

Research publication record (*Past six years*)

Summary:

- Lifetime journal publications: **Twenty-nine**
- Lifetime conference publications: **Forty-five**
- Lifetime other (technical reports, tutorial notes) publications: **Six**

A. Refereed journal (Published/accepted)

1. R. Raut, M.N.S. Swamy, and **N. Tian**, "Current-Mode Filters Using Voltage Amplifiers", *Circuits, Systems and Signal Processing Journal*, Vol. 26, No.5, September/October 2007, pp.773-792.
2. **L. Zhang**, R. Raut, Y. Jiang, and U. Kleine, "Placement Algorithms in Analog-Layout Designs", *IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems*, October 2006, Vol.25, No.10, pp.1889-1903.
3. R. Raut, M.N.S. Swamy, and **N. Tian**, "On the realization of current transfer function using voltage amplifiers", *International Journal of Circuit Theory and Applications*, 2006, **34** : 583-589
4. R. Raut, "Some Insight into the Implementation of a Trans-Impedance Amplifier in CMOS Technology Using Two-Port Network Parameters", *WSEAS Transactions on Circuits and Systems*, Issue 7, Vol.5, July 2006 (ISSN 1109-2734 <http://www.wseas.org>), pp.1067-1074.
5. **L. Zhang**, U. Kleine, R. Raut, and Yingtao Jiang, "ALADIN: A Layout Synthesis Tool for Analog Integrated Circuits", *International Journal of Analog Integrated Circuits and Signal Processing*, vol. 46, no.3, 00.215-230, March 2006.
6. **L. Zhang**, R. Raut, Yingtao Jiang, U. Kleine, and Y. Kim, "Macro-Cell Placement for Analog Physical Designs Using a Hybrid Genetic Algorithm with Simulated Annealing", *International Journal of Integrated Computer-Aided Engineering*, vol.12, no.4, pp.379-396, Dec. 2005.
7. **L. Zhang**, R. Raut, Yingtao Jiang, U. Kleine, and Y. Kim, "A Hybrid Evolutionary Analogue Module Placement Algorithm for Integrated Circuit Layout Designs", *International Journal of Circuit Theory and Applications*, vol.33, no.6, pp.487-501, Nov. 2005.

B. Refereed conference

Published/accepted

1. **Omidreza Ghasemi**, Rabin Raut, and Glenn Cowan, "A Low Power Transimpedance Amplifier Using Inductive Feedback Approach in 90nm CMOS", *Proc. Of the International Symposium on Circuits and Systems (ISCAS) 2009*, May 24-27, 2009, Taipei, Taiwan, pp.1937-1940.

2. **Omidreza Ghasemi**, Rabin Raut, "A Power Efficient Wide Band Trans-Impedance Amplifier in sub-micron CMOS Integrated Circuit Technology", Proc. Of the NEWCAS-TAISA '08 Conference, June 22-25, 2008, Montreal, Canada, pp.113-116.
3. **Vishal Patel**, R. Raut, "A STUDY ON CMOS NEGATIVE RESISTANCE CIRCUITS", Proc. Of the IEEE 21st Canadian Conference on Electrical and Computer Engineering, May 4-7, 2008, Niagra Falls, Ont., Canada, pp.1283-1288.
4. **Kaustubha A. Mendhurwar**, Vijay K. Devabhaktuni, and Rabin Raut, "Binning Algorithm for Accurate Computer Aided Device Modeling", Proc. Of the Internatl. Symp. On Circ. And Systems (ISCAS), May 18-21, 2008, Seattle, USA, pp. 2773-2776.
5. **K. A. Mendhurwar**, V. K. Devabhaktuni, and R. Raut, "A New Computer Aided Multi-Dimensional Device Modeling Algorithms Based on Binning Concepts", 26th Internatl. Conference on Microelectronics, Nis, Serbia, Mar. 11-14, 2008, pp.477-480.
6. (*accepted*) **O. Ghasemi** and R. Raut, "A Simple Wide-Band Power Efficient Trans-Impedance Amplifier in CMOS Integrated Circuit Technology", 2007 IEEE INTERNATIONAL ANALOG VLSI WORKSHOP November 7-9, 2007 Shannon Shamrock hotel, Bunratty, Co. Clare, Ireland (Ireland).
7. **Niladri Roy**, Mani Najmabadi, Rabin Raut, and Vijay Devabhaktuni, " A Systematic Approach Towards The Implementation of A Low-Noise Amplifier in Sub-Micron CMOS Technology", Proc. of the IEEE CCECE/CCGEI conference, Ottawa, Canada, May 2006, pp. 1909-1913.
8. **Y.Wang**, and R. Raut, "A 2.4 GHz 82 dB Ω Fully Differential CMOS Transimpedance Amplifier for Optical Receiver Based on Wide-Swing Cascode Topology", Proc. Of the 2005 IEEE ISCAS, Kobe, Japan, May 23-26, 2005, pp.1601-1605.
9. **M. Zamin Khan**, **Y. Wang**, and Rabin Raut, "A 0.8V, 2.4GHz, 1.2 dB Noise Figure CMOS Amplifier for Application in Blue-Tooth Systems", Proceedings of the 9th World Multi-Conference on Sytemics, Cybernetics and Informatics, Orlando, Florida, USA, July 10-13, 2005, Vol.VI, pp.66-69.
10. **M. Zamin Khan**, **Y. Wang**, and R. Raut, " Comparison of Different CMOS Low-Noise Amplifier Topologies for Bluetooth Applications", *poster presentation*, proceedings of the 2005 IEEE Annual Wireless and Microwave Technology Conference, Clear Beach, Florida, USA, April 6-7, 2005.
11. R. Raut, **K. Zheng**, "An Efficient A/D Converter Using Electronic Neurons", Proceedings of the 9th World Multi-Conference on Sytemics, Cybernetics and Informatics, Orlando, Florida, USA, July 10-13, 2005, Vol.VI, pp.70-73.

12. **Syed Masood Ali**, Rabin Raut, and Mohammad A. Sawan¹, "A power efficient decoder for 2-GHz, 6-bit CMOS Flash ADC architecture", the 5th Internatl. Workshop on System on Chip for Real Time Applications, July 2005, Banf, Alberta, pp.123-126.
13. **L. Zhang**, R. Raut, and Y. Jiang², "A Novel Evolutionary Algorithm for Analog VLSI Layout Placement Design", Proc. of the 2nd Annual IEEE Northeast Workshop on Circuits and Systems, 20-23 June, 2004, Montreal, Canada, pp.117-120
14. **G. Nohra**, R. Raut, and M. Sawan¹, "A 0.85V Tunable Gain 5 GHz Cascode Low Noise Amplifier", Proc. of the 2nd Annual IEEE Northeast Workshop on Circuits and Systems, 20-23 June, 2004, Montreal, Canada, pp.353-356.
15. **L. Zhang**, R. Raut, L. Wang, and Y. Jiang², "Analog Module Placement Realizing Symmetry Constraints Based on A Radiation Decoder", Proceedings of the 47th IEEE International Midwest Symposium on Circuits and Systems, Hiroshima, Japan, July 25-28, 2004, pp. I 481-I 484 (on CD).
16. **Y. Wang**, and R. Raut, "A 0.18 Micron Fully Differential Transimpedance Amplifier for Optical Receiver", Proc. of the 2nd Annual IEEE Northeast Workshop on Circuits and Systems, 20-23 June, 2004, Montreal, Canada, pp.229-232.
17. **L. Zhang**, R. Raut, and Y. Jiang², " A Placement Algorithms for Implementation of Analog LSI/VLSI Systems", Proceedings of the 2004 International Symposium on Circuits and Systems, May 23-26, 2004, Vancouver, British Columbia, Canada, pp. V-77 to V-80 (on CD).
18. (*accepted*) **Y. Wang**, and R. Raut, "A Wide-Swing Cascode Transimpedance Preamplifier for Optical fiber link", 46th IEEE International Midwest Symposium on Circuits and Systems (MWSCAS), Dec. 27-30, 2003, Cairo, Egypt.
19. **Y. Wang**, and R. Raut, "A Design of Transresistance Amplifier for high gain-bandwidth application", Proceedings of the 10th IEEE International Conference on Electronics, Circuits and Systems (ICECS), December 14-17, 2003, Sharjah, UAE, pp.12-15 (CD ROM)
20. (*accepted*) **Y. Wang**, and R. Raut, "A design of Transresistance Amplifier for High Frequency Applications", 5th International Conference on ASIC (ASICON), Oct. 21-24, 2003, Beijing, China.
21. R. Raut, and **Y. Wang**, "Realization of a transimpedance amplifier using two-port approach", Proceedings of the first Annual Northeast Workshop on circuits and systems (NEWCAS), June 17-20, 2003, Montreal, Canada, AF 97_50 (on CD ROM).

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