Chong-Yung Chi

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EDUCATION:

Ph. D.	University of Southern California, Los Angeles, CA, Electrical Engineering, 1983
MS	National Taiwan University, Taipei, Taiwan, Electrical Engineering, 1977
BS	Tatung Institute of Technology, Taipei, Taiwan, Electrical Engineering, 1975

RESEARCH INTERESTS: Google Scholar

Wireless Communications:
Convex analysis and optimization for wireless communications and networking, multiple-input multiple-output (MIMO) transmit beamforming, distributed and coordinated communications, resource allocation and interference management for heterogeneous networks.

Signal Processing:
Convex analysis and optimization for blind signal processing, blind separation of non-negative dependent sources, hyperspectral image analysis, graph-based learning, and data security and privacy protection in machine learning.

PROFESSIONAL EXPERIENCE:

8/02 ~7/05	Chairman, Institute of Communications Engineering, National Tsing Hua University (NTHU), Hsinchu, Taiwan
8/99 ~present	Professor, Institute of Communications Engineering, NTHU, Hsinchu, Taiwan
8/89 ~present	Professor, Department of Electrical Engineering, NTHU, Hsinchu, Taiwan
10/88 ~7/89	Visiting Specialist, Department of Electrical Engineering, National Taiwan University, Taipei, Taiwan
7/83 ~9/88	Member of Technical Staff, Jet Propulsion Laboratory (JPL), Pasadena, California

PROFESSIONAL ACHIEVEMENTS & HONORS:

I. Society Membership

- **Member** of the National Academy of Artificial Intelligence **(2025 NAAI Member)**
- **Fellow** of the International Artificial Intelligence Industry Alliance **(2024 AIIA Fellow)**
- **Fellow** of the Academy of Artificial Intelligence Sciences **(2026 AAIS Fellow)**
- **Fellow** of the Institute of Electrical and Electronics Engineers **(2020 IEEE Fellow)** for contributions to *convex analysis and optimization for blind source separation*
- **Active member** of the Chinese Institute of Electrical Engineering

II. Journal Editor

1/12 ~12/15	Associate Editor of IEEE Trans. Signal Processing
6/06 ~5/10	Associate Editor of IEEE Signal Processing Letters
1/08 ~12/09	Associate Editor of IEEE Trans. Circuits and Systems I
6/05 ~5/08	Member of Editorial Board of Elsevier Signal Processing

1/06 ~12/07	Associate Editor of IEEE Trans. Circuits and Systems II
5/01 ~4/06	Associate Editor of IEEE Trans. Signal Processing
7/03 ~12/05	Editorial Board Member of JASP (The EURASIP)
2006	Guest Editor, JASP special issue, "Multisensor Processing for Signal Extraction and Applications."

III. Conference Chair/Technical Program Committee (TPC) Member/ Society Technical Committee Member

2026	Conference Chair, 2nd International Conference on Communication Technology & Data Security (CTADS 2026)
2025	Conference Chair, 2025 International Conference on Generative Artificial Intelligence and Digital Media (GADM 2025)
2025	Conference Chair, 2025 International Conference on Educational Technology and Artificial Intelligence (ETAIC 2025)
2025	Conference Chair, 2025 5th International Conference on Communication Technology and Information Technology (ICCTIT 2025)
2025	Conference Chair, 2025 5th Asia Symposium on Signal Processing (ASSP 2025)
2024	TPC member, IEEE International Conference on Communications (ICC-2024)-SPC Symposium: Signal Processing for Communications Symposium
2023	TPC member, IEEE International Conference on Frontiers of Signal Processing (ICFSP-2023).
2023	General Co-Chair, Asia Conference on Communications, Signal Processing and Information Technology (CSPIT-2023).
2023	TPC member, IEEE International Conference on Computational Advances in Multi-Sensor Adaptive Processing (CAMSAP-2023).
2023	General Chair, 5th International Conference on Communications, Information Systems and Computer Engineering (CISCE-2023).
2023	TPC member, IEEE International Conference on Communications (ICC-2023): Signal Processing for Communications Symposium.
2022	General Chair, International Conference on Intelligent Transportation and Smart Cities (ITSC-2022).
2022	Chair, 2nd International Conference on Digital Management, Information Systems and Technologies (DMIST-2022).
2022	TPC member, IEEE Sensor Array and Multichannel Signal Processing Workshop (SAM-2022).
2022	TPC member, IEEE International Conference on Communications (ICC-2022).
2021	TPC member, IEEE International Conference on Communications (ICC-2021).
2021	Program Chair of 2021 3rd International Conference on Advances in Computer Technology, Information Science and Communications (CTISC-2021).
2020	TPC member, IEEE Sensor Array and Multichannel Signal Processing Workshop (SAM-2020).
2020	TPC member, IEEE International Conference on Communications (ICC-2020).
2019	TPC member, IEEE International Conference on Communications (ICC-2019).
2013~2018	***Sensor Array and Multichannel Technical Committee (SAM-TC) Member, IEEE Signal Processing Society.***
2018	TPC Member, 2018 IEEE Seventh International Conference on Communications and Electronics (IEEE ICCE-2018).
2018	TPC Member, IEEE International Conference on Communications (ICC-2018).
2018	TPC Member, 26th European Signal Processing Conference (EUSIPCO-2018).
2018	TPC Member, 10th IEEE Sensor Array and Multichannel Signal Processing Workshop (SAM-2018).
2018	TPC Member, 2018 International Conference on Sensor Networks and Signal Processing (SNSP-2018).
2017	TPC Member, 22nd International Conference on Digital Signal Processing (DSP-2017).
2017	TPC Member, 2017 IEEE Information Theory Workshop (ITW-2017).

2017 TPC Member, IEEE International Workshop on Computational Advances in Multi-Sensor Adaptive Processing (CAMSAP-2017).

2011~2016 ***Signal Processing for Communications and Networking Technical Committee (SPCOM-TC) Member, IEEE Signal Processing Society.***

2016 TPC Member, IEEE Global Conference on Signal and Information Processing (GlobalSIP-2016).

2016 TPC Member, IEEE International Conference on Ubiquitous Wireless Broadband (ICUWB-2016).

2016 TPC Member, 2016 IEEE 17th International Workshop on Signal Processing Advances in Wireless Communications (SPAWC-2016).

2016 Area Chair of Track *Sensor Array, Multichannel and Communication Signal Processing*, 2016 European Signal Processing Conference (EUSIPCO-2016).

2015 TPC Member, IEEE Global Conference on Signal and Information Processing (GlobalSIP-2015).

2015 TPC Member, IEEE International Conference on Communications - Signal Processing for Communications Symposium (ICC'15 (05) SPC).

2015 TPC Member, IEEE Workshop on Signal Processing Advances in Wireless Communications (SPAWC-2015).

2014 TPC Member, IEEE International Conference on Communications - Communication Theory Symposium (ICC'15 (04) CTS).

2014 TPC Member, Globecom 2014 - Signal Processing for Communications Symposium.

2014 TPC Member, IEEE Sensor Array and Multichannel Signal Processing (SAM) Workshop 2014.

2014 TPC Member, IEEE/CIC ICCC 2014 Symposium on Signal Processing for Communications.

2014 TPC Member, IEEE Workshop on Signal Processing Advances in Wireless Communications (SPAWC-2014).

2013 TPC Member, Signal Processing for Communications (SPC) Symposium, ChinaCOM 2013.

2013 TPC Member, 2nd IEEE/CIC International Conference on Communications in China: Signal Processing for Communications (ICCC 2013-SPC Symposium).

2013 TPC Member, IEEE Workshop on Signal Processing Advances in Wireless Communications (SPAWC-2013).

2012 TPC Member, IEEE International Conference on Information and Automation & International Symposium on Biomedical Engineering (ICIA-2012).

2012 TPC Member, IEEE Workshop on Signal Processing Advances in Wireless Communications (SPAWC-2012).

2012 TPC Member, IEEE Workshop on Statistical Signal Processing (SSP'12).

2011 ***Track Chair*** for MIMO, Signal Processing, and Smart in Antennas, 2011 IEEE Radio and Wireless Symposium in Radio and Wireless Week (RWW) 2011.

2011 TPC Member, IEEE Workshop on Statistical Signal Processing (SSP'11).

2011 TPC Member, IEEE International Conference on Communication Technology (ICCT'2011).

2011 TPC Member, European Conference on Signal Processing (EUSIPCO-2011).

2011 TPC Member, The International Conference on Wireless Communications and Signal Processing (WCSP-2011).

2010 TPC Member, European Conference on Signal Processing (EUSIPCO-2010).

2005~2010 ***Signal Processing Theory and Methods Technical Committee (SPTM-TC), IEEE Signal Processing Society.***

2010 TPC Member, Wireless Communications and Signal Processing (WCSP) track at the 19th International Conference on Computer Communications and Networks (ICCCN-2010).

2010 TPC Member of The International Conference on Wireless Communications and Signal Processing (WCSP-2010).

2010 TPC Member of APSIPA Annual Summit Conference 2010 "Wireless Communications & Networking" Track.

2009 ***Lead Co-Chair*** of Signal Processing for Communications (SPC) Symposium,

ChinaCOM 2009.

2009 TPC Member of The International Conference on Wireless Communications and Signal Processing (WCSP-2009).

2009 TPC Member, IEEE Workshop on Statistical Signal Processing (SSP'09).

2009 TPC Member of Third IEEE International Workshop on Computational Advances in Multi-Sensor Adaptive Processing (IEEE CAMSAP-2009).

2009 TPC Member, European Conference on Signal Processing (EUSIPCO-2009).

2009 Wireless Communications and Signal Processing (WCSP) track at the 18th International Conference on Computer Communications and Networks (ICCCN-2009).

2008 ***Co-Chair*** of **SPC** Symposium, ChinaCOM 2008.

2008 TPC Member, EUSIPCO 2008.

2007 TPC Member, IEEE Workshop on Statistical Signal Processing (SSP'07).

2007 TPC Member, 2007 Sixth International Conference on Information, Communications and Signal Processing (ICICS-2007).

2007 TPC Member of Second IEEE International Workshop on Computational Advances in Multi-Sensor Adaptive Processing (IEEE CAMSAP-2007).

2006 TPC Member, IEEE International Symposium on Signal Processing and Information Technology (ISSPIT'06).

2006 TPC Member of the ICC 2006 Wireless and Ad-Hoc Sensor Networks.

2006 Member of International Program Committee and Program Committee of the 6th International Symposium on Independent Component Analysis and Blind Source Separation (ICA-2006).

2006 TPC Member of 2006 International Wireless Communications and Computing Conference (IWCCC-2006).

2005 TPC Member of First IEEE International Workshop on Computational Advances in Multi-Sensor Adaptive Processing (IEEE CAMSAP-2005).

2005 TPC Member of Emerging Networks, Technologies & Standards Symposium, IEEE WirelessCom 2005.

2005 Track TPC Member of 2005 International Conference on Communications, Circuits and Systems (ICCCAS-2005).

2004 Technical Committee Member, IEEE Workshop on Signal Processing Advances in Wireless Communications (SPAWC-2004).

2003 Program Committee Member, International Conference on Signal Processing (ICSP-2003).

2003 Member of International Program Committee of the 4th International Symposium on Independent Component Analysis and Blind Source Separation (ICA-2003).

2003 Technical Committee Member, IEEE International Symposium on Signal Processing and Information Technology (ISSPIT'03).

7/01~6/03 Chair of Information Theory Chapter of IEEE Taipei Section.

2001 ***Co-organizer and a general co-chairman*** of 2001 IEEE SP Workshop on Signal Processing Advances in Wireless Communications (SPAWC-2001).

2001 Member of International Advisory Committee of TENCON'01.

2001 TPC Member, IEEE Workshop on Statistical Signal Processing (SSP'01).

1999 Technical Committee Member, IEEE Signal Processing Workshop on Higher-Order Statistics (HOS'99).

1997 Technical Committee Member, IEEE Signal Processing Workshop on Higher-Order Statistics (HOS'97).

IV. Honors

- ***國立清華大學電機工程學系榮譽退休教授(111 年 8 月起)***
- ***科技部109年度「傑出研究獎」***
- ***中國電機工程學會109年度傑出電機工程教授獎***
- ***MOST Young Scholar Fellowship under Einstein Program:*** **Chia-Hsiang Lin** (one of my former PhD students), Assistant Professor National Cheng Kung University (NCKU), Principal Investigator, Advanced Blind Source Separation and Hyperspectral Super-resolution Imaging via Convex

Geometry and Big Data Optimization, from Aug. 2018 to July 2023.

- ***2018 IEEE Signal Processing Society Best Paper Award:*** **Kun-Yu Wang**, Anthony Man-Cho So, Tsung-Hui Chang, Wing-Kin Ma, and **Chong-Yung Chi**, "Outage Constrained Robust Transmit Optimization for Multiuser MISO Downlinks: Tractable Approximations by Conic Optimization," IEEE Trans. Signal Processing, Vol. 62, No. 21, November 2014.
- ***Best PhD Dissertation Award of IEEE/GRS-S (2016):*** **Chia-Hsiang Lin** (one of my former Ph.D. students) won the best doctoral dissertation award of IEEE Geoscience and Remote Sensing Society (GRSS) Taipei Chapter for the PhD dissertation, "Simplex geometry based non-negative blind source separation," conferred in IEEE ICSANE, Nov. 2016.
- ***Outstanding PhD Dissertation Award of IPPR/CVGIP (2016):*** **Chia-Hsiang Lin** (one of my former Ph.D. students) won the outstanding doctoral dissertation award of IPPR/CVGIP for the PhD dissertation, "Simplex geometry-based non-negative blind source separation," conferred in IPPR/CVGIP, August 2016.
- ***IEEE Geoscience and Remote Sensing Society Taipei Chapter Best Thesis Award for 2013:*** **ArulMurugan Ambikapathi** (one of my former Ph.D. students) won the best thesis award for his Ph.D. thesis, "Chance-constrained robust unmixing algorithms and estimation of number of endmembers in hyperspectral images."
- ***Best Poster Award:*** **Wei-Chiang Li**, Tsung-Hui Chang, Che Lin and **Chong-Yung Chi**, "Outage constrained distributed multicell coordinated beamforming: A dynamic pricing scheme," presented in International Workshop on Mathematical Issues in Information Sciences (MIIS), Xi'an, China, July 7-13, 2012.
- ***Best Paper Award:*** **Tsung-Han Chan**, Wing-Kin Ma, Arulmurugan Ambikapathi and **Chong-Yung Chi**, "Robust endmember extraction using worst-case simplex volume maximization," in Proc. Third IEEE Workshop on Hyperspectral Image and Signal Processing: Evolution in Remote Sensing (WHISPERS), Lisbon, Portugal, June 6-9, 2011.
- ***Outstanding Doctoral Dissertation Award of IPPR (2010):*** **Tsung-Han Chan** (one of my former Ph.D. students) won the Outstanding Doctoral Dissertation Award of IPPR for the paper: "Convex analysis-based non-negative blind source separation for biomedical and hyperspectral image analysis" in IPPR, 2010.
- ***Best Doctoral Dissertation Award of CID & ORSTW (2010):*** **Tsung-Han Chan** (one of my former Ph.D. students) won the best doctoral dissertation award of CID & ORSTW for the paper: "Convex analysis-based non-negative blind source separation for biomedical and hyperspectral image analysis," in CID & ORSTW, 2010.
- ***Best Student Paper Award:*** **Chun-Hsien Peng** (one of my former Ph.D. students) won the best student paper award for the paper: Chun-Hsien Peng, **Chong-Yung Chi**, I-Chieh Chang and Chia-Hsing Kuo, "A blind space-time decoding algorithm by Kurtosis maximization for the down-link of MC-CDMA systems," 2005 IEEE International Conference on Information, Communications and Signal Processing (ICICS-2005), Bangkok, Thailand, Dec. 6-9, Dec. 2005.
- ***NSC Class A Research Award 2005:*** (within top 3% in Signal Processing Community in Taiwan)

V. Invited Plenary Talks at International Workshops/ Symposia/ Conferences

- *2026 5th International Conference on Algorithms, Data Mining, and Information Technology, Wuhan, China, Oct. 16-18, 2026 (ADMIT 2026)*
  Topic: CVXopt-Aided AI for Low-Light HSI Super-Resolution: UDAT
- *2026 International Workshop on Automation, Control and Communication Engineering, Guiyang, China, August 18-20, 2026 (IWACCE 2026)*
  Topic: CVXopt-Aided AI for Low-Light HSI Super-Resolution: UDAT
- *2026 International Conference on Artificial Intelligence and Remote Sensing Applications, Zhengzhou, China, April 10-12, 2026 (AIRSA 2026)*
  Topic: CVXopt-Aided AI for HSI Super-Resolution: CAUWT
- *2025 5th International Conference on Artificial Intelligence, Information Processing and Cloud Computing, Zhuhai, China, Dec. 18-20, 2025 (AIIPCC 2025)*
  Topic: CVXopt-Aided AI for HSI Super-Resolution: CAUWT
- *2025 17th International Conference on Signal Processing Systems (ICSPS), Chengdu, China, Oct. 24-26, 2025 (ICSPS 2025).*
  Topic: Privacy-Preserving Federated Clustering and Classification by CVX Optimization (CVXopt)

or AI-aided CVXopt

- *2025 2nd International Conference on Modeling, Natural Language Processing and Machine Learning, Fuzhou, China, May 16-18, 2025 (CMNM 2025)*
  Topic: CVXopt-Aided AI for Unsupervised HSI Denoising and Super-Resolution
- *The 3rd International Conference on Algorithms, Network and Communication Technology, Wuhan, China, Dec. 20-22, 2024 (ICANCT 2024)*
  Topic: CVXopt-Aided AI for Unsupervised HSI Denoising and Super-Resolution
- *4th IEEE Conference on Artificial Intelligence and Signal Processing, VIT-AP University, Amaravati, Andhra Pradesh, India, Oct. 26-28, 2024 (AISP 2024)*
  Topic: Convex Optimization-Aided AI: DIP-based Unsupervised HSI Denoising and Super-Resolution
- *IEEE Authorship Workshop, NTHU, Taiwan, 2024/10/16 (IEEE 投稿講座,涵堂資訊)*
  Topic: Writing of IEEE Transactions Papers【如何成功投稿 IEEE 期刊】
- *2024 4th International Conference on Artificial Intelligence, Big Data and Algorithms, Zhengzhou, China, July 5-7, 2024 (CAIBDA 2024)*
  Topic: Convex Optimization Aided Artificial Intelligence: DIP-based Unsupervised HSI Denoising and Super-Resolution
- *2024 International Conference on Advanced Robotics, Automation Engineering and Machine Learning, Hangzhou, China, June 28-30, 2024 (ARAEML 2024)*
  Topic: Convex Optimization Aided Artificial Intelligence: DIP-based Unsupervised HSI Denoising and Super-Resolution
- *2024 9th International Conference on Intelligent Computing and Signal Processing, Xi'an, China, Apr. 19-21, 2024 (ICSP 2024).*
  Topic: Privacy-preserving Federated Clustering and Classification by CVX Optimization (CVXopt) or AI-aided CVXopt
- *2023 4th International Conference on Electronics, Communications and Information Technology, Sanya, China, Dec. 22-24, 2023 (CECIT 2023).*
  Topic: Convex Optimization Aided Artificial Intelligence
- *2023 13th International Conference on Communication and Network Security, Fuzhou, China, Dec. 1-3, 2023 (ICCNS 2023).*
  Topic: Convex Optimization Aided Artificial Intelligence
- *2023 2nd International Conference on Communications, Information System and Data Science, Xi'an, China, Nov. 24-26, 2023 (CISDS 2023).*
  Topic: Convex Optimization Assisted Artificial Intelligence
- *2023 9th EAI International Conference on Intelligent IoT, Nanjing, China, Oct. 27-29, 2023 (EAI IoTaaS 2023).*
  Topic: Convergence of Convex Optimization & Artificial Intelligence
- *2023 5th International Conference on Communications, Information System and Computer Engineering, Guangzhou, China, Apr. 14-16, 2023 (CISCE 2023).*
  Topic: Hyperspectral Image Restoration Based on Deep Image Prior and Least Favorable Distribution
- *2022 7th International Conference on Frontiers of Signal Processing, Paris, France, Sep. 7-9, 2022 (ICFSP 2022).*
  Topic: Unsupervised Hyperspectral Denoising Based on Deep Image Prior and Least Favorable Distribution
- *2021 10th International Conference on Software and Information Engineering and 2021 4th International Conference on Network Technology, Cairo, Egypt, Nov. 12-14, 2021 (ICSIE and ICNT 2021).*
  Topic: Global Secrecy Energy Efficiency Maximization in CR Networks with Untrusted Secondary Users
- *2021 3rd International Conference on Advances in Computer Technology, Information Science and Communications and 2021 3rd International Conference on Advances in Computer Vision, Image and Virtualization, Shanghai, China, April 23-25, 2021 (CTISC and CVIV 2021).*
  Topic: Secrecy Energy Efficiency in Cognitive Radio Networks with Untrusted Secondary Users
- *2021 IEEE International Conference on Information Communication and Software Engineering and 2021 6th International Conference on Mathematics and Artificial Intelligence, Chengdu, China, March 19-21, 2021 (ICICSE and ICMAI 2021).*

Topic: Secrecy Energy Efficiency in Cognitive Radio Networks with Untrusted Secondary Users

- *2020 12th International Conference on Communication Software and Networks, Chongqing, China, June 12-15, 2020 (ICCSN 2020).*
  Topic: Local-Density Subspace Distributed Clustering for High-Dimensional Data
- *2018 3rd International Conference on Communication, Image and Signal Processing, Sanya, China, Nov. 16-18, 2018 (CCISP 2018).*
  Topic: Convex Optimization for Signal Processing and Communications: From Fundamentals to Applications
- *2018 International Conference on Sensor Networks and Signal Processing, Xi'An, China, Oct. 28-31, 2018 (SNSP 2018).*
  Topic: Super-Resolution Image via Hyperspectral and Multispectral Data Fusion Using Big-data Convex Optimization
- *5th International Conference on Big Data Analysis and Data Mining, Rome, Italy, June 20-21, 2018 (Data Mining 2018).*
  Topic: A Convex Optimization Based Coupled Non-Negative Matrix Factorization Algorithm for Hyperspectral and Multispectral Data Fusion
- *2018 2nd International Conference on Data Mining, Communications and Information Technology, Shanghai, China, May 25-27, 2018 (DMCIT 2018).*
  Topic: Blind Deconvolution Based Super-Resolution Imaging with ROSIS/HYDICE/AVIRIS Sensors via Big Data Convex Optimization
- *The 27th Wireless and Optical Communications Conference, National Dong Hwa University, Hualien, Taiwan, April 30- May 1, 2018 (WOCC 2018).*
  Topic: Blind Deconvolution Based Super-Resolution Imaging with ROSIS/HYDICE/AVIRIS Sensors via Big Data Convex Optimization
- *The International Mathematical Meeting and the Annual Meeting of the Taiwanese Mathematical Society,*
  National University of Kaohsiung, Kaohsiung, Taiwan, Dec. 19-20, 2015.
  Topic: Outage Constrained Robust Transmit Optimization for Multiuser MISO Downlinks: Tractable Approximations by Conic Optimization
- *IEEE China Summit and International Conference on Signal and Information Processing, Beijing, China, July 6-10, 2013 (IEEE ChinaSIP 2013).*
  Topic: Convex Geometric Analysis for Non-Negative Blind Source Separation
- *2nd International Symposium on IT Convergence Engineering, POSTECH, Pohang, Korea, August 19-20, 2010 (ISITCE 2010).*
  Topic: Non-Negative Blind Source Separation for Biomedical Image Analysis
- *The International Workshop on Optimization and Signal Processing, Chinese University of Hong Kong, Hong Kong, Dec. 19-21, 2007.*
  Topic: Non-Negative Least-correlated Component Analysis for Separation of Dependent Sources

VI. Invited Short Courses

1. **Beijing University of Posts and Telecommunications (BUPT),** Beijing, China (2026/6/30-2026/7/15)**:** *Convex Optimization from Fundamentals to AI Applications*
2. **University of Electronic Science and Technology of China (UESTC),** Chengdu, China (2025/6/30-2025/7/4)**:** *Convex Optimization from Fundamentals to AI Applications*
3. **Beijing University of Posts and Telecommunications (BUPT),** Beijing, China (2022/07/04-2022/07/22)**:** *Convex Optimization from Fundamentals to Applications*
4. **Beijing University of Posts and Telecommunications (BUPT),** Beijing, China (2021/06/28-2021/07/09)**:** *Convex Optimization from Fundamentals to Applications*
5. **Xidian University (XDU),** Xi'an, China (2019/08/05-2019/08/30)**:** *Convex Optimization for Communications and Signal Processing*
6. **Beijing University of Posts and Telecommunications (BUPT),** Beijing, China (2019/07/04-2019/07/22)**:** *Convex Optimization from Fundamentals to Applications*
7. **Shandong Normal University (SDNU),** Jinan, China (2018/08/05-2018/08/25)**:** *Convex Optimization from Fundamentals to Applications*
8. **Beijing University of Posts and Telecommunications (BUPT),** Beijing, China (2018/06/30-2018/07/21)**:** *Convex Optimization from Fundamentals to Applications*

9. **Shandong University (SDU),** Jinan, China (2017/10/30-2017/11/14)**:** *Convex Optimization from Fundamentals to Applications*
10. **Beijing Jiaotong University (BJTU),** Beijing, China (2017/08/05-2017/08/26)**:** *Convex Optimization from Fundamentals to Applications*
11. **Beijing University of Posts and Telecommunications (BUPT),** Beijing, China (2017/07/01-2017/07/22)**:** *Convex Optimization from Fundamentals to Applications*
12. **BUPT,** Beijing, China (2016/07/14-2016/07/28)**:** *Convex Optimization from Fundamentals to Applications*
13. **University of Electronic Science and Technology of China (UESTC),** Chengdu, China (2015/08/30-2015/09/13): *Convex Optimization from Fundamentals to Applications*
14. **Sun Yat-Sen University,** Guangzhou, China (2015/08/03-2015/08/14)**:** *Convex Optimization from Fundamentals to Applications*
15. **BJTU,** Beijing, China (2015/07/06-2015/07/20)**:** *Convex Optimization from Fundamentals to Applications*
16. **UESTC,** Chengdu, China (2014/09/01-2014/09/19)**:** *Convex Optimization from Fundamentals to Applications*
17. **Xiamen University**, Fujian Province, China (2013/12/5-2013/12/19)**:** *Convex Optimization from Fundamentals to Applications*
18. **UESTC,** Chengdu, China (2013/11/11-2013/11/22)**:** *Convex Optimization from Fundamentals to Applications*
19. **BJTU,** Beijing, China (2013/7/12-2013/7/25)**:** *Convex Optimization from Fundamentals to Applications*
20. **Tsinghua University,** Beijing, China (2012/8/20-2012/8/31)**:** *The Optimization Theories and Methods with Applications in Aerospace Information Transmission and Processing*
21. **Tianjin University,** Tianjin, China (2011/8/22-2011/9/2)**:** *Convex Optimization for Communications and Signal Processing*
22. **Tsinghua University,** Beijing, China (2010/8/23-2010/9/3)**:** *Convex Optimization for Communications and Signal Processing*
23. **SDU,** Jinan, China (2010/1/5-2010/1/18)**:** *Convex Optimization for Communications and Signal Processing*

PUBLICATIONS: **(Total citations: 9311 citations and 42 h-index papers by Google Scholar by 2026/11/15)**

More than 240 technical papers published, including more than 100 journal papers (mainly in *IEEE Trans. Signal Processing*), 3 book chapters, and more than 140 peer-reviewed conference papers, as well as 2 graduate-level textbooks: *Blind Equalization and System Identification* (approx. 480 pages), Springer-Verlag, 2006, and a graduate-level textbook, *Convex Optimization for Signal Processing and Communications: From Fundamentals to Applications* (432 pages), CRC Press, 2017. The details are as follows:



A-1. Journal Papers:

[1] Y. Fang, Yipeng Liu, Yang Liu, C.-Y. Chi, S. Li, and C. Zhu, "MULOR-Net: Multi-branch low-rank network for spectral compressive imaging," IEEE Trans. Computational Imaging, vol. 12, pp. 1760-1772, 2026.

[2] Y. Fang, Y. Liu, Z. Long, C.-Y. Chi, and C. Zhu, "Unfolding degradation-aware transformer for low-light hyperspectral image super-resolution," IEEE Trans. Computational Imaging, vol. 12, pp. 732-746, 2026.

[3] Y. Fang, Y. Liu, Z. Long, C.-Y. Chi, and C. Zhu, "Content-adaptive unfolding wavelet transformer for hyperspectral image super-resolution," IEEE Trans. Image Processing, vol. 35, pp. 1923-1936, 2026.

[4] T. Wei, H. Huang, L. Wu, C.-Y. Chi, Bhavani Shankar M. R., and B. Ottersten, "Quadratic equality constrained least squares: low-complexity ADMM for global optimality," IEEE Signal Processing Letters, vol. 33, pp. 361-365, 2026.

[5] X. Wang, Y. Lu, W. Chen, C.-Y. Chi, B. Ai, and D. Niyato, "CMENet: Laplacian pyramid architecture-based deep learning for OFDM channel estimation," IEEE Wireless Communications Letters, vol. 15, pp. 240-244, 2026.

[6] X. Xie, Y. Lu, C.-Y. Chi, W. Chen, B. Ai, and D. Niyato, "KANsformer for scalable beamforming," IEEE Trans. Vehicular Technology, vol. 74, no. 8, pp. 13202-13206, 2025.

[7] Y. Lu, C.-Y. Chi, B. Ai, and Z. Zhong, "Rate outage constrained energy efficiency under MISO interference channels," IEEE Trans. Wireless Communications, vol. 24, no. 6, pp. 4677-4689, June 2025.

[8] W. Mao, Y. Lu, C.-Y. Chi, B. Ai, Z. Zhong, and Z. Ding, "Communication-sensing region for cell-free massive MIMO ISAC systems," IEEE Trans. Wireless Communications, vol. 23, no. 9, pp. 12396-12411, Sep. 2024.

[9] Y. Fang, Y. Liu, C.-Y. Chi, Z. Long, and C. Zhu, "CS2DIPs: Unsupervised HSI super-resolution using coupled spatial and spectral DIPs," IEEE Trans. Image Processing, vol. 33, pp. 3090-3101, May 2024.

[10] Y. Li, H.-X. Ren, C.-Y. Chi, and Y.-B. Miao, "Artificial intelligence-guided gut-microenvironment-triggered imaging sensor reveals potential indicators of Parkinson's disease," Advanced Science, vol. 11, no. 23, pp. 1-14, June 2024.

[11] Y. Li, C.-W. Huang, C.-Y. Chi, and T. Q. S. Quek, "Privacy-preserving federated primal-dual learning for non-convex and non-smooth problems with model sparsification," IEEE Internet of Things Journal, vol. 11, no. 15, pp. 25853-25866, Aug. 2024.

[12] Y.-A. Geng, C.-Y. Chi, W. Sun, J. Zhang, and Q. Li, "Disentangling clusters from non-Euclidean data via graph frequency reorganization," Information Sciences, vol. 662, Mar. 2024, 120288.

[13] Y. Li, S. Wang, C.-Y. Chi, and T. Q. S. Quek, "Differentially private federated clustering over non-IID data," IEEE Internet of Things Journal, vol. 11, no. 4, pp. 6705-6721, Feb. 2024.

[14] C.-H. Lin, Y. Liu, C.-Y. Chi, C.-C. Hsu, H. Ren, and Tony Q. S. Quek, "Hyperspectral tensor completion using low-rank modeling and convex functional analysis," IEEE Trans. Neural Networks and Learning Systems, vol. 35, no. 8, pp. 10736-10750, Aug. 2024.

[15] K. F. Niresi and C.-Y. Chi, "Robust hyperspectral inpainting via low-rank regularized untrained convolutional neural network," IEEE Geoscience and Remote Sensing Letters, vol. 20, pp. 1-5, Jan. 2023.

[16] Y. Li, S. Wang, C.-Y. Chi, and T. Q. S. Quek, "Differentially private federated learning in edge networks: The perspective of noise reduction," IEEE Network, vol. 36, no. 5, pp. 167-172, Nov. 2022.

[17] K. F. Niresi and C.-Y. Chi, "Unsupervised hyperspectral denoising based on deep image prior and least favorable distribution," IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, vol. 15, pp. 5967-5983, Aug. 2022.

[18] W.-B. Wang, Y. Lu, and C.-Y. Chi, "Secrecy energy efficiency in cognitive radio networks with untrusted secondary users," IEEE Trans. Green Communications and Networking, vol. 5, no. 1, pp. 216-230, Mar. 2021.

[19] S. A. Bhat, I. B. Sofi, and C.-Y. Chi, "Edge computing and its convergence with blockchain in 5G and beyond: Security, challenges, and opportunities," IEEE Access, vol. 8, pp. 205340-205373, Nov. 2020.

[20] Y.-A. Geng, Q.-Y. Li, M.-F. Liang, C.-Y. Chi, J. Tan, and H. Huang, "Local-density subspace distributed clustering for high-dimensional data," IEEE Trans. Parallel and Distributed Systems, vol. 31, no. 8, pp. 1799-1814, Aug. 2020.

[21] Y.-R. Syu, C.-H. Lin, and C.-Y. Chi, "An outlier-insensitive unmixing algorithm with spatially varying hyperspectral signatures," IEEE Access, vol. 7, pp. 15086-15101, Jan. 2019.

[22] C.-H. Lin, C.-Y. Chi, L. Chen, D. J. Miller, and Y. Wang, "Detection of sources in non-negative blind source separation by minimum description length criterion," IEEE Trans. Neural Networks and Learning Systems, vol. 29, no. 9, pp. 4022-4037, Sep. 2018.
[23] C.-H. Lin, R. Wu, W.-K. Ma, C.-Y. Chi, and Y. Wang, "Maximum volume inscribed ellipsoid: A new simplex-structured matrix factorization framework via facet enumeration and convex optimization," SIAM Journal on Imaging Sciences, vol. 11, no. 2, pp. 1651-1679, Jul. 2018.
[24] C.-H. Lin, F. Ma, C.-Y. Chi, and C.-H. Hsieh, "A convex optimization-based coupled nonnegative matrix factorization algorithm for hyperspectral and multispectral data fusion," IEEE Trans. Geoscience and Remote Sensing, vol. 56, no. 3, pp. 1652-1667, Mar. 2018.
[25] G.-X. Xu, C.-H. Lin, W.-G. Ma, S.-Z. Chen, and C.-Y. Chi, "Outage constrained robust hybrid coordinated beamforming for massive MIMO enabled heterogeneous cellular networks," IEEE Access, vol. 5, pp. 13601-13616, Mar. 2017.
[26] X. Xu, X. Chen, M. Zhao, S. Zhou, C.-Y. Chi, and J. Wang, "Power-efficient distributed beamforming for full-duplex MIMO relaying networks," IEEE Trans. Vehicular Technology, vol. 66, no. 2, pp. 1087-1103, Feb. 2017.
[27] W. Xu, L. Wang, and C.-Y. Chi, "A simplified GCS-DCSK modulation and its performance optimization," International Journal of Bifurcation and Chaos, vol. 26, no. 13, pp. 1650213-1-1650213-11, Dec. 2016.
[28] A. Ambikapathi, T.-H. Chan, C.-H. Lin, F.-S. Yang, C.-Y. Chi, and Y. Wang, "Convex-optimization-based compartmental pharmacokinetic analysis for prostate tumor characterization using DCE-MRI," IEEE Trans. Biomedical Engineering, vol. 63, no. 4, pp. 707-720, Apr. 2016.
[29] C.-H. Lin, C.-Y. Chi, Y.-H. Wang, and T.-H. Chan, "A fast hyperplane-based minimum-volume enclosing simplex algorithm for blind hyperspectral unmixing," IEEE Trans. Signal Processing, vol. 64, no. 8, pp. 1946-1961, Apr. 2016.
[30] C.-H. Lin, W.-K. Ma, W.-C. Li, C.-Y. Chi, and A. Ambikapathi, "Identifiability of the simplex volume minimization criterion for blind hyperspectral unmixing: The no pure-pixel case," IEEE Trans. Geoscience and Remote Sensing, vol. 53, no.10, pp. 5530-5546, Oct. 2015.
[31] W.-C. Li, T.-H. Chang, and C.-Y. Chi, "Multicell coordinated beamforming with rate outage constraint–Part II: Efficient approximation algorithms," IEEE Trans. Signal Processing, vol. 63, no. 11, pp. 2763-2778, Jun. 2015.
[32] W.-C. Li, T.-H. Chang, and C.-Y. Chi, "Multicell coordinated beamforming with rate outage constraint–Part I: Complexity analysis," IEEE Trans. Signal Processing, vol. 63, no. 11, pp. 2749-2762, Jun. 2015.
[33] K.-Y. Wang, A. M.-C. So, T.-H. Chang, W.-K. Ma, and C.-Y. Chi, "Outage constrained robust transmit optimization for multiuser MISO downlinks: Tractable approximations by conic optimization," IEEE Trans. Signal Processing, vol. 62, no. 21, pp. 5690-5705, Nov. 2014. ***(2018 IEEE Signal Processing Society Best Paper Award)***
[34] W.-K. Ma, J. M. Bioucas-Dias, P. Gader, T.-H. Chan, N. Gillis, A. Plaza, A. Ambikapathi, and C.-Y. Chi, "A signal processing perspective on hyperspectral unmixing: Insights from remote sensing," IEEE Signal Processing Magazine, vol. 31, no. 1, pp. 67-81, January 2014.
[35] K.-K. Lee, W.-K. Ma, X. Fu, T.-H. Chan, and C.-Y. Chi, "A Khatri-Rao subspace approach to blind identification of mixtures of quasi-stationary sources," Signal Processing, vol. 93, no. 12, pp. 3515-3527, December 2013.
[36] T.-H. Chan, A. Ambikapathi, W.-K. Ma, and C.-Y. Chi, "Robust affine set fitting and fast simplex volume max-min for hyperspectral endmember extraction," IEEE Trans. Geoscience and Remote Sensing, vol. 51, no. 7, pp. 3982-3997, July 2013.
[37] H. Qin, Y. Sun, T.-H. Chang, X. Chen, C.-Y. Chi, M. Zhao, and J. Wang, "Power allocation and time-domain artificial noise design for wiretap OFDM with discrete inputs," IEEE Trans. Wireless Communications, vol. 12, no. 6, pp. 2717-2729, June 2013.
[38] F. He, Y. Sun, L. Xiao, X. Chen, C.-Y. Chi, and S. Zhou, "Capacity region bounds and resource allocation for two-way OFDM relay channels," IEEE Trans. Wireless Communications, vol. 12, no. 6, pp. 2904-2917, June 2013.
[39] A. Ambikapathi, T.-H. Chan, C.-Y. Chi, and K. Keizer, "Hyperspectral data geometry based estimation of number of endmembers using p-norm based pure pixel identification algorithm," IEEE Trans. Geoscience and Remote Sensing, vol. 51, no. 5, pp. 2753-2769, May 2013.
[40] K.-Y. Wang, N. Jacklin, Z. Ding, and C.-Y. Chi, "Robust MISO transmit optimization under

outage-based QoS constraints in two-tier heterogeneous networks," IEEE Trans. Wireless Communications, vol. 12, no. 4, pp. 1883-1897, April 2013.
[41] W.-C. Li, T.-H. Chang, C. Lin, and C.-Y. Chi, "Coordinated beamforming for multiuser MISO interference channel under rate outage constraints," IEEE Trans. Signal Processing, vol. 61, no. 5, pp. 1087-1103, March 2013.
[42] Y.-C. Lin, T.-H. Chan, C.-Y. Chi, S.-H. Ng, H.-L. Liu, K.-C. Wei, Y.-Y. Wai, C.-C. Wang, and J.-J. Wang, "Blind estimation of arterial input function in dynamic contrast-enhanced MRI using purity maximization," Magnetic Resonance in Medicine, vol. 68, no. 5, pp. 1439-1449, Nov. 2012.
[43] Y. Yang, T.-H. Chang, W.-K. Ma, J. Ge, C.-Y. Chi, and P.-C. Ching, "Noncoherent bit-interleaved coded OSTBC-OFDM with maximum spatial-frequency diversity," IEEE Trans. Wireless Communications, vol. 11, no. 9, pp. 3335-3347, Sept. 2012.
[44] T.-H. Chang, W.-K. Ma, C.-Y. Huang, and C.-Y. Chi, "Noncoherent OSTBC-OFDM for MIMO and cooperative communications: Perfect channel identifiability and achievable diversity order," IEEE Trans. Signal Processing, vol. 60, no. 9, pp. 4849-4863, Sept. 2012.
[45] C. Shen, T.-H. Chang, K.-Y. Wang, Z. Qiu, and C.-Y. Chi, "Distributed robust multicell coordinated beamforming with imperfect CSI: An ADMM approach," IEEE Trans. Signal Processing, vol. 60, no. 6, pp. 2988-3003, June 2012.
[46] Y. Sun, X. Zhong, T.-H. Chang, S. Zhou, J. Wang, and C.-Y. Chi, "Optimal real-time transmission control for spectrum sharing between cooperative relay and ad-hoc networks," IEEE Trans. Signal Processing, vol. 60, no. 4, pp. 1971-1985, April 2012.
[47] L. Chen, P. L. Choyke, T.-H. Chan, C.-Y. Chi, G. Wang, and Y. Wang, "Tissue-specific compartmental analysis for dynamic contrast-enhanced MR imaging of complex tumors," IEEE Trans. Medical Imaging, vol. 30, no 12, pp. 2044-2058, Dec. 2011.
[48] T.-H. Chan, W.-K. Ma, A. Ambikapathi, and C.-Y. Chi, "A simplex volume maximization framework for hyperspectral endmember extraction," IEEE Trans. Geoscience and Remote Sensing, vol. 49, no. 11, pp. 4177-4193, Nov. 2011.
[49] A. Ambikapathi, T.-H. Chan, W.-K. Ma, and C.-Y. Chi, "Chance constrained robust minimum volume enclosing simplex algorithm for hyperspectral unmixing," IEEE Trans. Geoscience and Remote Sensing, vol. 49, no. 11, pp. 4194-4209, Nov. 2011.
[50] L. Chen, T.-H. Chan, P. L. Choyke, E. M. C. Hillman, Z. M. Bhujwalla, C.-Y. Chi, G. Wang, Z. Szabo, and Y. Wang, "CAM-CM: A signal deconvolution tool for in vivo dynamic contrast-enhanced imaging of complex tissues," Bioinformatics, vol. 27, no. 18, pp. 2607-2609, July 2011.
[51] S.-C. Lin, T.-H. Chang, Y.-L. Liang, Y.-W. P. Hong, and C.-Y. Chi, "On the impact of quantized channel feedback in guaranteeing secrecy with artificial noise: The noise leakage problem," IEEE Trans. Wireless Communications, vol. 10, no. 3, pp. 901-915, March 2011.
[52] W.-C. Liao, T.-H. Chang, W.-K. Ma, and C.-Y. Chi, "QoS-based transmit beamforming in the presence of eavesdroppers: An optimized artificial-noise-aided approach," IEEE Trans. Signal Processing, vol. 59, no. 3, pp. 1202-1216, March 2011.
[53] T.-H. Chang, W.-C. Chiang, Y.-W. Hong, and C.-Y. Chi, "Training sequence design for discriminatory channel estimation in wireless MIMO systems," IEEE Trans. Signal Processing, vol. 58, no. 12, pp. 6223-6237, Dec. 2010.
[54] F.-Y. Wang, C.-Y. Chi, T.-H. Chan, and Y. Wang, "Nonnegative least-correlated component analysis for separation of dependent sources by volume maximization," IEEE Trans. Pattern Analysis and Machine Intelligence, vol. 32, no. 5, pp. 875-888, May 2010.
[55] T.-H. Chang, C.-W. Hsin, W.-K. Ma, and C.-Y. Chi, "A linear fractional semidefinite relaxation approach to maximum-likelihood detection of higher-order QAM OSTBC in unknown channels," IEEE Trans. Signal Processing, vol. 58, no. 4, pp. 2315-2326, April 2010.
[56] W.-K. Ma, T.-H. Hsieh, and C.-Y. Chi, "DOA estimation of quasi-stationary signals with less sensors than sources and unknown spatial noise covariance: A Khatri-Rao subspace approach," IEEE Trans. Signal Processing, vol. 58, no. 4, pp. 2168-2180, April 2010.
[57] P. De, T.-H. Chang, and C.-Y. Chi, "Linear prediction based semiblind channel estimation for multiuser OFDM with insufficient guard interval," IEEE Trans. Wireless Communications, vol. 8, no. 12, pp. 5728-5736, Dec. 2009. 3
[58] W.-K. Ma, C.-C. Su, J. Jaldén, T.-H. Chang, and C.-Y. Chi, "The equivalence of semidefinite relaxation MIMO detectors for higher-order QAM," IEEE Journal of Selected Topics in Signal Processing, vol. 3, no. 6, pp. 1038-1052, Dec. 2009.
[59] T.-H. Chan, C.-Y. Chi, Y.-M. Huang, and W.-K. Ma, "A convex analysis based minimum-volume

enclosing Simplex algorithm for hyperspectral unmixing," IEEE Trans. Signal Processing, vol. 57, no. 11, pp. 4418-4432, Nov. 2009.
[60] X. Chen, C.-Y. Chi, T.-H. Chang, and C.-W. Wong, "Non-cancellation multistage Kurtosis maximization with prewhitening for blind source separation," EURASIP Journal on Advances in Signal Processing, vol. 2009, Article ID 534137, 13 pages, January 2009. doi:10.1155/2009/534137.
[61] T.-H. Chan, W.-K. Ma, C.-Y. Chi, and Y. Wang, "A convex analysis framework for blind separation of non-negative sources," IEEE Trans. Signal Processing, vol. 56, no. 10, pp. 5120-5134, Oct. 2008.
[62] C.-Y. Chi, C.-H. Peng, K.-C. Huang, T.-H. Tsai, and W.-K. Ma, "A block-by-block blind post-FFT multistage beamforming algorithm for multiuser OFDM systems based on subcarrier averaging," IEEE Trans. Wireless Communications, vol. 7, no. 8, pp. 3238-3251, August 2008.
[63] T.-H. Chang, Z.-Q. Luo, and C.-Y. Chi, "Approximation bounds for semidefinite relaxation of max-min-fair multicast transmits beamforming problem," IEEE Trans. Signal Processing, vol. 56, no. 8, pp. 3932-3943, August 2008.
[64] Y.-W. P. Hong, K.-U. Lei, and C.-Y. Chi, "Channel-aware random access control for distributed estimation in sensor networks," IEEE Trans. Signal Processing, vol. 56, no. 7, pp. 2967-2980, July 2008.
[65] T.-H. Chang, W.-K. Ma, and C.-Y. Chi, "Maximum-likelihood detection of orthogonal space-time block coded OFDM in unknown block fading channels," IEEE Trans. Signal Processing, vol. 56, no. 4, pp. 1637-1649, April 2008.
[66] C.-H. Peng, C.-Y. Chi, and C.-W. Chang, "Blind multiuser detection by Kurtosis maximization for asynchronous multi-rate DS/CDMA systems," EURASIP Journal on Applied Signal Processing, vol. 2006, Article ID 84930, 17 pages, 2006. doi:10.1155/ASP/2006/84930.
[67] C.-Y. Chi and C.-H. Peng, "Turbo source extraction algorithm and noncancellation source separation algorithms by Kurtosis maximization," IEEE Trans. Signal Processing, vol. 54, no. 8, pp. 2929-2942, Aug. 2006.
[68] T.-H. Chang, C.-Y. Chi, and Y.-J. Chang, "Space-time selective RAKE receiver with finger selection strategies for UWB overlay communications," IEEE Trans. Microwave Theory and Techniques, vol. 54, no. 4, pp 1731-1744, April 2006.
[69] C.-Y. Chi, C-Y. Chen, C.-H. Chen, C.-C. Feng, and C.-H. Peng, "Blind identification of SIMO systems and simultaneous estimation of multiple time delays from HOS-based inverse filter criteria," IEEE Trans. Signal Processing, vol. 52, no. 10, pp. 2749-2761, Oct. 2004.
[70] K. Yang, T. Ohira, Y. Zhang, and C.-Y. Chi, "Super-exponential blind adaptive beamforming," IEEE Trans. Signal Processing, vol. 52, no. 6, pp. 1549-1563, June 2004.
[71] C.-Y. Chi, C.-Y. Chen, C.-H. Chen, and C.-C. Feng, "Batch processing algorithms for blind equalization using higher-order statistics," IEEE Signal Processing Magazine, vol. 20, no. 1, pp. 25-49, Jan. 2003.
[72] C.-Y. Chi, C.-H. Chen, and C.-Y. Chen, "Blind MAI and ISI suppression for DS/CDMA systems using HOS-based inverse filter criteria," IEEE Trans. Signal Processing, vol. 50, no. 6, pp. 1368-1381, June 2002.
[73] C.-H. Chen, C.-Y. Chi, and C.-Y. Chen, "Two-dimensional Fourier series-based model for nonminimum-phase linear shift-invariant systems and texture image classification," IEEE Trans. Signal Processing, vol. 50, no. 4, pp. 945-955, April 2002.
[74] C.-Y. Chi and C.-H. Chen, "Cumulant-based inverse filter criteria for MIMO blind deconvolution: Properties, algorithms, and application to DS/CDMA systems in multipath," IEEE Trans. Signal Processing, vol. 49, no. 7, pp. 1282-1299, July 2001.
[75] C.-Y. Chi and C.-H. Chen, "Two-dimensional frequency-domain blind system identification using higher order statistics with application to texture synthesis," IEEE Trans. Signal Processing, vol. 49, no. 4, pp. 864-877, April 2001. **2**
[76] C.-C. Feng and C.-Y. Chi, "Performance of Shalvi and Weinstein's deconvolution criteria for channels with/without zeros on the unit circle," IEEE Trans. Signal Processing, vol. 48, no. 2, pp. 571-575, Feb. 2000. **2**
[77] C.-Y. Chi, "Fourier series based nonminimum phase model for statistical signal processing," IEEE Trans. Signal Processing, vol. 47, no. 8, pp. 2228-2240, Aug. 1999.
[78] C.-C. Feng and C.-Y. Chi, "Performance of cumulant based inverse filters for blind deconvolution," IEEE Trans. Signal Processing, vol. 47, no. 7, pp. 1922-1935, July 1999.
[79] H.-M. Chien, H.-L. Yang, and C.-Y. Chi, "Parametric cumulant based phase estimation of 1-D and 2-D nonminimum phase systems by allpass filtering," IEEE Trans. Signal Processing, vol. 45, no. 7, pp.

1742-1762, July 1997.
[80] C.-C. Feng and C.-Y. Chi, “Design of Wiener filters using a cumulant based MSE criterion,” Signal Processing, vol. 54, no. 1, pp. 23-48, Oct. 1996.
[81] C.-H. Chen, C.-Y. Chi, and W-T. Chen, “New cumulant-based inverse filter criteria for deconvolution of nonminimum phase systems,” IEEE Trans. Signal Processing, vol. 44, no. 5, pp. 1292-1297, May 1996. 0
[82] C.-Y. Chi and M.-C. Wu, “Inverse filter criteria for blind deconvolution and equalization using two cumulants,” Signal Processing, vol. 43, no. 1, pp. 55-63, April 1995.
[83] C.-Y. Chi and J.-Y. Kung, “A new identification algorithm for allpass systems by higher-order statistics,” Signal Processing, vol. 41, no. 2, pp. 239-256, Jan. 1995.
[84] W.-T. Chen and C.-Y. Chi, “Higher-order statistics based deconvolution and vocal-tract parameter estimation of voice, speech signals,” Journal of the Chinese Institute of Engineers, vol. 1, no. 4, pp. 211-223, Nov. 1994.
[85] C.-Y. Chi, W.-J. Chang, and C.-C. Feng, “A new algorithm for the design of linear prediction error filters using cumulant-based MSE criteria,” IEEE Trans. Signal Processing, vol. 42, no. 10, pp. 2876-2880, Oct. 1994.
[86] C.-Y. Chi, J.-L. Hwang, and C.-F. Rau, “A new cumulant based parameter estimation method for noncausal autoregressive systems,” IEEE Trans. Signal Processing, vol. 42, no. 9, pp. 2524-2527, Sept. 1994.
[87] W.-T. Chen and C.-Y. Chi, “Recursive single-most-likely-replacement channel equalizer,” IEE Proceedings-Vision Image and Signal Processing, vol. 141, no. 3, pp. 185-190, June 1994.
[88] C.-Y. Chi, “Linear prediction, maximum flatness, maximum entropy and AR polyspectral estimation,” IEEE Trans. Signal Processing, vol. 41, no. 6, pp. 2155-2164, June 1993. 1
[89] C.-Y. Chi and J.-Y. Kung, “A phase determination method for nonminimum phase ARMA systems by a single cumulant sample,” IEEE Trans. Signal Processing, vol. 41, no. 2, pp. 981-985, Feb. 1993. 1
[90] C.-Y. Chi and S.-L. Chiou, “A new WLS Chebyshev approximation method for the design of FIR digital filters with arbitrary complex frequency response,” Signal Processing, vol. 29, no. 3, pp. 335-347, Dec. 1992.
[91] C.-Y. Chi and D. Wang, “An improved inverse filtering method for parametric spectral estimation,” IEEE Trans. Signal Processing, vol. 40, no. 7, pp. 1807-1811, July 1992.
[92] C.-Y. Chi, “Minimum-variance deconvolution and maximum-likelihood deconvolution for nonwhite Bernoulli-Gaussian processes with a Joseph Spectrum,” IEEE Trans. Signal Processing, vol. 40, no. 3, pp. 676-679, March 1992.
[93] C.-Y. Chi, “Performance of the SMLR deconvolution algorithm,” IEEE Trans. Signal Processing, vol. 39, no. 9, pp. 2082-2086, Sept. 1991.
[94] C.-Y. Chi and W.-T. Chen, “Maximum-likelihood blind deconvolution: Non-white Bernoulli-Gaussian case,” IEEE Trans. Geoscience and Remote Sensing, vol. 29, no. 5, pp. 790-795, Sept. 1991.
[95] C.-Y. Chi and W.-T. Chen, “An adaptive maximum-likelihood deconvolution algorithm,” Signal Processing, vol. 24, no. 2, pp. 149-163, Aug. 1991. 2
[96] C.-Y. Chi and W.-T. Chen, “Recursive SMLR deconvolution algorithm for Bernoulli-Gaussian signals,” IEE Proceedings Part F, Radar and Signal Processing, vol. 138, no. 3, pp. 263-266, June 1991.
[97] D. Long, C.-Y. Chi, and F. Li, “The design of an onboard digital Doppler processor for a spaceborne scatterometer,” IEEE Trans. Geoscience and Remote Sensing, vol. 26, no. 6, pp. 869-878, Nov. 1988.
[98] C.-Y. Chi and F. Li, “A comparative study of several wind estimation algorithms for spaceborne scatterometers,” IEEE Trans. Geoscience and Remote Sensing, vol. 26, no. 2, pp. 115-121, March 1988.
[99] C.-Y. Chi, “A fast maximum likelihood estimation and detection algorithm for Bernoulli-Gaussian processes,” IEEE Trans. Acoustics, Speech and Signal Processing, vol. ASSP-35, no. 11, pp. 1636-1639, Nov. 1987.
[100] C.-Y. Chi, D. Long, and F. Li, “Roundoff noise analysis for digital signal power processors using Welch's power spectrum estimation,” IEEE Trans. Acoustics, Speech, and Signal Processing, vol. ASSP-35, no. 6, pp. 784-795, June 1987.
[101] C.-Y. Chi, “A further analysis for the minimum-variance deconvolution filter performance,” IEEE Trans. Acoustics, Speech, and Signal Processing, vol. ASSP-35, no.6, pp. 888-889, June 1987.
[102] C.-Y. Chi, D. Long, and F. Li, “Radar backscatter measurement accuracies using digital Doppler processors in spaceborne scatterometers,” IEEE Trans. Geoscience and Remote Sensing, vol. GE-24,

no. 3, pp. 426-437, May 1986.
[103] C.-Y. Chi and J. M. Mendel, "Viterbi algorithm detector for Bernoulli-Gaussian processes," IEEE Trans. Acoustics, Speech, and Signal Processing, vol. ASSP-33, no. 3, pp. 511-519, June 1985.
[104] C.-Y. Chi and J. M. Mendel, "Performance of minimum-variance deconvolution filter," IEEE Trans. Acoustics, Speech and Signal Processing, vol. ASSP-32, no. 6, pp. 1145-1153, Dec. 1984.
[105] C.-Y. Chi, J. M. Mendel, and D. Hampson, "A computationally fast approach to maximum-likelihood deconvolution," Geophysics, vol. 49, no. 5, pp. 550-565, May 1984.
[106] C.-Y. Chi and J. M. Mendel, "Improved maximum-likelihood detection and estimation of Bernoulli-Gaussian processes," IEEE Trans. Information Theory, IT-30, no. 2, pp. 429-435, March 1984.

A-2. Books/Book Chapters:

[107] Chong-Yung Chi, Wei-Chiang Li, and Chia-Hsiang Lin, "*Convex Optimization for Signal Processing and Communications: From Fundamentals to Applications,*" CRC Press, Boca Raton, FL, Feb. 2017. (432 pages) (Available in CRC Press; also available in Taiwan SCI-TECH) Chinese version (信号处理与通信中的凸优化：从基础到应用) translated by Chen Xiang (陈翔) and Shen Chao (沈超) and published by 电子工业出版社, Jan. 2021.
https://www.phei.com.cn/module/goods/wssd_content.jsp?bookid=57237
[108] Yin Sun, Xiaofeng Zhong, Tsung-Hui Chang, Shidong Zhou, Jing Wang, and Chong-Yung Chi, "Dynamic spectrum sharing between cooperative relay and ad-hoc networks: Towards real-time optimal control," Chapter 15 in *Dynamic Ad-hoc Networks*, edited by Habib. F. Rashvand and Han-Chieh Chao, Institution of Engineering and Technology (IET), 2013.
[109] W.-K. Ma, T.-H. Chan, Chong-Yung Chi, and Y. Wang, "Convex analysis for non-negative blind source separation with application in imaging," Chapter 7 in *Convex Optimization in Signal Processing and Communications*, Daniel P. Palomar and Yonina C. Eldar, Eds., Cambridge University Press, 2010. **0**
[110] Chong-Yung Chi, C.-C. Feng, C.-H. Chen, and C.-Y. Chen, *Blind Equalization and System Identification: Batch Processing Algorithms, Performance and Applications*, Springer Verlag, London, 2006. (Approx. 480 pages)
[111] Chong-Yung Chi and W.-T. Chen, "The deconvolution of speech signals by the utilization of higher-order statistics based algorithms," a Chapter in *Control and Dynamic Systems*, C. T. Leondes, ed., vol. 65, part 2 of 2, pp. 203-251, Academic Press, 1994.

B-1. International Conference Papers:

[1] Y. Li, C.-W. Huang, S. Wang, C.-Y. Chi, Tony Q. S. Quek, "Privacy-preserving federated primal-dual learning for non-convex problems with non-smooth regularization," in Proc. IEEE Workshop on Machine Learning for Signal Processing (MLSP), Rome, Italy, Sep. 17-20, 2023, pp. 1-6.
[2] M.-H. Lin, Y. Li, S. Wang, R. Jiang, and C.-Y. Chi, "A convex optimization assisted DDQL algorithm for computing resource allocation in space-aerial integrated network," in Proc. IEEE VTC-Spring, Florence, Italy, Jun. 20-23, 2023, pp. 1-7.
[3] Z. Guo, K. Lin, X. Chen, and C.-Y. Chi, "Transfer learning for angle of arrivals estimation in massive MIMO system," in Proc. IEEE ICCC 2022, Foshan, China, Aug. 11-13, 2022, pp. 506-511.
[4] Z. Chen, X. Chien, and C.-Y. Chi, "Double deep Q-learning based satellite spectrum/code resource scheduling with multi-constraint," in Proc. IEEE IWCMC, Dubrovnik, Croatia, May 30-June 3, 2022, pp. 1341-1346.
[5] Y. Li, T.-H. Chang, and C.-Y. Chi, "Secure federated averaging algorithm with differential privacy," in Proc. IEEE Workshop on Machine Learning for Signal Processing (MLSP), Aalto University, Espoo, Finland (virtual conference), Sep. 21-24, 2020.
[6] W.-C. Zheng, C.-H Lin, K.-H. Tseng, C.-Y. Huang, T.-H. Lin, C.-H. Wang, and C.-Y. Chi, "Unsupervised change detection in multitemporal multispectral satellite images: A convex relaxation approach," in Proc. IEEE IGARSS, Yokohama, Japan, Jul. 28 - Aug. 2, 2019, pp. 1546-1549.
[7] A. Jalili, S. Sahami, C.-Y. Chi, and R. Amirfattahi,"Speech emotion recognition using cyclostationary spectral analysis," in Proc. IEEE MLSP, Aalborg, Denmark, Sep. 17-20, 2018.
[8] G.-X. Xu, C.-H. Lin, W.-G. Ma, and C.-Y. Chi, "Outage constrained robust hybrid coordinated beamforming for massive MIMO enabled heterogeneous cellular networks," in Proc. IEEE ICC, Paris,

France, May 21-25, 2017.
[9] G.-X. Xu, Y.-R. Syu, W.-G. Ma, and C.-Y. Chi, "A distributed robust transmit beamforming design for full-duplex relay-aided wireless communication systems," in Proc. IEEE ICASSP, New Orleans, USA, Mar. 5-9, 2017, pp. 3634-3638.
[10] W.-C. Li, H.-S. Hsieh, and C.-Y. Chi, "An online algorithm for throughput maximization of wireless powered communication networks," in Proc. IEEE ICASSP, Shanghai, China, Mar. 20-25, 2016, pp. 3731-3735.
[11] W.-K. Ma, C.-H. Lin, W.-C. Li, and C.-Y. Chi, "When can the minimum volume enclosing simplex identify the endmembers correctly when there is no pure pixel?" in Proc. IEEE WHISPERS, Tokyo, Japan, Jun. 2-5, 2015.
[12] C.-H. Lin, C.-Y. Chi, Y.-H. Wang, and T.-H. Chan, "A fast hyperplane-based MVES algorithm for hyperspectral unmixing," in Proc. IEEE ICASSP, Brisbane, Australia, Apr. 19-24, 2015, pp. 1384-1388.
[13] W.-C. Li, R.-Y. Chang, K.-Y. Wang, and C.-Y. Chi, "Energy-efficient precoding matrix design for relay-aided multiuser downlink networks," in Proc. IEEE ICASSP, Brisbane, Australia, Apr. 19-24, 2015, pp. 3098-3102.
[14] W.-C. Li, T-.H. Chang and C.-Y. Chi, "On the complexity of SINR outage constrained max-min-fairness multicell coordinated beamforming problem," in Proc. IEEE ICASSP, Florence, Italy, May 4-9, 2014, pp. 3484-3488.
[15] K.-Y. Wang, H. Wang, Z. Ding, and C.-Y. Chi, "A low-complexity algorithm for worst-case utility maximization in multiuser MISO downlink," in Proc. IEEE Vehicular Technology Conference (VTC) – Fall, Las Vegas, USA, Sept. 2-5, 2013, pp. 1-5.
[16] A. Ambikapathi, T.-H. Chan, C.-H. Lin, and C.-Y. Chi, "Convex geometry based outlier-insensitive estimation of number of endmembers in hyperspectral images," in Proc. 5th IEEE WHISPERS, Gainesville, Florida, USA, Jun. 25-28, 2013. pp.1233-1236.
[17] K.-Y. Wang, N. Jacklin, Z. Ding, and C.-Y. Chi, "Outage constrained transmission optimization for MISO two-tier femtocell networks," in Proc. 2013 IEEE ICC, Budapest, Hungary, Jun. 9-13, 2013, pp. 4995-4999.
[18] C.-H. Lin, A. Ambikapathi, W.-C. Li, and C.-Y. Chi, "On the endmember identifiability of Craig's criterion for hyperspectral unmixing: A statistical analysis for three-source case," in Proc. 2013 IEEE ICASSP, Vancouver, Canada, May 26-31, 2013, pp. 2139-2143.
[19] W.-C. Li, T.-H. Chang, C. Lin, and C.-Y. Chi, "Outage constrained weighted sum rate maximization for MISO interference channel by pricing-based optimization," in Proc. 2013 IEEE ICASSP, Vancouver, Canada, May 26-31, 2013. pp. 4799-4803.
[20] C. Shen, T.-H. Chang, K.-Y. Wang, Z. Qiu, and C.-Y. Chi, "Chance-constrained robust beamforming for multi-cell coordinated downlink," in Proc. 2012 GLOBECOM, Anaheim, California, USA, Dec. 3-7, 2012, pp. 4957-4962.
[21] T.-H. Chan, K. Jia, E. Wycoff, C.-Y. Chi, and Y. Ma, "Towards optimal design of time and color multiplexing codes," in Proc. 2012 European Conference on Computer Vision (ECCV), Florence, Italy, Oct. 7-13, 2012, pp. 485-498.
[22] H.-E. Huang, T.-H. Chan, A. Ambikapathi, W.-K. Ma, and C.-Y. Chi, "Outlier-robust dimension reduction and its impact on hyperspectral endmember extraction," in Proc. 2012 4th IEEE WHISPERS, Shanghai, China, June 1-4, 2012.
[23] Y.-S. Shen, T.-H. Chan, S. Bourguignon, and C.-Y. Chi, "Spatial-spectral unmixing of hyperspectral data for detection and analysis of astrophysical sources with the MUSE instrument," in Proc. 2012 4th IEEE WHISPERS, Shanghai, China, June 5-7, 2012, pp. 4849-4863.
[24] A. Ambikapathi, T.-H. Chan, K. Keizer, F.-S. Yang, and C.-Y. Chi, "An nBSS algorithm for pharmacokinetic analysis of prostate cancer using DCE-MR images," in Proc. 2012 9th IEEE ISBI, Barcelona, Spain, May 2-5, 2012, pp. 566-569.
[25] K.-Y. Wang, T.-H. Chang, W.-K. Ma, and C.-Y. Chi, "Optimal transmission strategy for outage rate maximization in MISO fading channels with training," in Proc. 2012 IEEE ICASSP, Kyoto, Japan, Mar. 25-30, 2012, pp. 2945-2948.
[26] A. Ambikapathi, T.-H. Chan, and C.-Y. Chi, "Convex geometry based estimation of number of endmembers in hyperspectral images," in Proc. 2012 IEEE ICASSP, Kyoto, Japan, Mar. 25-30, 2012, pp. 1233-1236.
[27] T.-H. Chan, J.-Y. Liu, A. Ambikapathi, W.-K. Ma, and C.-Y. Chi, "Fast algorithms for robust hyperspectral endmember extraction based on worst-case Simplex volume maximization," in Proc.

2012 IEEE ICASSP, Kyoto, Japan, Mar. 25-30, 2012, pp. 1237-1240. **3**

[28] K.-K. Lee, W.-K. Ma, Y.-L. Chiou, T.-H. Chan, and C.-Y. Chi, "Blind identification of mixtures of quasi-stationary sources using a Khatri-Rao subspace approach," in Proc. 2011 45th ACSSC, Pacific Glove, CA, USA, Nov. 6-9, 2011, pp. 2169-2173.

[29] T.-H. Chang, W.-K. Ma, and C.-Y. Chi, "Worst-case robust multiuser transmit beamforming using semidefinite relaxation: Duality and implications," in Proc. 2011 45th ACSSC, Pacific Glove, CA, USA, Nov. 6-9, 2011, pp. 1579-1583.

[30] T.-H. Chan, C.-J. Song, A. Ambikapathi, C.-Y. Chi, and W.-K. Ma, "Fast alternating volume maximization algorithm for blind separation of non-negative sources," in Proc. 2011 IEEE MLSP, Beijing, China, Sept. 18-21, 2011, pp. 1-6.

[31] T.-H. Chan, W.-K. Ma, A. Ambikapathi, and C.-Y. Chi, "An optimization perspective on Winter's endmember extraction belief," in Proc. 2011 IEEE IGARSS, Vancouver, Canada, July 24-29, 2011, pp. 1143-1146.

[32] T.-H. Chan, W.-K. Ma, A. Ambikapathi, and C.-Y. Chi, "Robust endmember extraction using worst-case simplex volume maximization," in Proc. 2011 3rd IEEE WHISPERS, Lisbon, Portugal, June 6-9, 2011, pp. 1-4. ***(This paper was awarded the "Best Paper Award" in WHISPERS-2011)***

[33] C. Shen, K.-Y. Wang, T.-H. Chang, Z. Qiu, and C.-Y. Chi, "Worst-case SINR constrained robust coordinated beamforming for multicell wireless systems," in Proc. 2011 IEEE ICC, Kyoto, Japan, June 5-9, 2011.

[34] T.-H. Chang, W.-C. Chiang, Y.-W. Hong, and C.-Y. Chi, "Joint training and beamforming design for performance discrimination using artificial noise," in Proc. 2011 IEEE ICC, Kyoto, Japan, June 5-9, 2011.

[35] W.-C. Li, T.-H. Chang, C. Lin, and C.-Y. Chi, "A convex approximation approach to weighted sum rate maximization of multiuser MISO interference channel under outage constraints," in Proc. 2011 IEEE ICASSP, Prague, Czech Republic, May 22-27, 2011, pp. 3368-3371.

[36] A. Ambikapathi, T.-H. Chan, C.-Y. Chi, and K. Keizer, "Two effective and computationally efficient pure-pixel based algorithms for hyperspectral endmember extraction," in Proc. 2011 IEEE ICASSP, Prague, Czech Republic, May 22-27, 2011, pp. 1369-1372.

[37] K.-Y. Wang, T.-H. Chang, W.-K. Ma, A. M.-C. So, and C.-Y. Chi, "Probabilistic SINR constrained robust transmit beamforming: A Bernstein-type inequality based conservative approach," in Proc. 2011 IEEE ICASSP, Prague, Czech Republic, May 22-27, 2011, pp. 3080-3083.

[38] K.-Y. Wang, T.-H. Chang, W.-K. Ma, and C.-Y. Chi, "A semidefinite relaxation based conservative approach to robust transmit beamforming with probabilistic SINR constraints," in Proc. 2010 18th EUSIPCO, Aalborg, Denmark, August 23-27, 2010, pp. 407-411.

[39] A. Ambikapathi, T.-H. Chan, W.-K. Ma, and C.-Y. Chi, "A robust alternating volume maximization algorithm for endmember extraction in hyperspectral images," in Proc. 2010 2nd WHISPERS, Reykjavik, Iceland, June 14-16, 2010.

[40] A. Ambikapathi, T.-H. Chan, W.-K. Ma, and C.-Y. Chi, "A robust minimum volume enclosing simplex algorithm for hyperspectral unmixing," in Proc. 2010 IEEE ICASSP, Dallas, Texas, Mar. 14-19, 2010, pp. 1202-1205.

[41] W.-C. Liao, T-H. Chang, W.-K. Ma, and C.-Y. Chi, "Joint transmit beamforming and artificial noise design for QoS discrimination in wireless downlink," in Proc. 2010 IEEE ICASSP, Dallas, Texas, Mar. 14-19, 2010, pp. 2562-2565.

[42] S.-C. Lin, T.-H. Chang, Y.-W. Hong, and C.-Y. Chi, "On the impact of quantized channel direction feedback in multiple-antenna wiretap channels," in Proc. 2010 IEEE ICC, Cape Town, South Africa, May 23-27, 2010.

[43] T.-H. Chang, Y.-W. Hong, and C.-Y. Chi, "Training signal design for discriminatory channel estimation," in Proc. 2009 GLOBECOM, Honolulu, Hawaii, USA, Nov. 30- Dec. 4, 2009.

[44] J. Du, C.-Y. Chi, T.-H. Chang, and J. Liu, "Parallel blind source separation by kurtosis maximization with successive prewhitening," in Proc. WCSP 2009, Nanjing, China, Nov. 13- 15, 2009.

[45] T.-H. Chan, W.-K. Ma, C.-Y. Chi, and A. Ambikapathi, "Hyperspectral unmixing from a convex analysis and optimization perspective," in Proc. 2009 1st WHISPERS, Grenoble, France, August 26-28, 2009. (Invited paper)

[46] Y.-L. Liang, Y.-S. Wang, T.-H. Chang, Y.-W. Hong, and C.-Y. Chi, "On the impact of quantized channel feedback in guaranteeing secrecy with artificial noise," in Proc. ISIT 2009, Seoul, Korea, June 28-July 3, 2009, pp. 2351-2355.

[47] T.-H. Chang, W.-K. Ma, C.-Y. Kuo, and C.-Y. Chi, "Blind maximum-likelihood detection for

decode-and-forward randomized distributed OSTBC,'' in Proc. 2009 10th IEEE SPAWC, Perugia, Italy, June 21-24, 2009, pp. 260-264.
[48] T.-H. Chang, W.-K. Ma, C.-Y. Huang, and C.-Y. Chi, "On perfect channel identifiability of semiblind ML detection of orthogonal space-time block coded OFDM,'' in Proc. 2009 IEEE ICASSP, Taipei, Taiwan, April 19-24, 2009, pp. 2713-2716.
[49] T.-H. Chan, C.-Y. Chi, Y.-M. Huang, and W.-K. Ma, "A convex analysis based minimum-volume enclosing simplex algorithm for hyperspectral unmixing,'' in Proc. 2009 IEEE ICASSP, Taipei, Taiwan, April 19-24, 2009, pp. 1089-1092.
[50] W.-K. Ma, T.-H. Hsieh, and C.-Y. Chi, "DOA estimation of quasi-stationary signals via Khatri-Rao subspace,'' in Proc. 2009 IEEE ICASSP, Taipei, Taiwan, April 19-24, 2009, pp. 2165-2168.
[51] T.-H. Chan, L. Chen, P. L. Choyke, C.-Y. Chi, and Y. Wang, "Convex analysis for separation of functional patterns in DCE-MRI: A longitudinal study to antiangiogenic therapy," in Proc. 2008 IEEE MLSP, Cancún, Mexico, Oct. 16-19, 2008, pp. 261-266.
[52] C.-W. Hsin, T.-H. Chang, W.-K. Ma, and C.-Y. Chi, "A linear fractional semidefinite relaxed ML approach to blind detection of 16-QAM orthogonal space time block codes,'' in Proc. 2008 IEEE ICC, Beijing, China, May 19-23, 2008, pp. 790-794.
[53] L. Chen, T.-H. Chan, P. L Choyke, C.-Y. Chi, G. Wang, and Y. Wang, "Convex analysis and separation of composite signals in DCE-MRI," in Proc. 2008 5th IEEE ISBI, Paris, France, May 14-17, 2008, pp. 1557-1560.
[54] T.-H. Chan, W.-K. Ma, C.-Y. Chi, and Y. Wang, "Blind separation of non-negative sources by convex analysis: Effective method using linear programming," in Proc. 2008 IEEE ICASSP, Las Vegas, Nevada, March 31-April 4, 2008, pp. 3493-3496.
[55] T.-H. Chang, Z.-Q. Luo, L. Deng, and C.-Y. Chi, "A convex optimization method for joint mean and variance parameter estimation of large-margin CDHMM," in Proc. 2008 IEEE ICASSP, Las Vegas, Nevada, March 31-April 4, 2008, pp. 4053-4056.
[56] W.-K. Ma, C.-C. Su, J. Jalden, and C.-Y. Chi, "Some results on 16-QAM MIMO detection using semidefinite relaxation,'' in Proc. 2008 IEEE ICASSP, Las Vegas, Nevada, March 31-April 4, 2008, pp. 2673-2676.
[57] T.-H. Chang, Z.-Q. Luo, and C.-Y. Chi, "Approximation bound for semidefinite relaxation based multicast transmit beamforming," in Proc. 2007 2nd IEEE CAMSAP, St. Thomas, U.S. Virgin Islands, Dec. 12-14, 2007, pp. 193-196.
[58] X. Chen, C.-Y. Chi, C.-W. Wang, S. Zhou, and Y. Yao, "Non-Cancellation multistage Kurtosis maximization with prewhitening for blind source separation," in Proc. 2007 41th ACSSC, Monterey, CA, Nov. 4-7, 2007, pp. 3-8.
[59] L. Chen, Y. Wang, C.-Y. Chi, Z. Szabo, and P. Choyke, "Separating composite signals in multi-probe dynamic biomedical imaging," in Proc. 2007 41th ACSSC, Monterey, CA, Nov. 4-7, 2007, pp. 9-12.
[60] S. Bai, J. Liu, and C.-Y. Chi, "An improved L1-norm algorithm for underdetermined blind source separation using sparse representation," in Proc. 2007 41th ACSSC, Monterey, CA, Nov. 4-7, 2007, pp. 17-21.
[61] D. Xu, H.-C. Wu, and C.-Y. Chi, "Blind separation and equalization using novel hill-climbing optimization," in Proc. 2007 41th ACSSC, Monterey, CA, Nov. 4-7, 2007, pp. 13-16.
[62] X. Chen, C.-Y. Chi, C.-W. Lin, W.-K. Ma, S. Zhou, and Y. Yao, "A blind post-FFT user-by-user beamforming algorithm for multiuser OFDM systems," in Proc. 2007 2nd CHINACOM, Shanghai, China, Aug. 22-24, 2007, pp. 519-523.
[63] C.-H. Peng, K.-C. Huang, C.-Y. Chi, W.-K. Ma, and T.-H. Tsai, "A block-by-block blind post-FFT beamforming algorithm for multiuser OFDM systems based on subcarrier averaging," in Proc. 2007 8th IEEE SPAWC, Helsinki, Finland, June 17-20, 2007.
[64] T.-H. Tsai, X. Chen, C.-Y. Chi, W.-K. Ma, S. Zhou, and Y. Yao, "A subcarrier average based block-by-block blind channel estimation algorithm for multi-user OFDM systems," in Proc. 2007 8th IEEE SPAWC, Helsinki, Finland, June 17-20, 2007.
[65] K.-U Lei, Y.-W. Hong, and C.-Y. Chi, "Distributed estimation in wireless sensor networks with channel-aware slotted aloha,'' in Proc. 2007 8th IEEE SPAWC, Helsinki, Finland, June 17-20, 2007.
[66] T.-H. Chang, W.-K. Ma, and C.-Y. Chi, "Semiblind ML OSTBC-OFDM detection in block fading channels," in Proc. 2007 IEEE ICASSP, Honolulu, Hawaii, April 15-20, 2007, pp. 309 -312 .
[67] T.-H. Chan, W.-K. Ma, Yue Wang, and C.-Y. Chi, "A convex analysis based criterion for blind separation of non-negative sources," in Proc. 2007 IEEE ICASSP, Honolulu, Hawaii, April 15-20, 2007 pp. 961 -964.

[68] F.-Y. Wang, C.-Y. Chi, T.-H. Chan, and Y. Wang, "Blind separation of positive dependent sources by non-negative least-correlated component analysis," in Proc. 2006 IEEE MLSP, Maynooth, Ireland, Sept. 6-8, 2006, pp 73-78.
[69] T-H. Chang, W.-K. Ma, and C.-Y. Chi, "Group-wise blind OFDM ML detection for complexity reduction," in Proc. 2006 14th EUSIPCO, Florence, Italy, Sept. 4-8, 2006.
[70] C.-H. Peng, C.-Y. Chi, and C.-W. Chang, "Blind mulituser detection by Kurtosis maximization for asynchronous multi-rate DS/CDMA systems," in Proc. 2006 14th EUSIPCO, Florence, Italy, Sept. 4-8, 2006.
[71] F.-Y. Wang, Y. Wang, T.-H. Chan, and C.-Y. Chi, "Blind separation of multichannel biomedical image patterns by non-negative least-correlated component analysis," in Proc. 2006 Workshop on Pattern Recognition in Bioinformatics (PRIB'06), Hong Kong, Aug. 20, 2006, pp. 151-162.
[72] W.-K. Ma, C.-Y. Chi, and P.-C. Ching, "Extended differential unitary space-time modulation: A non-coherent scheme with error penalty less than 3dB," in Proc. 2006 IEEE ICASSP, Toulouse, France, May 14-19, 2006.
[73] C.-H. Peng, C.-C. Lin, Y.-H. Lin, and C.-Y. Chi, "Blind beamforming for CCI reduction by Kurtosis maximization for OFDM systems in multipath," in Proc. 2005 ISPACS, Hong Kong, Dec. 13-16, 2005, pp. 105-108.
[74] C.-H. Peng, C.-C. Lin, T.-H. Chang, and C.-Y. Chi, "Turbo space-time receiver by Kurtosis maximization for CCI/ISI reduction in cellular wireless communications," in Proc. 2005 1st IEEE CAMSAP, Puerto Vallarta, Mexico, Dec. 13-15, 2005, pp. 141-144.
[75] C.-H. Peng, C.-Y. Chi, I-C. Chang, and C.-H. Kuo, "A blind space-time decoding algorithm by Kurtosis maximization for the down-link of MC-CDMA systems," in Proc. 2005 5th ICICS, Bangkok, Thailand, Dec. 6-9, 2005, pp. 1535-1539. (**Best Student Paper Award**)
[76] T.-H. Chang, Y.-J. Chang, C.-H. Peng, Y.-H. Lin, and C.-Y. Chi "Space time MSINR-SRAKE receiver with finger assignment strategies in UWB multipath channels," in Proc. 2005 IEEE ICU, Zurich, Switzerland, Sept. 5-8, 2005, pp. 242-247.
[77] C.-Y. Chi, C.-H. Peng, and H.-I. Su, "Blind multiuser detection for quasi-synchronous modified MC-CDMA systems by Kurtosis maximization," in Proc. 2004 IEEE SAM, Barcelona, Spain, July 18-21, 2004, pp. 133-137.
[78] C.-Y. Chi, C.-H. Peng, and W.-D. Li, "Multistage channel-constrained algorithms for blind source separation using inverse filter criteria," in Proc. 2004 IEEE SAM, Barcelona, Spain, July 18-21, 2004, pp. 432-436.
[79] C.-Y. Chi, C.-H. Peng, and C-W. Lin, "Blind equalization for asynchronous multi-rate DS/CDMA systems in multipath with multiple antennas," in Proc. 2004 5th IEEE SPAWC, Lisbon, Portugal, July 11-14, 2004, pp. 507-511.
[80] C.-Y. Chi, C.-H. Peng, and P.-S. Tseng, "Blind identification of instantaneous MIMO systems via a system to HOS based source extraction filter relation," in Proc. 2004 5th IEEE SPAWC, Lisbon, Portugal, July 11-14, 2004, pp. 541-545.
[81] C.-Y. Chi, C.-J. Chen, F.-Y. Wang, C.-Y. Chen, and C.-H. Peng, "Turbo source separation algorithm using HOS based inverse filter criteria," in Proc. 2003 3rd IEEE ISSPIT, Germany, Dec. 14-17, 2003, pp. 498-501.
[82] C.-C. Feng, Y.-T. Wu, and C.-Y. Chi, "Embedding and detection of side information for peak-to-average power ratio reduction of an OFDM signal using partial transmit sequences," in Proc. 2003 58th IEEE VTC, Orlando, Florida, Oct. 6-9, 2003, pp. 1354- 1358.
[83] C.-Y. Chi, C.-Y. Chen, H.-P. Lee, and C.-J. Chen, "Blind identification of MIMO FIR systems for colored inputs by HOS based inverse filter criteria and GCD," in Proc. 2003 4th IEEE SPAWC, Rome, Italy, June 15-18, 2003, pp. 329-333.
[84] C.-Y. Chi, C.-Y. Chen, and C.-H. Chen, "Blind identification of MIMO systems by a system to HOS based inverse filter relationship," in Proc. 2003 IEEE ICASSP, Hong Kong, April 6-10, 2003, vol. 4, pp. 305-308.
[85] K. Yang, T. Ohira, Y. Zhang, and C.-Y. Chi, "A super-exponential blind adaptive beamforming algorithm," in Proc. 2002 IEEE ICASSP, Orlando, Florida, May 13-17, 2002, pp. 3073-3076.
[86] C.-Y. Chi, C.-Y. Chen, and C.-C. Feng, "Signal processing advances in wireless communications: Blind equalization," in Proc. 2001 International Symposium on Communications, Tainan, Taiwan, Nov. 13-16, 2001. (Invited paper)
[87] C.-Y. Chi and C.-H. Chen, "Blind equalization using cumulant based MIMO inverse filter criteria for multiuser DS/CDMA systems in multipath," in Proc. 2001 IEEE SSP, Singapore, Aug. 6-8, 2001, pp.

118-121.
[88] C.-Y. Chi, X. Chang, and C.-H. Chen, "Blind single-input multi-output (SIMO) channel identification with application to time delay estimation," in Proc. 2001 IEEE SSP, Singapore, Aug. 6-8, 2001, pp. 293-296.
[89] C.-Y. Chi and C.-H. Chen, "MIMO inverse filter criteria and blind maximum ratio combining using HOS for equalization of DS/CDMA systems in multipath," in Proc. 2001 3rd IEEE SPAWC, Taoyuan, Taiwan, March 20-23, 2001, pp. 114-117.
[90] C.-Y. Chi and C.-Y. Chen, "Blind beamforming and maximum ratio combining by Kurtosis maximization for source separation in multipath," in Proc. 2001 3rd IEEE SPAWC, Taoyuan, Taiwan, March 20-23, 2001, pp. 243-246.
[91] C.-Y. Chi, C.-Y. Chen, and B.-W. Li, "On super-exponential algorithm, constant modulus algorithm and inverse filter criteria for blind equalization," in Proc. 2000 11th IEEE Signal Processing Workshop on Statistical Signal and Array Processing, Poconos, Pennsylvania, Aug. 13-16, 2000, pp. 216-220.
[92] C.-Y. Chi and C.-H. Chen, "Performance of cumulant based inverse filter criteria for blind deconvolution of multi-input multi-output linear time-invariant systems," in Proc. 2000 11th IEEE Signal Processing Workshop on Statistical Signal and Array Processing, Poconos, Pennsylvania, Aug. 13-16, 2000, pp. 354-358.
[93] C.-Y. Chi, C.-C. Feng, and C.-Y. Chen, "Performance of super-exponential algorithm for blind equalization," in Proc. 2000 51st IEEE VTC, Tokyo, Japan, May 14-18, 2000, pp. 1864-1868.
[94] C.-Y. Chi, F.-Y. Wang, and M.-C. Chiang, "Two-step lattice super-exponential algorithm for blind equalization of multi-input multi-output channels," in Proc. 2000 51st IEEE VTC, Tokyo, Japan, May 14-18, 2000, pp. 634-639.
[95] C.-Y. Chi and C.-H. Chen, "Noise-insensitive approaches to two-dimensional system identification and texture image synthesis," in Proc. 1999 IEEE SiPS, Taipei, Taiwan, R.O.C., Oct. 20-22, 1999, pp. 420-429.
[96] C.-Y. Chi and C.-C. Feng, "Blind channel estimation and MMSE equalization using Shalvi and Weinstein's blind deconvolution criteria," in Proc. 1999 IEEE WCNC, New Orleans, LA, Sept. 21-24, 1999, pp. 659-663.
[97] C.-Y. Chen and C.-Y. Chi, "Nonminimum-phase complex Fourier series based model for statistical signal processing," in Proc. 1999 IEEE Signal Processing Workshop on Higher-Order Statistics, Caesarea, Israel, June 14-16, 1999, pp. 30-33.
[98] C.-H. Chen and C.-Y. Chi, "Statistical texture image classification using two-dimensional nonminimum-phase Fourier series based model," in Proc. 1999 IEEE Signal Processing Workshop on Higher-Order Statistics, Caesarea, Israel, June 14-16, 1999, pp. 400-403.
[99] C.-C. Feng, C.-H. His, and C.-Y. Chi, "Performance of Shalvi and Weinstein's blind deconvolution criteria for channels with/without zeros on the unit circle," in Proc. 1999 2nd IEEE SPAWC, Annapolis, Maryland, May 9-12, 1999, pp. 82-85.
[100] C.-Y. Chi and C.-H. Chen, "Cumulant based blind equalization with user and channel identification for multiuser DS/CDMA systems in multipath," in Proc. 1999 2nd IEEE SPAWC, Annapolis, Maryland, May 9-12, 1999, pp. 211-214.
[101] C.-Y. Chi and C.-H. Hsi, "2-D blind deconvolution using Fourier series based model and higher-order statistics with application to texture synthesis," in Proc. 1998 9th IEEE Signal Processing Workshop on Statistical Signal and Array Processing, Portland, Oregon, Sept. 14-16, 1998, pp. 216-219.
[102] C.-C. Feng and C.-Y. Chi, "A class of blind deconvolution and equalization algorithm for nonminimum phase multi-input multi-output systems," in Proc. 1997 IEEE Signal Processing Workshop on Higher-Order Statistics, Banff, Alberta, Canada, July 21-23, 1997, pp. 199-203.
[103] C.-Y. Chi, "Fourier series based nonminimum phase model for second-and higher-order statistical signal processing," in Proc. 1997 IEEE Signal processing Workshop on Higher-Order Statistics, Banff, Alberta, Canada, July 21-23, 1997, pp. 395-399.
[104] C.-Y. Chi and C.-C. Feng, "Performance of a class of blind deconvolution and equalization criteria using cumulant based inverse filters," in Proc. 1997 1st IEEE SPAWC, Paris, France, April 16-18, 1997, pp. 349-352.
[105] H.-M. Chien and C.-Y. Chi, "Cumulant based phase estimation for 1-D and 2-D nonminimum phase systems by Fourier series based allpass model," in Proc. 1996 IEEE Digital Signal Processing Workshop, Loen, Norway, Sept. 1-4, 1996, pp. 303-306.
[106] C.-H. Chen and C.-Y. Chi, "Peak filter and notch filter for harmonic retrieval using high-order statistics," in Proc. 1996 8th IEEE Signal Processing Workshop on Statistical Signal and Array

Processing, Corfu, Greece, June 24-26, 1996, pp. 202-205.
[107] C.-Y. Chi and M.-C. Wu, "A unified class of inverse filter criteria using two cumulants for blind deconvolution and equalization," in Proc. 1995 IEEE ICASSP, Detroit, Michigan, May 9-12, 1995, pp. 1960-1963. **3**
[108] C.-C. Feng and C.-Y. Chi, "Time delay estimation using a single cumulant," in Proc. 1994 4rd EUSIPCO, Edinburgh, Scotland, Sept. 13-16, 1994.
[109] C.-C. Hsiao and C.-Y. Chi, "Image modeling and restoration by higher-order statistics based inverse filters," in Proc. IEEE Seventh SP Workshop on Statistical Signal and Array Processing, Quebec City, Canada, June 26-29, 1994.
[110] H.-L. Yang and C.-Y. Chi, "A new cumulant based phase estimation method for nonminimum-phase systems by allpass filtering," in Proc. IEEE Seventh SP Workshop on Statistical Signal and Array Processing, Quebec City, Canada, June 26-29, 1994.
[111] C.-Y. Chi and J.-L. Hwang, "A new cumulant based parameter estimation method for noncausal autoregressive systems," in Proc. 1994 IEEE ICASSP, Adelaide, Australia, April 19-22, 1994, pp. 57-60.
[112] W.-T. Chen and C.-Y. Chi, "Deconvolution and vocal-tract parameter estimation of speech signals by higher-order statistics based inverse filter," in Proc. 1993 IEEE Signal Processing Workshop on Higher-Order Statistics, South Lake Tahoe, California, June 7, 1993, pp. 51-55.
[113] C.-Y. Chi and W.-J. Chang, "New higher-order statistics based criteria for the design of linear prediction error filters," in Proc. 1993 IEEE Signal Processing Workshop on Higher-Order Statistics, South Lake Tahoe, California, June 7, 1993, pp. 106-110.
[114] C.-Y. Chi and S.-L. Chiou, "A new iterative WLS Chebyshev approximation method for the design of two-dimensional FIR digital filters," in Proc. 1993 IEEE ISCAS, Chicago, Illinois, May 3-6, 1993, pp. 898-901.
[115] W.-T. Chen and C.-Y. Chi, "An adaptive Bernoulli-Gaussian model based maximum-likelihood channel equalizer for detection of binary sequences," in Proc. 1993 IEEE ISCAS, Chicago, Illinois, May 3-6, 1993, pp. 231-234.
[116] W.-T. Chen and C.-Y. Chi, "New inverse filter criteria for identification and deconvolution of nonminimum-phase systems by single cumulant slice," in Proc. 1993 IEEE ICASSP, Minneapolis, Minnesota, April 27-30, 1993, pp. 192-195.
[117] C.-Y. Chi and J.-Y. Kung, "A new cumulant based inverse filtering algorithm for identification and deconvolution of nonminimum-phase systems," in Proc. 6th IEEE SP Workshop on Statistical Signal and Array Processing, Victoria, B.C. Canada, Oct. 7-9, 1992, pp. 144-147.
[118] C.-Y. Chi and W.-T. Chen, "Linear prediction based on higher-order statistics by a new criterion," in Proc. 6th IEEE SP Workshop on Statistical Signal and Array Processing, Victoria, B.C. Canada, Oct. 7-9, 1992, pp. 148-151.
[119] C.-Y. Chi and J.-Y. Kung, "A new identification algorithm for allpass systems by higher-order statistics," in Proc. 1992 6th EUSIPCO, Brussels, Belgium, Aug. 24-27, 1992.
[120] C.-Y. Chi, "Linear prediction, maximum flatness, maximum higher-order entropy on AR polyspectral estimation," in Proc. 1992 6th EUSIPCO, Brussels, Belgium, Aug. 24-27, 1992, pp. 2155-2164.
[121] C.-Y. Chi and S.-L. Chiou, "A new WLS Chebyshev approximation method for the design of FIR digital filters with arbitrary complex frequency response," in Proc. 1992 6th EUSIPCO, Brussels, Belgium, Aug. 24-27, 1992.
[122] W.-T. Chen and C.-Y. Chi, "A Bernoulli-Gaussian model based maximum-likelihood channel equalizer," in Proc. 1992 3rd ISSPA, Gold Coast, Australia, Aug. 16-21, 1992.
[123] C.-Y. Chi and W.-T. Chen, "Linear prediction based on higher order statistics," in Proc. 1992 3rd ISSPA, Gold Coast, Australia, Aug. 16-21, 1992.
[124] C.-Y. Chi and S.-L. Chiou, "A new self-initiated WLS approximation method for the design of two-dimensional equiripple FIR digital filters," in Proc. 1992 IEEE ISCAS, San Diego, 1992 California, May 10-13, 1992, pp. 1436-1439.
[125] C.-Y. Chi and J.-Y. Kung, "A fast phase determination algorithm by a single cumulant," in Proc. International Signal Processing Workshop on Higher-Order Statistics, Chamrousse, France, July 10-12, 1991.
[126] C.-Y. Chi and D. Wang, "An improved inverse filtering method for parametric spectral estimation," in Proc. 1991 American Control Conference, Boston, Massachusetts, June 26-28, 1991, pp. 2845-2846.
[127] C.-Y. Chi, and Y.-T. Kou, "A new self-initiated optimum WLS approximation method for the design of linear phase FIR digital filters," in Proc. IEEE 1991 International Symposium on Circuits and Systems,

Singapore, June 11-14, 1991, pp. 168-171.
[128] C.-Y. Chi and W.-T. Chen, "Maximum-likelihood blind deconvolution: Nonwhite Bernoulli-Gaussian case," in Proc. IEEE 1991 IGARSS, Espoo, Finland, June 3-6, 1991.
[129] C.-Y. Chi, "An improved multiple-most-likely-replacement deconvolution algorithm for estimating sparse spike sequences," in Proc. 1992 2nd ISSPA, Gold Coast, Australia, Aug. 27-31, 1990.
[130] C.-Y. Chi and W.-T. Chen, "An adaptive maximum-likelihood deconvolution algorithm," in Proc. 1992 2nd ISSPA, Gold Coast, Australia, Aug. 27-31, 1990. **2**
[131] C.-Y. Chi and W.-T. Chen, "An adaptive detection and estimation algorithm for Bernoulli-Gaussian processes," in Proc. 1992 2nd ISSPA, Gold Coast, Australia, Aug. 27-31, 1990.
[132] C.-Y. Chi and J.-Y. Kung "Maximum-likelihood impulse response estimation with Impulsive-Gaussian noise corrupted data," in Proc. IEEE 1990 IGARSS, University of Maryland, Maryland, May 20-24, 1990.
[133] C.-Y. Chi and W.-T. Chen "Unbiased minimum variance estimation of correlation function of random signals," in Proc. IEEE 1990 IGARSS, University of Maryland, Maryland, May 20-24, 1990, pp. 281-284.
[134] C.-Y. Chi, "Performance of maximum-likelihood deconvolution for Bernoulli-Gaussian Processes," in Proc. 28th IEEE CDC, Tampa, Florida, Dec. 13-15, 1989, pp. 2588-2589.
[135] C.-Y. Chi and F. Li, "A comparative study of several wind estimation algorithms for spaceborne scatterometers," in Proc. IEEE 1988 IGARSS, Ann Arbor, Michigan, March 1988, pp. 115-121.
[136] C.-Y. Chi and F. Li, "Wind measurements for non-uniform wind fields from spaceborne scatterometers," in Proc. IEEE 1987 IGARSS, Ann Arbor, Michigan, May 1987, pp. 765-768.
[137] E. Rodriguez, B. Chapman, C.-Y. Chi, and E. Liu, "Deconvolution of sea state parameters from altimeter waveforms," in Proc. IEEE 1987 IGARSS, Ann Arbor, Michigan, May 1987, pp. 779-782.
[138] C.-Y. Chi, D. Long, and F. Li, "Roundoff noise analysis for digital Doppler processors in radar scatterometers," in Proc. IEEE 1986 IGARSS, Zurich, Switzerland, Sept. 1986, pp. 579-584.
[139] C.-Y. Chi, R. Aroian, and F. Li, "Simulation studies for the NASA scatterormeter on NROSS," in Proc. IEEE 1986 IGARSS, Zurich, Switzerland, Sept. 1986, pp. 1673-1676.
[140] C.-Y. Chi and J. M. Mendel, "Multichannel maximum-likelihood deconvolution," in Proc. 55th Society of Exploration Geophysicists International meeting, Washington D. C., Oct. 1985.
[141] C.-Y. Chi, J. Goutsias, and J. M. Mendel, "A fast maximum-likelihood estimation and detection algorithm for Bernoulli-Gaussian processes," in Proc. 1985 IEEE ICASSP, Tampa, Florida, March 1985, pp. 1297-1300. **7** ★
[142] D. Long, C.-Y. Chi, and F. Li, "Digital filter processor design for spaceborne scatterometers," in Proc. IEEE 1984 IGARSS, Strasbourg, France, Aug. 1984, pp. 569-572.
[143] C.-Y. Chi and J. M. Mendel, "Performance of minimum-variance deconvolution," in Proc. IEEE 1984 ICASSP, San Diego, California, March 1984.
[144] C.-Y. Chi and J. M. Mendel, "A fast approach to identification using deconvolution," in Proc. 22th IEEE CDC, San Antonio, Texas, Dec. 1983, pp. 1347-1352.
[145] C.-Y. Chi, J. M. Mendel, and D. Hampson, "A computationally-fast approach to maximum-likelihood deconvolution," in Proc. 53rd Society of Exploration Geophysicists International Meeting, Las Vegas, Nevada, Sept. 1983.
[146] C.-Y. Chi and J. M. Mendel, "Viterbi algorithm for seismic event detection," in Proc. 51st Society of Exploration Geophysicists International Meeting, Los Angeles, California, Oct. 1981.

B-2. Local Conference Papers:

[1] C.-C. Feng and C.-Y. Chi, "A two-step lattice super-exponential algorithm for blind equalization," in Proc. Fourth Computer and Communications Symposium, Taoyuan, Taiwan, ROC, Oct. 7-8, 1998, pp. 329-335.
[2] C.-C. Feng and C.-Y. Chi, "A new algorithm for the design of wiener filters using a cumulant based MSE criterion," 1995 International Symposium on Communications, Taipei, Taiwan, ROC, Dec. 1995. **2**
[3] W.-T. Chen and C.-Y. Chi, "A recursive single-most-likely-replacement channel equalizer," 1993 International Symposium on Communications, Hsinchu, Taiwan, ROC, Dec. 1993.
[4] C.-Y. Chi and W.-T. Chen, "A novel adaptive maximum-likelihood deconvolution algorithm for estimating positive sparse spike trains and its application to speech analysis," 1992 IEEE International Workshop on Intelligent Signal Processing and Communication Systems, Taipei, ROC, March 19-21,

1992.
[5] C.-Y. Chi, “An equation error based ARMA spectral estimator for broadband signals,” 1989 Telecommunications Symposium, Taipei, ROC, Dec. 14-15, 1989.