Luis Merino

List of Publications by Year
in descending order

89 papers	**2,630** citations	361045 **20** h-index	276539 **41** g-index
91 all docs	**91** docs citations	**91** times ranked	**2241** citing authors

#	Article	IF	Citations
1	An Unmanned Aircraft System for Automatic Forest Fire Monitoring and Measurement. Journal of Intelligent and Robotic Systems: Theory and Applications, 2012, 65, 533-548.	2.0	304
2	A cooperative perception system for multiple UAVs: Application to automatic detection of forest fires. Journal of Field Robotics, 2006, 23, 165-184.	3.2	239
3	Vision-Based Odometry and SLAM for Medium and High Altitude Flying UAVs. Journal of Intelligent and Robotic Systems: Theory and Applications, 2009, 54, 137-161.	2.0	132
4	Computer vision techniques for forest fire perception. Image and Vision Computing, 2008, 26, 550-562.	2.7	131
5	Control and perception techniques for aerial robotics. Annual Reviews in Control, 2004, 28, 167-178.	4.4	124
6	Multiple eyes in the skies - Architecture and perception issues in the comets unmanned air vehicles project. IEEE Robotics and Automation Magazine, 2005, 12, 46-57.	2.2	93
7	Unmanned aerial vehicles as tools for forest-fire fighting. Forest Ecology and Management, 2006, 234, S263.	1.4	86
8	Decentralized multi-robot cooperation with auctioned POMDPs. International Journal of Robotics Research, 2013, 32, 650-671.	5.8	83
9	Cooperative Fire Detection using Unmanned Aerial Vehicles. , 0, , .		82
10	Automatic Forest-Fire Measuring Using Ground Stations and Unmanned Aerial Systems. Sensors, 2011, 11, 6328-6353.	2.1	76
11	A probabilistic framework for entire WSN localization using a mobile robot. Robotics and Autonomous Systems, 2008, 56, 798-806.	3.0	68
12	Multi-Unmanned Aerial Vehicle (UAV) Cooperative Fault Detection Employing Differential Global Positioning (DGPS), Inertial and Vision Sensors. Sensors, 2009, 9, 7566-7579.	2.1	63
13	Vision-based multi-UAV position estimation. IEEE Robotics and Automation Magazine, 2006, 13, 53-62.	2.2	60
14	Cooperative Decision-Making Under Uncertainties for Multi-Target Surveillance with Multiples UAVs. Journal of Intelligent and Robotic Systems: Theory and Applications, 2016, 84, 371-386.	2.0	58
15	A particle filtering method for wireless sensor network localization with an aerial robot beacon. , 2008, , .		54
16	Cooperative Unmanned Aerial Systems for Fire Detection, Monitoring, and Extinguishing. , 2015, , 2693-2722.		51
17	Homography Based Kalman Filter for Mosaic Building. Applications to UAV position estimation. Proceedings - IEEE International Conference on Robotics and Automation, 2007, , .	0.0	44
18	Multi-modal mapping and localization of unmanned aerial robots based on ultra-wideband and RGB-D sensing. , 2017, , .		42

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19	Motion compensation and object detection for autonomous helicopter visual navigation in the COMETS system. , 2004, , .		40
20	Unmanned Aerial Vehicle Localization Based on Monocular Vision and Online Mosaicking. Journal of Intelligent and Robotic Systems: Theory and Applications, 2009, 55, 323-343.	2.0	39
21	Decentralized Sensor Fusion for Ubiquitous Networking Robotics in Urban Areas. Sensors, 2010, 10, 2274-2314.	2.1	37
22	Decentralized multi-agent exploration with online-learning of Gaussian processes. , 2016, , .		34
23	Learning Human-Aware Path Planning with Fully Convolutional Networks. , 2018, , .		31
24	A general Gaussian-mixture approach for range-only mapping using multiple hypotheses. , 2010, , .		28
25	Improving vision-based planar motion estimation for unmanned aerial vehicles through online mosaicing. , 0, , .		27
26	Teaching Robot Navigation Behaviors to Optimal RRT Planners. International Journal of Social Robotics, 2018, 10, 235-249.	3.1	25
27	A Holistic Approach in Designing Tabletop Robotâ€™s Expressivity. , 2020, , .		25
28	Planning with ants. International Journal of Advanced Robotic Systems, 2016, 13, 172988141666407.	1.3	24
29	Decentralized Delayed-State Information Filter (DDSIF): A new approach for cooperative decentralized tracking. Robotics and Autonomous Systems, 2011, 59, 376-388.	3.0	23
30	A visual odometer without 3D reconstruction for aerial vehicles. Applications to building inspection. , 0, , .		21
31	A Robust Localization System for Inspection Robots in Sewer Networks. Sensors, 2019, 19, 4946.	2.1	21
32	Transferring human navigation behaviors into a robot local planner. , 2014, , .		19
33	Child-Robot Collaborative Problem-Solving and the Importance of Child's Voluntary Interaction: A Developmental Perspective. Frontiers in Robotics and AI, 2020, 7, 15.	2.0	18
34	Multi-UAV Experiments: Application to Forest Fires. , 2007, , 207-228.		18
35	Delayed-state information filter for cooperative decentralized tracking. , 2009, , .		17
36	Enhanced Monte Carlo Localization with Visual Place Recognition for Robust Robot Localization. Journal of Intelligent and Robotic Systems: Theory and Applications, 2015, 80, 641-656.	2.0	17

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37	Robotic Active Information Gathering for Spatial Field Reconstruction with Rapidly-Exploring Random Trees and Online Learning of Gaussian Processes. Sensors, 2019, 19, 1016.	2.1	17
38	A novel robot co-worker system for paint factories without the need of existing robotic infrastructure. Robotics and Computer-Integrated Manufacturing, 2021, 70, 102122.	6.1	17
39	Decentralized multi-robot cooperation with auctioned POMDPs. , 2012, , .		16
40	Decision-Theoretic Planning with Person Trajectory Prediction for Social Navigation. Advances in Intelligent Systems and Computing, 2016, , 247-258.	0.5	15
41	The development and real-world deployment of FROG, the fun robotic outdoor guide. , 2014, , .		14
42	Robot Local Navigation with Learned Social Cost Functions. , 2014, , .		14
43	RGBD-based robot localization in sewer networks. , 2017, , .		13
44	Distributed Multi-Robot Cooperation for Information Gathering Under Communication Constraints. , 2018, , .		13
45	Human-robot co-working system for warehouse automation. , 2019, , .		13
46	An Unmanned Aircraft System for Automatic Forest Fire Monitoring and Measurement. , 2011, , 533-548.		13
47	DLL: Direct LIDAR Localization. A map-based localization approach for aerial robots. , 2021, , .		13
48	Developing a Lightweight Rock-Paper-Scissors Framework for Human-Robot Collaborative Gaming. IEEE Access, 2020, 8, 202958-202968.	2.6	11
49	Distributed Multi-Robot Information Gathering under Spatio-Temporal Inter-Robot Constraints. Sensors, 2020, 20, 484.	2.1	11
50	FIRE DETECTION USING AUTONOMOUS AERIAL VEHICLES WITH INFRARED AND VISUAL CAMERAS. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2005, 38, 660-665.	0.4	10
51	Decentralized cooperation of multiple UAS for multi-target surveillance under uncertainties. , 2014, , .		10
52	Active sensing for range-only mapping using multiple hypothesis. , 2010, , .		9
53	Data fusion in ubiquitous networked robot systems for urban services. Annales Des Telecommunications/Annals of Telecommunications, 2012, 67, 355-375.	1.6	9
54	Decentralized target tracking based on multi-robot cooperative triangulation. , 2015, , .		9

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55	A Dynamic Weighted Area Assignment Based on a Particle Filter for Active Cooperative Perception. IEEE Robotics and Automation Letters, 2020, 5, 736-743.	3.3	9
56	Multi-UAV Cooperative Perception Techniques. , 2007, , 67-110.		8
57	Online information gathering using sampling-based planners and GPs: An information theoretic approach. , 2017, , .		8
58	Active perception for 3D range-only simultaneous localization and mapping with UAVs. , 2016, , .		7
59	Learning Robot Navigation Behaviors by Demonstration Using a RRT $*$ â— Planner. Lecture Notes in Computer Science, 2016, , 1-10.	1.0	7
60	MGRAPH: A Multi-Graph Homography Method to Generate Incremental Mosaics in Real Time From UAV Swarms. IEEE Robotics and Automation Letters, 2018, , 1-1.	3.3	7
61	The development and real-world application of FROG, the fun robotic outdoor guide. , 2014, , .		6
62	Exploring Affective Storytelling with an Embodied Agent. , 2021, , .		6
63	Integration of Monte Carlo Localization and place recognition for reliable long-term robot localization. , 2014, , .		5
64	Into the dirt: Datasets of sewer networks with aerial and ground platforms. Journal of Field Robotics, 2021, 38, 105-120.	3.2	5
65	SIAR: A Ground Robot Solution for Semi-autonomous Inspection of Visitable Sewers. Springer Tracts in Advanced Robotics, 2020, , 275-296.	0.3	5
66	Emoji to Robomoji: Exploring Affective Telepresence Through Haru. Lecture Notes in Computer Science, 2020, , 652-663.	1.0	5
67	An asynchronous distributed constraint optimization approach to multi-robot path planning with complex constraints. , 2017, , .		5
68	Computer vision techniques for fire monitoring using aerial images. , 0, , .		4
69	Bioinspired Direct Visual Estimation of Attitude Rates with Very Low Resolution Images using Deep Networks. , 2019, , .		4
70	Robust Person Guidance by Using Online POMDPs. Advances in Intelligent Systems and Computing, 2014, , 289-303.	0.5	4
71	A Framework for Modelling Local Human-Robot Interactions Based on Unsupervised Learning. Lecture Notes in Computer Science, 2016, , 32-41.	1.0	3
72	Bioinspired vision-only UAV attitude rate estimation using machine learning. , 2017, , .		3

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73	An Integrated Strategy for Autonomous Exploration of Spatial Processes in Unknown Environments. Sensors, 2020, 20, 3663.	2.1	3
74	Analyzing the Relevance of Features for a Social Navigation Task. Advances in Intelligent Systems and Computing, 2016, , 235-246.	0.5	3
75	Accurate fusion of robot, camera and wireless sensors for surveillance applications. , 2009, , .		2
76	Improving the efficiency of online POMDPs by using belief similarity measures. , 2013, , .		2
77	An extension of GHMMs for environments with occlusions and automatic goal discovery for person trajectory prediction. , 2015, , .		2
78	Social and Affective Robotics Tutorial. , 2016, , .		2
79	Autonomous Aerial Robot for High-Speed Search and Intercept Applications. , 2022, 2, 1320-1350.		2
80	<title>Aerial monitoring and measurement of forest fires</title>. , 2002, , .		1
81	A Particle-Filter Approach for Active Perception in Networked Robot Systems. Lecture Notes in Computer Science, 2015, , 451-460.	1.0	1
82	Developing The Bottom-up Attentional System of A Social Robot. , 2022, , .		1
83	APPLICATIONS OF NETWORKED UNMANNED AERIAL VEHICLES TO COOPERATIVE FIRE DETECTION USING GRID-BASED DATA FUSION TECHNIQUES. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2006, 39, 518-523.	0.4	0
84	Generation of expressive motions for a tabletop robot interpolating from hand-made animations. , 2019, , .		0
85	A RGBD-Based System for Real-Time Robotic Defects Detection on Sewer Networks. Advances in Intelligent Systems and Computing, 2020, , 593-605.	0.5	0
86	Exploring Creative Contents in Social Robotics. , 2020, , .		0
87	Design and Development of a Teleoperation System for Affective Tabletop Robot Haru. Lecture Notes in Computer Science, 2021, , 564-573.	1.0	0
88	Developing a Robotâ€™s Empathetic Reactive Response Inspired by a Bottom-Up Attention Model. Lecture Notes in Computer Science, 2021, , 85-95.	1.0	0
89	An aerial/ground robot team for autonomous firefighting in urban GNSS-denied scenarios. , 2022, 2, 241-273.		0