Dario Floreano

List of Publications by Year
in descending order

77 papers	6,620 citations	109137 35 h-index	102304 66 g-index
80 all docs	80 docs citations	80 times ranked	6214 citing authors

#	Article	IF	Citations
1	Passive Perching with Energy Storage for Winged Aerial Robots. Advanced Intelligent Systems, 2023, 5, 2100150.	3.3	12
2	Distributed Predictive Drone Swarms in Cluttered Environments. IEEE Robotics and Automation Letters, 2022, 7, 73-80.	3.3	22
3	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
4	Arm-Wrist Haptic Sleeve for Drone Teleoperation. IEEE Robotics and Automation Letters, 2022, 7, 12054-12061.	3.3	4
5	Autonomous Detection and Deterrence of Pigeons on Buildings by Drones. IEEE Access, 2022, 10, 1745-1755.	2.6	6
6	A Variable Stiffness Magnetic Catheter Made of a Conductive Phaseâ€Change Polymer for Minimally Invasive Surgery. Advanced Functional Materials, 2022, 32, .	7.8	40
7	On the Scalability of Vision-Based Drone Swarms in the Presence of Occlusions. IEEE Access, 2022, 10, 28133-28146.	2.6	8
8	How to compete with robots by assessing job automation risks and resilient alternatives. Science Robotics, 2022, 7, eabg5561.	9.9	10
9	Dual Stiffness Tensegrity Platform for Resilient Robotics. Advanced Intelligent Systems, 2022, 4, .	3.3	4
10	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
11	The Impact of Virtual Reality and Viewpoints in Body Motion Based Drone Teleoperation. , 2021, , .		3
12	Vision-Based Drone Flocking in Outdoor Environments. IEEE Robotics and Automation Letters, 2021, 6, 2954-2961.	3.3	42
13	Tracking and Relative Localization of Drone Swarms With a Vision-Based Headset. IEEE Robotics and Automation Letters, 2021, 6, 1455-1462.	3.3	22
14	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
15	Predictive control of aerial swarms in cluttered environments. Nature Machine Intelligence, 2021, 3, 545-554.	8.3	66
16	Conditions for the emergence of circumnutations in plant roots. PLoS ONE, 2021, 16, e0252202.	1.1	7
17	Stretchable and Soft Electroadhesion Using Liquidâ€Metal Subsurface Microelectrodes. Advanced Materials Technologies, 2021, 6, 2100263.	3.0	16
18	From individual robots to robot societies. Science Robotics, 2021, 6, .	9.9	7

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19	Smart Textiles that Teach: Fabricâ€Based Haptic Device Improves the Rate of Motor Learning. Advanced Intelligent Systems, 2021, 3, 2100043.	3.3	9
20	Personalized Human-Swarm Interaction Through Hand Motion. IEEE Robotics and Automation Letters, 2021, 6, 8341-8348.	3.3	1
21	Insect Inspired Self-Righting for Fixed-Wing Drones. IEEE Robotics and Automation Letters, 2021, 6, 6805-6812.	3.3	6
22	Magnetic Continuum Device with Variable Stiffness for Minimally Invasive Surgery. Advanced Intelligent Systems, 2020, 2, 1900086.	3.3	92
23	Phase Changing Materials-Based Variable-Stiffness Tensegrity Structures. Soft Robotics, 2020, 7, 362-369.	4.6	40
24	Personalized Telerobotics by Fast Machine Learning of Body-Machine Interfaces. IEEE Robotics and Automation Letters, 2020, 5, 179-186.	3.3	15
25	Hand-worn Haptic Interface for Drone Teleoperation. , 2020, , .		14
26	Downside Up:Rethinking Parcel Position for Aerial Delivery. IEEE Robotics and Automation Letters, 2020, 5, 4297-4304.	3.3	14
27	Lighter and Stronger: Cofabricated Electrodes and Variable Stiffness Elements in Dielectric Actuators. Advanced Intelligent Systems, 2020, 2, 2000069.	3.3	24
28	Bioinspired wing and tail morphing extends drone flight capabilities. Science Robotics, 2020, 5, .	9.9	80
29	A Morphing Cargo Drone for Safe Flight in Proximity of Humans. IEEE Robotics and Automation Letters, 2020, 5, 4233-4240.	3.3	20
30	Variable-stiffness tensegrity spine. Smart Materials and Structures, 2020, 29, 075013.	1.8	30
31	SwarmLab: a Matlab Drone Swarm Simulator. , 2020, , .		27
32	UWB-based System for UAV Localization in GNSS-Denied Environments: Characterization and Dataset. , 2020, , .		48
33	The current state and future outlook of rescue robotics. Journal of Field Robotics, 2019, 36, 1171-1191.	3.2	182
34	Stretchable pumps for soft machines. Nature, 2019, 572, 516-519.	13.7	263
35	Embodied Flight with a Drone. , 2019, , .		10
36	The Influence of Limited Visual Sensing on the Reynolds Flocking Algorithm. , 2019, , .		21

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37	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
38	Learning Vision-Based Flight in Drone Swarms by Imitation. IEEE Robotics and Automation Letters, 2019, 4, 4523-4530.	3.3	51
39	Cross-Packet Coding for Delay-Constrained Streaming Applications. IEEE Communications Letters, 2019, 23, 1962-1966.	2.5	4
40	Soft Haptic Device to Render the Sensation of Flying Like a Drone. IEEE Robotics and Automation Letters, 2019, 4, 2524-2531.	3.3	18
41	Allâ€Fabric Wearable Electroadhesive Clutch. Advanced Materials Technologies, 2019, 4, 1800313.	3.0	43
42	The Foldable Drone: A Morphing Quadrotor That Can Squeeze and Fly. IEEE Robotics and Automation Letters, 2019, 4, 209-216.	3.3	178
43	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
44	FlyJacket: An Upper Body Soft Exoskeleton for Immersive Drone Control. IEEE Robotics and Automation Letters, 2018, 3, 2362-2369.	3.3	70
45	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
46	Forceful manipulation with micro air vehicles. Science Robotics, 2018, 3, .	9.9	40
47	Soft Robotic Grippers. Advanced Materials, 2018, 30, e1707035.	11.1	1,097
48	Soft Biomimetic Fish Robot Made of Dielectric Elastomer Actuators. Soft Robotics, 2018, 5, 466-474.	4.6	222
49	Last-Centimeter Personal Drone Delivery: Field Deployment and User Interaction. IEEE Robotics and Automation Letters, 2018, 3, 3813-3820.	3.3	45
50	Bioinspired dual-stiffness origami. Science Robotics, 2018, 3, .	9.9	115
51	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
52	Spatial Encoding of Translational Optic Flow in Planar Scenes by Elementary Motion Detector Arrays. Scientific Reports, 2018, 8, 5821.	1.6	11
53	Haptic Guidance with a Soft Exoskeleton Reduces Error in Drone Teleoperation. Lecture Notes in Computer Science, 2018, , 404-415.	1.0	7
54	Insect-Inspired Mechanical Resilience for Multicopters. IEEE Robotics and Automation Letters, 2017, 2, 1248-1255.	3.3	61

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55	Versatile Soft Grippers with Intrinsic Electroadhesion Based on Multifunctional Polymer Actuators. Advanced Materials, 2016, 28, 231-238.	11.1	593
56	Adaptive Morphology: A Design Principle for Multimodal and Multifunctional Robots. IEEE Robotics and Automation Magazine, 2016, 23, 42-54.	2.2	71
57	Variable Stiffness Fiber with Selfâ€Healing Capability. Advanced Materials, 2016, 28, 10142-10148.	11.1	142
58	On-Board Relative Bearing Estimation for Teams of Drones Using Sound. IEEE Robotics and Automation Letters, 2016, 1, 820-827.	3.3	37
59	Dynamic Routing for Flying Ad Hoc Networks. IEEE Transactions on Vehicular Technology, 2016, 65, 1690-1700.	3.9	216
60	Science, technology and the future of small autonomous drones. Nature, 2015, 521, 460-466.	13.7	908
61	A Foldable Antagonistic Actuator. IEEE/ASME Transactions on Mechatronics, 2015, 20, 1997-2008.	3.7	60
62	A Collisionâ€resilient Flying Robot. Journal of Field Robotics, 2014, 31, 496-509.	3.2	145
63	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
64	Euler spring collision protection for flying robots. , 2013, , .		35
65	An Active Uprighting Mechanism for Flying Robots. IEEE Transactions on Robotics, 2012, 28, 1152-1157.	7.3	17
66	The AirBurr: A flying robot that can exploit collisions. , 2012, , .		23
67	Indoor navigation with a swarm of flying robots. , 2012, , .		25
68	Reynolds flocking in reality with fixed-wing robots: Communication range vs. maximum turning rate. , 2011, , .		70
69	Steerable miniature jumping robot. Autonomous Robots, 2010, 28, 295-306.	3.2	128
70	Enhancing pilot performance with a SymBodic system. , 2010, 2010, 6599-602.		5
71	Genetic Team Composition and Level of Selection in the Evolution of Cooperation. IEEE Transactions on Evolutionary Computation, 2009, 13, 648-660.	7.5	94
72	A perching mechanism for micro aerial vehicles. Journal of Micro-Nano Mechatronics, 2009, 5, 77-91.	1.0	87

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73	Sleep and Wake Classification With ECG and Respiratory Effort Signals. IEEE Transactions on Biomedical Circuits and Systems, 2009, 3, 71-78.	2.7	112
74	Analog Genetic Encoding for the Evolution of Circuits and Networks. IEEE Transactions on Evolutionary Computation, 2007, 11, 596-607.	7.5	99
75	Evolution of spiking neural circuits in autonomous mobile robots. International Journal of Intelligent Systems, 2006, 21, 1005-1024.	3.3	38
76	From Wheels to Wings with Evolutionary Spiking Circuits. Artificial Life, 2005, 11, 121-138.	1.0	54
77	Enhancement of pressureâ€sensitive adhesive by CO ² laser treatment. Advanced Engineering Materials, 0, , .	1.6	0