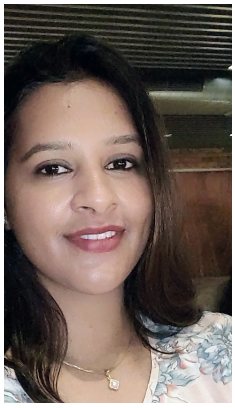
Profile Page



Name	:	Dr Tarun Chaudhary
Designation	:	Assistant Professor (Grade-II)
Department	:	Electronics and Comm. Engg.
Qualification	:	Ph.D Low Power VLSI Design (NIT Hamirpur) M.Tech Low Power VLSI Design (NIT Hamirpur) B.E ECE (UIET, Panjab University Chandigarh)
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Research Interests :

Nano scale device modelling, Analysis and design of low power VLSI Circuits, Characteristic study of 2D Materials based devices for analog and digital applications

Other Profile Links :

Google Scholar Link :

Tarun Chaudhary Click Here

Personal Web Link :

Linkedin Click Here

Journal Publications :

Year	Journal	Publication
June 2022	Silicon	Faizan Ansari, Tarun Chaudhary, Ramesh Kumar Sunkaria, Mandeep Singh, Balwinder Raj, "Comparative Analysis of Nanowire Tunnel Field Efect Transistor for Low Power Application"
Feb 2022	Silicon	Sadhana Singh, Tarun Chaudhary, "Performance and Comparative Analysis of Heterojunction Structure Based GAA-NWTFET for Low Power Application,"
2022	Silicon, 10.1007/s12633-021-01256-4	Priya Kaushal, Tarun Chaudhary and Gargi Khanna, "Effect of Tensile Strain on Performance Parameters of Different Structures of MoS2 Monolayer"
2021	Silicon	Sadhana Singh, Tarun Chaudhary, and Gargi Khanna, "Recent Advancements in Wide Band Semiconductors (SiC and GaN) Technology for Future Devices,

2017	Super lattices and Microstructures, vol. 103, pp. 102-112, 2017	Tarun Chaudhary and Gargi Khanna, “Performance analysis of junctionless double gate VeSFET considering the effects of thermal variation- An explicit 2-D analytical model,”
2017	IETE Journal of Research	Tarun Chaudhary and Gargi Khanna, “A 2-D potential based threshold voltage analysis and comparison of junctionless symmetric double gate vertical slit FET
2017	Journal of Nanoelectronics and Optoelectronics.	Tarun Chaudhary and Gargi Khanna, “Analytical modeling of surface potential and threshold voltage for junctionless double gate VeSFET,”
2017	Journal of Semiconductors, vol. 6, no. 2, pp. 109-113, June 2017	Tarun Chaudhary and Gargi Khanna, “Analysis and Impact of Process variability on performance of junctionless double gate VeSFET
2016	Journal of Nanoelectronics and Optoelectronics, vol. 11, no.6, pp.738-744, 2016	Tarun Chaudhary and Gargi Khanna, “Analytical modeling of drain current and short channel effects of junctionless double gate vertical slit field effect transistor,”
2016	Journal of Nanoengineering and Nanomanufacturing, vol. 6, no.2, pp. 109-113, June 2016	Tarun Chaudhary and Gargi Khanna, “Compact 2-D threshold voltage model based comparative analysis of junctionless double gate VeSFET
2014	International Journal of Engineering Research and Technology, vol. 3(01), pp. 2093-2098, 2014.	Tarun Chaudhary and Gargi Khanna, “Performance analysis of vertical slit field effect transistor"
2014	International Journal of Emerging Technologies in Computational and Applied Sciences, vol. 8(01), pp. 309-314, 2014.	Tarun Chaudhary and Gargi Khanna, “Performance enhancement and characterization of junctionless VeSFET,”
2012	International Journal of Computer Application, June 2012.	1. Tarun chaudhary, Gargi khanna, Rajeevan Chandel, “Performance Evaluation of MISISFET- TCAD Simulation,”

Conference Publications :

Year	Conference	Publication
2022	IEEE, 2nd CONIT, 2022	Faizan Ansari, Tarun Chaudhary, Ramesh Sunkaria and Mandeep Singh
2022	International Conference on Recent Advances in Engineering and Technology	Raviraj Yadav, Mandeep Singh and Tarun Chaudhary, " Comparative Analysis of T-shaped TFET Structure of Low Power Applications"
2022	SAARD Conference, International Conference on Multidisciplinary Research	Pragati Singhal, Tarun Chaudhary and Mandeep Singh
2021	International Conference on Women Researchers in Electronics & Computing, AIJR Publishing	Prateek Asthana, Gargi Khanna, Sahil Sankhyan and Tarun Chaudhary, "Design of Reed-Solomon Encoder for Error Detection in DRAM cells,
2021	International Conference on Women Researchers in Electronics & Computing, AIJR Publishing	Akash Kumar, Tarun Chaudhary, Vijay Kumar Ram, "Comparative Analysis of Multiplications Technique Conventional,Booth,Array Multiplier And Vedic Arithmatic Using VHDL
2021	International Conference on Women Researchers in Electronics & Computing, AIJR Publishing	Parvesh Kumar, Tarun Chaudhary, Vijay Kumar Ram, "Design of Constant Trans conductance Operational Amplifier By CMOS With High Gain And Low Operational Power,
2021	International Conference on Women Researchers in Electronics & Computing, AIJR Publishing	Amarah Zahra, Tarun Chaudhary, Farhana Shahid, Hritwik Todawat, Vaishnavi Singh, Vidhya Sagar, "Fabrication Process of MBCFET and its Characteristics"

2021	International Conference on Emerging Technologies: AI, IoT, and CPS for Science & Technology Applications	Mandeep Singh , Tarun Chaudhary and Balwinder Raj, "Comparative Analysis of Multiplications Technique Using Vedic Mathematics"
2015	ISTE Convention NIT Hamirpur, 2015	Tarun Chaudhary and Gargi Khanna, “Comparative analysis of JLDG VeSFET and MOSFET,”
2014	National Conference on VLSI, Signal Processing and Communication, National Institute of Technology, Hamirpur, 2014	Tarun Chaudhary and Gargi Khanna, “Comparative analysis of junctionless vertical slit field effect transistor,”
2012	IEEE International Conference on Signal Processing Computing and Control ISPCC, pp. 33-34, March 2012	Tarun Chaudhary, Gargi Khanna, Rajeevan Chandel, “Behaviour of nMISISFET in Nanoregime –TCAD simulation
2012	International conference on VLSI, NEMS and MEMS (VMN), pp. 262-263 January 2012.	Tarun Chaudhary, Gargi Khanna, Rajeevan Chandel, "Performance Enhancement of MISISFET structure using Halo Doping”
2011	IEEE Student conference on Cognizance of Applied Engineering and Research (ICAER), pp.20-21, Oct 2011. (BEST PAPER AWARD)	Tarun chaudhary, Gargi khanna, “Comparison of n-MOSFET with n-MISISFET using TCAD,”

Book/Chapter Publications :

Type	Title	Publisher	Authors	ISBN/ISSN No.	Year
Chapter	Variation of Sensitivity of a MEMS Capacitive Accelerometer Based Microphone with Suspension System Topology	Intech Open	Apoorva Dwivedi, Prateek Asthana, Gargi Khanna, Tarun Chaudhary	Multidisciplinary Teamwork to Public Health	2021
Chapter	Gallium Nitride—Emerging Future Technology for Low-Power Nanoscale IC Design	Springer	Sahil Sankhyan, Tarun Chaudhary, Gargi Khanna, and Rajeevan Chandel	Nanoscale VLSI	2020
Book	Optimized spectrum allocation in cognitive radio applications- Modified binary firefly algorithm	Lambert Academic Publishers	Deepti Kakkar, Tarun Chaudhary and Ekta Dogra	978-620-3-30556-2	2020
	Performance analysis and numerical investigation of JLDG VeSFET	Lambert Academic Publisher	T. Chaudhary and G. Khanna	978-613-9-99795-4	2019
	MISISFET and DQWRTD transistor for low power applications	Lambert Academic Publisher	T. Chaudhary	978-613-9-91612-2	2018

Events Organized :

Category	Type	Title	Venue	From	To	Designation
Conference	International	Women Researchers in Electronics & Computing'2021	ECE Department, Dr B R Ambedkar National Institute of Technology Jalandhar, Punjab-144011	22-04-2021	24-04-2021	Organizing Secretary

STC	International	Low Power VLSI Design for Communication Systems and Network	ECE Department, Dr B R Ambedkar National Institute of Technology Jalandhar, Punjab-144011	16-09-2020	20-09-2020	Coordinator
STC	International	Effective Tools and Techniques for Qualitative Research	ECE Department, Dr B R Ambedkar National Institute of Technology Jalandhar, Punjab-144011	10-08-2020	14-08-2020	Coordinator
STC	National	Submicrometer Semiconductor Device to Circuit Co Design and Modelling Techniques	ECE Department, Dr B R Ambedkar National Institute of Technology Jalandhar, Punjab-144011	20-08-2020	24-08-2020	Coordinator

PhD Supervised :

Scholar Name	Research Topic	Status	Year	Co-Supervisor
Vijay Kumar Ram	Nanoscale Devices for Low Power VLSI Circuits	Ongoing	Oct, 2020	
Sadhana Singh	PERFORMANCE ANALYSIS AND MODELING OF HETEROJUNCTION GAA-NWTFET	Ongoing	Jan, 2020	

Admin. Responsiblities :

Position Held	Organization	From	To
Coordinator Infrastructure	ECE Department NIT Jalandhar	14-02-2020	28-07-2021
NBA Coordinator (MTech VLSI)	ECE Department NIT Jalandhar	14-02-2020	28-07-2021
Coordinator, Departmental Purchase	ECE Department NIT Jalandhar	14-02-2020	28-07-2021
Coordinator ST/SC students	ECE Department NIT Jalandhar	14-02-2020	28-07-2021
Girls Counsellor B.Tech, M.Tech and PhD	ECE Department NIT Jalandhar	28-07-2021	Ongoing
Departmental Information Committee	ECE Department NIT Jalandhar	28-07-2021	Ongoing
Coordinator Nanoelectronics Research LAB	ECE Department NIT Jalandhar	14-02-2020	Ongoing
Coordinator Conference Committee	ECE Department NIT Jalandhar	28-07-2021	Ongoing
Coordinator for SWAYAM and ARPIT courses	ECE Department NIT Jalandhar	28-07-2021	Ongoing
Coordinator ST/SC students	ECE Department NIT Jalandhar	14-02-2020	Ongoing
Coordinator Techniti	NIT Jalandhar	04-03-2020	Ongoing

Award and Honours :

Title	Activity	Given by	Year

Best Paper Award	For Paper Publication	IEEE Student chapter, UIET Panjab University Chandigarh	2010