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Employment History:

- **The University of Sydney**, Research Fellow, 1997-2000
- **The University of New South Wales**, Lecturer, 2000-2001
- **The University of New South Wales**, Senior Lecturer, 2002-2005
- **The University of New South Wales**, Assoc. Professor, 2006-2009
- **The University of New South Wales**, Professor, 2010-

Membership:

- IEEE FELLOW
- Editor for IEEE Transactions on Communications 2012-now
- Editor for European Transactions on Telecommunications 2011-now
- Guest Editor for EURASIP Journal on Wireless Communications and Networking, 2008
- Editor for ETRI Journal, South Korean, Oct. 2006- Sept. 2009
- A TPC Member of IEEE ICC 2005, 2006, 2007, 2008, 2009, 2010, 1011, 2012 Globecom 2003, 2004, 2005, 2007, 2008, 2009, 2010, 2011, VTC2004 2005, 2006 2007 , etc
- TPC CO-CHAIR FOR IEEE ICC WCS 2014
- TPC CO-CHAIR FOR IEEE GLOBECOM CTS 2016
- TUTORIAL CHAIR FOR IEEE VTC 2017 SPRING
- General Chair of the 10thAustralian Communications Theory Workshop 2009, Sydney
- Chair of Communications Theory Symposium of The 13th IEEE international conference on communication technology (ICCT)
- Program Chair of Information and Coding Theory of the 7th International Conference on Communications and Networking in China(ChinaCOM 2012)
- General Chair for ACoRN workshop on cooperative wireless communications in 2007 in Sydney, 2008 in Melbourne, 2009 in NICTA at Australian Technology Park, and 2014 in Sydney

Research Interest:

- Mobile and Wireless Communications
- Information Theory
- Turbo Coding and Iterative Processing

- Space Time Coding and MIMO Techniques
- Wideband CDMA and OFDM

Awards:

2011: Best Paper Award of IEEE Wireless Communications and Networking Conference (WCNC), Cancun, Mexico, 2011. G. Wang, W. Xiang, J. Yuan, and T. Huang, "Outage Performance of Analog Network Coding in Generalized Two-way Multi-Hop Networks".

2007: Best paper award of IEEE International Symposium on Wireless Communications Systems (ISWCS), October 2007, Trondheim, Norway. I. Nevat and J. Yuan, "Error Propagation Mitigation for Iterative Channel Tracking, Detection and Decoding of BICM-OFDM Systems", Proceedings of IEEEInternational Symposium on Wireless Communications Systems (ISWCS), October 2007, Trondheim, Norway. (Sponsored jointly by IEEE Communications Society and IEEE Vehicular Technologies Society)

2007: Best paper awardof International conference on wireless broadband and ultra wideband communications, Sept. 2007, Sydney, Australia. K. Huang, and J. Yuan, "Power Allocation for MMSE Feedback Precoder on Multi-Antenna Broadcast Channels", International conference on wireless broadband and ultra wideband communications, Sept. 2007, Sydney, Australia

2001: Anthony Mason International Fellowship, the University of New South Wales

1997: Norman I Fellowship, the University of Sydney

1996: Young Scientist Award of Chinese Institute of Electronics for a research paper

Publications:

Books: Top

- Branka Vucetic and Jinhong Yuan, TURBO CODING: PRINCIPLES AND APPLICATIONS, Kluwer Academic Publishers, May 2001.
- Branka Vucetic and Jinhong Yuan, SPACE-TIME CODING, John Wiley & Sons, April 2003.

Book Chapters: Top

- **J. Yuan**, B. Vucetic, W. Feng, and M. Tan, Chapter 2. Design of Cyclic-shift interleavers for turbo codes, (pp. 10-28), Edited by Michel Jezequel andRamesh Pyndiah, *Turbo Codes: Error-Correcting Codes of Widening Application,* Hermes Penton Science, 2002.
- K. Huang, and **J. Yuan**, Chapter 6. Power Allocation for MMSE Feedback Precoder on Multi-Antenna Broadcast Channels, (pp. 133-152)J. Agbinya et al. Ed., The River Publishers' Series in Communications on Advances on Broadband Communication and Networks, 2008.
- G. Geraci, and **J. Yuan**, Chapter 6. Physical Layer Security for Multiuser MIMO Communications, Recent Trends in Multi-user MIMO Communications, (pp.141-156), ISBN 978-953-51-1210-5, edited by Maha Ben Zid, Recent Trends in Multi-user MIMO Communications, 2013.

Editorial: Top

- Y. Li, **J. Yuan**, A. Stefanov, and B. Vucetic, *Advanced Error Control Coding Techniques*, EURASIP Jour. on Wireless Communications and Networking, 2008.
- X. Cheng, **J. Yuan**, A. Tajer, A. Hu, W. Zhou, Special issue on recent advances in network and information security-security and communication networks journal, Security and Communication Networks 8(1):1-1 10 Jan 2015

- **J. Yuan**, Y. Yang and N. Zhou, Special Topic: Physical layer security for wireless and quantum communications, ZTE Communications, vol. 11, no. 3, Sept. 2013.

Selected Journal Papers: Top

1. H. Deng, H. M. Wang, **J. Yuan**, W. Wang, Q. Yin, Secure Communication in Uplink Transmissions: User Selection and Multiuser Secrecy Gain. *IEEE Transactions on Communications*, 2016, *64*(8), 3492-3506. doi:10.1109/TCOMM.2016.2585128
2. L. Yang, T. Yang, Y. Xie, **J. Yuan**, and J.An, Linear physical-layer network coding and information combining for the K-user fading multiple-access relay network. *IEEE Transactions on Wireless Communications*, 2016, *15*(8), 5637-5650.
3. F. K. Gong, G. Li, J. Ge, and **J. Yuan**, Distributed Concatenated Recursive Alamouti-Circulant STBC for Two-Way Multi-Relay Networks. *IEEE Transactions on Communications*, 2016, *64*(8), 3262-3274. doi:**10.1109/TCOMM.2016.2589269**
4. D. Jia, Z. Fei, **J. Yuan**, S. Tian, andJ. Kuang, A Hybrid EF/DF Protocol With Rateless Coded Network Code for Two-Way Relay Channels. *IEEE Transactions on Communications*, 2016, *64*(8), 3133-3147. doi:**10.1109/TCOMM.2016.2583422**
5. L. Yang, T. Yang, Y. Xie, **J. Yuan** and J. An, Multiuser Decoding Scheme for K-user Fading Multiple-Access Channel Based on Physical-Layer Network Coding. *IEEE Communications Letters*, 2016, *20*(5), 1046-1049. doi:**10.1109/LCOMM.2016.2542132**
6. Y. Xie, L. Yang and **J. Yuan,** Q-Ary Chain-Containing Quantum Synchronizable Codes. *IEEE Communications Letters*, 2016, *20*(3), 414-417. doi:**10.1109/LCOMM.2015.2512261**
7. H. Wang, T. Zheng, **J. Yuan**, D. Towsley and M. Lee, Physical Layer Security in Heterogeneous Cellular Networks. *IEEE Transactions on Communications*, 2016, *64*(3), 1204-1219. doi:**10.1109/TCOMM.2016.2519402**
8. Y. Xie, L. Yang, P. Kang, &**J. Yuan**, Euclidean geometry based spatially-coupled LDPC codes for storage. *IEEE Journal on Selected Areas in Communications, vol. 34, no. 9, Sept. 2016, pp. 2498-2509*. doi:**10.1109/JSAC.2016.2603703**
9. Y. Liu, Z. Ding, M. Elkashlan, and **J. Yuan**, Non-orthogonal multiple access in large-scale underlay cognitive radio networks, *IEEE Transactions on Vehicular Technology, Feb. 2016.*
10. N. Yang, M. Elkashlan, T. Q. Duong, J. Yuan, and R. Malaney, Optimal transmission with artificial noise in MISOME wiretap channels, *IEEE Transactions on Vehicular Technology, April 2016, vol 65, no. 4, pp. 2170-2181.*
11. T. Zheng, H. Wang, **J. Yuan**, D. Towsley and M. Lee, Multi-Antenna Transmission with Artificial Noise Against Randomly Distributed Eavesdroppers, *IEEE Transactions on Communications, vol. 63, no. 11, pp. 4347-4362, 2015.*
12. S. Yan, N. Yang, G. Geraci, R. Malaney, and **J. Yuan**, Optimization of Code Rates in SISOME Wiretap Channels, *IEEE Transactions on Wireless Communications*, vol. 14, no. 11, pp. 6377-6388, 2015.
13. B. He, N. Yang, X. Zhou, and **J. Yuan**, Base Station Cooperation for Confidential Broadcasting in Multi-Cell Networks, *IEEE Transactions on Wireless Communications*, vol. 14, no. 10, pp. 5287-5299, 2015.
14. L. Yang, T. Yang, **J. Yuan**, and J. An, Achieving the near-capacity performance of two-way relay channels with modulation-coded physical-layer network coding, *IEEE Transactions on Wireless Communications*, vol. 14., no. 9, pp. 5225-5239, 2015
15. M. Shirvanimoghaddam, Y. Li, B. Vucetic, and **J. Yuan**, Binary Compressive Sensing Via Analog Fountain Coding, *IEEE Transactions on Signal Processing*, vol. 63, no. 24, pp. 6540-6552, 2015.
16. L. Yao, N. Yang, M. Elkashlan, and **J. Yuan**, Partial Channel Quality Information Feedback in Multiuser Relay Networks over Nakagami-m Fading, *IEEE Transactions on Wireless Communications*, vol. 14, no. 9, pp. 4783-4796, 2015.

17. J. Guo, T. Yang, **J. Yuan** and J. Zhang, Linear Vector Physical-Layer Network Coding for MIMO Two-Way Relay Channels: Design and Performance Analysis, *IEEE Transactions on Communications* **63**(7):2591-2604 01 Jul 2015

18. C. Liu, N. Yang, **J. Yuan**, and R. Malaney, Location-Based Secure Transmission for Wiretap Channels, *IEEE Journal on Selected Areas in Communications*, **33**(7):1458-1470 01 Jul 2015

19. N. Yang, S. Yan, **J. Yuan**, R. Malaney, R. Subramanian, I. Land, Artificial noise: Transmission optimization in multi-input single-output wiretap channels, *IEEE Transactions on Communications,* **63**(5):1771-1783 01 May 2015

20. N. Yang, L. Wang, G. Geraci, M. Elkashlan, **J. Yuan**, M. Di Renzo, Safeguarding 5G wireless communication networks using physical layer security, *IEEE Communications Magazine,* **53**(4):20-27 01 Apr 2015

21. G. Wang, W. Xiang, **J. Yuan**, Multihop compute-and-forward for generalised two-way relay channels, *Transactions on Emerging Telecommunications Technologies* **26**(3):448-460 01 Mar 2015

22. J. Li, **J. Yuan**, R. Malaney, Wireless network coding design based on LDPC codes for a multiple-access relaying system, *Transactions on Emerging Telecommunications Technologies* **26**(3):380-388 01 Mar 2015

23. T. Yang, Q. T. Sun**, J. Yuan**, J. A. Zhang, A Linear Network Coding Approach for Uplink Distributed MIMO Systems: Protocol and Outage Behavior, *IEEE Journal on Selected Areas in Communications* **33**(2):250-263 01 Feb 2015

24. I. Nevat, G. W. Peters, A. Doucet, **J. Yuan**, Joint channel and Doppler offset estimation in dynamic cooperative relay networks, *IEEE Transactions on Wireless Communications*, vol. 13, no. 12, pp. 6570-6579, Dec 2014

25. A. Razi, D. J. Ryan**, J. Yuan** and I. Collings, Sum rates for multi-user MIMO vector perturbation precoding with regularization, *Physical Communication*, vol. 13, Dec. 2014, pp. 187-196.

26. C. Cao, Z. Fei, **J. Yuan**, J. Kuang, Low complexity list successive cancellation decoding of polar codes, *IET Communications* **8**(17):3145-3149 27 Nov 2014

27. M. Huang, and **J. Yuan**, Error Performance of Physical-Layer Network Coding in Multiple-Antenna TWRC, *IEEE Transactions on Vehicular Technology* **63**(8):3750-3761 Oct 2014

28. G. Wang, W. Xiang, **J. Yuan**, Generalized Wireless Network Coding Schemes for Multihop Two-Way Relay Channels, *IEEE Transactions on Wireless Communications* **13**(9):5132-5147 Sep 2014

29. F. Dong, A. Burr, **J. Yuan**, Linear Physical-Layer Network Coding Over Hybrid Finite Ring for Rayleigh Fading Two-Way Relay Channels, *IEEE Transactions on Communications* **62**(9):3249-3261 Sep 2014

30. N. Yang, G. Geraci, **J. Yuan**, R. Malaney, Confidential Broadcasting via Linear Precoding in Non-Homogeneous MIMO Multiuser Networks, *IEEE Transactions on Communications* **62**(7):2515-2530 Jul 2014

31. Q. Wang, D-W Yue**, J. Yuan**, An optimal cooperative spectrum sensing strategy with exponential primary link traffic, *Wireless Communications and Mobile Computing* **14**(8):789-802 10 Jun 2014

32. G. Geraci, H. S. Dhillon, JG Andrews, **J. Yuan**, Collings IB, Physical Layer Security in Downlink Multi-Antenna Cellular Networks, *IEEE Transactions on Communications* **62**(6):2006-2021 Jun 2014

33. G. Geraci, S. Singh, J. Andrews, **J. Yuan**, I. B. Collings, Secrecy Rates in Broadcast Channels with Confidential Messages and External Eavesdroppers, *IEEE Transactions on Wireless Communications* **13**(5):2931-2943 May 2014

34. S. Yan, N. Yang, R. Malaney, and **J. Yuan**, "Transmit antenna selection with Alamouti coding and power allocation in MIMO wiretap channels," *IEEE Trans. Wireless Communications*, **13**(3):1656-1667 Mar 2014

35. L. Wang, N. Yang, M. Elkashlan, P. L. Yeoh, and **J. Yuan**, "Physical layer security of maximal ratio combining in two-wave with diffuse power fading channels," *IEEE Transactions on Information Forensics and Security*, vol. 9, no. 2, pp. 247-258, Feb. 2014

36. M. A. Karim, **J. Yuan**, Z. Chen, and J. Li, Distributed Space-Time Code with Mutual Information Based Soft Information Relaying, *IEEE Communications Letters,***17**(12):2276-2279, Dec 2013

37. N. Yang, M. Elkashlan, P. L. Yeoh, and **J. Yuan**, "An introduction to transmit antenna selection in MIMO wiretap channels," Invited Paper for*ZTE Communications*, vol. 11, no. 3, pp. 26-32, Sept. 2013

38. J.A. Zhang, I.B. Collings, C. Chen, L. Roullet, L. Luo, S. Ho and **J. Yuan**, "Evolving Small-Cell Communications Towards Mobile-Over-FTTx Networks", *IEEE Communications Magazine*, vol. 51, no. 12, pp. 92-101, Dec 2013.

39. Q. T. Sun, T. Huang, and **J. Yuan**, On Lattice-Partition-Based Physical-Layer Network Coding over GF(4), *IEEE Communications Letters*, vol. 17, No. 10, Oct 2013, pp. 1988-1991

40. N. Yang, P. L. Yeoh, M. Elkashlan, R. Schober, and **J. Yuan,** MIMO Wiretap Channels: Secure Transmission Using Transmit Antenna Selection and Receive Generalized Selection Combining, *IEEE Communications Letters*, vol. 19, no. 9, Sept 2013, pp. 1754-1757.

41. Z. Fei, A. Yang, C. Xing, **J. Yuan**, J. Kuang ,"Performance of Superposition Coding for Downlink Coordinated Two-Point System*",* *IEEE Transactions on Vehicular Technology*, vol. 62, no. 8, Oct 2013, pp. 4057-4064.

42. G. Geraci, A. Y. Al-nahari, **J. Yuan**, and I. Collings, Linear Precoding for Broadcast Channels with Confidential Messages under Transmit-Side Channel Correlation, *IEEE Communications Letters,* Vol. 17, No. 6, pp. 1164-1167, June 2013.

43. G. Geraci, R. Couillet, **J. Yuan**, M. Debbah, and I. B. Collings, Large System Analysis of Linear Precoding in MISO Broadcast Channels with Confidential Messages*, IEEE Journal on Selected Areas in Communications-PHYSEC*, vol 31, no. 9, Sept 2013, pp. 1660-1671.

44. M. H. Azmi, J. Li, **J. Yuan**, and R. Malaney, LDPC codes for soft decode-and-forward in half-duplex relay channels, *IEEE Journal on Selected Area in Communications*, in Special Issue on Theories and Methods for Advanced Wireless Relays, vol. 31, no. 8, Aug. 2013, pp. 1402-1413

45. Q. T. Sun, **J. Yuan**, T. Huang, and K. W. Shum, Lattice Network Codes Based on Eisenstein Integers, *IEEE Transactions on Communications*, vol. 61, no. 7, Jul 2013, pp. 2713-2725

46. A. Yang, Z. Fei, C. Xing, M. Xiao, **J. Yuan**, and J. Kuang, Design of Binary Network Codes for Multi-user Multi-way Relay Networks, *IEEE Transactions on Vehicular Technologies, vol. 62, no. 8, Oct 2013, pp. 3786-3799*

47. J. Li, W. Chen, A. Norsratinia, **J. Yuan**, On The Throughput-Reliability Tradeoff for Amplify-and-Forward Cooperative Systems, *IEEE Transactions on Communications, Vol. 61, no. 4, April 2013, pp.1290-1303.*

48. T. Yang, X. Yuan, P. Li, I. B. Collings and **J. Yuan**, A new physical-layer network coding scheme with eigen-direction alignment precoding for MIMO two-way relaying, *IEEE Transactions on Communications, vol 61, no 3, Mar. 2013, pp.973-986*

49. G. Wang, W. Xiang, and **J. Yuan**, "Multi-Hop Compute-and-Forward for Generalized Two-Way Relay Channels," *Transactions on Emerging Telecommunications Technologies, Apr. 2013*.

50. J. Li, M. A. Karim, **J. Yuan**, Z. Chen, Z. Lin, B. Vucetic, "Novel Soft Information Forwarding Protocols in Two-Way Relaying Channels," *IEEE Transactions on Vehicular Technology*, vol. 62, no. 5, May 2013, pp. 2374-2381.

51. J. Li, **J. Yuan**, and R. Malaney, "Wireless Network Coding Design based on LDPC Codes for a Multiple-Access Relaying System," *European Transactions on Emerging Telecommunications Technologies, Jan 2013.*

52. T. Huang, T. Yang, **J. Yuan**, and I. Land, Design of irregular repeat-accumulate coded physical-layer network coding for Gaussian Two-way relay channels, *IEEE Transactions on Communications, vol. 61, no. 3, Mar. 2013, pp. 897-909.*

53. J. C. F. Li, W. Zhang, A. Nosratinia, and **J. Yuan**, SHARP: Spectrum harvesting with ARQ retransmission and probing in cognitive radio, *IEEE Transactions on Communications*, vol. 61, no. 3, pp. 951-960, Mar, 2013

54. G. Wang, W. Xiang, and **J. Yuan,** Outage Analysis for Compute-and-Forward in Generalized Multi-Way Relay Channels, *IEEE Communications Letter, vol. 16, pp. 2099-2102, Dec 2012.*

55. James C. F. Li, Wei Zhang, Aria Nosratinia, and **Jinhong Yuan**, SHARP: Spectrum harvesting with ARQ retransmission and probing in cognitive radio, *IEEE Transactions on Communications*, vol. 61, no. 3, Mar 2013, pp. 951-960.

56. Gareth Peters, Ido Nevat, and **Jinhong Yuan**, System Identification in Wireless Relay Networks via Gaussian Process, *IEEE Transactions on Vehicular Technologies*, vol. 61 no. 9, pp. 3969-3983*,* 2012

57. N. Yang, P. L. Yeoh, M. Elkashlan, **J. Yuan**, and I. B. Collings, "Cascaded TAS/MRC in MIMO multiuser relay networks," *IEEE Transactions on Wireless Communications*, vol. 11, no. 10, Oct 2012, pp. 3829-3839.

58. Q. Wang, Dianwu Yue, and **Jinhong Yuan**, An Optimal Cooperative Spectrum Sensing Strategy with Exponential Primary Link Traffic, Wireless Communications and Mobile Computing, April 2012

59. Marwan H. Azmi, Jun Li, **Jinhong Yuan**, and Robert Malaney, LDPC codes for soft decode-and-forward in half-duplex relay channels, *IEEE Journal on Selected Area in Communications*, Special Issue on Theories and Methods for Advanced Wireless Relays, vol. 31, no. 11, Nov. 2013, pp. 2517-2527

60. Giovanni Geraci, Malcolm Egan, **Jinhong Yuan**, Adeel Razi, Iain Collings, Secrecy Sum-Rates for Multi-User MIMO Regularized Channel Inversion Precoding, *IEEE Transactions on Communications*, vol. 60, no. 11, Nov 2012, pp. 3472-3482.

61. N. Yang, M. Elkashlan, Phee Lep Yeoh, and **J. Yuan**, "Multiuser MIMO relay networks in Nakagami-m fading channels," *IEEE Transactions on Communications*, vol. 60, no. 11, Nov 2012, pp. 3298-3310.

62. Jun Li, **Jinhong Yuan**, Robert Malaney, Ming Xiao and Wen Chen, "Full-diversity binary frame-wise Network Coding for Multiple-Source Multiple-Relay Networks over slow-fading channels," vol. 61, no. 3, *IEEE Transactions onVehicular Technologies*, pp. 1346-1360, 2012.

63. Md Anisul Karim, **Jinhong Yuan**, Zhuo Chen and Jun Li, Soft information relaying in fading channels, *IEEE Wireless Communications Letters*, vol. 1, no. 3, pp. 233-236, June 2012.

64. Tao Yang, Ingmar Land, Tao Huang, **Jinhong Yuan**, and Zhuo Chen, Distance spectrum and performance of channel-coded physical-layer network coding for binary-input Gaussian two-way relay channels, *IEEE Transactions on Communications*, vol. 60, no. 6, pp. 1499-1510, June 2012.

65. Adeel Razi, Yubin Shao, **Jinhong Yuan**: User scheduling for multi-antenna downlink channels with limited feedback. *Trans. European Transactions on Telecommunications, Emerging Telecommunications Technologies (ETT)* 23(1):36-49 (2012)

66. M. H. Azmi, **J. Yuan**, G. Lechner, and L. K. Rasmussen, , Design of Multi-Edge-Type Bilayer-Expurgated LDPC Codes for Decode-and-Forward in Relay Channels, *IEEE Transactions on Communications*, vol. 59, no. 11, pp. 2993 – 3006, 2011

67. J. C. F. Li, **W. Zhang**, and **J. Yuan**, "Opportunistic spectrum sharing in cognitive radio networks based on primary limited feedback," *IEEE Transactions on*

Communications, vol. 59, no. 10, October, pp. 3272-3277, 2011

68. G. Wang, W. Xiang, **J. Yuan**, and T. Huang, "Outage Analysis of Non-Regenerative Analog Network Coding for Two-Way Multi-Hop Networks", *IEEE Communications Letters*, vol. 15, no. 6, pp. 662-664, 2011.

69. Jun Li, **Jinhong Yuan**, Robert Malaney, Marwan H. Azmi, and Ming Xiao, "Network Coded LDPC Code Design for a Multi-source Relaying System," *IEEE Transactions on Wireless Communications*. vol. 10, no. 5, pp. 1538-1551, 2011

70. N. Yang, M. Elkashlan, and **J. Yuan**, "Impact of Opportunistic Scheduling on Cooperative Dual-Hop Relay Networks ", *IEEE Transactions on Communications, vol. 59, no. 3, Mar 2011, pp. 689-694*.

71. D. Yue, **J. Yuan**, "On the power of MIMO broadcast systems under SNR constraints with limited feedback", *IEEE Transactions on Vehicular Technologies,* vol. 60, no. 1, pp. 349-353, Jan. 2011

72. T. Yang, **J. Yuan**, and W. Zhang, "Recovering cooperative multiplexing gain in wireless relay networks" *IEEE Transactions on Communications,* vol. 58, no. 12, pp. 3538-3549, Dec. 2010

73. G.W. Peters, I. Nevat, S. Sisson, Y. Fan and **J. Yuan**, "Bayesian symbol detection in wireless relay networks via likelihood-free inference," *IEEE Transactions On Signal Processing*, vol. 58, no. 10, pp. 5206-5218, Oct. 2010.

74. Md. A. Karim, T. Yang, **J. Yuan**, Z. Chen, and I. Land "A Novel Soft Forwarding Technique for Memoryless Relay Channels Based on Symbol-Wise Mutual Information," *IEEE Communication Letters*, vol. 14, no. 10, pp. 927-929, Oct. 2010

75. N. Yang, M. Elkashlan, **J. Yuan**, and T. Shen, "On the SER of Fixed Gain Amplify-and-Forward Relaying with Beamforming in Nakagami-*m* Fading",*IEEE Communication Letters*, vol. 14, no. 10, pp. 942-944, Oct. 2010.

76. Nevat, T. Yang, K. Avnit, and **J. Yuan**, "MIMO Detection With High-level Modulations using Power Equality Constraints," *IEEE Transactions on Vehicular Technologies*, vol. 59, no. 7, pp. 3383-3392, Sept. 2010

77. N. Yang, M. Elkashlan, and **J. Yuan**, "Outage Probability of Multiuser Relay Networks in Nakagami-m Fading Channels", *IEEE Transactions on Vehicular Technology,* vol. 59, no. 5, pp. 2120-2132, June 2010.

78. Nevat, G. W. Peters and **J. Yuan**, "Detection of Gaussian Constellations in MIMO systems under Imperfect CSI," *IEEE Transactions on Communications*, vol. 58, no. 4, pp. 1151-1160, April 2010,

79. **J. Yuan**, Y. Li, and L. Chu, "Differential Modulation and Relay Selection With Detection-and-forward Cooperative Relaying," *IEEE Transactions on Vehicular Technology*, vol. 59, no. 1, Jan 2010, pp. 261-268.

80. H.Q. Huynh, S.I. Husain, **J. Yuan**, A.Razi and H. Suzuki, "Performance Analysis of Multi-branch Dual-hop Non-regenerative Relay Systems", *EURASIP Journal on Wireless Communications and Networking*. vol. 2010, Article ID 835498, 2010. doi:10.1155/2010/835498

81. T. Yang, and **J. Yuan**, "Performance of Iterative Decoding for Superposition Modulation-based Cooperative Transmission", *IEEE Transactions on Wireless Communications*, vol. 9, no. 1, pp. 51-59, Jan. 2010

82. Razi, D. J. Ryan, I. B. Collings, **J. Yuan**, "Sum rates, rate allocation and user scheduling for multi-user MIMO vector perturbation precoding", *IEEE Transactions on Wireless Communications*, vol. 9, no. 1, Jan. 2010, pp. 356-365.

83. **J. Yuan**, Z. Chen, Y. Li and J. Chu, "Distributed Space-time trellis codes for a cooperative system*", IEEE Trans. Wireless Communications*. 2009, vol. 8, No. 10, Oct 2009, pp. 4897-4905

84. G. W. Peters, Ido Nevat, and **J. Yuan**, Channel Estimation in OFDM Systems with Unknown Power Delay Profile using Trans-dimensional MCMC via Stochastic

Approximation and Conditional Path Sampling, *IEEE Trans. Signal Processing*, Sep. 2009, vol 57, No. 9 pp. 3545-3561.

85. T. Yang, **J. Yuan**, and Z. Shi, "Rate Optimization for IDMA systems with iterative joint multiuser decoding", *IEEE Trans. Wireless Communications*. vol 8. No. 3, March, 2009, pp.1148-1153.

86. Syed, **J. Yuan**, J. Zhang, and R. K. Martin, "Time Domain Equalizer Design Using Bit Error Rate Minimization for UWB Systems," *EURASIP Journal on Wireless Communications and Networking*, March 2009. doi:10.1155/2009/786291

87. Nevat and **J. Yuan**, "Joint Channel Tracking and Decoding for BICM-OFDM Systems using Consistency Tests and Adaptive Detection Selection," *IEEE Transactions on Vehicular Technology*, vol 58 no 8, pp. 4316-4328. 2009

88. T. Yang, **J. Yuan**, and Z. Shi , "Joint Gaussian approximation and multi-stage LLR combining in the iterative receiver for MIMO-BICM systems", *IEEE Trans. Wireless Communications*, vol. 7, no. 12, Dec. 2008, pp. 5250-5256

89. T. Yang, **J. Yuan**, Z. Shi and M. C. Reed, Convergence Behavior Analysis and Detection Switching for the Iterative Receiver of MIMO-BICM Systems, *IEEE Transactions on Vehicular Technology*, vol. 57, no. 4, July 2008, pp. 2642-2648.

90. K. Allan, Y. Li and B. Vucetic, **J. Yuan** "Power allocation and code construction for space–time turbo trellis codes with partial CSI feedback," *IEE Electronics Letters*, May 2008 vol. 44, no. 11, pp. 689-690.

91. L. Chu, **J. Yuan**, and Z. Chen, "A Coded Beamforming Scheme for Frequency-Flat MIMO Fading Channels," *IEE Proceedings Communications*, no 5, pp. 1075-1081, Oct. 2007.

92. X. Shao, **J. Yuan**, and Y, Shao, "Error performance analysis of linear zero forcing and MMSE precoders for MIMO broadcast channels," *IEE Proceedings Communications*, Oct. 2007, no 5, pp. 1067–1074.

93. S. I. Husain, **J. Yuan** and J. Zhang, "Modified channel shortening receiver based on MSSNR algorithm for UWB channels," *IEE Electronics Letters*, vol. 43, no 9, April 2007, pp. 535-537

94. **J. Yuan**, "Adaptive transmit antenna selection with pragmatic space-time trellis codes,"*IEEE Transactions on Wireless Communications*, vol. 5, no. 7, pp. 1706-1715, July 2006.

95. X. Shao and **J. Yuan**, "Multiuser scheduling for MIMO broadcast and multiple access channels with linear precoders and receivers,"*IEE Proc-Communi.*, vol. 153, no. 4, pp. 541-547, August 2006.

96. J. Choi, Y. Hong and **J. Yuan**, "An approximate MAP-based iterative receiver for MIMO channels using modified sphere detection", *IEEE Transactions on Wireless Communications*, vol. 5, no. 8, pp. 2119-2126, July 2006.

97. Y. Yu, S. Kerouedan, and **J. Yuan**, "Transmit antenna shuffling for quasi-orthogonal space-time block codes with linear receivers", *IEEE Communications Letters*, vol. 10, no. 8, pp. 596-598, August 2006.

98. Y. Yu, S. Kerouedan, and **J. Yuan**, "Closed-loop extended orthogonal space-time block codes for three and four transmit antennas", *IEEE Signal Processing Letters*, vol 13, no. 5, pp. 273-276, May 2006.

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