Alexandra Moutinho

List of Publications by Year
in descending order

39 papers	757 citations	759055 12 h-index	552653 26 g-index
40 all docs	40 docs citations	40 times ranked	493 citing authors

#	Article	IF	Citations
1	Hover Control of an UAV With Backstepping Design Including Input Saturations. IEEE Transactions on Control Systems Technology, 2008, 16, 517-526.	3.2	162
2	A backstepping controller for path‐tracking of an underactuated autonomous airship. International Journal of Robust and Nonlinear Control, 2009, 19, 418-441.	2.1	79
3	Wildfire detection using transfer learning on augmented datasets. Expert Systems With Applications, 2020, 142, 112975.	4.4	69
4	Airship Hover Stabilization Using a Backstepping Control Approach. Journal of Guidance, Control, and Dynamics, 2006, 29, 903-914.	1.6	62
5	Project AURORA: Infrastructure and flight control experiments for a robotic airship. Journal of Field Robotics, 2006, 23, 201-222.	3.2	46
6	Airship robust path-tracking: A tutorial on airship modelling and gain-scheduling control design. Control Engineering Practice, 2016, 50, 22-36.	3.2	46
7	Stability and Robustness Analysis of the AURORA Airship Control System using Dynamic Inversion. , 0, , .		41
8	Estimation of tire‐road friction for road vehicles: a time delay neural network approach. Journal of the Brazilian Society of Mechanical Sciences and Engineering, 2020, 42, 1.	0.8	31
9	A new offline optimization approach for designing a fuel cell hybrid bus. Transportation Research Part C: Emerging Technologies, 2014, 42, 14-27.	3.9	30
10	Classification of potential fire outbreaks: A fuzzy modeling approach based on thermal images. Expert Systems With Applications, 2019, 129, 216-232.	4.4	23
11	Thermal Infrared Sensing for Near Real-Time Data-Driven Fire Detection and Monitoring Systems. Sensors, 2020, 20, 6803.	2.1	22
12	Lateral Control of Airship with Uncertain Dynamics using Incremental Nonlinear Dynamics Inversion. IFAC-PapersOnLine, 2015, 48, 69-74.	0.5	21
13	Erratum on "Influence of Wind Speed on Airship Dynamics". Journal of Guidance, Control, and Dynamics, 2008, 31, 443-444.	1.6	15
14	Nonlinear state-feedback design for vehicle lateral control using sum-of-squares programming. Vehicle System Dynamics, 2022, 60, 743-769.	2.2	10
15	Nonlinear Control Approaches for an Autonomous Unmanned Robotic Airship. , 2007, , .		9
16	Addressing Actuation Redundancies in Incremental Controllers for Attitude Tracking of Fixed-Wing Aircraft. IFAC-PapersOnLine, 2019, 52, 417-422.	0.5	9
17	Robustness of Incremental Backstepping Flight Controllers: The Boeing 747 Case Study. IEEE Transactions on Aerospace and Electronic Systems, 2021, 57, 3492-3505.	2.6	9
18	Attitude Estimation in SO(3): A Comparative UAV Case Study. Journal of Intelligent and Robotic Systems: Theory and Applications, 2015, 80, 375-384.	2.0	8

#	Article	IF	Citations
19	Analysis of Fire Hazard in Campsite Areas. Fire Technology, 2017, 53, 553-575.	1.5	8
20	Increased Robustness to Delay in Incremental Controllers Using Input Scaling Gain. IEEE Transactions on Aerospace and Electronic Systems, 2022, 58, 1199-1210.	2.6	7
21	The Tilt-Quadrotor: Concept, Modeling and Identification. , 2015, , .		6
22	Robust Incremental Backstepping Controller for the Attitude and Airspeed Tracking of a Commercial Airplane. , 2019, , .		5
23	Integration of Phase Plane Flight Envelope Protections in Cascaded Incremental Flight Control. IFAC-PapersOnLine, 2019, 52, 429-435.	0.5	5
24	Actuation Failure Detection in Fixed-Wing Aircraft Combining a Pair of Two-Stage Kalman Filters. IFAC-PapersOnLine, 2020, 53, 744-749.	0.5	5
25	Stabilization and Altitude Control of an Indoor Low-Cost Quadrotor: Design and Experimental Results. , 2015, , .		4
26	Decentralized Distribution of UAV Fleets Based on Fuzzy Clustering for Demand-driven Aerial Services. , 2020, , .		4
27	System Architecture of a Robotics Airship. Smart Innovation, Systems and Technologies, 2021, , 13-22.	0.5	4
28	Preprocessing of Clinical Databases to improve classification accuracy of patient diagnosis*. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2011, 44, 14121-14126.	0.4	3
29	Implementing active learning through pedagogical coaching in Control Systems lectures. , 2018, , .		3
30	Automatic Detection of Obstacles in Railway Tracks Using Monocular Camera. Lecture Notes in Computer Science, 2019, , 284-294.	1.0	3
31	A comprehensive experimental validation of a scaled car-like vehicle: Lateral dynamics identification, stability analysis, and control application. Control Engineering Practice, 2021, 116, 104924.	3.2	2
32	Sum of squares approach for ground vehicle lateral control under tire saturation forces. IFAC-PapersOnLine, 2020, 53, 14387-14393.	0.5	1
33	Quadrotor Attitude Control using Incremental Nonlinear Dynamics Inversion. , 2017, , .		1
34	HOVER STABILIZATION OF AN AIRSHIP USING DYNAMIC INVERSION. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2006, 39, 193-198.	0.4	0
35	Attitude estimation in SO(3): A comparative case study. , 2014, , .		0
36	Control Design Based on Sum of Squares Programming for Non-affine in Input Systems. , 2020, , .		0

#	Article	IF	Citations
37	Color-based Superpixel Semantic Segmentation for Fire Data Annotation. , 2021, , .		0
38	Relating Aircraft Altitude with Pilotâ€™s Physiological Variables: Towards Increasing Safety in Light-sport Aviation. , 2017, , .		0
39	A Gain-Scheduling Approach for Airship Path-Tracking. , 2008, , 263-275.		0