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RESEARCH INTEREST

- Communication and information theory for multi-user networks.
- Signal processing with applications to communications and sensor networks.
- Network security for wireless and wireline systems.

EDUCATION

- Ph.D. Sep. 1995 – May 1999 Electrical Engineering, University of Connecticut, Storrs, CT.
Adviser: Professor Peter Willett
Dissertation: *Detection of Transient Signals*.
- M.S. Jan. 1997 – Dec. 1998 Statistics, University of Connecticut
Adviser: Professor Alan Gelfand
- M.E. Sep. 1992 – May 1994 Electronic Engineering, Tsinghua University, Beijing, China.
- B.E. Sep. 1987 – May 1992 Electronic Engineering, Tsinghua University, Beijing, China.

RESEARCH AND PROFESSIONAL EXPERIENCE

- Associate Professor Syracuse University, Syracuse, NY, since 2006.
- Assistant Professor Syracuse University, Syracuse, NY, 2000-2006.
- PostDoc Associate Cornell University, Ithaca, NY, May 1999 – August 2000.
- Research Assistant University of Connecticut, Storrs, CT, September 1995 – May 1999.
- Technical Staff AT&T (China) Inc., Beijing, China, March 1995 – August 1995.
- Research Associate Tsinghua University, Beijing, China, September 1994 – March 1995.

OTHER PROFESSIONAL ACTIVITIES AND SERVICES

- Associate Editor, IEEE Transactions on Signal Processing, IEEE Communications Letters.
- Past member of the editorial board, EURASIP Journal on Wireless Communications and Networking (2005-2008).
- Lead guest editor, Special Issue on Wireless Sensor Networks, EURASIP Journal on Wireless Communications and Networking (2006).
- Elected Member, Sensor Array and Multichannel (SAM) Technical Committee, IEEE Signal Processing Society.
- Technical program committee member of numerous international conferences and workshops, including IEEE ICC, IEEE GLOBECOM, IEEE WCNC, EUSIPCO, IEEE Radar, IEEE SAM Workshop.
- Technical Program Co-chair, 2nd IEEE Upstate NY Workshop on Sensor Networks, Syracuse, NY, October 2003.
- NSF panelist, numerous times.

- Reviewer for various journals, conferences, NSERC, and DoD agencies.
- Invited talks
 - “Wireless Networks for Information Transmission and Exploitation,” SUNY Binghamton, April 11 2003.
 - “Wireless Networks for Information Transmission and Exploitation,” Army Research Laboratory, April 17 2003.
 - “Integrated Transmission and Processing for Wireless Sensor Networks,” Ohio State University (IPL lecture series), June 2 2003.
 - “Channel-Aware Signal Processing for Wireless Sensor Networks,” Clarkson University, March 10 2004.
 - “Communication in Sensory and Ad hoc Networks – the Art of Recycling Useless Channels,” Co-sponsored by the IEEE AES, COM, and SP Societies Rochester Chapters and the Department of ECE of the University of Rochester, May 5 2004.
 - “Cooperative communication in ad hoc and sensory networks,” AFOSR 2004 Workshop, Newark, Delaware, June 2-4 2004.
 - “Sensor networks overview,” Sensor network mini-workshop, AFRL/IF Information Institute’s 2004 General Workshop, June 2004.
 - “Distributed signal processing for ad hoc networks,” USTC, Hefei, China, January 6 2005.
 - “Interference channels: past, present, and future,” University of Pittsburgh, Fessenden Lecture, March 21 2007.
 - “Interference channels: past, present, and future,” University of Connecticut, July 13 2007.
 - “Interference channels: past, present, and future,” University of British Columbia, August 16 2007.
 - “Interference channels: past, present, and future,” Microsoft Research, August 20, 2007.
 - “Recent Progress in Gaussian inference channel,” Cornell University, April 16, 2008.

HONORS AND AWARDS

- NSF CAREER Award, 2006.
- Co-authored a paper that won the student paper contest at the IEEE ICASSP’05, Philadelphia, PA, March 2005.
- Co-authored a paper that was among the ten finalists for best student paper award at the Asilomar Conference on Signals, Systems, and Computers, Pacific Grove, CA, November 2004.
- Summer Faculty Fellow, Air Force Research Lab, Rome research site, 2005.
- Outstanding performance in Advanced Probability Series, December 1998, Department of Statistics, University of Connecticut, Storrs, CT.
- Guanghai Scholarship (1991 and 1994), Tsinghua University, Beijing, China.
- Honor graduate, 1992, Tsinghua University, Beijing, China.

GRADUATE ADVISING

- Current Graduate Students

- Ph.D.: Mr. Yi Cao; Mr. Wei Liu; Ms. Ge Xu; Mr. Jin Xu; Ms. Fangfang Zhu.
- M.S.: Mr. Kapil Borle, Ms. Minna Chen.
- Past Graduate Students
 - Mr. Xiaohu Shang, Ph.D., August 2008, PostDoc Associate, Princeton University (All University Doctoral Prize).
 - Ms. Ying Lin, Ph.D., May 2007, Assistant Professor, SUNY New Paltz (All University Doctoral Prize).
 - Mr. Bin Liu, Ph.D., December 2006, Associate Professor, USTC, China.
 - Mr. Sean O’Hara, M.S., June 2006, Syracuse Research Corp., NY (All University Master Prize).
 - Ms. Ruixiang Jiang, Ph.D., December 2005.
 - Mr. Hao Wang, Ph.D., December 2004, Conexant System Inc., Red Bank, NJ (LePage Scholarship Winner).

CURRENT EXTERNAL RESEARCH PROJECTS

- PI (co-PIs: Hao Chen and Pramod Varshney), “A Unifying Framework for Distributed Inference in Networked Systems,” NSF. 2009-2012.
- PI, “Understanding and managing interference in communication networks,” NSF. 2009-2013.
- PI, “Wireless cybersecurity,” AFOSR, 2009-2012.
- PI, “Robust connectivity for sensor and ad hoc networks”, AFRL (under the Air Force Focused Long Term Challenge (FLTC) program), 2007-2010.
- PI, “CAREER - Aspiring for spectrum freedom through MIMO overlay transmission,” NSF, 2006-2011.

PAST EXTERNAL RESEARCH PROJECTS

- PI, “Integrated communications and processing for sensory and ad hoc networks,” NSF, 2005-2009.
- PI, “Enhancing throughput and connectivity for *ad hoc* and sensor networks,” AFOSR, 2006-2008.
- PI, REU Supplement for the CAREER Award, NSF, 2006.
- PI, “A likelihood principle based framework for knowledge aided space-time adaptive processing”, AFRL, 2005-2008.
- PI, “Robust connectivity for sensor and ad hoc networks”, AFRL (through the Air Force Center for Integrated Transmission and Exploitation (CITE)), 2005-2007.
- Co-PI (PI: Pramod Varshney), “Robust and adaptive multichannel radar detection and space-time adaptive processing in non-Gaussian clutter and Gaussian noise,” AFRL, 2002-2003.
- Co-PI (PI: Pramod Varshney), “Radar signal detection based on Bayesian hierarchical models and image analysis techniques,” AFRL, 2001-2002.

PATENT

- “Blind OFDM Channel Estimation and Identification Using Receiver Diversity,” U.S. Patent Number: 7355958, April 2008.

- Jin Xu and Biao Chen, “Encoding, decoding, and network protocol design for secure communication over wireline and wireless networks,” Provisional Patent Filed June 2009.

PUBLICATIONS

- Journal (**Submitted or In Preparation**)
 1. W. Liu and B. Chen, “Interference channels with arbitrarily correlated sources,” *submitted to IEEE Trans. Information Theory*.
 2. Y. Cao and B. Chen, “Interference channels with one cognitive transmitter,” *submitted to IEEE Trans. Information Theory*.
 3. X. Shang, B. Chen, G. Kramer, and H.V. Poor, “Capacity region and sum rate capacities of vector Gaussian interference channels,” *submitted to IEEE Trans. Information Theory*.
 4. X. Shang, B. Chen, H.V. Poor, “MISO interference channels with signal user detection: optimality of beamforming and the achievable rate region,” *submitted to the IEEE Trans. Information Theory*.
 5. X. Shang, B. Chen, G. Kramer, and H.V. Poor, “Noisy-interference sum rate capacity of parallel Gaussian interference channels,” *submitted to the IEEE Trans. Information Theory*.
- Journal (**Accepted or Appeared**)
 1. J. Xu, Y. Cao, and B. Chen, “Capacity bounds for broadcast channels with confidential messages,” *IEEE Transactions on Information Theory*, vol. 55, pp. 4529-4542, October, 2009.
 2. X. Shang, G. Kramer, and B. Chen, “A new outer bound and the noisy-interference sum-rate capacity for Gaussian interference channels,” *IEEE Transactions on Information Theory*, vol. 55, pp. 689-699, February 2009.
 3. H. Chen, B. Chen, and P.K. Varshney, “Further results on the optimality of likelihood ratio quantizer for distributed detection in non-ideal channels,” *IEEE Transactions on Information Theory*, vol. 55, pp. 828-832, February 2009.
 4. X. Shang, B. Chen, and J. Matyjas, “On the sum capacity optimality of orthogonal communications over vector Gaussian multiple access channels,” *IEEE Trans. Wireless communications*, vol. 7, pp. 4304-4311, November 2008.
 5. B. Liu and B. Chen, “Decentralized detection in wireless sensor networks with channel fading statistics,” *EURASIP Journal on Wireless Communications and Networking*, vol. 2007.
 6. Y. Lin, B. Chen, and B. Suter, “Robust distributed quantizer design for decentralized detection in sensor networks,” *IEEE Trans. Wireless communications*, vol. 6, pp. 2172-2181, June 2007.
 7. B. Liu, B. Chen, and R.S. Blum, “Minimum error probability cooperative relay design,” *IEEE Trans. Signal Processing*, vol. 55, pp. 656-664, February 2007.
 8. X. Shang, B. Chen, and M.J. Gans, “On achievable sum rate for MIMO interference channels,” *IEEE Trans. Information Theory*, vol. 52, pp. 4314-4320, 2006.
 9. Q. Cheng, B. Chen, and P.K. Varshney, “Detection performance limits for distributed sensor networks in the presence of non-ideal channels,” *IEEE Trans. Wireless Communications*, vol. 5, pp. 3034-3038, Nov. 2006.
 10. T. Wang, Y-S. Han, B. Chen, P.K. Varshney, “A combined decision fusion and channel coding scheme for distributed fault-tolerant classification in wireless sensor networks,” *IEEE Trans. Wireless Communications*, vol. 5, pp. 1695-1705, July 2006.

11. B. Liu and B. Chen, "Channel optimized quantizers for a decentralized detection system," *IEEE Trans. Information Theory*, vol. 52, pp. 3349-3358, July 2006.
12. B. Chen, L. Tong, and P.K. Varshney, "Channel aware distributed detection for wireless sensor networks," *IEEE Signal Processing Magazine, Special Issue on Signal Processing for Sensor Networks*, vol. 23, no. 4, pp. 16-26, July 2006.
13. B. Chen and M.J. Gans, "MIMO communications in ad hoc networks," *IEEE Trans. Signal Processing*, vol. 54, pp. 2773-2783, July 2006.
14. R. Niu, B. Chen, and P.K. Varshney, "Fusion of decisions transmitted over Rayleigh fading channels in wireless sensor networks," *IEEE Trans. Signal Processing*, vol. 54, pp. 1018-1027, March 2006.
15. B. Liu, B. Chen, and J.H. Michels, "A GLRT for multichannel radar detection in the presence of both compound Gaussian clutter and additive white Gaussian noise," *Digital Signal Processing (Elsevier)*, vol. 15, pp. 437-454, Sept 2005.
16. R. Jiang and B. Chen, "Fusion of censored decisions in wireless sensor networks," *IEEE Trans. Wireless Communications*, vol. 4, pp. 2668-2673, November 2005.
17. Y. Lin, B. Chen, and P.K. Varshney, "Decision fusion rules in multi-hop wireless sensor networks," *IEEE Trans. Aerospace and Electron. Systems*, vol. 51, pp. 475-488, April 2005.
18. B. Chen and P.K. Willett, "On the optimality of likelihood ratio test for local sensor decision rules in the presence of non-ideal channels," *IEEE Trans. Information Theory*, vol. 51, pp. 693-699, Feb. 2005.
19. B. Chen, R. Jiang, T. Kasetkasem, and P.K. Varshney, "Channel aware decision fusion for wireless sensor networks," *IEEE Trans. Signal Processing*, vol. 52, pp. 3454-3458, Dec. 2004.
20. B. Chen and H. Wang, "Blind OFDM carrier frequency offset estimation via oversampling," *IEEE Trans. Signal Processing*, vol. 52, no. 7, pp. 2047-2057, July 2004.
21. B. Chen, P.K. Varshney, and J.H. Michels, "Bayesian Hierarchical Model Based Training Data Selection With Application To Radar CFAR Detection," *IEEE Trans. Aerospace and Electronic Systems*, vol. 49, pp. 1462-1470, Oct. 2003.
22. H. Wang, Y. Lin, and B. Chen, "Data efficient blind OFDM channel estimation using receiver diversity," *IEEE Trans. Signal Processing*, vol. 51, no. 10, pp. 2613-2623, Oct. 2003.
23. B. Chen and P.K. Varshney, "A Bayesian sampling approach to decision fusion," *IEEE Trans. Signal Processing*, vol. 50, no. 8, pp. 1809-1818, August 2002.
24. B. Chen, "Maximum likelihood estimate of OFDM carrier frequency offset," *IEEE Signal Processing Letter*, vol. 9, no. 4, pp. 123-126, April 2002.
25. B. Chen and P. Willett, "Superimposed HMM transient detection via target tracking ideas", *IEEE Trans. Aerospace and Electronic Systems*, vol. 37, no. 3, pp. 946-956, September 2001.
26. B. Chen and L. Tong, "Traffic-aided multiuser detection for packet switching random access/CDMA networks", *IEEE Trans. Signal Processing*, vol. 49, no. 7, pp. 1570-1580, July 2001.
27. B. Chen and P. Willett, "Quickest detection of HMM transient signals", *IEEE Trans. Aerospace and Electronic Systems*, vol. 36, no. 4, pp. 1253-1268, Oct, 2000.
28. B. Chen and P. Willett, "On the theoretical bandwidth advantage of CDMA versus FDMA", *IEEE Trans. Information Theory*, vol. 45, no. 5, pp. 2046-2053, Sep. 1999.
29. P. Willett and B. Chen, "Robust detection of small stochastic signals", *IEEE Trans. Aerospace and Electronic Systems*, vol. 35, no. 1, pp. 15-30, Jan. 1999.

30. C. Han, P. Willett, B. Chen, and D. Abraham, "A detection optimal min-max test for transient signals", *IEEE Trans. Information Theory*, vol.44, no.2, pp. 866-869, Mar. 1998.
- Refereed Conference Proceedings (**Accepted or Appeared**)
 1. J. Xu, X. Shang, B. Chen, and H.V. Poor, "Parallel Discrete Memoryless Interference Channels Under Strong Interference: Separability and Capacity Region Results," *Proc. IEEE Information Theory Workshop*, Cairo, Egypt, January, 2010 (invited).
 2. X. Shang, B. Chen, and H.V. Poor, "On the optimality of beamforming for multi-user MISO interference channels with single-user detection," *Proc. IEEE Globecom*, Honolulu, Hawaii, December 2009.
 3. W. Liu and B. Chen, "Communicating correlated Gaussian sources over Gaussian interference channels," *Proc. IEEE Globecom*, Honolulu, Hawaii, December 2009.
 4. Y. Cao and B. Chen, "Capacity outer bounds for the cognitive Z channel," *Proc. IEEE Globecom*, Honolulu, Hawaii, December 2009.
 5. X. Shang, B. Chen, G. Kramer and H.V. Poor, "MIMO Z interference channels," *Proc. Asilomar Conference on Signals, Systems, and Computers*, Monterey, CA, Nov, 2009 (invited).
 6. W. Liu and B. Chen, "Interference channels with arbitrarily correlated sources," *Proc. Annual Allerton Conference on Communication, Control, and Computing*, Montecillo, IL, Oct. 2009 (invited paper).
 7. Y. Cao and B. Chen, "Two-hop interference networks," *Proc. Annual Allerton Conference on Communication, Control, and Computing*, Montecillo, IL, Oct. 2009.
 8. H. Chen, P.K. Varshney, and B. Chen, "Conditional dependence in distributed detection: How far can we go?," *Proc. IEEE International Symposium on Information Theory*, Seoul, Korea, June-July 2009.
 9. J. Xu and B. Chen, "Secure coding over networks" *Proc. IEEE International Symposium on Information Theory*, Seoul, Korea, June-July 2009.
 10. X. Shang, B. Chen, G. Kramer, and H.V. Poor, "Noisy-Interference Sum-Rate Capacity of Parallel Interference Channel," *Proc. IEEE International Symposium on Information Theory*, Seoul, Korea, June-July 2009.
 11. W. Liu and B. Chen, "Message Transmission and State Estimation Over Gaussian Broadcast Channels," *Proc. CISS*, Baltimore, MD, March 2009.
 12. Y. Cao and B. Chen, "The cognitive Z channel," *Proc. CISS*, Baltimore, MD, March 2009.
 13. J. Xu and B. Chen, "An outer bound to the rate-equivocation region of broadcast channels with two confidential messages," *Proc. IEEE Global Communications Conference (GLOBECOM)*, New Orleans, LA, Dec. 2008.
 14. X. Shang, B. Chen, and G. Kramer, "Sum-rate capacity of parallel Gaussian interference channels," *Proc. IEEE Global Communications Conference (GLOBECOM)*, New Orleans, LA, Dec. 2008.
 15. J. Xu and B. Chen, "On secure multi-channel communication systems," *Proc. IEEE Military Communications Conference (MILCOM)*, San Diego, CA, Nov. 2008.
 16. X. Shang, G. Kramer, and B. Chen, "Throughput optimization in multi-user interference channels," *Proc. IEEE Military Communications Conference (MILCOM)*, San Diego, CA, Nov. 2008.
 17. Y. Cao and B. Chen, "Interference channels with one cognitive transmitter," *Proc. 42nd Asilomar Conference on Signals, Systems, and Computers*, Monterey, CA, October 2008.

18. X. Shang, B. Chen, G. Kramer, and H. Vincent Poor “On the capacity of MIMO interference channels,” *Proc. Allerton Conference, Monticello, IL, Sept. 2008*.
19. Y. Cao and B. Chen, “An achievable rate region for discrete memoryless broadcast channels with confidential messages,” *Proc. IEEE International Symposium on Information Theory*, Toronto, Canada, July 2008.
20. X. Shang, G. Kramer, and B. Chen, “New outer bounds on the capacity region of Gaussian interference channels,” *Proc. IEEE International Symposium on Information Theory*, Toronto, Canada, July 2008.
21. H. Chen, P.K. Varshney, B. Chen, “Cooperative relay for decentralized detection,” *Proc. IEEE International Conference on Acoustic, Speech, and Signal Processing*, Las Vegas, NV, April 2008.
22. X. Shang, G. Kramer, and B. Chen, “Outer bound and noisy-interference sum-rate capacity for symmetric Gaussian interference Channels,” *Proc. Annual Conference on Information Sciences and Systems (CISS’2008)*, Princeton, NJ, March 2008.
23. J. Xu and B. Chen, “Broadcast confidential and public messages,” *Proc. Annual Conference on Information Sciences and Systems (CISS’2008)*, Princeton, NJ, March 2008.
24. Y. Cao and B. Chen, “Outer bounds on the capacity region of interference channels with common message,” *Proc. IEEE GLOBECOM’2007*, Washington, D.C., Nov. 2007.
25. X. Shang and B. Chen, “Achievable rate region for downlink beamforming in the presence of interference,” *Proc. 41st Asilomar Conference on Signals, Systems, and Computers*, Monterey, CA, November 2007.
26. W. Liu and B. Chen, “Wiretap channel with two-sided state information,” *Proc. 41st Asilomar Conference on Signals, Systems, and Computers*, Monterey, CA, November 2007.
27. S. Misra, A. Swami, and B. Chen, “Decision fusion in large sensor networks using partially coherent and noncoherent strategies” *Proc. IEEE Military Communications Conference (MILCOM’2007)*, Orlando, FL, Oct. 2007.
28. X. Shang and B. Chen, “A new computable achievable rate region for the Gaussian interference channel”, *Proc. IEEE ISIT’07*, Nice, France, June, 2007.
29. Y. Cao and B. Chen, ”An achievable rate region for interference channels with conferencing”, *Proc. IEEE ISIT’07*, Nice, France, June, 2007.
30. X. Shang, B. Chen, and J. Matyjas, “Sum capacity (sub)optimality of orthogonal transmissions in vector Gaussian multiple access channels,” *Proc. IEEE International Conference on Acoustic Speech and Signal Processing (ICASSP’07)*, Hawaii, April 2007.
31. Y. Lin, B. Chen, and L. Tong, “Distributed detection over multiple access channels,” *Proc. IEEE International Conference on Acoustic Speech and Signal Processing (ICASSP’07)*, Hawaii, April 2007.
32. J. Xu, B. Chen, and B. Himed, “A GLRT based STAP for the range dependent problem,” *Proc. IEEE International Conference on Acoustic Speech and Signal Processing (ICASSP’07)*, Hawaii, April 2007.
33. X. Shang and B. Chen, “An inner bound of the capacity region for the Gaussian interference channel,” *Proc. IEEE Wireless Communications and Networking Conference (WCNC’2007)*, Hong Kong, March 2007.
34. Y. Cao, B. Chen, and J. Zhang, “A new achievable rate region for interference channels with common information,” *Proc. IEEE Wireless Communications and Networking Conference (WCNC’2007)*, Hong Kong, March 2007.
35. Y. Lin, B. Chen, P.K. Willett, B. Suter, “Distributed binary quantizers for communication constrained large scale sensor networks,” *Proc. International Conference on*

- Information Fusion (FUSION'06)*, Florence, Italy, July 2006.
36. X. Shang, B. Chen, and M. J. Gans, "On achievable sum rate for vector Gaussian interference channels," *Proc. IEEE International Symposium on Information Theory (ISIT'06)*, Seattle, WA, July 2006.
 37. Y. Lin, B. Chen, P. K. Willett, B. Suter, "Distributed inary quantizer design for communication constrained large scale sensor networks," *Proc. International Conference on Information Fusion (ICIF'06)*, Florence, Italy, July 2006.
 38. B. Liu and B. Chen, "Decentralized detection in wireless sensor networks with channel fading statistics," *Proc. IEEE International Conference on Acoustic Speech and Signal Processing (ICASSP'06)*, Toulouse, France, May 2006.
 39. R. Jiang, Y. Lin, B. Chen, and B. Suter, "Distributed sensor censoring for detection in sensor networks under communication constraints," *Proc. Asilomar Conference on Signals, Systems, and Computers*, Pacific Grove, CA, Nov. 2005.
 40. R. Jiang, S. Misra, B. Chen, and A. Swami, "Generalized nonlinearity based decision fusion in wireless sensor networks," *Proc. IEEE MILCOM 2005*, Atlantic City, NJ, Oct. 2005.
 41. Z. Huang, W. Du, and B. Chen, "Deriving private information from randomized data," *Proc. ACM SIGMOD Conference*, Baltimore, MD, June 2005.
 42. Y. Lin, B. Chen, and B. Suter, "Multiple description quantizer design for distributed sensor networks," *Proc. CISS 2005*, Baltimore, MD, March 2005.
 43. B. Liu, B. Chen and R.S. Blum, "Exploiting the finite-alphabet property in cooperative relays," *Proc. IEEE ICASSP 2005*, Philadelphia, PA, March 2005. (**Winner of the student paper contest**).
 44. B. Chen and M.J. Gans, "Limiting throughput of MIMO *ad hoc* networks," *Proc. IEEE ICASSP 2005*, Philadelphia, PA, March 2005.
 45. B. Chen and M.J. Gans, "Beaconing in MIMO broadcast channels," *Proc. IEEE ICASSP 2005*, Philadelphia, PA, March 2005.
 46. B. Chen and M.J. Gans, "MIMO communication in *ad hoc* networks," *Proc. IEEE VTC 2005 Spring*, Stochkolm, Sweden, May 2005.
 47. B. Liu and B. Chen, "Joint source-channel coding for distributed sensor networks," *Proc. 34 Annual Asilomar Conference on Signals, Systems, and Computers*, Pacific Grove, CA, Nov. 2004.
 48. Q. Cheng, B. Chen, and P.K. Varshney, "Detection performance limits of channel impaired distributed sensor networks," *Proc. 34 Annual Asilomar Conference on Signals, Systems, and Computers*, Pacific Grove, CA, Nov. 2004. (**One of the ten finalists for the best student paper contest**).
 49. Y. Lin, B. Chen, and P.K. Varshney, "Decision fusion in multi-hop wireless sensor networks," *Proc. International Conference on Information Fusion (Fusion'04)*, Stockholm, Sweden,
 50. H. Wang and B. Chen, "A comparison of subcarrier allocation schemes for multiuser multicarrier communication systems," *Proc. CISS'04*, Princeton, NJ, March, 2004.
 51. B. Chen and P.K. Willett, "Channel optimized binary quantizers for distributed sensor networks," *Proc. IEEE ICASSP'2004*, Montreal, Canada, May 2004.
 52. R. Jiang and B. Chen, "Decision fusion with censored sensors," *Proc. IEEE ICASSP'2004*, Montreal, Canada, May 2004.
 53. H. Wang and B. Chen, "Asymptotic distributions and peak power analysis for OFDMA uplink signals," *Proc. IEEE ICASSP'2004*, Montreal, Canada, May 2004.

54. H. Wang and B. Chen, "On the distribution of peak-to-average power ratio for non-circularly modulated OFDM signals," *Proc. of the Globecom'2003*, San Francisco, CA, Dec. 2003.
55. S. O'hara, B. Chen, and J. Periard, "A bandwidth efficient peak power reduction scheme for multicarrier modulation using selected mapping," *Proc. CISS'2003*, Baltimore, MD, March 2003.
56. H. Wang and B. Chen, "Power correlation of OFDM symbols and peak-to-average power ratio analysis," *Proc. CISS'2003*, Baltimore, MD, March 2003.
57. R. Niu, B. Chen, and P.K. Varshney, "Decision fusion using fading statistics," *Proc. CISS'2003*, Baltimore, MD, March 2003.
58. S. O'hara, B. Chen, and J. Periard, "Subcarrier orthogonal coding for peak-to-average power reduction without side information," *Proc. 2003 IEEE Sarnoff Symposium*, Ewing, New Jersey, March 2003.
59. Q. Cheng, H. Wang, and B. Chen, "Joint timing synchronization and channel estimation using receiver diversity," *Proceedings of the 36th Annual Asilomar Conference on Signals, Systems, and Computers*, Pacific Grove, CA, Nov. 2002.
60. B. Chen, R. Jiang, T. Kasetkasem, and P.K. Varshney, "Fusion of decisions transmitted over fading channels in wireless sensor networks," *Proceedings of the 36th Annual Asilomar Conference on Signals, Systems, and Computers*, Pacific Grove, CA, Nov. 2002.
61. B. Liu, B. Chen, and J.H. Michels, "A GLRT for multi-channel radar detection in the presence of non-Gaussian clutter and white Gaussian noise," *Proc. 2nd IEEE Sensor Array and Multichannel Signal Processing Workshop (SAM'2002)*, Rosslyn, VA, August, 2002.
62. Y. Lin, H. Wang, and B. Chen, "On the identifiability of OFDM channels with receiver diversity," *Proc. of the 6th International Conference on Signal Processing*, Beijing, China, August 2002.
63. H. Wang, Y. Lin, and B. Chen, "Blind OFDM channel estimation using receiver diversity," *Proc. of the 36th Annual Conference on Information and Systems Science*, Princeton, NJ, March 2002.
64. B. Chen and H. Wang, "Maximum likelihood estimate of OFDM carrier frequency offset," *Proc. of 2002 IEEE International Conference on Communications (ICC'02)*, New York, April, 2002.
65. B. Chen and H. Wang, "Blind OFDM frequency offset estimation via oversampling," *Proceedings of the 35th Asilomar Conference on Signals, Systems, and Computers*, Pacific Grove, CA, November, 2001.
66. B. Chen, P. Varshney, and J. Michels, "Adaptive CFAR detection via Bayesian hierarchical model based parameter estimation," *Proceedings of the 35th Asilomar Conference on Signals, Systems, and Computers*, Pacific Grove, CA, November, 2001.
67. B. Chen, "Distributed detection using a Bayesian sampling approach", *Proceedings of the 4th International Conference on Information Fusion*, Montreal, Canada, August 2001.
68. B. Chen, "Data fusion and hierarchical models — a Bayesian sampling approach to distributed detection", *Proceedings of the 35th Annual Conference on Information Sciences and Systems*, Baltimore, MD, March 2001.
69. B. Chen and P. Willett, "Asymptotic analysis of the MVD statistic and saddle-point approximation of its tail probability", *Proceedings of the 35th Annual Conference on Information Sciences and Systems*, Baltimore, MD, March 2001.

70. B. Chen and L. Tong, "Traffic modeling and tracking for multiuser detection for random access networks", *Proceedings of the IEEE ICASSP'00*, Istanbul, Turkey, May 2000.
71. B. Chen and L. Tong, "Traffic aided multiuser detection for random access networks" (invited paper), *Proceedings of the 37th Annual Allerton Conference*, Monticello, IL, Sep. 1999.
72. B. Chen and P. Willett, "Transient detection using a homogeneity test", *Proceedings of the IEEE ICASSP'99*, Phoenix, AZ, March, 1999.
73. P. Willett and B. Chen, "A new sequential detector for short-duration signals", *Proceedings of the IEEE ICASSP'98*, Seattle, WA, May, 1998.
74. B. Chen, P. Willett, and R. Streit, "Improved Bayes/GLRT transient detection", *Proceedings of 32nd Annual Conference on Information and Systems Science*, Princeton, NJ. March 1998.
75. B. Chen, P. Willett, and R. Streit, "A test of overdispersion in a data set with application to transient detection", *Proceedings of 32nd Annual Conference on Information and Systems Science*, Princeton, NJ, Mar. 1998.
76. B. Chen and P. Willett, "Quickest detection of superimposed HMMs using a multiple-target tracker", *Proceedings of the IEEE Aerospace Conference*, Snowmass at Aspen, CO, Mar. 1998.
77. B. Chen and P. Willett, "Quickest detection of HMM signals", *Proceedings of the 1997 IEEE Conference on Decision and Control*, San Diego, CA, Dec., 1997.
78. B. Chen and P. Willett, "The extra bandwidth for FDMA versus CDMA for a Gaussian MAC", *Proceedings of the 31st Annual Conference on Information and Systems Science*, Baltimore, MD, Mar. 1997.