



*Electrical Engineering – Electronics and  
Telecommunications*

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## Education

- B.Sc: Amirkabir University of Technology, , 1379→1384
- M.Sc: Sharif University of Technology, , 1384→1386
- Ph.D: Sharif University of Technology, , 1387→1392

## Research Interests

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## Industry Collaborations

- طراحی تراشه فرستنده - گیرنده برای کاربرد خودرویی 1398
- مطالعه و پژوهش پیرامون تقویت کننده توان بالای فرکانس رادیویی و راهه طرح یک نمونه اولیه 1397

## Journal Papers

- A Wide-Input-/Output-Voltage-Range Buck Converter With Adaptive Light-Load Efficiency Improvement and Seamless Mode Transition  
Amir Besharati Rad, Masoud Kargaran, Masoud Meghdadi, Ali Medi  
IEEE TRANSACTIONS ON POWER ELECTRONICS, Vol.39, pp. 2200-2212, 2024
- An Ultra-Low-Noise Buck Converter for Noise-Sensitive Applications  
Amir Besharati Rad, Masoud Kargaran, Seyed Mohamad Razi Moosavi, Masoud Meghdadi, Ali Medi  
IEEE TRANSACTIONS ON POWER ELECTRONICS, Vol.39, pp. 2169-2179, 2024
- Study of second-harmonic self-injection impact on 1/f<sub>2</sub> phase noise of CMOS parallel LC-tank oscillators  
Dariush Naseh, Masoud Meghdadi, Amir Nikpaik

■ An ultra high slew rate recycling folded cascode OTA with 100-dB DC gain

Seyed Arash Katourani, Omid Hashemipour tafreshi, Masoud Meghdadi

AEU-INTERNATIONAL JOURNAL OF ELECTRONICS AND COMMUNICATIONS, Vol.147, 2022

■ A Current Re-Use Quadrature RF Receiver Front-End for Low Power Applications: Blixator Circuit

Mohammad Barzgari, Ali Ghafari, Masoud Meghdadi, Ali Medi

IEEE JOURNAL OF SOLID-STATE CIRCUITS, Vol., pp. 1-13, 2022

■ A 10-W X-Band Class-F High-Power Amplifier in a 0.25-?m GaAs pHEMT Technology

Amirreza Alizadeh, Majid Yaghoobi, Masoud Meghdadi, Ali Medi, Sayfe Kiaei

IEEE TRANSACTIONS ON MICROWAVE THEORY AND TECHNIQUES, Vol.69, pp. 157-169, 2021

■ Stabilisation of multi-loop amplifiers using circuit-based two-port models stability analysis

Abbas Pasdar, Masoud Meghdadi, Ali Medi

IET Circuits Devices and Systems, Vol.15, pp. 553-559, 2021

■ A reconfigurable high ultimate rejection inductorless band-pass filter by the use of N-path passive mixers

Amin Hazrati marangaloo, Ali Jalali, Masoud Meghdadi

INTERNATIONAL JOURNAL OF CIRCUIT THEORY AND APPLICATIONS, Vol.49, pp. 31-43, 2021

■ Vertical Noise Reduction in 3D Mixed-Signal Integrated Circuits with Graphene Nanoribbon and Carbon Nanotube Interconnects

Soheila Gharavi Hamedani, Mohammad Hossein Moaiyeri, Masoud Meghdadi,

IEEE Transactions on Components Packaging and Manufacturing Technology, Vol.11, pp. 302-311, 2021

■ A method for rejecting 3k-th harmonics in bandpass 6N-path filters

Amin Hazrati marangaloo, Ali Jalali, Masoud Meghdadi, Bardia Babaei

INTERNATIONAL JOURNAL OF CIRCUIT THEORY AND APPLICATIONS, Vol.48, pp. 335-348, 2020

■ A reconfigurable highly-linear CMOS transceiver core chip for X-band phased arrays

Masoud Meghdadi, Hadi Lotfi, Ali Medi

AEU-INTERNATIONAL JOURNAL OF ELECTRONICS AND COMMUNICATIONS, Vol.114, 2020

■ Low-power inductorless current-reuse LNAs with active and passive Gm-enhancement

Javad Chaghaei, Ali Jalali, Masoud Meghdadi

MICROELECTRONICS JOURNAL, Vol.97, 2020

■ Design of a 2-12-GHz Bidirectional Distributed Amplifier in a 0.18-um CMOS Technology

Amirreza Alizadeh, Masoud Meghdadi, Majid Yaghoobi, Ali Medi

IEEE TRANSACTIONS ON MICROWAVE THEORY AND TECHNIQUES, Vol.67, pp. 754-764, 2019

■ A Highly-Linear Dual-Gain CMOS Low-Noise Amplifier for X-Band

Masoud Meghdadi, Milad Piri, Ali Medi

IEEE TRANSACTIONS ON CIRCUITS AND SYSTEMS II-EXPRESS BRIEFS, Vol.99, pp. 1-5, 2017

■ Design of 6-18-GHz High-Power Amplifier in GaAs pHEMT Technology

Masoud Meghdadi, Ali Medi

IEEE TRANSACTIONS ON MICROWAVE THEORY AND TECHNIQUES, pp. 1-8, 2017

■ Minimum Power Miller-Compensated CMOS Operational Amplifiers

Masoud Meghdadi, Mehrdad Sharif Bakhtiar

Scientia Iranica, Vol.21, pp. 2243-2249, 2014

■ Two-Dimensional Multi-Parameter Adaptation of Noise Linearity and Power Consumption in Wireless Receivers

Masoud Meghdadi, Mehrdad Sharif Bakhtiar

IEEE TRANSACTIONS ON CIRCUITS AND SYSTEMS I-REGULAR PAPERS, Vol.61, pp. 2433-2443, 2014

■ Analysis and Optimization of SFDR in Differential Active-RC Filters

Masoud Meghdadi, Mehrdad Sharif Bakhtiar

IEEE TRANSACTIONS ON CIRCUITS AND SYSTEMS I-REGULAR PAPERS, Vol.59, pp. 1168-1177, 2012

## ■ A 6-Bit CMOS Phase Shifter for S-Band

Masoud Meghdadi, Mehrdad Azizi, Mehdi Kiani, Ali Medi, Mojtaba Atarodi

IEEE TRANSACTIONS ON MICROWAVE THEORY AND TECHNIQUES, Vol.12, pp. 3519-3526, 2010

# Conference Papers

## ■ A Study on Applying Interleaved Switching Pattern on a Double-Input/Single-Output Zeta Converter

Mahdi Ghavaminejad, Seyed ebrahim Afjei, Masoud Meghdadi

2021 12th Power Electronics Drive Systems and Technologies Conference (pedstc 2021), pp.1-5

## ■ Double-Input/Single-Output Zeta Converter

Mahdi Ghavaminejad, Seyed ebrahim Afjei, Masoud Meghdadi

2021 12th Power Electronics Drive Systems and Technologies Conference (pedstc 2021), pp.5-10

## ■ An N×6M-Path Filter for Low-IF Applications: Review and Modification

Amin Hazrati marangaloo, Ali Jalali, Masoud Meghdadi

2020 Austrochip Workshop on Microelectronics, pp.85-89

## ■ A Wideband Inductorless LNA Employing Active Complementary Current-Reuse Balun

Javad Chaghaei, Ali Jalali, Masoud Meghdadi

27th Iranian Conference on Electrical Engineering ICEE2019

## ■ A UHF variable gain amplifier for direct-conversion DVB-H receivers

Masoud Meghdadi, Mehrdad Sharif Bakhtiar

IEEE RFIC, pp.551-554

## Double-Input/Double-Output Buck-Zeta Converter ■

مهدى قوامی تزاد، سیدابراهیم افجه ای، مسعود مقدادی نیشابوری

بیست و نهمین کنفرانس مهندسی برق ایران، صفحات: ۱۱-۱۵

## Stochastic Spintronic Neuron with Application to Image Binarization ■

عبدالله امیرانی، محمدحسین معیری، مسعود مقدادی نیشابوری، کیان جعفری دینانی

بیست و ششمین کنفرانس بین المللی کامپیوتر، انجمن کامپیوتر ایران، صفحات: ۱-۵

## pHEMT GaAs ■ pHEMT GaAs بازدهی بالا در تکنولوژی F ۰.۲۵ X باند F پیاده‌سازی تقویتکننده توان کلاس

سمیرا عیازاه چوندرق، مسعود مقدادی نیشابوری، علی مدب

دومین کنفرانس میکروالکترونیک ایران، نسخه ۲، صفحات: ۱-۵

# M.Sc. Theses

## ■ Design and simulation of a hybrid multi-stage delta-sigma modulator for radio transmitters

Hadi Mirzaee

2021

## ■ Phase Noise Reduction in LC Oscillator Using Second-Harmonic Self-Injection

Dariush Naseh Gharehshiran

2021

## ■ Design of BJT and MOSFT-Based Temperature Sensors in CMOS Technology Without Trimming and Calibration

Milad Madadi avargani

2020

## ■ Design of a wideband low noise amplifier

Ahmad Khosravani  
2020

■ design of an oscillator with robustness against PVT variations  
Mahnaz Moghaddam  
2020

■  
Shadan Rahmani irani  
2019