

# Kenneth O Stanley

## List of Publications by Year in descending order

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Version: 2024-02-01

104  
papers

8,313  
citations

236925

25  
h-index

189892

50  
g-index

106  
all docs

106  
docs citations

106  
times ranked

3514  
citing authors

#	ARTICLE	IF	CITATIONS
1	First return, then explore. <i>Nature</i> , 2021, 590, 580-586.	27.8	103
2	The Surprising Creativity of Digital Evolution: A Collection of Anecdotes from the Evolutionary Computation and Artificial Life Research Communities. <i>Artificial Life</i> , 2020, 26, 274-306.	1.3	88
3	Why Open-Endedness Matters. <i>Artificial Life</i> , 2019, 25, 232-235.	1.3	13
4	An Overview of Open-Ended Evolution: Editorial Introduction to the Open-Ended Evolution II Special Issue. <i>Artificial Life</i> , 2019, 25, 93-103.	1.3	18
5	POET. , 2019, , .		30
6	Benchmarking open-endedness in minimal criterion coevolution. , 2019, , .		1
7	Evolvability ES. , 2019, , .		9
8	Deep neuroevolution of recurrent and discrete world models. , 2019, , .		25
9	Designing neural networks through neuroevolution. <i>Nature Machine Intelligence</i> , 2019, 1, 24-35.	16.0	406
10	Art in the Sciences of the Artificial. <i>Leonardo</i> , 2018, 51, 165-172.	0.3	4
11	The Emergence of Canalization and Evolvability in an Open-Ended, Interactive Evolutionary System. <i>Artificial Life</i> , 2018, 24, 157-181.	1.3	9
12	ES is more than just a traditional finite-difference approximator. , 2018, , .		18
13	Born to learn: The inspiration, progress, and future of evolved plastic artificial neural networks. <i>Neural Networks</i> , 2018, 108, 48-67.	5.9	73
14	Safe mutations for deep and recurrent neural networks through output gradients. , 2018, , .		41
15	VINE. , 2018, , .		4
16	Generative and developmental systems tutorial. , 2017, , .		0
17	Voxelbuild. , 2017, , .		5
18	Minimal criterion coevolution. , 2017, , .		21

#	ARTICLE	IF	CITATIONS
19	Generative and Developmental Systems Tutorial. , 2016, , .		0
20	Quality Diversity: A New Frontier for Evolutionary Computation. Frontiers in Robotics and AI, 2016, 3, .	3.2	228
21	On the Critical Role of Divergent Selection in Evolvability. Frontiers in Robotics and AI, 2016, 3, .	3.2	9
22	Open-Ended Evolution: Perspectives from the OEE Workshop in York. Artificial Life, 2016, 22, 408-423.	1.3	73
23	WebAL Comes of Age: A Review of the First 21 Years of Artificial Life on the Web. Artificial Life, 2016, 22, 364-407.	1.3	7
24	Simple Evolutionary Optimization Can Rival Stochastic Gradient Descent in Neural Networks. , 2016, , .		73
25	Searching for Quality Diversity When Diversity is Unaligned with Quality. Lecture Notes in Computer Science, 2016, , 880-889.	1.3	6
26	Petalz: Search-Based Procedural Content Generation for the Casual Gamer. IEEE Transactions on Games, 2016, 8, 244-255.	1.4	29
27	Indirectly Encoding Running and Jumping Sodarace Creatures for Artificial Life. Artificial Life, 2015, 21, 432-444.	1.3	1
28	Altruists Proliferate Even at a Selective Disadvantage within Their Own Niche. PLoS ONE, 2015, 10, e0128654.	2.5	2
29	Generative and Developmental Systems Tutorial. , 2015, , .		0
30	Integrated Approach to Personalized Procedural Map Generation Using Evolutionary Algorithms. IEEE Transactions on Games, 2015, 7, 139-155.	1.4	10
31	Investigating Biological Assumptions through Radical Reimplementation. Artificial Life, 2015, 21, 21-46.	1.3	4
32	Why Greatness Cannot Be Planned. , 2015, , .		52
33	Confronting the Challenge of Quality Diversity. , 2015, , .		74
34	Functional Scaffolding for Composing Additional Musical Voices. Computer Music Journal, 2014, 38, 80-99.	0.1	13
35	Guided self-organization in indirectly encoded and evolving topographic maps. , 2014, , .		5
36	Directional communication in evolved multiagent teams. , 2014, , .		1

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37	A novel human-computer collaboration. , 2014, , .		23
38	Generative and developmental systems tutorial. , 2014, , .		0
39	HyperNEAT: The First Five Years. Studies in Computational Intelligence, 2014, , 159-185.	0.9	9
40	Scalable multiagent learning through indirect encoding of policy geometry. Evolutionary Intelligence, 2013, 6, 1-26.	3.6	22
41	Generative and developmental systems. , 2013, , .		0
42	NeuroEvolutionary meta-optimization. , 2013, , .		1
43	Effective diversity maintenance in deceptive domains. , 2013, , .		35
44	Evolving multimodal controllers with HyperNEAT. , 2013, , .		16
45	Single-unit pattern generators for quadruped locomotion. , 2013, , .		20
46	Confronting the challenge of learning a flexible neural controller for a diversity of morphologies. , 2013, , .		13
47	Encouraging reactivity to create robust machines. Adaptive Behavior, 2013, 21, 484-500.	1.9	17
48	Evolvability Is Inevitable: Increasing Evolvability without the Pressure to Adapt. PLoS ONE, 2013, 8, e62186.	2.5	44
49	Generative and developmental systems. , 2012, , .		0
50	Evolving neural networks. , 2012, , .		2
51	An Enhanced Hypercube-Based Encoding for Evolving the Placement, Density, and Connectivity of Neurons. Artificial Life, 2012, 18, 331-363.	1.3	42
52	A unified approach to evolving plasticity and neural geometry. , 2012, , .		26
53	From modulated Hebbian plasticity to simple behavior learning through noise and weight saturation. Neural Networks, 2012, 34, 28-41.	5.9	25
54	Multirobot Behavior Synchronization through Direct Neural Network Communication. Lecture Notes in Computer Science, 2012, , 603-614.	1.3	8

#	ARTICLE	IF	CITATIONS
55	Abandoning Objectives: Evolution Through the Search for Novelty Alone. <i>Evolutionary Computation</i> , 2011, 19, 189-223.	3.0	595
56	Task switching in multirobot learning through indirect encoding. , 2011, , .		5
57	Search-Based Procedural Content Generation: A Taxonomy and Survey. <i>IEEE Transactions on Games</i> , 2011, 3, 172-186.	1.4	412
58	On the Performance of Indirect Encoding Across the Continuum of Regularity. <i>IEEE Transactions on Evolutionary Computation</i> , 2011, 15, 346-367.	10.0	106
59	Pareto-based evolutionary computational approach for wireless sensor placement. <i>Engineering Applications of Artificial Intelligence</i> , 2011, 24, 409-425.	8.1	22
60	On the deleterious effects of a priori objectives on evolution and representation. , 2011, , .		36
61	Constraining connectivity to encourage modularity in HyperNEAT. , 2011, , .		45
62	Picbreeder: A Case Study in Collaborative Evolutionary Exploration of Design Space. <i>Evolutionary Computation</i> , 2011, 19, 373-403.	3.0	153
63	Enhancing es-hyperneat to evolve more complex regular neural networks. , 2011, , .		18
64	Improving evolvability through novelty search and self-adaptation. , 2011, , .		27
65	Interactively evolving harmonies through functional scaffolding. , 2011, , .		15
66	Evolving a diversity of virtual creatures through novelty search and local competition. , 2011, , .		230
67	Evolving neural networks for geometric game-tree pruning. , 2011, , .		4
68	Novelty Search and the Problem with Objectives. <i>Genetic and Evolutionary Computation</i> , 2011, , 37-56.	1.0	56
69	Why Evolutionary Robotics Will Matter. <i>Studies in Computational Intelligence</i> , 2011, , 37-41.	0.9	4
70	Task switching in multirobot learning through indirect encoding. , 2011, , .		0
71	Galactic Arms Race. <i>ACM SIGEVOlution</i> , 2010, 4, 2-10.	0.5	3
72	Evolving the placement and density of neurons in the hyperneat substrate. , 2010, , .		20

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73	Generative and developmental systems. , 2010, , .		0
74	Revising the evolutionary computation abstraction. , 2010, , .		114
75	Transfer learning through indirect encoding. , 2010, , .		10
76	Autonomous Evolution of Topographic Regularities in Artificial Neural Networks. Neural Computation, 2010, 22, 1860-1898.	2.2	108
77	Search-Based Procedural Content Generation. Lecture Notes in Computer Science, 2010, , 141-150.	1.3	83
78	Learning to Dance through Interactive Evolution. Lecture Notes in Computer Science, 2010, , 331-340.	1.3	16
79	Indirectly Encoding Neural Plasticity as a Pattern of Local Rules. Lecture Notes in Computer Science, 2010, , 533-543.	1.3	42
80	Indirect Encoding of Neural Networks for Scalable Go. , 2010, , 354-363.		10
81	Evolving a Single Scalable Controller for an Octopus Arm with a Variable Number of Segments. , 2010, , 270-279.		12
82	Evolving content in the Galactic Arms Race video game. , 2009, , .		90
83	Evolving neural networks. , 2009, , .		3
84	A Hypercube-Based Encoding for Evolving Large-Scale Neural Networks. Artificial Life, 2009, 15, 185-212.	1.3	557
85	How novelty search escapes the deceptive trap of learning to learn. , 2009, , .		48
86	Generative and developmental systems. , 2009, , .		0
87	Automatic Content Generation in the <i>Galactic Arms Race</i> Video Game. IEEE Transactions on Games, 2009, 1, 245-263.	1.4	136
88	Interactive Evolution of Particle Systems for Computer Graphics and Animation. IEEE Transactions on Evolutionary Computation, 2009, 13, 418-432.	10.0	21
89	Exploiting functional relationships in musical composition. Connection Science, 2009, 21, 227-251.	3.0	18
90	Evolving neural networks. , 2008, , .		2

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91	Generative and developmental systems. , 2008, , .		2
92	Generative encoding for multiagent learning. , 2008, , .		70
93	Picbreeder: Collaborative Interactive Evolution of Images. Leonardo, 2008, 41, 98-99.	0.3	5
94	Scaffolding for Interactively Evolving Novel Drum Tracks for Existing Songs. Lecture Notes in Computer Science, 2008, , 412-422.	1.3	10
95	A novel generative encoding for exploiting neural network sensor and output geometry. , 2007, , .		65
96	NEAT Particles: Design, Representation, and Animation of Particle System Effects. , 2007, , .		21
97	Compositional pattern producing networks: A novel abstraction of development. Genetic Programming and Evolvable Machines, 2007, 8, 131-162.	2.2	495
98	Integration and Evaluation of Exploration-Based Learning in Games. , 2006, , .		8
99	Automatic feature selection in neuroevolution. , 2005, , .		63
100	Towards an empirical measure of evolvability. , 2005, , .		21
101	Evolving Reusable Neural Modules. Lecture Notes in Computer Science, 2004, , 69-81.	1.3	36
102	Evolving a Roving Eye for Go. Lecture Notes in Computer Science, 2004, , 1226-1238.	1.3	49
103	A Taxonomy for Artificial Embryogeny. Artificial Life, 2003, 9, 93-130.	1.3	357
104	Evolving Neural Networks through Augmenting Topologies. Evolutionary Computation, 2002, 10, 99-127.	3.0	2,279