Clement Gosselin

List of Publications by Year
in descending order

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286	10,115	47006	51608
papers	citations	47	86
		h-index	g-index

297	297	297	3930
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Singularity analysis of closed-loop kinematic chains. IEEE Transactions on Automation Science and Engineering, 1990, 6, 281-290.	2.3	1,428
2	Deep Learning for Electromyographic Hand Gesture Signal Classification Using Transfer Learning. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2019, 27, 760-771.	4.9	440
3	Stiffness mapping for parallel manipulators. IEEE Transactions on Automation Science and Engineering, 1990, 6, 377-382.	2.3	439
4	Underactuated Robotic Hands. Springer Tracts in Advanced Robotics, 2008, , .	0.4	302
5	Type Synthesis of 3T1R 4-DOF Parallel Manipulators Based on Screw Theory. IEEE Transactions on Automation Science and Engineering, 2004, 20, 181-190.	2.3	212
6	Kinetostatic Analysis of Underactuated Fingers. IEEE Transactions on Automation Science and Engineering, 2004, 20, 211-221.	2.3	200
7	The optimum design of robotic manipulators using dexterity indices. Robotics and Autonomous Systems, 1992, 9, 213-226.	5.1	173
8	Large-scale 3D printing with a cable-suspended robot. Additive Manufacturing, 2015, 7, 27-44.	3.0	154
9	On the quadratic nature of the singularity curves of planar three-degree-of-freedom parallel manipulators. Mechanism and Machine Theory, 1995, 30, 533-551.	4.5	152
10	Variable admittance control of a four-degree-of-freedom intelligent assist device. , 2012, , .		150
11	Kinematic-Sensitivity Indices for Dimensionally Nonhomogeneous Jacobian Matrices. IEEE Transactions on Robotics, 2010, 26, 166-173.	10.3	132
12	An anthropomorphic underactuated robotic hand with 15 dofs and a single actuator. , 2008, , .		129
13	On the Ability of a Cable-Driven Robot to Generate a Prescribed Set of Wrenches. Journal of Mechanisms and Robotics, 2010, 2, .	2.2	125
14	Parametric stiffness analysis of the Orthoglide. Mechanism and Machine Theory, 2007, 42, 296-311.	4.5	122
15	SHaDe, a new 3-DOF haptic device. IEEE Transactions on Automation Science and Engineering, 2002, 18, 166-175.	2.3	121
16	Cable-driven parallel mechanisms: state of the art and perspectives. Mechanical Engineering Reviews, 2014, 1, DSM0004-DSM0004.	4.7	111
17	The direct kinematics of planar parallel manipulators: Special architectures and number of solutions. Mechanism and Machine Theory, 1994, 29, 1083-1097.	4.5	109
18	On the determination of the force distribution inÂoverconstrained cable-driven parallel mechanisms. Meccanica, 2011, 46, 3-15.	2.0	104

#	Article	IF	Citations
19	Workspace analysis and optimal design of a 3-leg 6-DOF parallel platform mechanism. IEEE Transactions on Automation Science and Engineering, 2003, 19, 954-966.	2.3	96
20	Kinematically Redundant Spatial Parallel Mechanisms for Singularity Avoidance and Large Orientational Workspace. IEEE Transactions on Robotics, 2016, 32, 286-300.	10.3	96
21	Singularity-Free Kinematically Redundant Planar Parallel Mechanisms With Unlimited Rotational Capability. IEEE Transactions on Robotics, 2015, 31, 457-467.	10.3	94
22	Determination of the maximal singularity-free zones in the six-dimensional workspace of the general Goughâ€“Stewart platform. Mechanism and Machine Theory, 2007, 42, 497-511.	4.5	93
23	Type synthesis of 4-DOF SP-equivalent parallel manipulators: A virtual chain approach. Mechanism and Machine Theory, 2006, 41, 1306-1319.	4.5	89
24	Kinematic, static and dynamic analysis of a planar 2-DOF tensegrity mechanism. Mechanism and Machine Theory, 2006, 41, 1072-1089.	4.5	88
25	Determination of the maximal singularity-free orientation workspace for the Goughâ€“Stewart platform. Mechanism and Machine Theory, 2009, 44, 1281-1293.	4.5	86
26	Static balancing of 3-DOF planar parallel mechanisms. IEEE/ASME Transactions on Mechatronics, 1999, 4, 363-377.	5.8	83
27	On the Design of a Mechanically Programmable Underactuated Anthropomorphic Prosthetic Gripper. Journal of Mechanical Design, Transactions of the ASME, 2013, 135, .	2.9	80
28	Kinetostatic modeling of parallel mechanisms with a passive constraining leg and revolute actuators. Mechanism and Machine Theory, 2002, 37, 599-617.	4.5	76
29	Static balancing of spatial four-degree-of-freedom parallel mechanisms. Mechanism and Machine Theory, 2000, 35, 563-592.	4.5	74
30	Safe, Stable and Intuitive Control for Physical Human-Robot Interaction. , 2009, , .		73
31	Singularity analysis and representation of planar parallel manipulators. Robotics and Autonomous Systems, 1992, 10, 209-224.	5.1	72
32	Force Analysis of Connected Differential Mechanisms: Application to Grasping. International Journal of Robotics Research, 2006, 25, 1033-1046.	8.5	72
33	Redundancy in Parallel Mechanisms: A Review. Applied Mechanics Reviews, 2018, 70, .	10.1	72
34	Type synthesis of 5-DOF parallel manipulators based on screw theory. Journal of Field Robotics, 2005, 22, 535-547.	0.7	69
35	Determination of maximal singularity-free zones in the workspace of planar three-degree-of-freedom parallel mechanisms. Mechanism and Machine Theory, 2006, 41, 1157-1167.	4.5	69
36	Dynamic Point-to-Point Trajectory Planning of a Two-DOF Cable-Suspended Parallel Robot. IEEE Transactions on Robotics, 2014, 30, 728-736.	10.3	67

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37	Synthesis and Design of Reactionless Three-Degree-of-Freedom Parallel Mechanisms. IEEE Transactions on Automation Science and Engineering, 2004, 20, 191-199.	2.3	64
38	A flexible robot skin for safe physical human robot interaction. , 2009, , .		64
39	Determination of the workspace of planar parallel manipulators with joint limits. Robotics and Autonomous Systems, 1996, 17, 129-138.	5.1	59
40	Computationally Efficient Predictive Robot Control. IEEE/ASME Transactions on Mechatronics, 2007, 12, 570-578.	5.8	59
41	Kinematic analysis and singularity representation of spatial five-degree-of-freedom parallel mechanisms. Journal of Field Robotics, 1997, 14, 851-869.	0.7	55
42	Forward displacement analysis of third-class analytic 3-RPR planar parallel manipulators. Mechanism and Machine Theory, 2001, 36, 1009-1018.	4.5	55
43	Singularity Conditions of 3T1R Parallel Manipulators With Identical Limb Structures. Journal of Mechanisms and Robotics, 2012, 4, .	2.2	53
44	Global Planning of Dynamically Feasible Trajectories for Three-DOF Spatial Cable-Suspended Parallel Robots. Mechanisms and Machine Science, 2013, , 3-22.	0.5	53
45	Determination and Management of Cable Interferences Between Two 6-DOF Foot Platforms in a Cable-Driven Locomotion Interface. IEEE Transactions on Systems, Man and Cybernetics, Part A: Systems and Humans, 2009, 39, 528-544.	2.9	52
46	A convolutional neural network for robotic arm guidance using sEMG based frequency-features. , 2016, , .		52
47	Stable and Intuitive Control of an Intelligent Assist Device. IEEE Transactions on Haptics, 2012, 5, 148-159.	2.7	51
48	A Friendly Beast of Burden: A Human-Assistive Robot for Handling Large Payloads. IEEE Robotics and Automation Magazine, 2013, 20, 139-147.	2.0	50
49	A Statically Balanced Gough/Stewart-Type Platform: Conception, Design, and Simulation. Journal of Mechanisms and Robotics, 2009, 1, .	2.2	49
50	Stable Precision Grasps by Underactuated Grippers. , 2011, 27, 1056-1066.		49
51	Grasp-state plane analysis of two-phalanx underactuated fingers. Mechanism and Machine Theory, 2006, 41, 807-822.	4.5	47
52	Dynamic trajectory planning of a two-DOF cable-suspended parallel robot. , 2012, , .		47
53	Forward kinematic problem of 5-RPUR parallel mechanisms (3T2R) with identical limb structures. Mechanism and Machine Theory, 2011, 46, 945-959.	4.5	46
54	Singularity analysis of 3T2R parallel mechanisms using Grassmannâ€“Cayley algebra and Grassmann geometry. Mechanism and Machine Theory, 2012, 52, 326-340.	4.5	46

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55	Static balancing of spatial six-degree-of-freedom parallel mechanisms with revolute actuators. Journal of Field Robotics, 2000, 17, 159-170.	0.7	45
56	Dynamic Point-to-Point Trajectory Planning of a Three-DOF Cable-Suspended Parallel Robot. IEEE Transactions on Robotics, 2016, 32, 1550-1557.	10.3	45
57	Characterization of the electrical resistance of carbon-black-filled silicone: Application to a flexible and stretchable robot skin. , 2010, , .		41
58	uMan: A Low-Impedance Manipulator for Humanâ€“Robot Cooperation Based on Underactuated Redundancy. IEEE/ASME Transactions on Mechatronics, 2017, 22, 1401-1411.	5.8	41
59	Singularity Loci of a Special Class of Spherical Three-degree-of-freedom Parallel Mechanisms with Revolute Actuators. International Journal of Robotics Research, 2002, 21, 649-659.	8.5	40
60	Point-to-point motion planning of a parallel 3-dof underactuated cable-suspended robot. , 2012, , .		40
61	Picking, grasping, or scooping small objects lying on flat surfaces: A design approach. International Journal of Robotics Research, 2018, 37, 1484-1499.	8.5	40
62	A Backdrivable Kinematically Redundant (6+3)-Degree-of-Freedom Hybrid Parallel Robot for Intuitive Sensorless Physical Humanâ€“Robot Interaction. IEEE Transactions on Robotics, 2021, 37, 1222-1238.	10.3	39
63	Etude et representation des lieux de singularite des manipulateurs parallelles spheriques a trois degres de liberte avec actionneurs prismatiques. Mechanism and Machine Theory, 1994, 29, 559-579.	4.5	37
64	The Agile Stereo Pair for active vision. Machine Vision and Applications, 2006, 17, 32-50.	2.7	37
65	Series Clutch Actuators for safe physical human-robot interaction. , 2011, , .		37
66	Workspace and Sensitivity Analysis of a Novel Nonredundant Parallel SCARA Robot Featuring Infinite Tool Rotation. IEEE Robotics and Automation Letters, 2016, 1, 776-783.	5.1	37
67	Kinematically redundant planar parallel mechanisms: Kinematics, workspace and trajectory planning. Mechanism and Machine Theory, 2018, 119, 91-105.	4.5	37
68	A Cable-Suspended Intelligent Crane Assist Device for the Intuitive Manipulation of Large Payloads. IEEE/ASME Transactions on Mechatronics, 2016, 21, 2073-2084.	5.8	36
69	Dynamically feasible motions of a class of purely-translational cable-suspended parallel robots. Mechanism and Machine Theory, 2019, 132, 193-206.	4.5	36
70	A time-domain vibration observer and controller for physical human-robot interaction. Mechatronics, 2016, 36, 45-53.	3.3	35
71	An introduction to utilising the redundancy of a kinematically redundant parallel manipulator to operate a gripper. Mechanism and Machine Theory, 2016, 101, 50-59.	4.5	33
72	Title is missing!. Multibody System Dynamics, 2002, 7, 145-170.	2.7	32

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73	Kinematic analysis of 5-RPUR (3T2R) parallel mechanisms. Meccanica, 2011, 46, 131-146.	2.0	32
74	Gravity Compensation, Static Balancing and Dynamic Balancing of Parallel Mechanisms. , 2008, , 27-48.		31
75	On the design of a statically balanced serial robot using remote counterweights. , 2013, , .		31
76	Gravity Compensation of Robotic Manipulators Using Cylindrical Halbach Arrays. IEEE/ASME Transactions on Mechatronics, 2017, 22, 457-464.	5.8	31
77	Kinematic and static analysis of a 3-PUPS spatial tensegrity mechanism. Mechanism and Machine Theory, 2009, 44, 162-179.	4.5	30
78	A model-based scooping grasp for the autonomous picking of unknown objects with a two-fingered gripper. Robotics and Autonomous Systems, 2018, 106, 14-25.	5.1	30
79	Stable and repeatable grasping of flat objects on hard surfaces using passive and epicyclic mechanisms. Robotics and Computer-Integrated Manufacturing, 2019, 55, 1-10.	9.9	30
80	A Bisection Algorithm for Time-Optimal Trajectory Planning Along Fully Specified Paths. IEEE Transactions on Robotics, 2021, 37, 131-145.	10.3	30
81	Point-to-point motion control of a pendulum-like 3-dof underactuated cable-driven robot. , 2010, , .		29
82	Periodic Trajectory Planning Beyond the Static Workspace for 6-DOF Cable-Suspended Parallel Robots. IEEE Transactions on Robotics, 2018, 34, 1128-1140.	10.3	28
83	Variable Admittance for pHRI: From Intuitive Unilateral Interaction to Optimal Bilateral Force Amplification. Robotics and Computer-Integrated Manufacturing, 2018, 52, 1-8.	9.9	28
84	Practical prototyping. IEEE Robotics and Automation Magazine, 2001, 8, 43-52.	2.0	27
85	ANALYSIS OF STRUCTURAL ACOUSTIC COUPLING OF A CYLINDRICAL SHELL WITH AN INTERNAL FLOOR PARTITION. Journal of Sound and Vibration, 2002, 250, 903-921.	3.9	27
86	Wireless sEMG-Based Bodyâ€“Machine Interface for Assistive Technology Devices. IEEE Journal of Biomedical and Health Informatics, 2017, 21, 967-977.	6.3	27
87	Trajectory prediction for moving objects using artificial neural networks. IEEE Transactions on Industrial Electronics, 1995, 42, 147-158.	7.9	26
88	An admittance control scheme for haptic interfaces based on cable-driven parallel mechanisms. , 2014, , .		26
89	La synthÃ¨se d'une plate-forme de Gough-Stewart pour un espace atteignable prescrit. Mechanism and Machine Theory, 2001, 36, 327-342.	4.5	25
90	Optimal design of PZT actuators in active structural acoustic control of a cylindrical shell with a floor partition. Journal of Sound and Vibration, 2004, 269, 569-588.	3.9	25

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91	Modeling of physical humanâ€“robot interaction. International Journal of Advanced Robotic Systems, 2016, 13, 172988141665816.	2.1	25
92	Dynamic Point-to-Point Trajectory Planning of a Three-DOF Cable-Suspended Mechanism Using the Hypocycloid Curve. IEEE/ASME Transactions on Mechatronics, 2018, 23, 1964-1972.	5.8	25
93	A Gravity-Powered Mechanism for Extending the Workspace of a Cable-Driven Parallel Mechanism: Application to the Appearance Modelling of Objects. International Journal of Automation Technology, 2010, 4, 372-379.	1.0	25
94	Optimization of planar and spherical function generators as minimum-defect linkages. Mechanism and Machine Theory, 1989, 24, 293-307.	4.5	24
95	Dynamic trajectory planning study of planar two-dof redundantly actuated cable-suspended parallel robots. Mechatronics, 2015, 30, 187-197.	3.3	24
96	Dynamic Point-to-Point Trajectory Planning Beyond the Static Workspace for Six-DOF Cable-Suspended Parallel Robots. IEEE Transactions on Robotics, 2018, 34, 781-793.	10.3	24
97	A Multimodal Adaptive Wireless Control Interface for People With Upper-Body Disabilities. IEEE Transactions on Biomedical Circuits and Systems, 2018, 12, 564-575.	4.0	24
98	A First Semimanual Device for Clinical Intramuscular Repetitive Cell Injections. Cell Transplantation, 2010, 19, 67-78.	2.5	23
99	Synthesis and Design of a One Degree-of-Freedom Planar Deployable Mechanism With a Large Expansion Ratio. Journal of Mechanisms and Robotics, 2016, 8, .	2.2	23
100	Intuitive Physical Human-Robot Interaction: Using a Passive Parallel Mechanism. IEEE Robotics and Automation Magazine, 2018, 25, 28-38.	2.0	23
101	Development and Experimental Validation of a Haptic Compass Based on Asymmetric Torque Stimuli. IEEE Transactions on Haptics, 2017, 10, 29-39.	2.7	22
102	Trajectory planning for the static to dynamic transition of point-mass cable-suspended parallel mechanisms. Mechanism and Machine Theory, 2017, 113, 158-178.	4.5	22
103	Spatio-geometric impedance control of Gough-Stewart platforms. IEEE Transactions on Automation Science and Engineering, 1999, 15, 281-288.	2.3	21
104	Parallel kinematic machine design with kinetostatic model. Robotica, 2002, 20, 429-438.	1.9	21
105	Time-Optimal Trajectory Planning of Cable-Driven Parallel Mechanisms for Fully Specified Paths With G1-Discontinuities. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2015, 137, .	1.6	21
106	Low-Impedance Physical Human-Robot Interaction Using an Activeâ€“Passive Dynamics Decoupling. IEEE Robotics and Automation Letters, 2016, 1, 938-945.	5.1	21
107	A Systematic Approach for the Jacobian Analysis of Parallel Manipulators with Two End-Effectors. Mechanism and Machine Theory, 2017, 109, 171-194.	4.5	21
108	Singularity analysis of 5-RPUR parallel mechanisms (3T2R). International Journal of Advanced Manufacturing Technology, 2011, 57, 1107-1121.	3.0	20

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109	Weak support material techniques for alternative additive manufacturing materials. Additive Manufacturing, 2015, 8, 95-104.	3.0	20
110	Extending the capabilities of robotic manipulators using trajectory optimization. Mechanism and Machine Theory, 2018, 121, 502-514.	4.5	20
111	Intuitive Adaptive Orientation Control for Enhanced Humanâ€“Robot Interaction. IEEE Transactions on Robotics, 2019, 35, 509-520.	10.3	20
112	Dynamic transition trajectory planning of three-DOF cable-suspended parallel robots via linear time-varying MPC. Mechanism and Machine Theory, 2020, 146, 103715.	4.5	20
113	Kinematic Calibration of Cable-Driven Parallel Robots Considering the Pulley Kinematics. Mechanism and Machine Theory, 2022, 169, 104648.	4.5	20
114	Determination of Singularity-Free Zones in the Workspace of Planar 3-PÌ±RR Parallel Mechanisms. Journal of Mechanical Design, Transactions of the ASME, 2007, 129, 649-652.	2.9	19
115	Forward displacement analysis of a quadratic 4-DOF 3T1R parallel manipulator. Meccanica, 2011, 46, 147-154.	2.0	19
116	Underactuated tendon-driven robotic/prosthetic hands: design issues. , 0, , .		19
117	Determination of closed form solution to the 2-D orientation workspace of Gough-Stewart parallel manipulators. IEEE Transactions on Automation Science and Engineering, 1999, 15, 1121-1125.	2.3	18
118	On the Singularity Surface of Planar 3-RPR Parallel Mechanisms. Mechanics Based Design of Structures and Machines, 2008, 36, 411-425.	4.7	18
119	Determination of the complete set of shaking force and shaking moment balanced planar four-bar linkages. Mechanism and Machine Theory, 2009, 44, 1338-1347.	4.5	18
120	Kinematostatic modeling of compliant parallel mechanisms. Meccanica, 2011, 46, 155-169.	2.0	18
121	Approximate static balancing of a planar parallel cable-driven mechanism based on four-bar linkages and springs. Mechanism and Machine Theory, 2014, 79, 64-79.	4.5	18
122	Singularity analysis of a class of kinematically redundant parallel SchÃ¶nflies motion generators. Mechanism and Machine Theory, 2017, 112, 172-191.	4.5	18
123	SchÃ¶nflies Motion PARAllel Robot (SPARA): A Kinematically Redundant Parallel Robot With Unlimited Rotation Capabilities. IEEE/ASME Transactions on Mechatronics, 2019, 24, 2273-2281.	5.8	18
124	GEOMETRIC ANALYSIS OF THE KINEMATIC SENSITIVITY OF PLANAR PARALLEL MECHANISMS. Transactions of the Canadian Society for Mechanical Engineering, 2011, 35, 477-490.	0.8	17
125	Kinematically Redundant (6+3)-dof Hybrid Parallel Robot with Large orientational Workspace and Remotely Operated Gripper. , 2019, , .		17
126	Dynamic balancing of planar mechanisms using toric geometry. Journal of Symbolic Computation, 2009, 44, 1346-1358.	0.8	16

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127	Dynamically Feasible Periodic Trajectories for Generic Spatial Three-Degree-of-Freedom Cable-Suspended Parallel Robots1. Journal of Mechanisms and Robotics, 2018, 10, .	2.2	16
128	Kinematically Redundant Hybrid Robots With Simple Singularity Conditions and Analytical Inverse Kinematic Solutions. IEEE Robotics and Automation Letters, 2019, 4, 3828-3835.	5.1	16
129	Trajectory Generation for Three-Degree-of-Freedom Cable-Suspended Parallel Robots Based on Analytical Integration of the Dynamic Equations. Journal of Mechanisms and Robotics, 2016, 8, .	2.2	15
130	Convex cones in screw spaces. Mechanism and Machine Theory, 2005, 40, 710-727.	4.5	14
131	A Quasi-Static Model for Planar Compliant Parallel Mechanisms. Journal of Mechanisms and Robotics, 2009, 1, .	2.2	14
132	Design, control and experimental validation of a haptic robotic hand performing human-robot handshake with human-like agility. , 2017, , .		14
133	Exploiting the Kinematic Redundancy of a (6â€‰+â€‰3) Degrees-of-Freedom Parallel Mechanism. Journal of Mechanisms and Robotics, 2019, 11, .	2.2	14
134	A novel family of umbrella-shaped deployable mechanisms constructed by multi-layer and multi-loop spatial linkage units. Mechanism and Machine Theory, 2021, 161, 104169.	4.5	14
135	Kinematic and Static Analysis of a Three-degree-of-freedom Spatial Modular Tensegrity Mechanism. International Journal of Robotics Research, 2008, 27, 951-966.	8.5	13
136	Conceptual Design and Static Analysis of Novel Planar Spring-Loaded Cable-Loop-Driven Parallel Mechanisms. Journal of Mechanisms and Robotics, 2012, 4, .	2.2	13
137	Dynamically Feasible Trajectories for Three-DOF Planar Cable-Suspended Parallel Robots. , 2014, , .		13
138	Dynamic decoupling analysis and experiment based on a class of modified Gough-Stewart parallel manipulators with line orthogonality. Mechanism and Machine Theory, 2020, 143, 103636.	4.5	13
139	Kinematic design of an ejection-free underactuated anthropomorphic finger. , 2009, , .		12
140	Construction, Mobility Analysis and Synthesis of Polyhedra With Articulated Faces. Journal of Mechanisms and Robotics, 2014, 6, .	2.2	12
141	Kinematic and dynamic analysis of a novel parallel kinematic SchÃ¶nflies motion generator. Mechanism and Machine Theory, 2020, 147, 103629.	4.5	12
142	On the Design of a Three-DOF Cable-Suspended Parallel Robot Based on a Parallelogram Arrangement of the Cables. Mechanisms and Machine Science, 2018, , 319-330.	0.5	12
143	Kinematische und statische analyse eines ebenen parallelen manipulators mit dem freiheitsgrad zwei. Mechanism and Machine Theory, 1996, 31, 149-160.	4.5	11
144	Synthesis, optimization and experimental validation of reactionless two-DOF parallel mechanisms using counter-mechanisms. Meccanica, 2016, 51, 3211-3225.	2.0	11

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145	Passively Driven Redundant Spherical Joint With Very Large Range of Motion. Journal of Mechanisms and Robotics, 2017, 9, .	2.2	11
146	Kinematic Analysis of a Novel Kinematically Redundant Spherical Parallel Manipulator. Journal of Mechanisms and Robotics, 2018, 10, .	2.2	11
147	Mechanisms for Robotic Grasping and Manipulation. Annual Review of Control, Robotics, and Autonomous Systems, 2021, 4, 573-593.	11.8	11
148	On the Optimal Design of Underactuated Fingers Using Rolling Contact Joints. IEEE Robotics and Automation Letters, 2021, 6, 4656-4663.	5.1	11
149	Effect of Actuation Errors on a Purely-Translational Spatial Cable-Driven Parallel Robot. , 2019, , .		11
150	Dynamic Point-To-Point Trajectory Planning for Three Degrees-of-Freedom Cable-Suspended Parallel Robots Using Rapidly Exploring Random Tree Search. Journal of Mechanisms and Robotics, 2020, 12, .	2.2	11
151	A first semimanual device for clinical intramuscular repetitive cell injections. Cell Transplantation, 2010, 19, 67-78.	2.5	11
152	Generation and forward displacement analysis of two new classes of analytic 6-SPS parallel manipulators. Journal of Field Robotics, 2001, 18, 295-304.	0.7	10
153	The Maximal Singularity-Free Workspace of Planar 3-RPR Parallel Mechanisms. , 2006, , .		10
154	On the Modeling of Leg Constraints in the Dynamic Analysis of Gough/Stewart-Type Platforms. Journal of Computational and Nonlinear Dynamics, 2009, 4, .	1.2	10
155	3-DOF Cartesian Force Limiting Device Based on the Delta architecture for safe physical human-robot interaction. , 2010, , .		10
156	Performance Indices for Collaborative Serial Robots With Optimally Adjusted Series Clutch Actuators. Journal of Mechanisms and Robotics, 2012, 4, .	2.2	10
157	Computed-Torque Control of a Four-Degree-of-Freedom Admittance Controlled Intelligent Assist Device. Springer Tracts in Advanced Robotics, 2013, , 635-649.	0.4	10
158	A bidirectional haptic device for the training and assessment of handwriting capabilities. , 2013, , .		10
159	A tension distribution algorithm for cable-driven parallel robots operating beyond their wrench-feasible workspace. , 2016, , .		10
160	Parallel Mechanisms. Springer Handbooks, 2016, , 443-462.	0.6	10
161	Experimental Validation of Jacobian-Based Stiffness Analysis Method for Parallel Manipulators With Nonredundant Legs. Journal of Mechanisms and Robotics, 2016, 8, .	2.2	10
162	A Haptic Bilateral System for the Remote Humanâ€“Human Handshake. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2017, 139, .	1.6	10

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163	Experimental Determination of the Accuracy of a Three-Dof Cable-Suspended Parallel Robot Performing Dynamic Trajectories. Mechanisms and Machine Science, 2015, , 101-112.	0.5	10
164	Design and Control of the Laval Underactuated Hands. , 2007, , 171-207.		10
165	2 DOF cartesian force limiting device for safe physical human-robot interaction. , 2009, , .		9
166	Reactionless Two-Degree-of-Freedom Planar Parallel Mechanism With Variable Payload. Journal of Mechanisms and Robotics, 2010, 2, .	2.2	9
167	Underactuated versatile gripper for the cleaning of nuclear sites. , 2010, , .		9
168	Maximal singularity-free orientation workspace over a position region of Goughâ€“Stewart platform. Advanced Robotics, 2015, 29, 1427-1436.	1.8	9
169	Design, Control, and Experimental Validation of a Handshaking Reactive Robotic Interface. Journal of Mechanisms and Robotics, 2016, 8, .	2.2	9
170	Rotational Low-Impedance Physical Humanâ€“Robot Interaction Using Underactuated Redundancy. Journal of Mechanisms and Robotics, 2021, 13, .	2.2	9
171	Kinematic analysis of a new 2-DOF parallel wrist with a large singularity-free rotational workspace. Mechanism and Machine Theory, 2022, 175, 104942.	4.5	9
172	Bidirectional Haptic Communication: Application to the Teaching and Improvement of Handwriting Capabilities. Machines, 2016, 4, 6.	2.2	8
173	Force Capabilities of Two-Degree-of-Freedom Serial Robots Equipped With Passive Isotropic Force Limiters. Journal of Mechanisms and Robotics, 2016, 8, .	2.2	8
174	Model-Based Grasping of Unknown Objects from a Random Pile. Robotics, 2019, 8, 79.	3.5	8
175	Experimental Validation of a Three-Degree-of-Freedom Cable-Suspended Parallel Robot for Spatial Translation With Constant Orientation. Journal of Mechanisms and Robotics, 2019, 11, .	2.2	8
176	Human Safety Algorithms for a Parallel Cable-Driven Haptic Interface. Advances in Intelligent and Soft Computing, 2010, , 187-200.	0.2	8
177	Robotic force amplification with free space motion capability. , 2014, , .		7
178	A Comparison of the Effectiveness of Design Approaches for Human-Friendly Robots. Journal of Mechanical Design, Transactions of the ASME, 2015, 137, .	2.9	7
179	Dynamic modelling and control of a cubic flying blimp using external motion capture. Proceedings of the Institution of Mechanical Engineers Part I: Journal of Systems and Control Engineering, 2015, 229, 970-982.	1.0	7
180	An anticipative kinematic limitation avoidance algorithm for collaborative robots: Three-dimensional case. , 2017, , .		7

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