. <i>Proceedings of the Institution of Mechanical Engineers Part I: Journal of Systems and Control Engineering</i> , 2017, 231, 414-424.	0.7	2
94	A Survey of Suspension Component Specifications and Vehicle Vibration Measurements in an Operational Railway System. <i>Journal of Vibration Engineering and Technologies</i> , 2019, 7, 415-431.	1.3	2
95	Micro-lens fabrication by a long-stroke precision stage with switching control based on model response prediction. <i>Microsystem Technologies</i> , 2022, 28, 45-58.	1.2	2
96	Adaptation-Enhanced Model-Based Control with Charge Feedback for Piezo-Actuated Stage. <i>Asian Journal of Control</i> , 2020, 22, 104-116.	1.9	2
97	Study on the transient response to the point-to-point motion controls on a dual-axes air-bearing planar stage. <i>International Journal of Advanced Manufacturing Technology</i> , 2020, 111, 2759-2772.	1.5	2
98	Improved Haptic Transparency of Bilateral Control Using Torque-Measured Magnetic Coupling. <i>Machines</i> , 2021, 9, 172.	1.2	2
99	Realization of Natural Human Motion on a 3D Biped Robot For Studying the Exoskeleton Effective. <i>Journal of Medical and Biological Engineering</i> , 0, , 1.	1.0	2
100	Stability of PDF controller with stick-slip friction device. , 0, , .		1
101	A trajectory feedback control for the computer disk file track-accessing/following servo. <i>IEEE Transactions on Industrial Electronics</i> , 1997, 44, 739-741.	5.2	1
102	INTERRELATIONSHIP BETWEEN CONTROL PARAMETERS AND TUMOR/BONE CONDITIONS FOR EXTERNAL ULTRASOUND HYPERTHERMIA. <i>Biomedical Engineering - Applications, Basis and Communications</i> , 2001, 13, 199-212.	0.3	1
103	A mechatronics approach to the servo design for a maglev system. , 2001, , .		1
104	High performance motion control of the novel optical servo scanning platform. , 2005, 5873, 183.		1
105	Effect of force control algorithms on the scanning probe microscope lithography system. <i>Review of Scientific Instruments</i> , 2005, 76, 036103.	0.6	1
106	A Sub-band Spectral Analysis for Electrocardiography. , 2006, , .		1
107	A single deck 2D magnet levitation platform. , 2007, , .		1
108	Parameter identification when designing a solid-modeling-based grinding-machine controller. <i>International Journal of Machine Tools and Manufacture</i> , 2008, 48, 851-857.	6.2	1

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109	Ultrasound Image-guided Tracking Algorithm for Moving-tumor Treatment. , 2011, , .		1
110	Planar motion stage control using PDFF controller. , 2011, , .		1
111	MIMO variable structure control of a precision stage using PMLSM drives. , 2011, , .		1
112	A Robust Variable Sampling Time BLDC Motor Control Design Based upon $\hat{1}/4$ -Synthesis. Scientific World Journal, The, 2013, 2013, 1-7.	0.8	1
113	Computation of liver deformations for minimally invasive surgery. , 2015, , .		1
114	Dynamic human object recognition by combining color and depth information with a clothing image histogram. International Journal of Advanced Robotic Systems, 2019, 16, 172988141982810.	1.3	1
115	Active Transmission Module for Generator Speed Regulation. IEEE Access, 2020, 8, 203787-203792.	2.6	1
116	Decoupled Multi-Loop Robust Control for a Walk-Assistance Robot Employing a Two-Wheeled Inverted Pendulum. Machines, 2021, 9, 205.	1.2	1
117	High Performance FOV Switching Mechanism Design for an Infrared Zoom Lens. International Journal of Automation and Smart Technology, 2011, 1, 111-119.	0.4	1
118	Servo Design for a Laser 3D Measurement System. , 1993, , .		0
119	A novel track jump controller with hybrid track position detector for the optical disk drives. , 0, , .		0
120	In vivo wireless biodiagnosis system for long-term bioactivity monitoring network. , 2004, 5394, 288.		0
121	A new optical disk driver fine-seek algorithm based on runout learning. , 2005, , .		0
122	A general-purpose development kit for optical storage system design. , 2005, , .		0
123	Robust control in the three-dimensional optical pickup head for optical disk drive. , 2005, 5643, 396.		0
124	Design for control of a flexure jointed optical servo scanning platform. , 0, , .		0
125	Stitching Technology Using Hybrid Actuators in Nano Imprint. , 2008, , .		0
126	Multivariable fixed-order robust control for a PEMFC system. , 2009, , .		0

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127	Hybrid servo design for large area nano pattern stitching. , 2009, , .		0
128	Line stitching in servo-assisted electron beam lithography system. , 2011, , .		0
129	Development of a system for mapping of thrust ripple induced by PMLSM drives in a single-deck, dual-axis precision stage. , 2012, , .		0
130	Solution-Refined Method for Electrostatic Potential Distribution of Large-Scale Electron Optics. Japanese Journal of Applied Physics, 2013, 52, 055202.	0.8	0
131	Preliminary study of intracorporeal localization for endoscopy tracking. , 2013, , .		0
132	A Smart-Card E-paper Display System Based on RF Power Harvesting. IETE Journal of Research, 2015, 61, 201-212.	1.8	0
133	An eight degree-of-freedom robotic endoscope holder. , 2018, , .		0
134	Iterative Parameter Optimization for Multiple Switching Control Applied to a Precision Stage for Microfabrication. Machines, 2021, 9, 153.	1.2	0
135	Needle Driver Control for a Robotic MIS Suturing System. IFAC-PapersOnLine, 2021, 54, 527-532.	0.5	0
136	Dynamics Stress Analysis for a Minimal Invasive Scalpel Design. , 2013, , .		0
137	A Novel Design of High Intensity Focus Ultrasound (HIFU) for Enlarged Focus Area Application. , 2013, , .		0
138	Lung image registration by featured surface matching method. Computer Methods in Biomechanics and Biomedical Engineering: Imaging and Visualization, 0, , 1-10.	1.3	0
139	Correlation between corneal dynamic responses and keratoconus topographic parameters. Journal of International Medical Research, 2022, 50, 030006052211081.	0.4	0