

Jian S Dai

List of Publications by Year in descending order

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366
papers

8,500
citations

46984

47
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71651

76
g-index

379
all docs

379
docs citations

379
times ranked

3160
citing authors

#	ARTICLE	IF	CITATIONS
1	Mobility of Overconstrained Parallel Mechanisms. Journal of Mechanical Design, Transactions of the ASME, 2006, 128, 220-229.	1.7	346
2	Product Cost Estimation: Technique Classification and Methodology Review. Journal of Manufacturing Science and Engineering, Transactions of the ASME, 2006, 128, 563-575.	1.3	335
3	Euler-Rodrigues formula variations, quaternion conjugation and intrinsic connections. Mechanism and Machine Theory, 2015, 92, 144-152.	2.7	201
4	Kinematic design considerations for minimally invasive surgical robots: an overview. International Journal of Medical Robotics and Computer Assisted Surgery, 2012, 8, 127-145.	1.2	161
5	Matrix Representation of Topological Changes in Metamorphic Mechanisms. Journal of Mechanical Design, Transactions of the ASME, 2005, 127, 837-840.	1.7	143
6	Interrelationship between screw systems and corresponding reciprocal systems and applications. Mechanism and Machine Theory, 2001, 36, 633-651.	2.7	134
7	A High-performance Redundantly Actuated Parallel Mechanism for Ankle Rehabilitation. International Journal of Robotics Research, 2009, 28, 1216-1227.	5.8	125
8	Model-Free Control for Continuum Robots Based on an Adaptive Kalman Filter. IEEE/ASME Transactions on Mechatronics, 2018, 23, 286-297.	3.7	125
9	Mobility Change in Two Types of Metamorphic Parallel Mechanisms. Journal of Mechanisms and Robotics, 2009, 1, .	1.5	124
10	Control Strategies for Patient-Assisted Training Using the Ankle Rehabilitation Robot (ARBOT). IEEE/ASME Transactions on Mechatronics, 2013, 18, 1799-1808.	3.7	124
11	Orientation and Workspace Analysis of the Multifingered Metamorphic Hand-Metahand. IEEE Transactions on Robotics, 2009, 25, 942-947.	7.3	123
12	Sprained Ankle Physiotherapy Based Mechanism Synthesis and Stiffness Analysis of a Robotic Rehabilitation Device. Autonomous Robots, 2004, 16, 207-218.	3.2	118
13	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
14	Topology and Constraint Analysis of Phase Change in the Metamorphic Chain and Its Evolved Mechanism. Journal of Mechanical Design, Transactions of the ASME, 2010, 132, .	1.7	108
15	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
16	Constraint analysis on mobility change of a novel metamorphic parallel mechanism. Mechanism and Machine Theory, 2010, 45, 1864-1876.	2.7	105
17	Mobility analysis of a complex structured ball based on mechanism decomposition and equivalent screw system analysis. Mechanism and Machine Theory, 2004, 39, 445-458.	2.7	104
18	An historical review of the theoretical development of rigid body displacements from Rodrigues parameters to the finite twist. Mechanism and Machine Theory, 2006, 41, 41-52.	2.7	100

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19	Geometry and Kinematic Analysis of a Redundantly Actuated Parallel Mechanism That Eliminates Singularities and Improves Dexterity. <i>Journal of Mechanical Design, Transactions of the ASME</i> , 2008, 130, .	1.7	98
20	Geometric Analysis and Synthesis of the Metamorphic Robotic Hand. <i>Journal of Mechanical Design, Transactions of the ASME</i> , 2007, 129, 1191-1197.	1.7	95
21	Geometric constraint-based modeling and analysis of a novel continuum robot with Shape Memory Alloy initiated variable stiffness. <i>International Journal of Robotics Research</i> , 2020, 39, 1620-1634.	5.8	95
22	Origami-Inspired Integrated Planar-Spherical Overconstrained Mechanisms. <i>Journal of Mechanical Design, Transactions of the ASME</i> , 2014, 136, .	1.7	92
23	An Extensible Continuum Robot With Integrated Origami Parallel Modules. <i>Journal of Mechanisms and Robotics</i> , 2016, 8, .	1.5	92
24	Null-space construction using cofactors from a screw algebra context. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , 2002, 458, 1845-1866.	1.0	89
25	Compliance Analysis of a Three-Legged Rigidly-Connected Platform Device. <i>Journal of Mechanical Design, Transactions of the ASME</i> , 2006, 128, 755.	1.7	81
26	Design and kinematic analysis of a novel prism deployable mechanism. <i>Mechanism and Machine Theory</i> , 2013, 63, 35-49.	2.7	80
27	Geometric Constraint and Mobility Variation of Two 3SvPSv Metamorphic Parallel Mechanisms. <i>Journal of Mechanical Design, Transactions of the ASME</i> , 2013, 135, .	1.7	78
28	Mobility and Geometric Analysis of the Hoberman Switch-Pitch Ball and Its Variant. <i>Journal of Mechanisms and Robotics</i> , 2010, 2, .	1.5	77
29	A Novel Continuum Manipulator Design Using Serially Connected Double-Layer Planar Springs. <i>IEEE/ASME Transactions on Mechatronics</i> , 2016, 21, 1281-1292.	3.7	75
30	Kinematics of a Fully-Decoupled Remote Center-of-Motion Parallel Manipulator for Minimally Invasive Surgery. <i>Journal of Medical Devices, Transactions of the ASME</i> , 2012, 6, .	0.4	70
31	Geometric design optimization of an under-actuated tendon-driven robotic gripper. <i>Robotics and Computer-Integrated Manufacturing</i> , 2018, 50, 80-89.	6.1	70
32	KINEMATIC ANALYSIS AND PROTOTYPE OF A METAMORPHIC ANTHROPOMORPHIC HAND WITH A RECONFIGURABLE PALM. <i>International Journal of Humanoid Robotics</i> , 2011, 08, 459-479.	0.6	69
33	Biological Modeling and Evolution Based Synthesis of Metamorphic Mechanisms. <i>Journal of Mechanical Design, Transactions of the ASME</i> , 2008, 130, .	1.7	68
34	Constraint-Based Limb Synthesis and Mobility-Change-Aimed Mechanism Construction. <i>Journal of Mechanical Design, Transactions of the ASME</i> , 2011, 133, .	1.7	67
35	A Spatial Eight-Bar Linkage and Its Association With the Deployable Platonic Mechanisms. <i>Journal of Mechanisms and Robotics</i> , 2014, 6, .	1.5	65
36	A way of relating instantaneous and finite screws based on the screw triangle product. <i>Mechanism and Machine Theory</i> , 2017, 108, 75-82.	2.7	63

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37	Finite Displacement Screw Operators With Embedded Chasles's™ Motion. Journal of Mechanisms and Robotics, 2012, 4, .	1.5	62
38	Design of a Pneumatic Muscle Based Continuum Robot With Embedded Tendons. IEEE/ASME Transactions on Mechatronics, 2017, 22, 751-761.	3.7	59
39	Geometric Analysis of Overconstrained Parallel Manipulators with Three and Four Degrees of Freedom.. JSME International Journal Series C-Mechanical Systems Machine Elements and Manufacturing, 2002, 45, 730-740.	0.3	58
40	Structure synthesis and statics analysis of a foldable stair. Mechanism and Machine Theory, 2011, 46, 998-1015.	2.7	57
41	A high performance 2-dof over-actuated parallel mechanism for ankle rehabilitation. , 2009, , .		56
42	Structure Synthesis of Single-Driven Metamorphic Mechanisms Based on the Augmented Assur Groups. Journal of Mechanisms and Robotics, 2012, 4, .	1.5	54
43	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
44	Helical Kirigami-Enabled Centimeter-Scale Worm Robot With Shape-Memory-Alloy Linear Actuators. Journal of Mechanisms and Robotics, 2015, 7, .	1.5	53
45	Forward displacement analysis of the general 6R Stewart mechanism using Gr�bner bases. Mechanism and Machine Theory, 2009, 44, 1640-1647.	2.7	52
46	Stiffness Modeling of the Soft-Finger Contact in Robotic Grasping. Journal of Mechanical Design, Transactions of the ASME, 2004, 126, 646-656.	1.7	51
47	Geometric analysis and tooth profiling of a three-lobe helical rotor of the Roots blower. Journal of Materials Processing Technology, 2005, 170, 259-267.	3.1	51
48	Posture, Workspace, and Manipulability of the Metamorphic Multifingered Hand With an Articulated Palm. Journal of Mechanisms and Robotics, 2011, 3, .	1.5	51
49	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
50	A Linear Algebraic Procedure in Obtaining Reciprocal Screw Systems. Journal of Field Robotics, 2003, 20, 401-412.	0.7	50
51	An approach to carton-folding trajectory planning using dual robotic fingers. Robotics and Autonomous Systems, 2003, 42, 47-63.	3.0	48
52	Unified Kinematics and Singularity Analysis of a Metamorphic Parallel Mechanism With Bifurcated Motion. Journal of Mechanisms and Robotics, 2013, 5, .	1.5	48
53	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
54	Systematization of morphing in reconfigurable mechanisms. Mechanism and Machine Theory, 2016, 96, 215-224.	2.7	48

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55	Origami-based robotic paper-and-board packaging for food industry. Trends in Food Science and Technology, 2010, 21, 153-157.	7.8	47
56	Design of an Ackermann-type steering mechanism. Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 2013, 227, 2549-2562.	1.1	46
57	Geometry and Constraint Analysis of the Three-Spherical Kinematic Chain Based Parallel Mechanism. Journal of Mechanisms and Robotics, 2010, 2, .	1.5	45
58	A Darboux-Frame-Based Formulation of Spin-Rolling Motion of Rigid Objects With Point Contact. IEEE Transactions on Robotics, 2010, 26, 383-388.	7.3	45
59	Kinematic study of the general plane-symmetric Bricard linkage and its bifurcation variations. Mechanism and Machine Theory, 2017, 116, 89-104.	2.7	44
60	Stiffness Characteristics of Carton Folds for Packaging. Journal of Mechanical Design, Transactions of the ASME, 2008, 130, .	1.7	43
61	Dexterous Manipulation of Origami Cartons With Robotic Fingers Based on the Interactive Configuration Space. Journal of Mechanical Design, Transactions of the ASME, 2008, 130, .	1.7	42
62	Reconfiguration of Spatial Metamorphic Mechanisms. Journal of Mechanisms and Robotics, 2009, 1, .	1.5	41
63	Novel spherical-planar and Bennett-spherical 6R metamorphic linkages with reconfigurable motion branches. Mechanism and Machine Theory, 2018, 128, 628-647.	2.7	41
64	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
65	Topology and kinematic analysis of color-changing ball. Mechanism and Machine Theory, 2011, 46, 67-81.	2.7	39
66	Multi-furcation in a derivative queer-square mechanism. Mechanism and Machine Theory, 2014, 81, 36-53.	2.7	39
67	A packaging robot for complex cartons. Industrial Robot, 2006, 33, 82-87.	1.2	38
68	Design and modeling of a soft robotic surface with hyperelastic material. Mechanism and Machine Theory, 2018, 130, 109-122.	2.7	38
69	Kinematics and statics of eccentric soft bending actuators with external payloads. Mechanism and Machine Theory, 2019, 139, 526-541.	2.7	38
70	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
71	Design analysis and type synthesis of a petal-inspired space deployable-foldable mechanism. Mechanism and Machine Theory, 2019, 141, 151-170.	2.7	35
72	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

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73	Design and kinematics analysis of a new 3CCC parallel mechanism. <i>Robotica</i> , 2010, 28, 1065-1072.	1.3	33
74	Mathematical Modeling and Simulation of the External and Internal Double Circular-Arc Spiral Bevel Gears for the Nutation Drive. <i>Journal of Mechanical Design, Transactions of the ASME</i> , 2010, 132, .	1.7	33
75	Geometry Constraint and Branch Motion Evolution of 3-PUP Parallel Mechanisms with Bifurcated Motion. <i>Mechanism and Machine Theory</i> , 2013, 61, 168-183.	2.7	33
76	A Mechanically Intelligent Crawling Robot Driven by Shape Memory Alloy and Compliant Bistable Mechanism. <i>Journal of Mechanisms and Robotics</i> , 2020, 12, .	1.5	33
77	Constraint-plane-based synthesis and topology variation of a class of metamorphic parallel mechanisms. <i>Journal of Mechanical Science and Technology</i> , 2014, 28, 4179-4191.	0.7	32
78	Passivity Preservation for Variable Impedance Control of Compliant Robots. <i>IEEE/ASME Transactions on Mechatronics</i> , 2020, 25, 2342-2353.	3.7	32
79	Mobility in Metamorphic Mechanisms of Foldable/Erectable Kinds. , 1998, , .		32
80	Surgical robotics and its development and progress. <i>Robotica</i> , 2010, 28, 161-161.	1.3	31
81	Reciprocity-Based Singular Value Decomposition for Inverse Kinematic Analysis of the Metamorphic Multifingered Hand. <i>Journal of Mechanisms and Robotics</i> , 2012, 4, .	1.5	31
82	Constraint analysis and bifurcated motion of the 3PUP parallel mechanism. <i>Mechanism and Machine Theory</i> , 2012, 49, 256-269.	2.7	31
83	Variable Motion/Force Transmissibility of a Metamorphic Parallel Mechanism With Reconfigurable 3T and 3R Motion. <i>Journal of Mechanisms and Robotics</i> , 2016, 8, .	1.5	31
84	Repelling-Screw Based Force Analysis of Origami Mechanisms. <i>Journal of Mechanisms and Robotics</i> , 2016, 8, .	1.5	31
85	A new mechanical design method of compliant actuators with non-linear stiffness with predefined deflection-torque profiles. <i>Mechanism and Machine Theory</i> , 2019, 133, 164-178.	2.7	31
86	Orientation capability of planar manipulators using virtual joint angle analysis. <i>Mechanism and Machine Theory</i> , 2003, 38, 241-252.	2.7	30
87	Type synthesis of a class of spatial lower-mobility parallel mechanisms with orthogonal arrangement based on Lie group enumeration. <i>Science China Technological Sciences</i> , 2010, 53, 388-404.	2.0	30
88	Automatic folding of cartons using a reconfigurable robotic system. <i>Robotics and Computer-Integrated Manufacturing</i> , 2011, 27, 604-613.	6.1	29
89	Kinematic Analysis and Stiffness Validation of Origami Cartons. <i>Journal of Mechanical Design, Transactions of the ASME</i> , 2013, 135, .	1.7	29
90	Bifurcated configurations and their variations of an 8-bar linkage derived from an 8-kaleidocycle. <i>Mechanism and Machine Theory</i> , 2018, 121, 745-754.	2.7	29

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91	Reconfigurability of the origami-inspired integrated 8R kinematotropic metamorphic mechanism and its evolved 6R and 4R mechanisms. <i>Mechanism and Machine Theory</i> , 2021, 161, 104245.	2.7	29
92	Large bending behavior of creased paperboard. I. Experimental investigations. <i>International Journal of Solids and Structures</i> , 2013, 50, 3089-3096.	1.3	28
93	A Finite and Instantaneous Screw Based Approach for Topology Design and Kinematic Analysis of 5-Axis Parallel Kinematic Machines. <i>Chinese Journal of Mechanical Engineering (English Edition)</i> , 2018, 31, .	1.9	28
94	A novel 6R metamorphic mechanism with eight motion branches and multiple furcation points. <i>Mechanism and Machine Theory</i> , 2019, 142, 103598.	2.7	28
95	Analysis of unified error model and simulated parameters calibration for robotic machining based on Lie theory. <i>Robotics and Computer-Integrated Manufacturing</i> , 2020, 61, 101855.	6.1	28
96	A novel continuum-style robot with multilayer compliant modules. , 2014, , .		27
97	Bifurcation variations and motion-ruled-surface evolution of a novel Schatz linkage induced metamorphic mechanism. <i>Mechanism and Machine Theory</i> , 2020, 150, 103867.	2.7	27
98	Geometric Modeling and Meshing Characteristics of the Toroidal Drive. <i>Journal of Mechanical Design, Transactions of the ASME</i> , 2005, 127, 988-996.	1.7	26
99	From Origami to a New Class of Centralized 3-DOF Parallel Mechanisms. , 2007, , 1183.		26
100	Task-based structure synthesis of source metamorphic mechanisms and constrained forms of metamorphic joints. <i>Mechanism and Machine Theory</i> , 2016, 96, 334-345.	2.7	26
101	Trot Gait with Twisting Trunk of a Metamorphic Quadruped Robot. <i>Journal of Bionic Engineering</i> , 2018, 15, 971-981.	2.7	26
102	A Lie-Theory-Based Dynamic Parameter Identification Methodology for Serial Manipulators. <i>IEEE/ASME Transactions on Mechatronics</i> , 2021, 26, 2688-2699.	3.7	26
103	Lie Group Based Type Synthesis Using Transformation Configuration Space for Reconfigurable Parallel Mechanisms With Bifurcation Between Spherical Motion and Planar Motion. <i>Journal of Mechanical Design, Transactions of the ASME</i> , 2020, 142, .	1.7	26
104	Axis Constraint Analysis and Its Resultant 6R Double-Centered Overconstrained Mechanisms. <i>Journal of Mechanisms and Robotics</i> , 2011, 3, .	1.5	25
105	Assur-Group Inferred Structural Synthesis for Planar Mechanisms. <i>Journal of Mechanisms and Robotics</i> , 2015, 7, .	1.5	25
106	High-order based revelation of bifurcation of novel Schatz-inspired metamorphic mechanisms using screw theory. <i>Mechanism and Machine Theory</i> , 2020, 152, 103931.	2.7	25
107	Kinematic Geometry of Circular Surfaces With a Fixed Radius Based on Euclidean Invariants. <i>Journal of Mechanical Design, Transactions of the ASME</i> , 2009, 131, .	1.7	24
108	Geometric constraints and motion branch variations for reconfiguration of single-loop linkages with mobility one. <i>Mechanism and Machine Theory</i> , 2016, 106, 16-29.	2.7	24

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109	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
110	Force Analysis of a Vibratory Bowl Feeder for Automatic Assembly. Journal of Mechanical Design, Transactions of the ASME, 2005, 127, 637-645.	1.7	23
111	Numeration and type synthesis of 3-DOF orthogonal translational parallel manipulators. Progress in Natural Science: Materials International, 2008, 18, 563-574.	1.8	23
112	Characteristic Equation-Based Dynamics Analysis of Vibratory Bowl Feeders With Three Spatial Compliant Legs. IEEE Transactions on Automation Science and Engineering, 2008, 5, 164-175.	3.4	23
113	Continuous Static Gait with Twisting Trunk of a Metamorphic Quadruped Robot. Mechanical Sciences, 2018, 9, 1-14.	0.5	23
114	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
115	Dynamics and Coupling Actuation of Elastic Underactuated Manipulators. Journal of Field Robotics, 2003, 20, 135-146.	0.7	21
116	Mobility analysis of complex joints by means of screw theory. Robotica, 2009, 27, 915-927.	1.3	21
117	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
118	Stability Margin of a Metamorphic Quadruped Robot With a Twisting Trunk. Journal of Mechanisms and Robotics, 2019, 11, .	1.5	21
119	Mechanism design and analysis of a proposed wheelchair-exoskeleton hybrid robot for assisting human movement. Mechanical Sciences, 2019, 10, 11-24.	0.5	21
120	Category-based food ordering processes. Trends in Food Science and Technology, 2011, 22, 14-20.	7.8	20
121	FLEXIBLE ROBOTICS. BJU International, 2011, 107, 187-189.	1.3	20
122	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
123	Origaker: A Novel Multi-Mimicry Quadruped Robot Based on a Metamorphic Mechanism. Journal of Mechanisms and Robotics, 2022, 14, .	1.5	20
124	Segmental Kinematic Coupling of the Human Spinal Column during Locomotion. Journal of Bionic Engineering, 2008, 5, 328-334.	2.7	19
125	Predictive seam tracking with iteratively learned feedforward compensation for high-precision robotic laser welding. Journal of Manufacturing Systems, 2012, 31, 2-7.	7.6	19
126	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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127	An Optimization Approach to Teleoperation of the Thumb of a Humanoid Robot Hand: Kinematic Mapping and Calibration. <i>Journal of Mechanical Design, Transactions of the ASME</i> , 2014, 136, .	1.7	19
128	Spherical trigonometry constrained kinematics for a dexterous robotic hand with an articulated palm. <i>Robotica</i> , 2016, 34, 2788-2805.	1.3	19
129	A Sarrus-like overconstrained eight-bar linkage and its associated Fulleroid-like platonic deployable mechanisms. <i>Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science</i> , 2020, 234, 241-262.	1.1	19
130	Six novel 6R metamorphic mechanisms induced from three-series-connected Bennett linkages that vary among classical linkages. <i>Mechanism and Machine Theory</i> , 2021, 156, 104133.	2.7	19
131	Grasp analysis and optimal design of robotic fingertip for two tendon-driven fingers. <i>Mechanism and Machine Theory</i> , 2018, 130, 447-462.	2.7	18
132	A synthesis method for 1-DOF mechanisms with a cusp in the configuration space. <i>Mechanism and Machine Theory</i> , 2019, 132, 154-175.	2.7	18
133	Three Novel Symmetric Waldron's Bricard Metamorphic and Reconfigurable Mechanisms and Their Isomerization. <i>Journal of Mechanisms and Robotics</i> , 2019, 11, .	1.5	18
134	Stiffness characteristics and kinematics analysis of two-link elastic underactuated manipulators. <i>Journal of Field Robotics</i> , 2002, 19, 169-176.	0.7	17
135	Analysis and synthesis of ankle motion and rehabilitation robots. , 2009, , .		17
136	Task-oriented structure synthesis of a class of parallel manipulators using motion constraint generator. <i>Mechanism and Machine Theory</i> , 2013, 70, 394-406.	2.7	17
137	Motion/Force Transmission Analysis of Parallel Mechanisms With Planar Closed-Loop Subchains. <i>Journal of Mechanical Design, Transactions of the ASME</i> , 2016, 138, .	1.7	17
138	Joint force decomposition and variation in unified inverse dynamics analysis of a metamorphic parallel mechanism. <i>Meccanica</i> , 2016, 51, 1583-1593.	1.2	17
139	Workspace Analysis of Tendon-Driven Continuum Robots Based on Mechanical Interference Identification. <i>Journal of Mechanical Design, Transactions of the ASME</i> , 2017, 139, .	1.7	17
140	Relevance and Transferability for Parallel Mechanisms With Reconfigurable Platforms. <i>Journal of Mechanisms and Robotics</i> , 2019, 11, .	1.5	17
141	Comparative analysis of meshing characteristics with respect to different meshing rollers of the toroidal drive. <i>Mechanism and Machine Theory</i> , 2006, 41, 863-881.	2.7	16
142	Geometric and kinematic analysis of a seven-bar three-fixed-pivoted compound-joint mechanism. <i>Mechanism and Machine Theory</i> , 2010, 45, 170-184.	2.7	16
143	Geometric Constraint of an Evolved Deployable Ball Mechanism. <i>Journal of Advanced Mechanical Design, Systems and Manufacturing</i> , 2011, 5, 302-314.	0.3	16
144	Mechanism Synthesis of a Foldable Stair. <i>Journal of Mechanisms and Robotics</i> , 2012, 4, .	1.5	16

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145	Six-Dimensional Compliance Analysis and Validation of Orthoplanar Springs. <i>Journal of Mechanical Design, Transactions of the ASME</i> , 2016, 138, .	1.7	16
146	Reconfiguration of the plane-symmetric double-spherical 6R linkage with bifurcation and trifurcation. <i>Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science</i> , 2016, 230, 473-482.	1.1	16
147	Configuration analysis of a reconfigurable Rubik's snake robot. <i>Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science</i> , 2019, 233, 3137-3154.	1.1	16
148	Fine motion control based on constraint criteria under pre-loading configurations. <i>Journal of Field Robotics</i> , 2000, 17, 171-185.	0.7	15
149	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
150	First- and Second-Order Kinematics-Based Constraint System Analysis and Reconfiguration Identification for the Queer-Square Mechanism. <i>Journal of Mechanisms and Robotics</i> , 2019, 11, .	1.5	15
151	Geometrical revelation of correlated characteristics of the ray and axis order of the P ₁ A ₁ 4cker coordinates in line geometry. <i>Mechanism and Machine Theory</i> , 2020, 153, 103983.	2.7	15
152	Kinematic analysis and optimization of a planar parallel compliant mechanism for self-alignment knee exoskeleton. <i>Mechanical Sciences</i> , 2018, 9, 405-416.	0.5	15
153	Screw System Analysis of Parallel Mechanisms and Applications to Constraint and Mobility Study. , 2004, , 1569.		14
154	Error Analysis and Compensation for Meshing Contact of Toroidal Drives. <i>Journal of Mechanical Design, Transactions of the ASME</i> , 2006, 128, 610-617.	1.7	14
155	Orientation angle workspaces of planar serial three-link manipulators. <i>Science in China Series D: Earth Sciences</i> , 2009, 52, 975-985.	0.9	14
156	A Polynomial Formulation of Inverse Kinematics of Rolling Contact. <i>Journal of Mechanisms and Robotics</i> , 2015, 7, .	1.5	14
157	Analysis of frequency characteristics and sensitivity of compliant mechanisms. <i>Chinese Journal of Mechanical Engineering (English Edition)</i> , 2016, 29, 680-693.	1.9	14
158	Augmented Adjacency Matrix for Topological Configuration of the Metamorphic Mechanisms. <i>Journal of Advanced Mechanical Design, Systems and Manufacturing</i> , 2011, 5, 187-198.	0.3	13
159	Selective-Compliance-Based Lagrange Model and Multilevel Noncollocated Feedback Control of a Humanoid Robot. <i>Journal of Mechanisms and Robotics</i> , 2018, 10, .	1.5	13
160	Design of Transformable Hinged Ori-Block Dissected from Cylinders and Cones. <i>Journal of Mechanical Design, Transactions of the ASME</i> , 2021, 143, .	1.7	13
161	Stiffness of a rectilinear suspension with automatic length compensation branches. <i>Mechanism and Machine Theory</i> , 2012, 56, 99-122.	2.7	12
162	Design of a novel simulated "soft" mechanical grasper. <i>Mechanism and Machine Theory</i> , 2021, 158, 104240.	2.7	12

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163	Compliance model of Exechon manipulators with an offset wrist. Mechanism and Machine Theory, 2022, 167, 104558.	2.7	12
164	The investigation of environmental sustainability within product design: a critical review. Design Science, 2022, 8, .	1.1	12
165	Patterned Bootstrap: A New Method That Gives Efficiency for Some Precision Position Synthesis Problems. Journal of Mechanical Design, Transactions of the ASME, 2007, 129, 173-183.	1.7	11
166	Gravity compensation control of compliant joint systems with multiple drives. , 2013, , .		11
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