

# Gianni A Di Caro

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/3413025/publications.pdf>

Version: 2024-02-01

77  
papers

6,425  
citations

361413

20  
h-index

330143

37  
g-index

83  
all docs

83  
docs citations

83  
times ranked

4673  
citing authors

#	ARTICLE	IF	CITATIONS
1	Ant Algorithms for Discrete Optimization. Artificial Life, 1999, 5, 137-172.	1.3	2,264
2	A Machine Learning Approach to Visual Perception of Forest Trails for Mobile Robots. IEEE Robotics and Automation Letters, 2016, 1, 661-667.	5.1	448
3	Max-pooling convolutional neural networks for vision-based hand gesture recognition. , 2011, , .		409
4	AntHocNet: an adaptive nature-inspired algorithm for routing in mobile ad hoc networks. European Transactions on Telecommunications, 2005, 16, 443-455.	1.2	401
5	ARGoS: a modular, parallel, multi-engine simulator for multi-robot systems. Swarm Intelligence, 2012, 6, 271-295.	2.2	399
6	Swarm intelligence based routing protocol for wireless sensor networks: Survey and future directions. Information Sciences, 2011, 181, 4597-4624.	6.9	306
7	Swarmanoid: A Novel Concept for the Study of Heterogeneous Robotic Swarms. IEEE Robotics and Automation Magazine, 2013, 20, 60-71.	2.0	254
8	Design patterns from biology for distributed computing. ACM Transactions on Autonomous and Adaptive Systems, 2006, 1, 26-66.	0.8	243
9	Principles and applications of swarm intelligence for Adaptive routing in telecommunications networks. Swarm Intelligence, 2010, 4, 173-198.	2.2	98
10	Swarm Intelligence and cyber-physical systems: Concepts, challenges and future trends. Swarm and Evolutionary Computation, 2021, 60, 100762.	8.1	91
11	Self-organized cooperation between robotic swarms. Swarm Intelligence, 2011, 5, 73-96.	2.2	90
12	ARGoS: A modular, multi-engine simulator for heterogeneous swarm robotics. , 2011, , .		82
13	AntHocNet: An Ant-Based Hybrid Routing Algorithm for Mobile Ad Hoc Networks. Lecture Notes in Computer Science, 2004, , 461-470.	1.3	76
14	USING ANT AGENTS TO COMBINE REACTIVE AND PROACTIVE STRATEGIES FOR ROUTING IN MOBILE AD-HOC NETWORKS. International Journal of Computational Intelligence and Applications, 2005, 05, 169-184.	0.8	67
15	Human-friendly robot navigation in dynamic environments. , 2013, , .		65
16	Swarm intelligence for routing in mobile ad hoc networks. , 0, , .		63
17	Cooperative navigation in robotic swarms. Swarm Intelligence, 2014, 8, 1-33.	2.2	61
18	Human-swarm interaction using spatial gestures. , 2014, , .		57

#	ARTICLE	IF	CITATIONS
19	Ant Agents for Hybrid Multipath Routing in Mobile Ad Hoc Networks. , 0, , .		51
20	Routing Protocols for Next-Generation Networks Inspired by Collective Behaviors of Insect Societies: An Overview. Natural Computing Series, 2008, , 101-160.	2.2	46
21	Human Control of UAVs using Face Pose Estimates and Hand Gestures. , 2014, , .		44
22	RoboNetSim: An integrated framework for multi-robot and network simulation. Robotics and Autonomous Systems, 2013, 61, 483-496.	5.1	41
23	Communication assisted navigation in robotic swarms: Self-organization and cooperation. , 2011, , .		39
24	Convolutional Neural Support Vector Machines: Hybrid Visual Pattern Classifiers for Multi-robot Systems. , 2012, , .		39
25	Restricted Neighborhood Communication Improves Decentralized Demand-Side Load Management. IEEE Transactions on Smart Grid, 2014, 5, 92-101.	9.0	37
26	Toward the Formal Foundation of Ant Programming. Lecture Notes in Computer Science, 2002, , 188-201.	1.3	37
27	Cooperative self-organization in a heterogeneous swarm robotic system. , 2010, , .		36
28	Kinect-based people detection and tracking from small-footprint ground robots. , 2014, , .		32
29	Interactive Augmented Reality for understanding and analyzing multi-robot systems. , 2014, , .		28
30	Wearable multi-modal interface for human multi-robot interaction. , 2016, , .		23
31	A Dynamical Relay node placement solution for MANETs. Computer Communications, 2017, 114, 36-50.	5.1	23
32	An Analysis of the Different Components of the AntHocNet Routing Algorithm. Lecture Notes in Computer Science, 2006, , 37-48.	1.3	21
33	Connectivity-aware planning of search and rescue missions. , 2013, , .		21
34	Cooperative sensing and recognition by a swarm of mobile robots. , 2012, , .		19
35	Lexicographic multi-objective optimization for the unit commitment problem and economic dispatch in a microgrid. , 2011, , .		15
36	A mobility-assisted protocol for supervised learning of link quality estimates in wireless networks. , 2012, , .		15

#	ARTICLE	IF	CITATIONS
37	Simultaneous task allocation, data routing, and transmission scheduling in mobile multi-robot teams. , 2017, , .		15
38	A mathematical programming approach to collaborative missions with heterogeneous teams. , 2014, , .		14
39	Communication assisted navigation in robotic swarms: Self-organization and cooperation. , 2011, , .		14
40	Optimal relay node placement for throughput enhancement in wireless sensor networks. , 2011, , .		13
41	Incremental learning using partial feedback for gesture-based human-swarm interaction. , 2012, , .		13
42	Online supervised incremental learning of link quality estimates in wireless networks. , 2013, , .		13
43	A mobility-controlled link quality learning protocol for multi-robot coordination tasks. , 2014, , .		13
44	Wisdom of the swarm for cooperative decision-making in human-swarm interaction. , 2015, , .		13
45	Spatial prediction of wireless links and its application to the path control of mobile robots. , 2014, , .		11
46	Fair Multi-Target Tracking in Cooperative Multi-Robot systems. , 2015, , .		11
47	Theory and Practice of Ant-Based Routing in Dynamic Telecommunication Networks. , 0, , 185-216.		10
48	An evaluation of two swarm intelligence MANET routing algorithms in an urban environment. , 2008, , .		9
49	On Using Mobile Robotic Relays for Adaptive Communication in Search and Rescue Missions. , 2016, , .		9
50	A Simulation Study of Routing Performance in Realistic Urban Scenarios for MANETs. Lecture Notes in Computer Science, 2008, , 211-218.	1.3	9
51	A flow-based optimization model for throughput-oriented relay node placement in wireless sensor networks. , 2013, , .		8
52	Wireless Communications for Distributed Navigation in Robot Swarms. Lecture Notes in Computer Science, 2009, , 21-30.	1.3	8
53	ARGoS: A modular, multi-engine simulator for heterogeneous swarm robotics. , 2011, , .		7
54	Human-swarm interaction through distributed cooperative gesture recognition. , 2012, , .		7

#	ARTICLE	IF	CITATIONS
55	Online feature extraction for the incremental learning of gestures in human-swarm interaction. , 2014, , .		6
56	A model of artificial emotions for behavior-modulation and implicit coordination in multi-robot systems. , 2018, , .		6
57	DRNS: Dynamical Relay Node Placement Solution. Lecture Notes in Computer Science, 2016, , 273-276.	1.3	6
58	Differentiated quality of service scheme based on the use of multi-classes of ant-like mobile agents. , 2005, , .		5
59	A simple and efficient approach for cooperative incremental learning in robot swarms. , 2013, , .		5
60	Local reactive robot navigation: A comparison between reciprocal velocity obstacle variants and human-like behavior. , 2013, , .		5
61	An integer linear programming model for fair multitarget tracking in cooperative multirobot systems. Autonomous Robots, 2019, 43, 665-680.	4.8	5
62	Robot Navigation in a Networked Swarm. Lecture Notes in Computer Science, 2008, , 275-285.	1.3	5
63	Mobile Stigmergic Markers for Navigation in a Heterogeneous Robotic Swarm. Lecture Notes in Computer Science, 2010, , 456-463.	1.3	5
64	A new approach for integrating proactive and reactive routing in MANETs. , 2008, , .		4
65	Cooperative Stigmergic Navigation in a Heterogeneous Robotic Swarm. Lecture Notes in Computer Science, 2010, , 607-617.	1.3	4
66	A framework for realistic simulation of networked multi-robot systems. , 2012, , .		4
67	zePPeLIN: Distributed Path Planning Using an Overhead Camera Network. International Journal of Advanced Robotic Systems, 2014, 11, 119.	2.1	3
68	ANTS 2010 special issue. Swarm Intelligence, 2011, 5, 143-147.	2.2	2
69	Learning symmetric face pose models online using locally weighted projectron regression. , 2014, , .		2
70	From indoor GIS maps to path planning for autonomous wheelchairs. , 2016, , .		2
71	Distributed Motion Planning for Ground Objects Using a Network of Robotic Ceiling Cameras. Lecture Notes in Computer Science, 2011, , 137-148.	1.3	2
72	Human-robot cooperation. , 2014, , .		1

#	ARTICLE	IF	CITATIONS
73	Spatially-Distributed Missions With Heterogeneous Multi-Robot Teams. IEEE Access, 2021, 9, 67327-67348.	4.2	1
74	Poster Abstract: Link Quality Estimationâ€™A Case Study for On-line Supervised Learning in Wireless Sensor Networks. Lecture Notes in Electrical Engineering, 2014, , 97-101.	0.4	1
75	Use of Time-Dependent Spatial Maps of Communication Quality for Multi-robot Path Planning. Lecture Notes in Computer Science, 2015, , 217-231.	1.3	1
76	Perceiving people from a low-lying viewpoint. , 2014, , .		0
77	Robot rostering: Coalition formation for long-term missions with work shifts. , 2016, , .		0