Guilherme A S Pereira

List of Publications by Year
in descending order

61 papers	**1,637** citations
516710 **16** h-index	377865 **34** g-index
62 all docs	**62** docs citations
62 times ranked	**1456** citing authors

#	Article	IF	Citations
1	Multi-UAV Routing for Area Coverage and Remote Sensing with Minimum Time. Sensors, 2015, 15, 27783-27803.	3.8	227
2	Sensing and coverage for a network of heterogeneous robots. , 2008, , .		192
3	Vector Fields for Robot Navigation Along Time-Varying Curves in n-Dimensions. IEEE Transactions on Robotics, 2010, 26, 647-659.	10.3	136
4	Distributed Search and Rescue with Robot and Sensor Teams. , 0, , 529-538.		89
5	Swarm Coordination Based on Smoothed Particle Hydrodynamics Technique. IEEE Transactions on Robotics, 2013, 29, 383-399.	10.3	76
6	Simultaneous Coverage and Tracking (SCAT) of Moving Targets with Robot Networks. Springer Tracts in Advanced Robotics, 2009, , 85-99.	0.4	66
7	Development of a Hand-Launched Small UAV for Ground Reconnaissance. IEEE Transactions on Aerospace and Electronic Systems, 2010, 46, 335-348.	4.7	59
8	Control of swarms based on Hydrodynamic models. , 2008, , .		43
9	Quaternion-Based Robust Attitude Estimation Using an Adaptive Unscented Kalman Filter. Sensors, 2019, 19, 2372.	3.8	40
10	Fluids in Electrostatic Fields: An Analogy for Multirobot Control. IEEE Transactions on Magnetics, 2007, 43, 1765-1768.	2.1	34
11	Navigation of an Autonomous Car Using Vector Fields and the Dynamic Window Approach. Journal of Control, Automation and Electrical Systems, 2013, 24, 106-116.	2.0	31
12	A mobile manipulator for installation and removal of aircraft warning spheres on aerial power transmission lines. , 0, , .		29
13	Closed loop motion planning of cooperating mobile robots using graph connectivity. Robotics and Autonomous Systems, 2008, 56, 373-384.	5.1	29
14	Decentralized controllers for perimeter surveillance with teams of aerial robots. Advanced Robotics, 2013, 27, 697-709.	1.8	27
15	Robot navigation based on electrostatic field computation. IEEE Transactions on Magnetics, 2006, 42, 1459-1462.	2.1	24
16	Robot Navigation in Multi-terrain Outdoor Environments. International Journal of Robotics Research, 2009, 28, 685-700.	8.5	23
17	Cooperative Transport of Planar Objects by Multiple Mobile Robots Using Object Closure. , 2003, , 287-296.		22
18	GNSS/LiDAR-Based Navigation of an Aerial Robot in Sparse Forests. Sensors, 2019, 19, 4061.	3.8	20

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19	Longitudinal Model Identification and Velocity Control of an Autonomous Car. IEEE Transactions on Intelligent Transportation Systems, 2014, , 1-11.	8.0	18
20	Precise Landing of Autonomous Aerial Vehicles Using Vector Fields. IEEE Robotics and Automation Letters, 2020, 5, 4337-4344.	5.1	18
21	A robot for installation and removal of aircraft warning spheres on aerial power transmission lines. IEEE Transactions on Power Delivery, 2003, 18, 1581-1582.	4.3	16
22	Multi-robot Deployment using Topological Maps. Journal of Intelligent and Robotic Systems: Theory and Applications, 2017, 86, 641-661.	3.4	16
23	Decentralized Algorithms for Multirobot Manipulation via Caging. Springer Tracts in Advanced Robotics, 2004, , 257-273.	0.4	15
24	Airplane attitude estimation using computer vision: simple method and actual experiments. Electronics Letters, 2008, 44, 1303.	1.0	13
25	Artificial vector fields for robot convergence and circulation of time-varying curves in n-dimensional spaces. , 2009, , .		11
26	Real-Time Ellipse Detection for Robotics Applications. IEEE Robotics and Automation Letters, 2021, 6, 7009-7016.	5.1	11
27	A framework for optimal repairing of vector field-based motion plans. , 2016, , .		10
28	An aerial robotic system for inventory of stockpile warehouses. Engineering Reports, 2021, 3, e12396.	1.7	10
29	Coverage of curves in 3D with swarms of nonholonomic aerial robots. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2011, 44, 10367-10372.	0.4	9
30	Circulation of curves using vector fields: Actual robot experiments in 2D and 3D workspaces. , 2010, , .		8
31	An Architecture for Navigation of Service Robots in Human-Populated Office-like Environments**This work was supported by FundaÃ§Ã£o de Amparo Ã Pesquisa do Estado de Minas Gerais (FAPEMIG). Arthur Araujo and Guilherme Pereira are supported by Conselho Nacional de Desenvolvimento CientÃfico e Tecnologico (CNPq), Brazil.. IFAC-PapersOnLine, 2015, 48, 189-194.	0.9	8
32	A Probabilistic Approach for Fusing People Detectors. Journal of Control, Automation and Electrical Systems, 2015, 26, 616-629.	2.0	8
33	On Computing Complex Navigation Functions. , 0, , .		7
34	Hybrid mobile robot navigational strategy for efficient data collection in sparsely deployed sensor networks. , 2007, , .		7
35	Temporal synchronization of non-overlapping videos using known object motion. Pattern Recognition Letters, 2011, 32, 38-46.	4.2	7
36	Fully continuous vector fields for mobile robot navigation on sequences of discrete triangular regions. Proceedings - IEEE International Conference on Robotics and Automation, 2007, , .	0.0	6

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37	Navigation of Semi-autonomous Service Robots Using Local Information and Anytime Motion Planners. Robotica, 2020, 38, 2080-2098.	1.9	6
38	Coordination of multiple fixed-wing UAVs traversing intersecting periodic paths. , 2013, , .		5
39	On the development of a small hand-held multi-UAV platform for surveillance and monitoring. , 2013, , .		5
40	Robust attitude estimation using an adaptive unscented Kalman filter. , 2019, , .		5
41	On the Development of a Tether-based Drone Localization System. , 2021, , .		5
42	Cooperative localization and tracking in distributed robot-sensor networks. Tsinghua Science and Technology, 2005, 10, 91-101.	6.1	4
43	Synchronizing Video Cameras with Non-overlapping Fields of View. , 2008, , .		4
44	Learning robot reaching motions by demonstration using nonlinear autoregressive models. Robotics and Autonomous Systems, 2018, 107, 182-195.	5.1	4
45	Adaptable Platform for Interactive Swarm Robotics (APIS): A Human-Swarm Interaction Research Testbed. , 2019, , .		4
46	Tangle-Free Exploration with a Tethered Mobile Robot. Remote Sensing, 2020, 12, 3858.	4.0	4
47	Fast Path Computation using Lattices in the Sensor-Space for Forest Navigation. , 2021, , .		4
48	NASA Space Robotics Challenge 2 Qualification Round: An Approach to Autonomous Lunar Rover Operations. IEEE Aerospace and Electronic Systems Magazine, 2021, 36, 24-41.	1.3	4
49	Mobile robot outdoor localization using planar beacons and visual improved odometry. , 2007, , .		3
50	State Estimation for Aerial Vehicles in Forest Environments. , 2019, , .		3
51	Robot Navigation in Multi-terrain Outdoor Environments. Springer Tracts in Advanced Robotics, 2008, , 331-342.	0.4	3
52	Data based dynamical modeling of vision observed small robots. , 0, , .		2
53	Abstraction and Control for Swarms of Robots. Springer Tracts in Advanced Robotics, 2005, , 224-233.	0.4	2
54	Data-based dynamical modeling of externally observed actuators-only robots. IEEE Transactions on Systems, Man and Cybernetics, Part A: Systems and Humans, 2006, 36, 706-717.	2.9	1

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55	Temporal synchronization in mobile sensor networks using image sequence analysis. Machine Vision and Applications, 2014, 25, 1067-1076.	2.7	1
56	Development of a PC-Based Flight Simulator for Pilot Assistance Research. , 2010, , .		1
57	Fluids, Particles, and Multiple Robots in Electrostatic Fields. , 0, , .		0
58	Application of Remote Sensing Optical Properties of Ship Wakes at Sea Area out of Dalian Harbor. , 2010, , .		0
59	ICAR 2019 Special Issue. Journal of Intelligent and Robotic Systems: Theory and Applications, 2021, 102, 1.	3.4	0
60	Localização, modelagem e controle de um mini-helicóptero em ambientes internos. Controle and Automacao, 2011, 22, 238-255.	0.2	0
61	Parallel Sensor-Space Lattice Planner for Real-Time Obstacle Avoidance. Sensors, 2022, 22, 4770.	3.8	0