Silvio Ghilardi

List of Publications by Year
in descending order

94 papers	1,803 citations	304602 22 h-index	360920 35 g-index
104 all docs	104 docs citations	104 times ranked	391 citing authors

#	Article	IF	Citations
1	Unification in intuitionistic logic. Journal of Symbolic Logic, 1999, 64, 859-880.	0.4	133
2	Best solving modal equations. Annals of Pure and Applied Logic, 2000, 102, 183-198.	0.3	99
3	MCMT: A Model Checker Modulo Theories. Lecture Notes in Computer Science, 2010, , 22-29.	1.0	83
4	Backward Reachability of Array-based Systems by SMT solving: Termination and Invariant Synthesis. Logical Methods in Computer Science, 0, Volume 6, Issue 4, .	0.4	72
5	Model-Theoretic Methods in Combined Constraint Satisfiability. Journal of Automated Reasoning, 2004, 33, 221-249.	1.1	62
6	Unification through projectivity. Journal of Logic and Computation, 1997, 7, 733-752.	0.5	58
7	An algebraic theory of normal forms. Annals of Pure and Applied Logic, 1995, 71, 189-245.	0.3	53
8	LTL over description logic axioms. ACM Transactions on Computational Logic, 2012, 13, 1-32.	0.7	51
9	Undefinability of propositional quantifiers in the modal system S4. Studia Logica, 1995, 55, 259-271.	0.4	47
10	9 First-order modal logic. Studies in Logic and Practical Reasoning, 2007, , 549-620.	1.4	45
11	Unification in modal and description logics. Logic Journal of the IGPL, 2011, 19, 705-730.	1.3	44
12	Lazy Abstraction with Interpolants for Arrays. Lecture Notes in Computer Science, 2012, , 46-61.	1.0	40
13	Towards SMT Model Checking of Array-Based Systems. Lecture Notes in Computer Science, 2008, , 67-82.	1.0	38
14	Incompleteness results in Kripke semantics. Journal of Symbolic Logic, 1991, 56, 517-538.	0.4	37
15	Presheaf semantics and independence results for some non-classical first-order logics. Archive for Mathematical Logic, 1989, 29, 125-136.	0.2	34
16	Filtering unification and most general unifiers in modal logic. Journal of Symbolic Logic, 2004, 69, 879-906.	0.4	34
17	Unification, finite duality and projectivity in varieties of Heyting algebras. Annals of Pure and Applied Logic, 2004, 127, 99-115.	0.3	34
18	Decision procedures for extensions of the theory of arrays. Annals of Mathematics and Artificial Intelligence, 2007, 50, 231-254.	0.9	33

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19	A sheaf representation and duality for finitely presented Heyting algebras. Journal of Symbolic Logic, 1995, 60, 911-939.	0.4	32
20	An algebraic approach to subframe logics. Intuitionistic case. Annals of Pure and Applied Logic, 2007, 147, 84-100.	0.3	32
21	Sheaves, Games, and Model Completions. Trends in Logic, 2002, , .	0.2	32
22	SAFARI: SMT-Based Abstraction for Arrays with Interpolants. Lecture Notes in Computer Science, 2012, , 679-685.	1.0	30
23	Decidability and Undecidability Results for Nelson-Oppen and Rewrite-Based Decision Procedures. Lecture Notes in Computer Science, 2006, , 513-527.	1.0	28
24	A Resolution/Tableaux Algorithm for Projective Approximations in IPC. Logic Journal of the IGPL, 2002, 10, 229-243.	1.3	24
25	Booster: An Acceleration-Based Verification Framework for Array Programs. Lecture Notes in Computer Science, 2014, , 18-23.	1.0	22
26	Modal and tense predicate logic: Models in presheaves and categorical conceptualization. Lecture Notes in Mathematics, 1988, , 130-142.	0.1	21
27	An extension of lazy abstraction with interpolation for programs with arrays. Formal Methods in System Design, 2014, 45, 63-109.	0.9	21
28	A new combination procedure for the word problem that generalizes fusion decidability results in modal logics. Information and Computation, 2006, 204, 1413-1452.	0.5	19
29	A comprehensive combination framework. ACM Transactions on Computational Logic, 2008, 9, 1-54.	0.7	19
30	Petri Nets with Parameterised Data. Lecture Notes in Computer Science, 2020, , 55-74.	1.0	19
31	Quantifier-Free Interpolation of a Theory of Arrays. Logical Methods in Computer Science, 0, Volume 8, Issue 2, .	0.4	19
32	Decision Procedures for Flat Array Properties. Lecture Notes in Computer Science, 2014, , 15-30.	1.0	18
33	Continuity, freeness, and filtrations. Journal of Applied Non-Classical Logics, 2010, 20, 193-217.	0.4	17
34	Quantifier-free interpolation in combinations of equality interpolating theories. ACM Transactions on Computational Logic, 2014, 15, 1-34.	0.7	17
35	Directed frames. Archive for Mathematical Logic, 1989, 29, 53-67.	0.2	16
36	An Algebraic Approach to Subframe Logics. Modal Case. Notre Dame Journal of Formal Logic, 2011, 52, .	0.2	16

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37	Model completions and r-Heyting categories. Annals of Pure and Applied Logic, 1997, 88, 27-46.	0.3	15
38	Combination Methods for Satisfiability and Model-Checking of Infinite-State Systems. Lecture Notes in Computer Science, 2007, , 362-378.	1.0	15
39	Quantified extensions of canonical propositional intermediate logics. Studia Logica, 1992, 51, 195-214.	0.4	14
40	SMT-based verification of data-aware processes: a model-theoretic approach. Mathematical Structures in Computer Science, 2020, 30, 271-313.	0.5	14
41	From Model Completeness to Verification of Data Aware Processes. Lecture Notes in Computer Science, 2019, , 212-239.	1.0	13
42	Definability of Accelerated Relations in a Theory of Arrays and Its Applications. Lecture Notes in Computer Science, 2013, , 23-39.	1.0	13
43	Connecting many-sorted theories. Journal of Symbolic Logic, 2007, 72, 535-583.	0.4	12
44	The bounded proof property via step algebras and step frames. Annals of Pure and Applied Logic, 2014, 165, 1832-1863.	0.3	12
45	Modal logics withn-ary connectives. Zeitschrift Für Mathematische Logik Und Grundlagen Der Mathematik, 1990, 36, 193-215.	0.2	11
46	Combining word problems through rewriting in categories with products. Theoretical Computer Science, 2003, 294, 103-149.	0.5	11
47	Decision Procedures for Flat Array Properties. Journal of Automated Reasoning, 2015, 54, 327-352.	1.1	11
48	Modularity results for interpolation, amalgamation and superamalgamation. Annals of Pure and Applied Logic, 2018, 169, 731-754.	0.3	11
49	Connecting Many-Sorted Theories. Lecture Notes in Computer Science, 2005, , 278-294.	1.0	11
50	Brief Announcement: Automated Support for the Design and Validation of Fault Tolerant Parameterized Systems - A Case Study. Lecture Notes in Computer Science, 2010, , 392-394.	1.0	11
51	Automated Analysis of Parametric Timing-Based Mutual Exclusion Algorithms. Lecture Notes in Computer Science, 2012, , 279-294.	1.0	11
52	Algebraic and Model Theoretic Techniques for Fusion Decidability in Modal Logics. Lecture Notes in Computer Science, 2003, , 152-166.	1.0	10
53	Counting Constraints in Flat Array Fragments. Lecture Notes in Computer Science, 2016, , 65-81.	1.0	10
54	Goal-Directed Invariant Synthesis for Model Checking Modulo Theories. Lecture Notes in Computer Science, 2009, , 173-188.	1.0	10

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55	Petri net-based object-centric processes with read-only data. Information Systems, 2022, 107, 102011.	2.4	10
56	Universal Guards, Relativization of Quantifiers, and Failure Models in Model Checking Modulo Theories. Journal of Satisfiability, Boolean Modeling and Computation, 2012, 8, 29-61.	1.2	9
57	Cardinality constraints for arrays (decidability results and applications). Formal Methods in System Design, 2017, 51, 545-574.	0.9	9
58	From Strong Amalgamability to Modularity of Quantifier-Free Interpolation. Lecture Notes in Computer Science, 2012, , 118-133.	1.0	9
59	Quantifier Elimination and Provers Integration. Electronic Notes in Theoretical Computer Science, 2003, 86, 22-34.	0.9	8
60	Model Completeness, Covers and Superposition. Lecture Notes in Computer Science, 2019, , 142-160.	1.0	8
61	A New Combination Procedure for the Word Problem That Generalizes Fusion Decidability Results in Modal Logics. Lecture Notes in Computer Science, 2004, , 183-197.	1.0	7
62	Combined Covers and Beth Definability. Lecture Notes in Computer Science, 2020, , 181-200.	1.0	7
63	Monadic second order logic as the model companion of temporal logic. , 2016, , .		6
64	A Comprehensive Framework for Combined Decision Procedures. Lecture Notes in Computer Science, 2005, , 1-30.	1.0	6
65	AUTOMATED TERMINATION IN MODEL-CHECKING MODULO THEORIES. International Journal of Foundations of Computer Science, 2013, 24, 211-232.	0.8	5
66	A Framework for the Verification of Parameterized Infinite-state Systems*. Fundamenta Informaticae, 2017, 150, 1-24.	0.3	5
67	A MODEL-THEORETIC CHARACTERIZATION OF MONADIC SECOND ORDER LOGIC ON INFINITE WORDS. Journal of Symbolic Logic, 2017, 82, 62-76.	0.4	5
68	Admissible Bases Via Stable Canonical Rules. Studia Logica, 2016, 104, 317-341.	0.4	4
69	Delta-BPMN: A Concrete Language and Verifier for Data-Aware BPMN. Lecture Notes in Computer Science, 2021, , 179-196.	1.0	4
70	Model Completeness, Uniform Interpolants and Superposition Calculus. Journal of Automated Reasoning, 2021, 65, 941-969.	1.1	4
71	Formal Verification of ARP (Address Resolution Protocol) Through SMT-Based Model Checking - A Case Study -. Lecture Notes in Computer Science, 2017, , 391-406.	1.0	4
72	Light-Weight SMT-based Model Checking. Electronic Notes in Theoretical Computer Science, 2009, 250, 85-102.	0.9	3

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73	Interpolation and Amalgamation for Arrays with MaxDiff. Lecture Notes in Computer Science, 2021, , 268-288.	1.0	3
74	Noetherianity and Combination Problems. Lecture Notes in Computer Science, 2007, , 206-220.	1.0	3
75	Bounded Proofs and Step Frames. Lecture Notes in Computer Science, 2013, , 44-58.	1.0	3
76	Interpolation and Uniform Interpolation in Quantifier-Free Fragments of Combined First-Order Theories. Mathematics, 2022, 10, 461.	1.1	3
77	Fixed-point Elimination in the Intuitionistic Propositional Calculus. ACM Transactions on Computational Logic, 2020, 21, 1-37.	0.7	2
78	Free Heyting algebra endomorphisms: Ruitenburg's Theorem and beyond. Mathematical Structures in Computer Science, 2020, 30, 572-596.	0.5	2
79	Automated Termination in Model Checking Modulo Theories. Lecture Notes in Computer Science, 2011, , 110-124.	1.0	2
80	Fixed-Point Elimination in the Intuitionistic Propositional Calculus. Lecture Notes in Computer Science, 2016, , 126-141.	1.0	2
81	Model Completions. Trends in Logic, 2002, , 49-71.	0.2	2
82	Free Modal Algebras Revisited: The Step-by-Step Method. Outstanding Contributions To Logic, 2014, , 43-62.	0.2	2
83	Combination of Uniform Interpolants via Beth Definability. Journal of Automated Reasoning, 0, , .	1.1	2
84	From Bisimulation Quantifiers to Classifying Toposes. , 2002, , 193-220.		1
85	The logic of transitive and dense frames: from the step-frame analysis to full cut-elimination. Logic Journal of the IGPL, 2014, 22, 585-596.	1.3	1
86	Formal verification of data-intensive applications through model checking modulo theories. , 2017, , .		1
87	EXISTENTIALLY CLOSED BROUWERIAN SEMILATTICES. Journal of Symbolic Logic, 2019, 84, 1544-1575.	0.4	1
88	Diego's Theorem for nuclear implicative semilattices. Indagationes Mathematicae, 2021, 32, 498-535.	0.2	1
89	Substitution, Quantifiers and Identity in Modal Logic. Applied Logic Series, 2001, , 87-115.	0.3	1
90	Counter Simulations via Higher Order Quantifier Elimination: a preliminary report. Electronic Proceedings in Theoretical Computer Science, EPTCS, 0, 262, 39-53.	0.8	1

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91	A Formal Verification of ArpON â€" A Tool for Avoiding Man-in-the-Middle Attacks in Ethernet Networks. IEEE Transactions on Dependable and Secure Computing, 2022, 19, 4082-4098.	3.7	1
92	One-step Heyting Algebras and Hypersequent Calculi with the Bounded Proof Property. Journal of Logic and Computation, 2016, , exw029.	0.5	0
93	Higher-Order Quantifier Elimination, Counter Simulations and Fault-Tolerant Systems. Journal of Automated Reasoning, 2021, 65, 425-460.	1.1	0
94	Monotonic Abstraction Techniques: from Parametric to Software Model Checking. Electronic Proceedings in Theoretical Computer Science, EPTCS, 0, 168, 1-11.	0.8	0