

## Assoc. Prof. Hakan DOĞAN

### Personal Information

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### International Researcher IDs

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### Education Information

Doctorate, University of California, Berkeley, United States Of America 2001 - 2005

Undergraduate, University of Southern California, Electrical Engineering, United States Of America 1995 - 1999

### Dissertations

Doctorate, Analysis and design of RF CMOS attenuators, University of California, Berkeley, 2005

### Academic Titles / Tasks

Associate Professor, Istanbul Medipol University, Mühendislik ve Doğa Bilimleri Fakültesi, Elektrik-Elektronik Mühendisliği Bölümü, 2018 - Continues

Istanbul Medipol University, Mühendislik ve Doğa Bilimleri Fakültesi, Elektrik-Elektronik Mühendisliği Bölümü, 2017 - 2018

Assistant Professor, Istanbul Sehir University, Mühendislik Ve Doğa Bilimleri Fakültesi, Elektrik-Elektronik Mühendisliği Bölümü, 2013 - 2017

### Academic and Administrative Experience

Istanbul Sehir University, 2016 - 2017

### Courses

Advanced Integrated Analog Circuit Design, Postgraduate, 2017 - 2018

Elektronik 1, Undergraduate, 2017 - 2018

Electromekanik Enerji Dönüşümü, Undergraduate, 2017 - 2018

Microelectronic Circuit Design, Undergraduate, 2016 - 2017

Communication Circuits, Postgraduate, 2016 - 2017, 2015 - 2016, 2014 - 2015, 2013 - 2014

Analog-Digital Interface Integrated Circuits, Postgraduate, 2016 - 2017

Advanced Integrated Analog Circuit Design, Postgraduate, 2016 - 2017

Digital Logic Design, Undergraduate, 2015 - 2016, 2014 - 2015, 2013 - 2014

mmWave IC Design, Postgraduate, 2015 - 2016, 2014 - 2015

Control Systems, Undergraduate, 2015 - 2016, 2014 - 2015, 2013 - 2014

## Advising Theses

- Hakan D., A 5.84 GHz Integer-n Charge Pump Phase-Locked Loop in 130nm PDSOI CMOS for C-V2X Applications, Postgraduate, T.KAYANSELÇUK(Student), 2022
- Merve Yüstra D., Hakan D., Design of a digitally controlled ring oscillator for ADPLL, Postgraduate, O.HAMZEH(Student), 2021
- Hakan D., A high-resolution time to digital converter design for all digital phase-locked loops, Postgraduate, T.EREN(Student), 2021
- Hakan D., Digital filter and analog LDO design for ADPLL in 180 nm CMOS technology, Postgraduate, Z.NUR(Student), 2021
- Hakan D., Ultra low power 12-bit 100 ks/s differential sar adc in 65 nm cmos technology, Postgraduate, M.ALİ(Student), 2020
- Hakan D., A high voltage triboelectric energy harvesting system utilizing parallel-SSHI rectifier and DC-DC converters for sub-5 Hz motions, Doctorate, İ.KARA(Student), 2020
- Hakan D., Logaritmik Güç Detektörü Tasarımı, Postgraduate, C.AYAN(Student), 2019
- Hakan D., Nano-structured triboelectric nano generators for internet-of-things (IOT) applications, Postgraduate, K.ÜNLÜ(Student), 2018
- Hakan D., Ultra low power, low noise, and fully integrated receiver for short range wireless communications, Postgraduate, H.EL(Student), 2017
- Hakan D., Ultra-low power, low-voltage transmitter at ism band for short range transceivers, Postgraduate, R.RADY(Student), 2017
- Hakan D., DC-DC regulators for ultra low power applications, Postgraduate, S.ELHOSAINY(Student), 2017
- Hakan D., High gain, high bandwidth, wide icmr, and highly linear fully differential amplifier with large dynamic range and process corner configurable output stage, Postgraduate, A.MOZAMMEL(Student), 2017
- Hakan D., A wide-current range switched capacitor DC-DC converter utilizing frequency, interleaving and switch-size scaling techniques, Postgraduate, S.MOHAMMED(Student), 2016
- Hakan D., Low phase noise frequency synthesizer, Postgraduate, I.F.(Student), 2016

## Published journal articles indexed by SCI, SSCI, and AHCI

- I. **An Ultra Low Power Integrated Radio TX Link Supplied from a Switched Capacitor DC-DC Converter in 65-nm CMOS Achieving 2 Mbps**  
Rady R., DOĞAN H., Aktan M., Mohammed S. A., Ozgun M. T.  
IEEE Transactions on Circuits and Systems II: Express Briefs, vol.67, no.10, pp.1899-1903, 2020 (SCI-Expanded)
- II. **A fully integrated 2.4 dB NF capacitive cross coupling CG-LNA for LTE band**  
Abdelhamid A. A., Ozgun M. T., DOĞAN H.  
Analog Integrated Circuits and Signal Processing, vol.99, no.1, pp.159-166, 2019 (SCI-Expanded)
- III. **A low power receiver front-end design with tunable notch filter for TX leakage and blocker suppression**  
Ozgun M. T., Abdelhamid A., DOĞAN H.  
IEEE Transactions on Circuits and Systems I: Regular Papers, vol.66, no.3, pp.1180-1191, 2019 (SCI-Expanded)
- IV. **A novel biasing technique for low phase noise voltage controlled oscillators**  
Albittar I. F., DOĞAN H., Ozgun M. T.  
Microelectronics Journal, vol.72, pp.120-125, 2018 (SCI-Expanded)

## Articles Published in Other Journals

- I. **A COMPACT GAN POWER AMPLIFIER MODULE FOR NEW GENERATION CELLULAR BASESTATIONS**  
TÜRK B. B., HÜR CAN F., SAVCI H. S., Dogan H.  
Black Sea Journal of Engineering and Science, vol.7, no.3, pp.587-593, 2024 (Peer-Reviewed Journal)
- II. **A highly linear wide-band tunable LNA for military radio applications**  
DOĞAN H.  
Istanbul University - Journal of Electrical and Electronics Engineering, vol.18, no.1, pp.19-25, 2018 (Scopus)

### **Refereed Congress / Symposium Publications in Proceedings**

- I. **A GaN-based Power Amplifier Module Design for 5G Base Stations**  
Türk B. B., Hür can F., SAVCI H. Ş., DOĞAN H.  
International Conference on Cyber Security and Computer Science, Karabük, Turkey, 29 March 2023
- II. **6 GHz Low Noise Amplifier design with 65nm CMOS for 5G/6G Applications 5G/6G Uygulamaları için 65nm CMOS ile 6GHz Düşük Gürültülü Yükselteç Tasarımı**  
Eren T., Oktay Z. N., DOĞAN H., SAVCI H. Ş.  
12th International Conference on Electrical and Electronics Engineering, ELECO 2020, Bursa, Turkey, 26 - 28 November 2020, pp.88-92
- III. **A Fully Integrated Low Power LNA in 65nm CMOS Technology Suitable for ZigBee, Low-Power WiFi and Bluetooth Low Energy**  
DOĞAN H.  
8th International Advanced Technologies Symposium, Elazığ, Turkey, 19 - 22 October 2017, vol.2, pp.404-409
- IV. **A Fully Integrated Ultra-Low Power LNA in 65nm Cmos Technology Suitable For Sensor Network Applications**  
DOĞAN H.  
3rd International Conference on Engineering and Natural Sciences, Budapest, Hungary, 3 - 07 May 2017
- V. **A highly integrated wideband LNA with multiple inputs for multi-band mobile devices**  
Abdelhamid A. A., Ozgun M. T., DOĞAN H.  
2016 IEEE 59th International Midwest Symposium on Circuits and Systems (MWSCAS), Abu Dhabi, United Arab Emirates, 16 - 19 October 2016
- VI. **A 65nm dual-band 3-stream 802.11n MIMO WLAN SoC**  
Abdollahi-Alibeik S., Weber D., DOĞAN H., Si W. W., Baytekin B., Komijani A., Chang R., Vakili-Amini B., Lee M., Gan H., et al.  
2011 IEEE International Solid-State Circuits Conference, San-Francisco, Costa Rica, 20 - 24 February 2011, pp.170-171
- VII. **A Single-Chip CMOS Radio SoC for v2.1 Bluetooth Applications**  
Weber D., Si W. W., Abdollahi-Alibeik S., Lee M., Chang R., DOĞAN H., Luschas S., Husted P.  
2008 IEEE International Solid-State Circuits Conference - Digest of Technical Papers, San-Francisco, Costa Rica, 3 - 07 February 2008, pp.364-365
- VIII. **A dc-2.5GHz wide dynamic-range attenuator in 0.13µm CMOS technology**  
DOĞAN H., Meyer R. G., Niknejad A. M.  
Digest of Technical Papers. 2005 Symposium on VLSI Circuits, 2005., Kyoto, Japan, 16 - 18 June 2005, pp.90-93
- IX. **A DC-10GHz linear-in-dB attenuator in 0.13 µm CMOS technology**  
DOĞAN H., Meyer R. G., Niknejad A. M.  
Proceedings of the IEEE 2004 Custom Integrated Circuits Conference (IEEE Cat. No.04CH37571), Orlando, FL, USA, 6 - 08 October 2004, pp.609-612