

I-Ming Chen

List of Publications by Year in descending order

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310
papers

5,662
citations

101384

36
h-index

143772

57
g-index

320
all docs

320
docs citations

320
times ranked

3427
citing authors

#	ARTICLE	IF	CITATIONS
1	Local POE model for robot kinematic calibration. Mechanism and Machine Theory, 2001, 36, 1215-1239.	2.7	171
2	Force-closure workspace analysis of cable-driven parallel mechanisms. Mechanism and Machine Theory, 2006, 41, 53-69.	2.7	171
3	Stiffness modeling of flexure parallel mechanism. Precision Engineering, 2005, 29, 467-478.	1.8	157
4	Analytical and experimental investigation on the magnetic field and torque of a permanent magnet spherical actuator. IEEE/ASME Transactions on Mechatronics, 2006, 11, 409-419.	3.7	145
5	Design and Analysis of a Permanent Magnet Spherical Actuator. IEEE/ASME Transactions on Mechatronics, 2008, 13, 239-248.	3.7	133
6	Finding antipodal point grasps on irregularly shaped objects. IEEE Transactions on Automation Science and Engineering, 1993, 9, 507-512.	2.4	109
7	Workspace generation and planning singularity-free path for parallel manipulators. Mechanism and Machine Theory, 2005, 40, 776-805.	2.7	105
8	On Algorithms for Planning S-Curve Motion Profiles. International Journal of Advanced Robotic Systems, 2008, 5, 11.	1.3	92
9	A Wearable Sensing System for Tracking and Monitoring of Functional Arm Movement. IEEE/ASME Transactions on Mechatronics, 2011, 16, 213-220.	3.7	91
10	Workspace analysis of fully restrained cable-driven manipulators. Robotics and Autonomous Systems, 2009, 57, 901-912.	3.0	90
11	Task-based optimization of modular robot configurations: minimized degree-of-freedom approach. Mechanism and Machine Theory, 2000, 35, 517-540.	2.7	83
12	Rapid response manufacturing through a rapidly reconfigurable robotic workcell. Robotics and Computer-Integrated Manufacturing, 2001, 17, 199-213.	6.1	82
13	Autonomous navigation of UAV by using real-time model-based reinforcement learning. , 2016, , .		80
14	Armature Reaction Field and Inductance of Coreless Moving-Coil Tubular Linear Machine. IEEE Transactions on Industrial Electronics, 2014, 61, 6956-6965.	5.2	78
15	Pictobot: A Cooperative Painting Robot for Interior Finishing of Industrial Developments. IEEE Robotics and Automation Magazine, 2018, 25, 82-94.	2.2	74
16	Self-Calibration of a Biologically Inspired 7 DOF Cable-Driven Robotic Arm. IEEE/ASME Transactions on Mechatronics, 2008, 13, 66-75.	3.7	72
17	Enumerating the Non-Isomorphic Assembly Configurations of Modular Robotic Systems. International Journal of Robotics Research, 1998, 17, 702-719.	5.8	71
18	Geometric design optimization of an under-actuated tendon-driven robotic gripper. Robotics and Computer-Integrated Manufacturing, 2018, 50, 80-89.	6.1	70

#	ARTICLE	IF	CITATIONS
19	Kinematic Design of a Six-DOF Parallel-Kinematics Machine With Decoupled-Motion Architecture. , 2004, 20, 876-884.		65
20	Development of finger-motion capturing device based on optical linear encoder. Journal of Rehabilitation Research and Development, 2011, 48, 69.	1.6	64
21	Localization and velocity tracking of human via 3 IMU sensors. Sensors and Actuators A: Physical, 2014, 212, 25-33.	2.0	58
22	Kinematic design of a family of 6-DOF partially decoupled parallel manipulators. Mechanism and Machine Theory, 2009, 44, 912-922.	2.7	55
23	Locomotion and steering aspects in automation of colonoscopy. I. A literature review. IEEE Engineering in Medicine and Biology Magazine, 1997, 16, 85-96.	1.1	54
24	A General Approach to the Dynamics of Nonholonomic Mobile Manipulator Systems. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2002, 124, 512-521.	0.9	54
25	Kinematic design of a 6-DOF parallel manipulator with decoupled translation and rotation. , 2006, 22, 545-551.		54
26	Kinematic calibration of modular reconfigurable robots using product-of-exponentials formula. Journal of Field Robotics, 1997, 14, 807-821.	0.7	51
27	A large deflection and high payload flexure-based parallel manipulator for UV nanoimprint lithography: Part I. Modeling and analyses. Precision Engineering, 2014, 38, 861-871.	1.8	51
28	Design and nonlinear modeling of a large-displacement XYZ flexure parallel mechanism with decoupled kinematic structure. Review of Scientific Instruments, 2006, 77, 115101.	0.6	49
29	Numerical inverse kinematics for modular reconfigurable robots. Journal of Field Robotics, 1999, 16, 213-225.	0.7	48
30	Singularity analysis of three-legged parallel robots based on passive-joint velocities. IEEE Transactions on Automation Science and Engineering, 2001, 17, 413-422.	2.4	47
31	A flexure-based electromagnetic linear actuator. Nanotechnology, 2008, 19, 315501.	1.3	47
32	Automated generation of the DH parameters for configuration design of modular manipulators. Robotics and Computer-Integrated Manufacturing, 2007, 23, 553-562.	6.1	46
33	Kinematic Design of Modular Reconfigurable In-Parallel Robots. Autonomous Robots, 2001, 10, 83-89.	3.2	42
34	Determining task optimal modular robot assembly configurations. , 0, , .		40
35	Locomotive gait generation for inchworm-like robots using finite state approach. Robotica, 2001, 19, 535-542.	1.3	40
36	QuicaBot: Quality Inspection and Assessment Robot. IEEE Transactions on Automation Science and Engineering, 2019, 16, 506-517.	3.4	40

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37	Automation of colonoscopy. II. Visual control aspects. IEEE Engineering in Medicine and Biology Magazine, 1998, 17, 81-88.	1.1	39
38	Automatic Model Generation for Modular Reconfigurable Robot Dynamics. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 1998, 120, 346-352.	0.9	39
39	Electromechanical Modeling of a Permanent-Magnet Spherical Actuator Based on Magnetic-Dipole-Moment Principle. IEEE Transactions on Industrial Electronics, 2009, 56, 1640-1648.	5.2	39
40	3-D Localization of Human Based on an Inertial Capture System. IEEE Transactions on Robotics, 2013, 29, 806-812.	7.3	39
41	Accurate detection of ellipses with false detection control at video rates using a gradient analysis. Pattern Recognition, 2018, 81, 112-130.	5.1	39
42	A generic approximation model for analyzing large nonlinear deflection of beam-based flexure joints. Precision Engineering, 2010, 34, 607-618.	1.8	38
43	Modeling and Iron-Effect Analysis on Magnetic Field and Torque Output of Electromagnetic Spherical Actuators With Iron Stator. IEEE/ASME Transactions on Mechatronics, 2012, 17, 1080-1087.	3.7	38
44	A 6R linkage reconfigurable between the line-symmetric Bricard linkage and the Bennett linkage. Mechanism and Machine Theory, 2013, 70, 278-292.	2.7	37
45	Uncertainty-Based IMU Orientation Tracking Algorithm for Dynamic Motions. IEEE/ASME Transactions on Mechatronics, 2019, 24, 872-882.	3.7	36
46	A qualitative test for N-finger force-closure grasps on planar objects with applications to manipulation and finger gaits. , 0, , .		35
47	Configuration independent kinematics for modular robots. , 0, , .		35
48	Optimal facility layout planning for AGV-based modular prefabricated manufacturing system. Automation in Construction, 2019, 98, 310-321.	4.8	35
49	Task-oriented configuration design for reconfigurable parallel manipulator systems. International Journal of Computer Integrated Manufacturing, 2005, 18, 615-634.	2.9	34
50	Human velocity and dynamic behavior tracking method for inertial capture system. Sensors and Actuators A: Physical, 2012, 183, 123-131.	2.0	34
51	Programming a Robot for Conformance Grinding of Complex Shapes by Capturing the Tacit Knowledge of a Skilled Operator. IEEE Transactions on Automation Science and Engineering, 2017, 14, 1020-1030.	3.4	34
52	Planning algorithms for s-curve trajectories. , 2007, , .		33
53	Decentralized Control of Nonlinear Large-Scale Systems Using Dynamic Output Feedback. Journal of Optimization Theory and Applications, 2000, 104, 459-475.	0.8	32
54	Millimeters-Stroke Nanopositioning Actuator With High Positioning and Thermal Stability. IEEE/ASME Transactions on Mechatronics, 2015, 20, 2813-2823.	3.7	31

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55	Effects of constraint errors on parallel manipulators with decoupled motion. Mechanism and Machine Theory, 2006, 41, 912-928.	2.7	30
56	Inertia sensor-based guidance system for upperlimb posture correction. Medical Engineering and Physics, 2013, 35, 269-276.	0.8	30
57	A large deflection and high payload flexure-based parallel manipulator for UV nanoimprint lithography: Part II. Stiffness modeling and performance evaluation. Precision Engineering, 2014, 38, 872-884.	1.8	30
58	Real-Time Robotic Manipulation of Cylindrical Objects in Dynamic Scenarios Through Elliptic Shape Primitives. IEEE Transactions on Robotics, 2019, 35, 95-113.	7.3	30
59	A geometrical method for the singularity analysis of 3-RRR planar parallel robots with different actuation schemes. , 0, , .		29
60	A Large-Displacement 3-DOF Flexure Parallel Mechanism with Decoupled Kinematics Structure. , 2006, , .		29
61	An experimental characterization of human torso motion. Frontiers of Mechanical Engineering, 2015, 10, 311-325.	2.5	29
62	Singularity analysis of three-legged, six-dof platform manipulators with urs legs. IEEE/ASME Transactions on Mechatronics, 2003, 8, 469-475.	3.7	28
63	Analysis and design of a 3-DOF flexure-based zero-torsion parallel manipulator for nano-alignment applications. , 2011, , .		28
64	Design, Modeling and Experiments of 3-DOF Electromagnetic Spherical Actuators. Mechanisms and Machine Science, 2011, , .	0.3	28
65	Finding antipodal point grasps on irregularly shaped objects. , 0, , .		27
66	Equivolumetric partition of solid spheres with applications to orientation workspace analysis of robot manipulators. , 2006, 22, 869-879.		27
67	A direct violation correction method in numerical simulation of constrained multibody systems. Computational Mechanics, 2000, 26, 52-57.	2.2	26
68	Self-calibration of three-legged modular reconfigurable parallel robots based on leg-end distance errors. Robotica, 2001, 19, 187-198.	1.3	26
69	A geometrical approach for online error compensation of industrial manipulators. , 2010, , .		26
70	MAGNETIC FIELD OF TUBULAR LINEAR MACHINES WITH DUAL HALBACH ARRAY. Progress in Electromagnetics Research, 2013, 136, 283-299.	1.6	26
71	An Orientation Measurement Method Based on Hall-effect Sensors for Permanent Magnet Spherical Actuators with 3D Magnet Array. Scientific Reports, 2014, 4, 6756.	1.6	26
72	Wearable wireless sensing system for capturing human arm motion. Sensors and Actuators A: Physical, 2011, 166, 125-132.	2.0	25

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73	Hybrid torque modeling of spherical actuators with cylindrical-shaped magnet poles. <i>Mechatronics</i> , 2011, 21, 85-91.	2.0	24
74	A flexure-based electromagnetic nanopositioning actuator with predictable and re-configurable open-loop positioning resolution. <i>Precision Engineering</i> , 2015, 40, 249-260.	1.8	24
75	Using a genetic algorithm to schedule the space-constrained AGV-based prefabricated bathroom units manufacturing system. <i>International Journal of Production Research</i> , 0, , 1-17.	4.9	23
76	A Telemanipulation-Based Human-Robot Collaboration Method to Teach Aerospace Masking Skills. <i>IEEE Transactions on Industrial Informatics</i> , 2020, 16, 3076-3084.	7.2	23
77	Design and kinematic analysis of modular reconfigurable parallel robots. , 0, , .		22
78	D-Type learning control for nonlinear time-varying systems with unknown initial states and inputs. <i>Transactions of the Institute of Measurement and Control</i> , 2001, 23, 69-82.	1.1	22
79	A Three Degree-of-Freedom Optical Orientation Measurement Method for Spherical Actuator Applications. <i>IEEE Transactions on Automation Science and Engineering</i> , 2011, 8, 319-326.	3.4	22
80	Reconfigurable mechanism generated from the network of Bennett linkages. <i>Mechanism and Machine Theory</i> , 2015, 88, 49-62.	2.7	22
81	Singularity-free path planning of parallel manipulators using clustering algorithm and line geometry. , 0, , .		21
82	Real-Time Avoidance Strategy of Dynamic Obstacles via Half Model-Free Detection and Tracking With 2D Lidar for Mobile Robots. <i>IEEE/ASME Transactions on Mechatronics</i> , 2021, 26, 2215-2225.	3.7	21
83	Inverse kinematics for modular reconfigurable robots. , 0, , .		20
84	Cartesian coordinate control for redundant modular robots. , 0, , .		20
85	Mechatronic Design and Locomotion of Amoebot?A Metamorphic Underwater Vehicle. <i>Journal of Field Robotics</i> , 2003, 20, 307-314.	0.7	20
86	Magnetic field modeling of a dual-magnet configuration. <i>Journal of Applied Physics</i> , 2007, 102, 074924.	1.1	20
87	Transfer learning on convolutional activation feature as applied to a building quality assessment robot. <i>International Journal of Advanced Robotic Systems</i> , 2017, 14, 172988141771262.	1.3	20
88	Simultaneous base and tool calibration for self-calibrated parallel robots. <i>Robotica</i> , 2002, 20, 367-374.	1.3	19
89	Torque Modeling of a Spherical Actuator Based on Lorentz Force Law. , 0, , .		19
90	A Robust Robot Design for Item Picking. , 2018, , .		19

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91	High Torque Density Torque Motor With Hybrid Magnetization Pole Arrays for Jet Pipe Servo Valve. IEEE Transactions on Industrial Electronics, 2020, 67, 2133-2142.	5.2	19
92	Evaluation of resolution of flexure parallel mechanisms for ultraprecision manipulation. Review of Scientific Instruments, 2004, 75, 3016-3024.	0.6	18
93	Micro-motion selective-actuation X Y Z flexure parallel mechanism: design and modeling. Journal of Micromechatronics, 2005, 3, 51-73.	1.9	18
94	A low-cost motion tracker and its error analysis. , 2008, , .		18
95	Grasp analysis and optimal design of robotic fingertip for two tendon-driven fingers. Mechanism and Machine Theory, 2018, 130, 447-462.	2.7	18
96	Closed-form inverse kinematics solver for reconfigurable robots. , 0, , .		17
97	Singularity analysis of three-legged parallel robots based on passive-joint velocities. , 0, , .		17
98	SLAC: 3D localization of human based on kinetic human movement capture. , 2011, , .		17
99	Kinematic Study of the Original and Revised General Line-Symmetric Bricard 6R Linkages. Journal of Mechanisms and Robotics, 2014, 6, .	1.5	17
100	Equivalent energized coil model for magnetic field of permanent-magnet spherical actuators. Sensors and Actuators A: Physical, 2015, 229, 68-76.	2.0	17
101	Fast Ellipse Detection via Gradient Information for Robotic Manipulation of Cylindrical Objects. IEEE Robotics and Automation Letters, 2018, 3, 2754-2761.	3.3	17
102	Many strings attached - From conventional to robotic marionette manipulation. IEEE Robotics and Automation Magazine, 2005, 12, 59-74.	2.2	16
103	Numerical Orientation Workspace Analysis with Different Parameterization Methods. , 2006, , .		16
104	Torque Modeling of Spherical Actuators with Double-layer Poles. , 2006, , .		16
105	Analysis of Pole Configurations of Permanent-Magnet Spherical Actuators. IEEE/ASME Transactions on Mechatronics, 2010, , .	3.7	16
106	Novel permanent magnet linear motor with isolated movers: Analytical, numerical and experimental study. Review of Scientific Instruments, 2014, 85, 105007.	0.6	16
107	A wearable, self-calibrating, wireless sensor network for body motion processing. , 2008, , .		15
108	A novel approach for positional sensing of a spherical geometry. Sensors and Actuators A: Physical, 2011, 168, 328-334.	2.0	15

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109	Enabling grasp action: Generalized quality evaluation of grasp stability via contact stiffness from contact mechanics insight. <i>Mechanism and Machine Theory</i> , 2019, 134, 625-644.	2.7	15
110	Workspace evaluation of manipulators through finite-partition of SE(3). <i>Robotics and Computer-Integrated Manufacturing</i> , 2011, 27, 850-859.	6.1	14
111	Adaptive centroid-finding algorithm for freeform surface measurements. <i>Applied Optics</i> , 2013, 52, D75.	0.9	14
112	A tubular linear machine with dual Halbach array. <i>Engineering Computations</i> , 2014, 31, 177-200.	0.7	14
113	Strategy-based robotic item picking from shelves. , 2016, , .		14
114	Magnetic field modeling based on geometrical equivalence principle for spherical actuator with cylindrical shaped magnet poles. <i>Aerospace Science and Technology</i> , 2016, 49, 17-25.	2.5	14
115	Object Pose Estimation via Pruned Hough Forest With Combined Split Schemes for Robotic Grasp. <i>IEEE Transactions on Automation Science and Engineering</i> , 2021, 18, 1814-1821.	3.4	14
116	Finite-time disturbance observer-based trajectory tracking control for flexible-joint robots. <i>Nonlinear Dynamics</i> , 2021, 106, 459-471.	2.7	14
117	“Left Arm Up!” Interactive Yoga training in virtual environment. , 2011, , .		13
118	Modular Robots. <i>Springer Handbooks</i> , 2016, , 531-542.	0.3	13
119	Numerical inverse kinematics for modular reconfigurable robots. <i>Journal of Field Robotics</i> , 1999, 16, 213-225.	0.7	13
120	Interactive-motion control of modular reconfigurable manipulators. , 0, , .		12
121	Instantaneous kinematics and singularity analysis of three-legged parallel manipulators. <i>Robotica</i> , 2004, 22, 189-203.	1.3	12
122	A Large-Displacement and Decoupled XYZ Flexure Parallel Mechanism for Micromanipulation. , 2006, , .		12
123	A generic tension-closure analysis method for fully-constrained cable-driven parallel manipulators. , 2009, , .		12
124	A low cost wearable optical-based goniometer for human joint monitoring. <i>Frontiers of Mechanical Engineering in China</i> , 2010, 6, 13.	0.4	12
125	A low cost wearable wireless sensing system for upper limb home rehabilitation. , 2010, , .		12
126	Reference-free Shack“Hartmann wavefront sensor. <i>Optics Letters</i> , 2011, 36, 2752.	1.7	12

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127	A method for capturing the tacit knowledge in the surface finishing skill by demonstration for programming a robot. , 2014, , .		12
128	Exemplar-inspired strategies for low-resource spoken keyword search in Swahili. , 2016, , .		12
129	Capturing the tacit knowledge of the skilled operator to program tool paths and tool orientations for robot belt grinding. International Journal of Advanced Manufacturing Technology, 2017, 91, 1599-1618.	1.5	12
130	Flexible telemanipulation based handy robot teaching on tape masking with complex geometry. Robotics and Computer-Integrated Manufacturing, 2020, 66, 101990.	6.1	12
131	Kinematics, workspace and static analyses of 2-DOF flexure parallel mechanism. , 0, , .		11
132	Automatic Modeling for Modular Reconfigurable Robotic Systems: Theory and Practice. , 2006, , .		11
133	Motion Control of a Robotic Puppet through a Hybrid Motion Capture Device. , 2007, , .		11
134	Intuitive vibro-tactile feedback for human body movement guidance. , 2009, , .		11
135	Building Hand Motion-Based Character Animation: The Case of Puppetry. , 2010, , .		11
136	Design and analysis of a cable-driven manipulator with variable stiffness. , 2013, , .		11
137	Marionette: From Traditional Manipulation to Robotic Manipulation. , 2004, , 119-133.		11
138	Automatic generation of dynamics for modular robots with hybrid geometry. , 0, , .		10
139	Structure synthesis and singularity analysis of a parallel manipulator based on selective actuation. , 2004, , .		10
140	Robust control of XYZ flexure-based micromanipulator with large motion. Frontiers of Mechanical Engineering in China, 2009, 4, 25-34.	0.4	10
141	Compact piezoelectric micromotor with a single bulk lead zirconate titanate stator. Applied Physics Letters, 2013, 102, .	1.5	10
142	Continuous Terminal Sliding-Mode Control for FJR Subject to Matched/Mismatched Disturbances. IEEE Transactions on Cybernetics, 2022, 52, 10479-10489.	6.2	10
143	A novel kinematic calibration algorithm for reconfigurable robotic systems. , 0, , .		9
144	Experimental Investigation on the Magnetic Field of a Permanent Magnet Spherical Actuator. , 0, , .		9

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145	Management of parallel-manipulator singularities using joint-coupling. <i>Advanced Robotics</i> , 2007, 21, 583-600.	1.1	9
146	Flux Field Formulation and Back-Iron Analysis of Tubular Linear Machines. <i>IEEE Transactions on Magnetics</i> , 2012, 48, 2617-2626.	1.2	9
147	A novel method for 3D reconstruction: Division and merging of overlapping B-spline surfaces. <i>CAD Computer Aided Design</i> , 2016, 81, 14-23.	1.4	9
148	Efficient Pose Estimation from Single RGB-D Image via Hough Forest with Auto-Context. , 2018, , .		9
149	Vision-Based Measurement and Prediction of Object Trajectory for Robotic Manipulation in Dynamic and Uncertain Scenarios. <i>IEEE Transactions on Instrumentation and Measurement</i> , 2020, 69, 8939-8952.	2.4	9
150	Dynamic analysis of a 3-DOF flexure parallel micromanipulator. , 0, , .		8
151	A hybrid approach for magnetic field analysis. , 0, , .		8
152	Motion generation methodology of a permanent magnet spherical actuator. , 2009, , .		8
153	Visual marker-guided mobile robot solution for automated item picking in a warehouse. , 2017, , .		8
154	Robust ellipse detection via arc segmentation and classification. , 2017, , .		8
155	Learning sampling distribution for motion planning with local reconstruction-based self-organizing incremental neural network. <i>Neural Computing and Applications</i> , 2019, 31, 9185-9205.	3.2	8
156	Nonprehensile Manipulation: a Trajectory-Planning Perspective. <i>IEEE/ASME Transactions on Mechatronics</i> , 2020, , 1-1.	3.7	8
157	Singularity analysis of three-legged, six-DOF platform manipulators with RRRS legs. , 0, , .		7
158	A piezo-on-slider type linear ultrasonic motor for the application of positioning stages. , 1999, , .		7
159	Workspace analysis and singularity representation of three-legged parallel manipulators. , 0, , .		7
160	Spatial learning in a virtual multilevel building: Evaluating three exocentric view aids. <i>International Journal of Human Computer Studies</i> , 2010, 68, 746-759.	3.7	7
161	The development of a real-time wearable motion replication platform with spatial sensing and tactile feedback. , 2010, , .		7
162	Method to calibrate the skeleton model using orientation sensors. , 2013, , .		7

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163	Interactive robots as social partner for communication care. , 2014, , .		7
164	Automatic robot taping: system integration. , 2015, , .		7
165	Innovations in Infrastructure Service Robots. CISM International Centre for Mechanical Sciences, Courses and Lectures, 2016, , 3-16.	0.3	7
166	Quantitative Assessment at Task-Level for Performance of Robotic Configurations and Task Plans. Journal of Intelligent and Robotic Systems: Theory and Applications, 2019, 96, 439-456.	2.0	7
167	Compliant Manipulators. , 2014, , 1-63.		7
168	Mechanical design & numerical electromagnetic analysis of a DC spherical actuator. , 0, , .		6
169	A body sensor network for tracking and monitoring of functional arm motion. , 2009, , .		6
170	Empirical formulation of torque output for spherical actuators with low-cost rotor poles. , 2009, , .		6
171	Personalized biomedical devices & systems for healthcare applications. Frontiers of Mechanical Engineering in China, 2010, 6, 3.	0.4	6
172	Simultaneous Localization and Capture with velocity information. , 2011, , .		6
173	A compact 3-DOF compliant serial mechanism for trajectory tracking with flexures made by rapid prototyping. , 2012, , .		6
174	Surface-to-surface calibration of acoustic emission sensors. Sensors and Actuators A: Physical, 2012, 174, 16-23.	2.0	6
175	System and keyword dependent fusion for spoken term detection. , 2014, , .		6
176	Automated construction quality assessment: A review. , 2015, , .		6
177	Developing and benchmarking show & tell robotic puppet for preschool education. , 2015, , .		6
178	An agile robot taping system “ modeling, tool design, planning and execution. Industrial Robot, 2016, 43, 503-512.	1.2	6
179	Strategy for robot motion and path planning in robot taping. Frontiers of Mechanical Engineering, 2016, 11, 195-203.	2.5	6
180	A 3-DOF quick-action parallel manipulator based on four linkage mechanisms with high-speed cam. Mechanism and Machine Theory, 2017, 115, 168-196.	2.7	6

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181	Analysis With Histogram of Connectivity: For Automated Evaluation of Piping Layout. IEEE Transactions on Automation Science and Engineering, 2018, 15, 381-392.	3.4	6
182	Analytical models of electromagnetic field and torques in a novel reaction sphere actuator. , 2018, , .		6
183	Robust Output Feedback Tracking Control for Flexible-Joint Robots Based on CTSMC Technique. IEEE Transactions on Circuits and Systems II: Express Briefs, 2021, 68, 1982-1986.	2.2	6
184	Gait generation for inchworm-like robot locomotion using finite state model. , 0, , .		5
185	A virtual reality system for arm and hand rehabilitation. Frontiers of Mechanical Engineering in China, 2011, 6, 23.	0.4	5
186	Spatial Representation of a Virtual Room Space: Perspective and Vertical Movement. International Journal of Human-Computer Interaction, 2010, 26, 661-674.	3.3	5
187	An interactive therapy system for arm and hand rehabilitation. , 2010, , .		5
188	Human velocity tracking and localization using 3 IMU sensors. , 2013, , .		5
189	Design and modeling of tubular flux-switching permanent magnet linear motor. , 2014, , .		5
190	Design and analysis of an improved Halbach tubular linear motor with non-ferromagnetic mover tube for direct-driven EHA. , 2014, , .		5
191	Automatic robot taping: Auto-path planning and manipulation. , 2015, , .		5
192	Flux Field and Thrust Analysis of Permanent-Magnet Linear Machines With Isolated Movers. IEEE Transactions on Magnetics, 2015, 51, 1-8.	1.2	5
193	Reliability and Validity of Skills and Needs Inventories in Functional Behavior Assessments and Interventions for School Personnel. Journal of Special Education, 2016, 49, 233-242.	1.2	5
194	Torque optimization of a novel reaction sphere actuator based on support vector machines. , 2018, , .		5
195	Design and Analysis of a Modular Hybrid Parallel-Serial Manipulator for Robotised Deburring Applications. , 2008, , 167-188.		5
196	Design and analysis of a 3-RPRS modular parallel manipulator for rapid deployment. , 0, , .		4
197	The management of parallel-manipulator singularities using joint-coupling. , 0, , .		4
198	Design and analysis of a permanent magnet spherical actuator. , 2005, , .		4

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199	A Novel Actuator for High-Precision Alignment in a Nano-Imprint Multi-Layers-Interconnection Fabrication. Proceedings - IEEE International Conference on Robotics and Automation, 2007, , .	0.0	4
200	Strategies in vibrotactile feedback for improved upper arm posture mapping and replication using inertia sensors. , 2011, , .		4
201	Optimization of scanning strategy of digital Shackâ€“Hartmann wavefront sensing. Applied Optics, 2012, 51, 121.	0.9	4
202	Planar jumping with stable landing through foot orientation design and ankle joint control. Frontiers of Mechanical Engineering, 2012, 7, 100-108.	2.5	4
203	Analytical and Numerical Investigation on the Magnetic Field of Novel PM Spherical Actuator with Outer Rotor. , 2014, , .		4
204	Novel tubular switched reluctance motor with double excitation windings: Design, modeling, and experiments. Review of Scientific Instruments, 2015, 86, 125004.	0.6	4
205	Analysis of kinematics and dynamics of snake-like robot with joints of 4-DOF. , 2015, , .		4
206	Design and modeling of tubular double excitation windings linear switched reluctance motor. , 2015, , .		4
207	Repelling-screw-based geometrical interpretation of dualities of compliant mechanisms. Mechanism and Machine Theory, 2022, 169, 104636.	2.7	4
208	Singularity management of 2DOF planar manipulator using coupled kinematics. , 0, , .		3
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210	Design expressive behaviors for robotic puppet. , 0, , .		3
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