

Liang Ding

List of Publications by Year in descending order

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174
papers

2,928
citations

218381

26
h-index

233125

45
g-index

175
all docs

175
docs citations

175
times ranked

1955
citing authors

#	ARTICLE	IF	CITATIONS
1	Experimental study and analysis on driving wheels™ performance for planetary exploration rovers moving in deformable soil. <i>Journal of Terramechanics</i> , 2011, 48, 27-45.	1.4	169
2	Trilateral Teleoperation of Adaptive Fuzzy Force/Motion Control for Nonlinear Teleoperators With Communication Random Delays. <i>IEEE Transactions on Fuzzy Systems</i> , 2013, 21, 610-624.	6.5	148
3	Foot™ terrain interaction mechanics for legged robots: Modeling and experimental validation. <i>International Journal of Robotics Research</i> , 2013, 32, 1585-1606.	5.8	119
4	Robust Stabilization of a Wheeled Mobile Robot Using Model Predictive Control Based on Neurodynamics Optimization. <i>IEEE Transactions on Industrial Electronics</i> , 2017, 64, 505-516.	5.2	109
5	Adaptive Neural Network-Based Tracking Control for Full-State Constrained Wheeled Mobile Robotic System. <i>IEEE Transactions on Systems, Man, and Cybernetics: Systems</i> , 2017, 47, 2410-2419.	5.9	99
6	Adaptive Partial Reinforcement Learning Neural Network-Based Tracking Control for Wheeled Mobile Robotic Systems. <i>IEEE Transactions on Systems, Man, and Cybernetics: Systems</i> , 2020, 50, 2512-2523.	5.9	80
7	Interaction Mechanics Model for Rigid Driving Wheels of Planetary Rovers Moving on Sandy Terrain with Consideration of Multiple Physical Effects. <i>Journal of Field Robotics</i> , 2015, 32, 827-859.	3.2	71
8	Wheel slip-sinkage and its prediction model of lunar rover. <i>Central South University</i> , 2010, 17, 129-135.	0.5	69
9	Adaptive Neural Network-Based Finite-Time Online Optimal Tracking Control of the Nonlinear System With Dead Zone. <i>IEEE Transactions on Cybernetics</i> , 2021, 51, 382-392.	6.2	69
10	Adaptive neural network tracking control-based reinforcement learning for wheeled mobile robots with skidding and slipping. <i>Neurocomputing</i> , 2018, 283, 20-30.	3.5	60
11	Planetary rovers™ wheel™ soil interaction mechanics: new challenges and applications for wheeled mobile robots. <i>Intelligent Service Robotics</i> , 2011, 4, 17-38.	1.6	57
12	Adaptive motion control of wheeled mobile robot with unknown slippage. <i>International Journal of Control</i> , 2014, 87, 1513-1522.	1.2	56
13	Definition and Application of Variable Resistance Coefficient for Wheeled Mobile Robots on Deformable Terrain. <i>IEEE Transactions on Robotics</i> , 2020, 36, 894-909.	7.3	56
14	Gait Generation With Smooth Transition Using CPG-Based Locomotion Control for Hexapod Walking Robot. <i>IEEE Transactions on Industrial Electronics</i> , 2016, 63, 5488-5500.	5.2	52
15	ADP-Based Online Tracking Control of Partially Uncertain Time-Delayed Nonlinear System and Application to Wheeled Mobile Robots. <i>IEEE Transactions on Cybernetics</i> , 2020, 50, 3182-3194.	6.2	44
16	A review of heavy-duty legged robots. <i>Science China Technological Sciences</i> , 2014, 57, 298-314.	2.0	41
17	Design and terramechanics analysis of a Mars rover utilising active suspension. <i>Mechanism and Machine Theory</i> , 2018, 128, 125-149.	2.7	41
18	Improved explicit-form equations for estimating dynamic wheel sinkage and compaction resistance on deformable terrain. <i>Mechanism and Machine Theory</i> , 2015, 86, 235-264.	2.7	38

#	ARTICLE	IF	CITATIONS
19	Slip ratio for lugged wheel of planetary rover in deformable soil: definition and estimation. , 2009, , .		37
20	Kinematic Bilateral Teledriving of Wheeled Mobile Robots Coupled With Slippage. IEEE Transactions on Industrial Electronics, 2017, 64, 2147-2157.	5.2	36
21	Experimental study and analysis of the wheelsâ€™ steering mechanics for planetary exploration wheeled mobile robots moving on deformable terrain. International Journal of Robotics Research, 2013, 32, 712-743.	5.8	35
22	Haptic Tele-Driving of Wheeled Mobile Robots Under Nonideal Wheel Rolling, Kinematic Control and Communication Time Delay. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2020, 50, 336-347.	5.9	35
23	New perspective on characterizing pressureâ€™ sinkage relationship of terrains for estimating interaction mechanics. Journal of Terramechanics, 2014, 52, 57-76.	1.4	34
24	Parameter identification for planetary soil based on a decoupled analytical wheel-soil interaction terramechanics model. , 2009, , .		33
25	Trajectory tracking control of WMRs with lateral and longitudinal slippage based on active disturbance rejection control. Robotics and Autonomous Systems, 2018, 107, 236-245.	3.0	33
26	ROSTDyn: Rover simulation based on terramechanics and dynamics. Journal of Terramechanics, 2013, 50, 199-210.	1.4	31
27	Longitudinal skid model for wheels of planetary exploration rovers based on terramechanics. Journal of Terramechanics, 2013, 50, 327-343.	1.4	30
28	Trajectory tracking control of wheeled mobile manipulator based on fuzzy neural network and extended Kalman filtering. Neural Computing and Applications, 2018, 30, 447-462.	3.2	29
29	Surface characteristics of the Zhurong Mars rover traverse at Utopia Planitia. Nature Geoscience, 2022, 15, 171-176.	5.4	27
30	A 2-year locomotive exploration and scientific investigation of the lunar farside by the Yutu-2 rover. Science Robotics, 2022, 7, eabj6660.	9.9	25
31	Error-Tolerant Switched Robust Extended Kalman Filter With Application to Parameter Estimation of Wheel-Soil Interaction. IEEE Transactions on Control Systems Technology, 2014, 22, 1448-1460.	3.2	23
32	Terramechanics-based modeling of sinkage and moment for in-situ steering wheels of mobile robots on deformable terrain. Mechanism and Machine Theory, 2017, 116, 14-33.	2.7	23
33	An admittance-controlled wheeled mobile manipulator for mobility assistance: Humanâ€™robot interaction estimation and redundancy resolution for enhanced force exertion ability. Mechatronics, 2021, 74, 102497.	2.0	23
34	Reinforcement Learning Neural Network-Based Adaptive Control for State and Input Time-Delayed Wheeled Mobile Robots. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2020, 50, 4171-4182.	5.9	22
35	Enhancement of Force Exertion Capability of a Mobile Manipulator by Kinematic Reconfiguration. IEEE Robotics and Automation Letters, 2020, 5, 5842-5849.	3.3	22
36	Minimizing the Energy Consumption for a Hexapod Robot Based on Optimal Force Distribution. IEEE Access, 2020, 8, 5393-5406.	2.6	22

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37	An Apparatus to Measure Wheel-Soil Interactions on Sandy Terrains. IEEE/ASME Transactions on Mechatronics, 2018, 23, 352-363.	3.7	21
38	A multi-mode real-time terrain parameter estimation method for wheeled motion control of mobile robots. Mechanical Systems and Signal Processing, 2018, 104, 758-775.	4.4	20
39	System integration and control design of a maglev platform for space vibration isolation. JVC/Journal of Vibration and Control, 2019, 25, 1720-1736.	1.5	20
40	Adaptive Fuzzy Finite-Time Tracking Control for Nonstrict Full States Constrained Nonlinear System With Coupled Dead-Zone Input. IEEE Transactions on Cybernetics, 2022, 52, 1138-1149.	6.2	20
41	Linear normal stress under a wheel in skid for wheeled mobile robots running on sandy terrain. Journal of Terramechanics, 2017, 70, 49-57.	1.4	19
42	Adaptive NN-based finite-time tracking control for wheeled mobile robots with time-varying full state constraints. Neurocomputing, 2020, 403, 421-430.	3.5	19
43	Robust adaptive control of door opening by a mobile rescue manipulator based on unknown-force-related constraints estimation. Robotica, 2018, 36, 119-140.	1.3	18
44	Online estimation of terrain parameters and resistance force based on equivalent sinkage for planetary rovers in longitudinal skid. Mechanical Systems and Signal Processing, 2019, 119, 39-54.	4.4	18
45	Low Impact Force and Energy Consumption Motion Planning for Hexapod Robot with Passive Compliant Ankles. Journal of Intelligent and Robotic Systems: Theory and Applications, 2019, 94, 349-370.	2.0	18
46	Hydrodynamic calculation and analysis of a complex-shaped underwater robot based on computational fluid dynamics and prototype test. Advances in Mechanical Engineering, 2017, 9, 168781401773450.	0.8	17
47	Optimized control for longitudinal slip ratio with reduced energy consumption. Acta Astronautica, 2015, 115, 1-17.	1.7	16
48	Three-layer intelligence of planetary exploration wheeled mobile robots: Robint, virtint, and humint. Science China Technological Sciences, 2015, 58, 1299-1317.	2.0	16
49	Dual-User Haptic Teleoperation of Complementary Motions of a Redundant Wheeled Mobile Manipulator Considering Task Priority. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2022, 52, 6283-6295.	5.9	16
50	Adaptive Sliding Mode Control of Mobile Manipulators with Markovian Switching Joints. Journal of Applied Mathematics, 2012, 2012, 1-24.	0.4	15
51	Motion planning and simulation verification of a hydraulic hexapod robot based on reducing energy/flow consumption. Journal of Mechanical Science and Technology, 2015, 29, 4427-4436.	0.7	15
52	In-situ evaluation of terrain mechanical parameters and wheel-terrain interactions using wheel-terrain contact mechanics for wheeled planetary rovers. Mechanism and Machine Theory, 2020, 145, 103696.	2.7	15
53	High-slip wheel-terrain contact modelling for grouser-wheeled planetary rovers traversing on sandy terrains. Mechanism and Machine Theory, 2020, 153, 104032.	2.7	15
54	Contact Sequence Planning for Hexapod Robots in Sparse Foothold Environment Based on Monte-Carlo Tree. IEEE Robotics and Automation Letters, 2022, 7, 826-833.	3.3	15

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55	Terramechanics-based high-fidelity dynamics simulation for wheeled mobile robot on deformable rough terrain. , 2010, , .		14
56	A real-time, high fidelity dynamic simulation platform for hexapod robots on soft terrain. Simulation Modelling Practice and Theory, 2016, 68, 125-145.	2.2	14
57	Kinematic bilateral teleoperation of wheeled mobile robots subject to longitudinal slippage. IET Control Theory and Applications, 2016, 10, 111-118.	1.2	14
58	Semi-autonomous bilateral teleoperation of six-wheeled mobile robot on soft terrains. Mechanical Systems and Signal Processing, 2019, 133, 106234.	4.4	14
59	Terramechanics Model for Wheel-terrain Interaction of Lunar Rover Based on Stress Distribution. Jixie Gongcheng Xuebao/Chinese Journal of Mechanical Engineering, 2009, 45, 49.	0.7	14
60	Method for analyzing articulated torques of heavy-duty six-legged robot. Chinese Journal of Mechanical Engineering (English Edition), 2013, 26, 801-812.	1.9	13
61	Parametric Design and Multiobjective Optimization of Maglev Actuators for Active Vibration Isolation System. Advances in Mechanical Engineering, 2014, 6, 215358.	0.8	13
62	Trilateral Predictor-Mediated Teleoperation of a Wheeled Mobile Robot With Slippage. IEEE Robotics and Automation Letters, 2016, 1, 738-745.	3.3	13
63	Sinkage definition and visual detection for planetary rovers wheels on rough terrain based on wheel-soil interaction boundary. Robotics and Autonomous Systems, 2017, 98, 222-240.	3.0	13
64	Static Force Analysis of Foot of Electrically Driven Heavy-Duty Six-Legged Robot under Tripod Gait. Chinese Journal of Mechanical Engineering (English Edition), 2018, 31, .	1.9	13
65	Adaptive Neural Network-Based Finite-Time Tracking Control for Nonstrict Nonaffined MIMO Nonlinear Systems. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2021, 51, 4814-4824.	5.9	13
66	Fault-Tolerant Tripod Gait Planning and Verification of a Hexapod Robot. Applied Sciences (Switzerland), 2020, 10, 2959.	1.3	13
67	Dual-Master/Single-Slave Haptic Teleoperation System for Semiautonomous Bilateral Control of Hexapod Robot Subject to Deformable Rough Terrain. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2022, 52, 2435-2449.	5.9	13
68	Identifying mechanical property parameters of planetary soil using in-situ data obtained from exploration rovers. Planetary and Space Science, 2015, 119, 121-136.	0.9	12
69	Unknown geometrical constraints estimation and trajectory planning for robotic door-opening task with visual teleoperation assists. Assembly Automation, 2019, 39, 479-488.	1.0	12
70	Payload-agnostic decoupling and hybrid vibration isolation control for a maglev platform with redundant actuation. Mechanical Systems and Signal Processing, 2021, 146, 106985.	4.4	12
71	Longitudinal Skid Experimental Investigation for Wheels of Planetary Exploration Rovers. Jixie Gongcheng Xuebao/Chinese Journal of Mechanical Engineering, 2015, 51, 99.	0.7	12
72	Human-Robot Variable Impedance Skills Transfer Learning Based on Dynamic Movement Primitives. IEEE Robotics and Automation Letters, 2022, 7, 6463-6470.	3.3	12

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73	New conditions for global exponential stability of continuous-time neural networks with delays. <i>Neural Computing and Applications</i> , 2013, 22, 41-48.	3.2	11
74	Attitude-based dynamic and kinematic models for wheels of mobile robot on deformable slope. <i>Robotics and Autonomous Systems</i> , 2016, 75, 161-175.	3.0	11
75	Semi-Autonomous Bilateral Teleoperation of Hexapod Robot Based on Haptic Force Feedback. <i>Journal of Intelligent and Robotic Systems: Theory and Applications</i> , 2018, 91, 583-602.	2.0	11
76	Design of Comprehensive High-fidelity/High-speed Virtual Simulation System for Lunar Rover. , 2008, , .		10
77	Slip-ratio-coordinated control of planetary exploration robots traversing over deformable rough terrain. , 2010, , .		10
78	A method for on-line soil parameters modification to planetary rover simulation. <i>Journal of Terramechanics</i> , 2012, 49, 325-339.	1.4	10
79	Measurement Model and Precision Analysis of Accelerometers for Maglev Vibration Isolation Platforms. <i>Sensors</i> , 2015, 15, 20053-20068.	2.1	10
80	MPC motion planning-based sliding mode control for underactuated WPS vehicle via Olfati transformation. <i>IET Control Theory and Applications</i> , 2018, 12, 495-503.	1.2	10
81	Brain-Inspired Intelligence and Visual Perception. <i>Research on Intelligent Manufacturing</i> , 2020, , .	0.2	10
82	Adaptive Fuzzy Control for a Hybrid Spacecraft System With Spatial Motion and Communication Constraints. <i>IEEE Transactions on Fuzzy Systems</i> , 2022, 30, 3247-3256.	6.5	10
83	Path-Following Control of Wheeled Planetary Exploration Robots Moving on Deformable Rough Terrain. <i>Scientific World Journal, The</i> , 2014, 2014, 1-13.	0.8	9
84	Enhancement of tensile strength of embedded parts in carbon fiber-reinforced plastic/aluminum honeycomb sandwich structures for vehicle. <i>Composite Structures</i> , 2016, 152, 800-806.	3.1	9
85	Tracking control of WMRs on loose soil based on mixed H_2 / H_∞ control with longitudinal slip ratio estimation. <i>Acta Astronautica</i> , 2017, 140, 49-58.	1.7	9
86	Longitudinal skid model for wheels of planetary rovers based on improved wheel sinkage considering soil bulldozing effect. <i>Journal of Terramechanics</i> , 2017, 74, 45-56.	1.4	9
87	A novel bilateral haptic teleoperation approach for hexapod robot walking and manipulating with legs. <i>Robotics and Autonomous Systems</i> , 2018, 108, 1-12.	3.0	9
88	Mapping for Planetary Rovers from Terramechanics Perspective. , 2019, , .		9
89	Wheels' performance of Mars exploration rovers: Experimental study from the perspective of terramechanics and structural mechanics. <i>Journal of Terramechanics</i> , 2020, 92, 23-42.	1.4	9
90	Fast neural network control of a pseudo-driven wheel on deformable terrain. <i>Mechanical Systems and Signal Processing</i> , 2021, 152, 107478.	4.4	9

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91	Slippage-Dependent Teleoperation of Wheeled Mobile Robots on Soft Terrains. IEEE Robotics and Automation Letters, 2021, 6, 4962-4969.	3.3	9
92	Suppression in any configuration : A versatile coupling improved multi-objective manipulation framework for modular active vibration isolation system. Mechanical Systems and Signal Processing, 2022, 166, 108478.	4.4	9
93	Tension distribution algorithm based on graphics with high computational efficiency and robust optimization for two-redundant cable-driven parallel robots. Mechanism and Machine Theory, 2022, 172, 104739.	2.7	9
94	Bond strength between carbon fiber-reinforced plastic tubes and aluminum joints for racing car suspension. Advances in Mechanical Engineering, 2016, 8, 168781401667462.	0.8	8
95	Locally supervised neural networks for approximating terramechanics models. Mechanical Systems and Signal Processing, 2016, 75, 57-74.	4.4	8
96	Diagonal recurrent neural networks for parameters identification of terrain based on wheel-soil interaction analysis. Neural Computing and Applications, 2017, 28, 797-804.	3.2	8
97	Optimal Energy Consumption for Mobile Manipulators Executing Door-Opening Task. Mathematical Problems in Engineering, 2018, 2018, 1-11.	0.6	8
98	Direct method for tension feasible region calculation in multi-redundant cable-driven parallel robots using computational geometry. Mechanism and Machine Theory, 2021, 158, 104225.	2.7	8
99	Teleoperation of wheeled mobile robots subject to longitudinal slipping and lateral sliding by time-domain passivity controller. Mechatronics, 2022, 81, 102705.	2.0	8
100	Pressing and Rubbing: Physics-Informed Features Facilitate Haptic Terrain Classification for Legged Robots. IEEE Robotics and Automation Letters, 2022, 7, 5990-5997.	3.3	8
101	High-Fidelity Dynamic Modeling and Simulation of Planetary Rovers Using Single-Input-Multi-Output Joints With Terrain Property Mapping. IEEE Transactions on Robotics, 2022, 38, 3238-3258.	7.3	8
102	VDC-based admittance control of multi-DOF manipulators considering joint flexibility via hierarchical control framework. Control Engineering Practice, 2022, 124, 105186.	3.2	8
103	Teleoperation of Wheeled Mobile Robot With Dynamic Longitudinal Slippage. IEEE Transactions on Control Systems Technology, 2023, 31, 99-113.	3.2	8
104	The globally asymptotic stability analysis for a class of recurrent neural networks with delays. Neural Computing and Applications, 2013, 22, 587-595.	3.2	7
105	Approach to imitate maneuvering of lunar roving vehicle under lunar gravity using a terrestrial vehicle. Mechatronics, 2015, 30, 383-398.	2.0	7
106	An omnidirectional mobile operating robot based on mecanum wheel. , 2017, , .		7
107	Approach for Imitation of Manned Lunar Rover Acceleration Using Prototype Vehicle with Imitation Handling Ratio on Earth. IEEE Transactions on Vehicular Technology, 2018, , 1-1.	3.9	7
108	Virtual Decomposition Based Modeling for Multi-DOF Manipulator With Flexible Joint. IEEE Access, 2019, 7, 91582-91592.	2.6	7

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109	In-situ wheel sinkage estimation under high slip conditions for grouser-wheeled planetary rovers: Another immobility index. Mechanism and Machine Theory, 2021, 158, 104243.	2.7	7
110	Enhancing kinematic accuracy of redundant wheeled mobile manipulators via adaptive motion planning. Mechatronics, 2021, 79, 102639.	2.0	7
111	Analysis of driving efficiency for LRV wheels using forced-slip method. Advances in Space Research, 2014, 54, 2122-2130.	1.2	6
112	Turning gait planning and simulation validation of a hydraulic hexapod robot. , 2015, , .		6
113	Design and control of a novel six-DOF maglev platform for positioning and vibration isolation. , 2017, , .		6
114	State estimation of a heavy-duty hexapod robot with passive compliant ankles based on the leg kinematics and IMU data fusion. Journal of Mechanical Science and Technology, 2018, 32, 3885-3897.	0.7	6
115	Time-Optimal Point Stabilization Control for WIP Vehicles Using Quasi-Convex Optimization and B-Spline Adaptive Interpolation Techniques. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2021, 51, 3293-3303.	5.9	6
116	Transmission Mode Research on the Joints of a Multi-Legged Walking Robot. Applied Mechanics and Materials, 2012, 151, 518-522.	0.2	5
117	Design of Underwater Welding Robot Used in Nuclear Plant. Key Engineering Materials, 0, 620, 484-489.	0.4	5
118	Soil parameter modification used for boosting predictive fidelity of planetary rover's slippage. Journal of Terramechanics, 2014, 56, 173-184.	1.4	5
119	Efficient force distribution algorithm for hexapod robot walking on uneven terrain. , 2016, , .		5
120	A new iterative synthetic data generation method for CNN based stroke gesture recognition. Multimedia Tools and Applications, 2018, 77, 17181-17205.	2.6	5
121	Neural Network Identification of a Racing Car Tire Model. Journal of Engineering (United States), 2018, 2018, 1-11.	0.5	5
122	Improved Terzaghi-theory-based interaction modeling of rotary robotic locomotors with granular substrates. Mechanism and Machine Theory, 2020, 152, 103901.	2.7	5
123	Estimation of interaction forces with minimal parameters for rigid wheels on deformable terrain using modified Hooke's law. Mechanism and Machine Theory, 2022, 169, 104663.	2.7	5
124	Interact with robot: An efficient approach based on finite state machine and mouse gesture recognition. , 2016, , .		4
125	Dynamic Modeling and Experimental Validation of Door-Opening Process by a Mobile Manipulator. IEEE Access, 2019, 7, 80916-80927.	2.6	4
126	Closed-Form Equations and Experimental Verification for Soft Robot Arm Based on Cosserat Theory. , 2019, , .		4

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127	Sagittal SLIP-anchored task space control for a monopode robot traversing irregular terrain. <i>Frontiers of Mechanical Engineering</i> , 2020, 15, 193-208.	2.5	4
128	Simultaneous control of trajectory tracking and coordinated allocation of rocker-bogie planetary rovers. <i>Mechanical Systems and Signal Processing</i> , 2021, 151, 107312.	4.4	4
129	Footstep Planning for Hexapod Robots Based on 3D Quasi-static Equilibrium Support Region. <i>Journal of Intelligent and Robotic Systems: Theory and Applications</i> , 2021, 103, 1.	2.0	4
130	Human-Robot Collaboration for Heavy Object Manipulation: Kinesthetic Teaching of the Role of Wheeled Mobile Manipulator. , 2021, , .		4
131	Velocity Following Control of a Pseudo-Driven Wheel for Reducing Internal Forces Between Wheels. <i>IEEE Robotics and Automation Letters</i> , 2022, 7, 4337-4344.	3.3	4
132	Intelligent assistance for older adults via an admittance-controlled wheeled mobile manipulator with task-dependent end-effectors. <i>Mechatronics</i> , 2022, 85, 102821.	2.0	4
133	Effect of size and shape of joining insert on the strength of sandwich-structured laminate panels for wheeled vehicle's body. <i>Journal of Reinforced Plastics and Composites</i> , 2015, 34, 1823-1832.	1.6	3
134	Optimal-Switched H ∞ Robust Tracking for Maneuvering Space Target. <i>IFAC-PapersOnLine</i> , 2016, 49, 415-419.	0.5	3
135	Dynamic Simulation of Planetary Rovers with Terrain Property Mapping. , 2018, , .		3
136	A new local path planning approach based on improved dual covariant Hamiltonian optimization for motion planning method. <i>Advances in Mechanical Engineering</i> , 2019, 11, 168781401985100.	0.8	3
137	Scale effect mechanism research of insect-imitating hexapod robot. <i>Journal of Mechanical Science and Technology</i> , 2019, 33, 2873-2882.	0.7	3
138	Optimal ∞ -switched extendedH ∞ filter for nonlinear systems with stochastic uncertainties. <i>International Journal of Robust and Nonlinear Control</i> , 2020, 30, 2850-2870.	2.1	3
139	Linear Expressions of Drawbar Pull and Driving Torque for Grouser-Wheeled Planetary Rovers Without Terrain Mechanical Parameters. <i>IEEE Robotics and Automation Letters</i> , 2021, 6, 8197-8204.	3.3	3
140	Algorithm analysis for a rover simulation platform. , 2011, , .		2
141	Study of space micro-vibration active isolation platform acceleration measurement. , 2015, , .		2
142	Switch control for operating constrained mechanisms using a rescuing mobile manipulator with multiple working modes. , 2016, , .		2
143	Experimental study on an automatic drilling strategy for lunar regolith coring. , 2017, , .		2
144	Trajectory Tracking Control for WMRs with the Time-Varying Longitudinal Slippage Based on a New Adaptive SMC Method. <i>International Journal of Aerospace Engineering</i> , 2019, 2019, 1-13.	0.5	2

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145	A Local Dynamic Path Planning Approach for WMRs Based on Fuzzy Dual CHOMP. , 2019, , .		2
146	Analysis of Joint Torque under Single Movement Cycle of Underwater Legged Robot. , 2019, , .		2
147	Research on feature extraction and segmentation of rover wheel imprint. Journal of Supercomputing, 2020, 76, 2357-2373.	2.4	2
148	Center of mass and its domain for heavy hexapod robots. , 2014, , .		1
149	Dynamic Modeling and Vibration Analysis for the Vehicles with Rigid Wheels Based on Wheel-Terrain Interaction Mechanics. Shock and Vibration, 2015, 2015, 1-9.	0.3	1
150	Dynamic analysis of a cable underwater robot in a nuclear reaction pool. , 2016, , .		1
151	Design and tolerance analysis of compliant exchanger for rescuing manipulator in nuclear power plant. , 2016, , .		1
152	A new optimization-driven path planning method with probabilistic completeness for wheeled mobile robots. Measurement and Control, 2019, 52, 317-325.	0.9	1
153	Coupled Dynamic Modeling and Simulation of Seabed Hexapod Robot. , 2019, , .		1
154	Control Strategy for the Pseudo-Driven Wheels of Multi-Wheeled Mobile Robots Based on Dissociation by Degrees-of-Freedom. IEEE Access, 2020, 8, 155477-155491.	2.6	1
155	Wheel's Slip Ratio and Sinkage Estimation for Planetary Rovers Moving on Deformable Terrain. Journal of Physics: Conference Series, 2022, 2203, 012046.	0.3	1
156	Motion-control-based analytical model for wheel-soil interaction mechanics of lunar rover. , 2011, , .		0
157	Adaptive fuzzy control of trilateral tele-operation with communication random delays. , 2012, , .		0
158	Longitudinal slip versus skid of planetary rovers' wheels traversing on deformable slopes. , 2013, , .		0
159	A method to online estimate wheel's slippage for planetary rover. , 2014, , .		0
160	Effects of stride length and frequency on mobile performance of a hydraulic hexapod robot. , 2015, , .		0
161	Analysis of the normal bearing capacity of the terrain in case of foot-terrain interaction based on Terzaghi theory. , 2016, , .		0
162	Neural adaptive tracking control via chained transform for wheeled mobile robot. , 2016, , .		0

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163	RGBD-based parameter extraction for door opening tasks with human assists in nuclear rescue. , 2016, , .		0
164	Tracking Control of Wheeled Mobile Robots with Slippage Based on Active Disturbance Rejection Control. , 2017, , .		0
165	Extraction of Speed-Independent Vibration Features for Terrain Classification in Lugged-Wheel Rovers. , 2018, , .		0
166	Adaptive NN-Based Tracking Control for Partial Uncertain Time-Delayed WMR System. , 2018, , .		0
167	A novel localization approach for underwater welding vehicles in spent fuel pools via attitude heading reference system and altimeters. International Journal of Advanced Robotic Systems, 2019, 16, 172988141983054.	1.3	0
168	Closed-Form Analytical Model of Binding Force for Wheeled Mobile Robots with Skid-Steering Mechanism Running on Sandy Terrains. , 2019, , .		0
169	Experimental study and analysis of the wheelâ€™s stiffness characteristics for Chinaâ€™s Mars exploration rovers *. , 2019, , .		0
170	Centroid variability modelâ€™based control of HITUWV for automatic underwater welding with enhanced stability and accuracy. Advances in Mechanical Engineering, 2019, 11, 168781401989021.	0.8	0
171	Neural Cognitive Computing Mechanisms. Research on Intelligent Manufacturing, 2020, , 69-103.	0.2	0
172	Integration and Scheduling of Core Modules. Research on Intelligent Manufacturing, 2020, , 105-141.	0.2	0
173	Multi-Slip Conditions Acquisition of Planetary Rovers with Application to Terrain Parameter Identification. , 2021, , .		0
174	Intelligent sensing and control for aerospace unmanned systems. Aerospace Systems, 0, , 1.	0.7	0