## Jin-Guo Liu

## List of Publications by Year in descending order

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153 papers	2,422 citations	218381 26 h-index	42 g-index
157	157 docs citations	157	1529
all docs		times ranked	citing authors

#	Article	IF	CITATIONS
1	Distributed Resilient Tracking of Multiagent Systems Under Actuator and Sensor Faults. IEEE Transactions on Cybernetics, 2023, 53, 4653-4664.	6.2	8
2	Attention-Mechanism-Based Real-Time Gaze Tracking in Natural Scenes With Residual Blocks. IEEE Transactions on Cognitive and Developmental Systems, 2022, 14, 696-707.	2.6	9
3	An obstacle avoidance algorithm for space hyper-redundant manipulators using combination of RRT and shape control method. Robotica, 2022, 40, 1036-1069.	1.3	4
4	Novel power-exponent-type modified RNN for RMP scheme of redundant manipulators with noise and physical constraints. Neurocomputing, 2022, 467, 266-281.	3.5	2
5	Active Disturbance Rejection Control of Euler–Lagrange Systems Exploiting Internal Damping. IEEE Transactions on Cybernetics, 2022, 52, 4334-4345.	6.2	14
6	Modeling and evaluation of dynamic degradation behaviours of carbon fibre-reinforced epoxy composite shells. Applied Mathematical Modelling, 2022, 104, 21-33.	2.2	7
7	Deep Temporal Model-Based Identity-Aware Hand Detection for Space Human–Robot Interaction. IEEE Transactions on Cybernetics, 2022, 52, 13738-13751.	6.2	17
8	SIASAIL-I solar sail: From system design to on-orbit demonstration mission. Acta Astronautica, 2022, 192, 133-142.	1.7	22
9	Static and dynamic performances of sandwich plates with magnetorheological elastomer core: Theoretical and experimental studies. Journal of Sandwich Structures and Materials, 2022, 24, 1556-1579.	2.0	15
10	Binocular Feature Fusion and Spatial Attention Mechanism Based Gaze Tracking. IEEE Transactions on Human-Machine Systems, 2022, 52, 302-311.	2.5	10
11	Deep Object Detector With Attentional Spatiotemporal LSTM for Space Human–Robot Interaction. IEEE Transactions on Human-Machine Systems, 2022, 52, 784-793.	2.5	11
12	A review of soft manipulator research, applications, and opportunities. Journal of Field Robotics, 2022, 39, 281-311.	3.2	46
13	Foldable Units and Wing Expansion of the Oakleaf Butterfly During Eclosion. Journal of Bionic Engineering, 2022, 19, 724-736.	2.7	2
14	An efficient approach of centroid alignment for spaceflight vehicles considering parameter uncertainties. Mechanism and Machine Theory, 2022, 172, 104774.	2.7	0
15	Four-Criterion-Optimization Based Coordination Motion Control of Dual-arm Robots. IEEE Transactions on Cognitive and Developmental Systems, 2022, , 1-1.	2.6	0
16	Hand gesture recognition using multimodal data fusion and multiscale parallel convolutional neural network for human–robot interaction. Expert Systems, 2021, 38, e12490.	2.9	25
17	Review of in-space assembly technologies. Chinese Journal of Aeronautics, 2021, 34, 21-47.	2.8	70
18	A Cascaded Feature Pyramid Network With Non-Backward Propagation for Facial Expression Recognition. IEEE Sensors Journal, 2021, 21, 11382-11392.	2.4	7

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19	Analytical inverse kinematic computation for 7-DOF redundant sliding manipulators. Mechanism and Machine Theory, 2021, 155, 104006.	2.7	21
20	Finite-time leader-following output consensus for multi-agent systems via extended state observer. Automatica, 2021, 124, 109133.	3.0	41
21	Design and experimental study of a passive power-source-free stiffness-self-adjustable mechanism. Frontiers of Mechanical Engineering, 2021, 16, 32-45.	2.5	8
22	Physical Human–Robot Collaboration: Robotic Systems, Learning Methods, Collaborative Strategies, Sensors, and Actuators. IEEE Transactions on Cybernetics, 2021, 51, 1888-1901.	6.2	50
23	A Physics-Guided Coordinated Distributed MPC Method for Shape Control of an Antenna Reflector. IEEE Transactions on Cybernetics, 2021, PP, 1-13.	6.2	4
24	Nonlinear vibrations of fiber-reinforced composite cylindrical shells with bolt loosening boundary conditions. Journal of Sound and Vibration, 2021, 496, 115935.	2.1	80
25	Configuration analysis of a chain-type reconfigurable modular robot inspired by normal alkane. Science China Technological Sciences, 2021, 64, 1167-1176.	2.0	10
26	Design and Experimental Study of Space Continuous Robots Applied to Space Non-Cooperative Target Capture. Micromachines, 2021, 12, 536.	1.4	4
27	Review of Research and Development of Supernumerary Robotic Limbs. IEEE/CAA Journal of Automatica Sinica, 2021, 8, 929-952.	8.5	33
28	Vibration suppression effect of porous graphene platelet coating on fiber reinforced polymer composite plate with viscoelastic damping boundary conditions resting on viscoelastic foundation. Engineering Structures, 2021, 237, 112167.	2.6	19
29	A spring-damping contact force model considering normal friction for impact analysis. Nonlinear Dynamics, 2021, 105, 1437-1457.	2.7	12
30	Review of snake robots in constrained environments. Robotics and Autonomous Systems, 2021, 141, 103785.	3.0	68
31	Nonlinear vibration characteristics of fibre reinforced composite cylindrical shells in thermal environment. Mechanical Systems and Signal Processing, 2021, 156, 107665.	4.4	77
32	Event-triggered coordinated control for multiple solar sail formation flying around planetary displaced orbits. Acta Astronautica, 2021, 184, 286-298.	1.7	8
33	Fuzzy sliding mode variable structure control of a high-speed parallel PnP robot. Mechanism and Machine Theory, 2021, 162, 104349.	2.7	18
34	Attitude Decoupling Control of Semifloating Space Robots Using Time-Delay Estimation and Supertwisting Control. IEEE Transactions on Aerospace and Electronic Systems, 2021, 57, 4280-4295.	2.6	19
35	Post-Buckling Spring Vibration Isolator Using Silicone Gel Column: A Theoretical and Experimental Study. Applied Sciences (Switzerland), 2021, 11, 10559.	1.3	3
36	A hybrid continuum robot based on pneumatic muscles with embedded elastic rods. Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 2020, 234, 318-328.	1.1	24

#	Article	IF	CITATIONS
37	Design optimization of the ram structure of friction stir welding robot. Mechanics of Advanced Materials and Structures, 2020, 27, 108-118.	1.5	10
38	A Symplectic Instantaneous Optimal Control for Robot Trajectory Tracking With Differential-Algebraic Equation Models. IEEE Transactions on Industrial Electronics, 2020, 67, 3819-3829.	5.2	97
39	Robust real-time hand detection and localization for space human–robot interaction based on deep learning. Neurocomputing, 2020, 390, 198-206.	3.5	73
40	Effective Capture of Nongraspable Objects for Space Robots Using Geometric Cage Pairs. IEEE/ASME Transactions on Mechatronics, 2020, 25, 95-107.	3.7	69
41	Nonlinear vibration analysis of fiber reinforced composite cylindrical shells with partial constrained layer damping treatment. Thin-Walled Structures, 2020, 157, 107000.	2.7	56
42	A transformed proportional-integral-derivative controller for a multi-vectored propeller aerostat with independent actuator magnitude and rate saturations. Science Progress, 2020, 103, 36850420950123.	1.0	0
43	A nonlinear analytical model of composite plate structure with an MRE function layer considering internal magnetic and temperature fields. Composites Science and Technology, 2020, 200, 108445.	3.8	36
44	Survey on research and development of on-orbit active debris removal methods. Science China Technological Sciences, 2020, 63, 2188-2210.	2.0	48
45	Measurement of Simulated Lunar Soil Information Using Rutting Images. IEEE Access, 2020, 8, 130281-130292.	2.6	1
46	Novel Surface Design of Deployable Reflector Antenna Based on Polar Scissor Structures. Chinese Journal of Mechanical Engineering (English Edition), 2020, 33, .	1.9	10
47	Adaptive robust decoupling control of multi-arm space robots using time-delay estimation technique. Nonlinear Dynamics, 2020, 100, 2449-2467.	2.7	48
48	Novel Method of Obstacle Avoidance Planning for Redundant Sliding Manipulators. IEEE Access, 2020, 8, 78608-78621.	2.6	16
49	Corrections to "Iris Center Localization Using Energy Map With Image Inpaint Technology and Post-Processing Correction― IEEE Access, 2020, 8, 76595-76595.	2.6	0
50	Rapid Prediction of Respiratory Motion Based on Bidirectional Gated Recurrent Unit Network. IEEE Access, 2020, 8, 49424-49435.	2.6	15
51	Iris center localization using energy map synthesis based on gradient and isophote. Journal of Intelligent and Fuzzy Systems, 2020, 38, 4511-4523.	0.8	3
52	Iris Center Localization Using Energy Map With Image Inpaint Technology and Post-Processing Correction. IEEE Access, 2020, 8, 16965-16978.	2.6	10
53	Development of a Novel End-Effector for an On-Orbit Robotic Refueling Mission. IEEE Access, 2020, 8, 17762-17778.	2.6	13
54	Geometric constraint-based modeling and analysis of a novel continuum robot with Shape Memory Alloy initiated variable stiffness. International Journal of Robotics Research, 2020, 39, 1620-1634.	5.8	95

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55	A Two-Stream CNN Framework for American Sign Language Recognition Based on Multimodal Data Fusion. Advances in Intelligent Systems and Computing, 2020, , 107-118.	0.5	2
56	Dynamic Precision Analysis of a Redundant Sliding Manipulator. Communications in Computer and Information Science, 2020, , 157-171.	0.4	0
57	Obstacle Avoidance and Multitarget Tracking of a Super Redundant Modular Manipulator Based on Bezier Curve and Particle Swarm Optimization. Chinese Journal of Mechanical Engineering (English) Tj ETQq1 1 (	).7 <b>8.4</b> 314 r	g&T /Overloc
58	Special Issue on Reconfigurable Robots. Chinese Journal of Mechanical Engineering (English Edition), 2020, 33, .	1.9	0
59	Characteristics Analysis and Comparison of Conventional and Segmental Rotor Type 12/8 Switched Reluctance Motors. IEEE Transactions on Industry Applications, 2019, 55, 3129-3137.	3.3	17
60	Identification of the state-space model and payload mass parameter of a flexible space manipulator using a recursive subspace tracking method. Chinese Journal of Aeronautics, 2019, 32, 513-530.	2.8	25
61	Identification of the time-varying modal parameters of a spacecraft with flexible appendages using a recursive predictor-based subspace identification algorithm. Proceedings of the Institution of Mechanical Engineers, Part G: Journal of Aerospace Engineering, 2019, 233, 2032-2050.	0.7	2
62	Obstacle Avoidance of a Redundant Robot Using Virtual Force Field and Null Space Projection. Lecture Notes in Computer Science, 2019, , 728-739.	1.0	6
63	Dynamics Research and Parameter Optimization of Planetary Penetrators. IEEE Access, 2019, 7, 82052-82065.	2.6	1
64	Analysis of the dynamic mechanical property of multiple direction impact protection structure inspired by C60 molecule. Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 2019, 233, 5919-5932.	1.1	0
65	A Kriging-Based Active Learning Algorithm for Mechanical Reliability Analysis with Time-Consuming and Nonlinear Response. Mathematical Problems in Engineering, 2019, 2019, 1-14.	0.6	5
66	Research on Static Vision-Based Target Localization for Astronaut Assistant Robots. IEEE Access, 2019, 7, 128394-128407.	2.6	4
67	Design and analysis of spring parallel variable stiffness actuator based on antagonistic principle. Mechanism and Machine Theory, 2019, 140, 44-58.	2.7	45
68	Effects of lunar dust simulant on cardiac function and fibrosis in rats. Toxicology Research, 2019, 8, 499-508.	0.9	9
69	Degraded Planary Tracking Control of an Omnidirectional Vectored-Thruster Aerostat. Journal of Aerospace Engineering, 2019, 32, 04019026.	0.8	1
70	Adaptive Path Following and Locomotion Optimization of Snake-Like Robot Controlled by the Central Pattern Generator. Complexity, 2019, 2019, 1-13.	0.9	22
71	Dual-Hand Detection for Human–Robot Interaction by a Parallel Network Based on Hand Detection and Body Pose Estimation. IEEE Transactions on Industrial Electronics, 2019, 66, 9663-9672.	5.2	91
72	Performance Analysis for the Magnetically Coupled Resonant Wireless Energy Transmission System. Complexity, 2019, 2019, 1-13.	0.9	2

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73	Time-varying state-space model identification of an on-orbit rigid-flexible coupling spacecraft using an improved predictor-based recursive subspace algorithm. Acta Astronautica, 2019, 163, 157-167.	1.7	14
74	Configuration analysis of a reconfigurable Rubik's snake robot. Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 2019, 233, 3137-3154.	1.1	16
75	Mechanisms involved in inflammatory pulmonary fibrosis induced by lunar dust simulant in rats. Environmental Toxicology, 2019, 34, 131-140.	2.1	9
76	Improved Neural Network 3D Space Obstacle Avoidance Algorithm for Mobile Robot. Lecture Notes in Computer Science, 2019, , 105-117.	1.0	0
77	Design of experiment-based tolerance synthesis for a lock-or-release mechanism of the Chinese Space Station Microgravity Platform. Mechanical Sciences, 2019, 10, 393-412.	0.5	3
78	A novel vibration measurement and active control method for a hinged flexible two-connected piezoelectric plate. Mechanical Systems and Signal Processing, 2018, 107, 357-395.	4.4	25
79	Research on rat's pulmonary acute injury induced by lunar soil simulant. Journal of the Chinese Medical Association, 2018, 81, 133-140.	0.6	12
80	Head-Raising of Snake Robots Based on a Predefined Spiral Curve Method. Applied Sciences (Switzerland), 2018, 8, 2011.	1.3	7
81	Visual Tracking and Positioning for an Astronaut Assistant Robot. , 2018, , .		0
82	Nonlinear DOB-based explicit NMPC for station-keeping of a multi-vectored propeller airship with thrust saturation. Aeronautical Journal, 2018, 122, 1753-1774.	1.1	8
83	Characteristics Analysis of a Novel 12/14 Conical Bearingless Switched Reluctance Motor. , 2018, , .		3
84	Robust Fuzzy MPC for Station-keeping of A Multi-vectored Propeller Airship Based on Path Following Method. , $2018, \ldots$		3
85	Accuracy modeling and analysis for a lock-or-release mechanism of the Chinese Space Station Microgravity Platform. Mechanism and Machine Theory, 2018, 130, 552-566.	2.7	9
86	Effective motion planning strategy for space robot capturing targets under consideration of the berth position. Acta Astronautica, 2018, 148, 403-416.	1.7	36
87	An improved kinematic calibration method for serial manipulators based on POE formula. Robotica, 2018, 36, 1244-1262.	1.3	15
88	Nonlinear mechanics of flexible cables in space robotic arms subject to complex physical environment. Nonlinear Dynamics, 2018, 94, 649-667.	2.7	9
89	Hand Detection and Location Based on Improved SSD for Space Human-Robot Interaction. Lecture Notes in Computer Science, 2018, , 164-175.	1.0	3
90	Real-Time HALCON-Based Pose Measurement System for an Astronaut Assistant Robot. Lecture Notes in Computer Science, 2018, , 366-378.	1.0	0

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91	Free-flying dynamics and control of an astronaut assistant robot based on fuzzy sliding mode algorithm. Acta Astronautica, 2017, 138, 462-474.	1.7	25
92	Autonomous trajectory planner for space telerobots capturing space debris under the teleprogramming framework. Advances in Mechanical Engineering, 2017, 9, 168781401772329.	0.8	10
93	Static Hand Gesture Recognition with Parallel CNNs for Space Human-Robot Interaction. Lecture Notes in Computer Science, 2017, , 462-473.	1.0	37
94	Zooming image based false matches elimination algorithms for robot navigation. Advances in Mechanical Engineering, 2017, 9, 168781401773815.	0.8	1
95	On-orbit identification of spacecraft time-varying moment of inertia using an improved recursive subspace method., 2017,,.		0
96	Optimal coordinated planning strategy for space robots grasping targets., 2017,,.		0
97	On-orbit identification of time-varying moment of inertia for spacecraft based on a recursive subspace method., 2017,,.		0
98	A Novel Low Velocity Robotic Penetrator Based on Ampere Force. Lecture Notes in Computer Science, 2017, , 613-623.	1.0	1
99	An Interactive Astronaut-Robot System with Gesture Control. Computational Intelligence and Neuroscience, 2016, 2016, 1-11.	1.1	34
100	Stereo reconstruction error analysis for spatial circle based on calibration parameters disturbance model., $2016$ ,,.		0
101	Attitude control for astronaut assisted robot in the space station. International Journal of Control, Automation and Systems, 2016, 14, 1082-1095.	1.6	22
102	Vision-based autonomous docking for self-reconfigurable CubeSats. , 2016, , .		1
103	Survey on research and development of reconfigurable modular robots. Advances in Mechanical Engineering, 2016, 8, 168781401665959.	0.8	51
104	Quaternion Method for the Kinematics Analysis of Parallel Metamorphic Mechanisms. Mechanisms and Machine Science, 2016, , 259-274.	0.3	2
105	Acceleration Sensor-based First Resonance Vibration Suppression of a Double-clamped Piezoelectric Beam. International Journal of Acoustics and Vibrations, 2016, 21, .	0.3	1
106	Calibration of optical center displacement for Zooming image. , 2015, , .		0
107	Fuzzy adaptive PD control for quadrotor helicopter. , 2015, , .		14
108	Bio-inspired design of an inflatable deployable structure. , 2015, , .		1

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109	Experiments on fuzzy sliding mode variable structure control for vibration suppression of a rotating flexible beam. JVC/Journal of Vibration and Control, 2015, 21, 343-358.	1.5	26
110	Dual-layer fuzzy control architecture for the CAS rover arm. International Journal of Control, Automation and Systems, 2015, 13, 1262-1271.	1.6	5
111	Guest editorial on reconfigurable and deployable mechanisms. Advances in Mechanical Engineering, 2015, 7, 168781401559388.	0.8	1
112	Nonlinear Dynamics of Controlled Synchronizations of Manipulator System. Mathematical Problems in Engineering, 2014, 2014, 1-9.	0.6	4
113	Dynamic simulation of the vibration isolation system for astronaut treadmill., 2014,,.		0
114	Smartphone-Controlled Robot Snake for Urban Search and Rescue. Lecture Notes in Computer Science, 2014, , 352-363.	1.0	6
115	Dynamics and control of a parallel mechanism for active vibration isolation in space station. Nonlinear Dynamics, 2014, 76, 1737-1751.	2.7	55
116	China's robotics successes abound. Science, 2014, 345, 523-523.	6.0	9
117	Distance measurement of zooming image for a mobile robot. International Journal of Control, Automation and Systems, 2013, 11, 782-789.	1.6	11
118	Modeling, design and analysis of a biomimetic eyeball-like robot with accommodation mechanism. , 2013, , .		4
119	An Effective Method for Implementing Virtual Control and 3D Simulation of Robot Motion in VC Platform. Jiqiren/Robot, 2013, 35, 594.	0.4	8
120	A model reference adaptive PID control for electromagnetic actuated micro-positioning stage. , 2012, , .		19
121	Evaluation methods for the autonomy of unmanned systems. Science Bulletin, 2012, 57, 3409-3418.	1.7	31
122	A Brief Survey on Inflatable Deployment Space Structures' Research and Development. , 2012, , 773-782.		4
123	Restoration of Epipolar Line Based on Multi-population Cooperative Particle Swarm Optimization. Lecture Notes in Computer Science, 2012, , 574-581.	1.0	0
124	A novel autoâ€adapted pathâ€planning method for a shapeâ€shifting robot. International Journal of Intelligent Computing and Cybernetics, 2011, 4, 61-80.	1.6	5
125	Enumeration of the Non-Isomorphic Configurations for a Reconfigurable Modular Robot with Square-Cubic-Cell Modules. International Journal of Advanced Robotic Systems, 2010, 7, 31.	1.3	10
126	A path planning method for a shape-shifting robot. , 2010, , .		0

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127	AMOEBA-I: A Shape-Shifting Modular Robot for Urban Search and Rescue. Advanced Robotics, 2009, 23, 1057-1083.	1.1	39
128	The Adaptive Path Planning Research for a Shape-Shifting Robot Using Particle Swarm Optimization. , 2009, , .		4
129	Network-based reconfiguration routes for a self-reconfigurable robot. Science in China Series F: Information Sciences, 2008, 51, 1532-1546.	1.1	14
130	Cooperative Negotiation and Control Strategy of A Shape-shifting Robot., 2008,,.		5
131	Development of novel roboticized rock abrasion tool. , 2008, , .		0
132	Configuration representation of a link-type self-reconfigurable mobile robot. , 2008, , .		0
133	Autonomous Control of A Shape-shifting Robot in Urban Terrain. , 2007, , .		0
134	Center-configuration selection technique for the reconfigurable modular robot. Science in China Series F: Information Sciences, 2007, 50, 697-710.	1.1	17
135	Kinematics analysis of a robotic rock grinder. Science Bulletin, 2007, 52, 3299-3304.	1.7	2
136	Current research, key performances and future development of search and rescue robots. Frontiers of Mechanical Engineering in China, 2007, 2, 404-416.	0.4	47
137	Neural Network Based Kinematic Control of the Hyper-Redundant Snake-Like Manipulator. Lecture Notes in Computer Science, 2007, , 767-775.	1.0	2
138	RBF Neural Network Based Shape Control of Hyper-redundant Manipulator with Constrained End-Effector. Lecture Notes in Computer Science, 2006, , 1146-1152.	1.0	2
139	Study on a Novel Link-type Shape Shifting Robot. , 2006, , .		0
140	Transformation Technique Research of the Improved Link-type Shape Shifting Modular Robot., 2006,,.		13
141	REPRESENTING AND ENUMERATING THE NON-ISOMORPHIC CONFIGURATIONS OF THE RECONFIGURATION MODULAR ROBOT. Jixie Gongcheng Xuebao/Chinese Journal of Mechanical Engineering, 2006, 42, 98.	0.7	4
142	CURRENT RESEARCH, KEY PERFORMANCES AND FUTURE DEVELOPMENT OF SEARCH AND RESCUE ROBOT. Jixie Gongcheng Xuebao/Chinese Journal of Mechanical Engineering, 2006, 42, 1.	0.7	24
143	Radiation calibration research on multichannel CCD camera. , 2005, , .		0
144	CMOS APS imaging system application in star tracker. , 2005, 5633, 536.		2

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145	BIONIC RESEARCH ON CONCERTINA MOTION OF A SNAKE-LIKE ROBOT. Jixie Gongcheng Xuebao/Chinese Journal of Mechanical Engineering, 2005, 41, 108.	0.7	2
146	Shape control of hyper-redundant modularized manipulator using variable structure regular polygon. , 0, , .		0
147	Path planning of a snake-like robot based on serpenoid curve and genetic algorithms. , 0, , .		6
148	Development of a shape shifting robot for search and rescue. , 0, , .		8
149	Analysis of stairs-climbing ability for a tracked reconfigurable modular robot. , 0, , .		43
150	A-B Autonomy of a Shape-shifting Robot 'AMOEBA-I' for USAR. , 0, , .		0
151	Special issue on interpretation of deep learning: prediction, representation, quantification and visualization. Complex & Intelligent Systems, 0, , $1\cdot$	4.0	1
152	Mechatronics design of self-adaptive under-actuated climbing robot for pole climbing and ground moving. Robotica, 0, , 1-20.	1.3	2
153	Enumerating the Non-isomorphic Configurations of a Modular Reconfigurable Robot. Journal of Mechanisms and Robotics, 0, , 1-24.	1.5	1