Cagdas D Onal

List of Publications by Year
in descending order

53 papers	3,677 citations	471509 17 h-index	713466 21 g-index
53 all docs	53 docs citations	53 times ranked	3242 citing authors

#	Article	IF	Citations
1	Soft Pneumatic Actuators: Modeling, Control, and Application. , 2022, , 129-219.		0
2	Air-Releasable Soft Robots for Explosive Ordnance Disposal. , 2022, , .		1
3	An Origami Continuum Robot Capable of Precise Motion Through Torsionally Stiff Body and Smooth Inverse Kinematics. Soft Robotics, 2021, 8, 371-386.	8.0	71
4	Ori-Vent: Design and Prototyping ofÂAccessible and Portable Origami-Inspired Ventilators. Springer Proceedings in Advanced Robotics, 2021, , 126-136.	1.3	0
5	Fast Probabilistic 3-D Curvature Proprioception with a Magnetic Soft Sensor. , 2021, , .		0
6	Contact Testing of an Impedance-based Cancer Detection Probe. , 2021, , .		0
7	Soft Mobile Robots: a Review of Soft Robotic Locomotion Modes. Current Robotics Reports, 2021, 2, 371-397.	7.9	18
8	Soft Hybrid Wave Spring Actuators. Advanced Intelligent Systems, 2020, 2, 1900097.	6.1	8
9	Salamanderbot: A soft-rigid composite continuum mobile robot to traverse complex environments. , 2020, , .		6
10	Motion Planning and Iterative Learning Control of a Modular Soft Robotic Snake. Frontiers in Robotics and AI, 2020, 7, 599242.	3.2	18
11	Discretized Modeling of Planar Pneumatic Continuum Manipulators. , 2020, , .		0
12	Kinematic Optimization of an Underactuated Anthropomorphic Prosthetic Hand. , 2020, , .		2
13	Learning to Locomote with Artificial Neural-Network and CPG-based Control in a Soft Snake Robot. , 2020, , .		8
14	Intuitive Control of a Robotic Arm and Hand System With Pneumatic Haptic Feedback. IEEE Robotics and Automation Letters, 2019, 4, 4424-4430.	5.1	27
15	A Validated Physical Model For Real-Time Simulation of Soft Robotic Snakes. , 2019, , .		7
16	Bioinspired Robotics. , 2019, , 495-541.		0
17	Force-Sensitive Prosthetic Hand with 3-axis Magnetic Force Sensors. , 2019, , .		5
18	Design, Modeling, and Validation of a Soft Magnetic 3-D Force Sensor. IEEE Sensors Journal, 2018, 18, 3852-3863.	4.7	39

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19	OriSnake: Design, Fabrication, and Experimental Analysis of a 3-D Origami Snake Robot. IEEE Robotics and Automation Letters, 2018, 3, 1993-1999.	5.1	46
20	Reverse pneumatic artificial muscles (rPAMs): Modeling, integration, and control. PLoS ONE, 2018, 13, e0204637.	2.5	30
21	Design, fabrication and experimental analysis of a 3-D soft robotic snake. , 2018, , .		17
22	A Soft Robotic Wearable Wrist Device for Kinesthetic Haptic Feedback. Frontiers in Robotics and AI, 2018, 5, 83.	3.2	27
23	Adapting to Flexibility: Model Reference Adaptive Control of Soft Bending Actuators. IEEE Robotics and Automation Letters, 2017, 2, 964-970.	5.1	45
24	Toward Modular Soft Robotics: Proprioceptive Curvature Sensing and Sliding-Mode Control of Soft Bidirectional Bending Modules. Soft Robotics, 2017, 4, 117-125.	8.0	98
25	Soft Robotics: Review of Fluidâ€Driven Intrinsically Soft Devices; Manufacturing, Sensing, Control, and Applications in Humanâ€Robot Interaction. Advanced Engineering Materials, 2017, 19, 1700016.	3.5	707
26	Decentralized obstacle avoidance in collective object manipulation. , 2017, , .		4
27	Design and analysis of an origami continuum manipulation module with torsional strength. , 2017, , .		28
28	Scalable collective impedance control of an object via a decentralized force control method. , 2017, , .		4
29	Regionally Growing Random Trees: A synergistic motion planning and control algorithm for dynamic systems. , 2016, , .		2
30	A composite soft bending actuation module with integrated curvature sensing. , 2016, , .		44
31	Motion control of a soft-actuated modular manipulator. , 2016, , .		12
32	System-level challenges in pressure-operated soft robotics. Proceedings of SPIE, 2016, , .	0.8	2
33	Programmable Skins based on Core-Shell Microsphere/Nanotube/Polymer Composites. Materials Research Society Symposia Proceedings, 2015, 1800, 1.	0.1	0
34	Slithering towards autonomy: a self-contained soft robotic snake platform with integrated curvature sensing. Bioinspiration and Biomimetics, 2015, 10, 055001.	2.9	59
35	Bioinspired design and fabrication principles of reliable fluidic soft actuation modules. , 2015, , .		13
36	TriBot: A minimally-actuated accessible holonomic hexapedal locomotion platform. , 2015, , .		4

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37	A precise embedded curvature sensor module for soft-bodied robots. Sensors and Actuators A: Physical, 2015, 236, 349-356.	4.1	96
38	Optimized design of a rigid kinematic module for antagonistic soft actuation. , 2015, , .		10
39	Feedforward augmented sliding mode motion control of antagonistic soft pneumatic actuators. , 2015, , .		41
40	Origami-Inspired Printed Robots. IEEE/ASME Transactions on Mechatronics, 2015, 20, 2214-2221.	5.8	112
41	Design and fabrication of a foldable hexapod robot towards experimental swarm applications. , 2014, , .		10
42	Theoretical Modeling and Experimental Analysis of a Pressure-Operated Soft Robotic Snake. Soft Robotics, 2014, 1, 136-146.	8.0	103
43	Design improvements and dynamic characterization on fluidic elastomer actuators for a soft robotic snake. , 2014, , .		29
44	Autonomous Soft Robotic Fish Capable of Escape Maneuvers Using Fluidic Elastomer Actuators. Soft Robotics, 2014, 1, 75-87.	8.0	730
45	An Origami-Inspired Approach to Worm Robots. IEEE/ASME Transactions on Mechatronics, 2013, 18, 430-438.	5.8	289
46	Robot self-assembly by folding: A printed inchworm robot. , 2013, , .		100
47	A lightweight modular 12-DOF print-and-fold hexapod. , 2013, , .		17
48	Self-folding with shape memory composites. Soft Matter, 2013, 9, 7688.	2.7	236
49	Self-pop-up cylindrical structure by global heating. , 2013, , .		18
50	Autonomous undulatory serpentine locomotion utilizing body dynamics of a fluidic soft robot. Bioinspiration and Biomimetics, 2013, 8, 026003.	2.9	285
51	A modular approach to soft robots. , 2012, , .		96
52	Towards printable robotics: Origami-inspired planar fabrication of three-dimensional mechanisms. , 2011, , .		106
53	Soft robot actuators using energy-efficient valves controlled by electropermanent magnets. , 2011, , .		47