

Articles in refereed journals

Published or accepted

1. Performance Evaluation of WLAN/Cellular Media Access for Mobile Voice Users under Random Mobility Models
T. Ali and **M. Saquib**
IEEE Transactions on Wireless Communications (in press)
2. Pseudo Random Binary Phase Offset Scheme for Multi-carrier Delay Diversity Modulation
A. Sadeque and **M. Saquib**
IEEE Transactions on Wireless Communications, **10** 5 (May 2011) 1495 - 1503
3. A Fault-Tolerant Interconnect Mechanism for NMR Nano-Architectures
A. Namazi, M. Nourani and **M. Saquib**
IEEE Transactions on Very Large Scale Integration Systems, **18** 10 (October 2010) 1433 - 1446
4. Interference Cancellation and Signal Direction Finding with Low Complexity
L. D. Schmieder, D. Mellon and **M. Saquib**
IEEE Transactions on Aerospace and Electronic Systems **46** 3 (July 2010) 1052 - 1063
5. Fixed and Floating Point Implementations of Linear Adaptive Techniques for Predicting Physiological Hand Tremor in Microsurgery
B. Robinson, D. Hernandez and **M. Saquib**
IEEE Journal of Selected Topics in Signal Processing; Model Order Selection in Signal Processing, **4** 3 (June 2010) 659 - 667
6. Game Theoretic Approach to Joint Transmitter Adaptation and Power Control in Wireless Systems
D. Popescu, D. Rawat, O. Popescu and **M. Saquib**
IEEE Transactions on Systems, Man, and Cybernetics, Part B: Cybernetics; Special Issue: Game Theory, **40** 3 (June 2010) 675 - 682
7. Performance Analysis of Spread Spectrum Protocols with Adaptive Spreading
O. Jegbefume, **M. Saquib** and M. Torlak
IEEE Transactions on Wireless Communications, **9** 3 (March 2010) 1063 - 1073
8. Optimum Pilot-to-Data Power Ratio for Partial RAKE Receiver in Nakagami- m Fading Channels
K. Jitvanichphaibool, **M. Saquib** and O. Popescu
IEEE Transactions on Wireless Communications, **8** 1 (January 2009) 136 - 147
9. Novel Automatic Modulation Classification Using Cumulant Features for Communications via Multipath Channels

H.-C. Wu, **M. Saquib** and Z. Yun

IEEE Transactions on Wireless Communications, **7** 8 (August 2008) 3098 - 3105

10. [Effects of Time-Variations in Wireless Channels on the Two Different Fade-Resistant CDMA Systems](#)

Y. Na and **M. Saquib**

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11. [Sequential Opportunistic Decoding for Spread Spectrum Wireless Networks](#)

O. Jegbefume, **M. Saquib** and M. Tacca

IEEE Transactions on Wireless Communications, **6** 12 (December 2007) 4513 - 4523

12. [Interference Mitigation in Aeronautical Telemetry Systems Using Kalman Filter](#)

O. Popescu, **M. Saquib**, D. Popescu and M. Rice

IEEE Transactions on Aerospace and Electronic Systems, **43** 4 (October 2007) 1624 - 1630

13. [Hot-carrier Effects in Wireless Communication Systems Built on Short-Channel MOSFET Devices](#)

H.-C. Wu, S. R. Herlekar, **M. Saquib** and A. Srivastava

IEEE Transactions on Wireless Communications, **6** 7 (July 2007) 2402 - 2406

14. [Pilot-aided Multicode CDMA Transmission over Wireless Channels](#)

Y. Na, **M. Saquib** and G. Mandyam

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15. [Analysis of the Channel Energy Capture in Ultra-Wide-Band Transmitted Reference Systems](#)

Y. Na and **M. Saquib**

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16. [Performance of a Hybrid Receiver in the Downlink Multicell CDMA System](#)

M. H. Islam, **M. Saquib** and N. Al-Dhahir

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17. [Fade-resistant CDMA Transmission and Reception over Time-varying Wireless Channels](#)

M. Saquib, S. Das, G. Mandyam and M. Win

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18. [Pilot-aided Chip-Interleaved DS-CDMA Transmission over Time-varying Channels](#)

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19. [Soft-length Symbol Protocols for Wireless Networks](#)

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20. [Space-Time Trellis-Coded Transmissions with Parallel Sequences over Time-Varying Channels](#)

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21. [Fade Resistant Transmission over Time-Varying Wireless Channels](#)

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IEEE Signal Processing Letters, **11** 6 (June 2004) 561 - 564

22. [Near-Far Resistance of Linear Receivers in Chip Asynchronous CDMA Systems](#)

M. Saquib

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23. [Analysis of a Partial Decorrelator in a Multi-cell DS/CDMA System](#)

M. Saquib and R. Yates

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24. [Joint Transmitter-Receiver Optimization in the Downlink CDMA Systems](#)

M. Saquib and Md. H. Islam

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25. [An Asynchronous Multi-rate Decorrelator](#)

M. Saquib, R. Yates and A. Ganti

IEEE Transactions on Communications **48** 5 (May 2000) 739 - 742

26. [Power Control for an Asynchronous Multi-rate Decorrelator](#)

M. Saquib, R. Yates and A. Ganti

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27. [Decorrelating Detectors for a Dual Rate Synchronous DS/CDMA System](#)

M. Saquib, R. Yates and N. Mandayam

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28. [Decision Feedback Decorrelator for a Dual Rate Synchronous CDMA](#)

M. Saquib, R. Yates and N. Mandayam

ACM Journal of Wireless Networks, Special Issue: Multiuser Detection in Wireless Communications **4** (1998) 497 - 506

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29. [MIMO Radar Imaging for Target Detection and Localization in Sensor Networks](#)

A. Sadeque, T. Ali, **M. Saquib** and M. Ali

IEEE Systems Journal; Special Issue on Sensor Networks for Advanced Localization Systems (submitted, May 2011)

30. Analytical Framework for WLAN-Cellular Voice Handover Evaluation

T. Ali and **M. Saquib**

IEEE Transactions on Mobile Computing (asked to revise and resubmit, January 2011)

31. Multipath Analysis and Mitigation for Wideband Aeronautical Telemetry

I. Williams and **M. Saquib**

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1. [Performance Analysis of Vertical Handover Algorithm based on Expected WLAN Lifetime](#)
T. Ali, **M. Saquib** and M. M. Mollah
Global Telecommunications Conference, Houston, TX: December 5 - 9; IEEE (2011)
2. [Random Binary Phase Offset Scheme for CDD Based MIMO-OFDM System](#)
A. Sadeque and **M. Saquib**
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3. [MIMO Equalization for Helicopter-to-Ground Communications](#)
M. Rice and **M. Saquib**
Proceedings of IEEE Military Communications Conference Baltimore, MD: November 7 - 10; MILCOM (2011)
4. [A New Approach to Multipath Mitigation in Aeronautical Telemetry](#)
M. Rice, G. Narumanchi and **M. Saquib**
Proceedings of International Telemetry Conference Las Vegas, NV: October 24 - 27; ITC (2011)
5. [Channel Equalization and Spatial Diversity for Aeronautical Telemetry Application](#)
I. Williams and **M. Saquib**
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6. [Reduced Complexity Viterbi Decoders for SOQPSK Signals over Multipath Channels](#)
S. M. Kannappa and **M. Saquib**
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7. [Analysis of Performance Limitations with Linear Adaptive Equalizers for Aeronautical Telemetry Applications](#)
I. Williams and **M. Saquib**
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8. [Multipath Interference Mitigation Techniques for Aeronautical Telemetry Applications](#)
I. Williams and **M. Saquib**
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9. [Performance Analysis of a Cognitive Network with Dynamic Spectrum Assignment to Secondary Users](#)
S. M. Kannappa and **M. Saquib**
Proceedings of International Conference on Communications, Cape Town, South Africa: May 23 - 27; IEEE (2010)
10. [Vertical Handover Analysis for Voice over WLAN/Cellular Network](#)
T. Ali, **M. Saquib** and C. Sengupta

11. [Fixed and Floating Point Analysis of Linear Predictors for Physiological Hand Tremor in Microsurgery](#)
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Proceedings of International Conference on Acoustics, Speech, and Signal Processing (ICASSP), Dallas, TX: March 14 - 19; IEEE (2010)
12. [Multipath Mitigation for Aeronautical Telemetry with Multiple Antennas](#)
I. Williams and **M. Saquib**
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13. [Modeling of User-Perceived Web-browsing Performance over a WLAN/3G Inter-working Environment](#)
T. Ali, **M. Saquib**, C. Sengupta and Y. K. Lee
Proceedings of International Conference on Communications, Dresden, Germany: June 14 - 18; IEEE (2009)
14. [Signal Direction Finding with Low Complexity](#)
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15. [Delay Diversity For Correlated MIMO Channel \(invited paper\)](#)
A. Z. Sadeque, **M. Saquib** and M. Rice
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16. [Performance Analysis Framework and Vertical Handover Triggering Algorithms for Voice over WLAN/Cellular Network](#)
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17. [Artificial Code Puncturing for Wireless Networks](#)
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18. [Soft-Length Frame Protocols for Wireless Networks](#)
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19. [A Robust Interconnect Mechanism for Nanometer VLSI](#)
A. Namazi, M. Nourani and **M. Saquib**
Proceedings of International Test Synthesis Workshop (ITSW) San Antonio, TX: March 05 - 09 (2007)
20. [Reliable Interconnect Grid for Ultra Deep Submicron](#)

A. Namazi, M. Nourani and **M. Saquib**

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21. [Kalman Filter For Interference Mitigation and Channel Equalization in Aeronautical Telemetry](#)
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22. [Signal Processing Aided Opportunistic Decoding for Wireless Networks](#)
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23. [Interference Mitigation and Channel Equalization for ARTM Tier-I Waveforms using Kalman Filter](#)
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24. [Exploitation of Time-Variations in the Wireless Channels using Two Different CDMA Systems](#)
Y. Na and **M. Saquib**
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25. [Reduced-Complexity Receivers for the Downlink of a Multicell CDMA System with Multiple Antennas](#)
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26. [Optimum Pilot-to-Data Power Ratio for Partial RAKE Receiver in Nakagami Fading Channel](#)
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27. [Transport Layer FEC for Low-latency Wireless Video Transmission](#)
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31. [Chip-Interleaved DS-CDMA Transmission over Time-varying Channels](#)

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32. [Pilot-aided Chip-Interleaved DS-CDMA Transmission over Time-varying Channels](#) (**invited paper**)

Y. Na, **M. Saquib** and M. Z. Win

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33. [Multicode CDMA Transmission over Time-Varying Multipath Channels](#)

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34. [Fade Resistant Transmission in Time-Varying Wireless Channels using Parallel Sequences](#)

M. Saquib, S. Das, G. Mandyam and M. Win

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35. [Capacity Enhancement of Wireless Systems using Soft-length Symbol](#)

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36. [Parallel Symbol Transmission over Time-Varying Nakagami Fading Wireless Channels](#)

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37. [Capacity Enhancement of Wireless Systems using Soft-length Symbols](#)

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O. Jegbefume, **M. Saquib** and M. Win

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38. [Parallel Sequence Transmission for High Speed UWB](#)

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39. [Optimum Transmitters and Receivers for CDMA Systems](#)

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40. [Near-Far Resistance of Linear Receivers in Chip Asynchronous CDMA Systems](#)

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41. [Joint Transmitter-Receiver Optimization in the Down-link of CDMA Systems](#)

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43. [Power Control and Transmit Diversity in Multi-path CDMA Systems](#)

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44. [Analysis of a Partial Decorrelator in a Multi-cell DS/CDMA System](#)

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45. [Power Control for an Asynchronous Multi-cell Decorrelator \(invited paper\)](#)

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50. [Optimal Call Admission to a Mobile Cellular Network](#)

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