

## 蔡育仁 Publication List

### (A) 期刊論文

1. Ywh-Ren Tsai and Jin-Fu Chang, "Using Frequency Hopping Spread Spectrum Technique to Combat Multipath Interference in a Multiaccessing Environment," *IEEE Transactions on Vehicular Technology*, pp. 211-222, May 1994. (SCI, EI) (Impact Factor 1.488, 17/76) **(SCI: 16 citations/Self-cited: 0)**
2. Ywh-Ren Tsai and Jin-Fu Chang, "Using Spread Spectrum Techniques to Combat Multipath Interference in Mobile Random Accessed Networks," *IEEE Transactions on Communications*, pp. 329-337, Feb./Mar./Apr. 1995. (SCI, EI) (Impact Factor 1.512, 15/76) **(SCI: 1 citation/Self-cited: 0)**
3. Ywh-Ren Tsai and Jin-Fu Chang, "Feasibility of Adding a Personal Communications Network to an Existing Fixed-Service Microwave System," *IEEE Transactions on Communications*, pp. 76-83, Jan. 1996. (SCI, EI) (Impact Factor 1.512, 15/76) **(SCI: 20 citations/Self-cited: 1)**
4. Ywh-Ren Tsai and Horng-Shyang Liaw, "A Study of PACS Personal Communication Service System Co-channel Interference," *TL Technical Journal*, pp. 421-434, June 1996.
5. Shiann-Jau Tsai and Ywh-Ren Tsai, "Co-channel and Adjacent Channel Interference on Trunked Radio Systems," *Chunghwa Telecom Technical Quarterly Journal*, pp. 132-143, May 1997.
6. Chyi-Nan Wu, Ywh-Ren Tsai and Jin-Fu Chang, "A Quality-Based Birth-and-Death Queueing Model for Evaluating the Performance of an Integrated Voice/Data CDMA Cellular System," *IEEE Transactions on Vehicular Technology*, pp. 83-89, Jan. 1999. (SCI, EI) (Impact Factor 1.488, 17/76) **(SCI: 17 citations/Self-cited: 0)**
7. Shiuh-Jeng Wang, Ywh-Ren Tsai and Jin-Fu Chang, "A New Two-way and Location-secure Authentication Scheme Based on Secret Sharing," *Journal of the Chinese Institute of Electrical Engineering*, pp. 293-306, November 1999. (EI)
8. Shiuh-Jeng Wang and Yuh-Ren Tsai, "Private Communications in Hierarchical Group-Mobile Radio Systems," *Journal of Discrete Mathematical Science and Cryptography*, vol. 7, pp. 187-201, August 2004. (EI) (NSC-95-2221-E-015-003)
9. Yuh-Ren Tsai, and Kai-Jie Yang, "Coverage Shrinking and Available Data Rate Variations for 3G CDMA Mobile Cellular Systems," *IEICE Transactions on Communications*, vol. E89-B, no. 3, pp. 739-747, Mar. 2006. (SCI, EI) (Impact Factor 0.359, 53/76) **(SCI: 1 citation/Self-cited: 1)** (NSC 94-2213-E-007-008)
10. Yuh-Ren Tsai, and Cheng-Ju Chang, "SIM-based Subscriber Authentication Mechanism for Wireless Local Area Networks," *Computer Communications*, vol. 29, issue 10, pp. 1744-1753, June 2006. (SCI, EI) (Impact Factor 0.933, 36/76) **(SCI: 3 citations/Self-cited: 0)** (NSC 94-2752-E-007-003-PAE)
11. Yuh-Ren Tsai, "Spatial Correlation Models for Total Co-channel Interference and Carrier-to-Interference Ratio in Mobile Cellular Systems," *IEEE Transactions on Wireless Communications*, vol. 5, no. 10, pp. 2752-2759, Oct. 2006. (SCI, EI) (Impact Factor 1.903, 12/76) **(SCI: 1 citation/Self-cited: 1)** (NSC 93- 2752-E-007-003-PAE)

12. Yuh-Ren Tsai, "Macroscopic Diversity Combining Technique for Forward-link of CDMA Cellular Systems," *IEICE Transactions on Communications*, vol. E90-B, no. 1, pp. 69-77, Jan. 2007. (SCI, EI) (Impact Factor 0.359, 53/76) (NSC 91-2213-E-007-083)
13. Yuh-Ren Tsai and Shiuh-Jeng Wang, "Two-tier Authentication for Cluster and Individual Sets in Mobile Ad Hoc Networks," *Computer Networks*, vol. 51, issue 3, pp. 883-900, Feb. 2007. (SCI, EI) (Impact Factor 1.201, 23/76) (NSC 93-2752-E-007-003-PAE)
14. Yuh-Ren Tsai, "Coverage-Preserving Routing Protocols for Randomly Distributed Wireless Sensor Networks," *IEEE Transactions on Wireless Communications*, vol. 6, no. 4, pp. 1240-1245, Apr. 2007. (SCI, EI) (Impact Factor 1.903, 12/76) **(SCI: 14 citations/Self-cited: 0)** (NSC-95-2752-E-007-003-PAE)
15. Yuh-Ren Tsai and Xiu-Sheng Li, "Kasami Code-Shift-Keying Modulation for Ultra Wideband Communication Systems," *IEEE Transactions on Communications*, vol. 55, no. 6, pp. 1242-1252, June 2007. (SCI, EI) (Impact Factor 1.512, 15/76) **(SCI: 3 citations/Self-cited: 0)** (NSC 95-2219-E-007-006)
16. Shiuh-Jeng Wang, Yuh-Ren Tsai, Lei-Sheng Chou, and I-Shan Lin, "Mutually Identity Authentications in GSM-based Anonymous Communications," *Journal of Computers*, vol. 18, no. 2, pp. 33-46, July 2007. (NSC-95-2221-E-015-003)
17. Shiuh-Jeng Wang, Yuh-Ren Tsai and Chung-Wei Chen, "Strategies Averting Sybil-type Attacks Based on the Blom-scheme in Ad Hoc Sensor Networks," *Journal of Communications*, vol. 3, no. 1, pp. 20-26, Jan. 2008. (EI) (NSC 95-2221-E-015-002-MY2)
18. Yuh-Ren Tsai and Sin-Jih Huang, "PTS with Non-uniform Phase Factors for PAPR Reduction in OFDM Systems," *IEEE Communications Letters*, vol. 12, no. 1, pp. 20-22, Jan. 2008. (SCI, EI) (Impact Factor 1.14, 24/76) **(SCI: 4 citations/Self-cited: 0)** (NSC 96-2219-E-007-006)
19. Yuh-Ren Tsai, "Sensing Coverage for Randomly Distributed Wireless Sensor Networks in Shadowed Environments," *IEEE Transactions on Vehicular Technology*, vol. 57, no. 1, pp. 556-564, Jan. 2008. (SCI, EI) (Impact Factor 1.488, 17/76) **(SCI: 9 citations/Self-cited: 0)** (NSC 95-2752-E-007-003-PAE)
20. Shiuh-Jeng Wang, Yuh-Ren Tsai and Pin-You Chen, "Strategies of Proactive (k, n) Threshold Secret Sharing and Applications in a Secure Message Exchange System," *Journal of Computers*, vol. 19, no. 1, pp. 29-38, Apr. 2008.
21. Chung-Wei Chen, Shiuh-Jeng Wang and Yuh-Ren Tsai, "TLPKA: Pairwise Key Agreement Based on the Geometrical Property of the Tangent Line in Ad Hoc Network Systems," *International Journal of Hybrid Information Technology*, vol. 1, no. 4, pp. 49-66, Oct. 2008. (NSC 97-2221-E-015 -001)
22. Yuh-Ren Tsai and Li-Cheng Lin, "Quality Based OVSF Code Assignment and Reassignment Strategies for WCDMA Systems," *IEEE Transactions on Vehicular Technology*, vol. 58, no. 2, pp. 1027-1031, Feb. 2009. (SCI, EI) (Impact Factor 1.488, 17/76) **(SCI: 1 citation/Self-cited: 0)** (NSC 95-2752-E-007-003-PAE)
23. Yuh-Ren Tsai, "*M*-ary Spreading-Code-Phase-Shift-Keying Modulation for DSSS Multiple

- Access Systems,” *IEEE Transactions on Communications*, vol. 57, no. 11, pp. 3220-3224, Nov. 2009. (SCI, EI) (Impact Factor 1.512, 15/76) **(SCI: 1 citation/Self-cited: 0)** (NSC 94-2213-E-007-008)
24. Yuh-Ren Tsai and Kai-Jie Yang, “Approximate ML Doppler Spread Estimation over Flat Rayleigh Fading Channels,” *IEEE Signal Processing Letters*, vol. 16, no. 11, pp. 1007-1010, Nov. 2009. (SCI, EI) (Impact Factor 1.173, 103/245) **(SCI: 1 citation/Self-cited: 0)** (NSC 97-2219-E-007-007)
  25. Yuh-Ren Tsai and Li-Cheng Lin, “Sequential Fusion for Distributed Detection over BSC Channels in an Inhomogeneous Sensing Environment,” *IEEE Signal Processing Letters*, vol. 17, no. 1, pp. 99-102, Jan. 2010. (SCI, EI) (Impact Factor 1.173, 103/245) **(SCI: 3 citations/Self-cited: 0)** (NSC 97-2221-E-007-074- MY3)
  26. Y.-W. Peter Hong, Yuh-Ren Tsai, Yan-Yu Liao, Chih-Hsun Lin, and Kai-Jie Yang, “On the Throughput, Delay, and Energy Efficiency of Distributed Source Coding in Random Access Sensor Networks,” *IEEE Transactions on Wireless Communications*, vol. 9, no. 6, pp. 1965-1975, Jun. 2010. (SCI, EI) (Impact Factor 1.903, 12/76) **(SCI: 1 citations/Self-cited: 0)** (NSC-96-2752-E-007-003-PAE)
  27. Yuh-Ren Tsai and Li-Cheng Lin, “Optimal Power Allocation for Decode-and-Forward Cooperative Diversity under an Outage Performance Constraint,” *IEEE Communications Letters*, vol. 14, no. 10, pp. 945-947, Oct. 2010. (SCI, EI) (Impact Factor 1.14, 24/76) (NSC 97-2221-E-007-074-MY3)
  28. Shiuh-Jeng Wang, Yuh-Ren Tsai and Chien-Chih Shen, “Verifiable Threshold Scheme in Multi-Secret Sharing Distributions upon Extensions of ECC,” *Wireless Personal Communications*, vol. 56, no. 1, pp. 173-182, Jan. 2011. (SCI, EI) (Impact Factor 0.418, 49/77)
  29. Yuh-Ren Tsai and Yen-Chen Chen, “Multilevel Coupling Modulation for Multi-resolution Multimedia Broadcast/Multicast Service in OFDM Systems,” *IEEE Transactions on Communications*, vol. 59, no. 1, pp. 141-150, Jan. 2011. (SCI, EI) (Impact Factor 1.512, 15/77) (NSC 99-2219-E-007-006)
  30. Chung-Wei Chen and Yuh-Ren Tsai, “Location Privacy in Unattended Wireless Sensor Networks upon the Requirement of Data Survivability,” *IEEE Journal on Selected Areas in Communications*, vol. 29, no. 7, pp. 1480-1490, Aug. 2011. (SCI, EI) (Impact Factor 3.758, 2/77) (NSC 97-2221-E-007-074- MY3)
  31. Yuh-Ren Tsai and Cheng-Ju Chang, “Cooperative Information Aggregation for Distributed Estimation in Wireless Sensor Networks,” *IEEE Transactions on Signal Processing*, vol. 59, no. 8, pp. 3876-3888, Aug. 2011. (SCI, EI) (Impact Factor 2.212, 35/246) (NSC 97-2221-E-007-074-MY3)

## (B) 研討會論文

1. Ywh-Ren Tsai and Jin-Fu Chang, “Using Spread Spectrum Techniques to Combat Multipath Interference in Mobile Random Accessed Networks,” in Conf. Record of *International*

- Conference on Selected Topics in Wireless Communications*, 19.1, Vancouver, Canada, June 1992. (**Google Scholar: 3 citations**)
2. Ywh-Ren Tsai and Jin-Fu Chang, “The Feasibility of Combating Multipath Interference by Chirp Spread Spectrum Techniques over Rayleigh and Rician Fading Channels,” in Conf. Record of *International Symposium on Spread Spectrum Techniques & Applications, ISSSTA '94*, pp. 282-286, Oulu, Finland, July 1994. (EI) (**Google Scholar: 14 citations**)
  3. Ywh-Ren Tsai, Shu-Lan Her and Ming-Chich Hu, “Overview of Mobile Data Service Systems,” in Conf. Record of *First Workshop on Mobile Computing*, pp. 89-94, Hsinchu, Taiwan, Apr. 1995.
  4. Chyi-Nan Wu, Ywh-Ren Tsai and Jin-Fu Chang, “A Quality-Based Birth-and-Death Queueing Model for Evaluating the Performance of an Integrated Voice/Data CDMA Cellular System,” in Conf. Record of *Sixth IEEE International Symposium on Personal, Indoor and Mobile Radio Communications, (PIMRC'95)*, pp. 451-455, Toronto, Canada, Sept. 1995. (EI) (**Google Scholar: 25 citations**)
  5. Ywh-Ren Tsai and Jin-Fu Chang, “Migration from FDMA to CDMA - A Case Study,” in Conf. Record of *1996 Workshop on Computer Communication Networks*, pp. 145-156, Hsinchu, Taiwan, Mar. 1996.
  6. Ywh-Ren Tsai, “An Overlaid Hierarchical Structure for CDMA Cellular Mobile System,” in Conf. Record of *Second International Mobile Computing Conference*, pp. 80-88, Hsinchu, Taiwan, Mar. 1996.
  7. Shiuh-Jeng Wang, Le-Pond Chin, Jin-Fu Chang and Ywh-Ren Tsai, “ID-Based Authentication for Mobile Conference Call,” in Conf. Record of *12th International Conference on Information Security, (IFIP SEC'96)*, Island of Samos, Greece, May 1996. (EI)
  8. Horng-Shyang Liaw and Ywh-Ren Tsai, “Performance Simulation for IS-95 DS-SS Cellular System,” in Conf. Record of *2nd Radio Science Symposium*, Taoyuan, Taiwan, Dec. 1999.
  9. Horng-Shyang Liaw, Cheng-Hua Lee, Mei-Ying Wu and Ywh-Ren Tsai, “The Effect of Handoff Parameter and Power Distribution on the Performance of CDMA Cellular System,” in Conf. Record of *Fifth Symposium on Computer & Communication Technology*, Changhua, Taiwan, Oct. 2000.
  10. Yuh-Ren Tsai and Cheng-Ju Chang, “SIM-based Subscriber Authentication for Wireless Local Area Networks,” in Proc. of *IEEE International Carnahan Conference on Security Technology*, pp. 468 – 473, Oct. 2003. (EI) (**Google Scholar: 2 citations**)
  11. Yuh-Ren Tsai and Kai-Jie Yang, “Valid Cell Coverage and Maximum Available Data Rate for Third Generation CDMA Mobile Communication Systems,” in Proc. of *International Symposium on Communications*, Tao-Yuan, Dec. 2003. (NSC 90-2213-E-007-085)
  12. Yuh-Ren Tsai and Kai-Jei Yang, “Available Data Rate Variations for Third Generation CDMA Mobile Cellular Systems,” in Proc. of *IEEE 2004 Vehicular Technology Conference (VTC-2004 Spring)*, vol. 5, pp. 2512 – 2516, Milan, May 2004. (EI) (**Google Scholar: 1 citation**) (NSC90-2213-E007-085)

13. Yuh-Ren Tsai and Tsand-Ren Chen, "A Novel Macroscopic Diversity Technology for CDMA Mobile Communications Systems," in Proc. of *IEEE 2004 Vehicular Technology Conference (VTC-2004 Spring)*, vol. 1, pp. 485 – 489, Milan, May 2004. (EI) (NSC 91-2213-E-007-083)
14. Yuh-Ren Tsai, "Coherent  $M$ -ary Spreading-Code-Phase-Shift-Keying Modulation for Direct-Sequence Spread Spectrum Systems," in Proc. of *IEEE 2004 Vehicular Technology Conference (VTC-2004 Fall)*, vol. 1, pp. 759 – 763, Los Angeles, Sept. 2004. (EI) (**Google Scholar: 1 citation**) (NSC 93-2752-E-007-003-PAE)
15. Yuh-Ren Tsai and S.J. Wang, "Routing Security and Authentication Mechanism for Mobile Ad Hoc Networks," in Proc. of *IEEE 2004 Vehicular Technology Conference (VTC-2004 Fall)*, vol. 7, pp. 4716 – 4720, Los Angeles, Sept. 2004. (EI) (**Google Scholar: 11 citations**) (NSC 93-2752-E-007-003-PAE)
16. Yuh-Ren Tsai and J.W. Syu, "Spatial Correlation Models for Total Co-channel Interference and Carrier-to-Interference Ratio in Mobile Cellular Systems," in Proc. of *IEEE 2004 Global Telecommunications Conference (Globecom 2004)*, vol. 5, pp. 3073 – 3077, Dallas, Nov.-Dec. 2004. (EI) (**Google Scholar: 1 citation**) (NSC 93-2752-E-007-003-PAE)
17. Yuh-Ren Tsai and Li-Cheng Lin, "Quality Based OVSF Code Assignment and Reassignment Strategies for WCDMA Systems," in Proc. of *International Conference on Wireless Networks, Communications, and Mobile Computing (WirelessCom 2005)*, pp. 238 – 243, Maui, Hawaii, June 2005. (EI) (**Google Scholar: 5 citations**) (NSC 93-2752-E-007-003-PAE)
18. Yuh-Ren Tsai, Yi-Chien Wang and Kai-Jie Yang, "A New MAC Protocol for Streaming Services in Wireless Multi-channel Mobile Ad Hoc Networks," in Proc. of *IEEE 2005 International Conference on Information Technology: Research and Education (ITRE 2005)*, pp. 83 – 87, Hsinchu, Taiwan, June 2005. (EI) (NSC 93-2752-E-007-003-PAE)
19. Yuh-Ren Tsai, Tien-Yu Lin and Kai-Jie Yang, "Sensing Coverage for Randomly Distributed Wireless Sensor Networks in Shadowed Environments," in Proc. of *IEEE International Conference on Sensor Networks, Ubiquitous, and Trustworthy Computing (SUTC 2006)*, vol. 1, pp. 288 – 291, Taichung, Taiwan, June 2006. (EI) (**Google Scholar: 23 citations**) (NSC 94-2752-E-007-003-PAE)
20. Yuh-Ren Tsai and Che-Wei Lo, "Banyan-based Architecture for Quasi-Circuit Switching," in Proc. of *International Conference on Networking and Services (ICNS 2006)*, Silicon Valley, USA, July 2006. (EI) (**Google Scholar: 5 citations**) (NSC 93-2213-E-007-042)
21. Yuh-Ren Tsai, Sz-Yi Yeh and Kai-Jie Yang, "Path Metric-based Navigation Protocol for Wireless Sensor Networks," in Proc. of *Workshop on Wireless, Ad Hoc, and Sensor Networks (WASN 2006)*, Tao-Yuan, Taiwan, Aug. 2006. (NSC 93-2752-E-007-003-PAE)
22. Yuh-Ren Tsai and Xiu-Sheng Li, "Kasami Code-Shift-Keying Modulation for Ultra Wideband Communication Systems," in Proc. of *IEEE 2006 International Conference on Ultra-Wideband (ICUWB 2006)*, pp. 37 – 42, Massachusetts, USA, Sep. 2006. (EI) (**Google Scholar: 5 citations**) (NSC 94-2219-E-007-006)
23. Yuh-Ren Tsai, "Correlative  $M$ -ary Spreading-Code-Phase-Shift-Keying Modulation for Multiple Access Environments," in Proc. of *IEEE 2006 Vehicular Technology Conference*

- (VTC-2006 Fall), pp. 1 – 5, Montréal, Canada, Sept. 2006. (EI) (NSC 94-2219-E-007-006)
24. Yuh-Ren Tsai, “Coverage-Preserving Routing Protocols for Randomly Distributed Wireless Sensor Networks,” in Proc. of *IEEE 2006 Global Telecommunications Conference (Globecom 2006)*, San Francisco, USA, Nov.-Dec. 2006. (EI) (**Google Scholar: 32 citations**) (NSC 95-2752-E-007-003-PAE)
  25. Kai-Jie Yang and Yuh-Ren Tsai, “Link Stability Prediction for Mobile Ad Hoc Networks in Shadowed Environments,” in Proc. of *IEEE 2006 Global Telecommunications Conference (Globecom 2006)*, San Francisco, USA, Nov.-Dec. 2006. (EI) (**Google Scholar: 4 citations**) (NSC 95-2752-E-007-003-PAE)
  26. Yen-Chen Chen, Xiu-Sheng Li and Yuh-Ren Tsai, “Ranging Capacity and Inter-cell Interference Evaluation for OFDMA Broadband Wireless Mobile Communications,” in Proc. of *2006 National Symposium on Telecommunications*, Kaohsiung, Taiwan, Dec. 2006. (NSC 94-2219-E-007-006)
  27. Shih-Jeng Wang, Yuh-Ren Tsai, and Jhoong-Wei Chan, “A Countermeasure against Frequent Attacks Based on the Blom-scheme in Ad Hoc Sensor Networks,” in Proc. of *2007 International Symposium on Wireless Pervasive Computing (ISWPC 2007)*, pp. 160 – 163, Puerto Rico, Feb. 2007. (EI) (NSC 95-2221-E-015-003)
  28. Yuh-Ren Tsai, Yao-Win Hong, Yan-Yu Liao and Kai-Jie Yang, “The Efficiency and Delay of Distributed Source Coding in Random Access Sensor Networks,” in Proc. of *2007 IEEE Wireless Communications and Networking Conference (WCNC 2007)*, pp. 785-790, Hong Kong, Mar. 2007. (EI) (**Google Scholar: 1 citation**) (NSC-95-2752-E-007-003-PAE)
  29. Xiu-Sheng Li and Yuh-Ren Tsai, “Soft-Handoff Strategies for MB-OFDM Systems,” in Proc. of *IEEE 2007 Vehicular Technology Conference (VTC-2007 Spring)*, pp. 2722 – 2726, Dublin, Ireland, April 2007. (EI) (**Google Scholar: 1 citation**) (NSC 95-2219-E-007-006)
  30. 林立晟, 林聖偉, 蔡育仁, “無線區域網路之網路拓撲探勘技術研究,” in Proc. of *National Symposium on Telecommunications*, pp. 1080-1084, Taipei, Nov. 2007. (NSC 96-2623-7-007-014-D)
  31. Shih-Jeng Wang, Hung-Hsuan Chen, Pin-You Chen and Yuh-Ren Tsai, “Security Cryptanalysis in High-Order Improved Fast Encryption Algorithm for Multimedia,” in Proc. of *Future generation communication and networking (FGCN 2007)*, vol. 1, pp. 328-331, Jeju Island, Korea, Dec. 2007. (EI) (**Google Scholar: 2 citations**) (NSC 95-2221-E-015-002-MY2)
  32. Yuh-Ren Tsai, Kai-Jie Yang and Sz-Yi Yeh, “Non-uniform Node Deployment for Lifetime Extension in Large-scale Randomly Distributed Wireless Sensor Networks,” in Proc. of *IEEE International Conference on Advanced Information Networking and Applications (AINA2008)*, Okinawa, Japan, March 2008. (EI) (**Google Scholar: 2 citations**) (NSC 96-2752-E-007-003-PAE)
  33. Chung-Wei Chen, Shih-Jeng Wang and Yuh-Ren Tsai, “Geometrically Reciprocal Authentication Scheme Using Shift Tangent Line in Ad Hoc Network Systems,” in Proc. of *International Conference on Multimedia and Ubiquitous Engineering (MUE 2008)*, pp. 499-504, Busan, Korea, Apr. 2008. (EI) (NSC 96-3114-P-001-002-Y)

34. Yuh-Ren Tsai, Chin-Chou Wang, and Xiu-Sheng Li, "Adaptive Channel Estimation for MB-OFDM Systems in Multi-access Interfering Environments," in Proc. of *IEEE 2008 Vehicular Technology Conference (VTC-2008 Spring)*, pp. 918-922, Singapore, May 2008. (EI) (**Google Scholar: 5 citations**) (NSC 96-2219-E-007-006)
35. Yuh-Ren Tsai, Xiu-Sheng Li, and Chih-Yu Wei, "Data-carrier Aided Carrier Frequency Offset Estimation for OFDM Systems," in Proc. of *IEEE 2008 Vehicular Technology Conference (VTC-2008 Spring)*, pp. 898-902, Singapore, May 2008. (EI) (NSC 96-2219-E-007-006)
36. Yuh-Ren Tsai, Jyun-Wei Syu, and Yen-Shun Huang, "Down-link CIR Spatial Correlation and CIR Prediction for CDMA Cellular Systems," in Proc. of *IEEE 2008 Vehicular Technology Conference (VTC-2008 Spring)*, pp. 1836-1840, Singapore, May 2008. (EI) (NSC 96-2752-E-007-003-PAE)
37. Yuh-Ren Tsai and Yuan-Jiun Tsai, "Sub-optimal Step-by-step Node Deployment Algorithm for User Localization in Wireless Sensor Networks," in Proc. of *IEEE International Conference on Sensor Networks, Ubiquitous, and Trustworthy Computing (SUTC 2008)*, pp. 114-121, Taichung, Taiwan, June 2008. (EI) (**Google Scholar: 2 citations**) (NSC 96-2752-E-007-003-PAE)
38. Yuh-Ren Tsai and Hsien-Yun Chung, "MLSD Coupled with LMMSE Channel Estimation for OFDM in Time-variant Channels," in Proc. of *Asia-Pacific Conference on Communications (APCC 2008)*, Tokyo, Japan, Oct. 14-16, 2008. (EI) (NSC 96-2219-E-007-006)
39. Shih-Jeng Wang, Yuh-Ren Tsai, and Pin-You Chen, "An Authentication Scheme in Peer-to-peer Based Live Stream Sharing Management Systems," in Proc. of *International Conference on Intelligent Systems Design and Applications (ISDA-2008)*, Kaohsiung, Taiwan, Nov. 2008. (EI) (NSC 95-2221-E-015-002-MY2)
40. Shih-Jeng Wang, Yuh-Ren Tsai, and Jian-Jih Shen, "Dynamic Threshold Multi-secret Sharing Scheme Using Elliptic Curve and Bilinear Maps," in Proc. of *IEEE 2008 Future Generation Communication and Networking (FGCN 2008)*, Hainan Island, China, vol. 2, pp. 405 – 410, Dec. 13-15, 2008. (EI) (NSC 97-2221-E-015-001)
41. Kai-Jie Yang and Yuh-Ren Tsai, "Location Tracking in Mobile Networks under Correlated Shadowing Effects," in Proc. of *2009 IEEE Wireless Communications and Networking Conference (WCNC 2009)*, Budapest, Hungary, Apr. 2009. (EI) (**Google Scholar: 3 citations**) (NSC 97-2219-E-007-007)
42. Yen-Chen Chen and Yuh-Ren Tsai, "Adaptive Resource Allocation for Multi-resolution Multicast Services with Diversity in OFDM Systems," in Proc. of *IEEE 2009 Vehicular Technology Conference (VTC-2009 Spring)*, Barcelona, Spain, Apr. 2009. (EI) (**Google Scholar: 1 citation**) (NSC 97-2219-E-007-007)
43. Yen-Chen Chen and Yuh-Ren Tsai, "Cross-layer Design for Joint PAPR Reduction and Multi-resolution Resource Assignment," in Proc. of *IEEE 2009 Vehicular Technology Conference (VTC-2009 Spring)*, Barcelona, Spain, Apr. 2009. (EI) (NSC 97-2219-E-007-007)
44. Yuh-Ren Tsai, Sheng-Wei Lin and Li-Cheng Lin, "Power Allocation Based on Instantaneous Observation Quality for Distributed Detection in Wireless Sensor Networks," in Proc. of *IEEE*

- 2009 Vehicular Technology Conference (VTC-2009 Spring), Barcelona, Spain, Apr. 2009. (EI) (NSC 97-2221-E-007-074-MY3)
45. Shiuh-Jeng Wang, Yuh-Ren Tsai, Chien-Chih Shen and Pin-You Chen, "Hierarchical Key Agreement Protocols in Group-User Systems," in Proc. of *Fifth International Conference on Information Assurance and Security (IAS 2009)*, vol. 2, pp. 259-262, Shaanxi, China, Aug. 2009. (EI) (NSC 97-2221-E-015-001)
  46. Chung-Wei Chen, Shiuh-Jeng Wang, Yuh-Ren Tsai and Hsing-Chung Chen, "A Framework of Multicast Key Agreement for Distributed User on 3G-WLAN," in Proc. of *Fifth International Joint Conference on INC, IMS and IDC*, pp. 2062-2068, Seoul, Korea, Aug. 2009. (EI) (**Google Scholar: 1 citation**) (NSC 97-2221-E-015-001)
  47. Yuh-Ren Tsai and Li-Cheng Lin, "Sequential Fusion with Truncated SPRT for Event Detection in Centralized and Decentralized Wireless Sensor Networks," in Proc. of *IEEE 2009 Vehicular Technology Conference (VTC-2009 Fall)*, Alaska, USA, Sep. 2009. (EI) (NSC 97-2221-E-007-074-MY3)
  48. Yuh-Ren Tsai and Cheng-Ju Chang, "Distributed Estimation with Cooperative Information Aggregation in Wireless Sensor Networks," in Proc. of *IEEE 2009 Vehicular Technology Conference (VTC-2009 Fall)*, Alaska, USA, Sep. 2009. (EI) (NSC 97-2221-E-007-074-MY3)
  49. Yuh-Ren Tsai, and Tsung-Wei Wu, "Low-Complexity Iterative Carrier Frequency Offset Estimation with ICI Elimination for OFDM Systems," in Proc. of *IEEE 2010 Vehicular Technology Conference (VTC-2010 Spring)*, Taipei, Taiwan, May 2010. (EI) (NSC 97-2219-E-007-007)
  50. Yuh-Ren Tsai, Yu-Wei Chen, and Yen-Chen Chen, "Joint Channel Estimation and Data Detection Using Kalman Filter for OFDM Systems in Time-Variant Channels," in Proc. of *IEEE VTS Asia Pacific Wireless Communications Symposium (APWCS-2010)*, Kaohsiung, Taiwan, May 2010. (NSC 97-2219-E-007-007)
  51. Cheng-Ju Chang and Yuh-Ren Tsai, "Cooperative Information Aggregation based Distributed Sequential Estimation in Wireless Sensor Networks," in Proc. of *IEEE 2011 International Conference on Communications (ICC-2011)*, Kyoto, Japan, Jun. 2011. (EI) (NSC 97- 2221-E-007-074-MY3)
  52. Yuh-Ren Tsai, Chi-Hung Lin and Yen-Chen Chen, "A Low-Complexity SLM Approach Based on Time-domain Sub-block Conversion Matrices for OFDM PAPR Reduction," in Proc. of *IEEE 2011 symposium on Computers and Communications (ISCC-2011)*, Kerkyra, Greece, Jun. 2011. (EI) (NSC 99-2219-E-007-006)
  53. Yuh-Ren Tsai, Kai-Jie Yang, Chia-Hong Tsai, and Chin-Liang Wang, "Low-Complexity ML Doppler Spread Estimation for OFDM Systems," in Proc. of *IEEE 2010 Vehicular Technology Conference (VTC-2010 Fall)*, San Francisco, USA, Sep. 2011. (EI) (NSC 99-2219-E-007-006)
  54. Yuh-Ren Tsai, Hao-Yun Huang, Yen-Chen Chen and Kai-Jie Yang, "Simultaneous Carrier Frequency Offset Estimation for Multi-point Transmission in OFDM Systems," in Proc. of *IEEE 2011 Global Telecommunications Conference (Globecom 2011)*, Houston, USA, Dec. 2011. (EI) (NSC 99-2219-E-007-006)



(C) 其他

專書 (一章)

“無線通訊系統之訊號監測與接收”- 95 年度資通安全專論彙編

專利

1. “發射器、接收器、多等級多媒體廣播/群播服務系統以及其調變方法”(國內專利申請中)
2. “協調多點傳輸系統多重載波頻率偏移估計之訊號設計與技術方法”(國內專利申請中)
3. “Transmitter, Receiver, Multi-class Multimedia Broadcast/Multicast Service System and Modulation Method Thereof”(美國、歐盟專利申請中)
4. “Signal Design and Estimation Technology for Multiple Carrier Frequency Offset Estimation in Coordinated Multi-point Transmission Systems”(美國專利申請中)