

Alessio Mondini

List of Publications by Year in descending order

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53
papers

2,167
citations

304743

22
h-index

233421

45
g-index

56
all docs

56
docs citations

56
times ranked

2926
citing authors

#	ARTICLE	IF	CITATIONS
1	Flexible Three-axial Force Sensor for Soft and Highly Sensitive Artificial Touch. <i>Advanced Materials</i> , 2014, 26, 2659-2664.	21.0	383
2	Toward a New Generation of Electrically Controllable Hygromorphic Soft Actuators. <i>Advanced Materials</i> , 2015, 27, 1668-1675.	21.0	267
3	Toward Self-Growing Soft Robots Inspired by Plant Roots and Based on Additive Manufacturing Technologies. <i>Soft Robotics</i> , 2017, 4, 211-223.	8.0	161
4	Flexible tag microlab development: Gas sensors integration in RFID flexible tags for food logistic. <i>Sensors and Actuators B: Chemical</i> , 2007, 127, 2-7.	7.8	147
5	SPIRAL: A novel biologically-inspired algorithm for gas/odor source localization in an indoor environment with no strong airflow. <i>Robotics and Autonomous Systems</i> , 2009, 57, 393-402.	5.1	97
6	Active Targeting of Sorafenib: Preparation, Characterization, and In Vitro Testing of Drug-Loaded Magnetic Solid Lipid Nanoparticles. <i>Advanced Healthcare Materials</i> , 2015, 4, 1681-1690.	7.6	81
7	Soft Smart Garments for Lower Limb Joint Position Analysis. <i>Sensors</i> , 2017, 17, 2314.	3.8	75
8	Octopus-Inspired Soft Arm with Suction Cups for Enhanced Grasping Tasks in Confined Environments. <i>Advanced Intelligent Systems</i> , 2019, 1, 1900041.	6.1	73
9	A plant-inspired robot with soft differential bending capabilities. <i>Bioinspiration and Biomimetics</i> , 2017, 12, 015001.	2.9	60
10	Mapping multiple gas/odor sources in an uncontrolled indoor environment using a Bayesian occupancy grid mapping based method. <i>Robotics and Autonomous Systems</i> , 2011, 59, 988-1000.	5.1	57
11	Toward Growing Robots: A Historical Evolution from Cellular to Plant-Inspired Robotics. <i>Frontiers in Robotics and AI</i> , 2018, 5, 16.	3.2	51
12	Energy Conversion at the Cuticle of Living Plants. <i>Advanced Functional Materials</i> , 2018, 28, 1806689.	14.9	49
13	SIMBA: Tendon-Driven Modular Continuum Arm with Soft Reconfigurable Gripper. <i>Frontiers in Robotics and AI</i> , 2017, 4, .	3.2	45
14	A Miniaturized Mechatronic System Inspired by Plant Roots for Soil Exploration. <i>IEEE/ASME Transactions on Mechatronics</i> , 2011, 16, 201-212.	5.8	43
15	Passive Morphological Adaptation for Obstacle Avoidance in a Self-Growing Robot Produced by Additive Manufacturing. <i>Soft Robotics</i> , 2020, 7, 85-94.	8.0	40
16	Pneumatic Quasi-Passive Actuation for Soft Assistive Lower Limbs Exoskeleton. <i>Frontiers in Neurobotics</i> , 2020, 14, 31.	2.8	37
17	Integrated Simultaneous Detection of Tactile and Bending Cues for Soft Robotics. <i>Soft Robotics</i> , 2017, 4, 400-410.	8.0	34
18	Circumnutations as a penetration strategy in a plant-root-inspired robot. , 2016, , .		33

#	ARTICLE	IF	CITATIONS
19	An efficient soil penetration strategy for explorative robots inspired by plant root circumnutation movements. <i>Bioinspiration and Biomimetics</i> , 2018, 13, 015003.	2.9	33
20	Living Plant-€Hybrid Generators for Multidirectional Wind Energy Conversion. <i>Energy Technology</i> , 2020, 8, 2000236.	3.8	31
21	3D printed composites from heat extruded polycaprolactone/sodium alginate filaments and their heavy metal adsorption properties. <i>Materials Chemistry Frontiers</i> , 2020, 4, 2472-2483.	5.9	30
22	Flexible tag datalogger for food logistics. <i>Sensors and Actuators A: Physical</i> , 2010, 162, 316-323.	4.1	25
23	Climbing Plant-€Inspired Micropatterned Devices for Reversible Attachment. <i>Advanced Functional Materials</i> , 2020, 30, 2003380.	14.9	23
24	Design of a new real-time dosimeter to monitor personal exposure to elemental gaseous mercury. <i>Sensors and Actuators B: Chemical</i> , 2007, 123, 158-167.	7.8	21
25	A Universal Intelligent System-on-Chip Based Sensor Interface. <i>Sensors</i> , 2010, 10, 7716-7747.	3.8	21
26	Towards ultra-responsive biodegradable polysaccharide humidity sensors. <i>Materials Today Chemistry</i> , 2017, 6, 1-12.	3.5	18
27	Triboelectric smart machine elements and self-powered encoder. <i>Nano Energy</i> , 2015, 13, 92-102.	16.0	17
28	Plant-like hooked miniature machines for on-leaf sensing and delivery. <i>Communications Materials</i> , 2021, 2, .	6.9	16
29	A Vacuum Powered Soft Textile-Based Clutch. <i>Actuators</i> , 2019, 8, 47.	2.3	14
30	A Wearable Sensory Textile-€Based Clutch with High Blocking Force. <i>Advanced Engineering Materials</i> , 2019, 21, 1900886.	3.5	14
31	Flexible Tag Datalogger for Food Logistics. <i>Procedia Chemistry</i> , 2009, 1, 1215-1218.	0.7	13
32	Swarming Behavior Emerging from the Uptake-€Kinetics Feedback Control in a Plant-Root-Inspired Robot. <i>Applied Sciences (Switzerland)</i> , 2018, 8, 47.	2.5	13
33	Model validation of a mercury sensor, based on the resistivity variation of a thin gold film. <i>Sensors and Actuators B: Chemical</i> , 2006, 114, 513-521.	7.8	11
34	Characterization of the Growing From the Tip as Robot Locomotion Strategy. <i>Frontiers in Robotics and AI</i> , 2019, 6, 45.	3.2	11
35	Antagonistic Pneumatic Actuators with Variable Stiffness for Soft Robotic Applications. , 2019, , .		11
36	Enhanced In Vitro Magnetic Cell Targeting of Doxorubicin-Loaded Magnetic Liposomes for Localized Cancer Therapy. <i>Nanomaterials</i> , 2020, 10, 2104.	4.1	11

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37	Multisource energy conversion in plants with soft epicuticular coatings. <i>Energy and Environmental Science</i> , 2022, 15, 2545-2556.	30.8	11
38	Explorative Particle Swarm Optimization Method for Gas/Odor Source Localization in an Indoor Environment with no Strong Airflow. , 2007, , .		10
39	Continuous Growth in Plant-Inspired Robots Through 3D Additive Manufacturing. , 2018, , .		10
40	Investigation of fabrication and encapsulation processes for a flexible tag microlab. <i>Microsystem Technologies</i> , 2008, 14, 527-534.	2.0	9
41	A plant-inspired kinematic model for growing robots. , 2018, , .		9
42	Soft-Legged Wheel-Based Robot with Terrestrial Locomotion Abilities. <i>Frontiers in Robotics and AI</i> , 2016, 3, .	3.2	8
43	Octopusâ€inspired Soft Arm with Suction Cups for Enhanced Grasping Tasks in Confined Environments. <i>Advanced Intelligent Systems</i> , 2019, 1, 1970061.	6.1	6
44	Dry Adhesion of Artificial Gecko Setae Fabricated via Direct Laser Lithography. <i>Lecture Notes in Computer Science</i> , 2017, , 631-636.	1.3	6
45	Preliminary Experimental Study on Variable Stiffness Structures Based on Textile Jamming for Wearable Robotics. <i>Biosystems and Biorobotics</i> , 2019, , 49-52.	0.3	5
46	A Soft Sensorized Foot Module to Understand Anisotropic Terrains During Soft Robot Locomotion. <i>IEEE Robotics and Automation Letters</i> , 2020, 5, 4055-4061.	5.1	4
47	Sensorized Foam Actuator with Intrinsic Proprioception and Tunable Stiffness Behavior for Soft Robots. <i>Advanced Intelligent Systems</i> , 2021, 3, 2100022.	6.1	4
48	A preliminary study of a robotic probe for soil exploration inspired by plant root apices. , 2008, , .		3
49	Soft sucker shoe for anti-slippage application. , 2018, , .		2
50	Support localization strategy for growing robots aided by light perception inspired by climbing plants. , 2021, , .		2
51	Investigation on a sensitive Au thin film deposited on different substrates: Physical analysis via FIB and chemical analysis via evaluation of Au sensitivity to Hg0. <i>Sensors and Actuators B: Chemical</i> , 2007, 122, 475-483.	7.8	1
52	Drug Targeting: Active Targeting of Sorafenib: Preparation, Characterization, and In Vitro Testing of Drug-Loaded Magnetic Solid Lipid Nanoparticles (<i>Adv. Healthcare Mater.</i> 11/2015). <i>Advanced Healthcare Materials</i> , 2015, 4, 1734-1734.	7.6	1
53	Micropatterned Devices: Climbing Plantâ€inspired Micropatterned Devices for Reversible Attachment (<i>Adv. Funct. Mater.</i> 38/2020). <i>Advanced Functional Materials</i> , 2020, 30, 2070256.	14.9	1