

Xu-Zhi Lai

List of Publications by Year in descending order

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69
papers

1,175
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394286

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docs citations

69
times ranked

502
citing authors

#	ARTICLE	IF	CITATIONS
1	Single controller design based on integrated trajectory for three-link vertical underactuated manipulators with first active joint. <i>International Journal of Control</i> , 2023, 96, 424-434.	1.2	2
2	Effective Control Method Based on Trajectory Optimization for Three-Link Vertical Underactuated Manipulators With Only One Active Joint. <i>IEEE Transactions on Cybernetics</i> , 2023, 53, 3782-3793.	6.2	7
3	Tip Position Control and Vibration Suppression of a Planar Two-Link Rigid-Flexible Underactuated Manipulator. <i>IEEE Transactions on Cybernetics</i> , 2022, 52, 6771-6783.	6.2	20
4	A Control Strategy Based on Trajectory Planning and Optimization for Two-Link Underactuated Manipulators in Vertical Plane. <i>IEEE Transactions on Systems, Man, and Cybernetics: Systems</i> , 2022, 52, 3466-3475.	5.9	14
5	Observer-based trajectory control for directional drilling process. <i>Asian Journal of Control</i> , 2022, 24, 259-272.	1.9	12
6	Equivalent-input-disturbance-based robust control of drilling trajectory with weight-on-bit uncertainty in directional drilling. <i>ISA Transactions</i> , 2022, 127, 370-382.	3.1	7
7	Motion Planning and Adaptive Neural Tracking Control of an Uncertain Two-Link Rigid-Flexible Manipulator With Vibration Amplitude Constraint. <i>IEEE Transactions on Neural Networks and Learning Systems</i> , 2022, 33, 3814-3828.	7.2	61
8	A unified and simple control strategy for a class of n-link vertical underactuated manipulator. <i>ISA Transactions</i> , 2022, 128, 198-207.	3.1	4
9	PSO-based nonlinear model predictive planning and discrete-time sliding tracking control for uncertain planar underactuated manipulators. <i>International Journal of Systems Science</i> , 2022, 53, 2075-2089.	3.7	7
10	Distributed Monitoring With Integrated Probability PCA and mRMR for Drilling Processes. <i>IEEE Transactions on Instrumentation and Measurement</i> , 2022, 71, 1-13.	2.4	6
11	Two-Stage Decision-Making Method for Burden Distribution Based on Recognition of Conditions in Blast Furnace. <i>IEEE Transactions on Industrial Electronics</i> , 2021, 68, 4199-4208.	5.2	7
12	A Novel Robust Control Method for Motion Control of Uncertain Single-Link Flexible-Joint Manipulator. <i>IEEE Transactions on Systems, Man, and Cybernetics: Systems</i> , 2021, 51, 1671-1678.	5.9	28
13	Tracking control of single-link flexible-joint manipulator with unmodeled dynamics and dead zone. <i>International Journal of Robust and Nonlinear Control</i> , 2021, 31, 1270-1287.	2.1	16
14	Intelligent Control of Underactuated Mechanical System. <i>Studies in Systems, Decision and Control</i> , 2021, , 47-73.	0.8	1
15	Fault diagnosis based on feature clustering of time series data for loss and kick of drilling process. <i>Journal of Process Control</i> , 2021, 102, 24-33.	1.7	21
16	Chaos-PSO-based Motion Planning and Accurate Tracking for Position-posture Control of a Planar Underactuated Manipulator with Disturbance. <i>International Journal of Control, Automation and Systems</i> , 2021, 19, 3511-3521.	1.6	9
17	Position control with zero residual vibration for two degrees-of-freedom flexible systems based on motion trajectory optimization. <i>Information Sciences</i> , 2021, 575, 698-713.	4.0	10
18	Trajectory Azimuth Control Based on Equivalent Input Disturbance Approach for Directional Drilling Process. <i>Journal of Advanced Computational Intelligence and Intelligent Informatics</i> , 2021, 25, 31-39.	0.5	1

#	ARTICLE	IF	CITATIONS
19	Virtual Model Reduction-based Control Strategy of Planar Three-link Underactuated Manipulator with Middle Passive Joint. <i>International Journal of Control, Automation and Systems</i> , 2021, 19, 29-39.	1.6	15
20	Incident early warning based on sparse autoencoder and decision fusion for drilling process. , 2021, , .		0
21	A Simple Control Strategy Based on Trajectory Planning for Vertical Acrobot. <i>Actuators</i> , 2021, 10, 308.	1.2	3
22	Motion Control Strategy Based on Integrated Trajectory for the Pendubot. , 2021, , .		3
23	Control Strategy Based on Model Reduction and Online Intelligent Calculation for Planar n -Link Underactuated Manipulators. <i>IEEE Transactions on Systems, Man, and Cybernetics: Systems</i> , 2020, 50, 1046-1054.	5.9	14
24	Continuous State Feedback Control Based on Intelligent Optimization for First-Order Nonholonomic Systems. <i>IEEE Transactions on Systems, Man, and Cybernetics: Systems</i> , 2020, 50, 2534-2540.	5.9	21
25	A general control strategy for planar 3-DoF underactuated manipulators with one passive joint. <i>Information Sciences</i> , 2020, 534, 139-153.	4.0	25
26	Disturbance estimator and smith predictor-based active rejection of stickâ€“slip vibrations in drill-string systems. <i>International Journal of Systems Science</i> , 2020, 51, 826-838.	3.7	17
27	CNN-based Broad Learning with Efficient Incremental Reconstruction Model for Facial Emotion Recognition. <i>IFAC-PapersOnLine</i> , 2020, 53, 10236-10241.	0.5	12
28	Stable control strategy for a second-order nonholonomic planar underactuated mechanical system. <i>International Journal of Systems Science</i> , 2019, 50, 2126-2141.	3.7	7
29	A novel position-posture control method using intelligent optimization for planar underactuated mechanical systems. <i>Mechanism and Machine Theory</i> , 2019, 140, 258-273.	2.7	13
30	A new control method for planar four-link underactuated manipulator based on intelligence optimization. <i>Nonlinear Dynamics</i> , 2019, 96, 573-583.	2.7	10
31	Motion planning and adaptive neural sliding mode tracking control for positioning of uncertain planar underactuated manipulator. <i>Neurocomputing</i> , 2019, 334, 197-205.	3.5	16
32	Position control for planar four-link underactuated manipulator with a passive third joint. <i>ISA Transactions</i> , 2019, 87, 46-54.	3.1	17
33	A stable control for second-order nonholonomic planar underactuated mechanical system: energy attenuation approach. <i>International Journal of Control</i> , 2018, 91, 1630-1639.	1.2	21
34	A Control Strategy with Zero Residual Vibration for a Planar Single-Link Flexible Manipulator. , 2018, , .		7
35	Stable Control of Single-Link Flexible-Joint Manipulator. , 2018, , .		3
36	An Improved Control Strategy for Directional Drilling Attitude. , 2018, , .		1

#	ARTICLE	IF	CITATIONS
37	Adaptive robust control for planar n-link underactuated manipulator based on radial basis function neural network and online iterative correction method. Journal of the Franklin Institute, 2018, 355, 8373-8391.	1.9	11
38	A fast stable control strategy based on system energy for a planar single-link flexible manipulator. Nonlinear Dynamics, 2018, 94, 615-626.	2.7	34
39	A quick position control strategy based on optimization algorithm for a class of first-order nonholonomic system. Information Sciences, 2018, 460-461, 264-278.	4.0	16
40	Quick and Effective Position Control for Planar n -link Underactuated Manipulators Based on Optimization Algorithm. , 2018, , .		3
41	Position-Posture Control of a Planar Four-Link Underactuated Manipulator Based on Genetic Algorithm. IEEE Transactions on Industrial Electronics, 2017, 64, 4781-4791.	5.2	43
42	Nonlinear stabilizing control for a class of underactuated mechanical systems with multi degree of freedoms. Nonlinear Dynamics, 2017, 89, 2241-2253.	2.7	43
43	Effective position"posture control strategy based on switching control for planar three-link underactuated mechanical system. International Journal of Systems Science, 2017, 48, 2202-2211.	3.7	14
44	A quick control strategy based on hybrid intelligent optimization algorithm for planar n-link underactuated manipulators. Information Sciences, 2017, 420, 148-158.	4.0	25
45	Position control strategy based on energy attenuation for planar three-link underactuated manipulator. , 2016, , .		7
46	A simple and quick control strategy for a class of first-order nonholonomic manipulator. Nonlinear Dynamics, 2016, 85, 2261-2276.	2.7	17
47	Stable Control Strategy for Planar Three-Link Underactuated Mechanical System. IEEE/ASME Transactions on Mechatronics, 2016, 21, 1345-1356.	3.7	68
48	Control of an Underactuated Three-Link Passive"Active"Active Manipulator Based on Three Stages and Stability Analysis. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2015, 137, .	0.9	25
49	Stabilization of underactuated two-link gymnast robot by using trajectory tracking strategy. Applied Mathematics and Computation, 2015, 253, 193-204.	1.4	28
50	A bioinspired neural dynamics-based approach to tracking control of autonomous surface vehicles subject to unknown ocean currents. Neural Computing and Applications, 2015, 26, 1929-1938.	3.2	15
51	Stabilization of underactuated planar acrobot based on motion-state constraints. International Journal of Non-Linear Mechanics, 2015, 77, 342-347.	1.4	52
52	Singularity"avoiding swing"up control for underactuated three"link gymnast robot using virtual coupling between control torques. International Journal of Robust and Nonlinear Control, 2015, 25, 207-221.	2.1	17
53	Global stabilization of underactuated spring-coupled three-link horizontal manipulator using position measurements only. Applied Mathematical Modelling, 2015, 39, 1917-1928.	2.2	17
54	An efficient neural network based tracking controller for autonomous underwater vehicles subject to unknown dynamics. , 2014, , .		1

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55	Motion planning and tracking control for an acrobot based on a rewinding approach. <i>Automatica</i> , 2013, 49, 278-284.	3.0	38
56	Backstepping neurodynamics based position-tracking control of underactuated autonomous surface vehicles. , 2013, , .		2
57	Unified control of n-link underactuated manipulator with single passive joint: A reduced order approach. <i>Mechanism and Machine Theory</i> , 2012, 56, 170-185.	2.7	33
58	Robust stabilization and disturbance attenuation for a class of underactuated mechanical systems. <i>Journal of Central South University</i> , 2012, 19, 2488-2495.	1.2	6
59	Global stabilization of 2-DOF underactuated mechanical systems—an equivalent-input-disturbance approach. <i>Nonlinear Dynamics</i> , 2012, 69, 495-509.	2.7	84
60	Global Stabilization Control of Acrobot Based on Equivalent-Input-Disturbance Approach. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2011, 44, 14596-14601.	0.4	3
61	A rewinding approach to motion planning for acrobot based on virtual friction. , 2010, , .		5
62	Singularity avoidance for acrobots based on fuzzy-control strategy. <i>Robotics and Autonomous Systems</i> , 2009, 57, 202-211.	3.0	14
63	Comprehensive Unified Control Strategy for Underactuated Two-Link Manipulators. <i>IEEE Transactions on Systems, Man, and Cybernetics</i> , 2009, 39, 389-398.	5.5	93
64	New distributed positioning algorithm based on centroid of circular belt for wireless sensor networks. <i>International Journal of Automation and Computing</i> , 2007, 4, 315-324.	4.5	5
65	Control design and comprehensive stability analysis of acrobots based on Lyapunov functions. <i>Central South University</i> , 2005, 12, 210-216.	0.5	2
66	Design for robust stabilization of nonlinear systems with uncertain parameters. <i>Central South University</i> , 2004, 11, 102-104.	0.5	2
67	Control of acrobot based on lyapunov function. <i>Central South University</i> , 2004, 11, 210-215.	0.5	9
68	Stability analysis and control law design for acrobots. , 0, , .		3
69	Position and posture control for a class of second-order nonholonomic underactuated mechanical system. <i>IMA Journal of Mathematical Control and Information</i> , 0, , dnw056.	1.1	2