

個人簡歷



姓名： 連長華 (Chang-Hua Lien)

聯絡地址： 高雄市楠梓區旗津區中洲三路 482 號 (辦公室)

聯絡電話： (07)8100888-25223 (辦公室) 25010~25011, 23571

0915510776 (行動電話)

chlien@nkust.edu.tw; chlien@mail.nkmu.edu.tw (電子郵件)

現職： 國立高雄科技大學輪機工程系 教授兼海事學院院長
(教字第零一四八零三號)

專長： 控制理論、數位訊號處理、人工智慧、渾沌理論與應用、船舶監控系統、船體運動控制、物聯網應用

出生地： 台灣省雲林縣

兵役： 陸軍步兵

學歷： 雲林縣仁和國民小學

雲林縣大埤國民中學

國立雲林工專電機工程科：75 年 9 月~80 年 6 月

國立臺灣海洋大學航海技術系工學士：80 年 9 月~82 年 6 月

國立中山大學電機系碩士(直攻)：82 年 9 月~83 年 6 月

國立中山大學電機系博士：83 年 9 月~87 年 6 月

經歷：

- 國立中山大學電機系獎學金輔導助教：82 年 9 月~86 年 7 月
- 國立中山大學電機系國科會研究助理：82 年 9 月~87 年 7 月
- 陽明海運實習船副：81 年 7 月~81 年 9 月
- 海軍修復學校教官：85 年 3 月~85 年 5 月
- 陸軍官校資訊系助教：
- 高苑技術學院電機系兼任助理教授：

- 東方工商專校電機科專任助理教授：
- 義守大學電機工程學系專任助理教授、副教授、教授：
- 高雄海洋科技大學兼任助理教授、副教授：
- 高雄海洋科技大學輪機工程系 副教授、教授：
- 高雄海洋科技大學研發處 研究總中心主任(96/01/01-97/07/31)
- 高雄海洋科技大學航海科技研究所所長(97/07/01-98/07/31)
- 高雄海洋科技大學輪機工程系暨研究所主任(98/08/01~103/07/31)
- 高雄海洋科技大學海事學院院長(104/02/01~107/01/31)
- 高雄科技大學海事學院院長(107/02/01~至今)
- 中華民國船舶機械工程學會第十屆監事(98/12/29-101/12/29)
- 中華海運研究學會研究委員會委員(98/07/31-101/07/31)
- IEEE Transactions on Automatic Control 國際期刊審稿 (87 年開始) (三篇)
- International Journal of Control 國際期刊審稿 (87 年開始) (二篇)
- International Journal of Systems Science 國際期刊審稿 (88 年開始) (九篇)
- 2000 中華民國自動控制研討會審稿 (三篇)
- IET PROCEEDINGS-CONTROL THEORY AND APPLICATIONS 國際期刊審稿 (89 年開始) (八篇)
- Automatica 國際期刊審稿 (89 年開始) (四篇)
- Journal of The Franklin Institute 國際期刊審稿(92 年開始) (四篇)(10/7/2008, 3/8/2009, 10/3/2012, 10/23/2012)
- Autosoft Journal 國際期刊審稿 (92 年開始) (一篇)
- Asian Journal of Control 國際期刊審稿 (93 年開始) (十篇)
- International Journal of Robust and Nonlinear Control 國際期刊審稿 (93 年開始) (三篇)
- Journal of Intelligent and Fuzzy Systems 國際期刊審稿 (93 年開始) (一篇)
- 2004International Computer Symposium 國際研討會審稿

- Information Sciences 國際期刊審稿 (94 年開始) (四篇)
- Journal of the Chinese Institute of Engineers 國際期刊審稿 (94 年開始) (二篇)
- IEEE Transactions on Systems, Man, and Cybernetics - Part B 國際期刊審稿 (94 年開始) (四篇)
- Journal of Sound and Vibration 國際期刊審稿 (95 年開始) (一篇)
- 2006 CCA/CACSD/ISIC Conference 國際研討會審稿 (一篇)
- Neurocomputing 國際期刊審稿 (95 年開始) (二篇)
- Fuzzy Sets and Systems 國際期刊審稿 (95 年開始) (四篇)
- Communications in Nonlinear Science and Numerical Simulations 國際期刊審稿 (95 年開始) (四篇)
- SIAM Journal on Control and Optimization 國際期刊審稿 (95 年開始) (二篇 95 及 101)
- **Editorial Board** of Journal of Nonlinear Analysis and Applied Mathematics, JNAAM (97 年開始)
- **Editor in Chief** of International Journal of Control Theory and Applications (97 年開始)
- **Editorial Board** of The Open Operational Research Journal (96 年開始)
- **Editorial Board** of The Open Cybernetics and Systemics Journal (96 年開始)
- **Associate Editors** of Global Journal of Mathematical Sciences: Theory and Practical (97 年開始)
- **Editorial Board** of Circuits and Systems (Scientific Research Publishing) (99 年~101 年)
- **Editorial Board** of ISRN Applied Mathematics (Hindawi Publishing Corporation) (100 年開始)
- **Editorial Board** of International of Mathematics and Scientific Computing (100 年開始)
- **Lead Guest Editor** of Mathematical Problems in Engineering (Special

issue on Marine Engineering and Applications) (SCI Journal)

- **Lead Guest Editor** of Abstract and Applied Analysis (Special issue on Switched Dynamics with its Applications) (SCI Journal)
- **Associate Editor** of International Journal of Nonlinear Dynamics and Control (106 年開始)
- **Associate Editor** of Complex Engineering Systems (CES) (110 年開始)
- **Topic Editor in Chief** of Fractal and Fractional (IF: 3.313) · Mathematics (IF: 2.258) (Special issue on Analysis and Controls of Time-Delay Systems with Perturbations: Theory and Application) (SCI Journal) (110 年開始)
- IEEE Transactions on Control Systems Technology 國際期刊審稿(95 年開始)(二篇)
- IEE PROCEEDINGS-Vision, Image & Signal Processing 國際期刊審稿(95 年開始)
- ISSN2007 國際研討會審稿
- Dynamics of Continuous, Discrete and Impulsive Systems 國際期刊審稿(96 年開始)(二篇)
- Physics Letters A 國際期刊審稿(96 年開始)(二篇)
- 2007 IEEE Multi-conference on Systems and Control 國際研討會審稿(一篇)
- *Chaos, Solitons & Fractals* 國際期刊審稿(96 年開始)(二篇)
- Nonlinear Analysis Series A: Theory, Methods & Applications 國際期刊審稿(96 年開始)(一篇)
- Nonlinear Analysis Series B: Real World Applications 國際期刊審稿(96 年開始)(一篇)
- IEEE Transactions on Fuzzy Systems 國際期刊審稿(96 年開始)(一篇)
- Journal of Zhejiang University SCIENCE A 國際期刊審稿(96 年開始)(二篇)
- Applied Mathematical Modelling 國際期刊審稿(96 年開始)(一篇)
- IET Control Theory & Applications 國際期刊審稿(96 年開始)(二篇)

- 2007 CACS International Automatic Control Conference 國際研討會審稿
(六篇)
- TAAI2007 國際研討會審稿 (六篇)
- Computers and Mathematics with Applications 國際期刊審稿(96年開始)
(一篇) 100/8 (一篇) 101/2 (二篇)
- International Journal of Electrical Power and Energy Systems 國際期刊審
稿(96年開始)(一篇)
- International Journal of Nonlinear Science 國際期刊審稿(97年開始)(二
篇)
- The Open Operational Research Journal 國際期刊審稿(97年開始)(一
篇)
- Mechatronics 國際期刊審稿(97年開始)(一篇)
- International Journal of Control, Automation, and Systems 國際期刊審稿
(97年開始)(二篇 101JUNE)
- International Journal of Electrical Engineering 國際期刊審稿(97年開始)
(一篇)
- Journal of Inequalities and Applications 國際期刊審稿(98年開始)(101
年9月)
- Journal of Vibration and Control 國際期刊審稿(98年開始)(二篇)
- Mathematical and Computer Modelling 國際期刊審稿(98年開始)(一篇)
- ISA Transactions 國際期刊審稿(98年開始)(一篇)
- Connection Science 國際期刊審稿(100年開始)(一篇)
- FUZZ-IEEE 2011 國際研討會審稿(五篇)
- International Journal of Automation and Computing 國際期刊審稿(100年
開始)(二篇)
- Abstract and Applied Analysis 國際期刊審稿(100年開始)(一篇)
- Journal of Marine Science and Technology 國際期刊審稿(100年開始)
(二篇, 101/7)
- Advances in Difference Equations 國際期刊審稿(101年開始)(一篇)

- IFAC Workshop on Time Delay Systems 2012 國際研討會審稿 (101 年開始) (一篇)
- Nonlinear Dynamics 國際期刊審稿 (101 年開始) (一篇)
- Applied Mathematical and Computation 國際期刊審稿 (101 年開始) (一篇)
- Systems & Control Letters 國際期刊審稿 (101 年開始) (一篇)
- Neural Computing and Applications 國際期刊審稿 (101 年開始) (二篇)
- Journal of Control Engineering and Technology 國際期刊審稿(101 年開始) (一篇)
- International Journal of Energy and Environmental Engineering 國際期刊審稿(101 年開始) (一篇)
- International Journal of Electronics Letters 國際期刊審稿(102 年開始) (一篇)
- 2013 年第七屆資訊科技國際研討會(AIT2013) 審稿
- Journal of Vibration and Acoustics 國際期刊審稿(102 年開始) 2013/3/3
- 2013 IEEE International Conference on Fuzzy Systems 國際研討會 (FUZZ-IEEE 2013) 審稿(5 篇) 2013/3/18
- 52nd IEEE Conference on Decision and Control 國際研討會審稿(1 篇)2013/3/23
- Advances in Mechanical Engineering 國際期刊審稿(103 年開始) (一篇)
- FUZZ-IEEE 2015 國際研討會審稿(5 篇)2015/3/20
- CEIT2015 國際研討會審稿(6 篇)2015/3/23
- 義守大學電機系碩士班口試委員(98 年 1 月, 101 年二月 2 位)
- 樹德科技大學資工系、電通系碩士班口試委員(93 年 6 月及 7 月)
- 國立高雄第一科技大學工程科技研究所博士班共同指導教授及口試委員(93 年 4 月)
- 國立中山大學電機工程學系博士班口試委員(93 年 6 月、97 年 6 月)
- 國立中山大學電機工程學系碩士班口試委員(94 年 6 月、95 年 6 月、97 年 6 月)

- 國立成功大學工程科學學系博士班口試委員(97 年開始共六位、101 年 6 月 25 日、102 年 1 月 23 日)
- 國立台灣海洋大學電機工程學系博士班口試委員(99 年 11 月)
- 國立台灣海洋大學輪機工程學系博士班口試委員(109 年 1 月)
- 遠東科技大學電機系碩士班口試委員(101 年二月 1 位)
- 國科會計畫審查委員(96 年 3 月、99 年 6 月、100 年 3 月、101 年 3 月、103 年 3 月)
- 第十二屆及第十三屆人工智慧與應用研討會議程委員
- 2007 資通技術管理與應用會議議程委員
- 2009 資通技術管理與應用會議議程委員
- 2011 資通技術管理與應用會議議程委員
- 2007 CACS International Automatic Control Conference 議程委員
- 2009 中華民國第十七屆模糊理論及其應用研討會議程委員
- 中華民國自動控制學會會員
- 中華民國系統學會會員
- 3CA 2010 Invited Session Organizers
- 2010 教育部高職評鑑委員
- 2011、2012 海事高職輪機科教師甄選委員
- 2011、2012 全國高職學生實務專題製作競賽評審
- 2011 教育部產學攜手合作計畫成果分享者
- 海軍官校船舶機械系教育諮詢委員
- 2009 資通技術管理與應用會議，Session chair
- 2009 中華民國第十七屆模糊理論及其應用研討會，Session chair
- Proceedings of the 2011 International Conference on Fluid Power and Mechatronics，Session chair
- IEEE International Conference on Mechatronics and Automation，Session chair
- The 2012 International Conference on Information Security and Intelligent Control，Session chair

- 擔任國際研討會 CEIT'13 一般主席(General chair): :June 04-06, 2013.
- 擔任國際研討會 CEIT'14 International Scientific Committee: May, 2014.
- 擔任國際研討會 CEIT'15 International Scientific Committee: May 25-27, 2015.
- 2018 系統科學與工程研討會研討會，Session chair(兩場)

- 教育部產學連結合作育才平台綠色材料(能源)產業工作圈召集人-107年開始

- 名列史丹福大學世界頂尖前 2%科學家(**World's Top 2% Scientists by Stanford University**)

https://www.researchgate.net/publication/345921476_World's_Top_2_Scientists_by_Stanford_University

個人著作：

A. Referred papers

- [1] Lien, C. H., Hsieh, J. G., and Sun, Y. J., “Robust stabilization for a class of uncertain systems with multiple time delays via linear control,” *Journal of Mathematical Analysis and Applications*, vol. 218, pp. 369-378, 1998. (SCI) (EI)
- [2] Sun, Y. J., Lien, C. H., and Hsieh, J. G., “Global exponential stabilization for a class of uncertain nonlinear systems with control constraint,” *IEEE Transactions on Automatic Control*, vol. 43, no. 5, pp. 674-677, 1998. (SCI) (EI) (NSC-85-2213-E110-026)
- [3] Sun, Y. J., Lien, C. H., and Hsieh, J. G., “Comments on ‘D-stability of continuous time-delay systems subjected to a class of highly structured perturbations’,” *IEEE Transactions on Automatic Control*, vol. 43, no. 5, p. 689, 1998. (SCI) (EI)
- [4] Lien, C. H., Sun, Y. J., and Hsieh, J. G., “Global stabilizability for a class of uncertain systems with multiple time-varying delays via linear control,” *International Journal of Control*, vol. 72, no. 10, pp. 904-910, 1999. (SCI) (EI) (NSC-87-2213-E-110-038)
- [5] Lien, C. H., and Hsieh, J. G., “Exponential stabilization for a class of uncertain systems with time-varying delay and control constraint,” *Journal of the Chinese Institute of Engineers*, vol. 22, no. 2, pp. 129-137, 1999. (SCI) (EI)
- [6] Lien, C. H., “Asymptotic criterion for neutral systems with multiple time delays,” *IEE Electronics Letters*, vol. 35, no. 10, pp. 850-852, 1999. (SCI) (EI)
- [7] Lien, C. H., and Hsieh, J. G., “New results on global exponential stability of interval time-delay systems,” *JSME International Journal (Series C)*, vol. 43, no. 2, pp. 306-310, 2000. (SCI) (EI) (NSC-86-2213-E-110-018)
- [8] Lien, C. H., Yu, K. W., and Hsieh, J. G. “Stability conditions for a class of neutral systems with multiple time delays,” *Journal of Mathematical Analysis and Applications*, vol. 245, pp. 20-27, 2000. (SCI) (EI)

(NSC-86-2213-E-110-018)

- [9] Chen, J. D., Lien, C. H., Fan, K. K., and Cheng, J. S., “Delay-dependent stability criterion for neutral time-delays systems,” IEE Electronics Letters, vol.36, pp. 1897-1898, 2000. (SCI) (EI)
- [10] Lien, C. H., “New stability criterion for a class of uncertain nonlinear neutral time-delay systems,” International Journal of Systems Science, vol. 32, no. 2, pp. 215-219, 2001. (SCI) (EI) (NSC-86-2213-E-110-018)
- [11] Chen, J. D., Lien, C. H., Fan, K. K., and Chou, J. H. “Criteria for asymptotic stability of a class of neutral systems via LMI approach,” IEE Proceedings-Control Theory and Applications, vol. 148, no. 6, pp. 442-447, 2001. (SCI) (EI) (NSC-90-2213-E-214-062)
- [12] Luo, R. C., Chung, L. Y., and Lien, C. H. “Stabilization for linear uncertain system with time latency,” IEEE Transactions on Industrial Electronics, vol. 49, no. 4, pp. 905-910, 2002. (SCI) (EI)
- [13] Fan, K. K., Lien, C. H., and Hsieh, J. G. “Asymptotic stability for a class of neutral systems with discrete and distributed Time Delays,” Journal of Optimization Theory and Applications, vol. 114, no. 3, pp. 705-716, 2002. (SCI) (EI) (NSC-90-2213-E-214-062)
- [14] Fan, K. K., Chen, J. D., Lien, C. H., and Hsieh, J. G. “Delay-dependent Stability criterion for neutral time-delays systems via linear matrix inequality approach,” Journal of Mathematical Analysis and Applications, vol. 273, pp. 580-589, 2002. (SCI) (EI) (NSC-90-2213-E-214-062)
- [15] Chen, J. D., Lien, C. H., and Chou, J. H. “Flexible stability criteria of a class of neutral systems with multiple time delays via LMI approach,” Journal of the Chinese Institute of Engineers, vol. 25, no. 3, pp. 341-348, 2002. (SCI) (EI) (NSC-90-2213-E-214-062)
- [16] Lien, C. H., and Chen, J. D. “Discrete-delay-independent and Discrete-delay-dependent Criteria for a Class of Neutral Systems,” ASME Journal of Dynamic Systems, Measurement, and Control, vol. 125, no. 1, pp. 33-41, 2003.

(SCI) (EI) (NSC-90-2213-E-214-062)

- [17] Lien, C. H., Chen, J. D., and Yu, K. W. "LMI stability criterion for uncertain systems with multiple time delays," *JSME International Journal (Series C)*, vol. 46, pp. 1108-1111, 2003. (SCI) (EI) (NSC-91-2213-E-214-016)
- [18] Lien, C. H. "An efficient method to design robust observer-based control of uncertain linear systems," *Applied Mathematics and Computation*, vol. 158, pp. 29-44, 2004. (SCI) (EI) (NSC-92-2213-E-214-042)
- [19] Lien, C. H., "Global exponential stabilization for several classes of uncertain nonlinear systems with time-varying delay," *Nonlinear Dynamics and System Theory*, vol. 4, pp. 15-30, 2004. (NSC-92-2213-E-214-042)
- [20] Lien, C. H., and Chen, J. D. "Stability criteria for a class of neutral systems via LMI approach," *Asian Journal of Control*, vol. 6, no. 1, pp. 123-129, 2004. (SCI) (EI) (NSC-91-2213-E-214-016)
- [21] Kuo, J. M., Lien, C. H., Fan, K. K., and Hsieh, J. G. "Delay-independent observer-based control for a class of neutral systems," *ASME Journal of Dynamic Systems, Measurement, and Control*, vol. 126, no. 4, pp. 896-898, 2004. (SCI) (EI) (NSC-92-2213-E-214-042)
- [22] Lien, C. H., "Stability and stabilization criteria for a class of uncertain neutral systems with time-varying delays," *Journal of Optimization Theory and Applications*, vol. 124, no. 3, pp. 637-657, 2005. (SCI) (EI) (NSC-91-2213-E-214-016)
- [23] Lien, C. H., "Robust observer-based control of systems with state perturbations via LMI approach," *IEEE Transactions on Automatic Control*, vol. 49, no. 8, pp. 1365-1370, 2004. (SCI) (EI) (NSC-92-2213-E-214-042)
- [24] Lien, C. H., "Guaranteed cost observer-based controls for a class of uncertain neutral time-delay systems," *Journal of Optimization Theory and Applications*, vol. 126, no. 1, pp. 137-156, 2005. (SCI) (EI) (NSC-93-2213-E-214-020)
- [25] Lien, C. H. and Hou, Y. Y., "Guaranteed cost observer-based control for a class of uncertain time-delay systems," *ASME Journal of Dynamic Systems*,

- Measurement, and Control, vol. 127, no. 4, pp. 723-728, 2005. (SCI) (EI) (NSC-93-2213-E-214-020)
- [26] Lien, C. H., “Application of genetic algorithm to the observer-based controller design for neutral systems,” Journal of the Chinese Institute of Engineers, vol. 28, no. 3, pp. 479-492, 2005. (SCI) (EI) (NSC-92-2213-E-214-042)
- [27] Lien, C. H., “ H_∞ observer-based controls for a class of uncertain neutral time-delay systems,” Journal of Optimization Theory and Applications, vol. 127, no. 1, pp. 129-144, 2005. (SCI) (EI) (NSC-93-2213-E-214-020)
- [28] Lien, C. H., “Further results on delay-dependent robust stability of uncertain fuzzy systems with time-varying delay,” Chaos, Solitons & Fractals, vol. 28, no. 2, pp. 422-427, 2006. (SCI) (EI) (NSC-93-2213-E-214-020)
- [29] Lien, C. H., “Delay-dependent stability criteria for uncertain neutral systems with multiple time-varying delays via LMI approach,” IEE Proceedings on Control Theory and Applications, vol. 152, no. 6, pp. 707-714, 2005. (SCI) (EI) (NSC-93-2213-E-214-020)
- [30] Lien, C. H., “Delay-dependent H_∞ observer-based control for uncertain neutral systems via LMI optimization approach,” Journal of the Chinese Institute of Engineers, vol. 29, no. 5, pp. 801-811, 2006. (SCI) (EI) (NSC 92-2213-E-214-042)
- [31] Lien, C. H., “Non-fragile guaranteed cost control for uncertain neutral dynamic systems with time-varying delays in state and control input,” Chaos, Solitons & Fractals, vol. 31, no. 4, pp. 889-899, 2007. (SCI) (EI) (NSC-93-2213-E-214-020)
- [32] Lien, C. H., “Delay-dependent and delay-independent H_∞ control for uncertain neutral differential systems with time-varying delays,” International Mathematical Forum, vol. 1, no. 13-16, pp. 733-752, 2006. (NSC 92-2213-E-214-042)
- [33] Lien, C. H., “Stabilization for uncertain Takagi-Sugeno fuzzy systems with time-varying delays and bounded uncertainties,” Chaos, Solitons & Fractals,

- vol. 32, no. 2, pp. 645-652, 2007. (SCI) (EI) (NSC-93-2213-E-214-020)
- [34] Gau, R. S., Lien, C. H., and Hsieh, J. G., "Global exponential stability for uncertain cellular neural networks with multiple time-varying delays via LMI approach," *Chaos, Solitons & Fractals*, vol. 32, no. 4, pp. 1258-1267, 2007. (SCI) (EI) (NSC-94-2213-E-214-021)
- [35] Lien, C. H., Cheng, W. C., Tsai, C. H., and Yu, K. W. "Non-fragile observer-based controls of linear system via LMI approach," *Chaos, Solitons & Fractals*, vol. 32, pp. 1530-1537, 2007. (SCI) (EI) (NSC-94-2213-E-214-021)
- [36] Lien, C. H., and Yu, K. W., "LMI optimization approach for delay-dependent H_∞ control of time-varying delay systems," *Asian Journal of Control*, vol. 8, no. 2, pp. 190-196, 2006. (SCI) (EI) (NSC-93-2213-E-214-020)
- [37] Lien, C. H., "Delay-dependent and delay-independent guaranteed cost control for uncertain neutral systems with time-varying delays via LMI approach," *Chaos, Solitons & Fractals*, vol. 33, pp. 1017-1027, 2007. (SCI) (EI) (NSC-93-2213-E-214-020)
- [38] Lien, C. H., " H_∞ non-fragile observer-based controls of dynamical systems via LMI optimization approach," *Chaos, Solitons & Fractals*, vol. 34, pp. 428-436, 2007. (SCI) (EI) (NSC-93-2214-E-214-021)
- [39] Lien, C. H., and Chung L. Y., "Global asymptotic stability for cellular neural networks with discrete and distributed time-varying delays," *Chaos, Solitons & Fractals*, vol. 34, pp. 1213-1219, 2007. (SCI) (EI) (NSC-94-2213-E-214-021)
- [40] Lien, C. H., "Guaranteed cost output control for uncertain neutral systems with time-varying delays via LMI," *International Journal of Systems Science*, vol. 37, no. 10, pp. 723-734, 2006. (SCI) (EI) (NSC-93-2213-E-214-020)
- [41] Lien, C. H., and Yu, K. W., "Stability criteria for neutral systems with time-varying delays and nonlinear uncertainties," *Journal of the Chinese Institute of Engineers*, vol. 30, no. 3, pp. 517-522, 2007. (SCI) (EI)

(NSC-94-2213-E-214-021)

- [42] Lien, C. H., and Yu, K. W., “LMI optimization approach on robustness and H_∞ control analysis for observer-based control of uncertain systems,” *Chaos, Solitons & Fractals*, vol. 36, no. 3, pp. 617-628, 2008. (SCI) (EI) (NSC-94-2213-E-214-021)
- [43] Yu, K. W., and Lien, C. H., “Global exponential stability conditions for generalized state-space systems with time-varying delays,” *Chaos, Solitons & Fractals*, vol. 36, no. 4, pp. 920-927, 2008. (SCI) (EI) (NSC-94-2213-E-214-021)
- [44] Lien, C. H., and Yu, K. W., “Non-fragile H_∞ Control for Uncertain Neutral Systems with Time-varying Delays via LMI Optimization Approach,” *IEEE Transactions on Systems, Man, and Cybernetics, Part B*, vol. 37, pp. 493-499, 2007. (SCI) (EI) (NSC-94-2213-E-214-021)
- [45] Yu, K. W., and Lien, C. H., “Delay-dependent conditions for guaranteed cost observer-based control of uncertain neutral systems with time-varying delays,” *IMA Journal of Mathematical Control and Information*, vol. 24, no. 3, pp. 383-394, 2007. (SCI) (EI) (NSC-93-2213-E-214-020)
- [46] Lien, C. H., and Yu, K. W., “Robust control for Takagi-Sugeno fuzzy systems with time-varying state and input delays,” *Chaos, Solitons & Fractals*, vol. 35, no. 5, pp. 1003-1008, 2008. (SCI) (EI) (NSC-93-2213-E-214-020)
- [47] Yu, K. W., and Lien, C. H., “Robust H_∞ control for uncertain T-S fuzzy systems with state and input delays,” *Chaos, Solitons & Fractals*, vol. 37, no. 1, pp. 150-156, 2008. (SCI) (EI) (NSC-93-2213-E-214-020)
- [48] Lien, C. H., Yu, K. W., Chen W. D., Wan Z. L., and Chung Y. J., “Stability criteria for uncertain T-S fuzzy systems with interval time-varying delay,” *IET Proceedings on Control Theory and Applications*, vol. 1, no. 3, pp. 764-769, 2007. (SCI) (EI) (NSC 95-2221-E-022-019)
- [49] Hou Y. Y., Liao T. L., Yan J. J., and Lien C. H., “Non-fragile H_∞ control for singular systems with state and input time-varying delays,” *International*

- Journal of Nonlinear Sciences and Numerical Simulation, vol. 8, no. 1, pp. 31-40, 2007. (SCI) (EI)
- [50] Yu, K. W., and Lien, C. H., “Stability criteria for uncertain neutral systems with interval time-varying delays,” Chaos, Solitons & Fractals, vol. 38, no. 3, pp. 650-657, 2008. (SCI) (EI) (NSC- 94-2213-E-214-021)
- [51] Lien, C. H., Yu, K. W., Chang, D. H., Chen, W. D., Wan, Z. L., Chung Y. J., and Lu, M. C., “ H_∞ control for uncertain Takagi-Sugeno fuzzy systems with time-varying delays and nonlinear perturbations,” Chaos, Solitons & Fractals, vol. 39, no. 3, pp. 1426-1439, 2009. (SCI) (EI) (NSC- 94-2213-E-214-021)
- [52] Lien, C. H. and Yu, K. W., “Robust reliable control for uncertain time-delay systems with IQC performance,” Journal of Optimization Theory and Applications, vol. 138, no. 2, pp. 235-251, 2008. (SCI) (EI) (NSC-95-2221-E-022-019)
- [53] Lien, C. H. and Yu, K. W., “Robust H_∞ Control of uncertain neutral systems via LMI optimization approach,” Journal of Nonlinear Analysis and Applied Mathematics, vol 1, no. 1, pp. 1-17, 2008. (NSC- 94-2213-E-214-021)
- [54] Gau, R. S., Hsieh, J. G., and Lien, C. H., “Global exponential stability for uncertain bidirectional associative memory neural networks with multiple time-varying delays via LMI approach,” International Journal of Circuit Theory and Applications, vol 36, no. 4, pp. 451-471, 2008. (SCI) (EI) (NSC-95-2221-E-022-019)
- [55] Lien, C. H., Yu, K. W., Lin, Y. F., Chung Y. J., and Chung L. Y., “Robust reliable H_∞ control for uncertain nonlinear systems via LMI approach,” Applied Mathematics and Computation, vol 198, no.1, pp. 453-462, 2008. (SCI) (EI) (NSC-95-2221-E-022-019)
- [56] Hou Y. Y., Liao T. L., Lien C. H., and Yan J. J., “Stability analysis of neural networks with interval time-varying delays,” Chaos, vol. 17, 033120, 2007. (SCI) (EI)
- [57] Lien, C. H., Yu, K. W., Lin, Y. F., Chung Y. J., and Chung L. Y., “Exponential

- convergence rate estimation for uncertain delayed neural networks of neutral type,” *Chaos, Solitons & Fractals*, vol. 40, no. 5, pp. 2491-2499, 2009. (SCI) (EI) (NSC-95-2221-E-022-019)
- [58] Lien, C. H., Yu, K. W., Lin, Y. F., Chung Y. J., and Chung L. Y., “Stability conditions for Cohen-Grossberg neural networks with time-varying delays,” *Physics Letters A*, vol. 372, no. 13, pp. 2264-2268, 2008. (SCI) (EI) (NSC 96-2221-E-022-012)
- [59] Hou Y. Y., Liao T. L., Lien C. H., and Yan J. J., “Decentralized guaranteed cost control for uncertain fuzzy large-scale systems with time-varying delays,” *Engineering Intelligent Systems for Electrical Engineering and Communications*, vol. 14, no. 4, pp. 213-223, 2007. (SCI) (EI)
- [60] Lien, C. H., Yu, K. W., Lin, Y. F., Chung Y. J., and Chung L. Y., “Global exponential stability for uncertain delayed neural networks of neutral type with mixed time delays,” *IEEE Transactions on Systems, Man, and Cybernetics, Part B*, vol. 38, no. 3, pp. 709-720, 2008. (regular paper) (SCI) (EI) (NSC 95-2221-E-022-019)
- [61] Lien, C. H., Yu, K. W., Lin, Y. F., Chung Y. J., Chung L. Y., and Chen J. D., “Exponential stability for switched systems with mixed time delays,” *The Open Cybernetics and Systemics Journal*, vol. 2, pp. 20-23, 2008. (NSC 96-2221-E-022-012)
- [62] Chen, J. D., Yang C. D., Lien, C. H., and Huang J. H. “New delay-dependent non-fragile H_∞ observer-based control for continuous time-delay systems,” *Information Sciences*, vol. 178, pp. 4699-4706, 2008. (SCI) (EI)
- [63] Chen, J. D., Yang C. D., and Lien, C. H. “Robust H_∞ control for a class of uncertain neutral systems with both state and control input time-varying delays via a unified LMI optimization approach”, *Control and Cybernetics*, Vol. 37, no. 3, pp. 517-530, 2008. (SCI) (EI)
- [64] Yu, K. W., Lien, C. H., Chung, L. Y., Lin, Y. F., and Chung, Y. J., “Sufficient condition for interval uncertain neutral systems with nonlinear perturbations”,

- International Journal of Control Theory and Applications, Vol. 1, no. 1, pp. 27-32, 2008.
- [65] Chung, L. Y., Lien, C. H., , Huang, C. H., and Lin, B. J., “Department of a solar charging system by fuzzy logic method”, International Journal of Control Theory and Applications, Vol. 1, no. 1, pp. 33-45, 2008.
- [66] Wan, Z. L., Hou Y. Y., Yan J. J., Lien, C. H., Liao, T. L., “Non-fragile H_∞ state feedback delayed control for uncertain neutral systems”, International Journal of Control Theory and Applications, Vol. 1, no. 1, pp. 77-92, 2008.
- [67] Yu, K. W., Lien, C. H., Chung, L. Y., Lin, Y. F., and Chung, Y. J., “Robust delay-dependent H_∞ control for uncertain time-delay systems via LMI approach”, International Journal of Control Theory and Applications, Vol. 1, no. 1, pp. 93-101, 2008.
- [68] Lien, C. H., Yu, K. W., Chung, Y. J., Lin, Y. F., Chung, L. Y., and Chen J. D. “Exponential stability for discrete switched nonlinear systems with arbitrary switching signal”, International Journal of Control Theory and Applications, Vol. 1, no. 2, pp. 155-159, 2008.
- [69] Lien, C. H., Yu, K. W., Chung, Y. J., Lin, Y. F., Chung, L. Y., and Chen J. D. “Global exponential stability for uncertain switched nonlinear systems under switching signal”, International Journal of Control Theory and Applications, Vol. 1, no. 2, pp. 187-192, 2008.
- [70] Lien, C. H., Yu, K. W., Lin, Y. F., Chung Y. J., Chung L. Y., and Chen J. D., “Exponential stability analysis for uncertain switched neutral systems with interval time-varying state delay”, Nonlinear Analysis: Hybrid Systems, Vol. 3, no. 3 , pp. 334-342, 2009. (SCI) (EI) (NSC 96-2221-E-022-012)
- [71] Hou, Y. Y., Liao T. L., Yan J. J., and Lien C. H., “Guaranteed cost control for uncertain non-linear systems with time-varying delays using T–S fuzzy model”, International Journal of General Systems, Vol. 38, no. 5, pp. 485-504, 2009. (SCI) (EI)
- [72] Jian, M. S., Chung L. Y., Yang, K. S., Lien, C. H., and Hou Y. Y., “Dual RFID

module based medical management system with existed gate system integration”, International Journal of Control Theory and Applications, Vol. 2, no. 1, pp. 27-37, 2009.

- [73] Lien, C. H., Yu, K. W., Huang C. T., Chou P. Y., Chung L. Y., and Chen J. D., “Robust H_∞ control for uncertain T-S fuzzy time-delay systems with sampled-data input and nonlinear perturbations”, Nonlinear Analysis: Hybrid Systems, Vol. 4, no. 3, pp. 550-556, 2010. (SCI) (EI) (NSC 97-2221-E-022-009-MY2)
- [74] Chang, H. C., Lien, C. H., and Yu, K. W., “Stability of sampled-data nonlinear systems via state feedback control”, International Journal of Control Theory and Applications, Vol. 3, no. 1, pp. 37-43, 2010.
- [75] Gau R. S., Lien C.H., and Hsieh J. G. “Novel stability conditions for interval delayed neural networks with multiple time-varying delays”, International Journal of Innovative Computing, Information and Control, Vol. 7, no. 1, pp. 433-444, 2011. (SCI) (EI) (NSC95-2221-E-022-019)
- [76] Lien, C. H., Yu, K. W., Chung, Y. J., Chang, H. C., and Chen J. D., “Switching signal design for global exponential stability of uncertain switched nonlinear systems with time-varying delay”, Nonlinear Analysis: Hybrid Systems, Vol. 5, no. 1, pp. 10-19, 2011. (SCI) (EI) (NSC 97-2221-E-022-009-MY2)
- [77] Lien, C. H., Yu, K. W., Lin, Y. F., Chang, H. C., and Chung, Y. J., “Stability analysis for Cohen-Grossberg neural networks with time-varying delays via LMI approach”, Expert Systems with Applications, Vol. 38, no. 5 pp. 6360-6367, 2011. (SCI) (EI) (NSC 97-2221-E-022-009-MY2)
- [78] Lien, C. H., Yu, K. W., Chung, Y. J., Chang, H. C., Chung L. Y., and Chen J. D., “Exponential stability and robust H_∞ control for uncertain discrete switched systems with interval time-varying delay”, IMA Journal of Mathematical Control and Information, Vol. 28, no. 1, pp. 121-141, 2011. (SCI) (EI) (NSC

97-2221-E-022-009-MY2)

- [79] Lien, C. H., Yu, K. W., Hong, B. R., and Chang, H. C., “Guaranteed cost control for uncertain switched time-delay systems with sampled-data state feedback and Nonlinear Perturbations,” ICIC Express Letters, Vol. 6, no. 3, pp. 657-663, 2012. (EI) (NSC 99-2221-E-022-003)
- [80] Lien, C. H., Yu, K. W., Chang, H. C., Chung L. Y., and Chen J. D., “Robust guaranteed cost control for uncertain switched time-delay systems with sampled-data state feedback and linear fractional perturbations”, International Journal of Mathematics and Scientific Computing, Vol. 1, no. 1, pp. 1-7, 2011. (NSC 99-2221-E-022-003)
- [81] Chung L. Y., Lien, C. H., Yu, K. W., and Chen J. D. “Robust H_∞ control for uncertain switched time-delay systems with sampled-data input”, International Journal of Control Theory and Applications, Vol. 4, no. 2, pp. 111-122, 2011. (NSC 99-2221-E-022-003)
- [82] Lien, C. H., Chen, J. D., Yu, K. W., and Chung, L. Y., “Robust delay-dependent H_∞ control for uncertain switched time-delay systems via sampled-data state feedback input”, Computers & Mathematics with Applications, Vol. 64, no. 5, pp. 1187-1196, 2012. (SCI) (EI) (NSC 99-2221-E-022-003)
- [83] Lien, C. H., Yu, K. W., Chang, H. C., Chung, L. Y., and Chen, J. D., “Switching signal design for exponential stability of discrete switched systems with interval time-varying delay”, Journal of the Franklin Institute, Vol. 349, no. 6, pp. 2182-2192, 2012. (SCI) (EI) (NSC 100-2221-E-022-011)
- [84] Lien, C. H., Yu, K. W., Chen, J. D., and Chung, L. Y., “Switching signal design and passivity analysis for uncertain discrete switched systems with interval time-varying delay”, IMA Journal of Mathematical Control and Information,

- Vol. 30, no. 2, pp. 251-263, 2013. (SCI) (EI) (NSC 100-2221-E-022-011)
- [85] Lien, C. H., Yu, K. W., Chung, L. Y., and Chen, J. D., " H_∞ performance for uncertain discrete switched systems with interval time-varying delay via switching signal design", Applied Mathematical Modelling, Vol. 37, no. 4, pp. 2484-2494, 2013. (SCI) (EI) (NSC 100-2221-E-022-011)
- [86] Lien, C. H., and Yu, K. W., "Exponential stability for discrete switched time-delay systems with linear fractional perturbations via switching signal design", ICIC Express Letters, Vol. 7, no. 5, pp. 1481-1487, 2013. (EI) (NSC 100-2221-E-022-011)
- [87] Yu, K. W., Lin, Y. S., Wu, C. Y., and Lien, C. H., "The study of particle swarm optimization with adaptive fuzzy rule", ICIC Express Letters, Vol. 7, no. 5, pp. 1489-1493, 2013. (EI)
- [88] Lien, C. H., and Yu, K. W., "Exponential stability analysis for neural networks with interval time-varying delay and linear fractional perturbations", Journal of Marine Science and Technology, Vol. 22, no. 2, pp. 146-153, 2014. (SCI) (EI) (NSC 99-2221-E-022-003) (NSC 101-2514-S-022-001)
- [89] Lien, C. H., Yu, K. W., Chen, J. D., and Chung L. Y., "Sufficient conditions for global exponential stability of discrete switched time-delay systems with linear fractional perturbations via switching signal design", Advances in Difference Equations, Vol. 2013, no. 39, pp. 1-15, 2013. (SCI) (EI) (NSC 101-2221-E-022-009)
- [90] Lien, C. H., Chen J. D., Lee, C. T., Chen, R. S., and Yang, C. T., "Robust H_∞ filter design for discrete-time switched systems with interval time-varying delay and linear fractional perturbations: LMI optimization approach," Applied Mathematics and Computation, Vol. 219, no. 24, pp. 11395-11407, 2013. (SCI) (EI)
- [91] Lien, C. H., Chen J. D., Yu, K. W., Lee, C. T., Chen, R. S., and Yang, C. T.,

- “Robust exponential H_∞ control of uncertain discrete-time systems with interval-like time-varying delay”, ICIC Express Letters, Vol. 5, no. 2, pp. 333-339, 2014. (EI) (NSC 101-2221-E-022-009)
- [92] Chung L. Y., Lien, C. H., Yu, K. W., and Chen, J. D. “Robust H_∞ filtering for discrete switched systems with interval time-varying delay”, Signal Processing, Vol. 94, no. 24, pp. 661-669, 2014. (SCI) (EI) (NSC 101-2221-E-022-009)
- [93] Lien, C. H., Yu, K. W., Wu, L. C., Chen, J. D., and Chung L. Y., “Robust H_∞ switching control and switching signal design for uncertain discrete switched systems with interval time-varying delay”, Journal of the Franklin Institute, Vol. 351, pp. 565-578, 2014. (SCI) (EI) (NSC 100-2221-E-022-011)
- [94] Chung L. Y., Lien, C. H., Yu, K. W., and Hsu, Y. S., “Robust reliable control for uncertain neutral systems with time-varying delays and IQC performance”, International Journal of Control Theory and Applications, Vol. 6, no. 1, pp. 67-85, 2013. (NSC 99-2221-E-022-003)
- [95] Lien, C. H., Wu, J. J., Penesis, I., Śniegocki, H., Chang, W. J., “Marine engineering and applications”, Mathematical Problems in Engineering, Vol. 2013, Article ID 761083, 2 pages, 2013. (doi:10.1155/2013/761083). (SCI) (EI)
- [96] Lien, C. H., Yu, K. W., Chen, J. D., and Chung, L. Y., “Designs of switching signal and passive control for discrete uncertain switched time-delay systems”, IMA Journal of Mathematical Control and Information, Vol. 32, no. 2, pp. 405-426, 2015. (SCI) (EI) (NSC 101-2221-E-022-009)
- [97] Lien, C. H., Zhang, L., Vaidyanathan, S., and Reza Karimi H., “Switched dynamics with its applications”, Abstract and Applied Analysis, Vol. 2014, Article ID 528632, 3 pages, 2014. (doi: 10.1155/2013/528532). (SCI) (EI)
- [98] Lien, C. H., Yu, K. W., Chang, H. C., Chung, L. Y., and Chen, J. D., “Robust reliable guaranteed cost control for uncertain T-S fuzzy neutral systems with interval time-varying delay and linear fractional perturbations”, Optimal Control Applications and Methods, Vol. 36, pp. 121-137, 2015. (SCI) (EI) (NSC

99-2221-E-022-003)

- [99] Lien, C. H., Yu, K. W., Chang, H. C., Chung, L. Y., and Chen, J. D., “Robust exponential stability of uncertain discrete-time systems with interval time-varying delay”, Lecture Notes in Electrical Engineering, Vol. 293, pp 461-468, 2014 (EI) (NSC 101-2221-E-022-009)
- [100] Chen J. D., Lien, C. H., Yu, K. W., Lee, C. T., Chen, R. S., and Yang, C. T., “Robust exponential stability for uncertain discrete-time switched systems with interval time-varying delay via a switching signal”, Applied Mechanics and Materials, Vol. 478-480, pp. 983-988, 2014. (EI)
- [101] Lien, C. H., Chen J. D., Yu, K. W., Lee, C. T., Chen, R. S., and Feng, H. M., “Robust H_∞ switching control of uncertain discrete-time switched systems with interval time varying delay: LMI optimization approach”, ICIC Express Letters, Vol. 6, no. 4, pp. 1159-1164, 2015. (EI) (NSC 101-2221-E-022-009)
- [102] Chen J. D., I. T. Wu, Lien, C. H., Lee, C. T., Chen, R. S., and Yu, K. W., “Robust exponential stability for uncertain discrete-time switched systems with interval time-varying delay through a switching signal”, Journal of Applied Research and Technology, Vol. 12, pp. 1187-1197, 2014. (SCI)
- [103] Lien, C. H., Yu, K. W., Yang, J. H., Chou, I. C., Chen, J. D., and Chung, L. Y., “Novel delay-partitioning approach on stability of uncertain discrete switched time-delay systems via switching signal design”, IMA Journal of Mathematical Control and Information, Vol. 33, no. 3, pp. 843-857, 2016. (SCI) (EI) (NSC 101-2221-E-022-009)
- [104] Lien, C. H., Yu, K. W., Chen, J. D., and Chung, L. Y., “Global exponential stability of switched systems with interval time-varying delays and multiple nonlinearities via simple switching signal design”, IMA Journal of Mathematical Control and Information, Vol. 33, no. 4, pp. 1135-1155, 2016. (SCI) (EI) (MOST 103-2221-E-022-013)
- [105] Yu, K. W., Lien, C. H., Chen, J. D., and Chung, L. Y., “Passivity analysis and passive control for uncertain discrete switched time-delay systems via a simple

- switching signal design”, *Advances in Difference Equations*, Vol. 2016:104, pp. 1-24, 2016. (SCI) (EI) (MOST 104-2221-E-022-003)
- [106] Lien, C. H., Chen J. D., and Yu, K. W., “Further result on stability analysis of discrete-time systems with interval time varying delay and linear fractional perturbations via delay partitioning approach”, *ICIC Express Letters, Part B: Applications*, Vol. 7, no. 3, pp. 725-730, 2016. (EI) (NSC 101-2221-E-022-009)
- [107] Yu, K. W., Lien, C. H., and Chang, H. C., “ H_∞ analysis and switching control for uncertain discrete switched time-delay systems by discrete Wirtinger inequality”, *Advances in Difference Equations*, Vol. 2017:349, pp. 1-22, 2017. (SCI) (EI) (MOST 104-2221-E-022-003)
- [108] Lien, C. H., Vaidyanathan S., Yu, K. W., and Chang, H. C., “Robust mixed performance for uncertain Takagi-Sugeno fuzzy time-delay systems with linear fractional perturbations”, *International Journal of Modelling, Identification and Control*, Vol. 31, no. 2, pp. 193-203, 2019. (ESCI) (EI) (MOST 106-2221-E-022-006)
- [109] Lien, C. H., Yu, K. W., Hsieh, J. G., Chung, L. Y., and Chen, J. D., “Simple switching signal design for H_∞ performance and control of switched time-delay systems”, *Nonlinear Analysis: Hybrid Systems*, Vol. 29, pp. 203-220, 2018. (SCI) (EI) (MOST 103-2221-E-022-013)
- [110] Lien, C. H., Vaidyanathan, S., Yu, K. W., and Chang, H. C., “ H_∞ performance of continuous switched time-delay systems with sector and norm bounded nonlinearities”, *International Journal of Modelling, Identification and Control*, Vol. 31, no. 3, pp. 229-244, 2019. (ESCI) (EI) (MOST 106-2221-E-022-006)
- [111] Vaidyanathan S., Feki, M., Sambas, A., and Lien, C. H., “A new biological snap oscillator: Its modelling, analysis, simulations and circuit design”, *International Journal of Simulation and Process Modelling*, Vol.13, pp.419-432, 2018. (EI)
- [112] Vaidyanathan S., Azar, A. T., Lien, C. H., Akgul, A., Kacar, S., Cavusoglu, U., “A memristor-based system with hidden hyperchaotic attractors, its circuit design, synchronisation via integral sliding mode control and voice

- encryption”, *International Journal of Automation and Control*, Vol. 13, no. 6, pp. 644-667, 2019. (EI)
- [113] Lien, C. H., Yu, K. W., and Chang, H. C., “Robust mixed performance switching control for uncertain discrete switched systems with time delay”, *International Journal of Systems Science*, Vol. 49, pp. 2144-2154, 2018. (SCI) (EI) (MOST 104-2221-E-022-003)
- [114] Lien, C. H., Yu, K. W., and Chang, H. C., “Robust mixed performance of continuous switched systems with time delay”, *Asian Journal of Control*, Vol. 22, no. 2, pp. 988-998, 2020. (SCI) (EI) (MOST 106-2221-E-022-006)
- [115] Vaidyanathan, S., Dolvis, L. G., Jacqu, K., Lien, C. H., Sambas, A., “ A new five-dimensional four-wing hyperchaotic system with hidden attractor, its electronic circuit realisation and synchronisation via integral sliding mode control”, *International Journal of Modelling, Identification and Control*, Vol. 32, no. 1, pp. 30-45, 2019. (ESCI) (EI)
- [116] Lien, C. H., Yu, K. W., and Chang, H. C., “Robust mixed H_2 and passive switching control for uncertain discrete switched systems with time delay”, *IMA Journal of Mathematical Control and Information*, Vol. 37, no. 2, pp. 422-440, 2020. (SCI) (EI) (MOST 106-2221-E-022-006)
- [117] Vaidyanathan, S., Dolvis, L. G., Jacques, K., Lien, C. H., Sambas, A., “A new chaotic dynamical system with a hyperbolic curve of rest points, its complete synchronisation via integral sliding mode control and circuit design”, *International Journal of Modelling, Identification and Control*, Vol. 33, no. 3, pp. 198-207, 2019. (ESCI) (EI).
- [118] Lien, C. H., Yu, K. W., and Chang, H. C., “Robust mixed performance of uncertain switched systems with random time-varying delay”, *International Journal of Systems Science*, Vol. 50, pp. 1415-1433, 2019. (SCI) (EI) (MOST 106-2221-E-022-006) (MOST 107-2221-E-992-089)
- [119] Chang, H. C., Lien, C. H., and Yu, K. W., “ H_∞ performance analysis and switching control design for uncertain discrete switched time-delay systems”,

International Journal of Automation and Control (ESCI) (EI) (MOST 106-2221-E-022-006) (MOST 107-2221-E-992-089) (In Press).

- [120] Lien, C. H., Yu, K. W., and Chang, H. C., “Mixed performance analysis of continuous switched system with time-varying random delay”, Asian Journal of Control, Vol. 22, no. 12, pp. 2156-2166, 2020. (Regular paper). (SCI) (EI) (MOST 106-2221-E-022-006) (MOST 107-2221-E-992-089)
- [121] Lien, C. H., Hou, Y. Y., Yu, K. W., and Chang, H. C., “Aperiodic sampled-data robust H_∞ control of uncertain continuous switched time-delay systems”, International Journal of Systems Science, Vol. 51, pp. 2005-2024, 2020. (SCI) (EI) (MOST 106-2221-E-022-006) (MOST 107-2221-E-992-089)
- [122] Lien, C. H., Hou, Y. Y., Yu, K. W., and Chang, H. C., ”Robust mixed performance control of uncertain T-S fuzzy time-delay systems with aperiodic sampled-data input”, Optimal Control Applications and Methods, Vol. 42, pp. 744-768, 2021. (SCI) (EI) (MOST 106-2221-E-022-006) (MOST 107-2221-E-992-089)
- [123] Lien, C. H., Hou, Y. Y., Yu, K. W., and Chang, H. C., ” Novel switching signal selection for robust passive sampled-data control of uncertain continuous switched time-delay systems”, Asian Journal of Control, 2021. (Regular paper). (SCI) (EI) (MOST 106-2221-E-022-006) (MOST 107-2221-E-992-089) (In Press)

B. Conference paper

- [1] Sun, Y. J., Lien, C. H., and Hsieh, J. G., “Robust stabilization for a class of uncertain systems with multiple time-varying delays via linear control,” in Proceeding of the 1997 Automatic Control Conference, Taipei, Taiwan, vol. 1, pp. 23-27, 1997.
- [2] Fan, K. K., and Lien, C. H., “Global stabilizability of uncertain systems with multiple time-varying delays,” 第六屆三軍官校基礎學術研討會，Kaohsiung,

- Taiwan, vol. 1, pp. 291-297, 1999.
- [3] Lien, C. H., and Fan, K. K., “Robust stability for a class of neutral time-delay systems,” in Proceeding of the 2000 Automatic Control Conference, Hsinchu, Taiwan, vol. 2, pp. 576-580, 2000.
 - [4] Fan, K. K., Lien, C. H., and Hsieh, J. G., “Stability criteria for a class of neutral systems with uncertain nonlinearity,” 2000 Conference on Industrial Automatic Control & Power Applications, Kaohsiung, Taiwan, vol. 1, pp. D2-1-D2-6, 2000.
 - [5] Fan, K. K., Lien, C. H., and Chen, J. D., “ H_∞ control of linear neutral systems,” 2000 Conference on Industrial Automatic Control & Power Applications, Kaohsiung, Taiwan, vol. 1, pp. D3-36-D3-40, 2000.
 - [6] Chen, J. D., Lien, C. H., Fan, K. K., “Robust stabilization for uncertain neutral system via input delay,” Sixteenth National Technology and Career Education Conference, Hua-Lien, Taiwan, vol. 1, pp. 239-245, 2001.
 - [7] K. K. Fan and C. H. Lien, “Robust control of uncertain multiple time-varying delay systems with input nonlinearity and control constraint,” International Conference on Optimization and Optimal Control, Tainan, Taiwan, 2001.
 - [8] Chen, J. D., Lien, C. H., and Chou, J. H., “New delay-dependent stability criteria of neutral systems with multiple discrete and distributed time delays,” Proceedings of the Tenth National Conference on Science and Technology of National Defense, Taipei, Taiwan, vol. 1, pp. 2-181-2-186, 2001.
 - [9] Lien, C. H., Chen, J. D., and Chou, J. H., “Stability criteria for a class of neutral systems via LMI approach,” 2002 Automatic Control Conference, Tainan, Taiwan, pp. 208-213, March 16, 2002.
 - [10] Chen, J. D., Lien, C. H., and Chou, J. H., “New exponential stability for a class of uncertain time-delay systems via LMI,” 2002 Automatic Control Conference, Tainan, Taiwan, pp. 250-255, March, 16, 2002.
 - [11] Lien, C. H., Chen, J. D., Chen, C. C., and Chang, C. H., “Exponential stabilization for uncertain nonlinear systems with time-varying delay,” 2002

- Conference on industrial Automatic Control & Power Application, Kaohsiung, Taiwan, pp. E2-1-E2-6, 2002.
- [12] Lien, C. H., Chen, J. D., Chen, C. C., and Chang, C. H., “Asymptotic stability of neutral systems via LMI and GAs,” 2002 Conference on industrial Automatic Control & Power Application, Kaohsiung, Taiwan, pp. E3-27-E3-32, 2002.
- [13] Chen, J. D. and Lien, C. H., “Robust asymptotic stability for uncertain multiple time-delays systems: an LMI approach,” 2003 Automatic Control Conference, Chung-Li, Taiwan, pp. 1307-1312, March 13-14, 2003.
- [14] Lien, C. H., Chen, C. C., Chang, C. H., and Chen, J. D., “ Stabilization for a class of uncertain time-delay system with input delay via Riccati equation approach,” 2003 Automatic Control Conference, Chung-Li, Taiwan, pp. 1594-1598, March 13-14, 2003.
- [15] Lien, C. H., Chang, C. H., Liao, C. C., and Fan, K. K., “Robust asymptotic stability of uncertain neutral systems via LMI and GAs,” 2003 IEEE International Conference on Systems, Man & Cybernetics, Washington, D.C., USA, pp. 3145-3152, October 5-8, 2003.
- [16] Lien, C. H. and Liao, C. C., “Robust observer-based control of uncertain systems via LMI approach,” 2003 International Conference on Informatics Cybernetics and Systems, Kaohsiung, Taiwan, pp. 1788-1793, December 14-16, 2003.
- [17] Kuo, J. M., Lien, C. H., Fan, K. K., and Hsieh, J. G. “Delay-dependent observer-based control design for a class of neutral systems with multiple time delays,” 2003 International Conference on Informatics Cybernetics and Systems, Kaohsiung, Taiwan, pp. 1752-1757, December 14-16,2003.
- [18] Kuo, J. M., Lien, C. H., Fan, K. K., and Hsieh, J. G. “Delay-independent observer-based control design for a class of neutral systems with multiple time delays,” 2003 International Conference on Informatics Cybernetics and Systems, Kaohsiung, Taiwan, pp. 2018-2023, December 14-16, 2003.
- [19] Kuo, J. M., Lien, C. H., Fan, K. K., and Hsieh, J. G. “Guaranteed-cost

- delay-independent observer-based control for a class of neutral systems,” 2004 Automatic Control Conference, Chang-Hua, Taiwan, pp. C_01-02, March 27-28, 2004.
- [20] Lien, C. H. and Hou, Y. Y. “Output guaranteed cost controls for uncertain linear systems” R. O. C. Military Academy Conference, Kaohsiung, Taiwan, EE06, June, 2004.
- [21] Lien, C. H., Hou, Y. Y., and Shy, S. J. “ H_∞ control for time-delay systems via LMI optimization approach” 2004 Symposium on Process Systems Engineering, Taichung, Taiwan, pp. 337-342, December 10, 2004.
- [22] Hou, Y. Y. and Lien, C. H. “ H_∞ control for uncertain neutral differential systems with time-varying delays” International Conference on Systems and Signals, Kaohsiung, Taiwan, pp. 824-830, April 28-29, 2005.
- [23] Hou, Y. Y. and Lien, C. H. “Guaranteed cost control for uncertain neutral systems with time-varying delays” International Conference on Systems and Signals, Kaohsiung, Taiwan, pp. 842-848, April 28-29, 2005.
- [24] Lien, C. H., Cheng, W. C., Tsai, C. H., and Chang, D. H., “Robust control for Takagi-Sugeno fuzzy systems with time-varying input delay and parametric uncertainties,” 2005 The 13th National Conference on Fuzzy Theory and its Applications, Kaohsiung, Taiwan, no. 243, September 30-October 1, 2005.
- [25] Hou, Y. Y., Liao, T. L., Yan, J. J., and Lien, C. H., “Delay-dependent guaranteed cost control for uncertain T-S fuzzy system with time-varying delays,” Proceedings of the 25th IASTED International Conferences, Modelling, Identification, and Control, Lanzarote, Canary, Spain, pp. 372-378, February 6-8, 2006. (EI)
- [26] Lien, C. H., Yu, K. W., Lin, Y. F., Chung, Y. J., and Chung, L. Y. “Stability for Cohen-Grossberg neural networks with time-varying delays,” International Conference on Maritime Technology, Taipei, vol. 1, pp. 72-76, 2007.
- [27] Lien, C. H., Yu, K. W., Lin, J. S., and Hung, M. L., “Exponential estimation of generalized state-space time-delay systems,” Journal of Physics: Conference

Series, vol. 96, pp. 012100, 2008.

- [28] Lien, C. H., Yu, K. W., Chou, P. Y., and Huang, C. T., “New concept for the stability of sampled-data nonlinear systems,” 2009 資通技術管理與應用會議, Kaohsiung, 2009.
- [29] Lien, C. H., Yu, K. W., Chou, P. Y., and Huang, C. T., “ H_∞ control for T-S fuzzy time-delay systems with sampled-data input and nonlinear perturbations,” 中華民國第十七屆模糊理論及其應用研討會, Kaohsiung, 2009.
- [30] Lien, C. H., Yu, K. W., Chang, H. C. “Switching signal design for stability of switched systems with time-varying delay,” 2010 International Symposium on Computer, Communication, Control and Automation, pp. 286-289, Tainan, 2010. (EI)
- [31] Lien, C. H., Chang, H. C., Yu, K. W., “Guaranteed cost control for uncertain fuzzy time-delay systems with sampled-data input,” Proceedings of the 2011 International Conference on Fluid Power and Mechatronics, August 16-20, pp. 368-373, Beijing, China, 2011. (EI)
- [32] Lien, C. H., Yu, K. W., Hong, B. R., and Chang, H. C., “Guaranteed cost control for uncertain switched time-delay systems with sampled-data state feedback and nonlinear perturbations,” Sixth International Conference on Innovative Computing, Information and Control, ICICIC2011-425 (Vol.6, No.3), December 22- 24, Kitakyushu, Japan, 2011.
- [33] Lien, C. H., Yu, K. W., Pu, W. C., Liao, T. L., and Wan, Z. L., “Passivity analysis for uncertain discrete switched systems with interval time-varying delay,” IEEE International Conference on Mechatronics and Automation, August 5-8, pp. 110-115, Chengdu, China, 2012. (EI)
- [34] Lien, C. H., Yu, K. W., Chang, H. C., “Robust H_∞ Switching Control for Uncertain Discrete Switched Time-delay Systems,” The 2012 International Conference on Information Security and Intelligent Control, August 14-16, pp. 307-310, Yunlin, Taiwan, 2012. (EI)
- [35] Lien, C. H., and Yu, K. W., Exponential stability for discrete switched

- time-delay systems with linear fractional perturbations via switching signal design, The seventh International Conference on Innovative Computing, Information and Control, November 4-6, Shanghai, China, 2012.(轉登於 ICIC Express Letters, EI Journal)
- [36] Yu, K. W., Lin, Y. S., Wu, C. Y., and Lien, C. H., The study of particle swarm optimization with adaptive fuzzy rule, Seventh International Conference on Innovative Computing, Information and Control, November 4-6, Shanghai, China, 2012.(轉登於 ICIC Express Letters, EI Journal)
- [37] Lien, C. H., Chen J. D., Yu, K. W., Lee, C. T., Chen, R. S., and Yang, C. T., Robust exponential H_∞ control of uncertain discrete-time systems with interval-like time-varying delay”, Eighth International Conference on Innovative Computing, Information and Control, September 14-17, Kumamoto, Japan, 2013. (轉登於 ICIC Express Letters, EI Journal)
- [38] Lien, C. H., Yu, K. W., Chang, H. C., Chung, L. Y., and Chen, J. D., “Robust exponential stability of uncertain discrete-Time systems with interval time-varying delay”, The 2nd International Conference on Intelligent Technologies and Engineering Systems, 12-14 December, in Cheng Shiu University, Kaohsiung, Taiwan, 2013. (Lecture Notes in Electrical Engineering, EI Book)
- [39] Lien, C. H., Chen J. D., Yu, K. W., Lee, C. T., Chen, R. S., and Feng, H. M., “Robust H_∞ switching control of uncertain discrete-time switched systems with interval time varying delay: LMI optimization approach”, The Ninth International Conference on Innovative Computing, Information and Control, June 15-18, Busan, Korea, 2014. (轉登於 ICIC Express Letters, EI Journal)
- [40] Lien, C. H., Yu, K. W., Chung, L. Y., and Chen, J. D.,”Robust Stability of Uncertain Discrete Systems with Interval Time-varying Delay and Nonlinear Perturbations via Delay-partitioning Approach”, 2014 The 5th Conference on Nonlinear Science and Complexity, August 4-9, Xian, China, 2014.
- [41] 陳立修、侯易佑、蔡鵠仲、郭家宏、連長華， “仿擬智慧型家庭監控系統

- 之實現”，2014 光電與通訊工程應用研討會，11 月，高雄市，2014(最佳論文獎)。
- [42] 方政順、侯易佑、張萬榮、蔡鵠仲、連長華，“結合 APP 仿擬智能居家之實現”，中華民國第三十五屆電力研討會，12 月，高雄市，2014。
- [43] 劉享緯、侯易佑、張萬榮、陳立修、蔡鵠仲、連長華，“聲光導引學習輔具” 2014 智慧電子應用設計研討會，12 月，高雄市，2014。
- [44] Lien, C. H., Yu, K. W., and Chang, H. C., Mixed performance analysis for switched time-delay systems by Wirtinger inequality and switching rule selection, 2018 The International Conference on Science, Engineering, Vocational Education, and Novelty (ICSEVEN 2018), April 11-15, Japan, 2018.
- [45] Lien, C. H., Yu, K. W., and Chang, H. C., Mixed H_2 and passive switching control for switched time-delay systems, Proceedings of 2018 National Symposium on System Science and Engineering, National Taipei University, New Taipei City, 28-30 June, 2018.
- [46] Lien, C. H., Yu, K. W., and Chang, H. C., Mixed Performance of Switched Systems with Time-varying Random Delay, CASC2018, ChungLi, 4-6 November, 2018.
- [47] Tsai, M. T., Chu C. L., Huang, B. W., Lien, C. H., Chao, K. H., Design a DC Solid-State Circuit Breaker for smart grid application, 15th IEEE International Conference on Automation Science and Engineering (CASE), Vancouver, Canada, 22-24, August, 2019.

C. 國內中文期刊

- [1] 張皓欽、連長華、孫莉、鮑震元，機艙警報整合監控系統之製作，船舶科技，39 期，67-74 頁，2011 年 2 月，中華民國船舶機械工程學會出版，ISSN: 1028-1983。
- [2] 鮑震元、連長華，提高救生艇墜落防止裝置安全性的改良技術及方法，船舶科技，43 期，13-19 頁，2013 年 9 月，中華民國船舶機械工程學會出版，ISSN: 1028-1983。

- [3] 鮑震元、連長華，測試及驗證救生艇入水偵測器功能之改良技術及方法，船舶科技，44 期，62-68 頁，2014 年 1 月，中華民國船舶機械工程學會出版，ISSN: 1028-1983。
- [4] 張皓欽、連長華、俞克維、鮑昱男，船舶智慧自動化之監控輔助系統設計-以燃油用緊急快閉閥為例，船舶科技，50 期，14-21 頁，2018 年 2 月，中華民國船舶機械工程學會出版，ISSN: 1028-1983。

D. Books

- [1] Lien, C. H., “Some aspects of uncertain time-delay systems: stability analysis and stabilization,” Ph.D Dissertation, National Sun Yat-Sen University, Kaohsiung, 1998.
- [2] Vaidyanathan, Sundarapandian and Lien, C. H., “Applications of Sliding Mode Control in Science and Engineering,” Springer, 2017.

證照

1. STCW-95 In-Service Assessment (DNV Certificate of Training, No. 525) (97 年 1 月 18 日)
2. 人員求生技能、基礎急救、防火及基礎滅火、人員安全及社會責任(交通部，P120996199 號) (98 年 2 月 6 日)
3. 救生艇筏急救難艇操縱(交通部，P120996199 號) (98 年 2 月 6 日)
4. High Voltage Training (Management Level)(ATTS Certificate of Training, No. 015-5458) (104 年 9 月 4 日)
5. GWO Basic Safety Training First Aid (CTSI Certificate of Completion, No. 18GWO FA-0014-004) (107 年 8 月 20 日)
6. GWO Basic Safety Training Manual Handling (CTSI Certificate of Completion, No. 18GWO MH-0015-004) (107 年 8 月 22 日)
7. GWO Basic Safety Training Fire Awareness (CTSI Certificate of Completion, No. 18GWO F/A-014-004) (107 年 8 月 22 日)
8. GWO Basic Safety Training Working at Heights (CTSI Certificate of Completion,

No. 18GWO WAH-014-005) (107 年 8 月 24 日)

9. GWO Basic Safety Training Sea Survival (CTSI Certificate of Completion, No. 18GWO SS-013-004) (107 年 8 月 27 日)
10. GWO Basic Technical Training (Rely ON) (108 年 6 月 19 日~6 月 22 日)(Electrical、Mechanical、Hydraulics)

榮譽

1. 2009 資通技術管理與應用會議優秀論文獎(98 年 6 月 12 日)
2. 編著「船舶自動控制概要」教材榮獲教育部『98 年度職業學校優良教材評選』優勝(共同作者: 俞克維、過子凡、許基祥、涂乙平、姜景銘、王建達、康明仁、薛宏國)
3. 當選中華民國船舶機械工程學會第十屆及第十一屆監事(任期: 98 年 12 月 29 日~104 年 12 月 29 日)
4. 獲聘中華海運研究協會研究委員會委員(任期: 98 年 7 月 31 日~101 年 7 月 31 日)
5. 100、101 年度、102 年度『教育部補助未獲邁向頂尖大學獲獎勵大學卓越計畫之大專院校實施特殊優秀人才彈性薪資』
6. 100 年度榮獲國科會高瞻計畫:傑出作品優選獎、創意教具獎優選獎、年度執行研究團隊獎、年度特色學校獎、最佳亮點成果獎, 創意教案佳作。
7. 101 年度參加馬來西亞國際發明展榮獲一面銅牌。
8. 102 年度參加馬來西亞國際發明展榮獲兩面金牌。
9. 102 年度『國科會補助大專校院獎勵特殊優秀人才彈性薪資』。
10. 103 年度『科技部補助大專校院獎勵特殊優秀人才彈性薪資』。
11. 中華海洋事業協會第八屆理事。
12. 106 年度『科技部補助大專校院獎勵特殊優秀人才彈性薪資』。
13. 107 年度本校『特殊優秀研究人才彈性薪資獎勵』。
14. 108 年度本校『特殊優秀研究人才彈性薪資獎勵』。
15. 109 年度本校『特殊優秀產學人才彈性薪資獎勵』。

專利

1. 鍾隆宇、連長華、王明堂、賴俊吉，智慧型泡茶系統，中華民國新型專利，新型第 M433836 號，專利權期間: 2012/7/21-2022/2/1。
2. 鍾隆宇、連長華、蘇榮華，路邊自動停車系統，中華民國新型專利，新型第 M436009 號，專利權期間: 2012/8/21-2022/2/13。
3. 連長華、鍾隆宇、張皓欽，船舶機艙監控系統，中華民國新型專利，新型第 M436330 號，專利權期間: 2013/7/1-2023/3/19。
4. 俞克維、孫銘宏、連長華，俞承睿，磁場幅射電能轉換器，中華民國新型專利，新型第 M468842 號，專利權期間: 2013/12/21-2023/3/19。
5. 鍾隆宇、薛雅明、連長華、鍾奕信、余佳鏊、李東昇、王獻文、朱奕全、洪銘佑，遊戲裝置，中華民國新型專利，新型第 M489008 號，專利權期間: 2014/11/1~2024/6/23。

指導學生比賽

1. 海事學院第三屆學生專題製作競賽實作組第一名(樂高機器人簡易停車系統設計)(學生:蔡宗軒、李修緯、孫介晟)，100 年 10 月 15 日。
2. 馬來西亞國際發明創新及科技獎展銅牌(智慧型泡茶系統)，101 年 5 月 17-19 日。
3. 海事學院第四屆學生專題製作競賽實作組第三名(樂高機器人簡易吸塵路線搜尋系統設計)(學生: 謝瑋珈、譚宇欽、邱聖惟)，101年12月20日。
4. 2016國際學生自製船模大賽D組水面自動船舶組 性能獎 第二名，105年5月29日。

曾參與之國科會計畫

1. 計畫名稱： 具障礙物之城堡防禦微分對局之研究
Research on the differential game of guarding a territory in the present of an obstacle
計畫編號： NSC-83-0404-E-110-028
計畫時間： 82 年 8 月~ 83 年 7 月
計畫金額： 372,000
職務： 研究助理
2. 計畫名稱： 最短時間轟炸問題之研究

Research on minimum-time bombing problems

計畫編號： NSC-84-2213-E-110-038

計畫時間： 83 年 8 月~ 84 年 7 月

計畫金額： 297,000

職務： 研究助理

3. 計畫名稱： 具輸入非線性子不確定非線性時間延遲系統指數追蹤控制之研究

Research on the exponential tracking control of uncertain nonlinear time-delay systems with input nonlinearities

計畫編號： NSC-85-2213-E-110-026

計畫時間： 84 年 8 月~ 85 年 7 月

計畫金額： 281,400

職務： 研究助理

4. 計畫名稱： 具多個時變時間延遲之區間系統穩定性之研究

Research on the stability of interval systems with multiple time-varying delays

計畫編號： NSC-86-2213-E-110-018

計畫時間： 85 年 8 月~ 86 年 7 月

計畫金額： 278,000

職務： 研究助理

5. 計畫名稱： 具輸入非線性子之不確定非線性多重時變時間延遲全域穩定之研究

Research on global stabilization for uncertain nonlinear multiple time-varying delays systems with input nonlinearities

計畫編號： NSC-87-2213-E-110-038

計畫時間： 86 年 8 月~ 87 年 7 月

計畫金額： 432,400

職務： 研究助理

6. 計畫名稱： 以 LMI 方法解決一類多重分離及分布式時間延遲 Neutral 系

統漸近穩定性問題之研究

Research on asymptotic stability for a class of neutral systems with multiple discrete and distributed time delays via LMI approach

計畫編號： NSC 90-2213-E-214-062

計畫時間： 90 年 8 月~ 91 年 7 月

計畫金額： 185,700

職務： 主持人

7. 計畫名稱： 以遺傳演算法解決一類不確定時間延遲系統穩定性分析及強韌控制問題之研究

Research on stability analysis and robust control for a class of uncertain time delay systems via GA approach

計畫編號： NSC 91-2213-E-214-016

計畫時間： 91 年 8 月~ 92 年 7 月

計畫金額： 383,500

職務： 主持人

8. 計畫名稱： 不確定 Neutral 系統狀態觀測器設計控制及追蹤控制之研究

Research on observer-based controls and tracking controls for a class of uncertain neutral systems

計畫編號： NSC 92-2213-E-214-042

計畫時間： 92 年 8 月~ 93 年 7 月

計畫金額： 284,100

職務： 主持人

9. 計畫名稱： 具時變時間延遲不確定 Neutral 系統保證代價值控制之研究

Research on guaranteed cost control for uncertain neutral systems with time-varying delays

計畫編號： NSC 93-2213-E-214-020

計畫時間： 93 年 8 月~ 94 年 7 月

計畫金額： 369,600

- 職務： 主持人
10. 計畫名稱： 不確定 Neutral 系統之強健狀態、靜態輸出迴授控制及基於觀測器 H_∞ 控制器設計之研究
 Research on robust state, static output, and observer-based H_∞ controls for uncertain neutral systems
- 計畫編號： NSC 94-2213-E-214-021
- 計畫時間： 94 年 8 月~95 年 7 月
- 計畫金額： 398,000
- 職務： 主持人
11. 計畫名稱： 具輸入時變時間延遲不確定 neutral 系統強健非脆弱控制器設計之研究
 Research on robust non-fragile control for uncertain neutral systems with time-varying input delay
- 計畫編號： NSC 95-2221-E-022-019
- 計畫時間： 95 年 8 月~96 年 7 月
- 計畫金額： 377,000
- 職務： 主持人
12. 計畫名稱： 具區間時變時間延遲 Takagi-Sugeno 模糊系統之強健控制器之研究
 Research on robust control for Takagi-Sugeno fuzzy systems with interval time-varying delays
- 計畫編號： NSC 96-2221-E-022-012
- 計畫時間： 96 年 8 月~97 年 7 月
- 計畫金額： 317,000
- 職務： 主持人
13. 計畫名稱： 具輸入時變延遲之切換系統之強健可靠性控制之研究
 Research on robust reliable control for switched systems with input time-varying delays
- 計畫編號： NSC 97-2221-E-022-009-MY2

- 計畫時間： 97 年 8 月~99 年 7 月
- 計畫金額： 847,000 (第一年:435,000 第二年:412,000)
- 職務： 主持人
14. 計畫名稱： 具取樣保持輸入不確定時間延遲系統之強健性控制之研究
Research on robust control of uncertain time-delay systems with sampled-data hold input
- 計畫編號： NSC 99-2221-E-022-003
- 計畫時間： 99 年 8 月~100 年 10 月
- 計畫金額： 356,000
- 職務： 主持人
15. 計畫名稱： 不確定切換區間時變延遲系統之切換訊號及控制器設計
Research on switching signal and controller design of uncertain switching systems with interval time-varying delay
- 計畫編號： NSC 100-2221-E-022-011
- 計畫時間： 100 年 8 月~101 年 10 月
- 計畫金額： 450,000
- 職務： 主持人
16. 計畫名稱： 基於 STCW 國際公約規範之海事高職船舶機艙教學課程研發及評鑑計畫
The study of vocational curriculum and development of marine engineering based on the STCW convention
- 計畫編號： NSC 100-2514-S-022 -001
- 計畫時間： 100 年 11 月~101 年 9 月
- 計畫金額： 1,790,000
- 職務： 共同主持人
17. 計畫名稱： 以延遲分割法在切換時間延遲系統被動性分析及被動控制之研究
Research on passivity analysis and passive control of switched time-delay systems by delay partition approach

- 計畫編號： NSC 101-2221-E-022-009
計畫時間： 101 年 8 月~102 年 7 月
計畫金額： 450,000
職務： 主持人
18. 計畫名稱： 基於 STCW 國際公約規範之海事高職船舶機艙教學課程研發及評鑑計畫
The study of vocational curriculum and development of marine engineering based on the STCW convention
計畫編號： NSC 101-2514-S-022 -001
計畫時間： 101 年 10 月~102 年 8 月
計畫金額： 3,271,000
職務： 共同主持人
19. 計畫名稱： 基於 STCW 國際公約規範之海事高職船舶機艙教學課程研發及評鑑計畫
The study of vocational curriculum and development of marine engineering based on the STCW convention
計畫編號： NSC 102-3113-S-022 -001GJ
計畫時間： 102 年 11 月~103 年 7 月
計畫金額： 2,957,000
職務： 共同主持人
20. 計畫名稱： 切換式隨機混沌系統有限時間同步之研究
Research on finite time synchronous of switched random systems
計畫編號： NSC 102-2221-E-269-021
計畫時間： 102 年 10 月~103 年 8 月
計畫金額： 346,000
職務： 共同主持人
- 21 計畫名稱： 不確定切換時間延遲系統性能濾波器及切換訊號設計之研究
Research on designs of filter and switching signal for uncertain switched time-delay systems

- 計畫編號： MOST 103-2221-E-022-013
計畫時間： 103 年 8 月~104 年 7 月
計畫金額： 427,000 元
職務： 計畫主持人
22. 計畫名稱： 台航電機實務訓練專班
計畫編號： 103A5032
計畫時間： 103 年 7 月 22 日~103 年 7 月 25 日
計畫金額： 69,176 元
職務： 計畫主持人
23. 計畫名稱： 具非線性擾動之連續及離散切換時間延遲系統簡易切換訊號設計法則之研究
Research on simple design scheme of switching signal for continuous and discrete switched time-delay systems with nonlinear perturbations
計畫編號： MOST 104-2221-E-022-003
計畫時間： 104 年 8 月~105 年 7 月
計畫金額： 404,000 元
職務： 計畫主持人
24. 計畫名稱： 104 年交通部航海人員測驗電技員題庫建置案
計畫編號： 104H5101
計畫時間： 104 年 12 月~105 年 8 月
計畫金額： 1,400,000 元
職務： 計畫主持人
25. 計畫名稱： 海事教育推廣體驗計畫
Project for promotion and participation of maritime education
計畫編號： MOST 106-2515-S-022-002
計畫時間： 106 年 6 月~107 年 7 月
計畫金額： 670,000 元
26. 計畫名稱： 具乘法雜訊及隨機時間延遲不確定切換系統混合性能控制之

研究

Research on mixed performance control of uncertain switched system with multiplicative noise and random time delay

計畫編號： MOST 106-2221-E-022-006

計畫時間： 106 年 8 月~107 年 7 月

計畫金額： 428,000 元

- 27 計畫名稱： 具非週期時間取樣保持輸入之延遲不確定 T-S 模糊系統控制器設計之研究

Research on controller design of uncertain T-S fuzzy system with aperiodic time sampled-data hold input

計畫編號： MOST 107-2221-E-992-089

計畫時間： 107 年 8 月~108 年 7 月

計畫金額： 524,000 元

- 28 計畫名稱： 海事職場實習場域建置計畫

計畫時間： 107 年 5 月~110 年 8 月

計畫金額： 17,600,000 元(校配合款 1,600,000 元)

職務： 計畫共同主持人及申請執行人(教育部)

- 29 計畫名稱： 離岸風電職場海事工程菁英訓練基地計畫

計畫時間： 107 年 11 月~110 年 8 月

計畫金額： 52,800,000 元(校配合款 4,800,000 元)

職務： 計畫共同主持人及申請執行人(教育部)

- 30 計畫名稱： 使用切換法在具延遲慢變化之離散區間時變延遲系統混合性能分析及可達區域之研究

Research on mixed performance analysis and reachable set for discrete interval time-varying delay system with delay slow variation via switching approach

計畫編號： MOST 109-2221-E-992-054

計畫時間： 109 年 8 月~110 年 10 月

計畫金額： 547,000 元

- 職務： 計畫主持人
- 31 計畫名稱： 智慧製造機聯網之動態密碼資安技術及落地驗證
- 計畫編號： MOST 110-2218-E-006 -014 -MBK
- 計畫時間： 110 年 5 月~111 年 4 月
- 計畫金額： 3,535,000
- 職務： 共同主持人
- 32 計畫名稱： 不確定切換時間延遲系統取樣資料保持切換訊號及強韌切換
控制器之研究
Research on sampled-data hold switching signal and robust
switching control for uncertain switched time-delay system
- 計畫編號： MOST 110-2221-E-992-087
- 計畫時間： 110 年 8 月~111 年 7 月
- 計畫金額： 535,000 元
- 職務： 計畫主持人
- 博士論文題目： 不確定時間延遲系統穩定性分析及穩定化之一些論點-87
年 6 月
Some Aspects of Uncertain Time-delay Systems: Stability
Analysis and Stabilization
- 副教授升等論文： NEUTRAL 系統漸近穩定性之新結果-92 年 2 月
New Results on Asymptotic Stability of Neutral Systems
- 教授升等論文： 線性矩陣不等式法於連續系統穩定性分析及迴授控制之
新結果-95 年 2 月
New Results on Stability Analysis and Feedback Control of
Continuous Systems via Linear Matrix Inequality Approach