Robert J Wood

List of Publications by Year
in descending order

245 papers	24,457 citations	20759 60 h-index	11030 137 g-index
251 all docs	251 docs citations	251 times ranked	15199 citing authors

#	Article	IF	Citations
1	Scaling Up Soft Robotics: A Meter-Scale, Modular, and Reconfigurable Soft Robotic System. Soft Robotics, 2022, 9, 324-336.	4.6	23
2	A Modular and Selfâ€Contained Fluidic Engine for Soft Actuators. Advanced Intelligent Systems, 2022, 4, 2100094.	3.3	8
3	Injection Molding of Soft Robots. Advanced Materials Technologies, 2022, 7, 2100605.	3.0	17
4	The Chain-Link Actuator: Exploiting the Bending Stiffness of McKibben Artificial Muscles to Achieve Larger Contraction Ratios. IEEE Robotics and Automation Letters, 2022, 7, 542-548.	3.3	6
5	Controlling Palm-Object Interactions Via Friction for Enhanced In-Hand Manipulation. IEEE Robotics and Automation Letters, 2022, 7, 2258-2265.	3.3	5
6	An insect-scale robot reveals the effects of different body dynamics regimes during open-loop running in feature-laden terrain. Bioinspiration and Biomimetics, 2022, 17, 026006.	1.5	2
7	An efficient, modular controller for flapping flight composing model-based and model-free components. International Journal of Robotics Research, 2022, 41, 441-457.	5.8	1
8	An Ambidextrous STarfish-Inspired Exploration and Reconnaissance Robot (The ASTER-bot). Soft Robotics, 2022, 9, 991-1000.	4.6	7
9	Toward understanding the communication in sperm whales. IScience, 2022, 25, 104393.	1.9	7
10	Advances and future outlooks in soft robotics for minimally invasive marine biology. Science Robotics, 2022, 7, eabm6807.	9.9	19
11	Towards a Microfluidic Microcontroller Circuit Library for Soft Robots. , 2022, , .		2
12	Modular End-Effector System for Autonomous Robotic Maintenance & Repair. , 2022, , .		5
13	Multi-Dimensional Compliance of Soft Grippers Enables Gentle Interaction with Thin, Flexible Objects. , 2022, , .		4
14	Controlling Soft Fluidic Actuators Using Soft DEA-Based Valves. IEEE Robotics and Automation Letters, 2022, 7, 8837-8844.	3.3	7
15	Textile Technology for Soft Robotic and Autonomous Garments. Advanced Functional Materials, 2021, 31, 2008278.	7.8	127
16	Microrobotic laser steering for minimally invasive surgery. Science Robotics, 2021, 6, .	9.9	32
17	Soft Robotics: Textile Technology for Soft Robotic and Autonomous Garments (Adv. Funct. Mater.) Tj ETQq1 1 0.784314 rgBT /Overlock	7.8	5
18	Biologically inspired electrostatic artificial muscles for insect-sized robots. International Journal of Robotics Research, 2021, 40, 895-922.	5.8	30

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19	Smarter materials for smarter robots. Science Robotics, 2021, 6, .	9.9	6
20	A Fabrication Strategy for Reconfigurable Millimeterâ€Scale Metamaterials. Advanced Functional Materials, 2021, 31, 2103428.	7.8	12
21	A dynamic electrically driven soft valve for control of soft hydraulic actuators. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	24
22	A physical model of mantis shrimp for exploring the dynamics of ultrafast systems. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	29
23	An Active Palm Enhances Dexterity of Soft Robotic In-Hand Manipulation. , 2021, , .		5
24	SoMo: Fast and Accurate Simulations of Continuum Robots in Complex Environments. , 2021, , .		13
25	The Role of Digit Arrangement in Soft Robotic In-Hand Manipulation. , 2021, , .		5
26	A Wearable Soft Haptic Communicator Based on Dielectric Elastomer Actuators. Soft Robotics, 2020, 7, 451-461.	4.6	93
27	Soft Sensing Shirt for Shoulder Kinematics Estimation. , 2020, , .		24
28	Ultra-sensitive and resilient compliant strain gauges for soft machines. Nature, 2020, 587, 219-224.	13.7	279
29	Robotic Textiles: Smart Thermally Actuating Textiles (Adv. Mater. Technol. 8/2020). Advanced Materials Technologies, 2020, 5, 2070050.	3.0	0
30	Origami-inspired miniature manipulator for teleoperated microsurgery. Nature Machine Intelligence, 2020, 2, 437-446.	8.3	89
31	A putative chordate luciferase from a cosmopolitan tunicate indicates convergent bioluminescence evolution across phyla. Scientific Reports, 2020, 10, 17724.	1.6	16
32	Inverted and Inclined Climbing Using Capillary Adhesion in a Quadrupedal Insect-Scale Robot. IEEE Robotics and Automation Letters, 2020, 5, 4820-4827.	3.3	26
33	Multi-segment soft robotic fingers enable robust precision grasping. International Journal of Robotics Research, 2020, 39, 1647-1667.	5.8	69
34	Soft Actuator Arrays: Mechanically Programmable Dip Molding of High Aspect Ratio Soft Actuator Arrays (Adv. Funct. Mater. 12/2020). Advanced Functional Materials, 2020, 30, 2070075.	7.8	2
35	Tunable Multi-Modal Locomotion in Soft Dielectric Elastomer Robots. IEEE Robotics and Automation Letters, 2020, 5, 3868-3875.	3.3	39
36	Smart Thermally Actuating Textiles. Advanced Materials Technologies, 2020, 5, 2000383.	3.0	35

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37	A Dexterous Soft Robotic Hand for Delicate In-Hand Manipulation. IEEE Robotics and Automation Letters, 2020, 5, 5502-5509.	3.3	124
38	The structural origins of brittle star arm kinematics: An integrated tomographic, additive manufacturing, and parametric modeling-based approach. Journal of Structural Biology, 2020, 211, 107481.	1.3	7
39	Ultra-gentle soft robotic fingers induce minimal transcriptomic response in a fragile marine animal. Current Biology, 2020, 30, R157-R158.	1.8	9
40	A fluidic demultiplexer for controlling large arrays of soft actuators. Soft Matter, 2020, 16, 5871-5877.	1.2	25
41	Mechanically Programmable Dip Molding of High Aspect Ratio Soft Actuator Arrays. Advanced Functional Materials, 2020, 30, 1908919.	7.8	24
42	A Soft, Modular, and Bi-stable Dome Actuator for Programmable Multi-Modal Locomotion. , 2020, , .		7
43	Piezoelectric Grippers for Mobile Micromanipulation. IEEE Robotics and Automation Letters, 2020, 5, 4407-4414.	3.3	23
44	Direct Model Reference Adaptive Control for Tracking Contracting Nonlinear Systems. , 2020, , .		0
45	Template-Based Optimal Robot Design with Application to Passive-Dynamic Underactuated Flapping. , 2020, , .		0
46	A Vacuum-driven Origami â€œMagic-ballâ€• Soft Gripper. , 2019, , .		130
47	Nitinol living hinges for millimeter-sized robots and medical devices. , 2019, , .		2
48	Yaw Torque Authority for a Flapping-Wing Micro-Aerial Vehicle. , 2019, , .		10
49	A bio-robotic remora disc with attachment and detachment capabilities for reversible underwater hitchhiking. , 2019, , .		4
50	Actuators: Tension Pistons: Amplifying Piston Force Using Fluidâ€Induced Tension in Flexible Materials (Adv. Funct. Mater. 30/2019). Advanced Functional Materials, 2019, 29, 1970208.	7.8	0
51	Controlled flight of a microrobot powered by soft artificial muscles. Nature, 2019, 575, 324-329.	13.7	460
52	Ultragentle manipulation of delicate structures using a soft robotic gripper. Science Robotics, 2019, 4, .	9.9	186
53	Design, Fabrication, and Characterization of an Untethered Amphibious Sea Urchin-Inspired Robot. IEEE Robotics and Automation Letters, 2019, 4, 3348-3354.	3.3	43
54	Deep Machine Learning Techniques for the Detection and Classification of Sperm Whale Bioacoustics. Scientific Reports, 2019, 9, 12588.	1.6	57

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55	Realizing the potential of dielectric elastomer artificial muscles. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 2476-2481.	3.3	276
56	Untethered flight of an insect-sized flapping-wing microscale aerial vehicle. Nature, 2019, 570, 491-495.	13.7	322
57	Robotic Artificial Muscles: Current Progress and Future Perspectives. IEEE Transactions on Robotics, 2019, 35, 761-781.	7.3	225
58	Tension Pistons: Amplifying Piston Force Using Fluidâ€Induced Tension in Flexible Materials. Advanced Functional Materials, 2019, 29, 1901419.	7.8	21
59	Soft Sensors for Curvature Estimation under Water in a Soft Robotic Fish. , 2019, , .		10
60	Effective locomotion at multiple stride frequencies using proprioceptive feedback on a legged microrobot. Bioinspiration and Biomimetics, 2019, 14, 056001.	1.5	19
61	Contact-implicit trajectory optimization using variational integrators. International Journal of Robotics Research, 2019, 38, 1463-1476.	5.8	23
62	An insect-inspired collapsible wing hinge dampens collision-induced body rotation rates in a microrobot. Journal of the Royal Society Interface, 2019, 16, 20180618.	1.5	18
63	A Compact Laser-Steering End-Effector for Transoral Robotic Surgery. , 2019, , .		9
64	Ultrastrong and Highâ€Stroke Wireless Soft Actuators through Liquidâ€"Gas Phase Change. Advanced Materials Technologies, 2019, 4, 1800381.	3.0	36
65	Biocompatible Soft Fluidic Strain and Force Sensors for Wearable Devices. Advanced Functional Materials, 2019, 29, 1807058.	7.8	70
66	Soft Somatosensitive Actuators via Embedded 3D Printing. Advanced Materials, 2018, 30, e1706383.	11.1	398
67	Echinoderm-Inspired Tube Feet for Robust Robot Locomotion and Adhesion. IEEE Robotics and Automation Letters, 2018, 3, 2222-2228.	3.3	25
68	A Modular Soft Robotic Wrist for Underwater Manipulation. Soft Robotics, 2018, 5, 399-409.	4.6	98
69	Concomitant sensing and actuation for piezoelectric microrobots. Smart Materials and Structures, 2018, 27, 065028.	1.8	41
70	Soft Robotics: Soft Somatosensitive Actuators via Embedded 3D Printing (Adv. Mater. 15/2018). Advanced Materials, 2018, 30, 1870106.	11.1	12
71	The grand challenges of <i>Science Robotics</i>. Science Robotics, 2018, 3, .	9.9	787
72	The milliDelta: A high-bandwidth, high-precision, millimeter-scale Delta robot. Science Robotics, 2018, 3, .	9.9	105

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73	Power and Control Autonomy for High-Speed Locomotion With an Insect-Scale Legged Robot. IEEE Robotics and Automation Letters, 2018, 3, 987-993.	3.3	111
74	Untethered soft robotics. Nature Electronics, 2018, 1, 102-112.	13.1	704
75	Closure to â€œDiscussion of â€˜A Review of Propulsion, Power, and Control Architectures for Insect-Scale Flapping Wing Vehiclesâ€™â€•(Helbling, E. F., and Wood, R. J., 2018, ASME Appl. Mech. Rev., 70(1),) TjETQq1 1 0.784314	4.5	1
76	A Review of Propulsion, Power, and Control Architectures for Insect-Scale Flapping-Wing Vehicles. Applied Mechanics Reviews, 2018, 70, .	4.5	73
77	The principles of cascading power limits in small, fast biological and engineered systems. Science, 2018, 360, .	6.0	187
78	A Low Mass Power Electronics Unit to Drive Piezoelectric Actuators for Flying Microrobots. IEEE Transactions on Power Electronics, 2018, 33, 3180-3191.	5.4	31
79	Meso scale flextensional piezoelectric actuators. Smart Materials and Structures, 2018, 27, 015008.	1.8	14
80	Soft Curvature and Contact Force Sensors for Deep-Sea Grasping via Soft Optical Waveguides. , 2018, , .		25
81	An Efficient Method for the Design and Fabrication of 2D Laminate Robotic Structures. , 2018, , .		0
82	Printing Strain Gauges on Intuitive Surgical da Vinci Robot End Effectors. , 2018, , .		7
83	Inverted and vertical climbing of a quadrupedal microrobot using electroadhesion. Science Robotics, 2018, 3, .	9.9	116
84	An End-to-End Approach to Self-Folding Origami Structures. IEEE Transactions on Robotics, 2018, 34, 1409-1424.	7.3	27
85	Compliant Low Profile Multi-Axis Force Sensors. , 2018, , .		2
86	A Dexterous, Glove-Based Teleoperable Low-Power Soft Robotic Arm for Delicate Deep-Sea Biological Exploration. Scientific Reports, 2018, 8, 14779.	1.6	98
87	A Modular Dielectric Elastomer Actuator to Drive Miniature Autonomous Underwater Vehicles. , 2018, , .		45
88	Compact Dielectric Elastomer Linear Actuators. Advanced Functional Materials, 2018, 28, 1804328.	7.8	157
89	Controllable water surface to underwater transition through electrowetting in a hybrid terrestrial-aquatic microrobot. Nature Communications, 2018, 9, 2495.	5.8	86
90	Increasing the Dimensionality of Soft Microstructures through Injectionâ€Induced Selfâ€Folding. Advanced Materials, 2018, 30, e1802739.	11.1	69

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91	Shipboard design and fabrication of custom 3D-printed soft robotic manipulators for the investigation of delicate deep-sea organisms. PLoS ONE, 2018, 13, e0200386.	1.1	58
92	Rotary-actuated folding polyhedrons for midwater investigation of delicate marine organisms. Science Robotics, 2018, 3, .	9.9	59
93	Ultraâ€Lightweight, High Power Density Lithiumâ€Ion Batteries. Batteries and Supercaps, 2018, 1, 131-134.	2.4	25
94	SOFT ROBOTIC GLOVE FOR COMBINED ASSISTANCE AND REHABILITATION DURING ACTIVITIES OF DAILY LIVING. , 2018, , 135-157.		1
95	Stabilizing air dampers for hovering aerial robotics: design, insect-scale flight tests, and scaling. Autonomous Robots, 2017, 41, 1555-1573.	3.2	13
96	Undulatory Swimming Performance and Body Stiffness Modulation in a Soft Robotic Fish-Inspired Physical Model. Soft Robotics, 2017, 4, 202-210.	4.6	82
97	Gait studies for a quadrupedal microrobot reveal contrasting running templates in two frequency regimes. Bioinspiration and Biomimetics, 2017, 12, 046005.	1.5	32
98	A Fully Integrated Battery-Powered System-on-Chip in 40-nm CMOS for Closed-Loop Control of Insect-Scale Pico-Aerial Vehicle. IEEE Journal of Solid-State Circuits, 2017, 52, 2374-2387.	3.5	15
99	A Modular Folded Laminate Robot Capable of Multi Modal Locomotion. Springer Proceedings in Advanced Robotics, 2017, , 59-70.	0.9	4
100	Dynamics and flight control of a flapping-wing robotic insect in the presence of wind gusts. Interface Focus, 2017, 7, 20160080.	1.5	36
101	A biologically inspired, flapping-wing, hybrid aerial-aquatic microrobot. Science Robotics, 2017, 2, .	9.9	159
102	Addressable wireless actuation for multijoint folding robots and devices. Science Robotics, 2017, 2, .	9.9	83
103	A biorobotic adhesive disc for underwater hitchhiking inspired by the remora suckerfish. Science Robotics, 2017, 2, .	9.9	200
104	Pop-Up MEMS One-Way Endobronchial Valve for Treatment of Chronic Obstructive Pulmonary Disease. Journal of Medical Devices, Transactions of the ASME, 2017, 11, .	0.4	1
105	A Highly Stretchable Capacitiveâ€Based Strain Sensor Based on Metal Deposition and Laser Rastering. Advanced Materials Technologies, 2017, 2, 1700081.	3.0	90
106	Batch Fabrication of Customizable Siliconeâ€Textile Composite Capacitive Strain Sensors for Human Motion Tracking. Advanced Materials Technologies, 2017, 2, 1700136.	3.0	301
107	A high-force, high-stroke distal robotic add-on for endoscopy. , 2017, , .		5
108	A geometrically-amplified in-plane piezoelectric actuator for mesoscale robotic systems. , 2017, , .		7

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109	A high speed soft robot based on dielectric elastomer actuators. , 2017, , .		80
110	An Additive Millimeterâ€Scale Fabrication Method for Soft Biocompatible Actuators and Sensors. Advanced Materials Technologies, 2017, 2, 1700135.	3.0	54
111	High speed trajectory control using an experimental maneuverability model for an insect-scale legged robot. , 2017, , .		11
112	An actuated gaze stabilization platform for a flapping-wing microrobot. , 2017, , .		5
113	Fluid-driven origami-inspired artificial muscles. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 13132-13137.	3.3	499
114	A blade element approach to modeling aerodynamic flight of an insect-scale robot. , 2017, , .		5
115	Hybrid carbon fiber-textile compliant force sensors for high-load sensing in soft exosuits. , 2017, , .		14
116	A high speed motion capture method and performance metrics for studying gaits on an insect-scale legged robot. , 2017, , .		5
117	Soft Robotic Grippers for Biological Sampling on Deep Reefs. Soft Robotics, 2016, 3, 23-33.	4.6	624
118	Spiking neural network (SNN) control of a flapping insect-scale robot. , 2016, , .		33
119	Feedback-controlled self-folding of autonomous robot collectives. , 2016, , .		21
120	Influence of wing morphological and inertial parameters on flapping flight performance. , 2016, , .		18
121	Experimental and computational studies of the aerodynamic performance of a flapping and passively rotating insect wing. Journal of Fluid Mechanics, 2016, 791, 1-33.	1.4	49
122	An integrated design and fabrication strategy for entirely soft, autonomous robots. Nature, 2016, 536, 451-455.	13.7	1,557
123	Multilayer Dielectric Elastomers for Fast, Programmable Actuation without Prestretch. Advanced Materials, 2016, 28, 8058-8063.	11.1	185
124	Comparative analysis of fabrication methods for achieving rounded microchannels in PDMS. Journal of Micromechanics and Microengineering, 2016, 26, 115013.	1.5	17
125	Fabrication of stretchable composites with anisotropic electrical conductivity for compliant pressure transducers. , 2016, , .		3
126	Non-linear resonance modeling and system design improvements for underactuated flapping-wing vehicles. , 2016, , .		27

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127	The flying monkey: A mesoscale robot that can run, fly, and grasp. , 2016, , .		45
128	Multilayer laminated piezoelectric bending actuators: design and manufacturing for optimum power density and efficiency. Smart Materials and Structures, 2016, 25, 055033.	1.8	35
129	Biocompatible Pressure Sensing Skins for Minimally Invasive Surgical Instruments. IEEE Sensors Journal, 2016, 16, 1294-1303.	2.4	22
130	Perching with a robotic insect using adaptive tracking control and iterative learning control. International Journal of Robotics Research, 2016, 35, 1185-1206.	5.8	43
131	Self-Assembling, Low-Cost, and Modular mm-Scale Force Sensor. IEEE Sensors Journal, 2016, 16, 69-76.	2.4	22
132	Model driven design for flexure-based Microrobots. , 2015, , .		37
133	Printing angle sensors for foldable robots. , 2015, , .		17
134	Feedback control of a legged microrobot with on-board sensing. , 2015, , .		12
135	Hybrid aerial and aquatic locomotion in an at-scale robotic insect. , 2015, , .		21
136	Wind disturbance rejection for an insect-scale flapping-wing robot. , 2015, , .		3
137	Design and control of a parallel linkage wrist for robotic microsurgery. , 2015, , .		15
138	Design and fabrication of an insect-scale flying robot for control autonomy. , 2015, , .		23
139	Rotating the heading angle of underactuated flapping-wing flyers by wriggle-steering. , 2015, , .		6
140	Jumping on water: Surface tensionâ€“dominated jumping of water striders and robotic insects. Science, 2015, 349, 517-521.	6.0	306
141	A 3D-printed, functionally graded soft robot powered by combustion. Science, 2015, 349, 161-165.	6.0	802
142	Design and manufacturing rules for maximizing the performance of polycrystalline piezoelectric bending actuators. Smart Materials and Structures, 2015, 24, 065023.	1.8	51
143	Self-folding and self-actuating robots: A pneumatic approach. , 2015, , .		34
144	Development of the Polipo Pressure Sensing System for Dynamic Space-Suited Motion. IEEE Sensors Journal, 2015, 15, 6229-6237.	2.4	24

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145	Model-Free Control of a Hovering Flapping-Wing Microrobot. Journal of Intelligent and Robotic Systems: Theory and Applications, 2015, 77, 95-111.	2.0	25
146	Origami-Inspired Printed Robots. IEEE/ASME Transactions on Mechatronics, 2015, 20, 2214-2221.	3.7	112
147	Soft robotic glove for combined assistance and at-home rehabilitation. Robotics and Autonomous Systems, 2015, 73, 135-143.	3.0	1,168
148	OS1-10 Translational Flight Stability of an Insect-Scale Flapping-Wing Robot(OS1: Bio-inspired Flight) Tj ETQq0 0 0 rgBT /Overlock 10 Tf Science and Technology in Biomechanics, 2015, 2015.8, 71.	0.0	0
149	Self-folding origami: shape memory composites activated by uniform heating. Smart Materials and Structures, 2014, 23, 094006.	1.8	236
150	A monolithic approach to fabricating low-cost, millimeter-scale multi-axis force sensors for minimally-invasive surgery. , 2014, , .		19
151	Self-assembling sensors for printable machines. , 2014, , .		24
152	Wearable soft sensing suit for human gait measurement. International Journal of Robotics Research, 2014, 33, 1748-1764.	5.8	325
153	Wrist angle measurements using soft sensors. , 2014, , .		6
154	Bio-inspired mechanisms for inclined locomotion in a legged insect-scale robot. , 2014, , .		25
155	Pitch and yaw control of a robotic insect using an onboard magnetometer. , 2014, , .		23
156	A computational tool to improve flapping efficiency of robotic insects. , 2014, , .		4
157	Powertrain selection for a biologically-inspired miniature quadruped robot. , 2014, , .		16
158	A passive, origami-inspired, continuously variable transmission. , 2014, , .		29
159	Fly on the wall. , 2014, , .		14
160	A wirelessly powered, biologically inspired ambulatory microrobot. , 2014, , .		24
161	Mechanically programmed self-folding at the millimeter scale. , 2014, , .		7
162	Pneumatic Energy Sources for Autonomous and Wearable Soft Robotics. Soft Robotics, 2014, 1, 263-274.	4.6	215

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163	Mechanical and electrical numerical analysis of soft liquid-embedded deformation sensors analysis. Extreme Mechanics Letters, 2014, 1, 42-46.	2.0	38
164	An end-to-end approach to making self-folded 3D surface shapes by uniform heating. , 2014, , .		34
165	An analytic framework for developing inherently-manufacturable pop-up laminate devices. Smart Materials and Structures, 2014, 23, 094013.	1.8	32
166	Printing Strain Gauges on Surgical Instruments for Force Measurement1. Journal of Medical Devices, Transactions of the ASME, 2014, 8, .	0.4	8
167	An untethered jumping soft robot. , 2014, , .		124
168	A bioinspired approach to torque control in an insect-sized flapping-wing robot. , 2014, , .		8
169	High speed locomotion for a quadrupedal microrobot. International Journal of Robotics Research, 2014, 33, 1063-1082.	5.8	110
170	Single-loop control and trajectory following of a flapping-wing microrobot. , 2014, , .		11
171	Controlling free flight of a robotic fly using an onboard vision sensor inspired by insect ocelli. Journal of the Royal Society Interface, 2014, 11, 20140281.	1.5	98
172	Adaptive control of a millimeter-scale flapping-wing robot. Bioinspiration and Biomimetics, 2014, 9, 025004.	1.5	98
173	A Resilient, Untethered Soft Robot. Soft Robotics, 2014, 1, 213-223.	4.6	885
174	Embedded 3D Printing of Strain Sensors within Highly Stretchable Elastomers. Advanced Materials, 2014, 26, 6307-6312.	11.1	1,314
175	Monolithic Fabrication of Millimeter-Scale Surgical Devices With Integrated Sensing1. Journal of Medical Devices, Transactions of the ASME, 2014, 8, .	0.4	1
176	Algorithms for Rapid Development of Inherently-Manufacturable Laminate Devices. , 2014, , .		3
177	Lift Force Control of Flapping-Wing Microrobots Using Adaptive Feedforward Schemes. IEEE/ASME Transactions on Mechatronics, 2013, 18, 155-168.	3.7	28
178	Meshworm: A Peristaltic Soft Robot With Antagonistic Nickel Titanium Coil Actuators. IEEE/ASME Transactions on Mechatronics, 2013, 18, 1485-1497.	3.7	536
179	An Origami-Inspired Approach to Worm Robots. IEEE/ASME Transactions on Mechatronics, 2013, 18, 430-438.	3.7	289
180	Elastic Element Integration for Improved Flapping-Wing Micro Air Vehicle Performance. IEEE Transactions on Robotics, 2013, 29, 32-41.	7.3	42

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181	Biologically Inspired Optical-Flow Sensing for Altitude Control of Flapping-Wing Microrobots. IEEE/ASME Transactions on Mechatronics, 2013, 18, 556-568.	3.7	51
182	Model-free control of a flapping-wing flying microrobot. , 2013, , .		11
183	Design and Characterization of a Soft Multi-Axis Force Sensor Using Embedded Microfluidic Channels. IEEE Sensors Journal, 2013, 13, 4056-4064.	2.4	240
184	Flexible, stretchable tactile arrays from MEMS barometers. , 2013, , .		35
185	Robot self-assembly by folding: A printed inchworm robot. , 2013, , .		100
186	A Soft Strain Sensor Based on Ionic and Metal Liquids. IEEE Sensors Journal, 2013, 13, 3405-3414.	2.4	288
187	Controlled Flight of a Biologically Inspired, Insect-Scale Robot. Science, 2013, 340, 603-607.	6.0	873
188	Self-folding with shape memory composites. Soft Matter, 2013, 9, 7688.	1.2	236
189	Masked Deposition of Galliumâ€Indium Alloys for Liquidâ€Embedded Elastomer Conductors. Advanced Functional Materials, 2013, 23, 5292-5296.	7.8	248
190	Smart pneumatic artificial muscle actuator with embedded microfluidic sensing. , 2013, , .		55
191	Soft wearable motion sensing suit for lower limb biomechanics measurements. , 2013, , .		87
192	Microsurgical Devices by Pop-Up Book MEMS. , 2013, , .		17
193	Smaller, Softer, Safer, Smarter Robots. Science Translational Medicine, 2013, 5, 210ed19.	5.8	20
194	Influence of surface traction on soft robot undulation. International Journal of Robotics Research, 2013, 32, 1577-1584.	5.8	74
195	Design and analysis of an integrated driver for piezoelectric actuators. , 2013, , .		9
196	Adaptive control for takeoff, hovering, and landing of a robotic fly. , 2013, , .		23
197	A jumping robotic insect based on a torque reversal catapult mechanism. , 2013, , .		9
198	Pop-up assembly of a quadrupedal ambulatory MicroRobot. , 2013, , .		31

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199	Self-folding shape memory laminates for automated fabrication. , 2013, , .		29
200	Design and feedback control of a biologically-inspired miniature quadruped. , 2013, , .		8
201	Robustness of centipede-inspired millirobot locomotion to leg failures. , 2013, , .		13
202	Active modular elastomer sleeve for soft wearable assistance robots. , 2012, , .		56
203	Design, fabrication, and modeling of the split actuator microrobotic bee. , 2012, , .		69
204	Influence of cross-sectional geometry on the sensitivity and hysteresis of liquid-phase electronic pressure sensors. Applied Physics Letters, 2012, 101, .	1.5	54
205	Design and Fabrication of Soft Artificial Skin Using Embedded Microchannels and Liquid Conductors. IEEE Sensors Journal, 2012, 12, 2711-2718.	2.4	632
206	Open-loop roll, pitch and yaw torques for a robotic bee. , 2012, , .		29
207	A soft multi-axis force sensor. , 2012, , .		20
208	Turning gaits and optimal undulatory gaits for a modular centipede-inspired millirobot. , 2012, , .		13
209	Driving high voltage piezoelectric actuators in microrobotic applications. Sensors and Actuators A: Physical, 2012, 176, 78-89.	2.0	206
210	Soft artificial skin with multi-modal sensing capability using embedded liquid conductors. , 2011, , .		30
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