M Jamal Deen

List of Publications by Year
in descending order

270 papers	9,921 citations	41627 51 h-index	54771 88 g-index
304 all docs	304 docs citations	304 times ranked	11467 citing authors

#	Article	IF	Citations
1	Custom Grasping: A Region-Based Robotic Grasping Detection Method in Industrial Cyber-Physical Systems. IEEE Transactions on Automation Science and Engineering, 2023, 20, 88-100.	3.4	6
2	QTT-DLSTM: A Cloud-Edge-Aided Distributed LSTM for Cyberâ€“Physicalâ€“Social Big Data. IEEE Transactions on Neural Networks and Learning Systems, 2023, 34, 7286-7298.	7.2	20
3	Nanomaterials in Smart Packaging Applications: A Review. Small, 2022, 18, e2101171.	5.2	40
4	Hybrid Deep Model for Human Behavior Understanding on Industrial Internet of Video Things. IEEE Transactions on Industrial Informatics, 2022, 18, 7000-7008.	7.2	13
5	A Wearable Tele-Health System towards Monitoring COVID-19 and Chronic Diseases. IEEE Reviews in Biomedical Engineering, 2022, 15, 61-84.	13.1	48
6	Improved Noise Performance of CMOS Poly Gate Single-Photon Avalanche Diodes. IEEE Photonics Journal, 2022, 14, 1-8.	1.0	12
7	Characterization of Knee and Gait Features From a Wearable Tele-Health Monitoring System. IEEE Sensors Journal, 2022, 22, 4741-4753.	2.4	6
8	Insole-Based Systems for Health Monitoring: Current Solutions and Research Challenges. Sensors, 2022, 22, 438.	2.1	42
9	PHYSICAL MODEL FOR LOW FREQUENCY NOISE IN AVALANCHE BREAKDOWN OF PN JUNCTIONS. , 2022, , 433-442.		0
10	Meet the Co-Editor. Micro and Nanosystems, 2022, 14, 187-187.	0.3	0
11	Free Space Ground to Satellite Optical Communications Using Kramersâ€“Kronig Transceiver in the Presence of Atmospheric Turbulence. Sensors, 2022, 22, 3435.	2.1	7
12	Voice Activated IoT Devices for Healthcare: Design Challenges and Emerging Applications. IEEE Transactions on Circuits and Systems II: Express Briefs, 2022, 69, 3101-3107.	2.2	6
13	Enhanced Photon Detection Probability Model for Single-Photon Avalanche Diodes in TCAD with Machine Learning. , 2022, , .		1
14	Software-Defined Fiber Optic Communications for Ultrahigh-Speed Optical Pulse Transmission Systems. IEEE Journal of Selected Topics in Quantum Electronics, 2022, 28, 1-10.	1.9	2
15	A Multi-Time-Gated SPAD Array with Integrated Coarse TDCs. Electronics (Switzerland), 2022, 11, 2015.	1.8	2
16	Improved Multi-Order Distributed HOSVD with Its Incremental Computing for Smart City Services. IEEE Transactions on Sustainable Computing, 2021, 6, 456-468.	2.2	35
17	A Tensor-Based Multiattributes Visual Feature Recognition Method for Industrial Intelligence. IEEE Transactions on Industrial Informatics, 2021, 17, 2231-2241.	7.2	75
18	A Data-Driven Auto-CNN-LSTM Prediction Model for Lithium-Ion Battery Remaining Useful Life. IEEE Transactions on Industrial Informatics, 2021, 17, 3478-3487.	7.2	254

#	Article	IF	Citations
19	Natural Brain-Inspired Intelligence for Screening in Healthcare Applications. IEEE Access, 2021, 9, 67957-67973.	2.6	6
20	A reusable, reagent-less free chlorine sensor using gold thin film electrode. Analyst, The, 2021, 146, 2626-2631.	1.7	12
21	Time-Gated and Multi-Junction SPADs in Standard 65 nm CMOS Technology. IEEE Sensors Journal, 2021, 21, 12092-12103.	2.4	19
22	Fruit Quality Monitoring with Smart Packaging. Sensors, 2021, 21, 1509.	2.1	62
23	A Simple, Low-Cost Multi-Sensor-Based Smart Wearable Knee Monitoring System. IEEE Sensors Journal, 2021, 21, 8253-8266.	2.4	20
24	Wearable IMU-Based System for Real-Time Monitoring of Lower-Limb Joints. IEEE Sensors Journal, 2021, 21, 8267-8275.	2.4	21
25	A Low-Cost Multi-Parameter Water Quality Monitoring System. Sensors, 2021, 21, 3775.	2.1	17
26	A two-layer optimal scheduling framework for energy savings in a data center for Cyberâ€“Physicalâ€“Social Systems. Journal of Systems Architecture, 2021, 116, 102050.	2.5	8
27	Random Telegraph Signal in n⁺/p-Well CMOS Single-Photon Avalanche Diodes. IEEE Transactions on Electron Devices, 2021, 68, 2764-2769.	1.6	13
28	Cloudâ€“Edge-Based Lightweight Temporal Convolutional Networks for Remaining Useful Life Prediction in IIoT. IEEE Internet of Things Journal, 2021, 8, 12578-12587.	5.5	72
29	A comparative analysis of eleven neural networks architectures for small datasets of lung images of COVID-19 patients toward improved clinical decisions. Computers in Biology and Medicine, 2021, 139, 104887.	3.9	25
30	A survey on data center cooling systems: Technology, power consumption modeling and control strategy optimization. Journal of Systems Architecture, 2021, 119, 102253.	2.5	78
31	Differential Quench and Reset Circuit for Single-Photon Avalanche Diodes. Journal of Lightwave Technology, 2021, 39, 7334-7342.	2.7	6
32	High-Speed Active Quench and Reset Circuit for SPAD in a Standard 65 nm CMOS Technology. IEEE Photonics Technology Letters, 2021, 33, 1431-1434.	1.3	15
33	A Multi-Order Distributed HOSVD with Its Incremental Computing for Big Services in Cyber-Physical-Social Systems. IEEE Transactions on Big Data, 2020, 6, 666-678.	4.4	46
34	Wide-angle, wide-band, polarization-insensitive metamaterial absorber for thermal energy harvesting. Scientific Reports, 2020, 10, 16215.	1.6	31
35	A Robust Orientation Filter for Wearable Sensing Applications. IEEE Sensors Journal, 2020, 20, 14228-14236.	2.4	18
36	Freshness Monitoring of Packaged Vegetables. Applied Sciences (Switzerland), 2020, 10, 7937.	1.3	27

#	Article	IF	Citations
37	Homecare Robotic Systems for Healthcare 4.0: Visions and Enabling Technologies. IEEE Journal of Biomedical and Health Informatics, 2020, 24, 2535-2549.	3.9	94
38	Development of a low-cost, user-customizable, high-speed camera. PLoS ONE, 2020, 15, e0232788.	1.1	4
39	Optical Biopsy of the Upper GI Tract Using Fluorescence Lifetime and Spectra. Frontiers in Physiology, 2020, 11, 339.	1.3	6
40	Bisphenol A Electrochemical Sensor Using Graphene Oxide and Î²-Cyclodextrin-Functionalized Multi-Walled Carbon Nanotubes. Analytical Chemistry, 2020, 92, 5532-5539.	3.2	171
41	Natural Brain-Inspired Intelligence for Non-Gaussian and Nonlinear Environments with Finite Memory. Applied Sciences (Switzerland), 2020, 10, 1150.	1.3	6
42	Fully Integrated, Simple, and Low-Cost Electrochemical Sensor Array for in Situ Water Quality Monitoring. ACS Sensors, 2020, 5, 412-422.	4.0	77
43	Brain tumor segmentation and grading of lower-grade glioma using deep learning in MRI images. Computers in Biology and Medicine, 2020, 121, 103758.	3.9	178
44	Global Optimization of Rectennas for IR Energy Harvesting at 10.6Î¼m. IEEE Journal of Photovoltaics, 2019, 9, 1232-1239.	1.5	20
45	Evolutionary Computation for Parameter Extraction of Organic Thin-Film Transistors Using Newly Synthesized Liquid Crystalline Nickel Phthalocyanine. Micromachines, 2019, 10, 683.	1.4	3
46	Dual-Band and Polarization-Free Metamaterial Perfect Absorber for MIR/NIR Applications. , 2019, , .		2
47	A Distributed Tensor-Train Decomposition Method for Cyber-Physical-Social Services. ACM Transactions on Cyber-Physical Systems, 2019, 3, 1-15.	1.9	56
48	Brain Inspired Dynamic System for the Quality of Service Control over the Long-Haul Nonlinear Fiber-Optic Link. Sensors, 2019, 19, 2175.	2.1	9
49	Electrochemical sensing of lead in drinking water using Î²-cyclodextrin-modified MWCNTs. Sensors and Actuators B: Chemical, 2019, 296, 126632.	4.0	49
50	Monitoring Methods of Human Body Joints: State-of-the-Art and Research Challenges. Sensors, 2019, 19, 2629.	2.1	100
51	Smartphone Sensors for Health Monitoring and Diagnosis. Sensors, 2019, 19, 2164.	2.1	241
52	A Novel Cloud-Based Framework for the Elderly Healthcare Services Using Digital Twin. IEEE Access, 2019, 7, 49088-49101.	2.6	358
53	Deep Semantic Mapping for Heterogeneous Multimedia Transfer Learning Using Co-Occurrence Data. ACM Transactions on Multimedia Computing, Communications and Applications, 2019, 15, 1-21.	3.0	16
54	Cognitive decision making for the long-haul fiber optic communication systems. , 2019, , .		2

#	Article	IF	Citations
55	Flexible Sensors â€“ Materials, Interfaces and Surfaces. , 2019, , .		0
56	Smart long-haul fiber optic communication systems using brain-like intelligence. , 2019, , .		5
57	Sensors for Positron Emission Tomography Applications. Sensors, 2019, 19, 5019.	2.1	54
58	Near zero-bias MIIM diode based on TiO2/ZnO for energy harvesting applications. AIP Advances, 2019, 9, .	0.6	18
59	Brain-Inspired Cognitive Decision Making for Nonlinear and Non-Gaussian Environments. IEEE Access, 2019, 7, 180910-180922.	2.6	5
60	Brain-Inspired Intelligence for Real-Time Health Situation Understanding in Smart e-Health Home Applications. IEEE Access, 2019, 7, 180106-180126.	2.6	13
61	An Incremental Deep Convolutional Computation Model for Feature Learning on Industrial Big Data. IEEE Transactions on Industrial Informatics, 2019, 15, 1341-1349.	7.2	48
62	A Tensor-Based Big-Data-Driven Routing Recommendation Approach for Heterogeneous Networks. IEEE Network, 2019, 33, 64-69.	4.9	147
63	A Simple, Low-Cost and Efficient Gait Analyzer for Wearable Healthcare Applications. IEEE Sensors Journal, 2019, 19, 2320-2329.	2.4	40
64	Polymers and organic materials-based pH sensors for healthcare applications. Progress in Materials Science, 2018, 96, 174-216.	16.0	122
65	Predictive Walking-Age Health Analyzer. IEEE Journal of Biomedical and Health Informatics, 2018, 22, 363-374.	3.9	19
66	Privacy-Preserving Double-Projection Deep Computation Model With Crowdsourcing on Cloud for Big Data Feature Learning. IEEE Internet of Things Journal, 2018, 5, 2896-2903.	5.5	79
67	A Big Data-as-a-Service Framework: State-of-the-Art and Perspectives. IEEE Transactions on Big Data, 2018, 4, 325-340.	4.4	136
68	Open-Source Low-Cost Wireless Potentiometric Instrument for pH Determination Experiments. Journal of Chemical Education, 2018, 95, 326-330.	1.1	45
69	Electrochemical sensing of acetaminophen using multi-walled carbon nanotube and Î²-cyclodextrin. Sensors and Actuators B: Chemical, 2018, 254, 896-909.	4.0	154
70	Deep Convolutional Computation Model for Feature Learning on Big Data in Internet of Things. IEEE Transactions on Industrial Informatics, 2018, 14, 790-798.	7.2	159
71	Integrated water quality monitoring system with pH, free chlorine, and temperature sensors. Sensors and Actuators B: Chemical, 2018, 255, 781-790.	4.0	72
72	Fully Multi-Functional GaN-based Micro-LEDs for 2500 PPI Micro-displays, Temperature Sensing, Light Energy Harvesting, and Light Detection. , 2018, , .		24

#	Article	IF	Citations
73	Characterization of a Time-Resolved Diffuse Optical Spectroscopy Prototype Using Low-Cost, Compact Single Photon Avalanche Detectors for Tissue Optics Applications. Sensors, 2018, 18, 3680.	2.1	7
74	Adjoint-Based Design of a Crossed-Ellipse Absent THz Filter. , 2018, , .		0
75	Double Hot-Spot Dual-Polarization Chand-Bali Nanoantenna for NIR Detection Applications. , 2018, , .		0
76	An Improved Stacked Auto-Encoder for Network Traffic Flow Classification. IEEE Network, 2018, 32, 22-27.	4.9	47
77	Noncontact Wearable Wireless ECG Systems for Long-Term Monitoring. IEEE Reviews in Biomedical Engineering, 2018, 11, 306-321.	13.1	117
78	Tailoring MWCNTs and Î²-Cyclodextrin for Sensitive Detection of Acetaminophen and Estrogen. ACS Applied Materials & Interfaces, 2018, 10, 21411-21427.	4.0	66
79	A Distributed HOSVD Method With Its Incremental Computation for Big Data in Cyber-Physical-Social Systems. IEEE Transactions on Computational Social Systems, 2018, 5, 481-492.	3.2	110
80	Time-resolved diffuse optical tomography system using an accelerated inverse problem solver. Optics Express, 2018, 26, 963.	1.7	14
81	New Morphology of a Silver Chloride Surface Grown on Silver Wires. Advanced Structured Materials, 2018, , 63-71.	0.3	0
82	A novel biasing dependent circuit modeling of resonant cavity enhanced avalanche photodetectors (RCE-APDs). , 2018, , .		0
83	Morphology and electrical properties of inkjet-printed palladium/palladium oxide. Journal of Materials Chemistry C, 2017, 5, 1893-1902.	2.7	7
84	An equivalent circuit model and biasing effects over the gain and bandwidth of waveguide avalanche photodetectors (WG-APDs). Optical and Quantum Electronics, 2017, 49, 1.	1.5	6
85	Energy Transfer Kinetics in Photosynthesis as an Inspiration for Improving Organic Solar Cells. ACS Applied Materials & Interfaces, 2017, 9, 19030-19039.	4.0	6
86	Flexible surface acoustic wave respiration sensor for monitoring obstructive sleep apnea syndrome. Journal of Micromechanics and Microengineering, 2017, 27, 115006.	1.5	42
87	Short noise suppression factor for nano-scale MOSFETs working in the saturation region. , 2017, , .		2
88	Low-frequency noise in semiconductor devices - state-of-the-art and future perspectives plenary paper. , 2017, , .		5
89	Complete Solid State Dissolved Oxygen Sensor Using Hemin Electrocatalyst and Palladium-Reusable Reference Electrode. IEEE Sensors Journal, 2017, , 1-1.	2.4	3
90	Time-Resolved Diffuse Optical Spectroscopy and Imaging Using Solid-State Detectors: Characteristics, Present Status, and Research Challenges. Sensors, 2017, 17, 2115.	2.1	29

#	Article	IF	Citations
91	Electrophoretic Concentration and Electrical Lysis of Bacteria in a Microfluidic Device Using a Nanoporous Membrane. Micromachines, 2017, 8, 45.	1.4	20
92	Electrical Tweezer for Droplet Transportation, Extraction, Merging and DNA Analysis. Micromachines, 2017, 8, 353.	1.4	1
93	Wearable Sensors for Remote Health Monitoring. Sensors, 2017, 17, 130.	2.1	813
94	Smart Homes for Elderly Healthcareâ€"Recent Advances and Research Challenges. Sensors, 2017, 17, 2496.	2.1	379
95	Technique to estimate human reaction time based on visual perception. Healthcare Technology Letters, 2017, 4, 73-77.	1.9	32
96	Electrical Characterization of Semiconductor Materials and Devices. Springer Handbooks, 2017, , 1-1.	0.3	6
97	Characterization of SPAD Array for Multifocal High-Content Screening Applications. Photonics, 2016, 3, 56.	0.9	9
98	Nanocrystalline diamond films prepared by pulsed electron beam ablation on different substrates. Journal of Materials Research, 2016, 31, 1964-1971.	1.2	1
99	Impact of silicide layer on single photon avalanche diodes in a 130â€‰nm CMOS process. Journal Physics D: Applied Physics, 2016, 49, 345105.	1.3	11
100	A Tensor-Based Big Service Framework for Enhanced Living Environments. IEEE Cloud Computing, 2016, 3, 36-43.	5.3	70
101	Inkjet-printed bifunctional carbon nanotubes for pH sensing. Materials Letters, 2016, 176, 68-70.	1.3	58
102	Paper-Based, Hand-Drawn Free Chlorine Sensor with Poly(3,4-ethylenedioxythiophene):Poly(styrenesulfonate). Analytical Chemistry, 2016, 88, 10384-10389.	3.2	25
103	Nano crescent antenna with variable axial ratio for energy harvesting applications. , 2016, , .		1
104	Direct bonding of liquid crystal polymer to glass. RSC Advances, 2016, 6, 107200-107207.	1.7	13
105	Smart home for elderly living using Wireless Sensor Networks and an Android application. , 2016, , .		24
106	Low-temperature solution processing of palladium/palladium oxide films and their pH sensing performance. Talanta, 2016, 146, 517-524.	2.9	23
107	Inkjet Printing of a Highly Loaded Palladium Ink for Integrated, Lowâ€Cost pH Sensors. Advanced Functional Materials, 2016, 26, 4923-4933.	7.8	76
108	Improving the spatial resolution in CZT detectors using charge sharing effect and transient signal analysis: Simulation study. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2016, 808, 60-70.	0.7	13

#	Article	IF	Citations
109	Recent Developments and Design Challenges of High-Performance Ring Oscillator CMOS Time-to-Digital Converters. IEEE Transactions on Electron Devices, 2016, 63, 235-251.	1.6	67
110	A Comprehensive and Accurate Analytical SPAD Model for Circuit Simulation. IEEE Transactions on Electron Devices, 2016, 63, 1940-1948.	1.6	39
111	Resonant cavity enhanced photodetectors. , 2016, , 415-470.		6
112	A Low-Power Gateable Vernier Ring Oscillator Time-to-Digital Converter for Biomedical Imaging Applications. IEEE Transactions on Biomedical Circuits and Systems, 2016, 10, 445-454.	2.7	63
113	Observation of ultraslow stress release in silicon nitride films on CaF2. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2015, 33, 041515.	0.9	4
114	Low-Temperature Bonding for Silicon-Based Micro-Optical Systems. Photonics, 2015, 2, 1164-1201.	0.9	12
115	Nanobonding: A key technology for emerging applications in health and environmental sciences. Japanese Journal of Applied Physics, 2015, 54, 030201.	0.8	8
116	Toward Realization of 2.4 GHz Balunless Narrowband Receiver Front-End for Short Range Wireless Applications. Sensors, 2015, 15, 10791-10805.	2.1	10
117	Physical DC and thermal noise models of 18 nm double-gate junctionless p-type MOSFETs for low noise RF applications. Japanese Journal of Applied Physics, 2015, 54, 04DC08.	0.8	5
118	Materials analyses and electrochemical impedance of implantable metal electrodes. Physical Chemistry Chemical Physics, 2015, 17, 10135-10145.	1.3	22
119	Afterpulsing Characteristics of Free-Running and Time-Gated Single-Photon Avalanche Diodes in 130-nm CMOS. IEEE Transactions on Electron Devices, 2015, 62, 3727-3733.	1.6	31
120	CMOS Image Sensor With Area-Efficient Block-Based Compressive Sensing. IEEE Sensors Journal, 2015, 15, 3699-3710.	2.4	27
121	Information and communications technologies for elderly ubiquitous healthcare in a smart home. Personal and Ubiquitous Computing, 2015, 19, 573-599.	1.9	185
122	UV sensing using film bulk acoustic resonators based on Au/n-ZnO/piezoelectric-ZnO/Al structure. Scientific Reports, 2015, 5, 9123.	1.6	36
123	Low-frequency noise in organic transistors. , 2015, , .		2
124	Low-Cost Graphite-Based Free Chlorine Sensor. Analytical Chemistry, 2015, 87, 10734-10737.	3.2	51
125	Microfabricated electrochemical pH and free chlorine sensors for water quality monitoring: recent advances and research challenges. RSC Advances, 2015, 5, 69086-69109.	1.7	144
126	Sensitivity of the threshold voltage of organic thin-film transistors to light and water. Journal of Applied Physics, 2015, 117, .	1.1	5

#	Article	IF	Citations
127	Graphene electronic sensors â€“ review of recent developments and future challenges. IET Circuits, Devices and Systems, 2015, 9, 446-453.	0.9	51
128	Counting of Escherichia coli by a microflow cytometer based on a photonicâ€“microfluidic integrated device. Electrophoresis, 2015, 36, 298-304.	1.3	15
129	Raman Spectroscopy for In-Line Water Quality Monitoringâ€”Instrumentation and Potential. Sensors, 2014, 14, 17275-17303.	2.1	71
130	Future nano- and micro-systems using nanobonding technologies. , 2014, , .		1
131	Towards a portable Raman spectrometer using a concave grating and a time-gated CMOS SPAD. Optics Express, 2014, 22, 18736.	1.7	32
132	Foreword Special Issue on Compact Modeling of Emerging Devices. IEEE Transactions on Electron Devices, 2014, 61, 221-224.	1.6	0
133	Compact Modeling and Contact Effects in Thin Film Transistors. IEEE Transactions on Electron Devices, 2014, 61, 266-277.	1.6	29
134	Nanobonding - A key technology for emerging applications in health and environmental sciences. , 2014, , .		0
135	CMOS SPADs: Design Issues and Research Challenges for Detectors, Circuits, and Arrays. IEEE Journal of Selected Topics in Quantum Electronics, 2014, 20, 409-426.	1.9	87
136	A utility maximization approach for information-communication tradeoff in Wireless Body Area Networks. Personal and Ubiquitous Computing, 2014, 18, 1963-1976.	1.9	9
137	Development of a Low-Cost Hemin-Based Dissolved Oxygen Sensor With Anti-Biofouling Coating for Water Monitoring. IEEE Sensors Journal, 2014, 14, 3400-3407.	2.4	37
138	Walking-Age Analyzer for Healthcare Applications. IEEE Journal of Biomedical and Health Informatics, 2014, 18, 1034-1042.	3.9	27
139	Polymer integration for packaging of implantable sensors. Sensors and Actuators B: Chemical, 2014, 202, 758-778.	4.0	136
140	Block-Based CS in a CMOS Image Sensor. IEEE Sensors Journal, 2014, 14, 2897-2909.	2.4	24
141	Slew-rate enhancement for a single-ended low-power two-stage amplifier. , 2013, , .		7
142	Low frequency noise in silicon-based devices, circuits and systems. , 2013, , .		4
143	Time-resolved near-infrared spectroscopic imaging systems. , 2013, , .		2
144	Microfluidic Reference Electrode with Free-Diffusion Liquid Junction. Journal of the Electrochemical Society, 2013, 160, B177-B183.	1.3	15

#	Article	IF	Citations
145	DC and thermal noise modeling of 20 nm double-gate junctionless MOSFETs. , 2013, , .		3
146	Temporal noise analysis and measurements of CMOS active pixel sensor operating in time domain. , 2013, , .		1
147	Low power highly linear inductorless UWB CMOS mixer with active wideband input balun. , 2013, , .		3
148	Investigation of the electrical stability of Si-nanowire biologically sensitive field-effect transistors with embedded Ag/AgCl pseudo reference electrode. RSC Advances, 2013, 3, 7963.	1.7	19
149	Composite Semiconductor Material of Carbon Nanotubes and Poly[5,5â€²-bis(3-dodecyl-2-thienyl)-2,2â€²-bithiophene] for High-Performance Organic Thin-Film Transistors. Journal of Electronic Materials, 2013, 42, 3481-3488.	1.0	8
150	Compressive Sensing Image Sensors-Hardware Implementation. Sensors, 2013, 13, 4961-4978.	2.1	32
151	Single-Chip Fully Integrated Direct-Modulation CMOS RF Transmitters for Short-Range Wireless Applications. Sensors, 2013, 13, 9878-9895.	2.1	7
152	Flexible electronics - opportunities and challenges. , 2013, , .		2
153	Fabrication of vertically stacked single-crystalline Si nanowires using self-limiting oxidation. Nanotechnology, 2012, 23, 015307.	1.3	7
154	Design of a flat field concave-grating-based micro-Raman spectrometer for environmental applications. Applied Optics, 2012, 51, 6855.	0.9	28
155	Information and communications technologies for ubiquitous-healthcare. , 2012, , .		1
156	Transmission Lines and Passive Components. Advances in Imaging and Electron Physics, 2012, 174, 119-222.	0.1	0
157	Basic Properties of Silicon. , 2012, , 13-45.		0
158	Raman Lasers. , 2012, , 249-263.		0
159	Measurement Techniques and Issues. Advances in Imaging and Electron Physics, 2012, 174, 1-117.	0.1	2
160	Nanoscale FETs. Advances in Imaging and Electron Physics, 2012, , 261-347.	0.1	1
161	A wireless wearable ECG sensor for long-term applications. , 2012, 50, 36-43.		318
162	Effects of Gate Oxide and Junction Nonuniformity on the DC and Low-Frequency Noise Performance of Four-Gate Transistors. IEEE Transactions on Electron Devices, 2012, 59, 459-467.	1.6	60

#	Article	IF	Citations
163	CMOS Active-Pixel Sensor With In-Situ Memory for Ultrahigh-Speed Imaging. IEEE Sensors Journal, 2011, 11, 1375-1379.	2.4	21
164	A Novel, High-Dynamic-Range, High-Speed, and High-Sensitivity CMOS Imager Using Time-Domain Single-Photon Counting and Avalanche Photodiodes. IEEE Sensors Journal, 2011, 11, 1078-1083.	2.4	25
165	Silicon nanowire ion sensitive field effect transistor with integrated Ag/AgCl electrode: pH sensing and noise characteristics. Analyst, The, 2011, 136, 5012.	1.7	66
166	A Fully Integrated CMOS Power Amplifier Using Superharmonic Injection-Locking for Short-Range Applications. IEEE Sensors Journal, 2011, 11, 2149-2158.	2.4	17
167	Nanobonding Technology Toward Electronic, Fluidic, and Photonic Systems Integration. IEEE Journal of Selected Topics in Quantum Electronics, 2011, 17, 689-703.	1.9	37
168	U-Health Smart Home. IEEE Nanotechnology Magazine, 2011, 5, 6-11.	0.9	70
169	Impact of the fringing capacitance at the back of thin-film transistors. Organic Electronics, 2011, 12, 936-949.	1.4	12
170	Frozen noise origin of temporal low-frequency noise in electronic devices. , 2011, , .		0
171	Information-Based Energy Efficient Sensor Selection in Wireless Body Area Networks. , 2011, , .		17
172	Random telegraph signal noise in CMOS active pixel sensors. , 2011, , .		2
173	Information and communications technologies for ubiquitous-healthcare. , 2011, , .		0
174	Development of a catadioptric endoscope objective with forward and side views. Journal of Biomedical Optics, 2011, 16, 066015.	1.4	20
175	Flicker noise due to variable range hopping in organic thin-film transistors. , 2011, , .		1
176	High-Speed, Single-Photon Avalanche-Photodiode Imager for Biomedical Applications. IEEE Sensors Journal, 2011, 11, 2401-2412.	2.4	82
177	Nanoscale memory devices. Nanotechnology, 2010, 21, 412001.	1.3	97
178	Electrical Conductance in Biological Molecules. Advanced Functional Materials, 2010, 20, 1865-1883.	7.8	90
179	Information-based sensor tasking wireless body area networks in U-health systems. , 2010, , .		13
180	Compressive sensing with modified Total Variation minimization algorithm. , 2010, , .		8

#	Article	IF	Citations
181	A dual view catadioptric endoscope for fluorescence endoscopy. , 2010, , .		0
182	Extraction of Electron and Hole Ionization Coefficients From Metamorphically Grown InGaSb Diodes. IEEE Transactions on Electron Devices, 2009, 56, 523-528.	1.6	8
183	The Impact of On-Chip Interconnections on CMOS RF Integrated Circuits. IEEE Transactions on Electron Devices, 2009, 56, 1882-1890.	1.6	16
184	Special Issue on Compact Interconnect Models for Gigascale Integration. IEEE Transactions on Electron Devices, 2009, 56, 1784-1786.	1.6	2
185	Organic Thin-Film Transistors: Part Iâ€"Compact DC Modeling. IEEE Transactions on Electron Devices, 2009, 56, 2952-2961.	1.6	206
186	Organic Thin-Film Transistors: Part IIâ€"Parameter Extraction. IEEE Transactions on Electron Devices, 2009, 56, 2962-2968.	1.6	88
187	CMOS photodetector systems for low-level light applications. Journal of Materials Science: Materials in Electronics, 2009, 20, 87-93.	1.1	18
188	Growth and fabrication issues of GaSb-based detectors. Journal of Materials Science: Materials in Electronics, 2009, 20, 1039-1058.	1.1	18
189	High-throughput acousto-optic-tunable-filter-based time-resolved fluorescence spectrometer for optical biopsy. Optics Letters, 2009, 34, 1132.	1.7	24
190	CMOS Image Sensors for High Speed Applications. Sensors, 2009, 9, 430-444.	2.1	154
191	Low-Frequency Noise Partition of Asymmetric MOS Transistors Operating in Linear Regime. IEEE Electron Device Letters, 2009, 30, 840-842.	2.2	4
192	A multisampling time-domain CMOS imager with synchronous readout circuit. Analog Integrated Circuits and Signal Processing, 2008, 57, 151-159.	0.9	13
193	Efficient sensitivity analysis of the time independent SchrÃ¶dinger equation with application to quantum lasers. Optics Communications, 2008, 281, 4459-4463.	1.0	11
194	Supramolecular Functionalization of Single-Walled Carbon Nanotubes with Conjugated Polyelectrolytes and Their Patterning on Surfaces. Macromolecules, 2008, 41, 9869-9874.	2.2	44
195	Fully Integrated Single Photon Avalanche Diode Detector in Standard CMOS 0.18- mum Technology. IEEE Transactions on Electron Devices, 2008, 55, 760-767.	1.6	140
196	Toward a Miniaturized Wireless Fluorescence-Based Diagnostic Imaging System. IEEE Journal of Selected Topics in Quantum Electronics, 2008, 14, 226-234.	1.9	46
197	CMOS imaging for biomedical applications. IEEE Potentials, 2008, 27, 31-36.	0.2	15
198	A low-voltage low-noise superharmonic quadrature oscillator. , 2008, , .		6

#	Article	IF	Citations
199	Contact effects and extraction of intrinsic parameters in poly(3-alkylthiophene) thin film field-effect transistors. Journal of Applied Physics, 2008, 103, .	1.1	38
200	CMOS image sensors and camera-on-a-chip for low-light level biomedical applications. , 2008, , .		1
201	Optimization of DNA detection using FETs. , 2008, , .		0
202	Highly sensitive, low-cost integrated biosensors. , 2007, , .		4
203	Low-frequency noise and random telegraph noise in SiGe:C heterojunction bipolar transistors: impact of carbon concentration. , 2007, , .		0
204	A multisampling time-domain CMOS imager with synchronous readout circuit. , 2007, , .		0
205	Theory of microplasma fluctuations and noise in silicon diode in avalanche breakdown. Journal of Applied Physics, 2007, 101, 064515.	1.1	33
206	Flicker noise cancellation technique for low-voltage direct-conversion mixers. Electronics Letters, 2007, 43, 1020.	0.5	7
207	A Study of Ultrawideband Antennas for Near-Field Imaging. IEEE Transactions on Antennas and Propagation, 2007, 55, 1184-1188.	3.1	68
208	Analytical Determination of MOSFET's High-Frequency Noise Parameters From NF$_{50}$ Measurements and Its Application in RFIC Design. IEEE Journal of Solid-State Circuits, 2007, 42, 1034-1043.	3.5	27
209	Low-power integrated CMOS RF transceiver circuits for short-range applications. Midwest Symposium on Circuits and Systems, 2007, , .	1.0	4
210	Calculation of the Response of Field-Effect Transistors to Charged Biological Molecules. IEEE Sensors Journal, 2007, 7, 1233-1242.	2.4	52
211	CMOS-Based Active Pixel for Low-Light-Level Detection: Analysis and Measurements. IEEE Transactions on Electron Devices, 2007, 54, 3229-3237.	1.6	32
212	Design of the Input Matching Network of RF CMOS LNAs for Low-Power Operation. IEEE Transactions on Circuits and Systems Part 1: Regular Papers, 2007, 54, 544-554.	0.1	51
213	Design issues of a low power wideband frequency doubler implementation in 0.18ÂÎ¼m CMOS. Analog Integrated Circuits and Signal Processing, 2007, 53, 53-62.	0.9	3
214	High Sensitivity Detection of Biological Species via the Field-Effect. , 2006, , .		2
215	Evaluation of complementary metal-oxide semiconductor based photodetectors for low-level light detection. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2006, 24, 860-865.	0.9	10
216	Very low-voltage operation capability of complementary metal-oxide-semiconductor ring oscillators and logic gates. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2006, 24, 763-769.	0.9	9

#	Article	IF	Citations
217	Hot-carrier reliability of submicron NMOSFETs and integrated NMOS low noise amplifiers. Microelectronics Reliability, 2006, 46, 201-212.	0.9	34
218	Electrical studies of semiconductorâ€“dielectric interfaces. Journal of Materials Science: Materials in Electronics, 2006, 17, 663-683.	1.1	7
219	Performance of organic thin-film transistors. Journal of Vacuum Science & Technology B, 2006, 24, 1728.	1.3	24
220	Determination of the concentration of recombination centers in thin asymmetrical p-n junctions from capacitance transient spectroscopy. Applied Physics Letters, 2006, 89, 112107.	1.5	11
221	Signal and noise modeling and analysis of complementary metal-oxide semiconductor active pixel sensors. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2006, 24, 879-882.	0.9	6
222	Parasitics-aware layout design of a low-power fully integrated complementary metal-oxide semiconductor power amplifier. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2006, 24, 835-840.	0.9	2
223	Noise in Advanced Electronic Devices and Circuits. AIP Conference Proceedings, 2005, , .	0.3	17
224	A low-power CMOS class-E power amplifier for biotelemetry applications. , 2005, , .		16
225	A fully integrated low-power CMOS power amplifier for biomedical applications. , 2005, , .		1
226	Modeling of mushroom waveguide photodetector. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2004, 22, 811.	0.9	6
227	Variable current transport in polymer thin film transistors. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2004, 22, 755.	0.9	10
228	Effects of the parasitics on the time response of resonant-cavity-enhanced photodetectors (RCE-PDs). , 2004, , .		1
229	Modeling of waveguide-separated absorption charge multiplication-avalanche photodetector (WG-SACM-APD). , 2004, , .		1
230	PHYSICAL MODEL FOR LOW FREQUENCY NOISE IN AVALANCHE BREAKDOWN OF PN JUNCTIONS. Fluctuation and Noise Letters, 2004, 04, L287-L296.	1.0	5
231	A Pipeline Architecture for Processing of DNA Microarrays Images. Journal of Signal Processing Systems, 2004, 38, 287-297.	1.0	6
232	Low-frequency noise in SiGeC-based pMOSFETs. , 2004, , .		7
233	Resonant cavity enhanced photodetectors (RCE-PDs): structure, material, analysis and optimization. , 2003, 4999, 363.		14
234	Noise and charge transport in polymer thin film structures. , 2003, , .		0

#	Article	IF	Citations
235	Low-frequency noise behavior of polysilicon emitter bipolar junction transistors: a review. , 2003, , .		11
236	Effects of body biasing on the low-frequency noise of NMOSFETs from a 130-nm CMOS technology. , 2003, , .		2
237	Comparison of low-frequency noise in III-V and Si/SiGe HBTs. , 2003, 5113, 133.		3
238	Physical model for low-frequency noise in avalanche breakdown of PN junctions. , 2003, 5113, 484.		0
239	Effect of interface trapping on the frequency response of a photodetector. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2002, 20, 1105-1110.	0.9	5
240	Low frequency noise of reverse biased rectifier diodes in the avalanche breakdown regime. Journal of Applied Physics, 2002, 91, 9232-9240.	1.1	5
241	MOSFET 1âˆ•f noise model based on mobility fluctuation in linear region. Electronics Letters, 2002, 38, 429.	0.5	14
242	RF CMOS NOISE CHARACTERIZATION AND MODELING. Selected Topics in Electornics and Systems, 2002, , 199-271.	0.2	4
243	RF CMOS RELIABILITY. Selected Topics in Electornics and Systems, 2002, , 363-409.	0.2	3
244	Low-bias performance of avalanche photodetector. A time-domain approach. IEEE Journal of Quantum Electronics, 2001, 37, 69-74.	1.0	14
245	Modeling the variation of the low-frequency noise in polysilicon emitter bipolar junction transistors. IEEE Electron Device Letters, 2001, 22, 242-244.	2.2	18
246	High-performance photodetectors for fiber-optic communications. , 2001, , .		0
247	Time-domain model for an avalanche photodiode at low-bias. , 2001, 4417, 358.		0
248	<title>Time-domain modeling of InP/InGaAs avalanche photodiodes</title>. , 2001, , .		1
249	<title>Theoretical approach to frequency response of resonant-cavity avalanche photodiodes</title>. , 2001, 4288, 21.		8
250	LOW FREQUENCY NOISE IN AVALANCHE BREAKDOWN OF PN JUNCTION DIODES. , 2001, , .		1
251	LOW FREQUENCY NOISE IN POLYMER TRANSISTORS WITH NON-STATIONARY MOBILITY. , 2001, , .		2
252	LOW FREQUENCY NOISE IN CDSE THIN FILM TRANSISTORS. , 2001, , .		0

#	Article	IF	Citations
253	MODELING THE LEVEL AND VARIATION IN THE LOW-FREQUENCY NOISE IN POLYSILICON EMITTER BIPOLAR TRANSISTORS. , 2001, , .		0
254	UP-CONVERSION OF 1/f NOISE TO PHASE NOISE IN VOLTAGE CONTROLLED OSCILLATORS. , 2001, , .		1
255	HIGH-FREQUENCY NOISE OF MOSFETS. , 2001, , .		1
256	RF modeling of MOSFETs. , 2000, , .		1
257	Channel Noise Current in Deep Sub-Micron MOSFETs. , 2000, , .		1
258	Direct extraction of the channel thermal noise in metal-oxide-semiconductor field effect transistor from measurements of their rf noise parameters. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2000, 18, 757-760.	0.9	10
259	Two-dimensional gain profiles of InP/InGaAs separate absorption, grading, charge, and multiplication avalanche photodiodes modeled by a simplified stochastic approach. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2000, 18, 610-614.	0.9	5
260	On the origin of 1/f noise in polysilicon emitter bipolar transistors. Journal of Applied Physics, 1999, 85, 1192-1195.	1.1	54
261	Development and Applications of a New Deep Level Transient Spectroscopy Method and New Averaging Techniques. Advances in Imaging and Electron Physics, 1999, 109, 1-161.	0.1	2
262	<title>Ionization coefficient measurements in InP by using multiplication noise characteristics of InP/InGaAs separate absorption, grading, charge, and multiplication (SAGCM) avalanche photodiodes (APDs)</title>. , 1998, , .		7
263	Low frequency noise in polysiliconâ€emitter bipolar junction transistors. Journal of Applied Physics, 1995, 77, 6278-6288.	1.1	84
264	Nature of Impurities in .pi.-Conjugated Polymers Prepared by Ferric Chloride and Their Effect on the Electrical Properties of Metal-Insulator-Semiconductor Structures. Chemistry of Materials, 1995, 7, 631-641.	3.2	97
265	Reversible charge transfer complexes between molecular oxygen and poly(3-alkylthiophene)s. Advanced Materials, 1994, 6, 838-841.	11.1	78
266	A 1.8 V monolithic CMOS nested-loop frequency synthesizer for GSM receivers at 1.8 GHz. , 0, , .		6
267	Low power RFICs for receiver applications - design and performance issues. , 0, , .		3
268	CMOS distributed amplifiers. , 0, , .		3
269	Radio Frequency CMOS Integrated Circuits for-Low Power Transceiver Applications. , 0, , .		0
270	A Fully Integrated Low-Power CMOS Power Amplifier for Biomedical Applications. , 0, , .		3