Michele Loreti

List of Publications by Year
in descending order

86 papers	1,342 citations	393982 19 h-index	454577 30 g-index
93 all docs	93 docs citations	93 times ranked	459 citing authors

#	Article	IF	Citations
1	A Formal Approach to Autonomic Systems Programming. ACM Transactions on Autonomous and Adaptive Systems, 2014, 9, 1-29.	0.4	105
2	Sessions and Pipelines for Structured Service Programming. Lecture Notes in Computer Science, 2008, , 19-38.	1.0	79
3	Model checking mobile stochastic logic. Theoretical Computer Science, 2007, 382, 42-70.	0.5	58
4	The Klaim Project: Theory and Practice. Lecture Notes in Computer Science, 2003, , 88-150.	1.0	53
5	The SCEL Language: Design, Implementation, Verification. Lecture Notes in Computer Science, 2015, , 3-71.	1.0	48
6	Modelling and Analysis of Collective Adaptive Systems with CARMA and its Tools. Lecture Notes in Computer Science, 2016, , 83-119.	1.0	45
7	Specifying and Verifying Properties of Space. Lecture Notes in Computer Science, 2014, , 222-235.	1.0	44
8	Monitoring mobile and spatially distributed cyber-physical systems. , 2017, , .		43
9	Qualitative and Quantitative Monitoring of Spatio-Temporal Properties. Lecture Notes in Computer Science, 2015, , 21-37.	1.0	43
10	Spatio-temporal model checking of vehicular movement in public transport systems. International Journal on Software Tools for Technology Transfer, 2018, 20, 289-311.	1.7	41
11	A uniform definition of stochastic process calculi. ACM Computing Surveys, 2013, 46, 1-35.	16.1	36
12	A Language-Based Approach to Autonomic Computing. Lecture Notes in Computer Science, 2013, , 25-48.	1.0	32
13	A calculus for attribute-based communication. , 2015, , .		32
14	On the Power of Attribute-Based Communication. Lecture Notes in Computer Science, 2016, , 1-18.	1.0	32
15	CARMA: Collective Adaptive Resource-sharing Markovian Agents. Electronic Proceedings in Theoretical Computer Science, EPTCS, 0, 194, 16-31.	0.8	30
16	A uniform framework for modeling nondeterministic, probabilistic, stochastic, or mixed processes and their behavioral equivalences. Information and Computation, 2013, 225, 29-82.	0.5	28
17	Programming interactions in collective adaptive systems by relying on attribute-based communication. Science of Computer Programming, 2020, 192, 102428.	1.5	27
18	A modal logic for mobile agents. ACM Transactions on Computational Logic, 2004, 5, 79-128.	0.7	26

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19	Context-aware wireless mobile autonomic computing and communications: research trends and emerging applications. IEEE Wireless Communications, 2016, 23, 86-92.	6.6	26
20	An Experimental Spatio-Temporal Model Checker. Lecture Notes in Computer Science, 2015, , 297-311.	1.0	26
21	On-the-fly PCTL fast mean-field approximated model-checking for self-organising coordination. Science of Computer Programming, 2015, 110, 23-50.	1.5	25
22	Model Checking Spatial Logics for Closure Spaces. Logical Methods in Computer Science, 0, Volume 12, Issue 4, .	0.4	25
23	Rate-Based Transition Systems for Stochastic Process Calculi. Lecture Notes in Computer Science, 2009, , 435-446.	1.0	24
24	A calculus for collective-adaptive systems and its behavioural theory. Information and Computation, 2019, 268, 104457.	0.5	19
25	Programming of CAS Systems by Relying on Attribute-Based Communication. Lecture Notes in Computer Science, 2016, , 539-553.	1.0	19
26	Relating strong behavioral equivalences for processes with nondeterminism and probabilities. Theoretical Computer Science, 2014, 546, 63-92.	0.5	17
27	An infrastructure language for open nets. , 2002, , .		16
28	On-the-fly Fast Mean-Field Model-Checking. Lecture Notes in Computer Science, 2014, , 297-314.	1.0	16
29	Software update via mobile agent based programming. , 2002, , .		15
30	MarCaSPiS: a Markovian Extension of a Calculus for Services. Electronic Notes in Theoretical Computer Science, 2009, 229, 11-26.	0.9	15
31	Data Verification for Collective Adaptive Systems: Spatial Model-Checking of Vehicle Location Data. , 2014, , .		15
32	Spatial Logic and Spatial Model Checking for Closure Spaces. Lecture Notes in Computer Science, 2016, , 156-201.	1.0	15
33	Implementing Session Centered Calculi. Lecture Notes in Computer Science, 2008, , 17-32.	1.0	14
34	Revisiting Trace and Testing Equivalences for Nondeterministic and Probabilistic Processes. Logical Methods in Computer Science, 0, Volume 10, Issue 1, .	0.4	14
35	Stochastically timed predicate-based communication primitives for autonomic computing. Electronic Proceedings in Theoretical Computer Science, EPTCS, 0, 154, 1-16.	0.8	14
36	Programming and Verifying Component Ensembles. Lecture Notes in Computer Science, 2014, , 69-83.	1.0	13

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37	Revisiting bisimilarity and its modal logic for nondeterministic and probabilistic processes. Acta Informatica, 2015, 52, 61-106.	0.5	11
38	The metric linear-time branching-time spectrum on nondeterministic probabilistic processes. Theoretical Computer Science, 2020, 813, 20-69.	0.5	9
39	Hyperformulae, Parallel Deductions and Intersection Types. Electronic Notes in Theoretical Computer Science, 2001, 50, 178-195.	0.9	8
40	Modeling adaptation with a tuple-based coordination language. , 2012, , .		8
41	CaSPiS: a calculus of sessions, pipelines and services. Mathematical Structures in Computer Science, 2015, 25, 666-709.	0.5	8
42	Simulation and Analysis of Distributed Systems in Klaim. Lecture Notes in Computer Science, 2010, , 122-136.	1.0	8
43	Structured nets in KLAIM. , 2000, , .		7
44	Multiple-Labelled Transition Systems for nominal calculi and their logics. Mathematical Structures in Computer Science, 2008, 18, 107-143.	0.5	7
45	On a Uniform Framework for the Definition of Stochastic Process Languages. Lecture Notes in Computer Science, 2009, , 9-25.	1.0	7
46	On Programming and Policing Autonomic Computing Systems. Lecture Notes in Computer Science, 2014, , 164-183.	1.0	6
47	Provably correct implementation of the AbC calculus. Science of Computer Programming, 2021, 202, 102567.	1.5	6
48	On-the-fly Fluid Model Checking via Discrete Time Population Models. Lecture Notes in Computer Science, 2015, , 193-207.	1.0	6
49	Specification and Analysis of Open-Ended Systems with CARMA. Lecture Notes in Computer Science, 2015, , 95-116.	1.0	6
50	CARMA Eclipse Plug-in: A Tool Supporting Design and Analysis of Collective Adaptive Systems. Lecture Notes in Computer Science, 2016, , 167-171.	1.0	6
51	A Distributed Coordination Infrastructure for Attribute-Based Interaction. Lecture Notes in Computer Science, 2018, , 1-20.	1.0	6
52	jSSTL - A Tool to Monitor Spatio-Temporal Properties. , 2017, , .		6
53	ABEL - A Domain Specific Framework for Programming with Attribute-Based Communication. Lecture Notes in Computer Science, 2019, , 111-128.	1.0	6
54	Assessing CS1 java skills. , 2006, , .		5

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55	MoMo: A Modal Logic for Reasoning About Mobility. Lecture Notes in Computer Science, 2005, , 95-119.	1.0	5
56	Revisiting Trace and Testing Equivalences for Nondeterministic and Probabilistic Processes. Lecture Notes in Computer Science, 2012, , 195-209.	1.0	5
57	FlyFast: A Mean Field Model Checker. Lecture Notes in Computer Science, 2017, , 303-309.	1.0	4
58	Replicated Computations Results (RCR) Report for â€œMesoscopic Modelling of Pedestrian Movement using C <scp>arma</scp> and its Toolsâ€. ACM Transactions on Modeling and Computer Simulation, 2018, 28, 1-3.	0.6	3
59	Provably Correct Implementations of Services. Lecture Notes in Computer Science, 2009, , 69-86.	1.0	3
60	SoSL: A Service-Oriented Stochastic Logic. Lecture Notes in Computer Science, 2011, , 447-466.	1.0	3
61	On-the-fly Probabilistic Model Checking. Electronic Proceedings in Theoretical Computer Science, EPTCS, 0, 166, 45-59.	0.8	3
62	Tools for Ensemble Design and Runtime. Lecture Notes in Computer Science, 2015, , 429-448.	1.0	3
63	Analysis of Spatio-temporal Properties of Stochastic Systems Using TSTL. ACM Transactions on Modeling and Computer Simulation, 2019, 29, 1-24.	0.6	3
64	Monitoring Spatio-Temporal Properties (Invited Tutorial). Lecture Notes in Computer Science, 2020, , 21-46.	1.0	3
65	Online monitoring of spatio-temporal properties for imprecise signals. , 2021, , .		3
66	Sibilla: A Tool forÂReasoning about Collective Systems. Lecture Notes in Computer Science, 2022, , 92-98.	1.0	3
67	Modelling Node Connectivity in Dynamically Evolving Networks. Electronic Notes in Theoretical Computer Science, 2001, 54, 81-91.	0.9	2
68	Formulae Meet Programs Over the Net: A Framework for Correct Network Aware Programming. Automated Software Engineering, 2004, 11, 245-288.	2.2	2
69	Implementing a Distributed Mobile Calculus Using the IMC Framework. Electronic Notes in Theoretical Computer Science, 2007, 181, 63-79.	0.9	2
70	Multi Labelled Transition Systems: A Semantic Framework for Nominal Calculi. Electronic Notes in Theoretical Computer Science, 2007, 169, 133-146.	0.9	2
71	Modelling global computations with <scp>Klaim</scp>. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2008, 366, 3737-3745.	1.6	2
72	Automatic verification of reliability requirements of spatio-temporal analysis using Three-Valued Spatio-Temporal Logic. , 2017, , .		2

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73	Guest Editorial for the Special Issue on FORmal methods for the quantitative Evaluation of Collective Adaptive SysTems (FORECAST). ACM Transactions on Modeling and Computer Simulation, 2018, 28, 1-4.	0.6	2
74	Fluid approximation of broadcasting systems. Theoretical Computer Science, 2020, 816, 221-248.	0.5	2
75	Measuring Adaptability and Reliability of Large Scale Systems. Lecture Notes in Computer Science, 2020, , 380-396.	1.0	2
76	The Spectrum of Strong Behavioral Equivalences for Nondeterministic and Probabilistic Processes. Electronic Proceedings in Theoretical Computer Science, EPTCS, 0, 117, 81-96.	0.8	2
77	Investigating Fluid-Flow Semantics ofÂAsynchronous Tuple-Based Process Languages for Collective Adaptive Systems. Lecture Notes in Computer Science, 2015, , 19-34.	1.0	2
78	On StocS: A Stochastic Extension of SCEL. Lecture Notes in Computer Science, 2015, , 619-640.	1.0	2
79	Monitoring and visualizing adaptation of autonomic systems at runtime. , 2015, , .		1
80	How Adaptive and Reliable is Your Program?. Lecture Notes in Computer Science, 2021, , 60-79.	1.0	1
81	Group-by-Group Probabilistic Bisimilarities and Their Logical Characterizations. Lecture Notes in Computer Science, 2014, , 315-330.	1.0	1
82	A Fixpoint-Based Calculus for Graph-Shaped Computational Fields. Lecture Notes in Computer Science, 2015, , 101-116.	1.0	1
83	Uniform Labeled Transition Systems for Nondeterministic, Probabilistic, and Stochastic Process Calculi. Electronic Proceedings in Theoretical Computer Science, EPTCS, 0, 60, 66-75.	0.8	1
84	Modeling adaptation with Klaim. ACM SIGAPP Applied Computing Review: A Publication of the Special Interest Group on Applied Computing, 2012, 12, 21-35.	0.5	0
85	FlyFast: A Scalable Approach to Probabilistic Model-Checking Based on Mean-Field Approximation. Lecture Notes in Computer Science, 2017, , 254-275.	1.0	0
86	Replicated Computations Results (RCR) Report for â€œStatistical Abstraction for Multi-scale Spatio-temporal Systemsâ€. ACM Transactions on Modeling and Computer Simulation, 2019, 29, 1-2.	0.6	0