

Curriculum Vitae



Personal Information

Name / Sure Name **Mahdi Forouzanfar**

Date / Place of birth 21.02.1984 / Birjand, Iran

Position Assistant Professor at the University of Birjand

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Address Electronics group, Engineering Faculty, University of Birjand, Birjand, Iran.
No,39,4th Alley, Azadegan St, Moallem BLVD, Birjand,Iran

Academic Background

Research Field High-frequency power amplifier design, Ultra-wideband Low noise amplifier, Passive high-frequency circuit design.

Research Keywords PA, X-band, GaN HEMT, ultra-wideband, LNA, CMOS.

Ph.D. Studies **Ph.D. in "Electrical Engineering"**
Ranked 1st in Entrance Examination among 32 persons.
Graduated with GPA 18.53/20.0.

Institute/Dates **Department of Electrical Engineering, Ferdowsi University of Mashhad
Mashhad, Iran. / Jan 2018**

Thesis Title Design, simulation, and realization of high-power X-band PA using discrete GaN HEMTs

Master Studies **M.Sc. in "Electrical Engineering"**
Graduated with GPA 17.42/20.0

Institute/Dates **Department of Electrical Engineering, Ferdowsi University of Mashhad,
Mashhad, Iran / Sep. 2006 to Sep. 2009.**

Thesis Title	Design, and simulation of CMOS ultra-wideband Low noise amplifier
Bachelor Studies	B.Sc. in "Electrical Engineering" Graduated with GPA 15.67/20.0
Institute/Dates	Department of Electrical Engineering, Ferdowsi University of Mashhad, Mashhad, Iran/ Sep. 2005 to Sep. 2009.
Thesis Title	Simulation and Fabrication of 800-900 MHz Low noise amplifier.
Experiences	<p>2012-2018: Working at RF circuit Lab & Sun Air Research Institute of Ferdowsi University of Mashhad, Mashhad, Iran.</p> <p>2016-Now: Working at the University of Birjand, Birjand, Iran.</p>
Publications	<p>M.Forouzanfar, M. Joodaki, "Efficiency Enhancement by Employing the Transistor Non-Linear Capacitors Effects in a 6W Hybrid X-band Class-J Power Amplifier," International Journal of RF and Microwave Computer-Aided Engineering, 2017.</p> <p>M. Forouzanfar and M. Joodaki, "Systematic Design of Hybrid High Power Microwave Amplifiers Using Large Gate Periphery GaN HEMTs," AEU – Int. J. Electronic and Communication, 2017.</p> <p>M. Harifi-Mood, A. Bijari ,H. Alizadeh, M. Forouzanfar, N. Kandalaf, "Power efficiency enhancement analysis of an inverse class D power amplifier for NB-IoT applications," Analog Integrated Circuits and Signal Processing Journal, Feb.2021.</p> <p>M. Forouzanfar, "Design and implementation of 4:1 Wilkinson power divider", Majlesi Journal of telecommunication Devices, Vol.9, No,10, Sep 2021.</p> <p>M. Forouzanfar, "Simulation and fabrication of 3.5W 8.8-9.2 GHz power amplifier", Majlesi Journal of telecommunication Devices, Dec 2021.</p> <p>M. Soruri, S. M. Razavi, and M. Forouzanfar", Design and Optimizing of a GaN HEMT Power Amplifier Based on the Inclined Planes System Optimization Algorithm for Wireless Applications", Iranian Journal of Electrical and Electronic Engineering, April 2022, DOI: 10.22068/IJEEE.18.3.2369.</p> <p>M.Forouzanfar, R. Sahragard Shahrakht, A.Bijari , “ Design and simulation of wideband high-Efficiency X-band MMIC power amplifier based on GaN HEMT technology”, Majlesi Journal of Telecommunication Devices, Dec 2022.</p>

S. Vahabi-Amlashi, P.Layegh, B. Kiafar, M. Hoseininezhad, M. Abbaspour, S. Hajebi Khaniki, **M. Forouzanfar**, Vahideh Sabeti, "A randomized clinical trial on therapeutic effects of 0.25 mg oral minoxidil tablets on treatment of female pattern hair loss, Dermatologic Therapy, Wiley, November, 2021.

M. Khorshidi, **M. Forouzanfar** ," A New 3D Frequency-Selective structure for 5G Communication" , Recent Advances in Electrical & Electronic Engineering, February 2023.

Conference

M.Forouzanfar, S.Naseh," High gain CMOS ultra-wideband LNA Employing thermal noise cancellation", International conference on ultra wideband systems, Canada, Sep. 2009.

M. Forouzanfar, R. Fegghi, J. Baseri, and M. Joodaki, "High efficiency 8.8–9.6 GHz class J power amplifier," in IEEE 16th Meditrian Microwave Symposium (MMS), 2016, pp. 1-4.

J. Baseri, **M. Forouzanfar**, M. Joodaki, R. Fegghi," Design of X-band Power Amplifier based on the Partitioning Design Approach," 26th Iranian Conference on Electrical Engineering (ICEE), 2018.

M. Forouzanfar, R. Fegghi, and M. Joodaki, "An 8.8–9.8 GHz 100W hybrid solid-state power amplifier for high power applications," in 22nd Iranian Conference on Electrical Engineering (ICEE), 2014, pp. 433-437.

R. Fegghi, J. Baseri, **M. Forouzanfar**, and M. Joodaki, "Design and fabrication of hybrid 30-watt X-band GaN-based amplifier," in IEEE 16th Meditrian Microwave Symposium (MMS), 2016, pp. 1-4.

E. Amiri, M. Joodaki, **M. Forouzanfer**, G. Kompa," A Distributed Power Amplifier Design with a High Power Gain," 28th Iranian Conference on Electrical Engineering (ICEE),2020.

مهدی فروزانفر، ساسان ناصح "تقویت کننده کم نویز در باند فرکانسی ۳/۱-۱۰/۶ گیگا هرتز با استفاده از روش خنثی سازی نویز" . هفدهمین کنفرانس مهندسی برق ایران . 2009 .

Training& Competence

Working with Advanced design systems (ADS), HFSS, MATLAB, and HSpice software.

Working with RF measurement setup (Vector Network Analyser, Signal Generator, Spectrum analyzer, power meter, ...)

Research interests

- Modeling, design, and analysis of RF microwave circuits (LNA, Mixer, PA, Oscillator, ..)
- Design and fabrication of analog integrated circuit

Undergraduate courses

➤ VLSI circuit design

- Electrical Circuit I
- Electrical Circuit II
- Electronic I
- Electronic II
- Engineering Mathematics
- Pulse technique

Master courses

- Optical integrated circuits
- Semiconductor Devices