

Francesco Mondada

List of Publications by Year in Descending Order

Source: <https://exaly.com/author-pdf/1745033/francesco-mondada-publications-by-year.pdf>

Version: 2024-04-24

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

142
papers

3,942
citations

29
h-index

59
g-index

153
ext. papers

4,744
ext. citations

2.9
avg, IF

5.27
L-index

#	Paper	IF	Citations
142	The CT-cube: A framework for the design and the assessment of computational thinking activities. <i>Computers in Human Behavior Reports</i> , 2022 , 5, 100166	2.6	2
141	Aligning the Design of Educational Robotics Tools With Classroom Activities. <i>Advances in Educational Technologies and Instructional Design Book Series</i> , 2022 , 1-21	0.3	0
140	The role of feedback and guidance as intervention methods to foster computational thinking in educational robotics learning activities for primary school. <i>Computers and Education</i> , 2022 , 180, 104431	9.5	2
139	Teachers' Perspective on Fostering Computational Thinking Through Educational Robotics. <i>Advances in Intelligent Systems and Computing</i> , 2022 , 177-185	0.4	0
138	Exploring a Handwriting Programming Language for Educational Robots. <i>Advances in Intelligent Systems and Computing</i> , 2022 , 268-275	0.4	0
137	The symbiotic relationship between educational robotics and computer science in formal education. <i>Education and Information Technologies</i> , 2021 , 26, 1-31	3.6	2
136	Social Integrating Robots Suggest Mitigation Strategies for Ecosystem Decay. <i>Frontiers in Bioengineering and Biotechnology</i> , 2021 , 9, 612605	5.8	3
135	Investigating the Role of Educational Robotics in Formal Mathematics Education: The Case of Geometry for 15-Year-Old Students. <i>Lecture Notes in Computer Science</i> , 2021 , 67-81	0.9	
134	Accessible Maker-Based Approaches to Educational Robotics in Online Learning. <i>IEEE Access</i> , 2021 , 9, 96877-96889	3.5	1
133	Strategies to modulate zebrafish collective dynamics with a closed-loop biomimetic robotic system. <i>Bioinspiration and Biomimetics</i> , 2020 , 15, 046004	2.6	2
132	Introducing a Paper-Based Programming Language for Computing Education in Classrooms 2020 ,		7
131	Fostering computational thinking through educational robotics: a model for creative computational problem solving. <i>International Journal of STEM Education</i> , 2020 , 7,	4	35
130	Learning Symmetry with Tangible Robots. <i>Advances in Intelligent Systems and Computing</i> , 2020 , 270-283	0.4	0
129	Exploring Escape Games as a Teaching Tool in Educational Robotics. <i>Advances in Intelligent Systems and Computing</i> , 2020 , 95-106	0.4	7
128	A data-driven method for reconstructing and modelling social interactions in moving animal groups. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , 2020 , 375, 20190380	5.8	9
127	A computer science and robotics integration model for primary school: evaluation of a large-scale in-service K-4 teacher-training program. <i>Education and Information Technologies</i> , 2020 , 26, 1-31	3.6	11
126	Bidirectional interactions facilitate the integration of a robot into a shoal of zebrafish <i>Danio rerio</i> . <i>PLoS ONE</i> , 2019 , 14, e0220559	3.7	8

125	Heuristics for the Development and Evaluation of Educational Robotics Systems. <i>IEEE Transactions on Education</i> , 2019 , 62, 278-287	2.1	15
124	Robots mediating interactions between animals for interspecies collective behaviors. <i>Science Robotics</i> , 2019 , 4,	18.6	22
123	Autonomous Exploration for Radioactive Hotspots Localization Taking Account of Sensor Limitations. <i>Sensors</i> , 2019 , 19,	3.8	9
122	Robot swarms as an educational tool: The Thymio way. <i>International Journal of Advanced Robotic Systems</i> , 2019 , 16, 172988141882518	1.4	14
121	A Tangible Programming Language for the Educational Robot Thymio 2019 ,		10
120	Designing a socially integrated mobile robot for ethological research. <i>Robotics and Autonomous Systems</i> , 2018 , 103, 42-55	3.5	14
119	Closed-loop interactions between a shoal of zebrafish and a group of robotic fish in a circular corridor. <i>Swarm Intelligence</i> , 2018 , 12, 227-244	3	25
118	Evo-Bots: A Simple, Stochastic Approach to Self-assembling Artificial Organisms. <i>Springer Proceedings in Advanced Robotics</i> , 2018 , 373-385	0.6	3
117	Localization of Inexpensive Robots with Low-Bandwidth Sensors. <i>Springer Proceedings in Advanced Robotics</i> , 2018 , 545-558	0.6	2
116	How mimetic should a robotic fish be to socially integrate into zebrafish groups?. <i>Bioinspiration and Biomimetics</i> , 2018 , 13, 025001	2.6	18
115	How to Blend a Robot Within a Group of Zebrafish: Achieving Social Acceptance Through Real-Time Calibration of a Multi-level Behavioural Model. <i>Lecture Notes in Computer Science</i> , 2018 , 73-84	0.9	6
114	Bringing Robotics to Formal Education: The Thymio Open-Source Hardware Robot. <i>IEEE Robotics and Automation Magazine</i> , 2017 , 24, 77-85	3.4	60
113	Windfield 2017 ,		9
112	Windfield 2017 ,		3
111	Cellulo 2017 ,		28
110	Design of a modular robotic system that mimics small fish locomotion and body movements for ethological studies. <i>International Journal of Advanced Robotic Systems</i> , 2017 , 14, 172988141770662	1.4	12
109	Haptic-Enabled Handheld Mobile Robots 2017 ,		11
108	Mergeable nervous systems for robots. <i>Nature Communications</i> , 2017 , 8, 439	17.4	26

107	Multi-robot control and tracking framework for bio-hybrid systems with closed-loop interaction 2017 ,		11
106	Open-Source and Widely Disseminated Robot Hardware [From the Guest Editors]. <i>IEEE Robotics and Automation Magazine</i> , 2017 , 24, 30-31	3.4	2
105	Improved Mobile Robot Programming Performance through Real-time Program Assessment 2017 ,		2
104	Can Robotics Help Move Researchers Toward Open Science? [From the Field]. <i>IEEE Robotics and Automation Magazine</i> , 2017 , 24, 111-112	3.4	2
103	Automated Calibration of a Biomimetic Space-Dependent Model for Zebrafish and Robot Collective Behaviour in a Structured Environment. <i>Lecture Notes in Computer Science</i> , 2017 , 107-118	0.9	10
102	Infiltrating the zebrafish swarm: design, implementation and experimental tests of a miniature robotic fish lure for fishBot interaction studies. <i>Artificial Life and Robotics</i> , 2016 , 21, 239-246	0.6	15
101	R2T2: Robotics to integrate educational efforts in South Africa and Europe. <i>International Journal of Advanced Robotic Systems</i> , 2016 , 13, 172988141665816	1.4	7
100	Electroencephalography as implicit communication channel for proximal interaction between humans and robot swarms. <i>Swarm Intelligence</i> , 2016 , 10, 247-265	3	13
99	Autonomous Construction with Compliant Building Material. <i>Advances in Intelligent Systems and Computing</i> , 2016 , 1371-1388	0.4	9
98	Ranger, An Example of Integration of Robotics into the Home Ecosystem. <i>Mechanisms and Machine Science</i> , 2016 , 181-189	0.3	4
97	Real-time high-accuracy 2D localization with structured patterns 2016 ,		13
96	. <i>IEEE Robotics and Automation Magazine</i> , 2016 , 23, 16-23	3.4	33
95	Bio-inspired construction with mobile robots and compliant pockets. <i>Robotics and Autonomous Systems</i> , 2015 , 74, 340-350	3.5	24
94	2015 ,		45
93	2015 ,		21
92	Adaptation and Awareness in Robot Ensembles: Scenarios and Algorithms. <i>Lecture Notes in Computer Science</i> , 2015 , 471-494	0.9	12
91	You're Doing It Wrong! Studying Unexpected Behaviors in Child-Robot Interaction. <i>Lecture Notes in Computer Science</i> , 2015 , 390-400	0.9	14
90	Lessons learned from robotic vacuum cleaners entering the home ecosystem. <i>Robotics and Autonomous Systems</i> , 2014 , 62, 376-391	3.5	44

89	Cooperative navigation in robotic swarms. <i>Swarm Intelligence</i> , 2014 , 8, 1-33	3	49
88	Decentralized self-selection of swarm trajectories: from dynamical systems theory to robotic implementation. <i>Swarm Intelligence</i> , 2014 , 8, 329-351	3	21
87	A miniature mobile robot developed to be socially integrated with species of small fish 2014 ,		13
86	Social Adaptation of Robots for Modulating Self-Organization in Animal Societies 2014 ,		5
85	Which robot behavior can motivate children to tidy up their toys? 2014 ,		36
84	Fuzzy Control System for Autonomous Navigation of Thymio II Mobile Robots. <i>Journal of Emerging Technologies in Web Intelligence</i> , 2014 , 6,		1
83	A Sociological Contribution to Understanding the Use of Robots in Schools: The Thymio Robot. <i>Lecture Notes in Computer Science</i> , 2014 , 217-228	0.9	14
82	Swarmanoid: A Novel Concept for the Study of Heterogeneous Robotic Swarms. <i>IEEE Robotics and Automation Magazine</i> , 2013 , 20, 60-71	3.4	183
81	Seamless multi-robot programming for the people: ASEBA and the wireless Thymio II robot 2013 ,		1
80	Physical Interactions in Swarm Robotics: The Hand-Bot Case Study. <i>Springer Tracts in Advanced Robotics</i> , 2013 , 585-595	0.5	
79	Thymio II, a robot that grows wiser with children 2013 ,		46
78	Upgrade Your Robot Competition, Make a Festival! [Competitions]. <i>IEEE Robotics and Automation Magazine</i> , 2013 , 20, 12-14	3.4	4
77	Towards Long-Term Collective Experiments. <i>Advances in Intelligent Systems and Computing</i> , 2013 , 683-692	4	4
76	Towards Bio-hybrid Systems Made of Social Animals and Robots. <i>Lecture Notes in Computer Science</i> , 2013 , 384-386	0.9	14
75	ASSISI: Mixing Animals with Robots in a Hybrid Society. <i>Lecture Notes in Computer Science</i> , 2013 , 441-443	0.9	13
74	The Autonomous Photovoltaic MarXbot. <i>Advances in Intelligent Systems and Computing</i> , 2013 , 175-183	0.4	5
73	Autonomous construction using scarce resources in unknown environments. <i>Autonomous Robots</i> , 2012 , 33, 467-485	3	26
72	Building a safe robot for behavioral biology experiments 2012 ,		4

71	Involving and training public school teachers in using robotics for education 2012 ,		3
70	Analysis of impact of an annual robotics festival 2012 ,		1
69	A programming workshop using the robot Thymio II The effect on the understanding by children 2012 ,		8
68	Highly compact robots for inspection of power plants. <i>Journal of Field Robotics</i> , 2012 , 29, 47-68	6.7	19
67	Development of a mobile robot to study the collective behavior of zebrafish 2012 ,		14
66	A Two Years Informal Learning Experience Using the Thymio Robot 2012 , 37-48		18
65	Cutting Down the Energy Consumed by Domestic Robots: Insights from Robotic Vacuum Cleaners. <i>Lecture Notes in Computer Science</i> , 2012 , 128-139	0.9	3
64	A Stochastic Self-reconfigurable Modular Robot with Mobility Control. <i>Lecture Notes in Computer Science</i> , 2012 , 416-417	0.9	1
63	Towards Autonomous Energy-Wise ROjects. <i>Lecture Notes in Computer Science</i> , 2011 , 311-322	0.9	5
62	Cy-mag3D: a simple and miniature climbing robot with advance mobility in ferromagnetic environment. <i>Industrial Robot</i> , 2011 , 38, 229-233	1.4	9
61	ASEBA: A Modular Architecture for Event-Based Control of Complex Robots. <i>IEEE/ASME Transactions on Mechatronics</i> , 2011 , 16, 321-329	5.5	59
60	A social approach for target localization: simulation and implementation in the marXbot robot. <i>Memetic Computing</i> , 2011 , 3, 245-259	3.4	3
59	Communication assisted navigation in robotic swarms: Self-organization and cooperation 2011 ,		24
58	TRIPILLAR: a miniature magnetic caterpillar climbing robot with plane transition ability ¹ . <i>Robotica</i> , 2011 , 29, 1075-1081	2.1	20
57	Enhanced directional self-assembly based on active recruitment and guidance 2011 ,		5
56	Swarm-Bots to the Rescue. <i>Lecture Notes in Computer Science</i> , 2011 , 165-172	0.9	7
55	Towards an Autonomous Evolution of Non-biological Physical Organisms. <i>Lecture Notes in Computer Science</i> , 2011 , 173-180	0.9	4
54	CY-MAG3DE: MAGNETIC CLIMBING INSPECTION ROBOT 2011 ,		2

53	2010,		15
52	MagneBike: Compact magnetic wheeled robot for power plant inspection 2010,		8
51	The marXbot, a miniature mobile robot opening new perspectives for the collective-robotic research 2010,		95
50	Towards mixed societies of chickens and robots 2010,		25
49	Highly compact robots for inspection of power plants 2010,		11
48	Tubulo [A train-like miniature inspection climbing robot for ferromagnetic tubes 2010,		4
47	DESIGN OF MAGNETIC SWITCHABLE DEVICE (MSD) AND APPLICATIONS IN CLIMBING ROBOT 2010,		11
46	MAGNETIC WHEELS OPTIMIZATION AND APPLICATION TO THE MagneBike CLIMBING ROBOT 2010		2
45	Ubichip, Ubidule, and MarXbot: A Hardware Platform for the Simulation of Complex Systems. <i>Lecture Notes in Computer Science, 2010, 286-298</i>	0.9	2
44	Segregation in swarms of mobile robots based on the Brazil nut effect 2009,		14
43	Design of collision avoidance system for a chicken robot based on fuzzy relation equations 2009,		1
42	Teamwork in Self-Organized Robot Colonies. <i>IEEE Transactions on Evolutionary Computation, 2009, 13, 695-711</i>	15.6	90
41	Magnebike: A magnetic wheeled robot with high mobility for inspecting complex-shaped structures. <i>Journal of Field Robotics, 2009, 26, 453-476</i>	6.7	93
40	TRIPILLAR: MINIATURE MAGNETIC CATERPILLAR CLIMBING ROBOT WITH PLANE TRANSITION ABILITY 2009,		6
39	The Hand-Bot, a Robot Design for Simultaneous Climbing and Manipulation. <i>Lecture Notes in Computer Science, 2009, 11-22</i>	0.9	17
38	Planner9, a HTN Planner Distributed on Groups of Miniature Mobile Robots. <i>Lecture Notes in Computer Science, 2009, 1013-1022</i>	0.9	2
37	Interactive Mobile Robotic Drinking Glasses 2009, 543-551		1
36	What do people expect from robots? 2008,		104

35	Aseba-Challenge: An Open-Source Multiplayer Introduction to Mobile Robots Programming. <i>Lecture Notes in Computer Science</i> , 2008 , 65-74	0.9	4
34	Division of Labour in Self-organised Groups. <i>Lecture Notes in Computer Science</i> , 2008 , 426-436	0.9	7
33	Performance benefits of self-assembly in a swarm-bot 2007 ,		9
32	Adapted magnetic wheel unit for compact robots inspecting complex shaped pipe structures 2007 ,		25
31	Social integration of robots into groups of cockroaches to control self-organized choices. <i>Science</i> , 2007 , 318, 1155-8	33.3	365
30	Self-organized coordinated motion in groups of physically connected robots. <i>IEEE Transactions on Systems, Man, and Cybernetics</i> , 2007 , 37, 224-39		71
29	Compact magnetic wheeled robot with high mobility for inspecting complex shaped pipe structures 2007 ,		26
28	Cooperation through self-assembly in multi-robot systems. <i>ACM Transactions on Autonomous and Adaptive Systems</i> , 2006 , 1, 115-150	1.2	64
27	Autonomous Self-Assembly in Swarm-Bots 2006 , 22, 1115-1130		202
26	Autonomous Self-assembly in a Swarm-bot 2006 , 314-322		15
25	The SWARM-BOTS Project. <i>Lecture Notes in Computer Science</i> , 2005 , 31-44	0.9	35
24	. <i>IEEE Robotics and Automation Magazine</i> , 2005 , 12, 21-28	3.4	123
23	Superlinear Physical Performances in a SWARM-BOT. <i>Lecture Notes in Computer Science</i> , 2005 , 282-291	0.9	15
22	Self-assembly on Demand in a Group of Physical Autonomous Mobile Robots Navigating Rough Terrain. <i>Lecture Notes in Computer Science</i> , 2005 , 272-281	0.9	14
21	Evolution of Embodied Intelligence. <i>Lecture Notes in Computer Science</i> , 2004 , 293-311	0.9	5
20	Swarm-Bot: A New Distributed Robotic Concept. <i>Autonomous Robots</i> , 2004 , 17, 193-221	3	217
19	Evolving Self-Organizing Behaviors for a Swarm-Bot. <i>Autonomous Robots</i> , 2004 , 17, 223-245	3	200
18	Interactions between Art and Mobile Robotic System Engineering. <i>Lecture Notes in Computer Science</i> , 2001 , 121-137	0.9	5

17	KhepOnTheWeb: open access to a mobile robot on the Internet. <i>IEEE Robotics and Automation Magazine</i> , 2000 , 7, 41-47	3.4	56
16	Understanding collective aggregation mechanisms: From probabilistic modelling to experiments with real robots. <i>Robotics and Autonomous Systems</i> , 1999 , 29, 51-63	3.5	88
15	Design, Control, and Applications of Autonomous Mobile Robots 1999 , 159-186		6
14	Evolutionary neurocontrollers for autonomous mobile robots. <i>Neural Networks</i> , 1998 , 11, 1461-1478	9.1	125
13	Probabilistic Modelling of a Bio-Inspired Collective Experiment with Real Robots 1998 , 289-298		7
12	Hardware solutions for evolutionary robotics. <i>Lecture Notes in Computer Science</i> , 1998 , 137-151	0.9	11
11	Autonomous vacuum cleaner. <i>Robotics and Autonomous Systems</i> , 1997 , 19, 233-245	3.5	27
10	Evolution of homing navigation in a real mobile robot. <i>IEEE Transactions on Systems, Man, and Cybernetics</i> , 1996 , 26, 396-407		240
9	Evolution and mobile autonomous robotics. <i>Lecture Notes in Computer Science</i> , 1996 , 221-249	0.9	5
8	Evolution of neural control structures: some experiments on mobile robots. <i>Robotics and Autonomous Systems</i> , 1995 , 16, 183-195	3.5	53
7	Mobile robot miniaturisation: A tool for investigation in control algorithms 1994 , 501-513		42
6	"KhepOnTheWeb": An experimental demonstrator in telerobotics and virtual reality		8
5	Object transport by modular robots that self-assemble		13
4	Transport of an object by six pre-attached robots interacting via physical links		15
3	SWARM-BOT: from concept to implementation		29
2	Communication assisted navigation in robotic swarms: Self-organization and cooperation		10
1	A data-driven method for reconstructing and modelling social interactions in moving animal groups		1