

一、 期刊論文

1. Nen-Fu Huang and **S.-T. Sheu**, "A General Bandwidth Allocation Scheme for Multi-priority Traffic on DQDB Networks", *Journal of High Speed Networks*, vol. 2, no. 3, pp. 239-258, Nov. 1993. (SCI) [NSC 81-0408-E-007-010]
2. Nen-Fu Huang and **S.-T. Sheu**, "Solving the Bandwidth and Priority Domination Problems of DQDB Metropolitan Area Networks", *Computer Communications*, vol. 16, no. 11, pp. 717-725, Nov. 1993. (SCI/EI)
3. Nen-Fu Huang and **S.-T. Sheu**, "A Wavelength Reusing/Sharing Access Protocol for Multi-Channel Photonic Dual Bus Networks", *IEEE/OSA Journal of Lightwave Technology*, vol. 14, no. 5, pp. 678-692, May 1996. (SCI/EI) [NSC 83-0408-E007-011]
4. Nen-Fu Huang and **S.-T. Sheu**, "An Efficient Wavelength Reusing/Migrating/ Sharing Protocol (WRMSP) for Dual Bus Lightwave Networks (DBLN)", *IEEE/OSA Journal of Lightwave Technology*, vol. 15, no. 1, pp. 62-75, Jan. 1997. (SCI/EI) [NSC 83-0408-E007-011]
5. Nen-Fu Huang and **S.-T. Sheu**, "A Waste-free Congestion Control Scheme for Dual Bus High-Speed Networks", *Computer Networks and ISDN Systems*, vol. 29, pp. 221-235, Jun. 1997. (EI/INSPEC)
6. **S.-T. Sheu** and C-S. Liao, "Minimizing the Blocking Probability in Cable Networks Using Fuzzy and Grey Theories", *Journal of Grey System*, vol. 10, no. 4, pp. 297-334, Nov. 1998. (SCI/INSPEC)
7. M.-Y. Lio, Y.-J. Lai, Y-H Lee and **S.-T. Sheu**, "Suppression of Inter-User Interference for Fiber-Optic Synchronous Code Division Multiple Access Networks", *Journal of Optical Communications*, vol. 19, pp. 121-160, Aug. 1998. (SCI/EI) [NSC 86-2215-E-032-003]
8. **S.-T. Sheu** and C.-C. Wu, "Dynamic Load Balance Algorithm (DLBA) for IEEE 802.11 Wireless LAN", *Tamkang Journal of Science and Engineering*, vol. 2, no. 1, pp. 45-52, Jun. 1999. (EI)
9. **S.-T. Sheu**, "Reducing Clean Cell Loss Rate in Wireless ATM Networks", *Journal of High Speed Networks*, vol. 8, pp. 101-111, Jun. 1999. (SCI) [NSC 87-2213-E-032-010]
10. **S.-T. Sheu**, C.-T. FangTsou, W.-H. Hsu and M.-C. Hsiao, "Efficient Multicast Routing and Backup Algorithm in Ad-Hoc Wireless Networks", *IEICE Transactions on Fundamentals of Electronics, Communications and Computer Science*, vol. E82-A, no.7, pp. 1250-1260, Jul. 1999. (SCI/EI) [NSC 87-2219-E-032-001]
11. **S.-T. Sheu** and W.-H. Hsu, "A Virtually Dynamic Channel Assignment (VDCA) Strategy for Cellular Networks with Traffic Grey Prediction", *Journal of Grey System*, vol. 11, no. 3, pp. 209-222, Sep. 1999. (SCI/INSPEC)
12. **S.-T. Sheu** and M.-H. Chen, "A New Network Architecture with Intelligent Node (IN) to Enhance IEEE 802.14 HFC Networks", *IEEE Transactions on Broadcasting*, vol. 45, no. 3, pp. 308-317, Sep. 1999. (SCI/EI)
13. **S.-T. Sheu** and C.-C Wu, "An Adaptive Cell Checking Controller for Wireless ATM Networks", *IEICE Transactions on Communications*, vol. E83-B, no. 2, pp. 330-338, Feb. 2000. (SCI/EI) [NSC 89-2219-E-032-001]
14. **S.-T. Sheu** and Y.-R Chuang, "Alternative Routing Based Network Architecture (ARBNA) for ATM Switches", *IEICE Transactions on Communications*, vol. E83-B, no. 2, pp. 214-224, Feb. 2000. (SCI/EI) [NSC 89-2219-E-032-001]
15. **S.-T. Sheu**, Y.-H Lee and C.-C Wu, "A Smart Photonic ATM Switch Architecture with Compression Strategy", *IEEE/OSA Journal of Lightwave Technology*, vol. 19, no. 1, pp. 1-10, Jan. 2001. (SCI/EI)
16. **S.-T. Sheu**, T.-H Tsai and J.-H. Chen, "Delay-Oriented Routing Protocol for Wireless Ad-Hoc Networks", *IEICE Transactions on Communications*, vol. E84-B, no. 6, pp. 1581-1587, Jun. 2001. (SCI/EI)
17. **S.-T. Sheu** and T.-F. Sheu, "A Bandwidth Allocation/Sharing/Extension Protocol for Multimedia over IEEE 802.11 Ad Hoc Wireless LANs", *IEEE Journal on Selected Areas in Communications*, vol. 19, no. 10, pp. 2065-2081, Oct. 2001. (SCI/EI) [NSC 89-2218-E-032-012]
18. **S.-T. Sheu** and J.-H. Chen, "Performance Analysis of Multicast MAC Protocol for Multichannel Dual Bus Networks", *Lecture Notes in Computer Science (LNCS)*, vol. 2343, pp. 419-430, Sep. 2002, Springer Verlag. (SCI)
19. **S.-T. Sheu**, B.-H. Lee, H.-W. Tseng, C.-Y. Ko and W.-Z. Liang "A Balanced Scheduling Algorithm for High-Speed ATM Switch", *Lecture Notes in Computer Science (LNCS)*, vol. 2343, pp. 268-277, Sep. 2002, Springer Verlag. (SCI)
20. **S.-T. Sheu** and M.-H. Chen, "A Fuzzy Bandwidth Allocation Controller to Support Real-time Traffic over Wireless Networks", *International Journal of Computer Research*, vol. 11, no. 1, 2002.
21. **S.-T. Sheu**, T.-H Tsai and J.-H. Chen, "MR2RP : The Multi-Rate and Multi-Range Routing Protocol for IEEE 802.11 Wireless Ad Hoc Networks", *ACM/Kluwer Wireless Networks*, vol. 9, no. 2, pp. 165-177, Jan. 2003. (SCI/EI) [NSC 89-2218-E-032-012]

22. Fun Ye, **S.-T. Sheu**, Tobias Chen and J.-H. Chen, "The Impact on RTS Threshold in IEEE 802.11 Wireless LANs", *Tamkang Journal of Science and Engineering*, June 2003. (EI)
23. **S.-T. Sheu**, J.-H. Chen, Y.-D. Wang and H.-C. Yin, "Adaptive Rate Controller for Mobile Ad Hoc Networks", *International Journal of Mobile Communications*, vol. 1, no. 3, pp. 312-328, Sep. 2003. (EI)
24. J.-H. Chen, **S.-T. Sheu**, and Sheng-Kun Shen, "A Preemptive Priority Scheme for Collision Resolution in HFC Networks", *IEICE Transactions on Communications*, vol. E87-B, no. 10, p.2859-2870, Oct. 2004. (SCI/EI)
25. **S.-T. Sheu**, W.-H. Wu, H.-C. Yin and C.-W. Lai, "Smart Handoff Scheme for Supporting Roaming between WLAN and GPRS Networks", *IEICE Transactions on Communications*, vol. E88-B, no. 4, pp.1364-1373, April 2005. (SCI/EI) [NSC 93-2213-E-032-022]
26. S.-M. Tseng, C.-C. Chiou, U.-J. Chuang and **S.-T. Sheu**, "Synchronous Wavelength Reusing/Sharing Protocols for Non-regenerative WDM Photonic Dual Buses", *IEEE Journal on Selected Areas in Communications*, vol. 23, pp. 1458-1466, Aug. 2005. (SCI/EI) [NSC 92-2622-E-027-005-CC3]
27. J.-H. Chen and **S.-T. Sheu**, "Distributed Multichannel MAC Protocol for IEEE 802.11 Ad Hoc Wireless LANs", *Computer Communications*, vol. 28, 2005. (SCI/EI) [NSC93-2622-E-182-009-CC3]
28. J.-H. Chen, A-C. Pang, **S.-T. Sheu** and H.-W. Tseng, "High Performance Wireless Switch Protocol for IEEE 802.11 Wireless Networks", *ACM/Kluwer Mobile Networks & Applications (MONET)*, vol. 10, no. 5, pp. 741-751, Oct. 2005. (SCI/EI) [NSC 92-2213-E-182-024]
29. **S.-T. Sheu**, Y.-Y. Shih and U.-J. Chuang, "An ACK-based Polling Strategy for supporting High Performance and QoS in IEEE 802.11 Wireless Networks", *Computer Communications*, vol. 29, no. 3, pp. 358-371, Feb. 2006. (SCI/EI) [NSC 92-2622-E-032-002-CC3]
30. J.-H. Chen and **S.-T. Sheu**, "A Reliable Broadcast/Multicast Scheme for Multi-Hop Mobile Ad Hoc Networks", *IEICE Transactions on Communications*, vol. E89-B, no. 3, pp. 867-878, Mar. 2006. (SCI/EI) [NSC 93-2213-E-182-022]
31. **S.-T. Sheu**, W.-H. Hsu and J.-H. Chen, "SBMT-STEINER BACKUP MULTICAST TREE", *ACTA International Journal of Computers and Applications*, vol. 28, no. 2, pp. 87-98, Apr. 2006. (EI)
32. **S.-T. Sheu** and U.-J. Chuang, "A Pipeline-based Genetic Algorithm Accelerator for Time-critical Processes in Real-time Systems", *IEEE Transactions on Computers*, vol. 55, no. 11, pp. 1435-1448, Nov. 2006. (SCI/EI) [NSC 94-2213-E-008-044]
33. A-C. Pang, H.-W. Tseng and **S.-T. Sheu**, "Efficient and Fast Retransmission for Wireless Networks", *Computer Communications*, vol. 29, no. 15, pp. 2964-2974, Sep. 2006. (SCI/EI)
34. **S.-T. Sheu**, U.-J. Chuang and H.-W. Tseng, "An M-time Inheriting transmission Strategy for Interactive Multimedia Applications in Wireless Networks", *Computer Communications*, vol. 30, no. 6, pp. 1187-1198, Mar. 2007. (SCI/EI) [NSC 94-2213-E-008-044]
35. **S.-T. Sheu**, J.-S. Wu, C.-H. Huang, Y.-C. Cheng and L.W. Chen, "DDAS: Distance and Direction Awareness System for Intelligent Vehicles", *Journal of Information Science and Engineering*, vol. 23, no. 3, pp. 709-722, May 2007. (invited paper) (SCI)
36. H.-W. Tseng, Y.-H. Chou, M.-H. Chuang, Y.-H. Lee, **S.-T. Sheu**, Y.-G. Jan, "Design and Implementation of Subchannelization Scheduler in IEEE 802.16 Broadband Wireless Access Systems", *Journal of the Chinese Institute of Engineers*, vol. 31, No. 6, pp. 967-976, 2008.
37. **S.-T. Sheu**, Y.-Y. Shih and W.-T. Lee, "Carrier Sense Multiple Access with Collision Freeze (CSMA/CF) Protocol for IEEE 802.15.4 WPANs", *IEEE Transactions on Vehicular Technology*, vol. 58, no. 3, pp.1501-1516, Mar. 2009. (SCI/EI)
38. Y.-C. Cheng, **S.-T. Sheu**, and J.-S. Wu, "Vehicular Grouping Access Strategy for Supporting Roadway Planning in IEEE 802.11p Wireless Vehicular Networks", *Journal of Information Science and Engineering*, vol. 26, pp. 933-950, 2010. (SCI)
39. K.-C. Loa, C.-C. Wu, **S.-T. Sheu**, Y.-F. Yuan, Mary Chion, David Huo and L. Xu, "IMT-Advanced Relay Standards", *IEEE Communications Magazine*, vol. 48, no. 8, pp. 40-48, Aug. 2010 (Invited paper). (SCI/EI)
40. H.-W. Tseng, **S.-T. Sheu** and Y.-Y. Shih, "Rotational Listening Strategy (RLS) for IEEE 802.15.4 Wireless Body Networks", *IEEE Sensors Journal*, vol. 58, no. 12, pp. 1841-1855, Sep. 2011. (SCI)
41. J.-S. Wu, Y.-C. Cheng, and **S.-T. Sheu**, "Memorized Carrier Sense Multiple Access with Collision Avoidance (MCSMA/CA) Protocol for IEEE 802.11p", *International Journal of Internet Protocol Technology*, vol.7, no. 1, pp. 52-61, Jul. 2012.
42. Y.-R. Chuang, H.-W. Tseng, and **S.-T. Sheu**, "A Performance Study of Discrete-Error-Checking Scheme (DECS) with the Optimal Division Locations for IEEE 802.16-Based Multihop Networks", *IEEE Transactions on Computers*, vol. 62, no. 12, pp. 2354-2365, Dec. 2013. (SCI/EI)

43. W.-T. Lee, T.-Y. Wu, Y.-C. Cheng, Y.-R. Chuang and **S.-T. Sheu**, "Using the Kalman Filter for Auto Bit-rate H.264 Streaming Based on Human Interaction", *International Journal of Technology and Human Interaction (IJTHI)*, vol. 9, no. 4, pp. 58-74, 2013.
44. J. Chen, C.-C. Yang, and **S.-T. Sheu**, "An MBS-Assisted Femtocell Transmit Power Control Scheme with Mobile User QoS Guarantee in 2-Tier Heterogeneous Femtocell Networks", *The Scientific World Journal*, Volume 2013, Article ID 403978, Nov. 2013.
45. S.-S. Wang, H.-C. Yin and **S.-T. Sheu**, "Efficient Forwarding Scheme for Downlink Broadcast Messages in IEEE 802.16j Multi-hop Relay Networks", *Computers and Electrical Engineering*, vol. 40, no. 2, pp.563-576, Feb. 2014. (SCI)
46. H.-W. Tseng, Y.-C. Fan, **S.-T. Sheu**, and S.-Y. Ou, "An Effective Grouping Scheme for Avoiding Hidden Node Problem in IEEE 802.15.4-Based Wireless Sensor Networks," *ACM SIGAPP Applied Computing Review*, vol. 14, pp. 30-40, Mar. 2014.
47. J.-H. Chen, C.-C. Yang, and **S.-T. Sheu**, "Downlink Femtocell Interference Mitigation and Achievable Data Rate Maximization: Using FBS Association and Transmit Power Control Schemes", *IEEE Transactions on Vehicular Technology*, vol. 63, no. 6, pp. 2807-2818, Mar. 2014. (SCI/EI) [NSC 100-2221-E-008-086-MY2]
48. **S.-T. Sheu**, Y.-C. Cheng, P.-J. Hsieh, J.-S. Wu and L.-W. Chen, "Agent-Based Coordination Scheme for IEEE 802.11p Wireless Vehicular Networks", *IEICE Transactions on Communications*, vol. E97-B, no. 4, pp. 849-866, Apr. 2014. (SCI/EI) [NSC 99-2221-E-008-072-MY2]
49. **S.-T. Sheu**, Y.-C. Cheng, J.-S. Wu, C.-D. Tsai and L.-W. Chen, "Coordinated Interleaving Access Scheme for IEEE 802.11p Wireless Vehicular Networks", *IEICE Transactions on Communications*, vol. E97-B, no. 4, pp. 826-842, Apr. 2014. (SCI/EI) [NSC 99-2221-E-008-072-MY2]
50. T.-Y. Tsia, Y.-H. Tsai, Z.-H. Tsai and **S.-T. Sheu**, "A Novel Description Approach Based on Sorted Rectangles for Scheduling Information Bearing in OFDMA Systems", *Computer Networks*, Mar. 2017.

二、 研討會論文

1. Nen-Fu Huang and **S.-T. Sheu**, "Two Adaptive Algorithms for the Bandwidth Domination Problem of DQDB Network", Proc. of Int'l Symposium on Communications (ISCOM'91), Tainan, Taiwan, Dec. 1991, pp. 136-139.
2. Nen-Fu Huang, C.-C. Chiou and **S.-T. Sheu**, "A New Reservation Scheme for Cyclic Reservation Multiple Access", Proc. of Int'l Conf. on Communication System (ICCS'92), Singapore, Nov. 1992, pp. 710-714.
3. Nen-Fu Huang and **S.-T. Sheu**, "Solving the Bandwidth and Priority Domination Problems of DQDB Metropolitan Area Networks", Proc. of IEEE ICC'92, Chicago, Jun. 1992, pp. 338.4.1-338.4.5.
4. Nen-Fu Huang, H.-I. Liu, **S.-T. Sheu** and C.-S. Chang, "A Distributed Scheme for Management of Isochronous Channels in DQDB Networks", Proc. of First International Conference on Computer Communications and Networks (IC3N), San Diego, CA, Jun. 1992.
5. Nen-Fu Huang and **S.-T. Sheu**, "A General Bandwidth Allocation Scheme for Multi-priority traffic on DQDB Networks", Proc. of First International Conference on Computer Communications and Networks (IC3N), San Diego, CA, Jun. 1992.
6. Nen-Fu Huang and **S.-T. Sheu**, "A Slot Interleaved Multiple Access Scheme for DQDB Metropolitan Area Networks", Proc. of IEEE INFOCOM'93, San Francisco, Mar. 1993, pp. 1075-1082.
7. Nen-Fu Huang and **S.-T. Sheu**, "On the Wavelength Assignment Problem of Multi-Channel Photonic Dual Bus Networks", Proc. of IEEE GLOBECOM'94, San Francisco, Nov. 1994, pp. 1925-1929.
8. Nen-Fu Huang and **S.-T. Sheu**, "DTCAP: A Distributed Tunable-Channel Access Protocol for Multi-Channel Photonic Dual Bus Networks", Proc. of IEEE INFOCOM'95, Boston, Apr. 1995, pp. 908-915.
9. Nen-Fu Huang and **S.-T. Sheu**, "A Waste-free Congestion Control Scheme for Dual Bus High-Speed Networks", Proc. of IEEE ICC'95, Seattle, Jul. 1995, pp. 940-944.
10. **S.-T. Sheu** and C.-S. Liao, "Dynamic Channel Assignment Scheme for Cable Networks Using Fuzzy Set Theory", Proc. of IEICE/IEEE OECC'96, Chiba, Japan, Jul. 1996, pp. 322-323.
11. **S.-T. Sheu**, W.-E. Chen and C.-S. Liao, "A Virtually Dynamic Channel Assignment (VDCA) Strategy for Cellular Networks with Traffic Prediction", Proc. of 15th IASTED International Conference of Applied Informatics'97, Innsbruck, Austria, Feb. 1997, pp. 124-127.
12. **S.-T. Sheu** and J.-D. Fang, "An Efficient Multicasting Protocol for Multi-channel Dual Bus Networks", Proc. of 15th IASTED International Conference of Applied Informatics'97, Innsbruck Austria, Feb. 1997, pp. 375-378.
13. **S.-T. Sheu** and C.-H. Wang, "A Cell Discarding Strategy to Reduce Cell Error Rate in Wireless ATM Networks", Proc. of IEEE ATM Workshop 1997, Lisbon, Portugal, May 1997, pp. 401-409.

14. **S.-T. Sheu** and C.-P. Huang, "An Efficient Multicasting Protocol for WDM Star-Coupler Networks", Proc. of IEEE ISCC'97, Alexandria, Egypt, Jul. 1997, pp. 579-583.
15. **S.-T. Sheu**, C.-S. Liao and H.-H. Chen, "Minimizing the Blocking Probability in Cable Networks Using Fuzzy and Gray Theories", Proc. of 17th IASTED International Conference on Modeling Identification and Control, Grindelwald, Switzerland, Feb. 1998, pp. 423-427.
16. **S.-T. Sheu** and C.-H. Wang, "A Data/Header Interleaving Strategy to Reduce Cell Loss Rate in Wireless ATM Networks", Proc. of Task-Force 1th International Workshop/Conference on Wireless Mobile ATM Implementation in Telecommunications, Hangzhou, China, Apr. 1998, pp. 167-174.
17. **S.-T. Sheu**, C.-C. Wu and Y.-R. Chuang, "A Link Level Compression Strategy for High-Speed Backbone ATM Networks", Proc. of IASTED International Conference on Applied Modeling and Simulation, Hawaii, USA, Aug. 1998, pp. 347-351.
18. Y.-H. Lee, C.-C. Chiu and **S.-T. Sheu**, "Optimization Antenna Allocation for Wireless Ad Hoc Networks", Proc. of XXVIII International Conference on Antenna Theory and Technology, Moscow, Russia, Sep. 1998.
19. C.-T. FangTsou, **S.-T. Sheu**, W.-H. Hsu, and M.-C. Hsiao, "Efficient Multicast Routing in Wireless ATM Networks", Proc. of IEEE GLOBECOM'98, Sydney, Australia, Nov. 1998, pp. 1024-1029.
20. Y.-H. Lee, **S.-T. Sheu**, Y.-J. Zheng, Z.-M. Chen and L.-I. Chuang, "Application of Q-R Decomposition for Site Survey Estimation in the Wireless Ad Hoc Network", Proc. of the 4th Symposium on Computer and Communication Technology, Tao-Yuan, Taiwan, Oct. 1998, pp. 363-369.
21. **S.-T. Sheu**, C.-T. FangTsou, W.-H. Hsu and M.-C. Hsiao, December 1998, "A High Reliability Multicast Tree for LAN/WAN", Proc. of National Symposium on Telecommunications (NSTC'98), Tamsui, Taipei, Taiwan, Dec. 1998, pp. 46-51.
22. **S.-T. Sheu**, C.-H. Chen and W.-H. Hsu, "A Cells Splitting/Merging Multicast Routing Protocol for High-Speed ATM Networks", Proc. of National Symposium on Telecommunications (NSTC'98), Tamsui, Taipei, Taiwan, Dec. 1998, pp. 163-168.
23. C.-H. Niou, M.-H. Chen, **S.-T. Sheu** and Y.-H. Lee, "Synchronous Different Codes System Division Multiple Access (S/CDMA) Techniques with Prime Code in Optical Spread Spectrum Communication", Proc. of National Symposium on Telecommunications (NSTC'98), Tamsui, Taipei, Taiwan, Dec. 1998, pp. 52-57.
24. Y.-H. Lee, Y.-C. Cheng, **S.-T. Sheu** and C.-C. Chiu, "Site Survey Tool for Wireless Network Based on Auto-Calibration", Proc. of National Symposium on Telecommunications (NSTC'98), Tamsui, Taipei, Taiwan, Dec. 1998, pp. 409-414.
25. Y.-H. Lee, **S.-T. Sheu**, C.-M. Chen, L.-E. Chang, K.-P. Wang and L.-W. Lu, "Site Survey Estimation Method for Wireless Ad Hoc Networks", Proc. of National Symposium on Telecommunications (NSTC'98), Tamsui, Taipei, Taiwan, Dec. 1998, pp. 415-420.
26. **S.-T. Sheu**, Y.-H. Lee, C.-C. Wu, M.-H. Chen, F.-P. Chung, Y.-L. Lu, I.-C. Fang and C.-C. Lin, "The Architecture of Wireless LAN Card Based on IEEE 802.11 Standard", Proc. of National Symposium on Telecommunications (NSTC'98), Tamsui, Taipei, Taiwan, Dec. 1998, pp. 427-433.
27. **S.-T. Sheu**, Y.-H. Lee and C.-C. Wu, "Fast Switching Strategy for Photonic ATM Switches Using Optical Compressor", Proc. of IFIP ONDM'98, Paris, France, Dec. 1998, pp. 156-175.
28. **S.-T. Sheu** and M.-K. Hsueh, "An Intelligent Cell Checking Policy for Promoting Data Transfer Performance in Wireless ATM Networks", Proc. of IEEE ATM Workshop'99, Chibo, Japan, May 1999, pp. 239-244.
29. Y.-H. Lee, **S.-T. Sheu** and M.H. Chen, "Application of Genetic Algorithm for Optimal Simultaneous Code Set Selection in Optical CDMA", Proc. of Modeling and Simulation (MS'99), Philadelphia, USA, May 1999, pp. 11-14.
30. **S.-T. Sheu** and Y.-R. Chuang, "RCES : A Replication/Contention/Elimination Strategy for Replication Baseline ATM Switch Architectures", Proc. of IEEE ICATM'99, Colmar, France, Jun. 1999, pp. 396-403.
31. **S.-T. Sheu** and T.-F. Sheu, "A Hybrid Data/Header Interleaving Strategy for Wireless ATM Networks", Proc. of IEEE ICATM'99, Colmar, France, Jun. 1999, pp. 1-6.
32. **S.-T. Sheu**, Y.-H. Lee and C.-C. Wu, "Dynamic Load Balance Algorithm (DLBA) for IEEE 802.11 Wireless LAN", Proc. of AoM/IAoM 17th ICCS'99, Hawaii, Aug. 1999.
33. **S.-T. Sheu** and M.-H. Chen, "A Fuzzy Bandwidth Allocation Controller to Support Real-time Traffic over Wireless Network", Proc. of IEEE WCNC'99, New Orleans, Sep. 1999, pp.1348-1352.
34. **S.-T. Sheu** and C.-C. Wu, "Dynamic Access Point Approach (DAPA) for IEEE 802.11 Wireless LANs", Proc. of IEEE VTC'99, Amsterdam, Sep. 1999, pp. 2646-2650.
35. **S.-T. Sheu**, C.-C. Tsao, Y.-R. Chuang, H.-H. Chen and H.-C. Chao, "Upgrade Layer2 Ether-Switch to IP Switch Router", Proc. of IEEE ICICS'99, Singapore, Dec. 1999.

36. Y.-H. Lee, **S.-T. Sheu**, M.-H. Chen, Y.-C. Yu, and Y.-C. Huang, "The Effects of Microwave Oven over the IEEE 802.11 FHSS Wireless LAN Card", Proc. of IEICE/IEEE APCC/OECC'99, Chiba, Japan, Aug. 1999, pp. 817-820.
37. S.-H. Yang, Y.-H. Lee, R.-Y. Yen, Y.-J. Zheng, **S.-T. Sheu**, C.-H. Ko and M.-H. Chen, "A Wireless LAN Measurement Method Based on RSSI and FER", Proc. of IEICE/IEEE APCC/OECC'99, Chiba, Japan, Aug. 1999, pp. 821-824.
38. S.-A. Chen, Y.-H. Lee, R.-Y. Yen, Y.-J. Zheng, C.-H. Ko, **S.-T. Sheu** and M.-H. Chen, "Optimal Prediction Tool for Wireless LAN Using Genetic Algorithm and Neural Network Concept", Proc. of IEICE/IEEE APCC/OECC'99, Chiba, Japan, Aug. 1999, pp. 786-789.
39. W.-C. Chang, C.-H. Ko, Y.-H. Lee and **S.-T. Sheu**, "A Novel Prediction Tool for Indoor Wireless LAN under the Microwave Oven Interference", Proc. of 7th International Conference on Software in Telecommunications and Computer Networks, Oct. 1999.
40. W.-C. Chang, C.-H. Ko, Y.-H. Lee, **S.-T. Sheu** and Y.-J. Zheng, "A Novel Prediction System for Wireless LAN Based on the Genetic Algorithm and Neural Network", Proc. of 24th Annual Conference on Local Computer Networks (LCN), Oct. 1999, pp. 258-259.
41. **S.-T. Sheu**, C.-C. Wu, Y.-J. Chang and M.-J. Shu, "Analysis of Performance of Adaptive Cell Checking Controller for ATM-based Wireless Networks", Proc. of IEEE 3GWireless, San Francisco, Jun. 2000, pp. 414-422.
42. **S.-T. Sheu**, M.-H. Chen and Y.-H. Lee, "A New Network Architecture with Intelligent Node to Enhance IEEE 802.14 HFC Networks", Proc. of IEEE ICC'2000, New Orleans, June 2000, pp. 170-174.
43. **S.-T. Sheu**, Y.-R. Chuang and H.-T. Chen, Orlando, "A Novel Optical IP Router Architecture for WDM Networks", Proc. of SCI'2000/ISAS'2000, Orlando, Aug. 2000.
44. **S.-T. Sheu**, Y.-R. Chuang and M.-H. Chen, "Cells Splitting/Merging Strategy to Reduce Call Blocking Probability in ATM Networks", Proc. of IFIP WCC'2000, Beijing, China, Aug. 2000, pp. 1262-1269.
45. **S.-T. Sheu** and C.-C. Wu, "Using Grey Prediction Theory to Reduce Handoff Overhead in Cellular Communication Systems", Proc. of IEEE PIMRC'2000, London, Sep. 2000, pp. 782-786.
46. **S.-T. Sheu**, Y.-R. Chuang and H.-W. Tseng, "Balanced Scheduling Mechanism for Supporting Variable-Length Packets in WDM Networks", Proc. of TANET'2000, Tainan, Taiwan, Oct. 2000, pp. 895-902.
47. **S.-T. Sheu**, Y.-H. Lee, M.-H. Chen, Y.-C. Yu, and Y.-C. Huang, "PLFC: The Packet Length Fuzzy Controller to Improve the Performance of WLAN under the Interference of Microwave Oven", Proc. of IEEE GLOBECOM'2000, San Francisco, Nov. 2000, pp. 1427-1431.
48. S.-T. Sheu, Y.-R. Chuang and H.-W. Tseng, "A Novel Optical IP Router Architecture for WDM Networks", Proc. of IEEE ICOIN'2001, Beppu, Japan, Jan. 2001, pp. 335-340.
49. **S.-T. Sheu**, C.-C. Wu and P.-L. Wu, "A New Contention-based CSMA Protocol for Star Networks", Proc. of IEEE ICOIN'2001, Beppu, Japan, Jan. 2001, pp. 46-51.
50. **S.-T. Sheu** and T.-F. Sheu, "DBASE : A Distributed Bandwidth Allocation/Sharing/Extension Protocol for Multimedia over IEEE 802.11 Ad Hoc Wireless LAN", Proc. of IEEE INFOCOM'2001, Alaska, Apr. 2001.
51. **S.-T. Sheu**, T.-F. Sheu and C.-C. Wu, "Design and Implementation of a Reservation-based MAC Protocol for Voice/Data over IEEE 802.11 Ad-Hoc Wireless Networks", Proc. of IEEE ICC'2001, Finland, Jun. 2001.
52. **S.-T. Sheu** and J.-H. Chen, "A Novel Delay-Oriented Shortest Path Routing Protocol for Mobile Ad-Hoc Networks", Proc. of IEEE ICC'2001, Finland, Jun. 2001.
53. **S.-T. Sheu**, J.-H. Chen and Y.-D. Wang, "An Intelligent Modulation Controller with Fuzzy Function for IEEE 802.11 Multi-Rate/Range Transmissions", Proc. of IEEE WLAN Workshop, Boston, Sep. 2001.
54. Y.-J. Cheng, Y.-H. Lee and **S.-T. Sheu**, "Multi-rate Transmissions in Infrastructure Wireless LAN Based on IEEE 802.11b Protocol", Proc. of IEEE VTC Fall 2001, Atlanta, Nov. 2001.
55. **S.-T. Sheu**, Y.-H. Lee and M.-H. Chen, "Providing Multiple Data Rates in Infrastructure Wireless Networks", Proc. of IEEE GLOBECOM'2001, San Antonio, Nov. 2001.
56. M.-H. Chen, **S.-T. Sheu** and Y.-H. Lee, "Fair Bandwidth Allocation Fuzzy Controller for the IEEE 802.11 Multiple Data Rate Infrastructure Networks", Proc. of 9th National Conference on Fuzzy Theory and Its Applications, Chung-Li, Taiwan, Nov. 2001, pp. D5.1.
57. **S.-T. Sheu**, Y.-R. Chuang and H.-W. Tseng, "A Fast GA-based Scheduling Algorithm for DWDM Networks", Proc. of 9th National Conference on Fuzzy Theory and Its Applications, Chung-Li, Taiwan, Nov. 2001, pp. D5.2.

58. **S.-T. Sheu**, J.-H. Chen and U.-D. Wang, “適用於多速率 IEEE 802.11 無線區域網路之智慧型調變模糊控制器,” Proc. of 9th National Conference on Fuzzy Theory and Its Applications, Chung-Li, Taiwan, Nov. 2001, pp. D5.3.
59. **S.-T. Sheu**, B.-H. Lee, H.-W. Tseng, C.-Y. Ko and W.-Z. Liang, “A Balanced Scheduling Algorithm for High-Speed ATM Switch,” Proc. of 16th IEEE ICOIN’2002, Cheju Island, Korea, Jan. 2002.
60. **S.-T. Sheu**, and J.-H. Chen, “Performance Analysis of Multicast MAC Protocol for Multi-channel Dual Bus Networks,” Proc. of 16th IEEE ICOIN’2002, Cheju Island, Korea, Jan. 2002.
61. **S.-T. Sheu**, T.-H Tsai and J.-H. Chen, “A Highly Reliable Broadcast Scheme for IEEE 802.11 Multi-Hop Ad Hoc Networks”, Proc. of IEEE ICC’2002, New York, Apr. 2002.
62. **S.-T. Sheu** and J.-H. Chen, “MR²RP : The Multi-Rate and Multi-Range Routing Protocol for Ad Hoc Wireless Networks,” Proc. of IEEE ISCC’2002, Taormina/Giardini Naxos, Italy, Jul. 2002.
63. **S.-T. Sheu** and U.-J. Chuang, “A Pipelined Scheduling Strategy for Supporting Variable-Length Packets in WDM Networks,” Proc. of the 6th WSEAS CSCC’02, Crete, Jul. 2002.
64. **S.-T. Sheu**, Tobias Chen, J.-H. Chen and Fun Ye, “An Improved Data Flushing MAC Protocol for IEEE 802.11 Wireless Ad Hoc Networks,” Proc. of the IEEE VTC’02 Fall, Vancouver, Sep. 2002.
65. **S.-T. Sheu**, C.-K. Chang and C.-H. Lin, “分散式 Web 系統封包轉送方法,” 台灣網際網路研討會, pp. 1034-1039, 新竹, Taiwan, Oct. 2002.
66. **S.-T. Sheu**, Tobias Chen, J.-H. Chen and Fun Ye, “The Impact of RTS Threshold on IEEE 802.11 MAC Protocol,” Proc. of IEEE International Conference on Parallel and Distributed Systems (ICPADS), Taiwan, Dec. 2002.
67. **S.-T. Sheu**, J.-H. Chen, H.-W. Tseng and H.-T. Chiang, “A Safe Multiple Access-Rates Transmission (SMART) Scheme for IEEE 802.11 Wireless Networks,” Proc. of IEEE International Conference on Advanced Information Networking and Applications (AINA), Xi’an, China, Mar. 2003, pp. 172-175.
68. **S.-T. Sheu**, J.-H. Chen and Tobias Chen, “Data Flushing Data Transfer Protocol for IEEE 802.11 Ad Hoc Wireless Networks,” Proc. of IEEE WCNC’2003, New Orleans, Louisiana, Mar. 2003.
69. **S.-T. Sheu** and I.-W. Lee, “A Reliable Broadcast Scheme for Bluetooth Wireless Networks” (用於藍芽無線網路上可靠廣播之方法), 通信電子科技與應用研討會, 澎湖, May 2003, pp. 79-83.
70. **S.-T. Sheu** and C.-C. Shih, “電話網路與無線區域網路在家庭網路架構之整合應用,” 通信電子科技與應用研討會, 澎湖, May 2003, pp. 254-258.
71. **S.-T. Sheu**, I.-C. Chien, and C.-W. Wang, “一種適用於多速率無線區域網路探測傳輸方法之設計,” 通信電子科技與應用研討會, 澎湖, May 2003, pp. 384-389.
72. **S.-T. Sheu**, H.-C. In and Y.-R. Chuang “整合無線區域網路與 GPRS 系統之換手技術研究,” 通信電子科技與應用研討會, 澎湖, May 2003, pp. 390-395.
73. **S.-T. Sheu**, J.-H. Chen and H.-W. Tseng, “Wireless Switch Protocol,” Proc. of IEEE ICC’2003, Alaska, May 2003.
74. J.-H Chen, C.-C Chiou, S.-L. Wu, C.-Y Lin and **S.-T. Sheu**, “An Efficient Path Recovery Mechanism for LDP in MPLS Networks,” Proc. of the 7th WSEAS CSCC’03, Corfu, Greece, Jul. 2003.
75. S.-L. Wu, C.-C Chiou, J.-H Chen, T.-J. Chen and **S.-T. Sheu**, “Robust Path Routing Protocol in Mobile Ad Hoc Networks,” Proc. of the 7th WSEAS CSCC’03, Corfu, Greece, Jul. 2003.
76. **S.-T. Sheu** and Y.-J. Chuang, “An Optimization Solution for Packet Scheduling: A Pipeline-Based Genetic Algorithm Accelerator,” Proc. of AAAI GECCO’2003, Chicago, Jul. 2003.
77. J.-H. Chen, **S.-T. Sheu** and C.-A. Yang, “Medium Access Control Protocol for IEEE 802.11 Single-Hop Ad Hoc Multi-Channel Wireless LANs,” Proc. of IEEE PIMRC’2003, Beijing, Sep. 2003.
78. **S.-T. Sheu**, H.-C. Yin, Y.-T. Hung and C.-H. Wu, “移動式之智慧型自主性感測器網路,” 海峽兩岸資訊(信息)技術研討會, 中壢, Nov. 2003.
79. **S.-T. Sheu**, Y.-Y. Shih and Y.-J. Chuang, “An ACK-based Polling Strategy for the IEEE 802.11 Wireless Networks”, Proc. of IEEE GLOBECOM’2003, San Francisco, Nov. 2003.
80. **S.-T. Sheu**, H.-C. Yin and C.-W. Lai, “Smart Handoff Scheme for Supporting Roaming between WLAN and GPRS Networks”, Proc. of IEEE VTC Fall 2004, Milan, May 2004.
81. Jenhui Chen, **S.-T. Sheu**, and Sheng-Kun Shen, "A Preemptive Priority Scheme for Collision Resolution in HFC Networks," Proc. IASTED Commun. Syst. and Appl. (CSA), Banff, AB, Canada, Jul. 2004.
82. **S.-T. Sheu**, H.-W. Lee and C.-H. Huang, “Reliable Broadcast Scheme for Bluetooth Wireless Networks,” Proc. of IIIS World Multi-conference on systems, Cybernetics and Informatics (SCI 2004), Orlando, Jul. 2004.
83. **S.-T. Sheu**, Y.-T. Hung, H.-C. Yin and Y.-C. Kuo, “診斷無線感測網路之法團機制,” 網際網路暨通訊科技研討會, 台北, Nov. 2004, pp. 269-273.

84. **S.-T. Sheu**, C.-C. Hsu, “無線射頻辨識系統中反碰撞協定之研究,” 網際網路暨通訊科技研討會, 台北, Nov. 2004, pp. 274-278.
85. **S.-T. Sheu**, Y.-Y. Shih and L.-W. Chen, “An Adaptive Interleaving Access Scheme (IAS) for IEEE 802.15.4 WPANs,” Proc. of IEEE VTC Spring 2005, Stockholm, Sweden, May 2005.
86. **S.-T. Sheu**, Y.-Y. Shih and Y.-C. Cheng, “Grouping Strategy for Solving Hidden-Node Problem in IEEE 802.15.4 LR-WPANs,” Proc. of IEEE WICON’2005, Budapest, Hungary, Jul. 2005.
87. Y.-T. Lee, H.-I. Hsu, **S.-T. Sheu**, and Y.-C. Lee, “IEEE 802.16無線寬頻大都會網路技術之研究,” Proc. of 2005 National Workshop on Internet and Communication Technology (NWICT’05), vol. 1, no. 23, Taipei, Nov. 2005, pp. 123-127.
88. L.-L. Chao, Y.-H. Lee, **S.-T. Sheu**, U.-K Wang, J.-I. Kuang, U.-Y. Chuang, T.-W. Tseng and M.-C. Chuang, “基因演算法硬體架構於封包排程最佳化之應用,” Proc. of Workshop on Consumer Electronics and Signal Processing (WCEsp’2005), Yun-Lin, 2005.
89. R.-H. Wu, **S.-T. Sheu**, Y.-H. Lee, J.-I. Kuang, U.-K Wang, H.-W. Tseng, M.-C. Chuang, H.-K. Yah, T.-C. Wang, C.-C. Tseng, W.-C. Lee and K.-C. Wang,” RSSI 在日光燈變異環境因素下之影響分析與探討,” Proc. of Workshop on Consumer Electronics and Signal Processing (WCEsp’2005), Yun-Lin, 2005.
90. Y.-T. Lee, H.-I. Hsu, **S.-T. Sheu**, and T.-E. Chan, “研製以 Linux 作業系統為基礎之 IEEE 802.16 WiMAX 軟體模擬實體層,” Proc. of 2005 National Workshop on Internet and Communication Technology (NWICT’05), vol. 1, no. 24, Taipei, Nov. 2005, pp. 129-134.
91. **S.-T. Sheu** and Y.-Y. Shih, “P-Frozen Contention Strategy (PFCS) for Solving Collision Chain Problem in IEEE 802.15.4 WPANs,” Proc. of IEEE VTC 2006 Spring, Melbourne, Australia, May 2006.
92. **S.-T. Sheu**, Y.-R. Chuang and C.-C. Yang, “A Bi-directional Transmission Strategy for Interactive Applications in WLANs,” Proc. of IEEE APWCS’2006, Daejeon, Korea, Aug. 2006.
93. **S.-T. Sheu** and Y.-Y. Shih, “Day and Night Access (DNA) Scheme for Low Power IEEE 802.15.4 WPANs,” Proc. of IEEE VTC 2006 Fall, Montreal, Canada, Sep. 2006.
94. **S.-T. Sheu**, Y.-R. Chuang, H.-W. Tseng and C.-C. Yang, “An M-time Inheriting Transmission Strategy for Interactive Multimedia Applications in wireless Networks,” Proc. of IEEE GLOBECOM’2006, San Francisco, Nov. 2006.
95. H.-I. Hsu, C.-C. Hsieh, Y.-T. Lee, **S.-T. Sheu**, H.-C. Yin, Shao-Jung Lu, and Tien-Hsiang Lo, “Virtual Direct Link Access for IEEE 802.16 Wireless Metropolitan Area Networks (WMANs),” Proc. of IEEE VTC’2007 Spring, Dublin, Ireland, Apr. 2007.
96. **S.-T. Sheu** and Y.-Y. Shih, “A Collision-free Based Rotational Listening Strategy (RLS) for IEEE 802.15.4 WPAN,” Proc. of IEEE ICC’2007, Glasgow, Scotland, Jun. 2007.
97. S.-S. Wang, H.-C. Yin, Yi-Hsueh Tsai, and **S.-T. Sheu**, “An Effective Path Selection Metric for IEEE 802.16-based Multi-hop Relay Networks,” Proc. of IEEE ISCC’2007, Aveiro, Portugal, Jul. 2007.
98. S.-S. Wang, H.-C. Yin, Yi-Hsueh Tsai, and **S.-T. Sheu**, “An Effective Path Selection Metric for Throughput Enhancement in IEEE 802.16-based Multi-hop Relay Networks,” Proc. of the Workshop on Wireless, Ad Hoc, and Sensor Networks, Tamsui, Sep. 2007. (Best Paper Candidate)
99. **S.-T. Sheu**, H.-S. Chang and C.-C. Yang, “A Dynamic Frequency Allocation Scheme for IEEE 802.16 OFDMA-based WMANs Using Hungary Algorithm,” Proc. of WSOC’2007, Taipei, Dec. 2007.
100. S.-S. Wang, H.-C. Yin, and **S.-T. Sheu**, “Symmetric Path Selection in IEEE 802.16 Multi-hop Relay Networks with Error Prone Links,” Proc. of IEEE ICCSC 2008, Shanghai, China, May 2008.
101. **S.-T. Sheu** and L.-W. Chen, “A Novel CID Merge/Split (CIMES) Mechanism for IEEE 802.16 Wireless Metropolitan Networks,” Proc. of IEEE APWCS 2008, Sendai, Japan, Aug. 2008.
102. Y.-R. Chuang, C.-H. Huang, Y.-C. Cheng and **S.-T. Sheu**, “Using Differential Ranging Codes for Alternative Call Admission Control (CAC) in a Mobile WiMAX Network,” Proc. of IEEE APWCS 2008, Sendai, Japan, Aug. 2008.
103. **S.-T. Sheu**, W.-H. Hsiao, S.-L. Lu, C.-C. Yang and Y.-T. Lee, “Smart Merging Strategy for Configuring Power Saving Parameters in IEEE 802.16 Mobile WMANs,” Proc. of ACM Mobility Conference 2008, ILan, Sep. 2008.
104. **S.-T. Sheu**, Y.-C. Cheng, L.-W. Chen and J.-S. Wu, “Listening Interval Spreading Approach (LISA) for Handling Burst Traffic in IEEE 802.16e Wireless Metropolitan Area Networks,” Proc. of IEEE VTC 2008 Fall, Calgary, Canada, Sep. 2008.
105. S.-S. Wang, H.-C. Yin and **S.-T. Sheu**, “Efficient Data Forwarding Schemes for IEEE 802.16j Multi-hop Relay Networks,” Proc. of IEEE Mobile WiMAX Symposium, Napa Valley, CA, Jul. 2009, pp. 24-29.
106. **S.-T. Sheu**, K.-E. Hsieh and C.-C. Yang and Y.-T. Lee, “Robust Burst Mergence (RBM) Scheme for IEEE 802.16e OFDMA System,” Proc. of IEEE APWCS 2009, Seoul, Korea, Aug. 2009.

107. Y.-R. Chuang, C.-H. Huang, Y.-C. Cheng and **S.-T. Sheu**, "A Two-layer Roaming Signaling System for NAT-based WiFi and WiMAX Integrated Networks," Proc. of IEEE APWCS 2009, Seoul, Korea, Aug. 2009.
108. **S.-T. Sheu**, S.-S. Wang and H.-S. Chang, "Smart ARQ Report Strategy (SARS) for the IEEE 802.16e Wireless Metropolitan Network," Proc. of IEEE VTC 2009 Fall, Anchorage, Alaska, Sep. 2009, pp. 1-5.
109. Y.-R. Chuang, H.-W. Tseng and **S.-T. Sheu**, "An Almost Overhead-free Error Control Scheme for IEEE 802.16-based Multi-hop Networks," Proc. of IEEE GLOBECOM 2009, Honolulu, Hawaii, Nov. 2009.
110. **S.-T. Sheu**, C.-C. Yang, W.-E. Chen and S.-Y. Cheng, "An Interference Minimization (IM) Scheme for IEEE 802.16 Networks", Proc. of CSIT 2009, Chung-Li, Dec. 2009.
111. **S.-T. Sheu**, Y.-C. Cheng, and J.-S. Wu, "A Channel Access Scheme to Compromise Throughput and Fairness in IEEE 802.11p Multi-Rate/Multi-Channel Wireless Vehicular Networks," Proc. of IEEE VTC 2010 Spring, Taipei, May 2010.
112. **S.-T. Sheu**, M.-H. Tsai, T.-Y. Tsai and Y.-H. Tsai, "Condensed Downlink MAP Structures for IEEE 802.16e Wireless Metropolitan Area Networks (MANs)," Proc. of IEEE VTC 2010 Spring, Taipei, May 2010, pp. 1-5.
113. **S.-T. Sheu**, M.-S. Lee and Y.-H. Tsai, "In-Door Long-Term Positioning Technology," 海峡两岸信息科学与信息技术学术交流会议, Beijing, China, Jul. 2010.
114. **S.-T. Sheu**, M.-S. Lee, Y.-H. Tsai and P.-M. Lin, "Indoor Wireless Location Technology," Proc. of CHINACOM 2010, Beijing, China, Aug. 2010, pp. 1-7. (Invited paper)
115. **S.-T. Sheu** and L.-W. Chen, "Universal Power Saving Mechanism for Random Traffic Intensity in IEEE 802.16e Wireless Metropolitan Area Networks," Proc. of IEEE VTC 2011 Spring, Budapest, Hungary, May 2011, pp. 1-5.
116. **S.-T. Sheu**, Y.-C. Cheng, P.-J. Hsieh, and J.-S. Wu, "Agent-based Scheduling Scheme for IEEE 802.11p Wireless Vehicular Networks," Proc. of IEEE VTC 2011 Spring, Budapest, Hungary, May 2011, pp. 1-5.
117. H.-W. Tseng, Y.-R. Chuang and **S.-T. Sheu**, "An Automatic Mesh Scheme for IEEE 802.11 Wireless Mesh Networks," Proc. of IEEE IWCMC 2011, Istanbul, Turkey, Jul. 2011, pp. 47-52.
118. **S.-T. Sheu** and C.-H. Huang, "Mixed P2P-CDN System for Multimedia Streaming in Mobile Environment," Proc. of IEEE IWCMC 2011, Istanbul, Turkey, Jul. 2011, pp. 657-660.
119. **S.-T. Sheu**, P.-J. Hsieh, Y.-C. Cheng, and J.-S. Wu, "Coordinated Scheduling Scheme for IEEE 802.11p Wireless Vehicular Networks by IEEE 802.16e Wireless Metropolitan Area Networks," Proc. of IEEE IWCMC 2011, Istanbul, Turkey, Jul. 2011, pp. 772-776. (Invited paper)
120. **S.-T. Sheu**, C.-H. Chiu, S.-J. Lu, H.-H. Lai, "Efficient Data Transmission Scheme for MTC Communications in LTE System," Proc. of IEEE ITST 2011, San-Petersburg, Russia, Aug. 2011, pp. 727-731.
121. **S.-T. Sheu** and L.-W. Chen, "Advanced Power Saving Mechanism in IEEE 802.16m Wireless Metropolitan Area Networks," Proc. of IEEE VTC 2012 Spring, Yokohama, Japan, May 2012, pp. 1-5.
122. **S.-T. Sheu**, C.-H. Chiu, Y.-C. Cheng, and K.-H. Kuo, "Self-Adaptive Persistent Contention Scheme for Scheduling Based Machine Type Communications in LTE Systems," IEEE International Conference on Selected Topics in Mobile & Wireless Networks (iCOST 2012), Avignon, France, Jul. 2012.
123. W.-S. Shih, **S.-T. Sheu**, H.-Y. Lee, and T.-R. O, "CPR: A CRC-Based Packet Recovery Mechanism," Proc. of IEEE WCNC 2013, Shanghai, China, Apr. 2013.
124. **S.-T. Sheu**, K.-H. Kuo, C.-C. Yang, and Y.-M. Sheu, "A Go-back-N HARQ Time Bundling for Machine Type Communication devices in LTE TDD," Proc. of IEEE WCNC 2013, Shanghai, China, Apr. 2013, pp. 280-285.
125. Y.-H. Tsai, Y.-T. Liny, K.-C. Loa, T.-Y. Tsai, C.-C. Chien, D.-C. Huang and **S.-T. Sheu**, "Proximity-based Service Beyond 4G Network: Peer-aware discovery and communications using E-UTRAN and WLAN," Proc. of IEEE TrustCom 2013, Melbourne, Australia, Jul. 2013, pp. 1345 - 1350.
126. **S.-T. Sheu**, M.-T. Kao, Y.-M. Hsu, and Y.-C. Chen, "Indoor Location Estimation Using Smart Antenna System", Proc. of IEEE VTC 2013 Fall, Las Vegas, Sep. 2013, pp. 1-5.
127. H.-W. Tseng, S.-Y. Ou and **S.-T. Sheu**, "Node Joining and Grouping Scheme for Avoiding Hidden Node Problem in IEEE 802.15.4 Sensor Networks," Proc. ACM RACS 2013, Montreal, Canada, Oct. 2013, pp. 196-201.
128. **S.-T. Sheu** and Y.-M. Hsu, "Virtual Fingerprint Construction for Indoor Location Using Smart Antenna System," Proc. of UBICOMM 2014, Rome, Italy, Aug. 2014.
129. **S.-T. Sheu**, Y.-H. Tsai and C.-L. Lin, "以使用者為基礎之 PAGING 架構," 全國電信研討會, 台中, Nov. 2014.

130. **S.-T. Sheu**, W.-H. Wang and J.-H. Chen, "Implementation of Earthquake Early Warning System Based on Support Vector Machine and Fuzzy Inference," Proc. of WICOM, Shanghai, China, Sep. 2015, pp. 382-389.
131. **S.-T. Sheu**, C.-L. Lin, and J.-H. Chen, "Reducing Signaling Cost of Location Management in Cellular Network Using Fuzzy Logic Controller," Proc. of WICOM, Shanghai, China, Sep. 2015, pp. 689-696.
132. **S.-T. Sheu**, C.-L. Chen and E.-G. Lee, "提升無線多通道NoC架構網路效能之群組策略" 無線、隨意及感測網路研討會, 南投, Oct. 2015. (Best Paper Award, 最佳論文獎)
133. M.-Y. Hsu and **S.-T. Sheu**, "A Low Complexity Algorithm for Earthquake Detection System", IEEE HSIC&ICCP, Taipei, Sep. 2016.
134. **S.-T. Sheu**, Y.-H. Wu, Y.-L. Chen, "Indoor Location Estimation Using Virtual Fingerprint Construction and Zone-based Remedy Algorithm", IEEE HSIC&ICCP, Taipei, Sep. 2016.
135. T.-C. Lin, Y.-H. Wu, C.-W. Hsu, H.-H. Liang, Y.-L. Chen, and **S.-T. Sheu**, "EQS³: Earthquake Sensing and Signaling System Using Retired Mobile Devices", The 23rd International Conference on Parallel and Distributed Processing Techniques and Applications (PDPTA'17), Las Vegas, USA, Jul. 2017.
136. C.-Y. Huang, S.-H. Tseng, **S.-T. Sheu** and T.-W. Chiang, "基於LBT之LAA與WiFi共存環境下效能分析" 全國電信研討會, 淡水, Jan. 2018.
137. C.-Y. Huang, C.-H. Huang, **S.-T. Sheu** and T.-W. Chiang, "Enhancing Transmission Performance in the LAA and WiFi Heterogeneous Network", IEEE VTC Fall 2018, Chicago, USA, May. 2018.
138. H.-H. Liang, T.-W. Chiang, W.-X. Kuo, C.-H. Huang, C.-Y. Huang and **S.-T. Sheu**, "Hidden Node Avoidance in LTE Licensed Assisted Access (LAA) Networks Using Full Duplex Radio (FDR) Technology", International Conference On Wireless Networks, Nevada, USA, Jul. 2018.
139. C.-W. Lin, R.-G. Cheng, C.-Y. Huang, S.-C. Jay Yang and **S.-T. Sheu**, "Experimental Evaluation of Jamming Threat in LoRaWAN", IEEE VTC Spring 2019, Kuala Lumpur, Malaysia, Apr. 2019.

三、專書或專章

1. "Wireless Systems and Mobile Computing", Chapter 5, pp. 109-126, NOVA Science Publisher, Inc., 2001.
2. "網路路由技術", (454 頁/合著), 全華出版社, 2005.
3. "網路交換技術", (426 頁/合著), 全華出版社, 2006.
4. "Wireless Ad Hoc Networking: Personal-Area, Local-Area, and Sensory-Area Networks", Chapter 19, 2007.
5. IEEE Standard 802.16j-2009, IEEE, 2009 (co-author).
6. "行動無線通訊與應用", (374 頁/合著), 空中大學, 2013.

四、專利

(A) 中華民國專利

1. 採用競爭方式之通道使用的無線通訊系統及其方法, 中華民國專利號碼: 發明第 I 268682 號 (2006/12/11~2025/08/11)
2. 基因演算法收斂加速裝置、系統以及方法, 中華民國專利號碼: 發明第 I 272779 號 (2007/02/21~2022/12/25)
3. 在無線通訊系統中利用偵錯碼以提升通道頻寬效能的方法及其電腦可讀取媒體, 中華民國專利號碼: 發明第 I 286010 號 (2007/08/21~2025/12/12)
4. 雙向無線群組控管方法及裝置, 中華民國專利號碼: 發明第 I 292663 號 (2008/01/11~2028/01/10)
5. 在無線通訊系統中直接資料鏈結之方法, 中華民國專利號碼: 發明第 I 296472 號 (2008/05/01~2025/11/03)
6. 傳輸碼框之無線通訊系統、方法及其電腦可讀取媒體, 中華民國專利號碼: 發明第 I 301023 號 (2008/09/11~2025/11/21)
7. 可調整連線識別碼的數量之通訊裝置、方法及應用程式, 中華民國專利號碼: 發明 I 323528 號

(2010/04/11~2026/10/03)

8. 用於一多重躍進網路中繼一資料訊號之裝置、傳輸方法及其電腦可讀取記錄媒體，中華民國專利號碼：發明 I 364186 號 (2012/05/11~2027/12/02)
9. 資料校正裝置，資料校正方法及其電腦程式產品，中華民國專利號碼：發明 I 371928 號 (2012/09/01~2028/12/14)
10. 基地台、下級站台及其傳輸方法，中華民國專利號碼：發明 I 382728 號 (2013/01/11~2029/07/05)
11. 基於多重躍進中繼標準以傳輸及中繼通道描述之方法、無線通訊系統、電腦可讀取紀錄媒體及通訊裝置，中華民國專利號碼：發明 I 387282 號 (2013/02/21~2027/12/19)
12. 用於一多躍式無線網路之中央控制裝置、訊號傳輸裝置以及訊號轉發裝置及其傳輸方法，中華民國專利號碼：發明 I 387262 號 (2013/02/21~2029/01/15)
13. 基地台、下級站台及其傳輸方法，中華民國專利號碼：發明 I 390875 號 (2013/03/21~2029/05/03)
14. 微型基地台、基地台、微型閘道器及其通訊方法，中華民國專利號碼：發明 I 404431 號 (2013/08/01~2029/11/26)
15. 行動裝置，中華民國專利號碼：發明 I 423600 號 (2014/01/11~2030/11/24)
16. 訊號源配置系統、方法及其電腦可讀去記憶媒體，中華民國專利號碼：發明 I 531266 號 (2016/04/21~2031/11/17)
17. 授權輔助存取網路系統及其干擾通訊方法，中華民國專利號碼：發明 I 583146 號 (2017/05/11~2035/11/1)

(B) 韓國專利

1. METHOD AND COMPUTER READABLE MEDIA FOR EFFICIENT CHANNEL ACCESS BY USING PARTIAL ERROR DETECTION CODE IN CENTRALIZED WIRELESS COMMUNICATION SYSTEM, 韓國專利號碼:發明第 10-0700259 號 (2007/03/20~2026/02/06)
2. METHOD FOR DIRECT LINK IN WIRELESS COMMUNICATION SYSTEM, 韓國專利號碼:發明第 10-0737064 號 (2007/07/02~2026/03/06)
3. WIRELESS COMMUNICATION SYSTEM, METHOD FOR TRANSMITTING FRAME, AND MEDIUM RECORDING PROGRAM THEREOF, 韓國專利證書碼:發明第 10-0997925 號 (2007/07/19~2026/03/09)
4. WIRELESS COMMUNICATION SYSTEM, METHOD FOR TRANSMITTING FRAME, AND MEDIUM RECORDING PROGRAM THEREOF, 韓國專利證書碼:發明第 10-0742722 號 (2007/07/19~2029/07/06)
5. METHOD, WIRELESS COMMUNICATION SYSTEM, TANGIBLE MACHINE-READABLE MEDIUM, AND COMMUNICATION APPARATUS FOR TRANSMITTING BANDWIDTH ALLOCATION BASED ON A MULTI-HOP RELAY STANDARD, 韓國專利證書碼:發明第 10-0961002 號 (2010/05/25~2028/03/03)
6. METHOD, WIRELESS COMMUNICATION SYSTEM, TANGIBLE MACHINE-READABLE MEDIUM, AND COMMUNICATION APPARATUS FOR TRANSMITTING AND RELAYING CHANNEL DESCRIPTOR BASED ON A MULTI-HOP RELAY STANDARD, 韓國專利證書碼:發明第 10-0965899 號 (2010/06/16~2028/03/03)
7. METHOD, WIRELESS COMMUNICATION SYSTEM, COMPUTER-READABLE RECORDING MEDIUM, AND COMMUNICATION APPARATUS FOR TRANSMITTING UPLINK HYBRID AUTOMATIC REPEAT REQUEST PACKETS BASED ON A MULTI-HOP RELAY STANDAR, 韓國專利證書碼:發明第 10-0997924 號 (2010/11/26~2028/04/03)
8. METHOD, WIRELESS COMMUNICATION SYSTEM, COMPUTER-READABLE RECORDING MEDIUM, AND COMMUNICATION APPARATUS FOR TRANSMITTING DOWNLINK HYBRID AUTOMATIC REPEAT REQUEST PACKETS BASED ON A MULTI-HOP RELAY STANDARD, 韓國專利證書碼:發明第 10-0997925 號 (2010/11/26~2028/04/03)
9. APPARATUS, TRANSMISSION METHOD, AND TANGIBLE COMPUTER-READABLE MEDIUM THEREOF FOR RELAYING A DATA SIGNAL IN A MULTI-HOP NETWORK, 韓國專利證書碼:發明第 10-1005937 號 (2010/12/28~2028/03/03)

10. COMMUNICATION APPARATUS, COMMUNICATION METHOD, AND COMPUTER PROGRAM PRODUCT FOR A WIRELESS COMMUNICATION SYSTEM, 韓國專利證書碼:發明第 10-1110348 號 (2012/01/19~2029/12/04)
11. DATA CORRECTION APPARATUS, DATA CORRECTION METHOD AND TANGIBLE MACHINE-READABLE MEDIUM THEREOF, 韓國專利證書碼:發明第 10-1120593 號 (2012/02/20~2029/07/06)

(C) 美國專利

1. METHOD FOR DIRECT LINK IN WIRELESS COMMUNICATION SYSTEM, 美國專利號碼: US 7,555,305 B2 (2009/06/30~2026/01/20)
2. WIRELESS COMMUNICATION SYSTEM USING CHANNEL ACCESS BASED ON A CONTENTION APPROACH AND METHOD THEREOF, 美國專利號碼: US 7,634,285 B2 (2009/12/15~2025/10/17)
3. WIRELESS COMMUNICATION SYSTEM, METHOD FOR TRANSMITTING FRAME, AND COMPUTER PROGRAM PRODUCT THEREOF, 美國專利號碼: US 7,706,366 B2 (2010/04/27~2026/03/21)
4. WIRELESS NETWORK SCHEDULING CONTROL SYSTEM AND METHOD THEREOF AND COMPUTER READABLE RECORDING MEDIA, 美國專利號碼: US 7,792,067 B2 (2010/09/07~2027/05/25)
5. METHOD, WIRELESS COMMUNICATION SYSTEM, TANGIBLE MACHINE-READABLE MEDIUM, AND COMMUNICATION APPARATUS FOR TRANSMITTING BANDWIDTH ALLOCATION BASED ON A MULTI-HOP RELAY STANDARD, 美國專利號碼: US 8,027,689 B2 (2011/09/27~2027/12/05)
6. DATA CORRECTION APPARATUS, DATA CORRECTION METHOD AND TANGIBLE MACHINE-READABLE MEDIUM THEREOF, 美國專利號碼: US 8,073,825 B2 (2011/12/06~2029/06/17)
7. BASE STATION, SUBORDINATED STATION AND TRANSMISSION METHOD THEREOF, 美國專利號碼: US 8,265,884 B2 (2012/01/31~2029/07/07)
8. BASE STATION, SUBORDINATED STATION AND TRANSMISSION METHOD THEREOF, 美國專利號碼: US 8,107,884 B2 (2012/01/31~2029/01/10)
9. BASE STATION, SUBORDINATED STATION AND TRANSMISSION METHOD THEREOF, 美國專利號碼: US 8,265,644 B2 (2012/05/15~2029/05/05)
10. BASE STATION, SUBORDINATED STATION AND TRANSMISSION METHOD THEREOF, 美國專利號碼: US 8,179,825 B2 (2012/05/15~2029/05/10)
11. SERVICE PROVIDING APPARATUS SERVICE CONSUMING APPARATUS, AND SERVICE TRANSMITTING METHOD THEREOF, 美國專利號碼: US 8,265,644 B2 (2012/09/11~2030/11/30)
12. MOBILE APPARATUS, 美國專利號碼: US 8,395,548 B2 (2013/03/12~2030/12/10)
13. Method, Wireless Communication System, Tangible Machine-Readable Medium, And Communication Apparatus For Transmitting And Relaying Channel Description Based On A Multi-Hop Relay Standard, 美國專利號碼: US 7,970,343 B2
14. DIRECT MODE COMMUNICATION SYSTEM AND COMMUNICATION RESOURCE SCHEDULING METHOD THEREOF, 美國專利號碼: US 9,693,379 B2 (2017/6/27~)

(D) 英國專利

1. FEMTOCELL, BASE STATION, FEMTO GATEWAY, AND COMMUNICATION METHOD THEREOF, 專利證書號: GB2475745 號 (2012/04/11~2029/03/12)
2. FEMTOCELL, COMMUNICATION METHOD FOR THE FEMTOCELL, AND COMPUTER READABLE MEDIUM THEREOF, 專利證書第 GB2480888 號 (2012/06/27~2030/08/13)

(E) 德國專利

1. DATA CORRECTION APPARATUS, DATA CORRECTION METHOD AND TANGIBLE MACHINE-READABLE MEDIUM THEREOF, 專利證書號: Nr. 10 2009 032 640 號 (2009/10/07~2028/12/15)

2. SERVICE PROVIDING APPARATUS SERVICE CONSUMING APPARATUS, AND SERVICE TRANSMITTING METHOD THEREOF, 專利證書號: Nr. 10 2010 061 153 號
(2012/11/08~2030/10/12)

(F) 加拿大專利

1. WIRELESS NETWORK SCHEDULING CONTROL SYSTEM AND METHOD THEREOF AND COMPUTER READABLE RECORDING MEDIA, 專利證書號:2,589,235 (2011/07/26~2027/05/17)
2. WIRELESS COMMUNICATION SYSTEM,METHOD FOR TRANSMITTING FRAME,AND COMPUTER PROGRAM PRODUCT THEREOF, 專利證書號: 2,541,702 (2012/04/03~2026/04/04)
3. METHOD,WIRELESS COMMUNICATION SYSTEM,TANGIBLE MACHINE-READABLE MEDIUM,AND COMMUNICATION APPARATUS FOR TRANSMITTING BANDWIDTH ALLOCATION BASED ON A MULTI-HOP RELAY STANDARD, 專利證書號: 2,622,883 (2012/11/27~2028/11/27)

(G) 中國專利

1. 可中繼數據的裝置、傳輸方法及其電腦可讀取記錄媒體, 專利證書號:第 814311 號
(2011/07/27~2028/02/28)
2. 傳輸頻寬分配的方法、系統及裝置, 專利證書號:第 1020556 號 (2012/08/08~2028/02/28)
3. 數據校正裝置及數據校正方法, 專利證書號:第 1158557 號 (2013/03/27~2028/12/22)
4. 傳輸通道描述的方法、系統及裝置, 專利證書號:第 1147251 號 (2013/03/06~2028/02/29)
5. 移動台、基站、及其傳輸方法, 專利證書號:第 1225324 號 (2013/06/26~2030/04/09)