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List of Publications:

1. **Shivendra Yadav**, Anju, and Sukeshni Tirkey, "A Dielectric Modulated Biosensor for SARS-CoV-2", IEEE Sensor Journal, Accepted. doi: 10.1109/JSEN.2020.3019036, Aug. 2020.
2. **Shivendra Yadav**, Anuj, Anju Gedam, Guru Prasad Mishra and Mohd. Aslam, "Linearity/Intermodulation Distortion Analysis of Tunneling and Thermionic Emission Mechanisms; Design Proposal and High Frequency Investigation", Semiconductor Science and Technology, vol. 35, no. 10, Sep. 2020.
3. **Shivendra Yadav**, Dheeraj Sharma, Deepak Soni, and Mohd. Aslam, "Controlling of Ambipolarity with Improved RF Performance by Drain/Gate Workfunction Engineering and Using High-k Dielectric Material in Electrically Doped TFET: Proposal and Optimization", Journal of Computational Electronics, vol. 16, no. 3, pp. 721-731, Jun. 2017. DOI: <https://doi.org/10.1007/s10825-017-1019-2>.
4. **Shivendra Yadav**, Mohd. Aslam, Deepak Soni, and Dheeraj Sharma, "A Novel Hetero-Material Gate-Underlap Electrically Doped TFET for Improving DC/RF and Ambipolar Behavior", Superlattices and Microstructures vol. 117, pp. 9-17, Feb. 2018, DOI: <https://doi.org/10.1016/j.spmi.2018.02.005>.
5. **Shivendra Yadav**, Rahul Madhukar, Dheeraj Sharma, Mohd. Aslam, Deepak Soni, and Neeraj Sharma, "A New Structure of Electrically Doped TFET for Improving Electronic Characteristics", Applied Physics A, vol. 124, no. 7, pp. 517-526, Jul. 2018, DOI: <https://doi.org/10.1007/s00339-018-1930-9>.
6. **Shivendra Yadav**, Alemienla Lemtur, Dheeraj Sharma, Mohd. Aslam, and Deepak Soni, "An Effective Approach to Enhance DC and High Frequency Performance of Electrically Doped TFET", Micro & Nano Letters, vol. 13, no. 10, pp. 1469-1474, Oct. 2018, DOI: 10.1049/mnl.2018.5072.
7. **Shivendra Yadav**, Jyoti Patel, and Dheeraj Sharma, "A Novel Proposal for Enhancing TFET Performance and Its Reliability Issues", Journal of Nanoelectronics and Optoelectronics, vol. 14, no. 2, pp. 238-246, Feb. 2019, DOI: <https://doi.org/10.1166/jno.2019.2483>.
8. **Shivendra Yadav**, Madhuri Vemulapaty, Dheeraj Sharma, Anju Gedam, and Neeraj Sharma, "A Design structure of Tunnel FET by Combining thermionic Emission with Tunneling Phenomenon", Micro & Nano Letters, vol. 14, no. 4, pp. 450-454, Apr. 2019, DOI: 10.1049/mnl.2018.5548.
9. **Shivendra Yadav**, Alish Pamnani, Dheeraj Sharma, and Atul Kumar, "A Novel Design Approach of Charge Plasma Tunnel FET for Radio Frequency Applications", Journal of Semiconductors, vol. 40, no. 5, pp. 052901, May 2019, DOI: 10.1088/1674-4926/40/5/052901.
10. Dheeraj Sharma, Deepika Singh, Sunil Pandey, **Shivendra Yadav**, and P. N. Kondekar, "Comparative Analysis of Full-Gate and Short-Gate Dielectric Modulated Electrically Doped Tunnel-FET Based Biosensors", Superlattices and Microstructures, vol. 111, pp. 767-775, Jul. 2017, DOI: <http://dx.doi.org/10.1016/j.spmi.2017.07.035>.
11. Madhulika Verma, Sukeshni Tirkey, **Shivendra Yadav**, Dheeraj Sharma, and Dharmendra Singh Yadav, "Performance Assessment of A Novel Vertical Dielectrically Modulated TFET-Based Biosensor", Transaction on Electron Devices, vol. 64, no. 9, pp. 3841-3848, Sep. 2017, DOI: 10.1109/TED.2017.2732820.
12. Sukeshni Tirkey, Dheeraj Sharma, Dharmendra Singh Yadav, and **Shivendra Yadav**, "Analysis of a Novel Metal Implant Junctionless Tunnel Field-Effect Transistor for Better DC and Analog/RF Electrostatic Parameters", IEEE Transaction on Electron Devices, vol. 63, no. 9, pp. 3943-3950, Sep. 2017, DOI: 10.1109/TED.2017.2730922.
13. Mohd. Aslam, **Shivendra Yadav**, Deepak Soni, and Dheeraj Sharma, "A New Design Approach for Enhancement of DC/RF Performance with Improved Ambipolar Conduction of Dopingless TFET", Superlattices and Microstructures, vol. 112, pp. 86-96, Sep. 2017, DOI: <http://dx.doi.org/10.1016/j.spmi.2017.09.017>.

14. Deepak Soni, Dheeraj Sharma, **Shivendra Yadav**, Mohd. Aslam, and Neeraj Sharma, "Performance Improvement of Doped TFET by Using Plasma Formation Concept", *Superlattices and Microstructures*, vol. 113, pp. 97-109, Oct. 2017, DOI: <https://doi.org/10.1016/j.spmi.2017.10.012>.
15. Deepak Soni, Dheeraj Sharma, Mohd. Aslam, **Shivendra Yadav**, "A Novel Approach for the Improvement of Electrostatic Behavior of Physically Doped TFET by Using Plasma Formation and Shortening of Gate Electrode with Hetero Gate Dielectric", *Applied Physics A*, vol. 124, pp. 306, Feb. 2018, DOI: <https://doi.org/10.1007/s00339-018-1670-x>.
16. Anju, **Shivendra Yadav**, and Dheeraj Sharma, "Assessment of Read and Write Stability for 6T SRAM Cell Based on Charge Plasma DLTFET", *Superlattices and Microstructure*, vol. 115, pp. 67-77, Dec. 2017, DOI: <https://doi.org/10.1016/j.spmi.2017.12.061>.
17. Bandi Venkata Chandan, Sushmitha Dasari, **Shivendra Yadav**, and Dheeraj Sharma, "Approach to Suppress Ambipolarity and Improve RF and Linearity Performances on Electrically Doped Tunnel FET", *Micro & Nano Letters*, vol. 13, pp. 684-689, Feb. 2018, DOI: 10.1049/mnl.2017.0814.
18. Deepak Soni, Dheeraj Sharma, Mohd. Aslam, and **Shivendra Yadav**, "Improvement in Electrostatic Characteristic of Doped TFET by Hole Layer Formation", *Journal of Computational Electronics*, vol. 17, no. 2, pp. 736-744, Jun. 2018, DOI: <https://doi.org/10.1007/s10825-018-1139-3>.
19. Sarthak Gupta, Dheeraj Sharma, Deepak Soni, **Shivendra Yadav**, Mohd. Aslam, Dharmendra Singh Yadav, Kaushal Nigam, and Neeraj sharma, "Examination of the Impingement of Interface Trap Charges on Heterogenous Gate Dielectric Dual Material Control Gate Tunnel FET for the Refinement of Device Reliability", *Micro & Nano Letters*, vol. 13, no. 8, pp. 1192-1196, Aug. 2018, DOI: 10.1049/mnl.2017.0869.
20. Mohd. Aslam, Dheeraj Sharma, Deepak Soni, **Shivendra Yadav**, Bhagwan Ram Raad, Dharmendra Singh Yadav, and Neeraj Sharma, "An Effective Design Technique for Improvement of Electrostatics Behavior of Dopingless Tunnel FET: Proposal, Investigation and Optimization", *Micro & Nano Letters*, vol. 13, no. 10, pp. 1480-1485, Aug. 2018, DOI: 10.1049/mnl.2018.5129.
21. Dharmendra Singh Yadav, Dheeraj Sharma, Sukeshni Tirkey, Deepak Ganesh Sharma, Shriya bajpai, Deepak Soni, **Shivendra Yadav**, Mohd. Aslam, and Neeraj Sharma, "A Novel Hetero-Material Charge Plasma Tunnel FET with High-Frequency and Linearity Analysis for Ultra-Low Power Applications", *Micro & Nano Letters*, vol. 13, no. 11, pp. 1609-1614, Aug. 2018, DOI: 10.1049/mnl.2018.5075.
22. Bandi Chandan, Sushmitha Dasari, Kaushal Nigam, **Shivendra Yadav**, Sunil Pandey, and Dheeraj Sharma, "Impact of Gate Material Engineering on ED-Tunnel FET for Improving DC/Analog-RF/Linearity Performances", *Micro & Nano Letters*, vol. 13, no. 12, pp. 1653-1656, Dec. 2018, DOI: 10.1049/mnl.2018.5131.
23. Deepak Soni, Dheeraj Sharma, Mohd. Aslam, and **Shivendra Yadav**, "Approach for the Improvement of Sensitivity and Sensing Speed of TFET-based Biosensor by Using Plasma Formation Concept", *Micro & Nano Letters*, vol. 13, no. 12, pp. 1728-1733, Dec. 2018, DOI: 10.1049/mnl.2018.5252.
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25. Mohd. Aslam, Dheeraj Sharma, **Shivendra Yadav**, Deepak Soni, Neeraj Sharma, and Anju Gedam, "A Comparative Investigation of Low Workfunction Metal Implantation in the Oxide Region for Improving Electrostatic Characteristics of Charge Plasma TFET", *Micro & Nano Letters*, vol. 14, no. 2, pp. 123-128, Feb. 2019, DOI: 10.1049/mnl.2018.5390.
26. Bandi Venkata Chandan, Maitreyee Gautami, Kaushal Nigam, Dheeraj Sharma, Vinay Anand Tikkiwal, **Shivendra Yadav**, and Satyendra Kumar, "Impact of a Metal-Strip on a Polarity-Based Electrically Doped TFET for Improvement of DC and analog/RF Performance", *Journal of computational electronics*, vol. 18, no. 1, pp. 76-82, Mar. 2019, DOI: 10.1007/s10825-018-1280.
27. Jyoti Patel, Dheeraj Sharma, **Shivendra Yadav**, Alemienla Lemtur, and Priyanka Suman, "Performance Improvement of Nano Wire TFET by Hetero-dielectric and Hetero-material: At Device and Circuit Level", *Microelectronics Journal*, vol. 85, pp. 72-82, Mar. 2019, DOI: 10.1016/j.mejo.2019.02.004.
28. Mohd. Aslam, Girjesh Korram, Dheeraj Sharma, **Shivendra Yadav**, and Neeraj Sharma, "DC Performance Enhancement of PNP Hetero Dielectric Box Tunnel Field Effect Transistor for Low Power Applications", *Journal of Computational Electronics*, vol. 19, no. 1, pp. 1-6, Dec. 2019, DOI: <https://doi.org/10.1007/s10825-019-01427-y>

1. **Shivendra Yadav**, Dheeraj Sharma, Mohd. Aslam, and Deepak Soni, "A Novel Analysis to Reduce Leakage Current in Charge Plasma Based TFET", INDICON, pp. 1-3, ISSN: (2325-9418), IIT Roorkee, Uttarakhand India, Dec. 2017, DOI: 10.1109/INDICON.2017.8487606.
2. Deepak Soni, Dheeraj Sharma, **Shivendra Yadav**, Mohd. Aslam, and Dharmendra Singh Yadav, "Gate Metal Workfunction Engineering for the Improvement of Electrostatic Behaviour of Doped Tunnel Field Effect Transistor", IEEE International Symposium on Nano Electronics and Information Systems (IEEE INIS 2017), pp. 190-194, OIST Bhopal, Dec. 2017, India, DOI: 10.1109/iNIS.2017.47.

Book Chapter:

1. **Shivendra Yadav**, Chithraja Rajan, Dheeraj Sharma, and Sanjay Balotiya, "GaAs-SiGe based novel device structure of doping less Tunnel FET", book title: "VLSI Design and Test", Springer Singapore, IIT Indore, pp. 694-701, Aug. 2019, ISBN: 978-981-32-9767-8, DOI: https://doi.org/10.1007/978-981-32-9767-8_57.
2. Anju, Sunil Pandey, **Shivendra Yadav**, Kaushal Nigam, Dheeraj Sharma, and P.N. Kondekar, "Realization of Junctionless TFET based Power Efficient 6T SRAM Memory Cell for Internet-of-Things Applications", book title: "Proceedings of First International Conference on Smart System, Innovations and Computing", (SSIC-2017), Manipal University, Jaipur, India, vol. 79, pp. 515-523, Apr. 2017, ISBN: 978-981-10-5828-8 DOI: https://doi.org/10.1007/978-981-10-5828-8_49.
3. Mohd. Aslam, Dheeraj Sharma, Deepak Soni, and **Shivendra Yadav**, "Effect of Metallic Strip Deposition Within the Source Dielectric with Applied Double Metallic Drain for Enhanced DC/RF Behavior of Charge Plasma TFET for Low Power IOT Applications", book title: "Second International Conference on Smart IOT Systems: Innovations in Computing", (SSIC-2019), Manipal University, Jaipur, India, vol. 141, pp. 179-186, Oct. 2019, ISBN: 978-981-13-8406-6, DOI: https://doi.org/10.1007/978-981-13-8406-6_18.
4. Deepak Soni, Mohd. Aslam, **Shivendra Yadav**, and Dheeraj Sharma, "A Dielectric Modulated Polarity Controlled Electrically Doped Junctionless TFET biosensor for IOT Applications", book title: "Second International Conference on Smart IOT Systems: Innovations in Computing", (SSIC-2019), Manipal University, Jaipur, India, vol. 141, pp. 159-168, Oct. 2019, ISBN: 978-981-13-8406-6, DOI: https://doi.org/10.1007/978-981-13-8406-6_16.

I hereby declare that all the above mentioned information given by me is true and correct to the best of my knowledge and belief.



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