

**(A) 期刊論文**

1. Guo, T.W. and Cheng, J.H., 2021, "Modelling of Air Pumping Noise and Study of Tread Pattern Pitch," *Journal of Applied Science and Engineering*, Vol. 24 (2).
2. Guo, T.W. and Cheng, J.H., 2020, "Study of the influence of Carcass Temperature on Rolling Resistance," *Journal of the Chinese Society of Mechanical Engineers*, Vol. 41 (2), pp.189-197.
3. Chen, M., Yang, K., Sun, Y., and Cheng, J.H., 2019, "An Energy Management Strategy for Through-the-Road Type Plug-in Hybrid Electric Vehicles," *SAE Int. J. Alt. Power*, Vol. 8 (1), pp.61-74.
4. Chang, Y.W. and Cheng, J.H., 2012, "Numerical and experimental investigation of polycarbonate vacuum-forming process," *Journal of the Chinese Institute of Engineers*, Vol. 36, pp.831-841. (SCI, EI)
5. Chang, Y.W. and Cheng, J.H., 2011, "Material characterization of polycarbonate under glass transition temperature," *Journal of the Chinese Institute of Engineers*, Vol. 35, pp.967-978. (SCI, EI)
6. Chang, C.K. and Cheng, J.H., 2008, "Parametric deflection corrections of annular sandwich panels under transverse central loads," *Journal of the Chinese Institute of Engineers*, Vol. 31, pp.31-39. (SCI, EI)
7. Cheng, J.H., Yu, C.Y. and Hsu, V., 2009 "Energy Management Algorithm for a Hybrid Fuel Cells Scooter," *Journal of Power Sources*. (SCI)
8. Yu, C.Y., Huang, M.C. and Cheng, J.H., 2009, "Development of Electric Powertrain with a Boost Converter for the Fuel Cells Plug-in Electric Scooter," submitted to *IEEE Transactions on Energy Conversion*. (SCI)
9. **Hu, S.Y.** and Cheng, J.H., 2007, "Performance Evaluation of Pairing between Sites and Wind Turbines," *Renewable Energy*, Vol. 32, pp.1934-1947. (SCI, EI)
10. Yeh, H.Y. and Cheng, J.H., 2007, "On the Vantage of Superplastic Instability," in *Journal of Materials Processing Technology*. (SCI, EI)
11. Chang, C.K. and Cheng, J.H., 2007, "Optimization of Sandwich Monocoque Car Body with Equivalent Shell Element," *Journal of Mechanics*, Vol.23, pp. 381-387. (SCI)
12. Chang, C.K. and Cheng, J.H., 2007, "Evolutionary Sandwich Structure Optimization for a Solar Race Car," *Journal of Composite Materials*. (SCI, EI)
13. Yeh, H.Y. and Cheng, J.H., 2006, "Forming Limits Prediction of The Sheet Metal Forming Process by The Energy-based Damage Model," *Journal of Mechanics*, Vol. 22, pp.43-50. (SCI)

14. Huang, C.C. and Cheng, J.H., 2005, "A New Forming-Limit Criterion for Fracture Prediction in a Powder Forming Application," *International Journal of Mechanical Sciences*, Vol. 47, pp. 1123-1145 (SCI, EI)
15. Hu, S.Y. and Cheng, J.H., 2005, "Development of the Unlocking Mechanisms for the Complex Method," *Computers & Structures*, Vol.83, pp.1991-2002 (SCI, EI)
16. Huang, C.C. and Cheng, J.H., 2004, "An Investigation into the Forming Limits of Sintered Porous Materials under Different Operational Conditions," *Journal of Materials Processing Technology*, Vol. 148, pp.382-393. (SCI, EI)
17. 胡斯遠、鄭榮和, “氣渦輪機組件焊補變形之研究”, 中國航空太空學會學刊, 第三十五卷, 2004年。(EI)
18. Yeh, H.Y. and Cheng, J.H., 2003, "NDE of Metal Damage: Ultrasonics with a Damage Mechanics Model," *International Journal of Solids and Structures*, Vol. 40, No., 26, pp. 7285-7298. (SCI, EI)
19. 馬仁宏、鄭榮和, 2003, “積層板複合材料基材裂紋損傷演化律與破壞條件”, 中國航空太空學會學刊, 第三十五卷第四期, pp.353-364。(EI)
20. Chung, L.C. and Cheng, J.H., 2002, "Fracture Criterion and Forming Pressure Design for Superplastic Bulging," in *Materials Science and Engineering A*, Vol.333, pp.146-154. (EI)
21. Huang, C.C. and Cheng J.H., 2002, "Forging Simulation of Sintered Powder Compacts under Various Frictional Conditions," in *International Journal of Mechanical Sciences*, Vol.44, pp.489-507. (SCI, EI)
22. Maa, R.H. and Cheng, J.H., 2002, "A CDM-Based Failure Model For Predicting Strength of Notched Composite Laminates," in *Composite Part B: Engineering*, Vol.33, pp.479-489. (SCI, EI)
23. O. Yang, H.Y. and Cheng, J.H., 2002, "The Research of the Process of Manufacturing Tires," *Mechanics*, Series B, Vol. 18, pp.117-127. (EI)
24. Yu, S.Y. and Cheng, J.H., 2002, "Research and Reduction on Vibrational Noise of Gear Pump," *Mechanics*, Series B, Vol. 18, pp.129-139. (EI)
25. Cheng, J.H., Shu, C.Y., Hong, C.F., and Chung, Y.S, 2002, "Seal Mechanism and Analysis of Leakage Characteristics," *Journal of Mechatronic Industry*, Vol. 222, pp.221-229.
26. Chung, L.C. and Cheng, J.H., 2001, "The Analysis of Instability and Strain Concentration during Superplastic Deformation," in *Materials Science and Engineering A*, Vol.308, pp.153-160. (EI)
27. Cheng, J.H. and Liao, C.C., 2000, "Developing Automatic and Adaptive 2-D Remeshing Capabilities for Commercial Finite Element Programs," in *Journal of the Chinese Society of Mechanical Engineers*, Vol.21, pp.515-525. (EI)

28. Lin, C.P., Cheng, J.H., Versluis, A. and Douglas, W.H., 2000, "Failure Criteria of Dentin-Resin Adhesion—A Mixed Mode Fracture Mechanics Approach," in *Scripta Materialia*, Vol.42, pp.327-333. (SCI, EI)
29. Lin, C.P., Cheng, J.H., Versluis, A. and Douglas, W.H., 2000, "Failure Criteria of Dentin-Resin Adhesion—A Mixed Mode Fracture Mechanics Approach," in *Scripta Materialia*, Vol.42, pp.327-333.
30. Cheng, J.H. and Chang, C.W., 1999, "A Displacement-Based Fracture Criterion for Fracture Analysis of Fibrous Composites," in *Transactions of the Aeronautical and Astronautical Society of the Republic of China*, Vol.31, pp.91-100.
31. Cheng, J.H. and Tsai, M.T., 1999, "Damage Analysis of Fibrous Composite Materials," in *The Chinese Journal of Mechanics*, Vol.15, pp.59-70.
32. Cheng, J.H. and Huang, Y.S., 1999, "Analysis of Pneumatic Tire Blowout and Its Improvement," Accepted in *Bulletin of the College of Engineering National Taiwan University*.
33. Cheng, J.H. and Liao, C.C., 1999, "Developing Automatic and Adaptive 2-D Remeshing Capabilities for Commercial Finite Element Programs," accepted in the *Journal of the Chinese Society of Mechanical Engineers*.
34. Cheng, J.H., Chen, W.J., Tang, W.S. Fengchiang, S.B. Hsiu, G.C., and Chang, H.Y., 1998, "Design, Simulation, Manufacture and Strength Characterization of SPF/DB Parts," *Proceedings of the National Science Council, R.O.C.*, Vol.22, pp.142-153.
35. Chuang, T.H., Cheng, J.H., Wang, W.H., Yang, C.F. and Koo, C.H., 1998, "Research on the Superplastic Forming (SPF) and Diffusion Bonding (DB) of Aerospace Materials," *Proceedings of the National Science Council, R.O.C.*, Vol.22, pp.103-115.
36. Chang, H.Y. and Cheng, J.H., 1997, "Manufacturing and Mechaincal Tests of Straight-Rib Reinforced Hollow Structures," in *Transactions of the Aeronautical and Astronautical Society of the Republic of China*, Vol.29, pp.161-169.
37. Cheng, J.H. and Z.Y. Chang, 1996, "A Fracture Criterion and Finite Element Analysis of Fiber-Reinforced Composites," in *The Chinese Journal of Mechanics*, Vol.12, pp.389-400.
38. Cheng, J.H., 1996, "The Determination of Material Parameters from Superplastic Inflation Tests," in *Journal of Materials Processing Technology*, Vol.58, pp.233-246.
39. Cheng, J.H. and Liao, C.C., 1996, "Automation of Finite Element Remeshing for Metal Forming Simulation," in *Transactions of the Aeronautical and Astronautical Society of the Republic of China*, Vol.27, No.4, pp.329-341.
40. Cheng, J.H. and Chen, P.C., 1996, "Optimal Design of Fin-stabilized Saboted Projectiles," in *Bulletin of the College of Engineering National Taiwan University*, No.67, pp.45-70.

41. Cheng, J.H. and Wang, F., 1995, "Computer-Aided Cold Forgibility Analysis of Aluminum Alloys," *The Chinese Journal of Mechanics*, Vol.11, No.3, pp.215-224.
42. Cheng, J.H. and Huang, Y.C., 1995, "Design and Analysis of Superplastically-Formed Hollow Structures," in *Transactions of the Aeronautical and Astronautical Society of the Republic of China*, Vol.27, No.1, pp.51-60.
43. Cheng, J.H. and Fanchang, S.B., 1995, "Study of Mechanical Properties of Hollow Structures Manufactured by Superplastic Forming and Diffusion Bonding Methods," in *Transactions of the Aeronautical and Astronautical Society of the Republic of China*, Vol.27, No.3, pp.201-211.
44. Cheng, J.H., and Wang, F., 1995, "A Method for Identifying Forgibility Parameters by Combined Experiments with Finite Element Simulations," *Simulation of Materials Processing: Theory, Methods and Applications*, (ed.) S.-F. Shen and P.R. Dawson, pp.551-556.
45. Cheng, J.H., 1994, "Analytical Prediction of Pressure-Time Curve for Free Inflation of Superplastic Sheet," *Journal of the Chinese Institute of Engineers*, Vol.17, No.6, pp.823-834.
46. Cheng, J.H., 1994, "A Procedure for Designing Initial Thickness Variation for Superplastic Free Inflation," *International Journal of Mechanical Sciences*, Vol.36, No.11, pp.981-1000.
47. Cheng, J.H. and Chang, J., 1994, "Debonding Strength Prediction in Macroscopic Analysis of Fiber-Reinforced Composites," *The Chinese Journal of Mechanics*, Vol.10, No.4, pp.275-287 (in Chinese).
48. Cheng, J.H. and Tseng, K.C., 1994, "Stress Analysis of Fin-stabilized Saboted Projectiles," *Bulletin of the College of Engineering National Taiwan University*, No.61, pp.129-143 (in Chinese).
49. Cheng, J.H. and Lee, S., 1994, "Methods for Resolving Grooving Problems in Parts Manufactured from Combined Diffusion Bonding and Superplastic Forming Processes," in *Journal of Materials Processing Technology*, v.45, pp.249-254.
50. Cheng, J.H. and Chen, W.J., 1994, "A Procedure for Determining Material Constitutive Parameters for Superplastic Ti-6Al-4V Alloy," *Transactions of the Aeronautical and Astronautical Society of the Republic of China*, Vol.26, No.3, pp.223-231.
51. Cheng, J.H., 1993, "Adaptive Grid Optimization for Structural Analysis: Geometry-Based Approach," in *Computer Methods in Applied Mechanics and Engineering*, Vol.107, pp.1-22.
52. Lee, S., Cheng, J.H., and Lee, J., 1993, "Superplastic Forming Model Applications for Al-Li 8090," in *Journal of the Chinese Institute of Engineers*, Vol.16, pp.843-851.
53. Cheng, J.H. and Ju, M.D., 1993, "Finite Element Analysis for Hot Forging of Gear Tooth Blank," *Bulletin of the College of Engineering National Taiwan University*, No.59, pp.1-35.
54. Cheng, J.H., 1992, "Advanced Design of Superplastically Formed Components by Finite

- Element Simulation," in *Journal of the Chinese Society of Mechanical Engineers*, Vol.13, pp.289-298.
55. Cheng, J.H., 1988, "Automatic Adaptive Remeshing for Finite Element Simulation of Forming Processes," in *International Journal for Numerical Methods in Engineering*, Vol.26, pp.1-18.
  56. Cheng, J.H. and Kikuchi, N., 1986, "A Mesh Rezoning Technique for Finite Element Simulation of Metal Forming Processes," in *International Journal for Numerical Methods in Engineering*, Vol.23, pp.219-228.
  57. Cheng, J.H. and Kikuchi, N., 1985, "An Analysis of Metal Forming Processes Using Large Deformation Elastic-Plastic Formulations," in *Computer Methods in Applied Mechanics and Engineering*, Vol.49, pp.71-108.
  58. Cheng, J.H. and Kikuchi, N., 1985, "An Incremental Constitutive Relation of Unilateral Contact Friction for Large Deformation Analysis," in *Journal of Applied Mechanics*, Vol.52, pp.639-648.
  59. Kikuchi, N. and Cheng, J.H., 1983, "Finite Element Analysis of Large Deformation Problems Including Unilateral Contact and Friction," in *Computer Methods for Nonlinear Solids and Structural Mechanics*, (ed.) S.N. Atluri, AMD-54, ASME, pp.121-132.

## (B) 研討會論文

1. 夏紫穎、鄭榮和, 2019, "混合磁鐵輔助式磁阻馬達之轉子最佳化設計" , 中華民國力學學會年會暨第 43 屆全國力學會議 , 逢甲大學。
2. 蔡易珊、鄭榮和, 2019, "複合動力車行車模式切換扭力平順化方法研究" , 中華民國力學學會年會暨第 43 屆全國力學會議 , 逢甲大學。
3. 葉威德、鄭榮和, 2019, "應用於自駕巴士之線控煞車設計與 HiL 測試驗證" , 中華民國力學學會年會暨第 43 屆全國力學會議 , 逢甲大學。
4. 孫允中, 陳明彥, 鄭榮和, 2016, "多動力元件組合之插電式串並聯式複合動力電動車能量管理策略研究," 車輛工程學術研討會。
5. 楊傑, 陳明彥, 鄭榮和, "應用電磁與熱傳模擬於電動車感應馬達改良設計," 車輛工程學術研討會。
6. 李則霖, 彭毓瑩, 盧玟翰, 鄭榮和, 2016, "CPEV 自主避障控制策略研究," 車輛工程學術研討會。
7. 陳柏彣, 陳明彥, 鄭榮和, 2016, "電動車動力系統傳動箱體結構之優化設計," 車輛工程學術研討會。
8. 陳柏彣, 陳明彥, 鄭榮和, 2016, "電動車動力系統傳動箱體結構之優化設計," 2016 SIMULIA Region User Meeting.
9. 黃昱豪, 鄭榮和, 吳圓生, 2016, "輪胎胎紋噪音降噪之研究," SIMULIA Region User Meeting.
10. 黃昱豪, 鄭榮和, 2016, "輪胎胎紋噪音降噪之研究," 中國機械工程學會。
11. 郭庭璋, 鄭榮和, 吳圓生, 2016, "胎體溫度對滾動阻力影響之研究," SIMULIA Region User

Meeting.

12. W.H. Liu, C.H. Li, Y.Y. Peng and J.H. Cheng, 2015, "Development and Verification of Collision Avoidance and Obstacle Dodge Algorithm for Autonomous Vehicles," Proceedings of the 14th IFToMM World Congress, October 25-30, 2015.
13. W.H. Lu, H.L. Cheng, Y.Y. Peng, J.H. Cheng, 2014, "Development and Virtual Verification of Obstacle Avoidance Control for Autonomous Vehicle," EEVC European Electric Vehicle Congress.
14. J.H. Cheng, Y.Z. Wang, and A. Lu, "Study of Specification Matching Algorithm for Hybrid Power Systems", 12th International Symposium on Advanced Vehicle Control, Tokyo, Japan, 2014.
15. 盧玟翰、鄭榮和，”整合避障與車輛穩定之主動安全控制策略研究”，中華民國第二十屆車輛工程學術研討會，2015 年。
16. W.H. Lu, J.H. Cheng, C.H. Li, & Y.Y. Peng, "Development and Verification of Collision Avoidance and Obstacle Dodge Algorithm for Autonomous Vehicles", IFToMM World Congress, 2015
17. 陳英廷、鄭榮和，”輪型重車液氣壓式懸吊系統之動態與結構分析”，中華民國第二十屆車輛工程學術研討會，2015 年。
18. 丁必陞、鄭榮和，”四旋翼流場分析”，中國機械工程學會第三十二屆全國學術研討會，2015 年。
19. 丁元翔、鄭榮和，”輪胎濕抓地力之研究”，中國機械工程學會第三十二屆全國學術研討會，2015 年。
20. 丁元翔、鄭榮和，”輪胎濕抓地力之研究”，2015 SIMULIA Regional User Meeting , 2015 年。
21. 郭建宏、陳明彥、鄭榮和，”應用於電動車與複合動力車之高效率感應電動機設計研究”，第二十屆車輛工程學術研討會，2015 年。
22. 何政翰、鄭榮和，”電動車動力系統振動分析與優化設計之研究”，2015 SIMULIA Regional User Meeting , 2015 年。
23. 何政翰、鄭榮和，”電動車動力系統振動分析與優化設計之研究”，中華民國第二十屆車輛工程學術研討會，2015 年。
24. 鄭榮和, 林郁荃, 馬浩為, 2014, “兼具降噪及散熱之增程式發電機包覆性結構設計”，中國機械工程學會第 31 屆學術研討會，台中，台灣，12 月 6 日, 2014。
25. 鄭榮和, 何凱萍, 2014, "應用於複合動力車之高功率密度永磁同步馬達設計方法", 中華民國第 19 屆車輛工程學術研討會，桃園,台灣 ,11 月 14 日, 2014。
26. 鄭榮和, 林政勳, 2014, "應用模糊控制於插電式雙軸並聯油混合車之能量管理策略研究", 中華民國第 19 屆車輛工程學術研討會，桃園,台灣 ,11 月 14 日, 2014。
27. 盧玟翰, 李承和, 彭毓瑩, 鄭榮和, 2014, "自主駕駛車輛避障控制及虛擬驗證", 中華民國第 19 屆車輛工程學術研討會，桃園,台灣 ,11 月 14 日, 2014。
28. 郭庭璋, 鄭榮和, 2014, "電動機車輪胎滾動阻力之研究", 中國機械工程學會第 31 屆全國學術研討會論文，台中,台灣 ,2014。
29. 郭庭璋、鄭榮和，”Abaqus 於開發節能輪胎之應用”，第十八屆 ABAQUS 台灣使用者大會，2013 年。
30. 陳宗賢、鄭榮和，”折疊式電動自行車結構輕量化研究”，第十八屆 ABAQUS 台灣使用

者大會，2013 年。

31. 鄭榮和、沈丞佑、林家緯、李盈宏、鐘秋峰、陳瑞麒、唐文元，”大型風機在台灣風場下之安全性研究，”台灣風能學術研討會，國立交通大學，2012。
32. 鄭榮和、沈丞佑、林家緯、李盈宏、鐘秋峰、陳瑞麒、唐文元，”ABAQUS 於風力機結構安全評估之應用”，第十七屆 ABAQUS 台灣使用者大會，2012 年。
33. 鄭榮和、蘇汶航，”動力電池落下衝擊分析研究”，第十七屆 ABAQUS 台灣使用者大會，2012 年。
34. Hsieh, Y.Y., Cheng, J.H., 2012, “An Efficient Optimization Method for Composite Sandwich Structures Using Lamination Parameters in a Combined Gradient- and Evolution-based Algorithm,” Proceedings of 20th Annual International Conference on Composites or Nano Engineering, Beijing, China, July 22-28, 2012.
35. Chang, Y.W. and Cheng, J.H., 2011, "Material Characterization of Polycarbonate under Glass Transition Temperature," the Polymer Processing Society's 27th Annual Meeting, May 10-14 2011, Marrakech, Morocco.
36. Cheng, J.H. , 2011, “Electric Vehicles, Then, Now and Future,” Invited speaker, Third MECO-TECO Joint Science and Technology Commission Meeting.
37. 鄭榮和，”智慧輕型個人電動載具研發介紹”，兩岸新綠能前瞻車輛學術研發交流會，2011 年。
38. 張桓毓、鄭榮和，”電動車用傳動箱體結構最佳化設計方法”，第十六屆 ABAQUS 台灣使用者大會，2011 年。
39. Ying-Wei Hsu, Jung-Ho Cheng, “Traction Control System for All-Wheel-Drive Electric Vehicle based on Estimation of Speed and Friction Force,” 25<sup>th</sup> World Electric Vehicle Symposium, ShenZhen, China, 2010.
40. Jung-Ho Cheng, Tzu-Ting Hsu, Shih-yen Lo, “Research & development of an intelligent personal lightweight electric vehicle,” 25<sup>th</sup> World Electric Vehicle Symposium, ShenZhen, China, 2010.
41. Tzu-Ting Hsu, Jung-Ho Cheng, I-Wei Lan, “Influence of PMSM Magnet Arrangement Effected Motor Torque Analysis and Research,” 25<sup>th</sup> World Electric Vehicle Symposium, ShenZhen, China, 2010.
42. Yi-Hsiang Yang, Jung-Ho Cheng, Yi-Lung Chang, “Computing Battery SoC by Real-time Internal Resistance Determination,” 25<sup>th</sup> World Electric Vehicle Symposium, ShenZhen, China, 2010.
43. Chia-Cheng Wueng, Jung-Ho Cheng, “An Improved Regenerative Braking Control Strategy and System for Dual Motor Electric Vehicle,” 25<sup>th</sup> World Electric Vehicle Symposium, ShenZhen, China, 2010.
44. Yun-Jie Hsu, Jung-Ho Cheng, Yi-Hsiang Yang, “Effect of Vehicle Control Unit Parameters on Electric Vehicle Driving Operation Responses,” 25<sup>th</sup> World Electric Vehicle Symposium, ShenZhen, China, 2010.

45. Sung-Ching Lin, Jung-Ho Cheng, "Design and implementation of PEMFC system and control strategy for hybrid fuel cells scooter," 25<sup>th</sup> World Electric Vehicle Symposium, ShenZhen, China, 2010.
46. 鄭榮和、蘇玉麟，”高海拔環境中電波望遠鏡前端設備檢修車之初步設計與結構分析”，中國機械工程學會第二十七屆全國學術研討會，台北科技大學，2010 年。
47. 鄭榮和、林俊志，”可量產性設計複材車體結構之研究”，中國機械工程學會第二十七屆全國學術研討會，台北科技大學，2010 年。
48. 林松慶、鄭榮和，"應用 Abaqus 於馬達結構設計最佳化"，第十五屆 ABAQUS 台灣使用者大會，2010 年。
49. 馮瑞裕、鄭榮和，”燃料電池複合動力機車於路面震動衝擊之電堆損傷評估”，第十五屆 ABAQUS 台灣使用者大會，2010 年。
50. 馮瑞裕、鄭榮和，”量產型 125cc 機車側滑傾倒碰撞之成員傷勢評估”，第十五屆 ABAQUS 台灣使用者大會，2010 年。
51. Cheng, J.H., 2009, “Development of an Intelligent Personal Lightweight Electric Vehicle,” Taiwan Automotive International Forum and Exhibition.
52. Cheng, J.H. and Li, C.T., 2008, “Backward Energy Management Algorithm for a Solar Car,” World Renewable Energy Congress X and Exhibition, Glasgow, UK.
53. 鄭榮和、吳文獻，"質子交換膜燃料電池電堆模型模擬研究"，中國機械工程學會第二十五屆全國學術研討會，大葉大學，2008 年。
54. 鄭榮和、洪灝庭，"高轉速離心鼓風機設計參數對其性能影響"，中國機械工程學會第二十五屆全國學術研討會，大葉大學，2008 年。
55. Cheng, J.H. and Yeh, H.Y., 2007, “On the Vantage of Superplastic Instability,” Proceedings of the Thirteenth International Symposium on Plasticity (ed. by A.S. Khan), Anchorage, Alaska, USA.
56. 鄭榮和、陳丁銓，"質子交換膜燃料電池之端板改良設計以及相關性能探討"，中國機械工程學會第二十四屆全國學術研討會，中原大學，2007 年。
57. 馮瑞裕、鄭榮和，"膠合元素的實驗驗證與應用"，第十二屆 ABAQUS 台灣使用者大會，2007 年。
58. Cheng, J.H. and Hu, S.Y., 2006, “Innovative Designs for Ducted Wind Turbines,” World Renewable Energy Congress IX and Exhibition, Florence, Italy.
59. Chang, C.K. and Cheng, J.H. , 2006, “ Algebraic conversion of corrected deflections for annular sandwich panels under transverse central loads,” Fourteen Annual International Conference On Composites/ Nano Engineering, Boulder, Colorado, USA.
60. 鄭榮和，"夢想起飛(台大太陽能車澳洲三千里遠征紀錄片)"，第十一屆 ABAQUS 台灣使用者大會，2006 年。

61. 李喬婷、鄭榮和，"比賽用太陽能車之能量管理"，中華民國第十一屆車輛工程學術研討會，大葉大學，2006 年。
62. 林家緯、鄭榮和，"低風阻太陽能車外型設計分析"，中華民國第三十屆全國力學會議，大葉大學，2006 年。
63. 林逸祥、鄭榮和，"演化式結構最佳化方法於車輛設計之應用"，第十一屆 ABAQUS 台灣使用者大會，2006 年。
64. 張智凱、盧毓仁、楊政綱、林晏暉、鄭榮和，“太陽能車複合材料三明治結構車體分析”，第十屆 ABAQUS 台灣使用者大會，2005 年。
65. 盧毓仁、鄭榮和，“太陽能車模具設計分析與製作”，中國機械工程學會第二十二屆全國學術研討會，國立台灣大學，2005 年。
66. 林晏暉、鄭榮和，“太陽能車懸吊零件有限元素分析”，中國機械工程學會第二十二屆全國學術研討會，國立台灣大學，2005 年。
67. **Cheng, J.H. and Yeh, H.Y., 2004**, "Forming limit prediction of powder forging process by the energy-based elastoplastic damage model," **Proceedings of the 8th International Conference on Numerical Methods in Industrial Forming Processes, Columbus, Ohio, USA.**
68. **Hu, S.Y. and Cheng, J.H. 2004**, "Development of an Object-oriented Optimization Software for Industrial Utilization," **Proceedings of the 4th Conference of OPTDES, Japan.**
69. 包漢聰、鄭榮和，“核能電廠反應器組件裂縫成長後之安全評估”，中華民國第二十八屆全國力學會議，國立中山大學，2004 年。
70. 曾炳瑋、鄭榮和，“鈦合金超塑性成形及擴散接合技術研究”，中國機械工程學會第二十一屆全國學術研討會，國立中山大學，2004 年。
71. 陳季暉、鄭榮和，“輪胎模具最佳化逆向設計”，第九屆 ABAQUS 台灣使用者大會，2004 年。
72. 郭進和、鄭榮和，“賽車座椅背後撞擊測試與分析”，第九屆 ABAQUS 台灣使用者大會，2004 年。
73. 楊政綱、鄭榮和，“太陽能車輪圈衝擊分析”，第九屆 ABAQUS 台灣使用者大會，2004 年。
74. 葉宏揚、黃承照、鄭榮和，“能量形式的彈塑性損傷模型及其在粉末鍛造破壞預測的應用”，中華民國第二十七屆全國力學會議，國立成功大學，2003 年。
75. 林國隆、鄭榮和、葉宏揚，“隔膜閥之膜片材質組合與壽命分析”，中國機械工程學會第二十屆全國學術研討會，國立台灣大學，2003 年。
76. 林敬淵、鄭榮和，“被動式可變節距角風力機葉片設計分析”，中國機械工程學會第二十屆全國學術研討會，國立台灣大學，2003 年。
77. 洪偉智、鄭榮和，“以破壞力學觀點探討牙醫複合樹脂黏著強度測試”，中國機械工程學會第二十屆全國學術研討會，國立台灣大學，2003 年。

78. 張智凱、鄭榮和，“太陽能車複合材料三明治結構車體分析”，第八屆 ABAQUS 台灣使用者大會，2003 年。
79. 鄭榮和，“2003 World Solar Challenge”，第八屆 ABAQUS 台灣使用者大會，2003 年。
80. Huang, C.C. and Cheng, J.H., 2001, “Forging analysis of sintered powder compact,” In: Simulation of Material Processing: Theory, Methods and Application, edited by Mori, K.I., Swets & Zeitlinger, Lisse, The Netherlands, pp. 1039-1045.
81. Tsao, J.M., Cheng, J.H. and Lin, C.P., 2001, “The Creep Source and the Volumetric and Deviatoric Viscoelastic models of Periodontal Ligament,” International Conference on Biomechanics combined with the Annual Scientific Meeting of Taiwanese Society of Biomechanics, O35.
82. Tsao, J.M., Lin, C.P. and Cheng, J.H., 2001, “A Nonlinear Model to Simulate the Viscoelastic Behavior of Periodontal Ligament,” International Society of Biomechanics, XVIIIth Congress, O348.
83. 鄭榮和, 許嘉元, 洪正凡, 鍾允昇, 2001, “密封機制與洩漏特型分析,” 中華民國第二十五屆全國力學會議論文摘要集. pp. 140.
84. 鄭榮和, 鍾禮全, 2001, “超塑性 Ti-6Al-4V 板材的失穩分析及破壞判準,” 中華民國第二十五屆全國力學會議論文摘要集, pp.150.
85. 鄭榮和, 林松濤, 2001, “複合材料修補脫膠現象之研究,” 中華民國力學學會第二十五屆全國力學會議論文集, pp. 151.
86. 馬仁宏, 鄭榮和, 2001, “複合材料基材裂紋彈性損傷破壞模型,” 中華民國力學學會第二十五屆全國力學會議論文集, pp. 351.
87. Maa, R.H. and Cheng, J.H., 2000, “A CDM-Based Failure Model for Predicting Strength of Notched Composite,” Proceedings of the Seventh Annual International Conference on Composites Engineering (ed. by D. Hui), Denver, Colorado, USA, pp.573-575.
88. Cheng, J.H. and Chung, L.C., 2000, “Characterization of Instability and Strain Localization for Superplastic Deformation,” *Plastic and Viscoplastic Response of Materials and Metal Forming*, Proceedings of the Eighth International Symposium on Plasticity and Its Current Applications (ed. by A.S. Khan, H. Zhang, and Y. Yuan), Whistler, Canada, pp.472-474.
89. Cheng, J.H. and Chung, L.C., 2000, “The Analysis of Instability and Strain Concentration During Superplastic Deformation,” International Conference on Superplasticity in Advanced Materials, Orlando, FL, USA.
90. 鄭榮和, 許嘉元, 鍾允昇, 2000, “金屬密封塑性變形研究,” 中華民國第二十四屆全國力學會議論文集, pp. ATM 24/F167-174.

91. 鄭榮和, 黎龍芳, 2000, “齒輪幫浦容積效率與公差配合之改善,” 中華民國第二十四屆全國力學會議論文集, pp. ATM 24/F213-220.
92. 鄭榮和, 胡斯遠, 2000, “氣渦輪機組件焊補變形之研究,” 中華民國第二十四屆全國力學會議論文集, pp. ATM 24/F221-228.
93. 黃承照, 鄭榮和, 2000, “粉末燒結材料鍛造成形之破壞分析及預測,” 中華民國第二十四屆全國力學會議論文集, pp. ATM 24/M122-129.
94. 曹榮明, 鄭榮和, 林俊彬, 2000, “牙周膜之黏彈性行為探討,” 中華民國第二十四屆全國力學會議論文集, pp. ATM 24/K49-56.
95. 黃承照, 鄭榮和, 2000, “粉末燒結材料應用於傳動構件之鍛造模擬,” 中國機械工程學會第十七屆全國學術研討會論文集, D054.
96. 鄭榮和, 林家弘, 1999, “輪胎磨耗不均與接地壓力關係之研究,” 中國機械工程學會第十六屆全國學術研討會論文集, pp.75-82.
97. 鄭榮和, 許鴻源, 1999, “壓接模擬與預測,” 中國機械工程學會第十六屆全國學術研討會論文集, pp.91-98.
98. 馬仁宏, 鄭榮和, 1999, “含圓洞複合材料積層板之強度分析,” 中華民國第二十三屆全國力學會議論文集, pp.64-71.
99. 黃承照, 鄭榮和, 黃坤祥, 1999, “粉末燒結孔隙材料之鍛粗分析,” 中華民國第二十三屆全國力學會議論文集, pp.125-132.
100. Cheng, J.H. and Chang, H.Y., 1997, “Manufacture and Strength Characterization of SPF/DB Parts,” *Physics and Mechanics of Finite Plastic and Viscoplastic Deformation*, Proceedings of the Sixth International Symposium on Plasticity and Its Current Applications (ed. by A.S. Khan), Juneau, Alaska, USA, pp.421-423.
101. 黃義雄, 鄭榮和, 1997, “輪胎爆胎的分析與改善,” 中國機械工程學會第十四屆全國學術研討會論文集, pp.382-389.
102. 張朝萬, 鄭榮和, 1997, “纖維複合材料之位移觀點破壞判準,” 中華民國第二十一屆全國力學會議論文集, pp.133-140.
103. 蔡妙慈, 鄭榮和, 1997, “纖維強化複合材料損傷分析,” 中國航空太空學會第三十九屆學術研討會論文集, pp.195-202.
104. Cheng, J.H. and Chang, Z.Y., 1996, “A Displacement-Based Fracture Criterion for Failure Analysis of Unidirectional Composite Materials,” in the Proceedings of the Third International Conference on Composites Engineering, New Orleans, U.S.A., pp.163-166.
105. 梁煒圻, 鄭榮和, 1996, “鋁合金冷溫熱鍛可鍛性分析,” 中國機械工程學會第十三屆全國學術研討會論文集, pp.578-585.

106. 許國洲, 鄭榮和, 1996, “高爾夫球桿頭製作與初始板厚之逆向設計,” 中國機械工程學會第十三屆全國學術研討會論文集, pp.382-389.
107. 高怡久, 鄭榮和, 1996, “三維金屬成型模擬有限元素網格重建,” 中華民國第二十屆全國力學會議論文集, pp.503-510.
108. 張宏宇, 鄭榮和, 1996, “直肋強化中空結構件製作與機械性質測試,” 中國航空太空學會第三十八屆學術研討會論文集, pp.259-266.
109. 鄭榮和, 范姜士炳, 1995, “超塑性成型及擴散接合中空結構件之製作與機械性質探討,” 中國機械工程學會第十二屆全國學術研討會論文集, pp.475-484.
110. 鄭榮和, 陳柏誠, 1995, “尾翼穩定脫殼拋物體之分析與設計,” 中國機械工程學會第十二屆全國學術研討會論文集, pp.919-928.
111. 鄭榮和, 張智源, 1995, “纖維強化複合材料破壞分析--不受纖維方向影響的破壞判準,” 中華民國第十九屆全國力學會議論文集, pp.143-152.
112. 鄭榮和, 陳啟明, 陳水源, 1995, “絕熱塗層對渦輪葉片的高溫力學效應,” 中華民國第十九屆全國力學會議論文集, pp.197-206.
113. Cheng, J.H., Chang, J., 1994, “Finite Element Prediction of Debonding in Fiber Composites,” in the Proceedings of the Third World Congress on Computational Mechanics, Chiba, Japan, pp.1350-1351.
114. Cheng, J.H., Chen, W.J., 1994, “Determination of Stress-Strain Rate Relations for Superplastic Forming Simulation,” in the Proceedings of the Third World Congress on Computational Mechanics, Chiba, Japan, pp.411-412.
115. Cheng, J.H., Lee, S., 1994, “Methods for Resolving Grooving Problems in Parts Manufactured from Combined Diffusion Bonding and Superplastic Forming Processes,” in the Proceedings of the Fifth International Conference on Metal Forming, Birmingham, United Kingdom, pp.249-254.
116. 鄭榮和, 陳文杰, 1994, “Ti-6Al-4V 超塑性行為模式的參數之測定程序,” 超塑性成形與擴散接合學術研討會論文集, 臺灣大學, pp.212-239.
117. 鄭榮和, 唐偉森, 1994, “高爾夫球桿頭之超塑性成形設計與製作,” 中國機械工程學會第十一屆全國學術研討會論文集, pp.181-190.
118. 鄭榮和, 王昉, 1994, “鋁合金之冷鍛可鍛性分析,” 中華民國第十八屆全國力學會議論文集, pp.221-229.
119. 鄭榮和, 黃耀謀, 1994, “超塑性成型中空結構設計與分析,” 中華民國第十八屆全國力學會議論文集, pp.329-337.
120. 鄭榮和, 張鈞綸, 1993, “纖維強化金屬基複合材料微破壞性質之有限元素分析,” 中國機械工程學會第十屆全國學術研討會固力組論文集, pp.267-176.

121. 鄭榮和, 曾國金, 1993, “高動能拋物體發射初期之應力分析,” 中國機械工程學會第十屆全國學術研討會固力組論文集, pp.149-158.
122. 鄭榮和, 陳文杰, 1994, “Ti-6Al-4V 超塑性行為模式的參數之測定程序,” 超塑性成形與擴散接合學術研討會論文集, 臺灣大學, pp.212-239.
123. Yang, S.Y., Cheng, J.H., and Chen, J.S., 1992, “Experimental and Numerical Study on Hot Forming Process -- A Study on Microstructure Evolution and its Relation to Properties,” in the Proceedings of Asia-Pacific Symposium on Advances in Engineering Plasticity and its Application, Hong Kong.
124. Cheng, J.H., 1991, “Superplastic Forming Simulation for Aircraft Engine Components -- Design by Analysis”, in the Proceedings of 1st U.S. National Congress on Computational Mechanics, Chicago.
125. Chuang, T.H., Chang, S.Y., Cheng, J.H., Kao, H.P., and Hsu, S.E., 1991, “Diffusion Bonding/Superplastic Forming of Ti6Al4V/SUS 304/Ti6Al4V,” in *Superplasticity in Advanced Materials*, (ed.) S. Hori, M. Tokizane and N. Furushiro, The Japan Society for Research on Superplasticity, pp.661-666.
126. Cheng, J.H., Finnigan, P.M., Hathaway, A.F., Kela, A., and Schroeder, W.J., 1988, “Real Productivity with Next Generation MCAE Tools,” in the Proceedings of the 5th Chautauqua Conference on Productivity in Engineering and Design, Newport, Rhode Island.
127. Cheng, J.H., Finnigan, P.M., Hathaway, A.F., Kela, A., and Schroeder, W.J., 1988, “Quadtree/Octree Meshing with Adaptive Analysis,” in the Proceedings of the 2nd International Conference on Numerical Grid Generation in Computational Fluid Dynamics, Miami, Florida, pp.633-642.
128. Cheng, J.H. and Finnigan, P.M., 1988, “White Paper on Automated Materials Processing Simulations,” Wright-Patterson Air Force Base, U.S.A.
129. Cheng, J.H., 1986, “Automatic Adaptive Remeshing in Forming Simulation,” in the Proceedings of First World Congress on Computational Mechanics, Austin, Texas, U.S.A.

## (C) 專利

1. 鄭榮和、陳明彥、蔣雨苓, “車輛警示裝置”, 發明專利第I648713號
2. 楊傑、鄭榮和、陳建霖, “馬達散熱結構及散熱方法”, 發明專利第I636644號
3. 許偉倫、鄭文傑、鄭榮和, ”增程式電動車的動力系統及其能量控制方法”, 發明專利第I572504號
4. 蔡佳濃、林政勳、鄭榮和, “離合片組”, 發明專利第I503491號
5. 林似霖、陳榮俊、呂百修、馬浩為、林郁荃、鄭榮和, ”發電機組之包覆裝置”, 發明

專利第M508842號

6. 陳逸萱、呂百修、薛凱帆、何凱萍、郭建宏、鄭榮和，”轉子結構及應用該轉子結構之一體式啟動馬達發電機”，發明專利第M493815號
7. 鄭榮和、羅士硯、謝岳穎，“可攜式電動代步車”，發明專利第099123504號
8. 鄭榮和、謝岳穎、羅士硯，“具結合功能之子母形式載具”，發明專利第099123498號
9. 中華民國專利，「高爾夫球桿頭之超塑性成型製造方法」，專利號碼：327133
10. 美國專利，「Structure for Golf Club Head and the Method of Its Manufacture」，專利號碼：5643108