

Pedro Lima

List of Publications by Year in descending order

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Version: 2024-02-01

78
papers

1,473
citations

361413

20
h-index

454955

30
g-index

80
all docs

80
docs citations

80
times ranked

1304
citing authors

#	ARTICLE	IF	CITATIONS
1	On Incremental Structure from Motion Using Lines. IEEE Transactions on Robotics, 2022, 38, 391-406.	10.3	6
2	Performance Models in Robotics With a Use Case on SLAM. IEEE Robotics and Automation Letters, 2022, 7, 4646-4653.	5.1	2
3	Functionalities, Benchmarking System and Performance Evaluation for a Domestic Service Robot: People Perception, People Following, and Pick and Placing. Applied Sciences (Switzerland), 2022, 12, 4819.	2.5	1
4	An autonomous mobile manipulator to build outdoor structures consisting of heterogeneous brick patterns. SN Applied Sciences, 2021, 3, 1.	2.9	3
5	A multipurpose mobile manipulator for autonomous firefighting and construction of outdoor structures. , 2021, 1, 102-126.		2
6	Petri Net Toolbox for Multi-Robot Planning under Uncertainty. Applied Sciences (Switzerland), 2021, 11, 12087.	2.5	2
7	A robust localization system for multi-robot formations based on an extension of a Gaussian mixture probability hypothesis density filter. Autonomous Robots, 2020, 44, 395-414.	4.8	10
8	A Dynamic Weighted Area Assignment Based on a Particle Filter for Active Cooperative Perception. IEEE Robotics and Automation Letters, 2020, 5, 736-743.	5.1	9
9	SocRob@Home. KI - Kunstliche Intelligenz, 2019, 33, 343-356.	3.2	4
10	Benchmarking Functionalities of Domestic Service Robots Through Scientific Competitions. KI - Kunstliche Intelligenz, 2019, 33, 357-367.	3.2	11
11	Petri net based multi-robot task coordination from temporal logic specifications. Robotics and Autonomous Systems, 2019, 122, 103289.	5.1	22
12	Project INSIDE: towards autonomous semi-unstructured human-robot social interaction in autism therapy. Artificial Intelligence in Medicine, 2019, 96, 198-216.	6.5	29
13	Autonomous Surveillance Robots: A Decision-Making Framework for Networked Multiagent Systems. IEEE Robotics and Automation Magazine, 2017, 24, 52-64.	2.0	25
14	An Online Scalable Approach to Unified Multirobot Cooperative Localization and Object Tracking. IEEE Transactions on Robotics, 2017, 33, 1184-1199.	10.3	24
15	Context-based thermodynamic modeling of buildings spaces. Energy and Buildings, 2016, 124, 164-177.	6.7	13
16	Robot Competitions: What Did We Learn? [Competitions]. IEEE Robotics and Automation Magazine, 2016, 23, 16-18.	2.0	14
17	On-Board Relative Bearing Estimation for Teams of Drones Using Sound. IEEE Robotics and Automation Letters, 2016, 1, 820-827.	5.1	37
18	Institutional Robotics. International Journal of Social Robotics, 2015, 7, 825-840.	4.6	1

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19	Competitions for Benchmarking: Task and Functionality Scoring Complete Performance Assessment. IEEE Robotics and Automation Magazine, 2015, 22, 53-61.	2.0	48
20	Decision-theoretic planning under uncertainty with information rewards for active cooperative perception. Autonomous Agents and Multi-Agent Systems, 2015, 29, 1157-1185.	2.1	40
21	To err is robotic, to tolerate immunological: fault detection in multirobot systems. Bioinspiration and Biomimetics, 2015, 10, 016014.	2.9	30
22	Formation control driven by cooperative object tracking. Robotics and Autonomous Systems, 2015, 63, 68-79.	5.1	28
23	A Particle-Filter Approach for Active Perception in Networked Robot Systems. Lecture Notes in Computer Science, 2015, , 451-460.	1.3	1
24	On the Notion of Uncontrollable Marking in Supervisory Control of Petri Nets. IEEE Transactions on Automatic Control, 2014, 59, 3069-3074.	5.7	4
25	Formalization, Implementation, and Modeling of Institutional Controllers for Distributed Robotic Systems. Artificial Life, 2014, 20, 127-141.	1.3	7
26	3D to 2D bijection for spherical objects under equidistant fisheye projection. Computer Vision and Image Understanding, 2014, 125, 172-183.	4.7	13
27	Using reinforcement learning to optimize occupant comfort and energy usage in HVAC systems. Journal of Ambient Intelligence and Smart Environments, 2014, 6, 675-690.	1.4	55
28	RoCKIn Innovation Through Robot Competitions [Competitions]. IEEE Robotics and Automation Magazine, 2014, 21, 8-12.	2.0	6
29	Efficient Distributed Communications for Multi-robot Systems. Lecture Notes in Computer Science, 2014, , 280-291.	1.3	2
30	Unknown-color spherical object detection and tracking. , 2013, , .		2
31	Perception-driven multi-robot formation control. , 2013, , .		19
32	Multi-robot cooperative stereo for outdoor scenarios. , 2013, , .		3
33	Multi-robot cooperative spherical-object tracking in 3D space based on particle filters. Robotics and Autonomous Systems, 2013, 61, 1084-1093.	5.1	26
34	Cooperative robot localization and target tracking based on least squares minimization. , 2013, , .		50
35	General Path Planning Methodology for Leader-Follower Robot Formations. International Journal of Advanced Robotic Systems, 2013, 10, 64.	2.1	14
36	IROS 2012 Competitions [Competitions]. IEEE Robotics and Automation Magazine, 2013, 20, 10-12.	2.0	5

#	ARTICLE	IF	CITATIONS
37	Robust acoustic source localization of emergency signals from Micro Air Vehicles. , 2012, , .		51
38	Search and Rescue Robots: The Civil Protection Teams of the Future. , 2012, , .		13
39	Robot task plan representation by Petri nets: modelling, identification, analysis and execution. Autonomous Robots, 2012, 33, 337-360.	4.8	46
40	Clonal Expansion without Self-replicating Entities. Lecture Notes in Computer Science, 2012, , 191-204.	1.3	2
41	Biological Cell Inspired Stochastic Models and Control. , 2012, , 145-161.		0
42	Online Model Identification for Set-valued State Estimators With Discrete-Time Measurements. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2011, 44, 4753-4758.	0.4	0
43	Petri Net Plans. Autonomous Agents and Multi-Agent Systems, 2011, 23, 344-383.	2.1	64
44	Robot formation motion planning using Fast Marching. Robotics and Autonomous Systems, 2011, 59, 675-683.	5.1	47
45	Cooperative Localization Based on Visually Shared Objects. Lecture Notes in Computer Science, 2011, , 350-361.	1.3	4
46	Tracking objects with generic calibrated sensors: An algorithm based on color and 3D shape features. Robotics and Autonomous Systems, 2010, 58, 784-795.	5.1	26
47	Fault-tolerant probabilistic sensor fusion for Multi-Agent Systems. , 2010, , .		3
48	Active cooperative perception in network robot systems using POMDPs. , 2010, , .		25
49	Decision-theoretic robot guidance for active cooperative perception. , 2009, , .		3
50	ISROBOTNET: A testbed for sensor and robot network systems. , 2009, , .		20
51	3D Tracking by Catadioptric Vision Based on Particle Filters. Lecture Notes in Computer Science, 2008, , 77-88.	1.3	4
52	Eliciting preferences over observed behaviours based on relative evaluations. , 2007, , .		0
53	On the use of perspective catadioptric sensors for 3D model-based tracking with particle filters. , 2007, , .		1
54	Modelling, analysis and execution of robotic tasks using petri nets. , 2007, , .		30

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55	NON-HOLONOMIC ROBOT FORMATIONS WITH OBSTACLE COMPLIANT GEOMETRY. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2007, 40, 439-444.	0.4	10
56	A search and rescue robot with teleoperated tether docking system. Industrial Robot, 2007, 34, 332-338.	2.1	20
57	Optimal guidance and decentralised state estimation applied to a formation flying demonstration mission in GTO. IET Control Theory and Applications, 2007, 1, 532-544.	2.1	7
58	Cooperative opinion pool: a new method for sensor fusion by a robot team. , 2007, , .		3
59	A Bayesian Approach to Sensor Fusion in Autonomous Sensor and Robot Networks. IEEE Instrumentation and Measurement Magazine, 2007, 10, 22-27.	1.6	16
60	Robotics Educational Activities in Portugal: A Motivating Experience [Education]. IEEE Robotics and Automation Magazine, 2007, 14, 16-17.	2.0	6
61	Modeling dynamics of cell population molecule expression distribution. Nonlinear Analysis: Hybrid Systems, 2007, 1, 81-94.	3.5	0
62	Institutional Robotics. , 2007, , 595-604.		8
63	Modeling and Optimal Centralized Control of a Large-Size Robotic Population. IEEE Transactions on Robotics, 2006, 22, 1280-1285.	10.3	60
64	RAPOSA: Semi-Autonomous Robot for Rescue Operations. , 2006, , .		27
65	Special issue on multi-robots in dynamic environments. Robotics and Autonomous Systems, 2005, 50, 81-83.	5.1	2
66	Motion feasibility of multi-agent formations. , 2005, 21, 387-392.		89
67	Artificial Intelligence and Systems Theory: Applied to Cooperative Robots. International Journal of Advanced Robotic Systems, 2004, 1, 15.	2.1	38
68	Avoiding obstacles - Multisensor navigation for nonholonomic robots in cluttered environments. IEEE Robotics and Automation Magazine, 2004, 11, 70-82.	2.0	13
69	Compositional Abstractions of Hybrid Control Systems. Discrete Event Dynamic Systems: Theory and Applications, 2004, 14, 203-238.	1.5	35
70	A glass furnace operation system using fuzzy modelling and genetic algorithms for performance optimisation. Engineering Applications of Artificial Intelligence, 2003, 16, 681-690.	8.1	3
71	RoboCup 2001. IEEE Robotics and Automation Magazine, 2002, 9, 20-30.	2.0	8
72	The road to RoboCup 2050. IEEE Robotics and Automation Magazine, 2002, 9, 31-38.	2.0	50

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73	Composing Abstractions of Hybrid Systems. Lecture Notes in Computer Science, 2002, , 436-450.	1.3	20
74	Feasible formations of multi-agent systems. , 2001, , .		78
75	Omni-directional catadioptric vision for soccer robots. Robotics and Autonomous Systems, 2001, 36, 87-102.	5.1	43
76	Intelligent controllers as hierarchical stochastic automata. IEEE Transactions on Systems, Man, and Cybernetics, 1999, 29, 151-163.	5.0	7
77	Learning optimal robotic tasks. IEEE Intelligent Systems, 1996, 11, 38-45.	1.0	4
78	Inverse reinforcement learning with evaluation. , 0, , .		6