Eugene A Asarin

List of Publications by Year
in descending order

48	1,993	331670 21	265206 42
papers	citations	h-index	g-index

57	57	57	724
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Reachability analysis of dynamical systems having piecewise-constant derivatives. Theoretical Computer Science, 1995, 138, 35-65.	0.9	196
2	Approximate Reachability Analysis of Piecewise-Linear Dynamical Systems. Lecture Notes in Computer Science, 2000, , 20-31.	1.3	173
3	Hybridization methods for the analysis of nonlinear systems. Acta Informatica, 2007, 43, 451-476.	0.5	151
4	Scheduling with timed automata. Theoretical Computer Science, 2006, 354, 272-300.	0.9	144
5	Symbolic controller synthesis for discrete and timed systems. Lecture Notes in Computer Science, 1995, , 1-20.	1.3	125
6	Controller Synthesis for Timed Automata 1. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 1998, 31, 447-452.	0.4	124
7	The d/dt Tool for Verification of Hybrid Systems. Lecture Notes in Computer Science, 2002, , 365-370.	1.3	105
8	Reachability Analysis of Nonlinear Systems Using Conservative Approximation. Lecture Notes in Computer Science, 2003, , 20-35.	1.3	92
9	As Soon as Possible: Time Optimal Control for Timed Automata. Lecture Notes in Computer Science, 1999, , 19-30.	1.3	86
10	Parametric Identification of Temporal Properties. Lecture Notes in Computer Science, 2012, , 147-160.	1.3	81
11	Recent progress in continuous and hybrid reachability analysis. , 2006, , .		66
12	Data-structures for the verification of timed automata. Lecture Notes in Computer Science, 1997, , 346-360.	1.3	54
13	Symbolic Techniques for Parametric Reasoning about Counter and Clock Systems. Lecture Notes in Computer Science, 2000, , 419-434.	1.3	53
14	Timed Pattern Matching. Lecture Notes in Computer Science, 2014, , 222-236.	1.3	47
15	Verification of Timed Automata via Satisfiability Checking. Lecture Notes in Computer Science, 2002, , 225-243.	1.3	34
16	Online Timed Pattern Matching Using Derivatives. Lecture Notes in Computer Science, 2016, , 736-751.	1.3	32
17	Algorithmic analysis of polygonal hybrid systems, part I: Reachability. Theoretical Computer Science, 2007, 379, 231-265.	0.9	29
18	On the Decidability of the Reachability Problem for Planar Differential Inclusions. Lecture Notes in Computer Science, 2001, , 89-104.	1.3	28

#	Article	IF	Citations
19	Low dimensional hybrid systems â€“ decidable, undecidable, donÊ¼t know. Information and Computation, 2012, 211, 138-159.	0.7	26
20	Achilles and the Tortoise Climbing Up the Arithmetical Hierarchy. Journal of Computer and System Sciences, 1998, 57, 389-398.	1.2	23
21	Abstraction by Projection and Application to Multi-affine Systems. Lecture Notes in Computer Science, 2004, , 32-47.	1.3	22
22	Some Progress in Satisfiability Checking for Difference Logic. Lecture Notes in Computer Science, 2004, , 263-276.	1.3	22
23	Volume and Entropy of Regular Timed Languages: Analytic Approach. Lecture Notes in Computer Science, 2009, , 13-27.	1.3	17
24	Towards Computing Phase Portraits of Polygonal Differential Inclusions. Lecture Notes in Computer Science, 2002, , 49-61.	1.3	15
25	Entropy of regular timed languages. Information and Computation, 2015, 241, 142-176.	0.7	13
26	Noisy Turing Machines. Lecture Notes in Computer Science, 2005, , 1031-1042.	1.3	13
27	Widening the Boundary between Decidable and Undecidable Hybrid Systems*. Lecture Notes in Computer Science, 2002, , 193-208.	1.3	13
28	Achilles and the tortoise climbing up the arithmetical hierarchy. Lecture Notes in Computer Science, 1995, , 471-483.	1.3	13
29	Online Timed Pattern Matching Using Automata. Lecture Notes in Computer Science, 2018, , 215-232.	1.3	12
30	Recent Progress in Continuoushybrid Reachability Analysis. , 2006, , .		11
31	d/dt: A Tool for Reachability Analysis of Continuous and Hybrid Systems. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2001, 34, 741-746.	0.4	10
32	On Optimal Scheduling under Uncertainty. Lecture Notes in Computer Science, 2003, , 240-253.	1.3	10
33	Equations on timed languages. Lecture Notes in Computer Science, 1998, , 1-12.	1.3	9
34	SPeeDI â€" A Verification Tool for Polygonal Hybrid Systems. Lecture Notes in Computer Science, 2002, , 354-359.	1.3	9
35	Distance on Timed Words and Applications. Lecture Notes in Computer Science, 2018, , 199-214.	1.3	7
36	Balanced timed regular expressions1 1Partially supported by the European community project IST-2001-35304 AMETIST. Electronic Notes in Theoretical Computer Science, 2003, 68, 16-33.	0.9	6

#	Article	IF	Citations
37	Combining the Temporal and Epistemic Dimensions for MTL Monitoring. Lecture Notes in Computer Science, 2017, , 207-223.	1.3	6
38	Simple Algorithm for Simple Timed Games. , 2009, , .		3
39	Asymptotic behaviour in temporal logic. , 2014, , .		3
40	On Hybrid Control of Under-Actuated Mechanical Systems. Lecture Notes in Computer Science, 2001, , 77-88.	1.3	3
41	Generating Functions of Timed Languages. Lecture Notes in Computer Science, 2012, , 124-135.	1.3	3
42	Algorithmic analysis of polygonal hybrid systems, Part II: Phase portrait and tools. Theoretical Computer Science, 2008, 390, 1-26.	0.9	2
43	On the computation of covert channel capacity. RAIRO - Theoretical Informatics and Applications, 2010, 44, 37-58.	0.5	1
44	On the Complexity of Timed Pattern Matching. Lecture Notes in Computer Science, 2021, , 15-31.	1.3	1
45	Spectral Gap in Timed Automata. Lecture Notes in Computer Science, 2013, , 16-30.	1.3	1
46	Timed Formal Languages - A Framework for Hybrid Systems. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 1998, 31, 249-252.	0.4	0
47	Optimal control for timed automata 1. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 1999, 32, 2131-2136.	0.4	0
48	Timed Automata and Timed Languages Challenges and Open Problems. Lecture Notes in Computer Science, 2004, , 1-1.	1.3	0