Yong-Hyuk Kim

List of Publications by Year
in descending order

71 papers	**1,082** citations	516681 **16** h-index	434170 **31** g-index
71 all docs	**71** docs citations	**71** times ranked	**1016** citing authors

#	Article	IF	Citations
1	An Efficient Genetic Algorithm for Maximum Coverage Deployment in Wireless Sensor Networks. IEEE Transactions on Cybernetics, 2013, 43, 1473-1483.	9.5	274
2	Application of machine learning to an early warning system for very short-term heavy rainfall. Journal of Hydrology, 2019, 568, 1042-1054.	5.4	56
3	A genetic algorithm for joint replenishment based on the exact inventory cost. Computers and Operations Research, 2009, 36, 167-175.	4.0	54
4	Feature Selection for Very Short-Term Heavy Rainfall Prediction Using Evolutionary Computation. Advances in Meteorology, 2014, 2014, 1-15.	1.6	53
5	Machine-Learning Approach to Optimize SMOTE Ratio in Class Imbalance Dataset for Intrusion Detection. Computational Intelligence and Neuroscience, 2018, 2018, 1-11.	1.7	50
6	A comparison study of harmony search and genetic algorithm for the max-cut problem. Swarm and Evolutionary Computation, 2019, 44, 130-135.	8.1	49
7	Geometric Crossovers for Multiway Graph Partitioning. Evolutionary Computation, 2007, 15, 445-474.	3.0	46
8	Charge Scheduling of an Energy Storage System under Time-of-Use Pricing and a Demand Charge. Scientific World Journal, The, 2014, 2014, 1-9.	2.1	32
9	An improved forecast of precipitation type using correlation-based feature selection and multinomial logistic regression. Atmospheric Research, 2020, 240, 104928.	4.1	30
10	Lock-Gain Based Graph Partitioning. Journal of Heuristics, 2004, 10, 37-57.	1.4	29
11	A theoretical and empirical study on unbiased boundary-extended crossover for real-valued representation. Information Sciences, 2012, 183, 48-65.	6.9	23
12	Effective scheduling of residential energy storage systems under dynamic pricing. Renewable Energy, 2016, 87, 936-945.	8.9	21
13	Improved Correction of Atmospheric Pressure Data Obtained by Smartphones through Machine Learning. Computational Intelligence and Neuroscience, 2016, 2016, 1-12.	1.7	19
14	Multicampaign assignment problem. IEEE Transactions on Knowledge and Data Engineering, 2006, 18, 405-414.	5.7	18
15	Quotient geometric crossovers and redundant encodings. Theoretical Computer Science, 2012, 425, 4-16.	0.9	17
16	Forecasting lightning around the Korean Peninsula by postprocessing ECMWF data using SVMs and undersampling. Atmospheric Research, 2020, 243, 105026.	4.1	16
17	A Lagrangian Approach for Multiple Personalized Campaigns. IEEE Transactions on Knowledge and Data Engineering, 2008, 20, 383-396.	5.7	14
18	Two Applications of Clustering Techniques to Twitter: Community Detection and Issue Extraction. Discrete Dynamics in Nature and Society, 2013, 2013, 1-8.	0.9	14

#	ARTICLE	IF	CITATIONS
19	Investigation of the Fitness Landscapes in Graph Bipartitioning: An Empirical Study. Journal of Heuristics, 2004, 10, 111-133.	1.4	13
20	Correcting Air-Pressure Data Collected by MEMS Sensors in Smartphones. Journal of Sensors, 2015, 2015, 1-10.	1.1	13
21	Detecting Anomalies in Meteorological Data Using Support Vector Regression. Advances in Meteorology, 2018, 2018, 1-14.	1.6	12
22	A theoretical and empirical investigation on the Lagrangian capacities of the 0-1 multidimensional knapsack problem. European Journal of Operational Research, 2012, 218, 366-376.	5.7	11
23	Geometricity of genetic operators for real-coded representation. Applied Mathematics and Computation, 2013, 219, 10915-10927.	2.2	11
24	Error Correction of Meteorological Data Obtained with Mini-AWSs Based on Machine Learning. Advances in Meteorology, 2018, 2018, 1-8.	1.6	11
25	Effect of Changing the Basis in Genetic Algorithms Using Binary Encoding. KSII Transactions on Internet and Information Systems, 2008, 2, 184-193.	0.3	11
26	Geometric Generalisation of Surrogate Model-Based Optimisation to Combinatorial and Program Spaces. Mathematical Problems in Engineering, 2014, 2014, 1-10.	1.1	10
27	An Edge-Set Representation Based on a Spanning Tree for Searching Cut Space. IEEE Transactions on Evolutionary Computation, 2015, 19, 465-473.	10.0	10
28	Genetic Feature Selection Applied to KOSPI and Cryptocurrency Price Prediction. Mathematics, 2021, 9, 2574.	2.2	10
29	A genetic filter for cancer classification on gene expression data. Bio-Medical Materials and Engineering, 2015, 26, S1993-S2002.	0.6	9
30	A Memetic Lagrangian Heuristic for the 0-1 Multidimensional Knapsack Problem. Discrete Dynamics in Nature and Society, 2013, 2013, 1-10.	0.9	8
31	Maximizing the Coverage of Sensor Deployments Using a Memetic Algorithm and Fast Coverage Estimation. IEEE Transactions on Cybernetics, 2022, 52, 6531-6542.	9.5	8
32	Correcting abnormalities in meteorological data by machine learning. , 2014, , .		7
33	A Genetic Approach for Gene Selection on Microarray Expression Data. Lecture Notes in Computer Science, 2004, , 346-355.	1.3	7
34	A Memetic Algorithm with a Novel Repair Heuristic for the Multiple-Choice Multidimensional Knapsack Problem. Mathematics, 2022, 10, 602.	2.2	7
35	Comparative Study of Classification Algorithms for Various DNA Microarray Data. Genes, 2022, 13, 494.	2.4	7
36	A Mathematical Design of Genetic Operators on $GL_n(\hat{a}„\hat{2})$. Mathematical Problems in Engineering, 2014, 2014, 1-8.	1.1	6

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37	New Bucket Managements in Iterative Improvement Partitioning Algorithms. Applied Mathematics and Information Sciences, 2013, 7, 529-532.	0.5	6
38	Vertex Ordering, Clustering, and Their Application to Graph Partitioning. Applied Mathematics and Information Sciences, 2014, 8, 135-138.	0.5	6
39	Speed estimation of sound-emitted objects through convergence of sound information analysis and smart device technology. Journal of the Korea Convergence Society, 2015, 6, 233-240.	0.1	6
40	An Efficient Large-Scale Sensor Deployment Using a Parallel Genetic Algorithm Based on CUDA. International Journal of Distributed Sensor Networks, 2016, 12, 8612128.	2.2	5
41	Prediction of Drifter Trajectory Using Evolutionary Computation. Discrete Dynamics in Nature and Society, 2018, 2018, 1-15.	0.9	5
42	Epistasis-Based Basis Estimation Method for Simplifying the Problem Space of an Evolutionary Search in Binary Representation. Complexity, 2019, 2019, 1-13.	1.6	5
43	Detection of Precipitation and Fog Using Machine Learning on Backscatter Data from Lidar Ceilometer. Applied Sciences (Switzerland), 2020, 10, 6452.	2.5	5
44	A Hybrid Genetic Approach for Circuit Bipartitioning. Lecture Notes in Computer Science, 2004, , 1054-1064.	1.3	5
45	Genetic Feature Selection for Very Short-Term Heavy Rainfall Prediction. Lecture Notes in Computer Science, 2012, , 312-322.	1.3	5
46	Spatiotemporal Pattern Networks of Heavy Rain among Automatic Weather Stations and Very-Short-Term Heavy-Rain Prediction. Advances in Meteorology, 2016, 2016, 1-13.	1.6	4
47	Towards a Better Basis Search through a Surrogate Model-Based Epistasis Minimization for Pseudo-Boolean Optimization. Mathematics, 2020, 8, 1287.	2.2	4
48	Optimizing taxon addition order and branch lengths in the construction of phylogenetic trees using maximum likelihood. Journal of Bioinformatics and Computational Biology, 2020, 18, 2050003.	0.8	4
49	Spatiotemporal Approaches for Quality Control and Error Correction of Atmospheric Data through Machine Learning. Computational Intelligence and Neuroscience, 2020, 2020, 1-12.	1.7	4
50	A Note on Edge-based Graph Partitioning and its Linear Algebraic Structure. Mathematical Modelling and Algorithms, 2011, 10, 269-276.	0.5	3
51	An Improvement on Estimated Drifter Tracking through Machine Learning and Evolutionary Search. Applied Sciences (Switzerland), 2020, 10, 8123.	2.5	3
52	Investigation of the Fitness Landscapes and Multi-parent Crossover for Graph Bipartitioning. Lecture Notes in Computer Science, 2003, , 1123-1135.	1.3	3
53	Optimizing the Order of Taxon Addition in Phylogenetic Tree Construction Using Genetic Algorithm. Lecture Notes in Computer Science, 2003, , 2168-2178.	1.3	3
54	A Spanning Tree-Based Encoding of the MAX CUT Problem for Evolutionary Search. Lecture Notes in Computer Science, 2012, , 510-518.	1.3	3

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55	Context Prediction of Mobile Users Based on Time-Inferred Pattern Networks: A Probabilistic Approach. Mathematical Problems in Engineering, 2013, 2013, 1-10.	1.1	2
56	Melody composition using geometric crossover for variable-length encoding. , 2017, , .		2
57	Coverage problem in camera-based sensor networks using the CUDA platform. International Journal of Distributed Sensor Networks, 2017, 13, 155014771774635.	2.2	2
58	A geometric evolutionary search for melody composition. , 2018, , .		2
59	Gene-Similarity Normalization in a Genetic Algorithm for the Maximum k-Coverage Problem. Mathematics, 2020, 8, 513.	2.2	2
60	An Enzyme-Inspired Approach to Surmount Barriers in Graph Bisection. Lecture Notes in Computer Science, 2008, , 841-851.	1.3	2
61	Moving Clusters within a Memetic Algorithm for Graph Partitioning. Mathematical Problems in Engineering, 2015, 2015, 1-10.	1.1	1
62	Automatic Jazz Melody Composition Through a Learning-Based Genetic Algorithm. Lecture Notes in Computer Science, 2019, , 217-233.	1.3	1
63	Applying Artificial Neural Networks for Estimation of Planetary Boundary Layer Height. Journal of Korean Institute of Intelligent Systems, 2017, 27, 302-309.	0.1	1
64	Feature Selection to Predict Very Short-term Heavy Rainfall Based on Differential Evolution. Journal of Korean Institute of Intelligent Systems, 2012, 22, 706-714.	0.1	1
65	On the Effect of Walsh/Fourier transform in surrogate-assisted genetic algorithms. , 2020, , .		1
66	Accounting for Recent Changes of Gain in Dealing with Ties in Iterative Methods for Circuit Partitioning. Discrete Dynamics in Nature and Society, 2015, 2015, 1-8.	0.9	0
67	Finding the Quickest Straight-Line Trajectory for a Three-Wheeled Omnidirectional Robot under Input Voltage Constraints. Mathematical Problems in Engineering, 2015, 2015, 1-11.	1.1	0
68	Linkage-Based Distance Metric in the Search Space of Genetic Algorithms. Mathematical Problems in Engineering, 2015, 2015, 1-6.	1.1	0
69	Discrete Dynamics in Evolutionary Computation and Its Applications. Discrete Dynamics in Nature and Society, 2016, 2016, 1-2.	0.9	0
70	A New Adaptive Hungarian Mating Scheme in Genetic Algorithms. Discrete Dynamics in Nature and Society, 2016, 2016, 1-13.	0.9	0
71	A Spanning Tree-based Representation and Its Application to the MAX CUT Problem. Journal of Institute of Control, Robotics and Systems, 2012, 18, 1096-1100.	0.2	0