

MALAVIYA NATIONAL INSTITUTE OF TECHNOLOGY

DEPARTMENT OF ELECTRONICS & COMMUNICATION

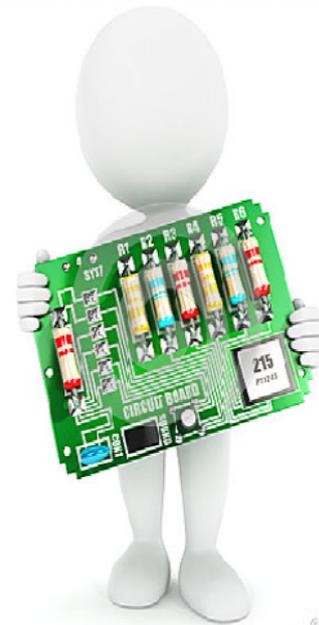


NEWSLETTER

January-June 2018

Vision

To create a centre for imparting technical education of international standards and conduct research at the cutting edge of electronics & communication technology to meet the current and future challenges of technological development.



Mission

To create technical manpower for meeting the current and future demands of industry and academia: to recognize education and research in close interaction with electronics & communication & related industry with emphasis on the development of leadership qualities in the young men and women entering the portals of the institute with sensitivity to social development and eye for opportunities for growth in the international perspective.

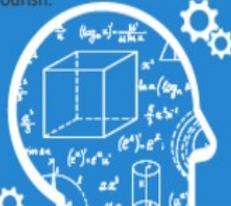
ARTIFICIAL INTELLIGENCE

Early artificial intelligence stirs excitement.



MACHINE LEARNING

Machine learning begins to flourish.



*The difference between where you are
And where you will be five years from
Now will be found in the quality of
Books you have read.*

-Jim Rohn

NOTABLE PUBLICATIONS

Soysouvanh, M.A. Jalil, I.S. Amiri, J. Ali, G. Singh, S. Mitatha, P. Yupapin, K.T.V. Grattan, and M. Yoshida, "Ultra-fast Electro-optic Switching Control using a Soliton Pulse within a Modified Add-drop Multiplexer" , *Microsystem Technologies (SCI Journal)* Volume :3 / 1-7 / 2018 ISBN: 1432-1858

S. Chouhan, D. K. Panda, M. Gupta and S. Singhal, "Meander line MIMO antenna for 5.8 GHz WLAN application" , *International Journal of RF and Microwave Computer-Aided Engineering* Volume :28 / 1-8 / 2018

Rukhsar Zafar, Sarfaraz Nawaz, Ghanshyam Singh, Md. Salim, "Plasmonics based Refractive Index Sensor for Detection of Hemoglobin Concentration" , *IEEE Sensors Journal*(<https://doi.org/10.1109/JSEN.2018.2826040>), IF: 2.512, *SCI* Volume :3 / 1-6 / 2018 ISBN: 1558-1748

N. Pornsuwancharoen, P. Youplao, K. Tamee, I.S. Amiri, J. Ali, G. Singh, P. Yupapin, F.H. Suhailin, L.A. Cacha, R.R. Poznanski, "A Microring Conjugate Mirror Design and Simulation for Naked-Eye 3D Imaging Application" , *Microwave and Optical Technology Letters* (<https://doi.org/10.1002/mop.31226>), IF: 0.585 Volume :3 / 1-6 / 2018

U. P. Shukla, S. J. Nanda, "Denoising Hyperspectral Images using Hilbert Vibration Decomposition with Cluster Validation" , *IET Image Processing* Volume :12 / 1736-1745 / 2018 ISBN: ISSN 1751-9659

Suksan Suwanarat, Surasak Chiangga, Ghanshyam Singh, Jalil Ali, Preecha P. Yupapin, "On-Chip Supercontinuum Generation in Nanostructured $Ge_{11.5}As_{24}Se_{64.5}$ Chalcogenide Waveguides using PANDA Ring Resonator" , *Result in Physics (SCI Journal)*, IF: 1.4) Volume :10 / 138-144 / 2018

P. Youplao, N. Pornsuwancharoen, I.S. Amiri, M.A. Jalil, M.S. Aziz, J. Ali, G. Singh, P. Yupapin, and K.T.V. Grattan, "Microring Stereo Sensor Model using Kerr-Vernier Effect for Bio-Cell Sensor and Communication" , *Nano Communication Networks (SCI, I.F.: 2.3)* Volume :3 / 1-6 / 2018 ISBN: 1878-7789

Nawaz Shafi, Chitrakant Sahu, C. Periasamy, "Virtually doped SiGe tunnel FET for enhanced sensitivity in biosensing applications" , *Superlattices and Microstructures (Impact Factor: 2.123)* Volume :120 / 75-89 / 2018

Niketa Sharma, Sandeep Kumar Dhakad, C. Periasamy and Nidhi Chaturved, "Refined isolation techniques for GaN-based high electron mobility transistors" , *Materials Science in Semiconductor Processing* Volume :87 / 195-201 / 2018

Abhinav Bhatnagar, Vijay Janyani, "Enhancing absorption in thin film organometal trihalide perovskite solar cell by photon recycling" , *Advanced Material Letters* Volume :9 / 721-726 / 2018 ISBN: ISSN:0976-3961

Wanchai Khunnam, I.S. Amiri, F.H. Suhailin, Ghanshyam Singh, Jalil Ali, Preecha P. Yupapin, "Mode-Locked Self-pumping and Squeezing Photons Model in a Nonlinear Micro-ring Resonator" , *Opt Quant Electron (SCI Journal)* Volume :50 / 343 / 2018

Sourabh Sahu, Jalil Ali, Preecha P. Yupapin, Ghanshyam Singh, "Effectiveness of Taguchi method for the optimization of narrowband optical filters based on grating waveguides" , *Microsystem Technologies (SCI Journal)* Volume :8 / 1-7 / 2018 ISBN: 0946-7076

Hemant Kumar Meena, K.K.Sharma, S.D. Joshi, "Facial expression recognition using the spectral graph wavelet, Accepted for Publication" , *IET Signal Processing* Volume :0 / 05 / 2018

J. Ali, P. Youplao, N. Pornsuwancharoen, K Chaiwong, S Chiangga, IS Amiri, Suphanchai Punthawanunt, G. Singh, P. Yupapin and K.T.V. Grattan, "An Integrated Microring Circuit Design for Optoelectronic Transformer Applications" , *Results in Physics (SCI Journal)* Volume :11 / 706-708 / 2018 ISBN: 2211-3797

Girraj Sharma, Ritu Sharma, "Performance improvement of CSS over imperfect reporting using diversity reception in cognitive radio networks" , *World Journal of Engineering* Volume :12 / 6 / 2018

Vijay and S. J. Nanda , "A Tetra-stage Cluster Identification Model to Analyze the Seismic Activities of Japan, Himalaya and Taiwan" , IET Signal Processing Volume :12 / 95-103 / 2018 ISBN: ISSN: 1751-9675

Jain, Prateek, and Amit M. Joshi , "Analyzing the impact of augmented transistor NMOS configuration on parameters of 4x1 multiplexer" , Radioelectronics and Communications Systems Volume :61 / 121-127 / 2018

C. S. Mishra, M. Ravi Kumar, S. K. Tripathy, G. Palai , "Study of Fiber Optic Code Division Multiple Access Code Families for Application in Optical Communication Based on Weight and Bit Error Rate" , Optik-International Journal for Light and Electron Optics Volume :154 / 41-46 / 2018

Kamayani Shrivastav, R.P.Yadav, K.C.Jain , "Cyclic Gradient Descent Optimization for joint MAP Estimation of Channel and Phase Noise in OFDM" , IET Communications Volume :10.1049 / 1-6 / 2018 ISBN: 1751-8636

Chitrakant sahu, Nawaz Shafi, and C.Periasamy , "Virtually doped SiGe tunnel FET for enhanced sensitivity in biosensing applications" , Superlattices and Microstructures (Impact Factor: 2.123) Volume :1 / 1-8 / 2018 ISBN: ISSN: 0749-6036

Chaiwong, K. Tamee, S. Punthawanunt, F. H. Suhailin, M. S. Aziz, J. Ali, G. Singh, P. Yupapin , "Naked-eye 3D imaging model using the embedded microconjugate mirrors within the medical micro-needle device" , Microsystem Technologies (SCI Journal) Volume :24 / 2695-269 / 2018

Ashish Kumar Ghunawat, Rim Cherif, Ghanshyam Singh , "Ultrahigh Nonlinear Polarization Maintaining Dispersion Compensating Photonic Crystal Fiber" , Optica Applicata Volume :49 / 1-12 / 2018

Amit Kumar Garg, Vijay Janyani , "Resilient, Bandwidth Scalable and Energy Efficient Hybrid PON Architecture" , Telecommunication Systems Volume :67 / 687-698 / 2018 ISBN: ISSN:1018-4864

N.D. Gupta, V. Janyani, M. Mathews, Monika, R. Singh , "Design and Fabrication of InGaN/GaN Superlattice based Solar Cell using Photonic Crystal Structure" , Journal of Nanophotonics Volume :12 / 043505 / 2018 ISBN: ISSN:1934-2608

Arathy Varghese, C. Periasamy, Lava Bhargava , "Analytical Modeling and Simulation Based Investigation of AlGaIn/AlIn/GaN Bio-HEMT Sensor for C-erbB-2 Detection" , IEEE Sensors Journal (<https://doi.org/10.1109/JSEN.2018.2826040>), IF: 2.512, SCI Volume :01 / 01-08 / 2018

R. Ratnakumar, S. J. Nanda , "A low complexity hardware architecture of K-means algorithm for real-time satellite image segmentation" , Multimedia Tools and Applications, Springer Volume :1 / 1-33 / 2018 ISBN: ISSN: 1380-7501

Ishan Varun, Deepak Bharti, Vivek Raghuvanshi, and Shree Prakash Tiwari , "Investigation of Resistive Switching in PVP and Ultra-Thin HfOx Based Bilayer Hybrid RRAM," , Solid State Ionics Volume :325 / 196-200 / 2018

Girraj Sharma, Ritu Sharma , "Joint sensing time and fusion rule threshold optimization for energy efficient CSS in cognitive radio sensor networks" , International Journal of Communication system Volume :10 / 12 / 2018

Tripathi, S. K., Mohd Ansari, and Amit M. Joshi , "Carbon Nanotubes-Based Digitally Programmable Current Follower" , VLSI Design Volume :2018 / 10 / 2018

Anup Sharma, Ritu Sharma , "Fabrication and Characterization of Zinc Oxide/Multi-walled Carbon Nanotube Schottky Barrier Diodes" , Journal of Electronic Material Volume :47 / 8 / 2018 ISBN: 0361-5235

Harshul Balani, Ghanshyam Singh, Manish Tiwari, Vijay Janyani, Ashish Kumar Ghunawat , "Supercontinuum Generation at 1.55 μm in As₂S₃ Core Photonic Crystal Fiber" , Applied Optics, <https://doi.org/10.1364/AO.57.003524> (SCI, IF: 1.65) Volume :57 / 3524-3533 / 2018

PLACEMENT DATA:

Highest package offered to UG students was 32.5 LPA

Highest package offered to PG students was 14.5 LPA.

Average package for UG students was 9.47 LPA.

Average package for PG students was 7.65LPA

National Workshop on 5G Communications at MNIT Jaipur, Jaipur, India from 11-06-2018 to 15-06-2018

National Workshop on One Week Global NKN Summer Faculty Development Program on "AI and Machine Learning" at Electronics and ICT Academy, MNIT, Jaipur, India from 04-06-2018 to 08-06-2018

National Short Term Course on One Week FDP on Digital CMOS Circuits & Devices at MNIT & SVNIT, Surat, India from 22-05-2018 to 26-05-2018

National Workshop on One Week Faculty Development Program on Emerging Application in Image Processing at Manipal University Jaipur, Jaipur, India from 21-02-2018 to 25-02-2018

National Short Term Course on E & ICT Academy Sponsored FDP on Advances in Communication Technology at MNIT, Jaipur, India from 09-02-2018 to 14-02-2018

PHD Awarded:

2013REC9570

TANUSHREE SHARMA

Topic: New methods of QRS detection and classification in ECG signals .

2010REC2006

SANJAY KUMAR SINGH

Topic: Design and Performance Evaluation of Tuning Methods of PID Controller.

2014REC9006

SOURABH SAHU

2012REC9531

ANUP KUMAR SHARMA

2013REC9031

AMIT KUMAR GARG

2010REC109

MAHABIR PRASAD

Seminars/Conferences/Symposia organized

National Seminar on Advances in Electronic Circuits and Systems (IETE Zonal Seminar-North Zone) at IETE Student Forum, SKIT Jaipur, Jaipur, India from 21-04-2018 to 21-04-2018

International Conference on International Conference on Optical and Wireless Technologies (OWT-2018) at MNIT Jaipur, JAIPUR, India from 10-02-2018 to 11-02-2018.

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Lalit Agrawal

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