

# Rajesh Saha

## List of Publications by Year in descending order

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43  
docs citations

43  
times ranked

189  
citing authors

#	ARTICLE	IF	CITATIONS
1	Linearity Parameters Evaluation due to Lateral Straggle in Ge-Source DMDG-TFET. Silicon, 2022, 14, 567-571.	3.3	4
2	Performance Evaluation of Epitaxial Layer Based Gate Modulated TFET (GM-TFET). Silicon, 2022, 14, 5713-5718.	3.3	2
3	Methods to Reduce Ambipolar Current of Various TFET Structures: a Review. Silicon, 2022, 14, 6507-6515.	3.3	16
4	DC and RF/analog parameters in Ge-source split drain ZHP-TFET: Drain and pocket engineering technique. International Journal of Numerical Modelling: Electronic Networks, Devices and Fields, 2022, 35, e2967.	1.9	7
5	Comprehensive investigation of radiofrequency/analog parameters in a ferroelectric tunnel field-effect transistor. Semiconductor Science and Technology, 2022, 37, 035008.	2.0	3
6	Effect of Temperature on Performance of 5-nm Node Silicon Nanosheet Transistors for Analog Applications. Silicon, 2022, 14, 10581-10589.	3.3	8
7	RF/Analog Parameters in DMG-FinFET for Channel Material Beyond Si. , 2022, , .		0
8	Analytical modelling for surface potential of dual material gate overlapped-on-drain TFET(DM-DMG-TFET) for label-free biosensing application. AEU - International Journal of Electronics and Communications, 2022, 151, 154225.	2.9	18
9	Impact of work function on analog/RF and linearity parameters in step-FinFET. Indian Journal of Physics, 2021, 95, 2387-2392.	1.8	3
10	Analysis on DC and RF/Analog Performance in Multifin-FinFET for Wide Variation in Work Function of Metal Gate. Silicon, 2021, 13, 73-77.	3.3	13
11	Dependence of metal gate work function variation for various ferroelectric thickness on electrical parameters in NC-FinFET. Ferroelectrics, 2021, 570, 67-76.	0.6	3
12	Sensitivity Analysis on Dielectric Modulated Ge-Source DMDG TFET Based Label-Free Biosensor. IEEE Nanotechnology Magazine, 2021, 20, 552-560.	2.0	32
13	Analysis on effect of lateral straggle on analog, high frequency and DC parameters in Ge-source DMDG TFET. International Journal of RF and Microwave Computer-Aided Engineering, 2021, 31, e22579.	1.2	25
14	Study on impact of ferroelectric layer thickness on RF/analog and linearity parameters in ferroelectric FinFET. International Journal of RF and Microwave Computer-Aided Engineering, 2021, 31, e22704.	1.2	9
15	Effect of Drain Engineering on DC and RF Characteristics in Ge-source SD-ZHP-TFET. , 2021, , .		8
16	Simulation study on ferroelectric layer thickness dependence RF/Analog and linearity parameters in ferroelectric tunnel junction TFET. Microelectronics Journal, 2021, 113, 105081.	2.0	30
17	Air-spacers as analog-performance booster for 5 nm-node N-channel nanosheet transistor. Semiconductor Science and Technology, 2021, 36, 095037.	2.0	7
18	TCAD simulation study on reliability issue of heterojunction heterodielectric FinFET: Effect of interface trap charge, BOX height and temperature. Pramana - Journal of Physics, 2021, 95, 1.	1.8	1

#	ARTICLE	IF	CITATIONS
19	Hot carrier effect in Ferro-FinFET for variation in temperature, work function, and FE layer thickness. Integrated Ferroelectrics, 2021, 221, 168-179.	0.7	0
20	Impact of Mole Fractions due to Work Function Variability (WFV) of Metal Gate on Electrical Parameters in Strained SOI-FinFET. Silicon, 2020, 12, 577-583.	3.3	3
21	Dependence of RF/Analog and Linearity Figure of Merits on Temperature in Ferroelectric FinFET: A Simulation Study. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2020, 67, 2433-2439.	3.0	23
22	Impact of lateral straggle on linearity performance in gate-modulated (GM) TFET. Applied Physics A: Materials Science and Processing, 2020, 126, 1.	2.3	12
23	Study of effect of oxide thickness variation on electrical parameters and high frequency characteristics induced by work-function variation for delta-doped germanium-source vertical TFET. Semiconductor Science and Technology, 2020, 35, 105009.	2.0	2
24	Deep insights into electrical parameters due to metal gate WFV for different gate oxide thickness in Si step FinFET. Micro and Nano Letters, 2019, 14, 384-388.	1.3	3
25	Impact of WFV on electrical parameters due to high-k/metal gate in SiGe channel tunnel FET. Microelectronic Engineering, 2019, 214, 1-4.	2.4	14
26	Quantum modeling of threshold voltage in Ge dual material gate (DMG) FinFET. Solid-State Electronics, 2019, 159, 129-134.	1.4	4
27	Analytical threshold voltage and subthreshold swing model for TMG FinFET. International Journal of Electronics, 2019, 106, 553-566.	1.4	8
28	Deep insight into DC, RF/analog, and digital inverter performance due to variation in straggle parameter for gate modulated TFET. Materials Science in Semiconductor Processing, 2019, 91, 102-107.	4.0	23
29	Effect of Ge Mole Fraction on Electrical Parameters of Si $_{1-x}$ Ge $_x$ Source Step-FinFET and its Application as an Inverter. Silicon, 2019, 11, 209-219.	3.3	9
30	Quantum Analytical Modeling of Inversion Charge and Threshold Voltage in Modified Bi-Level FinFET (BL-FinFET). ECS Journal of Solid State Science and Technology, 2018, 7, Q8-Q15.	1.8	1
31	A 3D statistical simulation study of titanium metal gate WFV on electrical parameters in n-channel Ge step-FinFET. Applied Physics A: Materials Science and Processing, 2018, 124, 1.	2.3	3
32	3D analytical modeling of surface potential, threshold voltage, and subthreshold swing in dual-material-gate (DMG) SOI FinFETs. Journal of Computational Electronics, 2018, 17, 153-162.	2.5	24
33	Performance evaluation of hetero-stacked TFET for variation in lateral straggle and its application as digital inverter. Applied Physics A: Materials Science and Processing, 2018, 124, 1.	2.3	13
34	Effect of gate dielectric on electrical parameters due to metal gate WFV in n-channel Si step FinFET. Micro and Nano Letters, 2018, 13, 1007-1010.	1.3	11
35	Temperature effect on RF/analog and linearity parameters in DMG FinFET. Applied Physics A: Materials Science and Processing, 2018, 124, 1.	2.3	62
36	Comparative Analysis Among Single Material Gate, Double Material Gate, and Triple Material Gate FinFETs: RF/Analog and Digital Inverter Performance. Journal of Nanoelectronics and Optoelectronics, 2018, 13, 803-811.	0.5	19

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37	Statistical Dependence of Gate Metal Work Function on Various Electrical Parameters for an n-Channel Si Step-FinFET. IEEE Transactions on Electron Devices, 2017, 64, 969-976.	3.0	29
38	Si and Ge step-FinFETs: Work function variability, optimization and electrical parameters. Superlattices and Microstructures, 2017, 107, 5-16.	3.1	19
39	Effects of temperature on electrical parameters in GaAs SOI FinFET and application as digital inverter. , 2017, , .		13
40	Dependence of Lateral Straggle Parameter on DC, RF/Analog, and Linearity Performance in SOI FinFET. IETE Journal of Research, 0, , 1-9.	2.6	0
41	Influence of dielectric material near tunnel junction on analog/ RF and linearity figure of merits in hetero dielectric ( HG ) TFET : A detailed study. International Journal of RF and Microwave Computer-Aided Engineering, 0, , e22915.	1.2	0
42	Comparison of RF/Analog and Linearity Performance of Various TFETs Using Source Engineering. Silicon, 0, , .	3.3	1