

Bibliography

- [1] C.H. Liu and H.H. Asada. "A Source Coding and Modulation Method for Power Saving and Interference Reduction in DS-CDMA Sensor Network Systems. In *Proc. of American Control Conf.*, volume 4, pages 3003–3008, May 2002.
- [2] J. Kim and J.G. Andrews. "An Energy Efficient Source Coding and Modulation Scheme for Wireless Sensor Networks". In *IEEE 6th Workshop on Signal Processing Advances in Wireless Communications*, pages 710–714, June 2005.
- [3] Dragan Petrovic, Kannan Ramchandran, and Jim Chou. "A Distributed and Adaptive Signal Processing Approach to Reducing Energy Consumption in Sensor Networks". In *IEEE INFOCOM*, 2003.
- [4] C. Toh. "Maximum Battery Life Routing to Support Ubiquitous Mobile Computing in Wireless AD-HOC Networks". In *IEEE Communications Magazine*, pages 138–147, June 2001.
- [5] R. Shah and J. Rabaey. "Energy Aware Routing for Low Energy ad-hoc Sensor Networks". In *Proc. of IEEE WCNC*, March 2002.
- [6] D.E.C. Intanagonwiwat and R. Govindan. "Directed Diffusion: a Scalable and Robust Communication Paradigm for Sensor Networks". In *Proc. of IEEE MobiCom*, August 2002.
- [7] G. Pottie and W. Kaiser. "Wireless Sensor Networks". In *Communications of the ACM*, 2000.
- [8] M. Chu, H. Haussecker, and F. Zhao. "Scalable Information-driven Sensor Querying and Routing for ad hoc Heterogeneous Sensor Net-

- works". In *IEEE Journal of High Performance Computing Applications*, 2002.
- [9] R. Blahut. *Theory and Practice of Data Transmission Codes*. 1995.
- [10] S. Toumpis and A.J. Goldsmith. "Capacity Regions for Wireless ad hoc Networks". In *IEEE Trans. on Wireless Communications*, volume 24, pages 3003–3008, May 2003.
- [11] I.F. Akyldiz, W.Y. Sankarasubramaniam, and E. Cayirci. "A Survey on Sensor Networks". In *IEEE Communications Magazine*, pages 102–114, August 2002.
- [12] E. Shih, H. Calhoun, S. Cho, and A.P. Chandrakasan. "Energy-Efficient Link Layer for Wireless Microsensor Networks". In *IEEE Computer Society Workshop on VLSI*, pages 16–21, April 2001.
- [13] C. Erin and H.H. Asada. "Energy Optimal Codes for Wireless Communications". In *Proc. of the 38th IEEE Conference of Decision and Control*, volume 5, pages 4446–4453, December 1999.
- [14] Y. Prakash and S.K. Gupta. "Energy Efficient Source Coding and Modulation for Wireless Applications". In *Proc. or IEEE WCNC*, volume 1, pages 212–217, March 2003.
- [15] M.B. Pursley. "Performance Evaluation for Phase-Coded Spread-Spectrum Multiple-Access Communication - Part I: System Analysis". In *IEEE Transactions on communications*, volume COM. 25, pages 795–799, August 1977.
- [16] S. Yao and E. Geraniotis. "Optimal Power Control Law for Multimedia Multirate CDMA Systems". In *IEEE 46th Vehicular Technology Conference: 'Mobile Technology for the Human Race'*, volume 1, pages 392–396, April 1996.
- [17] F. Santucci, G. Durastante, F. Graziosi, and C. Fischione. "Power Allocation and Control in Multimedia CDMA Wireless Systems". In *Telecommunication Systems*, volume 23, pages 69–94. Springer Netherlands, June 2003.

- [18] C. Fischione, A. Bonivento, K.H. Johansson, and A. Sangiovanni-Vincentelli. "Cooperative Diversity with Disconnection Constraints and Sleep Discipline for Power Control in Wireless Sensor Networks". In *IEEE VTC*, 2006.
- [19] A. Papoulis. "Probability, Random Variables, and Stochastic Processes". McGraw-Hill, 1984.
- [20] C. Fischione and M. Butusse. "Power and Rate Control Outage Based in CDMA Wireless Methods under MAI and Heterogeneous Traffic Sources". Technical report, Royal Institute of Technology (KTH), Stockholm, Sweden, 2006.
- [21] D.P. Bertsekas and J.N. Tsitsiklis. *Parallel and Distributed Computation: Numerical Methods*. Athen Scientific, 1997.
- [22] M. Zuniga and B. Krishnamachari. "Analyzing the Transitional Region in Low Power Wireless Links". In *IEEE SECON*, 2004.
- [23] J.B. Andersen, T.S. Rappaport, and S. Yoshida. "Propagation Measurements and Models for Wireless Communications Channels". In *IEEE Communications Magazine*, pages 42–49, January 1995.
- [24] Chipcon Products by Texas Instruments. *2.4 GHz IEEE 802.15.4 / ZigBee-ready RF Transceiver*, 2006.
- [25] John G. Proakis. *Digital Communications*. Electrical Engineering. McGraw Hill International Editions, third edition, 1995.
- [26] Moteiv Corporation. *Telos: Ultra low power IEEE 802.15.4 compliant wireless sensor module. Revision B : Humidity, Light, and Temperature sensors with USB*, 2004.
- [27] S. Haykin. *Adaptive Filter Theory*. PrenticeHall, third edition, 1996.
- [28] E. N. Gilbert. "Capacity of a Burst-Noise Channel". In *The Bell System Technical Journal*, volume 39, pages 1253–1265, September 1960.
- [29] TinyOS Community Forum. *TinyOS tutorial*, September 2003.

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- [30] L. Schwiebert, S.K.S. Gupta, P.S.G. Auner, G. Abrams, R. Lezzi, and P. McAllister. "A Biomedical Smart Sensor for Visually Impaired". Technical report, IEEE Sensors, June 2002.
- [31] B. Yang, S. Rhee, and H.H. Asada. "A Twenty-four Hour Tele-nursing System Using a Ring Sensor". In *Proc. of the IEEE International Conference on Robotics and Automation*, volume 1, 1998.
- [32] B. Hashem and E. Sousa. "Performance Evaluation of DS-CDMA Systems Employing Adaptive Transmission Rate under Imperfect Power Control". In *Proc. of IEEE ICC'98*, 1998.
- [33] K. Sipila et al. "Modelling the Impact of the Fast Power Control on the WCDMA Uplink". In *Proc. of IEEE VTC'99*, pages 1266–1270, May 1999.
- [34] Holtzman. "A Simple, Accurate Method to Calculate Spread-Spectrum Multiple-Access Error Probabilities". In *IEEE Trans. Comm.*, volume 40, pages 461–464, 1992.