Jian S Dai

List of Publications by Year
in descending order

		46984	71651
366	8,500	47	76
papers	citations	h-index	g-index

379	379	379	3160
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Design and Analysis of a Novel Reconfigurable Ankle Rehabilitation Exoskeleton Capable of Matching the Mobile Biological Joint Center in Real-Time. Journal of Mechanisms and Robotics, 2023, 15, .	1.5	4
2	Kinetostatic backflip strategy for self-recovery of quadruped robots with the selected rotation axis. Robotica, 2022, 40, 1713-1731.	1.3	8
3	Novel Design of a Rotation Center Auto-Matched Ankle Rehabilitation Exoskeleton With Decoupled Control Capacity. Journal of Mechanical Design, Transactions of the ASME, 2022, 144, .	1.7	8
4	Compliance model of Exechon manipulators with an offset wrist. Mechanism and Machine Theory, 2022, 167, 104558.	2.7	12
5	Variable-gain control for continuum robots based on velocity sensitivity. Mechanism and Machine Theory, 2022, 168, 104618.	2.7	6
6	Repelling-screw-based geometrical interpretation of dualities of compliant mechanisms. Mechanism and Machine Theory, 2022, 169, 104636.	2.7	4
7	Safe physical human-robot interaction: A quasi whole-body sensing method based on novel laser-ranging sensor ring pairs. Robotics and Computer-Integrated Manufacturing, 2022, 75, 102280.	6.1	7
8	Power-Shaping Model-Based Control With Feedback Deactivation for Flexible-Joint Robot Interaction. IEEE Robotics and Automation Letters, 2022, 7, 4566-4573.	3.3	8
9	A humanoid robotic hand capable of internal assembly and measurement in spacesuit gloves. Industrial Robot, 2022, 49, 603-615.	1.2	3
10	Finite displacement screw-based group analysis of 3PRS parallel mechanisms. Mechanism and Machine Theory, 2022, 171, 104727.	2.7	6
11	The investigation of environmental sustainability within product design: a critical review. Design Science, 2022, 8, .	1.1	12
12	Origaker: A Novel Multi-Mimicry Quadruped Robot Based on a Metamorphic Mechanism. Journal of Mechanisms and Robotics, 2022, 14, .	1.5	20
13	Minimally Model-Based Trajectory Tracking and Variable Impedance Control of Flexible-Joint Robots. IEEE Transactions on Industrial Electronics, 2021, 68, 6031-6041.	5.2	36
14	Analysis and Synthesis of Compliant Parallel Mechanismsâ€"Screw Theory Approach. Springer Tracts in Advanced Robotics, 2021, , .	0.3	7
15	Six novel 6R metamorphic mechanisms induced from three-series-connected Bennett linkages that vary among classical linkages. Mechanism and Machine Theory, 2021, 156, 104133.	2.7	19
16	An Improved Boucâ€"Wen Model Based on Equitorque Discretization for a Load-Dependent Nonlinear Stiffness Actuator. IEEE Transactions on Automation Science and Engineering, 2021, 18, 840-849.	3.4	2
17	Graph Representations. , 2021, , 1-12.		0
18	Flexible-Joint Humanoid Balancing Augmentation via Full-State Feedback Variable Impedance Control. Journal of Mechanisms and Robotics, 2021, 13, .	1.5	7

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19	Structure Synthesis of a Class of Parallel Manipulators With Fully Decoupled Projective Motion. Journal of Mechanisms and Robotics, 2021, 13, .	1.5	9
20	Design of Transformable Hinged Ori-Block Dissected from Cylinders and Cones. Journal of Mechanical Design, Transactions of the ASME, 2021, 143, .	1.7	13
21	Design of a novel simulated â€œsoftâ€•mechanical grasper. Mechanism and Machine Theory, 2021, 158, 104240.	2.7	12
22	Geometric Design-based Dimensional Synthesis of a Novel Metamorphic Multi-fingered Hand with Maximal Workspace. Chinese Journal of Mechanical Engineering (English Edition), 2021, 34, .	1.9	5
23	Reconfigurability of the origami-inspired integrated 8R kinematotropic metamorphic mechanism and its evolved 6R and 4R mechanisms. Mechanism and Machine Theory, 2021, 161, 104245.	2.7	29
24	A novel reconfigurable spherical joint based on linear independence of screws and its resultant metamorphic mechanisms. Mechanism and Machine Theory, 2021, 164, 104351.	2.7	4
25	Revelation of metamorphic phenomenon through the equivalent mechanisms and development of the novel metamorphic epicyclic gear trains. Mechanism and Machine Theory, 2021, 166, 104433.	2.7	4
26	A Lie-Theory-Based Dynamic Parameter Identification Methodology for Serial Manipulators. IEEE/ASME Transactions on Mechatronics, 2021, 26, 2688-2699.	3.7	26
27	Screw theory-based stiffness analysis for a fluidic-driven soft robotic manipulator. , 2021, , .		4
28	Large Deformation Analysis ofÂCompliant Parallel Mechanisms. Springer Tracts in Advanced Robotics, 2021, , 121-145.	0.3	1
29	An Introduction to Screw Theory. Springer Tracts in Advanced Robotics, 2021, , 17-31.	0.3	0
30	Compliance Parameterization andÂOptimization of Compliant Parallel Mechanisms. Springer Tracts in Advanced Robotics, 2021, , 99-120.	0.3	0
31	Conceptual Design of Compliant Parallel Mechanisms. Springer Tracts in Advanced Robotics, 2021, , 65-79.	0.3	0
32	Construction of Compliant Mechanisms. Springer Tracts in Advanced Robotics, 2021, , 49-64.	0.3	0
33	Stiffness Construction and Decomposition of Compliant Parallel Mechanisms. Springer Tracts in Advanced Robotics, 2021, , 81-98.	0.3	1
34	Screw Representation of Flexible Elements. Springer Tracts in Advanced Robotics, 2021, , 33-48.	0.3	0
35	Message from the new Editors-in-Chief. Robotica, 2021, 39, 1-2.	1.3	3
36	A Novel Ortho-Triplex Tensegrity Derived by the Linkage-Truss Transformation With Prestress-Stability Analysis Using Screw Theory. Journal of Mechanical Design, Transactions of the ASME, 2021, 143, .	1.7	1

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37	A Sarrus-like overconstrained eight-bar linkage and its associated Fulleroid-like platonic deployable mechanisms. Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 2020, 234, 241-262.	1.1	19
38	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
39	Optimization of Stiffness to Achieve Increased Bandwidth and Torque Resolution in Nonlinear Stiffness Actuators. IEEE Transactions on Industrial Electronics, 2020, 67, 2925-2935.	5.2	11
40	Analysis of unified error model and simulated parameters calibration for robotic machining based on Lie theory. Robotics and Computer-Integrated Manufacturing, 2020, 61, 101855.	6.1	28
41	Passivity Preservation for Variable Impedance Control of Compliant Robots. IEEE/ASME Transactions on Mechatronics, 2020, 25, 2342-2353.	3.7	32
42	Analytical Expressions of Serial Manipulator Jacobians and their High-Order Derivatives based on Lie Theory. , 2020, , .		4
43	Geometrical revelation of correlated characteristics of the ray and axis order of the PlÃ¼cker coordinates in line geometry. Mechanism and Machine Theory, 2020, 153, 103983.	2.7	15
44	Bifurcation variations and motion-ruled-surface evolution of a novel Schatz linkage induced metamorphic mechanism. Mechanism and Machine Theory, 2020, 150, 103867.	2.7	27
45	High-order based revelation of bifurcation of novel Schatz-inspired metamorphic mechanisms using screw theory. Mechanism and Machine Theory, 2020, 152, 103931.	2.7	25
46	A deformable tetrahedron rolling mechanism (DTRM) based on URU branch. Mechanism and Machine Theory, 2020, 153, 104000.	2.7	9
47	A matrix method to determine infinitesimally mobile linkages with only first-order infinitesimal mobility. Mechanism and Machine Theory, 2020, 148, 103776.	2.7	7
48	Tangential intersection of branches of motion. Mechanism and Machine Theory, 2020, 147, 103730.	2.7	10
49	Instantaneous mobility analysis using the twist space intersection approach for parallel mechanisms. Mechanism and Machine Theory, 2020, 151, 103866.	2.7	8
50	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
51	Lie Group Based Type Synthesis Using Transformation Configuration Space for Reconfigurable Parallel Mechanisms With Bifurcation Between Spherical Motion and Planar Motion. Journal of Mechanical Design, Transactions of the ASME, 2020, 142, .	1.7	26
52	A Mechanically Intelligent Crawling Robot Driven by Shape Memory Alloy and Compliant Bistable Mechanism. Journal of Mechanisms and Robotics, 2020, 12, .	1.5	33
53	Structure Synthesis of Parallel Manipulators With Fully Decoupled Projective Motion and Any Degrees of Freedom. , 2020, , .		0
54	Kinematic Calibration of a 3rRPS Metamorphic Parallel Mechanism. , 2020, , .		0

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55	A Model-Free Solution for Stable Balancing and Locomotion of Floating-base Legged Systems. , 2020, , .		4
56	Design analysis and type synthesis of a petal-inspired space deployable-foldable mechanism. Mechanism and Machine Theory, 2019, 141, 151-170.	2.7	35
57	A novel 6R metamorphic mechanism with eight motion branches and multiple furcation points. Mechanism and Machine Theory, 2019, 142, 103598.	2.7	28
58	Enabling grasp action: Generalized quality evaluation of grasp stability via contact stiffness from contact mechanics insight. Mechanism and Machine Theory, 2019, 134, 625-644.	2.7	15
59	Trajectory Tracking Control for Flexible-Joint Robot Based on Extended Kalman Filter and PD Control. Frontiers in Neurorobotics, 2019, 13, 25.	1.6	5
60	Kinematics and statics of eccentric soft bending actuators with external payloads. Mechanism and Machine Theory, 2019, 139, 526-541.	2.7	38
61	Jumping with Expandable Trunk of a Metamorphic Quadruped Robotâ€"The Origaker II. Applied Sciences (Switzerland), 2019, 9, 1778.	1.3	7
62	Reconfiguration-aimed and manifold-operation based type synthesis of metamorphic parallel mechanisms with motion between 1R2T and 2R1T. Mechanism and Machine Theory, 2019, 139, 66-80.	2.7	41
63	Relevance and Transferability for Parallel Mechanisms With Reconfigurable Platforms. Journal of Mechanisms and Robotics, 2019, 11, .	1.5	17
64	Task space-based orientability analysis and optimization of a wire-driven continuum robot. Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 2019, 233, 7658-7668.	1.1	6
65	A synthesis method for 1-DOF mechanisms with a cusp in the configuration space. Mechanism and Machine Theory, 2019, 132, 154-175.	2.7	18
66	The isomorphic design and analysis of a novel plane-space polyhedral metamorphic mechanism. Mechanism and Machine Theory, 2019, 131, 152-171.	2.7	10
67	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
68	A new mechanical design method of compliant actuators with non-linear stiffness with predefined deflection-torque profiles. Mechanism and Machine Theory, 2019, 133, 164-178.	2.7	31
69	First- and Second-Order Kinematics-Based Constraint System Analysis and Reconfiguration Identification for the Queer-Square Mechanism. Journal of Mechanisms and Robotics, 2019, 11, .	1.5	15
70	Three Novel Symmetric Waldronâ€"Bricard Metamorphic and Reconfigurable Mechanisms and Their Isomerization. Journal of Mechanisms and Robotics, 2019, 11, .	1.5	18
71	Stability Margin of a Metamorphic Quadruped Robot With a Twisting Trunk. Journal of Mechanisms and Robotics, 2019, 11, .	1.5	21
72	Mechanism design and analysis of a proposed wheelchair-exoskeleton hybrid robot for assisting human movement. Mechanical Sciences, 2019, 10, 11-24.	0.5	21

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73	A Shape Memory Alloy Driven Crawling Robot Utilizing a Bistable Mechanism. , 2019, , .		3
74	Model-Free Control for Continuum Robots Based on an Adaptive Kalman Filter. IEEE/ASME Transactions on Mechatronics, 2018, 23, 286-297.	3.7	125
75	Bifurcated configurations and their variations of an 8-bar linkage derived from an 8-kaleidocycle. Mechanism and Machine Theory, 2018, 121, 745-754.	2.7	29
76	Selective-Compliance-Based Lagrange Model and Multilevel Noncollocated Feedback Control of a Humanoid Robot. Journal of Mechanisms and Robotics, 2018, 10, .	1.5	13
77	Compositional Submanifolds of Prismaticâ€“Universalâ€“Prismatic and Skewed Prismaticâ€“Revoluteâ€“ Prismatic Kinematic Chains and Their Derived Parallel Mechanisms. Journal of Mechanisms and Robotics, 2018, 10, .	1.5	4
78	Geometric design optimization of an under-actuated tendon-driven robotic gripper. Robotics and Computer-Integrated Manufacturing, 2018, 50, 80-89.	6.1	70
79	A Finite and Instantaneous Screw Based Approach for Topology Design and Kinematic Analysis of 5-Axis Parallel Kinematic Machines. Chinese Journal of Mechanical Engineering (English Edition), 2018, 31, .	1.9	28
80	Trot Gait with Twisting Trunk of a Metamorphic Quadruped Robot. Journal of Bionic Engineering, 2018, 15, 971-981.	2.7	26
81	Self-aligning Analysis of the Metamorphic Palm of the KCL/TJU Metamorphic Hand. , 2018, , .		1
82	A Metamorphic Hand with Coplanar Reconfiguration. , 2018, , .		4
83	Group Method for Synthesis of Metamorphic Parallel Mechanism with 1R2T and 2R1T Reconfiguration. , 2018, , .		1
84	Preventing Tumbling With a Twisting Trunk for the Quadruped Robot: Origaker I. , 2018, , .		2
85	Metamorphic Mechanism and Reconfiguration of a Biomimetic Quadruped Robot. , 2018, , .		1
86	Matrix Analysis of Second-Order Kinematic Constraints of Single-Loop Linkages in Screw Coordinates. , 2018, , .		2
87	A Muscle-Specific Rehabilitation Training Method Based on Muscle Activation and the Optimal Load Orientation Concept. Applied Bionics and Biomechanics, 2018, 2018, 1-13.	0.5	2
88	A Single-Loop 8R Linkage with Plane-Symmetry and Bifurcation Property. , 2018, , .		2
89	Towards a Modular Suturing Catheter for Minimally Invasive Vascular Surgery. , 2018, , .		2
90	Dynamic Modelling and Simulation of a Deployable Quadrotor. , 2018, , .		3

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91	Motion Cycle and Configuration Torus With Their Relationship to Furcation During Reconfiguration. Journal of Mechanisms and Robotics, 2018, 10, .	1.5	3
92	Grasp analysis and optimal design of robotic fingertip for two tendon-driven fingers. Mechanism and Machine Theory, 2018, 130, 447-462.	2.7	18
93	Origami Carton Non Linear Multi-Body Simulation Towards Industry 4.0: Preliminary Study. , 2018, , .		0
94	A Mapping Method of Grasping Posture Applying to the Metamorphic Multi-fingered Hand. , 2018, , .		3
95	Novel spherical-planar and Bennett-spherical 6R metamorphic linkages with reconfigurable motion branches. Mechanism and Machine Theory, 2018, 128, 628-647.	2.7	41
96	Design and modeling of a soft robotic surface with hyperelastic material. Mechanism and Machine Theory, 2018, 130, 109-122.	2.7	38
97	Origami robots. Zhongguo Kexue Jishu Kexue/Scientia Sinica Technologica, 2018, 48, 1259-1274.	0.3	7
98	Continuous Static Gait with Twisting Trunk of a Metamorphic Quadruped Robot. Mechanical Sciences, 2018, 9, 1-14.	0.5	23
99	Kinematic analysis and optimization of a planar parallel compliant mechanism for self-alignment knee exoskeleton. Mechanical Sciences, 2018, 9, 405-416.	0.5	15
100	Rolling Contact in Kinematics of Multifingered Robotic Hands. Springer Proceedings in Advanced Robotics, 2018, , 217-224.	0.9	3
101	In-hand forward and inverse kinematics with rolling contact. Robotica, 2017, 35, 2381-2399.	1.3	8
102	Kinematic study of the general plane-symmetric Bricard linkage and its bifurcation variations. Mechanism and Machine Theory, 2017, 116, 89-104.	2.7	44
103	Workspace Analysis of Tendon-Driven Continuum Robots Based on Mechanical Interference Identification. Journal of Mechanical Design, Transactions of the ASME, 2017, 139, .	1.7	17
104	Design of a Pneumatic Muscle Based Continuum Robot With Embedded Tendons. IEEE/ASME Transactions on Mechatronics, 2017, 22, 751-761.	3.7	59
105	A way of relating instantaneous and finite screws based on the screw triangle product. Mechanism and Machine Theory, 2017, 108, 75-82.	2.7	63
106	Fuzzy Model Based Stability Analysis of the Metamorphic Robotic Palm. IFAC-PapersOnLine, 2017, 50, 8630-8635.	0.5	0
107	Modeling for a metamorphic quadruped robot with a twisting trunk: Kinematic and workspace. , 2017, , .		6
108	Robust Adaptive Control for Vision-Based Stabilization of a Wheeled Humanoid Robot. International Journal of Humanoid Robotics, 2016, 13, 1650010.	0.6	1

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109	Variable Motion/Force Transmissibility of a Metamorphic Parallel Mechanism With Reconfigurable 3T and 3R Motion. Journal of Mechanisms and Robotics, 2016, 8, .	1.5	31
110	Motion/Force Transmission Analysis of Parallel Mechanisms With Planar Closed-Loop Subchains. Journal of Mechanical Design, Transactions of the ASME, 2016, 138, .	1.7	17
111	Kinematics Analysis of a Snake Robot Module Using Screw Theory. , 2016, , .		3
112	Kinematics Analysis and Control of a Three-Fingered Metamorphic Robot Hand. , 2016, , .		0
113	Force Balance of a Spatial Metamorphic 6R Closed-Chain Linkage With Specific Kinematic Conditions. , 2016, , .		0
114	Optimal Design of a Metamorphic Parallel Mechanism With Reconfigurable 1T2R and 3R Motion Based on Unified Motion/Force Transmissibility. , 2016, , .		1
115	Product Submanifold Based Analysis of Kinematic Chains and a 3-PUP Parallel Mechanism. , 2016, , .		0
116	Spherical trigonometry constrained kinematics for a dexterous robotic hand with an articulated palm. Robotica, 2016, 34, 2788-2805.	1.3	19
117	Analysis of frequency characteristics and sensitivity of compliant mechanisms. Chinese Journal of Mechanical Engineering (English Edition), 2016, 29, 680-693.	1.9	14
118	A Novel 4-DOF Origami Grasper With an SMA-Actuation System for Minimally Invasive Surgery. IEEE Transactions on Robotics, 2016, 32, 484-498.	7.3	108
119	Stiffness analysis, motion design and reconfiguration study of parallel mechanisms and manipulators. Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 2016, 230, 339-340.	1.1	5
120	Design of a flexible force-sensing platform for medical ultrasound probes. , 2016, , .		2
121	Geometric constraints and motion branch variations for reconfiguration of single-loop linkages with mobility one. Mechanism and Machine Theory, 2016, 106, 16-29.	2.7	24
122	A compact continuum manipulator system with enhanced steering abilities for robot-assisted surgery. , 2016, , .		2
123	Task-based structure synthesis of source metamorphic mechanisms and constrained forms of metamorphic joints. Mechanism and Machine Theory, 2016, 96, 334-345.	2.7	26
124	Geometry and kinematics for a spherical-base integrated parallel mechanism. Meccanica, 2016, 51, 1607-1621.	1.2	10
125	Adaptive dynamic surface control for vision-based stabilization of an uncertain electrically driven nonholonomic mobile robot. Robotica, 2016, 34, 449-467.	1.3	5
126	Repelling-Screw Based Force Analysis of Origami Mechanisms. Journal of Mechanisms and Robotics, 2016, 8, .	1.5	31

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127	An Extensible Continuum Robot With Integrated Origami Parallel Modules. Journal of Mechanisms and Robotics, 2016, 8, .	1.5	92
128	A Novel Reconfigurable 7R Linkage with Multifurcation. Mechanisms and Machine Science, 2016, , 15-25.	0.3	3
129	A Novel Continuum Manipulator Design Using Serially Connected Double-Layer Planar Springs. IEEE/ASME Transactions on Mechatronics, 2016, 21, 1281-1292.	3.7	75
130	Six-Dimensional Compliance Analysis and Validation of Orthoplanar Springs. Journal of Mechanical Design, Transactions of the ASME, 2016, 138, .	1.7	16
131	Systematization of morphing in reconfigurable mechanisms. Mechanism and Machine Theory, 2016, 96, 215-224.	2.7	48
132	Reconfiguration and Static Joint Force Variation of a 3rRPS Metamorphic Parallel Mechanism with 3R and 1T2R Motion. Mechanisms and Machine Science, 2016, , 213-222.	0.3	5
133	Origami Carton Folding Analysis Using Flexible Panels. Mechanisms and Machine Science, 2016, , 95-106.	0.3	3
134	Joint force decomposition and variation in unified inverse dynamics analysis of a metamorphic parallel mechanism. Meccanica, 2016, 51, 1583-1593.	1.2	17
135	Reconfiguration of the plane-symmetric double-spherical 6R linkage with bifurcation and trifurcation. Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 2016, 230, 473-482.	1.1	16
136	An Origami Parallel Structure Integrated Deployable Continuum Robot. , 2015, , .		3
137	Stiffness Design, Analysis and Validation of a Parallel-Mechanism Equivalent Suspension System. , 2015, , .		0
138	Singularity-Free Workspace Aimed Optimal Design of a 2T2R Parallel Mechanism for Automated Fiber Placement. Journal of Mechanisms and Robotics, 2015, 7, .	1.5	34
139	Eulerâ€“Rodrigues formula variations, quaternion conjugation and intrinsic connections. Mechanism and Machine Theory, 2015, 92, 144-152.	2.7	201
140	New test rig for creased paperboard investigation to confectionery industry reconfigurable folders. , 2015, , .		1
141	Assur-Group Inferred Structural Synthesis for Planar Mechanisms. Journal of Mechanisms and Robotics, 2015, 7, .	1.5	25
142	Characteristic Equation-Based Dynamic Analysis of a Three-Revolute Prismatic Spherical Parallel Kinematic Machine. Journal of Computational and Nonlinear Dynamics, 2015, 10, .	0.7	5
143	Screw-System-Variation Enabled Reconfiguration of the Bennett Plano-Spherical Hybrid Linkage and Its Evolved Parallel Mechanism. Journal of Mechanical Design, Transactions of the ASME, 2015, 137, .	1.7	48
144	A Polynomial Formulation of Inverse Kinematics of Rolling Contact. Journal of Mechanisms and Robotics, 2015, 7, .	1.5	14

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145	Forward Kinematics Solution Distribution and Analytic Singularity-Free Workspace of Linear-Actuated Symmetrical Spherical Parallel Manipulators. Journal of Mechanisms and Robotics, 2015, 7, .	1.5	22
146	Variable Motion/Force Transmissibility of a Metamorphic Parallel Mechanism With Reconfigurable 3T and 3R Motion. , 2015, , .		2
147	Constraint Stiffness Construction and Decomposition of a SPS Orthogonal Parallel Mechanism. , 2015, , .		1
148	Characteristics of the double-cycled motion-ruled surface of the Schatz linkage based on differential geometry. Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 2015, 229, 957-964.	1.1	6
149	Comparison of numerical and neural network methods for the kinematic modeling of a hybrid structure robot. Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 2015, 229, 1162-1171.	1.1	4
150	Inverse kinematics and workspace analysis of the metamorphic hand. Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 2015, 229, 965-975.	1.1	10
151	Helical Kirigami-Enabled Centimeter-Scale Worm Robot With Shape-Memory-Alloy Linear Actuators. Journal of Mechanisms and Robotics, 2015, 7, .	1.5	53
152	From slidingâ€“rolling loci to instantaneous kinematics: An adjoint approach. Mechanism and Machine Theory, 2015, 85, 161-171.	2.7	8
153	Constraint-plane-based synthesis and topology variation of a class of metamorphic parallel mechanisms. Journal of Mechanical Science and Technology, 2014, 28, 4179-4191.	0.7	32
154	Multi-furcation in a derivative queer-square mechanism. Mechanism and Machine Theory, 2014, 81, 36-53.	2.7	39
155	A gabor based fast interest point detector for image-based robot visual servo control. , 2014, , .		0
156	Six Dimensional Compliance Analysis of Ortho-Planar Springs for a Continuum Manipulator. , 2014, , .		2
157	An Overconstrained Eight-Bar Linkage and its Associated Fulleroid-Like Deployable Platonic Mechanisms. , 2014, , .		2
158	A Kirigami-Inspired 8R Linkage and Its Evolved Overconstrained 6R Linkages With the Rotational Symmetry of Order Two. Journal of Mechanisms and Robotics, 2014, 6, .	1.5	51
159	Synthesis, Mobility, and Multifurcation of Deployable Polyhedral Mechanisms With Radially Reciprocating Motion. Journal of Mechanical Design, Transactions of the ASME, 2014, 136, .	1.7	111
160	An Optimization Approach to Teleoperation of the Thumb of a Humanoid Robot Hand: Kinematic Mapping and Calibration. Journal of Mechanical Design, Transactions of the ASME, 2014, 136, .	1.7	19
161	Lyapunov Stability Margins for humanoid robot balancing. , 2014, , .		11
162	A novel continuum-style robot with multilayer compliant modules. , 2014, , .		27

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163	Statistical identification and macroscopic transitional model between disorder and order. , 2014, , .		0
164	A Spatial Eight-Bar Linkage and Its Association With the Deployable Platonic Mechanisms. Journal of Mechanisms and Robotics, 2014, 6, .	1.5	65
165	Origami-Inspired Integrated Planar-Spherical Overconstrained Mechanisms. Journal of Mechanical Design, Transactions of the ASME, 2014, 136, .	1.7	92
166	A non-overconstrained variant of the Agile Eye with a special decoupled kinematics. Robotica, 2014, 32, 889-905.	1.3	8
167	Compliance modeling and analysis of a 3-RPS parallel kinematic machine module. Chinese Journal of Mechanical Engineering (English Edition), 2014, 27, 703-713.	1.9	21
168	Constraint-Based Design and Analysis of a Compliant Parallel Mechanism Using SMA-Spring Actuators. , 2014, , .		1
169	Independent Suspension of Invariable Alignment Parameters by Using Flexible Links With Anisotropic Elasticity. Journal of Mechanisms and Robotics, 2014, 6, .	1.5	0
170	Helical Kirigami-Inspired Centimeter-Scale Worm Robot With Shape-Memory-Alloy Actuators. , 2014, , .		4
171	Trifurcation of the Evolved Sarrus-Motion Linkage Based on Parametric Constraints. , 2014, , 345-353.		7
172	Reconfigurable and Deployable Platonic Mechanisms with a Variable Revolute Joint. , 2014, , 485-495.		11
173	DEXDEB â€“ Application of DEXtrous Robotic Hands for DEBoning Operation. Springer Tracts in Advanced Robotics, 2014, , 217-235.	0.3	0
174	DEXDEB â€“ Application of DEXtrous Robotic Hands for DEBoning Operation. Springer Tracts in Advanced Robotics, 2014, , 217-235.	0.3	0
175	Reconfigurability and unified kinematics modeling of a 3rTPS metamorphic parallel mechanism with perpendicular constraint screws. Robotics and Computer-Integrated Manufacturing, 2013, 29, 121-128.	6.1	53
176	Control Strategies for Patient-Assisted Training Using the Ankle Rehabilitation Robot (ARBOT). IEEE/ASME Transactions on Mechatronics, 2013, 18, 1799-1808.	3.7	124
177	A push recovery strategy for a passively compliant humanoid robot using decentralized LQR controllers. , 2013, , .		5
178	Design and kinematic analysis of a novel prism deployable mechanism. Mechanism and Machine Theory, 2013, 63, 35-49.	2.7	80
179	Large bending behavior of creased paperboard. I. Experimental investigations. International Journal of Solids and Structures, 2013, 50, 3089-3096.	1.3	28
180	Large bending behavior of creased paperboard. II. Structural analysis. International Journal of Solids and Structures, 2013, 50, 3097-3105.	1.3	19

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181	Task-oriented structure synthesis of a class of parallel manipulators using motion constraint generator. Mechanism and Machine Theory, 2013, 70, 394-406.	2.7	17
182	Modelling and analysis of a rigidâ€“compliant parallel mechanism. Robotics and Computer-Integrated Manufacturing, 2013, 29, 33-40.	6.1	8
183	Geometry Constraint and Branch Motion Evolution of 3-PUP Parallel Mechanisms with Bifurcated Motion. Mechanism and Machine Theory, 2013, 61, 168-183.	2.7	33
184	Structure Design, Kinematics and Grasp Constraint of a Metamorphic Robotic Hand for Meat Deboning Operation. , 2013, , .		4
185	Four Motion Branches of an Origami Based Eight Bar Spatial Mechanism. , 2013, , .		1
186	Stiffness Design for a Spatial Three Degrees of Freedom Serial Compliant Manipulator Based on Impact Configuration Decomposition. Journal of Mechanisms and Robotics, 2013, 5, .	1.5	20
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