

**Jia-Chin Lin**

Visiting Fellow

Department of Electrical Engineering, Princeton University  
C329 Engineering Quadrangle, Olden Street, Princeton, NJ 08544  
Phone: 1 609-258-0907 Email: jiachinl@princeton.edu

**EXPERIENCE**

Aug. 2014 to Present	<b>Professor</b> Department of Communication Engineering	<b>National Central University</b>
Aug. 2011 to Jul. 2014	<b>Professor and Chairman</b> Department of Communication Engineering	<b>National Central University</b>
Jan. 2011 to Dec. 2013	<b>Distinguished Professor</b> Department of Communication Engineering <i>Work: Research and Teaching.</i>	<b>National Central University</b>
Aug. 2008 to Present	<b>Full Professor</b> Department of Communication Engineering <i>Work: Research and Teaching.</i>	<b>National Central University</b>
Aug. 2006 to Jul. 2008	<b>Associate Professor</b> Department of Communication Engineering <i>Work: Research and Teaching.</i>	<b>National Central University</b>
Aug. 2005 to Jul. 2006	<b>Visiting Associate Professor</b> Space, Telecommunications and Radioscience Laboratory (STARLab), Department of Electrical Engineering Host: Professor John M. Cioffi <i>Work: Research on topics regarding Mobile OFDM.</i>	<b>Stanford University</b>
Aug. 2004 to Jul. 2005	<b>Associate Professor</b> Department of Electrical Engineering <i>Work: Research and Teaching.</i>	<b>National Chi-Nan University</b>
Jul. 2004 to Aug. 2004	<b>Visiting Assistant Professor</b> Space, Telecommunications and Radioscience Laboratory (STARLab), Department of Electrical Engineering Host: Professor John M. Cioffi <i>Work: Research on topics regarding ADSL, DMT and OFDM Communications.</i>	<b>Stanford University</b>

Feb. 2001      **Assistant Professor**      **National Chi-Nan University**  
to  
Jul. 2004      Department of Electrical Engineering  
*Work: Research and Teaching.*

Apr. 2000      **Research Assistant Professor**      **National Chiao-Tung University**  
to  
Jan. 2001      Microelectronics and Information Systems Research Center  
*Work: Design and implementation of PN acquisition, tracking, RAKE receivers and multi-user detection techniques in W-CDMA.*

Jul. 1998      **Army Lieutenant**      **Obligatory Military Service**  
to  
Mar. 2000      Design of computer query systems for military phone numbers  
*Work: Design of database and coding programs for user-interfacing and networking.*

May 1998      **Adjunct Patent Examiner**      **Intellectual Property Office**  
to  
Feb. 2001      *Work: Examination of patent applications regarding Electronics and Communications.*

Feb. 1998      **Adjunct Lecturer**      **National Taipei Univ. Tech.**  
to  
Jul. 1998      *Work: Teaching of the class "Digital Signal Processing (DSP)."*

Mar. 1996      **Technical Specialist**      **Chung-Hwa Telecommunication Company**  
to  
Jan. 1997      *Work: Maintenance of transmission and switch equipment.*

## EDUCATION

Sep. 1995      **National Taiwan University**      **Ph.D.**  
to  
Jun. 1998      Thesis: *Synchronization, Diversity Combining and Transceiving Techniques for DSSS Communications.*  
Thesis Advisor: Prof. Lin-Shan Lee in the Department of Electrical Engineering at NTU

Sep. 1994      **National Chiao-Tung University**      **M.S.E.E.**  
to  
Jun. 1995      Thesis: *PN Code Synchronization Techniques for Wireless CDMA Communications.*  
Thesis Advisor: Prof. Che-Ho Wei in the Department of Electronics Engineering at NCTU

Sep. 1990      **National Chiao-Tung University**      **B.S.E.E.**  
to  
Jun. 1994      Curriculum with emphasis on Electronics, Circuit and Systems, Communications, Engineering Mathematics, Electromagnetics, Digital Communications, Stochastic Processes, Digital Signal Processing, Statistical Communication Theory, and Digital Modulation Techniques.

## HONORS

- 2009      **Taiwan Ten Outstanding Young Persons of the Year 2009**  
Index: Research and Development of Science and Technology
- 2006      **Marquis Who's Who in the World**
- 2005      **Taiwan Merit Scholarships**  
Endorsed by the TMS Program, the Executive Yuan, Taiwan.  
The Taiwan government annually provides limited fellowships  
for a few selected top researchers to promote future excellence in advanced research.
- 2004      **Outstanding Young Researcher Award**  
Endorsed by the Asia-Pacific Board, IEEE Communications Society.
- 2004      **Pan Wen-Yuan Incentive Award – for Visiting Scholars**  
Endorsed by the Pan Wen-Yuan Foundation.  
Annually, only three or fewer professors/researchers are selected out of the entire  
academia of Taiwan to conduct research in prestigious universities in the United States.
- 2003      **Outstanding Faculty Member Award**  
Endorsed by the Ministry of Education, Taiwan  
for a few excellent instructors working in universities.
- 2002      **Da-You Wu Memorial Incentive Award**  
One of the four competitive awards  
endorsed by the National Science Council (NSC), Taiwan every year.  
Awarded by the NSC, Taiwan for principal investigators (P.I.) of research projects  
funded by the NSC, Taiwan. Every year, only one research team and its P.I. within the  
entire academic areas of Networks, Signal Processing, Electromagnetics and Commu-  
nications are selected and awarded for the following three years to conduct successful,  
contiguous, leading and advanced research work. The competitive project review pro-  
cess is based on research achievements in the past five years. (Roughly, \$30,000/year  
is awarded for this research.)
- 2002      **Young Scientist Award**  
Endorsed by the International Union of Radio Sciences (URSI).

## PROFESSIONAL ACTIVITIES

- 2008-Present    **Associate Editor (Jan. 2008 to Mar. 2013)**  
**Editor (Apr. 2013 to Present)**  
*IEEE Trans. Vehic. Technol.*

2008-Present **Editorial Board Member**  
*The Open Transportation Journal.*

2012-Present **Associate Technical Editor**  
*IEEE Communications Magazine*

2012-2013 **Guest Editor**  
*IET Intelligent Transportation Systems*

2012-2013 **Guest Editor**  
*IEEE Intelligent Transportation System Magazine*, Winter Issue, October 2013.

2011-2012 **Guest Editor**  
 Special Issue: *Emerging Technologies in Communications: Vehicular Networks and Telematics Applications*  
*IEEE Journ. Sel. Are. Commun.*, vol. 31, no. 9, September 2013.

2012 **General Chair**  
*International Conference on ITS Telecommunications, Taipei, November 5-8, 2012, technically co-sponsored by IEEE, IEEE ComSoc, IET, IEICE-ESS, IEICE-CS.*

2010-2012 **Associate Editor**  
*IEEE Signal Processing Letters*

2012 **Keynote Speaker**  
 The speech titled “*Recent Advances on Signal Synchronization*”  
 at *International Conference on Recent Advances in Information Technology, March 15-18, 2012, Dhanbad, India.*

2010-2011 **Lead Guest Editor**  
 Special Section: *Telematics Advances for Vehicular Communication Networks*  
*IEEE Trans. Vehic. Technol.*, vol. 61, no. 1, January 2012.

2010-2011 **Vice Chair**  
 Membership Development Committee, IEEE ComSoc APB

Aug. 2011 **Fellow, IET**

2008-2009 **Vice Chair**  
 Meetings and Conferences Committee, IEEE ComSoc APB

Jun. 2003 **Senior Member, IEEE**

2005-Present Technical Program Committee (TPC)  
 – **TPC Member**

- WCNC 2013, Globecom 2013
- Signal Processing for Communications Symposium, International Conference on Computing, Networking and Communications, (ICNC’12), Maui, Hawaii, USA, January 30 - February 2, 2012.

- The Second International Conference on Advances in Cognitive Radio, (COCORA 2012), Chamonix / Mont Blanc, France, April 29 - May 4, 2012.
- IEEE Radio Wireless Week (RWW 2012), Santa Clara, CA, January 15-19, 2012.
- The Eighth Advanced International Conference on Telecommunications (AICT 2012), Stuttgart, Germany, May 27 - June 1, 2012.
- The 7th IEEE WORKSHOP ON BROADBAND WIRELESS ACCESS (BWA), Huston, Texas, USA, Dec. 9, 2011. (co-located with GLOBECOM 2011)
- Workshop on Mobile Computing and Emerging Communication Networks 2011 (GLOBECOM'11 MCECN1), Huston, Texas, USA, Dec. 5, 2011. (co-located with GLOBECOM 2011)
- 2011 IEEE International Conference on Communications (ICC 2011), Signal Processing for Communications Symposium (SPC), Japan.
- The 2011 IEEE 73rd Vehicular Technology Conference (VTC-2011 Spring), Budapest, Hungary, May 15-18, 2011.
- 11th International Conference on ITS Telecommunications (ITST 2011), Saint-Petersburg, Russia, August 23-25, 2011. (Workshop Chair)
- IEEE Workshop on Mobile Computing and Networking Technologies (WMCNT 2011), Budapest, Hungary, October 5-7, 2011.
- 4th International Conference on Cognitive Radio and Advanced Spectrum Management (CogART 2011), Barcelona, Catalonia, Spain, October 26-29, 2011.
- The 2011 International Workshop on Multimedia, Communication and Convergence Technologies (MCC 2011), Grete, Greece, June 28-30.
- The First International Conference on Advances in Cognitive Radio, Budapest, Hungary, April 17-22, 2011, (COCORA 2011).
- IEEE Broadband Wireless Access (BWA) Workshop Series.
- Asia-Pacific Network Operations and Management Symposium, Taipei, September 21-23, 2011.
- 2011 International Conference on Communications and Mobile Computing (CMC 2011), April 18-20, Qingdao, China.
- IEEE Radio and Wireless Week, Phoenix, AZ, USA, January 16-20, 2011.
- The Seventh Advanced International Conference on Telecommunications (AICT 2011), St. Maarten, The Netherlands Antilles, March 20-25, 2011.
- IEEE Globecom 2010 Workshop on Mobile Computing and Emerging Communication Networks (MCECN 2010), Miami, Florida, U.S.A. December 10, 2010.
- The Second IEEE International Workshop on Intelligent Vehicular Networks (InVeNET 2010), San Francisco, CA, USA, November 8-12, 2010.
- IEEE Workshop on Mobile Computing and Networking Technologies (WMCNT 2010), Moscow, Russia, October 2010.

- The 2010 IEEE International Conference on Communications, Circuits and Systems (ICCCAS 2010), Chengdu, China, July 28-30, 2010.
- 2010 International Conference on Communications and Mobile Computing (CMC 2010).
- International Conference on Communications and Networking in China (ChinaCom 2010).
- International Conference on Ultra Modern Telecommunications (ICUMP 2009).
- 2009 Asia-Pacific Signal and Information Processing Association, Annual Summit and Conference (APSIPA ASC 2009), Japan, October 4-7, 2009.
- IEEE Mobile WiMAX Symposium, July 2009, (IEEE MWS'09).
- International Conference on Wireless ViTAE, Denmark, May 17-20, 2009.
- The 69th IEEE Vehicular Technology Conference, Barcelona, Spain, April 26-29, 2009 (VTC 2009-Spring).
- 2009 International Conference on Communications and Mobile Computing (CMC 2009).
- International Conference on Communications and Networking in China (ChinaCom 2009).
- International Conference on Mobile Ubiquitous Computing, Systems, Services and Technologies (UBI-COMM 2008).
- The 65th IEEE Vehicular Technology Conference, Dublin, 23-25 April 2007 (VTC 2007-Spring).
- International Conference on Mobile Ubiquitous Computing, Systems, Services and Technologies (UBI-COMM 2007).
- International Wireless Communications and Mobile Computing Conference (IWCMC 2006).
- International Symposium on Broadband Access Technologies in Metropolitan Area Networks (ISBAT 2006).
- The 63rd IEEE Vehicular Technology Conference, Melbourne, Australia, 7-10 May 2006 (VTC 2006-Spring).
- IEEE International Conference on Communication (ICC 2005).
- 2005 International Conference on Wireless Networks (ICWN 2005).

Aug. 2001  
to  
Jul. 2013

Research Projects Funded by the National Science Council (NSC), Taiwan  
– **Principal Investigator**

- Aug. 2011 to Jul. 2014: *Spectral Sensing, Cell Search and Channel Estimation Techniques for Mobile OFDM Communications*, under the Contract: NSC 100-2221-E-008-049-MY3.
- Aug. 2010 to Jul. 2011: *Cell Search and Channel Estimation Techniques for Mobile OFDM Communications*, under the Contract: NSC 99-2221-E-008-038-.
- Aug. 2008 to Jul. 2010: *Channel Estimation Techniques in Mobile OFDM Communications*, under the Contract: NSC 97-2221-E-008-002-MY2.
- Aug. 2007 to Jul. 2008: *Resource Allocation Techniques with Spectral Efficiency Analysis and Relevant Transceiving Technologies for Mobile Multi-User OFDM/OFDMA Communications – Main Project*, under the Contract: NSC 96-2219-E-008-002.
- Aug. 2007 to Jul. 2008: *Resource Allocation Techniques with Spectral Efficiency Analysis and Relevant Transceiving Technologies for Mobile Multi-User OFDM/OFDMA Communications – Sub-project V: Channel Capacity Evaluation and Spectral Efficiency Enhancement for Mobile MIMO-OFDM/OFDMA Communications*, under the Contract: NSC 96-2219-E-008-005.
- Aug. 2005 to Jul. 2007: *Transceiving Technologies in Wireless OFDM Communications*, under the Contract: NSC 94-2213-E-260-008.
- Aug. 2004 to Jul. 2005: *Transceiving Techniques in Very-High-Mobility Communications on High-Speed Trains*, under the Contract: NSC 93-2213-E-260-025.
- Aug. 2004 to Jul. 2005: *Wideband Transceiving Technologies in Wireless Environments – Toward B3G/OFDM Mobile Communications from DS/SS (3/3)*, under the Contract: NSC 93-2213-E-260-003.
- Aug. 2003 to Jul. 2004: *Wideband Transceiving Technologies in Wireless Environments – Toward B3G/OFDM Mobile Communications from DS/SS (2/3)*, under the Contract: NSC 92-2213-E-260-011.
- Aug. 2002 to Jul. 2003: *Wideband Transceiving Technologies in Wireless Environments – Toward B3G/OFDM Mobile Communications from DS/SS (1/3)*, under the Contract: NSC 91-2213-E-260-024.
- Aug. 2001 to Jul. 2002: *Wideband Transmission Technologies in Wireless Environments – Toward 3G/4G Mobile Communications based on DS/SS*, under the Contract: NSC 90-2213-E-260-027.

## PUBLICATION LIST

### • Journal Papers

– *Published or Accepted*

1. C. Lv, J.-C. Lin, S. Hou and W. Mei, “Signal detection assisted from channel weight prediction for delay-sensitive orthogonal frequency-division multiplexing communications,” *IET Commun.*, vol. 8, iss. 10, pp. 1745-1750, Jul. 2014.
2. J.-C. Lin, “Initial synchronization assisted by inherent diversity over time-varying frequency-selective fading channels,” *IEEE Trans. Wirel. Commun.*, vol. 13, no. 5, pp. 2518-2529, May 2014.
3. H.-G. Chou, C.-F. Chuang, W.-J. Wang and J.-C. Lin, “A fuzzy-model-based chaotic synchronization and its implementation on a secure communication system,” *IEEE Trans. on Inform. Foren. and Secur.*, vol. 8, iss. 12, pp. 2177-2185, Dec. 2013.
4. C.-S. Lin and J.-C. Lin, “Physical-layer transceiving techniques on data-aided OFDM toward seamless service on vehicular communications,” *IET Commun.*, vol. 7, iss. 8, pp. 721-730, 2013.
5. J.-C. Lin and H.-Y. Hsu, “Timing-delay and frequency-offset estimations for initial synchronisation on time-varying Rayleigh fading channels,” *IET Commun.*, vol. 7, iss. 6, pp. 562-576, 2013.
6. C. Chen, Y. Chen, N. Ding, Y. Wang, J.-C. Lin, X. Zeng and D. Huang, “Accurate sampling timing acquisition for baseband OFDM power-line communication in non-Gaussian noise,” *IEEE Trans. Commun.*, vol. 61, no. 4, pp. 1608-1620, Apr. 2013.
7. J.-C. Lin, C.-S. Lin, C.-N. Liang and B.-C. Chen, “Wireless communication performance based on IEEE 802.11p R2V field trials,” *IEEE Communications Magazine*, vol. 50, iss. 5, pp. 184-191, May 2012.
8. J.-C. Lin, “An approach to the second-order statistics of maximum-ratio combining-like reception over independent Nakagami channels,” *IEEE Trans. Vehic. Technol.*, vol. 61, no. 2, pp. 859-865, Feb. 2012.
9. C.-S. Lin, C.-K. Sun, J.-C. Lin and B.-C. Chen, “Performance evaluations of channel estimations in IEEE 802.11p environments,” *Telecommunication Systems, Springer Netherlands*, pp. 1-12, Jun. 2011.
10. J.-C. Lin, “Least-squares channel estimation assisted by self-interference cancellation for mobile PRP-OFDM applications,” *IET Commun.*, vol. 3, iss. 12, pp. 1907-1918, Dec. 2009.
11. J.-C. Lin, “Channel estimation assisted by postfixed pseudo-noise sequences padded with zero samples for mobile orthogonal-frequency-division-multiplexing communications,” *IET Commun.*, vol. 3, iss. 4, pp. 561-570, Apr. 2009.
12. J.-C. Lin, “Least-squares channel estimation for mobile OFDM communication on time-varying frequency-selective fading channels,” *IEEE Trans. Vehic. Technol.*, vol. 57, no. 6, pp. 3538-3550, Nov. 2008.
13. J.-S. Lin, H.-Y. Chen and J.-C. Lin, “Channel estimation technique assisted by postfixed PN sequences with zero padding for wireless OFDM communications,” *IEICE Trans. Commun.*, vol. E91-B, no. 4, pp. 1095-1102, Apr. 2008.



14. H.-Y. Hsu and J.-C. Lin, "A frequency offset estimation technique based on CCK for a WLAN receiver design," *IEEE Trans. Consum. Electron.*, vol. 53, no. 4, pp. 1362-1369, Nov. 2007.
15. J.-C. Lin, "A frequency offset estimation technique based on frequency error characterization for OFDM communication on time-varying multipath fading channels," *IEEE Trans. Vehic. Technol.*, vol. 56, no. 3, pp. 1209-1222, May 2007.
16. J.-C. Lin, "Coarse frequency offset acquisition via subcarrier differential detection for OFDM communications," *IEEE Trans. Commun.*, vol. 54, no. 8, pp. 1415-1426, Aug. 2006.
17. J.-C. Lin, "Comments on "A noncoherent tracking loop with diversity and multipath interference cancellation for direct-sequence spread-spectrum systems"," *IEEE Trans. Commun.*, vol. 52, no. 9, pp. 1449-1452, Sep. 2004.
18. J.-C. Lin, "Low-complexity noncoherent PN code chip timing recovery with resistance to MAI for a band-limited CDMA receiver," *IEEE Trans. Vehic. Technol.*, vol. 52, no. 5, pp. 1315-1328, Sep. 2003.
19. J.-C. Lin, "Maximum-likelihood frame timing instant and frequency offset estimation for OFDM communication over a fast Rayleigh fading channel," *IEEE Trans. Vehic. Technol.*, vol. 52, no. 4, pp. 1049-1062, Jul. 2003.
20. J.-C. Lin, "Differentially coherent PN code acquisition based on a matched filter for chip-asynchronous DS/SS communications," *IEEE Trans. Vehic. Technol.*, vol. 51, no. 6, pp. 1596-1599, Nov. 2002.
21. J.-C. Lin, "Differentially coherent PN code acquisition with full-period correlation in chip-synchronous DS/SS receivers," *IEEE Trans. Commun.*, vol. 50, no. 5, pp. 698-702, May 2002.
22. J.-C. Lin, "Noncoherent sequential PN code acquisition using sliding correlation for chip-asynchronous direct-sequence spread-spectrum communications," *IEEE Trans. Commun.*, vol. 50, no. 4, pp. 664-676, Apr. 2002.
23. J.-C. Lin, "Study of MR-DPSK modulation," *IEEE Commun. Lett.*, vol. 6, iss. 4, pp. 132-134, Apr. 2002.
24. J.-C. Lin, "Blind equalisation technique based on an improved constant modulus adaptive algorithm," *IEE Proc.-Commun.*, vol. 149, iss. 1, pp. 45-50, Feb. 2002.
25. J.-C. Lin, "A modified PN code tracking loop for direct-sequence spread-spectrum communication over arbitrarily correlated multipath fading channels," *Special Issue on Signal Synchronization in Digital Transmission Systems, IEEE Journ. Select. Area. Commun.*, vol. 19, no. 12, pp. 2381-2395, Dec. 2001.
26. J.-C. Lin, "Low-complexity code tracking loop with chip-level differential detection for DS/SS receivers," *Electronics Letters*, vol. 36, no. 24, pp. 2040-2041, Nov. 2000.
27. J.-C. Lin, "A modified sequential acquisition scheme in direct-sequence spread-spectrum communications over a fading channel," *IEICE Trans. Commun.*, vol. E83-B, no. 10, pp. 2442-2446, Oct. 2000.
28. J.-C. Lin, "Improved tracking loop with interference-cancellation diversity for DS/SS over frequency-selective fading channels," *Electronics Letters*, vol. 36, no. 2, pp. 169-171, Jan. 2000.

29. J.-C. Lin and L.-S. Lee, "Joint blind multipath diversity combining and PN code timing recovery for direct-sequence spread-spectrum systems," *IEICE Trans. Commun.*, vol. E82-B, no. 9, pp. 1470-1484, Sep. 1999.
30. J.-C. Lin, "Blind RAKE receiver with joint diversity combining and code tracking for DS/SS communication," *Electronics Letters*, vol. 34, no. 16, pp. 1550-1551, Aug. 1998.
31. J.-C. Lin, "Noncoherent SPRT-based acquisition scheme for DSSS," *Electronics Letters*, vol. 34, no. 13, pp. 1290-1291, Jun. 1998.
32. J.-C. Lin and L.-S. Lee, "A modified code tracking loop for direct-sequence spread-spectrum systems on frequency-selective fading channels," *IEICE Trans. Commun.*, vol. E80, no. 7, pp. 1055-1063, Jul. 1997.

• **Conference Papers**

– *Published or Accepted*

1. K. Singh, M.-L. Ku and J.-C. Lin, "Optimal energy-efficient power allocation for multiuser relay networks," in *2014 IEEE 79th Vehicular Technology Conference (VTC2014-Spring)*, Seoul, Korea, May 18-21, 2014.
2. K. Singh, M.-L. Ku and J.-C. Lin, "Power control for achieving energy-efficient multiuser two-way balancing relay networks," in *2014 IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP)*, Florence, Italy, May 4-9, 2014, pp. 2749-2753.
3. Y.-T. Sun and J.-C. Lin, "Semi-blind multiple-frequency-offset estimation for decode-and-forward OFDM cooperative networks," in *IEEE Wirel. Commun. and Networking Conf., (IEEE WCNC 2014)*, Istanbul, Turkey, April 6-9, 2014, pp. 475-479.
4. H.-K. Chang, M.-L. Ku, K. Singh and J.-C. Lin, "Low-complexity amplify-and-forward mobile relay networks without source-to-relay CSI," in *Proc. IEEE Vehicular Technology Conference (VTC 2013-Fall)*, Las Vegas, Nevada, U.S., September 2-5, 2013.
5. K. Singh, M.-L. Ku and J.-C. Lin, "An optimal temporal-and-spatial equalizer for two-hop MIMO relay networks with backward CSIs," in *Proc. 2013 IEEE Wireless Communications and Networking Conference (WCNC)*, Shanghai, China, April 7-10, 2013, pp. 3242-3247.
6. K. Singh, M.-L. Ku and J.-C. Lin, "A two-dimensional MMSE equalizer for MIMO relay networks in multipath fading channels," in *Proc. 2013 IEEE Wireless Communications and Networking Conference (WCNC)*, Shanghai, China, April 7-10, 2013, pp. 3236-3241.
7. H.-K. Chang, J.-C. Lin and M.-L. Ku, "Sequential spectrum sensing based on higher-order statistics for cognitive radios," in *2012 International Conference on Communications and Information Technology (ICCIT)*, Hammamet, Tunisia, June 26-28, 2012, pp. 413-417.
8. Y.-T. Sun and J.-C. Lin, "Multi-carrier frequency-offset estimation based on MUSIC for carrier-aggregation orthogonal frequency-division multiplexing communications," in *2012 International Conference on Communications and Information Technology (ICCIT)*, Hammamet, Tunisia, June 26-28, 2012, pp. 408-412.

9. K.-P. Chou and J.-C. Lin, “A hybrid Cramér-Rao bound for the channel estimation of non-orthogonal, disintegrated, amplify-and-forward cooperative OFDM systems,” in *2012 International Conference on Communications and Information Technology (ICCIT), Hammamet, Tunisia, June 26-28, 2012*, pp. 352-356.
10. C.-H. Liao, F.-N. Ku, F.-H. Yeh, J.-C. Lin and M.-K. Tsay, “The design and simulations of phase and timing tracking circuits with pre-assured 2nd order digital loop filter,” in *Proc. 2011 International Conference on Electrical and Control Engineering (ICECE), Yichang, China, September 16-18, 2011*, pp. 5054-5057.
11. C.-H. Liao, F.-H. Yeh, J.-C. Lin and M.-K. Tsay, “Elliptic radio environments cognitivity through sequential scanning scheme,” in *Proc. 2011 International Conference on Electrical and Control Engineering (ICECE), Yichang, China, September 16-18, 2011*, pp. 4791-4794.
12. C.-S. Lin and J.-C. Lin, “Handover in vehicular communication networks,” in *Proc. 2011 11th International Conference on ITS Telecommunications (ITST), St. Petersburg, Russia, August 23-25, 2011*, pp. 590-595.
13. C.-S. Lin and J.-C. Lin, “Improved time-domain channel estimation techniques in IEEE 802.11p environments,” in *Proc. 7th International Symposium on Communication Systems, Networks and Digital Signal Processing (CNSDSP), July 21-23, 2010*, pp. 437-442.
14. C.-S. Lin, B.-C. Chen and J.-C. Lin, “Field test and performance improvement in IEEE 802.11p V2R/R2V environments,” in *Proc. IEEE International Conference on Communications (ICC 2010), Cape Town, South Africa, May 23-27, 2010*.
15. C.-S. Lin and J.-C. Lin, “Novel channel estimation techniques in IEEE 802.11p environments,” in *Proc. IEEE 71st Vehicular Technology Conference (VTC 2010-Spring), Taipei, Taiwan, May 16-19, 2010*.
16. S.-C. Huang, J.-C. Lin and K.-P. Chou, “Novel channel estimation techniques on SC-FDMA uplink transmission,” in *Proc. IEEE 71st Vehicular Technology Conference (VTC 2010-Spring), Taipei, Taiwan, May 16-19, 2010*.
17. C.-S. Lin, C.-K. Sun, J.-C. Lin and B.-C. Chen, “Performance evaluations of channel estimations in IEEE 802.11p environments,” in *Proc. IEEE Workshop on Mobile Computing and Networking Technologies, St. Petersburg, Russia, October 12-14, 2009 (WMCNT 2009)*.
18. J.-C. Lin and Y.-T. Sun, “Estimation of timing delay and frequency offset using a dual-chirp sequence,” in *Proc. Wireless Communications, Vehicular Technology, Information Theory and Aerospace & Electronics Systems Technology, Aalborg, Denmark, May 17-20, 2009 (Wireless ViTAE 2009)*, pp. 862-866.
19. J.-C. Lin and C.-S. Lin, “LS channel estimation assisted from chirp sequences in OFDM communications,” in *Proc. Wireless Communications, Vehicular Technology, Information Theory and Aerospace & Electronics Systems Technology, Aalborg, Denmark, May 17-20, 2009 (Wireless ViTAE 2009)*, pp. 222-226.
20. J.-C. Lin, “Least-squares channel estimation assisted by self-interference cancellation for mobile PRP-OFDM applications,” in *Proc. Intern. Conf. Commun., (ICC 2008), IEEE, Beijing, China, May 19-23, 2008*, pp. 578-583.

21. J.-C. Lin, "Channel estimation assisted by postfixed pseudo-noise sequences padded with null samples for mobile OFDM communications," in *Proc. Wireless Communications and Networking Conference, (WCNC 2008), IEEE, Las Vegas, March 31-April 4, 2008*, pp. 846-851.
22. J.-C. Lin, "LS channel estimation technique for mobile OFDM communications on time-varying frequency-selective fading channels," in *Proc. Intern. Conf. Commun., (ICC 2007), IEEE, Glasgow, Scotland, U.K., June 24-28, 2007*, pp. 3016-3023.
23. H.-Y. Chen, W.-J. Lin, J.-S. Lin and J.-C. Lin, "Channel estimation technique assisted by postfixed PN sequences with zero padding for wireless OFDM communications," in *Proc. Intern. Wireless Communications and Mobile Computing Conf., (IWCMC 2006), ACM, Vancouver, Canada, July 3-6, 2006*, pp. 1033-1038.
24. C.-Y. Huang, W.-J. Lin, J.-C. Lin and J.-S. Lin, "Two-dimensional pilot-aided channel estimation for wireless OFDM systems over severe frequency-selective fading environments," in *Proc. Intern. Wireless Communications and Mobile Computing Conf., (IWCMC 2006), ACM, Vancouver, Canada, July 3-6, 2006*, pp. 1027-1032.
25. J.-C. Lin, "Frequency offset estimation technique based on error characterization for OFDM communications on time-varying multipath fading channels," in *Proc. Intern. Conf. Commun., (ICC 2006), IEEE, Istanbul, Turkey, June 11-15, 2006*, vol. 7, pp. 2911-2916.
26. J.-C. Lin, "Frequency offset acquisition based on subcarrier differential detection for OFDM communications on doubly-selective fading channels," in *Proc. Intern. Conf. Commun., (ICC 2005), IEEE, Seoul, Korea, May 16-20, 2005*, vol. 3, pp. 1952-1956.
27. J.-C. Lin, "Frequency offset estimation by differentially coherent frequency error characterization for OFDM wireless communications," in *Proc. Intern. Conf. Commun., (ICC 2004), IEEE, Paris, France, June 20-24*, vol. 4, pp. 2387-2391.
28. C.-H. Chen, T.-C. Chang and J.-C. Lin, "A modified ML frequency offset estimator for OFDM systems," in *Proc. Intern. Symp. Intelligent Signal Processing and Communication Systems, (ISPACS 2003), IEEE, Awaji Island, Japan, December 7-10, 2003*, pp. 839-843.
29. J.-C. Lin, A. Chen and V. Ma, "Maximum-likelihood fine frame timing and frequency offset estimation for OFDM communication over a Rayleigh fading channel," in *Proc. Global Telecomm. Conf., (Globecom 2002), IEEE, Taipei, Taiwan, November 17-21, 2002*, vol. 1, pp. 686-690.
30. J.-C. Lin, "A modified PN code tracking loop for direct-sequence spread-spectrum communication over arbitrarily correlated multipath fading channels," in *CD-ROM Conf. Rec. General Assembly, International Union of Radio Sciences, (URSI GA 2002), Maastricht, Netherlands, August 17-24, 2002*.
31. J.-C. Lin, "Differentially coherent PN code acquisition using matched filter for chip-asynchronous DS/SS communications," in *Proc. Global Telecomm. Conf., (Globecom 2001), IEEE, San Antonio, Texas, November 25-29, 2001*, vol. 1, pp. 669-673.
32. J.-C. Lin, "Pull-in capability of a modified code tracking loop for direct-sequence spread-spectrum communication on a frequency-selective fading channel," in *Proc.*

*Intern. Conf. Commun., (ICC 2001), IEEE, Helsinki, Finland, June 11-14, 2001*, vol. 5, pp. 1451-1455.

33. J.-C. Lin and C.-Y. Lin, "Noncoherent sequential PN code acquisition using sliding correlation in DS/SS," in *Proc. Intern. Conf. Commun., (ICC 2000), IEEE, New Orleans, June 18-22, 2000*, vol. 1, pp. 341-345.
34. J.-C. Lin and L.-S. Lee, "A noncoherent sequential PN code acquisition scheme in DS/SS receivers," in *Proc. Global Telecomm. Conf., (Globecom 1998), IEEE, Sydney, November 8-12, 1998*, vol. 4, pp. 2168-2173.
35. J.-C. Lin and L.-S. Lee, "A modified blind equalization technique based on a constant modulus algorithm," in *Proc. Intern. Conf. Commun., (ICC 1998), IEEE, Atlanta, Georgia, June 7-11, 1998*, vol. 1, pp. 344-348.
36. J.-C. Lin, "A blind joint estimator for multipath diversity and PN timing errors in direct-sequence spread-spectrum receivers," in *Proc. Intern. Conf. Acoustic, Speech, Signal Process., (ICASSP 1998), IEEE, Seattle, May 12-15, 1998*, vol. 6, pp. 3241-3244.
37. J.-C. Lin and L.-S. Lee, "A modified code tracking loop for direct-sequence spread-spectrum systems on frequency-selective fading channels," in *Proc. Intern. Conf. Commun., (ICC 1997), IEEE, Montreal, Quebec, Canada, June 8-12, 1997*, vol. 1, pp. 356-360.
38. J.-C. Lin and C.-H. Wei, "A two-stage SPRT-based acquisition scheme for CDMA wireless communication systems," in *Proc. Intern. Symp. Inform. Theory, (ISIT 1997), IEEE, Ulm, Germany, June 29-July 4, 1997*, p. 152.

- **Book**

- **Chapter Authored**

1. H.-K. Chang, M.-L. Ku, L.-W. Huang and J.-C. Lin, "Chapter 4: Multiple Antenna Techniques," *Recent Advances in Wireless Communications and Networks*, Intech Publisher, July 2011. (ISBN: 978-953-307-274-6)
2. Y.-T. Sun and J.-C. Lin, "Chapter 2: Synchronization for OFDM-based Systems," *Recent Advances in Wireless Communications and Networks*, Intech Publisher, July 2011. (ISBN: 978-953-307-274-6)
3. K.-P. Chou and J.-C. Lin, "Chapter 1: A Study of Cramèr-Rao-Like Bounds and Their Applications to Wireless Communications," *Recent Advances in Wireless Communications and Networks*, Intech Publisher, July 2011. (ISBN: 978-953-307-274-6)
4. J.-C. Lin, "Chapter 2: Channel Estimation for Wireless OFDM Communications," *Communications and Networking*, SCIYO, September 2010. (ISBN: 978-953-307-114-5)

- **Book Editor/Co-Editor:**

1. M.-L. Ku and J.-C. Lin, *Cognitive Radio and Interference Management: Technology and Strategy*, IGI Global, September 2012. (ISBN13: 978-146-662-005-6, ISBN10: 146-662-005-6)
2. J.-C. Lin, *Recent Advances in Wireless Communications and Networks*, Intech Publisher, July 2011. (ISBN: 978-953-307-274-6)

- **Patent**

- *Licensed*

1. J.-C. Lin “A modified PN code tracking loop for direct-sequence spread-spectrum communication over arbitrarily correlated multipath fading channels,” *Taiwan R.O.C. Patent, Certificate: I230521*, Apr. 1, 2005.