Ali Sadeghi

List of Publications by Year
in descending order

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Version: 2024-02-01

43 papers	1,213 citations	471509 17 h-index	434195 31 g-index
51 all docs	51 docs citations	51 times ranked	1107 citing authors

#	Article	IF	Citations
1	Toward Self-Growing Soft Robots Inspired by Plant Roots and Based on Additive Manufacturing Technologies. Soft Robotics, 2017, 4, 211-223.	8.0	161
2	A Novel Growing Device Inspired by Plant Root Soil Penetration Behaviors. PLoS ONE, 2014, 9, e90139.	2.5	117
3	Octopusâ€Inspired Soft Arm with Suction Cups for Enhanced Grasping Tasks in Confined Environments. Advanced Intelligent Systems, 2019, 1, 1900041.	6.1	73
4	A plant-inspired robot with soft differential bending capabilities. Bioinspiration and Biomimetics, 2017, 12, 015001.	2.9	60
5	Electrorheological Valves for Flexible Fluidic Actuators. Soft Robotics, 2016, 3, 34-41.	8.0	56
6	Toward Growing Robots: A Historical Evolution from Cellular to Plant-Inspired Robotics. Frontiers in Robotics and AI, 2018, 5, 16.	3.2	51
7	Energy Conversion at the Cuticle of Living Plants. Advanced Functional Materials, 2018, 28, 1806689.	14.9	49
8	Robotic mechanism for soil penetration inspired by plant root. , 2013, , .		45
9	Revealing bending and force in a soft body through a plant root inspired approach. Scientific Reports, 2015, 5, 8788.	3.3	45
10	SIMBA: Tendon-Driven Modular Continuum Arm with Soft Reconfigurable Gripper. Frontiers in Robotics and AI, 2017, 4, .	3.2	45
11	Innovative soft robots based on electro-rheological fluids. , 2012, , .		41
12	Passive Morphological Adaptation for Obstacle Avoidance in a Self-Growing Robot Produced by Additive Manufacturing. Soft Robotics, 2020, 7, 85-94.	8.0	40
13	Pneumatic Quasi-Passive Actuation for Soft Assistive Lower Limbs Exoskeleton. Frontiers in Neurorobotics, 2020, 14, 31.	2.8	37
14	Circumnutations as a penetration strategy in a plant-root-inspired robot. , 2016, , .		33
15	An efficient soil penetration strategy for explorative robots inspired by plant root circumnutation movements. Bioinspiration and Biomimetics, 2018, 13, 015003.	2.9	33
16	Modular Continuum Manipulator: Analysis and Characterization of Its Basic Module. Biomimetics, 2018, 3, 3.	3.3	31
17	Analysis, simulation, and implementation of a human-inspired pole climbing robot. Robotica, 2012, 30, 279-287.	1.9	30
18	A Novel Soft Metalâ€Polymer Composite for Multidirectional Pressure Energy Harvesting. Advanced Energy Materials, 2014, 4, 1400024.	19.5	30

#	Article	IF	Citations
19	Remotely Lightâ€Powered Soft Fluidic Actuators Based on Plasmonicâ€Driven Phase Transitions in Elastic Constraint. Advanced Materials, 2019, 31, e1905671.	21.0	26
20	Triboelectric-based harvesting of gas flow energy and powerless sensing applications. Applied Surface Science, 2014, 323, 82-87.	6.1	25
21	The evolution of UT pole climbing robots. , 2010, , .		17
22	Triboelectric smart machine elements and self-powered encoder. Nano Energy, 2015, 13, 92-102.	16.0	17
23	Design and development of innovative adhesive suckers inspired by the tube feet of sea urchins. , 2012, , .		14
24	A Vacuum Powered Soft Textile-Based Clutch. Actuators, 2019, 8, 47.	2.3	14
25	A Wearable Sensory Textileâ€Based Clutch with High Blocking Force. Advanced Engineering Materials, 2019, 21, 1900886.	3.5	14
26	Swarming Behavior Emerging from the Uptakeâ€“Kinetics Feedback Control in a Plant-Root-Inspired Robot. Applied Sciences (Switzerland), 2018, 8, 47.	2.5	13
27	Characterization of the Growing From the Tip as Robot Locomotion Strategy. Frontiers in Robotics and AI, 2019, 6, 45.	3.2	11
28	Antagonistic Pneumatic Actuators with Variable Stiffness for Soft Robotic Applications. , 2019, , .		11
29	Plant Root Strategies for Robotic Soil Penetration. Lecture Notes in Computer Science, 2013, , 447-449.	1.3	11
30	Continuous Growth in Plant-Inspired Robots Through 3D Additive Manufacturing. , 2018, , .		10
31	A plant-inspired kinematic model for growing robots. , 2018, , .		9
32	Soft-Legged Wheel-Based Robot with Terrestrial Locomotion Abilities. Frontiers in Robotics and AI, 2016, 3, .	3.2	8
33	Octopusâ€Inspired Soft Arm with Suction Cups for Enhanced Grasping Tasks in Confined Environments. Advanced Intelligent Systems, 2019, 1, 1970061.	6.1	6
34	Preliminary Experimental Study on Variable Stiffness Structures Based on Textile Jamming for Wearable Robotics. Biosystems and Biorobotics, 2019, , 49-52.	0.3	5
35	A Soft Sensorized Foot Module to Understand Anisotropic Terrains During Soft Robot Locomotion. IEEE Robotics and Automation Letters, 2020, 5, 4055-4061.	5.1	4
36	Sensorized Foam Actuator with Intrinsic Proprioception and Tunable Stiffness Behavior for Soft Robots. Advanced Intelligent Systems, 2021, 3, 2100022.	6.1	4

#	Article	IF	Citations
37	A human-inspired pole climbing robot. , 2008, , .		2
38	Soft sucker shoe for anti-slippage application. , 2018, , .		2
39	INFORA: A Novel Inflatable Origami-based Actuator. , 2019, , .		2
40	Embodied Behavior of Plant Roots in Obstacle Avoidance. Lecture Notes in Computer Science, 2013, , 431-433.	1.3	2
41	Unveiling the kinematics of the avoidance response in maize (Zea mays) primary roots. Biologia (Poland), 2016, 71, 161-168.	1.5	1
42	Dynamic Obstacles Detection for Robotic Soil Explorations*. , 2019, , .		1
43	Natural Triboelectric Generators: Energy Conversion at the Cuticle of Living Plants (Adv. Funct.) Tj ETQq1 1 0.784314 rgBT /Overlock 10	14.9	0