Jiann-Shiun Yuan

List of Publications by Year
in descending order

41 papers	709 citations	12 h-index (759055)	22 g-index (677027)
42 all docs	42 docs citations	42 times ranked	908 citing authors

#	Article	IF	Citations
1	Negative-Bias Temperature Instability of p-GaN Gate GaN-on-Si Power Devices. IEEE Transactions on Device and Materials Reliability, 2022, 22, 217-222.	1.5	3
2	DFDT: An End-to-End DeepFake Detection Framework Using Vision Transformer. Applied Sciences (Switzerland), 2022, 12, 2953.	1.3	13
3	MolData, a molecular benchmark for disease and target based machine learning. Journal of Cheminformatics, 2022, 14, 10.	2.8	12
4	ESD Stress Effect on Failure Mechanisms in GaN-on-Si Power Device. IEEE Transactions on Device and Materials Reliability, 2021, , 1-1.	1.5	2
5	Substrate Bias Enhanced Trap Effects on Time-Dependent Dielectric Breakdown of GaN MIS-HEMTs. IEEE Transactions on Electron Devices, 2021, 68, 2233-2239.	1.6	3
6	Multi-Tier 3D IC Physical Design with Analytical Quadratic Partitioning Algorithm Using 2D P&R Tool. Electronics (Switzerland), 2021, 10, 1930.	1.8	0
7	ADD: Attention-Based DeepFake Detection Approach. Big Data and Cognitive Computing, 2021, 5, 49.	2.9	13
8	Automated Machine Learning Pipeline for Traffic Count Prediction. Modelling, 2021, 2, 482-513.	0.8	1
9	TranScreen: Transfer Learning on Graph-Based Anti-Cancer Virtual Screening Model. Big Data and Cognitive Computing, 2020, 4, 16.	2.9	9
10	ESD Robustness of GaN-on-Si Power Devices under Substrate Biases by means of TLP/VFTLP Tests. , 2020, , .		5
11	Substrate Bias Effect on Dynamic Characteristics of a Monolithically Integrated GaN Half-Bridge. , 2020, , .		4
12	Artificial Intelligence for COVID-19 Drug Discovery and Vaccine Development. Frontiers in Artificial Intelligence, 2020, 3, 65.	2.0	137
13	Developing a Robust Defensive System against Adversarial Examples Using Generative Adversarial Networks. Big Data and Cognitive Computing, 2020, 4, 11.	2.9	4
14	Experimental investigation of buffer traps physical mechanisms on the gate charge of GaN-on-Si devices under various substrate biases. Applied Physics Letters, 2020, 116, .	1.5	14
15	RazorNet: Adversarial Training and Noise Training on a Deep Neural Network Fooled by a Shallow Neural Network. Big Data and Cognitive Computing, 2019, 3, 43.	2.9	4
16	Low-Side GaN Power Device Dynamic R_{on} Characteristics Under Different Substrate Biases. , 2019, , .		11
17	Utilizing Transfer Learning and Homomorphic Encryption in a Privacy Preserving and Secure Biometric Recognition System. Computers, 2019, 8, 3.	2.1	31
18	Noise Injection Adaption. , 2019, , .		115

#	Article	IF	Citations
19	Characterization of Deep and Shallow Traps in GaN HEMT Using Multi-Frequency C-V Measurement and Pulse-Mode Voltage Stress. IEEE Transactions on Device and Materials Reliability, 2019, 19, 350-357.	1.5	22
20	Experimental Verification of Substrate Bias Effect on the Gate Charge for GaN HEMTs. , 2019, , .		2
21	DeepMalaria: Artificial Intelligence Driven Discovery of Potent Antiplasmodials. Frontiers in Pharmacology, 2019, 10, 1526.	1.6	47
22	Leveraging Image Representation of Network Traffic Data and Transfer Learning in Botnet Detection. Big Data and Cognitive Computing, 2018, 2, 37.	2.9	24
23	Anomaly Generation Using Generative Adversarial Networks in Host-Based Intrusion Detection. , 2018, , .		24
24	C-V Measurement under Different Frequencies and Pulse-mode Voltage Stress to Reveal Shallow and Deep Trap Effects of GaN HEMTs. , 2018, , .		6
25	An Experimental Evaluation of Fault Diagnosis from Imbalanced and Incomplete Data for Smart Semiconductor Manufacturing. Big Data and Cognitive Computing, 2018, 2, 30.	2.9	18
26	A Cross-Layer Biometric Recognition System for Mobile IoT Devices. Electronics (Switzerland), 2018, 7, 26.	1.8	11
27	Evaluation of LDMOS Figure of Merit Using Device Simulation. Electronics (Switzerland), 2018, 7, 60.	1.8	1
28	Analysis and Simulation of Capacitor-Less ReRAM-Based Stochastic Neurons for the in-Memory Spiking Neural Network. IEEE Transactions on Biomedical Circuits and Systems, 2018, 12, 1004-1017.	2.7	18
29	Efficient Fault Localization and Failure Analysis Techniques for Improving IC Yield. Electronics (Switzerland), 2018, 7, 28.	1.8	11
30	Fabless design approach for lateral optimization of low voltage GaN power HEMTs. Superlattices and Microstructures, 2018, 121, 92-106.	1.4	9
31	Emerging Technology-Based Design of Primitives for Hardware Security. ACM Journal on Emerging Technologies in Computing Systems, 2017, 13, 1-19.	1.8	65
32	Security analysis of computing systems from circuit-architectural perspective. , 2017, , .		0
33	Capacitor-less RRAM-based stochastic neuron for event-based unsupervised learning. , 2017, , .		8
34	Optimization of an enhancement-mode AlGaN/GaN/AlGaN DHFET towards a high breakdown voltage and low figure of merit. , 2017, , .		7
35	Security Interrogation and Defense for SAR Analog to Digital Converter. Electronics (Switzerland), 2017, 6, 48.	1.8	7
36	Ultra-Low-Power Design and Hardware Security Using Emerging Technologies for Internet of Things. Electronics (Switzerland), 2017, 6, 67.	1.8	22

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37	Smart E-Beam for Defect Identification & Analysis in the Nanoscale Technology Nodes: Technical Perspectives. Electronics (Switzerland), 2017, 6, 87.	1.8	16
38	A 12-Bit Ultra-Low Voltage Noise Shaping Successive-Approximation Register Analogto-Digital Converter Using Emerging TFETs. Journal of Low Power Electronics, 2017, 13, 497-510.	0.6	3
39	RF energy harvesting using emerging TFET technology. , 2016, , .		0
40	Robust Trench Buried-Guard-Ring-Based Termination for Charge Balanced Devices. IEEE Transactions on Device and Materials Reliability, 2016, 16, 69-73.	1.5	0
41	Ultra-Low Power Successive Approximation Analog-to-Digital Converter Using Emerging Tunnel Field Effect Transistor Technology. Journal of Low Power Electronics, 2016, 12, 218-226.	0.6	7