List of Publications by Year in descending order

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		687363	414414
104	1,606	13	32
papers	citations	h-index	g-index
111	111	111	1286
all docs	docs citations	times ranked	citing authors

#	Article	IF	CITATIONS
1	Open-Ended Search for Environments and Adapted Agents Using MAP-Elites. Lecture Notes in Computer Science, 2022, , 651-666.	1.3	1
2	Editorial: Evolving Robotic Morphologies. Frontiers in Robotics and AI, 2022, 9, 874853.	3.2	2
3	A Transferable Adaptive Domain Adversarial Neural Network for Virtual Reality Augmented EMG-Based Gesture Recognition. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2021, 29, 546-555.	4.9	20
4	On Restricting Real-Valued Genotypes in Evolutionary Algorithms. Lecture Notes in Computer Science, 2021, , 3-16.	1.3	3
5	Co-optimising Robot Morphology and Controller in a Simulated Open-Ended Environment. Lecture Notes in Computer Science, 2021, , 34-49.	1.3	2
6	Real-world embodied AI through a morphologically adaptive quadruped robot. Nature Machine Intelligence, 2021, 3, 410-419.	16.0	40
7	Environmental Adaptation of Robot Morphology and Control Through Real-world Evolution. Evolutionary Computation, 2021, 29, 1-21.	3.0	7
8	MAP-Elites Enables Powerful Stepping Stones and Diversity for Modular Robotics. Frontiers in Robotics and AI, 2021, 8, 639173.	3.2	13
9	Non-flipping DNA glycosylase AlkD scans DNA without formation of a stable interrogation complex. Communications Biology, 2021, 4, 876.	4.4	0
10	Evolving Neuromodulated Controllers in Variable Environments. , 2021, , .		0
11	Unsupervised Domain Adversarial Self-Calibration for Electromyography-Based Gesture Recognition. IEEE Access, 2020, 8, 177941-177955.	4.2	35
12	A Framework for Automatic Behavior Generation in Multi-Function Swarms. Frontiers in Robotics and AI, 2020, 7, 579403.	3.2	4
13	Coevolutionary Learning of Neuromodulated Controllers for Multi-Stage and Gamified Tasks. , 2020, ,		2
14	Understanding Musical Predictions With an Embodied Interface for Musical Machine Learning. Frontiers in Artificial Intelligence, 2020, 3, 6.	3.4	1
15	Quality and Diversity in Evolutionary Modular Robotics. , 2020, , .		6
16	Real world morphological evolution is feasible. , 2020, , .		2
17	How Different Encodings Affect Performance and Diversification when Evolving the Morphology and Control of 2D Virtual Creatures. , 2020, , .		9
18	Two-Stage Transfer Learning for Heterogeneous Robot Detection and 3D Joint Position Estimation in a 2D Camera Image Using CNN. , 2019, , .		6

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19	Evolved embodied phase coordination enables robust quadruped robot locomotion. , 2019, , .		9
20	Engaging with Robotic Swarms. ACM Transactions on Human-Robot Interaction, 2019, 8, 1-26.	4.1	12
21	Self-Modifying Morphology Experiments with DyRET: Dynamic Robot for Embodied Testing. , 2019, , .		10
22	Lamarckian Evolution of Simulated Modular Robots. Frontiers in Robotics and AI, 2019, 6, 9.	3.2	20
23	Deep Learning for Electromyographic Hand Gesture Signal Classification Using Transfer Learning. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2019, 27, 760-771.	4.9	440
24	Experiences from Real-World Evolution with DyRET: Dynamic Robot for Embodied Testing. Communications in Computer and Information Science, 2019, , 58-68.	0.5	5
25	Additive manufacturing of laminar flow cells for single-molecule experiments. Scientific Reports, 2019, 9, 16784.	3.3	4
26	Evolving Robots on Easy Mode: Towards a Variable Complexity Controller for Quadrupeds. Lecture Notes in Computer Science, 2019, , 616-632.	1.3	3
27	Comparing three online evolvable hardware implementations of a classification system. Genetic Programming and Evolvable Machines, 2018, 19, 211-234.	2.2	7
28	Dynamic mutation in MAP-Elites for robotic repertoire generation. , 2018, , .		9
29	Insights in evolutionary exploration of robot morphology spaces. , 2018, , .		3
30	Effects of Selection Preferences on Evolved Robot Morphologies and Behaviors. , 2018, , .		12
31	Transfer Learning for Unseen Robot Detection and Joint Estimation on a Multi-Objective Convolutional Neural Network. , 2018, , .		6
32	Breaking the speed limit with multimode fast scanning of DNA by Endonuclease V. Nature Communications, 2018, 9, 5381.	12.8	14
33	Multi-Objective Convolutional Neural Networks for Robot Localisation and 3D Position Estimation in 2D Camera Images. , 2018, , .		12
34	Robot Localisation and 3D Position Estimation Using a Free-Moving Camera and Cascaded Convolutional Neural Networks. , 2018, , .		10
35	Real-world evolution adapts robot morphology and control to hardware limitations. , 2018, , .		26

Networking-Enabling Enhancement for a Swarm of COTS Drones. , 2018, , .

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#	Article	IF	CITATIONS
37	Field-Testing of High-Level Decentralized Controllers for a Multi-Function Drone Swarm. , 2018, , .		5
38	Search Space Analysis of Evolvable Robot Morphologies. Lecture Notes in Computer Science, 2018, , 703-718.	1.3	28
39	Combining MAP-Elites and Incremental Evolution to Generate Gaits forÂaÂMammalian Quadruped Robot. Lecture Notes in Computer Science, 2018, , 719-733.	1.3	11
40	Evolving a Repertoire of Controllers for a Multi-function Swarm. Lecture Notes in Computer Science, 2018, , 734-749.	1.3	10
41	Overcoming Initial Convergence in Multi-objective Evolution of Robot Control and Morphology Using a Two-Phase Approach. Lecture Notes in Computer Science, 2017, , 825-836.	1.3	9
42	Benefits of lamarckian evolution for morphologically evolving robots. , 2017, , .		0
43	Towards a Framework for the Levels and Aspects of Self-aware Computing Systems. , 2017, , 51-85.		7
44	Meta-heuristics for Improved RF Emitter Localization. Lecture Notes in Computer Science, 2017, , 207-223.	1.3	1
45	Analysis of Lamarckian evolution in morphologically evolving robots. , 2017, , .		6
46	An Ultrasound Robotic System Using the Commercial Robot UR5. Frontiers in Robotics and AI, 2016, 3, .	3.2	85
47	Visual servoing of a medical ultrasound probe for needle insertion. , 2016, , .		3
48	Automatic calibration of a robot manipulator and multi 3D camera system. , 2016, , .		26
49	Multi-objective evolution of fast and stable gaits on a physical quadruped robotic platform. , 2016, , .		11
50	Memetic robot control evolution and adaption to reality. , 2016, , .		8
51	Multi 3D camera mapping for predictive and reflexive robot manipulator trajectory estimation. , 2016, , .		3
52	Reference Architecture for Self-aware and Self-expressive Computing Systems. Natural Computing Series, 2016, , 37-49.	2.2	6
53	Architectural Aspects of Self-Aware and Self-Expressive Computing Systems: From Psychology to Engineering. Computer, 2015, 48, 62-70.	1.1	52
54	Real-World Reproduction of Evolved Robot Morphologies: Automated Categorization and Evaluation. Lecture Notes in Computer Science, 2015, , 771-782.	1.3	9

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55	Filling the reality gap: Using obstacles to promote robust gaits in evolutionary robotics. , 2014, , .		8
56	Decentralized harmonic synchronization in mobile music systems. , 2014, , .		5
57	Evolutionary digital circuit design with fast candidate solution establishment in field programmable gate arrays. , 2014, , .		2
58	Some distance measures for morphological diversification in generative evolutionary robotics. , 2014, , ,		12
59	Lookup table partial reconfiguration for an evolvable hardware classifier system. , 2014, , .		5
60	Adaptive variable neighborhood search for solving multi-objective facility layout problems with unequal area facilities. Swarm and Evolutionary Computation, 2013, 8, 1-12.	8.1	75
61	BioSleeve: A natural EMG-based interface for HRI. , 2013, , .		23
62	Investigating evolvable hardware classification for the BioSleeve electromyographic interface. , 2013, , .		3
63	Evolving locomotion for a 12-DOF quadruped robot in simulated environments. BioSystems, 2013, 112, 102-106.	2.0	9
64	Classification of Electromyographic Signals: Comparing Evolvable Hardware to Conventional Classifiers. IEEE Transactions on Evolutionary Computation, 2013, 17, 46-63.	10.0	17
65	A hox gene inspired generative approach to evolving robot morphology. , 2013, , .		10
66	Evolving Gaits for Physical Robots with the HyperNEAT Generative Encoding: The Benefits of Simulation. Lecture Notes in Computer Science, 2013, , 540-549.	1.3	25
67	Market-Based Control in Interactive Music Environments. Lecture Notes in Computer Science, 2013, , 439-458.	1.3	Ο
68	A multi-objective evolutionary algorithm for solving integrated scheduling and layout planning problems in manufacturing systems. , 2012, , .		5
69	Job Shop Scheduling with Transportation Delays and Layout Planning in Manufacturing Systems: A Multi-objective Evolutionary Approach. Lecture Notes in Computer Science, 2012, , 209-219.	1.3	6
70	A Comparison of Sampling Strategies for Parameter Estimation of a Robot Simulator. Lecture Notes in Computer Science, 2012, , 173-184.	1.3	9
71	Evolving Locomotion for a Simulated 12-DOF Quadruped Robot. Lecture Notes in Computer Science, 2012, , 90-98.	1.3	1
72	Compensating Resource Fluctuations by Means of Evolvable Hardware. International Journal of Adaptive Resilient and Autonomic Systems, 2012, 3, 17-31.	0.3	0

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73	Evolutionary design of efficient and robust switching image filters. , 2011, , .		11
74	A Survey of Self-Awareness and Its Application in Computing Systems. , 2011, , .		80
75	Genetic algorithm using a modified backward pass heuristic for the dynamic facility layout problem *. Paladyn, 2011, 2, .	2.7	3
76	Dynamic facility layout problem under uncertainty: a Pareto-optimality based multi-objective evolutionary approach. Open Computer Science, 2011, 1, .	1.7	4
77	Multi-objective evolutionary approach for solving facility layout problem using local search. , 2010, , .		6
78	Evolution of artificial muscle-based robotic locomotion in PhysX. , 2010, , .		12
79	A Coevolutionary, Hyper Heuristic approach to the optimization of Three-dimensional Process Plant Layouts — A comparative study. , 2010, , .		2
80	Design of an adaptive interval type-2 fuzzy logic controller for the position control of a servo system with an intelligent sensor. , 2010, , .		18
81	Dynamic facility layout problem with hybrid genetic algorithm. , 2010, , .		2
82	Evolutionary multi-objective clustering with adaptive local search. , 2010, , .		0
83	Evolutionary Approaches to the Three-dimensional Multi-pipe Routing Problem: A Comparative Study Using Direct Encodings. Lecture Notes in Computer Science, 2010, , 71-82.	1.3	9
84	An Adaptive Local Search Based Genetic Algorithm for Solving Multi-objective Facility Layout Problem. Lecture Notes in Computer Science, 2010, , 540-550.	1.3	5
85	Coping with Resource Fluctuations: The Run-time Reconfigurable Functional Unit Row Classifier Architecture. Lecture Notes in Computer Science, 2010, , 250-261.	1.3	5
86	An Indirect Approach to the Three-Dimensional Multi-pipe Routing Problem. Lecture Notes in Computer Science, 2010, , 86-97.	1.3	0
87	The X2 Modular Evolutionary Robotics Platform. Lecture Notes in Computer Science, 2010, , 274-285.	1.3	Ο
88	Coevolving heuristics for the Distributor's Pallet Packing Problem. , 2009, , .		5
89	Intermediate Level FPGA Reconfiguration for an Online EHW Pattern Recognition System. , 2009, , .		23

90 Evolution of Impulse Bursts Noise Filters. , 2009, , .

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91	Pareto Optimal Based Evolutionary Approach for Solving Multi-Objective Facility Layout Problem. Lecture Notes in Computer Science, 2009, , 159-168.	1.3	12
92	Online Evolvable Pattern Recognition Hardware. Studies in Computational Intelligence, 2009, , 41-54.	0.9	3
93	Partial Reconfiguration Applied in an On-line Evolvable Pattern Recognition System. , 2008, , .		16
94	Continuous Adaptation in Robotic Systems by Indirect Online Evolution. , 2008, , .		3
95	An adaptive pattern recognition hardware with on-chip shift register-based partial reconfiguration. , 2008, , .		2
96	Comparing Evolvable Hardware to Conventional Classifiers for Electromyographic Prosthetic Hand Control. , 2008, , .		17
97	A Comparison of Evolvable Hardware Architectures for Classification Tasks. Lecture Notes in Computer Science, 2008, , 22-33.	1.3	13
98	Making Hardware Soft in Intelligent Systems. , 2007, , .		1
99	Online Evolution for a High-Speed Image Recognition System Implemented On a Virtex-II Pro FPGA. , 2007, , .		16
100	Establishing a New Course in Reconfigurable Logic System Design. , 2007, , .		4
101	An Online EHW Pattern Recognition System Applied to Face Image Recognition. , 2007, , 271-280.		18
102	An Online EHW Pattern Recognition System Applied to Sonar Spectrum Classification. Lecture Notes in Computer Science, 2007, , 1-12.	1.3	10
103	A Flexible On-Chip Evolution System Implemented on a Xilinx Virtex-II Pro Device. Lecture Notes in Computer Science, 2005, , 66-75.	1.3	31
104	Indirect Online Evolution – A Conceptual Framework for Adaptation in Industrial Robotic Systems. Lecture Notes in Computer Science, 0, , 165-176.	1.3	3