Davide Bresolin

List of Publications by Year
in descending order

62 papers	793 citations	686830 13 h-index	610482 24 g-index
64 all docs	64 docs citations	64 times ranked	402 citing authors

#	Article	IF	Citations
1	A Platform-Based Design Methodology With Contracts and Related Tools for the Design of Cyber-Physical Systems. Proceedings of the IEEE, 2015, 103, 2104-2132.	16.4	114
2	Propositional interval neighborhood logics: Expressiveness, decidability, and undecidable extensions. Annals of Pure and Applied Logic, 2009, 161, 289-304.	0.3	63
3	Assumeâ€"guarantee verification of nonlinear hybrid systems withâ€‰<scp>Ariadne</scp>. International Journal of Robust and Nonlinear Control, 2014, 24, 699-724.	2.1	44
4	Tableaux for Logics of Subinterval Structures over Dense Orderings. Journal of Logic and Computation, 2010, 20, 133-166.	0.5	41
5	Robotic Surgery. IEEE Robotics and Automation Magazine, 2011, 18, 24-32.	2.2	41
6	Decidable and Undecidable Fragments of Halpern and Shohamâ€™s Interval Temporal Logic: Towards a Complete Classification. Lecture Notes in Computer Science, 2008, , 590-604.	1.0	32
7	An Optimal Decision Procedure for Right Propositional Neighborhood Logic. Journal of Automated Reasoning, 2007, 38, 173-199.	1.1	30
8	The dark side of interval temporal logic: marking the undecidability border. Annals of Mathematics and Artificial Intelligence, 2014, 71, 41-83.	0.9	27
9	Interval temporal logics over strongly discrete linear orders: Expressiveness and complexity. Theoretical Computer Science, 2014, 560, 269-291.	0.5	21
10	An Optimal Tableau-Based Decision Algorithm for Propositional Neighborhood Logic. , 2007, , 549-560.		21
11	Reachability computation for hybrid systems with Ariadne. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2008, 41, 8960-8965.	0.4	19
12	What's Decidable about Halpern and Shoham's Interval Logic? The Maximal Fragment ABBL. , 2011, , .		16
13	Computing the Evolution of Hybrid Systems using Rigorous Function Calculus. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 284-290.	0.4	16
14	Deterministic Timed Finite State Machines: Equivalence Checking and Expressive Power. Electronic Proceedings in Theoretical Computer Science, EPTCS, 0, 161, 203-216.	0.8	16
15	On Decidability and Expressiveness of Propositional Interval Neighborhood Logics. Lecture Notes in Computer Science, 2007, , 84-99.	1.0	15
16	Metric propositional neighborhood logics on natural numbers. Software and Systems Modeling, 2013, 12, 245-264.	2.2	14
17	The light side of interval temporal logic: the Bernays-SchÃ¶nfinkel fragment of CDT. Annals of Mathematics and Artificial Intelligence, 2014, 71, 11-39.	0.9	14
18	A Decidable Spatial Generalization of Metric Interval Temporal Logic. , 2010, , .		13

#	Article	IF	Citations
19	Open Problems in Verification and Refinement of Autonomous Robotic Systems. , 2012, , .		13
20	Horn Fragments of the Halpern-Shoham Interval Temporal Logic. ACM Transactions on Computational Logic, 2017, 18, 1-39.	0.7	12
21	The Dark Side of Interval Temporal Logic: Sharpening the Undecidability Border. , 2011, , .		10
22	ON BEGINS, MEETS AND BEFORE. International Journal of Foundations of Computer Science, 2012, 23, 559-583.	0.8	10
23	Formal verification of robotic surgery tasks by reachability analysis. Microprocessors and Microsystems, 2015, 39, 836-842.	1.8	10
24	Optimal Tableaux for Right Propositional Neighborhood Logic over Linear Orders. Lecture Notes in Computer Science, 2008, , 62-75.	1.0	10
25	HyLTL: a temporal logic for model checking hybrid systems. Electronic Proceedings in Theoretical Computer Science, EPTCS, 0, 124, 73-84.	0.8	10
26	Sub-propositional Fragments of the Interval Temporal Logic of Allenâ€™s Relations. Lecture Notes in Computer Science, 2014, , 122-136.	1.0	9
27	Optimal Tableau Systems for Propositional Neighborhood Logic over All, Dense, and Discrete Linear Orders. Lecture Notes in Computer Science, 2011, , 73-87.	1.0	9
28	Ariadne: Dominance Checking of Nonlinear Hybrid Automata Using Reachability Analysis. Lecture Notes in Computer Science, 2012, , 79-91.	1.0	9
29	Relational dual tableaux for interval temporal logics â˜…. Journal of Applied Non-Classical Logics, 2006, 16, 251-277.	0.4	8
30	Undecidability of Interval Temporal Logics with the Overlap Modality. , 2009, , .		8
31	Parametric formal verification: the robotic paint spraying case study. IFAC-PapersOnLine, 2017, 50, 9248-9253.	0.5	8
32	Interval Temporal Logics over Strongly Discrete Linear Orders: the Complete Picture. Electronic Proceedings in Theoretical Computer Science, EPTCS, 0, 96, 155-168.	0.8	8
33	Time Granularities and Ultimately Periodic Automata. Lecture Notes in Computer Science, 2004, , 513-525.	1.0	7
34	A game-theoretic approach to fault diagnosis and identification of hybrid systems. Theoretical Computer Science, 2013, 493, 15-29.	0.5	7
35	Optimal decision procedures for MPNL over finite structures, the natural numbers, and the integers. Theoretical Computer Science, 2013, 493, 98-115.	0.5	7
36	Tableau Systems for Logics of Subinterval Structures over Dense Orderings. Lecture Notes in Computer Science, 2007, , 73-89.	1.0	7

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37	A theory of ultimately periodic languages and automata with an application to time granularity. Acta Informatica, 2009, 46, 331-360.	0.5	6
38	Right Propositional Neighborhood Logic over Natural Numbers with Integer Constraints for Interval Lengths. , 2009, , .		5
39	Undecidability of the Logic of Overlap Relation over Discrete Linear Orderings. Electronic Notes in Theoretical Computer Science, 2010, 262, 65-81.	0.9	5
40	Correct-by-construction code generation from hybrid automata specification. , 2011, , .		5
41	Formal Verification Applied to Robotic Surgery. Lecture Notes in Control and Information Sciences, 2015, , 347-355.	0.6	5
42	On the Complexity of Fragments of the Modal Logic of Allenâ€™s Relations over Dense Structures. Lecture Notes in Computer Science, 2015, , 511-523.	1.0	5
43	A computable and compositional semantics for hybrid automata. , 2020, , .		5
44	An optimal tableau for Right Propositional Neighborhood Logic over Trees. , 2008, , .		3
45	Application of contract-based verification techniques for hybrid automata to surgical robotic systems. , 2014, , .		3
46	Minimizing Deterministic Timed Finite State Machines. IFAC-PapersOnLine, 2018, 51, 486-492.	0.5	3
47	Formal Verification of Medical CPS. ACM Transactions on Cyber-Physical Systems, 2018, 2, 1-29.	1.9	3
48	Improving HyLTL model checking of hybrid systems. Electronic Proceedings in Theoretical Computer Science, EPTCS, 0, 119, 79-92.	0.8	3
49	The impact of EFSM composition on functional ATPG. , 2009, , .		2
50	Static and dynamic property-preserving updates. Information and Computation, 2021, 279, 104611.	0.5	2
51	A Tableau-Based System for Spatial Reasoning about Directional Relations. Lecture Notes in Computer Science, 2009, , 123-137.	1.0	2
52	A Tableau System for Right Propositional Neighborhood Logic over Finite Linear Orders: An Implementation. Lecture Notes in Computer Science, 2013, , 74-80.	1.0	2
53	Complete and Terminating Tableau for the Logic of Proper Subinterval Structures Over Dense Orderings. Electronic Notes in Theoretical Computer Science, 2009, 231, 131-151.	0.9	1
54	A framework for fault diagnosis of hybrid systems based on predicate abstractions. , 2013, , .		1

#	ARTICLE	IF	CITATIONS
55	Finite satisfiability of propositional interval logic formulas with multi-objective evolutionary algorithms. , 2013, , .		1
56	Verification of Robotic Surgery Tasks by Reachability Analysis: A Comparison of Tools. , 2014, , .		1
57	An Introduction to the Verification of Hybrid Systems Using Ariadne. Lecture Notes in Control and Information Sciences, 2015, , 339-346.	0.6	1
58	Ongoing Work on Automated Verification of Noisy Nonlinear Systems with Ariadne. Lecture Notes in Computer Science, 2017, , 313-319.	1.0	1
59	The Light Side of Interval Temporal Logic: The Bernays-Schönfinkel's Fragment of CDT. , 2011, , .		0
60	Begin, After, and Later: a Maximal Decidable Interval Temporal Logic. Electronic Proceedings in Theoretical Computer Science, EPTCS, 0, 25, 72-88.	0.8	0
61	An Optimal Decision Procedure for MPNL over the Integers. Electronic Proceedings in Theoretical Computer Science, EPTCS, 0, 54, 192-206.	0.8	0
62	Rigorous Continuous Evolution of Uncertain Systems. Lecture Notes in Computer Science, 2019, , 60-75.	1.0	0