

Irma ChacÃ³n

List of Publications by Year in descending order

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263
papers

2,953
citations

218677

26
h-index

315739

38
g-index

265
all docs

265
docs citations

265
times ranked

2002
citing authors

#	ARTICLE	IF	CITATIONS
1	D-NAT: Data-Driven Non-Ideality Aware Training Framework for Fabricated Computing-In-Memory Macros. IEEE Journal on Emerging and Selected Topics in Circuits and Systems, 2022, 12, 381-392.	3.6	2
2	Compression-Aware Projection with Greedy Dimension Reduction for Convolutional Neural Network Activations. , 2022, , .		5
3	Low-Complexity Compressive Channel Estimation for IRS-Aided mmWave Systems With Hypernetwork-Assisted LAMP Network. IEEE Communications Letters, 2022, 26, 1883-1887.	4.1	5
4	WMMSE-Based Alternating Optimization for Low-Complexity Multi-IRS MIMO Communication. IEEE Transactions on Vehicular Technology, 2022, 71, 11234-11239.	6.3	3
5	An Effective Entropy-Assisted Mind-Wandering Detection System Using EEG Signals of MM-SART Database. IEEE Journal of Biomedical and Health Informatics, 2022, 26, 3649-3660.	6.3	5
6	A 7.8â€“13.6 pJ/b Ultra-Low Latency and Reconfigurable Neural Network-Assisted Polar Decoder With Multi-Code Length Support. IEEE Transactions on Circuits and Systems I: Regular Papers, 2021, 68, 1956-1965.	5.4	4
7	Convolutional Neural Network-Aided Tree-Based Bit-Flipping Framework for Polar Decoder Using Imitation Learning. IEEE Transactions on Signal Processing, 2021, 69, 300-313.	5.3	8
8	A Tri-Mode Compressed Analytics Engine for Low-Power AF Detection With On-Demand EKG Reconstruction. IEEE Journal of Solid-State Circuits, 2021, 56, 1608-1617.	5.4	8
9	Coherence between Decomposed Components of Wrist and Finger PPG Signals by Imputing Missing Features and Resolving Ambiguous Features. Sensors, 2021, 21, 4315.	3.8	9
10	Convolutional Neural Network-Aided Bit-Flipping for Belief Propagation Decoding of Polar Codes. , 2021, , .		3
11	Two-Step Codebook-Assisted Alternating Minimization (CA-AltMin) for Low-Complexity Hybrid Beamforming Design. IEEE Communications Letters, 2021, 25, 1989-1993.	4.1	2
12	MuTa-HDC: A Multi-Task Learning Framework For Hyperdimensional Computing. IEEE Transactions on Computers, 2021, 70, 1269-1284.	3.4	5
13	The mindâ€™s eye: mind-wandering revealed by eye movement hidden Markov model. Journal of Vision, 2021, 21, 2597.	0.3	0
14	An Arbitrarily Reconfigurable Extreme Learning Machine Inference Engine for Robust ECG Anomaly Detection. IEEE Open Journal of Circuits and Systems, 2021, 2, 196-209.	1.9	16
15	Efficient Mind-wandering Detection System with GSR Signals on MM-SART Database. , 2021, , .		0
16	When Eyes Wander Around: Mind-Wandering as Revealed by Eye Movement Analysis with Hidden Markov Models. Sensors, 2021, 21, 7569.	3.8	12
17	IP-HDC: Information-Preserved Hyperdimensional Computing for Multi-Task Learning. , 2020, , .		5
18	Low-Complexity On-Demand Reconstruction for Compressively Sensed Problematic Signals. IEEE Transactions on Signal Processing, 2020, 68, 4094-4107.	5.3	3

#	ARTICLE	IF	CITATIONS
19	An Ultra-Low Latency 7.8â€“13.6 pJ/b Reconfigurable Neural Network-Assisted Polar Decoder with Multi-Code Length Support. , 2020, , .		6
20	Online Extreme Learning Machine Design for the Application of Federated Learning. , 2020, , .		9
21	Compressed-Domain ECG-Based Biometric User Identification Using Compressive Analysis. Sensors, 2020, 20, 3279.	3.8	10
22	Low-Complexity LSTM-Assisted Bit-Flipping Algorithm For Successive Cancellation List Polar Decoder. , 2020, , .		11
23	Low-Complexity Compressed Alignment-Aided Compressive Analysis for Real-Time Electrocardiography Telemonitoring. , 2020, , .		3
24	Task-Projected Hyperdimensional Computing for Multi-task Learning. IFIP Advances in Information and Communication Technology, 2020, , 241-251.	0.7	9
25	Accumulated Polar Feature-Based Deep Learning for Efficient and Lightweight Automatic Modulation Classification With Channel Compensation Mechanism. IEEE Transactions on Vehicular Technology, 2020, 69, 15472-15485.	6.3	26
26	Hyperdimensional Computing-based Multimodality Emotion Recognition with Physiological Signals. , 2019, , .		38
27	Low-Complexity Compressive Analysis in Sub-Eigenspace for ECG Telemonitoring System. , 2019, , .		6
28	Sparse Autoencoder with Attention Mechanism for Speech Emotion Recognition. , 2019, , .		9
29	Low-Complexity Compressed-Sensing-Based Watermark Cryptosystem and Circuits Implementation for Wireless Sensor Networks. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2019, 27, 2485-2497.	3.1	19
30	Joint Multi-Beam Training and Codebook Design for Indoor High-Throughput Transmissions Under Limited Training Steps. IEEE Transactions on Vehicular Technology, 2019, 68, 5585-5597.	6.3	2
31	Low-complexity Recurrent Neural Network-based Polar Decoder with Weight Quantization Mechanism. , 2019, , .		40
32	Scattering Multi-connectivity Estimation for Indoor mmWave Small Cells under Limited Training Steps. , 2019, , .		0
33	Bundle-Updatable SRAM-Based TCAM Design for OpenFlow-Compliant Packet Processor. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2019, 27, 1450-1454.	3.1	18
34	Real-Time Multi-User Detection Engine Design for IoT Applications via Modified Sparsity Adaptive Matching Pursuit. IEEE Transactions on Circuits and Systems I: Regular Papers, 2019, 66, 2987-3000.	5.4	6
35	Neural Network-based Equalizer by Utilizing Coding Gain in Advance. , 2019, , .		7
36	Entropy and Complexity Assisted EEG-based Mental Workload Assessment System. , 2019, , .		5

#	ARTICLE	IF	CITATIONS
37	Feature Selection Framework for XGBoost Based on Electrodermal Activity in Stress Detection. , 2019, , .		32
38	Co-Design of Sparse Coding and Dictionary Learning for Real-Time Physiological Signals Monitoring. , 2019, , .		1
39	AdaBoost-assisted Extreme Learning Machine for Efficient Online Sequential Classification. , 2019, , .		1
40	Robust and Lightweight Ensemble Extreme Learning Machine Engine Based on Eigenspace Domain for Compressed Learning. IEEE Transactions on Circuits and Systems I: Regular Papers, 2019, 66, 4699-4712.	5.4	23
41	A 232â€“1996-kS/s Robust Compressive Sensing Reconstruction Engine for Real-Time Physiological Signals Monitoring. IEEE Journal of Solid-State Circuits, 2019, 54, 307-317.	5.4	17
42	Efficient Compressive Channel Estimation for Millimeter-Wave Large-Scale Antenna Systems. IEEE Transactions on Signal Processing, 2018, 66, 2414-2428.	5.3	64
43	Dynamically Updatable Ternary Segmented Aging Bloom Filter for OpenFlow-Compliant Low-Power Packet Processing. IEEE/ACM Transactions on Networking, 2018, 26, 1004-1017.	3.8	12
44	Structural Scrambling of Circulant Matrices for Cost-effective Compressive Sensing. Journal of Signal Processing Systems, 2018, 90, 695-707.	2.1	3
45	Entropy-Assisted Multi-Modal Emotion Recognition Framework Based on Physiological Signals. , 2018, , .		22
46	Polar Feature Based Deep Architectures for Automatic Modulation Classification Considering Channel Fading. , 2018, , .		16
47	Low-Complexity Compressed Analysis in Eigenspace with Limited Labeled Data for Real-Time Electrocardiography Telemonitoring. , 2018, , .		3
48	Low-Complexity Secure Watermark Encryption for Compressed Sensing-Based Privacy Preserving. , 2018, , .		1
49	Overview of Efficient Compressive Sensing Reconstruction Engines for E-Health Applications. , 2018, , .		0
50	Structured Random Compressed Channel Sensing for Millimeter-Wave Large-Scale Antenna Systems. IEEE Transactions on Signal Processing, 2018, 66, 5096-5110.	5.3	17
51	Low-Complexity Privacy-Preserving Compressive Analysis Using Subspace-Based Dictionary for ECG Telemonitoring System. IEEE Transactions on Biomedical Circuits and Systems, 2018, 12, 801-811.	4.0	37
52	Low-latency Voltage-Racing Winner-Take-All (VR-WTA) circuit for acceleration of learning engine. , 2017, , .		2
53	Compressive sensing based ECG monitoring with effective AF detection. , 2017, , .		5
54	Compressive Sensing (CS) Assisted Low-Complexity Beam-space Hybrid Precoding for Millimeter-Wave MIMO Systems. IEEE Transactions on Signal Processing, 2017, 65, 1412-1424.	5.3	53

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55	Variation-Aware Reliable Many-Core System Design by Exploiting Inherent Core Redundancy. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2017, 25, 2803-2816.	3.1	6
56	Low-Complexity Stochastic Gradient Pursuit Algorithm and Architecture for Robust Compressive Sensing Reconstruction. IEEE Transactions on Signal Processing, 2017, 65, 638-650.	5.3	22
57	Path-Diversity-Aware Fault-Tolerant Routing Algorithm for Network-on-Chip Systems. IEEE Transactions on Parallel and Distributed Systems, 2017, 28, 838-849.	5.6	47
58	Thermal/Traffic Mutual-Coupling Co-simulation Platform for 3D Network-on-Chip (NoC) Designs. , 2017, , .		0
59	Overview of high-efficiency ant colony optimization (ACO)-based adaptive routings for traffic balancing in network-on-chip systems. , 2017, , .		3
60	Reliable compressive sensing (CS)-based multi-user detection with power-based Zadoff-Chu sequence design. , 2017, , .		3
61	Profiling and SW/HW co-design for efficient SDN/openflow data plane realization. , 2017, , .		0
62	Robust compressed analysis using subspace-based dictionary for ECG telemonitoring systems. , 2017, , .		5
63	Joint spatially sparse channel estimation for millimeter-wave cellular systems. , 2016, , .		1
64	Sniper-TEVR: Core-variation simulation platform with register-level fault injection for robust computing in CMP system. , 2016, , .		1
65	Reliable PPG-based algorithm in atrial fibrillation detection. , 2016, , .		19
66	Unified low-complexity decision feedback equalizer with adjustable double radius constraint. , 2016, 51, 82-91.		1
67	Robust LMS-based compressive sensing reconstruction algorithm for noisy wireless sensor networks. , 2016, , .		0
68	Dynamic Reconfigurable Ternary Content Addressable Memory for OpenFlow-Compliant Low-Power Packet Processing. IEEE Transactions on Circuits and Systems I: Regular Papers, 2016, 63, 1661-1672.	5.4	21
69	Filter-based dual-voltage architecture for low-power long-word TCAM design. , 2016, , .		3
70	Progressive channel estimation for ultra-low latency millimeter-wave communications. , 2016, , .		4
71	Predicting stroke outcomes based on multi-modal analysis of physiological signals. , 2015, , .		0
72	Low memory-cost scramble methods for constructing deterministic CS matrix. , 2015, , .		0

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73	An algorithmic error-resilient scheme for robust LDPC decoding. , 2015, , .		2
74	Byte-Reconfigurable LDPC Codec Design With Application to High-Performance ECC of NAND Flash Memory Systems. IEEE Transactions on Circuits and Systems I: Regular Papers, 2015, 62, 1794-1804.	5.4	18
75	Scalable compressive sensing-based multi-user detection scheme for Internet-of-Things applications. , 2015, , .		11
76	Thermal-Aware 3D Network-On-Chip (3D NoC) Designs: Routing Algorithms and Thermal Managements. IEEE Circuits and Systems Magazine, 2015, 15, 45-69.	2.3	42
77	Variation-aware core-level redundancy scheme for reliable DSP computation in multi-core systems. , 2015, , .		2
78	Dynamic group allocation reconstruction for group sparse signals. , 2015, , .		0
79	Compressive sensing based ECG telemonitoring with personalized dictionary basis. , 2015, , .		7
80	Low-complexity hybrid precoding algorithm based on orthogonal beamforming codebook. , 2015, , .		20
81	RC-Based Temperature Prediction Scheme for Proactive Dynamic Thermal Management in Throttle-Based 3D NoCs. IEEE Transactions on Parallel and Distributed Systems, 2015, 26, 206-218.	5.6	35
82	A 1.96mm ² low-latency multi-mode crypto-coprocessor for PKC-based IoT security protocols. , 2015, , .		1
83	Ant Colony Optimization-Based Adaptive Network-on-Chip Routing Framework Using Network Information Region. IEEE Transactions on Computers, 2015, 64, 2119-2131.	3.4	14
84	Regional ACO-Based Cascaded Adaptive Routing for Traffic Balancing in Mesh-Based Network-on-Chip Systems. IEEE Transactions on Computers, 2015, 64, 868-875.	3.4	30
85	Effect of mannitol on cerebrovascular pressure reactivity in patients with intracranial hypertension. Journal of the Formosan Medical Association, 2015, 114, 842-848.	1.7	6
86	Complexity of heart rate variability predicts outcome in intensive care unit admitted patients with acute stroke. Journal of Neurology, Neurosurgery and Psychiatry, 2015, 86, 95-100.	1.9	77
87	Ant Colony Optimization-Based Fault-Aware Routing in Mesh-Based Network-on-Chip Systems. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2014, 33, 1693-1705.	2.7	20
88	Thermal-aware Dynamic Buffer Allocation for Proactive routing algorithm on 3D Network-on-Chip systems. , 2014, , .		8
89	High performance adaptive routing for Network-on-Chip systems with express highway mechanism. , 2014, , .		1
90	A stroke severity monitoring system based on quantitative modified multiscale entropy. , 2014, , .		0

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91	LMS-based adaptive temperature prediction scheme for proactive thermal-aware three-dimensional Network-on-Chip systems. , 2014, , .		1
92	Adaptive filter-based reconstruction engine design for compressive sensing. , 2014, , .		0
93	Robust decision feedback equalizer scheme by using sphere-decoding detector. , 2014, , .		1
94	Low-complexity sinusoidal-assisted EMD (SAEMD) algorithms for solving mode-mixing problems in HHT. , 2014, 24, 170-186.		40
95	Low-Complexity Motion-Compensated Beamforming Algorithm and Architecture for Synthetic Transmit Aperture in Ultrasound Imaging. IEEE Transactions on Signal Processing, 2014, 62, 840-851.	5.3	7
96	Path-Congestion-Aware Adaptive Routing With a Contention Prediction Scheme for Network-on-Chip Systems. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2014, 33, 113-126.	2.7	53
97	High-throughput QC-LDPC decoder with cost-effective early termination scheme for non-volatile memory systems. , 2014, , .		2
98	Spatial-Temporal Enhancement of ACO-Based Selection Schemes for Adaptive Routing in Network-on-Chip Systems. IEEE Transactions on Parallel and Distributed Systems, 2014, 25, 1626-1637.	5.6	8
99	Trend-extracted MSE based on adaptive aligned EEMD with early termination scheme: Analysis of the acute stroke patients' physiological signals. , 2014, , .		0
100	Traffic- and Thermal-Aware Routing Algorithms for 3D Network-on-Chip (3D NoC) Systems. , 2014, , 307-338.		1
101	Hydra: An Energy-Efficient Programmable Cryptographic Coprocessor Supporting Elliptic-Curve Pairings over Fields of Large Characteristics. Lecture Notes in Computer Science, 2014, , 174-186.	1.3	0
102	New Ping-Pong Scheduling for Low-Latency EMD Engine Design in Hilbertâ€™Huang Transform. IEEE Transactions on Circuits and Systems II: Express Briefs, 2013, 60, 532-536.	3.0	13
103	Traffic- and Thermal-aware Adaptive Beltway Routing for three dimensional Network-on-Chip systems. , 2013, , .		6
104	Implementation of ACO-Based Selection with Backward-Ant Mechanism for Adaptive Routing in Network-on-Chip Systems. IEEE Embedded Systems Letters, 2013, 5, 46-49.	1.9	7
105	Reconfigurable Parallel Turbo Decoder Design for Multiple High-Mobility 4G Systems. Journal of Signal Processing Systems, 2013, 73, 109-122.	2.1	15
106	Routing-Based Traffic Migration and Buffer Allocation Schemes for 3-D Network-on-Chip Systems With Thermal Limit. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2013, 21, 2118-2131.	3.1	16
107	Design of thermal management unit with vertical throttling scheme for proactive thermal-aware 3D NoC systems. , 2013, , .		1
108	Proactive Thermal-Budget-Based Beltway Routing algorithm for thermal-aware 3D NoC systems. , 2013, , .		13

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109	Hybrid path-diversity-aware adaptive routing with latency prediction model in Network-on-Chip systems. , 2013, , .		6
110	Accelerating motion-compensated adaptive color Doppler engine on CUDA-based GPU platform. , 2013, , .		2
111	Dual-Mode Low-Complexity Codebook Searching Algorithm and VLSI Architecture for LTE/LTE-Advanced Systems. IEEE Transactions on Signal Processing, 2013, 61, 3545-3562.	5.3	9
112	ACO-based fault-aware routing algorithm for Network-on-Chip systems. , 2013, , .		4
113	Topology-Aware Adaptive Routing for Nonstationary Irregular Mesh in Throttled 3D NoC Systems. IEEE Transactions on Parallel and Distributed Systems, 2013, 24, 2109-2120.	5.6	52
114	Reconfigurable Adaptive Singular Value Decomposition Engine Design for High-Throughput MIMO-OFDM Systems. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2013, 21, 747-760.	3.1	30
115	Securing M2M With Post-Quantum Public-Key Cryptography. IEEE Journal on Emerging and Selected Topics in Circuits and Systems, 2013, 3, 106-116.	3.6	20
116	Transport-layer-assisted routing for runtime thermal management of 3D NoC systems. Transactions on Embedded Computing Systems, 2013, 13, 1-22.	2.9	13
117	Editorial Low-Power, Intelligent, and Secure Solutions for Realization of Internet of Things. IEEE Journal on Emerging and Selected Topics in Circuits and Systems, 2013, 3, 1-4.	3.6	13
118	VLSI implementation of real-time motion compensated beamforming in synthetic transmit aperture imaging. , 2013, , .		2
119	Path-Diversity-Aware Adaptive Routing in Network-on-Chip Systems. , 2012, , .		12
120	Networks-on-Chip: Architectures, Design Methodologies, and Case Studies. Journal of Electrical and Computer Engineering, 2012, 2012, 1-1.	0.9	4
121	Coherent Image Herding of Inhomogeneous Motion Compensation for Synthetic Transmit Aperture in Ultrasound Image. , 2012, , .		1
122	A Low-Complexity Grouping FFT-Based Codebook Searching Algorithm in LTE System. , 2012, , .		0
123	Transport-layer assisted vertical traffic balanced routing for thermal-aware three-dimensional Network-on-Chip systems. , 2012, , .		0
124	Traffic-Balanced Topology-Aware Multiple Routing Adjustment for Throttled 3D NOC Systems. , 2012, , .		9
125	Iterative Superlinear-Convergence SVD Beamforming Algorithm and VLSI Architecture for MIMO-OFDM Systems. IEEE Transactions on Signal Processing, 2012, 60, 3264-3277.	5.3	34
126	ACO-Based Deadlock-Aware Fully-Adaptive Routing in Network-on-Chip Systems. , 2012, , .		4

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127	Matrix Merging Scheme and Efficient Decoding Techniques for Reconfigurable QC-LDPC Decoders. Journal of Signal Processing Systems, 2012, 68, 183-202.	2.1	3
128	Power-Efficient State Exchange Scheme for Low-Latency SMU Design of Viterbi Decoder. Journal of Signal Processing Systems, 2012, 68, 233-245.	2.1	1
129	Traffic-and thermal-aware routing for throttled three-dimensional Network-on-Chip systems. , 2011, , .		32
130	Transport Layer Assisted Routing for Non-Stationary Irregular mesh of thermal-aware 3D Network-on-Chip systems. , 2011, , .		15
131	A 0.16nJ/bit/iteration 3.38mm ² turbo decoder chip for WiMAX/LTE standards. , 2011, , .		2
132	Area-Efficient Scalable MAP Processor Design for High-Throughput Multistandard Convolutional Turbo Decoding. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2011, 19, 305-318.	3.1	37
133	A scalable built-in self-recovery (BISR) VLSI architecture and design methodology for 2D-mesh based on-chip networks. Design Automation for Embedded Systems, 2011, 15, 111-132.	1.0	6
134	Parallel Architecture Core (PAC)â€”the First Multicore Application Processor SoC in Taiwan Part I: Hardware Architecture & Software Development Tools. Journal of Signal Processing Systems, 2011, 62, 373-382.	2.1	15
135	Parallel Architecture Core (PAC)â€”the First Multicore Application Processor SoC in Taiwan Part II: Application Programming. Journal of Signal Processing Systems, 2011, 62, 383-402.	2.1	4
136	Adaptive thresholding incorporating temporal and spatial information with eigen-based clutter filter for color Doppler processing in ultrasonic systems. , 2011, , .		1
137	Multi-Pheromone ACO-based routing in Network-on-Chip system inspired by economic phenomenon. , 2011, , .		3
138	Traffic-thermal mutual-coupling co-simulation platform for three-dimensional Network-on-Chip. , 2010, , .		41
139	Joint-decision adaptive clutter filter and motion-tracking adaptive persistence for Color Doppler processing in ultrasonic systems. , 2010, , .		5
140	A Two-Cycle Lock-In Time ADPLL Design Based on a Frequency Estimation Algorithm. IEEE Transactions on Circuits and Systems II: Express Briefs, 2010, 57, 430-434.	3.0	42
141	Generalized Pipelined Tomlinsonâ€”Harashima Precoder Design Methodology With Build-In Arbitrary Speed-Up Factors. IEEE Transactions on Signal Processing, 2010, 58, 2375-2382.	5.3	5
142	Efficient parallelized particle filter design on CUDA. , 2010, , .		13
143	A 2.17 mm ² 125 mW reconfigurable SVD chip for IEEE 802.11n system. , 2010, , .		0
144	Traffic- and Thermal-Aware Run-Time Thermal Management Scheme for 3D NoC Systems. , 2010, , .		110

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145	Cost-effective constrained particle filter for indoor localization. , 2010, , .		0
146	Motion-tracking adaptive persistence and adaptive-size median filter for color Doppler processing in ultrasound systems on multicore platform. , 2010, , .		1
147	Regional ACO-based routing for load-balancing in NoC systems. , 2010, , .		15
148	ACO-based Cascaded Adaptive Routing for traffic balancing in NoC systems. , 2010, , .		10
149	Multi-prediction particle filter for efficient memory utilization. , 2010, , .		0
150	A triple-mode LDPC decoder design for IEEE 802.11n SYSTEM. , 2009, , .		3
151	A Channel-Adaptive Early Termination strategy for LDPC decoders. , 2009, , .		8
152	A Scalable built-in self-test/self-diagnosis architecture for 2D-mesh based chip multiprocessor systems. , 2009, , .		7
153	Multilevel LINC System Designs for Power Efficiency Enhancement of Transmitters. IEEE Journal on Selected Topics in Signal Processing, 2009, 3, 523-532.	10.8	33
154	High-convergence-speed low-computation-complexity SVD algorithm for MIMO-OFDM systems. , 2009, , .		5
155	Design and Implementation of Cost-Effective Probabilistic-Based Noise-Tolerant VLSI Circuits. IEEE Transactions on Circuits and Systems I: Regular Papers, 2009, 56, 2411-2424.	5.4	27
156	Low-Power Memory-Reduced Traceback MAP Decoding for Double-Binary Convolutional Turbo Decoder. IEEE Transactions on Circuits and Systems I: Regular Papers, 2009, 56, 1005-1016.	5.4	35
157	A real-time programmable LDPC decoder chip for arbitrary QC-LDPC parity check matrices. , 2009, , .		5
158	A 52-mW 8.29mm ² 19-mode LDPC decoder chip for Mobile WiMAX applications. , 2009, , .		1
159	PAC Duo SoC performance analysis with ESL design methodology. , 2009, , .		3
160	Fault-tolerant router with built-in self-test/self-diagnosis and fault-isolation circuits for 2D-mesh based chip multiprocessor systems. , 2009, , .		14
161	Cost-Effective Joint Echo-NEXT Canceller Designs for 10GBase-T Ethernet Systems Based on a Shortened Impulse Response Filter (SIRF) Scheme. Journal of Signal Processing Systems, 2008, 52, 59-73.	2.1	2
162	Overview of ITRI PAC project - from VLIW DSP processor to multicore computing platform. , 2008, , .		29

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163	An 8.29 mm ² 52 mW Multi-Mode LDPC Decoder Design for Mobile WiMAX System in 0.13 μ m CMOS Process. IEEE Journal of Solid-State Circuits, 2008, 43, 672-683.	5.4	109
164	Traffic-Balanced Routing Algorithm for Irregular Mesh-Based On-Chip Networks. IEEE Transactions on Computers, 2008, 57, 1156-1168.	3.4	38
165	High-throughput dual-mode single/double binary map processor design for wireless wan. , 2008, , .		1
166	Design and Analysis of Isolated Noise-Tolerant (INT) Technique in Dynamic CMOS Circuits. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2008, 16, 1708-1712.	3.1	4
167	High-throughput 12-mode CTC decoder for WiMAX standard. , 2008, , .		6
168	Power efficient low latency survivor memory architecture for Viterbi decoder. , 2008, , .		6
169	Unified Convolutional/Turbo Decoder Design Using Tile-Based Timing Analysis of VA/MAP Kernel. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2008, 16, 1358-1371.	3.1	10
170	Traffic-balanced IP mapping algorithm for 2D-mesh On-Chip-Networks. , 2008, , .		1
171	A universal look-ahead algorithm for pipelining IIR filters. , 2008, , .		3
172	High-performance scheduling algorithm for partially parallel LDPC decoder. , 2008, , .		3
173	Cost-effective echo and NEXT canceller designs for 10GBASE-T ethernet system. , 2008, , .		0
174	An efficient methodology to evaluate nanoscale circuit fault-tolerance performance based on belief propagation. , 2008, , .		1
175	A 7.39mm ² 76mW (1944, 972) LDPC decoder chip for IEEE 802.11n applications. , 2008, , .		3
176	Low-power traceback MAP decoding for double-binary convolutional turbo decoder. , 2008, , .		2
177	Location-Constrained Particle Filter human positioning and tracking system. , 2008, , .		8
178	Energy-effective design & implementation of an embedded VLIW DSP. , 2008, , .		8
179	Ensemble Dependent Matrix Methodology for Probabilistic-Based Fault-tolerant Nanoscale Circuit Design. , 2007, , .		5
180	A Power-Aware Reconfigurable Rendering Engine Design with 453MPixels/s, 16.4MTriangles/s Performance. , 2007, , .		0

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181	Low-Latency Quasi-Synchronous Transmission Technique for Multiple-Clock-Domain IP Modules. , 2007, , .		1
182	A clock-fault tolerant architecture and circuit for reliable nanoelectronics system. , 2007, , .		5
183	A Systematic Design Approach to the Band-Tracking Packet Detector in OFDM-Based Ultrawideband Systems. IEEE Transactions on Vehicular Technology, 2007, 56, 3791-3806.	6.3	8
184	Reconfigurable Color Doppler DSP Engine for High-Frequency Ultrasonic Imaging Systems. Signal Processing Systems Design and Implementation (siPS), IEEE Workshop on, 2007, , .	0.0	7
185	Multilevel Linc System Design for Power Efficiency Enhancement. , 2007, , .		3
186	Multilevel LINC System Design for Wireless Transmitters. , 2007, , .		15
187	Dynamic Channel Flow Control of Networks-on-Chip Systems for High Buffer Efficiency. Signal Processing Systems Design and Implementation (siPS), IEEE Workshop on, 2007, , .	0.0	8
188	Robust Packet Detector based Automatic Gain Control Algorithm for OFDM-based Ultra-WideBand systems. Signal Processing Systems Design and Implementation (siPS), IEEE Workshop on, 2007, , .	0.0	4
189	A 19-mode 8.29mm ² ; 52-mW LDPC Decoder Chipp for IEEE 802.16e System. , 2007, , .		12
190	A 0.13 μ m hardware-efficient probabilistic-based noise-tolerant circuit design and implementation with 24.5dB noise-immunity improvement. , 2007, , .		5
191	On the Fixed-Point Properties of Mixed-Scaling-Rotation Cordic Algorithm. Signal Processing Systems Design and Implementation (siPS), IEEE Workshop on, 2007, , .	0.0	1
192	A New Binomial Mapping and Optimization Algorithm for Reduced-Complexity Mesh-Based On-Chip Network. , 2007, , .		43
193	Joint AGC-Equalization Algorithm and VLSI Architecture for Wirelined Transceiver Designs. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2007, 15, 236-240.	3.1	3
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