Bin Zi

List of Publications by Year
in descending order

58 papers	1,261 citations	361413 20 h-index	377865 34 g-index
58 all docs	58 docs citations	58 times ranked	915 citing authors

#	Article	IF	Citations
1	Kinematic Uncertainty Analysis of a Cable-Driven Parallel Robot Based on an Error Transfer Model. Journal of Mechanisms and Robotics, 2022, 14, .	2.2	9
2	Dynamic Modeling and Error Analysis of a Cable-Linkage Serial-Parallel Palletizing Robot. IEEE Access, 2021, 9, 2188-2200.	4.2	8
3	Combined kinematic and static analysis of an articulated lower limb traction device for a rehabilitation robotic system. Science China Technological Sciences, 2021, 64, 1189-1202.	4.0	11
4	Application of Deep Learning for Defect Detection of Paint Film. , 2021, , .		3
5	Control and Monitoring of a Double Cable Driven System. , 2021, , .		0
6	Lightâ€Driven Selfâ€Oscillating Actuators with Phototactic Locomotion Based on Black Phosphorus Heterostructure. Angewandte Chemie, 2021, 133, 20674-20680.	2.0	3
7	Lightâ€Driven Selfâ€Oscillating Actuators with Phototactic Locomotion Based on Black Phosphorus Heterostructure. Angewandte Chemie - International Edition, 2021, 60, 20511-20517.	13.8	82
8	Smooth Trajectory Planning for a Cable-Driven Waist Rehabilitation Robot Using Quintic NURBS. Lecture Notes in Computer Science, 2021, , 555-563.	1.3	2
9	Cable Angle and Minimum Resultant Force Response Analysis of Lower Limb Traction Device for Rehabilitation Robot With Interval Parameters. Journal of Computing and Information Science in Engineering, 2021, 21, .	2.7	5
10	Path Planning for a Cable-Driven Parallel Waist Rehabilitation Robot Based on Discriminant Analysis Model. , 2021, , .		2
11	Design and Modeling for Hybrid Driven Knee Orthosis with SMA actuator. , 2021, , .		0
12	Design and Simulation of a Robotic Knee Exoskeleton with a Variable Stiffness Actuator for Gait Rehabilitation. , 2021, , .		4
13	Design and Kinematic Analysis of a Rigid-flexible Coupling Driven Parallel Spraying Robot. , 2021, , .		0
14	State-of-the-art research in robotic hip exoskeletons: A general review. Journal of Orthopaedic Translation, 2020, 20, 4-13.	3.9	44
15	Development of an active and passive finger rehabilitation robot using pneumatic muscle and magnetorheological damper. Mechanism and Machine Theory, 2020, 147, 103762.	4.5	38
16	Dynamic Trajectory Planning for a Three Degrees-of-Freedom Cable-Driven Parallel Robot Using Quintic B-Splines. Journal of Mechanical Design, Transactions of the ASME, 2020, 142, .	2.9	22
17	Algebraic Method-Based Point-to-Point Trajectory Planning of an Under-Constrained Cable-Suspended Parallel Robot with Variable Angle and Height Cable Mast. Chinese Journal of Mechanical Engineering (English Edition), 2020, 33, .	3.7	11
18	Special Issue on Rehabilitation Robots, Devices, and Methodologies. Journal of Engineering and Science in Medical Diagnostics and Therapy, 2020, 3, .	0.5	2

#	Article	IF	Citations
19	Research on a Virtual Simulation System for Master-slave Teaching of a Spraying Robot. , 2019, , .		0
20	Kinematics Modeling and Analysis of a Novel Five-DoF Spraying Robot. , 2019, , .		1
21	Design and Development of a New Cable-Driven Parallel Robot for Waist Rehabilitation. IEEE/ASME Transactions on Mechatronics, 2019, 24, 1497-1507.	5.8	88
22	Typical configuration analysis of a modular reconfigurable cable-driven parallel robot. International Journal of Advanced Robotic Systems, 2019, 16, 172988141983475.	2.1	4
23	External Force Self-Sensing Based on Cable-Tension Disturbance Observer for Surgical Robot End-Effector. IEEE Sensors Journal, 2019, 19, 5274-5284.	4.7	24
24	Mechanism Design and Kinematic Analysis of a Waist and Lower Limbs Cable-Driven Parallel Rehabilitation Robot. , 2019, , .		2
25	Design, Modeling and Analysis of a Novel Backdrivable Cable-driven Series Elastic Actuator. , 2019, , .		0
26	Vibration Characteristics of Rotating Mistuned Bladed Disks considering the Coriolis Force, Spin Softening, and Stress Stiffening Effects. Shock and Vibration, 2019, 2019, 1-22.	0.6	5
27	A Clamping Force Estimation Method Based on a Joint Torque Disturbance Observer Using PSO-BPNN for Cable-Driven Surgical Robot End-Effectors. Sensors, 2019, 19, 5291.	3.8	17
28	Simulation and Analysis of Mechanical Characteristics of a 6-DOF Spray-painting Robot. , 2019, , .		1
29	Development and Control of an MR Brake-Based Passive Force Feedback Data Glove. IEEE Access, 2019, 7, 172477-172488.	4.2	9
30	Design, stiffness analysis and experimental study of a cable-driven parallel 3D printer. Mechanism and Machine Theory, 2019, 132, 207-222.	4.5	64
31	Development of Modular Cable-Driven Parallel Robotic Systems. IEEE Access, 2019, 7, 5541-5553.	4.2	10
32	Effects of unbalance on the nonlinear dynamics of rotors with transverse cracks. Nonlinear Dynamics, 2018, 91, 2755-2772.	5.2	23
33	Design of a New Piezoelectric Energy Harvester Based on Compound Two-Stage Force Amplification Frame. IEEE Sensors Journal, 2018, 18, 3989-4000.	4.7	53
34	New Graph Representation for Planetary Gear Trains. Journal of Mechanical Design, Transactions of the ASME, 2018, 140, .	2.9	45
35	Three-dimensional static and dynamic stiffness analyses of the cable driven parallel robot with non-negligible cable mass and elasticity. Mechanics Based Design of Structures and Machines, 2018, 46, 455-482.	4.7	13
36	Kinematic Calibration of a Cable-Driven Parallel Robot for 3D Printing. Sensors, 2018, 18, 2898.	3.8	45

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37	A Review on Cable-driven Parallel Robots. Chinese Journal of Mechanical Engineering (English) Tj ETQq1 1 0.784314 rgBT /Overlock 10	3.7	115
38	Luffing angular response field prediction of the DACS with narrowly random payload parameters based on a modified hybrid random method. Archive of Applied Mechanics, 2018, 88, 1767-1789.	2.2	1
39	Design, analysis and control of a winding hybrid-driven cable parallel manipulator. Robotics and Computer-Integrated Manufacturing, 2017, 48, 196-208.	9.9	60
40	Dynamics-based nonsingular interval model and luffing angular response field analysis of the DACS with narrowly bounded uncertainty. Nonlinear Dynamics, 2017, 90, 2599-2626.	5.2	21
41	Design and analysis of a novel cable-actuated palletizing robot. International Journal of Advanced Robotic Systems, 2017, 14, 172988141774108.	2.1	9
42	Steady-State Heat-Flow Coupling Field of a High-Power Magnetorheological Fluid Clutch Utilizing Liquid Cooling. Journal of Fluids Engineering, Transactions of the ASME, 2017, 139, .	1.5	30
43	The Design and Development of an Omni-Directional Mobile Robot Oriented to an Intelligent Manufacturing System. Sensors, 2017, 17, 2073.	3.8	93
44	Design and Optimization of a Hybrid-Driven Waist Rehabilitation Robot. Sensors, 2016, 16, 2121.	3.8	28
45	Collision free force closure workspace determination of reconfigurable planar cable driven parallel robot. , 2016, , .		7
46	Dynamics and trajectory tracking control of cooperative multiple mobile cranes. Nonlinear Dynamics, 2016, 83, 89-108.	5.2	84
47	Kinematics and error analysis of cooperative cable parallel manipulators for multiple mobile cranes. International Journal of Mechanics and Materials in Design, 2014, 10, 395-409.	3.0	25
48	Integrated Mechanism Design and Control for Completely Restrained Hybrid-Driven Based Cable Parallel Manipulators. Journal of Intelligent and Robotic Systems: Theory and Applications, 2014, 74, 643-661.	3.4	12
49	Iterative Learning Tracking Control of a Hybrid-Driven Based Three-Cable Parallel Manipulator. Advances in Mechanical Engineering, 2014, 6, 248385.	1.6	2
50	New Structural Representation and Digital-Analysis Platform for Symmetrical Parallel Mechanisms. International Journal of Advanced Robotic Systems, 2013, 10, 243.	2.1	19
51	Non-smooth dynamical analysis and experimental validation of the cable-suspended parallel manipulator. Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 2012, 226, 2456-2466.	2.1	11
52	Design and Analysis of Cooperative Cable Parallel Manipulators for Multiple Mobile Cranes. International Journal of Advanced Robotic Systems, 2012, 9, 207.	2.1	12
53	Dynamic Simulation of Hybrid-Driven Planar Five-Bar Parallel Mechanism Based on SimMechanics and Tracking Control. International Journal of Advanced Robotic Systems, 2011, 8, 37.	2.1	37
54	Analysis and control of the cable-supporting system including actuator dynamics. Control Engineering Practice, 2011, 19, 491-501.	5.5	44

#	Article	IF	Citations
55	Design and analysis of completely restrained cable manipulators with 3 Degrees of Freedom. , 2010, , .		0
56	Design and analysis of a 2-DOF hybrid-driven planar parallel manipulator based on virtual prototype technology. , 2010, , .		1
57	On Control System of the Cable-Supporting Parallel Mechanism Including Actuator Dynamics. , 2009, , .		0
58	Trajectory control of the cable-based parallel mechanism based on dynamics. , 2009, , .		0