

# Rogelio Lozano

## List of Publications by Year in descending order

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Version: 2024-02-01

61  
papers

2,309  
citations

257357

24  
h-index

223716

46  
g-index

65  
all docs

65  
docs citations

65  
times ranked

1839  
citing authors

#	ARTICLE	IF	CITATIONS
1	Non-linear Control for Underactuated Mechanical Systems. Communications and Control Engineering, 2002, , .	1.0	312
2	Synchronization of bilateral teleoperators with time delay. Automatica, 2008, 44, 2142-2148.	3.0	311
3	Stabilization of the inverted pendulum around its homoclinic orbit. Systems and Control Letters, 2000, 40, 197-204.	1.3	166
4	Second order sliding mode controllers for altitude control of a quadrotor UAS: Real-time implementation in outdoor environments. Neurocomputing, 2017, 233, 61-71.	3.5	106
5	Swing-attenuation for a quadrotor transporting a cable-suspended payload. ISA Transactions, 2017, 68, 433-449.	3.1	99
6	Modeling and Control of a Small Autonomous Aircraft Having Two Tilting Rotors. , 2006, 22, 1297-1302.		91
7	Combining Stereo Vision and Inertial Navigation System for a Quad-Rotor UAV. Journal of Intelligent and Robotic Systems: Theory and Applications, 2012, 65, 373-387.	2.0	87
8	Quad-Tilting Rotor Convertible MAV: Modeling and Real-Time Hover Flight Control. Journal of Intelligent and Robotic Systems: Theory and Applications, 2012, 65, 457-471.	2.0	71
9	Chattering-Free Sliding Mode Altitude Control for a Quad-Rotor Aircraft: Real-Time Application. Journal of Intelligent and Robotic Systems: Theory and Applications, 2014, 73, 137-155.	2.0	68
10	Stabilization of the Furuta pendulum around its homoclinic orbit. International Journal of Control, 2002, 75, 390-398.	1.2	67
11	Real-Time Stabilization of an Eight-Rotor UAV Using Optical Flow. IEEE Transactions on Robotics, 2009, 25, 809-817.	7.3	64
12	An adaptive vision-based autopilot for mini flying machines guidance, navigation and control. Autonomous Robots, 2009, 27, 165-188.	3.2	56
13	Autonomous Navigation for Unmanned Underwater Vehicles: Real-Time Experiments Using Computer Vision. IEEE Robotics and Automation Letters, 2019, 4, 1351-1356.	3.3	46
14	Stabilization and nonlinear control for a novel trirotor mini-aircraft. Control Engineering Practice, 2009, 17, 886-894.	3.2	45
15	Robust adaptive identification of slowly time-varying parameters with bounded disturbances. Automatica, 1999, 35, 1291-1305.	3.0	42
16	Super-twisting integral sliding mode control for trajectory tracking of an Unmanned Underwater Vehicle. Ocean Engineering, 2021, 234, 109164.	1.9	38
17	Adaptive control for a radio-controlled helicopter in a vertical flying stand. International Journal of Adaptive Control and Signal Processing, 2004, 18, 473-485.	2.3	36
18	A Vision and GPS-Based Real-Time Trajectory Planning for a MAV in Unknown and Low-Sunlight Environments. Journal of Intelligent and Robotic Systems: Theory and Applications, 2014, 74, 59-67.	2.0	36

#	ARTICLE	IF	CITATIONS
19	Adaptive Non-singular Terminal Sliding Mode Control for an Unmanned Underwater Vehicle: Real-time Experiments. <i>International Journal of Control, Automation and Systems</i> , 2020, 18, 615-628.	1.6	35
20	Mini Rotorcraft Flight Formation Control Using Bounded Inputs. <i>Journal of Intelligent and Robotic Systems: Theory and Applications</i> , 2012, 65, 175-186.	2.0	31
21	Real-time localization of an UAV using Kalman filter and a Wireless Sensor Network. <i>Journal of Intelligent and Robotic Systems: Theory and Applications</i> , 2012, 65, 283-293.	2.0	27
22	Real-Time Attitude Stabilization of a Mini-UAV Quad-rotor Using Motor Speed Feedback. <i>Journal of Intelligent and Robotic Systems: Theory and Applications</i> , 2013, 70, 93-106.	2.0	27
23	Robust nonsingular fast terminal sliding-mode control for Sit-to-Stand task using a mobile lower limb exoskeleton. <i>Control Engineering Practice</i> , 2020, 101, 104496.	3.2	27
24	Robust Quadrotor Control: Attitude and Altitude Real-Time Results. <i>Journal of Intelligent and Robotic Systems: Theory and Applications</i> , 2017, 88, 299-312.	2.0	25
25	Energy-Based Control and LMI-Based Control for a Quadrotor Transporting a Payload. <i>Mathematics</i> , 2019, 7, 1090.	1.1	24
26	Predictor-based Position Control of a Quad-rotor with Delays in GPS and Vision Measurements. <i>Journal of Intelligent and Robotic Systems: Theory and Applications</i> , 2013, 70, 13-26.	2.0	23
27	Modeling and Stabilization of a Multi-Rotor Helicopter. <i>Journal of Intelligent and Robotic Systems: Theory and Applications</i> , 2013, 69, 161-169.	2.0	22
28	Fault Estimation for a Quad-Rotor MAV Using a Polynomial Observer. <i>Journal of Intelligent and Robotic Systems: Theory and Applications</i> , 2014, 73, 455-468.	2.0	22
29	PD+SMC Quadrotor Control for Altitude and Crack Recognition Using Deep Learning. <i>International Journal of Control, Automation and Systems</i> , 2020, 18, 834-844.	1.6	22
30	Attitude Stabilization with Real-time Experiments of a Tail-sitter Aircraft in Horizontal Flight. <i>Journal of Intelligent and Robotic Systems: Theory and Applications</i> , 2012, 65, 123-136.	2.0	21
31	Identification of linear time-varying systems using a modified least-squares algorithm. <i>Automatica</i> , 2000, 36, 1009-1015.	3.0	19
32	Global Stabilization of the PVTOL: Real-Time Application to a Mini-Aircraft. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2004, 37, 235-240.	0.4	19
33	Passivity-Based Control for a Micro Air Vehicle Using Unit Quaternions. <i>Applied Sciences (Switzerland)</i> , 2017, 7, 13.	1.3	16
34	Real-Time Embedded Control System for VTOL Aircrafts: Application to stabilize a quad-rotor helicopter. , 2006, , .		13
35	Real-time altitude robust controller for a Quad-rotor aircraft using Sliding-mode control technique. , 2013, , .		11
36	Real-time Stabilization of a Quadrotor UAV: Nonlinear Optimal and Suboptimal Control. <i>Journal of Intelligent and Robotic Systems: Theory and Applications</i> , 2013, 70, 79-91.	2.0	11

#	ARTICLE	IF	CITATIONS
37	Optimized Discrete Control Law for Quadrotor Stabilization: Experimental Results. Journal of Intelligent and Robotic Systems: Theory and Applications, 2016, 84, 67-81.	2.0	11
38	Development, Modeling and Control of a Dual Tilt-Wing UAV in Vertical Flight. Drones, 2020, 4, 71.	2.7	11
39	Automated Agave Detection and Counting Using a Convolutional Neural Network and Unmanned Aerial Systems. Drones, 2021, 5, 4.	2.7	11
40	Vision Based Tracking for a Quadrotor Using Vanishing Points. Journal of Intelligent and Robotic Systems: Theory and Applications, 2012, 65, 361-371.	2.0	10
41	Assistive robotic exoskeleton using recurrent neural networks for decision taking for the robust trajectory tracking. Expert Systems With Applications, 2022, 193, 116482.	4.4	10
42	Super Twisting vs Modified Super Twisting algorithm for altitude control of an Unmanned Aircraft System. , 2015, , .		9
43	PVTOL control using feedback linearisation with dynamic extension. International Journal of Control, 2021, 94, 1794-1803.	1.2	9
44	Enhanced Robust Altitude Controller via Integral Sliding Modes Approach for a Quad-Rotor Aircraft: Simulations and Real-Time Results. Journal of Intelligent and Robotic Systems: Theory and Applications, 2017, 88, 313-327.	2.0	8
45	Real-Time Improvement of a Trajectory-Tracking Control Based on Super-Twisting Algorithm for a Quadrotor Aircraft. Drones, 2022, 6, 36.	2.7	7
46	Adaptive Vision-Based Controller for Small Rotorcraft UAVs Control and Guidance. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2008, 41, 797-802.	0.4	6
47	Sun Tracking Technique Applied to a Solar Unmanned Aerial Vehicle. Drones, 2019, 3, 51.	2.7	6
48	Control of Nonlinear Mechanical Systems. European Journal of Control, 2001, 7, 328-348.	1.6	5
49	Adaptive quaternion control of a 3-DOF inertial stabilised platforms. International Journal of Control, 2020, 93, 473-482.	1.2	5
50	PVTOL global stabilisation using a nested saturation control. International Journal of Control, 2022, 95, 2656-2666.	1.2	5
51	Modeling and Control of a Single Rotor Composed of Two Fixed Wing Airplanes. Drones, 2021, 5, 92.	2.7	4
52	Finite horizon nonlinear optimal control for a quadrotor: Experimental results. Optimal Control Applications and Methods, 2021, 42, 54-80.	1.3	3
53	Design and implementation of an embedded control system for small Unmanned Aerial Vehicles: Application to a four-rotor mini rotorcraft. , 2009, , .		2
54	Stabilization of the Furuta Pendulum Around Its Homoclinic Orbit. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2001, 34, 807-812.	0.4	1

#	ARTICLE	IF	CITATIONS
55	Robust trajectory-tracking control design for a small Quad-rotor aircraft via sliding modes. , 2016, , .		1
56	Finite Horizon Nonlinear Energy Optimizing Control in a Force Augmenting Hybrid Exoskeleton for the Elbow Joint. IEEE Transactions on Control Systems Technology, 2020, 28, 2681-2688.	3.2	1
57	Finite Horizon Nonlinear Suboptimal Control for an Autonomous Soaring UAV. Mathematical Problems in Engineering, 2022, 2022, 1-15.	0.6	1
58	Control and cable deployment of a tethered PVTOL aircraft. , 2021, , .		1
59	Lyapunov Stability of a Planar Vertical Take-Off and Landing Aircraft Exerting a Force in the Environment. Drones, 2022, 6, 144.	2.7	1
60	On Closed-Loop Stability for Mechanical Systems with Input Delays. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2001, 34, 43-48.	0.4	0
61	Quad rotor-UAV stabilization by predictor based control. , 2017, , .		0