# Yuhui Shi

List of Publications by Year
in descending order

| | | | |
|---|---|---|---|
| 139 papers | 9,550 citations | 136950<br>32 h-index | 69250<br>77 g-index |
| 145 all docs | 145 docs citations | 145 times ranked | 5366 citing authors |

| # | Article | IF | Citations |
|---|---------|-----|-----------|
| 1 | Parameter selection in particle swarm optimization. Lecture Notes in Computer Science, 1998, , 591-600. | 1.3 | 2,169 |
| 2 | Particle swarm optimization: developments, applications and resources. , 0, , . | | 2,117 |
| 3 | Metaheuristic research: a comprehensive survey. Artificial Intelligence Review, 2019, 52, 2191-2233. | 15.7 | 480 |
| 4 | Fuzzy adaptive particle swarm optimization. , 0, , . | | 461 |
| 5 | Brain Storm Optimization Algorithm. Lecture Notes in Computer Science, 2011, , 303-309. | 1.3 | 440 |
| 6 | Implementation of evolutionary fuzzy systems. IEEE Transactions on Fuzzy Systems, 1999, 7, 109-119. | 9.8 | 350 |
| 7 | An Optimization Algorithm Based on Brainstorming Process. International Journal of Swarm Intelligence Research, 2011, 2, 35-62. | 0.7 | 208 |
| 8 | Enhancing Learning Efficiency of Brain Storm Optimization via Orthogonal Learning Design. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2021, 51, 6723-6742. | 9.3 | 197 |
| 9 | Brain storm optimization algorithm: a review. Artificial Intelligence Review, 2016, 46, 445-458. | 15.7 | 169 |
| 10 | On the exploration and exploitation in popular swarm-based metaheuristic algorithms. Neural Computing and Applications, 2019, 31, 7665-7683. | 5.6 | 149 |
| 11 | Predator–Prey Brain Storm Optimization for DC Brushless Motor. IEEE Transactions on Magnetics, 2013, 49, 5336-5340. | 2.1 | 127 |
| 12 | Particle Swarm Optimization With Interswarm Interactive Learning Strategy. IEEE Transactions on Cybernetics, 2016, 46, 2238-2251. | 9.5 | 110 |
| 13 | Optimal Satellite Formation Reconfiguration Based on Closed-Loop Brain Storm Optimization. IEEE Computational Intelligence Magazine, 2013, 8, 39-51. | 3.2 | 99 |
| 14 | Population Diversity Maintenance In Brain Storm Optimization Algorithm. Journal of Artificial Intelligence and Soft Computing Research, 2014, 4, 83-97. | 4.3 | 90 |
| 15 | Dynamic Discrete Pigeon-Inspired Optimization for Multi-UAV Cooperative Search-Attack Mission Planning. IEEE Transactions on Aerospace and Electronic Systems, 2021, 57, 706-720. | 4.7 | 84 |
| 16 | Solving non-convex/non-smooth economic load dispatch problems via an enhanced particle swarm optimization. Applied Soft Computing Journal, 2017, 59, 229-242. | 7.2 | 79 |
| 17 | Brain storm optimization algorithm in objective space. , 2015, , . | | 77 |
| 18 | Feature selection based on brain storm optimization for data classification. Applied Soft Computing Journal, 2019, 80, 761-775. | 7.2 | 68 |

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| 19 | Computational intelligence. , 2007, , 17-38. | | 67 |
| 20 | Monitoring of particle swarm optimization. Frontiers of Computer Science, 2009, 3, 31-37. | 0.6 | 67 |
| 21 | Random drift particle swarm optimization algorithm: convergence analysis and parameter selection. Machine Learning, 2015, 101, 345-376. | 5.4 | 64 |
| 22 | Multi-Objective Optimization Based on Brain Storm Optimization Algorithm. International Journal of Swarm Intelligence Research, 2013, 4, 1-21. | 0.7 | 60 |
| 23 | Experimental Study on Boundary Constraints Handling in Particle Swarm Optimization. International Journal of Swarm Intelligence Research, 2011, 2, 43-69. | 0.7 | 58 |
| 24 | Brain Storm Optimization Algorithm for Multi-objective Optimization Problems. Lecture Notes in Computer Science, 2012, , 513-519. | 1.3 | 58 |
| 25 | A quarter century of particle swarm optimization. Complex & Intelligent Systems, 2018, 4, 227-239. | 6.5 | 54 |
| 26 | Brain Storm Optimization Algorithm with Modified Step-Size and Individual Generation. Lecture Notes in Computer Science, 2012, , 243-252. | 1.3 | 49 |
| 27 | A hybrid model of fuzzy minâ€"max and brain storm optimization for feature selection and data classification. Neurocomputing, 2019, 333, 440-451. | 5.9 | 48 |
| 28 | Multiple strategies based orthogonal design particle swarm optimizer for numerical optimization. Computers and Operations Research, 2015, 60, 91-110. | 4.0 | 47 |
| 29 | Hybrid brain storm optimisation and simulated annealing algorithm for continuous optimisation problems. International Journal of Bio-Inspired Computation, 2016, 8, 109. | 0.9 | 46 |
| 30 | Enhanced Brain Storm Optimization Algorithm for Wireless Sensor Networks Deployment. Lecture Notes in Computer Science, 2015, , 373-381. | 1.3 | 45 |
| 31 | Hybrid Sampling Evolution Strategy for Solving Single Objective Bound Constrained Problems. , 2018, , . | | 44 |
| 32 | Advanced discussion mechanism-based brain storm optimization algorithm. Soft Computing, 2015, 19, 2997-3007. | 3.6 | 43 |
| 33 | Random Grouping Brain Storm Optimization Algorithm with a New Dynamically Changing Step Size. Lecture Notes in Computer Science, 2015, , 357-364. | 1.3 | 43 |
| 34 | Population Diversity of Particle Swarms. , 2008, , . | | 42 |
| 35 | Diversity control in particle swarm optimization. , 2011, , . | | 40 |
| 36 | Solution clustering analysis in brain storm optimization algorithm. , 2013, , . | | 38 |

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| 37 | Brain storm optimization algorithms with k-medians clustering algorithms. , 2015, , . | | 38 |
| 38 | Evolutionary computation for solving search-based data analytics problems. Artificial Intelligence Review, 2021, 54, 1321-1348. | 15.7 | 38 |
| 39 | An Improved Brain Storm Optimization with Differential Evolution Strategy for Applications of ANNs. Mathematical Problems in Engineering, 2015, 2015, 1-18. | 1.1 | 35 |
| 40 | A Study of Normalized Population Diversity in Particle Swarm Optimization. International Journal of Swarm Intelligence Research, 2013, 4, 1-34. | 0.7 | 34 |
| 41 | Developmental Swarm Intelligence. International Journal of Swarm Intelligence Research, 2014, 5, 36-54. | 0.7 | 34 |
| 42 | Interactive Learning Environment for Bio-Inspired Optimization Algorithms for UAV Path Planning. IEEE Transactions on Education, 2015, 58, 276-281. | 2.4 | 34 |
| 43 | Survey on data science with population-based algorithms. Big Data Analytics, 2016, 1, . | 2.2 | 33 |
| 44 | Maintaining population diversity in brain storm optimization algorithm. , 2014, , . | | 31 |
| 45 | An Adaptive Online Parameter Control Algorithm for Particle Swarm Optimization Based on Reinforcement Learning. , 2019, , . | | 30 |
| 46 | Swarm Intelligence in Big Data Analytics. Lecture Notes in Computer Science, 2013, , 417-426. | 1.3 | 29 |
| 47 | Biomimicry of parasitic behavior in a coevolutionary particle swarm optimization algorithm for global optimization. Applied Soft Computing Journal, 2015, 32, 224-240. | 7.2 | 27 |
| 48 | Limit-Cycle-Based Mutant Multiobjective Pigeon-Inspired Optimization. IEEE Transactions on Evolutionary Computation, 2020, 24, 948-959. | 10.0 | 27 |
| 49 | Population Diversity of Particle Swarm Optimizer Solving Single and Multi-Objective Problems. International Journal of Swarm Intelligence Research, 2012, 3, 23-60. | 0.7 | 27 |
| 50 | Learning–interaction–diversification framework for swarm intelligence optimizers: a unified perspective. Neural Computing and Applications, 2020, 32, 1789-1809. | 5.6 | 26 |
| 51 | On the Performance Metrics of Multiobjective Optimization. Lecture Notes in Computer Science, 2012, , 504-512. | 1.3 | 26 |
| 52 | Population diversity based study on search information propagation in particle swarm optimization. , 2012, , . | | 24 |
| 53 | Evolutionary Computation and Big Data: Key Challenges and Future Directions. Lecture Notes in Computer Science, 2016, , 3-14. | 1.3 | 24 |
| 54 | Locating Multiple Optima via Brain Storm Optimization Algorithms. IEEE Access, 2018, 6, 17039-17049. | 4.2 | 23 |

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| 55 | Predator-Prey Pigeon-Inspired Optimization for UAV ALS Longitudinal Parameters Tuning. IEEE Transactions on Aerospace and Electronic Systems, 2019, 55, 2347-2358. | 4.7 | 23 |
| 56 | Bionic Visual Control for Probe-and-Drogue Autonomous Aerial Refueling. IEEE Transactions on Aerospace and Electronic Systems, 2021, 57, 848-865. | 4.7 | 23 |
| 57 | Alternate search pattern-based brain storm optimization. Knowledge-Based Systems, 2022, 238, 107896. | 7.1 | 23 |
| 58 | A Novel Local Community Detection Method Using Evolutionary Computation. IEEE Transactions on Cybernetics, 2021, 51, 3348-3360. | 9.5 | 22 |
| 59 | Promoting Diversity in Particle Swarm Optimization to Solve Multimodal Problems. Lecture Notes in Computer Science, 2011, , 228-237. | 1.3 | 21 |
| 60 | Dynamical exploitation space reduction in particle swarm optimization for solving large scale problems. , 2012, , . | | 20 |
| 61 | A self-adaptive chaos and Kalman filter-based particle swarm optimization for economic dispatch problem. Soft Computing, 2017, 21, 3353-3365. | 3.6 | 20 |
| 62 | A comprehensive survey of brain storm optimization algorithms. , 2017, , . | | 18 |
| 63 | Evolutionary Dynamic Multiobjective Optimization via Learning From Historical Search Process. IEEE Transactions on Cybernetics, 2022, 52, 6119-6130. | 9.5 | 18 |
| 64 | An Asymptotically Optimal Cooperative Relay Scheme for Two-Way Relaying Protocol. IEEE Signal Processing Letters, 2010, 17, 145-148. | 3.6 | 17 |
| 65 | Brain storm optimization with chaotic operation. , 2015, , . | | 17 |
| 66 | Normalized Population Diversity in Particle Swarm Optimization. Lecture Notes in Computer Science, 2011, , 38-45. | 1.3 | 17 |
| 67 | Brain Storm Optimization with Agglomerative Hierarchical Clustering Analysis. Lecture Notes in Computer Science, 2016, , 115-122. | 1.3 | 14 |
| 68 | Exploration Enhanced RPSO for Collaborative Multitarget Searching of Robotic Swarms. Complexity, 2020, 2020, 1-12. | 1.6 | 13 |
| 69 | The use of deep learning methods in low-dose computed tomography image reconstruction: a systematic review. Complex & Intelligent Systems, 2022, 8, 5545-5561. | 6.5 | 13 |
| 70 | A decoupling receding horizon search approach to agent routing and optical sensor tasking based on brain storm optimization. Optik, 2015, 126, 690-696. | 2.9 | 12 |
| 71 | Dynamic Multimodal Optimization Using Brain Storm Optimization Algorithms. Communications in Computer and Information Science, 2018, , 236-245. | 0.5 | 12 |
| 72 | Adaptive online data-driven closed-loop parameter control strategy for swarm intelligence algorithm. Information Sciences, 2020, 536, 25-52. | 6.9 | 12 |

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| 73 | EEG-Based Drowsiness Estimation for Driving Safety Using Deep Q-Learning. IEEE Transactions on Emerging Topics in Computational Intelligence, 2021, 5, 583-594. | 4.9 | 12 |
| 74 | Population diversity based inertia weight adaptation in Particle Swarm Optimization. , 2012, , . | | 11 |
| 75 | An Unknown Environment Exploration Strategy for Swarm Robotics Based on Brain Storm Optimization Algorithm. , 2019, , . | | 11 |
| 76 | Particle swarm optimization based semi-supervised learning on Chinese text categorization. , 2012, , . | | 10 |
| 77 | Convergence analysis of brain storm optimization algorithm. , 2016, , . | | 10 |
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| 79 | Consensus Learning for Distributed Fuzzy Neural Network in Big Data Environment. IEEE Transactions on Emerging Topics in Computational Intelligence, 2021, 5, 29-41. | 4.9 | 10 |
| 80 | BSO20: efficient brain storm optimization for real-parameter numerical optimization. Complex & Intelligent Systems, 2021, 7, 2415-2436. | 6.5 | 10 |
| 81 | An adaptive niching method based on multi-strategy fusion for multimodal optimization. Memetic Computing, 2021, 13, 341-357. | 4.0 | 10 |
| 82 | Visual fixation prediction with incomplete attention map based on brain storm optimization. Applied Soft Computing Journal, 2020, 96, 106653. | 7.2 | 9 |
| 83 | BSO-AL: Brain Storm Optimization Algorithm with Adaptive Learning Strategy. , 2020, , . | | 9 |
| 84 | A Novel Multi-Task Optimization Algorithm Based on the Brainstorming Process. IEEE Access, 2020, 8, 217134-217149. | 4.2 | 9 |
| 85 | Brain storm optimization algorithm for solving knowledge spillover problems. Neural Computing and Applications, 2023, 35, 12247-12260. | 5.6 | 9 |
| 86 | Analytics on Fireworks Algorithm Solving Problems with Shifts in the Decision Space and Objective Space. International Journal of Swarm Intelligence Research, 2015, 6, 52-86. | 0.7 | 8 |
| 87 | Multi-center variable-scale search algorithm for combinatorial optimization problems with the multimodal property. Applied Soft Computing Journal, 2019, 84, 105726. | 7.2 | 8 |
| 88 | Generalized pigeon-inspired optimization algorithms. Science China Information Sciences, 2019, 62, 1. | 4.3 | 8 |
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| 90 | Artificial Bee Colony Algorithm with Time-Varying Strategy. Discrete Dynamics in Nature and Society, 2015, 2015, 1-17. | 0.9 | 7 |

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| 91 | Brain storm optimization algorithm for full area coverage of wireless sensor networks. , 2016, , . | | 7 |
| 92 | Homing Pigeon-Inspired Autonomous Navigation System for Unmanned Aerial Vehicles. IEEE Transactions on Aerospace and Electronic Systems, 2021, 57, 2218-2224. | 4.7 | 7 |
| 93 | Unified Swarm Intelligence Algorithms. Advances in Computational Intelligence and Robotics Book Series, 2018, , 1-26. | 0.4 | 7 |
| 94 | Contour Gradient Optimization. International Journal of Swarm Intelligence Research, 2013, 4, 1-28. | 0.7 | 7 |
| 95 | Swarm Intelligence in Data Science: Applications, Opportunities andÂChallenges. Lecture Notes in Computer Science, 2020, , 3-14. | 1.3 | 7 |
| 96 | Community Detection in Multiplex Networks Based on Evolutionary Multitask Optimization and Evolutionary Clustering Ensemble. IEEE Transactions on Evolutionary Computation, 2023, 27, 728-742. | 10.0 | 7 |
| 97 | Multimodal optimization using particle swarm optimization algorithms: CEC 2015 competition on single objective multi-niche optimization. , 2015, , . | | 6 |
| 98 | Feature Selection via Swarm Intelligence for Determining Protein Essentiality. Molecules, 2018, 23, 1569. | 3.8 | 6 |
| 99 | mBSO: A Multi-Population Brain Storm Optimization for Multimodal Dynamic Optimization Problems. , 2019, , . | | 6 |
| 100 | Cooperative coevolution of real predator robots and virtual robots in the pursuit domain. Applied Soft Computing Journal, 2020, 89, 106098. | 7.2 | 6 |
| 101 | Chaotic predator-prey brain storm optimization for continuous optimization problems. , 2017, , . | | 5 |
| 102 | Close formation flight of swarm unmanned aerial vehicles via metric-distance brain storm optimization. Memetic Computing, 2018, 10, 369-381. | 4.0 | 5 |
| 103 | Dynamic Multimodal Optimization: A Preliminary Study. , 2019, , . | | 5 |
| 104 | Brain Storm Optimization Algorithm Based on Improved Clustering Approach Using Orthogonal Experimental Design. , 2019, , . | | 5 |
| 105 | An improved Brain Storm Optimization algorithm based on graph theory. , 2017, , . | | 4 |
| 106 | Brain Storm Optimization Algorithms: More Questions than Answers. Adaptation, Learning, and Optimization, 2019, , 3-32. | 0.6 | 4 |
| 107 | Sparse FIR Filter Design Using Binary Particle Swarm Optimization. IEICE Transactions on Fundamentals of Electronics, Communications and Computer Sciences, 2014, E97.A, 2653-2657. | 0.3 | 3 |
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| 109 | Thematic issue on "Brain Storm Optimization Algorithms". Memetic Computing, 2018, 10, 351-352. | 4.0 | 3 |
| 110 | Binocular Pose Estimation for UAV Autonomous Aerial Refueling via Brain Storm Optimization. , 2019, , . | | 3 |
| 111 | TraceBERT—A Feasibility Study on Reconstructing Spatial–Temporal Gaps from Incomplete Motion Trajectories via BERT Training Process on Discrete Location Sequences. Sensors, 2022, 22, 1682. | 3.8 | 3 |
| 112 | Editorial: Special Section on Bio-Inspired Swarm Computing and Engineering. IEEE/ACM Transactions on Computational Biology and Bioinformatics, 2017, 14, 1-3. | 3.0 | 2 |
| 113 | Brain Storm Robotics: An Automatic Design Framework for Multi-Robot Systems. , 2020, , . | | 2 |
| 114 | A Hybrid BSO-ACS Algorithm for Vehicle Routing Problem with Time Windows on Road Networks. , 2020, , . | | 2 |
| 115 | Normalized Ranking Based Particle Swarm Optimizer for Many Objective Optimization. Lecture Notes in Computer Science, 2017, , 347-357. | 1.3 | 2 |
| 116 | Population Diversity of Particle Swarm Optimizer Solving Single- and Multi-Objective Problems. Advances in Computational Intelligence and Robotics Book Series, 2015, , 71-98. | 0.4 | 2 |
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| 118 | Automatic synthesizing multi-robot cooperation strategies based on Brain Storm Robotics. Applied Soft Computing Journal, 2022, 120, 108672. | 7.2 | 2 |
| 119 | Special Section on Swarm-Based Algorithms and Applications in Computational Biology and Bioinformatics. IEEE/ACM Transactions on Computational Biology and Bioinformatics, 2018, 15, 1863-1864. | 3.0 | 1 |
| 120 | A Feature Extraction Method Based on BSO Algorithm for Flight Data. Adaptation, Learning, and Optimization, 2019, , 157-188. | 0.6 | 1 |
| 121 | BSOGCN: Brain Storm Optimization Graph Convolutional Networks Based Heterogeneous Information Networks Embedding. , 2020, , . | | 1 |
| 122 | Adaptive Coordinated Motion Control for Swarm Robotics Based on Brain Storm Optimization. , 2021, , . | | 1 |
| 123 | Attention-oriented Brain Storm Optimization for Multimodal Optimization Problems. , 2021, , . | | 1 |
| 124 | Experimental Study on Boundary Constraints Handling in Particle Swarm Optimization. Advances in Computational Intelligence and Robotics Book Series, 2020, , 217-246. | 0.4 | 1 |
| 125 | Evolutionary Robust Clustering Over Time for Temporal Data. IEEE Transactions on Cybernetics, 2023, 53, 4334-4346. | 9.5 | 1 |
| 126 | Examples initialization in Chinese text categorization. , 2013, , . | | 0 |

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| 127 | An improved extremal optimization based on the distribution knowledge of candidate solutions. Natural Computing, 2017, 16, 135-149. | 3.0 | 0 |
| 128 | Improving estimation of distribution algorithms with heavy-tailed student's t distributions. , 2018, , . | | 0 |
| 129 | Gradient-free Algorithms for Graph Embedding. , 2019, , . | | 0 |
| 130 | Robotic Brain Storm Optimization: A Multi-target Collaborative Searching Paradigm for Swarm Robotics. Lecture Notes in Computer Science, 2021, , 155-167. | 1.3 | 0 |
| 131 | Multiple-Preys Pursuit based on Biquadratic Assignment Problem. , 2021, , . | | 0 |
| 132 | An Analysis on Fireworks Algorithm Solving Problems With Shifts in the Decision Space and Objective Space. Advances in Computational Intelligence and Robotics Book Series, 2018, , 119-153. | 0.4 | 0 |
| 133 | Contour Gradient Optimization. Advances in Computational Intelligence and Robotics Book Series, 2020, , 247-276. | 0.4 | 0 |
| 134 | An Analysis of Fireworks Algorithm Solving Problems With Shifts in the Decision Space and Objective Space. Advances in Computational Intelligence and Robotics Book Series, 2020, , 277-311. | 0.4 | 0 |
| 135 | A Study of Normalized Population Diversity in Particle Swarm Optimization. Advances in Computational Intelligence and Robotics Book Series, 2020, , 345-381. | 0.4 | 0 |
| 136 | Population Diversity of Particle Swarm Optimization Algorithm on Solving Single and Multi-Objective Problems. Advances in Computational Intelligence and Robotics Book Series, 2020, , 312-344. | 0.4 | 0 |
| 137 | Developmental Swarm Intelligence. , 0, , 349-367. | | 0 |
| 138 | Analytics on Fireworks Algorithm Solving Problems with Shifts in the Decision Space and Objective Space. , 0, , 1008-1038. | | 0 |
| 139 | An Improvement Heuristic Based on Variable Neighborhood Search for Dynamic Orienteering Problems with Changing Node Values and Changing Budgets. SN Computer Science, 2022, 3, . | 3.6 | 0 |