

# Nader Mokari Yamchi

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## Publications

### Refereed Journal Publications:

- 2017 **Mohammad Reza Abedi, Nader Mokari, Hamid. Saeedi and H. Yanikomeroğlu**, *Robust Resource Allocation to Enhance Physical Layer Security in Systems with Full-Duplex Receivers: Active Adversary*, Accepted in IEEE Transactions on Wireless Communications.
- Faezeh Alavi, Nader Mokari, Mohammad R. Javan and Kanapathippillai Cumanan**, *Limited Feedback Scheme for Device to Device Communications in 5G Cellular Networks with Reliability and Cellular Secrecy Outage Constraints*, Accepted in IEEE Transactions on Vehicular Technology.
- N. Tavakoli, P. Azmi, Nader Mokari**, *Performance Evaluation and Optimal Detection of Relay-Assisted Diffusion-Based Molecular Communication with Drift*, Accepted in IEEE Transactions on NanoBioscience.
- A. Mardi, P. Azmi, Nader Mokari, and S. Parsaeefrad**, *Resource Allocation for Full-Duplex based Heterogeneous Cellular Networks Considering Back-haul Capacity*, Accepted in Transactions on Emerging Telecommunications Technologies.
- Mohammad R. Abedi, Nader Mokari, Mohammad R. Javan, and H. Yanikomeroğlu**, *Secure Communication in OFDMA Based Cognitive Radio Networks: An Incentivized Secondary Network Coexistence Approach*, Accepted in IEEE Transactions on Vehicular Technology.
- Mohammad R. Javan, Nader Mokari, Faezeh Alavi, and Ali Rahmati**, *Resource Allocation in Decode-and-Forward Cooperative Communications Networks with Limited Rate Feedback Channel*, Accepted in IEEE Transactions on Vehicular Technology, vol. 66, no. 1, 2017.
- 2016 **M. R. Abedi, N. Mokari, M. R. Javan, H. Yanikomeroğlu**, *Limited Rate Feedback Scheme for Resource Allocation in Secure Relay-Assisted OFDMA Networks*, IEEE Transactions on Wireless Communications, vol. 15, no. 4, 2016.
- Nader Mokari, F. Alavi, S. Parsaeefard, T. Le-Ngoc**, *Limited-Feedback Resource Allocation in Heterogeneous Cellular Networks*, IEEE Transactions on Vehicular Technology, vol. 65, no. 4, 2016.
- Ali Mokdad, Paeiz Azmi, N. Mokari**, *Radio resource allocation for heterogeneous traffic in GFDM-NOMA heterogeneous cellular networks*, IET Communications, vol. 10, no. 12, 2016.
- Nader Mokari, P. Hajipour, Leila. Mohammadi, P. Sojoodi, Z.Ghatan**, *Resource Allocation for Non-Delay-Sensitive Satellite Services using ACM-MIMO-OFDM*, IET Communications, vol. 10, no.3, 2016.
- Nader Mokari, S. Parsaeefard, P. Azmi, H. Saeedi, and E. Hossein**, *Robust Ergodic Uplink Resource Allocation in Underlay OFDMA Cognitive Radio Networks*, IEEE Transactions on Mobile Computing, Vol. 15, no. 2, 2016.

- 2015 **Nader Mokari, S. Parsaeefard, P. Azmi, H. Saeedi, and E. Hossein**, *Secure Robust Ergodic Resource Allocation in Relay-Assisted Cognitive Radio Networks*, IEEE Transactions on Signal Processing, Vol. 63, no. 2, 2015.
- M. G. Khoshkholgh, Nader Mokari, K. Navaie, H. Yanikomeroglu, V. Leung, and K. G. Shin**, *On the downlink radio resource allocation in DS-CDMA/OFDM spectrum sharing systems: Optimality of OFDMA*, IEEE Journal on Selected Areas in Communications, 2015.
- M. Dashti, N. Mokari, and K. Navie**, *Uplink Radio Resource Allocation in AF and DF Relay-Assisted Networks with Limited Rate Feedback*, IEEE Transactions on Vehicular Technology, 2015.
- 2014 **Nader Mokari, H. Saeedi and P. Azmi**, *Quantized Ergodic Radio Resource Allocation in Cognitive Femto Networks with Controlled Collision and Power Outage Probabilities*, IEEE Journal on Selected Areas in Communications, Vol. 32, no. 11, 2014 .
- Nader Mokari, S. Parsaeefard, P. Azmi and H. Saeedi**, *A New Cooperative Paradigm for Secure Cognitive Radio Networks*, IEEE Transactions on Wireless Communications, Vol. 13, no. 2, 2014.
- Nader Mokari, P. Azmi, and H. Saeedi**, *Quantized Ergodic Radio Resource Allocation in Cognitive Networks with Guaranteed Quality of Service for Primary Network*, IEEE Transactions on Vehicular Technology, vol. 63, no. 8, 2014.
- M. Dashti, N. Mokari, and M. R. Abedi**, *Uplink Radio Resource Allocation in OFDMA Heterogeneous Networks With Limited Feedback*, IET Communications, vol. 8, no. 18, 2014.
- 2013 **Nader Mokari, P. Azmi, and H. Saeedi**, *Quantized Ergodic Radio Resource Allocation in Cognitive DF Relay-Assisted Networks with Guaranteed Quality of Service for Primary Network*, IEEE Transactions on Wireless Communications, vol. 12 , no. 10, 2013.
- M. G. Khoshkholgh, Nader Mokari, and K. G. Shin**, *Ergodic Sum Capacity of Spectrum-Sharing Multiple Access with Collision Metric*, IEEE Journal on Selected Areas in Communications, vol. 31 no. 11 , 2013.
- Nader Mokari, H. Saeedi, and K. Navaie**, *Channel Coding Increases the Achievable Rate of the Cognitive Networks*, IEEE Communications Letters, Vol. 5, no. 8, 2013.
- 2012 **K. Navaie, and Nader Mokari**, *Relay assisted OFDMA spectrum sharing system*, Transactions on Emerging Telecommunications Technologies, Vol. 25, no. 5, 2012.
- 2011 **Nader Mokari, and K. Navaie**, *Radio resource allocation in OFDM-based cooperative relaying networks for a mixture of elastic and streaming traffic*, IET Communications, Vol. 5, Iss. 8, 2011.
- Nader Mokari, K. Navaie, and M. G. Khoshkholgh**, *Downlink Radio Resource Allocation in OFDMA Spectrum Sharing Environment with Partial Channel State Information*, IEEE Transactions on Wireless Communications, vol. 10, no. 10, 2011.
- 2010 **Nader Mokari, M. R. Javan, and K. Navaie**, *Cross-Layer Resource Allocation in OFDMA Systems for Heterogeneous Traffic With Imperfect CSI*, IEEE Transactions on Vehicular Technology, vol. 59, no. 2, 2010.

**Nader Mokari, and K. Navaie**, *Cross-layer resource allocation for push to talk service over orthogonal frequency division multiple access-based networks with heterogeneous traffic*, IET Communications, Vol. 4, Iss. 15, 2010.

#### Refereed Conference Publications:

**F Alavi, N Mokari, H Saeedi**, *Secure resource allocation in OFDMA-based cognitive radio networks with two-way relays*, in Proceedings of Iranian Conference on Electrical Engineering (ICEE), 2015.

**M. R Abedi, N. Mokari, H. Saeedi, H. Yanikomeroglu**, *Secure Robust Resource Allocation using Full-Duplex Receivers*, in Proceedings of IEEE International Conference on Communication Workshop (ICCW), 2015.

**Nader Mokari, M. R. Abedi, H. Saeedi, and P. Azmi**, *Ergodic Radio Resource Allocation Based on Imperfect Channel Distribution Information*, in Proceedings of IEEE Wireless Communications and Networking Conference (WCNC), 2014.

**H. Mamani, Nader Mokari, M. G. Khoshkholgh, and H. Saeedi**, *Message Passing Based Algorithms for Resource Allocation in Spectrum Sharing OFDMA systems*, in Proceedings of IEEE Wireless Communications and Networking Conference (WCNC), 2014.

**M. Javan, and Nader Mokari**, *Resource Allocation for Maximizing Secrecy Rate in Presence of Active Eavesdropper*, in Proceedings of IEEE Iranian Conference on Electrical Engineering (ICEE 2014).

**Nader Mokari, F. Arian, S. Parsaeefrad, T. Le-Ngoc**, *Dynamic Secure Power Allocation over Multiple Access Channels*, IEEE Vehicular Technology Conference Fall (VTC 2014).

**Nader Mokari, K. Navaie, and H. Saeedi**, *Trellis Coded Modulation OFDMA for Spectrum Sharing in Cognitive Environment*, in Proceedings of IEEE Symposium on Computers and Communications (ISCC), 2012 .

**Nader Mokari, and K. Navaie**, *Radio resource allocation schemes for relay assisted OFDMA dynamic spectrum allocation systems*, in Proceedings of IEEE Wireless Advanced (WiAd), 2012 .

**Nader Mokari, M. R. Javan, and K. Navaie**, *Resource Allocation Based on Channel Distribution Information for Elastic and Streaming Traffic in OFDMA Networks: A Heuristic Algorithm*, in Proceedings of IEEE Vehicular Technology Conference (VTC), 2009-Fall .

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#### Research Interests

- Wireless Communication
- Cognitive radio networks
- Cooperative Communication
- Statistical and Modern Signal Processing
- Optimization Methods
- Radio Resource Allocation
- MIMO systems
- Channel Coding
- Security
- Routing
- Cloud Computing
- Vehicular Communication
- Network Planning

- Satellite Communication
- Molecular Communication

## Related Courses

Advanced Theory of Communication  
 Stochastic Processes  
 Digital Signal Processing  
 Numerical Optimization  
 Data Networks  
 Communication Systems 2  
 Communication Systems 1  
 Signals & Systems  
 Probability and Statistics  
 Communications seminar  
 Information Theory  
 Coding Theory  
 Wireless Communication

## Professional Experiences

- Since 2009 **Some of my works in mobile telecommunication company of Iran (MCI),** .  
 Technical manager of software development for frequency hopping in GSM networks.  
 Technical manager of software development for KPI evaluation in GSM networks.  
 Technical manager of software development for monitoring and adjusting BSS and NSS parameters in GSM networks.  
 Technical manager of traffic modelling in 3G and 4G .
- Since 2012 **Some of my works in Iran telecommunication research center (ITRC),** .  
 Technical advisor for designing the new methods for Wimax QoS measurements.  
 Technical advisor for implementing the novel approaches in the satellite transponder .  
 Technical advisor for determining the QoS of satellite services .  
 Technical advisor for designing the business plan of satellite operator in Iran .
- Since 2013 **Some of my works in Sadr Research Center,** .  
 Technical advisor for 4G network planning .
- Since 2013 **Some of my works in Tehran Province Gas Company,** .  
 Technical advisor for Tetra network planning .
- Since 2015 **Some of my works in information technology organization of Iran (ITC),** .  
 Technical advisor for national broadband network planning .

## Reviewer

- Journal **IEEE Transactions on Mobile Computing, IEEE Wireless Communications Letters, IEEE Wireless Communications, European Transactions on Telecommunications, IEEE Journal On Selected Areas In Communications, IEEE Transactions on Vehicular Technology, IEEE Transactions on Information Forensics and Security.** ,

Conference **ICC, WCNC, VTC, GLOBECOM.**

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## Teaching Experiences

Spring, Fall 2014 **Advanced Digital Communication.**  
Spring, Fall 2014 **Stochastic Processes.**  
Spring 2014 **Signals and Systems.**  
Summer 2014 **Introduction to 3G and 4G of mobile cellular network.**  
Fall 2014 **Data and Computer Communications.**  
Fall 2014 **Digital Signal Processing.**  
Fall 2014 **Green Communication.**  
Winter 2015 **Mobile Cellular Network Planning.**  
Winter 2015 **Introduction to 5G of mobile cellular network.**  
Spring 2016 **Resource Allocation.**  
Spring 2016 **Wireless Communications.**  
Fall 2016 **Network and Communication Layer of IoT.**

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## Academic and Professional Membership

Since January 2009 **IEEE Graduate Student.**  
Since January 2009 **IEEE Communication Society.**  
2014 **TPC member of IEEE Vehicular Technology Conference.**  
2016 **TPC member of IEEE GLOBECOM workshop Conference .**  
2016 **TPC member of International Conference on COMMunication Systems and NETWORKS (COMSNETS).**

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## References

Professor **Dr. P. Azmi**, Tarbiat Modares University, Tehran, Iran.  
  
Professor **Dr. A. R. Sharafat**, Tarbiat Modares University , Tehran, Iran.  
  
Assistant Professor **Dr. B. Akbari**, Tarbiat Modares University, Tehran, Iran.  
  
Assistant Professor **Dr. H. Saeedi**, Tarbiat Modares University, Tehran, Iran.