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獎勵及榮譽

- 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 1993 IEEE International Symposium on Information Theory 所選出的 long presentation[1]
- **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

- Member of IEEE – Information Theory and Communication Societies
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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
- 無線網路– 特別在感應器網路及ad hoc 網路的保密應用
- 無線通訊– 特別在錯誤更正碼的應用
- 密碼學– 特別在編碼理論、消息理論及有限場相關的問題
- 互聯網路– 特別在互聯網路距離相關的問題
- 演算法– 特別在應用消息理論於演算法

執行計劃

- 教育部提昇大學基礎教育計畫–子計畫一: 寬頻網路之建置, 執行起迄:20010901∼20040831, 教育部
- Fano metric 之推廣及循序解碼程式, 執行起迄: 20020801∼20030731, 國科會
- 第四代無線通訊之WOFDM 下行傳輸技術研究–子計畫一: 行動無線通道上 WOFDM 傳輸系統之編碼技術研究, 執行起迄: 20010801∼20040731, 國科會

[1]被 IEEE International Symposium on Information Theory 選爲 long presentation 的論文皆是 Information Theory 和 Coding Theory 領域的國際著名學者們認爲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 篇爲 long presentation.

- 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, 執行起迄: 19990801∼ 20020731, 國科會
- 線性塊狀碼幾何搜尋解碼演算法的研究, 執行起迄: 19990801∼ 20010731, 國科會
- 台灣學術網路/研究網路連線計畫–暨南大學, 執行起迄: 19990701∼20010630, 國科會
- 迴旋碼的最大可靠度軟性決定循序解碼的研究, 執行起迄: 19980801∼19990731, 國科會
- 線性塊狀碼硬性解碼的研究, 執行起迄: 19970801∼19980731, 國科會
- 啓發性資訊在線性格狀碼之軟性決定解碼上的影響, 執行起迄: 19950801∼19960731, 國科會
- 線性格狀碼之軟性決定解碼的研究, 執行起迄: 19940801∼19950731, 國科會

著作

- 專書論文
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  2. 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)**
  3. 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)**
  4. 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)**
  5. 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.
  6. 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.
  7. 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.
  8. 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)**
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8. Y. S. Han, "A Minimum ρ-Distance Decoding Algorithm of Linear Block Codes Based on Voronoi Neighbors, " *the 1997 International Symposium on Communications*, Hsinchu, Taiwan, December, 1997.
9. Y. S. Han, "An Optimal Gradient Decoding Algorithm for Hard-Decision Decoding of Linear Block Codes," *the 1997 International Conference on Combinatorics, Information Theory and Statistics*, Portland, Maine, July, 1997. **(invited speaker)**
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17. 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.

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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.
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