Sujata Pandey

List of Publications by Year
in descending order

139 papers	552 citations	840776 11 h-index	888059 17 g-index
141 all docs	141 docs citations	141 times ranked	345 citing authors

#	Article	IF	Citations
1	Design and Analysis of Metamaterial-Based SWB-MIMO Antenna. IETE Journal of Research, 2023, 69, 6733-6746.	2.6	8
2	A super wideband MIMO antenna with metamaterial superstrate for gain enhancement at WLAN frequency band. International Journal of Systems Assurance Engineering and Management, 2023, 14, 643-658.	2.4	2
3	A Study on RPL Protocol with Respect to DODAG Formation Using Objective Function. Advances in Intelligent Systems and Computing, 2022, , 633-644.	0.6	3
4	A Variation Tolerant Nanoscale SRAM for Low Power Wireless Sensor Nodes. Wireless Personal Communications, 2022, 124, 3235-3251.	2.7	2
5	Energy-Efficient Tunnel FET for Application as a Biosensor. Springer Proceedings in Energy, 2022, , 181-186.	0.3	0
6	Thermal effect on Layers of 3D Printed Components & its impact on Material's Property. , 2022, , .		1
7	Analysis of the IoT Framework for Sensor Data Connectivity. , 2022, , .		0
8	Performance Analysis, Design and simulation of Piezoresistive Pressure Sensor. , 2022, , .		0
9	Influence of Acetone Smoothed 3D Printed ABS polymer on Impact Strength. , 2022, , .		0
10	A Compact High Gain Metamaterial-Based Antenna for Terahertz Applications. Journal of Electronic Materials, 2022, 51, 4589-4600.	2.2	6
11	Accessible review of internet of vehicle models for intelligent transportation and research gaps for potential future directions. Peer-to-Peer Networking and Applications, 2021, 14, 978-1005.	3.9	13
12	Physical Design Analysis of USB 3.0 Architecture. , 2021, , .		0
13	Design and Analysis of Microstrip Line bandpass filter. , 2021, , .		1
14	A High Gain Super Wideband Metamaterial Based Antenna. Journal of Microwaves, Optoelectronics and Electromagnetic Applications, 2021, 20, 248-273.	0.7	7
15	Network efficient topology for low power and lossy networks in smart corridor design using RPL. International Journal of Pervasive Computing and Communications, 2021, ahead-of-print, .	1.3	4
16	Double co-host emitter based top emitting white organic light emitting diodes with enhanced brightness and efficiency. Optoelectronics Letters, 2021, 17, 581-585.	0.8	1
17	Lightweight capability-token for consent-based authentication protocol for smart sensor nodes. Journal of Information Security and Applications, 2021, 63, 103024.	2.5	1
18	A Flower shaped Printed wideband monopole antenna for RFID applications. , 2021, , .		1

#	Article	IF	Citations
19	A Dual band Monopole Antenna For RFID Applications. , 2021, , .		0
20	A Convergence Time Predictive Model using Machine Learning for LLN. , 2021, , .		2
21	Role of Ion Irradiation in Resistive Memory Devices. , 2021, , .		2
22	Transient Analysis of Poly (3,4-Ethylenedioxythiophene) Poly (Styrenesulphonate) (PEDOT: PSS)-Polyfluorene Organic Polymer Layer Light Emitting Diode. Micro and Nanosystems, 2020, 12, 226-231.	0.6	0
23	Protecting composite IoT server by secure secret key exchange for XEN intra virtual machines. International Journal of Information and Computer Security, 2020, 12, 53.	0.2	3
24	Micro-Cavity Nano-Layered Organic Light Emitting Diode to Improve Light Extraction and Electrical Properties of the Device. , 2020, , .		0
25	Optoâ€electrical properties of HATâ€CN based organic light emitting diode. Micro and Nano Letters, 2020, 15, 24-29.	1.3	0
26	A Novel Design of High Performance Low Power Phase-Frequency Detector for CMOS PLL Frequency Synthesizer. International Journal of Sensors, Wireless Communications and Control, 2020, 10, 838-845.	0.7	0
27	Design and Implementation of an Efficient Buffer Management System for Network on Chip Routers. , 2020, , .		1
28	Experimental Investigation of a Novel Multi-Patch Fractal Antenna for Radio Frequency Energy Harvesting. , 2020, , .		1
29	Design of psk based trusted dtls for smart sensor nodes. Recent Advances in Computer Science and Communications, 2020, 13, .	0.7	0
30	Low Leakage Optimization Techniques for Multi-threshold CMOS Circuits. Nanoscience and Nanotechnology - Asia, 2020, 10, 696-708.	0.7	0
31	Design Techniques for Power-Gated Nanoscale Low Power Circuits. Micro and Nanosystems, 2019, 11, 90-99.	0.6	0
32	Optimization of organic light emitting diode for HAT-CN based nano-structured device by study of injection characteristics at anode/organic interface. Frontiers of Optoelectronics, 2019, 12, 268-275.	3.7	4
33	Design of a Novel Mirowave Antenna. , 2019, , .		0
34	Investigation of Tunnel Field Effect Transistor for Biosensing Applications. , 2019, , .		4
35	Graphene Based Tunnel Field Effect Transistor for RF Applications. , 2019, , .		4
36	Design and Electrical Characteristics of a Microwave Multiband Single Slotted Antenna with Different Dielectric Substrate Materials. , 2019, , .		0

#	Article	IF	Citations
37	Study of Piezoelectric-mechanical Properties of III-V Nitride Based Tunnel FET. , 2019, , .		1
38	A Novel Lotus Shaped Multiband Patch Antenna with Improved Performance. , 2019, , .		1
39	Optimising the DTLS handshake design for TEE enabled sensor nodes. International Journal of Security and Networks, 2019, 14, 167.	0.2	2
40	A boosted negative bit-line SRAM with write-assisted cell in 45 nm CMOS technology. Journal of Semiconductors, 2018, 39, 025001.	3.7	5
41	A dual V t disturb-free subthreshold SRAM with write-assist and read isolation. Journal of Semiconductors, 2018, 39, 025002.	3.7	1
42	Effect of Substrate on S-Parameters of Microstrip Ring Resonator. , 2018, , .		0
43	Measurement of Bandwidth and FFT of a low frequency modulated signal in a Phase locked VCO. , 2018, , .		0
44	A Low Cost Portable Radiation Level Monitoring Device. , 2018, , .		2
45	A Multiband Uniplanar Left Handed Metamaterial Unit Cell. , 2018, , .		0
46	Surveyance of Ambient Conditions in Mines Using Intelligent Sensor Nodes. , 2018, , .		1
47	A New Charge-Recycling Approach for Reactivation-Noise Reduction. , 2018, , .		0
48	Novel design techniques for noise-tolerant power-gated CMOS circuits. Journal of Semiconductors, 2017, 38, 015001.	3.7	3
49	Effect of Surface Passivation on the Electrical Characteristics of Nanoscale AlGaN/GaN HEMT. IOP Conference Series: Materials Science and Engineering, 2017, 225, 012095.	0.6	6
50	Effect of substrate material on sensing behaviour of SAW based gas sensors. AIP Conference Proceedings, 2017, , .	0.4	0
51	A Novel Design of Fractal Antenna: Effect of Different Dielectric Substrate Materials. Springer Proceedings in Physics, 2017, , 521-526.	0.2	0
52	Implementation of an IOT framework for smart healthcare. , 2017, , .		5
53	IOT based health monitoring systems. , 2017, , .		15
54	Fast integral image computing scheme for vision based applications. , 2017, , .		2

#	Article	IF	Citations
55	A novel design of multi patch antenna. , 2017, , .		0
56	Switching characteristics of InN tunnel field effect transistor and its application in the design of RF amplifiers. , 2017, , .		0
57	A new hexagonal multi patch antenna. , 2017, , .		0
58	Study and implementation of IOT based smart healthcare system. , 2017, , .		6
59	Analysis of multilayered SAW based gas sensor. , 2017, , .		5
60	GaN based tunnel field effect transistor for terahertz applications. , 2017, , .		2
61	Analysis of schottky barrier indium arsenide nanowire MOSFET for high frequency application. , 2017, , .		0
62	Thermal analysis of III-V transistor at high frequencies. , 2017, , .		0
63	Multiphysics simulation of InP NWT for high speed digital applications. , 2017, , .		1
64	Modified Sierpenski Antenna With Metamaterial For Wireless Applications. IOP Conference Series: Materials Science and Engineering, 2017, 225, 012122.	0.6	2
65	Simulation of bi-layer organic polymer light emitting diode using LiF/Al cathode. , 2017, , .		1
66	III–V Junctionless Nanowire Transistor with High-k Dielectric Material and Schottky Contacts. Journal of Nanoelectronics and Optoelectronics, 2017, 12, 925-931.	0.5	5
67	Multiphysics Analysis of Heat Transfer in Gate All Around (GAA) Silicon Nanowire Transistor: Material Perspective. Springer Proceedings in Physics, 2017, , 49-55.	0.2	0
68	Two Dimensional Modeling of III-V Heterojunction Gate All Around Tunnel Field Effect Transistor. Journal of Nano- and Electronic Physics, 2017, 9, 01030-1-01030-4.	0.5	1
69	Small Signal Parameter Extraction of III-V Heterojunction Surrounding Gate Tunnel Field Effect Transistor. Journal of Nano- and Electronic Physics, 2017, 9, 04004-1-04004-4.	0.5	2
70	Metamaterial inspired multiband slotted antenna for application in IOT band. , 2016, , .		5
71	Design and implementation of high speed reconfigurable NoC router. , 2016, , .		1
72	CMOS voltage controlled oscillator with negative delay for improved performance. , 2016, , .		1

#	Article	IF	Citations
73	Physical design implementation of 32-bit AMBA ASB APB module with improved performance. , 2016, , .		2
74	An efficient multistage security system for user authentication. , 2016, , .		4
75	Analytical Modeling and Simulation Based Investigation of Advanced TFET Architecture. , 2016, , .		0
76	IoTEE-An integrated framework for rapid trusted IOT application development. , 2016, , .		6
77	TCAD analysis of nanoscale AlGaN/GaN HEMT for application in terahertz regime. , 2016, , .		0
78	Computational analysis of potential profile of III-V heterojunction gate-all-around Tunneling FET for low power digital circuits. , 2016, , .		0
79	Investigation of material engineered junctionless cylindrical gate MOSFET with and without source/drain extension. , 2016, , .		1
80	A new high speed three stage class B output buffer for LCD applications. , 2016, , .		2
81	Simulation and analysis of Si GAA nanowire Tunneling FET. , 2016, , .		1
82	Design and simulation of GaN HEMT and its application to RF amplifiers. , 2016, , .		6
83	Design of a wide output range and reduced current mismatch charge pump PLL with improved performance. , 2016, , .		4
84	High performance 14-bit pipelined redundant signed digit ADC. Journal of Semiconductors, 2016, 37, 035001.	3.7	0
85	Quantum Mechanical Analysis of GaN Nanowire Transistor for High Voltage Applications. Journal of Nano- and Electronic Physics, 2016, 8, 04063-1-04063-6.	0.5	0
86	A Novel Low-Power Design Approach to Exploit the Power Usage of AMBA APB Bridge. , 2016, , 373-380.		0
87	Simulation and Finite Element Analysis of Electrical Characteristics of Gate-all-Around Junctionless Nanowire Transistors. Journal of Nano- and Electronic Physics, 2016, 8, 01025-1-01025-5.	0.5	0
88	A Novel Digital Background Calibration Technique for 16 bit SHA-less Multibit Pipelined ADC. Advances in Electrical and Electronic Engineering, 2016, 14, .	0.3	0
89	Modelling and Simulation of Piezoelectric Cantilevers in RF MEMS Devices for Energy Harvesting Applications. , 2015, , .		3
90	Modelling and simulation of Si and InAs gate all around (GAA) nanowire transistors. , 2015, , .		1

#	Article	IF	Citations
91	Analysis of GaSb/InAs heterojunction Gate All Around Tunnel FET (HGAATFET). , 2015, , .		1
92	A Method for Harvesting Energy Using Piezoelectric Transducers. Applied Mechanics and Materials, 2015, 727-728, 607-611.	0.2	2
93	Work function engineered charge plasma diodes for enhanced performance. Journal Physics D: Applied Physics, 2015, 48, 495101.	2.8	4
94	A new design of Aluminium cantilever with embedded piezoelectric ceramic film in RF MEMS devices for energy harvesting. , 2015, , .		1
95	Finite element analysis of silicon gate all around Nanowire Transistor with different high-k dielectrics. , 2015, , .		1
96	Implementation of AMBA APB bridge with efficient deployment of system resources. , 2015, , .		2
97	Leakage power reduction in MTCMOS based high speed adders. , 2015, , .		1
98	Implementing low-power dynamic adders in MTCMOS technology. , 2015, , .		4
99	Power Optimization of Communication System Using Clock Gating Technique. , 2015, , .		2
100	RTL implementation for AMBA ASB APB protocol at system on chip level. , 2015, , .		6
101	Optimization of row decoder for 128&#x00D7;128 6T SRAMs. , 2015, , .		8
102	Analysis and implementation of ripple and area efficient charge pump circuits. , 2015, , .		2
103	Design and performance analysis of wideband CMOS voltage controlled ring oscillator. , 2015, , .		3
104	Ring VCO Design with Variable Capacitance XNOR Delay Cell. Journal of the Institution of Engineers (India): Series B, 2015, 96, 371-379.	1.9	11
105	Green's function approach for modeling of electrostatic effects in nanoscale fully depleted doubleâ€gate siliconâ€onâ€insulator metalâ€oxideâ€semiconductor fieldâ€effect transistors. International Journal of Numerical Modelling: Electronic Networks, Devices and Fields, 2014, 27, 173-184.	1.9	3
106	Design of AMBA APB bridge with reset controller for efficient power consumption. , 2014, , .		7
107	Low power approach for implementation of 8B/10B encoder and 10B/8B decoder used for high speed communication. , 2014, , .		4
108	Power optimization of 8b/10b encoder decoder used for high speed communication. , 2014, , .		4

#	Article	IF	Citations
109	Implementation of 8B/10B encoder-decoder for Gigabit Ethernet Frame. , 2014, , .		7
110	Low power digitally controlled oscillator designs with a novel 3-transistor XNOR gate. Journal of Semiconductors, 2012, 33, 035001.	3.7	5
111	Analytical modeling of drain current and RF performance for double-gate fully depleted nanoscale SOI MOSFETs. Journal of Semiconductors, 2012, 33, 024001.	3.7	3
112	Compact modeling and simulation of nanoscale fully depleted DG-SOI MOSFETS. Journal of Computational Electronics, 2011, 10, 201-209.	2.5	4
113	Digitally controlled oscillator design with a variable capacitance XOR gate. Journal of Semiconductors, 2011, 32, 105001.	3.7	15
114	Design of CMOS Energy Efficient Single Bit Full Adders. Communications in Computer and Information Science, 2011, , 159-168.	0.5	7
115	An Illumination Invariant Accurate Face Recognition with Down Scaling of DCT Coefficients. Journal of Computing and Information Technology, 2010, 18, 53.	0.3	26
116	Noise Analysis of Sub Quarter Micrometer AlGaN/GaN Microwave Power HEMT. Journal of Semiconductor Technology and Science, 2009, 9, 125-135.	0.4	3
117	Modeling and analysis of fully strained and partially relaxed lattice mismatched AlGaN/GaN HEMT for high temperature applications. Superlattices and Microstructures, 2008, 44, 781-793.	3.1	13
118	A new two-dimensional C–V model for prediction of maximum frequency of oscillation (fmax) of deep submicron AlGaN/GaN HEMT for microwave and millimeter wave applications. Microelectronics Journal, 2008, 39, 1634-1641.	2.0	3
119	Modeling of nanoscale GaN FET in a compact 2-D model with gate stack effects. , 2008, , .		0
120	Analytical approach for high temperature analysis of AlGaN/GaN HEMT. , 2008, , .		0
121	Capacitance modeling of 120nm AlGaN/GaN HEMT for microwave and high speed circuit applications. , 2008, , .		1
122	A Novel Approach for Face Recognition Using DCT Coefficients Re-scaling for Illumination Normalization. , 2007, , .		25
123	2-Dimensional simulation and characterization of deep-submicron AlGaN/GaN HEMTs for high frequency applications. , 2007, , .		0
124	Microwave analysis of a 70 nm InGaAs pHEMT on InP substrate for nanoscale digital IC application. Microwave and Optical Technology Letters, 2007, 49, 2462-2470.	1.4	3
125	An analytical two-dimensional model for AlGaN/GaN HEMT with polarization effects for high power applications. Microelectronics Journal, 2007, 38, 877-883.	2.0	18
126	A compact C–V model for 120nm AlGaN/GaN HEMT with modified field dependent mobility for high frequency applications. Microelectronics Journal, 2007, 38, 848-854.	2.0	13

#	Article	IF	Citations
127	Polarization dependent analysis of AlGaN/GaN HEMT for high power applications. Solid-State Electronics, 2007, 51, 130-135.	1.4	70
128	An analytical 2D model for drain-induced barrier lowering in subquarter micrometer gate length InAlAs/InGaAs/InAlAs/InP LMHEMT. Microelectronics Journal, 2002, 33, 633-638.	2.0	3
129	Carrier-concentration-dependent low-field-mobility model for InAlAs/InGaAs/InP lattice-matched HEMT for microwave application. Microwave and Optical Technology Letters, 2001, 29, 66-70.	1.4	16
130	Current-voltage characteristics and field distribution of pseudomorphic (AlGaAs/InGaAs) modulation-doped field-effect transistor for microwave circuit applications. Microwave and Optical Technology Letters, 2000, 24, 407-412.	1.4	2
131	Analytical model for dc characteristics and small-signal parameters of AlGaN/GaN modulation-doped field-effect transistor for microwave circuit applications. Microwave and Optical Technology Letters, 2000, 27, 413-419.	1.4	18
132	Current-voltage characteristics and small signal parameters of an AlGaAs/GaAs modulation doped field effect transistor. International Journal of Electronics, 2000, 87, 137-152.	1.4	0
133	Temperature and aluminium composition dependent sheet carrier concentration at AlGaAs/GaAs interface. Journal Physics D: Applied Physics, 2000, 33, 18-23.	2.8	6
134	Design Aspects of a Submicrometer Gate Length High Electron Mobility Transistor. IETE Technical Review (Institution of Electronics and Telecommunication Engineers, India), 1999, 16, 223-228.	3.2	0
135	Thermal characterization of a double-gate silicon-on-insulator MOSFET. Journal Physics D: Applied Physics, 1999, 32, 344-349.	2.8	8
136	Two-dimensional C-V model of AlGaAs/GaAs modulation doped field effect transistor (MODFET) for high frequency applications. IEEE Transactions on Electron Devices, 1999, 46, 1818-1823.	3.0	18
137	Transconductance extraction for pseudomorphic modulation-doped field-effect transistor (AlGaAs/InGaAs) for microwave and millimeter-wave applications. Microwave and Optical Technology Letters, 1999, 22, 41-48.	1.4	7
138	Capacitance-voltage characteristics and cutoff frequency of pseudomorphic (AlGaAs/InGaAs) modulation-doped field-effect transistor for microwave and high-speed circuit applications. Microwave and Optical Technology Letters, 1999, 23, 312-318.	1.4	12
139	Analysis of SRAM bit cell topologies in submicron CMOS technology. International Journal of Simulation: Systems, Science and Technology, 0, , .	0.0	0