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Citations (Scopus):

1083

**Supervised MSc Theses**

#	Thesis title	By	Date
1	Improving LoRaWAN scalability with adjusting Spreading Factor and Transmission Power	Farzad Azizi Dashdmerlou & Mehdi Rasti	June 2022
2	Improving energy consumption in LoRaWAN networks	Benyamin Teymuri & Mehdi Rasti	June 2022
3	cache placement and Offloading in D2D Assisted Wireless Networks	Amirhossein Taheri Otaghsara & Mehdi Rasti	February 2020
4	Resource Allocation in D2D-based Multicast Content Delivery in Cellular Cognitive Radio Networks	Hosein Zarini & Mehdi Rasti	May 2019
5	Radio Resource allocation in cellular heterogeneous networks with dual connectivity	Elham Moein & Mehdi Rasti	February 2019
6	Proposing a MAC scheme for energy efficiency in IOT networks	Fatemeh Omidvar & Mehdi Rasti	February 2019
7	Energy theft Detection in Advanced Metering Infrastructure	Mahyar Azari & Mehdi Rasti	February 2019
8	studying and comparing resource allocation schemes for interference management in C-RAN	Elham Mohammadzadeh Mianji & Mehdi Rasti	March 2018
9	Energy Efficiency In-Band Full Duplex Communication In Heterogeneous Networks	Sheyda Zarandi & Mehdi Rasti	February 2018
10	Interference management in in- band full duplex DD communication	Siminossadat Badri & Mehdi Rasti	February 2018

11	Resource Allocation in In-Band Full Duplex Small Cells in Cloud-RAN	Hossein Davoudi & Mehdi Rasti	October 2017
12	comparing random access mechanism for machine-to-machine communications in LTE - advanced networks	Leila Hokmabadi & Mehdi Rasti	March 2017
13	Studying and Comparing Intrusion Detection Mechanisms in Internet of Things	Maryam Imanimahmoudabad & Mehdi Rasti	March 2017
14	Relay selection and interference management in cooperative cognitive radio networks	Ameneh Rasouli & Mehdi Rasti	February 2017
15	Resource allocation for full duplex device communication in cellular networks	Alaa Naji Kadhim & Mehdi Rasti	February 2017
16	An investigation on challenges and related solution on internet of things	Bahareh Arzani & Mehdi Rasti	February 2017
17	Joint Power Control and Subchannel Allocation for OFDMA Femtocell Networks	Shiva Kazemi Taskou & Mehdi Rasti	October 2016
18	Joint power control and mode selection in D2D communication	Alireza Abedin Varamin & Mehdi Rasti	September 2016
19	Designing a DOS-resistant routing protocol for VANET	Ahad Rostami & Mehdi Rasti	September 2016
20	Studing Naming and routing in information centric network	Elahe Hadi & Mehdi Rasti	May 2016
21	Spectrum Allocation via Auction in Cognitive Radio Networks	Zahra Shariatmadar Asl & Mehdi Rasti	May 2016
22	Cmparison and evaluation methods of interference management in femtocell networks	Behrouz Zadmehr & Mehdi Rasti	March 2016
23	Mitigating the impact of misbehaving in cognitive radio networks	Masoud Sanatizadeh & Mehdi Rasti	February 2016
24	Inter-Cell Interference Management In Femtocell Networks With Frequency Reuse	Mohammad Taghi Shaykhan & Mehdi Rasti	February 2016
25	Proposing an improved risk assessment methodology based on security metrics for enterprise networks	Mehraneh Davari & Mehdi Rasti	January 2016
26	Efficient Mode Selection For Device-to-Device Communications In Wireless Cellular Networks	Ehsan Naghipour & Mehdi Rasti	October 2015
27	designing a distributed admission control scheme for underlay cognitive radio network	Seyed Mohammad Reza Esmaeili Taba & Mehdi Rasti	October 2015
28	Comparison and Improvement of Interference Management schemes in Underlying Device-to-Device Cellular Networks	Shabnam Ghoreishian & Mehdi Rasti	October 2015
29	Energy Efficiency Improvement In Cognitive Radio Networks Using Channel Assignment	Nasser Shami & Mehdi Rasti	October 2015
30	Performance evaluation of cross-layer-design based styles for real-tim video streaming in ad hoc networks	Elahe Fatolahi & Mehdi Rasti	September 2015
31	Evaluating and Improvement of Channel Allocation Schemes in Device Communication	Foad Hajiaghajani Memar & Mehdi Rasti	September 2015
32	Comparison and Improvement of Channel and power Allocation Schemes in Multi-Tier OFDMA Networks	Tayebeh Khedmat & Mehdi Rasti	July 2015

33	Interference management in underlay cognitive radio networks using relay nodes	Abdolmottaleb Mohammadi & Mehdi Rasti	May 2015
34	Comparison of interference management methods in cognitive radio networks	Akram Shafiee & Mehdi Rasti	May 2015
35	Efficient base-station assignment and power control in Femtocell Networks	Ali Nazarbeigi & Mehdi Rasti	October 2014
36	A Qos-based mechanism for Trust Management in Cloud Computing	Hamidreza Banaei & Mehdi Rasti	May 2014
37	Network Security Assessment Based On Information Security Management Standard	Mehdi Esfandiari & Mehdi Rasti	May 2014

## Books

#	Title	Author(s)	Publisher country	publication date	version
<b>Portal Records</b>					
1	Radio resource Management in Wireless Networks: An Engineering Approach	Ekram Hossain, Mehdi Rasti, Long Bao Le	United Kingdom	January 2018	1

## Journal Papers

### Portal Records

- Mehdi Rasti, Shiva Kazemi Taskou, Hina Tabassom, Ekram Hossain, "Evolution Toward 6G Multi-band Wireless Networks: A Resource Management Perspective", IEEE WIRELESS COMMUNICATIONS, May 2022 Vol. 1, Num. 1, Page 1-1, May 2022,
- Atefeh Termehchi, Mehdi Rasti, "A Learning Approach for Joint Design of Event-triggered Control and Power-Efficient Resource Allocation", IEEE TRANSACTIONS ON VEHICULAR TECHNOLOGY, March 2022 Vol. 1, Num. 1, Page 1-1, March 2022,
- Shiva Kazemi Taskou, Mehdi Rasti, Pedro H. J. Nardelli, "Energy and cost efficient resource allocation for Blockchain-enabled NFV", IEEE Transactions on Services Computing, January 2021 Vol. 1, Num. 1, Page 1-1, January 2021,
- Rojin Aslani, Mehdi Rasti, "A Distributed Power Control Algorithm for Energy Efficiency Maximization in Wireless Cellular Networks", IEEE Wireless Communications Letters, November 2020 Vol. 9, Num. 11, Page 1975-1979, November 2020,
- Hamed Rajabi Qomi, Mehdi Rasti, Hossein Pedram, Rohollah Yousefpour, "Joint subchannel assignment and power control in OFDMA in-band full-duplex heterogeneous networks", Transactions on Emerging Telecommunications Technologies, August 2020 Vol. 31, Num. 8, Page 0-0, August 2020,
- Rojin Aslani, Ebrahim Saberinia, Mehdi Rasti, "Resource Allocation for Cellular V2X Networks Mode-3 With Underlay Approach in LTE-V Standard", IEEE TRANSACTIONS ON VEHICULAR TECHNOLOGY, August 2020 Vol. 69, Num. 8, Page 8601-8612, August 2020,
- Atefeh Termehchi, Mehdi Rasti, "Joint Sampling Time and Resource Allocation for Power-efficiency in Industrial Cyber Physical Systems", IEEE TRANSACTIONS ON INDUSTRIAL INFORMATICS, June 2020 Vol. 17, Num. 4, Page 2600-2610, June 2020,
- Fahime Khoramnejad, Mehdi Rasti, Hossein Pedram, Ekram Hossain, Shahrokh Valaee, "Load Management, Power and Admission Control in Downlink Cellular OFDMA Networks", IEEE TRANSACTIONS ON MOBILE COMPUTING, December 2019 Vol. 0, Num. 0, Page 1-12, December 2019,

- 9 Rojin Aslani, Mehdi Rasti, Ata Khalili, "Energy Efficiency Maximization Via Joint Sub-Carrier Assignment and Power Control for OFDMA Full Duplex Networks", IEEE TRANSACTIONS ON VEHICULAR TECHNOLOGY, October 2019 Vol. 68, Num. 12, Page 11859-11872, October 2019,
- 10 Ata Khalili, Mohammad Robot Mili, Mehdi Rasti, Saeedeh Parsaeefard, Derrick Wing Kwan Ng, "Antenna Selection Strategy for Energy Efficiency Maximization in Uplink OFDMA Networks: A Multi-objective Approach", IEEE TRANSACTIONS ON WIRELESS COMMUNICATIONS, October 2019 Vol. 1, Num. 19, Page 595-609, October 2019,
- 11 Ata Khalili, Sheyda Zarandi, Mehdi Rasti, "Joint Resource Allocation and Offloading Decision in Mobile Edge Computing", IEEE COMMUNICATIONS LETTERS, February 2019 Vol. 23, Num. 4, Page 684-687, February 2019,
- 12 Hamed Rajabi Qomi, Mehdi Rasti, Hossein Pedram, Rohollah Yousefpour, "Tier-aware joint subchannel and power allocation in uplink OFDMA heterogeneous networks", Transactions on Emerging Telecommunications Technologies, December 2018 Vol. 30, Num. 2, Page 1-21, December 2018,
- 13 Fahime Khoramnejad, Mehdi Rasti, Hossein Pedram, Mehdi Monemi, "Efficient joint power and admission control in underlay cognitive networks using Benders' decomposition method", COMPUTER COMMUNICATIONS, July 2018 Vol. 129, Num. 0, Page 19-31, July 2018,
- 14 Mehdi Rasti, Shiva Kazemi Taskou, "On Joint Sub-channel Allocation, Duplexing Mode Selection, and Power Control in Full-Duplex Co-Channel Femtocell Networks", Amirkabir International Journal of Electrical and Electronics Engineering, June 2018 Vol. 50, Num. 1, Page 13-24, June 2018,
- 15 Fahime Khoramnejad, Mehdi Rasti, Hossein Pedram, Ekram Hossain, "On Resource Management in Load-Coupled OFDMA Networks", IEEE TRANSACTIONS ON COMMUNICATIONS, December 2017 Vol. 66, Num. 5, Page 2295-2311, December 2017,
- 16 Rojin Aslani, Mehdi Rasti, "Distributed Power Control Schemes for In-Band Full-Duplex Energy Harvesting Wireless Networks", IEEE TRANSACTIONS ON WIRELESS COMMUNICATIONS, August 2017 Vol. 16, Num. 8, Page 5233-5243, August 2017,
- 17 Shiva Kazemi Taskou, Mehdi Rasti, "Fast Water-Filling Method for Sum-Power Minimization in OFDMA Networks", IEEE SIGNAL PROCESSING LETTERS, July 2017 Vol. 24, Num. 7, Page 1058-1062, July 2017,
- 18 Zahra Baghali Khanian, Mehdi Rasti, Farzin Salek, Ekram Hossain, "A Distributed Opportunistic MAC Protocol for Multichannel Wireless Networks", IEEE TRANSACTIONS ON WIRELESS COMMUNICATIONS, May 2016 Vol. 15, Num. 6, Page 4263-4276, May 2016,
- 19 Mehdi Rasti, Monowar Hasan, Long Bao Le, Ekram Hossain, "Distributed Uplink Power Control for Multi-Cell Cognitive Radio Networks", IEEE TRANSACTIONS ON COMMUNICATIONS, February 2016 Vol. 63, Num. 3, Page 628-642, February 2016,
- 20 Mehdi Monemi, Mehdi Rasti, Ekram Hossain, "On characterization of feasible interference regions in cognitive radio networks", IEEE TRANSACTIONS ON COMMUNICATIONS, January 2016 Vol. 64, Num. 2, Page 511-524, January 2016,
- 21 Mehdi Monemi, Mehdi Rasti, Ekram Hossain, "Low-Complexity SINR Feasibility Checking and Joint Power and Admission Control in Prioritized Multitier Cellular Networks", IEEE TRANSACTIONS ON WIRELESS COMMUNICATIONS, December 2015 Vol. 0, Num. 0, Page 1-14, December 2015,
- 22 Mehdi Monemi, Mehdi Rasti, "Existence of Fixed-Point and Convergence Analysis of Piece-Wise Wide-Sense Standard Power Update Functions", IEEE COMMUNICATIONS LETTERS, June 2015 Vol. 19, Num. 6, Page 1025-1028, June 2015,
- 23 Ebrahim Baktash, Mehdi Rasti, Ekram Hossain, "Resource allocation for dynamic intra-cell subcarrier reuse in cooperative OFDMA wireless networks", IEEE TRANSACTIONS ON MOBILE COMPUTING, September 2014 Vol. early access, Num. 0, Page 0-0, September 2014,
- 24 Mehdi Monemi, Mehdi Rasti, Ekram Hossain, "On Joint Power and Admission Control in Underlay Cellular Cognitive Radio Networks", IEEE TRANSACTIONS ON WIRELESS COMMUNICATIONS, July 2014 Vol. early access, Num. 0, Page 0-0, July 2014,
- 25 Ekram Hossain, Mehdi Rasti, Hina Tabassum, Amr Abdelnasser, "Evolution toward 5G multi-tier cellular wireless networks: An interference management perspective", IEEE WIRELESS COMMUNICATIONS, May 2014 Vol. 21, Num. 3, Page 118-127, May 2014,

- 26 Mehdi Rasti, Ekram Hossain, "Distributed priority-based power and admission control in cellular wireless networks", IEEE TRANSACTIONS ON WIRELESS COMMUNICATIONS, September 2013 Vol. vol. 12, Num. 0, Page 4483-4495, September 2013,
- 27 Mehdi Monemi, Alireaz Zolghadr Asli, Shapoor Golbahar Haghighi, Mehdi Rasti, "Distributed Multiple Target-SINRs Tracking Power Control in Wireless Networks", IEEE TRANSACTIONS ON WIRELESS COMMUNICATIONS, April 2013 Vol. vol. 12, Num. 0, Page 1850-1859, April 2013,
- 28 Mehdi Rasti, Ahmad R. Sharafat, Jens Zander, "Pareto and energy-efficient distributed power control with feasibility check in wireless networks", IEEE TRANSACTIONS ON INFORMATION THEORY, January 2012 Vol. vol. 57, Num. 0, Page 245-255, January 2012,
- 29 Mehdi Rasti, Ahmad R. Sharafat, "Distributed uplink power control with soft removal for wireless networks", IEEE TRANSACTIONS ON COMMUNICATIONS, March 2011 Vol. vol. 59, Num. 0, Page 833-843, March 2011,



## Conference Papers






### Portal Records

- 1 Amir Golroo, Mehdi Rasti, Bahram Taheri, Mahmoud Mesbah Namini, Maryam Amir Haeri, Hainian Wang, "A Nexus Framework for the intelligent transportation infrastructure based on circular economy ", World Transport Convention, June 2021
- 2 Hosein Zarini, Ata Khalili, Hina Tabassom, Mehdi Rasti, "Joint Transmission in QoE-Driven Backhaul-Aware MC-NOMA Cognitive Radio Network ", IEEE Global Communications Conference, December 2020
- 3 Jaber Babaki, Mehdi Rasti, Rojin Aslani, "Dynamic Spreading Factor and Power Allocation of LoRa Networks for Dense IoT Deployments ", IEEE International Symposium on Personal, Indoor and Mobile Radio Communications, August 2020
- 4 Ata Khalili, Sheyda Zarandi, Mehdi Rasti, Ekram Hossain, "Multi-Objective Optimization for Energy- and Spectral-Efficiency Tradeoff in In-Band Full-Duplex (IBFD) Communication ", 2019 IEEE Global Communications Conference (GLOBECOM), December 2019
- 5 Elham Moein, Shiva Kazemi Taskou, Mehdi Rasti, "Base Station Assignment in Two-tier Dual Connectivity Heterogeneous Networks ", 9th International Symposium on Telecommunications, December 2018
- 6 Fatemeh Omidvar, وحید سلمانی, Mehdi Rasti, "A Contention Resolution Scheme for Energy Efficiency of M2M Traffic in LTE Networks ", 9th International Symposium on Telecommunications, December 2018
- 7 Sheyda Zarandi, Mehdi Rasti, "Resource allocation in inband full-duplex two-tier networks with quality of service provisioning ", 2018 IEEE Wireless Communications and Networking Conference (WCNC), April 2018
- 8 Siminossadat Badri, Mansour Nascheraghi, Mehdi Rasti, "Performance analysis of joint pairing and mode selection in D2D communications with FD radios ", (2018 IEEE Wireless Communications and Networking Conference (WCNC), April 2018
- 9 Fahime Khoramnejad, Mehdi Rasti, Hossein Pedram, Shahrokh Valaee, "Admission control and load management in underlay OFDMA cognitive radio networks ", 28th IEEE Annual International Symposium on Personal, Indoor, and Mobile Radio Communications, October 2017
- 10 Alaa Naji Kadhim, Foad Hajiaghajani Memar, Mehdi Rasti, "On selecting duplex-mode and resource allocation strategy in full duplex D2D communication ", 2017 Iranian Conference on Electrical Engineering (ICEE), July 2017
- 11 Hossein Davoudi, Mehdi Rasti, "Resource Allocation and Admission Control in OFDMA Macrocell-Small Cell Networks ", 25th Iranian conference on Electrical Engineering, May 2017
- 12 Foad Hajiaghajani Memar, Ramtin Davoudi, Mehdi Rasti, "Energy efficient resource allocation and admission control for D2D-aided collaborative mobile clouds ", 2017 15th International Symposium on Modeling and Optimization in Mobile, Ad Hoc, and Wireless Networks (WiOpt), May 2017

- 13 Shiva Kazemi Taskou, Mehdi Rasti, "Joint Power Control and Sub-channel Allocation for Co-Channel OFDMA Femtocells ", ISCC 2016 - The twenty first IEEE Symposium on Computers and Communications, June 2016
- 14 Alireza Abedin Varamin, Mehdi Rasti, "A Distributed Joint Power Control and Mode Selection Scheme for D2D-enabled Cellular Systems ", ISCC 2016 - The twenty first IEEE Symposium on Computers and Communications, June 2016
- 15 Alireza Abedin Varamin, Mehdi Rasti, "A Distributed Power Control and Mode Selection Algorithm for D2D-enabled Cellular Systems ", The 24th Iranian Conference on Electrical Engineering (ICEE 2016), May 2016
- 16 Mohammad Taghi Shaykhan, Mehdi Rasti, "A Method for Resource Allocation in OFDMA Femtocell Networks Based on Clustering ", The 24th Iranian Conference on Electrical Engineering (ICEE 2016), May 2016
- 17 Shiva Kazemi Taskou, Mehdi Rasti, "A Distributed Algorithm for Power Control and Sub-Channel Allocation for OFDMA Femtocells ", The 24th Iranian Conference on Electrical Engineering (ICEE 2016), May 2016
- 18 Nasser Shami, Mehdi Rasti, "A Joint Multi-Channel Assignment and Power Control Scheme for Energy Efficiency in Cognitive Radio Networks ", IEEE Wireless Communications and Networking Conference, April 2016
- 19 Ehsan Naghipour, Mehdi Rasti, "A Distributed Joint Power Control and Mode Selection Scheme for D2D Communication Underlying LTE-A Networks ", IEEE Wireless Communications and Networking Conference, April 2016
- 20 Foad Hajiaghajani Memar, Ramtin Davoudi, Mehdi Rasti, "A joint channel and power allocation scheme for Device-to-Device communications underlying uplink cellular networks ", 2016 IEEE Conference on Computer Communications Workshops (INFOCOM WKSHPS), April 2016
- 21 Foad Hajiaghajani Memar, Mehdi Rasti, "Downlink Resource Reuse for Device-to-Device Communication Underlying Cellular Networks Using A Generalized Knapsack Framework ", IEEE Consumer Communications and Networking Conference (CCNC), January 2016
- 22 Foad Hajiaghajani Memar, Mehdi Rasti, "An adaptive uplink resource allocation scheme for device-to-device communication underlying cellular networks ", (IEEE International Conference on Communication in China (ICCC), November 2015
- 23 Mehdi Monemi, Mehdi Rasti, Ekram Hossain, "Characterizing Feasible Interference Region for Underlay Cognitive Radio Networks ", IEEE International Conference on Communications (ICC) 2015, June 2015
- 24 Nasser Shami, Mehdi Rasti, "An energy efficiency scheduling scheme for cognitive radio networks ", 2015 23rd Iranian Conference on Electrical Engineering, May 2015
- 25 Maryam Miriastabanati, Mehdi Rasti, S.Mostafa Safavihamami, "A mobile ad hoc network routing based on energy and Markov chain trus ", International Symposium on Telecommunications, August 2014
- 26 Amir Allahyari, Mahmoud Rashidpour, Mehdi Rasti, "A Centralized Cooperative Power Control Algorithm for Cognitive Radio Networks ", 20th Iranian Conference on Electrical Engineering ICEE 2012, Iran, Tehran, May 2012

## Taught Courses

#	Course title	Description	Headlines	Date
1	Special Topics (Internet of Things)	This course introduces Internet of Things (IoT) concepts and its applications, IoT architecture and its corresponding technologies, network protocols. Students will also learn how to choose an appropriate network for IoT applications, and acquire ski		Spring 2022
2	Topics in Mobile & Wireless Networks Advanced	Explained above		Spring 2022

3	Special Topics (Internet of Things)	This course introduces Internet of Things (IoT) concepts and its applications, IoT architecture and its corresponding technologies, network protocols. Students will also learn how to choose an appropriate network for IoT applications, and acquire ski		Fall 2021
4	Signals and Systems	This course introduces the methods of description and analysis for continuous-time and discrete-time signals and (linear time-invariant) systems, including time domain analysis using convolution, frequency domain analysis using the Fourier series and		Fall 2021
5	Mobile Computing & Wireless Networks	Thus course provides comprehension of the basic principles and topics of fundamental importance concerning the technology and architecture of wireless networks. It provides a detailed discussion of leading- edge topics, including Gigabit Wi- Fi, the		Fall 2021
6	Topics in Mobile & Wireless Networks Advanced	Explained above		Spring 2021
7	Special Topics (Internet of Things)	This course introduces Internet of Things (IoT) concepts and its applications, IoT architecture and its corresponding technologies, network protocols. Students will also learn how to choose an appropriate network for IoT applications, and acquire ski		Spring 2021