Joel Lehman

List of Publications by Citations

31 papers	1,174 citations	14 h-index	34 g-index
34 ext. papers	1,571 ext. citations	7 avg, IF	5.14 L-index

#	Paper	IF	Citations
31	Abandoning objectives: evolution through the search for novelty alone. *Evolutionary Computation*, **2011**, 19, 189-223	4.3	400
30	Designing neural networks through neuroevolution. *Nature Machine Intelligence*, **2019**, 1, 24-35	22.5	227
29	Evolving a diversity of virtual creatures through novelty search and local competition **2011**,		140
28	A Neuroevolution Approach to General Atari Game Playing. *IEEE Transactions on Games*, **2014**, 6, 355-366		64
27	Evolvability is inevitable: increasing evolvability without the pressure to adapt. *PLoS ONE*, **2013**, 8, e62186	3.7	33
26	The Surprising Creativity of Digital Evolution: A Collection of Anecdotes from the Evolutionary Computation and Artificial Life Research Communities. *Artificial Life*, **2020**, 26, 274-306	1.4	31
25	Why Greatness Cannot Be Planned **2015**,		29
24	Novelty Search and the Problem with Objectives. *Genetic and Evolutionary Computation*, **2011**, 37-56	0.8	27
23	The Surprising Creativity of Digital Evolution **2018**,		24
22	First return, then explore. *Nature*, **2021**, 590, 580-586	50.4	23
21	**2011**,		21
20	Safe mutations for deep and recurrent neural networks through output gradients **2018**,		19
19	Learning Behavior Characterizations for Novelty Search **2016**,		16
18	Encouraging reactivity to create robust machines. *Adaptive Behavior*, **2013**, 21, 484-500	1.1	15
17	ES is more than just a traditional finite-difference approximator **2018**,		14
16	Overcoming deception in evolution of cognitive behaviors **2014**,		13
15	Extinction events can accelerate evolution. *PLoS ONE*, **2015**, 10, e0132886	3.7	11

List of Publications

14	POET **2019**,		10
13	Grasping novel objects with a dexterous robotic hand through neuroevolution **2014**,		10
12	Enhancing Divergent Search through Extinction Events **2015**,		7
11	Evolvability Search **2016**,		7
10	Multirobot Behavior Synchronization through Direct Neural Network Communication. *Lecture Notes in Computer Science*, **2012**, 603-614	0.9	7
9	Task switching in multirobot learning through indirect encoding **2011**,		5
8	On the Critical Role of Divergent Selection in Evolvability. *Frontiers in Robotics and AI*, **2016**, 3,	2.8	5
7	Investigating Biological Assumptions through Radical Reimplementation. *Artificial Life*, **2015**, 21, 21-46	1.4	4
6	Rewarding Reactivity to Evolve Robust Controllers without Multiple Trials or Noise		4
5	Tradeoffs in Neuroevolutionary Learning-Based Real-Time Robotic Task Design in the Imprecise Computation Framework. *ACM Transactions on Cyber-Physical Systems*, **2019**, 3, 1-29	2.3	3
4	Evolvability ES **2019**,		2
3	Tradeoffs in Real-Time Robotic Task Design with Neuroevolution Learning for Imprecise Computation **2015**,		2
2	Boosting Interactive Evolution Using Human Computation Markets. *Lecture Notes in Computer Science*, **2013**, 1-18	0.9	1
1	The Interesting and the Novel **2015**, 39-54		