Kusum Deep

List of Publications by Year
in descending order

159 papers	4,860 citations	126708 33 h-index	106150 65 g-index
171 all docs	171 docs citations	171 times ranked	3528 citing authors

#	Article	IF	Citations
1	A real coded genetic algorithm for solving integer and mixed integer optimization problems. Applied Mathematics and Computation, 2009, 212, 505-518.	1.4	588
2	A new crossover operator for real coded genetic algorithms. Applied Mathematics and Computation, 2007, 188, 895-911.	1.4	344
3	A new mutation operator for real coded genetic algorithms. Applied Mathematics and Computation, 2007, 193, 211-230.	1.4	305
4	A novel Random Walk Grey Wolf Optimizer. Swarm and Evolutionary Computation, 2019, 44, 101-112.	4.5	286
5	A hybrid self-adaptive sine cosine algorithm with opposition based learning. Expert Systems With Applications, 2019, 119, 210-230.	4.4	221
6	A Modified Binary Particle Swarm Optimization for Knapsack Problems. Applied Mathematics and Computation, 2012, 218, 11042-11061.	1.4	185
7	Improved sine cosine algorithm with crossover scheme for global optimization. Knowledge-Based Systems, 2019, 165, 374-406.	4.0	147
8	Optimal coordination of over-current relays using modified differential evolution algorithms. Engineering Applications of Artificial Intelligence, 2010, 23, 820-829.	4.3	130
9	A memory-based Grey Wolf Optimizer for global optimization tasks. Applied Soft Computing Journal, 2020, 93, 106367.	4.1	115
10	A Survey on Parallel Particle Swarm Optimization Algorithms. Arabian Journal for Science and Engineering, 2019, 44, 2899-2923.	1.7	103
11	A modified Sine Cosine Algorithm with novel transition parameter and mutation operator for global optimization. Expert Systems With Applications, 2020, 154, 113395.	4.4	97
12	A Hybrid Harmony search and Simulated Annealing algorithm for continuous optimization. Information Sciences, 2018, 450, 246-266.	4.0	96
13	Opposition-based learning Harris hawks optimization with advanced transition rules: principles and analysis. Expert Systems With Applications, 2020, 158, 113510.	4.4	85
14	Novel inertia weight strategies for particle swarm optimization. Memetic Computing, 2013, 5, 229-251.	2.7	79
15	A memory guided sine cosine algorithm for global optimization. Engineering Applications of Artificial Intelligence, 2020, 93, 103718.	4.3	74
16	Performance of Laplacian Biogeography-Based Optimization Algorithm on CEC 2014 continuous optimization benchmarks and camera calibration problem. Swarm and Evolutionary Computation, 2016, 27, 132-144.	4.5	73
17	An efficient equilibrium optimizer with mutation strategy for numerical optimization. Applied Soft Computing Journal, 2020, 96, 106542.	4.1	73
18	Quadratic approximation based hybrid genetic algorithm for function optimization. Applied Mathematics and Computation, 2008, 203, 86-98.	1.4	70

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19	Mean particle swarm optimisation for function optimisation. International Journal of Computational Intelligence Studies, 2009, 1, 72.	0.3	64
20	A novel hybrid sine cosine algorithm for global optimization and its application to train multilayer perceptrons. Applied Intelligence, 2020, 50, 993-1026.	3.3	60
21	Opposition based Laplacian Ant Lion Optimizer. Journal of Computational Science, 2017, 23, 71-90.	1.5	58
22	Sine cosine grey wolf optimizer to solve engineering design problems. Engineering With Computers, 2021, 37, 3123-3149.	3.5	57
23	Discrete Grey Wolf Optimizer for symmetric travelling salesman problem. Applied Soft Computing Journal, 2021, 105, 107298.	4.1	57
24	A self-organizing migrating genetic algorithm for constrained optimization. Applied Mathematics and Computation, 2008, 198, 237-250.	1.4	56
25	An efficient opposition based Lévy Flight Antlion optimizer for optimization problems. Journal of Computational Science, 2018, 29, 119-141.	1.5	54
26	Harmonized salp chain-built optimization. Engineering With Computers, 2021, 37, 1049-1079.	3.5	53
27	Opposition-based Laplacian Equilibrium Optimizer with application in Image Segmentation using Multilevel Thresholding. Expert Systems With Applications, 2021, 174, 114766.	4.4	53
28	Enhanced leadership-inspired grey wolf optimizer for global optimization problems. Engineering With Computers, 2020, 36, 1777-1800.	3.5	50
29	Spider monkey optimization algorithm for constrained optimization problems. Soft Computing, 2017, 21, 6933-6962.	2.1	48
30	Hybrid sine cosine artificial bee colony algorithm for global optimization and image segmentation. Neural Computing and Applications, 2020, 32, 9521-9543.	3.2	45
31	An opposition-based chaotic Grey Wolf Optimizer for global optimisation tasks. Journal of Experimental and Theoretical Artificial Intelligence, 2019, 31, 751-779.	1.8	39
32	Parameter optimization of multi-pass turning using chaotic PSO. International Journal of Machine Learning and Cybernetics, 2015, 6, 319-337.	2.3	36
33	Self-adaptive artificial bee colony. Optimization, 2014, 63, 1513-1532.	1.0	35
34	Hybridization of particle swarm optimization with quadratic approximation. Opsearch, 2009, 46, 3-24.	1.1	34
35	Cauchy Grey Wolf Optimiser for continuous optimisation problems. Journal of Experimental and Theoretical Artificial Intelligence, 2018, 30, 1051-1075.	1.8	33
36	An efficient co-swarm particle swarm optimization for non-linear constrained optimization. Journal of Computational Science, 2014, 5, 258-268.	1.5	31

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37	Gravitational swarm optimizer for global optimization. Swarm and Evolutionary Computation, 2016, 31, 64-89.	4.5	31
38	Improving the Local Search Ability of Spider Monkey Optimization Algorithm Using Quadratic Approximation for Unconstrained Optimization. Computational Intelligence, 2017, 33, 210-240.	2.1	31
39	Random walk grey wolf optimizer for constrained engineering optimization problems. Computational Intelligence, 2018, 34, 1025-1045.	2.1	29
40	A new membrane algorithm using the rules of Particle Swarm Optimization incorporated within the framework of cell-like P-systems to solve Sudoku. Applied Soft Computing Journal, 2016, 45, 27-39.	4.1	28
41	Accelerated Opposition-Based Antlion Optimizer with Application to Order Reduction of Linear Time-Invariant Systems. Arabian Journal for Science and Engineering, 2019, 44, 2213-2241.	1.7	28
42	Applications of Harmony Search Algorithm in Data Mining: A Survey. Advances in Intelligent Systems and Computing, 2016, , 863-874.	0.5	27
43	Cell-like P-systems based on rules of Particle Swarm Optimization. Applied Mathematics and Computation, 2014, 246, 546-560.	1.4	25
44	Application of Random Search Technique in Directional Overcurrent Relay Coordination. International Journal of Emerging Electric Power Systems, 2006, 7, .	0.6	23
45	A new guiding force strategy for differential evolution. International Journal of Systems Assurance Engineering and Management, 2017, 8, 2170-2183.	1.5	23
46	An Efficient Grey Wolf Optimizer with Opposition-Based Learning and Chaotic Local Search for Integer and Mixed-Integer Optimization Problems. Arabian Journal for Science and Engineering, 2019, 44, 7277-7296.	1.7	22
47	A new hybrid Self Organizing Migrating Genetic Algorithm for function optimization. , 2007, , .		20
48	A random walk Grey wolf optimizer based on dispersion factor for feature selection on chronic disease prediction. Expert Systems With Applications, 2022, 206, 117864.	4.4	20
49	Explorationâ€"exploitation balance in Artificial Bee Colony algorithm: a critical analysis. Soft Computing, 2019, 23, 9525-9536.	2.1	18
50	Optimization of directional overcurrent relay times by particle swarm optimization. , 2008, , .		17
51	An interactive method using genetic algorithm for multi-objective optimization problems modeled in fuzzy environment. Expert Systems With Applications, 2011, 38, 1659-1667.	4.4	17
52	Opposition-based antlion optimizer using Cauchy distribution and its application to data clustering problem. Neural Computing and Applications, 2020, 32, 6967-6995.	3.2	17
53	Optimal Coordination of Overcurrent Relays Using Improved Leadership-Based Grey Wolf Optimizer. Arabian Journal for Science and Engineering, 2020, 45, 2081-2091.	1.7	17
54	Shrinking hypersphere based trajectory of particles in PSO. Applied Mathematics and Computation, 2013, 220, 246-267.	1.4	16

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55	Optimization of directional overcurrent relay times using Laplace Crossover Particle Swarm Optimization (LXPSO). , 2009, , .		15
56	Calibration of nearest neighbors model for avalanche forecasting. Cold Regions Science and Technology, 2015, 109, 33-42.	1.6	15
57	Information sharing strategy among particles in Particle Swarm Optimization using Laplacian operator. , 2009, , .		14
58	A novel hybrid genetic algorithm for constrained optimization. International Journal of Systems Assurance Engineering and Management, 2013, 4, 86-93.	1.5	13
59	STEREO CAMERA CALIBRATION USING PARTICLE SWARM OPTIMIZATION. Applied Artificial Intelligence, 2013, 27, 618-634.	2.0	13
60	A State-of-the-Art Review of Biogeography-Based Optimization. Advances in Intelligent Systems and Computing, 2015, , 533-549.	0.5	13
61	Management of Multipurpose Multireservoir Using Fuzzy Interactive Method. Water Resources Management, 2009, 23, 2987-3003.	1.9	12
62	Constrained Optimization Using Gravitational Search Algorithm. The National Academy of Sciences, India, 2013, 36, 527-534.	0.8	12
63	Tournament Selection Based Probability Scheme in Spider Monkey Optimization Algorithm. Advances in Intelligent Systems and Computing, 2016, , 239-250.	0.5	12
64	Effectiveness of new Multiple-PSO based Membrane Optimization Algorithms on CEC 2014 benchmarks and Iris classification. Natural Computing, 2017, 16, 473-496.	1.8	12
65	A Socio-Cognitive Particle Swarm Optimization for Multi-Dimensional Knapsack Problem. , 2008, , .		11
66	A novel approach to accelerate calibration process of a k-nearest neighbours classifier using GPU. Journal of Parallel and Distributed Computing, 2017, 104, 114-129.	2.7	11
67	Multi-objective two-level swarm intelligence approach for multiple RNA sequence-structure alignment. Swarm and Evolutionary Computation, 2017, 34, 130-144.	4.5	11
68	Reliabilityâ€"Redundancy Allocation Using Random Walk Gray Wolf Optimizer. Advances in Intelligent Systems and Computing, 2020, , 941-959.	0.5	11
69	A non-deterministic adaptive inertia weight in PSO. , 2011, , .		10
70	New variants of glowworm swarm optimization based on step size. International Journal of Systems Assurance Engineering and Management, 2015, 6, 286-296.	1.5	10
71	Soft computing for problem solving (SocProS 2015). International Journal of Systems Assurance Engineering and Management, 2018, 9, 1-1.	1.5	10
72	Artificial Bee Colony algorithm with improved search mechanism. Soft Computing, 2019, 23, 12437-12460.	2.1	10

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73	Optimal Design of Water Distribution Networks via Particle Swarm Optimization. , 2009, , .		9
74	Initializing PSO with probability distributions and low-discrepancy sequences: The comparative results. , 2009, , .		9
75	Constrained Laplacian biogeography-based optimization algorithm. International Journal of Systems Assurance Engineering and Management, 2017, 8, 867-885.	1.5	9
76	Multi task selection including part mix, tool allocation and process plans in CNC machining centers using new binary PSO. , 2012, , .		8
77	Differential evolution using a localized Cauchy mutation operator. , 2010, , .		7
78	Modified parallel particle swarm optimization for global optimization using Message Passing Interface. , 2010, , .		7
79	A shrinking hypersphere PSO for engineering optimisation problems. Journal of Experimental and Theoretical Artificial Intelligence, 2016, 28, 1-33.	1.8	7
80	A Modified Biogeography Based Optimization. Advances in Intelligent Systems and Computing, 2016, , 227-238.	0.5	7
81	Portfolio optimization using Laplacian biogeography based optimization. Opsearch, 2019, 56, 1117-1141.	1.1	7
82	Constrained Laplacian Biogeography-Based Optimization for Economic Load Dispatch Problems. Process Integration and Optimization for Sustainability, 2022, 6, 483-496.	1.4	7
83	Solving nonconvex trim loss problem using an efficient hybrid Particle Swarm Optimization. , 2009, , .		6
84	A fuzzy interactive approach for optimal portfolio management. Opsearch, 2009, 46, 69-88.	1.1	6
85	Investigation of Suitable Perturbation Rate Scheme for Spider Monkey Optimization Algorithm. Advances in Intelligent Systems and Computing, 2016, , 839-850.	0.5	6
86	Hybridizing gravitational search algorithm with real coded genetic algorithms for structural engineering design problem. Opsearch, 2017, 54, 505-536.	1.1	6
87	Quadratic Approximation PSO for Economic Dispatch Problems with Valve-Point Effects. Lecture Notes in Computer Science, 2010, , 460-467.	1.0	6
88	Artificial Neural Network Technique for Solution of Nonlinear Elliptic Boundary Value Problems. Advances in Intelligent Systems and Computing, 2015, , 113-121.	0.5	6
89	A state-of-the-art review of population-based parallel meta-heuristics. , 2009, , .		5
90	Power Mutation Embedded Modified PSO for Global Optimization Problems. Lecture Notes in Computer Science, 2010, , 139-146.	1.0	5

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91	Global Optimization of Lennard-Jones Potential Using Newly Developed Real Coded Genetic Algorithms. , 2011, , .		5
92	Genetic algorithm based fuzzy weighted average for multi-criteria decision making problems. Opsearch, 2011, 48, 96-108.	1.1	5
93	Totally disturbed chaotic Particle Swarm Optimization. , 2012, , .		5
94	Solution of fractional programming problems using PSO algorithm. , 2013, , .		5
95	A New Improved Gravitational Search Algorithm for Function Optimization Using a Novel "Best-So-Far" Update Mechanism. , 2015, , .		5
96	C-SOMAQI: Self Organizing Migrating Algorithm with Quadratic Interpolation Crossover Operator for Constrained Global Optimization. Studies in Computational Intelligence, 2016, , 147-165.	0.7	5
97	A two‐phase harmony search algorithm for continuous optimization. Computational Intelligence, 2017, 33, 1038-1075.	2.1	5
98	Novel GA for metropolitan stations of Indian railways when modelled as a TSP. International Journal of Systems Assurance Engineering and Management, 2018, 9, 639-645.	1.5	5
99	Process optimization of biodiesel production using antlion optimizer. Journal of Information and Optimization Sciences, 2019, 40, 1281-1294.	0.2	5
100	Optimal Extraction of Bioactive Compounds from Gardenia Using Laplacian Biogoegraphy Based Optimization. Advances in Intelligent Systems and Computing, 2016, , 251-258.	0.5	5
101	Application of Globally Adaptive Inertia Weight PSO to Lennard-Jones Problem. Advances in Intelligent and Soft Computing, 2012, , 31-38.	0.2	5
102	Novel hybridised variants of gravitational search algorithm for constraint optimisation. International Journal of Swarm Intelligence, 2017, 3, 1.	0.2	4
103	Harmony search based memetic algorithms for solving sudoku. International Journal of Systems Assurance Engineering and Management, 2018, 9, 741-754.	1.5	4
104	Special issue on swarm intelligence and its applications to engineering. International Journal of Systems Assurance Engineering and Management, 2018, 9, 739-740.	1.5	4
105	Multi Objective Extraction Optimization of Bioactive Compounds from Gardenia Using Real Coded Genetic Algorithm. IFMBE Proceedings, 2010, , 1463-1466.	0.2	4
106	Hybridization of P Systems and Particle Swarm Optimization for Function Optimization. Advances in Intelligent Systems and Computing, 2014, , 395-401.	0.5	4
107	A new fine grained inertia weight Particle Swarm Optimization. , 2011, , .		3
108	A &#x0022;Never-Loose&#x0022; Strategy to Play the Game of Tic-Tac-Toe. , 2014, , .		3

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109	Fuzzy-based interactive method for solution of bi- and multi-level programming problems. International Journal of Information and Decision Sciences, 2014, 6, 166.	0.1	3
110	Accelerated grey wolf optimiser for continuous optimisation problems. International Journal of Swarm Intelligence, 2020, 5, 22.	0.2	3
111	How Improvements in Glowworm Swarm Optimization Can Solve Real-Life Problems. Advances in Intelligent Systems and Computing, 2015, , 279-291.	0.5	3
112	New Hybrid Discrete PSO for Solving Non Convex Trim Loss Problem. International Journal of Applied Evolutionary Computation, 2012, 3, 19-41.	0.7	3
113	A Novel Co-swarm Gravitational Search Algorithm for Constrained Optimization. Advances in Intelligent Systems and Computing, 2014, , 629-640.	0.5	3
114	Gompertz PSO variants for Knapsack and Multi-Knapsack Problems. Applied Mathematics, 2021, 36, 611-630.	0.6	3
115	Particle Swarm Optimization for economic dispatch problems with valve-point effects. , 2010, , .		2
116	Novel Binary PSO for Continuous Global Optimization Problems. Advances in Intelligent and Soft Computing, 2012, , 169-176.	0.2	2
117	A New Disc Based Particle Swarm Optimization. Advances in Intelligent and Soft Computing, 2012, , 23-30.	0.2	2
118	GA-NR for optimal design of water distribution networks. International Journal of Operational Research, 2014, 20, 241.	0.1	2
119	Performance of Grey Wolf Optimizer on large scale problems. AIP Conference Proceedings, 2017, , .	0.3	2
120	Effectiveness of Constrained Laplacian Biogeography Based Optimization for Solving Structural Engineering Design Problems. Advances in Intelligent Systems and Computing, 2017, , 206-219.	0.5	2
121	Improved Variants of Gravitational Search Algorithm Based on â€œBest-so-Farâ€•Updating Mechanism. The National Academy of Sciences, India, 2017, 40, 365-372.	0.8	2
122	A heuristic based harmony search algorithm for maximum clique problem. Opsearch, 2018, 55, 411-433.	1.1	2
123	An Efficient Bi-Level Discrete PSO Variant for Multiple Sequence Alignment. Advances in Intelligent Systems and Computing, 2019, , 797-807.	0.5	2
124	Performance Analysis of Turning Process via Particle Swarm Optimization. Studies in Computational Intelligence, 2008, , 453-460.	0.7	2
125	Robotics and Image Processing for Plucking of Fruits. Advances in Intelligent Systems and Computing, 2016, , 771-781.	0.5	2
126	Hybridized Gravitational Search Algorithms with Real Coded Genetic Algorithms for Integer and Mixed Integer Optimization Problems. Advances in Intelligent Systems and Computing, 2017, , 84-112.	0.5	2

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127	A Novel CPU Scheduling Algorithm Based on Ant Lion Optimizer. Advances in Intelligent Systems and Computing, 2019, , 339-353.	0.5	2
128	Improved Grey Wolf Optimizer Based on Opposition-Based Learning. Advances in Intelligent Systems and Computing, 2019, , 327-338.	0.5	2
129	Maximisation of Expected Target Damage Value. Defence Science Journal, 2005, 55, 133-139.	0.5	2
130	Use of Evolutionary Algorithms to Play the Game of Checkers: Historical Developments, Challenges and Future Prospects. Advances in Intelligent Systems and Computing, 2014, , 55-62.	0.5	2
131	THE RANDOM SEARCH GLOBAL OPTIMIZATION METHOD FOR PARALLEL COMPUTERS. International Journal of Parallel, Emergent and Distributed Systems, 1995, 5, 269-282.	0.4	1
132	A Fuzzy Interactive Method for Multiobjective Engineering Design Problems. , 2008, , .		1
133	OPTIMIZATION OF POWER SYSTEMS USING REAL CODED GENETIC ALGORITHMS. AIP Conference Proceedings, 2008, , .	0.3	1
134	Special Issue on Bio-Inspired Computing: Theories and Applications: Journal of Computational Science. Journal of Computational Science, 2014, 5, 135-136.	1.5	1
135	Efficient Mutation Strategies Embedded in Laplacian-Biogeography-Based Optimization Algorithm for Unconstrained Function Minimization. International Journal of Applied Evolutionary Computation, 2016, 7, 12-44.	0.7	1
136	Curve Fitting Using Gravitational Search Algorithm and Its Hybridized Variants. Advances in Intelligent Systems and Computing, 2016, , 823-837.	0.5	1
137	Reconstruction of 3D curves and surfaces using new variants of gravitational search algorithm. Journal of Information and Optimization Sciences, 2018, 39, 1199-1221.	0.2	1
138	Novel hybridised variants of gravitational search algorithm for constraint optimisation. International Journal of Swarm Intelligence, 2017, 3, 1.	0.2	1
139	Incorporating Genetic Algorithms in Transport Management. Advances in Intelligent and Soft Computing, 2012, , 177-192.	0.2	1
140	Performance Analysis of Whale Optimization Algorithm Based on Strategy Parameter. Advances in Intelligent Systems and Computing, 2020, , 15-30.	0.5	1
141	Optimization of Lycopene Extraction from Tomato Processing Waste Skin Using Harmony Search Algorithm. Advances in Intelligent Systems and Computing, 2020, , 141-154.	0.5	1
142	Finding stable conformations of small molecules using real coded genetic algorithm. , 2009, , .		0
143	Special issue on advances in nature inspired algorithms for complex numerical optimization problems. Memetic Computing, 2013, 5, 253-254.	2.7	0
144	A Novel Crossover Operator Designed to Exploit Synergies of Two Crossover Operators for Real-Coded Genetic Algorithms. Advances in Intelligent Systems and Computing, 2016, , 343-350.	0.5	0

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145	Cell-like P-systems coupled with rules of particle swarm optimisation to solve Blasius differential equation. International Journal of Swarm Intelligence, 2016, 2, 87.	0.2	0
146	Design of chemo-GA for engineering design optimization problem. , 2016, , .		0
147	Cell-like P-systems using deterministic update rules to solve Sudoku. International Journal of Systems Assurance Engineering and Management, 2017, 8, 857-866.	1.5	0
148	Protect botanical plants and pluck botanical products using robotics and image processing. International Journal of Systems Assurance Engineering and Management, 2018, 9, 287-293.	1.5	0
149	Single and multi-objective optimization of nanofluid flow in flat tube to enhance heat transfer using antlion optimizer algorithms. International Journal of Systems Assurance Engineering and Management, 2021, 12, 1026-1035.	1.5	0
150	Timely Prediction of Tsunami Using under Sea Earthquake Signals. Advances in Intelligent and Soft Computing, 2012, , 1011-1018.	0.2	0
151	METAHEURISTIC TECHNIQUE FOR FINDING EARTHQUAKE LOCATIONS IN NW HIMALAYAN REGION. , 2012, , 1-10.		0
152	Liquid-Drop-Like Multi-Orbit Topology Versus Ring Topology in PSO for Lennard-Jones Problem. Advances in Intelligent Systems and Computing, 2013, , 229-243.	0.5	0
153	Engineering Optimization Using SOMGA. Advances in Intelligent Systems and Computing, 2014, , 323-335.	0.5	0
154	Role of Particle Swarm Optimization in Computer Games. Advances in Intelligent Systems and Computing, 2015, , 259-277.	0.5	0
155	Digitization of Library: Engineering Colleges. Advances in Intelligent Systems and Computing, 2015, , 237-248.	0.5	0
156	SOMGA for Large Scale Function Optimization and Its Application. Studies in Computational Intelligence, 2016, , 187-205.	0.7	0
157	Use of Improved Gravitational Search Algorithm for 3D Reconstruction of Space Curves Using NURBS. Advances in Intelligent Systems and Computing, 2019, , 185-197.	0.5	0
158	An Implementation of Three-level Multi-objective ABC Algorithm for RNA Multiple Structural Alignment. Recent Advances in Computer Science and Communications, 2020, 13, 68-76.	0.5	0
159	Hookes-Jeeves-Based Variant of Memetic Algorithm. , 0, , 450-475.		0