دکتر جعفر صبحی

آدرس: دانشگاه تبریز، دانشکده مهندسی برق و کامپیوتر تلفن ۳۳۹۳۷۹۵۳-۰۴۱

sobhi@tabrizu.ac.ir

شهرک صنعتی سهند آذران، صنایع صبح پارلار آسیا ۵۱۶۱۰۰۰۰-۰۴۱

sobhi@parlar.ir

تلفن همراه: ۰۹۱۴-۳۴۱-۱۸۰۵ کد ملی: ۱۳۸۰۸۵۹۷۵۱

تحصیلات: دکتری الکترونیک (طراحی IC) سال ۱۳۸۵

پایان نامه دکتری: طراحی و ساخت IC مبدل آنالوگ به دیجیتال با دقت ۱۲ بیت با سرعت نمونه برداری ۲۸۰ میلیون نمونه در ثانیه که لایسنس ساخت این IC به یک شرکت ژاپنی فروخته شده است. سال ۸۳

فعالیت دانشگاهی: دانشیار دانشکده مهندسی برق و کامپیوتر دانشگاه تبریز از سال ۸۵

با بیش از ۹۰مقاله علمی در زمینه الکترونیک

فعالیت صنعتی: از سال ۷۴ تا ۸۹ در صنایع مختلف استان

تراکتور سازی تبریز: ساخت دستگاه کنترلر کوره های القایی

آب و فاضلاب تبریز: سیستم های مانیتورینگ چاه ها از راه دور

کارخانه لوله بتنی تبریز: تعمیر و ساخت دستگاه بچینگ بتون

کارخانجات جوجه مادر: طراحی و ساخت سیستم مونیتورینگ و کنترل صنعتی

کارخانجات لوازم خانگی: سیستم تست انتهای خط یخچال و تولید بردهای الکترونیکی

موسس و مالک: شرکت صنایع صبح پارلار آسیا (www.parlar.ir) تاسیس سال ۱۳۸۹

ضمینه فعالیت: طراحی و تولید سیستم های الکترونیکی و نرم افزاری

محصولات: ۱) بزرگترین تولید کننده بردهای الکترونیکی لوازم خانگی کشور

تامین کننده بردهای بیش از ۷۰ درصد کارخانجات لوازم خانگی کشور

۲) توسعه نرم افزار ERP جامع

۳) تامین کننده مستقیم ایران خودرو و سایپا (قطعات الکترونیکی و شبکه خودرو)

سرمایه انسانی: ۶۵۱ نفر فارغ التحصیلان دانشگاه های معتبر کشور با مدرک دکتری، کارشناسی ارشد،

۱۰۲ نفر شاغل در بخش تحقیق و توسعه با تخصص های : الکترونیک، نرم افزار و مکانیک

اختراعات: ۱) آشکار ساز گاز CO با قابلیت قطع کن گاز شماره اختراع: ۶۶۹۳۵

۲) یک روش نوین برای کاهش توان مصرفی کولرهای آبی شماره اختراع ۵۹۴۱۶

۳) کلید هوشمن کولر آبی دارای محافظ جان شماره اختراع: ۹۰۹۶۲

۴) مدار محافظ طول عمر برای موتور های هود آشپزخانه شماره اختراع: ۸۷۹۸۳

۵) ترموستات دیجیتالی یخچال، فریز، آب سرد کن شماره اختراع: ۹۰۹۶۲

۶) تب سنج پزشکی دیجیتال دقیق بر مبنای گوشی های هوشمند

دستاورد دانشگاه: استاد راهنمای ۸ دانشجوی دکتری از سال ۱۳۹۱

استاد مشاور ۱۲ دانشجوی دکتری از سال ۱۳۸۷

استاد راهنمای ۶۲ دانشجوی کارشناسی ارشد از سال ۱۳۸۵

استاد مشاور ۴۸ دانشجوی کارشناسی ارشد از سال ۱۳۸۳

مقالات: چاپ و ارائه بیش از ۱۰۰ مقاله علمی در مجلات و همایش‌های معتبر بین المللی:

مقالات مجله:

1- **J. Sobhi**, Kh. Hadidi, A. Khoei, "A New Method for Offset Cancellation in High-Resolution High-Speed Comparators," IEICE Transaction on Electronics, 2005.

2- A. Vatanjou, Z. Daie kozekonani, **J. Sobhi**, F. N. Daghdaghan, "A Wideband multipath CMOS OTA for highspeed application," IEICE Electronic Express, 2011.

3- P. Aliparst, Z. Daie kozekonani, H. B. Bahar, **J. Sobhi**, "A 12-bit 1-Gsample/s Nyquist Current DAC in 0.35um CMOS for Wireless Transmitter," Circuits and Systems, 2011.

4- P. Aliparast, Z. Daie kozekonani, **J. Sobhi**, "Design of a 12-bit high-speed CMOS D/A converter using a new 3D digital decoder structure useful for wireless transmitter applications," Analog Integrated Circuits and Signal Processing, 2011.

5- H. Mirmazhari, A. Taghizadeh, **J. Sobhi**, Z. Daie kozekonani, "A high efficiency DC-DC Converter using a new in-package structure of Bonding-Wire inductor," IEICE Electronic Express, 2012.

6- A. Sahafi, **J. Sobhi**, Z. Daie kozekonani, "Nano Watt CMOS temperature sensor," Analog Integrated Circuits and Signal Processing, 2013.

7- A. Sahafi, **J. Sobhi**, M. Sahafi, O. Farahanie, Z. Daie kozekonani, "Ultralow power frequency divider for 2.4GHz Zigbee frequency synthesizer," Analog Integrated Circuits and Signal Processing, 2013.

8- A. Taghizadeh, Z. Daie kozekonani, J. Sobhi, "A modified approach for CMOS auto-zeroed offset stabilized OPAMP," Scientific Research- Circuits and Systems, 2013.

9- A. Sahafi, **J. Sobhi**, Z. Daie kozekonani, "Pico Watt Sub-threshold CMOS voltage reference circuit," IEICE Electronic Express, 2013.

10- M. Yousefi, Z. Daie Koozehkanani, **J. Sobhi**, H. Jangi, "A 1.8 GHz Power Amplifier Class-E with Good Average Power Added Efficiency," Circuits and Systems, 2013.

11- P. Aliparst, Z. Daie kozekonani, B. bahar, **J. Sobhi**, "A new current mode APS in 0.18um standard CMOS process for smart image sensors," Analog Integrated Circuits and Signal Processing, 2014.

12- M. Yousefi, Z. Daie kozekonani, **J. Sobhi**, N. N. Azizkandi, "A 430 MHz fully integrated high efficiency OOK transmitter for wireless biomedical application," International Journal of Electrical & Computer Sciences, 2014.

13- M. Yousefi, Z. Daie kozekonani, H. Jangi, N. N. Azizkandi, **J Sobhi**, "A-5 dBm 400MHz OOK Transmitter for Wireless Medical Application," International Journal of Electronics and Telecommunications, 2014.

14- M. Yousefi, Z. Daie Koozehkanani, **J. Sobhi**, H. Jangi, N. N. Azizkandi, "Efficiency analysis of low power class-E power amplifier," Modern Applied Science, 2014.

15- M. Yousefi, Z. Daie Koozehkanani, **J. Sobhi**, H. Jangi, "A High Efficiency Fully Integrated OOK Transmitter for WBAN," Journal of Electronic Science and Technology, 2014.

16- I. Mohammad, A. Sahafi, **J. Sobhi**, Z. Daei Koozehkanani, "A linear, low power, 2.5-dB NF LNA for UWB application in a 0.18μm CMOS," Microelectronics Journal, 2015.

17- A. Rikhtegar Ghiasi, A. Sahafi, **J. Sobhi**, Z. Daie kozekonani, "A 2:1 switched-capacitor DC–DC converter for low power circuits," Analog Integrated Circuits and Signal Processing, 2015

18- M. Yousefi, Z. Daei Koozehkanani, **J. Sobhi**, N. N. Azizkandi, "Improved Efficiency 2.4 GHz Class-E Power Amplifier with Improved Controlled Output Power," Indian Journal of Science and Technology, 2015.

19- S. Farsiani, A. Sahafi, **J. Sobhi**, "A novel topology for modular frequency dividers with enhanced speed and power efficiency," Analog Integrated Circuits and Signal Processing, 2015.

20- M. Emami Tabar, **J. Sobhi**, Z. Daei Koozehkanani, "Wideband Inductor-less Low-Noise Amplifier Using Three Feedback Paths," Journal of Telecommunication, Electronic and Computer Engineering (JTEC), 2015.

21- A. M. Khiavi, M. F. Kangarlu, Z. Daei Koozehkanani, **J. Sobhi**, Sh. Hosseini, "Single-phase Multilevel Current Source Inverter with Reduced Device Count and Current Balancing Capability," Advances in Electrical and Computer Engineering, 2015.

22- A. Sahafi, **J. Sobhi**, Z. Daei Koozehkanani, "Linearity improvement of gm-boosted common gate LNA: Analysis to design," Microelectronics Journal, 2016.

23- A. Karimlou, R. Jafarnejad, **J. Sobhi**, Z. Daei Koozehkanani, "An Inductor-less Sub-mW Low Noise Amplifier for Wireless Sensor Network Applications," Integration the VLSI Journal, 2016.

24- T. M. Khanshan, M. Nematzade, Kh. Hadidi, A. Khoei, Z. Daie Koozehkanani, **J. Sobhi**, "Very linear open-loop CMOS sample-and-hold structure for high precision and high-speed ADCs," Analog Integrated Circuits and Signal Processing, 2016.

25- H. Jangi Bahador, Z. Daei Koozehkanani, H. Balazadeh Bahar, **J. Sobhi**, "A -10 dBm 5 Mbps Energy-Efficient Injection-Locked FSK Transceiver for Wireless Body Sensor Networks," IETE Journal of Research, 2016.

26- Sh. Ahmadian, A. M. Khiavi, **J. Sobhi**, Z. Daei Koozehkanani, "A PMSM Current Controller System on FPGA Platform," Journal of Fundamental and Applied Sciences, 2016.

27- R. Jafarnejad, A. Jannesari, **J. Sobhi**, "Pre-distortion technique to improve linearity of low noise amplifier," Microelectronics Journal, 2017.

28- R. Jafarnejad, A. Jannesari, **J. Sobhi**, "A linear ultra-wide band low noise amplifier using pre-distortion technique," AEU- International Journal of Electronics and Communications, 2017.

29- Roya Jafarnejad, A. Jannesari, Jafar Sobhi, "A sub-2-dB noise figure linear wideband low noise amplifier in 0.18 μm CMOS," Microelectronics Journal, 2017.

30- A. M. Khiavi, **J. Sobhi**, Z. Daei Koozehkanani, M. F. Kangarlu, "FPGA-Based Reconfigurable PWM Generator for Power Electronic Converter Applications," Journal of Control, Automation and Electrical Systems, 2017.

31- M. Modava, A. Sahafi, **J. Sobhi**, Z. Daie Koozehkanani, "Design of efficient power amplifier for low power transmitters," Analog Integrated Circuits and Signal Processing, 2017.

32- S. Naghavi, N. Sharifi, M. Nematzadeh, T. M. Khanshan, A. Abrishamifar, Z. Daei Kuzekanani, **J. Sobhi** "A 500 MHz low offset fully differential latched comparator," Analog Integrated Circuits and Signal Processing, 2017.

33- A. Aravand, **J. Sobhi**, "The implementation of automated optical inspection in printed circuit," International Journal of Computer Science and Network Security, 2017.

34- A. Taghizadeh, Z. Daei Koozehkanani, **J. Sobhi**, "A new high-speed low-power and low-offset dynamic comparator with a current-mode offset compensation technique," AEU- International Journal of Electronics and Communications, 2017.

35- R. Eskandari, A. Ebrahimi, **J. Sobhi**, "A wideband noise cancelling balun LNA employing current reuse technique," Microelectronics Journal, 2018.

36- S. Mowlavi, A. Baharmast, **J. Sobhi**, Z. Daei Koozehkanani, "A novel current-mode low-power adjustable wide input range four-quadrant analog multiplier," Integration the VLSI Journal, 2018.

37- A. Khabbaz, **J. Sobhi**, Z. Daei Koozehkanani, "A sub-mW 2.9-dB noise figure Inductor-less low noise amplifier for wireless sensor network applications," Elsevier AEU - International Journal of Electronics and Communications, 2018.

38- M. Teymoui, **J. Sobhi**, "An ultra-linear CMOS image sensor for a high-accuracy imaging system," International Journal of Circuit Theory and Applications, 2018.

39- G. Zare Fatin, Z. Daei Koozehkanani, A. Fotowat-Ahmady, **J. Sobhi**, R. Farrell, "Design of a reconfigurable front-end for a multi-standard receiver for the frequency range of 800 MHz to 2.5 GHz," International Journal of Circuit Theory and Applications, 2018.

40- M. Yousefi, Z. Daei Koozehkanani, **J. Sobhi**, "A 910MHz Injection Locked BFSK Transceiver for Wireless Body Sensor Network Using Colpitts Oscillator," Iranian Association of Electrical and Electronics Engineers 2018.

41- S. Naghavi, M. Nematzade, N. Sharifi, T. M. Khanshan, A. Abrishamifar, Z. Daei Koozehkanani, **J. Sobhi**, "A Simple and Efficient Charge Injection Error Compensation Structure for MOS Sampling Switches," Journal of Circuits Systems and Computers, 2018.

42- M. Teymouri, **J. Sobhi**, "A FHD 1080, 120 fps CMOS image sensor with two step SS-ADC," Analog Integrated Circuits and Signal Processing, 2019.

43- M. A. Gharbali, M. Azadbakht, E. Feyzi, **J. Sobhi**, E. Najafi Aghdam, Z. Daie Koozehkanani, "A 2.4 GHz integer-N frequency synthesizer for ZigBee applications," Analog Integrated Circuits and Signal Processing, 2019.

44- A. Aravand, Gh. Karimian, **J. Sobhi**, "Automatic optical inspection of printed circuit boards," Advanced Signal Processing, 2020.

45- Z. Sheykholeslami, **J. Sobhi**, Z. Daei Koozehkanani, "A new direct multiplexing-based pulse shaping idea for bandwidth efficient OQPSK transmitters in biomedical applications," Analog Integrated Circuits and Signal Processing, 2020.

46- M. Hosseini, R. Jafarnejad, **J. Sobhi**, Z. Daei Koozehkanani, "A low power wideband RGC-based modified-MIC trans-impedance amplifier in 0.18μm CMOS process," Microelectronics Journal, 2020.

47- A. H. Vafi, Z Koozehkanani, **J. Sobhi**, M. Yousefi, "Design of a 16-by-16-bit Using Retime Technique," Majlesi Journal of Electrical Engineering, 2020.

48- S. Zargari, Z. Daie Koozehkanani, H. Veladi, **J. Sobhi**, A. Rezania, "A new Mylar-based triboelectric energy harvester with an innovative design for mechanical energy harvesting applications," Energy Conversion and Management, 2021.

49- S. Zargari, A. Rezania, Z. Daie Koozehkanani, H. Veladi**, J. Sobhi**, L. Rosendahl, "Effect of the inherent capacitance optimization on the output performance of triboelectric nanogenerators," Nano Energy, 2022

50- S. Zargari, Z. Daie Koozehkanani, H. Veladi, **J. Sobhi**, A. Rezania, "Cost-effective fabrication approaches for improving output performance of triboelectric energy harvesters," Journal of Electrostatics, 2022.

51- M. Vatan Parast Aghdami, M. Mousazadeh, **J. Sobhi**, Z. Daei Koozehkanani, "A 70-MS/S Vcm-free 10-bit-resolution SAR ADC with a novel DAC structure to reduce area and parasitic capacitance effect MVP," AEU-International Journal of Electronics and Communications, 2022.

52- M. Khanehbeygi, R. Jafarnejad, Z. Daie Koozehkanani, **J. Sobhi**, "A low-power wideband LNA exploiting current-reuse and noise cancelation techniques," International Journal of Circuit Theory and Applications, 2022.

53- I. Mohammadi, **J. Sobhi**, A. M. Khiavi, Z. Daie Koozehkanani, "A low power MASH digital delta-sigma modulator with accurate output average value," Microelectronics Journal, 2022.

54- E. Vakili, Gh. Karimian, M. Shoaran, R. Yadipour, **J. Sobhi**, "Valid-IoU: An Improved IoU-based Loss Function and Its Application to Detection of Defects on Printed Circuit Boards," Multimedia Tools and Applications, 2024.

مقالات منتخب ارائه شده در همایش‌های بین المللی:

1- Kh. Hadidi, **J. Sobhi**, A. Hassankhan, D. Muramatsu, T. Matsumoto, "A Novel Highly Linear CMOS Buffer," IEEE International Conference on Electronics, Circuits, and Systems, Lisbon, Portugal, 1998.

2- Kh. Hadidi, M. Jenabi, **J. Sobhi**, A. Hassankhan, "A 300 MHz 18 dB Variable Gain Amplifier," IEEE International Conference on Electronics, Circuits, and Systems, Lisbon, Portugal, 1998.

3- **J. Sobhi**, A. Khoei, Kh. Hadidi, "Analog Realization of a Defuzzifier Circuit Using COA Method," Iranian Conference on Electrical Engineering, Tehran, Iran, 1998.

4- **J. Sobhi**, Kh. Hadidi, A. Khoei, "A New Sample and Hold Circuit with 100MS/sec, -60dB THD in Nyquist Rate," Iranian Conference on Electrical engineering, Tehran, Iran, 1999.

5- M. Zarifi, M. Yousefi ,A. Rostami, Z. Daie Koozehkanani, **J. Sobhi**, "Very High Gain and Fast Settling OpAmp for Switched Capacitor Application," International Conference on Microelectronics, Cairo, Egypt, 2007.

6- MH. Zarifi, A. Rostami, Z. Daie Koozehkanani, **J Sobhi**, "A 12 bit, 80 Msamples/s, pipelined analog to digital converter," 5th International Conference on Electrical and Electronics Engineering, Istanbul -Turkey, 2007.

7- M. Yousefi, Z. Daie Koozehkanani, A. Rostami, **J. Sobhi**, H. Zarifi, "A Flexible Sample and Hold Circuit for Data Converter Application," International Conference on Computational Technologies in Electrical and Electronics Engineering, Novosibirsk, Russia, 2008.

8- **J. Sobhi**, Z. Daie Koozehkanani, A. Tahmasebi, M. Yousefi, "A Simple Background Interstate Gain Calibration Technique for Pipeline ADCs," 6th International Conference on Electrical Engineering, Chonburi, Thailand, 2009.

9- Z. Daie Koozehkanani, **J. Sobhi**, A. Tahmaseb, M. Yousefi, "A Fully Digital Background Calibration Technique for Pipeline Analog to Digital Converters," 6th International Conference on Electrical Engineering, Chonburi, Thailand, 2009.

10- **J. Sobhi**, Z. Daie Koozehkanani, A. Tahmasebi, M. Yousefi, "A Mixed Mode Background Calibration Technique for Pipeline ADCs," 4th IEEE Conference on Industrial Electronics and Applications, Xi'an, China, 2009.

11- **J. Sobhi**, Kh. Karamzadeh, H. Moharrami, M. Yousefi, "Design of A Programmable Bandgap Reference Circuit," 4th IEEE Conference on Industrial Electronics and Applications, Xi'an, China, 2009.

12- A. Tahmasebi, A. Kamali, Z. Daie Koozehkanani, **J. Sobhi**, "A simple background interstate gain calibration technique for pipeline ADCs," International Conference on Signal Acquisition and Processing, Kuala Lumpur, Malaysia, 2009.

13- P. Aliparast, Z. Daie Koozehkanani**, J. Sobhi**, N. Nasirzadeh, B. A. Soltany, "Design of a 10-bit Low Power Current Steering Digital to Analog Converter Based on a 4D Thermometer Decoding Matrix," 17th International Conference Mixed Design of Integrated Circuits and Systems, Wroclaw, Poland, 2010.

14- **J. Sobhi**, Z. Daie Koozehkanani, A. Baghi, A. Tahmasebi, "A new OTA based on FGMOS inverters for low voltage and low power applications," International conference on circuit systems processing, 2010.

15- Sh. HaddadiNejad, Z. Daie Koozehkanani, **J. Sobhi**, I. Salami Fard, K. Ghanbari, "A High Speed, highly linear CMOS Fully Differential Track and Hold Circuit," 23rd Annual Symposium on Integrated Circuits and Systems Design, Paulo, Brazil, 2010.

16- A. H. Alizadeh, P. Keshavarzi, Z. Daie Koozehkanani, **J. Sobhi**, "Acquiring real time traffic information using VANET and dynamic route guidance," 2nd International Conference on Computing, Control and Industrial Engineering, Wuhan, China, 2011.

17- A. Sahafi, **J. Sobhi**, M. Sahafi, O. Farhaniyeh, "An Ultra-Low Power Frequency divider for 2.4GHz Zigbee applications," 7th International conference on electrical and electronic engineering (ELECO), Bursa, Turkey, 2011.

18- A. Sahafi**, J. Sobhi**, M. Sahafi, O. Farhaniyeh, "A new ROM-Less Pulse Shaper for 2.4GHz Zigbee application," 7th International conference on electrical and electronic engineering (ELECO), Bursa, Turkey, 2011.

19- A. Vatanjou, **J. Sobhi**, A. Dadashi, Z. Daie Koozehkanani, "A high speed power efficient pipeline ADC in 0.18 μm CMOS," IEEE Faible Tension Faible Consommation Conference, Paris, France, 2013.

20- A. Sahafi**, J. Sobhi**, Z. Daie Koozehkanani, "Low Power Quadrature Voltage Controlled Oscillator Designed in 0.18μm CMOS Technology," 21th Iranian Conference on Electric Engineering, Mashhad, Iran, 2013.

21- M. Shahabi, R. Jafarnejad, **J. Sobhi**, Z. Daei Koozehkanani, "A novel low power high CMRR pseudo-differential CMOS OTA with common-mode feedforward technique" 23rd Iranian Conference on Electrical Engineering, Tehran, Iran, 2015.

22- S. Nuri, A. M. Khiavi, **J. Sobhi**, Z. Daei Koozehkanani, "FPGA Implementation of CAN Controller" 2nd International Congress on Electrical Engineering, 2015.

23- A. M. Khiavi, **J. Sobhi**, Z. Daei Koozehkanani, "High Resolution High Sampling Rate Sine Wave Generator Based on Modified Taylor Series" 2nd International Congress on Electrical Engineering, 2015.

24- R. Jafarnejad, A. Jannesari, **J. Sobhi**, "A 670μW inductor less low noise amplifier employing dual capacitive cross coupling and dual negative feedback" 24rd Iranian Conference on Electrical Engineering, Shiraz, Iran, 2016.

25- A. M. Khiavi, **J. Sobhi**, Z. Daei Koozehkanani, M. F. Kangarloo, "Reconfigurable PWM Generator Hardware for Power Converter Applications" 2nd international conference of Science and Engineering, 2016.

26- M. Abdollahy**, J. Sobhi**, "Design of Analog Baseband Chain Circuits for IEEE 802.11a/b/g WLAN Receivers," Iranian Conference on Electrical Engineering, Mashhad, Iran, 2018.

27- M. Gharib Khajeh, **J. Sobhi**, "An 87-dB-SNDR 1MS/s bilateral bootstrapped CMOS switch for sample-and-hold circuit," 28th Iranian Conference on Electrical Engineering, Tabriz, Iran, 2020.

28- Sh. M. Sadaghiani, Gh. Karimian, **J. Sobhi**, "Recovery of oversaturated pixels in a low-cost solder paste inspection setup," 28th Iranian Conference on Electrical Engineering, Tabriz, Iran, 2020.

29- M. KhanehBeygi, F. M. Khosrowshahi, R. Jafarnejad, **J. Sobhi**, Z. Daie Koozehkanani, "Application of Folded Cascode-Based Gain-Boosting Circuit in Declining the Current Mismatch Characteristics," 28th Iranian Conference on Electrical Engineering, Tabriz, Iran, 2020.

30- S Morteza Golzan, **J. Sobhi**, Z. Daie Koozehkanani, "An Open-Loop Time Amplifier with Zero-Gain Delay in Output for Coarse-Fine Time to Digital Converters," 29th Iranian Conference on Electrical Engineering, Tehran, Iran, 2021.