

Faculty Publication Details

The year 2017-2018

ELECTRONICS & COMMUNICATION ENGINEERING DEPARTMENT		
Sr. No.	Name of Paper Published	AUTHOR(s) NAME
01.	“Review of Different Approaches for Face Detection “International Journal of Latest Engineering Research and Applications (IJLERA) Volume – 02, Issue – 12, December – 2017, PP 01-10, ISSN: 2455-7137.	Susamma Mathew, Shiwani Vashist, Shallu Sharma, Rajesh Mehra
02.	“A Survey on lossless compression Algorithms for Medical Images”, International Journal of Electrical Electronics & Computer Science Engineering, Volume 4, Issue 6, pp. 96-102, December 2017, ISSN No. 2348-2273.	Vivek Kumar, D.Sriramulu, Rajesh Mehra, Shallu
03.	"Review of Tunnel Field Effect Transistor (TFET)." Int. Res. J. Eng. Tech 4, no. 7 (2017): 1195-1200.	Tamak, Prabhat and Rajesh Mehra
04.	“Palm Print Recognition and Authentication Using Hough Transform For Biometric Application” International Journal for Research in Applied Science & Engineering Technology (IJRASET) Volume 5 Issue XII December 2017, ISSN: 2321-9653	Ranjeet Singh Chauhan, Jagrithi Kumari, Rajesh Mehra, Shallu
05.	“Image Compression and Denoising using Wavelet Transform” International Journal of Modern Electronics and Communication Engineering (IJMECE), Volume No. - 5, Issue No. – 6, November 2017, ISSN: 2321-2152	Bhupender Singh, Parul Sharma, Rajesh Mehra, Shallu Sharma
07.	“Design of Double Gate Heterojunction TFET for low power application”, UGC approved International Journal of Scientific Research and Development, Vol. 5, Issue 06. pp. 40-44, August 2017	Prabhat Tamak, Rajesh Mehra
08.	“High Gain Amplifier Design for Switched-Capacitor Circuit Applications” IOSR Journal of VLSI and Signal Processing (IOSR-JVSP) Volume 7, Issue 5, Ver. I (Sep.-Oct. 2017), PP 62-68e-ISSN: 2319 – 4200, P-ISSN No. : 2319 – 4197. www.iosrjournals.org	Pragati Sheel, Dr. Rajesh Mehra
09.	“Speed and Area Efficient Reconfigurable Viterbi Decoder using Hybrid Approach”, International Journal for Scientific Research & Development,” Vol. 5, Issue-02, pp. 1575-1577, April 2017	Dinesh Kumar Rajesh Mehra
10.	"A Power Efficient Schmitt Trigger Latch Design Using CNTFET Technology", International Journal of Advancement in Engineering Technology, Management and Applied Science, Vol. 4, Issue 10, pp.62-67, October 2017.	Raj Kumari, Rajesh Mehra
11.	"Optimized Design of Switched Capacitor Integrator", International Journal of Engineering Research and Applications, Volume 8, Issue 1, Part-III, pp. 85-90, January 2018.	Pragati Sheel, Rajesh Mehra

12.	"Techniques to improve Darlington pair amplifier applications for high data rate communication system", International Journal of Electronics and Communication Engineering and technology (IJCET), Vol. 8, Issue 5, pp. 7-17, October 2017.	Rashmi Singh, Rajesh Mehra
13.	"Design a Darlington amplifier with improved gain and slew rate", International journal of electronics and communication technology (IJECT), Vol. 8, Issue 4, pp.13-16, October 2017.	Rashmi Singh, Rajesh Mehra
14.	"Low Leakage and PDP Optimized FinFET based ST SRAM Design," UGC Approved in International Journal on Recent and Innovation Trends in Computing and Communication (IJRTCC). Vol. 5, No. 7, pp. 116-120, July 2017.	Ayushi Gagneja and Rajesh Mehra
15.	Recent Advances in Photovoltaic Technology based on Perovskite Solar Cell- A Review", UGC approved in International Research Journal of Engineering and Technology, Vol.4, Issue 7, pp.1284-1296, July 2017.	Navneet Kour, Rajesh Mehra
16.	"Comparative Study of Solar Cell Devices using Lead and Tin based Perovskite Material Through Numerical Simulation", UGC approved International Research Journal of Engineering and Technology, Vol.5, Issue 5, pp.1289-1292, July 2017.	Navneet Kour, Rajesh Mehra
17.	"Energy Efficient CNTFET based Full Adder using Hybrid Logic", UGC Approved Journal, International Journal on Recent and Innovation Trends in Computing and Communication (IJRTCC), Vol.5, No. 7, pp 98-103, July 2017.	Priya Kaushal and Rajesh Mehra
18.	"Efficient design of perovskite solar cell using parametric grading of mixed halide perovskite and copper iodide." Journal of Electronic materials 47, no. 11 (2018): 6935-6942.	Thakur, Neha, Rajesh Mehra, and Chandni Devi.
19.	"Energy Efficient Clustering Based on Expectation Maximization for Homogeneous Wireless Sensor Network", International Journal of Innovative Research in Science, Engineering and Technology, Vol. 06, No.08, pp. 16530-16536, August 2017.	Neha Sharma, Kanika Sharma
20.	"Review on reducing energy consumption and improving the lifetime of LEACH protocol for Wireless Sensor networks" IEEE International Conference on "Computing for Sustainable Global Development pp. 2315-2321, 01st 03rd March, 2017.	Bharti Goyal, Kanika Sharma
21.	"Energy Efficient Clustering Algorithm Based on Maximum Likelihood Estimation on Wireless Sensor Network", IETE International Conference on Science, Technology & Management, International Journal of Electronics, Electrical and Computational System vol. 6, No.9 pp 679-685, September 2017.	Uday K.R and Kanika Sharma
22.	"Review on data gathering in Wireless Sensor Networks with Compressive Sensing" IEEE International Conference on "Computing for	Aman Jindal, Kanika Sharma

	Sustainable Global Development" pp. 2309-2314, 01st. 03rd March, 2017.	
23.	"Maximum Likelihood Estimation based Clustering Algorithm on Wireless Sensor Network - A Review", International Conference on Energy, Communication , Data Analysis& Soft Computing, by IEEE Madras Session, SRK Engineering College, No. 2, pp. 452-457, August 2017.	Uday K.R and Kanika Sharma
24.	"Review paper on Various Clustering Schemes IEEE International Conference on Smart Technologies and Management for Computing, Communication, Controls. Energy, and Materials (ICSTM). pp 44-48, October 2017	Pratiksha Gupta, Kanika Sharma
25.	"Energy Efficient Grid Based Routing Algorithm Using Centrality and BFO for Wireless Sensor Network", International Journal of Innovative Research in Science, Engineering and Technology (IJIRSET), Vol.6, No. 8, pp 16579-16586, August 2017.	Priya Rana, Kanika Sharma
26.	"Energy Efficient Multi Hop Cross Layer Design for Large Scale Wireless Sensor Networks", International Journal of Latest Trends in Engineering and Technology (IJLTET), vol. 8, Issue 4- 1, pp 81-87, August 2017.	Bharti Goyal, Kanika Sharma
27.	"Design of a Compressive Data Gathering Scheme with an Energy Efficient Reconstruction Algorithm for WSN", UGC Approved International Journal of Latest Trends in Engineering and Technology (IJLTET)", Vol.8 Issue (4-1) 5, pp. 097-103, 2017.	Aman Jindal, Kanika Sharma
28.	"Improved LEACH Protocol based on K- Means Clustering Algorithm for Wireless Sensor Network", International Journal of Electronics & Communication Technology (IJECT), Vol.8, No.4, pp 28-32, Oct- Dec 2017.	Pratiksha Saheb, Kanika Sharma
29.	"A Compact Dual Element PIFA Array for Wireless MIMO Advance TDD LTE Applications", International Journal of Advancement In Engineering Technology, Management And Applied Sciences Volume 04, Issue 09, pp. 85-93, September 2017, ISSN:2349-3224, UGC Journal No:63082	Manish Kumar Soni, Garima Saini
30.	"Design Of Reconfigurable Notch Band Antenna for UWB Application Using P-I-N diodes", International Journal of Emerging Trends and Technology In Computer Science, Volume 6, Issue 5, pp. 245-252, September 2017, ISSN:2278-6856, UGC Journal – 48939	Praveen Kumar Chakravarti, Garima Saini
31.	"Evaluation of SAR on Human Phantom Due to Circular SRR Loading", International Journal of Advanced Research in Science and Engineering, Vol. No. 06, Issue No.09, pp. 1384- 1390, September 2017, ISSN: 2319-8354, UGC Journal No:	Garima Saini, Shyam Sunder Pattnaik
32.	"A Review of Wearable/Body Worn Antennas for Body-Centric Wireless Communication (BWC)", International Journal of Advancement In Engineering Technology, Management and Applied Science, Volume 04, Issue 10,	Ajeet Thakur, Garima Saini

	pp. 31-44, October 2017, ISSN:2349-3224, UGC Journal No: 63082	
33.	“A Design Concept of Printed Inverted F-Antenna for Smart Watch Applications”, International Journal of Electrical Electronics And Computer Science Engineering, Volume 4, Issue 5, pp. 62-65, October 2017, ISSN: - 2348-2273, UGC Journal No. 44927	Ajeet Thakur, Garima Saini
34.	“Calculation of Bandwidth And Gain or Improving the Performance of Planar Inverted F-Antenna Using ANN”, International Journal of Advance Research Trends In Engineering and Technology, Vol. 4, Issue 11, pp. 1-7, November 2017, ISSN:2394-3785	Monica Singhal, Garima Saini
35.	“A Compact Dual Element PIFA Array For Wireless LTE Portable Devices”, International Journal For Research In Applied Science and Engineering Technology, Volume 5, Issue XI, pp. 1795-1801 November 2017, ISSN:2321-9653, UGC Journal No. 44382	Manish Kumar Soni, Garima Saini
36.	“Reconfigurable Microstrip Patch Antenna Using Single Switch For Wideband Applications”, International Journal of Emerging Technologies in Engineering Research, Volume 5, Issue 10, pp. 6-9, October 2017, ISSN:2454-6410, UGC Journal No. 44955, Thomson Reuters Research ID - H-8878-2016	Naman Thakur, Garima Saini
37.	"Speaker and speech recognition using deep neural network." International Journal of Emerging Research in Management and Technology 6 (2017): 8.	Gurpreet Kaur, Mohit Srivastava, Amod Kumar
38.	"Designing and Modeling of Speech and Speaker Recognition System to Control the Wheelchair." Advances in Computational Sciences and Technology 10, no. 3 (2017): 445-460.	Gurpreet Kaur, Mohit Srivastava, Amod Kumar
39.	"Genetic algorithm for combined speaker and speech recognition using deep neural networks." Journal of Telecommunications and Information Technology (2018).	Gurpreet Kaur, Mohit Srivastava, Amod Kumar
40.	"Automated classification of non-motor mental task in electroencephalogram based brain-computer interface using multivariate autoregressive model in the intrinsic mode function domain." Biomedical Signal Processing and Control 43 (2018): 174-182.	Suman Dutta, Mandeep Singh, Amod Kumar.
41.	"Integrated speaker and speech recognition for wheel chair movement using artificial intelligence." Informatica 42, no. 4 (2018).	Gurpreet Kaur, Mohit Srivastava, Amod Kumar
42.	“3-D Printed Antennas: A Review”, International Journal of Engineering Science and Computing, Volume 8, Issue No. 3, pp. 16582-16586, March 2018, ISSN: 2321-3361	Arashpreet Kaur, Garima Saini
43.	"Fingerprint enhancement using modified short-time fourier transform." International journal of Engineering & Technology, 7(4) (2018) 7015-7020..	Chopra, Jyotika, Amod Kumar, Anupma Marwaha, and Sanjay Marwaha.

44	Analysis of Feature Extraction Methods for Speaker Dependent Speech Recognition” International journal of Engineering and Technology Innovation, vol. 7, no. 2, 2017, pp. 78 - 88	Gurpreet Kaur, Mohit Srivastava, Amod kumar
45	Optimization of Antenna Parameters Using Artificial Neural Network: A Review” International Journal of Computer Trends and Technology (IJCTT) – Volume 44 Issue 2- February 2017	Monica Singhal, Garima saini
46	A Compact Planner Inverted F Antenna Array for Wireless LTE Portable Devices” International Journal for Research in Applied Science & Engineering Technology (IJRASET) ISSN: 2321-9653; IC Value: 45.98; SJ Impact Factor: 6.887 Volume 5 Issue XI November 2017	Manish Kumar Soni, Garima Saini
National Journals:		
47.	“Deep insights into the advancements and applications of perovskite based photovoltaic cells” Elsevier SCI Published in Journal of Energy Chemistry, ISSN No. 2095-4956	Chandni Devi, Rajesh Mehra,
48.	“Efficient Design of Perovskite Solar Cell using mixed Halide and Copper Oxide”, SCI Published in Chin. Phys. B, Vol. 27, No. 1, pp. 018801-1 – 018801-7.	Navneet Kour, Rajesh Mehra, Chandni
49.	“Reconfigurable Low Pass FIR Filter Design using Canonic Signed Digit for Audio Applications” Indian Journal of Science and Technology, Vol 10(16), April 2017, ISSN (Print): 0974- 6846	Preethi M. Nair, Rajesh Mehra and Chandni
50.	Comparative analysis of Wavelet Curvelet Techniques for Noise Removal”, Journal of Emerging Technologies and Innovative Research, Volume 4, Issue 11, pp. 615-618, November 2017, ISSN No. 2349-5162.	Amit Kumar Rana, Kumud, Rajesh Mehra, Shallu
51.	“Design of SRR array embedded PIFA for LTE-Hi Applications”, Journal of Engineering and Applied Sciences, 12(22), pp. 6033- 6038, 2017, ISSN:1816-949x, Scoups, UGC Journal No:7336	Garima Saini, Shyam Sunder Pattnaik
52.	“ Optically Reconfigurable microstrip patch antenna for wideband applications: A review “ 4 th International Conference on Emerging trends in Engineering , Technology, Science and Management,IETE Janakpuri, new Delhi,India16th july,2017,ISBN:978-93-86171-54-2.	Naman Thakur, Garima Saini

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Sr. No	Name of the Paper Published	Author (s) Name
01.	“Comparative Analysis of Electron Transport Materials in Mixed Halide Perovskite Solar Cells for Enhanced Efficiency”, Journal of Nanoelectronics and Optoelectronics, Vol. 13, pp. 1–10, 2018.	Neha Thakur,Rajesh Mehra
02.	“Efficient Design of Perovskite Solar Cell Using Parametric Grading of Mixed Halide Perovskite and Copper Iodide”, Journal of Electronic Materials https://doi.org/10.1007/s11664-018-6620-z .	Neha Thakur,Rajesh Mehra,Chandni Devi
03.	“Efficient Tandem Organic Light Emitting Diode Using Organic Photovoltaic Charge Generation Layer”, International Journal of Optics, Volume 86, 2018, https://doi.org/10.1155/2018/9458530 .	Akansha Jetly,Rajesh Mehra
04.	“Design of Tandem Organic Light Emitting Diode using efficient charge generation layer”, International Journal of Optics, Volume 88, pp. 304-312, 2019.	Akansha Jetly,Rajesh Mehra
05.	“Device simulation of lead-free MASnI3 solar cell with CuSbS2 (copper antimony sulfide)”, Journal of Material Science (Electronic Materials), Volume 54, Number 7, pp. 5615-5624, 2019. DOI 10.1007/s10853-018-03265-y .	Chandni Devi,Rajesh Mehra
06.	“Breast Cancer Histology Images Classification: Training from Scratch of Transfer Learning”, Journal of ICT Express, Vol. 4(4), 247-254, 2018.	Shallu, Rajesh Mehra

Paper Published in Non-SCI Journal

Sr. No.	Title of the Paper Presented/Accepted along with a Name of the Conference/Seminar (venue, with date)	Author (s) Name
01.	“A Review on Interference Mitigation Technique for Two Tier Macro-Femto Network”, International Journal of Research In Electronics and Computer Engineering, Vol. 6, Issue 2, pp. 1914-1919, APR-JUNE 2018, ISSN:2348-2281, UGCJournal No. 44816	Jyoti Bala, Garima Saini
02.	“Performance Analysis of Fractional Frequency Reuse Schemes Works”, International Journal of Electronics Engineering, Volume 10, Issue 2, pp. 393-398, June 2018-Dec 2018, ISSN:0973-7383 UGC Journal No. 2946	Girisha Kumar,Garima Saini
03.	“Various Handover Techniques for Heterogeneous Networks: A Survey”, International Journal of Research In Electronics And Computer Engineering, Vol. 6, Issue 2, pp. 1909 - 1913,APR-JUNE 2018, ISSN:2348-2281, UGC Journal No. 44816.	Konika Mahajan,Garima Saini
04.	“Planar Antennas for UHF RFID Reader Applications-A Review”, International Journal of Electronics Engineering,Volume 10, Issue 1, pp. 136-139, Jan 2018 -June 2018, ISSN:0973-7383, UGC Journal No. 2946	Naveen Kumar,Garima Saini
05.	“Interference Mitigation Technique for Two Tier Macro- Femto Network using Grey Wolf Optimization”, International Journal of Electronics Engineering, Volume 10, Issue 2, pp.372-377, June 2018-Dec 2018, ISSN:0973-7383, UGCJournal No. 2946	Jyoti Bala, Garima Saini
06.	“Vertical Handover Technique for LTE-A Heterogeneous Network by using Expectation Maximization Algorithm”, International Journal of Electronics Engineering, Volume 10, Issue 2, pp. 378-384, June 2018-Dec 2018, ISSN:0973-7383,	Konika Mahajan,Garima Saini

	UGC Journal No. 2946	
07.	“Compact UHF Patch Antennas for RFID Reader Applications”, Journal of Advance Research in Dynamical & Control Systems, Vol. 10, Special Issue-09, pp. 2477-2483, 2018, ISSN - 1943-023x, Scopus Indexed.	Naveen Kumar, Garima reSaini
08.	“Design Analysis of 2.4GHz PIFA using ABS Material”, Vol.10, Journal of Advance Research in Dynamical & Control Systems Special Issue-09, pp. 2386-2391, 2018, ISSN - 1943-023x, Scopus Indexed.	Arshpreet Kaur, Garima Saini
09.	“Implementation of fractional Frequency Reuse Schemes in LTE-A Network”, Lecture Notes in Networks and Systems, Springer, Volume 46, pp. 313-321, 2019, Scopus Indexed.	Girisha Kumar, Garima Saini
10.	“A Novel Wineglass Shaped Wide Band Antenna for TV White Space Communication”, International Journal of Engineering & Technology, 7(45), pp. 324-328, 2018, Scopus Indexed.	Ghulam Ahmad Raza, Garima Saini, Naveen Kumar
11.	“Multi-Level Fractional Frequency Reuse Schemes for 5G Networks”, Journal of Advance Research in Dynamical & Control Systems, Vol. 10, Special Issue-06, pp. 2027-2033, 2018, ISSN - 1943-023x, Scopus Indexed	Girisha Kumar, Garima Saini
12.	“Method & Implementation of Optimal Routing Mechanism with Wakeup Schedule in WSN”, Journal of Emerging Technologies and Innovative Research (JETIR), ISSN: 2349-5162, Vol. 5, No. 7, pp. No.521-528, July 2018. (UGC Journal No. 63975)	Sushila, Kanika Sharma
13.	*Wireless Nanosensors: A Review", UGC Approved Journal of Emerging Technology and Innovative Research (JETIR), ISSN-2349-5 162, Vol.5, No. 6, pp. 70-74, June 2018. (UGC Journal No. 63975)	Pooja Kataria, Kanika Sharma
14.	"An Improved Pulse Based Localization Algorithm for Wireless Nanosensor Network", UGC Approved International Journal of Electronics and Engineering (IJEE), ISSN-0973-7383, Vol.5, No. 2, pp. 342-351, June 2018. (UGC Journal No. 2946)	Pooja Kataria, Kanika Sharma
15.	“Balanced and Energy-Efficient Wireless Sensor Network Using A-Star Algorithm”, Journal of Emerging Technologies and Innovative Research (JETIR), ISSN: 23495162, Vol. 7, No. 5, pp. No.380-385, July 2018. (UGC Journal No. 63975)	Harsh Sharma, Kanika Sharma
16.	“Algorithm for Improved Normalized Residual Energy in Wireless Nano - Sensor networks”, International Journal of Electronics and Engineering (IJEE), ISSN-2455-2585, Vol.4, No. 10, pp. 272-282, October 2018. (UGC Journal No. 47719)	Pooja Kataria, Kanika Sharma
17.	“A Review on Cluster Based Routing Protocols for Wireless Sensor Network”, International Journal of Research In Electronics and Computer Engineering, Vol. 6, Issue 2, pp. 1896-1900, June 2018, ISSN: 2393-9028 (print)/ISSN: 2348-2281 (online). (UGC Journal No. 44816)	Shilpa Mohina, Kanika Sharma
18.	“Cluster Head Selection using Gradient Descent Algorithm For Wireless Sensor Network”, International Journal of Technical Innovation in Modern Engineering and Science, Vol. 4, Issue 9, pp. 62-69, September 2018, ISSN: 2455-2585. (UGC Journal No. 47719)	Shilpa Mohina, Kanika Sharma
19.	“Efficient Clustering Algorithm Based on Gradient Descent Approach for Wireless Sensor Network”, UGC Approved International Journal of Electronics and Engineering (IJEE), ISSN: 0973-7383, Vol.10, No. 2, pp. 385-392, June 2018.	Shilpa Mohina, Kanika Sharma

20.	“Grid Based Clustering Protocol In Wireless Sensor Network: A Review”, Journal of Emerging Technology and Innovative Research (JETIR), ISSN-2349-5162, Vol. 5, No. 7, pp. 441-444, July 2018. (UGC Journal No. 63975)	Monika Chauhan, Kanika Sharma
21.	“Improved Grid Based Clustering and Combinational Routing for Wireless Sensor Network”, UGC Approved International Journal of Electronics and Engineering (IJEE), ISSN-2349- 5162, Vol.10, No. 2, pp. 336-341, July 2018. (UGC Journal No. 2946)	Monika Chauhan, Kanika Sharma
22.	“INPMAC: An Improved Node Power Based MAC Protocol with Adaptive Listening Period”, International Journal of Technical innovation in Modern Engineering and Science, ISSN-2349-5162, Vol.4, No. 7, pp. 1322-1327, July 2018. (UGC Journal No. 47719)	Vishakha, Kanika Sharma
23.	“A Review on Energy Efficient MAC Protocols in Wireless Sensor Network”, Journal of Emerging Technology and Innovative Research (JETIR), ISSN-2455-2585, Vol. 5, No. 7, pp. 607-611, July 2018. (UGC Journal No. 63975)	Vishakha, Kanika Sharma
24.	“Enhancing the Lifetime of EADUC using PSO for Wireless Sensor Networks”, International Journal of Electrical, Electronics and Computer Science Engineering, E-ISSN: 2348-2273 P-ISSN: 2454-1222, Vol. 5, No. 3, pp. 100-105, June 2018.	Ankita Mahajan, Kanika Sharma
25.	“Low noise amplifier using Darlington pair at 90 nm Technology” Scopus Indexed International Journal of Electrical and Computer Engineering, 8(4), pp. 2054-2062, 2018.	Singh R, Rajesh Mehra
26.	“Automatic Magnification independent classification of breast cancer tissue in histological images using deep convolution neural network” Scopus Book Chapter on Communications in Computer and Information Science, pp. 772-781, 2019.	Shallu, Rajesh Mehra
27.	“Qualitative Analysis of Darlington feedback amplifier at 45nm Technology” Scopus Indexed Bulletin of Electrical Engineering and Informatics, 7(1), pp. 21-27, 2018.	Singh R, Rajesh Mehra
28.	“Comparative Analysis of Electron Transport Materials in Mixed Halide Perovskite Solar Cells for Enhanced Efficiency”, Journal of Nanoelectronics and Optoelectronics, Vol. 13, pp. 1–10, 2018.	Neha Thakur, Rajesh Mehra
29.	“Review on Full Protection Covers for Parked Car at Remote Stations” IEEE International Conference on Signal Processing, Computing and Control, pp. 24-29, October 2019.	Kirti Masown, Rajesh Mehra

Paper Published/Presented at Important Conferences/Seminar (International)

Sr. No.	Title of the Paper Presented/Accepted along with a Name of the Conference/Seminar (venue, with date)	Author(s) Name
01.	“Comparative Evaluation of Cluster Head Selection Algorithm for Wireless Sensor Networks”, International Conference on Manufacturing Advance Computing, Renewable Energy and Communication (MARC-2018) from 19-20th July 2018 at HMRITM, New Delhi.	Tanvi Sood, Kanika Sharma
02.	“A Comparative Analysis on the Scheduling Algorithms for Wireless Sensor Networks”, IEEE 13th International Conference on industrial and Information Systems from 01- 02 December, 2018 at IIT Ropar.	Tanvi Sood, Kanika Sharma
03.	“A Survey on Routing Algorithms for Wireless Sensor Network”, IEEE International Conference on Recent Innovations in Electrical,	Harsh Sharma, Kanika Sharma

	Electronics & Communication Engineering (ICRIEECE), Manuscript ID – 355 with catalog “CFP18P98-PRT:978-1-5386-5994-6” July 2018.	
04.	“Routing and Clustering Optimization Techniques in WSN: A Review”, IEEE 8 th International Conference on Computing and Networking Technologies, July 2017, ISBN-978-1-5090-3037-8	Neha Sharma, Kanika Sharma
05.	Recent Advancements in clustering Protocols for Wireless Sensor Networks,” IEEE 8 th International Conference on Computing and Networking Technologies, July 2017, ISBN-978-1-5090-3037-8	Priya Rana, Kanika Sharma
06.	“Low Complexity MMSE Channel Estimator for Downlink MC-CDMA System” Proceedings of the Second International Conference on Inventive Systems and Control (ICISC 2018) IEEE Xplore Compliant – Part Number: CFP18J06-ART, ISBN:978-1-5386-0807-4; DVD Part Number:CFP18J06DVD, ISBN:978-1-5386-0806-7	Nitin Kumar Suyan, Garima Saini

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Sr. No.	Name of the Paper Published	Author (s) Name
01.	"Energy efficient compression sensing-based clustering framework for IoT-based heterogeneous WSN" Springer Journal of Telecommunication Systems, Vol.74, pp.311-330, March 2020.	Rachit Manchanda, kanika Sharma
02.	"Design of Hybrid Fractal Boundary Antenna for RF Energy Harvesting Applications," International Journal of Innovative Technology and Exploring Engineering, Volume-8, Issue-9S, July 2019, pp.411-413. [DOI: 10.35940/ijitee.I1065.0789S19].	Amritpal Kaur, Balwinder S. Dhaliwal, Suman Pattnaik
03.	"A Modified Two-Step ANN Ensemble Approach to Improve Generalization and its Application in Fractal Antenna Design." Journal of Circuits, Systems and Computers, [DOI:https://doi.org/10.1142/S0218126620501066].No. 7 (2020) 2050106 (13 pages). Vol.29,	Balwinder S. Dhaliwal, Gaganpreet Kaur, Navreet Saini, Shyam Sundar Pattnaik and Simranjit Kaur Josan
04.	"Design of Wearable Microstrip Patch Antenna for WBAN Applications to Enhance Bandwidth using Multiple Slots and CRR," International Journal of Advanced Research in Engineering and Technology, Vol. 11, No. 8, August 2020, pp. 319-327. [DOI: 10.3421 8/LJARET.11.8.2020.032]	Devarapaga Sriramulu, Garima Saini and Balwinder S. Dhaliwal
05.	"Flexible Wearable Patch Antennas for Body Area Network Applications: A Review" Wutan Huatan Jisuan Jishu, Volume XVI, Issue XI.December2020, pp. 1040-1046. [DOI:doi.org/10.37896/whjj16.12/468]	Vikas Jain and Balwinder S. Dhaliwal
06.	"Hybrid Fractal Boundary MIMO Antenna for Multiband Applications," SAMRIDDHI: A Journal of Physical Sciences, Engineering and Technology, Vol. 12, Special Issue 3, 2020, pp. 23-27. [DOI:10.18090/samriddhi.v1 2iS3.5 (Published 30-11-2020)]	Mansi Girdhar, and Balwinder S. Dhaliwal
07.	"Wireless Sensor Network approaches for monitoring and irrigation of farm fields in Precision Agriculture: A Review," Solid State Technology Vol. 63, No. 6, 2020, pp. 18401 - 18410.	Amandeep Kumar, Balwinder Singh Dhaliwal, and Damanpreet Singh
08.	"PSO Based Energy Efficient Clustering Protocol for WSNs," Journal of Engineering & Technology Education, Vol. 14, No. 2, July- December, 2020, pp. 46-50.	Amandeep Kumar, Balwinder Singh Dhaliwal and Damanpreet Singh
09.	"Miniaturized Wearable Fractal Patch Antenna for Body Area Network Applications," International Journal of Electronics and Telecommunications, Vol. 67, No. 2, 2021, pp. 149-154.[DOI: 10.24425/ijet.2021.135957]	Vikas Jain, and Balwinder Singh Dhaliwal
10.	"A review paper on estimation of pain of patients using various techniques and methods "National Conference on Biomedical Engineering (NCBE-2020), held on 22-24 Jan, 2020.	Amit Kumar, Dr.Amod Kumar, Dr.Kanika Sharma
11.	"A review on Energy Efficient Routing protocol in Wireless sensor Network" National Conference on Biomedical Engineering (NCBE-2020), held on 22-24 Jan, 2020.	Sanjay Kumar Mirania, Kanika Sharma

12.	Scale-free PSO for in-run and infield inertial sensor calibration, Measurement, Vol. 147, July 2019, available on-line. (IF = 3.364)	Shashi Poddar, Amod Kumar
13.	Real time estimation and suppression of hand tremor for surgical robotic applications Microsystem Technologies, January 2020, DOI 10.1007/s00542-019-04736-1 (IF = 1.61)	Akhlesh Kumar, Sanjeev Kumar, Ajeet Kaushik, Amod Kumar & J. S. Saini
14.	Development of a Hybrid SIMBO-ANN Algorithm for Optimization of SRR parameters to enhance the performance of PIFA, Journal of Scientific & Industrial Research, Vol. 78, November 2019, pp. 727-732.	Garima Saini Dr. S SPattnaik
15.	Impact of High-k Gate dielectric and Work functions variation on Electrical Characteristics of VeSFET, Advances in Intelligent Systems and Computing (Springer book series)	Gurpurneet Kaur, Sandeep Singh Gill, Munish Rattan
16.	Carbon Nano Tube based sensor design for NEMS/MEMS applications, In Raj, B., Khosla, M., & Singh, A. (Ed.), Major Applications of Carbon Nanotube Field-Effect Transistors (CNTFET) (pp. 37-53). IGI Global. http://doi:10.4018/978-1-7998-1393-4.ch003	Rekha Devi, Sandeep Singh Gill
17.	Development of range free three dimensional localisation in wireless sensor networks, International Journal of Sensor Networks (IJSNET), Vol. 31, No. 1, 2019	Shashi Bhushan Kotwal, Sandeep Singh Gill, Kuldeepak Singh Saini
18.	“Conventional Machine Learning and Deep Learning Approach for Multi-Classification of Breast Cancer Histopathology Images—a Comparative Insight”, Journal of Digital Imaging, 33, 632–654 (2020). Indexing: SCIE, Scopus.	Shallu Sharma & Rajesh Mehra
19.	“Effect of layer-wise fine-tuning in magnification-dependent classification of breast cancer histopathological image”, The Visual Computer, 36, 1755–1769 (2020).	Shallu Sharma & Rajesh Mehra
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21.	“Investigation of Organic LED Materials Using a Transparent Cathode for Improved Efficiency”, Journal of Electronic Materials Volume 48(7), 4409–4417, April 2019.	Rana, R., Mehra, R.
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25.	A deep insight to heterogeneous routing protocols for harsh environment in Wireless Sensor Network, “Journal of Emerging Technologies and Innovative Research, Vol.6, no.6, pp. 565-570, June, 2019	Pratima Malhotra and Kanika Sharma
26.	Improved Multiple Gateway Node based Routing Architecture for heterogeneous Wireless Sensor Network ‘Elsevier International Journal of Innovative Technology and Exploring Engineering, Vol.8, no.10, pp.2175-2180, August 2019.	Pratima Malhotra and Kanika Sharma

27.	Study of Hotspot mitigating Techniques in Wireless Sensor Networks, "Journal of emerging Technologies and Innovative Research, vol.6, no.6, pp. 249-252, June 2019	Anjali Thakur, Kanika Sharma
28.	"Energy Efficient Dynamic Multi-Hop Routing Technique in Wireless Sensor Networks" International Journal of Engineering and Advanced technology, ISSSN:2249-8958, Vol.8, Issue 6, Aug.2019,pp:2942-2949	Anjali Thakur, Kanika Sharma
29.	H-Best Particle Swarm Optimization Based Localization Algorithm for Wireless Sensor Network "International Journal of Engineering and Advanced Technology (IJEAT), Volume-9 Issue-1, pp-2769-2778 October 2019	Yadevendra Kamal, Kanika Sharma
30.	Review to the optimized localization for wireless sensor network, "International Journal of Emerging Technologies and Innovative Research, ISSN: 2349-5162, Vol.6, Issue 6, Page no. 765-770, June-2019	Yadevendra Kamal, Kanika Sharma
31.	Energy Efficient Inter and Intra Cluster Movement of Mobile Sink in Wireless Sensor Network, "Scopus International Journal of Engineering and Advanced Technology (IJEAT), ISSN: 2249-8958, Volume-8, issue-6, August 2019	Nisha Sharma, Kanika Sharma
32.	Study of Routing Schemes and its Contribution in Evolution of Sink, International Journal of Emerging Technologies and Innovative Research (JETIR), (ISSN-2349-5162), Volume 6, Issue 6, Page No. 457-462, June 2019	Nisha Sharma, Kanika Sharma
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37.	Dual-Band Slotted Filtering Antenna For LTE-Advanced Applications, International Journal of Scientific & Technology Research, Vol. 8, Issue 8, August 2019, pp. 1463-1467, ISSN 2277-8616, Scopus	GurpreetKour, Garima Saini
38.	Different Substrate Material for Designing a Passive UHF RFID Tag Antenna, International Journal of Innovative Technology and Exploring Engineering, Vol.8, Issue 9S, pp. 572-580, July 2019, ISSN 2278-3075, Scopus	P. Limameren Chang, Garima Saini
39.	Multipolarised Near Field RFID Antenna for Mobile Devices, International Journal of Electronics and Engineering, Vol. 11, Issue 2, pp. 41-50, June – Dec 2019, ISSN 0973-7383	Gaurav Gupta, Garima Saini
40.	Various Techniques of Interference Management in Heterogeneous Network: A Review, International Journal of Scientific Research in Science and Technology, Vol. 6, Issue 3, pp. 310-328, ISSN 2395-6011	BaljotKaur, Garima Saini
41.	Enhancing Cell Throughput &Area Spectral Efficiency Using Two Level Soft Frequency Reuse Technique", International Journal of	BaljotKaur, Garima Saini

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43.	Broadband Stacked Antenna Design with Hybrid Structure for C-band Communication, International Journal of Innovative Technology and Exploring Engineering, Vol. 8, Issue 10, pp. 3510-3516, August 2019, ISSN 2278-3075, Scopus.	Swati Kandoria, Garima Saini
44.	Antenna Array Design Using Hybrid Feed for High Frequency Application, International Journal of Engineering and Advanced Technology, Vol. 8, Issue 6, August 2019, ISSN 2249-8958, Scopus	SumitTyagi, Garima Saini
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46.	A Review on Hybrid Feed Micro strip Antenna Array, Journal of Emerging Technologies and Innovative Research, Vol. 6, Issue 6, June 2019, ISSN 2349-5162, UGC Journal	SumitTyagi, Garima Saini
47.	Design and Performance Analysis of Application Specific Integrated Circuit for Internet of Things Application, Sensor Letter ASP, Vol.18, PP. 31-38, Jan 2020	Vivek Pogra, S K ishvakarma, and Balwinder Raj
48.	Vertical Tunnel FET: Design Optimization with Introduced SiGe Layers”, National Conference on Biomedical Engineering Dept. of ECE, NITTTR Chandigarh, 22-24 Jan 2020.	Shailendra Singh and Balwinder Raj
49.	A review of Non-conventional Analog circuit design techniques for low voltage low power operation, International Journal of research in Advent technology, Vol 7, No 5, May 2019	Kiranjeet Kaur, Sandeep Singh Gill, Navneet Kaur
50.	Whale Optimization Algorithm for Performance Improvement of Silicon-On-Insulator FinFET, International Journal of Artificial Intelligence (Scopus), Volume 18, Number 1, March 2020	Gurpuneet Kaur, Sandeep Singh Gill, Munish Rattan
51.	Stress and Deformation Analysis of Piezoresistive square diaphragm nano pressure sensor, Sensor Letters, Vol 17, No 9, September 2019, Scopus Indexed	Rekha Devi, Sandeep Singh Gill
52.	“Synergy of Bis (Sulfanylidene)Tungsten and Spiro-Ometad for an Efficient Perovskite Solar Cell”, International Journal of Engineering and Advanced Technology (IJEAT), Volume-9 Issue-1, pp.4011-4016, October 2019.	Srishtee Chaudhary, Rajesh Mehra
53.	“IoT Based Full Protection Covers for Parked Car at Remote Stations” International Journal of Innovative Technology and Exploring Engineering (IJITEE), Volume-8 Issue-11, pp. 4185 - 4189, September 2019.	Kirti Masown, Rajesh Mehra
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55.	“Multi-modal Iris Recognition System based on Convolution Neural Network” International Journal of Innovative Technology and Exploring Engineering (IJITEE), Volume-8 Issue-10, pp. 798 - 803, August 2019.	Gajanan Choudhari, Rajesh Mehra, Shallu

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58.	"Comparative Evaluation of Tin Perovskite based Solar Cell" Trends in Opto-Electro & Optical Communication, Volume 9, No. 3, pp. 15 - 18, 2019.	Chandni Devi, Rajesh Mehra
59.	"Face Spoofing Detection using Enhanced Local Binary Pattern", Scopus Indexed International Journal of Engineering and Advanced Technology, Vol. 9, No. 2, pp. 3365-3371, December 2019.	Karuna Grover, Rajesh Mehra
60.	"Biometric Face Anti-Spoofing And Context-Based Detection Techniques: A Review", Journal of Emerging Technologies and Innovative Research, Vol. 6, No. 4, pp. 812-816, April 2019.	Karuna Grover, Rajesh Mehra
61.	"Investigation of organic LED materials using a transparent cathode for improved efficiency." Journal of Electronic Materials 48, no. 7 (2019): 4409-4417.	Rana, Rita and Rajesh Mehra
62.	"Recognize Various Scenes using Classification methods in Million Images Dataset: A Review", in Journal of Emerging Technologies and Innovative Research (JETIR), Vol.6, Issue6, pp.240-246, June 2019.	Priya Singla, Rajesh Mehra
63.	"Development of range free three dimensional localisation in wireless sensor networks." <i>International Journal of Sensor Networks</i> 31, no. 1 (2019): 52-63.	Kotwal, Shashi Bhushan, Sandeep Singh Gill, and Kuldeepak Singh Saini.

Conference/Seminar

Sr. No.	Title of the Paper Presented/Accepted along with a Name of the Conference/Seminar (venue, with date)	Author(s) Name
01.	A review on different Cluster head selection methods for improving the lifetime of a wireless sensor network in International conference on Electrical, Electronics, Computer Science and Information Technology on 2 nd Jan. 2020 at Ernakulam, India	Vinod, Kanika Sharma
02.	"Optimization of Hybrid Fractal Antenna Using Curve Fitting and GA Approach for RF Energy Harvesting Application," IEEE Indian Conference on Antennas and Propagation (InCAP), 19-22 Dec. 2019, Ahmedabad, India, DOI: 10.1109/InCAP47789.2019.9134573	Balwinder S. Dhaliwal, Amritpal Kaur, Suman Pattnaik, and Shyam S. Pattnaik,
03.	Impact of High-k Gate Dielectric and Work function Variation on Electrical Characteristics of VeSFET, AMLTA2020, Manipal University, Jaipur, February 13-15, 2020	Gurpurneet Kaur, Sandeep Singh Gill, Munish Rattan
04.	"Advances in Solar Cells as Renewable Energy", International Conference on Advancements in Computing & Management (ICACM), pp.201-208, Bangkok, Thailand, April 2019.	Srishtee Chaudhary, Rajesh Mehra
05.	"35.3% Efficient Non-Toxic Perovskite Solar Cell using Copper-Iodide and Tin-Oxide", IEEE International Conference on Computation, Automation and Knowledge Management (ICCAKM), pp.258-262, Dubai, Jan 9-11, 2020.	Srishtee Chaudhary, Rajesh Mehra

06.	“FPGA Based Multiplier Less Decimator for Wireless Communication Systems”, IEEE International Conference on Computation, Automation and Knowledge Management (ICCAKM), pp. 58-61, Dubai, Jan 9-11,2020.	Geetanjali, Rajesh Mehra, Lajwanti Singh
07.	“Review on Full Protection Covers for Parked Car at Remote Stations” IEEE International Conference on Signal Processing, Computing and Control, pp. 24-29, October 2019.	Kirti Masown, Rajesh Mehra
08.	“Performance Enhancement of Datacenters by using low power and high speed CNTFET based SRAM Cell” IEEE International Conference Image Information Processing, pp. 459-462, November 2019.	Chauhan R, Mehra R
10.	“Performance Investigation of CH ₃ NH ₃ SnI ₃ Solar Cell with HTM of CuSbS ₂ ” Symposium on NanoGe Fall Meeting, Berlin, Germany, November 2019.	Chandni Devi, Rajesh Mehra
11.	“An Extensive Review on Organic Light-Emitting Diode for Energy-Saving and Eco-friendly Technology” Springer International Conference on Applications of Computing, Automation and Wireless Systems in Electrical Engineering, pp 891-912, June 2019.	Rita Rana, Akansha Jetly, Rajesh Mehra

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Sr. No.	Name of the Paper Published	Author (s) Name
01.	"Investigation of inherent capacitive effects in linear memristor model." Silicon 13, no. 10 (2021): 3423-3430.	Singh, Jeetendra, Sanjeev Kumar Sharma, Balwinder Raj
02.	Comparative Study of Efficient Design, Control and Monitoring of Solar Power Using Internet of Things." Sensor Letters 18, no. 5 (2020): 419-426.	Kaur, Parminder, Vikas Pandey, and Balwinder Raj. "
03.	"Comparative analysis of photovoltaic technologies for high-efficiency solar cell design." Superlattices and Microstructures 153 (2021): 106861.	Sharma, Divya, Rajesh Mehra, and Balwinder Raj.
04.	"OLEDs for low power flexible electronic devices and optical fiber communication system." Journal of Engineering & Technology Education, Vol. 14, No. 2, July-December, 2020	Er. Bodade Sandip Vasudeo, Dr. Sandip Singh Gill and Dr. Balwinder Raj
05.	"Parametric Investigation and Design of Junctionless Nanowire Tunnel Field Effect Transistor." Silicon (2021): 1-7.	Kumar, Parveen, and Balwinder Raj.
06.	"Improved sensitivity of dielectric modulated junctionless transistor for nanoscale biosensor design." Sensor Letters 18, no. 4 (2020): 328-333.	Singh, Shradhya, Shashi Bala, Balwant Raj, Balwinder Raj
07.	"An analytical modeling of charge plasma-based Tunnel Field Effect Transistor with impacts of gate underlap region." Superlattices and Microstructures 142 (2020): 106512.	Wadhwa, Girish, and Balwinder Raj.
08.	"Dual-material gate-drain overlapped DG-TFET device for low leakage current design." Silicon 13, no. 5 (2021): 1599-1607.	Kumar, Sunil, Balwant Raj, and Balwinder Raj.
09.	"Development and Analysis of Compact Model for Double-Gate Schottky Barrier Carbon Nano Tube Field Effect Transistor." Journal of Nanoelectronics and Optoelectronics 15, no. 10 (2020): 1199-1208.	Bhardwaj, Anil Kumar, Sumeet Gupta, and Balwinder Raj.
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14.	"Speech-Based Vehicle Movement Control Solution." Journal of Telecommunications and Information Technology (2021).	Kaur, Gurpreet, Mohit Srivastava, and Amod Kumar.
15.	Analysis of ONOFIC technique using SiGe heterojunction Double Gate Vertical TFET for low power applications", Journal of Silicon, Springer, July 2020.	Shailendra Singh, Balwinder Raj,"
16.	Development & Analysis of compact model for Double Gate Schottky Barrier CNTFET, Journal of Nanoelectronics and Optoelectronics, ASP, August 2020	Anil Kumar Bhardwaj, Sumeet Gupta and Balwinder Raj
17.	"Mobile Sink Based Improved Energy Efficient Routing using Cluster coordinator Node in Wireless Sensor Network"	Sanjay Kumar Mirania, Kanika Sharma

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18.	"Compact Flexible and Wearable Fractal Patch Antenna for Medical Body Area Network Applications," International Journal of Microwave and Optical Technology, Vol. 16, No.5, September 2021. pp. 432-440	Vikas Jain, Balwinder S. Dhaliwal, and Jayant G. Joshi
19.	"Energy Efficient Clustering Protocols for Wireless Sensor Networks: A Review," Webology, Vol. 18, No. 4, 2021, pp. 391-404.	Amandeep Kumar, Balwinder Singh Dhaliwal, and Damanpreet Singh
20.	"A novel framework for energy-efficient compressive data gathering in heterogeneous wireless sensor network", International Journal of Communication Systems, October 2020. https://onlinelibrary.wiley.com/doi/abs/10.1002/dac.4677	Rachit Manchanda, Kanika Sharma
21.	"LUET: A novel lines -of-uniformity based clustering protocol for heterogeneous-WSN for multiple-applications, Journal of King Saud University Computer and Information Sciences, Elsevier, September,2020. https://doi.org/10.1016/j.jksuci.2020.09.016	Tanvi Sood, Kanika Sharma
22.	"Enhanced Traffic-adaptive slotted MAC for 100T-based smart monitoring grid," Journal of SuperComputing, Feb.2021 DOI:10.1007/s11227-020-03588-1	Tanvi Sood, Kanika Sharma
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24.	. "Design and investigation of doped triple metal double gate vertical TFET for performance enhancement." Silicon 13, no. 6 (2021): 1839-1849.	Wadhwa, Girish, Jeetendra Singh, and Balwinder Raj
25.	"Surface Potential Modeling and Simulation Analysis of Dopingless TFET Biosensor." Silicon (2021): 1-10.	Wadhwa, Girish, and Balwinder Raj.
26.	"Design and Simulation of Low Power Microcontroller for Internet of Things Applications." Sensor Letters 18, no. 5 (2020): 401-409.	Yadav, Divya, Balwant Raj, and Balwinder Raj.
27.	Reconfigurable Notch Band Antenna for UWB Application: A Review" International Journal of Engineering Trends and Technology (IJETT) – Volume-44 Number-3- February 2017	Praveen Kumar chakravarti, Garima Saini
28.	Comparative Analysis of Nanowire Tunnel Field Effect Transistor for Biosensor Applications, Journal of Silicon, Springe, Sep, 2020	Parveen Kumar, Sanjeev Kumar, Balwinder Raj
29.	Design and analysis of double-gate junctionless vertical TFET for gas sensing applications", Applied Physics A, Springer, Vol.127, No.16, 2 Jan 2021	Balwinder Raj, Manta Khosla, Sonal
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31.	Analytical and compact modeling of sige hetero-Material vertical L-shaped TFET, Journal of silicon	Shailendra Singh, Balwinder Raj
32.	Analysis of Junction less based symmetric Nanogap embedded TFET TFEE Biogense, IETE Journal of Research	Girish and Balwinder Raj
33.	Comparative Analysis of OFETs Materials and Devices for Sensor Applications. Silicon, 1-9.	Raj, B., Kaur, P., Kumar, P., & Gill, S. S.

34.	"Design and simulation of triple metal double-gate germanium on insulator vertical tunnel field-effect transistor." <i>Microelectronics Journal</i> 114 (2021): 105125.	Chawla, Tulika, Mamta Khosla, and Balwinder Raj.
35.	"In1-xGaxAs Double Metal Gate-Stacking Cylindrical Nanowire MOSFET for Highly Sensitive Photo Detector." <i>Silicon</i> (2021): 1-7.	Sharma, Sanjeev Kumar, Parveen Kumar, Balwant Raj, and Balwinder Raj.
36.	"Performance analysis of channel and inner gate engineered GAA nanowire FET." <i>Silicon</i> 13, no. 6 (2021): 1863-1869.	Ashima, Vaithyanathan. D., Balwinder Raj.
37.	Design and Performance Analysis of FinFET Based SRAM Cell Stability, 'Sustainable Development through Engineering Innovations (SDEI), 17-19 September, 2020 at Guru Nanak Dev Engineering College, Ludhiana (Punjab), India	Gurpurneet Kaur, Sandeep Singh Gill, Munish Rattan
38.	Lanthanum doped Zirconium Oxide (LaZrO2) High-k Gate Dielectric FinFET SRAM Cell Optimization", accepted for publication in <i>Transactions on Electrical and Electronic Materials</i> . (Scopus)	G Kaur, SS Gill, M Rattan
39.	A squared bossed diaphragm piezoresistive pressure sensor based on CNTs for low pressure range with enhanced sensitivity. <i>Microsystem Technologies</i> , 1-9.	Devi, R., & Gill, S. S.
40.	Compact and Low-Profile Planar Antenna with Novel Metastructure for Wearable MBAN Devices." <i>Wireless Personal Communications</i> (2021): 1-13.	Ramanpreet, Nancy, Munish Rattan, and SS Gill

Paper Published by the Institute in Non-SCI Journals

Sr. No.	Name of the Paper Published	Author (s) Name
01.	Design of Wearable Antennas for Body area Networks. In: Pant M., Sharma T., Verma O., Singla R., Sikander A. (eds) <i>Soft Computing: Theories and Application. Advances in Intelligent Systems and Computing</i> , Vol 1053. Springer, Singapore, 11 February 2020, https://doi.org/10.1007/978-981-15-0751-9_84 .	V.Jain and Balwinder Singh Dhaliwal
02.	"Design of Wearable Microstrip Patch Antenna for WBAN Applications to enhance Bandwidth using Multiple slots and CRR," <i>International Journal of Advanced Research in Engineering and Technology</i> , Vol.11, No8, August 2020, pp.319-327.	Devarapaga Sriramulu, Garima Saini and Balwinder Singh Dhaliwal
03.	"Flexible wearable Patch Antennas for Body Area Network applications: A Review" Wutan Huatan Jisuan Jishu, Volume XVI, Issue XII, December 2020, pp.1040-1046. Doi.org/10.37896/whjj16.12/468	Vikas Jain and Balwinder Singh Dhaliwal
04.	"Hybrid Fractal Boundary MIMO Antenna for Multiband Applications," <i>SAMRIDDHI: A Journal of Physical Sciences, Engineering and Technology</i> , Vol. 12, Special Issue 3,2020, pp.23-27. DOI:10.18090/samriddhi v12i3S.5 (Published 30-11-2020)	Mansi Girdhar and Balwinder Singh Dhaliwal
05.	"Miniaturized Wearable Fractal Patch Antenna for Body Area Network Applications," <i>International Journal of Electronics and Telecommunications</i> , Vol.67, No.2,2021, pp.149-154.OI:10.24425/ijet.2021.135957	Vikas Jain and Balwinder Singh Dhaliwal
06.	"Artificial Intelligence based Nanoscale FinFET Device", <i>Journal of Seybold Report</i> , Vol. 15, Issue 9, 2020.	Gurpurneet Kaur, Sandeep Singh Gill and Munish Rattan

07.	"Design of Compact MIMO Antenna for 5G Mobile Terminal", International Journal of Recent Technology and Engineering (IJRTE) ISSN: 2277-3878, Volume-9 Issue-3, September 2020.	Susamma Mathew, Garima Saini, S.S Gill
08.	"Design and Investigation of Junctionless DGTFT for Biological Molecule Recognition" Transactions on Electrical and Electronic Materials, Springer, Vol. , PP. 8 Aug, 2020	Girish Wadhwa, Priyanka Kamboj; Jeetendra Singh, Balwinder Raj
09.	smart Advanced DV-Hop Localization Algorithm for Wireless Sensor Network", International Journal of Advanced Research in Engineering and Technology (IJARET) ISSN Print: 0976-6480 and ISSN Online: 0976-6499, pp. 359-369, Volume-11 Issue-8, August2020.	Jamal Kutty K, Kanika Sharma
10.	Lanthanum doped Zirconium Oxide (LaZrO ₂) High-k Gate Dielectric FinFET SRAM Cell Optimization", accepted for publication in Transactions on Electrical and Electronic Materials. (Scopus)	G Kaur, SS Gill, M Rattan
11.	Compact and Low-Profile Planar Antenna with Novel Metastructure for Wearable MBAN Devices." Wireless Personal Communications (2021): 1-13.	Ramanpreet, Nancy, Munish Rattan, and SS Gill
12.	A squared bossed diaphragm piezoresistive pressure sensor based on CNTs for low pressure range with enhanced sensitivity. Microsystem Technologies, 1-9.	Devi, R., & Gill, S. S.
13.	Whale Optimization Algorithm Approach for Performance Optimization of Novel Xmas Tree-Shaped FinFET. Silicon, 1-12.	Kaur, G., Gill, S. S., & Rattan, M.
14.	A Review on different cluster Head Selection Methods for improving the lifetime of Wireless Sensor Networks; International Journal of Advance Computational Engineering in Networking (IJACEN) col.8, Issue-4, April 2020	Vinod Kumar, Kanika Sharma
15.	Improved DV-HOP Localization Algorithm for Wireless sensor Networks, international Journal of Engineering in Advance Technology (IJEAT), VOL.9, Issue 5, June 2020	Janal Kutty, Kanika Sharma
16.	GAEER: Genetic Algorithm based energy efficient routing protocol in WSN, International Journal of Scientific in Technology research (Scopus Listed) vol.9, Issue 6, June 2020.	Roshan Lal, Kanika Sharma

PAPERS PUBLISHED / PRESENTED IN INTERNATIONAL CONFERENCES/SEMINARS

Sr.No.	Title of the Paper Presented/Accepted alongwith a Name of the Conference/Seminar (venue, with date)	Author (s) Name
01.	"Analysis of the Effect of Infill Density of 3D Printed Substrate on Rectangular Microstrip Antenna Performance," IEEE Sponsored Indian Conference on Antennas and Propagation (InCAP 2021),December 13-16, 2021, Malaviya National Institute of Technology, Jaipur.	Balwinder Singh Dhaliwal, Kush Singla, and Garima Saini,
02.	"Investigation of Impact of Mobile Phone Radiations on EEG/ ECG and Modeling of Their Coherence using ANN Ensemble" 3rd International Conference on Sustainable and Innovative Solutions for Current Challenges in Engineering & Technology (ICSISCET 2021) 13th- 14th November 2021, Madhav Institute of Technology & Science, Gwalior, India.	Suman Pattnaik, Balwinder Singh Dhaliwal and S. S. Pattnaik

03.	"Characterization and Comparison of 3D Printed Substrate with Varying Infill Density for Antenna Design Applications," International Conference on Emerging Technologies: AI, IoT and CPs for Science & Technology Applications, 6th -7th Sep, 2021, NITTR Chandigarh.	Kush Singla, Balwinder Singh Dhali wal and Garima Saini
04.	"Design and crumpling analysis of a wearable antenna for WiMAX applications," 6h IEEE International Conference on Communication and Electronics Systems (ICES), 8-10 July 2021,Coimbatre. India, pp. 426-429,[DOI: doi: 10.1109/ICES51350.2021.9489259].	D. Mandal, I. Bala, S. S. Pattnaik and Balwinder. S. Dhaliwal,
05.	"Experimental Investigation of a Flexible 3D Printed Ring Resonator for Bluetooth Applications," International Conference on Emerging Technologies: AI, IoT and CPS for Science & Technology Applications, 6th -7th Sep, 2021, NITTR Chandigarh (Best Paper Award).	Chahat Jain. Balwinder Singh Dhaliwal and Rupinder Singh,
06.	Design and Performance Analysis of FinFET Based SRAM Cell Stability, 'Sustainable Development through Engineering Innovations (SDEI), 17-19 September, 2020 at Guru Nanak Dev Engineering College, Ludhiana (Punjab), India	Gurpurneet Kaur, Sandeep Singh Gill, Munish Rattan
07.	Design and Analysis of Dopingless TFET Biosensor for high performance”, (Paper ID: CCSP_2019_NITJ_VLSI_16), International Conference on Communication Computing, NIT Jalandhar, 23-24 July 2020.	Girish Wadhwa, Balwinder Raj
08.	Parametric Analysis of Double Gate Tunnel Field Effect Transistor”, (CCSP_2019_NITJ_VLSI_20), International Conference on Communication Computing, NIT Jalandhar, 23-24 July 2020.	Parveen Kumar, Balwinder Raj
09.	Design of Wearable Microstrip Patch Antenna for WBAN Applications to Enhance Bandwidth using Multiple Slots and CRR,” International Journal of Advanced Research in Engineering and Technology, Vol. 11, No. 8, August 2020, pp. 319-327, ISSN online:0976-6499(Scopus Index).	Devarapaga Sriramulu, Garima Saini and Balwinder S. Dhaliwal
10.	A review of reconstruction Algorithm in Compressive Sensing” paper in IEEE sponsored International Conference on Advances in Computing, Communication and Materials (ICACCM), Conference ID-50413, held from 21st and 22nd Aug.2020.	Rachit Manchanda, Kanika Sharma
11.	SSDA: Sleep Scheduled Data Aggregation in WSN based Internal of things: International Conference on Data Analytics and Management ICDAM-200 held on 18 th June 2020, Book Chapter, Springs, Data Analytics and Management	Rachit Manchanda, Kanika Sharma
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14.	Comparative study of spintronic based STT-MRAM. International Conference on Emerging Technology: AI, Iot, and CPS for Science & Technology Applications, September 2021.	SS Gill, Parul Sharma, Balwinder Raj

PAPERS PUBLISHED / PRESENTED IN NATIONAL CONFERENCES/SEMINARS

Sr.No.	Title of the Paper Presented/Accepted along with a Name of the Conference/Seminar (venue, with date)	Author (s) Name
01.	"Compact Wearable Fractal Patch Antenna and its Performance Analysis for BAN", Proceeding of National Convention on "Antenna Design for Efficient Communication and Networking" December 4-5,2021,ISBN:978-93-90953-99-8.	Vikash Jain, Shubhramshu Pattnaik, Balwinder S.Dhaliwal, Jayant G.Joshi
02.	"Compact Wearable Fractal Patch Antenna and its Performance Analysis for BAN," National Convention of Electronics and Telecommunication Engineers, The Institution of Engineers (India), Bathinda Local Centre, Bathinda, December 4-5, 2021, pp. 122 -130.	Vikas Jain, Shubhramshu Pattnaik, Balwinder S. Dhaliwal and Jayant G. Joshi,
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04.	Soil Humidity Measurement using Microstrip Interdigital Capacitor (IDC) and Rectangular Slotted Fingers Interdigital Capacitor (RSFIDC)", Technical Volume of 35th Indian Engineering Congress, The Institution of Engineers (India), December 18-20, 2020,pp. 947-953.	Jayant Gajanan Joshi, Mandar P Joshi, Balwinder Singh Dhaliwal, and Shyam S Pattnaik,
05.	"Innovations in Curriculum Design for Implementation of NEP 2020 to Achieve Atmanirbhar Bharat Objectives", Proceedings of National Conference on Unlocking Atmanirbhar Bharat Through NEP-2020, Chandigarh, November 27, 2020, pp. 127- 132.	Meenakshi Sood, Balwinder Singh Dhaliwal, and P K Singla,
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1	Curriculum Development for Autonomous Technical Institutions Under Nep 2020 To Accelerate Multidisciplinary Research: A Step Towards Atmanirbhar Bharat Jayant. National Conference on	G. Joshi, Balwinder Singh Dhaliwal And Shyam S. Pattnaik

	Unlocking Atmanirbhar Bharat Through Nep-2020 Chandigarh, India, November 27, 2020 Anb-Nep-2020p1	
2	Innovations in Curriculum Design for Implementation of Nep 2020 To Achieve Atmanirbhar Bharat Objectives” 1st National Conference on Unlocking Atmanirbhar Bharat Through Nep-2020 Chandigarh, India, November 27, 2020 Anb-Nep-2020p19	Meenakshisood", Balwinder Singh Dhaliwal, P K Singla

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Sr. No.	Name of the Paper Published	Author (s) Name
1	"Methods for Integration of III-V Compound and Silicon Multijunction for High-Efficiency Solar Cell Design." <i>Silicon</i> (2022): 1-8.	Sharma, Divya, Rajesh Mehra, and Balwinder Raj.
2	"Mobile Phone Radiations Effect on the Synchronization Between Heart and Brain," <i>Wireless Personal Communications</i> , 2022. 1DOLhups:/doi.org/10. 1007/s11277-022-09509-0 International Conference Papers	Suman Pattnaik, Balwinder Singh Dhaliwal, and Shyam Sundar Pattnaik
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