Dario Floreano

List of Publications by Year
in descending order

#	Article	IF	Citations
1	Soft Robotic Grippers. Advanced Materials, 2018, 30, e1707035.	11.1	1,097
2	Science, technology and the future of small autonomous drones. Nature, 2015, 521, 460-466.	13.7	908
3	Versatile Soft Grippers with Intrinsic Electroadhesion Based on Multifunctional Polymer Actuators. Advanced Materials, 2016, 28, 231-238.	11.1	593
4	Stretchable pumps for soft machines. Nature, 2019, 572, 516-519.	13.7	263
5	Soft Biomimetic Fish Robot Made of Dielectric Elastomer Actuators. Soft Robotics, 2018, 5, 466-474.	4.6	222
6	Ultrastretchable Strain Sensors Using Carbon Blackâ€Filled Elastomer Composites and Comparison of Capacitive Versus Resistive Sensors. Advanced Materials Technologies, 2018, 3, 1700284.	3.0	219
7	Dynamic Routing for Flying Ad Hoc Networks. IEEE Transactions on Vehicular Technology, 2016, 65, 1690-1700.	3.9	216
8	Variable stiffness material based on rigid low-melting-point-alloy microstructures embedded in soft poly(dimethylsiloxane) (PDMS). RSC Advances, 2013, 3, 24671.	1.7	185
9	The current state and future outlook of rescue robotics. Journal of Field Robotics, 2019, 36, 1171-1191.	3.2	182
10	The Foldable Drone: A Morphing Quadrotor That Can Squeeze and Fly. IEEE Robotics and Automation Letters, 2019, 4, 209-216.	3.3	178
11	A Collisionâ€resilient Flying Robot. Journal of Field Robotics, 2014, 31, 496-509.	3.2	145
12	Variable Stiffness Fiber with Selfâ€Healing Capability. Advanced Materials, 2016, 28, 10142-10148.	11.1	142
13	Steerable miniature jumping robot. Autonomous Robots, 2010, 28, 295-306.	3.2	128
14	Bioinspired dual-stiffness origami. Science Robotics, 2018, 3, .	9.9	115
15	Sleep and Wake Classification With ECG and Respiratory Effort Signals. IEEE Transactions on Biomedical Circuits and Systems, 2009, 3, 71-78.	2.7	112
16	Analog Genetic Encoding for the Evolution of Circuits and Networks. IEEE Transactions on Evolutionary Computation, 2007, 11, 596-607.	7.5	99
17	Genetic Team Composition and Level of Selection in the Evolution of Cooperation. IEEE Transactions on Evolutionary Computation, 2009, 13, 648-660.	7.5	94
18	Magnetic Continuum Device with Variable Stiffness for Minimally Invasive Surgery. Advanced Intelligent Systems, 2020, 2, 1900086.	3.3	92

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19	A perching mechanism for micro aerial vehicles. Journal of Micro-Nano Mechatronics, 2009, 5, 77-91.	1.0	87
20	Bioinspired wing and tail morphing extends drone flight capabilities. Science Robotics, 2020, 5, .	9.9	80
21	Adaptive Morphology: A Design Principle for Multimodal and Multifunctional Robots. IEEE Robotics and Automation Magazine, 2016, 23, 42-54.	2.2	71
22	Reynolds flocking in reality with fixed-wing robots: Communication range vs. maximum turning rate. , 2011, , .		70
23	FlyJacket: An Upper Body Soft Exoskeleton for Immersive Drone Control. IEEE Robotics and Automation Letters, 2018, 3, 2362-2369.	3.3	70
24	Predictive control of aerial swarms in cluttered environments. Nature Machine Intelligence, 2021, 3, 545-554.	8.3	66
25	Insect-Inspired Mechanical Resilience for Multicopters. IEEE Robotics and Automation Letters, 2017, 2, 1248-1255.	3.3	61
26	A Foldable Antagonistic Actuator. IEEE/ASME Transactions on Mechatronics, 2015, 20, 1997-2008.	3.7	60
27	Data-driven bodyâ€"machine interface for the accurate control of drones. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 7913-7918.	3.3	57
28	From Wheels to Wings with Evolutionary Spiking Circuits. Artificial Life, 2005, 11, 121-138.	1.0	54
29	Learning Vision-Based Flight in Drone Swarms by Imitation. IEEE Robotics and Automation Letters, 2019, 4, 4523-4530.	3.3	51
30	UWB-based System for UAV Localization in GNSS-Denied Environments: Characterization and Dataset. , 2020, , .		48
31	Last-Centimeter Personal Drone Delivery: Field Deployment and User Interaction. IEEE Robotics and Automation Letters, 2018, 3, 3813-3820.	3.3	45
32	Allâ€Fabric Wearable Electroadhesive Clutch. Advanced Materials Technologies, 2019, 4, 1800313.	3.0	43
33	Vision-Based Drone Flocking in Outdoor Environments. IEEE Robotics and Automation Letters, 2021, 6, 2954-2961.	3.3	42
34	Forceful manipulation with micro air vehicles. Science Robotics, 2018, 3, .	9.9	40
35	Phase Changing Materials-Based Variable-Stiffness Tensegrity Structures. Soft Robotics, 2020, 7, 362-369.	4.6	40
36	A Variable Stiffness Magnetic Catheter Made of a Conductive Phaseâ€Change Polymer for Minimally Invasive Surgery. Advanced Functional Materials, 2022, 32, .	7.8	40

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37	Evolution of spiking neural circuits in autonomous mobile robots. International Journal of Intelligent Systems, 2006, 21, 1005-1024.	3.3	38
38	On-Board Relative Bearing Estimation for Teams of Drones Using Sound. IEEE Robotics and Automation Letters, 2016, 1, 820-827.	3.3	37
39	Euler spring collision protection for flying robots. , 2013, , .		35
40	Variable-stiffness tensegrity spine. Smart Materials and Structures, 2020, 29, 075013.	1.8	30
41	SwarmLab: a Matlab Drone Swarm Simulator. , 2020, , .		27
42	Indoor navigation with a swarm of flying robots. , 2012, , .		25
43	Lighter and Stronger: Cofabricated Electrodes and Variable Stiffness Elements in Dielectric Actuators. Advanced Intelligent Systems, 2020, 2, 2000069.	3.3	24
44	VIODE: A Simulated Dataset to Address the Challenges of Visual-Inertial Odometry in Dynamic Environments. IEEE Robotics and Automation Letters, 2021, 6, 1343-1350.	3.3	24
45	The AirBurr: A flying robot that can exploit collisions. , 2012, , .		23
46	Inquiry-Based Learning With RoboGen: An Open-Source Software and Hardware Platform for Robotics and Artificial Intelligence. IEEE Transactions on Learning Technologies, 2019, 12, 356-369.	2.2	23
47	Tracking and Relative Localization of Drone Swarms With a Vision-Based Headset. IEEE Robotics and Automation Letters, 2021, 6, 1455-1462.	3.3	22
48	Distributed Predictive Drone Swarms in Cluttered Environments. IEEE Robotics and Automation Letters, 2022, 7, 73-80.	3.3	22
49	The Influence of Limited Visual Sensing on the Reynolds Flocking Algorithm. , 2019, , .		21
50	A Morphing Cargo Drone for Safe Flight in Proximity of Humans. IEEE Robotics and Automation Letters, 2020, 5, 4233-4240.	3.3	20
51	Soft Haptic Device to Render the Sensation of Flying Like a Drone. IEEE Robotics and Automation Letters, 2019, 4, 2524-2531.	3.3	18
52	An Active Uprighting Mechanism for Flying Robots. IEEE Transactions on Robotics, 2012, 28, 1152-1157.	7.3	17
53	Stretchable and Soft Electroadhesion Using Liquidâ€Metal Subsurface Microelectrodes. Advanced Materials Technologies, 2021, 6, 2100263.	3.0	16
54	Personalized Telerobotics by Fast Machine Learning of Body-Machine Interfaces. IEEE Robotics and Automation Letters, 2020, 5, 179-186.	3.3	15

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55	Hand-worn Haptic Interface for Drone Teleoperation. , 2020, , .		14
56	Downside Up:Rethinking Parcel Position for Aerial Delivery. IEEE Robotics and Automation Letters, 2020, 5, 4297-4304.	3.3	14
57	Haptic Feedback Perception and Learning With Cable-Driven Guidance in Exosuit Teleoperation of a Simulated Drone. IEEE Transactions on Haptics, 2019, 12, 375-385.	1.8	13
58	Passive Perching with Energy Storage for Winged Aerial Robots. Advanced Intelligent Systems, 2023, 5, 2100150.	3.3	12
59	Spatial Encoding of Translational Optic Flow in Planar Scenes by Elementary Motion Detector Arrays. Scientific Reports, 2018, 8, 5821.	1.6	11
60	Embodied Flight with a Drone. , 2019, , .		10
61	How to compete with robots by assessing job automation risks and resilient alternatives. Science Robotics, 2022, 7, eabg5561.	9.9	10
62	Smart Textiles that Teach: Fabricâ€Based Haptic Device Improves the Rate of Motor Learning. Advanced Intelligent Systems, 2021, 3, 2100043.	3.3	9
63	On the Scalability of Vision-Based Drone Swarms in the Presence of Occlusions. IEEE Access, 2022, 10, 28133-28146.	2.6	8
64	Conditions for the emergence of circumnutations in plant roots. PLoS ONE, 2021, 16, e0252202.	1.1	7
65	From individual robots to robot societies. Science Robotics, 2021, 6, .	9.9	7
66	Haptic Guidance with a Soft Exoskeleton Reduces Error in Drone Teleoperation. Lecture Notes in Computer Science, 2018, , 404-415.	1.0	7
67	Insect Inspired Self-Righting for Fixed-Wing Drones. IEEE Robotics and Automation Letters, 2021, 6, 6805-6812.	3.3	6
68	Autonomous Detection and Deterrence of Pigeons on Buildings by Drones. IEEE Access, 2022, 10, 1745-1755.	2.6	6
69	Enhancing pilot performance with a SymBodic system. , 2010, 2010, 6599-602.		5
70	Cross-Packet Coding for Delay-Constrained Streaming Applications. IEEE Communications Letters, 2019, 23, 1962-1966.	2.5	4
71	Robotic <i>Elytra:</i> Insect-Inspired Protective Wings for Resilient and Multi-Modal Drones. IEEE Robotics and Automation Letters, 2022, 7, 223-230.	3.3	4
72	Arm-Wrist Haptic Sleeve for Drone Teleoperation. IEEE Robotics and Automation Letters, 2022, 7, 12054-12061.	3.3	4

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73	Dual Stiffness Tensegrity Platform for Resilient Robotics. Advanced Intelligent Systems, 2022, 4, .	3.3	4
74	The Impact of Virtual Reality and Viewpoints in Body Motion Based Drone Teleoperation. , 2021, , .		3
75	Machine-Learning Based Monitoring of Cognitive Workload in Rescue Missions With Drones. IEEE Journal of Biomedical and Health Informatics, 2022, 26, 4751-4762.	3.9	2
76	Personalized Human-Swarm Interaction Through Hand Motion. IEEE Robotics and Automation Letters, 2021, 6, 8341-8348.	3.3	1
77	Enhancement of pressureâ€sensitive adhesive by CO ² laser treatment. Advanced Engineering Materials, 0, , .	1.6	0