Wang, Michael Yu

List of Publications by Year
in descending order

223 papers	12,330 citations	28190 55 h-index	30010 103 g-index
229 all docs	229 docs citations	229 times ranked	4946 citing authors

#	Article	IF	Citations
1	A level set method for structural topology optimization. Computer Methods in Applied Mechanics and Engineering, 2003, 192, 227-246.	3.4	2,319
2	â€œColorâ€•level sets: a multi-phase method for structural topology optimization with multiple materials. Computer Methods in Applied Mechanics and Engineering, 2004, 193, 469-496.	3.4	372
3	Radial basis functions and level set method for structural topology optimization. International Journal for Numerical Methods in Engineering, 2006, 65, 2060-2090.	1.5	260
4	Energy absorption characteristics of metallic triply periodic minimal surface sheet structures under compressive loading. Additive Manufacturing, 2018, 23, 505-515.	1.7	257
5	A level setâ€based parameterization method for structural shape and topology optimization. International Journal for Numerical Methods in Engineering, 2008, 76, 1-26.	1.5	222
6	Design of graded lattice structure with optimized mesostructures for additive manufacturing. Materials and Design, 2018, 142, 114-123.	3.3	209
7	A multi-material level set-based topology and shape optimization method. Computer Methods in Applied Mechanics and Engineering, 2015, 283, 1570-1586.	3.4	208
8	Multimaterial structural topology optimization with a generalized Cahnâ€"Hilliard model of multiphase transition. Structural and Multidisciplinary Optimization, 2006, 33, 89-111.	1.7	194
9	An 88-line MATLAB code for the parameterized level set method based topology optimization using radial basis functions. Structural and Multidisciplinary Optimization, 2018, 58, 831-849.	1.7	187
10	Design of Multimaterial Compliant Mechanisms Using Level-Set Methods. Journal of Mechanical Design, Transactions of the ASME, 2005, 127, 941-956.	1.7	181
11	Shape and topology optimization of compliant mechanisms using a parameterization level set method. Journal of Computational Physics, 2007, 227, 680-705.	1.9	178
12	An extended level set method for shape and topology optimization. Journal of Computational Physics, 2007, 221, 395-421.	1.9	176
13	A level set solution to the stress-based structural shape and topology optimization. Computers and Structures, 2012, 90-91, 55-64.	2.4	167
14	Piecewise constant level set method for structural topology optimization. International Journal for Numerical Methods in Engineering, 2009, 78, 379-402.	1.5	158
15	Concurrent design with connectable graded microstructures. Computer Methods in Applied Mechanics and Engineering, 2017, 317, 84-101.	3.4	152
16	Topological shape optimization of microstructural metamaterials using a level set method. Computational Materials Science, 2014, 87, 178-186.	1.4	151
17	Vibration energy harvesting using a phononic crystal with point defect states. Applied Physics Letters, 2013, 102, .	1.5	147
18	Stress-related topology optimization via level set approach. Computer Methods in Applied Mechanics and Engineering, 2011, 200, 3439-3452.	3.4	137

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19	Design of piezoelectric actuators using a multiphase level set method of piecewise constants. Journal of Computational Physics, 2009, 228, 2643-2659.	1.9	133
20	A study on X-FEM in continuum structural optimization using a level set model. CAD Computer Aided Design, 2010, 42, 708-719.	1.4	129
21	Structural topology optimization based on non-local Shepard interpolation of density field. Computer Methods in Applied Mechanics and Engineering, 2011, 200, 3515-3525.	3.4	125
22	Level set based structural topology optimization for minimizing frequency response. Journal of Sound and Vibration, 2011, 330, 5820-5834.	2.1	123
23	A new level set method for systematic design of hinge-free compliant mechanisms. Computer Methods in Applied Mechanics and Engineering, 2008, 198, 318-331.	3.4	120
24	DEM simulation of particle damping. Powder Technology, 2004, 142, 154-165.	2.1	117
25	An enhanced aggregation method for topology optimization with local stress constraints. Computer Methods in Applied Mechanics and Engineering, 2013, 254, 31-41.	3.4	116
26	A level-set based variational method for design and optimization of heterogeneous objects. CAD Computer Aided Design, 2005, 37, 321-337.	1.4	115
27	Topology optimization of thermoelastic structures using level set method. Computational Mechanics, 2008, 42, 837-857.	2.2	112
28	A semi-implicit level set method for structural shape and topology optimization. Journal of Computational Physics, 2008, 227, 5561-5581.	1.9	111
29	Particle damping for passive vibration suppression: numerical modelling and experimental investigation. Journal of Sound and Vibration, 2005, 279, 1097-1120.	2.1	109
30	An enhanced genetic algorithm for structural topology optimization. International Journal for Numerical Methods in Engineering, 2006, 65, 18-44.	1.5	109
31	An optimum design for 3-D fixture synthesis in a point set domain. IEEE Transactions on Automation Science and Engineering, 2000, 16, 839-846.	2.4	104
32	Structural shape and topology optimization in a level-set-based framework of region representation. Structural and Multidisciplinary Optimization, 2004, 27, 1-19.	1.7	104
33	Optimizing fixture layout in a point-set domain. IEEE Transactions on Automation Science and Engineering, 2001, 17, 312-323.	2.4	99
34	Topology Optimized Design, Fabrication, and Characterization of a Soft Cable-Driven Gripper. IEEE Robotics and Automation Letters, 2018, 3, 2463-2470.	3.3	96
35	Shape feature control in structural topology optimization. CAD Computer Aided Design, 2008, 40, 951-962.	1.4	95
36	Simulation and Characterization of Particle Damping in Transient Vibrations. Journal of Vibration and Acoustics, Transactions of the ASME, 2004, 126, 202-211.	1.0	93

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37	Topology Optimized Multimaterial Soft Fingers for Applications on Grippers, Rehabilitation, and Artificial Hands. IEEE/ASME Transactions on Mechatronics, 2019, 24, 120-131.	3.7	93
38	Hybrid Jamming for Bioinspired Soft Robotic Fingers. Soft Robotics, 2020, 7, 292-308.	4.6	91
39	A level set based method for the optimization of cast part. Structural and Multidisciplinary Optimization, 2010, 41, 735-747.	1.7	88
40	Design Optimization of Soft Robots: A Review of the State of the Art. IEEE Robotics and Automation Magazine, 2020, 27, 27-43.	2.2	88
41	Topology optimization of geometrically nonlinear structures based on an additive hyperelasticity technique. Computer Methods in Applied Mechanics and Engineering, 2015, 286, 422-441.	3.4	87
42	An EEG/EMG/EOG-Based Multimodal Human-Machine Interface to Real-Time Control of a Soft Robot Hand. Frontiers in Neurorobotics, 2019, 13, 7.	1.6	83
43	Modeling of Granular Particle Damping Using Multiphase Flow Theory of Gas-Particle. Journal of Vibration and Acoustics, Transactions of the ASME, 2004, 126, 196-201.	1.0	76
44	Electrostatic Layer Jamming Variable Stiffness for Soft Robotics. IEEE/ASME Transactions on Mechatronics, 2019, 24, 424-433.	3.7	75
45	An adaptive refinement approach for topology optimization based on separated density field description. Computers and Structures, 2013, 117, 10-22.	2.4	71
46	Integrated topology optimization with embedded movable holes based on combined description by material density and level sets. Computer Methods in Applied Mechanics and Engineering, 2013, 255, 1-13.	3.4	71
47	A level set method for shape and topology optimization of both structure and support of continuum structures. Computer Methods in Applied Mechanics and Engineering, 2014, 272, 340-353.	3.4	69
48	Optimal topology design of continuum structures with stress concentration alleviation via level set method. International Journal for Numerical Methods in Engineering, 2013, 93, 942-959.	1.5	67
49	Simultaneous optimization of the material properties and the topology of functionally graded structures. CAD Computer Aided Design, 2008, 40, 660-675.	1.4	65
50	A moving superimposed finite element method for structural topology optimization. International Journal for Numerical Methods in Engineering, 2006, 65, 1892-1922.	1.5	63
51	Level set based topology optimization of vibrating structures for coupled acoustic–structural dynamics. Computers and Structures, 2014, 132, 34-42.	2.4	62
52	3D shape modeling using a self-developed hand-held 3D laser scanner and an efficient HT-ICP point cloud registration algorithm. Optics and Laser Technology, 2013, 45, 414-423.	2.2	60
53	Automatic Design of Soft Dielectric Elastomer Actuators With Optimal Spatial Electric Fields. IEEE Transactions on Robotics, 2019, 35, 1150-1165.	7.3	60
54	A comprehensive study on the speed-varying stiffness of ball bearing under different load conditions. Mechanism and Machine Theory, 2019, 136, 1-13.	2.7	60

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55	Bilateral filtering for structural topology optimization. International Journal for Numerical Methods in Engineering, 2005, 63, 1911-1938.	1.5	59
56	Topological design of compliant smart structures with embedded movable actuators. Smart Materials and Structures, 2014, 23, 045024.	1.8	59
57	An Experimental Study of Particle Damping for Beams and Plates. Journal of Vibration and Acoustics, Transactions of the ASME, 2004, 126, 141-148.	1.0	58
58	Topology optimization with pressure load through a level set method. Computer Methods in Applied Mechanics and Engineering, 2015, 283, 177-195.	3.4	58
59	A level set based shape and topology optimization method for maximizing the simple or repeated first eigenvalue of structure vibration. Structural and Multidisciplinary Optimization, 2011, 43, 473-485.	1.7	57
60	A nodal variable method of structural topology optimization based on Shepard interpolant. International Journal for Numerical Methods in Engineering, 2012, 90, 329-342.	1.5	55
61	Adaptive topology optimization with independent error control for separated displacement and density fields. Computers and Structures, 2014, 135, 50-61.	2.4	55
62	Structure-material integrated design by level sets. Structural and Multidisciplinary Optimization, 2016, 54, 1145-1156.	1.7	53
63	Tolerance analysis for fixture layout design. Assembly Automation, 2002, 22, 153-162.	1.0	52
64	Synthesis of shape and topology of multi-material structures with a phase-field method. Journal of Computer-Aided Materials Design, 2004, 11, 117-138.	0.7	48
65	Level-set method for design of multi-phase elastic and thermoelastic materials. International Journal of Mechanics and Materials in Design, 2004, 1, 213-239.	1.7	48
66	Multi-Axis Soft Sensors Based on Dielectric Elastomer. Soft Robotics, 2016, 3, 3-12.	4.6	48
67	Reliability based topology optimization for continuum structures with local failure constraints. Computers and Structures, 2014, 143, 73-84.	2.4	47
68	A topology optimization method for geometrically nonlinear structures with meshless analysis and independent density field interpolation. Computational Mechanics, 2014, 54, 629-644.	2.2	47
69	Locator and Sensor Placement for Automated Coordinate Checking Fixtures. Journal of Manufacturing Science and Engineering, Transactions of the ASME, 1999, 121, 709-719.	1.3	46
70	Multi-objective optimal fixture layout design. Robotics and Computer-Integrated Manufacturing, 2002, 18, 365-372.	6.1	46
71	Nonlinear diffusions in topology optimization. Structural and Multidisciplinary Optimization, 2004, 28, 262-276.	1.7	45
72	Design and Development of a Topology-Optimized Three-Dimensional Printed Soft Gripper. Soft Robotics, 2018, 5, 650-661.	4.6	45

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73	Compliant Mechanism Optimization: Analysis and Design with Intrinsic Characteristic Stiffness. Mechanics Based Design of Structures and Machines, 2009, 37, 183-200.	3.4	44
74	Shape equilibrium constraint: a strategy for stress-constrained structural topology optimization. Structural and Multidisciplinary Optimization, 2013, 47, 335-352.	1.7	44
75	VCUT level set method for topology optimization of functionally graded cellular structures. Computer Methods in Applied Mechanics and Engineering, 2019, 354, 487-505.	3.4	43
76	The stiffness spreading method for layout optimization of truss structures. Structural and Multidisciplinary Optimization, 2014, 49, 667-682.	1.7	42
77	Engineering feature design for level set based structural optimization. CAD Computer Aided Design, 2013, 45, 1524-1537.	1.4	41
78	A particle damper for vibration and noise reduction. Journal of Sound and Vibration, 2004, 270, 1033-1040.	2.1	40
79	Numerical Modelling and Analysis of Automotive Transmission Rattle. JVC/Journal of Vibration and Control, 2002, 8, 921-943.	1.5	39
80	Structural topology optimization with minimum distance control of multiphase embedded components by level set method. Computer Methods in Applied Mechanics and Engineering, 2016, 306, 299-318.	3.4	38
81	Length scale control for structural optimization by level sets. Computer Methods in Applied Mechanics and Engineering, 2016, 305, 891-909.	3.4	38
82	Dynamic electromechanical instability of a dielectric elastomer balloon. Europhysics Letters, 2015, 112, 47003.	0.7	37
83	A novel subdomain level set method for structural topology optimization and its application in graded cellular structure design. Structural and Multidisciplinary Optimization, 2019, 60, 2221-2247.	1.7	37
84	Semi-Lagrange method for level-set-based structural topology and shape optimization. Structural and Multidisciplinary Optimization, 2006, 31, 419-429.	1.7	36
85	End-to-end nonprehensile rearrangement with deep reinforcement learning and simulation-to-reality transfer. Robotics and Autonomous Systems, 2019, 119, 119-134.	3.0	35
86	Contact Force Prediction and Force Closure Analysis of a Fixtured Rigid Workpiece With Friction. Journal of Manufacturing Science and Engineering, Transactions of the ASME, 2003, 125, 325-332.	1.3	34
87	A Kinetoelastic Formulation of Compliant Mechanism Optimization. Journal of Mechanisms and Robotics, 2009, 1, .	1.5	34
88	Design and development of a soft gripper with topology optimization. , 2017, , .		34
89	Effective Estimation of Contact Force and Torque for Vision-Based Tactile Sensors With Helmholtzâ€"Hodge Decomposition. IEEE Robotics and Automation Letters, 2019, 4, 4094-4101.	3.3	34
90	Fully parallel level set method for large-scale structural topology optimization. Computers and Structures, 2019, 221, 13-27.	2.4	34

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91	\<title\>Dissipation mechanisms of nonobstructive particle damping using discrete element method\</title\>. , 2001, , .		33
92	A soft compressive sensor using dielectric elastomers. Smart Materials and Structures, 2016, 25, 035045.	1.8	33
93	Rearrangement with Nonprehensile Manipulation Using Deep Reinforcement Learning. , 2018, , .		33
94	Designing Distributed Compliant Mechanisms With Characteristic Stiffness. , 2007, , 33.		32
95	A finite element–based level set method for structural optimization. International Journal for Numerical Methods in Engineering, 2010, 82, 805-842.	1.5	31
96	An analysis of flexural wave band gaps of locally resonant beams with continuum beam resonators. Meccanica, 2016, 51, 171-178.	1.2	31
97	Efficient structure topology optimization by using the multiscale finite element method. Structural and Multidisciplinary Optimization, 2018, 58, 1411-1430.	1.7	31
98	Shape and topology optimization for tailoring stress in a local region to enhance performance of piezoresistive sensors. Computers and Structures, 2013, 114-115, 98-105.	2.4	30
99	Five-Axis NC Machining of Sculptured Surfaces. International Journal of Advanced Manufacturing Technology, 1999, 15, 7-14.	1.5	29
100	Form Error Evaluation: An Iterative Reweighted Least Squares Algorithm*. Journal of Manufacturing Science and Engineering, Transactions of the ASME, 2004, 126, 535-541.	1.3	29
101	Frequency band structure of locally resonant periodic flexural beams suspended with force–moment resonators. Journal Physics D: Applied Physics, 2013, 46, 255502.	1.3	29
102	Cellular level set in B-splines (CLIBS): A method for modeling and topology optimization of cellular structures. Computer Methods in Applied Mechanics and Engineering, 2019, 349, 378-404.	3.4	29
103	Pseudo-ductile fracture of 3D printed alumina triply periodic minimal surface structures. Journal of the European Ceramic Society, 2020, 40, 408-416.	2.8	29
104	A Numerical Test for the Closure Properties of 3-D Grasps. IEEE Transactions on Automation Science and Engineering, 2004, 20, 543-549.	2.4	28
105	XFEM schemes for level set based structural optimization. Frontiers of Mechanical Engineering, 2012, 7, 335-356.	2.5	28
106	Intersection of offsets of parametric surfaces. Computer Aided Geometric Design, 1996, 13, 453-465.	0.5	27
107	Interactions Between Dielectric Elastomer Actuators and Soft Bodies. Soft Robotics, 2016, 3, 161-169.	4.6	27
108	A Low-cost Inchworm-inspired Soft Robot Driven by Supercoiled Polymer Artificial Muscle. , 2019, , .		27

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109	Volumetric stereo and silhouette fusion for image-based modeling. Visual Computer, 2010, 26, 1435-1450.	2.5	26
110	Dynamic performance of a dielectric elastomer balloon actuator. Meccanica, 2015, 50, 2731-2739.	1.2	26
111	A variable-width harmonic probe for multifrequency atomic force microscopy. Applied Physics Letters, 2015, 106, .	1.5	26
112	Fixture Kinematic Analysis Based on the Full Contact Model of Rigid Bodies. Journal of Manufacturing Science and Engineering, Transactions of the ASME, 2003, 125, 316-324.	1.3	25
113	Fuzzy Adaptive Sliding Mode Control for the Precision Position of Piezo-Actuated Nano Positioning Stage. International Journal of Precision Engineering and Manufacturing, 2018, 19, 1447-1456.	1.1	25
114	Level set band method: A combination of density-based and level set methods for the topology optimization of continuums. Frontiers of Mechanical Engineering, 2020, 15, 390-405.	2.5	25
115	Geometric Confined Pneumatic Soft–Rigid Hybrid Actuators. Soft Robotics, 2020, 7, 574-582.	4.6	25
116	Multi-Object Rearrangement with Monte Carlo Tree Search: A Case Study on Planar Nonprehensile Sorting. , 2020, , .		25
117	An Automatic Hole-Filling Algorithm for Polygon Meshes. Computer-Aided Design and Applications, 2008, 5, 889-899.	0.4	24
118	Simultaneous optimization of cast part and parting direction using level set method. Structural and Multidisciplinary Optimization, 2011, 44, 751-759.	1.7	24
119	Multi-objective optimization design of a fixture layout considering locator displacement and force–deformation. International Journal of Advanced Manufacturing Technology, 2013, 67, 1267-1279.	1.5	24
120	High-Resolution 3-Dimensional Contact Deformation Tracking for FingerVision Sensor With Dense Random Color Pattern. IEEE Robotics and Automation Letters, 2021, 6, 2147-2154.	3.3	24
121	The natural vibration of a symmetric cross-ply laminated composite conical-plate shell. Composite Structures, 2007, 80, 265-278.	3.1	23
122	A method for shape and topology optimization of truss-like structure. Structural and Multidisciplinary Optimization, 2013, 47, 687-697.	1.7	22
123	On Clamping Planning in Workpiece-Fixture Systems. IEEE Transactions on Automation Science and Engineering, 2008, 5, 407-419.	3.4	21
124	Dynamics of unsymmetric piecewise-linear/non-linear systems using finite elements in time. Journal of Sound and Vibration, 1995, 185, 155-170.	2.1	20
125	A CAD modeling system for heterogeneous object. Advances in Engineering Software, 2008, 39, 444-453.	1.8	20
126	Dielectric Elastomer Actuators for Soft Wave-Handling Systems. Soft Robotics, 2017, 4, 61-69.	4.6	20

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127	A robotic manipulator design with novel soft actuators. , 2017, , .		20
128	Parametric structural optimization with dynamic knot RBFs and partition of unity method. Structural and Multidisciplinary Optimization, 2013, 47, 353-365.	1.7	19
129	Topology optimized design, fabrication and evaluation of a multimaterial soft gripper. , 2018, , .		19
130	A Study on Basis Functions of the Parameterized Level Set Method for Topology Optimization of Continuums. Journal of Mechanical Design, Transactions of the ASME, 2021, 143, .	1.7	19
131	A semi-Lagrangian level set method for structural optimization. Structural and Multidisciplinary Optimization, 2012, 46, 487-501.	1.7	18
132	Wide Band-Gaps in Flexural Periodic Beams With Separated Force and Moment Resonators. Journal of Vibration and Acoustics, Transactions of the ASME, 2015, 137, .	1.0	18
133	Programmable Deformations of Networked Inflated Dielectric Elastomer Actuators. IEEE/ASME Transactions on Mechatronics, 2019, 24, 45-55.	3.7	18
134	Optimal topology design of steelâ€"concrete composite structures under stiffness and strength constraints. Computers and Structures, 2012, 112-113, 433-444.	2.4	17
135	Quantitative Analysis of Inner Force Distribution and Load Capacity of Grasps and Fixtures. Journal of Manufacturing Science and Engineering, Transactions of the ASME, 2002, 124, 444-455.	1.3	16
136	Topology optimization of reinforced concrete structures considering control of shrinkage and strength failure. Computers and Structures, 2015, 157, 31-41.	2.4	16
137	A Novel Variable Stiffness Actuator Based on Pneumatic Actuation and Supercoiled Polymer Artificial Muscles. , 2019, , .		16
138	Isotropic â€œQuasiâ€Fluidâ€Metamaterials Designed by Topology Optimization. Advanced Theory and Simulations, 2020, 3, 1900182.	1.3	16
139	Herding by caging: a formation-based motion planning framework for guiding mobile agents. Autonomous Robots, 2021, 45, 613-631.	3.2	16
140	Shape and topology optimization for tailoring the ratio between two flexural eigenfrequencies of atomic force microscopy cantilever probe. Frontiers of Mechanical Engineering, 2014, 9, 50-57.	2.5	15
141	Compliant grasping with passive forces. Journal of Field Robotics, 2005, 22, 271-285.	0.7	14
142	Parametric Structural Shape and Topology Optimization Method With Radial Basis Functions and Level-Set Method. , 2006, , 463.		14
143	Parametric structural optimization with radial basis functions and partition of unity method. Optimization Methods and Software, 2011, 26, 533-553.	1.6	14
144	Reinforcement Learning in Topology-based Representation for Human Body Movement with Whole Arm Manipulation. , 2019, , .		14

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145	Reference Trajectory Generation for Force Tracking Impedance Control by Using Neural Network-based Environment Estimation. , 2006, , .		13
146	A move limit strategy for level set based structural optimization. Engineering Optimization, 2013, 45, 1061-1072.	1.5	13
147	Fingertip Surface Optimization for Robust Grasping on Contact Primitives. IEEE Robotics and Automation Letters, 2018, 3, 742-749.	3.3	13
148	Multi-objective optimization of sequential brakeforming processes. Journal of Materials Processing Technology, 2000, 102, 266-276.	3.1	12
149	Design of distributed compliant micromechanisms with an implicit free boundary representation. Structural and Multidisciplinary Optimization, 2008, 36, 607-621.	1.7	12
150	Non-jamming conditions in multi-contact rigid-body dynamics. Multibody System Dynamics, 2009, 22, 269-295.	1.7	12
151	Mechanical and geometric advantages in compliant mechanism optimization. Frontiers of Mechanical Engineering in China, 2009, 4, 229.	0.4	12
152	Design and optimization of a harmonic probe with step cross section in multifrequency atomic force microscopy. Review of Scientific Instruments, 2015, 86, 125007.	0.6	12
153	Simulation of Networked Dielectric Elastomer Balloon Actuators. IEEE Robotics and Automation Letters, 2016, 1, 221-226.	3.3	12
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155	Optimal Synthesis of Compliant Mechanisms Using a Connectivity Preserving Level Set Method. , 2005, , 51.		10
156	On the prediction of passive contact forces of workpiece-fixture systems. Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture, 2005, 219, 309-324.	1.5	10
157	Force Analysis of Whole Hand Grasp by Multifingered Robotic Hand. Proceedings - IEEE International Conference on Robotics and Automation, 2007, , .	0.0	10
158	Optimization of stresses in a local region for the maximization of sensitivity and minimization of cross†"sensitivity of piezoresistive sensors. Structural and Multidisciplinary Optimization, 2013, 48, 927-938.	1.7	10
159	An Origami-Inspired Monolithic Soft Gripper Based on Geometric Design Method. , 2019, , .		10
160	A Compact and Low-cost Robotic Manipulator Driven by Supercoiled Polymer Actuators. , 2020, , .		10
161	Elastically isotropic open-cell uniform thickness shell lattices with optimized elastic moduli via shape optimization. Materials and Design, 2022, 215, 110426.	3.3	10
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164	Stress-based shape and topology optimization with cellular level set in B-splines. Structural and Multidisciplinary Optimization, 2020, 62, 2391-2407.	1.7	9
165	Elastically-isotropic open-cell minimal surface shell lattices with superior stiffness via variable thickness design. Additive Manufacturing, 2021, 47, 102293.	1.7	9
166	Stereo Matching by Self-supervision of Multiscopic Vision. , 2021, , .		9
167	Viko 2.0: A Hierarchical Gecko-Inspired Adhesive Gripper With Visuotactile Sensor. IEEE Robotics and Automation Letters, 2022, 7, 7842-7849.	3.3	9
168	Parametric Shape and Topology Optimization with Radial Basis Functions. , 2006, , 13-22.		8
169	Optimal design of a tapping-mode atomic force microscopy cantilever probe with resonance harmonics assignment. Engineering Optimization, 2017, 49, 43-59.	1.5	8
170	CPU parallel-based adaptive parameterized level set method for large-scale structural topology optimization. Structural and Multidisciplinary Optimization, 2022, 65, 1.	1.7	8
171	Soft Actuator with Programmable Design: Modeling, Prototyping, and Applications. Soft Robotics, 2022, 9, 907-925.	4.6	8
172	A bilateral teleoperation controller considering the transition between the free space motion and the constrained motion. Robotica, 2008, 26, 781-790.	1.3	7
173	A robust and accurate method for visual hull computation. , 2009, , .		7
174	Networked soft actuators with large deformations. , 2017, , .		7
175	Design of multi-material soft pneumatic modules. Smart Materials and Structures, 2021, 30, 095006.	1.8	7
176	Conceptual design of compliant mechanisms using level set method. Frontiers of Mechanical Engineering in China, 2006, 1, 131-145.	0.4	6
177	Topology design of a conforming gripper with distributed compliance via a level set method. , 2014, , .		6
178	An Inchworm-inspired Rigid-reinforced Soft Robot with Combined Functions of Locomotion and Manipulation. , 2018, , .		6
179	MFuseNet: Robust Depth Estimation With Learned Multiscopic Fusion. IEEE Robotics and Automation Letters, 2020, 5, 3113-3120.	3.3	6
180	Multidimensional Tactile Sensor with a Thin Compound Eye-Inspired Imaging System. Soft Robotics, 2022, 9, 861-870.	4.6	6

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181	Real-Time Collision-Free Grasp Pose Detection With Geometry-Aware Refinement Using High-Resolution Volume. IEEE Robotics and Automation Letters, 2022, 7, 1888-1895.	3.3	6
182	A Proprioceptive Soft Robot Module Based on Supercoiled Polymer Artificial Muscle Strings. Polymers, 2022, 14, 2265.	2.0	6
183	A Kinetoelastic Approach to Continuum Compliant Mechanism Optimization. , 2008, , .		5
184	Stress-based topology optimization of concrete structures with prestressing reinforcements. Engineering Optimization, 2013, 45, 1349-1364.	1.5	5
185	Self-Latched Micromachined Mechanism With Large Displacement Ratio. Journal of Microelectromechanical Systems, 2006, 15, 1576-1585.	1.7	4
186	Combined Impedance/Direct Control of Robot Manipulators. , 2006, , .		4
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188	Investigation on Developing a Topology Optimized and 3D Printable Multimaterial Soft Gripper. , 2018, , .		4
189	Parallel-motion Thick Origami Structure for Robotic Design. , 2020, , .		4
190	Geometric Width Control in Topology Optimization Using Level Set Method and a Quadratic Energy Functional. , 2006, , 329.		3
191	Virtual circle mapping for master–slave hand systems. Advanced Robotics, 2007, 21, 183-208.	1.1	3
192	Compliant fixture layout design using topology optimization method. , 2011, , .		3
193	A full contact model for fixture kinematic analysis. , 0, , .		2
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195	Fast implicit surface reconstruction method based on normal constraints. , 2010, , .		2
196	Hong-Tan based ICP registration for partially overlapping range images. , 2011, , .		2
197	VTacArm. A Vision-based Tactile Sensing Augmented Robotic Arm with Application to Human-robot Interaction. , 2020, , .		2
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