Books

1. K. J. R. Liu, **A. K. Sadek**, W. Su, and A. Kwasinski, *Cooperative Communications and Networking*, Cambridge University Press, 2008.

Book Chapters

1. **A. K. Sadek**, W. Su, and K. J. R. Liu, *Cooperative Sensor Communications*, Handbook on Array Processing and Sensor Networks, Wiley, in preparation.

Journal Publication

1. **A. K. Sadek**, W. Su, and K. J. R. Liu, "Diversity analysis for frequency-selective MIMO-OFDM systems with arbitrary spatial and temporal correlation", *IEEE Transactions on Communications*, vol. 54, no. 5, pp. 878-888, May 2006.

2. **A. K. Sadek**, W. Su, and K. J. R. Liu, "Multi-node cooperative communications in wireless networks", *IEEE Transactions on Signal Processing*, vol. 55, no. 1, pp. 341 - 355 , Jan. 2007.

3. K. Seddik, **A. K. Sadek**, W. Su, and K. J. R. Liu, "Outage analysis and optimal power allocation for multi-node amplify-and-forward relay networks," *IEEE Signal Processing Letters*, vol. 14, pp. 377-380, June 2007.

4. **A. K. Sadek**, K. J. R. Liu, and A. Ephremides, "Cognitive multiple-access via cooperation: Protocol design and performance analysis," *IEEE Transactions on Information Theory, Special Issue on Models, Theory, and Codes for Relaying and Cooperation in Communication Networks*, vol 53, no 10, pp.3677-3696, Oct 2007.

5. **A. K. Sadek**, Weifeng Su, and K. J. R. Liu, "Transmit beamforming design for space-frequency coded MIMO-OFDM systems with spatial correlation feedback," to appear, *IEEE Transactions on Communications*.

6. K.G. Seddik, **A.K. Sadek**, A.S. Ibrahim, and K.J.R. Liu, "Design Criteria and Performance Analysis for Distributed Space-Time Coding", to appear, *IEEE Trans. on Vehicular Technology*.

7. W. Su, **A. K. Sadek**, and K. J. R. Liu, "Cooperative communications in wireless networks: Performance analysis and optimum power allocation," to appear, *Wireless Personal Communications*.

8. W.P. Siriwongpairat, **A.K. Sadek**, and K.J.R. Liu, "Cooperative Communications Protocol for Multiuser OFDM Networks", to appear, *IEEE Trans. on Wireless Communications*.

9. A. Ibrahim, **A. K. Sadek**, W. Su, and K. J. R. Liu, "Multi-node cooperative communications with relay-selection: When to cooperate and whom to cooperate with?", to appear*IEEE Transactions on Wireless Communications*.

In Revision or Submitted

10. **A. K. Sadek**, Z. Han, and K. J. R. Liu, " Distributed relay-assignment protocols for coverage expansion in cooperative wireless networks", submitted to *IEEE Transactions on Wireless Communications*.

11. **A. K. Sadek**, W. Yu, and K. J. R. Liu, "On the energy efficiency of cooperative communications in wireless sensor networks", submitted to *ACM Transactions on Sensor Networks*.

Conference Publication

1. A. El-Sherif, **A. K. Sadek**, A. Kwasinski, and K.J.R. Liu, "Content-Aware Cooperative Multiple Access Protocol for Packet Speech Communications", *Proc. IEEE Globecom*, Washington DC, 2007.

2. K. Seddik, **A. K. Sadek**, A. Ibrahim, and K.J.R. Liu, "Synchronization-Aware Distributed Space-Time Codes in Wireless Relay Networks", *Proc. IEEE Globecom*, Washington DC, 2007

3. **A. K. Sadek**, W. Yu, and K. J. R. Liu, "Does cooperation have better performance in sensor networks?", in *Proceedings IEEE conference on Sensor, Mesh and Ad Hoc Communications and Networks (SECON)*, Reston, VA, 2006.

4. **A. K. Sadek**, K. J. R. Liu, and A. Ephremides, "Collaborative multiple-access protocols for wireless networks: Protocol design and stability analysis," in *Proceedings IEEE Conference on Information Sciences and Systems (CISS)*, Princeton, NJ, 2006.

5. **A. K. Sadek**, Z. Han, and K. J. R. Liu, "A distributed relay-assignment algorithm for cooperative communications in wireless networks", in *Proceedings IEEE International Conference on Communications (ICC)*, Istanbul, Turkey, 2006.

6. **A. K. Sadek**, Z. Han, and K. J. R. Liu, "An efficient cooperation protocol to extend coverage area in cellular networks", in *Proceedings IEEE Wireless Communications and Networking Conference (WCNC)*, Las Vegas, NV, 2006.

7. K. Seddik, **A. K. Sadek**, W. Su, and K. J. R. Liu, " Outage analysis for multi-node amplify and-forward relay networks," in *Proceedings IEEE Wireless Communications and Networking Conference (WCNC)*, Las Vegas, NV, 2006.

8. K. Seddik, **A. K. Sadek**, and K. J. R. Liu, "Protocol-aware design criteria and performance analysis for distributed space-time coding" in *Proceedings IEEE Global Telecommunications Conference (Globecom)*, San Francisco, CA, 2006.

9. W. P. Siriwongpairat , **A. K. Sadek**, and K. J. R. Liu, "Bandwidth-efficient cooperative protocol for OFDM wireless networks," in *Proceedings IEEE Global Telecommunications Conference (Globecom)*, San Francisco, CA, 2006.

10. **A. K. Sadek**, W. Su, and K.J.R. Liu, "Clustered cooperative communications in wireless networks", in *Proceedings IEEE Global Telecommunications Conference (Globecom)*, San Louis, Nov, 2005.

11. **A. K. Sadek**, Z. Han, and K.J.R. Liu, "Multi-node cooperative resource allocation to improve coverage area in wireless networks", in *Proceedings IEEE Global Telecommunications Conference (Globecom)*, San Louis, Nov, 2005.

12. A. Ibrahim, **A. K. Sadek**, W. Su, and K.J.R. Liu, "Cooperative communications with channel state information: When to cooperate?", in *Proceedings IEEE Global Telecommunications Conference (Globecom)* , San Louis, Nov, 2005.

13. **A. K. Sadek**, W. Su, and K.J.R. Liu, "A class of cooperative communication protocols for multi-node wireless networks", in *Proceedings IEEE International Workshop on Signal Processing Advances in Wireless Communications (SPAWC)*, New York, June 2005.

14. **A. K. Sadek**, W. Su, and K.J.R. Liu, "Eigen-selection approach for joint beamforming and space-frequency coding in MIMO-OFDM systems with spatial correlation feedback", in *Proceedings IEEE International Workshop on Signal Processing Advances in Wireless Communications (SPAWC)*, New York, June 2005.

15. **A. K. Sadek**, W. Su, and K.J.R. Liu, "Performance analysis for multi-node decode-and-forward relaying in collaborative wireless networks", in *Proceedings IEEE International Conference on Acoustic, Speech, and Signal Processing (ICASSP)*, Philadelphia, March 2005.

16. W. Su, **A. K. Sadek**, and K. J. R. Liu, "SER performance analysis and optimum power allocation for decode-and-forward cooperation protocol in wireless networks", in *Proceedings IEEE Wireless Communications and Networking Conference (WCNC)*, New Orleans, March 2005.

17. **A. K. Sadek**, W. Su, and K. J. R. Liu, "Maximum achievable diversity for arbitrary spatially correlated MIMO-OFDM systems", in *Proceedings IEEE Global Telecommunications Conference (Globecom)*, Dallas, Dec 2004.

18. S. E. El-Khamy and **A. K. Sadek**, "Space-time EVA blind equalization for high data rate wireless communications," in *Proceedings IEEE International Symposium on Antennas and Propagation*, California, June 2004.

19. S. E. El-Khamy, S. E. Shaaban, and **A. K. Sadek**, "A modified EVA/DD algorithm for the equalization of non-constant modulus signals based on eigen-analysis of cross-cumulants", in *Proceedings of the Twentieth National Radio Science Conference*, Cairo, Egypt, March 2003.