Amlan Chakrabarti

List of Publications by Year
in descending order

116 papers	936 citations	623734 14 h-index	642732 23 g-index
120 all docs	120 docs citations	120 times ranked	742 citing authors

#	Article	IF	Citations
1	A review on application of data mining techniques to combat natural disasters. Ain Shams Engineering Journal, 2018, 9, 365-378.	6.1	109
2	A new hybrid feature selection approach using feature association map for supervised and unsupervised classification. Expert Systems With Applications, 2017, 88, 81-94.	7.6	46
3	Twitter sentiment analysis for product review using lexicon method. , 2017, , .		44
4	A feature cluster taxonomy based feature selection technique. Expert Systems With Applications, 2017, 79, 76-89.	7.6	41
5	Feature Selection: A Practitioner View. International Journal of Information Technology and Computer Science, 2014, 6, 66-77.	1.0	37
6	An Image Denoising Technique using Quantum Wavelet Transform. International Journal of Theoretical Physics, 2020, 59, 3348-3371.	1.2	28
7	Scheduling Dynamic Hard Real-Time Task Sets on Fully and Partially Reconfigurable Platforms. IEEE Embedded Systems Letters, 2015, 7, 23-26.	1.9	24
8	Rician noise removal in magnitude MRI images using efficient anisotropic diffusion filtering. International Journal of Imaging Systems and Technology, 2017, 27, 248-264.	4.1	24
9	FTQLS: Fault-Tolerant Quantum Logic Synthesis. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2014, 22, 1350-1363.	3.1	23
10	Synthesis Techniques for Ternary Quantum Logic. , 2011, , .		22
11	QLib. ACM Journal on Emerging Technologies in Computing Systems, 2014, 11, 1-20.	2.3	22
12	Optimized Quantum Gate Library for Various Physical Machine Descriptions. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2013, 21, 2055-2068.	3.1	18
13	A hybrid quantum feature selection algorithm using a quantum inspired graph theoretic approach. Applied Intelligence, 2020, 50, 1775-1793.	5.3	18
14	Generation of Ball Possession Statistics in Soccer Using Minimum-Cost Flow Network. , 2019, , .		17
15	A Novel Approach for Human Action Recognition from Silhouette Images. IETE Journal of Research, 2017, 63, 160-171.	2.6	16
16	VEA: Vessel Extraction Algorithm by Active Contour Model and a Novel Wavelet Analyzer for Diabetic Retinopathy Detection. International Journal of Image and Graphics, 2018, 18, 1850008.	1.5	15
17	Dynamic Scheduling of Real-Time Tasks in Heterogeneous Multicore Systems. IEEE Embedded Systems Letters, 2019, 11, 29-32.	1.9	15
18	An Efficient FPGA Implementation of Optimized Anisotropic Diffusion Filtering of Images. International Journal of Reconfigurable Computing, 2016, 2016, 1-17.	0.2	14

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19	Self Aware SoC Security to Counteract Delay Inducing Hardware Trojans at Runtime. , 2017, , .		14
20	Chest X-ray enhancement to interpret pneumonia malformation based on fuzzy soft set and Dempsterâ€"Shafer theory of evidence. Applied Soft Computing Journal, 2020, 86, 105889.	7.2	14
21	Variability of Cobb angle measurement from digital X-ray image based on different de-noising techniques. International Journal of Biomedical Engineering and Technology, 2014, 16, 113.	0.2	12
22	An approach of feature selection using graph-theoretic heuristic and hill climbing. Pattern Analysis and Applications, 2019, 22, 615-631.	4.6	12
23	Weighted delay prediction in mobile ad hoc network using fuzzy time series. Egyptian Informatics Journal, 2014, 15, 105-114.	6.8	11
24	RTNA: Securing SOC architectures from confidentiality attacks at runtime using ART1 neural networks. , 2015, , .		11
25	Adaptive denoising of 3D volumetric MR images using local variance based estimator. Biomedical Signal Processing and Control, 2020, 59, 101901.	5.7	10
26	Modified switching DE algorithm to facilitate reduction of PAPR in OFDM systems. Physical Communication, 2018, 29, 245-260.	2.1	9
27	A Hybrid Approach of Bayesian Structural Time Series With LSTM to Identify the Influence of News Sentiment on Short-Term Forecasting of Stock Price. IEEE Transactions on Computational Social Systems, 2021, 8, 1153-1162.	4.4	9
28	A Synthesis Method for Quaternary Quantum Logic Circuits. Lecture Notes in Computer Science, 2012, , 270-280.	1.3	9
29	Asymptotically improved circuit for a d-ary Grover's algorithm with advanced decomposition of the n-qudit Toffoli gate. Physical Review A, 2022, 105, .	2.5	9
30	Real-Time SoC Security against Passive Threats Using Crypsis Behavior of Geckos. ACM Journal on Emerging Technologies in Computing Systems, 2017, 13, 1-26.	2.3	8
31	Biogeographic-Based Temporal Prediction of Link Stability in Mobile Ad Hoc Networks. Wireless Personal Communications, 2019, 104, 217-233.	2.7	8
32	Robust Human Action Recognition Using AREI Features and Trajectory Analysis from Silhouette Image Sequence. IETE Journal of Research, 2019, 65, 236-249.	2.6	8
33	Background modeling and foreground extraction in video data using spatio-temporal region persistence features. Computers and Electrical Engineering, 2020, 81, 106520.	4.8	8
34	Synthesis of Quantum Circuits for Dedicated Physical Machine Descriptions. Lecture Notes in Computer Science, 2015, , 248-264.	1.3	8
35	A Novel Method for Soft Error Mitigation in FPGA Using Modified Matrix Code. IEEE Embedded Systems Letters, 2016, 8, 65-68.	1.9	7
36	A Graph-Theoretic Approach for Visualization of Data Set Feature Association. Advances in Intelligent Systems and Computing, 2017, , 109-124.	0.6	7

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37	Reliability Driven Mixed Critical Tasks Processing on FPGAs Against Hardware Trojan Attacks. , 2018, , .		7
38	One-Dimensional Lazy Quantum Walk in Ternary System. IEEE Transactions on Quantum Engineering, 2021, 2, 1-12.	4.9	7
39	Synthesis of Ternary Grover's Algorithm. , 2014, , .		6
40	Efficient dynamic priority based soft error mitigation techniques for configuration memory of FPGA hardware. Microprocessors and Microsystems, 2017, 51, 313-330.	2.8	6
41	Reduction of Peak-to-Average Power Ratio of OFDM System Using Triangular Distribution Based Modified Companding Scheme. IETE Journal of Research, 2018, 64, 660-672.	2.6	6
42	SHIRT (Self Healing Intelligent Real Time) Scheduling for Secure Embedded Task Processing. , 2018, , .		6
43	An information-theoretic graph-based approach for feature selection. Sadhana - Academy Proceedings in Engineering Sciences, 2020, 45, 1.	1.3	6
44	Hybrid Turbo Coding PTS with Enhanced Switching Algorithm Employing DE to Carry Out Reduction in PAPR in AUL-Based MIMO-OFDM. Arabian Journal for Science and Engineering, 2020, 45, 1821-1839.	3.0	6
45	Design and implementation of real time secured RS232 link for multiple FPGA communication. , 2011, , .		5
46	Automatic Detection and Classification of Solitary Pulmonary Nodules from Lung CT Images. , 2014, , .		5
47	Synthesis of Vertex Coloring Problem Using Grover's Algorithm. , 2015, , .		5
48	Remote Sensing Image Fusion using Multithreshold Otsu Method in Shearlet Domain. Procedia Computer Science, 2015, 57, 554-562.	2.0	5
49	An Efficient Dynamic Scheduling of Tasks for Multicore Real-Time Systems. , 2016, , 31-47.		5
50	Multi core SSL/TLS security processor architecture and its FPGA prototype design with automated preferential algorithm. Microprocessors and Microsystems, 2016, 40, 124-136.	2.8	5
51	An efficient feature selection technique for clustering based on a new measure of feature importance. Journal of Intelligent and Fuzzy Systems, 2017, 32, 3847-3858.	1.4	5
52	Automated Quantum Circuit Synthesis and Cost Estimation for the Binary Welded Tree Oracle. ACM Journal on Emerging Technologies in Computing Systems, 2017, 13, 1-14.	2.3	5
53	Demonetization and its aftermath: an analysis based on twitter sentiments. Sadhana - Academy Proceedings in Engineering Sciences, 2018, 43, 1.	1.3	5
54	Criticality based reliability against hardware Trojan attacks for processing of tasks on reconfigurable hardware. Microprocessors and Microsystems, 2019, 71, 102865.	2.8	5

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55	Stigmergy-Based Security for SoC Operations From Runtime Performance Degradation of SoC Components. Transactions on Embedded Computing Systems, 2019, 18, 1-26.	2.9	5
56	Dynamic power-aware scheduling of real-time tasks for FPGA-based cyber physical systems against power draining hardware trojan attacks. Journal of Supercomputing, 2020, 76, 8972-9009.	3.6	5
57	Pre-Layout Decoupling Capacitance Estimation and Allocation for Noise-Aware Crypto-System on Chip Applications. Journal of Low Power Electronics, 2015, 11, 333-339.	0.6	5
58	Quantum image edge extraction based on classical robinson operator. Multimedia Tools and Applications, 2022, 81, 33459-33481.	3.9	5
59	A novel AES-256 implementation on FPGA using co-processor based architecture. , 2012, , .		4
60	Design of Quantum Circuits for Random Walk Algorithms. , 2012, , .		4
61	Audio de-noising by spectral subtraction technique implemented on reconfigurable hardware. , 2014, , .		4
62	An FPGA-Based High-Speed Error Resilient Data Aggregation and Control for High Energy Physics Experiment. IEEE Transactions on Nuclear Science, 2017, 64, 933-944.	2.0	4
63	A study and analysis of a discrete quantum walk-based hybrid clustering approach using d-regular bipartite graph and 1D lattice. International Journal of Quantum Information, 2019, 17, 1950016.	1.1	4
64	A Novel Distributive Population-Based Differential Evolution Algorithm for SLM Scheme to Reduce PAPR in Massive MIMO-OFDM Systems. SN Computer Science, 2020, 1, 1.	3.6	4
65	EAAM: Energy-aware application management strategy for FPGA-based IoT-Cloud environments. Journal of Supercomputing, 2020, 76, 10258-10287.	3.6	4
66	Advanced switching DE algorithm based PTS companding technique for PAPR reduction in OFDM systems. Telecommunication Systems, 2021, 77, 109-128.	2.5	4
67	Shot Classification and Replay Detection in Broadcast Soccer Video. Advances in Intelligent Systems and Computing, 2020, , 57-66.	0.6	4
68	Hardware software co-design of a fast bilateral filter in FPGA. , 2013, , .		3
69	FPGA based dual microphone speech enhancement. Microsystem Technologies, 2019, 25, 765-775.	2.0	3
70	Criticality Aware Soft Error Mitigation in the Configuration Memory of SRAM Based FPGA. , 2019, , .		3
71	A CAD approach for pre-layout optimal PDN design and its post-layout verification. Microprocessors and Microsystems, 2019, 65, 158-168.	2.8	3
72	Dynamic scheduling of tasks for multiâ€core realâ€time systems based on optimum energy and throughput. IET Computers and Digital Techniques, 2019, 13, 93-101.	1.2	3

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73	An efficient load balanced stable multi-path routing for mobile ad-hoc network. Microsystem Technologies, 2020, , 1.	2.0	3
74	A mathematical framework for design discovery from multi-threaded applications using neural sequence solvers. Innovations in Systems and Software Engineering, 2021, 17, 289-307.	2.1	3
75	Circuit Design for k-Coloring Problem and Its Implementation in Any Dimensional Quantum System. SN Computer Science, 2021, 2, 1.	3.6	3
76	A New Evaluation Measure for Feature Subset Selection with Genetic Algorithm. International Journal of Intelligent Systems and Applications, 2015, 7, 28-36.	1.1	3
77	A novel differential evolution algorithm for tone reservation based peak to average power ratio reduction technique in orthogonal frequency division multiplexing systems. Swarm and Evolutionary Computation, 2022, 72, 101086.	8.1	3
78	Real time communication between multiple FPGA systems in multitasking environment using RTOS. , 2012, , .		2
79	FPGA Based Novel High Speed DAQ System Design with Error Correction. , 2015, , .		2
80	An efficient hardware accelerated design for image denoising using Extended Trilateral filter. , 2016, , .		2
81	Dual Microphone Sound Source Localization Using Reconfigurable Hardware. Communications in Computer and Information Science, 2017, , 397-406.	0.5	2
82	Development of a Multi-Fog Based Water Quality Monitoring System Using Bio-Sensing Platform. , 2018, , .		2
83	Ensuring Green Computing in Reconfigurable Hardware based Cloud Platforms from Hardware Trojan Attacks. , 2020, , .		2
84	A fuzzy set based approach for effective feature selection. Fuzzy Sets and Systems, 2022, 449, 187-206.	2.7	2
85	FPGA Implementation of High Speed Latency Optimized Optical Communication System Based on Orthogonal Concatenated Code. , 2015, , .		1
86	Pre-layout module wise decap allocation for noise suppression and accurate delay estimation of SoC. , 2016, , .		1
87	Task Allocation Strategies for FPGA Based Heterogeneous System on Chip. Lecture Notes in Computer Science, 2017, , 341-353.	1.3	1
88	Spatio-Temporal Scheduling of Preemptive Real-Time Tasks on Partially Reconfigurable Systems. ACM Transactions on Design Automation of Electronic Systems, 2017, 22, 1-26.	2.6	1
89	Triangular Distribution-Based Companding Technique for Reducing PAPR of OFDM Systems. Iranian Journal of Science and Technology - Transactions of Electrical Engineering, 2017, 41, 175-186.	2.3	1
90	Coherence based dual microphone speech enhancement technique using FPGA. Microprocessors and Microsystems, 2017, 55, 111-118.	2.8	1

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91	A Software tool for 3D visualization and slicing of MR images. , 2017, , .		1
92	Hardware variant NSP with security‑aware automated preferential algorithm. IET Computers and Digital Techniques, 2018, 12, 192-205.	1.2	1
93	Auction Based Power Aware Real-Time Scheduler for Heterogeneous FPGA Cloud Platform. , 2019, , .		1
94	Differential graphene functions on two photosynthetic microbes. Advances in Natural Sciences: Nanoscience and Nanotechnology, 2020, 11, 015004.	1.5	1
95	A strong intuitionistic fuzzy feature association map-based feature selection technique for high-dimensional data. Sadhana - Academy Proceedings in Engineering Sciences, 2020, 45, 1.	1.3	1
96	Energy-Aware Real-Time Tasks Processing for FPGA-Based Heterogeneous Cloud. IEEE Transactions on Sustainable Computing, 2022, 7, 414-426.	3.1	1
97	Criticality based Reduction of Security Costs in a FPGA based Cloud Computing Farm. , 2021, , .		1
98	Clustered Error Resilient SRAM-Based Reconfigurable Computing Platform. IEEE Transactions on Aerospace and Electronic Systems, 2021, 57, 1768-1779.	4.7	1
99	Inexact Implementation of Wavelet Transform and Its Performance Evaluation Through Bit Width Reduction. , 2016, , 227-242.		1
100	A Novel Approach to Voltage-Drop Aware Placement in Large SoCs in Advanced Technology Nodes. Lecture Notes in Computer Science, 2012, , 360-363.	1.3	1
101	Post Optimization of a Clock Tree for Dynamic Clock Tree Power Reduction in 45 nm and Below Technology Nodes. Journal of Low Power Electronics, 2014, 10, 32-37.	0.6	1
102	FPGA-Based Novel Speech Enhancement System Using Microphone Activity Detector. Advances in Intelligent Systems and Computing, 2019, , 117-127.	0.6	1
103	2D Qubit Placement of Quantum Circuits Using LONGPATH. Advances in Intelligent Systems and Computing, 2020, , 127-141.	0.6	1
104	Analysis of power distribution network for some cryptocores. , 2014, , .		0
105	Multicore encryption and authentication on a reconfigurable hardware. , 2015, , .		0
106	Approximate Computing Based Adder Design for DWT Application. Communications in Computer and Information Science, 2019, , 150-163.	0.5	0
107	An Architectural Approach for QoS Aware Video Scheduling for Transcoding in Clouds. , 2019, , .		0
108	Counteracting Active Attacks. , 2021, , 111-152.		0

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109	Handling Power Draining Attacks. , 2021, , 153-183.		0
110	Introduction to Hardware Security forÂFPGA Based Systems. , 2021, , 69-89.		0
111	Real-Time Scheduling: Background and Trends. , 2021, , 25-44.		0
112	Bypassing Passive Attacks. , 2021, , 91-110.		0
113	An Efficient Methodology for Full Chip Signal ElectroMigration Analysis for Advanced Technology Node Designs. Journal of Low Power Electronics, 2011, 7, 420-425.	0.6	0
114	Stable Neighbor-Node Prediction with Multivariate Analysis in Mobile Ad Hoc Network Using RNN Model. Studies in Computational Intelligence, 2020, , 165-179.	0.9	0
115	An Intelligent PAPR Reduction Technique for OFDM Systems Based on Adaptive Mutation-Oriented Differential Evolution Algorithm. Lecture Notes in Networks and Systems, 2022, , 135-152.	0.7	0
116	3D Reconstruction from Micro-CT Slices for Non-Destructive Viewing inside a Fossil. , 2021, , .		0