

## 論文發表

### (A) 期刊論文 (近五年)

1. Tain-Sou Tsay, Analyses and Designs of a Nonlinear Mechanical Scanning Control System, Journal of the Franklin Institute, Vol. 343, No.1, pp. 83-93, (2006) (SCI/EI ).
2. Tain-Sou Tsay, Linear Quadratic Regulation Method for Supersonic Missile Flight Control System Design, Journal of Aeronautics Astronautics and Aviation, Series A, Vol. 38, No. 3, pp. 207-216, (2006) ( EI ).
3. Tain-Sou Tsay, Variable Structure Controller for a Supersonic Missile Autopilot Design, Journal of National Formosa University, Vol. 25, No.2, pp. 23-33, (2006) (NA).
4. Tain-Sou Tsay, Decoupling of Multivariable Systems and Application to Flight Control System, Journal of National Formosa University, Vol. 25, No. 4, pp. 43-56, (2006)(NA).
5. T. P. Tsai, T. S. Tsay, L. R. Chen, Analytic Military Decision-Making Method, Hsin-Hsin Quarterly, Vol.35, No.3, pp.100-111, (2007)(NA).
6. Tain-Sou Tsay, Analysis and Design of Feedback Control Systems with Tracking Errors Square, Asian Journal of Control, Vol. 9, No.3, pp.333-339, (2007) ( SCI/EI ).
7. Tain-Sou Tsay, On-line Computing and Control for Decoupling Multivariable Processes with Specified Gain and Phase Margins, Journal of Mathematical Control Science and Applications Vol.1, No.1, pp.115-132, (2007)( NA )
8. Tain-Sou Tsay, Fuzzy Flight Control System for Decoupling Supersonic Missile, Journal of National Formosa University, Vol. 26, No.1, pp. 31-42, (2007)(NA).
9. Tain-Sou Tsay, Decoupling the Flight Control System of a Supersonic Vehicle, Aerospace Science and Technology, Vol.11, No.7-8, pp.553-562, (2007) (SCI/EI).
10. Tain-Sou Tsay, Modeling and Compensations of a Passive Homing Seeker with Glint Noise, JAAA-B(2007)(EI)
11. T. S. Tsay & R. C. Lee, A Variable Structure System Controller for Better Robustness, Journal of National Formosa University, Vol. 26, No. 3, pp. 17-24, (2007) (NA).
12. R. C. Lee & T. S. Tsay, Automatic Regulation Time Series for

- Sampled-data Feedback Control Systems, Journal of National Formosa University, Vol.26, No.4, pp.1-8, (2007) (NA).
13. Tain-Sou Tsay, Automatic Gain Control for Feedback Control System with Large Parameter Variations, WSEAS Trans. on System and Control, Vol.2, No.12, pp.537-545, (2007)(EI).
  14. Tain-Sou Tsay, Nonlinear Dynamic Modeling and Speed Control for a Cruise Missile Turbofan Engine, Journal of Mathematical Control Science and Applications, Vol.2, No.1, pp.85-94, (2008)(NA).
  15. Tain-Sou Tsay, Automatic Gain Control for Decoupling Flight Control Systems, Journal of Aeronautic Astronautics Aviation, Series A, Vol.39, No.3, pp.137-150, (2008)(EI).
  16. Tain-Sou Tsay, Simplified 6-DOF Simulation Models and Guidance Laws for Bank to Turn Unmanned Aerial Vehicles, Journal of National Formosa University, Vol.27, No.2, pp.11-26,(2008)(NA).
  17. Tain-Sou Tsay, Automatic Gain Control for Unity Feedback Control Systems, Intelligent and Control System, (2008)(in press)(EI)
  18. Tain-Sou Tsay, High Accurate Positioning Technique for AUV, WSEAS Trans. on System and Control, (2008) (in press)(EI).

(B) 研討會論文 (近五年)

1. Tain-Sou Tsay, Fuzzy Flight Control for Decoupling a Supersonic Missile, 2006 CACS International Automatic control Conference, pp.482-487,(2006)
2. Tain-Sou Tsay, On-line Tuning of PI-Lead Compensators for Decoupling Multivariable Processes, 2006 CACS International Automatic Control Conference, pp.162-167, (2006)
3. Tain-Sou Tsay, Automatic Gain Control for Decoupling Flight Control Systems, 2007 AASRC Conference, (2007)
4. Tain-Sou Tsay, On-line Computing and Controlling for Industry Process with Gain and Phase Specifications, 2008 CACS International Automatic control conference, (2008), NOV.21-23.
5. Tain-Sou Tsay, Simplified Simulation Models and Bank-to-Turn Guidance Laws for Auto-landing Unmanned Aerial Vehicles, 2008 AASRC Conference, (2008), DEC.06.

(C)技術報告及其它 (近五年)

(C-1) 國科會結案報告

1. 智慧型水下載具運動控制導引、目標最佳搜尋法則研究和操控訓練儀研製,NSC94-2213-E-150-027-
2. 無人飛行載具之導航導引控制律設計及任務規劃操控台研發 NSC 95-2221-E-150-030-.
3. 無人飛行載具自動降落技術研發與導航裝置研究 NSC 96-2221-E-150-008-MY2(期中報告)

(C-2) 中山科學研究院技術報告 - 飛行載具類

1. 自動駕駛儀設計方法(Procedure of Auto-Pilot Design).
2. 簡化六自由度模擬數學模式( Simplified Mathematical Models for 6-DOF Simulation of Missile)
3. 飛彈自動駕駛儀設計分析方法( Analyzing & Designing Method for Tactical Missile)
4. 巡航飛彈之可變增益非線性高度控制迴路及橫向路徑控制迴路 ( Nonlinear Altitude/Lateral Control System with Adaptive Gain for Cruise Missile)
5. 飛行控制系統規格分析方法( Procedure for Finding Specifications of Flight Control Systems)
6. 伴隨模擬規格分析法( Specification Analysis with Adjoin Method)
7. 巡航飛彈 BTT 控制設計法則及其應用(BTT Concepts for Cruise Missile)
8. 巡航攻陸飛彈高度控制概念及操縱能力分析( Altitude Concepts for Cruise Missile)
9. 導航儀精度需求分析( Accuracy Analysis & Specifications for Inertial Reference Unit)
10. 飛行載具控制系統設計與模擬簡介(新新季刊)

(C-3) 中山科學研究院技術報告 - 戰鬥車輛類

1. 戰車追蹤穩定迴路初步規格分析
2. 現代戰車砲控系統初步分析
3. DM63 彈砲彈砲表與氣動力分析
4. 非水平目標砲令分析設計

(C-4) 中山科學研究院技術報告 - 水下載具類

1. 亢龍魚雷尋標器偵測距離需求分析,中山科學研究院, 2000.
2. 亢龍魚雷航速運作構想,中山科學研究院, 2000.
3. 亢龍魚雷終端導引聲納主被動模式與航速切換運用構想,中山科學研究院, 2000.
4. 龍魚雷自動駕駛儀設計,中山科學研究院,2001.
5. 亢龍魚雷終端導引迴路分析及規格訂定,中山科學研究院, 2001.
6. 亢龍魚雷導航儀精度需求分析, 中山科學研究院, 2001.
7. 魚雷之中途導引律設計,中山科學研究院, 2002.
8. 尋標器鎖定誤差規格分析,中山科學研究院, 2002.
9. 亢龍魚雷聲納尋標器方位伺服迴路設計,中山科學研究院, 2002.
10. 線導操控魚雷端細部設計, 中山科學研究院,2003.
11. 魚雷運作流程細部設計,中山科學研究院, 2003.
12. 魚雷戰術導引控制律設計,中山科學研究院, 2003.
13. 亢龍魚雷導控系統結案報告, 中山科學研究院, 2003.

(C-5) 專門著作

1. 戰術武器系統之導引控制律設計及系統整合-設計實例  
Integration, Guidance & Control Laws of Tactical Weapon  
Systems —some practical examples, Chung-Shan Institute of  
Science and Technology, 2003.
2. 巡弋飛彈導控系統概念設計及導引控制律設計 Concept Design,  
Guidance & Control Laws of the Cruise Missile, Chung-Shan  
Institute of Science and Technology, 2003.
3. 魚雷導控系統設計與系統整合測試 Guidance & Control System  
Design, Integration & Testing of Torpedo, Chung-Shan Institute of  
Science and Technology, 2003.