

Recent Publications

1	Smriti Sahu, Shivendra Kumar Pandey, Anbarasu Manivannan*, Uday Prabhakarrrao Deshpande, Vasant G. Sathe, Varimalla Raghavendra Reddy, and Murugavel Sevi, Direct evidence for phase transition in thin Ge1Sb4Te7 films using in situ UV-Vis-NIR spectroscopy and Raman scattering studies , <i>Phys. Status Solidi B</i> , vol. 253, pp. 1069, 2016	Published
2	Deepika Gupta and S. K. Vishvakarma, Impact of LDD depth variation on the performance characteristics of SONOS NAND flash memory device , <i>IEEE Transactions on Device and Materials and Reliability</i> , 2016	In Press
3	Shivendra Kumar Pandey and Anbarasu Manivannan , Sub-nanosecond threshold-switching dynamics and set process of In3SbTe2 phasechange memory devices , <i>Applied Physics Letters</i> , vol. 108, pp. 233501, 2016	Published
4	C. B. Kushwah, S. K. Vishvakarma and D. Dwivedi, A 20nm Robust Single-Ended Boost-Less 7T FinFET Sub-threshold SRAM Cell under Process-Voltage-Temperature Variation , <i>Microelectronics Journal</i> , vol. 51, pp. 75-88, 2016	Published
5	Ankur Beohar and S. K. Vishvakarma, Performance Enhancement of Asymmetrical Underlap 3D-Cylindrical GAA-TFET with Low Spacer Width , <i>IET Micro & Nano Letters</i> , 2016	In Press
6	Satish K. Tiwari and Prabhat K. Upadhyay, Maximum Likelihood Estimation of SNR for Diffusion-Based Molecular Communication , <i>IEEE Wireless Communications Letters</i> , 2016	In Press
7	Pankaj K. Sharma and Prabhat K. Upadhyay, Performance Analysis of Cooperative Spectrum Sharing with Multiuser Two-Way Relaying over Fading Channels , <i>IEEE Transactions on Vehicular Technology</i> , 2016	In Press
8	Vikas Vijayvargiya, Bhupendra Reniwal, Pooran Singh, S. K. Vishvakarma, Analog/RF Performance Attributes of an Underlap Tunnel Field Effect Transistor for Low Power Applications , <i>IET Electronics Letters</i> , vol. 52, pp. 559-560, 2016	Published
9	Pankaj K. Sharma and Prabhat K. Upadhyay, Cognitive Relaying with Transceiver Hardware Impairments under Interference Constraints , <i>IEEE Communications Letters</i> , vol. 20 (4), pp. 820-823, 2016	Published
10	Mohit S. Choudhary, Mahesh Kumawat, Pramod K. Bharti and S. K. Vishvakarma, 16.64Gbps Synchronous CML SerDes Transceiver Design Technique with Process Corner Variations for Low Power Application , <i>IEEE VLSI Circuits & Systems Letter</i> , vol. 2, pp. 2-6, 2016	Published
11	M.K. Saxena, S.D.V.S.J. Raju, R. Arya, R.B. Pachori, S.V.G. Ravindranath, S. Kher, and S.M. Oak, Empirical mode decomposition based detection of bend induced error and its correction in a Raman optical fiber distributed temperature sensor , <i>IEEE Sensors Journal</i> , vol. 16, pp. 1243-1252, 2016	Published
12	Smriti Sahu, Shivendra Kumar Pandey, Anbarasu Manivannan*, Uday Prabhakarrrao Deshpande, Vasant G. Sathe, Varimalla Raghavendra Reddy, and Murugavel Sevi, Direct evidence for phase transition in thin Ge1Sb4Te7 films using in situ UV-Vis-NIR spectroscopy and Raman scattering studies , <i>Phys. Status Solidi B</i> , 2016	In Press
13	S. Maheshwari, R.B. Pachori, and U.R. Acharya, Automated diagnosis of glaucoma using empirical wavelet transform and correntropy features extracted from fundus images , <i>IEEE Journal of Biomedical and Health Informatics</i> , 2016	In Press
14	R.B. Pachori and A. Nishad, Cross-terms reduction in Wigner-Ville distribution using tunable-Q wavelet transform , <i>Signal Processing</i> , vol. 120, pp. 288-304, 2016	Published
15	Devendra S. Gurjar and Prabhat K. Upadhyay, Impact of Channel Estimation Error on Zero-Forcing based MIMO Two-Way Relaying , <i>IET Signal Processing</i> , 2016	In Press
16	Sonal Jain, Deepika Gupta , Vaibhav Neema, S. K. Vishvakarma, BE-SONOS Flash Memory along with Metal Gate and High-k Dielectrics in Tunnel Barrier and its Impact in Charge Retention	Published

	Dynamics , <i>Journal of Semiconductors, IOP Science</i> , vol. 37, pp. 3, 2016	
17	Manoj K Manna, Aaryashree, Shruti Verma, Apurba K Das, and Shaibal Mukherjee, Lamellar Peptide–Cadmium-Doped Zinc Oxide Nanohybrids That Emit White Light , <i>ChemPlusChem</i> , vol. 81, pp. 329–337, 2016	Published
18	Tejendra Dixit, Ashish Kumar, I A Palani and Vipul Singh, Surface-plasmon-mediated red and near infrared emission from Au-coated ZnO/ZnCr2O4 nanocomposites , <i>Scripta Materialia</i> , vol. 114, pp. 84, 2016	Published
19	Vivek Garg, Brajendra S. Sengar, Vishnu Awasthi, Aaryashree, Pankaj Sharma, C. Mukherjee, Shailendra Kumar and Shaibal Mukherjee, Localized surface plasmon resonance on Au nanoparticles: tuning and exploitation for performance enhancement in ultrathin photovoltaics , <i>RSC Advances</i> , vol. 6, pp. 26216-26226, 2016	Published
20	Prateek Jain and Trapti Jain, Development of V2G and G2V Power Profiles and their Implications on Grid under Varying Equilibrium of Aggregated Electric Vehicles , <i>International Journal of Emerging Electric Power Systems</i> , vol. 17, no.2, pp. 101-115, 2016	Published
21	S. Sood, M. Kumar, R.B. Pachori, and U.R. Acharya, Empirical mode decomposition based features for analysis of normal and CAD heart rate signals , <i>Journal of Mechanics in Medicine and Biology</i> , vol. 16, article 1640002, 2016	Published
22	D. Bhati, M. Sharma, R.B. Pachori, S.S. Nair, and V.M. Gadre, Design of time-frequency optimal three-band wavelet filter banks with unit Sobolev regularity using frequency domain sampling , <i>Circuits, Systems & Signal Processing</i> , 2016	In Press
23	R.B. Pachori, M. Kumar, S. Kora, P. Avinash, and U.R. Acharya, An improved online paradigm for screening of diabetic patients using RR interval signals , <i>Journal of Mechanics in Medicine and Biology</i> , vol. 16, article 1640003, 2016	Published
24	Prabhat K. Upadhyay and Pankaj K. Sharma, Max-Max User-Relay Selection Scheme in Multiuser and Multirelay Hybrid Satellite Terrestrial Relay Systems , <i>IEEE Communications Letters</i> , vol. 20(2), pp. 268-271, 2016	Published
25	C. B. Kushwah, S. K. Vishvakarma and D. Dwivedi, Single-Ended Boost-Less (SE-BL) 7T Process Tolerant SRAM Cell Design in Sub-Threshold Regime for Ultra-Low Power Applications , <i>Circuits, Systems & Signal Processing (CSSP)</i> , Springer, vol. 35, pp. 385-407, 2016	Published
26	Tejendra Dixit, I A Palani and Vipul Singh, Selective Tuning of Enhancement in near band edge emission in hydrothermally grown ZnO nanorods coated with Gold , <i>Journal of Luminescence</i> , vol. 170, pp. 180, 2016	Published
27	Omkishor Sahu, Vijay Anand, Vivek Kanhangad and Ram Bilas Pachori, Classification of Magnetic Resonance Brain Images using Bi-dimensional Empirical Mode Decomposition and Autoregressive Model , <i>Biomedical Engineering Letters</i> , 2016	In Press
28	Sonal Jain, Vaibhav Neema, Deepika Gupta, S. K. Vishvakarma, Investigation of BE-SONOS Flash Memory with High-k Dielectrics in Tunnel Barrier and its Impact on Charge Retention Dynamics , <i>Journal of Nanoelectronics and Optoelectronics</i> , vol. 11, pp. 1–6, 2016	Published
29	M. Sharma, D. Bhati, S. Pillai, R. B. Pachori, and V.M. Gadre, Design of time-frequency localized filter banks: Transforming non-convex problem into convex via semidefinite relaxation technique , <i>Circuits, Systems & Signal Processing</i> , 2016	In Press
30	Rangeet Mitra and Vimal Bhatia, Chebyshev polynomial based adaptive predistorter for nonlinear LED compensation in VLC , <i>IEEE Photonics Technology Letter</i> , 2016	In Press
31	Kshitij Bhargava, Anubha Bilgaiyan, S. Raj Mohan, M. O. Itoop, Mukesh P. Joshi, L. M. Kukreja and Vipul Singh, "Investigating the influence of alkyl chain length in poly(3-alkylthiophene)s over the thin film morphology by optical and electrical characterization" , <i>Journal of Nanoscience & Nanotechnology</i> , vol. 16, pp. 1-7, 2016	Published
32	Ashish Kumar, Tejendra Dixit, I A Palani and Vipul Singh, A Systematic Tuning of Structural and	Published

	Optical Properties of Hydrothermally Grown ZnO Nanorods by Post Growth Thermal Annealing , <i>Advanced Science Engineering and Medicine</i> , vol. 8, pp. 49, 2016	
33	Deepika Gupta and S. K. Vishvakarma, Improved Short Channel Characteristics with Long Data Retention time in Extreme Short Channel Flash Memory Devices , <i>IEEE Transactions on Electron Devices</i> , vol. 63, pp. 668-674, 2016	Published
34	Pankaj K. Sharma and Prabhat K. Upadhyay, Cooperative Spectrum Sharing in Two-Way Multi-user Multi-relay Networks , <i>IET Communications</i> , vol. 10 (1), pp. 111-121, 2016	Published
35	Anubha Bilgaiyan, Tejendra Dixit, Gaurav Kapil, Shyam S. Pandey, Shuji Hayase, Iyamperumal Anand Palani and Vipul Singh, "Effect of Addition of KI on the Hydrothermal Growth of ZnO Nanostructures towards Hybrid Optoelectronic Device Applications" , <i>Journal of Nanoscience & Nanotechnology</i> , vol. 16, pp. 1-6, 2016	Published
36	Tejendra Dixit, Anubha Bilgaiyan, I. A. Palani and Vipul Singh, "Influence of Parametric Variations on Hydrothermal Growth of ZnO nanostructures for Hybrid Polymer/ZnO based Photodetector" , <i>Journal of Nanoscience & Nanotechnology</i> , vol. 16, pp. 1-6, 2016	Published
37	Kshitij Bhargava and Vipul Singh, Investigation of Gold and Poly(3-Alkylthiophene) interface in top and bottom contact structures , <i>Synthetic Metals</i> , vol. 211, pp. 49, 2016	Published
38	Nagendra Kumar and Vimal Bhatia, Outage Probability and Average Channel Capacity of Amplify-and-Forward in Conventional Cooperative Communication Networks over Rayleigh Fading Channels , <i>Wireless Personal Communications</i> , 2016	In Press
39	C. B. Kushwah and S. K. Vishvakarma, A Single-Ended with Dynamic Feedback Control 8T Sub-Threshold SRAM Cell , <i>IEEE Transactions on Very Large Scale Integration (VLSI) Systems</i> , vol. 24, pp. 373-377, 2016	Published