Dario Floreano

List of Publications by Citations

73 papers	3,832 citations	28 h-index	61 g-index
80 ext. papers	5,234 ext. citations	8.5 avg, IF	6.26 L-index

#	Paper	IF	Citations
73	Science, technology and the future of small autonomous drones. *Nature*, **2015**, 521, 460-6	50.4	582
72	Soft Robotic Grippers. *Advanced Materials*, **2018**, 30, e1707035	24	555
71	Versatile Soft Grippers with Intrinsic Electroadhesion Based on Multifunctional Polymer Actuators. *Advanced Materials*, **2016**, 28, 231-8	24	394
70	Variable stiffness material based on rigid low-melting-point-alloy microstructures embedded in soft poly(dimethylsiloxane) (PDMS). *RSC Advances*, **2013**, 3, 24671	3.7	146
69	. *IEEE Transactions on Vehicular Technology*, **2016**, 65, 1690-1700	6.8	144
68	Stretchable pumps for soft machines. *Nature*, **2019**, 572, 516-519	50.4	140
67	Ultrastretchable Strain Sensors Using Carbon Black-Filled Elastomer Composites and Comparison of Capacitive Versus Resistive Sensors. *Advanced Materials Technologies*, **2018**, 3, 1700284	6.8	139
66	Soft Biomimetic Fish Robot Made of Dielectric Elastomer Actuators. *Soft Robotics*, **2018**, 5, 466-474	9.2	119
65	Steerable miniature jumping robot. *Autonomous Robots*, **2010**, 28, 295-306	3	103
64	Variable Stiffness Fiber with Self-Healing Capability. *Advanced Materials*, **2016**, 28, 10142-10148	24	101
63	A Collision-resilient Flying Robot. *Journal of Field Robotics*, **2014**, 31, 496-509	6.7	98
62	Sleep and Wake Classification With ECG and Respiratory Effort Signals. *IEEE Transactions on Biomedical Circuits and Systems*, **2009**, 3, 71-8	5.1	97
61	The Foldable Drone: A Morphing Quadrotor That Can Squeeze and Fly. *IEEE Robotics and Automation Letters*, **2019**, 4, 209-216	4.2	93
60	Analog Genetic Encoding for the Evolution of Circuits and Networks. *IEEE Transactions on Evolutionary Computation*, **2007**, 11, 596-607	15.6	74
59	The current state and future outlook of rescue robotics. *Journal of Field Robotics*, **2019**, 36, 1171-1191	6.7	73
58	Genetic Team Composition and Level of Selection in the Evolution of Cooperation. *IEEE Transactions on Evolutionary Computation*, **2009**, 13, 648-660	15.6	72
57	A perching mechanism for micro aerial vehicles. *Journal of Micro-Nano Mechatronics*, **2009**, 5, 77-91		66

56	Bioinspired dual-stiffness origami. *Science Robotics*, **2018**, 3,	18.6	61
55	From wheels to wings with evolutionary spiking circuits. *Artificial Life*, **2005**, 11, 121-38	1.4	47
54	Magnetic Continuum Device with Variable Stiffness for Minimally Invasive Surgery. *Advanced Intelligent Systems*, **2020**, 2, 1900086	6	46
53	Reynolds flocking in reality with fixed-wing robots: Communication range vs. maximum turning rate **2011**,		45
52	Adaptive Morphology: A Design Principle for Multimodal and Multifunctional Robots. *IEEE Robotics and Automation Magazine*, **2016**, 23, 42-54	3.4	45
51	A Foldable Antagonistic Actuator. *IEEE/ASME Transactions on Mechatronics*, **2015**, 20, 1997-2008	5.5	42
50	. *IEEE Robotics and Automation Letters*, **2018**, 3, 2362-2369	4.2	36
49	Insect-Inspired Mechanical Resilience for Multicopters. *IEEE Robotics and Automation Letters*, **2017**, 2, 1248-1255	4.2	34
48	Evolution of spiking neural circuits in autonomous mobile robots. *International Journal of Intelligent Systems*, **2006**, 21, 1005-1024	8.4	32
47	On-Board Relative Bearing Estimation for Teams of Drones Using Sound. *IEEE Robotics and Automation Letters*, **2016**, 1, 820-827	4.2	31
46	Learning Vision-Based Flight in Drone Swarms by Imitation. *IEEE Robotics and Automation Letters*, **2019**, 4, 4523-4530	4.2	30
45	Data-driven body-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	11.5	26
44	. *IEEE Robotics and Automation Letters*, **2018**, 3, 3813-3820	4.2	25
43	Euler spring collision protection for flying robots **2013**,		24
42	Bioinspired wing and tail morphing extends drone flight capabilities. *Science Robotics*, **2020**, 5,	18.6	23
41	All-Fabric Wearable Electroadhesive Clutch. *Advanced Materials Technologies*, **2019**, 4, 1800313	6.8	22
40	Forceful manipulation with micro air vehicles. *Science Robotics*, **2018**, 3,	18.6	19
39	Indoor navigation with a swarm of flying robots **2012**,		18

38	Phase Changing Materials-Based Variable-Stiffness Tensegrity Structures. *Soft Robotics*, **2020**, 7, 362-369	9.2	18
37	An Active Uprighting Mechanism for Flying Robots. *IEEE Transactions on Robotics*, **2012**, 28, 1152-1157	6.5	15
36	Predictive control of aerial swarms in cluttered environments. *Nature Machine Intelligence*, **2021**, 3, 545-554	25	14
35	The AirBurr: A flying robot that can exploit collisions **2012**,		13
34	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	4	13
33	Lighter and Stronger: Cofabricated Electrodes and Variable Stiffness Elements in Dielectric Actuators. *Advanced Intelligent Systems*, **2020**, 2, 2000069	6	12
32	The Influence of Limited Visual Sensing on the Reynolds Flocking Algorithm **2019**,		11
31	A Morphing Cargo Drone for Safe Flight in Proximity of Humans. *IEEE Robotics and Automation Letters*, **2020**, 5, 4233-4240	4.2	10
30	UWB-based System for UAV Localization in GNSS-Denied Environments: Characterization and Dataset **2020**,		10
29	Soft Haptic Device to Render the Sensation of Flying Like a Drone. *IEEE Robotics and Automation Letters*, **2019**, 4, 2524-2531	4.2	9
28	Variable-stiffness tensegrity spine. *Smart Materials and Structures*, **2020**, 29, 075013	3.4	9
27	Haptic Feedback Perception and Learning With Cable-Driven Guidance in Exosuit Teleoperation of a Simulated Drone. *IEEE Transactions on Haptics*, **2019**, 12, 375-385	2.7	9
26	Vision-Based Drone Flocking in Outdoor Environments. *IEEE Robotics and Automation Letters*, **2021**, 6, 2954-2961	4.2	9
25	Spatial Encoding of Translational Optic Flow in Planar Scenes by Elementary Motion Detector Arrays. *Scientific Reports*, **2018**, 8, 5821	4.9	8
24	Downside Up:Rethinking Parcel Position for Aerial Delivery. *IEEE Robotics and Automation Letters*, **2020**, 5, 4297-4304	4.2	6
23	Enhancing pilot performance with a SymBodic system. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2010**, 2010, 6599-602	0.9	5
22	Haptic Guidance with a Soft Exoskeleton Reduces Error in Drone Teleoperation. *Lecture Notes in Computer Science*, **2018**, 404-415	0.9	5
21	Personalized Telerobotics by Fast Machine Learning of Body-Machine Interfaces. *IEEE Robotics and Automation Letters*, **2020**, 5, 179-186	4.2	5

20	VIODE: A Simulated Dataset to Address the Challenges of Visual-Inertial Odometry in Dynamic Environments. *IEEE Robotics and Automation Letters*, **2021**, 6, 1343-1350	4.2	5
19	Cross-Packet Coding for Delay-Constrained Streaming Applications. *IEEE Communications Letters*, **2019**, 23, 1962-1966	3.8	4
18	Embodied Flight with a Drone **2019**,		4
17	Tracking and Relative Localization of Drone Swarms With a Vision-Based Headset. *IEEE Robotics and Automation Letters*, **2021**, 6, 1455-1462	4.2	4
16	Stretchable and Soft Electroadhesion Using Liquid-Metal Subsurface Microelectrodes. *Advanced Materials Technologies*, **2021**, 6, 2100263	6.8	4
15	A Variable Stiffness Magnetic Catheter Made of a Conductive Phase-Change Polymer for Minimally Invasive Surgery. *Advanced Functional Materials*,2107662	15.6	3
14	SwarmLab: a Matlab Drone Swarm Simulator **2020**,		3
13	Hand-worn Haptic Interface for Drone Teleoperation **2020**,		3
12	Smart Textiles that Teach: Fabric-Based Haptic Device Improves the Rate of Motor Learning. *Advanced Intelligent Systems*,2100043	6	3
11	Insect Inspired Self-Righting for Fixed-Wing Drones. *IEEE Robotics and Automation Letters*, **2021**, 6, 6805-6812	4.2	3
10	How to compete with robots by assessing job automation risks and resilient alternatives.. *Science Robotics*, **2022**, 7, eabg5561	18.6	2
9	Robotic Elytra: Insect-Inspired Protective Wings for Resilient and Multi-Modal Drones. *IEEE Robotics and Automation Letters*, **2022**, 7, 223-230	4.2	1
8	Arm-wrist haptic sleeve for drone teleoperation. *IEEE Robotics and Automation Letters*, **2021**, 1-1	4.2	1
7	Distributed Predictive Drone Swarms in Cluttered Environments. *IEEE Robotics and Automation Letters*, **2022**, 7, 73-80	4.2	1
6	Conditions for the emergence of circumnutations in plant roots. *PLoS ONE*, **2021**, 16, e0252202	3.7	1
5	On the Scalability of Vision-Based Drone Swarms in the Presence of Occlusions. *IEEE Access*, **2022**, 10, 28133-28146	3.5	1
4	Autonomous Detection and Deterrence of Pigeons on Buildings by Drones. *IEEE Access*, **2022**, 10, 1745-1755	3.5	0
3	Passive Perching with Energy Storage for Winged Aerial Robots. *Advanced Intelligent Systems*,2100150	6	0

2	Personalized Human-Swarm Interaction Through Hand Motion. *IEEE Robotics and Automation Letters*, **2021**, 6, 8341-8348	4.2	0
1	Dual Stiffness Tensegrity Platform for Resilient Robotics. *Advanced Intelligent Systems*,2200025	6	