

Dr.D. NIRMAL Electronics and Communication Engineering, Karunya University Nanoelectronics and VLSI Design

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A review of InP/InAlAs/InGaAs based transistors for high frequency applications J Ajayan, D Nirmal Superlattices and Microstructures 86, 1-19	83	2015
A survey of Gallium Nitride HEMT for RF and high power applications ASA Fletcher, D Nirmal Superlattices and Microstructures	71	2017
Analysis of nanometer-scale InGaAs/InAs/InGaAs composite channel MOSFETs using high-K dielectrics for high speed applications J Ajayan, D Nirmal, P Prajoon, JC Pravin AEU-International Journal of Electronics and Communications 79, 151-157	46	2017
Implementation of nanoscale circuits using dual metal gate engineered nanowire MOSFET with high-k dielectrics for low power applications JC Pravin, D Nirmal, P Prajoon, J Ajayan Physica E: Low-dimensional Systems and Nanostructures 83, 95-100	41	2016
Subthreshold performance of gate engineered FinFET devices and circuit with high-k dielectrics D Nirmal, P Vijayakumar, DM Thomas, BK Jebalin, N Mohankumar Microelectronics Reliability 53 (3), 499-504	34	2012
InP high electron mobility transistors for submillimetre wave and terahertz frequency applications: A review J Ajayan, D Nirmal, T Ravichandran, P Mohankumar, P Prajoon, AEU-International Journal of Electronics and Communications 94, 199-214	30	2018
20-nm enhancement-mode metamorphic GaAs HEMT with highly doped InGaAs source/drain regions for high-frequency applications J Ajayan, D Nirmal International Journal of Electronics 104 (3), 504-512	29	2017
20 nm high performance enhancement mode InP HEMT with heavily doped S/D regions for future THz applications J Ajayan, D Nirmal Superlattices and Microstructures 100, 526-534	l 28	2016
Nanoscale tri gate MOSFET for ultra low power applications using high-k dielectrics D Nirmal, PV Kumar, D Joy, BK Jebalin, NM Kumar 2013 IEEE 5th International Nanoelectronics Conference (INEC), 12-19	28	2013
Unique model of polarization engineered AlGaN/GaN based HEMTs for hig power applications BK Jebalin, AS Rekh, P Prajoon, D Godwinraj, NM Kumar, D Nirmal Superlattices and Microstructures 78, 210, 223	h 27	2015

Superlattices and Microstructures 78, 210-223

TITLE	CITED BY	YEAR
Subthreshold analysis of nanoscale FinFETs for ultra low power application using high-k materials D Nirmal, P Vijayakumar, PPC Samuel, BK Jebalin, N Mohankumar International Journal of Electronics 100 (6), 803-817	26	2013
Nand gate using FinFET for nanoscale technology V Kumar, S Jabaraj International Journal of Engineering Science and Technology 2 (5), 1351-1358	26	2010
The influence of high-k passivation layer on breakdown voltage of Schottky AlGaN/GaN HEMTs BK Jebalin, AS Rekh, P Prajoon, NM Kumar, D Nirmal Microelectronics Journal 46 (12), 1387-1391	25	2015
20-nm T-gate composite channel enhancement-mode metamorphic HEMT on GaAs substrates for future THz applications J Ajayan, D Nirmal Journal of Computational Electronics 15 (4), 1291-1296	24	2016
Numerical modeling of triple material gate stack gate all-around (TMGSGAA) MOSFET considering quantum mechanical effects B Padmanaban, R Ramesh, D Nirmal, S Sathiyamoorthy Superlattices and Microstructures 82, 40-54	23	2015
Current collapse modeling in AlGaN/GaN HEMT using small signal equivalent circuit for high power application D Nirmal, L Arivazhagan, ASA Fletcher, J Ajayan, P Prajoon Superlattices and Microstructures 113, 810-820	22	2018
Nanosized high κ dielectric material for FINFET D Nirmal, B Nalini, P Vijayakumar Integrated Ferroelectrics 121 (1), 31-35	20	2010
Nanoscale channel engineered double gate MOSFET for mixed signal applications using high-k dielectric D Nirmal, P Vijayakumar, K Shruti, N Mohankumar International Journal of Circuit Theory and Applications 41 (6), 608-618	19	2013
Analysis of AlGaN/GaN HEMT using discrete field plate technique for high power and high frequency applications ASA Fletcher, D Nirmal, J Ajayan, L Arivazhagan AEU-International Journal of Electronics and Communications 99, 325-330	18	2019
A New Drain Current Model for a Dual Metal Junctionless Transistor for Enhanced Digital Circuit Performance JC Pravin, D Nirmal, P Prajoon, MA Menokey IEEE Transactions on Electron Devices 63 (9), 3782-3789	18	2016