Journals

- Vijaya Bhadauria, Krishna Kant and Swapna Banerjee, "Linearity Enhancement of 0.18 μm Transconductor using Active Attenuation Technique," *Canadian Journal on Electrical and Electronics Engineering*, Vol. 2, no. 12, pp. 598-601, December 2011.
- [2] **Vijaya Bhadauria**, Krishna Kant and Swapna Banerjee, "Design and Analysis of A Power Efficient Linearly Tunable Cross Coupled Transconductor having Separate Bias Control," *Circuits and Systems by Scientific Research Publication*, Vol. 3, no. 1, pp. 99-106, January 2012.
- [3] Tripurari Sharan and **Vijaya Bhadauria**, "Sub-threshold, cascode-compensated, bulk-driven OTAs with enhanced gain and phase-margin" *Microelectronics Journal*, Vol. 54, pp. 150–165, August 2016.
- [4] Tripurari Sharan and **Vijaya Bhadauria**, "Fully Differential, Bulk-Driven, Class AB, Sub-Threshold OTA with Enhanced Slew Rates and Gain" *Journal of Circuits, Systems, and Computers*, Vol. 26, No. 1, pp 1-25, January 2017.
- [5] Tripurari Sharan and **Vijaya Bhadauria**, "Fully Differential Operational Transconductance Amplifier with Enhanced Phase Margin and Gain for Ultra-Low-Power," *Journal of low power Electronics (JOLPE)*, Vol. 13, No. 3, pp. 1-16, 2017.
- [6] Tripurari Sharan, Priyanka Chetri, **Vijaya Bhadauria**, "Ultra-low-power bulk-driven fully differential subthreshold OTAs with partial positive feedback for G_m-C filters," *Journal of Analog Integrated Circuit and Signal Processing, Springer*, Vol. 94, no. 3 pp 427-447, March 2018.
- [7] Tripurari Sharan, Priyanka Chetri, **Vijaya Bhadauria**, "Correction to: Ultra-low-power bulk-driven fully differential subthreshold OTAs with partial positive feedback for G_m-C filters," *Journal of Analog Integrated Circuit and Signal Processing, Springer*, Vol. 94, no. 3 pp 449, March 2018.
- [8] Tanmay Dubey and **Vijaya Bhadauria**, "A low-voltage highly linear OTA using bulk-driven floating gate MOSFETs," *AEÜ International Journal of Electronics and Communications*, Vol. 98, pp 29–37, January 2019.
- [9] Tanmay Dubey, **Vijaya Bhadauria**, and Rishikesh Pandey. "Linearity Enhancement Techniques for Operational Transconductance Amplifier: A Survey." *Recent Advances in Electrical & Electronic Engineering (Formerly Recent Patents on Electrical & Electronic Engineering)* Vol. 13, no. 5, pp 650-668, August 2020.

- [10] Tanmay Dubey and **Vijaya Bhadauria**, "Linearity Improvement of Bulk Driven Floating Gate OTA Using Cross-Bulk and Quasi-Bulk Techniques." *Journal of Circuits, Systems and Computers*, Vol. 30, no.7, pp 2150124, November 2020.
- [11] Tanmay Dubey and **Vijaya Bhadauria**, "A Low-Voltage Two-Stage Enhanced Gain Bulk-Driven Floating Gate OTA." *Journal of Circuits, Systems and Computers*, Vol. 30, no. 12, pp 2150220, April 2021.
- [12] Sougata Ghosh and **Vijaya Bhadauria**, "An Ultra-Low-Power Bulk-Driven Subthreshold Super Class-AB Rail-To-Rail CMOS OTA with Enhanced Small and Large Signal Performance Suitable for Large Capacitive Loads", *Microelectronics Journal*, Published by Elsevier, Vol. 115, pp. 105208, Sep 2021.
- [13] Nagaraju Mamidi, Santosh Kumar Gupta, and **Vijaya Bhadauria**, "Design and Implementation of Parallel Bypass Bin Processing for CABAC Encoder", *Advances in Electrical and Electronic Engineering*, Publisher Elsevier ,Vol. 19, No. 3 pp. 243-257, September 2021
- [14] Sougata Ghosh and **Vijaya Bhadauria**, "An Ultra-Low-Power Near Rail-To-Rail Pseudo-Differential Subthreshold Gate-Driven OTA with improved Small and Large Signal Performances", *Analog Integrated Circuit and Signal Processing*, Published by Springer Link, Vol.109, no. 2, pp. 345–366, October 2021.
- [15] Sougata Ghosh and **Vijaya Bhadauria**, "High Current Efficiency Single-Stage Bulk-Driven Subthreshold-Biased Class-AB OTAs with Enhanced Transconductance and Slew Rate For Large Capacitive Loads", *Analog Integrated Circuit and Signal Processing*, Published by Springer Link, Vol. 109, no. 2, pp. 403–433, October 2021.
- [16] Abhishek .Kumar, Santosh .Kumar Gupta and **Vijaya Bhadauria**, "Low-power and low glitch area current steering DAC," *Engineering Science and Technology, an International Journal*, Publisher Elsevier Vol. 29, pp. 101035, May 2022.
- [17] Abhishek .Kumar, Santosh .Kumar Gupta and **Vijaya Bhadauria**, "Design of IF-RF-Based Heterodyne Transmitter Using Current Steering DAC with 5.4GHz Spur-Free Bandwidth", *IETE Journal of Research*, Publisher Taylor and Francis, pp. 1-16, May 2022
- [18] Mamidi Nagaraju, Santosh Kumar Gupta, and **Vijaya Bhadauria**, "High-throughput, area-efficient hardware architecture of CABAC Binarization for UHD applications." *Microelectronics Journal* Publisher Science Direct Vol. 123, pp 105425, May 2022.
- [19] Abhishek .Kumar, Santosh .Kumar Gupta and **Vijaya Bhadauria**, "A 12-bit SC³ partially segmented current steering DAC with improved SFDR and bandwidth", *International Journal of Circuit Theory and Applications*, Publisher John Wiley and Sons Ltd, Vol. 50 issue 8, pp.2941-2959, August 2022.

- [20] Devarshi Shukla, Santosh Kumar Gupta, **Vijaya Bhadauria**, and Rajeev Tripathi, "High Gain, Low Noise, Low Voltage, and Low Power Current Mode Up-Conversion Mixer for 5G Application", *IETE Journal of Research*, Publisher Taylor & Francis, pp. 1-13, August 2022.
- [21] Sougata Ghosh and **Vijaya Bhadauria**, "A high current efficiency fast transient gain-boosted single-stage bulk-driven OTA with enhanced input stage suitable for heavy capacitive loads", AEU- International Journal of electronics and communications, Published by Elsevier, Vol. 155 pp. 154357, Oct 2022.
- [22] Devarshi Shukla, Santosh Kumar Gupta, **Vijaya Bhadauria**, and Rajeev Tripathi, "An Inverter Amplifier with Resistive Feedback Current Mirror Gilbert Mixer", *International Journal of Electronics*, Publisher Taylor & Francis, Vol. 110, issue 2, pp. 221-244, February 2023.
- [23] Devarshi Shukla, Santosh Kumar Gupta, **Vijaya Bhadauria**, and Rajeev Tripathi, "An ultrawide band IIP3 of 38.2 dBm and conversion gain of 17.95 dB down conversion Gilbert mixer for 5G internet of things applications", *Wireless Networks*, Publisher Springer US, Vol. 20, issue 4, pp. 1657-1669, March 2023.

Conferences

- [24] **Vijaya Bhadauria** and Krishna Kant, "A Novel Technique for Tuning Low Voltage Linear Transconductor," 2010 International conference on Electronic Devices, Systems and Application (ICEDSA2010), pp. 22-25, Kuala Lumpur, Malaysia, April 2010.
- [25] Tanmai Kulshreshtha and **Vijaya Bhadauria**, "A highly linear CMOS pseudo differential transconductor using active attenuator," *International Conference on Power, Control, and Embedded Systems, (ICPCES2010)*, pp. 1-4, Allahabad, India, Nov. 29 Dec. 1 2010.
- [26] **Vijaya Bhadauria**, Krishna Kant and Swapna Banerjee, "Tunable Transconductor with high Linearity," *Proc. Asia Pacific Conference on Circuits and Systems (APCCAS 2010)*, pp. 5-8, Kuala Lumpur, Malaysia, December 2010.
- [27] Yogesh Yadav and **Vijaya Bhadauria**, "Frequency Compensation of Two Stage Op-Amp Using Triode Mode Compensation Stage," *IJCA Proceedings on International Conference on Communication, Circuits and Systems 2012, iC3S* -, 2012, *International Journal of Computer Applications (0975 8887),* No 5, pp. 16-18, June 2013 (iC3S/Number 5 (ISBN: 973-93-80875-28-3)), 2012

- [28] Shankar Narayan and **Vijaya Bhadauria**, "Linearity Improvement of Double Differential Pair CMOS OTA Using Quasi-Floating-Gate Technique," 2nd International Conference on Power, Control and Embedded Systems (ICPCES), 2012, Allahabad, India pp. 1-4, Digital Object Identifier: 10.1109/ICPCES.2012.6508137, 2012
- [29] Saurabh Kumar and **Vijaya Bhadauria**, "Low Power Adiabatic Logic Using DCPAL Block" 2014 Students Conference on Engineering and Systems (SCES) held at MNNIT Allahabad during 28th May-30th May 2014.
- [30] Tripurari Sharan, and **Vijaya Bhadauria**, "Ultra Low-power Rail-to-Rail Linear Subthreshold Bulk-driven Transconductor" International Conference on Power, Control & Embedded Systems (ICPCES 2014), held at MNNIT Allahabad during 26th December -28th December. 2014.
- [31] Tripurari Sharan, and **Vijaya Bhadauria**, "Ultra-Low-Power Bulk and Gate-driven, Class AB, Sub-threshold Transconductor", 2nd international conference (SPIN-2015) held at Amity School of Engg. And Technology, Amity Univ. Noida during 19th February -20th February 2015.
- [32] Tripurari Sharan, and **Vijaya Bhadauria** "Low-power bulk-driven feed-forward reverse nested miller compensated OTA with high drive capability." *IEEE Students Conference on Engineering and Systems (SCES)*, held at MNNIT Allahabad during 6th November 8th November 2015.
- [33] Kumar, Shanu, **Vijaya Bhadauria** and Tanmay Dubey" LVLP High Gm Bulk-driven Folded Cascode OTA using Current Shunt Auxiliary Pair." IEEE 4th International Conference on. Power, Control and Embedded Systems (ICPCES), held at MNNIT Allahabad during 9th to 11th March 2017.
- [34] Tripurari Sharan, Priyanka Chetri, and **Vijaya Bhadauria**, "Bulk-driven feed-forward compensated sub-threshold low-voltage OTA to drive high capacitive load," *IESC-2017*, 6-7 *April 2017*, *IEEE Conference*, *NIT Meghalaya Shillong*, 2017.
- [35] Surabhi Gautam, Man Mohan Singh, **Vijaya Bhadauria**, M. J. Siddiqui, "Leakage Minimization in Full Adder by Using Sub- Threshold Technique" International Conference on Multimedia, Signal Processing and Communication Technologies (IMPACT 2017) held at Aligarh Muslim University Aligarh during 24th to 26th November 2017.
- [36] Utkarsh Sharma, Tanmay Dubey, and **Vijaya Bhadauria**, "Linearity Enhancement using Bulk-Degeneration for Source Degenerated OTAs", IEEE *Second International Conference on Advances in Electronics, Computers and Communications (ICAECC)*, held at REVA University, Bangalore, India during 9th to 10th February 2018.

- [37] Tanmay Dubey, Ravi Shankar and **Vijaya Bhadauria**, "Cross Coupled Bulk Degenerated OTA using Source Follower Auxiliary Pair to Improve Linearity," *1st Int. Conf. VLSI, Communication and Signal Processing, (VCAS 2018)*, held at MNNIT Allahabad during 29th November to 1st December 2018. Published by Springer in 'Lecture Notes in Electrical Engineering, Vol. 587 entitled 'Advances in VLSI, Communication, and Signal Processing', pp 683-691.
- [38] Tanmay Dubey, Anurag Kumar and **Vijaya Bhadauria**, "Highly Linear Source Degenerated OTA with Floating Gate Auxiliary Differential Pair," *Ist Int. Conf. VLSI, Communication and Signal Processing, (VCAS 2018)*, held at MNNIT Allahabad during 29th November to 1st December 2018. Published by Springer in 'Lecture Notes in Electrical Engineering Vol. 587 entitled 'Advances in VLSI, Communication, and Signal Processing', pp 693-704.
- [39] Shalini Mishra, Devarshi Shukla, **Vijaya Bhaduaria**, Santosh Kumar Gupta, ". Tuned Universal Filter Design Using Single Differential Difference Current Conveyor for Sub-GHz Frequency Band," *Ist Int. Conf. VLSI, Communication and Signal Processing, (VCAS 2018)*, held at MNNIT Allahabad during 29th November to 1st December 2018. Published by Springer in 'Lecture Notes in Electrical Engineering Vol. 587 entitled 'Advances in VLSI, Communication, and Signal Processing', pp 451-461.
- [40] Sougata Ghosh and **Vijaya Bhadauria**, "0.5 V Two-Stage Subthreshold Fully Differential Miller Compensated OTA Using Voltage Combiners," *1st Int. Conf. VLSI, Communication and Signal Processing, (VCAS 2018)*, held at MNNIT Allahabad during 29th November to 1st December 2018. Published by Springer in 'Lecture Notes in Electrical Engineering Vol. 587 entitled 'Advances in VLSI, Communication, and Signal Processing', pp 463-479.
- [41] Mamidi Nagaraju, Santosh Kumar Gupta, **Vijaya Bhadauria**, and Devarshi Shukla, "Design and implementation of an efficient mixed parallel-pipeline SAD architecture for HEVC motion estimation, 2nd ¹Int. Conf. VLSI, Communication and Signal Processing, (VCAS 2019), held at MNNIT Allahabad during 21st 23rd October 2019. Published by Springer in 'Lecture Notes in Electrical Engineering Vol. 683 entitled 'Advances in VLSI, Communication, and Signal Processing', pp 605-621.
- [42] Tanmay Dubey and **Vijaya Bhadauria**, "A Linear OTA using Series Connected Source Degenerated Bulk Driven Floating Gate Differential Pairs, 2nd **Int. Conf. VLSI, Communication and Signal Processing, (VCAS 2019), held at MNNIT Allahabad during 21st 23rd October 2019. Published by Springer in 'Lecture Notes in Electrical Engineering 683 entitled 'Advances in VLSI, Communication, and Signal Processing', pp 447-457
- [43] Mamidi Nagaraju, Santosh Kumar Gupta, **Vijaya Bhadauria**, and Devarshi Shukla, "Design and implementation of an efficient mixed parallel-pipeline SAD architecture for HEVC motion estimation, 2nd ^tInt. Conf. VLSI, Communication and Signal Processing, (VCAS 2019), held at MNNIT Allahabad during 21st 23rd October 2019. Published by Springer in

- 'Lecture Notes in Electrical Engineering Vol. 683 entitled 'Advances in VLSI, Communication, and Signal Processing', pp 605-621.
- [44] Sougata Ghosh, Saumya Tripathi and **Vijaya Bhadauria** " A Low Harmonic High Gain Subthreshold Flipped Voltage Follower-Based Bulk-Driven OTA Suitable for Low-Frequency Applications," 2nd *Int. Conf. VLSI, Communication and Signal Processing, (VCAS 2019)*, held at MNNIT Allahabad during 21st 23rd October 2019. Published by Springer in 'Lecture Notes in Electrical Engineering, Vol 683 entitled 'Advances in VLSI, Communication, and Signal Processing', pp 469-488.
- [45] Devarshi Shukla, Abhishek Kumar, **Vijaya Bhaduaria**, Santosh Kumar Gupta, "865–867 MHz 180 nm Transmitter with Direct BPSK Modulation for Wireless Sensor Application, 3rd *Int. Conf. VLSI, Communication and Signal Processing, (VCAS 2020)*, held at MNNIT Allahabad during 9th to 11th October 2020. Published by Springer in 'Lecture Notes in Electrical Engineering Vol. 777 entitled 'Recent Trends in Electronics and Communication: Select Proceedings of VCAS 2020', pp 669-682.
- [46] Rakesh Kumar Pandey; **Vijaya Bhadauria**; and V.K. Singh "Rail-to-Rail, Reconfigurable Subthreshold Bulk-Driven OTA based on Flipped Voltage Follower for Biomedical Applications", IEEE Int. Conf. on Technology, Research & Innovation for Betterment of Society (TRIBES-2021) held at IIIT Naya Raipur, Chhattisgarh, India during December 17 th-19th, 2021.
- [47] Abhishek Kumar, Santosh Kumar Gupta and **Vijaya Bhaduaria**, "Tunable Three-Phase Voltage Controlled Oscillator Using Single VDTA", 5th *Int. Conf. VLSI, Communication and Signal Processing, (VCAS 2022)*, held at MNNIT Allahabad during 14th to 16th October 2022, Published by Springer in 'Lecture Notes in Electrical Engineering Vol. 1024 entitled 'VLSI, Communication, and Signal Processing', pp 819-835.