Yigit Menguc

List of Publications by Year
in descending order

66 papers	3,802 citations	279701 23 h-index	276775 41 g-index
67 all docs	67 docs citations	67 times ranked	5290 citing authors

#	Article	IF	Citations
1	3D Printed Motor-Sensory Module Prototype for Facial Rehabilitation. Soft Robotics, 2022, 9, 354-363.	4.6	3
2	Experimentally Identified Models of McKibben Soft Actuators as Primary Movers and Passive Structures. Journal of Mechanisms and Robotics, 2022, 14, .	1.5	5
3	Acoustophoretic Liquefaction for 3D Printing Ultrahighâ€Viscosity Nanoparticle Suspensions. Advanced Materials, 2022, 34, e2106183.	11.1	14
4	Redundancy and overactuation in cephalopod-inspired soft robot arms. Bioinspiration and Biomimetics, 2022, , .	1.5	0
5	Redundancy and overactuation in cephalopod-inspired soft robot arms. Bioinspiration and Biomimetics, 2022, 17, 036004.	1.5	1
6	Self-Sensing, Stretchable, Active Circuit Arrays: Liquid Metal Paste as a Combination Interconnect and Strain Sensor. , 2022, , .		1
7	Curvilinear Kirigami Skins Let Soft Bending Actuators Slither Faster. Frontiers in Robotics and AI, 2022, 9, 872007.	2.0	4
8	A generalizable equilibrium model for bending soft arms with longitudinal actuators. International Journal of Robotics Research, 2021, 40, 148-177.	5.8	12
9	Indentation and bifurcation of inflated membranes. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2021, 477, 20200930.	1.0	3
10	Stenciled Liquid Metal Paste for Robust Stretchable Electrical Interconnects. , 2021, , .		4
11	Auger-Based 3D Printing of Stretchable Liquid Metal Paste Interconnects: A Brief Tutorial. , 2021, , .		0
12	Multi-material direct ink writing of photocurable elastomeric foams. Communications Materials, 2021, 2, .	2.9	28
13	A tuned mass amplifier for enhanced haptic feedback. Mechanics of Materials, 2021, 160, 103979.	1.7	0
14	Predicting interfacial layer adhesion strength in 3D printable silicone. Additive Manufacturing, 2021, 47, 102320.	1.7	9
15	Lumped-Parameter Response Time Models for Pneumatic Circuit Dynamics. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2021, 143, .	0.9	12
16	Learning to Control Reconfigurable Staged Soft Arms. , 2020, , .		2
17	Machine learning generative models for automatic design of multi-material 3D printed composite solids. Extreme Mechanics Letters, 2020, 41, 100992.	2.0	43
18	An Eulerâ€“Bernoulli beam model for soft robot arms bent through self-stress and external loads. International Journal of Solids and Structures, 2020, 207, 113-131.	1.3	20

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19	A data-driven computational scheme for the nonlinear mechanical properties of cellular mechanical metamaterials under large deformation. Soft Matter, 2020, 16, 7524-7534.	1.2	30
20	Skin in the Game: A Tunable Interface-Quality Sensor for Human-Coupled Accessories. , 2020, 4, 1-4.		2
21	Evaluation of a Circumferential Extending Antagonist Actuator in a Soft Arm. , 2020, , .		1
22	3D printable tough silicone double networks. Nature Communications, 2020, 11, 4000.	5.8	74
23	3D Printing of Viscoelastic Suspensions via Digital Light Synthesis for Tough Nanoparticleâ€"Elastomer Composites. Advanced Materials, 2020, 32, e2001646.	11.1	31
24	Self-sensing Elastomeric Membrane for Haptic Bubble Arrray. , 2020, , .		3
25	Analyzing the Effect of Soft Arm Design on Obstacle Navigation through Collision. , 2020, , .		2
26	Design of Deployable Soft Robots Through Plastic Deformation of Kirigami Structures. IEEE Robotics and Automation Letters, 2020, 5, 2272-2279.	3.3	26
27	Snake-Inspired Kirigami Skin for Lateral Undulation of a Soft Snake Robot. IEEE Robotics and Automation Letters, 2020, 5, 1728-1733.	3.3	34
28	Electrical Characterization of Stretchable Printed Liquid Metal Interconnects under Repeated Cyclic Loading. , 2019, , .		1
29	Compact Modeling of Stretchable Printed Liquid Metal Electrical Interconnects. , 2019, , .		0
30	Evaluation of 3D Printed Soft Robots in Radiation Environments and Comparison With Molded Counterparts. Frontiers in Robotics and AI, 2019, 6, 40.	2.0	27
31	3D-Printed Liquid Metal Interconnects for Stretchable Electronics. IEEE Sensors Journal, 2019, 19, 3832-3840.	2.4	57
32	Characterization of a Class of Soft Bending Arms. , 2019, , .		4
33	Zero-Support 3D Printing of Thermoset Silicone Via Simultaneous Control of Both Reaction Kinetics and Transient Rheology. 3D Printing and Additive Manufacturing, 2019, 6, 139-147.	1.4	29
34	Developing a UV-Curable, Environmentally Benign and Degradable Elastomer for Soft Robotics. MRS Advances, 2018, 3, 1551-1556.	0.5	5
35	Fully Soft 3D-Printed Electroactive Fluidic Valve for Soft Hydraulic Robots. Soft Robotics, 2018, 5, 258-271.	4.6	68
36	Rheological Modification of Liquid Metal for Additive Manufacturing of Stretchable Electronics. Advanced Materials Technologies, 2018, 3, 1700351.	3.0	149

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37	Soft Snake Robots: Investigating the Effects of Gait Parameters on Locomotion in Complex Terrains. , 2018, , .		16
38	Highly-Stretchable Biomechanical Strain Sensor using Printed Liquid Metal Paste. , 2018, , .		16
39	Incorporate Oblique Muscle Contractions to Strengthen Soft Robots. , 2018, , .		1
40	Direct 3D printing of silicone elastomer soft robots and their performance comparison with molded counterparts. , 2018, , .		68
41	Contextual Collision. , 2018, , .		2
42	Measurement of tissue stiffness using soft eGa-in sensors and pressure application. , 2018, , .		2
43	Helically wound soft actuators for torsion control. , 2018, , .		1
44	Using an environmentally benign and degradable elastomer in soft robotics. International Journal of Intelligent Robotics and Applications, 2017, 1, 124-142.	1.6	24
45	Will robots be bodies with brains or brains with bodies?. Science Robotics, 2017, 2, .	9.9	19
46	Directly Fabricating Soft Robotic Actuators With an Open-Source 3-D Printer. IEEE Robotics and Automation Letters, 2017, 2, 277-281.	3.3	54
47	Soft snake robots: Mechanical design and geometric gait implementation. , 2017, , .		36
48	Smart and Squishy Robots. American Scientist, 2017, 105, 143.	0.1	3
49	Smart and Squishy Robots. American Scientist, 2017, 105, 143.	0.1	0
50	What Is the Path Ahead for Soft Robotics?. Soft Robotics, 2016, 3, 159-160.	4.6	9
51	Hybrid soft sensor with embedded IMUs to measure motion. , 2016, , .		4
52	Soft Robotics as an Emerging Academic Field. Soft Robotics, 2015, 2, 131-134.	4.6	7
53	A Soft, Wearable, Quantitative Ankle Diagnostic Device1. Journal of Medical Devices, Transactions of the ASME, 2015, 9, .	0.4	3
54	Capacitive Soft Strain Sensors via Multicoreâ€"Shell Fiber Printing. Advanced Materials, 2015, 27, 2440-2446.	11.1	372

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55	Development of the Polipo Pressure Sensing System for Dynamic Space-Suited Motion. IEEE Sensors Journal, 2015, 15, 6229-6237.	2.4	24
56	Wearable soft sensing suit for human gait measurement. International Journal of Robotics Research, 2014, 33, 1748-1764.	5.8	325
57	Pneumatic Energy Sources for Autonomous and Wearable Soft Robotics. Soft Robotics, 2014, 1, 263-274.	4.6	215
58	Mechanical and electrical numerical analysis of soft liquid-embedded deformation sensors analysis. Extreme Mechanics Letters, 2014, 1, 42-46.	2.0	38
59	Staying sticky: contact self-cleaning of gecko-inspired adhesives. Journal of the Royal Society Interface, 2014, 11, 20131205.	1.5	78
60	Embedded 3D Printing of Strain Sensors within Highly Stretchable Elastomers. Advanced Materials, 2014, 26, 6307-6312.	11.1	1,314
61	Soft wearable motion sensing suit for lower limb biomechanics measurements. , 2013, , .		87
62	Enhanced fabrication and characterization of gecko-inspired mushroom-tipped microfiber adhesives. Journal of Adhesion Science and Technology, 2013, 27, 1921-1932.	1.4	26
63	Geckoâ€Inspired Controllable Adhesive Structures Applied to Micromanipulation. Advanced Functional Materials, 2012, 22, 1246-1254.	7.8	145
64	Bioinspired Materials: Gecko-Inspired Controllable Adhesive Structures Applied to Micromanipulation (Adv. Funct. Mater. 6/2012). Advanced Functional Materials, 2012, 22, 1245-1245.	7.8	1
65	Waalbot II: Adhesion Recovery and Improved Performance of a Climbing Robot using Fibrillar Adhesives. International Journal of Robotics Research, 2011, 30, 118-133.	5.8	194
66	Adhesion recovery and passive peeling in a wall climbing robot using adhesives. , 2010, , .		5