

論文發表

(A) 期刊論文 (近五年)

1. Yeong-Ley Tsay, **Jen-Chieh Cheng** and Tsai-Shou Chang, 2003, Enhancement of Heat Transfer from Surface-mounted Block Heat Sources in a Duct with Baffles, *Numerical Heat Transfer, Part A: Applications*, Volume 43, No. 8, June, 2003, pp. 827–841. (SCI, EI) (NSC 89-2212-E-150-012)
2. Yeong-Ley Tsay, Tsai-Shou Chang and **Jen-Chieh Cheng**, 2005, Heat Transfer Enhancement of Backward-Facing Step Flow in a Channel by Using Baffle Installation on the Channel Wall, *Acta Mechanica*, Volume 174, No. 1-2, January, 2005, pp. 63-76. (SCI, EI) (NSC 91-2212-E-150-038)
3. Yeong-Ley Tsay, **Jen-Chieh Cheng** and Tsai-Shou Chang, 2005, Influences of a Baffle on Mixed Convection Characteristics of Backward-Facing Step Flow in Vertical Channels, *Transactions of the Aeronautical and Astronautical Society of Republic of China*, Volume 37, No. 1, March, 2005, pp. 667-676. (EI) (NSC 91-2212-E-150-038)
4. **Jen-Chieh Cheng**, Cheng-Ying Lo, S. H. Liu and Yeong-Ley Tsay , 2005, Application of quality functional deployment to the assessment of aircraft maintenance education, *Transactions of the Aeronautical and Astronautical Society of Republic of China*, Volume 37, No. 3, September, 2005, pp. 231-238. (EI)
5. Yeong-Ley Tsay, and **Jen-Chieh Cheng**, 2006, Enhancement of Heat Transfer from Block Heat Sources Mounted on a Short Board to Air Stream in a Channel by Constructing Slots in the Board, *Numerical Heat Transfer, Part A: Applications*, Volume 49, No. 5, March, 2006, pp. 495-510.(SCI, EI) (NSC 93-2212-E-150-003)
6. **Jen-Chieh Cheng**, and Yeong-Ley Tsay, 2006, Effects of Solid and Slotted Baffles on the Convection Characteristics of Backward-Facing Step Flow in a Channel, *Heat and Mass Transfer*, Volume 42, No. 9, July, 2006, pp.843-852.(SCI, EI). (NSC-93-2212-E-150-003)
7. Yeong-Ley Tsay, and **Jen-Chieh Cheng**, 2008, Analysis of Convective Heat Transfer Characteristics for a Channel Containing Short Multi-Boards Mounted with Heat Generating Blocks,

- International Journal of Heat and Mass Transfer, Volume 51, January, 2008, pp.145-154. (SCI, EI) (NSC-94-2212-E-150-042)
8. Yeong-Ley Tsay, and **Jen-Chieh Cheng**, 2008, Effects of Slots and Baffle on Heat Transfer from Block Heat Sources Mounted on a Short Board to Air Stream in a Channel, The Journal of Aeronautics, Astronautics and Aviation, series A, Volume 40, No. 3, pp. 163-172 (EI) (NSC 95-2212-E-150-053)
 9. **Jen-Chieh Cheng**, 2008, Nonlinear Aerodynamic Effects on Transonic Flap Buzz, Tail Flutter and Limit-Cycle Oscillations of Two-Dimensional Wing-Flap-Tail Configurations, International Journal For Numerical Methods In Fluids (revised) (SCI, EI)
 10. Yeong-Ley Tsay, and **Jen-Chieh Cheng**, 2008, Thermal Interaction and Chimney Effects on Natural Convective Cooling Performance of Heat Generating Blocks Mounted on a Board in a Two-Dimensional Cabinet, Numerical Heat Transfer, Part A: Applications (revised). (SCI, EI)

(B) 研討會論文 (近五年)

1. Yeong-Ley Tsay, Tsai-Shou Chang and **Jen-Chieh Cheng**, 2003, Heat Transfer Enhancement of Backward-facing Step Flow in a Channel by Using Baffle Installation on the Channel Wall, The 14th International Symposium on Transport Phenomena, 6-9 July, Bali, Indonesia.
2. **Jen-Chieh Cheng**, 2003, Unsteady Aerodynamic and Aeroelastic Interferences of Wing-Flap-Tail Configurations Due to The Transonic Flap Buzz, The 14th International Symposium on Transport Phenomena, 6-9 July, Bali, Indonesia.
3. Yeong-Ley Tsay, **Jen-Chieh Cheng** and Tsai-Shou Chang, 2003, Influences of a Baffle on Flow and Thermal Characteristics of Backward-Facing Step Flow in Vertical Channel, 2003, AASRC/CCAS Joint Conference, Tainan, Taiwan, R.O.C.
4. Yeong-Ley Tsay and **Jen-Chieh Cheng**, Effects of Inclined Baffle on Heat Transfer Characteristics of Backward-Facing Step Flow in a Channel, The 10th International Symposium on Rotating Machinery, March 07. - 11. 2004, Honolulu, Hawaii, USA.
5. 鄭仁杰, 陳輝邦, 陳必虔, 2004, 流道上板噴流在具背階流道中熱傳增益性能之研究, Proceedings of the 11th national conference on

computational fluid dynamics, 2004 Taitung, Taiwan, ROC.

6. **J. C. Cheng**, C.Y. Lo, S. H. Liu and Y. L. Tsay, 2004, Application of Quality Functional Deployment to the Assessment of Aircraft Maintenance Education, Int. Conf. on Engi. Education (ICEE), Florida, U.S.A.
7. S. H. Liu **J. C. Cheng**, Y. L. Tsay and C.Y. Lo, 2004, The Establishment and Operation of an Integrated E-Learning Hanger to Improve the Aviation Technology Education in an Academic – Industry Alliance, Int. Conf. on Engi. Education (ICEE), Florida, U.S.A.
8. 鄭仁杰, 陳輝邦, 陳必虔, 2004, 非穩態噴流在具背階流道中熱傳增益性能之研究, AASRC/ CCAS Joint Conference, Taichung, Taiwan, R.O.C.
9. 鄭仁杰, 邱昌田, 陳必虔, 2004, 流道上板噴流在具矩形穴流道中熱源凸塊熱傳增益性能之研究, AASRC/CCAS Joint Conference, Taichung, Taiwan, R.O.C.
10. 鄭仁杰, 2004, 以數值方法探討飛機藉由斜跑道進行短場起飛之氣動力場特性, 92 年度國科會航太學門研究成果研討會, Taichung, Taiwan, R.O.C.
11. **J. C. Cheng** and Y. L. Tsay, 2005, Using an Inclined Baffle with Slot to Enhance Heat Transfer Characteristics of Backward-facing Step Flow in Channels, 4th Int. Conf. on Computational Heat and Mass Transfer, May 17–20, 2005, Paris-Cachan, FRANCE.
12. **Jen-Chieh Cheng**, 2005, Heat Transfer Enhancement of Block Heat Source in the Cavity Channel by Using Flow Injection on the Upper Channel Wall, 4th Int. Conf. on Computational Heat and Mass Transfer, May 17–20, 2005, Paris-Cachan, FRANCE.
13. **Jen-Chieh Cheng**, 2005, Heat Transfer Enhancement of Block Heat Sources in the Channel with Cavity by Using Unsteady Flow Pulsation, The 16th International Symposium on Transport Phenomena, Prague, August 29-September 3, Czech Republic.
14. Yeong-Ley Tsay and **Jen-Chieh Cheng**, 2005, Enhancement of Heat Transfer from Block Heat Sources Mounted on a Board to Air Stream in a Channel by Constructing Slots in the Board, The 16th International Symposium on Transport Phenomena, Prague, August 29-September 3, Czech Republic
15. 鄭仁杰, 2005, 飛彈發射箱發射狀態下之衝擊負荷評估, 中山科學研究院第二研究所釋商科專案-共用型軍用發射系統研製計畫

學術研討會暨成果發表會, 九十四年十一月二十八日, 新竹.

16. **Jen-Chieh Cheng**, 2005, Mixed Convection of Channel Flow over Cavity Mounted With Heated Blocks by Flow Pulsation, 2005 AASRC/CCAS Joint Conference, December 10, Taiwan, R.O.C.
17. 鄭仁杰, 郭仲晟, 吳俊成, 李柏鋒, 2006, 旁通流對具單排加熱凸塊流道中熱傳增進之研究, Proceedings of the 13th national conference on computational fluid dynamics, 2006, Taipei county, Taiwan, ROC.
18. **Jen-Chieh Cheng**, 2006, Transient Analysis of Ignition Overpressure Effects on Launching System, The 17th International Symposium on Transport Phenomena, September 4-September 8, Toyama, Japan.
19. Yeong-Ley Tsay and **Jen-Chieh Cheng**, 2006, Analysis of Convective Heat Transfer Characteristics for a Channel carrying Multi-boards Mounted with Heat Generating Blocks, The 17th International Symposium on Transport Phenomena, September 4-September 8, Toyama, Japan
20. 鄭仁杰, 李榮通, 翁維隆, 鄭智壕, 2006, 飛彈發射箱發射狀態下之衝擊負荷評估, 2006 中國航太學會/中華民航學會聯合學術研討會, 中壢, 台灣, 中華民國.
21. Yeong-Ley Tsay and **Jen-Chieh Cheng**, 2007, Effects of Slots and Baffle on Heat Transfer from Block Heat Sources Mounted on a Board to Air Stream in A Channel, The 18th International Symposium on Transport Phenomena, 27-30 August, 2007, Daejeon, KOREA
22. 鄭仁杰, 林鴻佳, 高瑞鴻, 游象麟, 楊書聞, 2007, 以數值方法探討機翼結冰對於無人飛機(UAV)翼型氣動力特性影響, Proceedings of the 14th National Conference on Computational Fluid Dynamics, 2007, Nantou county, Taiwan, ROC. (NSC -96- 2623 -7- 006-005-D)
23. 鄭仁杰, 施宗呈, 方忠浩, 林育增, 余政洋, 2007, 飛彈發射離箱時對發射箱燃氣特性及衝擊負荷分析, Proceedings of the 14th National Conference on Computational Fluid Dynamics, 2007, Nantou county, Taiwan, ROC. (NSC-95-2221-E-150-027)
24. 鄭仁杰, 林鴻佳, 苗君易, 彭寶華, 2007, 以數值及實驗方法探討機翼結冰對於無人飛機(UAV)翼型氣動力特性影響, 96 年度國防科技學術合作計畫成果發表會, 桃園、龍潭, (NSC -96- 2623 -7- 006-005-D)
25. 鄭仁杰, 蘇信彰, 林青鋒, 蔡昌桔, 顏啟晃, 2008, 週期性電熱除冰系統對於無人飛機機翼結冰與節能特性影響, Proceedings of the 15th National Conference on Computational Fluid Dynamics,

2008, Kaohsiung, Taiwan, ROC.

26. Yeong-Ley Tsay and **Jen-Chieh Cheng**, 2008, Thermal Interaction and Chimney Effects on Natural Convective Cooling Performance of Heat Generating Blocks Mounted on a Board in an Enclosure, The 7th International Symposium on Heat and Transfer 2008, 26-29 October, 2008, Beijing, China.
27. **鄭仁杰**, 李國光, 2008, 波浪型旁通流室對二維矩形流道中具單排加熱凸塊之熱對流增進之研究, 2008 中國航太學會學術研討會, 台北, 台灣, 中華民國.
28. 蔡永利, **鄭仁杰**, 劉彥豪, 詹智航, 2008, 熱源模組於密閉及具通氣孔的機匣中自然對流熱傳特性之研究, 2008 中國航太學會學術研討會, 台北, 台灣, 中華民國.

(C)技術報告及其它 (近五年)

1. **鄭仁杰**, 2003,1, 以無結構性自調性解子探討葉片-渦流及葉片-尾流交互作用之噪音, 行政院國家科學委員會專題研究計畫成果報告(NSC 90-2212-E-150-030)
2. 蔡永利, **鄭仁杰**, 2003,10 具背階之流道中混合對流熱傳增進之研究 Enhancement of Mixed Convection Heat Transfer in Ducts with Backstep (NSC-91-2212-E-150-038)
3. 蔡永利、楊世英、駱正穎、葉俊郎、**鄭仁杰** 和劉傳聖, 2003, 航太科技教育改進計畫-飛機維修領域, 教育部顧問室委託計畫結案報告。
4. **鄭仁杰**, 2004, 以數值方法探討飛機藉由斜跑道進行短場起飛之氣動力場特性, 行政院國家科學委員會專題研究計畫成果報告 (NSC92-2212-E-150-026)
5. 蔡永利、劉昇祥、駱正穎、葉俊郎、**鄭仁杰** 和劉傳聖, 2004, 航太科技教育改進計畫-飛機維修領域, 教育部顧問室委託計畫結案報告。
6. **鄭仁杰**, 2004, 航太科技教育改進計畫 90-93 年度計畫總結報告-飛機維修實務教學提昇計畫-飛機維修示範教學棚場特色教學實習(驗)室, 教育部顧問室委託計畫結案報告
7. 蔡永利, **鄭仁杰**, 2005,具背階之流道中混合對流熱傳增進之研究 (2/2),行政院國家科學委員會專題研究計畫成果報告 (NSC-93-2212-E-150-003)
8. **鄭仁杰**, 2005, 非穩態脈動流場對於具空穴區域之流道中凸塊熱源傳導增進之研究, 行政院國家科學委員會專題研究計畫成果

報告(NSC93-2212-E-150-019)

9. 鄭仁杰, 2005, 飛彈發射箱發射狀態下之衝擊負荷評估, 國防部軍備局中山科學研究院委託學術合作研究計畫期末總研究成果報告(BB94018P)
10. 鄭仁杰, 2006, 飛機藉由斜跑道進行短場起飛之動力學與非穩態氣體動力學分析, 行政院國家科學委員會專題研究計畫成果報告(NSC94-2212-E-150-028)
11. 鄭仁杰, 2007, 發射架系統中飛彈發射箱內外熱流環境之非穩態計算分析, 行政院國家科學委員會專題研究計畫成果報告(NSC95-2212-E-150-027)
12. 苗君易, 鄭仁杰, 林鴻佳, 2008, UAV 長滯空高升力翼型設計及高空防冰分析評估, 行政院國家科學委員會國防科技研究計畫成果報告, (NSC -96- 2623 -7- 006-005-D)
13. 蔡永利, 莊賦祥, 陳文瑞, 鄭仁杰, 2008, 高功率群聚 LED 晶粒模組於機匣中熱傳特性與散熱效能提昇研究(I), 行政院國家科學委員會專題研究計畫成果報告(NSC96-2212-E-150-040)
14. 鄭仁杰, 2008, 飛彈發射離箱狀態下發射箱內外熱流環境及充及負荷之非穩態分析, 行政院國家科學委員會專題研究計畫成果報告(NSC96-2212-E-150-007)

(D) 研究計畫 (近五年)

1. 蔡榮鋒、蔡永利、蔡承隆、陳美伶, 2008, 池水擾動設備, 中華民國專利, 發明第 I 299252 號。
2. 通風系統中整體換氣配合壓力差分佈對污染物傳播影響之模擬分析, 93/07~94/02 (國科會大專生計畫 NSC 93-2815-C-150-007 -E, 指導教授)
3. 非穩態脈動流場對於具空穴區域之流道中加熱凸塊傳導增進之研究, 93/08~94/07 (國科會 NSC 93-2212-E-150-019-) 已結案
4. 飛彈發射箱發射狀態之衝擊負荷評估, 94/05~94/12 (中科院)
5. 飛機藉由斜跑道進行短場起飛之動力學與非穩態氣體動力學分析, 94/08~95/07 (國科會 NSC 94-2212-E-150-028-) 已結案
6. 發射架系統中飛彈發射箱內外熱流環境之非穩態計算分析, 95/08~96/07 (國科會 NSC 95-2212-E-150-027-)
7. 高導熱基板及構裝之散熱特性電腦輔助模擬與實驗測量, 95/12~96/11 (禾伸堂協同研究人員)
8. UAV 長滯空高升力翼型設計及高空防冰分析評估, 96/01~96/12 (國科會 NSC 96-2623-7-006-007-D, 共同主持人)

9. 飛彈發射離箱狀態下發射箱內外熱流環境及衝擊負荷之非穩態分析(I), 96/08~97/07 (國科會NSC 96-2212-E-150-007-)
10. 無需跑道之 TILT-ROTOR 式旋翼及定翼雙型態無人機(UAV)縮尺原型機開發及懸停與前飛轉換飛行展示(1/2),97/01~97/12 (國科會 NSC97-2623-7-150-001-D,共同主持人)
11. 飛彈發射離箱狀態下發射箱內外熱流環境及衝擊負荷之非穩態分析(II), 97/08~98/07(國科會NSC 96-2212-E-150-007-