

論文發表

(A) 期刊論文 (近五年)

(A-1) 國際性

1. **W.-C. Liu** and C.-M. Wu, 2004 May, "Broadband dual-frequency CPW-fed planar monopole antenna with rectangular notch," *Electronics Letters*, Vol.40, No.11, pp.642-643 (SCI/EI).
2. **W.-C. Liu**, C.-C. Huang and C.-M. Wu, 2004 June, "Dual-polarised single-layer slotted patch antenna," *Electronics Letters*, Vol.40, No.12, pp.717-718 (SCI/EI) NSC 91-2213-E-150-012-.
3. **W.-C. Liu** and W.-R. Chen, 2004 Sep., "CPW-fed compact meandered patch antenna for dual-band operation", *Electronics Letters*, Vol.40, No.18, pp.1094-1095 (SCI/EI)
4. **W.-C. Liu**, 2004 Oct., "Broadband dual-frequency meandered CPW-fed monopole antenna," *Electronics Letters*, Vol.40, No.21, pp.1319-1320 (SCI/EI)
5. **W.-C. Liu**, W.-R. Chen, and C.-M. Wu, 2004 Dec., "Printed double S-shaped monopole antenna for wideband and multiband operation of wireless communications," *IEE Proceedings Microwaves, Antennas and Propagation*, Vol.151, No.6, pp.473-476 (SCI/EI) NSC 92-2622-E-150-042-CC3
6. **Wen-Chung Liu** and Chuan-Chien Huang, 2005 Mar., "A CPW-fed L-shaped slot planar monopole antenna for triple-band operations," *Microwave and Optical Technology Letters*, Vol.44, No.6, pp.510-512 (SCI/EI)
7. **W.-C. Liu** and C.-F. Hsu, 2005 Mar., "Dual-band CPW-fed Y-shaped monopole antenna for PCS/WLAN application," *Electronics Letters*, Vol.41, No.7, pp.390-391 (SCI/EI)
8. **W.-C. Liu**, 2005 July, "Compact microstrip-line-fed ring monopole antenna with a tuning strip for 5-GHz WLAN operation," *Electronics Letters*, Vol.41, No.15, pp.831-832 (SCI/EI)
9. **W.-C. Liu**, 2005 Aug., "Design of a CPW-fed notched planar monopole antenna for multiband operations using a genetic algorithm," *IEE Proceedings Microwaves, Antennas and Propagation*, Vol.152, No.4, pp.273-277 (SCI/EI) NSC 93-2622-E-150-027-CC3
10. **Wen-Chung Liu**, 2005 Aug., "Broadband dual-frequency

cross-shaped slot CPW-fed monopole antenna for WLAN operation,” *Microwave and Optical Technology Letters*, Vol.46, No.4, pp.353-355 (SCI/EI)

11. **W.-C. Liu** and Z.-K. Hu, 2005 Aug, “Broadband CPW-fed folded-slot monopole antenna for 5.8 GHz RFID application,” *Electronics Letters*, Vol.41, No.17, pp.5-6 (SCI/EI)
12. **Wen-Chung Liu**, 2005 Oct., “Design of a multiband CPW-fed monopole antenna using a particle swarm optimization approach,” *IEEE Trans. Antennas and Propag.*, Vol.53, No.10, pp.3273-3279 (SCI/EI)
13. **W.-C. Liu**, 2005 Dec., “Wideband dual-frequency double inverted-L CPW-fed monopole antenna for WLAN application,” *IEE Proceedings Microwaves, Antennas and Propagation*, Vol.152, No.6, pp.505-510 (SCI/EI)
14. **Wen-Chung Liu** and Ping-Chi Kao, 2005 Dec., “CPW-fed triangular monopole antenna for ultra wideband operation,” *Microwave and Optical Technology Letters*, Vol.47, No.6, pp.580-582 (SCI/EI) NSC 94-2213-E-150-009-
15. **Wen-Chung Liu** and Chao-Ming Wu, 2006 Mar., “CPW-fed shorted F-shaped monopole antenna for 5.8 GHz RFID Application,” *Microwave and Optical Technology Letters*, Vol.48, No.3, pp.573-575 (SCI/EI)
16. **Wen-Chung Liu** and Ping-Chi Kao, 2006 June., “CPW-fed triangular antenna with a frequency band notch function for ultra-wideband application,” *Microwave and Optical Technology Letters*, Vol.48, No.6, pp.1032-1035 (SCI/EI) NSC 94-2213-E-150-009-
17. **W.-C. Liu** and H.-J. Liu, 2006 July, “Compact CPW-fed monopole antenna for 5 GHz wireless application,” *Electronics Letters*, Vol.42, No.15, pp.837-839 (SCI/EI)
18. **W.-C. Liu** and H.-J. Liu, 2006 July, “Compact triple-band slotted monopole antenna with asymmetrical CPW grounds,” *Electronics Letters*, Vol.42, No.15, pp.840-842 (SCI/EI)
19. **Wen-Chung Liu** and Ching-Feng Hsu, 2006 Aug., “Flexible CPW-fed double meandered monopole antenna for dual-band WLAN operation,” *Microwave and Optical Technology Letters*, Vol.48, No.8, pp.1529-1532 (SCI/EI) NSC 94-2213-E-150-009-

20. **Wen-Chung Liu** and Ping-Chi Kao, 2006 Aug., "Compact CPW-fed dual folded-strip monopole antenna for 5.8 GHz RFID application," *Microwave and Optical Technology Letters*, Vol.48, No.8, pp.1614-1615 (SCI/EI)
21. **Wen-Chung Liu**, 2007 Jan., "A coplanar waveguide-fed folded-slot monopole antenna for 5.8 GHz radio frequency identification application," *Microwave and Optical Technology Letters*, Vol.49, No.1, pp.71-74 (SCI/EI) NSC 95-2221-E-150-019-
22. **W.-C. Liu** and C.-F. Hsu, 2007, "CPW-fed notched monopole antenna for UMTS/IMT-2000/WLAN applications," *Journal of Electromagnetic Waves and Applications*, Vol.21, No.6, pp.841-851 (SCI/EI)
23. **W.-C. Liu** and P.-C. Kao, 2007, "Design of probe-fed H-shaped microstrip antenna for circular polarization," *Journal of Electromagnetic Waves and Applications*, Vol.21, No.7, pp.857-864 (SCI/EI)
24. **W.-C. Liu** and Y.-T. Kao, 2007, "CPW-fed compact meandered strip antenna on a soft substrate for dualband WLAN communication," *Journal of Electromagnetic Waves and Applications*, Vol.21, No.7, pp.987-995 (SCI/EI) NSC 95-2221-E-150-019-
25. **W.-C. Liu** and H.-J. Liu, 2007, "Miniaturized asymmetrical CPW-fed meandered strip antenna for triple-band operation," *Journal of Electromagnetic Waves and Applications*, Vol.21, No.8, pp.1089-1097 (SCI/EI) NSC 95-2221-E-150-019-
26. **W.-C. Liu**, 2007 Apr., "Optimal design of dualband CPW-fed G-shaped monopole antenna for WLAN application," *Progress in Electromagnetics Research*, PIER 74, pp.21-38 (SCI/EI) NSC 95-2221-E-150-019-
27. **Wen-Chung Liu** and Shu-Ming Chen, 2007 July, "Ultra-wideband printed fork-shaped monopole antenna with a band-rejection characteristic," *Microwave and Optical Technology Letters*, Vol.49, No.7, pp.1536-1538 (SCI/EI)
28. **Wen-Chung Liu**, 2007 July, "Broadband dual-frequency CPW-fed antenna with a cross-shaped feeding line for WLAN application," *Microwave and Optical Technology Letters*, Vol.49, No.7, pp.1739-1744 (SCI/EI) NSC 94-2213-E150-009-
29. Yeuh-Yeong Liou, Chi-Chang Liu, Chin-Chiuan Kuo, **Wen-Chung**

- Liu, and Cheng-Chung Jaing, 2007 Aug., "Design of universal broadband visible antireflection coating for commonly used glass substrates," *Japanese Journal of Applied Physics*, Vol.46, Pt. 1, No.8A, pp. 5143-5147 (SCI/EI) NSC 95-2221-E-270-017-
30. W.-C. Liu, 2007 Oct., "Dual wideband CPW-fed notched antenna with asymmetrical grounds for multi-band wireless application," *IET Microwaves, Antennas and Propagation*, Vol.1, No.5, pp.980-985 (SCI/EI) NSC 95-2221-E-150-019-
31. Wen-Chung Liu and Feng-Ming Yeh, 2008 Mar., "Compact dual- and wide-band CPW-fed slot antenna for wireless applications," *Microwave and Optical Technology Letters*, Vol.50, No.3, pp.574-575 (SCI/EI) NSC 96-2221-E-150-001-
32. Wen-Chung Liu and Feng-Ming Yeh, 2008 Mar., "CPW-fed shorted monopole antenna for broadband application," *Microwave and Optical Technology Letters*, Vol.50, No.3, pp.787-789 (SCI/EI)
33. Wen-Chung Liu, Feng-Ming Yeh, and Mohammad Ghavami, 2008 Sep., "Miniaturized implantable broadband antenna for biotelemetry communication," *Microwave and Optical Technology Letters*, Vol.50, No.9, pp.2407-2409 (SCI/EI) NSC 96-2221-E-150-001 and NSC 96-2918-I-150-002.
34. Wen-Chung Liu, Jieh-La Jaw, and Bohr-Chun Chen, 2008 Nov., "Triple-band CPW-fed monopole antenna with branch strips for wireless applications," *Microwave and Optical Technology Letters*, Vol.50, No.11, pp.2794-2797 (SCI/EI)
35. W.-C. Liu, S.-H. Chen and C.-M Wu, 2008, "Implantable broadband circular stacked PIFA antenna for biotelemetry communication," *Journal of Electromagnetic Waves and Applications*, Vol. 22, No.13, pp.1791-1800 (SCI/EI) NSC 96-2221-E-150-001-
36. Wen-Chung Liu, Chao-Ming Wu, Shih-Hsiung Chung, and Jieh-La Jaw, 2008 Dec., "Strip loaded CPW-fed triangular monopole antenna for UWB operation," *Microwave and Optical Technology Letters*, Vol.50, No.12, pp.3097-3101 (SCI/EI)
37. Wen-Chung Liu, Chao-Ming Wu, Shih-Hsiung Chung, and Jieh-La Jaw, 2008 Dec., "Notched CPW-fed pentagonal monopole antenna for dual wideband operation," *Microwave and Optical Technology Letters*, Vol.50, No.12, pp.3104-3108 (SCI/EI) NSC 96-2815-C-150-022-E
38. Wen-Chung Liu, Chau-Chung Song, Shih-Hsiung Chung, and

- Jieh-La Jaw, 2009 Jan., "Strip-loaded CPW-fed pentagonal antenna for GPS/WiMAX/WLAN applications," *Microwave and Optical Technology Letters*, Vol.51, No.1, pp.48-52 (SCI/EI)
NSC 96-2815-C-150-022-E
39. **Wen-Chung Liu**, Ssu.-Hung Chen, and Chao-Ming Wu, 2008 Oct, "Bandwidth enhancement and size reduction of an implantable PIFA antenna for biotelemetry devices," *Microwave and Optical Technology Letters*, Vol.51, No.3, pp.755-757. (SCI/EI)
NSC 96-2221-E-150-001
40. **Wen-Chung Liu** and Jiun-Kai Chen, 2008 Nov., "Dual-band CPW-fed lateral pentagonal monopole antenna for IMT-2000/WLAN operations," *Microwave Journal*, accepted (SCI/EI)
41. **W.-C. Liu**, M. Ghavami, and W.-C. Chung, 2008 Dec., "Triple-frequency meandered monopole antenna with shorted parasitic strips for wireless application," *IET Microwaves, Antennas and Propagation*, accepted (SCI/EI) NSC 96-2221-E-150-001- and NSC 96-2918-I-150-002-
42. **W.-C. Liu** and H.-L. Ko, 2009 Jan., "Wideband CPW-fed dual meandered-strip monopole antenna," *Microwave and Optical Technology Letters*, accepted MOP-08-1424. (SCI/EI)

(A-2) 國內性

1. **Wen-Chung Liu**, Chao-Ming Wu and Chien-Ming Lee, 2004 Mar., "Design of curved H-shaped slot patch antenna for WLAN," *Journal of Huwei University of Science and Technology*, Vol. 1, pp.189-196.
2. **Wen-Chung Liu** and Wei-Hsuan Chen, 2006 Dec., "Design of double S-shaped slotted antenna for dual-band WLAN application" *Journal of National Formosa University*, Vol.25, No.4, pp.35-42
NSC 94-2815-C-150-036-E
3. **Wen-Chung Liu** and Ching-Feng Hsu, 2007 July, "Design of flexible CPW-fed folded-slot monopole antenna for 5.8 GHz RFID tags," *Journal of National Formosa University*, Vol.26, No.2, pp.53-58 NSC 95-2221-E-150-019

(B) 研討會論文 (近五年)

1. Chuan-Chien Huang and Wen-Chung Liu, 2004 May, "Design of a multi-band CPW-fed antenna for wireless communications", *2004 Conference on Electronic Communication and Applications*, Kaohsiung, Taiwan.
2. Wen-Ren Chen, Wen-Chung Liu and Chao-Ming Wu, 2004 May, "Printed meandered monopole antenna for multiband operation of wireless communications", *2004 Conference on Electronic Communication and Applications*, Kaohsiung, Taiwan. NSC 92-2622-E-150-042-CC3
3. 陳文仁、劉文忠, 2004 June, "應用於 WLAN 之小型化單極印刷天線", 第十三屆全國自動化科技研討會
4. Wen-Chung Liu and Chao-Ming Wu, 2004 Dec., "A Triple-band CPW-fed Notched Monopole Antenna for Wireless Communications", *The 1st Applied Science And Technology Conference*, Kaohsiung, Taiwan. TSC 9304
5. Wen-Chung Liu and Ching-Feng Hsu, 2005 Apr. 29, "Dual-band CPW-fed notched monopole antenna for wireless communication," *2005 Communication Electronic Technology and Application*, Kaohsiung, Taiwan
6. Wen-Chung Liu and Ping-Chi Kao, 2005 Apr. 29, "Compact CPW-fed triangular monopole antenna for ultra-wideband operation," *2005 Communication Electronic Technology and Application*, Kaohsiung, Taiwan
7. Wen-Chung Liu and Chao-Ming Wu, 2005 June 20-23, "Dual Broadband Slit-loaded CPW-fed Monopole Antenna for Wireless Communication", *IEEE Int. Symp. on Industrial Electronics*, Dubrovnik, Croatia, Vol. 4, pp.1377-1380. (EI) NSC 93-2622-E-150-027-CC3
8. Roy Chaoming Hsu and Wen-Chung Liu, 2005 June 27-30, "Project Based Learning as a Pedagogical Tool for Embedded System Education", accepted, *The 3rd Int. Conference on Information Technology: Research and Education*, Hsinchu, Taiwan
9. Wen-Chung Liu, Ping-Chi Kao and Chao-Ming Wu, 2005 Dec. 23, "CPW-fed ultra-wideband planar Antenna with a band-stop function", 彰雲嘉大學校院聯盟 2005 學術研討會, Changhua,

Taiwan, pp. 244-246

10. **Wen-Chung Liu** and Ping-Chi Kao, 2006 May 26, "Compact CPW-fed folded-strip monopole antenna for 5.8 GHz RFID application," 八十二週年校慶暨第十三屆三軍官校基礎學術研討會, Kaohsiung, Taiwan, pp. EE17-20
11. **Wen-Chung Liu** and Ching-Feng Hsu, 2006 July 7, "Flexible CPW-Fed Double S-Shaped Monopole Antenna for Dual-band WLAN Operation," *2006 Conference on Electric Communication and Applications*, Kaohsiung, Taiwan NSC 94-2213-E-150-009
12. **Wen-Chung Liu** and Chao-Ming Wu, 2006 Aug. 2-5, "Particle swarm optimization of dual-band CPW-fed antenna for WLAN operation," *Progress in Electromagnetics Research Symposium*, Tokyo, Japan NSC 94-2213-E150-009-
13. Hong-Jun Liu, **Wen-Chung Liu** and Chao-Ming Wu, 2006 Dec. 15, "CPW-fed compact meandered patch antenna for triple-band operation," *2006 年彰雲嘉大學校院聯盟學術研討會*, Cha-Yi, Taiwan.
14. **Wen-Chung Liu**, Yu-Ting Kao and Chao-Ming Wu, 2006 Dec. 15, "Design of a flexible CPW-fed meandered antenna for 2.4/5.2/5.8GHz WLAN application," *2006 年彰雲嘉大學校院聯盟學術研討會*, Cha-Yi, Taiwan. NSC 95-2221-E-150-019-
15. **Wen-Chung Liu** and Chao-Ming Wu, 2007 Mar. 26-30, "Dual-band CPW-fed G-shaped monopole antenna for 2.4/5 GHz WLAN application," *Progress in Electromagnetics Research Symposium*, Beijing, China. NSC 95-2221-E150-019-
16. **Wen-Chung Liu**, Chao-Ming Wu, and Yueh-Hsing Ho, 2007 Oct. 31-Nov. 2, "Broad dualband fork-shaped CPW-fed monopole antenna," *IEEE TENCON 2007 Taipei*, Taipei, Taiwan, R.O.C. NSC 95-2221-E-150-019- and NSC 96-2221-E-150-001-
17. **Wen-Chung Liu**, Feng-Ming Yeh and Chao-Ming Wu, 2007 Dec. 20, "Broadband CPW-fed shorted monopole antenna for wireless application," *2007 年彰雲嘉大學校院聯盟學術研討會*, Huwei, Taiwan.
18. **Wen-Chung Liu** and Mohammad Ghavami, 2008 Aug. 25-28, "Meandered monopole antenna with ground strips for multi-band wireless communication," *2008 Third International Conference on Communications and Networking in China*, Hangzhou, China. NSC 96-2221-E-150-001 and NSC 96-2918-I-150-002

19. **Wen-Chung Liu** and Jiun-Kai Chen, 2008 Dec.5-6, "Dual-band CPW-fed lateral pentagonal monopole antenna for IMT-2000/WLAN operations," *2008 National Symposium on Telecommunications*, Huawei, Taiwan
20. C.-C. Song, Y.-K. Chen, **W.-C. Liu**, and D.-C. Liaw, 2009 Feb. 10-13, "Periodic Modeling and Analysis of Bifurcation Dynamics for Switching Converters," *2009 IEEE International Conference on Industrial Technology (ICIT2009)*, accepted, Monash University, Gippsland, (EI) NSC 96-2625-Z-150-001 and NSC 97-2625-M-150-001

(C)技術報告及其它 (近五年)

1. 陳良瑞、劉文忠，2003，產業委託研究計畫「晶圓封裝廠 MIS 系統與生產設備之製程連線監控系統」結案報告 (虎技 飛 91AF09)
2. 劉文忠，2003，國科會專題研究計畫「應用於 SAR 之具雙極化性印刷天線陣列設計」結案報告 NSC 91-2213-E-150-012-
3. 劉文忠，2004，國科會補助提升產業技術及人才培育研究計畫「應用於無線通訊之多頻平面單極天線設計」結案報告 NSC 92-2622-E-150-042-CC3-
4. 陳良瑞、劉文忠，2004，產業委託研究計畫「晶圓封裝廠鐳線機製程連線監控系統」結案報告 (虎技 飛 92AF05)
5. 劉文忠，2004，國立虎尾科技大學鼓勵性研究計畫「應用於藍芽/無線網路通訊系統之雙頻微帶天線設計」結案報告 TCS 9304
6. 劉文忠，2005，國科會補助提升產業技術及人才培育研究計畫「多頻共平面波導饋入天線設計」結案報告 NSC 93-2622-E-150-027-CC3-
7. 劉文忠，2005，國立虎尾科技大學鼓勵性研究計畫「具低旋翼調變效應之直昇機 NVIS 通訊天線設計與量測」結案報告 TCS 93249
8. 劉文忠、吳昭明，2006，國科會專題研究計畫「共平面波導饋入式超寬頻(UWB)單極天線設計」結案報告 NSC 94-2213-E-150-009-
9. 劉文忠、吳昭明，2006，國科會補助提升產業技術及人才培育研究計畫「小型三頻無線區域網路共平面波導饋入式天線之研發—使用蜂群搜尋法」結案報告 NSC 94-2622-E-150-032-CC3-
10. 劉文忠，2007，教育部推動技專校院與產業園區產學合作研究計畫「應用於無線區域網路之軟性雙寬頻平面天線研發」結案報告 公-04-工-150-

11. 劉文忠、吳昭明，2007，國科會專題研究計畫「應用於射頻辨識系統之小型可彎式平面天線設計」結案報告
NSC 95-2213-E-150-019-
12. 劉文忠，2008，國科會專題研究計畫「超寬頻雷達技術之研究」結案報告 NSC 96-2918-I-150-002-
13. 劉文忠，2008，國科會專題研究計畫「應用於生醫無線通訊系統之植入式天線的研製與量測」結案報告
NSC 96-2221-E-150-001-

(D) 發明專利 (近五年)

1. 劉文忠、胡智凱，2005 Aug.，「操作在射頻辨識系統 5.8 GHz 頻段之 H 型微帶平面天線佈局及其方法」，中華民國發明專利，證號：I258893。NSC 93-2622-E-150-027-CC3
2. 劉文忠、吳昭明，2005 Sep.，「操作在射頻辨識系統 5.8GHz 頻段之 F 型微帶平面天線佈局」，中華民國發明專利，證號：I267232。NSC 94-2213-E-150-009
3. 劉文忠、許慶峰，2006 Mar.，「軟式共面波導饋入雙寬頻雙彎臂型單偶極天線」，中華民國發明專利，證號：I296865。NSC 94-2622-E-150-032-CC3
4. 劉文忠、劉鴻鈞，2006 May，「適用 5 GHz 頻段可調之小型共面波導饋入天線」，中華民國發明專利，已通過，公開號：95117068。NSC 94-2213-E-150-009-
5. 劉文忠、劉鴻鈞，2006 June，「小型共面波導饋入式三頻單偶極天線」，中華民國發明專利，審查中，公開號：95122879。NSC 94-2622-E-150-032-CC3