

研究成果(專利、期刊與會議論文)

➤ 專利

類別	專利名稱	國別	專利號碼	發明人	專利權人	專利權期限
發明專利	石材薄板切割機之鋼帶穩定機構	本國專利/95	專利號: I-245697	陳建昌、 許文政、 張建中、 陳清芳	石材工業發展中心	2024/12/12
新型專利	整合型防水連接器測試機	本國專利/96	M-331663	陳章南、 許文政、 陳建昌..	亮泰公司 陳章南 (產學案)	2019/10/12
新型專利	具安全檢測的電源控制裝置	本國專利/99	M-372529	陳章南、 許文政、 鄭芳松、 許益敏..	亮泰公司 陳章南 (產學案)	2021/07/23
新型專利	自動收縮式車體防護罩	本國專利/98	M-378171	梁峻銘、 許文政、 鄭芳松..	梁峻銘	2021/09/15
發明專利	工具機振動載台	本國專利	專利號: I-480122	許文政、 鍾智賢	國立高雄應用科技大學	2015-0411 2032/7/12
發明專利	放電研削裝置	本國專利	專利號: I-520801	許文政、 王俊捷	國立高雄應用科技大學	2016/02/11 2033/12/23
發明專利	複合式微放電研磨加工機台	本國專利	專利號: I-594826	許文政、 張嘉鴻	國立高雄應用科技大學	2017-0811 2034-0212
發明專利	具備刀具修整功能的放電加工機台	本國專利	專利號: I-571338	許文政 (粘世智- 彭林賢)	國立高雄應用科技大學	2017-0221 2035-1209
發明專利	純水電解加工與複合研磨製程	本國專利	專利號: I-565546	許文政、 黃子源	國立高雄應用科技大學	2017-0111 2035-1228
日本發明專利	放電加工機	日本國專利	6165934 特願號: 2016-134015	許文政 (粘世智)	國立高雄應用科技大學	2017-0501~ 2037-0430
中國標準專利	具備刀具修整功能的放電加工機台	中國標準專利	標準專利號: ZL201610031714.8 證書號: 3251203	許文政 (粘世智)	國立高雄應用科技大學	2018/12/24 2038/12/23
發明	可適應工件形狀的夾持器械	本國專利	專利號: I-641453	許文政、 林彥廷	國立高雄科技大學	2018/11/21~ 2037/10/31

發明	刀具組件及其刀把	本國專利	專利號: I-657890	許文政 (曾一中)	國立高雄科技大學	2019/5/01~ 2038/7/02
發明	振動輔助線切割放電加工模組	本國專利、中、美申請中	專利號: I-715977	許文政 (蘇子修)	國立高雄科技大學	2019/5/08~

➤ Publication Lists of Albert Wen_Jeng Hsue

➤ WOS index: (HSUE AWJ, Albert Wen-Jeng Hsue After 2000, and HSUE WJ Before 2000)

- [1] [Albert Wen-Jeng Hsue*](#), Zih-Siou Su, Yang-Lei Lin, "Dual-Axial Ultrasonic Assisted Wire-EDM Process with Vibration Exerted through the Upper Guide", *Procedia CIRP*, 95, 324-329, (2020). (EI) (originally, SCIE)
- [2] [Albert Wen-Jeng Hsue*](#), Chih-Fan Tsai, Torque Controlled Mini-Screwdriver Station with A SCARA Robot and A Machine-Vision Guidance, IEEE Xplore (under final proving), 2020. Best paper Prize of the Int. Symposium of Computer Control and Consumer Products, IS3C.
- [3] [Albert Wen-Jeng Hsue*](#), Yi-Zhong Zheng. "A novel flexible tool with rotary ultrasonic spindle for fine grinding of tungsten carbide", *MATEC Proceedings Web of Conferences*, V185, 1801-1810, (2018).
- [4] [Albert Wen-Jeng Hsue*](#), Tian-June Hao, Tsung-Ming Lin. "Pulse Efficiency and Gap Status of Rotary Ultrasonic Assisted Electrical Discharge Machining and EDM Milling", *Procedia CIRP*, 68:783-788, (2018). (SCIE)
- [5] [Albert Wen-Jeng Hsue*](#), Yu-Fu Chang, "Toward synchronized hybrid micro-EDM grinding of micro-holes using helical taper tools formed by Ni-Co/ diamond co-deposition". *Journal of Materials Processing Technology*, V.234: 368-382 (2016), First online 7 April. (doi:10.1016/j.jmatprotec.2016.04.00) (SCI) (IF=2.236, Rank in **ENG, MANUFACTURING** 7/40, **ENG, INDUSTRIAL**: 5/43)
- [6] [Albert Wen-Jeng Hsue*](#), Tian-Jun Hao, "Comparison on gas bubble and pulse trains of deep-cavity electrical discharge machining with/without rotary ultrasonic assistance". *International Journal of Advanced Manufacturing Technology* (2016), First online 19 March. (doi:10.1007/s00170-016-8557-9) (SCI) (IF=1.458 & 1.693 in 5 Year, Rank in **ENG, MANUFACTURING**: 17/40 in 2014 & 10/39 in 2013)
- [7] [Albert W.-J. Hsue*](#), M.-T. Yan, C.-H. Chung, "Effective Pulses Discriminator and Control Strategy for High Speed Direct-Drive Electrical Discharge Machining", *Journal of the Chinese Society of Mechanical Engineers*, V.34 (2): 167-176, 2013. (SCI) (IF=0.163 in 2012 & 0.17 in 5 years, Rank in **ENGINEERING, MECHANICAL**: 124/128) 引用/使用次數:1/4
- [8] S. F. Hsieh, [Albert W. J. Hsue](#), S. L. Chen, M. H. Lin, K. L. Ou, EDM surface characteristics and shape recovery ability of Ti35.5Ni48.5Zr16 and Ni60Al24.5Fe15.5 ternary shape memory alloys, accepted by *Journal of Alloys and Compounds*, Vol. 571, 63-68, 2013. (SCI) DOI: dx.doi.org/10.1016/j.jallcom.2013.03.111, IF=2.726 & 2.407 in 5 Year, Rank in **METALLURGY & METALLURGICAL ENG**: 5/75 in 2013) 引用/使用次數:1/4 (be Cited in at least 1 surveying paper)
- [9] S.-T. Chen, [Albert W.-J.C. Hsue*](#), T.-S., Luo, "Fabrication of Mass Micro-Holes Using the Hybrid Precision Extruded-Wax Electroforming and Micro-EDM Processes", *Journal of the Chinese Society of Mechanical Engineers*, V.33 (4): 349-356, 2012. (SCI) (IF=0.274 in 2011 & 0.303 in 5 Year, Rank in **ENGINEERING, MECHANICAL**: 114/125) 引用/使用次數:1/12
- [10] C.-H. Chung*, M.-S. Chen, [Albert W-J Hsue](#)," A NEW ADAPTIVE CONTROL FOR PERIODIC TRACKING/DISTURBANCE REJECTION", *Asian Journal of Control*, Vol.14(3): 827-834, 2012. (SCI) , IF=1.556, Rank in **ENG, AUTOMATION & CONTROL SYS**: 25/58 引用/使用次數:4/19
- [11] Fang-Sung Cheng, Albert Wen-Jeng Hsue, "Sub-wavelength structures (SWSs) on the PC film for antireflection by using gas-assisted hot embossing", *Advanced Science Letters*, Vol.5:1-5, 2012. (EI, originally SCI)
- [12] [Albert Wen-Jeng Hsue*](#), Jun-Jie Wang, Chia-Hun Chang, Yin Chuan, "Removal Analysis for multi-axial WEDM and Ultrasonic Assisted WEDG Processes with Augmented Rotational Axes", *Advanced Materials Research* Vol. 579, 201-210, 2012, (DOI:10.4028/www.scientific.net/ AMR.579. 2012) (EI)

- [13] C.-C. Peng, Albert W.-J. Hsue and C.-L. Chen, "Variable Structure Based Robust BackStepping Controller Design for Nonlinear Systems", *Nonlinear Dynamics*, V.63, pp.253-262, 2011. (SCI) IF=2.849, Rank in **ENG, MECHANICAL**: 7/130, in **MECHANICS**: 8/137, 引用/使用次數:11/11
- [14] Albert W.-J. Hsue, C.-H. Chung, "Novel Jump Control for Debris Processes of Electrical Discharge Machining with Direct-Drive Spindle", *Journal of Advanced Materials Research*, Vol.97-101, pp. 4178-4181, 2010. (EI)
- [15] Albert W.-J. Hsue, "Improvement of Wire-EDM Finishing Processes through Adaptive Fuzzy Logic Control Algorithm", *Journal of Material Science Forum*, Vol. 594, pp.407-414, 2008. (EI, originally SCIE)
- [16] C.-S. Chang, L.-R. Hwang, Albert W.-J. Hsue, "A Study of Cutting Temperatures in Turning of Glass Fiber Reinforced Plastics Materials", *Journal of Material Science Forum*, Vol.594, pp. 193-213, 2008. (EI, originally SCI)
- [17] Albert W.J. Hsue, M.T. Yan, "Comparison on Linear Synchronous Motors and Conventional Rotary Motors Driven Wire-EDM Processes", *Journal of Materials Processing Technology*, V.192-193, 478-485, 2007. (SCI) IF=2.236, Rank in **ENG, MANUFACTURING** 7/40, **ENG, INDUSTRIAL**: 5/43) 引用/使用次數:4/8
- [18] Albert Wen-Jeng Hsue, Wen-Cheng Wei, "Fundamental Analysis and Implementation of Wire Electrical Discharge Machining Processes with Augmented Cylindrical Axis", *Proceeding of Asian Electrical Machining Symposium '07*, Nago ya, Japan, Nov. 2007. (日本電氣加工學會誌)
- [19] Albert W.-J. Hsue, H.-C. Su, "Removal analysis of WEDM's tapering process and its application to generation of precise conjugate surface", *Journal of Materials Processing Technology*, V.149, pp.117-123, 2004. (SCI) IF=2.236, Rank in **ENG, MANUFACTURING** 7/40, **ENG, INDUSTRIAL**: 5/43) 引用次數:7
- [20] Albert W.-J. Hsue, "Feedback Control of WEDM Process for Improving Its Removal Dynamics and Finishing Quality", *Int. Journal of Manufacturing Science and Technology*, Vol.6-2, pp.46-53, 2004. (EI)
- [21] (Albert) W. J. Hsue, Y. S. Liao and S. S. Lu, "A Study of Corner Control Strategy of Wire-EDM Based on Quantitative MRR Analysis", *International Journal of Electrical Machining*, No.4, pp.33-39, 2000. (EI)(至目前最專業之放電加工專業期刊)
- [22] (Albert) W. J. Hsue, Y. S. Liao, and S. S. Lu, "Fundamental Geometry Analysis of Wire Electrical Discharge Machining in Corner Cutting", *International Journal of Machine Tools & Manufacture*, V.39(4), pp.651-667, 1999. (SCI) 其impact factor排名於製造領域前3名) IF=3.037, Rank in **ENG, MANUFACTURING** 3/40, 引用次數:20 (be Cited in at least 2 surveying papers)
- [23] J. T. Huang, Y. S. Liao, and W. J. Hsue, "Determination of Finish-Cutting Operation Number and Machining-Parameters Setting in Wire Electrical Discharge Machining", *Journal of Materials Processing Technology*, Vol.87(1-3), pp.69-81, 1999. (SCI) IF=2.236, Rank in **ENG, MANUFACTURING** 7/40, **ENG, INDUSTRIAL**: 5/43) 引用次數:47 (be Cited in at least 2 surveying papers)

➤ Int. Conference papers:

1. "The Stability and Accuracy of Wire-EDM Process through Circularly Ultrasonic Vibration Modules", Albert W.-J. Hsue*, Y.-L. Lin, and Z.-S. Su, Proc. of the 8th International Conference of Asian Society for Precision Engineering and Nanotechnology (ASPEN-2019), Nov 12-15, Matsue, Japan, 2019.
2. "A novel flexible tool with rotary ultrasonic spindle for fine grinding of tungsten carbide", Albert Wen-Jeng Hsue*, Yi-Zhong Zheng, Proc. of International Conference on

Precision Machinery and Manufacturing Technology (ICPMMT-2018), Feb 4-9 Auckland, New Zealand, 2018.

3. “Performance and Wear of Micro Diamond Tools for Hybrid Micro Electrical Discharging with Grinding Processes”. Albert Wen-Jeng Hsue, Yu-Fu Chang, 2018 International Conference on Engineering Tribology and Applied Technology, (ICETAT-2018), Nov 14-15, Taipei, Taiwan, 2018.
4. 漸進修整刀具電極之機構與達成超高精度之放電銑削加工法, 許文政、彭林賢、粘世智, 2018 臺灣精密工程科技研討會-TPTW2018 暨川寶科技論文競賽, Nov. 12 台中市 中興大學, 科技部計畫:105-2221- E-151-019, 2018.
5. “Linear Scanner Associated with A Scattering Mechanism for AOI of **Ultrasonic Welded Plastics**”, Albert W-J Hsue, Sam C-J Shen, and David C-J Chao, Proceeding of The 14th Int. Conference on Automation Technology (Automation 2017), Dec 8-10, Kaohsiung, Taiwan, 2017.
6. “An Automatic Optical Inspection of **Plastic Parts’ Step-Error and In-plane Deviation** Associated with a Novel Mechanism and Laser Module”, Albert Wen-Jeng Hsue, Sam Chih-Jen Shen, (IEEE ICASI 2017), *Proceeding of International Conference on Applied System Innovation*, Sapporo, Japan, May 13-16, 2017.
7. “Micro Moulding with **Electrochemical Machining in Pure Water and in Mixed Alumina Powder**”, Albert W-Jg Hsue, Z-Y Huang, *Proc. of The 2017 World Congress on Micro and Nano Manufacturing (WCMNM-2017), a joint conf. the 12th ICOMM-2017, the 13th conf. 4M-2017, and the IFMM'17*, Kaohsiung, Taiwan, Mar. 27-30, 2017.
8. “Tool wear and gap Status of rotary ultrasonic assisted electrical discharge machining”, Albert Wen-Jeng Hsue, Tsung-Ming Lin, *Proceedings of 2017 Int. Symp. of Computational Numerical Control Machining*, Hsinchu, NTHU, Taiwan, Mar 23-25, 2017.
9. “Discharge .Coating on Mold Steel Surface through Wire-EDM by Nickel-coated Copper Wire and Conventional Brass Wire”, Albert Wen-Jeng Hsue, Sheng-Hsuan Chiu, Yang-Lei Lin, *Proceedings of 2016 Int. Conf. on Advanced Manufacturing (ICAM 2016)*, 16th-19th Dec, Nantou, Taiwan, 2016.
10. “High Precision Electrical Discharge Machining and EDM Milling Processes with an On-Line Dressing Tool”, Albert W.-J. Hsue, S.-C. Nian, L.-S. Peng, *IEEE 2016 Proceeding of International Conference on Applied System Innovation (IEEE ICASI 2016)*, 28th May-1st June, Okinawa, Japan. 2016.
11. “Hybrid Micro ECM-Milling with Deionized Water and Al₂O₃ Powder and Simultaneously Polishing”, Albert Wen-Jeng Hsue, Zih-Yuan Huang, *Proceeding of The 13th Int. Conference on Automation, (ICAT-2015)* Nov. 13-15, Taipei, 2015.
12. “Hybrid Electrical Discharge Drilling and Simultaneous Grinding with A High Speed Spindle and Micro Diamond Tool”, Albert Wen-Jeng Hsue, Yu-Fu Chang, S-S Chou, *Proceedings of Int. Conference on Computing and Precision Engineering, (ICCPE)*, Nov. 27-29, Nantou, 2015.
13. “Bubbles, Debris and Pulse Trains in Hybrid Processes of Rotary Ultrasonic Electrical Discharge Machining”, Albert Wen-Jeng Hsue, Tian-June Hao, Chien-Jou Shu, *SPINTECH Technology Thesis Award (全研工程科技論文競賽)*, 11 月 28 日, 南投, 2015.
14. “Observation of the Bubbles and Debris in Deep-Cavity EDM and Improvement by Application of A Novel Rotary Ultrasonic Spindle”, Albert Wen-Jeng Hsue, Tian-June Hao, Jeng-Yu Wang, *Proceedings of Int. Conference of Asian Society for Precision Engineering and Nanotechnology (ASPEN-2015)*, Aug 15-19, Harbin, P.R. China, 2015.

15. "Co-deposition of Ni-Co / Diamond Micro-Tools & Its Application to Hybrid EDM-Grinding for Precision Micro-Holes", Albert Wen-Jeng Hsue, Yu-Fu Chang, *Proceeding of Int. Conference of Precision Positioning Technology (ICPT-2014)*, Kitakyushu, Japan, Nov 18-21, 2014.
16. "Ultrasonic Assisted High Efficiency Electrical Discharge Machining and its Gap Status Viewed from Spatial-Time Relationship", Albert W.-J. Hsue, C.-Y. Wang, *Proceeding of Int. Conference on Advanced Manufacturing, (ICAM-2014)*, Chiayi, Taiwan, Sep. 30 - Oct 2, 2014.
17. "Analysis and Tools Design of Synchronized Hybrid-EDM Grinding for Precision Micro Machining", Albert Wen-Jeng Hsue, Chia-Hun Chang, Jung-Chou Hung, *Proceeding of Int. Conference on Advanced Manufacturing Technology, (ICAM-2013)* Taipei, Taiwan, Sep. 23-25, 2013.
18. "Analysis Experiments of Synchronized Micro-EDM Grinding for Micro Fine Surfaces", Albert Wen-Jeng Hsue, Chia-Hun Chang, *Proceeding of the 5th Int Symposium Nanoscience and Nanotechnology (NNS-2013)*, Surabaya, Indonesia, 2013.
19. "Milling Tool of Micro-EDM by Ultrasonic Assisted Multi-axial Wire Electrical Discharge Grinding Processes", Albert Wen-Jeng Hsue, Jun-Jie Wang, Chia-Hun Chang, *Proceeding of Int. Manufacturing Science and Engineering Conference (MSEC 2012 joint ASME conference with NAMRC)*, South Band, IN, USA, 4-8 June, 2012.
20. "Removal Analysis for multi-axial WEDM and Ultrasonic Assisted WEDG Processes with Augmented Rotational Axes", Albert Wen-Jeng Hsue, Jun-Jie Wang, , Chia-Hun Chang, *Proceeding of the 4th International Conference on Advanced Manufacturing, (ICAM- 4th)*, Jiaosi, Taiwan, MAR 04-08, 2012.
21. "振動輔助線放電研削微螺旋刀具與高速微放電加工分析", 許文政*、王俊捷2012全國精密製造研討會, 國際製造工程師學會台北分會, 台中, 民國101年11月, 2012.
22. "行星式放電加工配合黏彈性粒子拋光模具法", 許文政、張嘉鴻、王俊捷、劉庚辛, 2012 精密機械與製造科技研討會論文集, 屏東, 民國101年5月, 2012.
23. "Ultrasonic Assisted Multi-Axial Wire Electrical Discharge Grinding (WEDG) Processes for Micro-EDM and Cylindrical-WEDM", Albert W.-J. Hsue, and W.-C. Wei, Yin Chuan, *Proc. of the 16th International Symposium for ElectroMachining (ISEM-16)*, Shanghai, China, 20th-23th, April, 2010.
24. "Implementation and Analysis of Multi-Axial Thin Wire Electrical Discharge Machining for Meso-Scale/Micro Parts", Albert W.-J. Hsue, and W.-C. Wei, Yin Chuan, *Proc. The 5th International Conference on Micro Manufacturing (ICOMM/4M-2010)*, Wisconsin Madison, U.S.A., 5th-8th April. 2010.
25. "The research of multi-wires EDG technology in the manufacture of micro-electrode", Yin Chuan, Jack C. Y. Lin, Albert W. J. Hsue, *Proc. The 5th International Conference on Micro Manufacturing (ICOMM/4M-2010)*, Wisconsin Madison, U.S.A., 5th-8th April. 2010.
26. "Augmented Cylindrical Axis to Macro Wire Electrical Discharge Machining (WEDM) and WEDG Processes", Albert W.J. Hsue, and W.-C. Wei, *Proc. the 10th International Conference on Automation Technology (Automation 2009)*, NCKU, Tainan, 27th-29th, June, 2009.
27. "Control Strategy for High Speed Electrical Discharge Machining (Die-sinking EDM) Equipped with Linear Motor", Albert W.-J. Hsue, and C.-H. Chung, *Proc. IEEE/ASME International Conference on Advanced Intelligent Mechatronics (IEEE/ASME AIM 2009)*, Singapore, 14th-17th, July, 2009.
28. "線性馬達驅動放電加工機之加工速度與排渣特性", 許文政, 鍾志鴻, 顏木田, 第七屆全國精密製造暨國際製造工程學會論文集(SME 2008), 台南 崑山科技大學, 民國97年

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29. "Fundamental Analysis and Implementation of Wire Electrical Discharge Machining Processes with Augmented Cylindrical Axis", Albert Wen-Jeng Hsue, Wen-Cheng Wei, *Asian Electrical Machining Symposium '07*, (AEMS '07), Nagoya, Japan, Nov. 2007.
 30. "Design of Linear Motors Driven Electrical Discharge Machine Supported with Granite Structure", Albert W.-J. Hsue, C.-C. Chen, and M.-T. Yan, *Proc. of the 15th International Symposium for ElectroMachining (ISEM-XV)*, Pittsburgh, U.S.A., April, 2007.
 31. "Comparison on Performance of Linear Motors and Conventional Rotary Motors Driven Wire-EDM Processes", Albert W.J. Hsue, M.T. Yan, *Proc. of the 7th Asia Pacific Conference on Materials Processing (APCMP 2006)*, Singapore, June, 2006.
 32. "Adaptive Fuzzy Control and Finishing Improvement of Wire-EDM through Gap-Width Monitoring", Albert W.-J. Hsue, *International Conference on Manufacturing, Machine Design and Tribology (ICMDT-2005)*, Seoul, South Korea, June, 2005.
 33. "Removal analysis of WEDM's tapering process and its application to generation of precise conjugate surface", Albert W.-J. Hsue, H.-C. Su, *Proc. of the 14th International Symposium for Electro-Machining (ISEM-14)*, Edinburgh, U.K., pp.117-123, April, 2004.
 34. "Generalized Material Removal Analysis of CO2 Laser and Application to Engraving of Platelet Work", Albert W.-J., Hsue, Hsin-Cheng Su, *Proc. of Int. Conference on Mechatronics Technology 2003*, (ICMT-2003), Taipei, Taiwan, Dec. 2003.
 35. "Feedback Control of Wire-EDM's Machining Accuracy through Machining Load", W. J. Hsue (Albert), *Proc. of the IEEE/ASME Conference on Advanced Manufacturing and Technology Education (IEEE/ASME AMTE-2002)*, Chia-Yi, Taiwan, August, 2002.
 36. "A Preliminary Study of Tactile Perception on Soft Tissues Using a Manipulator Probe", 19th CSME annual conference, 顏炳郎, 許文政, 第十九屆中國機械工程學會學術研討會論文集, E8-001, 虎尾技術學院, 民國91年11月, 2002.
- *Other Conference paper before 2001 was omitted.

Editor board member: **International journal of advanced intelligent manufacturing technology,**

Journal reviewer: **Micromachines,
Int. Journal of Advanced Manufacturing Technology,
Advances in Mechanical Engineering,
Composites Part B: Engineering,
Journal of the Chinese Mechanical Engineers,
Transaction of Nonferrous Metal Society, China.**