

# David R Lester

## List of Publications by Year in descending order

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Version: 2024-02-01

29  
papers

1,394  
citations

840119

11  
h-index

676716

22  
g-index

29  
all docs

29  
docs citations

29  
times ranked

1282  
citing authors

#	ARTICLE	IF	CITATIONS
1	Overview of the SpiNNaker System Architecture. IEEE Transactions on Computers, 2013, 62, 2454-2467.	2.4	479
2	SpiNNaker: A 1-W 18-Core System-on-Chip for Massively-Parallel Neural Network Simulation. IEEE Journal of Solid-State Circuits, 2013, 48, 1943-1953.	3.5	450
3	Performance Comparison of the Digital Neuromorphic Hardware SpiNNaker and the Neural Network Simulation Software NEST for a Full-Scale Cortical Microcircuit Model. Frontiers in Neuroscience, 2018, 12, 291.	1.4	100
4	sPyNNaker: A Software Package for Running PyNN Simulations on SpiNNaker. Frontiers in Neuroscience, 2018, 12, 816.	1.4	61
5	Verified Real Number Calculations: A Library for Interval Arithmetic. IEEE Transactions on Computers, 2009, 58, 226-237.	2.4	41
6	Code Generation in Computational Neuroscience: A Review of Tools and Techniques. Frontiers in Neuroinformatics, 2018, 12, 68.	1.3	32
7	SpiNNTools: The Execution Engine for the SpiNNaker Platform. Frontiers in Neuroscience, 2019, 13, 231.	1.4	25
8	A modular fully-lazy lambda lifter in Haskell. Software - Practice and Experience, 1991, 21, 479-506.	2.5	23
9	Concurrent heterogeneous neural model simulation on real-time neuromimetic hardware. Neural Networks, 2011, 24, 961-978.	3.3	22
10	A fixed point exponential function accelerator for a neuromorphic many-core system. , 2017, , .		21
11	FUNCTIONAL PEARL: Enumerating the rationals. Journal of Functional Programming, 2006, 16, 281.	0.5	20
12	Using PVS to validate the algorithms of an exact arithmetic. Theoretical Computer Science, 2003, 291, 203-218.	0.5	18
13	Topology in PVS. , 2007, , .		14
14	A location-independent direct link neuromorphic interface. , 2013, , .		13
15	Real Number Calculations and Theorem Proving. Lecture Notes in Computer Science, 2005, , 195-210.	1.0	12
16	Spiking Neural PID Controllers. Lecture Notes in Computer Science, 2011, , 259-267.	1.0	10
17	SpiNNaker: Fault tolerance in a power- and area- constrained large-scale neuromimetic architecture. Parallel Computing, 2013, 39, 693-708.	1.3	9
18	Approximate Fixed-Point Elementary Function Accelerator for the SpiNNaker-2 Neuromorphic Chip. , 2018, , .		9

#	ARTICLE	IF	CITATIONS
19	Real Number Calculations and Theorem Proving. Lecture Notes in Computer Science, 2008, , 215-229.	1.0	7
20	A monadic approach to automated reasoning for Bluespec SystemVerilog. Innovations in Systems and Software Engineering, 2011, 7, 85-95.	1.6	6
21	Transport-Independent Protocols for Universal AER Communications. Lecture Notes in Computer Science, 2015, , 675-684.	1.0	4
22	SpiNNaker: The Design Automation Problem. Lecture Notes in Computer Science, 2009, , 1049-1056.	1.0	4
23	A constructive algorithm for finding the exact roots of polynomials with computable real coefficients. Theoretical Computer Science, 2002, 279, 51-64.	0.5	3
24	Stochastic Formal Methods: An Application to Accuracy of Numeric Software. , 2007, , .		3
25	Improved bound for stochastic formal correctness of numerical algorithms. Innovations in Systems and Software Engineering, 2010, 6, 173-179.	1.6	3
26	A communication infrastructure for a million processor machine. , 2010, , .		2
27	Using PVS to Validate the Inverse Trigonometric Functions of an Exact Arithmetic. Lecture Notes in Computer Science, 2004, , 259-273.	1.0	2
28	The world's shortest correct exact real arithmetic program?. Information and Computation, 2012, 216, 39-46.	0.5	1
29	Machine-efficient Chebyshev approximation for exact arithmetic. , 2010, , .		0