Aminul Islam

List of Publications by Year in Descending Order

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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.

161 papers	1,057 citations	16 h-index	26 g-index
197 ext. papers	1,511 ext. citations	1.5 avg, IF	5.39 L-index

#	Paper	IF	Citations
161	Al0.30Ga0.70N /GaN MODFET with triple-teeth metal for RF and high-power applications. *Physica Scripta*, **2022**, 97, 034003	2.6	0
160	An Analysis and Modeling of the Class-E Inverter for ZVS/ZVDS at Any Duty Ratio with High Input Ripple Current. *Electronics (Switzerland)*, **2021**, 10, 1312	2.6	2
159	Soft-Error Resilient Read Decoupled SRAM With Multi-Node Upset Recovery for Space Applications. *IEEE Transactions on Electron Devices*, **2021**, 68, 2246-2254	2.9	6
158	Design of low power, variation tolerant single bitline 9T SRAM cell in 16-nm technology in subthreshold region. *Microelectronics Reliability*, **2021**, 120, 114126	1.2	3
157	Design of Soft-Error-Aware SRAM With Multi-Node Upset Recovery for Aerospace Applications. *IEEE Transactions on Circuits and Systems I: Regular Papers*, **2021**, 68, 2470-2480	3.9	6
156	Variation resilient low-power memristor-based synchronous flip-flops: design and analysis. *Microsystem Technologies*, **2021**, 27, 525-538	1.7	5
155	Highly Stable Low Power Radiation Hardened Memory-by-Design SRAM for Space Applications. *IEEE Transactions on Circuits and Systems II: Express Briefs*, **2021**, 68, 2147-2151	3.5	5
154	Soft-Error-Immune Read-Stability-Improved SRAM for Multi-Node Upset Tolerance in Space Applications. *IEEE Transactions on Circuits and Systems I: Regular Papers*, **2021**, 68, 3317-3327	3.9	2
153	A Comparative Performance Analysis of Zero Voltage Switching Class E and Selected Enhanced Class E Inverters. *Electronics (Switzerland)*, **2021**, 10, 2226	2.6	2
152	Soft-Error-Aware Read-Decoupled SRAM With Multi-Node Recovery for Aerospace Applications. *IEEE Transactions on Circuits and Systems II: Express Briefs*, **2021**, 68, 3336-3340	3.5	3
151	A Highly Reliable and Radiation-Hardened Majority PFET-Based 10T SRAM Cell. *Lecture Notes in Electrical Engineering*, **2021**, 113-122	0.2	1
150	Design of SRAM cell for low power portable healthcare applications. *Microsystem Technologies*, **2020**, 1	1.7	4
149	Architecture of resistive RAM with write driver. *Solid State Electronics Letters*, **2020**, 2, 10-22	0.6	4
148	Advances in Ultrasonic Welding of Thermoplastic Composites: A Review. *Materials*, **2020**, 13,	3.5	26
147	Reliable write assist low power SRAM cell for wireless sensor network applications. *IET Circuits, Devices and Systems*, **2020**, 14, 137-147	1.1	11
146	Effect of Source, Drain and Channel Spacing from Gate of HEMT. *Lecture Notes in Electrical Engineering*, **2020**, 81-90	0.2	1
145	Indium Phosphide Based Dual Gate High Electron Mobility Transistor. *Lecture Notes in Electrical Engineering*, **2020**, 255-264	0.2	1

144	Comparative Study of Active Inductor-Based Low-Noise Amplifiers. *Lecture Notes in Electrical Engineering*, **2020**, 411-418	0.2	
143	A Technique to Design Robust Single-Stage Operational Amplifier. *Lecture Notes in Electrical Engineering*, **2020**, 469-478	0.2	
142	Study and Analysis of AlInN/GaN Based High Electron Mobility Transistor. *Lecture Notes in Electrical Engineering*, **2020**, 449-459	0.2	1
141	Variation resilient reliable design of trigger pulse generator. *IET Circuits, Devices and Systems*, **2020**, 14, 860-868	1.1	0
140	A Current-Mode Memristor Emulator Circuit. *Lecture Notes in Electrical Engineering*, **2020**, 493-501	0.2	
139	Design of Fractional-Order Low-Pass and High-Pass Filter. *Lecture Notes in Electrical Engineering*, **2020**, 535-542	0.2	
138	Active Multifunctional Filter Design Using Carbon Nanotube Transistors. *Lecture Notes in Electrical Engineering*, **2020**, 103-111	0.2	
137	A Fully Integrated Tunable Memristor Emulator Circuit. *Lecture Notes in Electrical Engineering*, **2020**, 553-560	0.2	
136	Design of Robust Ratioed CMOS SR Latch. *Lecture Notes in Electrical Engineering*, **2020**, 429-441	0.2	
135	Design of resistive random access memory cell and its architecture. *Microsystem Technologies*, **2020**, 26, 1325-1332	1.7	4
134	A VDTA-based robust electronically tunable memristor emulator circuit. *Analog Integrated Circuits and Signal Processing*, **2020**, 104, 47-59	1.2	5
133	A highly stable reliable SRAM cell design for low power applications. *Microelectronics Reliability*, **2020**, 105, 113503	1.2	21
132	Half-Select-Free Low-Power Dynamic Loop-Cutting Write Assist SRAM Cell for Space Applications. *IEEE Transactions on Electron Devices*, **2020**, 67, 80-89	2.9	21
131	A low power SRAM cell design for wireless sensor network applications. *Microsystem Technologies*, **2020**, 26, 2325-2335	1.7	1
130	Characterization of single-ended 9T SRAM cell. *Microsystem Technologies*, **2020**, 26, 1591-1604	1.7	2
129	Enhanced Energy Savings in Indoor Environments with Effective Daylight Utilization and Area Segregation. *Symmetry*, **2020**, 12, 1313	2.7	0
128	The Influence of the Hybridization Process on the Mechanical and Thermal Properties of Polyoxymethylene (POM) Composites with the Use of a Novel Sustainable Reinforcing System Based on Biocarbon and Basalt Fiber (BC/BF). *Materials*, **2020**, 13,	3.5	5
127	Study of variability performance of CMOS active inductors. *Microsystem Technologies*, **2020**, 26, 3101-3111	1.7	2

126	Study of high Al fraction in AlGaN barrier HEMT and GaN and InGaN channel HEMT with In0.17Al0.83N barrier. *Microsystem Technologies*, **2020**, 26, 2145-2158	1.7	7
125	A novel CNFET based tunable memristor emulator. *Microsystem Technologies*, **2020**, 26, 2173-2181	1.7	2
124	Characterization of InP-based pseudomorphic HEMT with T-gate. *Microsystem Technologies*, **2020**, 26, 2183-2191	1.7	7
123	Design of differential TG based 8T SRAM cell for ultralow-power applications. *Microsystem Technologies*, **2020**, 26, 3299-3310	1.7	8
122	Compact design of an MTJ-based non-volatile CAM cell with read/write operations. *Microsystem Technologies*, **2020**, 26, 3259-3270	1.7	1
121	Transmission gate-based 9T SRAM cell for variation resilient low power and reliable internet of things applications. *IET Circuits, Devices and Systems*, **2019**, 13, 584-595	1.1	18
120	Process chains for the mass production of transparent crowns for posterior teeth. *CIRP Annals - Manufacturing Technology*, **2019**, 68, 591-594	4.9	
119	Modeling and sizing of non-linear CMOS analog circuits used in mixed signal systems. *Analog Integrated Circuits and Signal Processing*, **2019**, 99, 95-109	1.2	
118	Design of memristor based low power and highly reliable ReRAM cell. *Microsystem Technologies*, **2019**, 1	1.7	6
117	Design of Power- and Variability-Aware Nonvolatile RRAM Cell Using Memristor as a Memory Element. *IEEE Journal of the Electron Devices Society*, **2019**, 7, 701-709	2.3	16
116	Design and development of memristor-based RRAM. *IET Circuits, Devices and Systems*, **2019**, 13, 548-557	1.1	9
115	Characterization of Half-Select Free Write Assist 9T SRAM Cell. *IEEE Transactions on Electron Devices*, **2019**, 66, 4745-4752	2.9	24
114	Design of CNFET based power- and variability-aware nonvolatile RRAM cell. *Microelectronics Journal*, **2019**, 86, 7-14	1.8	5
113	An efficient circuit-level power reduction technique for ultralow power applications. *Microsystem Technologies*, **2019**, 25, 1689-1697	1.7	1
112	Comprehensive characterization and material modeling for ceramic injection molding simulation performance validations. *International Journal of Advanced Manufacturing Technology*, **2019**, 102, 225-240	3.2	6
111	Design and analysis of MISO bi-quad active filter. *International Journal of Electronics*, **2019**, 106, 287-304	1.2	4
110	Power-aware sourse feedback single-ended 7T SRAM cell at nanoscale regime. *Microsystem Technologies*, **2019**, 25, 1783-1791	1.7	4
109	A low power, temperature compensated, robust design of CS amplifier in nanoscale regime. *Microsystem Technologies*, **2019**, 25, 1841-1852	1.7	1

108	Comparative analysis of AlGaN/GaN high electron mobility transistor with sapphire and 4H-SiC substrate. *Microsystem Technologies*, **2019**, 25, 1927-1935	1.7	4
107	A CMOS active inductor based digital and analog dual tuned voltage-controlled oscillator. *Microsystem Technologies*, **2019**, 25, 1571-1583	1.7	8
106	Correlation of mechanical and electrical properties with processing variables in MWCNT reinforced thermoplastic nanocomposites. *Journal of Composite Materials*, **2018**, 52, 3681-3697	2.7	7
105	Compact Versatile Noise Suppressed Programmable Trigger Pulse Generator for Industrial Applications. *The National Academy of Sciences, India*, **2018**, 41, 97-101	0.6	1
104	Optimization of SiC UMOSFET Structure for Improvement of Breakdown Voltage and ON-Resistance. *IEEE Transactions on Electron Devices*, **2018**, 65, 615-621	2.9	16
103	Circuit-Level Technique to Design Variation- and Noise-Aware Reliable Dynamic Logic Gates. *IEEE Transactions on Device and Materials Reliability*, **2018**, 18, 224-239	1.6	4
102	Design of 10T full adder cell for ultralow-power applications. *Ain Shams Engineering Journal*, **2018**, 9, 2363-2372	4.4	8
101	Floating active inductor based Class-C VCO with 8 digitally tuned sub-bands. *AEU - International Journal of Electronics and Communications*, **2018**, 83, 1-10	2.8	24
100	Performance Enhancement of Full Adder Circuit: Current Mode Operated Majority Function Based Design. *Advances in Intelligent Systems and Computing*, **2018**, 569-578	0.4	1
99	Effect of Process Parameters on Flow Length and Flash Formation in Injection Moulding of High Aspect Ratio Polymeric Micro Features. *Micromachines*, **2018**, 9,	3.3	12
98	Multi-functional Active Filter Design Using Three VDTAs. *Communications in Computer and Information Science*, **2018**, 124-130	0.3	
97	A VDIBA Based Voltage-Mode Highpass and Bandpass Filter. *Communications in Computer and Information Science*, **2018**, 83-89	0.3	1
96	Process and Voltage Variation-Aware Design and Analysis of Active Grounded Inductor-Based Bandpass Filter. *Advances in Intelligent Systems and Computing*, **2018**, 309-315	0.4	1
95	An Electronically-Tuneable VDTA Based Sinusoidal Oscillator. *Communications in Computer and Information Science*, **2018**, 115-123	0.3	
94	Reliable and Q -Enhanced Floating Active Inductors and Their Application in RF Bandpass Filters. *IEEE Access*, **2018**, 6, 48181-48194	3.5	13
93	Optimization of InP HEMT Using Multilayered Cap and Asymmetric Gate Recess. *Communications in Computer and Information Science*, **2018**, 19-28	0.3	
92	Interaction of nanofillers in injection-molded graphene/carbon nanotube reinforced PA66 hybrid nanocomposites. *Journal of Polymer Engineering*, **2018**, 38, 971-981	1.4	6
91	Low-power half-select free single-ended 10 transistor SRAM cell. *Microsystem Technologies*, **2017**, 23, 4133-4144	1.7	3

90	Current-mode circuit-level technique to design variation-aware nanoscale summing circuit for ultra-low power applications. *Microsystem Technologies*, **2017**, 23, 4045-4056	1.7	3
89	A 2.5 GHz Low Power, High- ${Q}$, Reliable Design of Active Bandpass Filter. *IEEE Transactions on Device and Materials Reliability*, **2017**, 17, 229-244	1.6	22
88	Direct electroplating of plastic for advanced electrical applications. *CIRP Annals - Manufacturing Technology*, **2017**, 66, 209-212	4.9	10
87	Variation-aware widely tunable nanoscale design of CMOS active inductor-based RF bandpass filter. *International Journal of Circuit Theory and Applications*, **2017**, 45, 2181-2200	2	9
86	High breakdown (958 V) low threshold GaN HEMT **2017**,		1
85	Performance comparison of AlGaN/GaN HFET with sapphire and 4H-SiC substrate **2017**,		1
84	Development of HEMT device with surface passivation for a low leakage current and steep subthreshold slope **2017**,		1
83	Analysis of various delay elements @ 16-nm technology node **2017**,		3
82	Analysis of AlGaN/GaN high electron mobility transistor for high frequency application **2017**,		3
81	Multi-gate device and summing-circuit co-design robustness studies @ 32-nm technology node. *Microsystem Technologies*, **2017**, 23, 4099-4109	1.7	2
80	Analysis of breakdown voltage of a field plated High Electron Mobility Transistor **2017**,		2
79	Analysis of Al0.22Ga0.78As/In0.18Ga0.82As/GaAs Pseudomorphic HEMT device with higher conductivity **2017**,		1
78	Estimation of MOS Capacitance Across Different Technology Nodes. *Advances in Intelligent Systems and Computing*, **2017**, 297-306	0.4	
77	Cross-Coupled Dynamic CMOS Latches: Scalability Analysis. *Advances in Intelligent Systems and Computing*, **2017**, 307-315	0.4	
76	Cross-Coupled Dynamic CMOS Latches: Robustness Study of Timing. *Advances in Intelligent Systems and Computing*, **2017**, 317-325	0.4	
75	Variation Tolerant Differential 8T SRAM Cell for Ultralow Power Applications. *IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems*, **2016**, 35, 549-558	2.5	67
74	Characterization of AlGaN/GaN and AlGaN/AlN/GaN HEMTs in terms of mobility and subthreshold slope. *Journal of Computational Electronics*, **2016**, 15, 172-180	1.8	15
73	Comparative study of subthreshold leakage in CNFET & MOSFET @ 32-nm technology node **2016**,		2

72	A comparative analysis of various programmable delay elements using predictive technology model **2016**,		2
71	Gate Design in Injection Molding of Microfluidic Components Using Process Simulations. *Journal of Micro and Nano-Manufacturing*, **2016**, 4,	1.3	7
70	Design of magnetic tunnel junction-based tunable spin torque oscillator at nanoscale regime. *IET Circuits, Devices and Systems*, **2016**, 10, 121-129	1.1	3
69	Effect of potassium fertilization on yield and potassium nutrition of Boro rice in a wetland ecosystem of Bangladesh. *Archives of Agronomy and Soil Science*, **2016**, 62, 1530-1540	2	30
68	A Monotonic Digitally Controlled Delay Element-Based Programmable Trigger Pulse Generator. *Advances in Intelligent Systems and Computing*, **2016**, 365-374	0.4	3
67	Low-Leakage, Low-Power, High-Stable SRAM Cell Design. *Advances in Intelligent Systems and Computing*, **2016**, 549-556	0.4	
66	Design of a Low-Delay-Write Model of a TMCAM. *Advances in Intelligent Systems and Computing*, **2016**, 41-47	0.4	
65	Study and Analysis of Subthreshold Leakage Current in Sub-65 nm NMOSFET. *Advances in Intelligent Systems and Computing*, **2016**, 1-10	0.4	
64	Low Voltage Charge Pump for RF Energy Harvesting Applications. *Indian Journal of Science and Technology*, **2016**, 9,	1	1
63	Low Power and High Variation Tolerant 9T-SRAM Cell at 16-nm Technology Node. *Indian Journal of Science and Technology*, **2016**, 9,	1	3
62	TG based 2T2M RRAM using Memristor as Memory Element. *Indian Journal of Science and Technology*, **2016**, 9,	1	9
61	Investigating Phase Transform Behavior in Indium Selenide Based RAM and Its Validation as a Memory Element. *Journal of Materials*, **2016**, 2016, 1-7		
60	Analytical Modeling of Wrap-Gate Carbon Nanotube FET With Parasitic Capacitances and Density of States. *IEEE Transactions on Electron Devices*, **2016**, 63, 3314-3319	2.9	6
59	Experimental Investigation of Comparative Process Capabilities of Metal and Ceramic Injection Molding for Precision Applications. *Journal of Micro and Nano-Manufacturing*, **2016**, 4,	1.3	2
58	Characterisation of field plated high electron mobility transistor **2016**,		2
57	Validation of precision powder injection molding process simulations using a spiral test geometry **2016**,		1
56	. *IEEE Transactions on Device and Materials Reliability*, **2016**, 16, 172-182	1.6	51
55	Investigation on electrical characteristics of FDSOI device for ultra-low power operation **2016**,		1

54	Quality investigation of miniaturized Moulded Interconnect Devices (MIDs) for hearing aid applications. *CIRP Annals - Manufacturing Technology*, **2015**, 64, 539-544	4.9	12
53	Design of a Stable Read-Decoupled 6T SRAM Cell at 16-Nm Technology Node **2015**,		4
52	Threshold voltage extraction and its reliance on device parameters @ 16-nm process technology **2015**,		2
51	Design of hybrid full adder in deep subthreshold region for ultralow power applications **2015**,		2
50	Which is the Best 2-to-1 Line Multiplexer for Ultralow-Power Applications? **2015**,		2
49	A Compact Low Power High Frequency Pulse Generator **2015**,		4
48	Technology scaling and its side effects **2015**,		5
47	CNFET Based Voltage Multiplier Circuit for RF Energy Harvesting Applications **2015**,		3
46	Device bias technique to improve design metrics of 6T SRAM cell for subthreshold operation **2015**,		3
45	Comparative analysis of various 9T SRAM cell at 22-nm technology node **2015**,		1
44	Nonvolatile and Robust Design of Content Addressable Memory Cell Using Magnetic Tunnel Junction at Nanoscale Regime. *IEEE Transactions on Magnetics*, **2015**, 51, 1-13	2	9
43	Revisiting performance of various delay elements to realize a trigger pulse generator **2015**,		3
42	Low-power 9T subthreshold SRAM cell with single-ended write scheme **2015**,		1
41	7-Transistor 2-memristor based non-volatile static random access memory cell design **2015**,		1
40	Trigger Pulse Generator Using Proposed Buffered Delay Model and Its Application. *Active and Passive Electronic Components*, **2015**, 2015, 1-9	0.3	7
39	CNFET-Based 0.1- to 1.2-V DC/DC Boost Converter With Voltage Regulation for Energy Harvesting Applications. *IEEE Nanotechnology Magazine*, **2015**, 14, 660-667	2.6	2
38	Circuit-level design technique to mitigate impact of process, voltage and temperature variations in complementary metal-oxide semiconductor full adder cells. *IET Circuits, Devices and Systems*, **2015**, 9, 204-212	1.1	20
37	MOSFET aspect ratio optimization for minimized transistor mismatch at UDSM technology nodes **2015**,		1

36	Comparative analysis of D flip-flops in terms of delay and its variability **2015**,		4
35	Notice of Removal: Optimized design of Au-polysilicon electrothermal microgripper for handling micro objects **2015**,		4
34	Characterization of AlGaN and GaN Based HEMT with AlN Interfacial Spacer **2015**,		5
33	Design of a Signal Sensor for Analyzing Biological Activities at Cellular Level. *Advances in Intelligent Systems and Computing*, **2015**, 405-412	0.4	
32	Robustness study and CNFET realization of optimal logic circuit for ultralow power applications **2014**,		1
31	CNFET-based ternary inverter and its variability analysis **2014**,		2
30	Performance evaluation of MCML-based XOR/XNOR circuit at 16-nm Technology node **2014**,		2
29	Comparative study of CMOS- and FinFET-based 10T SRAM cell in subthreshold regime **2014**,		8
28	Highly stable subthreshold single-ended 7T SRAM cell **2014**,		1
27	Implementation of FinFET based STT-MRAM bitcell **2014**,		8
26	CNFET-based 0.1 V to 0.6 V DC/DC converter **2014**,		2
25	Power - and variability-aware design of FinFET-based XOR circuit at nanoscale regime **2014**,		5
24	Robust Design of CNFET Based Buffered Delay Model and Microwave Pulse Generator **2014**,		7
23	Power and variability analysis of CMOS logic families @ 22-nm technology node **2014**,		1
22	Stability and variability enhancement of 9T SRAM cell for subthreshold operation **2014**,		1
21	Design and Analysis of Robust Spin Transfer Torque Magnetic Random Access Memory Bitcell Using FinFET. *Journal of Low Power Electronics*, **2014**, 10, 220-227	1.2	2
20	Design of 2:1 multiplexer and 1:2 demultiplexer using magnetic tunnel junction elements **2013**,		1
19	Design of variation-resilient CNFET-based Schmitt trigger circuits with optimum hysteresis at 16-nm technology node **2013**,		3

18	Performance evaluation of CNFET based operational amplifier at technology node beyond 45-nm **2013**,		1
17	A technique to mitigate impact of process, voltage and temperature variations on design metrics of SRAM Cell. *Microelectronics Reliability*, **2012**, 52, 405-411	1.2	61
16	Variability aware low leakage reliable SRAM cell design technique. *Microelectronics Reliability*, **2012**, 52, 1247-1252	1.2	25
15	. *IEEE Transactions on Electron Devices*, **2012**, 59, 631-638	2.9	90
14	Experimental investigation of new manufacturing process chains to create micro-metal structures on polymer substrates for lab-on-chip sensors. *International Journal of Advanced Manufacturing Technology*, **2012**, 59, 101-109	3.2	5
13	Variation resilient subthreshold SRAM cell design technique. *International Journal of Electronics*, **2012**, 99, 1223-1237	1.2	18
12	Optimized Design of a 32-nm CNFET-Based Low-Power Ultrawideband CCII. *IEEE Nanotechnology Magazine*, **2012**, 11, 1100-1109	2.6	33
11	FinFET-based variation resilient 8T SRAM cell **2012**,		2
10	Variability Analysis of MTJ-Based Circuit **2012**,		4
9	Variability analysis and FinFET-based design of XOR and XNOR circuit **2011**,		11
8	Power optimized variation aware dual-threshold SRAM cell design technique. *Nanotechnology, Science and Applications*, **2011**, 4, 25-33	3.9	1
7	Variability Immune FinFET-Based Full Adder Design in Subthreshold Region **2011**,		3
6	Robust subthreshold full adder design technique **2011**,		5
5	VARIABILITY ANALYSIS OF 6T AND 7T SRAM CELL IN SUB-45NM TECHNOLOGY. *IIUM Engineering Journal*, **2011**, 12, 13-30	1.2	11
4	Design and Analysis of Robust Dual Threshold CMOS Full Adder Circuit in 32nm Technology **2010**,		3
3	High Speed Cache Design Using Multi-diameter CNFET at 32nm Technology. *Communications in Computer and Information Science*, **2010**, 215-222	0.3	0
2	Characterization of AlGaN/GaN based HEMT for low noise and high frequency application. *International Journal of Numerical Modelling: Electronic Networks, Devices and Fields*,e2932	1	0
1	Radiation-hardened read-decoupled low-power 12T SRAM for space applications. *International Journal of Circuit Theory and Applications*,	2	2