A. Journal Publications:

- [1] **C.H. Cheng**, J.Y. Lin, and J.H. Wen, "O³-based linear decorrelating detector for asynchronous UWB systems over multipath fading channels," *AEU International Journal of Electronics and Communications*, vol. 63, pp.158-167, March 2009. (SCI) (EI)
- [2] **C.H. Cheng**, J.Y. Lin, C.K. Wen, and J.H. Wen, "O³BPSK-based linear decorrelating Detector for asynchronous DS/CDMA systems over frequency-selective Rayleigh fading channels," *Wireless Personal Communications*, vol:48, pp. 311-325, January 2009. (SCI) (EI)
- [3] **C.H. Cheng**, Wen-Jun Lin and Kai-Jie Chen, "Subspace-based blind multi-user detection for TH-UWB systems in multi-path channels," *WSEAS Trans. Comm.*, vol. 7, no. 8, pp. 796-806, July 2008. (EI)
- [4] Y.F. Huang, T.H. Tan, **C.H. Cheng** and N. C. Wang, "Performance of partial parallel interference cancellation with MC-CDMA transmission techniques for power line communication systems," *WSEAS Trans. Comm.*, vol. 7, no. 7, pp. 729-738, July 2008. (EI)
- [5] **C.H. Cheng**, J.Y. Lin, J.H. Wen, and C.K. Wen "On the performance of O³BPSK LDD with diversity combining techniques over fading channels," *Computer Communications*, vol. 31, no. 9, pp. 1832-18418, June 2008. (SCI) (EI)
- [6] **C.H. Cheng**, J.H. Wen, Y.F. Chen, and J.Y. Lin, "A robust interference cancellation technique for DS-UWB systems using fuzzy step size LMS algorithm," *European Transactions on Telecommunications*. vol. 19, no. 2, pp.207-217, Mar. 2008. (SCI) (EI)
- [7] **C.H. Cheng**, J.Y. Lin, and J.H. Wen, "Orthogonal on-off-based near-far-resistant detection with diversity technique in UWB systems," *IET Proceedings –Communications*, vol. 1, no. 5, pp. 1042-1047, Oct. 2007. (SCI) (EI)
- [8] J.H. Wen and **J.S. Jeng**, "One-shot near-far resistant detection scheme over Nakagami-*m* fading channel for DS/CDMA systems," *IEICE Trans. on Fundamentals of Electronics, Communications and Computer Sciences*, vol. E81-A, no.11, pp. 2298-2303, 1998. (SCI) (EI)

B. Conference Papers:

[1] J.H. Wen, C.H. Cheng, Y.J. Wang and C.C. Su, "Blind Channel Estimation

- with Exponential Pulse Filter for TH-PPM-UWB Systems," accept in *the Proc.* of NST2008, Yunlin, Taiwan, R.O.C, 5-6 Dec. 2008.
- [2] **C.H. Cheng**, Y.F. Chen, K.J. Chen and Y.F. Huang, "A Robust fuzzy step size LMS algorithm for DS-UWB systems," in *Proc. of IEEE SMC2008*, Singapore, pp. 1205-1210, 12–15 October, 2008.
- [3] **C. H. Cheng** and J.H. Wen, "Near-far resistant successive interference cancellation multiuser detector for asynchronous UWB Systems," *Proc. of ChinaCOM* 2008, Hangzhou, China, pp. 55-59, August 25-27, 2008. (EI)
- [4] **C. H. Cheng**, W. J. Lin and K. J. Chen, "Blind multi-user detection for TH-UWB systems in UWB channels," *Proc. of the 12th WSEAS International Conference on Communications*, pp. 123-128, July 23-25, 2008.
- [5] Y. F. Huang, T. H. Tan, **C. H. Cheng** and N. C. Wang, 2008, "Performance of power line communication systems using MC-CDMA transmission Techniques," *Proc. of the 12th WSEAS International Conference on Communications*, pp. 135-140, July 23-25, 2008.
- [6] **C.H. Cheng,** Y.J. Wang, and J.H. Wen, "O³-based multiuser parallel Interference cancellation for ultra-wideband wireless communications," *the Proc. of NST2007*, pp. 457-461, Taipei, Taiwan, R.O.C, Nov. 2007.
- [7] **C.H. Cheng** and J.H. Wen, "O³-based linear decorrelating detector for asynchronous UWB systems over multipath fading channels," *Proc. of Wireless Communications, Networking and Mobile Computing (WiCOM2007)* pp.590-593, Shanghai, China, Sept. 2007. (EI)
- [8] **C.H.** Cheng, Y.F. Chen, G.J. Wen, and J.H. Wen, "An iterative channel estimation technique on DS-UWB systems," *the Proc. of NST2006*, Kaohsiung, Taiwan, R.O.C, Dec. 2006.
- [9] **C.H. Cheng** and J.H. Wen, "O³-based near-fear resistant detection in fading channels for asynchronous UWB systems," *the Proc. of NST2004*, vol. I, pp. 6-11, Keelung, Taiwan, Dec. 2004.
- [10] **C.H. Cheng** and J.H. Wen, "Orthogonal on-off UWB signaling scheme with one-shot linear decorrelating detector over Nakagami-*m* fading channel," *Proc. of IEEE Joint UWBST and IWUWBS2004*, pp.101-105, Kyoto, Japan, May 2004.
- [11] **C.H. Cheng** and J.H. Wen "Orthogonal on-off UWB signaling scheme with one-shot linear decorrelating detector," *the Proc. of IEEE ICICS2003*, pp. 923-928, Kaohsiung, Taiwan, R.O.C., Dec. 2003.