

# Guilherme V Raffo

## List of Publications by Year in descending order

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31  
papers

1,493  
citations

623574

14  
h-index

752573

20  
g-index

31  
all docs

31  
docs citations

31  
times ranked

1248  
citing authors

#	ARTICLE	IF	CITATIONS
1	Zonotopic Filtering for Uncertain Nonlinear Systems: Fundamentals, Implementation Aspects, and Extensions [Applications of Control]. IEEE Control Systems, 2022, 42, 19-51.	1.0	4
2	Joint state and parameter estimation based on constrained zonotopes. Automatica, 2022, 142, 110425.	3.0	4
3	Distributed supervisory control for multiple robot autonomous navigation performing single-robot tasks. Mechatronics, 2022, 86, 102848.	2.0	2
4	A new robust adaptive mixing control for trajectory tracking with improved forward flight of a tilt-rotor UAV. ISA Transactions, 2021, 110, 86-104.	3.1	32
5	Nonlinear Model Predictive Control on SE(3) for Quadrotor Aggressive Maneuvers. Journal of Intelligent and Robotic Systems: Theory and Applications, 2021, 101, 1.	2.0	16
6	A robust optimal control approach in the weighted Sobolev space for underactuated mechanical systems. Automatica, 2021, 125, 109474.	3.0	10
7	Nonlinear Model Predictive Path Following Controller with Obstacle Avoidance. Journal of Intelligent and Robotic Systems: Theory and Applications, 2021, 102, 1.	2.0	17
8	Set-valued state estimation of nonlinear discrete-time systems with nonlinear invariants based on constrained zonotopes. Automatica, 2021, 129, 109638.	3.0	20
9	Collision-free vector field guidance and MPC for a fixed-wing UAV. , 2021, , .		5
10	Guaranteed methods based on constrained zonotopes for set-valued state estimation of nonlinear discrete-time systems. Automatica, 2020, 111, 108614.	3.0	40
11	Set-based state estimation and fault diagnosis of linear discrete-time descriptor systems using constrained zonotopes. IFAC-PapersOnLine, 2020, 53, 4291-4296.	0.5	1
12	Autonomous Navigation of Multiple Robots using Supervisory Control Theory. , 2019, , .		10
13	Nonlinear Model Predictive Control on SE(3) for Quadrotor Trajectory Tracking and Obstacle Avoidance. , 2019, , .		8
14	Suspended load path tracking control using a tilt-rotor UAV based on zonotopic state estimation. Journal of the Franklin Institute, 2019, 356, 1695-1729.	1.9	23
15	Path Tracking Control with State Estimation based on Constrained Zonotopes for Aerial Load Transportation. , 2018, , .		8
16	Set-based state estimation of nonlinear systems using constrained zonotopes and interval arithmetic. , 2018, , .		13
17	Nonlinear $H_2$ and $H_\infty$ control formulated in the Weighted Sobolev space for underactuated mechanical systems with input coupling. , 2018, , .		2
18	Approximated solutions to the nonlinear $H_2$ and $H_\infty$ control approaches formulated in the Sobolev space $\langle \sup \rangle$ . , 2018, , .		2

#	ARTICLE	IF	CITATIONS
19	A Load Transportation Nonlinear Control Strategy Using a Tilt-Rotor UAV. Journal of Advanced Transportation, 2018, 2018, 1-20.	0.9	13
20	Path tracking Model Predictive Control of a Tilt-rotor UAV carrying a suspended load. , 2016, , .		7
21	Nonlinear robust control of a quadrotor UAV for load transportation with swing improvement. , 2016, , .		40
22	Input-Output Linearizing Control of the Underactuated Hovercraft Using the Derivative-Free Nonlinear Kalman Filter. Unmanned Systems, 2015, 03, 127-142.	2.7	15
23	Two-wheeled self-balanced pendulum workspace improvement via underactuated robust nonlinear control. Control Engineering Practice, 2015, 44, 231-242.	3.2	30
24	Robust Nonlinear Control for Path Tracking of a Quad-Rotor Helicopter. Asian Journal of Control, 2015, 17, 142-156.	1.9	42
25	Path Tracking of a UAV via an Underactuated Control Strategy. European Journal of Control, 2011, 17, 194-213.	1.6	54
26	Nonlinear $H^\infty$ Controller for the Quad-Rotor Helicopter with Input Coupling*. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2011, 44, 13834-13839.	0.4	38
27	An integral predictive/nonlinear $H^\infty$ control structure for a quadrotor helicopter. Automatica, 2010, 46, 29-39.	3.0	666
28	A Predictive Controller for Autonomous Vehicle Path Tracking. IEEE Transactions on Intelligent Transportation Systems, 2009, 10, 92-102.	4.7	253
29	Backstepping/nonlinear $H^\infty$ control for path tracking of a quadrotor unmanned aerial vehicle. , 2008, , .		83
30	MPC with Nonlinear $H^\infty$ Control for Path Tracking of a Quad-Rotor Helicopter. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2008, 41, 8564-8569.	0.4	29
31	Nonlinear $H^\infty$ control applied to the Personal Pendulum Car. , 2007, , .		6