

LIST OF PUBLICATIONS ECE DEPARTMENT (2016-2017)

Papers in Reviewed Journal

1. Praween Kumar Sinha, Himani Dhir, Neelam Sharma, Shubham Jindal "Realization Of Grounded Inductance And Capacitance Using Current Feedback Operational Amplifier And Its Application" International Journal of Electronics, Electrical and Computational System (IJECS), ISSN 2348-117X, Volume 6, Issue 2, February 2017, Page 96-101.
2. "Fast Adders: Timing, Layout and Cost Comparison", Akshat Malik, Abhilasha Gokhale and Neelam Sharma, International Journal of Electronics, Electrical and Computational System (IJECS) ISSN 2348-117X, Volume 6, May 2017.
3. Sonam Rewari, Vandana Nath, Subhasis Haldar, S.S.Deswal, and R.S. Gupta, "Improved Analog and AC Performance with Increased Noise Immunity using Nanotube Junctionless Field Effect Transistor (NJLFET)" Applied Physics A, vol. 123, No. 1, DOI: 10.1007/s00339-016-0583-9, Jan 2017.
4. Sonam Rewari, Vandana Nath, Subhasis Haldar, S.S.Deswal, and R.S. Gupta, "A Novel Design to Improve Band to Band Tunneling and to reduce Gate Induced Drain Leakages (GIDL) in Cylindrical Gate All Around (GAA) MOSFET", Microsystem Technologies Journal, DOI 10.1007/s00542-017-3446-1, Sept. 2017.
5. Sonam Rewari, Vandana Nath, Subhasis Haldar, S.S.Deswal, and R.S. Gupta, "Hafnium Oxide Based Cylindrical Junctionless Double Surrounding Gate (CJLDSG) MOSFET for High Speed, High Frequency Digital and Analog Applications," Microsystem Technologies Journal, DOI 10.1007/s00542-017-3436-3 Sept. 2017.
6. Manoj Kumar, Subhasis Haldar, Mridula Gupta, and R. S. Gupta, "Analytical model of threshold voltage degradation due to localized charges in gate material engineered schottky barrier cylindrical GAA MOSFET", Semiconductor Science and Technology, vol. 13, pp. 105013105023, July 2016. (Impact Factor : 2.098).
7. Nitin Trivedi, Manoj Kumar, Subhasis Haldar, S. S. Deswal, Mridula Gupta and R. S. Gupta, "Analytical Modelling Simulation and Characterization of short channel Junctionless Accumulation Mode Surrounding Gate (JLAMSG) MOSFET for improved analog/RF performance", Superlattices and Microstructures, vol. 100, pp.1271–1275, December 2016 (Impact Factor : 2.117).
8. Manoj Kumar, Subhasis Haldar, Mridula Gupta, and R.S. Gupta, "Ambipolarity Reduction in DMG Asymmetric Vacuum Dielectric Schottky Barrier GAA MOSFET to Improve Hot Carrier Reliability", Superlattices and Microstructures, April 2017 (Accepted, In press). (Impact Factor : 2.117).

9. Manoj Kumar, Subhasis Haldar, Mridula Gupta, and R.S. Gupta, "Cylindrical Gate All Around Schottky Barrier MOSFET with Insulated Shallow Extensions at Source/Drain for Removal of Ambipolarity: A Novel Approach", Journal of Semiconductors, June 2017 (Accepted, In press).
10. Nitin Trivedi, Manoj Kumar, Subhasis Haldar, S. S. Deswal, Mridula Gupta and R.S. Gupta, "Assessment of analog RF performance for insulated shallow extension (ISE) cylindrical surrounding gate (CSG) MOSFET incorporation gate stack", Microsystem and Technology, (Accepted, In press) July, 2017. (Impact Factor : 0.974).
11. Yogesh Pratap, Manoj Kumar, Sneha Kabra, Subhasis Haldar, R.S. Gupta and Mridula Gupta, "Analytical modeling of Junctionless transistor for biomolecule detection", Journal of Computational Electronics, (Accepted, In press) 2017. (Impact Factor : 1.104).
12. Nitin Trivedi, Manoj Kumar, Subhasis Haldar, S.S Deswal, Mridula Gupta and R. S. Gupta, "Charge plasma technique based dopingless accumulation mode junction less cylindrical surrounding gate MOSFET: analog performance improvement", Journal of Applied Physics A, Springer, Appl. Phys. A (2017) 123:564 DOI 10.1007/s00339-017-1176-y.
13. Sharma, A. Jain, Yogesh Pratap, and R. S Gupta, "Effect of High-k and Vacuum Dielectrics as Gate Stack on a Junctionless Cylindrical Surrounding Gate (JL-CSG) MOSFET," Solid State Electronics, Vol. 123, pp. 26-32, September 2016.
14. Panda, Jeebananda, Kaberi Nath, Shrikishan Choudhary, and Sunil Kumar, "A non-blind multiple transform based audio watermarking based on highest entropy sub-bands" International Journal of Scientific & Engineering Research, Volume 7, Issue 10, 1899 ISSN 2229-5518, October 2016.
15. K. L. Pushkar, R. K. Goel, Kavya Gupta et al., "New VD-DIBA-Based Single-Resistance-Controlled Sinusoidal Oscillator," Circuits and Systems, vol. 7, no. 13, Nov. 2016. <http://dx.doi.org/10.4236/cs.2016.713341>, ISSN 2153-1293
16. K. L. Pushkar, Ghanshyam Singh and R. K. Goel, "CMOS VDIBAs-based Single-Resistance-Controlled Voltage-Mode Sinusoidal Oscillator," Circuits and Systems, vol. 8, no. 1, 2017. <http://dx.doi.org/10.4236/cs.2017.81002>, ISSN 2153-1293.
17. K. L. Pushkar and D. R. Bhaskar "New Single-Element-Controlled Sinusoidal Oscillator using Single VDIBA," Journal of Engineering Technology, ISSN: 0747-9964, Vol. 4, Issue 1, (Accepted)
18. K. L. Pushkar and K. Gupta, "MISO-type voltage-mode universal biquadratic filter using single Universal Voltage Conveyor," Circuits and Systems, ID: 7601237, 2017., ISSN 2153-1293
19. K. L. Pushkar, "Electronically controllable sinusoidal oscillator employing VDIBAs," Advances in Electrical and Electronics Engineering, ISSN: 1804-3119, Vol. 15, Issue 2, 2017. (Accepted)

20. N. Yadav, "DWT-SVD-WHT watermarking using varying strength factor derived from means of the WHT coefficients," *Arabian Journal of Science and Engineering* (SCIE indexed, Impact factor 0.865) Accepted recently.
21. Dinesh Prasad, Javed Ahmad, and Mayank Srivastav, "A Novel Grounded To Floating Admittance Converter With Electronic Control," *Indian Journal Of Physics*, DOI 10.1007/s12648-017- 1077-0 (Springer).
22. Realization Of Grounded Inductance And Capacitance Using current Feedback Operational Amplifier And Its Application Praween Kumar Sinha , Himani Dhir, Dr. Neelam Sharma, Shubham Jindal, *International Journal of Electronics, Electrical and Computational System* Volume 6, Issue 2 February 2017
23. H. Khanna, M. Aggarwal and S. Ahuja, "Performance analysis of an inter-relay co-operation in FSO communication system," *Journal of Optical Communications*, DOI -10.1515/joc-2016- 0115, ISSN (Online) 2191-6322, ISSN (Print) 0173-4911, Nov. 2016.
24. H. Khanna, M. Aggarwal and S. Ahuja, "Optimum Distance and Power allocation Strategies for Quantum-limited Inter-Relayed FSO Communication System," *AEU–International Journal of Electronics and Communications*, DOI –10.1016/j.aeue.2017.06.015, vol. 80, pp. 10-18, 2017.
25. H. Khanna, M. Aggarwal and S. Ahuja, "On the end-to-end performance of a mixed RF-FSO link with a Decode and Forward relay," *Journal of Optical Communications*, DOI - 10.1515/joc-2017- 0077, ISSN (Online) 2191-6322, ISSN (Print) 0173-4911, Jul. 2017.
26. "Fast Adders: Timing, Layout and Cost Comparison", Akshat Malik, Abhilasha Gokhale and Neelam Sharma, *International Journal of Electronics, Electrical and Computational System (IJECS)* ISSN 2348-117X, Volume 6, May 2017.
27. Divya Goyal and Pragya Varshney. "CCII and RC fractance based fractional order current integrator." *Microelectronics Journal* 65 (2017): 1-10. DOI: 10.1016/j.mejo.2017.05.002
28. Satyajit Banerjee, Mayank Gupta, Vaibhav Sharma, Alpana Sahu 'LI-FI (Light fidelity)–An Implementation to future in Wireless communication', *SSRG International Journal of Electronics and Communication Engineering (SSRG-IJECE)* –Volume 4, Issue 3, PP. 49- 55, March 2017.
29. Sonam Rewari, Vandana Nath, Subhasis Haldar, S.S.Deswal, and R.S. Gupta, "Improved Analog and AC Performance with Increased Noise Immunity using Nanotube Junctionless Field Effect Transistor (NJLFET)" *Applied Physics A*, vol. 123, No. 1, DOI: 10.1007/s00339-016-0583-9, Jan 2017.
30. Sonam Rewari, Vandana Nath, Subhasis Haldar, S.S.Deswal, and R.S. Gupta, "A Novel Design to Improve Band to Band Tunneling and to reduce Gate Induced Drain Leakages (GIDL) in Cylindrical Gate All Around (GAA) MOSFET", *Microsystem Technologies Journal*, DOI 10.1007/s00542-017-3446-1, Sept. 2017.

31. Sonam Rewari, Vandana Nath, Subhasis Haldar, S.S.Deswal, and R.S. Gupta, "Hafnium Oxide Based Cylindrical Junctionless Double Surrounding Gate (CJLDSG) MOSFET for High Speed, High Frequency Digital and Analog Applications," *Microsystem Technologies Journal*, DOI 10.1007/s00542-017-3436-3 Sept. 2017.
32. Hemant Tulsani, Palak Chawla, Rashmi Gupta, A Novel Steganographic Model for Securing Binary Images, *International Journal of Information Technology*, Springer, 2017
33. Hemant Tulsani, Palak Chawla, Rashmi Gupta, "A Novel Steganographic Model for Securing Binary Images", *International Journal of Information Technology*, Springer, 2017.

Papers in International Conferences

1. Akshat Malik, Abhilasha Gokhale and Neelam Sharma, "Fast Computing using Redundant Binary Signed Digit Adders", *INDIACom-2017, 4 th International Conference on Computing for Sustainable Global Development*, 1st – 3rd March, 2017, BVICAM, Paschim Vihar, New Delhi.
2. Akshat Malik, Abhilasha Gokhale and Neelam Sharma, "Performance Analysis of Signed Digit Adders", *3 rd International Conference on VLSI, Communication and Network (VCAN-2017)*, 10 th – 11 th March, 2017, IET, Alwar.
3. Reibhu Sant, Neelam Sharma and Abhilasha Gokhale, "Energy Crisis and the Next Step Forward", *3 rd International Conference on VLSI, Communication and Network (VCAN-2017)*, 10 th – 11 th March, 2017, IET, Alwar.
4. Akshat Malik, Abhilasha Gokhale and Neelam Sharma, "Fast Adders: Timing, Layout and Cost Comparison", *5 th International Conference on Engineering and Technology, Science and Management Innovation (ICETSMI - 2017)*, 30 th April, 2017, IETE, Lodhi Road, New Delhi.
5. Praween Kumar Sinha, Neelam Sharma "Design of Two stage CMOS op-amp with low power and high Slew Rate" Published in *Proceedings of International Conference on "VLSI, Communication and Networks"* held on 10-11 March 2017 at IET, Alwar, India.
6. Triple Metal Gate All Around MOSFET (TMGAA) for DNA Molecule and Neutral Species Detection", Sonam Rewari, Vandana Nath, Subhasis Haldar, S.S.Deswal, R.S.Gupta, *ICANN -2016*, 4-5 November, Jamia Miliya Islamiya, New Delhi.
7. "GaN based Junctionless Double Surrounding Gate (JLDSG) MOSFET for Sub millimeter wave Applications", Sonam Rewari, Vandana Nath, Subhasis Haldar, S. S. Deswal, and R. S. Gupta, *APMC 2016*, Hotel Pullman, Delhi 5-9 December, 2016.
8. Optimized performance of GaN based Junctionless MOSFET at Cryogenic Temperature", Sonam Rewari, Vandana Nath, Subhasis Haldar, S. S. Deswal, and R. S. Gupta, *NCRDE 2017*, University of Delhi 17-18 February, 2017.

"Dual Metal Gate All Around MOSFET to Improve Band to Band Tunneling and to reduce Gate Induced Drain Leakages (GIDL) in Cylindrical Gate All Around (GAA) MOSFET," Sonam Rewari, Vandana Nath, Subhasis Haldar, S.S.Deswal and R.S.Gupta, 2nd International DEVIC conference, 23-24 March, 2017, Kalyani City, West Bengal, India.

1. A Numerical Model of GaN based Cylindrical Junctionless Gate All Around MOSFET for Sub threshold region at Cryogenic Temperatures," Sonam Rewari, Vandana Nath, Subhasis Haldar, S.S.Deswal and R.S.Gupta, 2nd International DEVIC conference, 23-24 March, 2017, Kalyani City, West Bengal, India.
2. Nitin Trivedi, Manoj Kumar, Subhasis Haldar, S. S. Deswal, Mridula Gupta, R. S. Gupta, Assessment of Analog RF performance for Insulated Shallow Extension (ISE) Cylindrical Surrounding Gate All Around (GAA) MOSFET Incorporating Gate Stack", pp. 391-394, ISBN :978-93-80813-45-5, International Conference on Microelectronics Circuit and System, Kolkata, July 9-10, 2016.
3. Manoj Kumar, Subhasis Haldar, Mridula Gupta and R.S. Gupta, "Gaussian Graded Channel (GGC) Schottky Barrier Surrounding Gate MOSFET for Analog/RF Performance Enhancement", International Conference on Advance in Nan materials and Nanotechnology (ICANN, Delhi, India), November 4-5, 2016.
4. Nitin Trivedi, Manoj Kumar, Subhasis Haldar, S.S Deswal, Mridula Gupta and R. S. Gupta, Enhanced Analog/RF performance of Underlap Cylindrical Gate All Around MOSFET with high-k Dielectric Material Spacer", International Conference on Advance in Nan materials and Nanotechnology (ICANN, Delhi, India), November 4-5, 2016.
5. Nitin Trivedi, Manoj Kumar, Subhasis Haldar, S.S Deswal, Mridula Gupta and R. S. Gupta, "Investigation of Analog/RF performance of High-k Spacer Junctionless Accumulation-Mode Cylindrical Gate All Around (JLAM-CGAA) MOSFET".UPCON-2016, IIT BHU, 9-11 Dec 2016 Electronic ISBN:978-1-5090-5384-1 ISBN:978-1-5090-5385-8, DOI:[10.1109/UPCON.2016.7894652](https://doi.org/10.1109/UPCON.2016.7894652).
6. Sunil Mathur, Tapan Sharma, Dr. Vinod Shokeen "Best of Breed Solution for Clustering of Satellite Images Using Big data Platform Spark" International Conference on Inventive Communication and Computational Technologies (ICICCT 2017) .
7. Tapan Sharma, Vinod Shokeen, Sunil Kumar, "Performance Comparison of Edge Detection Algorithms for Satellite Images using Big data Platform Spark" IEEE Conference DTU, August 2016.
8. Sunil Kumar, Jeebananda Panda, Shrikishan Choudhary, Kaberi Nath, "Audio Zero Watermarking Scheme based on Sub band Mean Energy Comparison Using DWT-DCT" International Conference on Signal Processing and Communication, December 2016.
9. Design of Two stage CMOS op-amp with low power and high Slew Rate Praween Kumar Sinha, Dr. Neelam Sharma, VLSI, Communication and Networks 10-11 March 2017.

10. Dinesh Prasad, Javed Ahmad and Mayank Srivastava, "New CM/VM 3rd Order Quadrature oscillator Using VDCCs.," 2017 IEEE International Conference on Applied System Innovation (IEEE ICASI 2017) May 13-17, 2017, Sapporo, Japan.
11. Ahmad Javed, Prasad Dinesh, Srivastava Mayank and Laxya, "New VDVTA Based Electronically Tunable Floating Inductor Simulator," 1st IEEE International Conference on Power Electronics, Intelligent Control and Energy Systems (ICPEICES-2016). doi: 10.1109/ICPEICES.2016.7853466.
12. H. Khanna, M. Aggarwal and S. Ahuja, "Outage analysis of a variable-gain amplify and forward relayed mixed RF-FSO system," in conference proceedings of INDICON, IEEE annual India conference, Bengaluru, DOI-10.1109/INDICON.2016.7839140, ISSN: 2325-9418, 16-18 Dec., 2016.
13. "Fast Computing using Redundant Binary Signed Digit Adders", Akshat Malik, Abhilasha Gokhale and Neelam Sharma, INDIACom-2017, 4th International Conference on Computing for Sustainable Global Development, 1st – 3rd March, 2017, BVICAM, Paschim Vihar, New Delhi.
14. "Performance Analysis of Signed Digit Adders", Akshat Malik, Abhilasha Gokhale and Neelam Sharma, 3rd International Conference on VLSI, Communication and Network (VCAN-2017), 10th – 11th March, 2017, IET, Alwar.
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16. "Fast Adders: Timing, Layout and Cost Comparison", Akshat Malik, Abhilasha Gokhale and Neelam Sharma, 5th International Conference on Engineering and Technology, Science and Management Innovation (ICETSMI - 2017), 30th April, 2017, IETE, Lodhi Road, New Delhi.
17. Divya Goyal and Pragya Varshney, "DVCCTA based PID controller with grounded passive elements," 2016 Second International Innovative Applications of Computational Intelligence on Power, Energy and Controls with their Impact on Humanity (CIPECH), KIET Ghaziabad, 2016, pp. 41-45.
18. Divya Goyal and Pragya Varshney; CCII based realizations of Half order PI Controller; presented in 2017 4th International conference on Computing for Sustainable Global Development, Delhi, March 2017.
19. Nitin Sharma,, and Om Prakash Verma. "A Novel Fuzzy Based Satellite Image Enhancement." In Proceedings of International Conference on Computer Vision and Image Processing, pp. 421-428. Springer, Singapore, 2017.

20. "Triple Metal Gate All Around MOSFET (TMGAA) for DNA Molecule and Neutral Species Detection", Sonam Rewari, Vandana Nath, Subhasis Halder, S.S.Deswal, R.S.Gupta, ICANN -2016, 4-5 November, Jamiya Miliya Islamiya, New Delhi.
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23. Dual Metal Gate All Around MOSFET to Improve Band to Band Tunneling and to reduce Gate Induced Drain Leakages (GIDL) in Cylindrical Gate All Around (GAA) MOSFET," Sonam Rewari, Vandana Nath, Subhasis Halder, S.S.Deswal and R.S.Gupta , 2nd International DEVIC conference, 23-24 March, 2017, Kalyani City, West Bengal, India.
24. A Numerical Model of GaN based Cylindrical Junctionless Gate All Around MOSFET for Sub threshold region at Cryogenic Temperatures," Sonam Rewari, Vandana Nath, Subhasis Halder, S.S.Deswal and R.S.Gupta, 2nd International DEVIC conference, 23-24 March, 2017, Kalyani City, West Bengal, India.
25. Hemant Tulsani, Palak Chawla, Rashmi Gupta, ;Visual Cryptography and Integer Wavelet Transform based Watermarking for Securing Binary Images";, IEEE International Conference on Computing for Sustainable Global Development, Mar. 2017.
26. Hemant Tulsani, Palak Chawla, Rashmi Gupta, ;Visual Cryptography and Integer Wavelet Transform based Watermarking for Securing Binary Images";, IEEE International Conference on Computing for Sustainable Global Development, Mar. 2017.
27. Vaibhav, Hemant Tulsani;Low Power High Speed Current Conveyor based Current Comparator, Mirror Circuit and Encoder used in ADCs ;, IEEE International Conference on Computing for Sustainable Global Development, Mar. 2017.