# Laura Kovacs

List of Publications by Year
in descending order

| 66 papers | 1,054 citations | 759233 12 h-index | 526287 27 g-index |
|---|---|---|---|
| 76 all docs | 76 docs citations | 76 times ranked | 397 citing authors |

| # | ARTICLE | IF | CITATIONS |
|---|---------|-----|-----------|
| 1 | First-Order Theorem Proving and Vampire. Lecture Notes in Computer Science, 2013, , 1-35. | 1.3 | 229 |
| 2 | Theorema: Towards computer-aided mathematical theory exploration. Journal of Applied Logic, 2006, 4, 470-504. | 1.1 | 94 |
| 3 | Finding Loop Invariants for Programs over Arrays Using a Theorem Prover. Lecture Notes in Computer Science, 2009, , 470-485. | 1.3 | 91 |
| 4 | Reasoning Algebraically About P-Solvable Loops. , 2008, , 249-264. | | 48 |
| 5 | Interpolation and Symbol Elimination. Lecture Notes in Computer Science, 2009, , 199-213. | 1.3 | 39 |
| 6 | Interpolation and Symbol Elimination in Vampire. Lecture Notes in Computer Science, 2010, , 188-195. | 1.3 | 34 |
| 7 | ABC: Algebraic Bound Computation for Loops. Lecture Notes in Computer Science, 2010, , 103-118. | 1.3 | 30 |
| 8 | Symbolic Loop Bound Computation for WCET Analysis. Lecture Notes in Computer Science, 2012, , 227-242. | 1.3 | 28 |
| 9 | Invariant Generation for Multi-Path Loops with Polynomial Assignments. Lecture Notes in Computer Science, 2018, , 226-246. | 1.3 | 26 |
| 10 | WCET squeezing. , 2013, , . | | 23 |
| 11 | Coming to terms with quantified reasoning. , 2017, , . | | 21 |
| 12 | Automatic Generation of Moment-Based Invariants for Prob-Solvable Loops. Lecture Notes in Computer Science, 2019, , 255-276. | 1.3 | 21 |
| 13 | Automated Generation of Non-Linear Loop Invariants Utilizing Hypergeometric Sequences. , 2017, , . | | 20 |
| 14 | Invariant Generation in Vampire. Lecture Notes in Computer Science, 2011, , 60-64. | 1.3 | 19 |
| 15 | Finding Loop Invariants for Programs over Arrays Using a Theorem Prover. , 2009, , . | | 15 |
| 16 | Automated Termination Analysis of Polynomial Probabilistic Programs. Lecture Notes in Computer Science, 2021, , 491-518. | 1.3 | 14 |
| 17 | A Complete Invariant Generation Approach for P-solvable Loops. Lecture Notes in Computer Science, 2010, , 242-256. | 1.3 | 14 |
| 18 | Playing in the grey area of proofs. , 2012, , . | | 13 |

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| 19 | The vampire and the FOOL. , 2016, , . | | 13 |
| 20 | r-TuBound: Loop Bounds for WCET Analysis (Tool Paper). Lecture Notes in Computer Science, 2012, , 435-444. | 1.3 | 13 |
| 21 | Combining Logic and Algebraic Techniques for Program Verification in Theorema. , 2006, , . | | 12 |
| 22 | Aligator: A Mathematica Package for Invariant Generation (System Description). Lecture Notes in Computer Science, 2008, , 275-282. | 1.3 | 12 |
| 23 | Mora - Automatic Generation of Moment-Based Invariants. Lecture Notes in Computer Science, 2020, , 492-498. | 1.3 | 12 |
| 24 | Playing in the grey area of proofs. ACM SIGPLAN Notices, 2012, 47, 259-272. | 0.2 | 11 |
| 25 | Induction with Generalization in Superposition Reasoning. Lecture Notes in Computer Science, 2020, , 123-137. | 1.3 | 11 |
| 26 | Supervisory Control of Discrete-Event Systems via IC3. Lecture Notes in Computer Science, 2014, , 252-266. | 1.3 | 10 |
| 27 | Analysis of Bayesian Networks via Prob-Solvable Loops. Lecture Notes in Computer Science, 2020, , 221-241. | 1.3 | 9 |
| 28 | Invariant and Type Inference for Matrices. Lecture Notes in Computer Science, 2010, , 163-179. | 1.3 | 9 |
| 29 | Coming to terms with quantified reasoning. ACM SIGPLAN Notices, 2017, 52, 260-270. | 0.2 | 9 |
| 30 | Verifying Relational Properties using Trace Logic. , 2019, , . | | 8 |
| 31 | Aligators for Arrays (Tool Paper). Lecture Notes in Computer Science, 2010, , 348-356. | 1.3 | 8 |
| 32 | Subsumption Demodulation in First-Order Theorem Proving. Lecture Notes in Computer Science, 2020, , 297-315. | 1.3 | 7 |
| 33 | Extensional Crisis and Proving Identity. Lecture Notes in Computer Science, 2014, , 185-200. | 1.3 | 7 |
| 34 | A First Class Boolean Sort in First-Order Theorem Proving and TPTP. Lecture Notes in Computer Science, 2015, , 71-86. | 1.3 | 7 |
| 35 | Case Studies on Invariant Generation Using a Saturation Theorem Prover. Lecture Notes in Computer Science, 2011, , 1-15. | 1.3 | 7 |
| 36 | Symbolic Computation and Automated Reasoning for Program Analysis. Lecture Notes in Computer Science, 2016, , 20-27. | 1.3 | 6 |

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|---|---------|-----|-----------|
| 37 | Aligator.jl â€" A Julia Package for Loop Invariant Generation. Lecture Notes in Computer Science, 2018, , 111-117. | 1.3 | 6 |
| 38 | Invariant Generation for P-Solvable Loops with Assignments. , 2008, , 349-359. | | 5 |
| 39 | Segment Abstraction for Worst-Case Execution Time Analysis. Lecture Notes in Computer Science, 2015, , 105-131. | 1.3 | 5 |
| 40 | Integer Induction in Saturation. Lecture Notes in Computer Science, 2021, , 361-377. | 1.3 | 4 |
| 41 | Vinter: A Vampire-Based Tool for Interpolation. Lecture Notes in Computer Science, 2012, , 148-156. | 1.3 | 4 |
| 42 | A FOOLish Encoding of the Next State Relations of Imperative Programs. Lecture Notes in Computer Science, 2018, , 405-421. | 1.3 | 4 |
| 43 | The Probabilistic Termination Tool Amber. Lecture Notes in Computer Science, 2021, , 667-675. | 1.3 | 4 |
| 44 | Summing up Smart Transitions. Lecture Notes in Computer Science, 2021, , 317-340. | 1.3 | 3 |
| 45 | Algebra-Based Synthesis of Loops and Their Invariants (Invited Paper). Lecture Notes in Computer Science, 2021, , 17-28. | 1.3 | 3 |
| 46 | Interactive Visualization of Saturation Attempts in Vampire. Lecture Notes in Computer Science, 2019, , 504-513. | 1.3 | 3 |
| 47 | ExperimentingÂwithÂSATÂSolversÂinÂVampire. Lecture Notes in Computer Science, 2014, , 431-442. | 1.3 | 3 |
| 48 | Solving Robust Glucose-Insulin Control by Dixon Resultant Computations. , 2012, , . | | 2 |
| 49 | Bound Propagation for Arithmetic Reasoning in Vampire. , 2013, , . | | 2 |
| 50 | Replacing conjectures by positive knowledge: Inferring proven precise worst-case execution time bounds using symbolic execution. Journal of Symbolic Computation, 2017, 80, 101-124. | 0.8 | 2 |
| 51 | Portfolio SAT and SMT Solving of Cardinality Constraints in Sensor Network Optimization. , 2019, , . | | 2 |
| 52 | Algebra-Based Loop Synthesis. Lecture Notes in Computer Science, 2020, , 440-459. | 1.3 | 2 |
| 53 | A Supervisory Control Algorithm Based on Property-Directed Reachability. Lecture Notes in Computer Science, 2017, , 115-130. | 1.3 | 2 |
| 54 | The Inverse Method for Many-Valued Logics. Lecture Notes in Computer Science, 2013, , 12-23. | 1.3 | 2 |

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| 55 | Lingva: Generating and Proving Program Properties Using Symbol Elimination. Lecture Notes in Computer Science, 2015, , 67-75. | 1.3 | 2 |
| 56 | Algebra-Based Reasoning for Loop Synthesis. Formal Aspects of Computing, 0, , . | 1.8 | 2 |
| 57 | Loop Analysis by Quantification over Iterations. , 0, , . | | 2 |
| 58 | Automated Generation of Exam Sheets for Automated Deduction. Lecture Notes in Computer Science, 2021, , 185-196. | 1.3 | 1 |
| 59 | Automating Induction by Reflection. Electronic Proceedings in Theoretical Computer Science, EPTCS, 0, 337, 39-54. | 0.8 | 1 |
| 60 | Reasoning About Loops Using Vampire in KeY. Lecture Notes in Computer Science, 2015, , 434-443. | 1.3 | 1 |
| 61 | SmacC: A Retargetable Symbolic Execution Engine. Lecture Notes in Computer Science, 2013, , 482-486. | 1.3 | 1 |
| 62 | A Parametric Interpolation Framework for First-Order Theories. Lecture Notes in Computer Science, 2013, , 24-40. | 1.3 | 1 |
| 63 | Splitting Proofs for Interpolation. Lecture Notes in Computer Science, 2017, , 291-309. | 1.3 | 1 |
| 64 | Special issue on Automated Specification and Verification of Web Systems. The Journal of Logic and Algebraic Programming, 2013, 82, 241-242. | 1.4 | 0 |
| 65 | Superposition Reasoning about Quantified Bitvector Formulas. , 2019, , . | | 0 |
| 66 | Formalizing Graph Trail Properties in Isabelle/HOL. Lecture Notes in Computer Science, 2020, , 190-205. | 1.3 | 0 |