



## Hassan Faraji

Associate Professor

College: Faculty of Electrical Engineering

### Employment Information

Faculty/Department	Position/Rank	Employment Type	Cooperation Type	Grade
(not set)	(not set)	Tenured	Full Time	12

### Papers in Conferences

- حسن فرجی بگتاش، تقویت- کننده تراهدایتی کم ولتاژ با توان مصرفی ۱۹ میکرو وات، ششمین کنگره ملی تازه های ۱۳۹۸ مهندسی برق و کامپیوتر ایران با نگاه کاربردی بر انرژی های نو، ۱۳۹۸.
- ایستا: یک خانواده منطقی جدید، ششمین CMOS حسن فرجی بگتاش، کاهش جریان اتصال کوتاه در خانواده منطقی کنگره ملی تازه های مهندسی برق و کامپیوتر ایران با نگاه کاربردی بر انرژی های نو، ۱۳۹۸.
- رسول پاکدل و حسن فرجی بگتاش، تقویت کننده کسکود تاشده تحریک بدنه با بهره بالا و توان مصرفی پایین، بیست و ششمین کنفرانس مهندسی برق ایران، ۱۳۹۷.
- حسن فرجی بگتاش، آینه جریان با خطای انتقال جریان بسیار پایین و گستره دینامیکی جریان ۱۶۰ دسی-بل، اولین کنفرانس بین المللی دستاوردهای نوین پژوهشی در مهندسی برق و کامپیوتر، ۱۳۹۵، ۱۶.
- یازدهمین کنفرانس هوافضای، LEO حسین بلندی و سایر، آنالیز کمی و کیفی قابلیت اطمینان بخش تله-کامند ماهواره ۱۲، ۱۳۹۰، (Aero ۲۰۱۲) ایران.
- جهت تله-متری FPGA در IRIG حسین بلندی و سایر، طراحی و پیاده سازی فریم-بندی مطمئن مطابق استاندارد ۱۳۹۰، (Reli ۲۰۱۱) دومین کنفرانس مهندسی قابلیت اطمینان، LEO داده-های ماهواره.
- خلیل منفردی، حسن فرجی بگتاش، علی شادمند، طراحی و پیاده سازی سیستم کنترلر دیجیتال مبتنی بر پردازنده خلیل منفردی، سیگنال دیجیتال، همایش منطقه ای مهندسی برق و کامپیوتر ۱۳۸۹، (ECSC ۲۰۱۰).
- حسن فرجی بگتاش، خلیل منفردی، مجید عباسی، نوسانگر کنترل شونده با ولتاژ با محدوده فرکانسی وسیع، همایش ۱۳۸۹، (ECSC ۲۰۱۰) منطقه ای مهندسی برق و کامپیوتر.
- بهره ولتاژ بالا Interleaved مجید عباسی، حسن فرجی بگتاش، خلیل منفردی، تحلیل و طراحی مبدل فلای بک بوست ۱۳۸۹، (ECSC ۲۰۱۰) به همراه مدار کلمپ بی اتلاف غیر فعال، همایش منطقه ای مهندسی برق و کامپیوتر.
- Rasoul Pakdel, & Hassan Faraji Baghtash, Design of a Low Noise Low Power Amplifier for Biomedical Applications, 2018 25th National and 3rd International Iranian Conference on Biomedical Engineering (ICBME), 2018 11 1.
- H. Karrari, E. Najafi Aghdam, H. Faraji Baghtash, A Wideband Noise Cancelling Balun-LNA, 2017 Iranian Conference on Electrical Engineering (ICEE), 2017.
- Hamid Karrari, Hassan Faraji Baghtash, Esmail Najafi Aghdam, A 3-11GHz Current-Reuse Low Noise Amplifier for Ultra-Wideband Receivers, 2016 Eighth International Conference on Ubiquitous and Future Networks (ICUFN), 2016.

13. Hassan Faraji Baghtash ,An Ultra-Wide Swing Current Mirror Structure ,1st International Conference on New Research Achievements in Electrical and Computer Engineering (ICNRAECE) ,2016.
14. A. H. Miremadi ,& H. Faraji Baghtash ,A Novel Simple and High Performance Structure for Improving CMRR: Application to Current Buffers and Folded Cascode Amplifiers ,NORCHIP 2010 ,2010 11 1.
15. H. Faraji Baghtash , K. Monfaredi , S. J. Azhari ,A novel high performance Atto-Ampere Current Mirror ,International Conference on Signal Acquisition and Processing (ICSAP) ,2010.
16. K. Monfaredi , H. Faraji Baghtash , S. J. Azhari ,A novel low voltage current compensated high performance current mirror/NIC ,11th Int'l Symposium on Quality Electronic Design (ISQED) ,2010.
17. H. Faraji Baghtash ,& S. J. Azhari ,A novel low voltage high performance current mirror ,2nd National Electrical Engineering Conference ,2010.
18. L. Safari , H. Faraji Baghtash , K. Monfaredi ,A Low Supply Noise VCO with Wide Frequency Range in 0.13 $\mu$ m CMOS Technology ,2nd National Electrical Engineering Conference ,2010.
19. K. Monfaredi , H. Faraji Baghtash , M. Abbasi ,A Novel Low Power Very Low Voltage High Performance Current Mirror ,World Academy of Science, Engineering and Technology ,2010.
20. Ava Khosgoftar , Tayebeh Azadmousavi , H. Faraji Baghtash , E. Najafi Aghdam ,Robust Low-Voltage LNA Design to Overcome Reliability and Variability Issues , اولین کنفرانس میکروالکترونیک ایران, 19 12 1398,.

### Papers in Journals

- 
1. حسن فرجی بگتاش، آینه جریان سریع و مقاوم در برابر ناهمجواری ترانزیستورها، مجله مهندسی برق دانشگاه [۲۰]. تبریز، ۱۳۹۸، ۴ ۱۷.
  2. M. Noohi ,& H. Faraji Baghtash,A flexible rectangular coil to excite uniform magnetic field in nuclear magnetic resonance spectrometer: Design, optimization and implementation,Sensing and Imaging,2024 4 5.
  3. H. Safari , H. Faraji Baghtash , E. Najafi Aghdam,A low-power 10Gb/s CMOS clock and data recovery circuit with a quarter-rate phase detector,Analog Integrated Circuits and Signal Processing,2024 1 1.
  4. H. Faraji Baghtash ,& M. Karga,An FVF-Based Gm-Enhanced fully balanced Preamplifier,Tabriz Journal of Electrical Engineering,2023 10 22.
  5. A. Khoshgoftar , H. Faraji Baghtash , E. Najafi Aghdam , T. Azadmousavi,Design of a low-voltage LNA with considering reliability and variability issues,Journal of The Institution of Engineers,2022 12 1.
  6. Tohid Aghaei , H. Faraji Baghtash , A. Naderi Saatlo,A translinear principle based low-power high-precision RMS-to-DC converter in CMOS technology,Analog Integrated Circuits and Signal Processing,2022 1 20.
  7. Rasoul Pakdel H ,& Faraji Baghtash,A Low-Power, High-Gain Amplifier with Rail-to-Rail Operating Capability: Applications to Biomedical Signal Processing,Proceedings of the Pakistan Academy of Sciences: A: Physical and Computational Sciences,2021 8 27.
  8. Razieh Eskandari , Afshin Ebrahimi , H. Faraji Baghtash,A wideband balun-LNA employing symmetrical CCC technique and balanced outputs,IET Circuits, Devices & Systems,2021 2 21.
  9. Razieh Eskandari , Afshin Ebrahimi , H. Faraji Baghtash,An area-efficient broadband balun LNA mixer front-end for multi-standard receivers,Tabriz Journal of Electrical Engineering,2021 1 1.
  10. Razieh Eskandari , Afshin Ebrahimi , H. Faraji Baghtash,A wideband low power merged balance-balun-LNA and I/Q-mixer,Microelectronics Journal,2021 1 1.
  11. H. Faraji Baghtash,A 0.4 V, tail-less, fully differential trans-conductance amplifier: an all inverter based structure,Analog Integrated Circuits and Signal Processing,2020 7 1.
  12. H. Faraji Baghtash,A 0.4 V, body-driven, fully differential, tail-less OTA based on current push-pull,Microelectronics Journal,2020 5 1.
  13. Razieh Eskandari , Afshin Ebrahimi , H. Faraji Baghtash,Low power balanced balun LNA employing double noise-canceling techniques,Analog Integrated Circuits and Signal Processing,2020 12 1.

14. H. Faraji Baghtash, Bias-stabilized inverter-amplifier: an inspiring solution for low-voltage and low-power applications, *Analog Integrated Circuits and Signal Processing*, 2020 11 1.
15. H. Faraji Baghtash, & Kh. Monfaredi, A Novel Active Feedback Frequency Compensation Scheme for Two-Stage OTA, *Iranian Journal of Electrical and Electronic Engineering*, 2019 9 1.
16. Kh. Monfaredi, & H. Faraji Baghtash, An Extremely Low Voltage and High Compliance Current Mirror, *Circuits, Systems, and Signal Processing*, 2019 6 20.
17. H. Faraji Baghtash, A wide swing, high drive current output stage, *International Journal of Electronics Letters*, 2019 11 1.
18. T. Azadmousavi, H. Faraji Baghtash, E. Najafi Aghdam, An Ultra-Low Power Variable Gain Current Mirror, *Iranian Journal of Electrical and Electronic Engineering (IJEED)*, 2018 9 1.
19. T. Azadmousavi, H. Faraji Baghtash, E. Najafi Aghdam, A Power Efficient Gain Enhancing Technique for Current Mirror, *Iranian Journal of Electrical and Electronic Engineering (IJEED)*, 2018 6 1.
20. H. Karrari, E. Najafi Aghdam, H. Faraji Baghtash, A wide-band noise-cancelling direct-conversion balun-LNA-mixer front-end, *Analog Integrated Circuits and Signal Processing*, 2018 4 17.
21. H. Faraji Baghtash, Body Controlled Threshold Voltage Shifting Variable Gain Current Mirror, *Body Controlled Threshold Voltage Shifting Variable Gain Current Mirror*, 2017 8 8.
22. H. Faraji Baghtash, A 37uW, Binary-Weighted PGA Based on a Novel Degeneration Transistor-Ladder, *IEEE Transaction on Circuits and Systems II: Express Briefs*, 2017 3 1.
23. H. Faraji Baghtash, An Accurate, Wide Dynamic Range Current Mirror Structure, *World Academy of Science, Engineering and Technology (WASET)*, 2016 3 1.
24. H. Karrari, H. Faraji Baghtash, E. Najafi Aghdam, A high speed single-pole two-stage fully differential amplifier with intrinsic CMFB, *Analog Integrated Circuits and Signal Processing*, 2016 11 21.
25. H. Faraji Baghtash, A 0.74 mW, linear-in-dB, constant bandwidth, variable gain amplifier based on zero-pole repositioning technique, *Analog Integrated Circuits and Signal Processing*, 2015 6 2.
26. H. Faraji Baghtash, & A. Ayatollahi, A high CMRR, class AB, fully differential current output stage, *Analog Integrated Circuits and Signal Processing*, 2013 9 28.
27. H. Faraji Baghtash, & A. Ayatollahi, A Zero-Pole Reposition Based, 0.95-mW, 68-dB, Linear-in-dB, Constant-Bandwidth Variable Gain Amplifier, *Circuits, Systems, and Signal Processing*, 2013 11 28.
28. K. Monfaredi, H. Faraji Baghtash, S. J. Azhari, A novel Ultra Low Power Low Voltage Femto-Ampere Current Mirror, *Circuits, Systems and Signal Processing*, 2011 9 8.
29. A. Mahmoudi, K. Monfaredi, H. Faraji Baghtash, A. Bahrami, Synthesis and Analysis of the Handheld Computer Power Consumption, *Advanced Materials Research*, 2011 6 1.
30. H. Faraji Baghtash, K. Monfaredi, A. Ayatollahi, A novel  $\pm 0.5$  V, high current drive, and rail to rail current operational amplifier, *Analog Integrated Circuits and Signal Processing*, 2011 4 29.
31. H. Faraji Baghtash, A. Ayatollahi, K. Monfaredi, A Novel  $\pm 0.5$  V Ultra High Current Drive and Output Voltage Headroom Current Output Stage with Very High Output Impedance, *Amirkabir International Journal of Electrical and Electronics Engineering*, 2011 4 1.
32. S. J. Azhari, H. Faraji Baghtash, K. Monfaredi, A Novel Ultra High Compliance, High Output Impedance Low Power Very Accurate High Performance Current Mirror, *Microelectronics journal*, 2011 2 1.
33. H. Faraji Baghtash, S. J. Azhari, K. Monfaredi, A Novel Very High Performance CMOS Current Mirror with extremely low input and ultra high output resistance, *Iranian Journal Of Electrical And Electronic Engineering*, 2011 12 1.
34. H. Faraji Baghtash, K. Monfaredi, A. Ayatollahi, Very Low Power, Low Voltage, High Accuracy and High Performance Current Mirror, *Journal of Electronic Science and Technology (JEST International)*, 2011 1 1.
35. H. Faraji Baghtash, & S. J. Azhari, Very low input impedance low power current mirror, *Analog Integrated Circuits and Signal Processing*, 2010 5 25.
36. K. Monfaredi, H. Faraji Baghtash, M. Abbasi, A Novel Low Power Very Low Voltage High Performance Current Mirror, *World Academy of Science, Engineering and Technology (WASET)*, 2010 1

1.

37. S. J. Azhari , K. Monfaredi , H. Faraji Baghtash, A Novel Ultra Low Power High Performance Atto-Ampere CMOS Current Mirror with Enhanced Bandwidth, Journal of Electronic Science and Technology (JEST International), 2010 1 1.

38. H. Faraji Baghtash, A 0.9 V, High-Speed, Low-Power Tunable Gain Current Mirror, World Academy of Science, Engineering and Technology (WASET), 2007 1 1.