Mirko Kovac

List of Publications by Year
in descending order

69 papers	2,525 citations	236925 25 h-index	233421 45 g-index
70 all docs	70 docs citations	70 times ranked	4882 citing authors

#	Article	IF	Citations
1	A miniature 7g jumping robot. , 2008, , .		200
2	A biologically inspired, flapping-wing, hybrid aerial-aquatic microrobot. Science Robotics, 2017, 2, .	17.6	159
3	Steerable miniature jumping robot. Autonomous Robots, 2010, 28, 295-306.	4.8	128
4	Rotorigami: A rotary origami protective system for robotic rotorcraft. Science Robotics, 2018, 3, .	17.6	116
5	A review of collective robotic construction. Science Robotics, 2019, 4, .	17.6	116
6	Launching the AquaMAV: bioinspired design for aerialâ€“aquatic robotic platforms. Bioinspiration and Biomimetics, 2014, 9, 031001.	2.9	113
7	Power and Control Autonomy for High-Speed Locomotion With an Insect-Scale Legged Robot. IEEE Robotics and Automation Letters, 2018, 3, 987-993.	5.1	111
8	Wind and water tunnel testing of a morphing aquatic micro air vehicle. Interface Focus, 2017, 7, 20160085.	3.0	90
9	A perching mechanism for micro aerial vehicles. Journal of Micro-Nano Mechatronics, 2009, 5, 77-91.	1.0	87
10	The Bioinspiration Design Paradigm: A Perspective for Soft Robotics. Soft Robotics, 2014, 1, 28-37.	8.0	70
11	Perspectives on biologically inspired hybrid and multi-modal locomotion. Bioinspiration and Biomimetics, 2015, 10, 020301.	2.9	68
12	An Integrated Delta Manipulator for Aerial Repair: A New Aerial Robotic System. IEEE Robotics and Automation Magazine, 2019, 26, 54-66.	2.0	65
13	Measurement of the <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msup><mml:mi>B</mml:mi><mml:mo>Â±</mml:mo></mml:msup></mml:math> Meson Nuclear Modification Factor in Pb-Pb Collisions at <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msqrt><mml:mrow><mml:msub><mml:mrow><mml:mi>s</mml:mi></mml:mrow><mml:mrow> Physical Review Letters, 2017, 119, 152301.	7.8	62
14	TiltDrone: A Fully-Actuated Tilting Quadrotor Platform. IEEE Robotics and Automation Letters, 2020, 5, 6845-6852.	5.1	60
15	Consecutive aquatic jump-gliding with water-reactive fuel. Science Robotics, 2019, 4, .	17.6	59
16	Aerial-aquatic robots capable of crossing the air-water boundary and hitchhiking on surfaces. Science Robotics, 2022, 7, eabm6695.	17.6	56
17	A miniature jumping robot with self-recovery capabilities. , 2009, , .		55
18	Anchoring like octopus: biologically inspired soft artificial sucker. Journal of the Royal Society Interface, 2017, 14, 20170395.	3.4	52

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19	Fast Aquatic Escape With a Jet Thruster. IEEE/ASME Transactions on Mechatronics, 2017, 22, 217-226.	5.8	51
20	Learning from nature how to land aerial robots. Science, 2016, 352, 895-896.	12.6	49
21	Performance analysis of jump-gliding locomotion for miniature robotics. Bioinspiration and Biomimetics, 2015, 10, 025006.	2.9	43
22	Search for Evidence of the Type-III Seesaw Mechanism in Multilepton Final States in Proton-Proton Collisions at <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msqrt><mml:mrow><mml:mi>s</mml:mi></mml:mrow></mml:msqrt><mml:mo>=</mml:mo><mm Physical Review Letters, 2017, 119, 221802.	7.8	40
23	Skills for physical artificial intelligence. Nature Machine Intelligence, 2020, 2, 658-660.	16.0	39
24	Efficient Aerialâ€"Aquatic Locomotion With a Single Propulsion System. IEEE Robotics and Automation Letters, 2017, 2, 1304-1311.	5.1	37
25	The EPFL jumpglider: A hybrid jumping and gliding robot with rigid or folding wings. , 2011, , .		36
26	Search for Narrow Resonances in the <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>b</mml:mi></mml:math> -Tagged Dijet Mass Spectrum in Proton-Proton Collisions at <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msqrt><mml:mrow><mml:mi>s</mml:mi></mml:mrow></mml:msqrt><mml:mo>=</mml:mo><mm Physical Review Letters, 2018, 120, 201801.	7.8	36
27	Aerodynamic evaluation of wing shape and wing orientation in four butterfly species using numerical simulations and a low-speed wind tunnel, and its implications for the design of flying micro-robots. Interface Focus, 2017, 7, 20160087.	3.0	33
28	A Passively Adaptive Microspine Grapple for Robust, Controllable Perching. , 2019, , .		32
29	Unmanned Aerial Sensor Placement for Cluttered Environments. IEEE Robotics and Automation Letters, 2020, 5, 6623-6630.	5.1	30
30	MEDUSA: A Multi-Environment Dual-Robot for Underwater Sample Acquisition. IEEE Robotics and Automation Letters, 2020, 5, 4564-4571.	5.1	24
31	Bioinspired design of a landing system with soft shock absorbers for autonomous aerial robots. Journal of Field Robotics, 2019, 36, 230-251.	6.0	23
32	SailMAV: Design and Implementation of a Novel Multi-Modal Flying Sailing Robot. IEEE Robotics and Automation Letters, 2019, 4, 2894-2901.	5.1	22
33	Towards a Self-Deploying and Gliding Robot. , 2009, , 271-284.		22
34	SpiderMAV: Perching and stabilizing micro aerial vehicles with bio-inspired tensile anchoring systems. , 2017, , .		21
35	Fully autonomous micro air vehicle flight and landing on a moving target using visualâ€"inertial estimation and modelâ€predictive control. Journal of Field Robotics, 2019, 36, 49-77.	6.0	20
36	Observation of the Production of Three Massive Gauge Bosons at <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msqrt><mml:mi>s</mml:mi></mml:msqrt><mml:mo>=</mml:mo><mml:mn>13</mml:mn><mml:mtext>â€‰</ Physical Review Letters, 2020, 125, 151802.	7.8	20

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37	A 1.5g SMA-actuated Microglider looking for the Light. Proceedings - IEEE International Conference on Robotics and Automation, 2007, , .	0.0	19
38	A Design and Fabrication Approach for Pneumatic Soft Robotic Arms Using 3D Printed Origami Skeletons. , 2019, , .		19
39	At the Crossroads: Interdisciplinary Paths to Soft Robots. Soft Robotics, 2014, 1, 63-69.	8.0	17
40	Tensile Web Construction and Perching with Nano Aerial Vehicles. Springer Proceedings in Advanced Robotics, 2018, , 71-88.	1.3	17
41	Search for Long-Lived Particles Decaying in the CMS End Cap Muon Detectors in Proton-Proton Collisions at <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msqrt><mml:mrow><mml:mi>s</mml:mi></mml:mrow></mml:msqrt><mml:mo>=</mml:mo><m Physical Review Letters, 2021, 127, 261804.	7.8	17
42	Optic Flow-Based Reactive Collision Prevention for MAVs Using the Fictitious Obstacle Hypothesis. IEEE Robotics and Automation Letters, 2021, 6, 3144-3151.	5.1	16
43	Studies of $${mathrm {B}} ^{*}_{{mathrm {s}}2}(5840)^0 $$ B s 2 âˆ— (5840) 0 and $${mathrm {B}}		

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55	Modelling and simulation of a bioinspired aquatic micro aerial vehicle. , 2019, , .		6
56	A High Payload Aerial Platform for Infrastructure Repair and Manufacturing. , 2021, , .		6
57	Measurements of the Electroweak Diboson Production Cross Sections in Proton-Proton Collisions at <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msqrt><mml:mrow><mml:mi>s</mml:mi></mml:mrow></mml:msqrt><mml:mo>=</mml:mo><m Using Leptonic Decays. Physical Review Letters, 2021, 127, 191801.	7.8	6
58	Undulatory Swimming Performance Explored With a Biorobotic Fish and Measured by Soft Sensors and Particle Image Velocimetry. Frontiers in Robotics and AI, 2021, 8, 791722.	3.2	6
59	High-Power Propulsion Strategies for Aquatic Take-off in Robotics. Springer Proceedings in Advanced Robotics, 2018, , 5-20.	1.3	5
60	Constraints on the Initial State of Pb-Pb Collisions via Measurements of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>Z</mml:mi></mml:math> -Boson Yields and Azimuthal Anisotropy at <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msqrt><mml:mrow><mml:msub><mml:mrow><mml:mi>s</mml:mi></mml:mrow><mml:mrow><m Physical Review Letters, 2021, 127, 102002.	7.8	5
61	Deep Neuromorphic Controller with Dynamic Topology for Aerial Robots. , 2021, , .		5
62	Aerial Locomotion in Cluttered Environments. Springer Tracts in Advanced Robotics, 2017, , 21-39.	0.4	4
63	Challenges in Control and Autonomy of Unmanned Aerial-Aquatic Vehicles. , 2021, , .		4
64	Body Caudal Undulation Measured by Soft Sensors and Emulated by Soft Artificial Muscles. Integrative and Comparative Biology, 2021, 61, 1955-1965.	2.0	4
65	An Intelligent Aerial Manipulator for Wind Turbine Inspection and Repair. , 2022, , .		3
66	Effects of ionic liquids and dual curing on vat photopolymerization process and properties of 3d-printed ionogels. Additive Manufacturing, 2022, 56, 102895.	3.0	2
67	Beyond SchrÃ¶dinger's cat Furry Logic The Physics of Animal Life <i>Matin Durrani and Liz Kalaugher</i> Bloomsbury Sigma, 2017. 312 pp.. Science, 2017, 355, 253-253.	12.6	0
68	Robotic Electrospinning Actuated by Non-Circular Joint Continuum Manipulator for Endoluminal Therapy. , 2021, , .		0
69	Bioinspired Aerial Robots. , 2020, , 1-12.		0