Prasanta K Jana

List of Publications by Year
in descending order

116 papers	4,467 citations	117453 34 h-index	118652 62 g-index
117 all docs	117 docs citations	117 times ranked	2644 citing authors

#	Article	IF	Citations
1	Energy efficient clustering and routing algorithms for wireless sensor networks: Particle swarm optimization approach. Engineering Applications of Artificial Intelligence, 2014, 33, 127-140.	4.3	422
2	A particle swarm optimization based energy efficient cluster head selection algorithm for wireless sensor networks. Wireless Networks, 2017, 23, 2005-2020.	2.0	301
3	A novel evolutionary approach for load balanced clustering problem for wireless sensor networks. Swarm and Evolutionary Computation, 2013, 12, 48-56.	4.5	224
4	A novel differential evolution based clustering algorithm for wireless sensor networks. Applied Soft Computing Journal, 2014, 25, 414-425.	4.1	193
5	Energy-aware routing algorithm for wireless sensor networks. Computers and Electrical Engineering, 2015, 41, 357-367.	3.0	163
6	Efficient task scheduling algorithms for heterogeneous multi-cloud environment. Journal of Supercomputing, 2015, 71, 1505-1533.	2.4	158
7	Energy efficient fault tolerant clustering and routing algorithms for wireless sensor networks. Computers and Electrical Engineering, 2015, 41, 177-190.	3.0	134
8	Application of wireless sensor network for environmental monitoring in underground coal mines: A systematic review. Journal of Network and Computer Applications, 2018, 106, 48-67.	5.8	125
9	Genetic algorithm approach for k -coverage and m -connected node placement in target based wireless sensor networks. Computers and Electrical Engineering, 2016, 56, 544-556.	3.0	124
10	A GSA based hybrid algorithm for bi-objective workflow scheduling in cloud computing. Future Generation Computer Systems, 2018, 83, 14-26.	4.9	123
11	Energy efficient path selection for mobile sink and data gathering in wireless sensor networks. AEU - International Journal of Electronics and Communications, 2017, 73, 110-118.	1.7	108
12	Energy Efficient Load-Balanced Clustering Algorithm for Wireless Sensor Networks. Procedia Technology, 2012, 6, 771-777.	1.1	92
13	Energy Efficient Clustering and Routing Algorithms for Wireless Sensor Networks: GA Based Approach. Wireless Personal Communications, 2015, 83, 2403-2423.	1.8	89
14	An efficient scheduling scheme for mobile charger in on-demand wireless rechargeable sensor networks. Journal of Network and Computer Applications, 2018, 114, 123-134.	5.8	88
15	An energy-efficient task scheduling algorithm for heterogeneous cloud computing systems. Cluster Computing, 2019, 22, 509-527.	3.5	81
16	A multi-objective and PSO based energy efficient path design for mobile sink in wireless sensor networks. Pervasive and Mobile Computing, 2018, 46, 122-136.	2.1	76
17	PSO-based approach for energy-efficient and energy-balanced routing and clustering in wireless sensor networks. Soft Computing, 2017, 21, 6825-6839.	2.1	74
18	Approximation schemes for load balanced clustering in wireless sensor networks. Journal of Supercomputing, 2014, 68, 87-105.	2.4	69

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19	GAR: An Energy Efficient GA-Based Routing for Wireless Sensor Networks. Lecture Notes in Computer Science, 2013, , 267-277.	1.0	66
20	SLA-based task scheduling algorithms for heterogeneous multi-cloud environment. Journal of Supercomputing, 2017, 73, 2730-2762.	2.4	66
21	A distributed algorithm for energy efficient and fault tolerant routing in wireless sensor networks. Wireless Networks, 2015, 21, 251-267.	2.0	65
22	Particle swarm optimization for maximizing lifetime of wireless sensor networks. Computers and Electrical Engineering, 2016, 51, 26-42.	3.0	64
23	Normalization-Based Task Scheduling Algorithms for Heterogeneous Multi-Cloud Environment. Information Systems Frontiers, 2018, 20, 373-399.	4.1	63
24	A multi-objective task scheduling algorithm for heterogeneous multi-cloud environment. , 2015, , .		55
25	A novel cost-efficient approach for deadline-constrained workflow scheduling by dynamic provisioning of resources. Future Generation Computer Systems, 2018, 79, 95-110.	4.9	53
26	An efficient scheduling scheme for on-demand mobile charging in wireless rechargeable sensor networks. Pervasive and Mobile Computing, 2019, 59, 101074.	2.1	51
27	A grid based clustering and routing algorithm for solving hot spot problem in wireless sensor networks. Wireless Networks, 2016, 22, 1901-1916.	2.0	46
28	Task scheduling algorithms for multi-cloud systems: allocation-aware approach. Information Systems Frontiers, 2019, 21, 241-259.	4.1	45
29	A Fuzzy Logic-Based On-Demand Charging Algorithm for Wireless Rechargeable Sensor Networks With Multiple Chargers. IEEE Transactions on Mobile Computing, 2021, 20, 2715-2727.	3.9	45
30	A distributed fault-tolerant clustering algorithm for wireless sensor networks. , 2013, , .		42
31	Uncertainty-Based QoS Minâ€"Min Algorithm for Heterogeneous Multi-cloud Environment. Arabian Journal for Science and Engineering, 2016, 41, 3003-3025.	1.1	40
32	Coverage hole detection and restoration algorithm for wireless sensor networks. Peer-to-Peer Networking and Applications, 2017, 10, 66-78.	2.6	39
33	An Energy Efficient Algorithm for Workflow Scheduling in IaaS Cloud. Journal of Grid Computing, 2020, 18, 357-376.	2.5	37
34	Genetic Algorithm for k-Connected Relay Node Placement in Wireless Sensor Networks. Advances in Intelligent Systems and Computing, 2016, , 721-729.	0.5	36
35	A hybrid MapReduce-based k-means clustering using genetic algorithm for distributed datasets. Journal of Supercomputing, 2018, 74, 1562-1579.	2.4	36
36	Allocation-aware Task Scheduling for Heterogeneous Multi-cloud Systems. Procedia Computer Science, 2015, 50, 176-184.	1.2	34

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37	Efficient Workflow Scheduling Algorithm for Cloud Computing System: A Dynamic Priority-Based Approach. Arabian Journal for Science and Engineering, 2018, 43, 7945-7960.	1.7	32
38	Load balanced task scheduling for cloud computing: a probabilistic approach. Knowledge and Information Systems, 2019, 61, 1607-1631.	2.1	32
39	Improved Load Balanced Clustering Algorithm for Wireless Sensor Networks. Lecture Notes in Computer Science, 2012, , 399-404.	1.0	30
40	An energy balanced distributed clustering and routing algorithm for Wireless Sensor Networks. , 2012, , .		28
41	A Survey on Mobile Charging Techniques in Wireless Rechargeable Sensor Networks. IEEE Communications Surveys and Tutorials, 2022, 24, 1750-1779.	24.8	28
42	An efficient task scheduling algorithm for heterogeneous multi-cloud environment. , 2014, , .		26
43	Polynomial interpolation and polynomial root finding on OTIS-mesh. Parallel Computing, 2006, 32, 301-312.	1.3	25
44	Energy efficient multipath routing for wireless sensor networks: A genetic algorithm approach. , 2016, , .		25
45	Heap and parameter-based load balanced clustering algorithms for wireless sensor networks. International Journal of Communication Networks and Distributed Systems, 2015, 14, 413.	0.3	23
46	AN IMPROVED PARALLEL PREFIX ALGORITHM ON OTIS-MESH. Parallel Processing Letters, 2006, 16, 429-440.	0.4	22
47	An efficient minimum spanning tree based clustering algorithm. , 2009, , .		21
48	An efficient energy saving task consolidation algorithm for cloud computing systems. , 2014, , .		20
49	A smoothing based task scheduling algorithm for heterogeneous multi-cloud environment. , 2014, , .		20
50	Energy and Coverage-Aware Routing Algorithm for Wireless Sensor Networks. Wireless Personal Communications, 2015, 81, 531-545.	1.8	20
51	Distributed fault detection and recovery algorithms in two-tier wireless sensor networks. International Journal of Communication Networks and Distributed Systems, 2016, 16, 281.	0.3	20
52	Relay Node Placement with Assured Coverage and Connectivity: A Jarvis March Approach. Wireless Personal Communications, 2018, 98, 1361-1381.	1.8	20
53	Compute-intensive workflow scheduling in multi-cloud environment. , 2016, , .		19
54	An efficient scheme for trajectory design of mobile chargers in wireless sensor networks. Wireless Networks, 2020, 26, 897-912.	2.0	19

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55	An efficient partial charging scheme using multiple mobile chargers in wireless rechargeable sensor networks. Ad Hoc Networks, 2021, 113, 102407.	3.4	18
56	An Efficient Resource Allocation Algorithm for IaaS Cloud. Lecture Notes in Computer Science, 2015, , 351-355.	1.0	17
57	PSO-Based Multiple-sink Placement Algorithm for Protracting the Lifetime of Wireless Sensor Networks. Advances in Intelligent Systems and Computing, 2016, , 605-616.	0.5	17
58	Granularity-based workflow scheduling algorithm for cloud computing. Journal of Supercomputing, 2017, 73, 5440-5464.	2.4	17
59	Energy density based mobile sink trajectory in wireless sensor networks. Microsystem Technologies, 2019, 25, 1771-1781.	1.2	16
60	Multi-mesh of trees with its parallel algorithms. Journal of Systems Architecture, 2004, 50, 193-206.	2.5	15
61	A delay-bound efficient path design algorithm for mobile sink in wireless sensor networks. , 2016, , .		15
62	An Efficient Task Consolidation Algorithm for Cloud Computing Systems. Lecture Notes in Computer Science, 2016, , 61-74.	1.0	15
63	Optimized Fuzzy Logic-Based Fire Monitoring in Underground Coal Mines: Binary Particle Swarm Optimization Approach. IEEE Systems Journal, 2020, 14, 3039-3046.	2.9	15
64	Multi-objective workflow scheduling scheme: a multi-criteria decision making approach. Journal of Ambient Intelligence and Humanized Computing, 2021, 12, 10789-10808.	3.3	15
65	A Flower Pollination Algorithm Based Task Scheduling in Cloud Computing. Communications in Computer and Information Science, 2017, , 97-107.	0.4	15
66	A distributed energy efficient and energy balanced routing algorithm for wireless sensor networks. , 2014, , .		14
67	A GA-based approach for fault tolerant relay node placement in wireless sensor networks. , 2015, , .		14
68	A multi-attribute decision making approach for on-demand charging scheduling in wireless rechargeable sensor networks. Computing (Vienna/New York), 2021, 103, 1677.	3.2	14
69	An Energy efficient Load Balancing Algorithm for cluster-based wireless sensor networks. , 2012, , .		12
70	A routing load balanced trajectory design for mobile sink in wireless sensor networks. , 2016, , .		12
71	A delay efficient path selection strategy for mobile sink in wireless sensor networks. , 2017, , .		12
72	A novel approach for designing delay efficient path for mobile sink in wireless sensor networks. Wireless Networks, 2018, 24, 2337-2356.	2.0	12

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73	Relay node placement algorithm in wireless sensor network. , 2014, , .		11
74	Energy efficient fault-tolerant clustering algorithm for wireless sensor networks. , 2015, , .		11
75	A novel K-means based clustering algorithm for big data. , 2016, , .		11
76	Parallel algorithms for finding polynomial Roots onÂOTIS-torus. Journal of Supercomputing, 2010, 54, 139-153.	2.4	9
77	BDCP: A backoff-based distributed clustering protocol for wireless sensor networks. , 2013, , .		9
78	Indegree-based path design for mobile sink in wireless sensor networks. , 2016, , .		9
79	Scheme for tour planning of mobile sink in wireless sensor networks. IET Communications, 2020, 14, 430-439.	1.5	9
80	Sustainable and Optimized Data Collection via Mobile Edge Computing for Disjoint Wireless Sensor Networks. IEEE Transactions on Sustainable Computing, 2022, 7, 471-484.	2.2	9
81	A grid clustering algorithm using cluster boundaries. , 2012, , .		8
82	OTIS-MOT: an efficient interconnection network forÂparallel processing. Journal of Supercomputing, 2012, 59, 920-940.	2.4	8
83	E<sup>3</sup>BFT: Energy efficient and energy balanced fault tolerance clustering in Wireless Sensor Networks. , 2014, , .		8
84	A Gravitational Search Algorithm for Energy Efficient Multi-sink Placement in Wireless Sensor Networks. Lecture Notes in Computer Science, 2016, , 222-234.	1.0	8
85	Evolutionary Computing Approaches for Clustering and Routing in Wireless Sensor Networks. Advances in Computational Intelligence and Robotics Book Series, 2016, , 246-266.	0.4	8
86	SORTING AND ROUTING ON OTIS-MESH OF TREES. Parallel Processing Letters, 2010, 20, 145-154.	0.4	7
87	A PSO Based Fault Tolerant Routing Algorithm for Wireless Sensor Networks. Advances in Intelligent Systems and Computing, 2015, , 329-336.	0.5	7
88	An effective multi-objective workflow scheduling in cloud computing: A PSO based approach. , 2016, , .		7
89	Task duplication-based workflow scheduling for heterogeneous cloud environment. , 2016, , .		7
90	Evolutionary Computing Approaches for Clustering and Routing in Wireless Sensor Networks. , 2020, , 125-146.		7

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91	DMCP: A Distributed Mobile Charging Protocol in Wireless Rechargeable Sensor Networks. ACM Transactions on Sensor Networks, 2023, 19, 1-29.	2.3	7
92	Energy Efficient Algorithms for Hot Spot Problem in Wireless Sensor Networks. Advances in Intelligent Systems and Computing, 2016, , 509-517.	0.5	6
93	Parallel Algorithm for Conflict Graph on OTIS-Triangular Array. Lecture Notes in Computer Science, 2007, , 274-279.	1.0	6
94	An Efficient Parallel Sorting Algorithm on OTIS Mesh of Trees. , 2009, , .		5
95	Energy Efficient Clustering for Wireless Sensor Networks: A Gravitational Search Algorithm. Lecture Notes in Computer Science, 2016, , 247-259.	1.0	5
96	Transfer time-aware workflow scheduling for multi-cloud environment. , 2016, , .		5
97	A Hybrid Meta-heuristic Approach for Load Balanced Workflow Scheduling in IaaS Cloud. Lecture Notes in Computer Science, 2019, , 73-89.	1.0	5
98	Grid Based Adaptive Sleep for Prolonging Network Lifetime in Wireless Sensor Network. Procedia Computer Science, 2015, 46, 1140-1147.	1.2	4
99	Forward Load Aware Scheduling for Data-Intensive Workflow Applications in Cloud System. , 2016, , .		4
100	Energy efficient unequal clustering and routing algorithms for wireless sensor networks. , 2014, , .		3
101	Novel leases for IaaS cloud. , 2015, , .		3
102	An Effective Task Scheduling Approach for Cloud Computing Environment. Lecture Notes in Electrical Engineering, 2016, , 163-169.	0.3	3
103	Energy efficient algorithms to maximize lifetime of wireless sensor networks. , 2016, , .		3
104	DFDA: A Distributed Fault Detection Algorithm in Two Tier Wireless Sensor Networks. Advances in Intelligent Systems and Computing, 2015, , 739-746.	0.5	3
105	Clustering-Based Energy Efficient Task Offloading for Sustainable Fog Computing. IEEE Transactions on Sustainable Computing, 2023, 8, 56-67.	2.2	3
106	A General Framework for Class Label Specific Mutual Information Feature Selection Method. IEEE Transactions on Information Theory, 2022, 68, 7996-8014.	1.5	3
107	An efficient resource provisioning algorithm for workflow execution in cloud platform. Cluster Computing, 2022, 25, 4233-4255.	3.5	3
108	An improved MST-based clustering for biological data. , 2012, , .		2

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109	A novel clustering algorithm using voronoi diagram. , 2012, , .		2
110	Hamiltonicity of a General OTIS Network. Lecture Notes in Computer Science, 2010, , 459-465.	1.0	2
111	Permutation algorithms on optical multi-trees. Computers and Mathematics With Applications, 2008, 56, 2656-2665.	1.4	1
112	A new distributed approach for building balanced ring for fault tolerance in mesh architecture. , 2009, , .		1
113	Improved Algorithms for Balanced Ring Formation for Fault Tolerance in A 2D Mesh. International Journal of Computers and Applications, 2010, 32, 232-237.	0.8	1
114	Fast parallel prefix on multi-mesh of trees. , 2010, , .		1
115	A Novel Clustering Algorithm for Biological Data. , 2011, , .		1
116	Efficient Overlay Construction for Wireless Sensor Networks. Wireless Personal Communications, 2016, 86, 959-973.	1.8	1