

# Frederic Loulergue

## List of Publications by Year in descending order

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Version: 2024-02-01

80  
papers

434  
citations

933447

10  
h-index

888059

17  
g-index

82  
all docs

82  
docs citations

82  
times ranked

114  
citing authors

#	ARTICLE	IF	CITATIONS
1	Reflections on the Design of Parallel Programming Frameworks. Communications in Computer and Information Science, 2021, , 154-181.	0.5	1
2	Transforming powerlist-based divide-and-conquer programs for an improved execution model. Journal of Supercomputing, 2020, 76, 5016-5037.	3.6	2
3	Automatic Optimization of Python Skeletal Parallel Programs. Lecture Notes in Computer Science, 2020, , 183-197.	1.3	1
4	Verified Runtime Assertion Checking for Memory Properties. Lecture Notes in Computer Science, 2020, , 100-121.	1.3	3
5	Towards Full Proof Automation in Frama-C Using Auto-active Verification. Lecture Notes in Computer Science, 2019, , 88-105.	1.3	11
6	PySke: Algorithmic Skeletons for Python. , 2019, , .		4
7	Towards Automatically Optimizing PySke Programs. , 2019, , .		2
8	New List Skeletons for the Python Skeleton Library. , 2019, , .		0
9	Logic against ghosts. , 2019, , .		4
10	Soundness of a Dataflow Analysis for Memory Monitoring. ACM SIGAda Ada Letters, 2019, 38, 97-108.	0.1	4
11	A First Step in the Translation of Alloy to Coq. Lecture Notes in Computer Science, 2019, , 455-469.	1.3	0
12	Parallel programming with Coq. , 2019, , .		1
13	Ghosts for Lists: A Critical Module of Contiki Verified in Frama-C. Lecture Notes in Computer Science, 2018, , 37-53.	1.3	14
14	MMFilter : A CHR-Based Solver for Generation of Executions under Weak Memory Models. Computer Languages, Systems and Structures, 2018, 53, 121-142.	1.4	0
15	Towards the Generation of Correct Java Programs (Research Poster). , 2018, , .		0
16	Parallel Programming with OCaml: A Tutorial. , 2018, , .		0
17	Strong Security Guarantees: From Alloy to Coq (Research Poster). , 2018, , .		0
18	A Cloud Brokerage Solution: Formal Methods Meet Security in Cloud Federations. , 2018, , .		4

#	ARTICLE	IF	CITATIONS
19	A Lesson on Verification of IoT Software with Frama-C. , 2018, , .		7
20	Tutorial: Secure Your Things: Secure Development of IoT Software with Frama-C. , 2018, , .		2
21	Verified Programs for Frequent Itemset Mining. , 2018, , .		0
22	Interactive Bulk Synchronous Parallel Functional Programming in a Browser. , 2018, , .		0
23	Calculating Parallel Programs in Coq Using List Homomorphisms. International Journal of Parallel Programming, 2017, 45, 300-319.	1.5	16
24	Replicated Synchronization for Imperative BSP Programs. Procedia Computer Science, 2017, 108, 535-544.	2.0	7
25	Imperative BSPlib-style Communications in BSML. Procedia Computer Science, 2017, 108, 2368-2372.	2.0	0
26	Automated Generation of BSP Automata. Parallel Processing Letters, 2017, 27, 1740002.	0.6	1
27	A Java Framework for High Level Parallel Programming Using Powerlists. , 2017, , .		7
28	A Verified Accumulate Algorithmic Skeleton. , 2017, , .		4
29	Towards a Verified Parallel Implementation of Frequent Itemset Mining. , 2017, , .		0
30	Formalization of a Big Graph API in Coq. , 2017, , .		0
31	Implementing Algorithmic Skeletons with Bulk Synchronous Parallel ML. , 2017, , .		6
32	Introduction to the Special Issue on Practical Aspects of High-Level Parallel Programming. Scalable Computing, 2017, 18, .	1.0	0
33	A BSPlib-style API for Bulk Synchronous Parallel ML. Scalable Computing, 2017, 18, .	1.0	5
34	Conc2Seq: A Frama-C Plugin for Verification of Parallel Compositions of C Programs. , 2016, , .		4
35	A formal semantics of nested atomic sections with thread escape. Computer Languages, Systems and Structures, 2015, 42, 2-21.	1.4	0
36	Nested atomic sections with thread escape. , 2015, , .		0

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37	Formal derivation and extraction of a parallel program for the all nearest smaller values problem. , 2014, , .		7
38	Nested atomic sections with thread escape. , 2014, , .		1
39	Development effort and performance trade-off in high-level parallel programming. , 2014, , .		4
40	Handling Data-skew Effects in Join Operations Using MapReduce. Procedia Computer Science, 2014, 29, 145-158.	2.0	21
41	Implementing Powerlists with Bulk Synchronous Parallel ML. , 2014, , .		2
42	A Verified Generate-Test-Aggregate Coq Library for Parallel Programs Extraction. Lecture Notes in Computer Science, 2014, , 258-274.	1.3	7
43	Managing arbitrary distributions of arrays in Orl&#x00E9;ans Skeleton Library. , 2013, , .		4
44	Nested Atomic Sections with Thread Escape: An Operational Semantics. , 2013, , .		4
45	OSL: An Algorithmic Skeleton Library with Exceptions. Procedia Computer Science, 2013, 18, 260-269.	2.0	10
46	Powerlists in Coq: Programming and Reasoning. , 2013, , .		2
47	Programming with BSP Homomorphisms. Lecture Notes in Computer Science, 2013, , 446-457.	1.3	4
48	Towards verified cloud computing environments. , 2012, , .		3
49	A Verified Library of Algorithmic Skeletons on Evenly Distributed Arrays. Lecture Notes in Computer Science, 2012, , 218-232.	1.3	2
50	Verification of a Heat Diffusion Simulation Written with Orl&#x00E9;ans Skeleton Library. Lecture Notes in Computer Science, 2012, , 91-100.	1.3	0
51	Experiments in Parallel Matrix Multiplication on Multi-core Systems. Lecture Notes in Computer Science, 2012, , 362-376.	1.3	1
52	Parallel programming and performance predictability with Orl&#x00E9;ans Skeleton Library. , 2011, , .		8
53	A Verified Bulk Synchronous Parallel ML Heat Diffusion Simulation. Procedia Computer Science, 2011, 4, 36-45.	2.0	13
54	An efficient skew-insensitive algorithm for join processing on grid architectures. , 2011, , .		0

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55	Type system for a safe execution of parallel programs in BSML , 2011, , .		2
56	Program Calculation in Coq. Lecture Notes in Computer Science, 2011, , 163-179.	1.3	10
57	A Formal Programming Model of Orleans Skeleton Library. Lecture Notes in Computer Science, 2011, , 40-52.	1.3	6
58	Bulk synchronous parallel ML with exceptions. Future Generation Computer Systems, 2010, 26, 486-490.	7.5	18
59	Functional Parallel Programming with Revised Bulk Synchronous Parallel ML. , 2010, , .		5
60	Systematic Development of Correct Bulk Synchronous Parallel Programs. , 2010, , .		14
61	OSL: Optimized Bulk Synchronous Parallel Skeletons on Distributed Arrays. Lecture Notes in Computer Science, 2009, , 436-451.	1.3	11
62	Divide-and-Conquer Parallel Programming with Minimally Synchronous Parallel ML. , 2008, , 1078-1085.		0
63	Introduction to the special issue on semantics and costs models for high-level parallel programming. Computer Languages, Systems and Structures, 2007, 33, 79-81.	1.4	0
64	Formal Semantics of DRMA-Style Programming in BSPLib. , 2007, , 1122-1129.		8
65	Bulk Synchronous Parallel ML with Exceptions. , 2007, , 33-42.		1
66	Semantics of an Exception Mechanism for Bulk Synchronous Parallel ML. , 2007, , .		0
67	A static analysis for Bulk Synchronous Parallel ML to avoid parallel nesting. Future Generation Computer Systems, 2005, 21, 665-671.	7.5	21
68	Bulk Synchronous Parallel ML: Modular Implementation and Performance Prediction. Lecture Notes in Computer Science, 2005, , 1046-1054.	1.3	53
69	A FUNCTIONAL LANGUAGE FOR DEPARTMENTAL METACOMPUTING. Parallel Processing Letters, 2005, 15, 289-304.	0.6	6
70	PREFACE: Special Issue on High-Level Parallel Programming and Applications. Parallel Processing Letters, 2003, 13, 313-316.	0.6	1
71	A Parallel Virtual Machine for Bulk Synchronous Parallel ML. Lecture Notes in Computer Science, 2003, , 155-164.	1.3	4
72	Parallel Superposition for Bulk Synchronous Parallel ML. Lecture Notes in Computer Science, 2003, , 223-232.	1.3	9

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73	A Polymorphic Type System for Bulk Synchronous Parallel ML. Lecture Notes in Computer Science, 2003, , 215-229.	1.3	8
74	Parallel Juxtaposition for Bulk Synchronous Parallel ML. Lecture Notes in Computer Science, 2003, , 781-788.	1.3	8
75	Concrete data structures and functional parallel programming. Theoretical Computer Science, 2001, 258, 233-267.	0.9	3
76	A calculus of functional BSP programs. Science of Computer Programming, 2000, 37, 253-277.	1.9	31
77	BS $\hat{\gg}$ ppp: Functional BSP Programs on Enumerated Vectors. Lecture Notes in Computer Science, 2000, , 355-363.	1.3	3
78	Functional parallel programming with explicit processes: Beyond SPMD. Lecture Notes in Computer Science, 1997, , 530-537.	1.3	5
79	From Concurrent Programs to Simulating Sequential Programs: Correctness of a Transformation. Electronic Proceedings in Theoretical Computer Science, EPTCS, 0, 253, 109-123.	0.8	0
80	Experience Report: Teaching Code Analysis and Verification Using Frama-C. Electronic Proceedings in Theoretical Computer Science, EPTCS, 0, 349, 69-75.	0.8	1