

Redha M. Radaydeh, PhD

CONTACT INFORMATION Department of Engineering & Technology
P.O. Box 3011
Texas A&M University-Commerce
Commerce, TX 75429-3011
E-mail:
redha.radaydeh@tamuc.edu
redha.radaydeh@gmail.com

CURRENT POSITION Tenure-track Faculty Member Electrical Engineering, Texas A&M University-Commerce, TX.

EDUCATION **University of Mississippi**, Oxford, MS

Ph.D., Electrical Engineering, January 2004 – November 2006

- GPA: 4.0/4.0
- Dissertation Topic: Efficient Receivers and Digital Modulation Techniques for Communications Systems.
- Area of Study: Wireless Communications

Jordan University of Science and Technology (JUST), Irbid, Jordan

M.Sc., Electrical Engineering, October 2001 – August 2003

- Percentage Average: 87.2% [Top 5% of graduates]
- Thesis Topic: Detection and Diversity Combining in Mobile Channels.
- Area of Study: Communications and Electronics

B.Sc., Electrical Engineering (five years program; 162 credit hours), October 1996 – June 2001

- Percentage Average: 80.7% [Top 5% of graduates]
- Area of Study: Communications and Electronics

Zarnouji Comprehensive Secondary School, Kufryouba, Irbid, Jordan

The General Secondary Education Certificate Examination, August 1995 – July 1996

- Percentage Average: 93.4%
- Area of Study: Scientific Stream

ACADEMIC AND RESEARCH EXPERIENCE **Texas A&M University-Commerce**, TX

Tenure-Track Faculty Member of Electrical Engineering August 2018 to Present

**King Abdullah University of Science and Technology (KAUST),
Thuwal, KSA**

Remote Research Scientist in Communication Theory Lab (CTL)
October 2016 to May 2018

Texas A&M University-College Station, TX

Visiting Researcher July 2017 to December 2017

Alfaisal University (AU), Riyadh, KSA

Associate Professor of Electrical Engineering December 2014
to August 2016

Assistant Professor of Electrical Engineering September 2012
to November 2014

Texas A&M University-Qatar (TAMUQ), Doha, Qatar

Associate Research Scientist January 2012 to September 2012

**King Abdullah University of Science and Technology (KAUST),
Thuwal, KSA**

Research Fellow and Graduate Research Supervisor October
2009 to January 2012

Jordan University of Science and Technology (JUST), Irbid, Jordan

Assistant Professor of Electrical Engineering February 2007 to
September 2009 (officially till February 2010)

Instructor October 2003 to January 2004

Teaching Assistant October 2001 to June 2003

University of Mississippi, Oxford, MS, USA

Research Assistant January 2004 to November 2006

Graduate Instructor January 2006 to May 2006

ACADEMIC
AWARDS

University of Mississippi

- Full Research Assistant Scholarship, January 2004 – July 2006.
- Dissertation Fellowship, August 2006 – December 2006.
- Recognized for Academic Excellence.

Jordan University of Science and Technology (JUST)

- Graduate Scholarship, October 2001 – June 2003.
- Full tuition waiver for the undergraduate studies, October 1996 – June 2001.
- Recognized for Academic Excellence.

Alfaisal University

- Faculty Award for Research Excellence, 2015.

RESEARCH
VISITS

- **University of Oulu**, Oulu, Finland
October 2010 to November 2010
- **Telecom Paris-tech**, Paris, France
May 2010 to July 2010
- **King Abdullah University of Science and Technology (KAUST)**,
Thuwal, KSA
Summer 2012, Summer 2013, March 2014, July 2014, Jan 2015, July 2015,
June 2016.
- **Texas A&M University at Qatar (TAMUQ)**, Thuwal, KSA
July-August 2014.

RESEARCH
GRANTS

SEED Grant Texas A&M Engineering Experiment (TEES)

- Co-PI: Development and Deployment of Emission Free Smart Infrastructure,, 2020. (\$40,000)

KAUST

- Collaboration Travel Fund Grant, February 2010. (\$21,500)

AU

- Internal Research Grant, December 2012. (\$11,467)

QNRf - NPRP

- PI: Power control, Mobility and Interference Management for Underlay D2D Communications in 5G Networks, May 2015. (\$ 890,000.00 USD)

KACST - NSTIP

- Co-PI: Proposing and Investigating New Scenarios for Advanced Communications Networks Based on Free Space Optical Communications, September 2015. (1,482000.00 SAR).

TEACHING
INTERESTS

Teaching interests in Electrical/General Engineering fields:

- Advanced Mathematics.
- Applied Electromagnetics.
- Linear Algebra. Differential Equations. Intermediate Analysis. Statistics.
- Probability Theory. Random Processes.
- Operations Research. Optimization.
- Computer Networks. Security and Cryptography.
- Electric Circuits. Electronic Circuits.
- Power Electronics. Electric Machines.
- Feedback Control Systems. Digital Control.

- Digital Signal Processing. Digital Filters.
- Antennas. Wave Propagation. Fiber Optics.
- Communication Systems. Digital Communications. Communication Electronics.
- Wireless Communications. Digital Data Transmission. Wireless Networks.
- Error Control Coding. Information Theory.

COURSES
TAUGHT

- At Texas A&M University-Commerce, TX
 - ENGR 110 Introduction to Engineering and Tech. (Fall 2018)
 - EE 220 Circuit Theory (Spring 2020, Fall 2020)
 - EE 320 Electronics I (Fall 2018, 2019, 2020)
 - EE 321 Electronics II (Spring 2019, 2020, 2021)
 - EE 340 Electromagnetics (Spring 2019, 2020, 2021)
 - EE 452 Antenna Theory and Design (Fall 2019, 2020)
 - EE 454 Power Electronics (Fall 2019, 2020)
 - EE 471 Electrical Engineering Capstone II (Spring 2020, 2021)
 - EE 497 Special Topics - Energy Storage Systems (Spring 2021)
- At Alfaisal University
 - EE 202: Introduction to Electronics (Spring 2014, 2015, 2016)
 - EE 309: Applied Electromagnetics (Fall 2012, 2013, 2014, 2015)
 - EE 403: Wireless Communications (Fall 2012)
 - EE 413: Digital Communications (Spring 2013, Fall 2013, 2014, 2015)
 - EE 417: Digital Signal Processing (Spring 2013, 2014, 2015, 2016)
 - EE 422: Antennas and Wave Propagation (Spring 2014, 2015, 2016)
 - EE 490: Capstone Project (Fall/Spring 2012–2013; Fall/Spring 2014–2015, Fall 2015)
- At JUST
 - EE 210: Electric Circuits I
 - EE 310: Electric Circuits II
 - EE 303: Principles of Electrical Engineering
 - EE 307: Electromagnetics II
 - EE 451: Digital Communications
 - EE 452: Communications LAB
 - EE 553: Communications Systems
 - EE 751: Digital Data Transmission
 - EE 781: Wireless Communications
 - EE 782: Advanced Wireless Communications

TOPICS OF
RESEARCH
INTERESTS

Wireless communication theory. Digital signal processing for communications. Beamforming and diversity techniques. Narrowband and wideband multi-user systems . CDMA and OFDM techniques. Wireless standards. Noncoherent systems. Power adaptation algorithms. Handover algorithms. Cognitive radio. Cooperative networks . Adaptive transmission schemes. Scheduling algorithms. Resource sharing, distribution, and allocation schemes. Interference mitigation and management schemes. MIMO systems. Decentralized wireless networks. Heterogenous networks. Small-cell networks. Physical-layer security. Free-space optical communications.

OTHER
TECHNICAL
SERVICES

- Associate Editor - Board of Communications Theory, Frontiers in Communications and Networks).
- Guest Editor - Special Issue on “Device to Device (D2D) Communication”, Journal of Sensors.
- Technical Program Committee (TPC) member in leading IEEE and international conferences, e.g.:
 - IEEE Wireless Communications and Networking Conference (IEEE WCNC 2009-2020)
 - IEEE Global Communications Conference (IEEE Globecom 2009-2020)
 - IEEE International Conference on Communications (IEEE ICC 2011-2020)
 - IEEE International Symposium on Personal, Indoor and Mobile Radio Communications (IEEE PIMRC 2012, 2013 etc.)
 - IEEE International Conference on Wireless and Mobile Computing, Networking and Communications (WiMob 2011, 2012, 2013 etc.)
 - The International Conference on Selected Topics in Mobile and Wireless Networking (iCOST 2011, 2012, 2013 etc.)
 - The International Conference on Telecommunications (ICT 2011-2020)
 - International Workshop on Cyber-Physical Systems and Social Computing (CSSC 2014)
 - IEEE/SAE International Conference on Connected Vehicles & Expo (ICCVE 2013)
 - The International Conference on Innovations in Information Technology (IIT 2013)
 - INFOCOM’2014 Workshop on Mobile Cloud Computing
 - The Asia Pacific Conference on Wireless and Mobile 2014 (APWiMob 2014)
 - IEEE Mediterranean Electrotechnical Conference (MELECON2014)
 - The 2014 International Conference on Internet of Vehicles (IOV 2014)
 - International Conference on Computer, Communication, and Control Technology (I4CT 2015)
 - International Symposium on Wireless Communication Systems (ISWCS 2015)
 - IEEE INFOCOM 2015 Workshop on Mobile Cloud and Virtualization
 - International Conference on Advances in Computing, Communications and Informatics (ICACCI-2015)
 - International Conference on Computing in Mechanical Engineering (ICCME 2015)
 - IEEE International Conference on Signal Processing, Informatics, Communication and Energy Systems 2015 (IEEE SPICES 2015)
- Reviewer for several leading IEEE and IET Journals and Transactions, e.g.:
 - IET Communications
 - IET Electronics Letters
 - IEEE Transactions on Communications
 - IEEE Transactions on Wireless Communications

- IEEE Transactions on Vehicular Technology
- IEEE Communication Letters
- IEEE Journal on Selected Areas in Communications

MEMBERSHIP

- Senior Member of Institute of Electrical and Electronics Engineers (IEEE).
- Member of IEEE Communications Society.
- IEEE Signal Processing for Communications and Electronics Technical Committee (SPCE TC).
- Member of the Honor Society of Phi Kappa Phi.

PUBLICATIONS – REFEREED JOURNAL PAPERS

- **2020**
 - **R. M. Radaydeh**, F. S. Al-Qahtani, A. Celik, K. Qaraqe, and M.-S. Alouini, “Generalized Imperfect D2D Associations in Spectrum-Shared Cellular Networks Under Transmit Power and Interference Constraints,” *IEEE Access*, vol. 8, 2020.
- **2019**
 - **R. M. Radaydeh**, F. S. Al-Qahtani, A. Celik, M.-S. Alouini, and N. Tayem, “Adaptive Spectrum-Shared Association for Controlled Underlay D2D Communication in Cellular Networks,” *IET Communications*, vol. 13, no. 18, pp. 3075–3087, 2019.
 - A. Celik, M.-C. Tsai, **R. M. Radaydeh**, F. S. Al-Qahtani, M.-S. Alouini, “Distributed User Clustering and Resource Allocation for Imperfect NOMA in Heterogeneous Networks”, *IEEE Transactions on Communications*, vol. 67, no. 10, pp. 7211-7227, 2019.
 - A. Celik, M.-C. Tsai, **R. M. Radaydeh**, F. S. Al-Qahtani, M.-S. Alouini, “Distributed Cluster Formation and Power-Bandwidth Allocation for Imperfect NOMA in DL-HetNets,” *IEEE Transactions on Communications*, no. 2, vol. 67, pp. 1677-1692, 2019.
 - A. A. Hussain, N. Tayem, A.-H. Soliman, and **R. M. Radaydeh**, “ FPGA-Based Hardware Implementation of Computationally Efficient Multi-Source DOA Estimation Algorithms,” *IEEE Access*, vol. 7, pp. 88845–88858, 2019.
- **2018**
 - Y. H. Al-Badarneh, C. N. Georghiades, **R. M. Radaydeh**, M.-S. Alouini, “On the Secrecy Performance of Generalized User Selection for Interference-Limited Multiuser Wireless Networks,” *IEEE Transactions on Vehicular Technology*, no. 12, vol. 67, pp. 12442–12446, 2018.
 - Y. Zhang, J. Ge, E. Serpedin, **R. M. Radaydeh**, and Y. Hu, “On Cooperative NOMA Relay Selection Under Nakagami-m Fading and Imperfect Channel Estimation” *Transactions on Emerging Telecommunications Technologies*, no. 12, Vol. 29, e3535, Dec. 2018.

- A. A. AbdelNabi, F. S. Al-Qahtani, **R. M. Radaydeh**, M. Shaqfeh, and H. Alnuweiri, “Hybrid Access Femtocells in Overlaid MIMO Cellular Networks with Transmit Selection under Poisson Field Interference,” *IEEE Transactions on Communications*, no. 1, vol. 66, pp. 163–179, 2018.
- **2017**
 - A. Celik, **R. M. Radaydeh**, F. S. Al-Qahtani, and M.-S. Alouini, “Resource Allocation and Interference Management for D2D-Enabled DL/UL Decoupled Het-Nets”, *IEEE Access – Advances in Interference Mitigation Techniques for Device-to-Device Communications*, vol. 5, pp. 22735–22749, 2017.
 - F. S. Al-Qahtani, Y. Huang, S. Hessien, **R. M. Radaydeh**, C. Zhong, and H. Alnuweiri, “Secrecy Analysis of MIMO Wiretap Channels with Low-Complexity Receivers Under Imperfect Channel Estimation,” *IEEE Transactions on Information Forensics & Security*, no. 2, vol. 12, pp. 257–270, 2017.
 - F. S. Al-Qahtani, A. H. Abd El-Malek, I. S. Ansari, **R. M. Radaydeh**, and S. A. Zummo, “Outage Analysis of Mixed Underlay Cognitive RF MIMO and FSO Relaying with Interference Reduction,” *IEEE Photonics Journal*, no. 2, vol. 9, Apr. 2017.
 - F. S. Al-Qahtani, **R. M. Radaydeh**, S. Hassan, T. Q. Duong, and H. Alnuweiri, “Underlay Cognitive Multihop MIMO Networks With and Without Receive Interference Cancellation,” *IEEE Transactions on Communications*, no. 4, vol. 65, pp. 1477–1493, 2017.
 - A. H. Abd El-Malek, F. S. Al-Qahtani, **R. M. Radaydeh**, S. A. Zummo, and H. Alnuweiri, “Performance Analysis and Power Allocation for Underlay Cognitive MIMO Relaying Networks with Transmit Antenna Selection Under Antenna Correlation,” *Wireless Personal Communications*, no. 4, vol. 94, pp. 3057–3089, Jun. 2017.
- **2016**
 - A. M. Salhab, F. Al-Qahtani, **R. M. Radaydeh**, S. A. Zummo, and H. Alnuweiri, “Power Allocation and Performance of Multiuser Mixed RF/FSO Relay Networks with Opportunistic Scheduling and Outdated Channel Information,” *IEEE/OSA Journal of Lightwave Technology*, no. 13, vol. 34, pp. 3259–3272, 2016.
 - **R. M. Radaydeh**, F. Gaaloul, and M.-S. Alouini, “Impact of Users Identities and Access Conditions on Downlink Performance in Closed Small-Cell Networks,” *IEEE Transactions on Vehicular Technology*, no. 5, vol. 65, pp. 3200–3216, 2016.
 - **R. M. Radaydeh**, A. Zafar, F. S. Al-Qahtani, and M.-S. Alouini, “Improved Interference-Free Channel Allocation in Coordinated Multiuser Multi-Antenna Open-Access Small Cells,” *IEEE Transactions on Vehicular Technology*, no. 12, vol. 65, pp. 9994–10010, 2016.
- **2015**
 - S. Hassan, F. S. Al-Qahtani, **R. M. Radaydeh**, C. Zhong, and H. Alnuweiri, “On the Secrecy Enhancement in MIMO Generalized Composite Fading with Low-Complexity Large-Scale Transmit Selection,” *IEEE Wireless Communications Letters*, vol. 4, no. 4, pp. 429–432, August 2015.

- 2014
 - **R. M. Radaydeh**, M.-S. Alouini, and Khalid A Qaraqe, “Adaptive Interference-Aware Multichannel Assignment for Shared Overloaded Small-Cell Access Points Under Limited Feedback,” *IEEE Transactions on Vehicular Technology*, vol. 63, no. 2, pp. 747–762, Feb. 2014.
 - A. Zafar, **R. M. Radaydeh**, Y. Chen, and M.-S. Alouini, “Power Allocation Strategies for Fixed-Gain Half-Duplex Amplify-and-Forward Relaying in Nakagami-m Fading,” *IEEE Transactions on Wireless Communications*, vol. 13, no. 1, pp. 159–173, Jan. 2014.
 - **R. M. Radaydeh** and M.-S. Alouini, “Comparisons of Receive Array Interference Reduction Techniques Under Erroneous Generalized Transmit Beamforming,” *IEEE Transactions on Communications*, vol. 62, no. 1, pp. 600–615, Feb. 2014.
 - A. Zafar, **R. M. Radaydeh**, Y. Chen, M.-S. Alouini, “Enhancing the Efficiency of Constrained Dual-hop Variable-gain AF Relaying under Nakagami-m Fading,” *IEEE Transactions on Signal Processing*, vol. 62, no. 14, pp. 3616–3630, July 2014.
- 2013
 - F. S. Al-Qahtani, Jing Yang, **R. M. Radaydeh**, and H. Alnuweiri, “On the Capacity of Two-Hop AF Relaying in the Presence of Interference Under Nakagami-m Fading,” *IEEE Communications Letters*, vol. 17, no. 1, pp. 19–22, Jan. 2013.
 - A. Magableh, **R. M. Radaydeh**, and M.-S. Alouini, “On the Performance of Shared-Access Control Strategy for Femtocells,” *Transactions on Emerging Telecommunications Technologies*, vol. 24, no. 2, pp. 244–256, March 2013.
 - F. Gaaloul, **R. M. Radaydeh**, M.-S. Alouini, “Performance Improvement of Switched-Based Interference Mitigation for Downlink Channel Assignment in Over-Loaded Small-Cell Networks,” *IEEE Transactions on Wireless Communications*, vol. 12, no. 5, pp. 2091–2103, May 2013.
- 2012
 - F. Gaaloul, **R. M. Radaydeh** and M.-S. Alouini, “Comparison of Low-Complexity Diversity Schemes For Dual-Hop AF Relaying Systems,” *IEEE Transactions on Vehicular Technology*, vol. 61, no. 2, pp. 826–833, February 2012.
 - **R. M. Radaydeh** and M.-S. Alouini, “Switched-Based Interference Reduction Scheme for Open-Access Overlaid Cellular Networks,” *IEEE Transactions on Wireless Communications*, vol. 11, no. 6, pp. 2160–2172, June 2012.
 - A. Zafar, Y. Chen, M.-S. Alouini, and **R. M. Radaydeh**, “Optimizing Co-operative Cognitive Radio Networks with Opportunistic Access,” *Journal of Computer Networks and Communications*, special issue on Trends and Applications of Cognitive Radio, 2012.
 - F. Gaaloul, **R. M. Radaydeh** and M.-S. Alouini, “Switched Diversity Strategies for Dual-Hop AF Relaying Systems,” *IET Communications*, vol. 6, no. 12, pp. 1651–1661, August 2012.
 - **R. M. Radaydeh** and M.-S. Alouini, “Low-Overhead Interference Mitigation Scheme for Collaborative Channel Assignment in Over-Loaded Multi-Antenna Femtocells,” *IEEE Transactions on Vehicular Technology*, vol. 61, no. 7, pp. 3071–3086, September 2012.

- F. Gaaloul, H.-C. Yang, **R. M. Radaydeh**, and M.-S. Alouini, “Switch Based Opportunistic Spectrum Access for General Primary User Traffic Model,” *IEEE Wireless Communications Letters*, vol. 1, no. 5, pp. 424–427, October 2012.
- F. Gaaloul, **R. M. Radaydeh**, H.-C. Yang, and M.-S. Alouini, “Adaptive Scheduling with Post-Examining User Selection in Non-Identical Fading,” *IEEE Transactions on Vehicular Technology*, Vol. 61, no. 9, pp. 4175–4183, November 2012.
- F. S. Al-Qahtani, Jing Yang, **R. M. Radaydeh**, Caijun Zhong, and H. Alnuweiri, “Exact Outage Analysis of Dual-Hop Fixed-Gain AF Relaying with CCI under Dissimilar Nakagami-m fading,” *IEEE Communications Letters*, vol. 16, no. 11, pp. 1756–1759, November 2012.
- A. Zafar, **R. M. Radaydeh**, Y. Chen, M.-S. Alouini, “Energy-Efficient Power Allocation for Fixed-Gain Amplify-and-Forward Relay Networks with Partial Channel State Information,” *IEEE Wireless Communications Letters*, vol. 1, no. 6, pp. 553–556, 2012.
- **2011**
 - **R. M. Radaydeh** and M.-S. Alouini, “On the Performance of Arbitrary Transmit Selection for Threshold-Based Receive MRC With and Without Co-channel Interference,” *IEEE Transactions on Communications*, vol. 59, no. 11, pp. 3177–3191, November 2011.
 - **R. M. Radaydeh** and M.-S. Alouini, “Impact of Co-channel Interference on the Performance of Adaptive Generalized Transmit Beamforming,” *IEEE Transactions on Wireless Communications*, vol. 10, no. 8, pp. 2616–2629, August 2011.
 - **R. M. Radaydeh** and M.-S. Alouini, “Adaptive Single-Antenna Transmit Selection With Interference Suppression,” *IEEE Transactions on Wireless Communications*, vol. 10, no. 10, pp. 3196–3210, October 2011.
 - M.-A. Daghfous, **R. M. Radaydeh** and M.-S. Alouini, “Performance of Adaptive MS-GSC in the presence of Cochannel Interference,” *IEEE Transactions on Vehicular Technology*, vol. 60, no. 6, pp. 2829–2837, July 2011.
- **2010**
 - **R. M. Radaydeh**, “Performance of Non-Ideal OT-MRC with Co-channel Interference,” *IEEE Transactions on Communications*, vol. 58, no. 12, pp. 3352–3357, December 2010.
- **2009**
 - **R. M. Radaydeh**, “SNR and SINR-based selection combining algorithms in the presence of arbitrarily distributed co-channel interferers,” *IET Communications*, vol. 3, no. 1, pp. 57–66, January 2009.
 - **R. M. Radaydeh**, “Performance of Cellular Mobile Systems Employing SNR-Based GSC in Presence of Rayleigh and Nakagami-q Cochannel Interferers,” *IEEE Transactions on Vehicular Technology*, vol. 58, no. 6, pp. 3081–3088, July 2009.
 - **R. M. Radaydeh**, “Performance of W-CDMA Systems with Rectangular Signalling in OSTBC MIMO Generalized Nakagami-m Fading Channels,” *IET Communications*, vol. 3, no. 8, pp. 1379–1391, August 2009.

- **R. M. Radaydeh**, “Receive MRC with Outdated Arbitrary Transmit Antenna Selection in Nakagami-m Fading,” *IET Communications*, vol. 3, no. 10, pp. 1638–1648, October 2009.
 - **R. M. Radaydeh**, “Impact of Delayed Arbitrary Transmit Antenna Selection on the Performance of Rectangular QAM with Receive MRC in Fading Channels,” *IEEE Communications Letters*, vol. 13, no. 6, pp. 390–392, June 2009.
 - **R. M. Radaydeh**, “MRC in Presence of Asynchronous Co-Channel Interference Over Frequency-Selective Rayleigh Fading Channels,” *IEEE Transactions on Vehicular Technology*, vol. 58, no. 8, pp. 4329–4341, October 2009.
- **2008**
 - **R. M. Radaydeh** and M. M. Matalgah, “Compact Formulas for the Average Error Performance of Noncoherent M-ary Orthogonal Signals Over Generalized Rician, Nakagami-m, and Nakagami-q Fading Channels with Diversity Reception,” *IEEE Transactions on Communications*, vol. 56, no. 1, pp. 32–38, January 2008.
 - **R. M. Radaydeh** and M. M. Matalgah, “Noncoherent Improved-Gain Diversity Reception of Binary Orthogonal Signals in Nakagami-q (Hoyt) Mobile Channels,” *IET Communications*, vol. 2, no. 2, pp. 372–379, February 2008.
 - **R. M. Radaydeh** and M. M. Matalgah, “Results for Infinite Integrals Involving higher-Order Powers of the Gaussian Q-function with Application to Average SEP Analysis of DE-QPSK,” *IEEE Transactions on Wireless Communications*, vol. 7, no. 3, pp. 793–798, March 2008.
 - **R. M. Radaydeh** and M. M. Matalgah, “Simple Average BER Formulas for M-ary Orthogonal Signals with Noncoherent Diversity Combining in Nakagami-m Fading Channels,” *IEEE Transactions on Communications*, vol. 56, no. 5, pp. 694–699, May 2008.
 - **R. M. Radaydeh** and M. M. Matalgah, “Average BER Analysis for M-ary FSK Signals in Nakagami-q (Hoyt) Fading with Noncoherent Diversity Combining,” *IEEE Transactions on Vehicular Technology*, vol. 57, no. 4, pp. 2257–2267, July 2008.
 - **R. M. Radaydeh**, “Performance analysis of rectangular quadrature amplitude modulation with combined arbitrary transmit antenna selection and receive maximal ratio combining in nakagami-m fading,” *IET Communications*, vol. 2, no. 8, pp. 1077–1088, September 2008.
 - **2007**
 - M. M. Matalgah, **R. M. Radaydeh**, and M. H. Ismail, “Performance Analysis of the Forward Link cdma2000 1xEV-DO Evolution for Multi-Rate Services in Cellular Wireless Systems,” *Wiley Journal on Wireless Communications and Mobile Computing*, vol. 7, no. 4, pp. 431–444, 2007.
 - **R. M. Radaydeh**, “Average Error Performance of M-ary Modulation Schemes in Nakagami-q (Hoyt) Fading Channels,” *IEEE Communications Letters*, vol. 11, no. 3, pp. 255–257, March 2007.
 - **R. M. Radaydeh** and M. M. Matalgah, “Simple Analysis for Average BER of Orthogonal Signals in Nonidentical Rician Channels with Improved-Gain Noncoherent Diversity Reception,” *IEEE Communications Letters*, vol. 11, no. 4, pp. 337–339, April 2007.

- **R. M. Radaydeh**, “Average SEP of Rectangular QAM in Rayleigh Fading with GSC,” *IEEE Communications Letters*, vol. 11, no. 6, pp. 492–494, June 2007.
- **R. M. Radaydeh**, “Simple Tight Upper Bounds for Average SEP and BEP of Coherent Diversity M-ary Biorthogonal Signals Over Fading Channels,” *IEEE Transactions on Vehicular Technology*, vol. 56, no. 5, pp. 2816–2820, September 2007.
- **2006**
 - **R. M. Radaydeh**, “Simple approximate expression for error performance of coherent M-ary orthogonal signals in generalised fading channels,” *IEE/IET Electronics Letters*, vol. 42, pp. 293–294, March 2006.
 - **R. M. Radaydeh** and M. M. Matalgah, “Improved Performance Non-coherent Weighted-Coefficients Diversity Combiner for DPSK and NC-FSK Signals in Nonidentical Nakagami Fading Channels,” *IEEE Communications Letters*, vol. 10, pp. 281–283, April 2006.
 - **R. M. Radaydeh** and M. M. Matalgah, “Closed Form Expression for the Error Performance of Noncoherent M-ary Orthogonal Signals Over Multi-Branch Rayleigh Fading Channels with Arbitrary Average Fading Powers,” *IEEE Communications Letters*, vol. 10, no. 9, pp. 661–663, September 2006.
- **2005**
 - M. M. Matalgah and **R. M. Radaydeh**, “Hybrid Frequency-Polarization Shift-Keying Modulation for Optical Transmission,” *IEEE Journal Of Lightwave Technology*, vol. 23, no. 3, pp. 1152–1163, March 2005.
- **2004**
 - S. M. Radaideh, M. T. Hayaajneh, and **R. M. Radaydeh**, “Series Resistance Compensation in PTAT Temperature Sensors and Bandgap Reference Circuits,” *International Journal of Electronics*, vol. 91, Issue 5, pp. 259 - 269, May 2004.
- **2018**
 - R. M. Radaydeh, F. S. Al-Qahtani, A. Celik, Khalid A. Qaraqe, and M.-S. Alouini, “Imperfect D2D Association in Spectrum-Shared Cellular Networks Under Interference and Transmit Power Constraints,” *IEEE International Conference on Communications (ICC-Workshops)*, 2018, pp. 1–6.
- **2017**
 - A. Celik, **R. M. Radaydeh**, F. S. Al-Qahtani, A. H. Abd El-Malek, and M.-S. Alouini, “Resource Allocation and Cluster Formation for Imperfect NOMA in DL/UL Decoupled HetNets,” *IEEE Global Communications Conference (Globecom 2017)– Workshop on Ultra-Reliable Low-Latency Communications in Wireless Networks*, 2017, pp. 1–6.
 - A. Celik, F. S. Al-Qahtani, **R. M. Radaydeh**, and M.-S. Alouini, “Cluster Formation and Joint Power-Bandwidth Allocation for Imperfect NOMA in DL-HetNets,” *IEEE Global Communications Conference (Globecom 2017)*, 2017, pp. 1–5.

PUBLICATIONS –
 REFEREED
 CONFERENCE
 PAPERS

- **R. M. Radaydeh**, F. S. Al-Qahtani, A. Celik, and M.-S. Alouini, “Dynamic Downlink Spectrum Access for D2D-Enabled Heterogeneous Networks,” *IEEE Global Communications Conference (Globecom 2017)*, 2017, pp 1–7.
- A. A. AbdelNabi, F. S. Al-Qahtani, **R. M. Radaydeh**, and M. Shaqfeh, “Performance of Overlaid MIMO Cellular Networks with TAS/MRC Under Hybrid-Access Small Cells and Poisson Field Interference,” *IEEE Vehicular Technology Conference (VTC2017-Fall)*, 2017, pp. 1–7.
- A. Celik, **R. M. Radaydeh**, F. S. Al-Qahtani, and M.-S. Alouini, “Joint Interference Management and Resource Allocation for Device-to-Device (D2D) Communications Underlying Downlink/Uplink Decoupled (DUDe) Heterogeneous Networks,” *IEEE International Conference on Communications (ICC’17)*, 2017, pp. 1–6.
- **2015**
 - A. M. Salhab, F. Al-Qahtani, **R. M. Radaydeh**, S. A. Zummo, H. Alnuweiri, “Multiuser Scheduling in Mixed RF/FSO Relaying with Outdated Channel Estimation,” *IEEE Global Communications Conference (Globecom 2015)*, 2015, pp. 1–6.
 - **R. M. Radaydeh**, F. Gaaloul, and M.-S. Alouini, “On the Impact of Closed Access and Users Identities in Spectrum-Shared Overlaid Wireless Networks,” *IEEE Global Communications Conference (Globecom 2015)*, 2015, pp. 1–6.
 - **R. M. Radaydeh**, A. Zafar, F. S. Al-Qahtani, and M.-S. Alouini, “Low-Complexity Interference-Free Downlink Channel Assignment with Improved Performance in Coordinated Small Cells,” *IEEE Vehicular Technology Conference (VTC 2015-Spring)*, 2015, pp. 1–6.
- **2013**
 - A. Zafar, **R. M. Radaydeh**, Y. Chen, and M.-S. Alouini, “Energy-Efficient Relay Selection and Optimal Power Allocation for Performance-constrained Dual-hop Variable-gain AF Relaying,” in *Proc. IEEE Global Communications Conference (IEEE GLOBECOM 2013)*, 9–13 December, 2013, Atlanta, GA, USA.
 - A. Zafar, **R. M. Radaydeh**, Y. Chen, and M.-S. Alouini, “Efficient Power Allocation for Fixed-Gain Amplify-and-Forward Relaying in Rayleigh Fading,” in *Proc. IEEE International Conference on Communications 2013: IEEE ICC’13 - Workshop on Energy Efficiency in Wireless Networks & Wireless Networks for Energy Efficiency (E2Nets)*, 9–13 June, 2013, Budapest, Hungary.
 - **R. M. Radaydeh**, and M.-S. Alouini, and K. Qaraqe, “Reduced-Complexity Adaptive Multi-Channel Assignment for Shared Access Points in Over-Loaded Small-Cell Networks,” *IEEE Vehicular Technology Conference (VTC 2013-Spring)*, 2–5 June, 2013, Dresden, Germany.
 - F. S. Al-Qahtani, C. Zhong, **R. M. Radaydeh**, and H. Alnuweiri, “Performance Analysis of Partial Relay Selection with Feedback Delay in the Presence of Interference in Nakagami-m fading channels,” *IEEE Wireless Communications and Networking Conference (WCNC 2013)*, 7–10 April, 2013, Shanghai, China.
- **2012**

- A. M. Magableh, **R. M. Radaydeh**, and M.-S. Alouini, “Shared Access Protocol (SAP) in Femtocell Channel Resources for Cellular Coverage Enhancement,” *The 4th IEEE International Workshop on Heterogeneous and Small Cell Networks (HetSNets) (GC’12 Workshop - HetSNets 2012)*, 10–15 June, 2012, Ottawa, Canada.
- F. Gaaloul, **R. M. Radaydeh**, and M.-S. Alouini, “Interference Mitigation Enhancement of Switched-Based Scheme in Over-Loaded Femtocells,” *The 13th IEEE International Workshop on Signal Processing Advances in Wireless Communications (SPAWC 2012)*, 17–20 June, 2012, Turkey.
- A. Zafar, M.-S. Alouini, Y. Chen, and **R. M. Radaydeh**, “New Resource Allocation Scheme for Cognitive Relay Networks with Opportunistic Access,” *IEEE International Conference on Communications, Workshop on Cooperative and Cognitive Mobile Networks (ICC 2012 WS - CoCoNet 4)*, 10–15 June, 2012, Ottawa, Canada.
- A. Zafar, M.-S. Alouini, Y. Chen, and **R. M. Radaydeh**, “Minimizing Symbol Error Rate for Cognitive Relaying with Opportunistic Access,” *7th International Conference on Cognitive Radio Oriented Wireless Networks (CROWNCOM 2012)*, 18–20 June, 2012, Stockholm, Sweden.
- F. Gaaloul, H.-C. Yang, **R. M. Radaydeh**, and M.-S. Alouini, “Opportunistic Spectrum Access in Cognitive Radio Based on Channel Switching,” *7th International Conference on Cognitive Radio Oriented Wireless Networks (CROWNCOM 2012)*, 18–20 June, 2012, Stockholm, Sweden.
- F. Gaaloul, **R. M. Radaydeh**, M.-S. Alouini, and H.-C. Yang, “On the Performance of Multiuser Scheduling with Post-Examining Under Non-Identical Fading,” *IEEE Wireless Communications and Networking Conference (IEEE WCNC 2012)*, 1–4 April, 2012, Paris, France.
- A. Zafar, Y. Chen, M.-S. Alouini, and **R. M. Radaydeh**, “Resource Allocation for Relay Assisted Cognitive Radio Networks,” *IEEE Wireless Communications and Networking Conference (IEEE WCNC 2012)*, 1–4 April, 2012, Paris, France.
- **2011**
 - F. S. Al-Qahtani, **R. M. Radaydeh**, and H. Alnuweiri, “Outage Probability of Dual-Hop Partial Relay Selection with Feedback Delay in the Presence of Interference,” *IEEE International Symposium on Personal, Indoor and Mobile Radio Communications (IEEE PIMRC 2011)*, 11–14 September 2011, Toronto, Canada.
 - **R. M. Radaydeh** and M.-S. Alouini, “Low-Complexity Interference Reduction Scheme in Overlaid Cellular Networks,” *IEEE Global Telecommunications Conference (IEEE GLOBECOM 2011)*, 5–9 December 2011, Houston, TX, USA.
 - F. Gaaloul, **R. M. Radaydeh** and M.-S. Alouini, “Low-Complexity Combining Schemes in Dual-Hop AF Relaying Systems,” *IEEE 73rd Vehicular Technology Conference (IEEE VTC 2011-Spring)*, 15–18 May, 2011, Budapest, Hungary.
 - M.-A. Daghfous, **R. M. Radaydeh** and M.-S. Alouini, “Performance of Adaptive MS-GSC with Co-channel Interference,” *IEEE International Conference of Communications (IEEE ICC 2011)*, 5–9 June, 2011, Kyoto, Japan.

- 2010

- **R. M. Radaydeh** and M.-S. Alouini, "Performance of Power-Efficient Adaptive Interference Cancellation in Fading Channels," *IEEE Global Telecommunications Conference (IEEE GLOBECOM 2010)*, 6–10 December, 2010, Miami, FL, USA.
- **R. M. Radaydeh** and M.-S. Alouini, "Imperfect Generalized Transmit Beamforming With Co-channel Interference Cancellation," *International Symposium on Information Theory and its Applications (ISITA 2010)*, 17–20 October, 2010, Taichung, Taiwan.
- Fakhreddine Gaaloul, **R. M. Radaydeh** and M.-S. Alouini, "Switched Diversity Strategies for Dual-Hop Relaying Networks," *Asilomar Conference on Signals, Systems, and Computers*, 7–10 November, 2010, Asilomar, USA.
- **R. M. Radaydeh** and M.-S. Alouini, "Impact of Co-channel Interference on the Performance of Adaptive Non-ideal Generalized Transmit Diversity," *International Symposium on Wireless Communication Systems (ISWCS 2010)*, 19–22 September, 2010, York, UK.
- **R. M. Radaydeh** and M.-S. Alouini, "Adaptive Co-channel Interference Cancellation for Power-Limited Applications," *IEEE International Symposium on Personal, Indoor and Mobile Radio Communications (IEEE PIMRC 2010)*, 26–30 September, 2010, Istanbul, Turkey.
- **R. M. Radaydeh** and M.-S. Alouini, "Adaptive Transmit Selection Algorithms With Interference Suppression," *IEEE International Symposium on Wireless Pervasive Computing (IEEE ISWPC 2010)*, 5–7 May, 2010, Modena, Italy.
- **R. M. Radaydeh** and M.-S. Alouini, "Transmit Selection for Imperfect Threshold-Based Receive MRC in the Presence of Co-channel Interference," *25th Biennial Symposium on Communications (QBSC 2010)*, 12–14 May, 2010, Kingston, Ontario, Canada.
- **R. M. Radaydeh** and M.-S. Alouini, "Transmit Selection for Imperfect Threshold-Based Receive MRC in Rayleigh Fading Channels," *International Conference on Telecommunications (ICT 2010)*, 4–7 April 2010, Doha, Qatar.

- 2007

- **R. M. Radaydeh** and M. M. Matalgah, "Average Results for m -th Power of the Gaussian Q -function Over Rayleigh Fading Channels with Applications," *IEEE International Conference on Communications (IEEE ICC 2007)*, 24–28 June, 2007, Glasgow, Scotland, pp. 5910–5914

- 2006

- **R. M. Radaydeh** and M. M. Matalgah, "Simple Average BER Formula for M-ary Orthogonal Signals with Noncoherent Diversity Combining Over Arbitrarily Correlated Nonidentically Distributed Nakagami- m Fading Channels," *IEEE Global Telecommunications Conference (IEEE GLOBECOM 2006)*, November 27 - December 1, 2006, San Francisco, USA.
- **R. M. Radaydeh** and M. M. Matalgah, "Improved Performance of DPSK and NCFSK Signals Under Nonidentical Nakagami- m Fading Channels," *International Wireless Communications and Mobile Computing Conference (IWCMC 2006)*, 3–6 July, 2006, Vancouver, Canada.

- **R. M. Radaydeh** and M. M. Matalgah, “Closed-Form Formula for the Average BER of Noncoherent Multi-Level Orthogonal Signals over Nonidentical Nakagami-m Fading Channels,” *International Wireless Communications and Mobile Computing Conference (IWCMC 2006)*, 3-6 July, 2006, Vancouver, Canada.
- **R. M. Radaydeh** and M. M. Matalgah, “Performance Analysis of Steiner System Design-Based Noncoherent M-ary FSK with Diversity Combining Over Nonidentically Distributed and Arbitrarily Correlated Fading Channels,” *IEEE Wireless Communications and Networking Conference (IEEE WCNC 2006)*, 3-6 April, 2006, Las Vegas, USA.
- **R. M. Radaydeh** and M. M. Matalgah, “Compact Expressions for the Bit Error Rate of M-ary Orthogonal Signals with Square-Law Combining Under Non-Identical Fading,” *6th Jordanian International Electrical and Electronics Engineering Conference (JIEEEEC 2005)*, 14-16 March, 2006, Amman, Jordan.
- **2005**
 - M. M. Matalgah, **R. M. Radaydeh**, and M. H. Ismail, “Performance Analysis of the Forward Link cdma2000 1xEV-DO in Multirate Wireless Cellular Systems,” *IEEE Vehicular Technology Conference (IEEE VTC-Fall 2005)*, 25-28 September, 2005, Dallas, USA.
 - **R. M. Radaydeh**, M. M. Matalgah, and G. Matalkah, “Probability of Error Performance of Noncoherent M-ary FSK Over Multi-Link Generalized Fading Channels,” *IEEE Vehicular Technology Conference (IEEE VTC-Fall 2005)*, 25-28 September, 2005, Dallas, USA.
 - M. M. Matalgah, **R. M. Radaydeh**, and M. H. Ismail, “Performance Framework for the Forward Link in the cdma2000 Evolution for Voice and High Speed Data Services (1xEV-DV),” *IEEE International Conference on Wireless Networks, Communications, and Mobile Computing (IEEE WirelessCom 2005)*, 13-16 June, 2005, Hawaii, USA, pp. 135-139
 - M. M. Matalgah and **R. M. Radaydeh**, “Power-Efficient Multi-level modulation Scheme for High-Speed Optical Communications,” *IEEE Symposium on Computers and Communications (IEEE ISCC 2005)*, 27-30 June, 2005, La Manga del Mar Menor, Spain, pp. 538-543
 - **R. M. Radaydeh** and M. M. Matalgah, “Performance Analysis of Multiple Carrier FSK System with Diversity Combining Over Generalized Fading Channels,” *IEEE International Conference on Communications (IEEE ICC 2005)*, 16-20 May, Seoul, Korea, pp. 2357-2361

Thesis/Dissertation

- **R. M. Radaydeh**, *Multiple Symbol Differential Detection of MPSK Signals with Diversity Combining in Correlated Generalized Mobile Channels*. M.Sc. Thesis, 2003.
- **R. M. Radaydeh**, *Performance Analysis of Efficient Receivers and Modulation Techniques for Digital Communication Systems*. Ph.D. Dissertation, 2006.