

# Xuan Zhang

## List of Publications by Citations

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

51  
papers

487  
citations

12  
h-index

18  
g-index

65  
ext. papers

718  
ext. citations

4  
avg, IF

3.94  
L-index

#	Paper	IF	Citations
51	A Low-Power, Process-and- Temperature- Compensated Ring Oscillator With Addition-Based Current Source. <i>IEEE Transactions on Circuits and Systems I: Regular Papers</i> , <b>2011</b> , 58, 868-878	3.9	64
50	Process-Invariant Current Source Design: Methodology and Examples. <i>IEEE Journal of Solid-State Circuits</i> , <b>2007</b> , 42, 2293-2302	5.5	33
49	A Fully Integrated Reconfigurable Switched-Capacitor DC-DC Converter With Four Stacked Output Channels for Voltage Stacking Applications. <i>IEEE Journal of Solid-State Circuits</i> , <b>2016</b> , 51, 2142-2152	5.5	26
48	The Architectural Implications of Facebook's DNN-Based Personalized Recommendation <b>2020</b> ,		24
47	RecNMP: Accelerating Personalized Recommendation with Near-Memory Processing <b>2020</b> ,		18
46	A 16-core voltage-stacked system with an integrated switched-capacitor DC-DC converter <b>2015</b> ,		17
45	AxTrain <b>2018</b> ,		17
44	Simple Physical Adversarial Examples against End-to-End Autonomous Driving Models <b>2019</b> ,		15
43	A fully integrated battery-connected switched-capacitor 4:1 voltage regulator with 70% peak efficiency using bottom-plate charge recycling <b>2013</b> ,		15
42	Attacking vision-based perception in end-to-end autonomous driving models. <i>Journal of Systems Architecture</i> , <b>2020</b> , 110, 101766	5.5	14
41	A 46- $\mu$ W Self-Calibrated Gigahertz VCO for Low-Power Radios. <i>IEEE Transactions on Circuits and Systems II: Express Briefs</i> , <b>2011</b> , 58, 847-851	3.5	13
40	Voltage-Stacked GPUs: A Control Theory Driven Cross-Layer Solution for Practical Voltage Stacking in GPUs <b>2018</b> ,		13
39	A multi-chip system optimized for insect-scale flapping-wing robots <b>2015</b> ,		12
38	Ivory <b>2017</b> ,		12
37	Processing Near Sensor Architecture in Mixed-Signal Domain With CMOS Image Sensor of Convolutional-Kernel-Readout Method. <i>IEEE Transactions on Circuits and Systems I: Regular Papers</i> , <b>2020</b> , 67, 389-400	3.9	12
36	A 16-Core Voltage-Stacked System With Adaptive Clocking and an Integrated Switched-Capacitor DCDC Converter. <i>IEEE Transactions on Very Large Scale Integration (VLSI) Systems</i> , <b>2017</b> , 25, 1271-1284	2.6	11
35	Joint Design of Training and Hardware Towards Efficient and Accuracy-Scalable Neural Network Inference. <i>IEEE Journal on Emerging and Selected Topics in Circuits and Systems</i> , <b>2018</b> , 8, 810-821	5.2	11

34	Density Flow in Dynamical Networks via Mean-Field Games. <i>IEEE Transactions on Automatic Control</i> , <b>2017</b> , 62, 1342-1355	5.9	10
33	NNest <b>2018</b> ,		10
32	Characterizing and evaluating voltage noise in multi-core near-threshold processors <b>2013</b> ,		9
31	A power electronics unit to drive piezoelectric actuators for flying microrobots <b>2015</b> ,		9
30	Improving Absolute Accuracy of Integrated Resistors With Device Diversification. <i>IEEE Transactions on Circuits and Systems II: Express Briefs</i> , <b>2012</b> , 59, 346-350	3.5	9
29	A Fully Integrated Battery-Powered System-on-Chip in 40-nm CMOS for Closed-Loop Control of Insect-Scale Pico-Aerial Vehicle. <i>IEEE Journal of Solid-State Circuits</i> , <b>2017</b> , 52, 2374-2387	5.5	8
28	Process Compensation Loops for High Speed Ring Oscillators in Sub-Micron CMOS. <i>IEEE Journal on Emerging and Selected Topics in Circuits and Systems</i> , <b>2011</b> , 1, 59-70	5.2	7
27	A low variation GHz ring oscillator with addition-based current source <b>2009</b> ,		7
26	NeuADC: Neural Network-Inspired Synthesizable Analog-to-Digital Conversion. <i>IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems</i> , <b>2020</b> , 39, 1841-1854	2.5	7
25	Evaluating Adaptive Clocking for Supply-Noise Resilience in Battery-Powered Aerial Microbotic System-on-Chip. <i>IEEE Transactions on Circuits and Systems I: Regular Papers</i> , <b>2014</b> , 61, 2309-2317	3.9	6
24	PCBChain: Lightweight Reconfigurable Blockchain Primitives for Secure IoT Applications. <i>IEEE Transactions on Very Large Scale Integration (VLSI) Systems</i> , <b>2020</b> , 28, 2196-2209	2.6	6
23	Decentralized temperature control via HVAC systems in energy efficient buildings: An approximate solution procedure <b>2016</b> ,		6
22	When Capacitors Attack: Formal Method Driven Design and Detection of Charge-Domain Trojans <b>2019</b> ,		6
21	Voltage-Stacked Power Delivery Systems: Reliability, Efficiency, and Power Management. <i>IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems</i> , <b>2020</b> , 39, 5142-5155	2.5	5
20	Supply-noise resilient adaptive clocking for battery-powered aerial microrobotic System-on-Chip in 40nm CMOS <b>2013</b> ,		5
19	Low-Power, Minimally Invasive Process Compensation Technique for Sub-Micron CMOS Amplifiers. <i>IEEE Transactions on Very Large Scale Integration (VLSI) Systems</i> , <b>2014</b> , 22, 1-12	2.6	5
18	A process compensated 3-GHz ring oscillator <b>2009</b> ,		5
17	Process variation compensation of a 4.6 GHz LNA in 65nm CMOS <b>2010</b> ,		4

16	Neural Network-Inspired Analog-to-Digital Conversion to Achieve Super-Resolution with Low-Precision RRAM Devices <b>2019</b> ,		4
15	Evaluating Neural Network-Inspired Analog-to-Digital Conversion With Low-Precision RRAM. <i>IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems</i> , <b>2021</b> , 40, 808-821	2.5	4
14	A successive approximation based process-invariant ring oscillator <b>2010</b> ,		3
13	Low variation current source for 90nm CMOS <b>2008</b> ,		3
12	NeuADC: Neural Network-Inspired RRAM-Based Synthesizable Analog-to-Digital Conversion with Reconfigurable Quantization Support <b>2019</b> ,		3
11	Variance-based digital logic for energy harvesting Internet-of-Things <b>2017</b> ,		2
10	Efficient and reliable power delivery in voltage-stacked manycore system with hybrid charge-recycling regulators <b>2018</b> ,		2
9	A Quantitative Exploration of Collaborative Pruning and Approximation Computing Towards Energy Efficient Neural Networks. <i>IEEE Design and Test</i> , <b>2020</b> , 37, 36-45	1.4	2
8	Near-Memory Processing in Action: Accelerating Personalized Recommendation with AxDIMM. <i>IEEE Micro</i> , <b>2021</b> , 1-1	1.8	2
7	Fully integrated parity-time-symmetric electronics.. <i>Nature Nanotechnology</i> , <b>2022</b> , 17, 262-268	28.7	2
6	A low variation GHz ring oscillator with addition-based current source <b>2009</b> ,		1
5	Executing Data Integration Effectively and Efficiently Near the Memory. <i>IEEE Design and Test</i> , <b>2021</b> , 1-1	1.4	1
4	Exploiting Read/Write Asymmetry to Achieve Opportunistic SRAM Voltage Switching in Dual-Supply Near-Threshold Processors. <i>Journal of Low Power Electronics and Applications</i> , <b>2018</b> , 8, 28	1.7	0
3	Energy-Dissipation Limits in Variance-Based Computing. <i>Fluctuation and Noise Letters</i> , <b>2018</b> , 17, 1850013	1.2	
2	Neural-PIM: Efficient Processing-In-Memory with Neural Approximation of Peripherals. <i>IEEE Transactions on Computers</i> , <b>2021</b> , 1-1	2.5	
1	System-level Early-stage Modeling and Evaluation of IVR-assisted Processor Power Delivery System. <i>Transactions on Architecture and Code Optimization</i> , <b>2021</b> , 18, 1-27	1.3	