

# Patrick Siarry

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/5134908/publications.pdf>

Version: 2024-02-01

125  
papers

7,793  
citations

66315

42  
h-index

53190

85  
g-index

131  
all docs

131  
docs citations

131  
times ranked

6339  
citing authors

#	ARTICLE	IF	CITATIONS
1	A survey on optimization metaheuristics. Information Sciences, 2013, 237, 82-117.	4.0	1,200
2	Nonlinear inertia weight variation for dynamic adaptation in particle swarm optimization. Computers and Operations Research, 2006, 33, 859-871.	2.4	555
3	Particle swarm and ant colony algorithms hybridized for improved continuous optimization. Applied Mathematics and Computation, 2007, 188, 129-142.	1.4	290
4	Tabu Search applied to global optimization. European Journal of Operational Research, 2000, 123, 256-270.	3.5	274
5	A combinatorial particle swarm optimization for solving multi-mode resource-constrained project scheduling problems. Applied Mathematics and Computation, 2008, 195, 299-308.	1.4	255
6	Genetic and Nelderâ€“Mead algorithms hybridized for a more accurate global optimization of continuous multim minima functions. European Journal of Operational Research, 2003, 148, 335-348.	3.5	254
7	A Continuous Genetic Algorithm Designed for the Global Optimization of Multimodal Functions. Journal of Heuristics, 2000, 6, 191-213.	1.1	238
8	A multilevel automatic thresholding method based on a genetic algorithm for a fast image segmentation. Computer Vision and Image Understanding, 2008, 109, 163-175.	3.0	216
9	A comparative study of various meta-heuristic techniques applied to the multilevel thresholding problem. Engineering Applications of Artificial Intelligence, 2010, 23, 676-688.	4.3	190
10	Multiobjective Optimization. Decision Engineering, 2004, , .	1.5	188
11	Continuous interacting ant colony algorithm based on dense heterarchy. Future Generation Computer Systems, 2004, 20, 841-856.	4.9	152
12	A new social and momentum component adaptive PSO algorithm for image segmentation. Expert Systems With Applications, 2011, 38, 4998-5004.	4.4	149
13	An estimation of distribution algorithm for minimizing the total flowtime in permutation flowshop scheduling problems. Computers and Operations Research, 2009, 36, 2638-2646.	2.4	148
14	Analog circuit design optimization through the particle swarm optimization technique. Analog Integrated Circuits and Signal Processing, 2010, 63, 71-82.	0.9	146
15	Differential evolution for solving multi-mode resource-constrained project scheduling problems. Computers and Operations Research, 2009, 36, 2653-2659.	2.4	135
16	A hybrid method combining continuous tabu search and Nelderâ€“Mead simplex algorithms for the global optimization of multim minima functions. European Journal of Operational Research, 2005, 161, 636-654.	3.5	134
17	Improved spatial fuzzy c-means clustering for image segmentation using PSO initialization, Mahalanobis distance and post-segmentation correction. , 2013, 23, 1390-1400.		131
18	Index-based permutation-diffusion in multiple-image encryption using DNA sequence. Optics and Lasers in Engineering, 2019, 115, 131-140.	2.0	131

#	ARTICLE	IF	CITATIONS
19	An image watermarking scheme in wavelet domain with optimized compensation of singular value decomposition via artificial bee colony. <i>Information Sciences</i> , 2015, 301, 44-60.	4.0	130
20	Integrating fuzzy entropy clustering with an improved PSO for MRI brain image segmentation. <i>Applied Soft Computing Journal</i> , 2018, 65, 230-242.	4.1	117
21	A genetic algorithm with real-value coding to optimize multimodal continuous functions. <i>Structural and Multidisciplinary Optimization</i> , 2001, 23, 63-74.	1.7	103
22	Combinatorial particle swarm optimization (CPSO) for partitional clustering problem. <i>Applied Mathematics and Computation</i> , 2007, 192, 337-345.	1.4	102
23	A theoretical study on the behavior of simulated annealing leading to a new cooling schedule. <i>European Journal of Operational Research</i> , 2005, 166, 77-92.	3.5	101
24	Fast multilevel thresholding for image segmentation through a multiphase level set method. <i>Signal Processing</i> , 2013, 93, 139-153.	2.1	91
25	A combinatorial particle swarm optimisation for solving permutation flowshop problems. <i>Computers and Industrial Engineering</i> , 2008, 54, 526-538.	3.4	88
26	FITTING OF TABU SEARCH TO OPTIMIZE FUNCTIONS OF CONTINUOUS VARIABLES. <i>International Journal for Numerical Methods in Engineering</i> , 1997, 40, 2449-2457.	1.5	84
27	Differential evolution algorithm for the selection of optimal scaling factors in image watermarking. <i>Engineering Applications of Artificial Intelligence</i> , 2014, 31, 15-26.	4.3	82
28	Multi-objective optimization and energy management in renewable based AC/DC microgrid. <i>Computers and Electrical Engineering</i> , 2018, 70, 179-198.	3.0	82
29	A fuzzy logic control using a differential evolution algorithm aimed at modelling the financial market dynamics. <i>Information Sciences</i> , 2011, 181, 79-91.	4.0	78
30	Biogeography-based optimization for constrained optimization problems. <i>Computers and Operations Research</i> , 2012, 39, 3293-3304.	2.4	72
31	Hybridizing Biogeography-Based Optimization With Differential Evolution for Optimal Power Allocation in Wireless Sensor Networks. <i>IEEE Transactions on Vehicular Technology</i> , 2011, 60, 2347-2353.	3.9	65
32	A genetic algorithm for optimizing Takagi-Sugeno fuzzy rule bases. <i>Fuzzy Sets and Systems</i> , 1998, 99, 37-47.	1.6	64
33	Two-stage update biogeography-based optimization using differential evolution algorithm (DBBO). <i>Computers and Operations Research</i> , 2011, 38, 1188-1198.	2.4	59
34	Performance evaluation of TRIBES, an adaptive particle swarm optimization algorithm. <i>Swarm Intelligence</i> , 2009, 3, 149-178.	1.3	58
35	Image histogram thresholding based on multiobjective optimization. <i>Signal Processing</i> , 2007, 87, 2516-2534.	2.1	53
36	A survey on search-based model-driven engineering. <i>Automated Software Engineering</i> , 2017, 24, 233-294.	2.2	51

#	ARTICLE	IF	CITATIONS
37	An improved biogeography based optimization approach for segmentation of human head CT-scan images employing fuzzy entropy. <i>Engineering Applications of Artificial Intelligence</i> , 2012, 25, 1698-1709.	4.3	49
38	A Multi-Objective Gravitational Search Algorithm Based on Non-Dominated Sorting. <i>International Journal of Swarm Intelligence Research</i> , 2012, 3, 32-49.	0.5	49
39	A trajectory planning of redundant manipulators based on bilevel optimization. <i>Applied Mathematics and Computation</i> , 2015, 250, 934-947.	1.4	49
40	Three new metrics to measure the convergence of metaheuristics towards the Pareto frontier and the aesthetic of a set of solutions in biobjective optimization. <i>Computers and Operations Research</i> , 2005, 32, 773-792.	2.4	48
41	Image thresholding based on Pareto multiobjective optimization. <i>Engineering Applications of Artificial Intelligence</i> , 2010, 23, 313-320.	4.3	47
42	Combinatorial particle swarm optimization for solving blocking flowshop scheduling problem. <i>Journal of Computational Design and Engineering</i> , 2016, 3, 295-311.	1.5	47
43	A hybrid genetic algorithm for solving no-wait flowshop scheduling problems. <i>International Journal of Advanced Manufacturing Technology</i> , 2011, 54, 1129-1143.	1.5	45
44	An ant colony algorithm aimed at dynamic continuous optimization. <i>Applied Mathematics and Computation</i> , 2006, 181, 457-467.	1.4	43
45	A PSO-aided neuro-fuzzy classifier employing linguistic hedge concepts. <i>Expert Systems With Applications</i> , 2007, 33, 1097-1109.	4.4	43
46	A thresholding method based on two-dimensional fractional differentiation. <i>Image and Vision Computing</i> , 2009, 27, 1343-1357.	2.7	40
47	A multi-swarm PSO using charged particles in a partitioned search space for continuous optimization. <i>Computational Optimization and Applications</i> , 2012, 53, 271-295.	0.9	39
48	Continuous ant colony system and tabu search algorithms hybridized for global minimization of continuous multi-minima functions. <i>Computational Optimization and Applications</i> , 2010, 45, 639-661.	0.9	37
49	A fractional partial differential equation based multiscale denoising model for texture image. <i>Mathematical Methods in the Applied Sciences</i> , 2014, 37, 1784-1806.	1.2	37
50	Hybrid ICA-PSO algorithm for continuous optimization. <i>Applied Mathematics and Computation</i> , 2013, 219, 11149-11170.	1.4	36
51	An adaptive multi-objective algorithm based on decomposition and large neighborhood search for a green machine scheduling problem. <i>Swarm and Evolutionary Computation</i> , 2019, 51, 100601.	4.5	34
52	Boosting content based image retrieval performance through integration of parametric & nonparametric approaches. <i>Journal of Visual Communication and Image Representation</i> , 2019, 58, 205-219.	1.7	34
53	Non-supervised image segmentation based on multiobjective optimization. <i>Pattern Recognition Letters</i> , 2008, 29, 161-172.	2.6	33
54	MO-TRIBES, an adaptive multiobjective particle swarm optimization algorithm. <i>Computational Optimization and Applications</i> , 2011, 49, 379-400.	0.9	33

#	ARTICLE	IF	CITATIONS
55	A multi-objective optimization approach for brain MRI segmentation using fuzzy entropy clustering and region-based active contour methods. <i>Magnetic Resonance Imaging</i> , 2019, 61, 41-65.	1.0	33
56	Fractional differentiation and non-Pareto multiobjective optimization for image thresholding. <i>Engineering Applications of Artificial Intelligence</i> , 2009, 22, 236-249.	4.3	31
57	An Enhanced Particle Swarm Optimization Method Integrated With Evolutionary Game Theory. <i>IEEE Transactions on Games</i> , 2018, 10, 221-230.	1.2	31
58	A new charged ant colony algorithm for continuous dynamic optimization. <i>Applied Mathematics and Computation</i> , 2008, 197, 604-613.	1.4	29
59	A sensitivity analysis method for driving the Artificial Bee Colony algorithm's search process. <i>Applied Soft Computing Journal</i> , 2016, 41, 515-531.	4.1	29
60	Design of second-generation current conveyors employing bacterial foraging optimization. <i>Microelectronics Journal</i> , 2010, 41, 616-626.	1.1	27
61	EM323: a line search based algorithm for solving high-dimensional continuous non-linear optimization problems. <i>Soft Computing</i> , 2011, 15, 2275-2285.	2.1	26
62	An Input-Delay Neural-Network-Based Approach for Piecewise ECG Signal Compression. <i>IEEE Transactions on Biomedical Engineering</i> , 2005, 52, 945-947.	2.5	24
63	Multi-objective design of optimal higher order sliding mode control for robust tracking of 2-DoF helicopter system based on metaheuristics. <i>Aerospace Science and Technology</i> , 2019, 91, 442-455.	2.5	24
64	Segmentation of MR Brain Images Through Hidden Markov Random Field and Hybrid Metaheuristic Algorithm. <i>IEEE Transactions on Image Processing</i> , 2020, 29, 6507-6522.	6.0	24
65	A fuzzy rule base for the improved control of a pressurized water nuclear reactor. <i>IEEE Transactions on Fuzzy Systems</i> , 2000, 8, 1-10.	6.5	21
66	A Postural Information-Based Biometric Authentication System Employing S-Transform, Radial Basis Function Network, and Extended Kalman Filtering. <i>IEEE Transactions on Instrumentation and Measurement</i> , 2010, 59, 3131-3138.	2.4	21
67	Solving reverse emergence with quantum PSO application to image processing. <i>Soft Computing</i> , 2019, 23, 6921-6935.	2.1	21
68	Psychological stimulation for anxious states detection based on EEG-related features. <i>Journal of Ambient Intelligence and Humanized Computing</i> , 2021, 12, 8519-8533.	3.3	21
69	A Swarm Intelligence Method Combined to Evolutionary Game Theory Applied to the Resources Allocation Problem. <i>International Journal of Swarm Intelligence Research</i> , 2012, 3, 20-38.	0.5	20
70	Detection and replacement of a failing node in the wireless sensors networks. <i>Computers and Electrical Engineering</i> , 2014, 40, 421-432.	3.0	20
71	A centred formulation of Takagi-Sugeno rules for improved learning efficiency. <i>Fuzzy Sets and Systems</i> , 1994, 62, 277-285.	1.6	17
72	QUAntum Particle Swarm Optimization: an auto-adaptive PSO for local and global optimization. <i>Computational Optimization and Applications</i> , 2022, 82, 525-559.	0.9	17

#	ARTICLE	IF	CITATIONS
73	A Reliable Image Watermarking Scheme Based on Redistributed Image Normalization and SVD. Discrete Dynamics in Nature and Society, 2016, 2016, 1-15.	0.5	16
74	ADAPTIVE LEARNING SEARCH, A NEW TOOL TO HELP COMPREHENDING METAHEURISTICS. International Journal on Artificial Intelligence Tools, 2007, 16, 483-505.	0.7	15
75	Solving bilevel programming problems with multicriteria optimization techniques. Opsearch, 2009, 46, 169-183.	1.1	15
76	Global Simplex Optimizationâ€”A simple and efficient metaheuristic for continuous optimization. Engineering Applications of Artificial Intelligence, 2012, 25, 48-55.	4.3	15
77	Automatic ECG arrhythmias classification scheme based on the conjoint use of the multi-layer perceptron neural network and a new improved metaheuristic approach. IET Signal Processing, 2019, 13, 726-735.	0.9	15
78	Automatic multiple moving humans detection and tracking in image sequences taken from a stationary thermal infrared camera. Expert Systems With Applications, 2020, 146, 113171.	4.4	14
79	Fuzzy rule base learning through simulated annealing. Fuzzy Sets and Systems, 1999, 105, 353-363.	1.6	13
80	Multiobjective improved spatial fuzzy c-means clustering for image segmentation combining Pareto-optimal clusters. Journal of Heuristics, 2016, 22, 383-404.	1.1	13
81	A differential evolution algorithm to solve redundancy allocation problems. International Transactions in Operational Research, 2012, 19, 809-824.	1.8	12
82	A GRASP based on DE to solve single machine scheduling problem with SDST. Computational Optimization and Applications, 2012, 51, 411-435.	0.9	12
83	A multiple local search algorithm for continuous dynamic optimization. Journal of Heuristics, 2013, 19, 35-76.	1.1	12
84	Robust rigid registration of retinal angiograms through optimization. Computerized Medical Imaging and Graphics, 2006, 30, 453-463.	3.5	11
85	Robust RST control design based on Multi-Objective Particle Swarm Optimization approach. International Journal of Control, Automation and Systems, 2016, 14, 1607-1617.	1.6	11
86	An RBF-PSO technique for the rapid optimization of (CMOS) analog circuits. , 2018, , .		11
87	Epsilon-multiobjective particle swarm optimization-based tuning of sensitivity functions for polynomial control design. Transactions of the Institute of Measurement and Control, 2019, 41, 3688-3704.	1.1	11
88	Adaptive pattern search for large-scale optimization. Applied Intelligence, 2017, 47, 319-330.	3.3	10
89	A sensitivity analysis method aimed at enhancing the metaheuristics for continuous optimization. Artificial Intelligence Review, 2018, 50, 625-647.	9.7	10
90	On the Sensitivity of Aggregative Multiobjective Optimization Methods. Journal of Computing and Information Technology, 2008, 16, 1.	0.2	10

#	ARTICLE	IF	CITATIONS
91	Convergence rates of the efficient global optimization algorithm for improving the design of analog circuits. <i>Analog Integrated Circuits and Signal Processing</i> , 2020, 103, 143-162.	0.9	9
92	Circuit performance optimization and model fitting based on simulated annealing. <i>International Journal of Electronics</i> , 1992, 73, 1267-1271.	0.9	8
93	Application of simulated annealing for estimating BAEPs in endocochlear pathologies. <i>Medical Engineering and Physics</i> , 2002, 24, 385-392.	0.8	8
94	Dynamic cluster in particle swarm optimization algorithm. <i>Natural Computing</i> , 2015, 14, 655-672.	1.8	7
95	A robust FLIR target detection employing an auto-convergent pulse coupled neural network. <i>Remote Sensing Letters</i> , 2019, 10, 639-648.	0.6	7
96	Fast simulated annealing algorithm for BAEP time delay estimation using a reduced order dynamic model. <i>Medical Engineering and Physics</i> , 2005, 27, 705-711.	0.8	6
97	A new vision on the averaging technique for the estimation of non-stationary Brainstem Auditory-Evoked Potentials: Application of a metaheuristic method. <i>Computers in Biology and Medicine</i> , 2006, 36, 574-584.	3.9	6
98	Novel approach for replacement of a failure node in wireless sensor network. <i>Telecommunication Systems</i> , 2017, 65, 341-350.	1.6	6
99	An approach for finding efficient points in multiobjective linear programming. <i>Journal of Information and Optimization Sciences</i> , 2008, 29, 203-216.	0.2	5
100	Expected Improvement-Based Optimization Approach for the Optimal Sizing of a CMOS Operational Transconductance Amplifier. , 2018, , .		5
101	A method for solving bilevel linear programming problems. <i>Journal of Information and Optimization Sciences</i> , 2008, 29, 335-338.	0.2	4
102	Evolutionary algorithm with ensemble strategies based on maximum a posteriori for continuous optimization. <i>Information Sciences</i> , 2018, 460-461, 1-22.	4.0	4
103	Pseudo Expected Improvement Based-Optimization for CMOS Analog Circuit Design. , 2019, , .		4
104	Hybrid Half-Gaussian Selectively Adaptive Fuzzy Control of an Actuated Ankleâ€œFoot Orthosis. <i>IEEE Robotics and Automation Letters</i> , 2022, 7, 9635-9642.	3.3	4
105	Local search for real-world scheduling and planning. <i>Engineering Applications of Artificial Intelligence</i> , 2012, 25, 207-208.	4.3	3
106	A hybrid particle swarm approach based on Tribes and tabu search for multi-objective optimization. <i>Optimization Methods and Software</i> , 2016, 31, 204-231.	1.6	3
107	A novel disturbance rejection factor based stable direct adaptive fuzzy control strategy for a class of nonlinear systems. <i>Expert Systems</i> , 2021, 38, e12651.	2.9	3
108	Guest Editorial: Special Section on Cognitive Big Data Science Over Intelligent IoT Networking Systems in Industrial Informatics. <i>IEEE Transactions on Industrial Informatics</i> , 2021, 17, 2112-2115.	7.2	3

#	ARTICLE	IF	CITATIONS
109	Optimisation de circuits non linéaires et caractérisation de modèles de composants: association de la méthode du recuit simulé et du simulateur électrique Spice-pac. Annales Des Telecommunications/Annals of Telecommunications, 1991, 46, 205-215.	1.6	2
110	Generalised influential rule search scheme for fuzzy function approximation. Soft Computing, 2006, 10, 631-642.	2.1	2
111	A framework for analysis of brain cine MR sequences. Computerized Medical Imaging and Graphics, 2012, 36, 152-168.	3.5	2
112	A new neighborhood topology for QUAntum particle swarm optimization (QUAPSO). , 2019, , .		2
113	Metaheuristics-based Multi-objective Design of Global Robust Optimal Sliding Mode Control of Discrete Uncertain Systems. International Journal of Control, Automation and Systems, 2019, 17, 1378-1392.	1.6	2
114	Learning of neural networks approximating continuous functions through circuit simulator SPICE-PAC driven by simulated annealing. International Journal of Electronics, 1994, 76, 437-441.	0.9	1
115	Extraction of the topology of equivalent circuits based on parameter statistical evolution driven by simulated annealing. International Journal of Electronics, 1995, 79, 47-52.	0.9	1
116	A modified sensitivity analysis method for driving a multidimensional search in the Artificial Bee Colony algorithm. , 2016, , .		1
117	Effect of the Dynamic Topology on the Performance of PSO-2S Algorithm for Continuous Optimization. Lecture Notes in Computer Science, 2015, , 60-64.	1.0	1
118	Simulations of hardened components and circuits. International Journal of Electronics, 1996, 81, 125-136.	0.9	0
119	DESIGNING 2 POLE AND 2/4 POLE WINDINGS BY THE SIMULATED ANNEALING METHOD. Electric Power Components and Systems, 1998, 26, 1059-1066.	0.1	0
120	BAEP dynamic estimation in case of endocochlear pathologies using a time delay correction method. Journal of Medical Engineering and Technology, 2004, 28, 235-241.	0.8	0
121	A tool to convert continuous multiobjective optimisation test problems into combinatorial ones. International Journal of Operational Research, 2008, 3, 281.	0.1	0
122	Computational intelligence in production and logistics systems: solving vehicle routing, supply chain network, and air-traffic trajectory planning problems [guest editorial]. IEEE Computational Intelligence Magazine, 2014, 9, 16-17.	3.4	0
123	Introduction to special issue on "intelligent computing and adaptive systems". Innovations in Systems and Software Engineering, 2017, 13, 241-242.	1.6	0
124	A sensitivity analysis indicator to adapt the shift length in a metaheuristic. , 2020, , .		0
125	Metaheuristics for the positioning of 3D objects based on image analysis of complementary 2D photographs. Machine Vision and Applications, 2021, 32, 1.	1.7	0