

# Mooly Sagiv

## List of Publications by Year in descending order

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Version: 2024-02-01

55  
papers

3,162  
citations

394421

19  
h-index

345221

36  
g-index

55  
all docs

55  
docs citations

55  
times ranked

819  
citing authors

#	ARTICLE	IF	CITATIONS
1	Precise interprocedural dataflow analysis via graph reachability. , 1995, , .		810
2	Parametric shape analysis via 3-valued logic. ACM Transactions on Programming Languages and Systems, 2002, 24, 217-298.	2.1	553
3	Solving shape-analysis problems in languages with destructive updating. ACM Transactions on Programming Languages and Systems, 1998, 20, 1-50.	2.1	230
4	Precise interprocedural dataflow analysis with applications to constant propagation. Theoretical Computer Science, 1996, 167, 131-170.	0.9	216
5	TVLA: A System for Implementing Static Analyses. Lecture Notes in Computer Science, 2000, , 280-301.	1.3	111
6	Symbolic Implementation of the Best Transformer. Lecture Notes in Computer Science, 2004, , 252-266.	1.3	96
7	Putting static analysis to work for verification. , 2000, , .		74
8	VeriCon. , 2014, , .		72
9	VeriCon. ACM SIGPLAN Notices, 2014, 49, 282-293.	0.2	66
10	A semantics for procedure local heaps and its abstractions. , 2005, , .		66
11	Symbolically Computing Most-Precise Abstract Operations for Shape Analysis. Lecture Notes in Computer Science, 2004, , 530-545.	1.3	65
12	The Boundary Between Decidability and Undecidability for Transitive-Closure Logics. Lecture Notes in Computer Science, 2004, , 160-174.	1.3	60
13	Interprocedural Shape Analysis for Cutpoint-Free Programs. Lecture Notes in Computer Science, 2005, , 284-302.	1.3	57
14	Data representation synthesis. , 2011, , .		50
15	Concurrent data representation synthesis. , 2012, , .		41
16	A Decidable Logic for Describing Linked Data Structures. Lecture Notes in Computer Science, 1999, , 2-19.	1.3	38
17	Effectively-Propositional Reasoning about Reachability in Linked Data Structures. Lecture Notes in Computer Science, 2013, , 756-772.	1.3	34
18	Finite Differencing of Logical Formulas for Static Analysis. Lecture Notes in Computer Science, 2003, , 380-398.	1.3	33

#	ARTICLE	IF	CITATIONS
19	Static Program Analysis via 3-Valued Logic. Lecture Notes in Computer Science, 2004, , 15-30.	1.3	32
20	Shape Analysis. Lecture Notes in Computer Science, 2000, , 1-17.	1.3	31
21	A Relational Approach to Interprocedural Shape Analysis. Lecture Notes in Computer Science, 2004, , 246-264.	1.3	27
22	Estimating the impact of heap liveness information on space consumption in Java. , 2002, , .		27
23	Demand interprocedural dataflow analysis. Software Engineering Notes: an Informal Newsletter of the Special Interest Committee on Software Engineering / ACM, 1995, 20, 104-115.	0.7	23
24	Automatic fine-grain locking using shape properties. , 2011, , .		23
25	Thread-modular shape analysis. ACM SIGPLAN Notices, 2007, 42, 266-277.	0.2	22
26	Modular reasoning about heap paths via effectively propositional formulas. , 2014, , .		22
27	Decidable fragments of many-sorted logic. Journal of Symbolic Computation, 2010, 45, 153-172.	0.8	21
28	Precise and compact modular procedure summaries for heap manipulating programs. ACM SIGPLAN Notices, 2011, 46, 567-577.	0.2	20
29	Concurrent libraries with foresight. , 2013, , .		20
30	Abstraction for Shape Analysis with Fast and Precise Transformers. Lecture Notes in Computer Science, 2006, , 547-561.	1.3	20
31	A dynamic evaluation of the precision of static heap abstractions. , 2010, , .		17
32	Verification via Structure Simulation. Lecture Notes in Computer Science, 2004, , 281-294.	1.3	17
33	Automatically Verifying Concurrent Queue Algorithms. Electronic Notes in Theoretical Computer Science, 2003, 89, 450-463.	0.9	16
34	Abstract Transformers for Thread Correlation Analysis. Lecture Notes in Computer Science, 2009, , 30-46.	1.3	16
35	Some Complexity Results for Stateful Network Verification. Lecture Notes in Computer Science, 2016, , 811-830.	1.3	16
36	A logic of reachable patterns in linked data-structures. The Journal of Logic and Algebraic Programming, 2007, 73, 111-142.	1.4	15

#	ARTICLE	IF	CITATIONS
37	HAWKEYE. , 2011, , .		14
38	Automatic scalable atomicity via semantic locking. , 2015, , .		11
39	TVLA: A System for Generating Abstract Interpreters. , 2004, , 367-375.		11
40	A semantics for procedure local heaps and its abstractions. ACM SIGPLAN Notices, 2005, 40, 296-309.	0.2	11
41	JANUS. , 2012, , .		8
42	Decentralizing SDN Policies. ACM SIGPLAN Notices, 2015, 50, 663-676.	0.2	7
43	Shape Analysis and Applications. , 2002, , .		7
44	Automatic Assume/Guarantee Reasoning for Heap-Manipulating Programs. Electronic Notes in Theoretical Computer Science, 2005, 131, 125-138.	0.9	5
45	Modular reasoning about heap paths via effectively propositional formulas. ACM SIGPLAN Notices, 2014, 49, 385-396.	0.2	5
46	Detecting memory errors via static pointer analysis (preliminary experience). ACM SIGPLAN Notices, 1998, 33, 27-34.	0.2	4
47	Establishing local temporal heap safety properties with applications to compile-time memory management. Science of Computer Programming, 2005, 58, 264-289.	1.9	4
48	A dynamic evaluation of the precision of static heap abstractions. ACM SIGPLAN Notices, 2010, 45, 411-427.	0.2	4
49	Composing concurrency control. ACM SIGPLAN Notices, 2015, 50, 240-249.	0.2	4
50	Shape Analysis and Applications. , 2007, , 12-1-12-44.		4
51	Turning nondeterminism into parallelism. ACM SIGPLAN Notices, 2013, 48, 589-604.	0.2	3
52	HAWKEYE. ACM SIGPLAN Notices, 2011, 46, 207-224.	0.2	2
53	Automatic Scalable Atomicity via Semantic Locking. ACM Transactions on Parallel Computing, 2017, 3, 1-29.	1.4	1
54	Some complexity results for stateful network verification. Formal Methods in System Design, 2019, 54, 191-231.	0.8	0

#	ARTICLE	IF	CITATIONS
55	On the Utility of Canonical Abstraction. , 2005, , 215-253.		0