

# Stefania Bandini

## List of Publications by Year in descending order

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119  
papers

1,321  
citations

394286

19  
h-index

454834

30  
g-index

130  
all docs

130  
docs citations

130  
times ranked

796  
citing authors

#	ARTICLE	IF	CITATIONS
1	Cellular automata: From a theoretical parallel computational model to its application to complex systems. <i>Parallel Computing</i> , 2001, 27, 539-553.	1.3	71
2	Modelling negative interactions among pedestrians in high density situations. <i>Transportation Research Part C: Emerging Technologies</i> , 2014, 40, 251-270.	3.9	70
3	SITUATED CELLULAR AGENTS APPROACH TO CROWD MODELING AND SIMULATION. <i>Cybernetics and Systems</i> , 2007, 38, 729-753.	1.6	61
4	Towards an integrated approach to crowd analysis and crowd synthesis: A case study and first results. <i>Pattern Recognition Letters</i> , 2014, 44, 16-29.	2.6	58
5	Integrating Awareness in Cooperative Applications through the Reaction-Diffusion Metaphor. <i>Computer Supported Cooperative Work</i> , 2002, 11, 495-530.	1.9	56
6	Observation results on pedestrian-vehicle interactions at non-signalized intersections towards simulation. <i>Transportation Research Part F: Traffic Psychology and Behaviour</i> , 2018, 59, 269-285.	1.8	53
7	Heterogeneous Agents Situated in Heterogeneous Spaces. <i>Applied Artificial Intelligence</i> , 2002, 16, 831-852.	2.0	39
8	Analyzing crowd behavior in naturalistic conditions: Identifying sources and sinks and characterizing main flows. <i>Neurocomputing</i> , 2016, 177, 543-563.	3.5	38
9	Multilayered cellular automata. <i>Theoretical Computer Science</i> , 1999, 217, 99-113.	0.5	35
10	Dealing with space in multi-agent systems. , 2002, , .		34
11	A simulation model for non-signalized pedestrian crosswalks based on evidence from on field observation. <i>Intelligenza Artificiale</i> , 2017, 11, 117-138.	1.0	32
12	An analysis of different types and effects of asynchronicity in cellular automata update schemes. <i>Natural Computing</i> , 2012, 11, 277-287.	1.8	30
13	Route choice in pedestrian simulation: Design and evaluation of a model based on empirical observations. <i>Intelligenza Artificiale</i> , 2016, 10, 163-182.	1.0	30
14	Calibration and validation of a simulation model for predicting pedestrian fatalities at unsignalized crosswalks by means of statistical traffic data. <i>Journal of Traffic and Transportation Engineering (English Edition)</i> , 2020, 7, 1-18.	2.0	29
15	Mobility analysis of the aged pedestrians by experiment and simulation. <i>Pattern Recognition Letters</i> , 2014, 44, 58-63.	2.6	28
16	Group Dynamics in Pedestrian Crowds. <i>Transportation Research Record</i> , 2014, 2421, 51-56.	1.0	25
17	An agent-based model for plausible wayfinding in pedestrian simulation. <i>Engineering Applications of Artificial Intelligence</i> , 2020, 87, 103241.	4.3	25
18	TOWARD A PLATFORM FOR MULTI-LAYERED MULTI-AGENT SITUATED SYSTEM (MMASS)-BASED SIMULATIONS: FOCUSING ON FIELD DIFFUSION. <i>Applied Artificial Intelligence</i> , 2006, 20, 327-351.	2.0	23

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19	Design issues for knowledge artifacts. Knowledge-Based Systems, 2008, 21, 856-867.	4.0	23
20	Towards a Methodology for Situated Cellular Agent Based Crowd Simulations. Lecture Notes in Computer Science, 2006, , 203-220.	1.0	22
21	When reactive agents are not enough: Tactical level decisions in pedestrian simulation. Intelligenza Artificiale, 2015, 9, 163-177.	1.0	21
22	Shape matters: Modelling, calibrating and validating pedestrian movement considering groups. Simulation Modelling Practice and Theory, 2018, 87, 73-91.	2.2	21
23	Empirical Investigation on Pedestrian Crowd Dynamics and Grouping. , 2015, , 83-91.		20
24	Parallel simulation of reactionâ€“diffusion phenomena in percolation processes. Future Generation Computer Systems, 2001, 17, 679-688.	4.9	18
25	An Agent Model of Pedestrian and Group Dynamics: Experiments on Group Cohesion. Lecture Notes in Computer Science, 2011, , 104-116.	1.0	17
26	Parallel processing simulation of dynamic properties of filled rubber compounds based on cellular automata. Parallel Computing, 2001, 27, 643-661.	1.3	16
27	Determining relevance of imprecise temporal intervals for cultural heritage information retrieval. International Journal of Human Computer Studies, 2010, 68, 549-560.	3.7	16
28	Experimental Investigation of Pedestrian Personal Space. Transportation Research Record, 2014, 2421, 57-63.	1.0	16
29	Compositional features for promoting awareness within and across cooperative applications. , 1997, , .		15
30	An agent-based model of pedestrian dynamics considering groups: A real world case study. , 2014, , .		15
31	Detection of Social Groups in Pedestrian Crowds Using Computer Vision. Lecture Notes in Computer Science, 2015, , 249-260.	1.0	15
32	A Cellular Automata Based Model for Pedestrian and Group Dynamics: Motivations and First Experiments. Lecture Notes in Computer Science, 2011, , 125-139.	1.0	13
33	A support system to COTS-based software development for business services. , 2002, , .		12
34	L*MASS: A Language for Situated Multi-agent Systems. Lecture Notes in Computer Science, 2001, , 249-254.	1.0	12
35	From handicraft prototypes to limited serial productions: Exploiting knowledge artifacts to support the industrial design of high quality products. Artificial Intelligence for Engineering Design, Analysis and Manufacturing: AIEDAM, 2010, 24, 17-34.	0.7	11
36	Case Based Reasoning and Production Process Design: The Case of P-Truck Curing. Lecture Notes in Computer Science, 2004, , 504-517.	1.0	11

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37	Improving the effectiveness of monitoring and control systems exploiting knowledge-based approaches. <i>Personal and Ubiquitous Computing</i> , 2005, 9, 301-311.	1.9	10
38	Commonsense Spatial Reasoning for Context-Aware Pervasive Systems. <i>Lecture Notes in Computer Science</i> , 2005, , 180-188.	1.0	10
39	COMMON-SENSE SPATIAL REASONING FOR INFORMATION CORRELATION IN PERVASIVE COMPUTING. <i>Applied Artificial Intelligence</i> , 2007, 21, 405-425.	2.0	10
40	Studying Pedestrian and Crowd Dynamics through Integrated Analysis and Synthesis. <i>IEEE Intelligent Systems</i> , 2013, 28, 56-60.	4.0	10
41	Identifying Sources and Sinks and Detecting Dominant Motion Patterns in Crowds. <i>Transportation Research Procedia</i> , 2014, 2, 195-200.	0.8	10
42	Implementing Cellular Automata Based Models on Parallel Architectures: The CAPP Project. <i>Lecture Notes in Computer Science</i> , 1999, , 167-180.	1.0	10
43	What Do We Mean by Asynchronous CA? A Reflection on Types and Effects of Asynchronicity. <i>Lecture Notes in Computer Science</i> , 2010, , 385-394.	1.0	9
44	Modelling the immune system: the case of situated cellular agents. <i>Natural Computing</i> , 2007, 6, 19-32.	1.8	8
45	Agent-Based Modeling and Simulation. , 2009, , 667-682.		8
46	A Conceptual Framework for Monitoring and Control System Development. <i>Lecture Notes in Computer Science</i> , 2004, , 111-124.	1.0	7
47	Case-Based Reasoning to Support Work and Learning in Small and Medium Enterprises. , 2009, , .		7
48	A Deep Learning Approach to Recognize Cognitive Load using PPG Signals. , 2021, , .		7
49	Case-Based Support to Small-Medium Enterprises: The Symphony Project. <i>Lecture Notes in Computer Science</i> , 2007, , 483-494.	1.0	7
50	Crowd Modeling and Simulation. , 2004, , 161-175.		6
51	Modeling Core Knowledge and Practices in a Computational Approach to Innovation Process. , 2002, , 369-390.		6
52	Regulation Function of the Environment in Agent-Based Simulation. , 2006, , 157-169.		6
53	Pedestrian and Crowd Dynamics Simulation: Testing SCA on Paradigmatic Cases of Emerging Coordination in Negative Interaction Conditions. <i>Lecture Notes in Computer Science</i> , 2007, , 360-369.	1.0	6
54	Estimating Speeds of Pedestrians in Real-World Using Computer Vision. <i>Lecture Notes in Computer Science</i> , 2014, , 526-535.	1.0	6

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55	Controlled generation of two-dimensional patterns based on Stochastic Cellular Automata. Future Generation Computer Systems, 2002, 18, 973-981.	4.9	5
56	WWW in the Small. World Wide Web, 2007, 10, 471-501.	2.7	5
57	Stress estimation in pedestrian crowds: Experimental data and simulations results. Web Intelligence, 2019, 17, 85-99.	0.1	5
58	Unveiling the Hidden Dimension of Pedestrian Crowds: Introducing Personal Space and Crowding into Simulations. Fundamenta Informaticae, 2019, 171, 19-38.	0.3	5
59	Micro and Macro Pedestrian Dynamics in Counterflow: The Impact of Social Group. , 2019, , 151-158.		5
60	A Hybrid Logic for Commonsense Spatial Reasoning. Lecture Notes in Computer Science, 2005, , 25-37.	1.0	5
61	Case-Based Troubleshooting in the Automotive Context: The SMMART Project. Lecture Notes in Computer Science, 2008, , 600-614.	1.0	5
62	Modelling the Immune System with Situated Agents. Lecture Notes in Computer Science, 2006, , 231-243.	1.0	4
63	Multi-agent modeling of the immune system: The situated cellular agents approach. Multiagent and Grid Systems, 2007, 3, 173-182.	0.5	4
64	Modeling, Simulating, and Visualizing Crowd Dynamics with Computational Tools Based on Situated Cellular Agents. , 2009, , 45-62.		4
65	Crossing Disciplinary Borders Through Studying Walkability. Lecture Notes in Computer Science, 2016, , 491-503.	1.0	4
66	Collision Avoidance Dynamics Among Heterogeneous Agents: The Case of Pedestrian/Vehicle Interactions. Lecture Notes in Computer Science, 2017, , 44-57.	1.0	4
67	Tuning Production Processes through a Case Based Reasoning Approach. Lecture Notes in Computer Science, 2002, , 475-489.	1.0	4
68	Enhancing Cellular Spaces by Multilayered Multi Agent Situated Systems. Lecture Notes in Computer Science, 2002, , 156-167.	1.0	4
69	An Asynchronous Cellular Automata-Based Adaptive Illumination Facility. Lecture Notes in Computer Science, 2009, , 405-415.	1.0	4
70	Towards an Ontology for Crowds Description: A Proposal Based on Description Logic. Lecture Notes in Computer Science, 2008, , 538-541.	1.0	3
71	Self-organization models for adaptive environments: Envisioning and evaluation of alternative approaches. Simulation Modelling Practice and Theory, 2010, 18, 1483-1492.	2.2	3
72	GUEST EDITORIAL: BEST OF "AGENT BASED MODELLING AND SIMULATION 2010" (ABModSim-3). Cybernetics and Systems, 2011, 42, 481-483.	1.6	3

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73	Granulometric Distribution and Crowds of Groups: Focusing on Dyads. , 2016, , 273-280.		3
74	Discriminating affective state intensity using physiological responses. Multimedia Tools and Applications, 2020, 79, 35845-35865.	2.6	3
75	Agent Based Modeling and Simulation. , 2012, , 105-117.		3
76	GP Generation of Pedestrian Behavioral Rules in an Evacuation Model Based on SCA. Lecture Notes in Computer Science, 2008, , 409-416.	1.0	3
77	A Cellular Automata-Based Modular Lighting System. Lecture Notes in Computer Science, 2010, , 334-344.	1.0	3
78	Modeling Stories in the Knowledge Management Context to Improve Learning Within Organizations. International Federation for Information Processing, 2008, , 173-182.	0.4	3
79	Personalized PPG Normalization Based on Subject Heartbeat in Resting State Condition. Signals, 2022, 3, 249-265.	1.2	3
80	Web Sites as Agentsâ€™ Environments: General Framework and Applications. Lecture Notes in Computer Science, 2006, , 235-250.	1.0	2
81	Simulation supporting the design of self-organizing ambient intelligent systems. , 2009, , .		2
82	GUEST EDITORIAL: BEST OF “AGENT-BASED MODELING AND SIMULATION 2008” (ABMODSIM-2). Cybernetics and Systems, 2009, 40, 363-366.	1.6	2
83	Pattern recognition and crowd analysis. Pattern Recognition Letters, 2014, 44, 1-2.	2.6	2
84	A CA-Based Model of Dyads in Pedestrian Crowds: The Case of Counter Flow. Lecture Notes in Computer Science, 2016, , 355-364.	1.0	2
85	Safety perception and pedestrian dynamics: Experimental results towards affective agents modeling. AI Communications, 2021, 34, 5-19.	0.8	2
86	Modelling Heterogeneity in Multi Agent Systems. Lecture Notes in Computer Science, 2002, , 685-692.	1.0	2
87	Personalized Music Experience for the Wellbeing of Elderly People. Lecture Notes in Computer Science, 2019, , 335-340.	1.0	2
88	Situated Cellular Agents in Non-uniform Spaces. Lecture Notes in Computer Science, 2003, , 10-19.	1.0	2
89	Social and Active Inclusion of the Elderly in the City Through Affective Walkability. The Review of Socionetwork Strategies, 2021, 15, 557-573.	1.0	2
90	Knowledge Maintenance and Sharing in the KM Context: The Case of “Truck. Lecture Notes in Computer Science, 2003, , 499-510.	1.0	2

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91	A CA Approach to Study Complex Dynamics in Asset Markets. Lecture Notes in Computer Science, 2004, , 591-600.	1.0	2
92	Supporting the application of Situated Cellular Agents in non-uniform spaces. Future Generation Computer Systems, 2005, 21, 627-631.	4.9	1
93	GUEST EDITORIAL: BEST OF "AGENT-BASED MODELING AND SIMULATION"(ABMODSIM). Cybernetics and Systems, 2007, 38, 627-630.	1.6	1
94	A CA-Based Approach to Self-Organized Adaptive Environments: The Case of an Illumination Facility. , 2008, , .		1
95	A conceptual and computational approach to support learning and education in wide organisations. International Journal of Entrepreneurship and Innovation Management, 2010, 11, 341.	0.1	1
96	CA-based self-organizing environments. Journal of Supercomputing, 2011, 57, 109-120.	2.4	1
97	Social and Domain Knowledge Management through the Integration of Storytelling and Case Based Reasoning. , 2009, , 365-374.		1
98	Modeling and Programming Asynchronous Automata Networks: The MOCA Approach. Lecture Notes in Computer Science, 2010, , 345-355.	1.0	1
99	Pattern Control in the Generation of Artificial Percolation Beds: a Cellular Automata Approach. , 2001, , 1-10.		1
100	A CA-Based Self-organizing Environment: A Configurable Adaptive Illumination Facility. Lecture Notes in Computer Science, 2009, , 153-167.	1.0	1
101	Adaptive Tactical Decisions in Pedestrian Simulation: A Hybrid Agent Approach. Lecture Notes in Computer Science, 2015, , 58-71.	1.0	1
102	Combining Avoidance and Imitation to Improve Multi-agent Pedestrian Simulation. Lecture Notes in Computer Science, 2016, , 118-132.	1.0	1
103	Adaptive Tactical Decisions in Pedestrian Simulation: A Hybrid Agent Approach. , 2016, , 257-264.		1
104	Traffic Modeling and Simulation from a Cognitive and Qualitative Reasoning Perspective. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 1997, 30, 1265-1270.	0.4	0
105	Intelligent Alarm Correlation and Abductive Reasoning. Logic Journal of the IGPL, 2006, 14, 347-362.	1.3	0
106	STATE OF APPLICATIONS IN AI RESEARCHES FROM AI'05—IA 2005. Applied Artificial Intelligence, 2007, 21, 257-258.	2.0	0
107	A CA-Based Self-Organized Illumination Facility. , 2008, , .		0
108	Using knowledge artifacts to support work and learning: a case study. International Journal of Knowledge and Learning, 2009, 5, 389.	0.1	0

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109	Epistemological Levelism and Dynamical Complex Systems: The Case of Crowd Behaviour. Information (Switzerland), 2013, 4, 75-93.	1.7	0
110	A cellular automata based approach to track salient objects in videos. Natural Computing, 2019, 18, 865-873.	1.8	0
111	Situated Agents and the Web: Supporting Site Adaptivity. Lecture Notes in Computer Science, 2005, , 521-530.	1.0	0
112	Emergent Spatial Patterns in Vegetable Population Dynamics: Towards Pattern Detection and Interpretation. Lecture Notes in Computer Science, 2006, , 289-296.	1.0	0
113	Model-Based Chemical Compound Formulation. Studies in Computational Intelligence, 2007, , 413-430.	0.7	0
114	Knowledge Artifacts Modeling to Support Work and Learning in the Knowledge Society. Lecture Notes in Computer Science, 2009, , 564-573.	1.0	0
115	Exploiting Knowledge Based Systems to Support Manufacturing of Functional Food Products. International Federation for Information Processing, 2010, , 214-223.	0.4	0
116	Social Interactions in Crowds of Pedestrians: An Adaptive Model for Group Cohesion. Lecture Notes in Computer Science, 2013, , 288-299.	1.0	0
117	Modeling a Crowd of Groups: Multidisciplinary and Methodological Challenges. The Kluwer International Series in Video Computing, 2013, , 99-122.	0.7	0
118	Cumulative Mean Crowding and Pedestrian Crowds: A Cellular Automata Model. Lecture Notes in Computer Science, 2018, , 481-491.	1.0	0
119	Context-Aware Applications Enhanced with Commonsense Spatial Reasoning. , 2008, , 105-124.		0