

韓永祥 (Yunghsiang S. Han)
高等研究院
电子科技大学
广东省深圳市龙华区观澜街道观光路 1301-80 号二号楼
yunghsiangh@gmail.com

學歷	雪城大學 (SYRACUSE UNIVERSITY)	Syracuse, NY
	• 計算機科學博士 (8 月 1993) – 論文題目: Efficient Soft-Decision Decoding Algorithms for Linear Block Codes Using Algorithm A* – 1994 雪城大學博士論文獎	
	國立清華大學	新竹
	• 電機工程碩士 (6 月 1986) • 電機工程學士 (6 月 1984)	
經歷	电子科技大学 (深圳) 高等研究院	深圳
	6 月 2021 – 迄今 教授	
	華為技術有限公司理論實驗室	香港
	3 月 2020 – 3 月 2023 編碼團隊創者	
	東莞理工學院電子工程與智能化學院	東莞
	2 月 2017 – 2 月 2021 傑出人才特聘教授	
	國立台灣科技大學電機工程系	台北
	6 月 2011 – 1 月 2017 講座教授	
	國立台北大學電機資訊學院	台北
	2 月 2015 – 迄今 科技講座教授	
	INSTITUTE OF NETWORK CODING	
	香港中文大學	香港
	6 月 2014 – 9 月 2014 1 月 2015 – 2 月 2015 訪問學者	
	DEPARTMENT OF ELECTRICAL ENGINEERING AND COMPUTER SCIENCE SYRACUSE UNIVERSITY	Syracuse, NY
	7 月 2012 – 6 月 2013 傅爾布萊特訪問學者	

DEPARTMENT OF COMPUTER SCIENCE UNIVERSITY OF HOUSTON 6 月 2011 – 7 月 2011 訪問學者	Houston TX
國立台灣科技大學電機工程系 8 月 2010 – 5 月 2011 教授	台北
國立台北大學通訊工程研究所 8 月 2009 – 7 月 2010 教授兼所長	台北
國立台北大學通訊工程研究所 8 月 2008 – 7 月 2009 教授	台北
DEPARTMENT OF ELECTRICAL AND COMPUTER ENGINEERING UNIVERSITY OF TEXAS AT AUSTIN 8 月 2008 – 6 月 2009 訪問學者	Austin, TX
國立台北大學通訊工程研究所 8 月 2004 – 7 月 2008 教授兼所長	台北
國立暨南國際大學資訊工程學系 8 月 1998 – 7 月 2004 教授	埔里
THE NEW YORK STATE CENTER FOR ADVANCED TECHNOLOGY IN COMPUTER APPLICATIONS AND SOFTWARE ENGINEERING (CASE) THE CENTER FOR SYSTEMS ASSURANCE (CSA) DEPARTMENT OF ELECTRICAL ENGINEERING AND COMPUTER SCIENCE SYRACUSE UNIVERSITY 9 月 2002 – 1 月 2004 SUPRIA (Syracuse University Prototypical Research in Information Assurance) 訪問研究學者	Syracuse, NY
DEPARTMENT OF ELECTRICAL ENGINEERING UNIVERSITY OF HAWAII AT MANOA 6 月 2001 – 10 月 2001 訪問學者	Honolulu, HI
國立暨南國際大學資訊工程學系 8 月 1998 – 7 月 2001 計算機與網路中心主任	埔里
國立暨南國際大學資訊工程學系 8 月 1997 – 7 月 1998 副教授	埔里
華梵人文科技學院電子工程學系 9 月 1994 – 7 月 1996	台北

計算機中心主任

華梵人文科技學院電子工程學系
8 月 1993 – 7 月 1997
副教授

台北

雪城大學資訊科學系
8 月 1992 – 8 月 1993
Graduate Research Associate

Syracuse, NY

雪城大學資訊科學系
8 月 1989 – 7 月 1992
Graduate Teaching Assistant

Syracuse, NY

學術服務

IEEE TAIPEI SECTION
January 2007– December 2008
Chair of Educational Activities.

IEEE INFORMATION THEORY SOCIETY TAIPEI CHAPTER
August 2005– July 2007
Chapter Chair.

JOURNAL OF INTERNET TECHNOLOGY
2001-2016
Editor.

INTERNATIONAL JOURNAL OF AD HOC AND UBIQUITOUS COMPUTING
2005-2016
Editor.

INTERNATIONAL JOURNAL OF DISTRIBUTED SENSOR NETWORKS
2010- May 2013
Editor.

THE IEEE INTERNATIONAL WORKSHOP ON AD HOC,
UBIQUITOUS COMPUTING
2006
Co-Chair.

Taichung

THE INTERNATIONAL SYMPOSIUM ON INFORMATION THEORY AND ITS
APPLICATIONS 2010 (ISITA 2011)
2010
General Secretary.

Taichung

THE 3RD IEEE INTERNATIONAL CONFERENCE ON SMART GRID
COMMUNICATIONS (IEEE SMARTGRIDCOMM 2012)
2012
Keynote/Panel Chair

Taitan

THE 3RD IEEE INTERNATIONAL CONFERENCE ON SMART GRID
COMMUNICATIONS (IEEE SMARTGRIDCOMM 2012): SMART GRID
COMMUNICATION NETWORKS SYMPOSIUM
2012
Co-Chair.

Taitan

IEEE GLOBAL TELECOMMUNICATIONS CONFERENCE
(IEEE GLOBECOM 2013): COMMUNICATION AND INFORMATION
SYSTEMS SECURITY SYMPOSIUM
2013
Co-Chair.

Atlanta

IEEE TRANSACTIONS ON VEHICULAR TECHNOLOGY
SPECIAL SECTION ON VEHICULAR SOCIAL NETWORKS
2013
Guest Editor.

THE 9TH INTERNATIONAL WORKSHOP ON SIGNAL DESIGN AND ITS
APPLICATIONS IN COMMUNICATIONS (IWSDA 2019)
2019
General Co-Chair.

Dongguan

獎勵及榮譽

- **2013, 2013 ACM CCS Test-of-Time 獎¹**
- 2012, 2012-2013 傅爾布萊特資深學者赴美研究獎助金
- 2011, 國立台灣科技大學講座教授
- 2011, 電機電子工程師學會會士 (IEEE Fellow)
- 2010, 國立台灣科技大學研究優良獎
- 2007, 國立台北大學電機與資訊學院研究傑出獎
- 2002-2004, SUPRIA 訪問研究獎勵
- 2000, 八十九年度國科會甲種獎勵
- 2000, 國立暨南國際大學學術績優獎
- 1999, 八十八年度國科會甲種獎勵
- 1998, 八十七年度國科會甲種獎勵
- 1997, 八十六年度國科會甲種獎勵
- **1997**, 一篇論文是 1997 IEEE International Symposium on Information Theory 所選出的 long presentation²
- **1994**, 1994 雪城大學博士論文獎
- 1994, 八十三年度國科會甲種獎助
- 1993, 八十二年度國科會新進人員獎助
- **1993**, 一篇論文是 1993 IEEE International Symposium on Information Theory 所選出的 long presentation

學術會員

- **IEEE Fellow 2011– Elevated by Communication Society for contributions to Decoding Techniques**

研究主題

- 編碼理論– 特別在解碼理論的發展及有效率的解碼程式之設計

¹此獎項主要表揚 10 年前發表於 ACM SIGSAC 的旗艦會議 the ACM Conference on Computer and Communications Security (CCS) 對資訊安全領域有極大影響力的論文。

²被 IEEE International Symposium on Information Theory 選為 long presentation 的論文皆是 Information Theory 和 Coding Theory 領域的國際著名學者們認為將對此領域造成重大影響的文章。每年被此會議接受的論文約 586 篇，其中僅約有 17 篇為 long presentation。

- 人工智能在編碼理論應用- 特別在運用機器學習於解碼理論的發展及有效率的解碼程式之設計
- 無線網路- 特別在感測器網路 (sensor network) 及 ad hoc 網路的保密、資料融合 (data fusion) 及能量控制應用
- 資訊安全- 特別在感測器網路及隱私保存相關的問題
- 無線通訊- 特別在錯誤更正碼的應用及 VLSI 設計

執行計畫

• 國家自然科學基金

1. 1 月 2017- 12 月 2020。线性分组码的两阶段最大似然软判决译码方法，面上項目，計畫主持人。

• 國科會

1. 8 月 2013- 7 月 2016。利用錯誤更正碼在無線感測網路位置偵測之研究，計畫主持人。
2. 8 月 2012- 7 月 2015。再生碼在分散式儲存系統應用的研究，計畫主持人。
3. 8 月 2010- 7 月 2013。編碼理論在雲端計算容錯及個人隱私應用的研究，計畫主持人。
4. 8 月 2010- 7 月 2011。基於錯誤控制碼的有效分散式網路儲存的研究，計畫主持人。
5. 8 月 2007- 7 月 2010。去尾迴旋碼之軟性決定解碼之研究，計畫主持人。
6. 8 月 2007- 7 月 2010。利用 MDS 碼在無線感測器網路上有效率建立保密通道，計畫主持人。
7. 8 月 2006- 7 月 2007。無線感測器網路上密鑰交換之研究，計畫主持人。
8. 8 月 2005- 7 月 2007。針對訊息長度偵測之循環冗餘檢查碼的研究，計畫主持人。
9. 8 月 2004- 7 月 2005。編碼理論在無線感測器網路的資料融合應用研究，計畫主持人。
10. 8 月 2003- 7 月 2004。第四代無線通訊之 WOFDM 下行傳輸技術研究 (3/3)-子計畫一：行動無線通道上 WOFDM 傳輸系統之編碼技術研究，計畫主持人。
11. 8 月 2002- 7 月 2003。Fano Metric 之推廣及循序解碼程式，計畫主持人。
12. 8 月 2001- 7 月 2002。第四代無線通訊之 WOFDM 下行傳輸技術研究 (1/3)-子計畫一：行動無線通道上 WOFDM 傳輸系統之編碼技術研究，計畫主持人。
13. 8 月 1999- 7 月 2002。國家寬頻實驗網路上整體醫療服務系統之研究-子計畫五：多媒體醫療資訊儲存及傳輸的安全性研究，計畫主持人。
14. 8 月 1999- 7 月 2001。台灣學術網路/研究網路連線計畫-暨南大學，計畫主持人。
15. 8 月 1999- 7 月 2001。線性塊狀碼幾何搜尋解碼演算法的研究，計畫主持人。
16. 8 月 1998- 7 月 1999。迴旋碼的最大可靠度軟性決定循序解碼的研究，計畫主持人。
17. 8 月 1997- 7 月 1998。線性塊狀碼硬性解碼的研究，計畫主持人。
18. 8 月 1995- 7 月 1996。啟發性資訊在線性格狀碼之軟性決定解碼上的影響，計畫主持人。
19. 8 月 1994- 7 月 1995。線性格狀碼之軟性決定解碼的研究，計畫主持人。

• 工業界

1. 6 月 2025- 11 月 2026。基于 FFT 以及 RMT 的 RS 快速编译码技术合作项目，計畫主持人。(華為科技有限公司)
2. 9 月 2023- 9 月 2025。BCH 新型译码研究探索，計畫主持人。(希奥端(深圳)计算技术有限公司)
3. 1 月 2024- 1 月 2025。后量子密码算法研究，量子计算和先进压缩算法调研，計畫主持人。(希奥端(深圳)计算技术有限公司)
4. 9 月 2023- 8 月 2024。加解密及存储编解码算法原型开发，計畫主持人。(希奥端(深圳)计算技术有限公司)

5. 2 月 2022– 2 月 2023。級聯軟判糾錯碼性能的理论分析與研究，計畫主持人。(華為科技有限公司)
6. 3 月 2020– 3 月 2023。信息理論研究，計畫主持人。(華為科技有限公司)
7. 8 月 2010– 6 月 2011。
8. 12 月 2010– 9 月 2011。多階層快閃記憶體之 BCH 解碼器及 CRC 檢查電路整合設計，計畫主持人。(鑫創科技)
9. 8 月 2010– 6 月 2011。低開數多階層快閃記憶體之 LDPC 碼的設計，計畫主持人。(鑫創科技)
10. 11 月 2009– 9 月 2010。基於 Welch-Berlekamp 演算法的多階層快閃記憶體之 VLSI 設計，計畫主持人。(鑫創科技)
11. 7 月 2009– 5 月 2010。多階層快閃記憶體之 LDPC 碼的設計，計畫主持人。(鑫創科技)
12. 11 月 2007– 7 月 2008。AES 的 VLSI 設計，計畫主持人。(鑫創科技)
13. 8 月 2007– 6 月 2008。低開數多階層快閃記憶體之錯誤控制碼的設計，計畫主持人。(鑫創科技)
14. 8 月 2006– 4 月 2007。高效率多階層快閃記憶體之錯誤控制碼的設計，計畫主持人。(鑫創科技)
15. 1 月 2006– 1 月 2007。第三點五代行動通訊系統錯誤更正演算法研究發展，計畫主持人。(凌陽科技)

著作

• 專書論文

1. Y. S. Han and P.-N. Chen, “Sequential Decoding of Convolutional Codes,” *Encyclopedia of Telecommunications* (Editor: John Proakis), New York, Wiley, 2002, pp. 2140-2146.

• 期刊論文

1. W. Yan and Y. S. Han, “The Construction of Near-Optimal Universal Coding of Integers,” *IEEE Trans. on Information Theory*, pp. 6240-6262, August, 2026. **(Full paper)**
2. N. Tang, Y. S. Han, C. Chen, and D. Pei, “Generalized Inverse Discrete Fourier Transform with Application to Goppa Codes,” *IEEE Trans. on Information Theory*, pp. 4719-4738, July, 2026. **(Full paper)**
3. C. Chen, S.-J. Lin, N. Tang, Y. S. Han, S. Cai, L. Yu, Z. Li, B. Bai, and B. Bai, “Two Fast Erasure Decoding Algorithms for Reed-Solomon Codes Based on LCH-FFT,” *IEEE Trans. on Information Theory*, pp. 3784 - 3798, June, 2026. **(Full paper)**
4. W. Yan, Y. S. Han, and G. Yang, “On Some Properties for Universal Coding of Integers and Its Generalization,” *IEEE Trans. on Communications*, pp. 8587-8596, May, 2025. **(Full paper)**
5. J. Li, H. Cai, X. Tang, Y. S. Han, B. Bai, and G. Zhang, “Vector Locally Repairable Codes With Small Repair Bandwidth and Small Sub-packetization Levels,” *IEEE Trans. on Communications*, pp. 2906-2920, May, 2025. **(Full paper)**
6. C. Chen, Y. S. Han, N. Tang, X. Ma, and B. Bai, “Parallel Welch-Berlekamp Algorithm,” *IEEE Trans. on Information Theory*, pp. 3473 - 3488, May 2025. **(Full paper)**
7. N. Wang, S. Xu, C. Qin, S.-J. Lin, S. Shao, and Y. S. Han, “High-Capacity Framework for Reversible Data Hiding Using Asymmetric Numeral Systems,” *IEEE Trans. on Knowledge and Data Engineering*, pp. 8447 - 8461, December, 2024. **(Full paper)**
8. L. Yu, S.-J. Lin, and Y. S. Han, “A Class of Rateless Reed-Solomon Codes with Near-Linear Computational Complexities,” *IEEE Trans. on Communications*, pp. 6677 - 6687, November, 2024. **(Full paper)**

9. L. Yu, Y. S. Han, J. Yuan, and Z. Zhang, "Variant Codes Based on A Special Polynomial Ring and Their Fast Computations," *IEEE Trans. on Communications*, pp. 5255 - 5267, September, 2024. **(Full paper)**
10. W. Yan and Y. S. Han, "Generalized Universal Coding of Integers," *IEEE Trans. on Communications*, pp. 4538 - 4550, August, 2024. **(Full paper)**
11. L. Yu and Y. S. Han, "Construction of Reed-Solomon Erasure Codes with Four Parities Based on Systematic Vandermonde Matrices," *IEEE Trans. on Computers*, pp. 1875-1882, July, 2024.
12. Z. Li, W. H. Mow, Y. S. Han, and T.-Y. Wu, "Generalization of Minimum Storage Regenerating Codes for Heterogeneous Distributed Storage Systems," *IEEE Trans. on Information Theory*, pp. 4022 - 4043, June, 2024. **(Full paper)**
13. N. Tang, C. Chen, and Y. S. Han, "Fast Error and Erasure Decoding Algorithm for Reed-Solomon Codes," *IEEE Communications Letters*, pp. 759-762, April, 2024.
14. C. Quan, Y. S. Han, B. Geng, and P. K. Varshney, "Distributed Quantized Detection of Sparse Signals Under Byzantine Attacks," *IEEE Trans. on Signal Processing*, pp. 57-69, January, 2024. **(Full paper)**
15. N. Wang, W. Yan, H. Jiang, S.-J. Lin, and Y. S. Han, "Prefix Coding Scheme Supporting Direct Access without Auxiliary Space," *IEEE Trans. on Knowledge and Data Engineering*, pp. 12917-12931, December, 2023. **(Full paper)**
16. J. Li, Y. Liu, X. Tang, Y. S. Han, B. Bai and G. Zhang, "MDS Array Codes With (Near) Optimal Repair Bandwidth for All Admissible Repair Degrees," *IEEE Trans. on Communications*, pp. 5633 - 5646, October, 2023. **(Full paper)**
17. C. Quan, S. Bulusu, B. Geng, Y. S. Han, N. Sriranga and P. K. Varshney, "On Ordered Transmission based Distributed Gaussian Shift-in-Mean Detection under Byzantine Attacks," *IEEE Trans. on Signal Processing*, pp. 3343 - 3356, September, 2023. **(Full paper)**
18. W. Yan, S.-J. Lin, and Y. S. Han, "A New Metric and the Construction for Evolving 2-Threshold Secret Sharing Schemes Based on Prefix Coding of Integers," *IEEE Trans. on Communications*, pp. 2906-2915, May, 2023. **(Full paper)**
19. J. Rui, Q. Huang, Y. S. Han, and T.-Y. Wu, "Optimal Busy-Node Repair of $(k+4, k, 4)$ MDS Codes with Small Sub-packetization Level," *IEEE Communications Letters*, pp. 1080-1084, April, 2023.
20. J. Li, X. Tang, H. Hou, Y. S. Han, B. Bai, and G. Zhang, "PMDS Array Codes with Small Sub-packetization, Small Repair Bandwidth/Rebuilding Access," *IEEE Trans. on Information Theory*, pp. 1551-1566. March, 2023. **(Full paper)**
21. C. Quan, N. Sriranga, H. Yang, Y. S. Han, B. Geng, and P. K. Varshney, "Efficient Ordered-Transmission Based Distributed Detection under Data Falsification Attacks," *IEEE Signal Processing Letters*, pp. 145-149, February, 2023.
22. H. Hou, Y. S. Han, P. P. C. Lee, Y. Wu, G. Han, and M. Blaum, "A Generalization of Array Codes with Local Properties and Efficient Encoding/Decoding," *IEEE Trans. on Information Theory*, pp. 107-125, January, 2023. **(Full paper)**
23. N. Tang and Y. S. Han, "A New Decoding Method for Reed-Solomon Codes Based on FFT and Modular Approach," *IEEE Trans. on Communications*, pp. 7790-7801, December, 2022. **(Full paper)**
24. L.-H. Chang, P.-N. Chen, F. Alajaji, and Y. S. Han, "Decoder Ties Do Not Affect the Error Exponent of the Memoryless Binary Symmetric Channel," *IEEE Trans. on Information Theory*, pp. 3501-3510, June, 2022. **(Full paper)**
25. C. Quan, B. Geng, Y. S. Han, and P. K. Varshney, "Enhanced Audit Bit Based Distributed Bayesian Detection in the Presence of Strategic Attacks," *IEEE Transactions on Signal and Information Processing over Networks*, pp. 49 - 62, January, 2022. **(Full paper)**

26. Z. Li, S.-J. Lin, P.-N. Chen, Y. S. Han, and H. Hou, "Update Bandwidth for Distributed Storage," *IEEE Trans. on Information Theory*, pp. 7159-7179, November, 2021. **(Full paper)**
27. L. Deng, Y. Yu, Y. Zhang and Y. S. Han, "Comparing Delay-Constrained ALOHA and CSMA: A Learning-Based Low-Complexity Approximate Approach," *IEEE Open Journal of the Communications Society*, vol. 2, pp. 1721-1735, 2021. **(Full paper)**
28. Y. S. Han, C. Chen, S.-J. Lin, and B. Bai, "On Fast Fourier Transform-Based Decoding of Reed-Solomon Codes," *Int. J. Ad Hoc and Ubiquitous Computing*, pp. 180-187, 36(3), 2021. **(Invited paper)**
29. N. Wang, S.-J. Lin, Y. S. Han, and N. Yu, "Variants of Golomb Coding and the n -ary Versions," *IEEE Trans. on Communications*, pp. 7460-7472, December, 2020. **(Full paper)**
30. H. Hou, Y. S. Han, and P. C. C. Lee, "Two Classes of Binary MDS Array Codes with Asymptotically Optimal Repair for Any Single Column," *IEEE Trans. on Communications*, pp. 6723-6736, November, 2020. **(Full paper)**
31. H. Hou, P. C. C. Lee, and Y. S. Han, "Zigzag-Decodable Reconstruction Codes with Asymptotically Optimal Repair for All Nodes," *IEEE Trans. on Communications*, pp. 5999-6011, October, 2020. **(Full paper)**
32. H.-Y. Lin, P.-N. Chen, Y. S. Han, and P. K. Varshney, "Minimum Byzantine Effort for Blinding Distributed Detection in Wireless Sensor Networks," *IEEE Trans. on Signal Processing*, pp. 647-661, 2020. **(Full paper)**
33. L. Yu, Z. Lin, S.-J. Lin, Y. S. Han, and N. Yu, "Fast Encoding Algorithms for Reed-Solomon Codes with between Four and Seven Parity Symbols," *IEEE Trans. on Computers*, pp. 699-705, May, 2020.
34. H. Hou, Y. S. Han, P. C. C. Lee, Y. Hu, and H. Li, "A New Design of Binary MDS Array Codes with Asymptotically Weak-Optimal Repair," *IEEE Trans. on Information Theory*, pp. 7095-7113, November, 2019. **(Full paper)**
35. S.-J. Lin, Y. S. Han, and N. Yu, "New Locally Correctable Codes Based on Projective Reed-Muller Codes," *IEEE Trans. on Communications*, pp. 3834-3841, June, 2019. **(Full paper)**
36. L.-H. Chang, P.-N. Chen, V. Y. F. Tan, C. Wang, and Y. S. Han, "On the Maximum Size of Block Codes Subject to a Distance Criterion," *IEEE Trans. on Information Theory*, pp. 3751-3757, June, 2019. **(Full paper)**
37. H. Cao, S.-J. Lin, W. Zhang, and Y. S. Han, "On the Security of Secret Sharing over a Ring and the Fast Implementation," *IEEE Signal Processing Letters*, pp. 705-709, May, 2019.
38. C. Chen, S.-J. Lin, and Y. S. Han, "Extended Versions of Polynomial Remainder Codes and Chinese Remainder Codes," *IEEE Communications Letters*, pp. 2407-2410, December, 2018.
39. L. Deng, W. S. Wong, P.-N. Chen, Y. S. Han, and H. Hou, "Delay-Constrained Input-Queued Switch," *IEEE Journal on Selected Areas in Communications (JSAC): special issue on Emerging Technologies in Tactile Internet and Backhaul/Fronthaul networks*, pp. 2464-2474, November, 2018. **(Full paper)**
40. H. Hou, Y. S. Han, K. W. Shum, and H. Li, "A Unified Form of EVENODD and RDP Codes and Their Efficient Decoding," *IEEE Trans. on Communications*, pp. 5053 - 5066, November, 2018. **(Full paper)**
41. H. Hou and Y. S. Han, "A Class of Binary MDS Array Codes with Asymptotically Weak-Optimal Repair," *SCIENCE CHINA Information Sciences*, pp. 100302:1-100302:11, October, 2018. **(Invited paper)**
42. C.-Y. Wei, H.-Y. Lin, P.-N. Chen, Y. S. Han, and P. K. Varshney, "Target Localization Using Sensor Location Knowledge in Wireless Sensor Networks," *IEEE Wireless Communications Letters*, pp. 456-459, July, 2018.

43. Y. S. Han, T.-Y. Wu, P.-N. Chen, and P. K. Varshney, "A Low-Complexity Maximum-Likelihood Decoder for Tail-Biting Convolutional Codes," *IEEE Trans. on Communications*, pp. 1859-1870, May, 2018. **(Full paper)**
44. C. Huang, T.-Y. Wu, P.-N. Chen, F. Alajaji, and Y. S. Han, "An Efficient Tree Search Algorithm for the Free Distance of Variable-Length Error-Correcting Codes," *IEEE Communications Letters*, pp. 474-477, March, 2018.
45. H. Hou and Y. S. Han, "A New Construction and an Efficient Decoding Method for Rabin-Like Codes," *IEEE Trans. on Communications*, pp. 521-533, February, 2018. **(Full paper)**
46. C.-Y. Wei, P.-N. Chen, Y. S. Han, and P. K. Varshney, "Local Threshold Design for Target Localization Using Error Correcting Codes in Wireless Sensor Networks in the Presence of Byzantine Attacks," *IEEE Trans. on Information Forensics and Security*, pp. 1517-1584, July 2017. **(Full paper)**
47. M. A. Mulatu, L.-C. Chang, Y. S. Han, F. G. Mengistu, and D.-F. Tseng, "Threshold-Based Cooperative Communication of Energy Harvesting Active Networked Tags," *Int. J. Ad Hoc and Ubiquitous Computing*, pp. 225-236, 24(4), 2017. **(Full paper)**
48. S.-J. Lin, T. Y. Al-Naffouri, Y. S. Han, and W.-H. Chung, "Novel Polynomial Basis with Fast Fourier Transform and Its Application to Reed-Solomon Erasure Codes," *IEEE Trans. on Information Theory*, pp. 6284-6299, November, 2016. **(Full paper)**
49. S.-J. Lin, T. Y. Al-Naffouri, and Y. S. Han, "FFT Algorithm for Binary Extension Finite Fields and its Application to Reed-Solomon Codes," *IEEE Trans. on Information Theory*, pp. 5343-5358, October, 2016. **(Full paper)**
50. J.-T. Tsai and Y. S. Han, "Geographic routing with enhanced local information for wireless networks," *Journal of Information Science and Engineering*, pp. 1261-1288, September, 2016. **(Full paper)**
51. R. El-Bardan, E. Masazade, O. Ozdemir, Y. S. Han, and P. K. Varshney, "Permutation Trellis Coded Multi-level FSK Signaling to Mitigate Primary User Interference in Cognitive Radio Networks," *IEEE Trans. on Communications*, pp. 104-116, January, 2016. **(Full paper)**
52. B. Kailkhura, Y. S. Han, S. Brahma, and P. K. Varshney, "Distributed Bayesian Detection in the Presence of Byzantine Data," *IEEE Trans. on Signal Processing*, pp. 5250 - 5263, October, 2015. **(Full paper)**
53. B. Kailkhura, S. Brahma, B. Dulek, Y. S. Han, and P. K. Varshney, "Distributed Detection in Tree Networks: Byzantines and Mitigation Techniques," *IEEE Trans. on Information Forensics and Security*, pp. 1499-1512, July, 2015. **(Full paper)**
54. Y. S. Han, H.-T. Pai, R. Zheng, and P. K. Varshney, "Update-Efficient Error-Correcting Product-Matrix Codes," *IEEE Trans. on Communications*, pp. 1925-1938, June, 2015. **(Full paper)**
55. B. Kailkhura, Y. S. Han, S. Brahma, and P. K. Varshney, "Asymptotic Analysis of Distributed Bayesian Detection with Byzantine Data," *IEEE Signal Processing Letters*, pp. 608-611, May, 2015.
56. S.-J. Lin, W.-H. Chung, Y. S. Han, and T. Y. Al-Naffouri, "A Unified Form of Exact-MSR Codes via Product-Matrix Frameworks," *IEEE Trans. on Information Theory*, pp. 873-886, February, 2015. **(Full paper)**
57. D.-F. Tseng, F. G. Mengistu, Y. S. Han, M. A. Mulatu, L.-C. Chang, and T.-R. Tsai, "Robust Turbo Decoding in a Markov Gaussian Channel," *IEEE Wireless Communications Letters*, pp. 633-636, December, 2014.
58. F. G. Mengistu, D.-F. Tseng, Y. S. Han, M. A. Mulatu, and L.-C. Chang, "A Robust Decoding Scheme for Convolutionally Coded Transmission Through a Markov Gaussian Channel," *IEEE Trans. on Vehicular Technology*, pp. 4344-4356, November, 2014. **(Full paper)**

59. B. Kailkhura, S. Brahma, Y. S. Han, and P. K. Varshney, "Distributed Detection in Tree Topologies with Byzantines," *IEEE Trans. on Signal Processing*, pp. 3208-3219, June, 2014. **(Full paper)**
60. V. S. S. Nadendla, Y. S. Han, and P. K. Varshney, "Distributed Inference with M -ary Quantized Data in the Presence of Byzantine Attacks," *IEEE Trans. on Signal Processing*, pp. 2681-2695, May, 2014. **(Full paper)**
61. Y. S. Han, H.-T. Pai, R. Zheng, and W. H. Mow, "Efficient Exact Regenerating Codes for Byzantine Fault Tolerance in Distributed Networked Storage," *IEEE Trans. on Communications*, pp. 385-397, February, 2014. **(Full paper)**
62. A. Vempaty, Y. S. Han, and P. K. Varshney, "Target Localization in Wireless Sensor Networks using Error Correcting Codes," *IEEE Trans. on Information Theory*, pp. 697-712, January, 2014. **(Full paper)**
63. D.-F. Tseng, Y. S. Han, W. H. Mow, P.-N. Chen, J. Deng, and A. J. Han Vinck, "Robust Decoding for Convolutionally Coded Systems Impaired by Memoryless Impulsive Noise," *IEEE Trans. on Communications*, pp. 4640 - 4652, November, 2013. **(Full paper)**
64. T.-Y. Wu, P.-N. Chen, F. Alajaji, and Y. S. Han, "On the Design of Variable-Length Error-Correcting Codes," *IEEE Trans. on Communications*, pp. 3553-3565, September, 2013. **(Full paper)**
65. J. Deng and Y. S. Han, "Cooperative Secret Delivery in Wireless Sensor Networks," *Int. J. Ad Hoc and Ubiquitous Computing*, Vol. 14, No. 4, pp. 226-237, 2013. **(Full paper)**
66. Y. S. Han, S. Omiwade, and R. Zheng, "Progressive Data Retrieval for Distributed Networked Storage," *IEEE Trans. on Parallel and Distributed Systems*, pp. 2303-2314, December, 2012. **(Full paper)**
67. J. Deng, S. C.-H. Huang, and Y. S. Han, "An On-line Relay Selection Scheme in Power Controllable Wireless Sensor Networks," *International Journal of Distributed Sensor Networks*, Vol. 2012, Article ID 213598, 13 pages. **(Full paper)**
68. D.-F. Tseng, Y. S. Han, W. H. Mow, L.-C. Chang, and A. J. Han Vinck, "Robust Clipping for OFDM Transmissions over Memoryless Impulsive Noise Channels," *IEEE Communications Letters*, pp. 1110-1113, July, 2012.
69. Y. S. Han, T.-Y. Wu, H.-T. Pai and P.-N. Chen, "The Modified Wrap-Around Viterbi Algorithm for Convolutional Tail-Biting Codes," *Journal of the Chinese Institute of Engineers*, pp. 431-437, June, 2012. **(Full paper)**
70. T.-R. Tsai, D.-F. Tseng, Y. S. Han, and H.-T. Pai, "Improved EXIT Analysis for Turbo Decoding," *IEEE Communications Letters*, pp. 995-997, September. 2011.
71. H.-T. Pai, Y. S. Han, and Y.-J. Chu, "New HARQ Scheme Based on Decoding of Tail-biting Convolutional Codes in IEEE 802.16e," *IEEE Trans. on Vehicular Technology*, pp. 912-918, March, 2011. **(Full paper)**
72. S.-L. Shieh, P.-N. Chen, Y. S. Han, and T.-Y. Wu, "Early-Elimination Modification for Priority-First Search Decoding," *IEEE Trans. on Communications*, pp. 3459-3469, December, 2010. **(Full paper)**
73. Y.-M. Huang, T.-Y. Wu, and Y. S. Han, "An A^* -based Algorithm for Constructing Reversible Variable Length Codes with Minimum Average Codeword Length," *IEEE Trans. on Communications*, pp. 3175-3185, November, 2010. **(Full paper)**
74. H.-T. Pai, J. Deng, and Y. S. Han, "Time-Slotted Voting Mechanism for Fusion Data Assurance in Wireless Sensor Networks Under Stealthy Attacks," *Computer Communications*, pp. 1524-1530, August, 2010. **(Full paper)**
75. C.-L. Wu, P.-N. Chen, Y. S. Han, and M.-H. Kuo, "Maximum-Likelihood Priority-First Search Decodable Codes for Combined Channel Estimation and Error Correction," *IEEE Trans. on Information Theory*, pp. 4191-4203, September 2009. **(Full paper)**

76. J. Deng, Y. S. Han, and S. R. Kulkarni, "Can Multiple Subchannels Improve the Delay Performance of RTS/CTS-based MAC Schemes?" *IEEE Trans. on Wireless Communications*, pp. 1591-1596, April, 2009.
77. H.-T. Pai, Y. S. Han, T.-Y. Wu, P.-N. Chen, and S.-L. Shieh, "Low-Complexity ML Decoding for Convolutional Tail-Biting Codes," *IEEE Communications Letters*, pp. 883-885, December, 2008.
78. S. C.-H. Huang, P.-J. Wan, J. Deng, and Y. S. Han, "Broadcast Scheduling in Interference Environment," *IEEE Trans. on Mobile Computing*, pp. 1338-1348, November, 2008. **(Full paper)**
79. C.-Y. Wang, P.-N. Chen, W.-T. Chen, S.-L. Shieh, and Y. S. Han, "An Efficient SNR Estimate Scheme for Turbo Decoder over Quasi-Static Channels," *International Journal of Electrical Engineering (IJEE)*, pp. 261-268, 2008. **(Full paper)**
80. Y.-M. Huang, Y. S. Han, and T.-Y. Wu, "Soft-Decision Priority-First Decoding Algorithms for Variable-Length Error-Correcting Codes," *IEEE Communications Letters*, pp. 572-574, August, 2008.
81. J. Deng and Y. S. Han, "Multi-path Key Establishment for Wireless Sensor Networks Using Just Enough Redundancy Transmission," *IEEE Trans. on Dependable and Secure Computing*, pp. 177-190, July-September, 2008. **(Full paper)**
82. H.-T. Pai, Y. S. Han, and J.-T. Sung, "Two-Dimensional Coded Classification Schemes in Wireless Sensor Networks," *IEEE Trans. on Wireless Communications*, pp. 1450-1455, May, 2008.
83. H.-T. Pai and Y. S. Han, "Power-Efficient Direct-Voting Assurance for Data Fusion in Wireless Sensor Networks," *IEEE Trans. on Computers*, pp. 261-273, February, 2008. **(Full paper)**
84. J. Deng, Y. S. Han, P.-N. Chen, and P. K. Varshney, "Optimal Transmission Range for Wireless Ad Hoc Networks Based on Energy Efficiency," *IEEE Trans. on Communications*, pp. 1772-1782, September, 2007. **(Full paper)**
85. S.-L. Shieh, P.-N. Chen, and Y. S. Han, "Flip CRC Modification for Message Length Detection," *IEEE Trans. on Communications*, pp. 1747-1756, September, 2007. **(Full paper)**
86. H.-T. Pai, J.-T. Sung, and Y. S. Han, "Adaptive Retransmission with Balanced Load for Fault-Tolerant Distributed Detection in Wireless Sensor Networks," *Journal of Information Science and Engineering: special issue on Wireless Ad Hoc and Sensor Networks*, pp. 1141-1154, July, 2007. **(Full paper)**
87. C. Yao, P.-N. Chen, T.-Y. Wang, Y. S. Han, and P. K. Varshney, "Performance Analysis and Code Design for Minimum Hamming Distance Fusion in Wireless Sensor Networks," *IEEE Trans. on Information Theory*, pp. 1706-1715, May, 2007. **(Full paper)**
88. Y.-J. Chen, D.-R. Duh, and Y. S. Han, "An Improved Modulo $(2^n + 1)$ Multiplier for IDEA," *Journal of Information Science and Engineering*, pp. 911-923, March 2007.
89. C.-W. Chang, P.-N. Chen, and Y. S. Han, "A Systematic Bit-wise Decomposition of M-ary Symbol Metric," *IEEE Trans. on Wireless Communications*, pp. 2742-2751, October, 2006. **(Full paper)**
90. Y. S. Han, J. Deng, and Z. J. Haas, "Analyzing Multi-Channel Medium Access Control Schemes with ALOHA Reservation," *IEEE Trans. on Wireless Communications*, pp. 2143-2152, August, 2006. **(Full paper)**
91. T.-Y. Wang, Y. S. Han, B. Chen, and P. K. Varshney, "A Combined Decision Fusion and Channel Coding Scheme for Distributed Fault-Tolerant Classification in Wireless Sensor Networks," *IEEE Trans. on Wireless Communications*, pp. 1695-1705, July, 2006. **(Full paper)**
92. J. Deng, Y. S. Han, and Z. J. Haas, "Analyzing Split Channel Medium Access Control Schemes," *IEEE Trans. on Wireless Communications*, pp. 967-971, May, 2006.

93. W. Du, J. Deng, Y. S. Han, and P. K. Varshney "A Key Pre-distribution Scheme for Sensor Networks Using Deployment Knowledge," *IEEE Trans. on Dependable and Secure Computing*, pp. 62-77, January, 2006. **(Full paper)** (根據 Google Scholar 已被引用超過 1306 次)
94. J. Deng, Y. S. Han, W. B. Heinzelman, and P. K. Varshney, "Scheduling Sleeping Nodes in High Density Cluster-based Sensor Networks," *ACM/Kluwer MONET Special Issue on "Energy Constraints and Lifetime Performance in Wireless Sensor Networks,"* pp. 825-835, December, 2005. **(Full paper)**
95. T.-Y. Wang, Y. S. Han, and P. K. Varshney, "Fault-Tolerant Distributed Classification Based on Non-binary Codes in Wireless Sensor Networks," *IEEE Communications Letters*, pp. 808-810, September, 2005.
96. J. Deng, Y. S. Han, W. B. Heinzelman, and P. K. Varshney, "Balanced-energy Sleep Scheduling Scheme for High Density Cluster-based Sensor Networks," *Computer Communications : special issue on ASWN04*, pp. 1631-1642, September, 2005. **(Full paper)**
97. W. Du, J. Deng, Y. S. Han, P. K. Varshney, J. Katz, and A. Khalili, "A Pairwise Key Pre-distribution Scheme for Wireless Sensor Networks," *ACM Trans. on Information and System Security (TISSEC)*, pp. 228-258, May, 2005. **(Full paper)** (根據 Google Scholar 已被引用超過 2487 次)
98. T.-Y. Wang, Y. S. Han, P. K. Varshney, and P.-N. Chen, "Distributed Fault-Tolerant Classification in Wireless Sensor Networks," *IEEE Journal on Selected Areas in Communications (JSAC): special issue on Self-Organizing Distributed Collaborative Sensor Networks*, pp. 724-734, April, 2005. **(Full paper)**
99. C.-C. Lee, P.-C. Chung, D.-R. Duh, Y. S. Han, and C.-W. Lin, "A Practice of a Collaborative Multipoint Medical Teleconsultation System on Broadband Network," *Journal of High Speed Networks*, pp. 207-222, September 2004. **(Full paper)**
100. Y. S. Han, P.-N. Chen and H.-B. Wu, "A Maximum-Likelihood Soft-Decision Sequential Decoding Algorithm for Binary Convolutional Codes," *IEEE Trans. on Communications*, pp. 173-178, February, 2002.
101. P.-N. Chen and Y. S. Han, "Asymptotic Minimum Covering Radius of Block Codes," *SIAM Journal on Discrete Mathematics*, pp. 549-564, November, 2001. **(Full paper)**
102. P.-N. Chen, T.-Y. Lee, and Y. S. Han, "Distance-Spectrum Formulas on the Largest Minimum Distance of Block Codes," *IEEE Trans. on Information Theory*, pp. 869-885, May, 2000. **(Full paper)**
103. Y. S. Han, "A New Decoding Algorithm for Complete Decoding of Linear Block Codes," *SIAM Journal on Discrete Mathematics*, pp. 664-671, November, 1998. **(Full paper)**
104. Y. S. Han, "A New Treatment of Priority-First Search Maximum-Likelihood Soft-Decision Decoding of Linear Block Codes," *IEEE Trans. on Information Theory*, pp. 3091-3096, November, 1998.
105. Y. S. Han, C. R. P. Hartmann, and K. G. Mehrotra, "Decoding Linear Block Codes Using a Priority-First Search: Performance Analysis and Suboptimal Version," *IEEE Trans. on Information Theory*, pp. 1233-1246, May, 1998.
106. Y. S. Han, and C. R. P. Hartmann, "The Zero-Guards Algorithm for General Minimum Distance Decoding Problem," *IEEE Trans. on Information Theory*, pp. 1655-1658, September, 1997.
107. D. L. Tao, C. R. P. Hartmann , and Y. S. Han, "New Encoding/Decoding Methods for Designing Fault-Tolerant Matrix Operations," *IEEE Trans. on Parallel and Distributed Systems*, pp. 931-938, September, 1996. **(Full paper)**
108. Y. S. Han, C. R. P. Hartmann, and C.-C. Chen, "Efficient Priority-First Search Maximum-Likelihood Soft-Decision Decoding of Linear Block Codes," *IEEE Trans. on Information Theory*, pp. 1514-1523, September, 1993. **(Full paper)** (根據 Google Scholar 已被引用 170 次)

• 審核會議論文

1. L. Yu, Y. S. Han, P. Li, and J. Yuan, “A Novel Formula for Solving Quadratic Equations over Binary Extension Fields,” *2026 International Symposium on Information Theory (ISIT2026)*, Guangzhou, China, June, 2026.
2. C. Chen, N. Tang, Y. S. Han, and B. Bai, “Fast Algorithms for Certain Reed-Solomon Codes Based on LCH-FFT,” *2026 International Symposium on Information Theory (ISIT2026)*, Guangzhou, China, June, 2026.
3. C. Chen, N. Tang, Y. S. Han, and B. Bai, “A Recursive Welch-Berlekamp Algorithm with Quasi-Linear Complexity $O(n \log_2 n)$,” *2026 International Symposium on Information Theory (ISIT2026)*, Guangzhou, China, June, 2026.
4. C. Chen, N. Tang, Y. S. Han, and B. Bai, “A New Interpolation Formula for $F_{2^m}[x]/(x^{2^m} - x)$,” *2026 International Symposium on Information Theory (ISIT2026)*, Guangzhou, China, June, 2026.
5. Y. Li, L. Yu, J. Yuan, and Y. S. Han, “Erasure-Coded Consistent Hashing for Distributed Storage,” *13th International Workshop on Blockchain Technologies and Distributed Storage for Big Data (BIGDATA2025)*, Macau, December, 2025.
6. N. Tang, Y. S. Han, D. Pei, and C. Chen, “A Fast Decoding Algorithm for Generalized Reed-Solomon Codes and Alternant Codes,” *The 11th International Workshop on Signal Design and its Applications in Communications (IWSDA'25)*, Melbourne, December, 2025.
7. Q. Cheng, H. Cao, S.-J. Lin, N. Yu, Y. S. Han, and X. Xie, “A Construction of Evolving k -threshold Secret Sharing Scheme over a Polynomial Ring,” *The Asiacrypt 2025 (asiacrypt2025)*, Melbourne, December, 2025.
8. L. Yu, J. Yuan, Y. S. Han, Q. Cheng, and C. Chen, “A New Soft-Decision Decoding for Extended BCH Codes Based on Reed-Muller Decomposition,” *2025 IEEE Information Theory Workshop (ITW2025)*, Sydney, Australia, September, 2025.
9. C. Chen, S.-J. Lin, Y. S. Han, and B. Bai, “A Fast Chinese Remaindering Transform Over Finite Fields,” *2025 International Symposium on Information Theory (ISIT2025)*, Ann Arbor, Michigan, June, 2025.
10. C. Chen, Z. Wang, Y. S. Han, and B. Bai, “Reformulated Euclidean Algorithm and Optimized (OREA) Architecture for Reed-Solomon Decoding,” *2024 International Symposium on Information Theory and its Applications (ISITA2024)*, Taipei, November, 2024.
11. Z. Li, W. H. Mow, Y. S. Han, and Y. Wan, “Optimal Bandwidth for All-Linear-Reduce Operation,” *2024 IEEE Information Theory Workshop (ITW2024)*, Shenzhen, China, November, 2024.
12. C. Chen, N. Tang, Y. S. Han, B. Bai, J. Zhang, and W. Zhou, “A New Early-Termination Method for the Berlekamp-Massey Algorithm,” *2024 IEEE Information Theory Workshop (ITW2024)*, Shenzhen, China, November, 2024.
13. C. Chen, B. Bai, X. Ma, Y. S. Han, N. Tang, and X. Wang, “Efficient Decoding of a Class of Reed-Solomon Codes over Fermat Fields,” *2024 International Symposium on Information Theory (ISIT2024)*, Athens, Greece, July, 2024.
14. P. Zhu, J. Lv, Y. S. Han, L. Song, and H. Hou, “New EVENODD+ Codes with More Flexible Parameters and Lower Complexity,” *2024 International Symposium on Information Theory (ISIT2024)*, Athens, Greece, July, 2024.
15. L. Yu and Y. S. Han, “A Class of Extended Generalized RDP Codes,” *The Fifteenth International Conference on Wireless Communications and Signal Processing*, Hangzhou, China, November, 2023.
16. C. Chen, S. Cai, Y. S. Han, N. Tang, and B. Bai, “Fast Encoding of Extended Integrated Interleaved Codes Based on Two-Dimensional LCH-FFT,” *2023 12th International Symposium on Topics in Coding (ISTC)*, Brest, France, September, 2023.

17. C. Chen, N. Tang, Y. S. Han, and B. Bai, "On the Equivalence between the WB Algorithm and the MA Algorithm," *2023 IEEE/CIC International Conference on Communications in China (ICCC Workshops)*, Dalian City, China, August, 2023.
18. F. Sun, Q. Huang, J. Rui, T.-Y. Wu, and Y. S. Han, "Side Encoding for MDS Array Codes," *2023 International Symposium on Information Theory (ISIT2023)*, Taipei, June, 2023.
19. C. Chen, S.-J. Lin, Z. Li, S. Cai, and Y. S. Han, "Reduced-Complexity Erasure Decoding of Low-Rate Reed-Solomon Codes Based on LCH-FFT," *2023 International Symposium on Information Theory (ISIT2023)*, Taipei, June, 2023.
20. Z. Li, W. H. Mow, Y. S. Han, and T.-Y. Wu, "Cache-Aided Distributed Storage System," *2023 International Symposium on Information Theory (ISIT2023)*, Taipei, June, 2023.
21. Z. Li, Y. S. Han, S.-J. Lin, and C. Chen, "An Efficient Reed-Solomon Erasure Code over Cantor-Constructed Binary Extension Finite Fields," *2023 International Symposium on Information Theory (ISIT2023)*, Taipei, June, 2023.
22. C. Chen, Y. S. Han, N. Tang, and S.-J. Lin, "An Early-Termination Method for the Welch-Berlekamp Algorithm," *2023 International Symposium on Information Theory (ISIT2023)*, Taipei, June, 2023.
23. C. Quan, B. Geng, Y. S. Han, and P. K. Varshney, "Human-machine Hierarchical Networks for Decision Making in the Presence of Byzantine Attacks," *57th Annual Conference on Information Sciences and Systems (CISS2023)*, Baltimore, Maryland, March, 2023.
24. N. Tang, Y. S. Han, and H. Ren, "On Concatenated Coding Scheme for High-Speed Ethernet," *25th International Conference on Advanced Communications Technology (ICACT2023)*, Phoenix Pyeongchang, Korea, February, 2023.
25. J. Deng, P.-N. Chen, and Y. S. Han, "Perturbation-based MAC for Dense Wireless Networks with Periodic Traffic," *2023 International Conference on Computing, Networking and Communications (ICNC): Mobile and Wireless Networking*, Honolulu, Hawaii, February, 2023.
26. C. Quan, Y. S. Han, B. Geng, and P. K. Varshney, "Reputation and Audit Bit Based Distributed Detection in the Presence of Byzantines," *the 56th Asilomar Conference on Signals, Systems, and Computers*, Pacific Grove, CA, October, 2022.
27. H. Hou, Y. S. Han, B. Bai, and G. Zhang, "Towards Efficient Repair and Coding of Binary MDS Array Codes With Small Sub-Packetization," *2022 International Symposium on Information Theory (ISIT2022)*, Espoo, Finland, June, 2022.
28. H. Shi, H. Hou, Y. S. Han, P. P. C. Lee, Z. Jiang, Z. Huang, and B. Bai, "New Piggybacking Codes With Lower Repair Bandwidth for Any Single-Node Failure," *2022 International Symposium on Information Theory (ISIT2022)*, Espoo, Finland, June, 2022.
29. Z. Tang, S.-J. Lin, Y. S. Han, Z. Huang, B. Bai, and G. Zhang, "Data Integrity Check in Distributed Storage Systems," *2022 International Symposium on Information Theory (ISIT2022)*, Espoo, Finland, June, 2022.
30. J. Li, X. Tang, H. Hou, Y. S. Han, B. Bai, and G. Zhang, "PMDS Array Codes With Small Sub-Packetization Level and Small Repair Bandwidth," *2022 International Symposium on Information Theory (ISIT2022)*, Espoo, Finland, June, 2022.
31. D. Wu, L. Deng, Z. Liu, Y. Zhang, Y. S. Han, "RL Random Access for Delay-Constrained Heterogeneous Wireless Networks: A Two-User Case," *IEEE 2021 Global Communications Conference: Workshop-AiWN*, Madrid, Spain, December, 2021.
32. Z. Li, Y. S. Han, T.-Y. Wu, H. Hou, B. Bai, and G. Zhang, "On the Repair Bandwidth and Repair Access of Two Storage Systems: Large-Scale and Uniform Rack-Aware Storage Systems," *2021 IEEE Information Theory Workshop (ITW 2021)*, Kanazawa, Japan, October, 2021.

33. T.-Y. Wu, Y. S. Han, Z. Li, B. Bai, G. Zhang, "Achievable Lower Bound on the Optimal Access Bandwidth of $(K + 2, K, 2)$ -MDS Array Code with Degraded Read Friendly," *2021 IEEE Information Theory Workshop (ITW 2021)*, Kanazawa, Japan, October, 2021.
34. Z. Jiang, H. Hou, Y. S. Han, Z. Huang, B. Bai, and G. Zhang, X. Zhang, and X. Wu, "An Efficient Piggybacking Design with Lower Repair Bandwidth and Lower Sub-packetization," *2021 International Symposium on Information Theory (ISIT2021)*, Melbourne, Victoria, Australia, July, 2021.
35. Y. Wu, H. Hou, Y. S. Han, P. P. C. Lee, and G. Han, "Generalized Expanded-Blaum-Roth Codes and Their Efficient Encoding/Decoding," *IEEE 2020 Global Communications Conference (Globecom 2020)*, Taipei, December, 2020.
36. Y. Yu, L. Deng, Y. Zhang, and Y. S. Han, "Comparing Delay-Constrained ALOHA and CSMA: A Learning-Based Low-Complexity Approximate Approach," *IEEE International Conference on Control & Automation (IEEE ICCA 2020)*, Sapporo, Japan, October, 2020. **(Invited paper)**
37. T.-Y. Wu and Y. S. Han, "ML Soft-decision Decoding for Binary Linear Block Codes Based on Trellises of Their Supercodes," *The 29th International Conference on Computer Communications and Networks (ICCCN 2020)*, Honolulu, Hawaii, August, 2020. **(Invited paper)**
38. L.-H. Chang, P.-N. Chen, F. Alajaji, and Y. S. Han, "The Asymptotic Generalized Poor-Verdú Bound Achieves the BSC Error Exponent at Zero Rate," *2020 International Symposium on Information Theory (ISIT2020)*, Los Angeles, California, June, 2020.
39. Z. Li, S.-J. Lin, and Y. S. Han, "On the Exact Lower Bounds of Encoding Circuit Sizes of Hamming Codes and Hadamard Codes," *2020 International Symposium on Information Theory (ISIT2020)*, Los Angeles, California, June, 2020.
40. H. Hou, P. P. C. Lee, and Y. S. Han, "Minimum Storage Rack-Aware Regenerating Codes with Exact Repair and Small Sub-Packetization," *2020 International Symposium on Information Theory (ISIT2020)*, Los Angeles, California, June, 2020.
41. H. Hou, P. P. C. Lee, and Y. S. Han, "Toward Optimality in Both Repair and Update via Generic MDS Code Transformation," *2020 International Symposium on Information Theory (ISIT2020)*, Los Angeles, California, June, 2020.
42. C. Chen, Y. S. Han, Z. Wang, and B. Bai, "A New Inversionless Berlekamp-Massey Algorithm with Efficient Architecture," *The IEEE International Workshop on Signal Processing Systems (SiPS 2019)*, Nanjing, P. R. China, October, 2019.
43. S.-J. Lin, Z. Gao, and Y. S. Han, "Arithmetic Coding Based on Reflected Binary Codes," *The 9th International Workshop on Signal Design and its Applications in Communications (IWSDA 2019)*, Dongguan, P. R. China, October, 2019.
44. H. Hou, Y. S. Han, and P. P. C. Lee, "Binary MDS Array Codes with Asymptotically Optimal Repair for All Columns," *The 28th International Conference on Computer Communications and Networks (ICCCN 2019)*, Valencia, Spain, July, 2019. **(Invited paper)**
45. H. Hou, Y. S. Han, P. P. C. Lee, and Q. Zhou, "New Regenerating Codes over Binary Cyclic Codes," *2019 International Symposium on Information Theory (ISIT2019)*, Paris, France, July, 2019.
46. S. Huang, H. Hou, and Y. S. Han, "An Improved MDS Condition of Blaum-Bruck-Vardy Codes," *The 10th International Symposium on Turbo Codes & Iterative Information Processing*, Hong Kong, China, December, 2018.
47. L. Deng, W. S. Wong, P.-N. Chen, and Y. S. Han, "Delay-Constrained Input-Queued Switch," *The Nineteenth International Symposium on Mobile Ad Hoc Networking and Computing (MobiHoc 2018)*, Los Angeles, USA, June 2018. (Poster)

48. L. Deng, J. Deng, P.-N. Chen, and Y. S. Han, "On the Asymptotic Performance of Delay-Constrained Slotted ALOHA," *The 27th International Conference on Computer Communications and Networks (ICCCN 2018)*, Hangzhou, China, July, 2018. **(Invited paper)**
49. H. Hou and Y. S. Han, "On Binary MDS Array Codes with Asymptotically Weak-Optimal Repair," *2018 INFORMS International Conference*, Taipei, June, 2018. **(Invited talk)**
50. L.-H. Chang, C. Wang, P.-N. Chen, V. Y. F. Tan and Y. S. Han, "Applications of an exact formula for the largest minimum distance of block codes," *52th Annual Conference on Information Sciences and Systems (CISS)*, Princeton, NJ, USA, March 2018.
51. L.-H. Chang, C. Wang, P.-N. Chen, Y. S. Han, and V. Y. F. Tan, "Distance Spectrum Formula for the Largest Minimum Hamming Distance of Finite-Length Binary Block Codes," *2017 IEEE Information Theory Workshop (ITW 2017)*, Kaohsiung, November, 2017.
52. H. Hou and Y. S. Han, "BASIC Codes for Distributed Storage Systems," *The 26th International Conference on Computer Communications and Networks (ICCCN 2017)*, Vancouver, Canada, July, 2017. **(Invited paper)**
53. H. Hou, P. P. C. Lee, Y. S. Han, and Y. Hu, "Triple-Fault-Tolerant Binary MDS Array Codes with Asymptotically Optimal Repair," *2017 International Symposium on Information Theory (ISIT2017)*, Aachen, Germany, June, 2017.
54. Y. S. Han, S.-W. Fu, and P.-N. Chen, "A New Step-by-Step Complete Decoding Algorithm for Binary Cyclic Codes," *2017 International Conference on Signals and Systems (ICSigSys' 2017)*, Bali, Indonesia, May 2017.
55. S.-M. Tseng, D.-F. Tseng, T.-R. Tsai, and Y. S. Han, "Robust Turbo Decoding in Single-Carrier Systems over Memoryless Impulse Noise Channels," *2016 International Conference on Advanced Technologies for Communications (ATC'2016)*, Hanoi, Vietnam, October, 2016.
56. X. Wang, W. H. Mow, and Y. S. Han, "List-Output Priority-First Sequential Decoding for Physical-Layer Network Coding," *Thirteenth International Symposium on Wireless Communication Systems (ISWCS'2016)*, Poznan, Poland, September, 2016.
57. P.-N. Chen, Y. S. Han, H.-Y. Lin, and P. K. Varshney, "Optimal Byzantine Attack for Distributed Inference with M-ary Quantized Data," *2016 International Symposium on Information Theory (ISIT2016)*, Barcelona, Spain, July, 2016.
58. J.-T. Tsai and Y. S. Han, "Cooperative Rotational Sweep Schemes for Geographic Routing," *IEEE International Conference on Communications (ICC'2016)*, Kuala Lumpur, Malaysia, May, 2016.
59. V. S. S. Nadendla, Y. S. Han, and P. K. Varshney, "Information-Dispersal Games for Security in Cognitive-Radio Networks," *2015 International Symposium on Information Theory (ISIT2015)*, Hong Kong, China, June, 2015.
60. D.-F. Tseng, L.-C. Chang, and Y. S. Han, "A Robust Receiver for OFDM Systems in Nonlinear Impulse Channels," *2nd IEEE International Symposium on Telecommunication Technologies (ISTT2014)*, Langkawi Island, Malaysia, November, 2014.
61. S.-J. Lin, W.-H. Chung, and Y. S. Han, "Novel Polynomial Basis and Its Application to Reed-Solomon Erasure Codes," *The 55th Annual IEEE Symposium on Foundations of Computer Science (FOCS 2014)*, Philadelphia, October, 2014.
62. S.-J. Lin, W.-H. Chung, and Y. S. Han, "On the Fault-Tolerance of Unified-Form Exact-MSR Codes," *The 6th International Symposium on Communications, Control, and Signal Processing (ISCCSP 2014)*, Athens, Greece, May, 2014. **(Invited Talk)**
63. A. Vempaty, Y. S. Han, L. R. Varshney, and P. K. Varshney, "Coding Theory for Reliable Signal Processing," *2014 International Conference on Computing, Networking and Communication (ICNC 2014)*, Honolulu, Hawaii, February, 2014. **(Invited Position Talk)**

64. B. Kailkhura, Y. S. Han, S. Brahma, and P. K. Varshney, "On Covert Data Falsification Attacks on Distributed Detection Systems," *The 13th International Symposium on Communications and Information Technologies (ISCIT 2013)*, Samui Island, Thailand, September, 2013.
65. A. Vempaty, Y. S. Han, and P. K. Varshney, "Byzantine Tolerant Target Localization in Wireless Sensor Networks Over Non-Ideal Channels," *The 13th International Symposium on Communications and Information Technologies (ISCIT 2013)*, Samui Island, Thailand, September, 2013.
66. Y. S. Han, H.-T. Pai, R. Zheng, and P. K. Varshney, "Update-Efficient Regenerating Codes with Minimum Per-Node Storage," *2013 International Symposium on Information Theory (ISIT2013)*, Istanbul, Turkey, July, 2013.
67. A. Vempaty, Y. S. Han, and P. K. Varshney, "Target Localization in Wireless Sensor Networks Using Error Correcting Codes in the Presence of Byzantines," *The 38th International Conference on Acoustics, Speech, and Signal Processing (ICASSP 2013)*, Vancouver, Canada, May, 2013.
68. B. Kailkhura, S. Brahma, Y. S. Han, and P. K. Varshney, "Optimal Distributed Detection in the Presence of Byzantines," *The 38th International Conference on Acoustics, Speech, and Signal Processing (ICASSP 2013)*, Vancouver, Canada, May, 2013.
69. D.-F. Tseng, T.-R. Tsai, and Y. S. Han, "Robust Turbo Decoding in Impulse Noise Channels," *the 17th IEEE International Symposium on Power Line Communications and its Applications (ISPLC 2013)*, Johannesburg, South Africa, March, 2013.
70. D.-F. Tseng, R.-B. Yang, T.-R. Tsai, Y. S. Han, and W. H. Mow, "Efficient Clipping for Broadband Power Line Systems in Impulsive Noise Environment," *the 16th IEEE International Symposium on Power Line Communications and its Applications (ISPLC 2012)*, Beijing, P. R. China, March, 2012.
71. Y. S. Han, R. Zheng, and W. H. Mow, "Exact Regenerating Codes for Byzantine Fault Tolerance in Distributed Storage," *The IEEE INFOCOM 2012*, Orlando, March, 2012.
72. S.-Y. Huang, C.-L. Wu, P.-N. Chen, T.-Y. Wang, and Y. S. Han, "Combining Channel Estimation and Sensor Fault Protection in Wireless Sensor Networks," *The 8th International Conference on Information, Communications and Signal Processing (ICICS 2011)*, Singapore, December, 2011.
73. D.-F. Tseng, Y. S. Han, W. H. Mow, and J. Deng, "Efficient Decoding over Power-line Channels," *The 5th International Workshop on Signal Design and its Applications in Communications (IWSDA '11)*, Guilin, P. R. China, October, 2011.
74. T.-Y. Wu, P.-N. Chen, F. Alajaji, Y. S. Han, "On the Construction and MAP Decoding of Optimal Variable-Length Error-Correcting Codes," *2011 International Symposium on Information Theory (ISIT2011)*, Saint-Petersburg, Russia, June, 2011.
75. J. Deng, S. C.-H. Huang, Y. S. Han, and J. H. Deng, "Fault-Tolerant and Reliable Computation in Cloud Computing," *IEEE Globecom 2010 Workshop on Web and Pervasive Security (WPS 2010)*, Miami, December, 2010.
76. C.-Y. Wang, S.-L. Lin, P.-N. Chen, and Y. S. Han, "Path Deletions for Finite Stack-Size Sequential-Type Decoding Algorithms," *2010 International Symposium on Information Theory and its Applications (ISITA2010)*, Taichun, October, 2010.
77. Y. S. Han, S. Omiwade, and R. Zheng, "Survivable Distributed Storage with Progressive Decoding," *IEEE INFOCOM 2010 (mini-conference)*, San Diego, March, 2010.
78. J. Deng, Y. S. Han, and B. Liang, "Fairness Index Based on Variational Distance," *IEEE 2009 Global Communications Conference (Globecom'2009)*, Hawaii, November, 2009.
79. C.-L. Wu, M. Skoglund, P.-N. Chen, and Y. S. Han, "A Systematic Space-Time Code Design and Its Maximum-Likelihood Decoding for Combined Channel Estimation and

- Error Correction,” *2009 International Symposium on Information Theory (ISIT2009)*, Seoul, South Korea, June, 2009.
80. C.-L. Wu, P.-N. Chen, and Y. S. Han, “A Self-Orthogonal Code and Its Maximum-Likelihood Decoder for Combined Channel Estimation and Error Protection,” *2008 International Symposium on Information Theory and its Applications (ISITA2008)*, Auckland, New Zealand, December, 2008.
 81. Y. S. Han, T.-Y. Wu, H.-T. Pai, P.-N. Chen, and S.-L. Shieh, “Priority-First Search Decoding for Convolutional Tail-biting Codes,” *2008 International Symposium on Information Theory and its Applications (ISITA2008)*, Auckland, New Zealand, December, 2008.
 82. Y.-M. Huang, C.-F. Lo, and Y. S. Han, “Bit- and Trellis- Based Soft-Decision Sequential Decoding for Variable-Length Error-Correcting Codes,” *The 14th Asia-Pacific Conference on Communications (APCC 2008)*, Tokyo, Japan, October, 2008.
 83. Y.-M. Huang and Y. S. Han, “Trellis-Based Joint Huffman and Convolutional Soft-Decision Priority-First Decoding,” *2008 IEEE Data Compression Conference (DCC 2008)*, Utah, March, 2008, p. 521.
 84. J. Deng and Y. S. Han, “Babel: Using a Common Bridge Node to Deliver Multiple Keys in Wireless Sensor Networks,” *Proceedings of IEEE 2007 Global Communications Conference (GlobeCom’2007)*, Washington D.C., November, 2007, pp. 161-165.
 85. S.-L. Shieh, P.-N. Chen and Y. S. Han, “Reduction of Computational Complexity and Sufficient Stack Size of the MLSDA by Early Elimination,” *the IEEE International Symposium on Information Theory (ISIT2007)*, Nice, France, June, 2007, pp. 1671-1675.
 86. P.-N. Chen, T.-Y. Wang, Y. S. Han, and Y.-T. Wang, “On the Design of Soft-Decision Fusion Rule for Coding Approach in Wireless Sensor Networks,” *International Conference on Algorithms, Systems, and Applications (WASA2006)*, Xian, P. R. China, August, 2006. *Lecture Notes in Computer Science (LNCS)*, Springer-Verlag, pp. 140-150, 2006.
 87. P.-N. Chen, T.-Y. Wang, Y. S. Han, P. K. Varshney, C. Yao, and S.-L. Shieh, “Fault-Tolerance Analysis of a Wireless Sensor Network with Distributed Classification Codes,” *the IEEE International Symposium on Information Theory (ISIT2006)*, Seattle, July, 2006, pp. 217-221.
 88. H.-T. Pai and Y. S. Han, “Power-Efficient Data Fusion Assurance Using Direct Voting Mechanism in Wireless Sensor Networks,” *the 2006 IEEE International Conference on Sensor Networks, Ubiquitous, and Trustworthy Computing (SUTC2006)*, Taichung, June, 2006, pp. 2-7.
 89. H.-T. Pai, J.-T. Sung, and Y. S. Han, “Adaptive Retransmission for Distributed Detection in Wireless Sensor Networks,” *the IEEE Workshop on Ad Hoc and Ubiquitous Computing (AHUC2006)*, Taichung, June, 2006, pp. 368-375.
 90. J. Deng and Y. S. Han, “Using MDS Codes for the Key Establishment of Wireless Sensor Networks,” *International Conference on Mobile Ad-hoc and Sensor Networks (MSN ’05)*, Wuhan, P. R. China, December 2005. *Lecture Notes in Computer Science (LNCS)*, Springer-Verlag, pp. 732-744, 2005.
 91. S.-L. Shieh, S.-T. Kuo, P.-N. Chen and Y. S. Han, “Strategies for Blind Transport Format Detection Using Cyclic Redundancy Check in UMTS WCDMA,” *2005 IEEE International Conference on Wireless and Mobile Computing, Networking and Communications (WIMOB2005)*, Montreal, Canada, August, 2005, pp. 44-50.
 92. H.-T. Pai, J.-T. Sung, and Y. S. Han, “A Simple Two-Dimensional Coded Detection Scheme in Wireless Sensor Networks,” *the First IEEE International Workshop in Heterogeneous Wireless Sensor Networks (HWISE-2005)*, Fukuoka, Japan, July 2005, pp. 383-387.
 93. P.-N. Chen, T.-Y. Wang, Y. S. Han, P. K. Varshney and C. Yao, “Asymptotic Performance Analysis for minimum-Hamming-distance fusion,” *the IEEE International*

- Conference on Acoustics, Speech, and Signal Processing 2005 (ICASSP'05)*, Philadelphia, USA, March 2005, pp. 865-868.
94. S.-L. Shieh, P.-N. Chen, and Y. S. Han, "A Novel Modification of Cyclic Redundancy Check for Message Length Detection," *the 2004 IEEE International Symposium on Information Theory and its Applications (ISITA2004)*, Parma, Italy, October, 2004.
 95. C.-W. Chang, P.-N. Chen, and Y. S. Han, "Realization of a Systematic Bit-wise Decomposition Metric," *the 2004 IEEE Asia-Pacific Conference on Circuits and Systems (APCCAS'04)*, Tainan, December, 2004, pp. 1065-1068.
 96. J. Deng, Y. S. Han, W. B. Heinzelman, and P. K. Varshney, "Balanced-energy Sleep Scheduling Scheme for High Density Cluster-based Sensor Networks," *4th Workshop on Applications and Services in Wireless Networks (ASWN04)*, Boston, Massachusetts, August, 2004, pp. 99-108. **(Selected for possible publication in a special issue of Elsevier's Computer Communications Journal)**
 97. Y.-J. Chen, D.-R. Duh, and Y. S. Han, "A New Modulo $(2^n + 1)$ Multiplier for IDEA," *the 2004 International Conference on Security and Management (SAM'04)*, Las Vegas, Nevada, June, 2004, pp. 318-324.
 98. T.-Y. Wang, Y. S. Han, and P. K. Varshney, "A Combined Decision Fusion and Channel Coding Scheme for Fault-Tolerant Classification in Wireless Sensor Networks," *the 2004 IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP 2004)*, Montreal, Quebec, Canada, May, 2004, pp. 1073-1076.
 99. J. Deng, Y. S. Han, P.-N. Chen, and P. K. Varshney, "Optimum Transmission Range for Wireless Ad Hoc Networks," *the IEEE Wireless Communications and Networking Conference 2004 (WCNC04)*, Atlanta, GA, March, 2004, pp. 1024-1029.
 100. W. Du, Y. S. Han, and S. Chen "Privacy-Preserving Multivariate Statistical Analysis: Linear Regression and Classification," *the 2004 SIAM International Conference on Data Mining (SDM2004)*, Lake Buena Vista, FL, April, 2004, pp. 222-233. (Regular paper)
 101. T.-Y. Wang, Y. S. Han, and P. K. Varshney, "Further Results on Fault-Tolerant Distributed Classification Using Error Correcting Codes," *the SPIE's Aerosense conference on Multisensor, Multisource Information Fusion: Architectures, Algorithms, and Applications*, Orlando, FL, April, 2004.
 102. W. Du, J. Deng, Y. S. Han, S. Chen and P. K. Varshney "A Key Management Scheme for Wireless Sensor Networks Using Deployment Knowledge," *the IEEE INFOCOM 2004*, Hong Kong, China, March 2004, pp.586-597. **(Has been cited about 1391 times according to Google Scholar)**
 103. W. Du, J. Deng, Y. S. Han, and P. K. Varshney, "A Pairwise Key Pre-distribution Scheme for Wireless Sensor Networks," *Proceedings of 10th ACM Conference on Computer and Communications Security (CCS2003)*, Washington DC, October, 2003, pp. 42-51.
 104. J. Deng, Y. S. Han, and Z. J. Haas, "Analyzing Split Channel Medium Access Control Schemes with ALOHA Reservation," in *Ad-Hoc, Mobile, and Wireless Networks – ADHOC-NOW '03*, S. Pierre, M. Barbeau, and E. Kranakis, Eds. 2003, vol. 2865 of Lecture Notes in Computer Science (LNCS), pp. 128-139, Springer-Verlag.
 105. W. Du, J. Deng, Y. S. Han, and P. K. Varshney, "A Witness-Based Approach for Data Fusion Assurance in Wireless Sensor Networks," *Proceedings of IEEE 2003 Global Communications Conference (GLOBECOM2003)*, San Francisco, CA, December, 2003, pp. 1435-1439.
 106. T.-Y. Wang, Y. S. Han, and P. K. Varshney, "Fault-Tolerant Classification in Multi-sensor Networks Using Coding Theory," *Proceedings of the 6th International Conference on Information Fusion (Fusion2003)*, Cairns, Australia, July, 2003, pp. 772-779. **(invited paper)**

107. T.-Y. Wang, P. K. Varshney, and Y. S. Han, "Distribution Classification Fusion Using Error Correcting Codes," *Proceedings of the SPIE's Aerosense conference on Multi-sensor, Multisource Information Fusion: Architectures, Algorithms, and Applications*, Orlando, FL, April, 2003, pp. 47-57.
108. Y. S. Han, P.-N. Chen, and M. Fossorier, "A Generalization of the Fano Metric and Its Effect on Sequential Decoding Using a Stack," *Proceedings of the IEEE International Symposium on Information Theory (ISIT2002)*, Lausanne, Switzerland, June, 2002, p. 134.
109. P.-N. Chen, Y. S. Han, C. R. P. Hartmann, and H.-B. Wu, "Analysis of Decoding Complexity Using New Variation of Berry-Esseen Theorem," *Proceedings of the IEEE International Symposium on Information Theory (ISIT2002)*, Lausanne, Switzerland, June, 2002, p. 286.
110. C.-K. Lin, P.-N. Chen and Y. S. Han, "A Low-Complexity Stochastic Codebook Searching Algorithm for FS1016," *Workshop on the 21st Century Digital Life and Internet Technologies*, Tainan, May, 2001.
111. Y. S. Han and P.-N. Chen, "Asymptotic Covering Radius of Block Codes," *Proceedings of the International Symposium on Information Theory and Its Applications (ISITA2000)*, Honolulu, Hawaii, November, 2000, pp. 521-524.
112. T.-Y. Lee, P.-N. Chen and Y. S. Han, "Determination of the Asymptotic Largest Minimum Distance of Block Codes," *Proceedings of the IEEE International Symposium on Information Theory (ISIT2000)*, Sorrento, Italy, June, 2000, p. 227.
113. H.-B. Wu, P.-N. Chen, and Y. S. Han, "Investigation of the Maximum-Likelihood Soft-Decision Sequential Decoding algorithms for convolutional Codes," *Proceedings of the International Symposium on Communications*, Kaohsiung, November, 1999, pp. 82-86.
114. Y. S. Han, "A Minimum ρ -Distance Decoding Algorithm of Linear Block Codes Based on Voronoi Neighbors," *Proceedings of the International Symposium on Communications*, Hsinchu, December, 1997, pp. 99-103.
115. Y. S. Han, "An Optimal Gradient Decoding Algorithm for Hard-Decision Decoding of Linear Block Codes," *Proceedings of the International Conference on Combinatorics, Information Theory and Statistics*, Portland, Maine, July, 1997, p. 36. **(invited speaker)**
116. Y. S. Han, "A New Treatment of Priority-First Search Maximum-Likelihood Soft-Decision Decoding for Linear Block Codes," *Proceedings of the IEEE International Symposium on Information Theory (ISIT1997)*, Ulm, Germany, June, 1997, p. 394. **(honored as long presentation)**
117. Y. S. Han, "The Zero-Coverings Algorithm for General Minimum Distance Decoding Problem," *Proceedings of the IEEE International Symposium on Information Theory (ISIT1997)*, Ulm, Germany, June, 1997, p. 330.
118. Y. S. Han, "The Effect of Heuristic Information on the Soft-Decision Decoding for Linear Block Codes," *Proceedings of the Seventh IEEE International Symposium on Personal, Indoor and Mobile Radio Communications (PIMRC1996)*, Taipei, October, 1996, pp. 309-311.
119. Y. S. Han, C. R. P. Hartmann, C.-T. Chin, and C. K. Mohan, "Efficient Suboptimal Decoding of Linear Block Codes," *Proceedings of the 32nd Allerton Conference on Communication, Control, and Computing*, University of Illinois, Urbana-Champaign, September, 1994, pp. 93-102. **(invited paper)**
120. Y. S. Han, C. R. P. Hartmann, and K. G. Mehrotra, "Further Results on Decoding Linear Block Codes Using a Generalized Dijkstra's Algorithm," *Proceedings of the 1994 IEEE International Symposium on Information Theory (ISIT1994)*, Trondheim, Norway, June, 1994, p. 342.
121. Y. S. Han, C. R. P. Hartmann, and C.-C. Chen, "Efficient Maximum-Likelihood Soft-Decision Decoding of Linear Block Codes Using Algorithm A*," *Proceedings of the*

1993 IEEE International Symposium on Information Theory (ISIT1993), San Antonio, Texas, January 1993, p. 27. **(honored as long presentation)**

122. D. L. Tao, Y. S. Han, and C. R. P. Hartmann, "New Encoding/Decoding Methods for Designing Fault-Tolerant Matrix Operations," *Proceedings of SPIE, Vol. 1770, Advanced Signal Processing, Algorithms, Architectures, and Implementations III*, pp. 72-83, July 1992.

- 技術報告

1. Y. S. Han, and C. R. P. Hartmann, "Designing Efficient Maximum-Likelihood Soft-Decision Decoding of Linear Block Codes Using Algorithm A*," Technical Report SU-CIS-92-10, School of Computer and Information Science, Syracuse University, Syracuse, NY, June 1992.
2. Y. S. Han, C. R. P. Hartmann, and C-C Chen, "Efficient Maximum-Likelihood Soft-Decision Decoding of Linear Block Codes Using Algorithm A*," Technical Report SU-CIS-91-42, School of Computer and Information Science, Syracuse University, Syracuse, NY, December 1991.

- 專利

1. S.-L. Shieh, P.-N. Chen, and Y. S. Han, "Cyclic Redundancy Check Modification for Length Detection of Message with Convolutional Protection," US Patent: US 7,219,292 B2, May 15, 2007.
2. S.-L. Shieh, S.-T. Kuo, P.-N. Chen, and Y. S. Han, "System and Method for Blind Transport Format Detection with Cyclic Redundancy Check," US Patent: US 7,716,554 B2, May 11, 2010.