Sujay Deb

List of Publications by Year
in descending order

96 papers	1,443 citations	1039406 9 h-index	794141 19 g-index
96 all docs	96 docs citations	96 times ranked	622 citing authors

#	ARTICLE	IF	CITATIONS
1	Wireless NoC as Interconnection Backbone for Multicore Chips: Promises and Challenges. IEEE Journal on Emerging and Selected Topics in Circuits and Systems, 2012, 2, 228-239.	2.7	237
2	Scalable Hybrid Wireless Network-on-Chip Architectures for Multicore Systems. IEEE Transactions on Computers, 2011, 60, 1485-1502.	2.4	229
3	Design of an Energy-Efficient CMOS-Compatible NoC Architecture with Millimeter-Wave Wireless Interconnects. IEEE Transactions on Computers, 2013, 62, 2382-2396.	2.4	167
4	Performance evaluation and design trade-offs for wireless network-on-chip architectures. ACM Journal on Emerging Technologies in Computing Systems, 2012, 8, 1-25.	1.8	87
5	Enhancing performance of network-on-chip architectures with millimeter-wave wireless interconnects. , 2010, , .		61
6	Face video based touchless blood pressure and heart rate estimation. , 2016, , .		40
7	A wideband body-enabled millimeter-wave transceiver for wireless Network-on-Chip. , 2011, , .		37
8	Interference-Aware Wireless Network-on-Chip Architecture Using Directional Antennas. IEEE Transactions on Multi-Scale Computing Systems, 2017, 3, 193-205.	2.5	31
9	HyWin: Hybrid Wireless NoC with Sandboxed Sub-Networks for CPU/GPU Architectures. IEEE Transactions on Computers, 2017, 66, 1145-1158.	2.4	29
10	Design of an efficient NoC architecture using millimeter-wave wireless links. , 2012, , .		28
11	Adaptive Multi-Voltage Scaling with Utilization Prediction for Energy-Efficient Wireless NoC. IEEE Transactions on Sustainable Computing, 2017, 2, 382-395.	2.2	22
12	Millimeter-wave planar log periodic antenna for on-chip wireless interconnects. , 2014, , .		20
13	Determination of SpO<inf>2</inf> and heart-rate using smartphone camera. , 2014, , .		18
14	An energy efficient wireless Network-on-Chip using power-gated transceivers. , 2014, , .		17
15	Cuffless BP measurement using a correlation study of pulse transient time and heart rate. , 2014, , .		16
16	Power efficient router architecture for wireless Network-on-Chip. , 2016, , .		16
17	Millimeter wave wireless interconnects in deep submicron chips: Challenges and opportunities. The Integration VLSI Journal, 2019, 64, 127-136.	1.3	15
18	Cuff-Less Estimation of Blood Pressure Using Pulse Transit Time and Pre-ejection Period. , 2007, , .		14

#	ARTICLE	IF	CITATIONS
19	CMOS compatible many-core noc architectures with multi-channel millimeter-wave wireless links. , 2012, , .		14
20	A sparse regression based approach for cuff-less blood pressure measurement. , 2016, , .		13
21	OFDM Based High Data Rate, Fading Resilient Transceiver for Wireless Networks-on-Chip. , 2017, , .		13
22	Comparative performance evaluation of wireless and optical NoC architectures. , 2010, , .		12
23	Wireless network-on-chip: a new era in multi-core chip design. , 2014, , .		12
24	An Efficient Hardware Implementation of DVFS in Multi-core System with Wireless Network-on-Chip. , 2014, , .		12
25	A comparative analysis of jitter estimation techniques. , 2014, , .		11
26	Energy-Efficient Transceiver for Wireless NoC. , 2017, , .		11
27	Energy-efficient wireless network-on-chip architecture with log-periodic on-chip antennas. , 2014, , .		10
28	P 2 NoC: Power- and Performance-aware NoC Architectures for Sustainable Computing. Sustainable Computing: Informatics and Systems, 2017, 16, 25-37.	1.6	10
29	Design space exploration for reliable mm-wave wireless NoC architectures. , 2013, , .		9
30	Energy efficient on-chip wireless interconnects with sleepy transceivers. , 2013, , .		9
31	Broadcast- and Power-Aware Wireless NoC for Barrier Synchronization in Parallel Computing. , 2018, , .		9
32	Data-flow Aware CNN Accelerator with Hybrid Wireless Interconnection. , 2018, , .		9
33	A Utilization Aware Robust Channel Access Mechanism for Wireless NoCs. , 2018, , .		9
34	UVM based STBUS verification IP for verifying SoC architectures. , 2014, , .		8
35	Energy efficient EEG acquisition and reconstruction for a Wireless Body Area Network. The Integration VLSI Journal, 2017, 58, 295-302.	1.3	8
36	Low-Noise Energy Efficient Readout Front-End for Wearable Continuous Blood Pressure Monitoring Systems. IEEE Transactions on Consumer Electronics, 2020, 66, 318-326.	3.0	8

#	Article	IF	Citations
37	Dynamic NoC platform for varied application needs. , 2018, , .		7
38	Efficient Post-Silicon Validation of Network-on-Chip Using Wireless Links. , 2019, , .		7
39	Sixth‑order differential Sallen‑and‑Key switched capacitor LPF using a‑IGZO TFTs. International Journal of Circuit Theory and Applications, 2019, 47, 32-42.	1.3	7
40	Sniffer: A Machine Learning Approach for DoS Attack Localization in NoC-Based SoCs. IEEE Journal on Emerging and Selected Topics in Circuits and Systems, 2021, 11, 278-291.	2.7	7
41	Achievable Performance Enhancements with mm-Wave Wireless Interconnects in NoC. , 2015, , .		6
42	A Hardware and Thermal Analysis of DVFS in a Multi-core System with Hybrid WNoC Architecture. , 2015, , .		6
43	Energy Efficient and Congestion-Aware Router Design for Future NoCs. , 2016, , .		6
44	Efficient Hardware Verification Using Machine Learning Approach. , 2019, , .		6
45	Designing an intelligent blink analyzer tool for effective human computer interaction through eye. , 2012, , .		5
46	Energy Efficient Analog-to-Information Converter for Biopotential Acquisition Systems. , 2015, , .		5
47	Enabling Reliable High Throughput On-chip Wireless Communication for Many Core Architectures. , 2018, , .		5
48	Energy Efficient Chip-to-Chip Wireless Interconnection for Heterogeneous Architectures. ACM Transactions on Design Automation of Electronic Systems, 2019, 24, 1-27.	1.9	5
49	Security Threats in Channel Access Mechanism of Wireless NoC and Efficient Countermeasures. , 2020, , .		5
50	WiND: An Efficient Post-Silicon Debug Strategy for Network on Chip. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2021, 40, 2372-2385.	1.9	5
51	Analysis and design guidelines for customized logic families in CMOS. , 2015, , .		4
52	An affordable cuff-less blood pressure estimation solution. , 2016, 2016, 5294-5297.		4
53	Path loss-aware adaptive transmission power control scheme for energy-efficient wireless NoC. , 2017, , .		4
54	Reliability Analysis of On-Chip Wireless Links for Many Core WNoCs. , 2018, , .		4

#	Article	IF	Citations
55	A Low-Cost Smart Vein Viewer System. , 2018, , .		4
56	A Comparitive Study of On-Chip Clock Generators Using a-IGZO TFTs for Flexible Electronic Systems. , 2018, , .		4
57	RCAS: Critical Load Based Ranking for Efficient Channel Allocation in Wireless NoC. , 2019, , .		4
58	Design Space Optimization of Shared Memory Architecture in Accelerator-rich Systems. ACM Transactions on Design Automation of Electronic Systems, 2021, 26, 1-31.	1.9	4
59	Securing an Accelerator-rich System from Flooding-based Denial-of-Service Attacks. IEEE Transactions on Emerging Topics in Computing, 2021, , 1-1.	3.2	4
60	Single Key Omni directional Pointing and command System (SKOPS) -a smart on screen navigational tool for physically disabled persons. , 2007, , .		3
61	A low-cost non-intrusive appliance load monitoring system. , 2013, , .		3
62	Pragmatic approaches to implement self-checking mechanism in UVM based TestBench. , 2015, , .		3
63	A multi-signal acquisition system for preventive cardiology with cuff-less BP measurement capability. , 2016, , .		3
64	Hierarchical Cluster Based NoC Design Using Wireless Interconnects for Coherence Support. , 2016, , .		3
65	Energy efficient biopotential acquisition unit for wearable health monitoring applications. , 2017, , .		3
66	Energy Efficient NoC Router for High Throughput Applications in Many-Core GPUs. , 2017, , .		3
67	On-Chip Wireless Channel Propagation: Impact of Antenna Directionality and Placement on Channel Performance. , 2018, , .		3
68	High Bandwidth Off-Chip Memory Access Through Hybrid Switching and Inter-Chip Wireless Links. , 2018, , .		3
69	Reutilization of Trace Buffers for Performance Enhancement of NoC based MPSoCs. , 2020, , .		3
70	Mostly Passive Î" -Î£ ADC with a-IGZO TFTs for Flexible Electronics. , 2021, , .		3
71	Reliability Enhancement of SoCs Based on Dynamic Memory Access Profiling in Conjunction with PVT Monitoring. , 2015, , .		2
72	MAC based FIR filter: A novel approach for low-power real-time de-noising of ECG signals. , 2015, , .		2

#	Article	IF	Citations
73	A Pre-RTL floorplanner tool for automated CMP design space exploration with thermal awareness. , 2016, , .		2
74	Bootstrapping Circuit with IGZO TFTs for On-Chip Power Supply Generation. , 2019, , .		2
75	Efficient Router Architecture for Trace Reduction During NoC Post-Silicon Validation. , 2019, , .		2
76	Robust linear sampling switch for low-voltage SAR ADCs. Analog Integrated Circuits and Signal Processing, 2020, 103, 345-353.	0.9	2
77	Cuff-Less Estimation of Blood Pressure Using Pulse Transit Time and Pre-ejection Period. , 2007, , .		2
78	Power- and performance-aware fine-grained reconfigurable router architecture for NoC. , 2015, , .		1
79	Mixed Mode Simulation and Verification of SSCG PLL through Real Value Modeling. , 2016, , .		1
80	An effective and efficient algorithm to analyse and debug clock propagation issues. , 2016, , .		1
81	Smart mobility solution with multiple input Output interface. , 2017, 2017, 3781-3784.		1
82	Biopotential acquisition unit for energyâ€efficient wearable health monitoring. IET Cyber-Physical Systems: Theory and Applications, 2018, 3, 73-80.	1.9	1
83	A High-Efficient Current-Mode PWM DC-DC Buck Converter Using Dynamic Frequency Scaling. , 2018, , .		1
84	Energy-and Performance-Aware Router Design for Chip Multiprocessors. , 2019, , .		1
85	Comparative Study of Different Switch Implementations for Ook Modulator. , 2014, , .		0
86	Estimation of inter-symbol interference using clock pattern. , 2015, , .		0
87	A novel approach to reusable time-economized STIL based pattern development. , 2015, , .		0
88	Energy-efficient reconfigurable framework for evaluating hybrid NoCs. , 2016, , .		0
89	An Efficient Approach Targeting Broken Topological Clock Path for Master â€" Generated Clock Pair. , 2016, , .		0
90	Enhancing Retention Voltage for SRAM. Communications in Computer and Information Science, 2017, , 406-413.	0.4	0

#	Article	IF	Citations
91	Near Threshold Last Level Cache for Energy Efficient Embedded Applications. , 2018, , .		0
92	A PVT Insensitive Low-Power Differential Ring Oscillator. Communications in Computer and Information Science, 2019, , 77-87.	0.4	0
93	NoC Post-Silicon Validation and Debug. , 2021, , 339-369.		0
94	Switched capacitor low‐pass filter with amorphous indium‐gallium‐zinc‐oxide thin‐film transistors on flexible substrate. Electronics Letters, 2021, 57, 410-411.	0.5	0
95	A Novel Hybrid Cache Coherence with Global Snooping for Many-core Architectures. ACM Transactions on Design Automation of Electronic Systems, 2022, 27, 1-31.	1.9	0
96	Pseudo-BIST: A Novel Technique for SAR-ADC Testing. Communications in Computer and Information Science, 2017, , 168-178.	0.4	0