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h-index (Scopus):
Citations (Scopus):

Supervised MSc Theses

#	Thesis title	By	Date
1	Exploring the possibility of blood pressure estimation using photoplethysmography signal (PPG) recorded from a hand moving in the sagittal plane	Paria Mansouri Nazhad & Mohamad Mehdi Ahmadi	October 2021
2	Elderly fall detection under partial occlusion of subjects body in the camera's field of view using CCTV cameras	Sara Khalili Picha & Mohamad Mehdi Ahmadi	September 2021
3	Design and implementation of a single-channel neural stimulation circuit with the capability of generating different stimulation wave forms	Yasaman Safaiyan & Mohamad Mehdi Ahmadi	September 2021
4	design and implementation of a wireless power transfer link using a multi-cycle Q modulation technique	Maryam Shafighpour & Mohamad Mehdi Ahmadi	February 2020
5	Analysis and simulation of clock jitter effects in the performance of continuous-time delta-sigma analog to digital converters in hearing aids	Masoumeh Aqamolaei & Mohamad Mehdi Ahmadi	February 2020
6	Design and implementation of a self-tuned class-E power oscillator for wireless power and data transmission to an implantable medical microsystem	Shirin Pezeshkpour & Mohamad Mehdi Ahmadi	September 2019
7	Design of the stimulation front-end of a fully integrated 16-channel system for neural electrical stimulation	Hossein Malekan & Mohamad Mehdi Ahmadi	June 2019
8	Analysis and modeling of clock phase noise effects in the performance of class D audio amplifiers in hearing aids	Mohaddeseh Amirian Chayjan & Mohamad Mehdi Ahmadi	February 2019

9	Design and implementation of an inductive power and data transfer link driven by an ASK-modulated Class-E power amplifier switched in its high efficiency region	Zahra Kabirkhoo & Mohamad Mehdi Ahmadi	December 2018
10	Design of the data and power recovery blocks of an inductively-powered implantable neural stimulation system	Zahra Sadat Fatemi & Mohamad Mehdi Ahmadi	June 2018
11	Design of the digital controller block of an integrated neural stimulation system	Farnaz Fahimi Hanzaee & Mohamad Mehdi Ahmadi	June 2018
12	Design and Implementing Of the Speech Processor Of a Cochlear Implant	Mohammadreza Sarbandifarahani & Mohamad Mehdi Ahmadi	June 2017
13	Design and implementation of a power and data transfer system for a cochlear implant using FSK modulation	Sima Ghandi & Mohamad Mehdi Ahmadi	February 2017
14	Investigation and implementation of an acoustic feedback cancellation algorithm, based on signal frequency shifting in hearing aid systems	Mehdi Valiollah & Mohamad Mehdi Ahmadi	February 2017

Books

#	Title	Author(s)	Publisher country	publication date	version
	Portal Records				
1	Wireless Applications: Inductive Links for Power and Data Telemetry to Medical Implants	Mohamad Mehdi Ahmadi, Shirin Pezeshkpour	United States	January 2022	1

Journal Papers

Portal Records

1 Mohamad Mehdi Ahmadi, Shirin Pezeshkpour, Zahra Kabirkhoo, "A High-Efficiency ASK-Modulated Class-E Power and Data Transmitter for Medical Implants", IEEE TRANSACTIONS ON POWER ELECTRONICS, June 2021 Vol. 0, Num. 0, Page 1-12, June 2021,

2 Mohamad Mehdi Ahmadi, Mohammadreza Sarbandifarahani, "A Class-E Power and Data Transmitter with On–Off Keying Data Modulation for Wireless Power and Data Transmission to Medical Implants", CIRCUITS SYSTEMS AND SIGNAL PROCESSING, February 2020 Vol. 0, Num. 0, Page 1-13, February 2020,

3 Navid Hasanzadeh, Mohamad Mehdi Ahmadi, Hoda Mohammadzade, "Blood Pressure Estimation Using Photoplethysmogram Signal and Its Morphological Features", IEEE SENSORS JOURNAL, December 2019 Vol. 20, Num. 8, Page 4300-4310, December 2019,

4 Mohamad Mehdi Ahmadi, Shirin Pezeshkpour, "A Self-Starting Class-E Power Oscillator with an Inverting Gate Driver", IEEE TRANSACTIONS ON INDUSTRIAL ELECTRONICS, October 2019 Vol. 0, Num. 0, Page 1-11, October 2019,

5 Zahra Sadat Fatemi, Mohamad Mehdi Ahmadi, "Design and simulation of the data and power recovery blocks of an inductively-powered microsystem dedicated to a brain implant", , December 2018 Vol. 12, Num. 3, Page 200-210, December 2018,

6 Farnaz Fahimi Hanzaee, Mohamad Mehdi Ahmadi, "Design and Simulation of the Digital Controller Block of a Neural Stimulation Chip for a Brain Implant", , September 2018 Vol. 12, Num. 2, Page 147-159, September 2018,

7 Mohamad Mehdi Ahmadi,, "A Self-Tuned Class-E Power Oscillator", IEEE TRANSACTIONS ON POWER ELECTRONICS, July 2018 Vol. 0, Num. 0, Page 1-16, July 2018,

8 Mohamad Mehdi Ahmadi, Sima Ghandi, "A Class-E Power Amplifier With Wideband FSK Modulation for Inductive Power and Data Transmission to Medical Implants", IEEE SENSORS JOURNAL, June 2018 Vol. 18, Num. 17, Page 7242-7252, June 2018,

Conference Papers

Portal Records

1 Zahra Kabirkhoo, Mohamad Mehdi Ahmadi, "A novel method for power and data transmission to a medical implant using a Class-E power amplifier and ASK modulation ", 25th national and 3rd International Iranian Conference on Biomedical Engineering, November 2018

2 Mohammadreza Sarbandifarahani, Mohamad Mehdi Ahmadi, Farshad Almasganj, "A New Method for Implementing OOK Modulation on a Class-E Power Amplifier ", 24th national and 2nd International Iranian Conference on Biomedical Engineering, November 2017

Taught Courses

#	Course title	Description	Headlines	Date
1	Integrated Circuit Design and its Application in Medicine	To learn the design of integrated circuits and their applications in medicine		Fall 2021
2	Electronics (II)	In this course, the students learn the basics of analog (integrated) circuit design.		Fall 2021
3	Electronics (II)	In this course, the students learn the basics of analog (integrated) circuit design.		Spring 2021
4	Electronics (I)	To learn the basics of electronic devices and circuits		Spring 2021
5	Implantable Biomedical Microsystems	The goal of this coarse is to introduce the fundamentals of the design of implantable biomedical microsystems		Spring 2021
6	Electronics (II)	In this course, the students learn the basics of analog (integrated) circuit design.		Fall 2020

Inventions/Patents

#	Invention title	Reg. number	Country	contributers	Reg. date	Exp. date
1	Common-mode control for AC-coupled receivers	11005688			2021/05/1	2038/01/19
2	Passive linear equalizer for serial wireline receivers	10944602			2021/03/1	2038/01/19
3	Charge-balanced current-controlled stimulation circuit and method of operating same				2019/02/1	-