

## Articles in referred journals

### Published or accepted

1. Performance Analysis of Spread Spectrum Protocols with Adaptive Spreading  
O. Jegbefume, **M. Saquib** and M. Torlak  
*IEEE Transactions on Wireless Communications* (accepted, November 2009)
2. 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* (accepted, September 2009)
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* (accepted, May 2009)
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* (accepted, February 2009)
5. 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
6. Novel Automatic Modulation Classification Using Cumulant Features for Communications via Multi-path Channels  
H.-C. Wu, **M. Saquib** and Z. Yun  
*IEEE Transactions on Wireless Communications*, **7** 8 (August 2008) 3098 - 3105
7. Effects of Time-Variations in Wireless Channels on the Two Different Fade-Resistant CDMA Systems  
Y. Na and **M. Saquib**  
*IEEE Transactions on Wireless Communications*, **7** 8 (August 2008) 2923 - 2929
8. 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
9. 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

10. [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
11. [Pilot-aided Multicode CDMA Transmission over Wireless Channels](#)  
Y. Na, **M. Saquib** and G. Mandyam  
*IEEE Transactions on Signal Processing*, **55** 7 (July 2007) 3823 - 3836
12. [Analysis of the Channel Energy Capture in Ultra-Wide-Band Transmitted Reference Systems](#)  
Y. Na and **M. Saquib**  
*IEEE Transactions on Communications*, **55** 2 (February 2007) 262 - 265
13. [Performance of a Hybrid Receiver in the Downlink Multicell CDMA System](#)  
M. H. Islam, **M. Saquib** and N. Al-Dhahir  
*IEEE Transactions on Signal Processing*, **55** 2 (February 2007) 645 - 655
14. [Fade-resistant CDMA Transmission and Reception over Time-varying Wireless Channels](#)  
**M. Saquib**, S. Das, G. Mandyam and M. Win  
*IEEE Transactions on Wireless Communications*, **5** 5 (May 2006) 1197 - 1206
15. [Pilot-aided Chip-Interleaved DS-SS-CDMA Transmission over Time-varying Channels](#)  
Y. Na, **M. Saquib** and M. Z. Win  
*IEEE Journal on Selected Areas in Communications; Next-Generation CDMA Technologies*, **1** 24 (January 2006) 151 - 160
16. [Soft-length Symbol Protocols for Wireless Networks](#)  
O. Jegbefume, **M. Saquib** and M. Z. Win  
*IEEE Communications Letters*, **9** 9 (September 2005) 793 - 795
17. [Space-Time Trellis-Coded Transmissions with Parallel Sequences over Time-Varying Channels](#)  
K. Jitvanichphaibool, **M. Saquib** and N. Al-Dhahir  
*IEEE Communications Letters*, **8** 9 (September 2004) 558 - 560
18. [Fade Resistant Transmission over Time-Varying Wireless Channels](#)  
**M. Saquib** and M. Win  
*IEEE Signal Processing Letters*, **11** 6 (June 2004) 561 - 564
19. [Near-Far Resistance of Linear Receivers in Chip Asynchronous CDMA Systems](#)  
**M. Saquib**  
*IEEE Transactions on Communications* **51** 12 (December 2003) 1975 - 1978
20. [Analysis of a Partial Decorrelator in a Multi-cell DS/SS-CDMA System](#)  
**M. Saquib** and R. Yates  
*IEEE Transactions on Communications* **50** 12 (December 2002) 1895 - 1898

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

**M. Saquib** and Md. H. Islam

*Eurasip Journal on Applied Signal Processing; Special Issue on 3G Wireless Communications and Beyond* 8 (August 2002) 807 - 817

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

**M. Saquib**, R. Yates and A. Ganti

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

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

**M. Saquib**, R. Yates and A. Ganti

*IEEE Transactions on Communications* 48 5 (May 2000) 804 - 812

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

**M. Saquib**, R. Yates and N. Mandayam

*Wireless Personal Communications* 9 (1998) 197 - 216

25. [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

**Submitted**

26. [Performance Evaluation of Vertical Handover Algorithms for Voice over WLAN/Cellular Network](#)

T. Ali, **M. Saquib** and C. Sengupta

*IEEE Transactions on Wireless Communications* (asked to revise and resubmit, September 2009)

27. [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* (accepted with minor revision, October 2009)

## Articles in conference proceedings

1. [Multipath Mitigation for Aeronautical Telemetry with Multiple Antennas](#)  
I. Williams (supervised by: **M. Saquib**)  
*Proceedings of International Telemetry Conference* Las Vegas, NV: 26 - 29 October; ITC (2009)
2. [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)
3. [Signal Direction Finding with Low Complexity](#)  
L. D. Schmieder, D. Mellon and **M. Saquib**  
*Proceedings of International Waveform Diversity and Design Conference*, Orlando, USA: February 08 - 13; IEEE (2009)
4. [Delay Diversity For Correlated MIMO Channel \(invited paper\)](#)  
A. Z. Sadeque, **M. Saquib** and M. Rice  
*Proceedings of International Waveform Diversity and Design Conference*, Orlando, USA: February 08 - 13; IEEE (2009)
5. [Performance Analysis Framework and Vertical Handover Triggering Algorithms for Voice over WLAN/Cellular Network](#)  
T. Ali, **M. Saquib** and C. Sengupta  
*Proceedings of Wireless Communications and Networking Conference*, Las Vegas, NV: March 31 - April 03; IEEE (2008)
6. [Artificial Code Puncturing for Wireless Networks](#)  
O. Jegbefume, **M. Saquib** and M. Torlak  
*Proceedings of Wireless Communications and Networking Conference*, Las Vegas, NV: March 31 - April 03; IEEE (2008)
7. [Soft-Length Frame Protocols for Wireless Networks](#)  
O. Jegbefume and **M. Saquib**  
*Global Telecommunications Conference*, Washington, DC: November 26 - 30; IEEE (2007)
8. [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 (2007)
9. [Reliable Interconnect Grid for Ultra Deep Submicron](#)  
A. Namazi, M. Nourani and **M. Saquib**  
*Proceedings of Fifth IEEE Dallas Circuits and Systems (DCAS)* Dallas, TX: October (2006)
10. [Kalman Filter For Interference Mitigation and Channel Equalization in Aeronautical Telemetry](#)

- O. Popescu, **M. Saquib**, D. Popescu and M. Rice  
*Proceedings of IEEE Military Communications Conference* Washington, DC: 1 - 4 October; MILCOM (2006)
11. [Signal Processing Aided Opportunistic Decoding for Wireless Networks](#)  
O. Jegbefume, **M. Saquib** and M. Tacca  
*Global Telecommunications Conference*, San Francisco, CA: 27 November - 1 December; IEEE (2006)
12. [Interference Mitigation and Channel Equalization for ARTM Tier-I Waveforms using Kalman Filter](#)  
O. Popescu, **M. Saquib**, D. Popescu and M. Rice  
*Proceedings of International Telemetry Conference* San Diego, CA: 23 - 26 October; ITC (2006)
13. [Exploitation of Time-Variations in the Wireless Channels using Two Different CDMA Systems](#)  
Y. Na and **M. Saquib**  
*Proceedings of International Conference on Communications*, Istanbul, Turkey: 11-15 June; IEEE (2006)
14. [Reduced-Complexity Receivers for the Downlink of a Multicell CDMA System with Multiple Antennas](#)  
M. H. Islam, **M. Saquib** and N. Al-Dhahir  
*Proceedings of International Conference on Communications*, Istanbul, Turkey: 11-15 June; IEEE (2006)
15. [Optimum Pilot-to-Data Power Ratio for Partial RAKE Receiver in Nakagami Fading Channel](#)  
K. Jitvanichphaibool and **M. Saquib**  
*Proceedings of International Conference on Communications*, Istanbul, Turkey: 11-15 June; IEEE (2006)
16. [Transport Layer FEC for Low-latency Wireless Video Transmission](#)  
T. M. Ali, **M. Saquib**, F. Chebil and R. Kurceren  
*Proceedings of First International Conference on Next-Generation Wireless Systems* Dhaka, Bangladesh: 2 - 4 January; IEEE (2006)
17. [Interference Cancellation using ARTM Tier-1 Waveforms in Aeronautical Telemetry](#)  
T. M. Ali, **M. Saquib** and M. Rice  
*Proceedings of International Telemetry Conference* Las Vegas, NV: 24 - 27 October; ITC (2005)
18. [On the Channel Energy Capture in Ultra-Wide-Band Transmitted Reference Systems](#)  
Y. Na and **M. Saquib**  
*Proceedings of 62nd Vehicular Technology Conference* Dallas, TX: 25 - 28 September; IEEE (2005)
19. [A Reduced Complexity Hybrid Receiver for the Downlink Multicell CDMA System](#)  
M. H. Islam, **M. Saquib** and N. Al-Dhahir  
*Proceedings of 62nd Vehicular Technology Conference* Dallas, TX: 25 - 28 September; IEEE (2005)
20. [Chip-Interleaved DS-CDMA Transmission over Time-varying Channels](#)  
Y. Na, **M. Saquib** and M. Z. Win

- Proceedings of 62nd Vehicular Technology Conference* Dallas, TX: 25 - 28 September; IEEE (2005)
21. [Pilot-aided Chip-Interleaved DS-CDMA Transmission over Time-varying Channels \(invited paper\)](#)  
Y. Na, **M. Saquib** and M. Z. Win  
*Proceedings of Noise in Communications Systems*, Austin, TX: 23-26 May; International Society for Optical Engineering (2005)
  22. [Multicode CDMA Transmission over Time-Varying Multipath Channels](#)  
Y. Na, **M. Saquib** and G. Mandyam  
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  23. [Fade Resistant Transmission in Time-Varying Wireless Channels using Parallel Sequences](#)  
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  24. [Capacity Enhancement of Wireless Systems using Soft-length Symbol](#)  
O. Jegbefume, **M. Saquib** and M. Win  
*Proceedings of International Conference on Communications*, Paris, France: 20 - 24 June; IEEE (2004)
  25. [Parallel Symbol Transmission over Time-Varying Nakagami Fading Wireless Channels](#)  
**M. Saquib** and M. Win  
*Proceedings of Military Communications Conference*, USA: October; IEEE Milcom (2003)
  26. [Capacity Enhancement of Wireless Systems using Soft-length Symbols](#)  
(short paper)  
O. Jegbefume, **M. Saquib** and M. Win  
*Proceedings of High Speed Networking (HSN) Workshop (in Conjunction with Infocom)*, USA: March; (2003)
  27. [Parallel Sequence Transmission for High Speed UWB](#)  
**M. Saquib** and M. Win  
*Proceedings of the Conference on UWB*, Korea: December; Korea Electronics Technology Institute, Korea (2002)
  28. [Optimum Transmitters and Receivers for CDMA Systems](#)  
**M. Saquib** and Md. H. Islam  
*Proceedings of the Thirty-fifth Asilomar Conference on Signals, Systems and Computers*, CA, USA: 4-7 November; IEEE **35** (2001) 1606 - 1610
  29. [Near-Far Resistance of Linear Receivers in Chip Asynchronous CDMA Systems](#)  
**M. Saquib**  
*Proceedings of International Conference on Communications*, Helsinki, Finland: 11-14 June; IEEE (2001) 2747 - 2751
  30. [Joint Transmitter-Receiver Optimization in the Down-link of CDMA Systems](#)

**M. Saquib**, Md. H. Islam and A. Sampath

*Proceedings of the Conference on Information Science and Systems*, Johns Hopkins University, Baltimore, MD: March; (2001)

31. [Robustness of the Linear Receivers against the Near-Far Problem in Chip Asynchronous Random CDMA Systems](#)

**M. Saquib**

*Proceedings of the Conference on Information Science and Systems*, Johns Hopkins University, Baltimore, MD: March; (2001)

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

**M. Saquib**, Md. H. Islam and S. Kumar

*Wireless Communications and Networking Conference*, Chicago, IL: 23-28 September; IEEE (2000) 613 - 618

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

**M. Saquib** and R. Yates

*Global Telecommunications Conference*, Brazil: December; IEEE (1999) 2193 - 2197

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

**M. Saquib**, R. Yates and A. Ganti

*Thirty-fifth Annual Allerton Conference on Communication, Control and Computing*, Monticello, IL: June; Allerton (1997)

35. [A Two Stage Decorrelator for a Dual Rate Synchronous DS/CDMA System](#)

**M. Saquib** and R. Yates

*Proceedings of Supercomm/IEEE International Conference on Communications*, Montreal, Canada: 8 - 12 June; IEEE (1997) 334 - 338

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

**M. Saquib**, R. Yates and A. Ganti

*Proceedings of the Conference on Information Science and Systems*, Johns Hopkins University, Baltimore, MD: March; IEEE (1997)

37. [A Decision Feedback Decorrelator for a Dual Rate Synchronous DS/CDMA System](#)

**M. Saquib**, R. Yates and N. Mandayam

*Proceedings of Global Telecommunications Conference*, London, UK: 18-22 November; IEEE (1996) 1804 - 1808

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

**M. Saquib**, R. Yates and N. Mandayam

*Proceedings of 46th Vehicular Technology Conference*, Atlanta, GA: 28 April - 1 May; IEEE (1996) 377 - 381

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

**M. Saquib** and R. Yates

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