

# List of Publications

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### *Journals:*

- [1] A. Bhide, O. E. Najari, B. Mesgarzadeh, and A. Alvandpour, "An 8-GS/s 200-MHz Bandwidth 68-mW  $\Delta\Sigma$  DAC in 65-nm CMOS", in IEEE Transactions on Circuits and Systems II, vol. 60, no. 7, pp. 387-391, July 2013.
- [2] Y. Jung; J. Fritzin, M. Enqvist, A. Alvandpour, "Least-Squares Phase Predistortion of a +30 dBm Class-D Outphasing RF PA in 65 nm CMOS", in IEEE Transactions on Circuits and Systems I, vol. 60, no. 7, pp. 1915-1928, July 2013.
- [3] Fazli Yeknami, F. Qazi and A. Alvandpour, "Low-Power DT  $\Delta\Sigma$  Modulators Using SC Passive Filters in 65nm CMOS," in IEEE Transaction on Circuits and Systems-I, vol. pp, no. 99, pp. 1-13, 2013.
- [4] D. Svärd, C. Jansson and A. Alvandpour, "A Readout IC for an Uncooled Microbolometer infrared FPA with On-chip Self-heating Compensation in 0.35  $\mu\text{m}$  CMOS", in Journal of Analog Integrated Circuits and Signal Processing, vol. 77, no. 1, pp. 29 - 44, Oct. 2013.
- [5] Fazli Yeknami and A. Alvandpour, "A 2.1  $\mu\text{W}$  80 dB SNR DT  $\Delta\Sigma$  Modulator for Medical Implant Devices," in Journal of Analog Integrated Circuits and Signal Processing, vol. 77 , pp. 69-78, no. 1, Oct. 2013.
- [6] H. Raza Khan, J. Fritzin, A. Alvandpour , Q. Wahab," A parallel circuit differential class-E power amplifier using series", in Journal of Analog Integrated Circuits and Signal Processing, vol. 75, no. 1, pp. 31-40, April 2013.
- [7] P. Landin, J. Fritzin, W. Van Moer, M. Isaksson, and A. Alvandpour, "Modeling and Digital Predistortion of Class-D Outphasing RF Power Amplifiers," in IEEE Transactions on Microwave Theory and Techniques, vol. 60, no. 6, pp. 1907-1915, June 2012.
- [8] J. Fritzin, C. Svensson, and A. Alvandpour, "Analysis of a 5.5V Class-D stage used in +30 dBm outphasing RF PAs in 130nm and 65nm CMOS," in IEEE Transactions on Circuits and Systems-II, vol. 59, no.11, pp. 726-730, Nov. 2012.
- [9] J. Fritzin, C. Svensson, and A. Alvandpour, "Design and Analysis of a Class-D Stage with Harmonic Suppression," in IEEE Transactions on Circuits and Systems-I, vol. 59, no. 6, pp. 1178-1186, 2012.
- [10] D. Zhang, A. Bhide, and A. Alvandpour, "A 53-nW 9.1-ENOB 1-kS/s SAR ADC in 0.13- $\mu\text{m}$  CMOS for Medical Implant Devices," in IEEE Journal of Solid-State Circuits, vol. 47, no. 7, pp.1585-1593, July 2012.
- [11] J. Fritzin, Y. Jung, P.N. Landin, P. Handel, M. Enqvist, and A. Alvandpour, "Phase Predistortion of a Class-D Outphasing RF Amplifier in 90nm CMOS," IEEE Transactions on Circuits and Systems-II, vol. 58, no. 10, pp. 642-646, Oct. 2011.

- [12] T. Sundström, C. Svensson, and A. Alvandpour, "A 2.4 GS/s, Single-Channel, 31.3 dB SNDR at Nyquist, 8-bit Pipeline ADC in 65nm CMOS," in *Journal of Solid State Circuits*, vol. 46, no. 7, pp. 1575-1584 July 2011.
- [13] J. Fritzin and A. Alvandpour, "A 3.3V 72.2Mbit/s 802.11n WLAN Transformer-Based Power Amplifier in 65nm CMOS" in *Journal of Analog Integrated Circuits and Signal Processing*, vol. 64, no. 3, pp. 241-247, Sept. 2010.
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- [15] T. Sundström and A. Alvandpour, "Utilizing Process Variations for Reference Generation in a Flash ADC", in *IEEE Trans. Circuits and Systems II*, vol. 56, no. 5, pp. 364- 368, May 2009.
- [16] B. Mesgarzadeh and A. Alvandpour, "A Low-Power Digital DLL-Based Clock Generator in Open-Loop Mode", in *IEEE Journal of Solid-State Circuits*, vol. 44, no. 7, pp. 1907-1913, 2009.
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- [19] S. Hsu, A. Alvandpour, S. Mathew, S. Lu, R. Krishnamurthy, S. Borkar, "A 4.5GHz 130nm 32-kb L0 Cache with a Leakage-tolerant Self Reverse-Bias Bitline Scheme," *IEEE Journal of Solid-State Circuits*, vol.38, no.5, pp. 755-76, May 2003.
- [20] A. Alvandpour, R. Krishnamurthy, K. Soumyanath, S. Borkar, "A Sub-130nm Conditional Keeper Technique," *IEEE Journal of Solid-State Circuits*, vol. 37, no: 5, pp. 633-638, May 2002.
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*International Conferences:*

- [22] A. Ojani, B. Mesgarzadeh, and A. Alvandpour, "A Quadrature UWB Frequency Synthesizer with Dynamic Settling-Time Calibration", *IEEE Intl. Symp. Circuits and Systems (ISCAS)*, pp. 2480-2483, May 2013.
- [23] A. Fazli Yeknami, and A. Alvandpour, "A 0.5-V 250-nW 65-dB SNDR Passive  $\Delta\Sigma$  Modulator for Medical Implant Devices", *IEEE Intl. Symp. Circuits and Systems (ISCAS)*, pp. 2010-2013, May 2013.
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- [25] D. Zhang and A. Alvandpour, "A 3-nW 9.1-ENOB SAR ADC at 0.7 V and 1 kS/s," in *IEEE European Solid-State Circuits Conference (ESSCIRC)*, pp. 369-372, September 2012.
- [26] B. Mesgarzadeh, I. Soderquist, and A. Alvandpour, "Reliability Challenges in Avionics due to Silicon Aging," in *proc. IEEE Intl. Symp. on Design and Diagnostics of Electronic Circuits and Systems (DDECS)*, pp. 342-347, April 2012.

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- [32] D. Svard, C. Jansson, and A. Alvandpour, "A Readout Circuit for an Uncooled IR Camera With Mismatch and Self-Heating Compensation," in IEEE Norchip Conference, pp. 1-4, November 2012.
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- [35] B. Mesgarzadeh, I. Esmail Zadeh, and A. Alvandpour, "A Multi-Segment Clocking Scheme to Reduce On-Chip EMI," in proc. IEEE International SoC Conference (SoCC), pp. 251-255, September 2011.
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- [37] J. Fritzin, C. Svensson, and A. Alvandpour, "A Wideband Fully Integrated +30dBm Class-D Outphasing RF PA in 65nm CMOS," in IEEE International Symposium on Integrated Circuits (ISIC), December 2011.
- [38] E. Nilsson and C. Svensson, "Envelope detector sensitivity and blocking characteristics," in European Conference on Circuit Theory and Design (ECCTD), pp. 802-805, August 2011.
- [39] D. Zhang, C. Svensson, and A. Alvandpour, "Power Consumption Bounds for SAR ADCs," in IEEE European Conference on Circuit Theory and Design (ECCTD), pp. 556-559, August 2011.
- [40] A. Fazli Yeknami, M. Hansson, B. Mesgarzadeh, and A. Alvandpour, "A low voltage and process variation tolerant SRAM cell in 90-nm CMOS", in Proc. International Symp. on VLSI Design, Automation and Test (VLSI-DAT), pp. 78-81, 2010.
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- [42] J. Fritzin, T. Sundstrom, T. Johansson, and A. Alvandpour, "Reliability Study of a Low-Voltage Class-E Power Amplifier in 130nm CMOS", in proc. IEEE International Symposium on Circuits and Systems, (ISCAS), pp. 1907-1910, May 2010.
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- [46] D. Zhang, A. Bhide, and A. Alvandpour, "Design of CMOS Sampling Switch for Ultra-Low Power ADCs for Biomedical Applications," in proc. Norchip conference, Finland, 2010.
- [47] J. Fritzin and A. Alvandpour, "Low Voltage Class-E Power Amplifiers for DECT and Bluetooth in 130nm CMOS", in proc. IEEE Topical Meeting on Silicon Monolithic Integrated Circuits in RF Systems (SiRF), pp. 57-60, San Diego, USA, 2009.
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- [63] B. Mesgarzadeh and A. Alvandpour, "First-Harmonic Injection-Locked Ring Oscillators", IEEE Custom Integrated Circuits Conference (CICC), Sept. 2006, pp. 733-736.
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### *Invited papers and talks at international conferences*

- [103] R. Krishnamurthy, A. Alvandpour, S. Mathew, M. Anders, S. Borkar, "High-performance, Low Power, and Leakage Tolerant Challenges for Sub-70nm Microprocessor Circuits," European Solid-State Circuit Conference, 2002.
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- [107] S. Natarajan, A. Alvandpour, "Mainstream Memory Technologies in Deep Submicron", 12th IEEE Mediterranean Electrotechnical Conference, MELECON, pp. 175-178, Dubrovnik, Croatia, 12-15 May 2004.
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