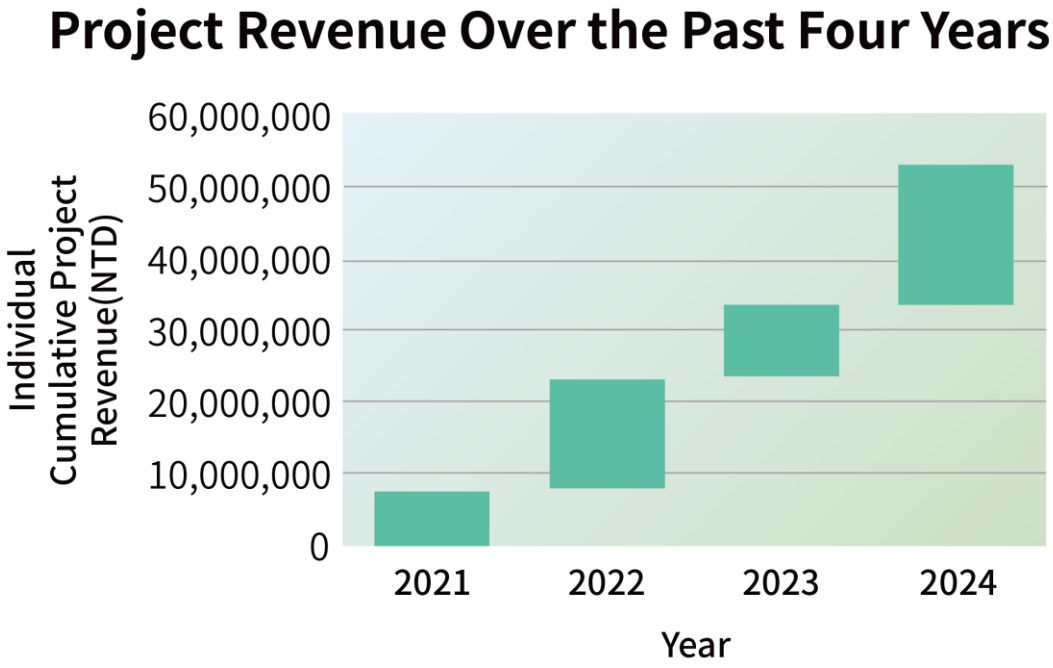
洪國永教授個人資料

1. 開發濕熱背心專利技術，於 2024.11 月技轉台塑生醫產品上市
2. 開發康美(ComMed)人工牙根，協助長庚醫學科技公司取得台灣衛生福利部(2015.1)與美國 FDA(2015.6)上市許可
3. 中國機械工程學會 101 年度 優秀青年工程教授獎
4. 獲得第七屆(2011)、十一屆(2015)上銀機械碩士論文獎
5. 連續多年獲得科技部獎勵優秀人才榮譽
6. 中等學校教師資格-電機科、數學
7. 可攜式血糖計、ECG 開發經驗
8. 主持 103 年度專題研究計畫，計畫名稱: 整合創新微分光鏡元件設計暨製造技術之新穎微投影系統研究 III，參加科技部工程司自動化學門 103 年度專題研究計畫成果發表會榮獲計畫成果優秀海報獎(104.11)
9. 2012 全國技專校院學生實務專題製作競賽暨成果展創業類群全國第一名、2011 榮獲機械與動力學群 全國第二名(2011.5.28)、2013 機械與動力機械群全國第三名(2013.5.25)
10. 勞動部機電整合職類乙、丙級技術士技能檢定術科測試監評、TQC+基礎零件設計證照(Pro-E Creo 2.0)、ORCAD PCB 證照

著作及執行研究計畫目錄

近年之產學案集中在智慧化、自動化控制系統、自動化設備及醫療器材開發，從牙周再生膜(第 21 屆國家新創獎，與基隆長庚陳志豪醫師及南亞研發中心合作)自有技術、協助廠商開發量產型設備、濕熱敷衣商品化(技轉由台塑生醫於 113 年 11 月 20 上市)...等技術，皆可證明申請人具有完整醫療器材或設備開發之能力，且能夠將技術轉化為產品，符合所成立智慧醫療研究中心之發展方向。2022 年之產學案金額達到約 968 萬元，2023 年亦有約 660 萬元，2024 年更超過 2300 萬元， 且有超過 300 萬技轉案(濕熱敷);無人載具技術之技轉洽談中，顯示團隊產學實踐能力極佳，能獲得廠商認同。目前已完成多台高精度自動化及 AOI 光學檢測設備， 協助廠商用於生產中之瑕疵檢測(檢測精度達 10 um，效能 14 個工件/分鐘)。醫療器材方面，抗沾粘膜已經過豬隻動物試驗，抗沾黏成效良好，著手送醫材認證程序、牙周再生膜已完成大白兔動物試驗。

洪國永教授具有 EE 與 MEMS 之背景，曾獲得中國機械工程學會 101 年度優秀青年工程教授獎、上銀機械碩士論文獎、第 19,21 屆國家新創獎...等榮譽，亦有專書電子學基礎理論、電子學（進階應用）（第十版）（楊棧雲、洪國永、張耀鴻編譯）出版。早期研究之成果主要表現於:人工牙植體表面改質技術[已由合作廠商建置量產線及申請 GMP 通過(GMP 1067, 2014.4.1)、醫療器材上市許可(樣品皆經德國 TUV ISO 10993 認證通過)衛部醫器製字第 004831 號通過(2015.1.23)及第三類醫療器材 FDA 510(k)通過 (2015.6.15)]、生醫微米光機電系統(Bio Micro Opto-Electro-Mechanical Systems) 及微型化光學關鍵零組件之設計及製造。



(一)期刊論文

-Hao-Yen Liao, Kuo-Yung Hung*, Cheng-Shane Chu, and Yang-Shun Wu, "High-Precision Air Leakage Monitoring in Portable Chest Drainage Systems Using an Intrapleural Pressure Difference and Dynamic Pressure Gradient Modulation," submitted to Measurement

-Princess Joy Naig, Zih-Yin Kuo, Yang-Shun Wu, Kuo Yung Hung*, "Eco-Engineered Nanofibers for skincare: Triglyceride Adsorption Efficiency of Bamboo-derived Carbon Nanoparticles in Biodegradable Facial Masks," submitted to Surfaces and Interfaces

1. Elayaperumal Sujithkrishnan, Perumal Elumalai, Ali Akremi, Thamraa Alshahrani, Umamahes wari Rajaji*, Kuo-Yung Hung*, Facile microwave-assisted solvothermal synthesis of Cu-MOF/Graphitic carbon nitridemodified electrode for the electrochemical detection of nitrofurantoin, Microchemical Journal, Volume 215, August 2025, 114102, https://doi.org/10.1016/j.microc.2025.114102
2. Parthasarathi Manimaran, Shen-Ming Chen, Samar A. Aldossari, Umamaheswari Rajaji*, Kuo-Yung Hung*, Elevated temperature fabrication of copper sulfide nanosphere implemented boron carbide nanocomposite for hyper-sensitive detection of sulfadiazine in water and urine samples, Journal of Colloid and Interface Science, Volume 692, 2025, 137503, ISSN 0021-9797, https://doi.org/10.1016/j.jcis.2025.137503. (https://www.sciencedirect.com/science/article/pii/S002197972500894X)
3. Naushad Ahmad Khan, Yi-Han Kuo, Shang-Yang Yu, Yun-Cheng Ku, **Kuo-Yung Hung**, Jiunn-Woei Liaw, Laser-Induced Photochemical Reduction for the Production of Gold and Silver Nanoclusters on Gold Nanostructures, Results in Physics, 70 (2025.2.9) 108152.
4. Princess Joy Naig, Zih-Yin Kuo, Min-Fan Chung, Chih-Hao Chen, Chi-Yun Wang and **Kuo-Yung Hung***, Enhancing Bone Regeneration Using Blended Poly(L-lactide-co-D, L-lactide) and β-Tricalcium Phosphate Nanofibrous Periodontal Biodegradable Membranes, Polymers, *Polymers* 2025, *17*(3), 256; https://doi.org/10.3390/polym17030256 (registering DOI).
5. YW Cheng, YY Lin, CL Liu, KY Hung, NR Barveen, CH Tseng, PY Cheng, A Hardiansyah, Zwitterionic functional layer modified electrospun polyurethane nanofiber membrane incorporating silver nanoparticles for enhanced antibacterial applications, Surface and Coatings Technology, Volume 484, 130865, 30 May 2024.
6. Wen-Hui Kuan, Yi-Show Hu, Chen-Yi Chiu, **Kuo-Yung Hung** and Shan-Shan Chou, "Microwave-Catalyzed Conversion of Phenolic Resin Waste to Activated Carbon and Its Applications for Removing Ammonium from Water," Catalysts, Volume 11, Issue 7, 783, 2021.
7. Haidee Mana-ay, Chiu-Yen Wang, **Kuo-Yung Hung**, Pin-Yi Chen, Chi-Shun Tu, Cheng-Sao Chen, "E-field poling effect on photosensitivity of samarium-doped bismuth ferrite ceramics," Ceramics International, Volume 47, Issue 9, pp. 12574-12582, 1 May 2021 **(SCI, Impact Factor:**

3.45, Ranking: 2/27).

8. Pin-Yi Chen, Sheng-Fen Wang, R. R. Chien, Chi-Shun Tu, Kuei-Chih Feng, Cheng-Sao Chen, **Kuo-Yung Hung**, V. Hugo Schmidt, "Evolution of the microstructural and mechanical properties of hydroxyapatite bioceramics with varying sintering temperature", Ceramics International, Volume 45, Issue 13, pp. 16226-16233, 2019 **(SCI, Impact Factor: 3.45, Ranking: 2/27)**.
9. Yun-Ju Chuang, **Kuo-Yung Hung*,** Yi-Wei Tsai, "Design, fabrication, and characterization of a multidimensional prism", Applied Optics, Vol. 58, No. 7, 2019 (SCI, Impact Factor: 1.973). **Atomic and Molecular Physics, and Optics (Q2)**
10. **Kuo-Yung Hung***, Hong-Chen Lai, Yung-Chin Yang, and Hui-Ping Feng, "Characterization of Hydroxyapatite (HA) Sputtering Targets by APS Methods", Coatings, 7(11), 197, 2017 (SCI, Impact Factor:2.175).
11. **Kuo-Yung Hung***, Yi-Chih Lin and Hui-Ping Feng, "The Effects of Acid Etching on the Nanomorphological Surface Characteristics and Activation Energy of Titanium Medical Materials", Materials, 10, 1164, 2017 (SCI, Impact Factor: 2.654).
12. **Kuo-Yung Hung***, Hong-Chen Lai and Hui-Ping Feng, "Characteristics of RF-Sputtered Thin Films of Calcium Phosphate on Titanium Dental Implants", Coatings, 7(8), 126, 2017 (SCI, Impact Factor:2.175).
13. H. C. Lai, H. H. Tsai, **K. Y. Hung***, H. P. Feng*, "Fabrication of Hydroxyapatite Targets in RF-sputtering for Surface Modification of **Titanium Dental Implants**", Journal of Intelligent Material Systems and Structures, Vol. 26, 9: pp. 1050-1058, June 2015. (SCI, Impact Factor:2.172, Ranking:68/251 in Materials Science, Multidisciplinary)
14. Xu-Hang Liu, His-Fu Shih, **Kuo-Yung Hung**, and Chuen-Lin Tien, "Liquid Crystal Compensator Using Dual-Layer Electrodes for the Optical Pickup Head Application," IEEE Trans. on Magn., Vol. 50, No. 7, July 2014.(SCI IF:1.243)
15. Yun-Ju Chuang, Shih-Hao Huang, Ying-Chuan Chen, **Kuo-Yung Hung* (Corresponding Author)**, "Application of the Inclined Exposure and Molding Process to Fabricate a Micro Beam-Splitter with Nanometer Roughness," Microsystem Technologies-Micro-and Nanosystems-Information Storage and Processing Systems, Vol. 19, Issue 3, pp. 461-470, 2013.03. (SCI IF:1.195)
16. **Kuo-Yung Hung***, Sung-Cheng Lo, Chung-Sheng Shih, Yung-Chin Yang, Hui-Ping Feng‡, Yi-Chih Lin, "Titanium Surface Modified by Hydroxyapatite Coating **for Dental Implants**," surface and coatings technology, Volume 231, 25, pp. 337–345, Sep. 2013. (SCI, Impact Factor:2.374)
17. **Kuo-Yung Hung***, Chun-Fu Lee, Yi-Wei Tsai, "Design and Fabrication of a Novel Prism for Micro-Optical System," *Applied Optics,* Vol. 51, No. 16, June 2012. (SCI IF: 1.707)

18. S. H. Huang, T. C. Chien, and **K. Y. Hung**, “Selective deposition of electrospun alginate-based nanofibers onto cell-repelling hydrogel surfaces for cell-based microarrays”, Current Nanoscience, , Volume 7, Number 2, , pp. 267-274, April 2011. (SCI IF= 1.47)
19. Y. J. Chuang, T. H. Liao, P. R. Chen, **K. Y. Hung* (Corresponding Author)**, “Experimental Investigation of a Display Chip Incorporating an Electrostatic Actuating Polymer Membrane,” Journal of Micromechanics and Microengineering, 20,085020, July 2010. (SCI IF: 2.281)
20. Shih-Hao Huang, Hui-Jung Hsueh, **Kuo-Yung Hung**, “Configurable AC electroosmotic generated in-plane microvortices and pumping flow in microchannels,” Microfluidics and Nanofluidics, DOI 10.1007/s10404-009-0453-2, Volume 8, Number 2, pp. 187-195, February 2010. (SCI IF: 3.507) Subject category "Instruments & instrumentation": Rank 3 of 61, Subject category "Nanoscience & Nanotechnology": Rank 20 of 64, Subject category "Physics, fluids & plasmas": Rank 3 of 31)
21. **Kuo-Yung Hung***, Yi-Ko Chen, Shih-Hao Huang, Der-Chi Shye, “Molding and Hot Forming Techniques for Fabricating Plastic Aspheric Lenses with High Blue-Light Transmittance,” Microsystem Technologies-Micro-and Nanosystems-Information Storage and Processing Systems, Volume 16, Issue 8, pp. 1439-1444, 2010. (SCI IF: 1.071). 113/247 in Engineering, Electrical & Electronic
22. **Kuo-Yung Hung***, Chun-Der Cheng, Ying-Chuan Chen, “Thermal-Deformation (Mechanical) Analysis of the Polymer Micro-Mirror Optic Device," Microsystem Technologies-Micro-and Nanosystems-Information Storage and Processing Systems, Volume 16, Issue 8, pp. 1643-1647, 2010. (SCI IF:1.071).
23. **K. Y. Hung***, Y. J. Chuang, T. H. Liao, Der-Chi Shye, Shih-Hao Huang, “Research on Electrostatic Actuator Polymer Thin-Film for Controlling Light Scattering Phenomena,” Microsystem Technologies-Micro-and Nanosystems-Information Storage and Processing Systems, Volume 16, Issue 8, pp. 1649-1655, 2010. (SCI IF:1.071).
24. S. H. Huang, Z. Y. Yu, C. K. Lin, and **K. Y. Hung**, "Dynamically adjustable three-dimensional gray masks operated by electrostatic force modulation for the fabrication of microlens arrays in microchannels", Journal of Micro/Nanolithography, MEMS, and MOEMS (JM3), 9, 043002, 2010 (SCI IF: 1.194) (103/247 Engineering, Electrical & Electronic)
25. **Kuo-Yung Hung***, Chao-Chih Fan, Fan-Gang Tseng, and Yi-Ko Chen, “Design and fabrication of a copolymer aspheric bi-convex lens utilizing thermal energy and electrostatic force in a dynamic fluidic,” Optics Express Vol. 18, Iss. 6, pp. 6014–6023, March 2010. (SCI IF: 3.753) (5/78 in Optics)

26. **Kuo-Yung Hung***, Liang-Wei Chang, Fan-Gang Tseng, Jin-Chern Chiou,Yi Chiu, “Optimum Electrostatic Force Control for Fabricating a Hybrid UV-Curable Aspheric Lens“, Journal of Micromechanics and Microengineering, 20, 7, 075001, 2010. (SCI IF: 2.281)
27. **K. Y. Hung***, P. S. Wu, “Application of the Surface Free Energy Minimization Principle to Modify the Indentation of a Polymer Mirror Structure,” Applied Optics, Vol. 48, Iss. 33, pp. 6528–6536, November 2009. (25/71 in Optics) (SCI IF: 1.707) (23/78 in Optics)
28. Yi Chiu, Hsi-Fu Shih, Jin-Chern Chiou, Shih-Tung Cheng, **Kuo-Yung Hung**, Fan-Gang Tseng, Weileun Fang, “Design and fabrication of a small-form-factor optical pickup head,” , IEEE Transactions of Magnetics (ISSN: 0018-9464, published by IEEE.) IEEE Transactions on Magnetics, Vol. 45, Issue 5, pp. 2194-2197, May 2009. (SCI IF 1.061). 115/246 in Engineering, Electrical & Electronic.
29. Der-Chi Shye, Chen-Chia Chou, Bo-Heng Liou, **Kuo-Yung Hung**, and Pi-Chun Juan, "Effects of Laser Treatment for The Pb(Zr, Ti)O3/(La, Sr)MnO3 Multifilm Prepared onto The Stainless Steel Substrate", accepted by the special issue of “Ferroelectrics”, Vol. 383 Issue 1, p40-49, June 2009 (紙本出刊). (SCI IF: 0.562). 144/192 in Materials Science, Multidisciplinary
30. **Kuo-Yung Hung***, Fan-Gang Tseng and Hwa-Seng Khoo, “Integrated Three-Dimensional Optical MEMs for Chip-Based Fluorescence Detection,” Journal of Micromechanics and Microengineering, Vol. 19, No. 4, 045014, pp. 1-10, March 2009. (SCI IF:1.997)
31. **Kuo-Yung Hung***, Po-Jen Hsiao, Fan-Gang Tseng, Miao-Chin Wei, “From Spheric to Aspheric Solid Polymer Lenses: A review,” Optofluidics for Lab on a Chip for a new open access journal Advances in Optoelectronics, Vol. 2011, Article ID 197549, 14 pages, 2011. (CSA Illustrata - Natural Sciences; CSA Illustrata – Technology; Ei Compendex; INSPEC; Open J-Gate; Scopus)
32. **Kuo-Yung Hung***, Po-Jen Hsiao, Fan-Gang Tseng, “Optic MEMS－Development of Blu-ray micro pickup head and Fabricate Technology of micro-aspheric lens (II),” Journal of the Chinese Monthly Society of Electronic Engineers, Vol. 164, pp. 151-158, March 2009.
33. **Kuo-Yung Hung***, Po-Jen Hsiao, Fan-Gang Tseng, “Optic MEMS－Development of Blu-ray micro pickup head and Fabricate Technology of micro-aspheric lens (I),” Journal of the Chinese Monthly Society of Electronic Engineers, Vol. 162, pp. 130-141, January 2009.
34. **Kuo-Yung Hung*** and Jung-Chiang Liao, ”The Application of Fresnel Equations and Anti-Reflection Technology to Improve Inclined Exposure Interface Reflection and Develop a Key Component Needed for Blu-ray DVD--Micro-Mirrors,” Journal of Micromechanics and Microengineering, Volume 18, Number 7, 075022, pp. 1-9, June 2008. (SCI IF: 2.233, ranked 12/112 in Mechanics)
35. **Kuo-Yung Hung***, Te- Hsien Liang, “Application of Inclined-Exposure and Thick Film Process for High Aspect-Ratio Micro Structures on Polymer Optic Devices,” Microsystem

Technologies-Micro-and Nanosystems-Information Storage and Processing Systems, Volume 14, Numbers 9-11, pp. 1217-1222, 2008. (SCI IF: 1.229).

36. Kuo-Yung Hung*, Chih-Chun Pei, Chih-Jen Hu and Tun-Chun Yang, "Manipulation Image Processing Algorithmic Technology to Realize 1.8" RGBW Transflective TFT-LCDs with Adjustable Colour Gamut", DISPLAYS, Volume 29, Issue. 5, pp. 526-535, December 2008. (SCI IF: 1.768) (13/56 in INSTRUMENTS & INSTRUMENTATION) (17/64 in optics)
37. **Kuo-Yung Hung***, Fan-Gang Tseng, Tsung-Hsin Liao, "Electrostatic force Modulated Micro-Aspherical Lens for Optical Pickup Head," Journal of Microelectromechanical Systems, Vol. 17, Number 2, pp. 370-380, April 2008. (SCI IF: 2.226) 6/105 in ENGINEERING, MECHANICAL.
38. **Kuo-Yung Hung***, Tun-Chun Yang, Chih-Chun Pei, Chih-Jen Hu and Chih-Ming Chang, "A Dual-gap RGBW Transflective TFT LCD with Adjustable Color Gamut," Journal of the Society for Information Display 15/3, pp. 187-191,March 2007. (SCI IF: 1.017) (107/192, MATERIALS SCIENCE, MULTIDISCIPLINARY)
39. **K. Y. Hung***, F.G. Tseng, H. P. Chou, "Application of 3D Gray Mask for the Fabrication of Curved SU-8 Structures," Journal of MicroSystem Technologies (Change to Microsystem Technologies-Micro-and Nanosystems-Information Storage and Processing Systems), Volume 11, Numbers 4-5 , pp. 365-369, 2005 (SCI). (Times Cited 6/1)
40. **K. Y. Hung***, H. T. Hu, and F. G. Tseng, "Application 3D Glycerol-Compensated Inclined-Exposure Technology to Integrated Optical Pick-Up Head," Journal of Micromechanics and Microengineering, 14, pp. 975-983, 2004 (SCI). (Times cited 19/6)
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(二)專利

國內外專利與發明				
發明人	**專利或發明名稱**	**國別**	**專利證書號**	**獲得時間**
1.曾繁根;洪國永;胡恆蒼	微型光學讀取頭模組與其製造方法及其接物透鏡之製造方法	中華民國	I 225246	2004.12.11
2.曾繁根;洪國永;胡恆蒼	Micro Optical Pickup Head Module, Method of Manufacturing the Same and Method of Manufacturing the Objective Lens of the Same	美國	7012762	2006.3.14
3.曾繁根;洪国永;胡恒苍	微型光学读取头模块与其制造方法及其取景物镜制造方	中國大陸	ZL 03152585.7	2006.3.22

	法			
4.蘇瑋柏;貝志駿;吳仰恩;洪國永;黃郁惠	色彩轉換方法以及電路	中華民國	I 285862	2007.8.21
5.洪国永;张志明;胡至仁;贝志骏;陈志豪	显示面板及其显示品质改善方法	中國大陸	ZL 200610006002.7	2006
6.洪国永;张志明;胡至仁;贝志骏	半穿透半反射型显示器及其制造方法、显示器制造方法	中國大陸	ZL 200610082729.3	2006
7.胡至仁;张志明;贝志骏;洪国永	半透射半反射式液晶显示器及其显示品质改善方法	中國大陸	ZL 200610106159.7	2006
8.苏玮柏;贝志骏;吴仰恩;洪国永;黄郁惠	颜色转换方法以及电路	中國大陸	ZL 2005 1 0091973.1	2005
9.廖堂煌;洪國永(2012 中止付費)	電致變色薄膜裝置	中華民國	M 338359	2008.8.11
10.Kuo-Yung Hung, Chih-Ming Chang, Chih-Jen Hu, Chih-Chun Pei	Transflective liquid crystal displays and methods for fabricating the same	美國	7545467	2009.6.9
11.Chih-Jen Hu, Chih-Ming Chang, Chih-Chun Pei, Kuo-Yung Hung	Sub-pixel structure in transflective color liquid crystal display	美國	7564530	2009.7.21
12.Kuo-Yung Hung, Chih-Ming Chang, Chih-Jen Hu, Chih-Chun Pei, Chih-Hao Chen	Four-color transflective color liquid crystal display	美國	7636076	2009.12.22
13.洪國永;張志明;胡至仁;貝志駿;陳志豪	顯示面板及其顯示品質改善方法	中華民國	I 319103	2010.01.01
14.史德智;金立德;洪国永;谢沧岩;王殿臣	非侵入式光学血糖测量仪	中國大陸	201020002832.4	2010
15.史德智;唐明中;王殿臣;许礼泛;洪国永	具有挥发物排放结构的血糖测试机	中國大陸	201020003839.8	2010
16.史德智;金立德;洪国永;王殿臣;唐明中	非侵入式血糖计电极结构	中國大陸	201020291654.1	2010
17.史德智;金立德;洪國永;謝滄岩;王殿臣	非侵入式之光學檢測血糖測試機	中華民國	M 384315	2010.7.11
18.史德智;唐明中;王殿臣;許禮汎;洪國永	具揮發物排放結構之血糖測試機	中華民國	M 385694	2010.8.1

19.Kuo-Yung Hung, Fan-Gang Tseng	Portable optical detection chip and manufacturing method thereof	美國	7851251	2010.12.14
20.史德智;金立德;洪國永;王殿臣;唐明中	非侵入式血糖計電極結構	中華民國	M 394799	2010.12.21
21.洪國永;張志明;胡至仁;貝志駿	半穿透半反射型顯示器及其製作方法，顯示器之製作方法	中華民國	I 337668	2011.2.21
22.胡至仁;張志明;貝志駿;洪國永	半穿透半反射式液晶顯示器及其顯示品質改善方法	中華民國	I 338174	2011.3.1
23.Kuo-Yung Hung, Fan-Gang Tseng	Portable optical detection chip and manufacturing method thereof	美國	7902619	2011.3.8
24. 洪國永;曾繁根;施錫富	微型光學讀取頭光路裝置及其運作方法	中華民國	I359420	2012.3.1
25. Kuo-Yung Hung, Fan-Gang Tseng	Immersion lithography apparatus and tank thereof	美國	8189175	2012.5.29
26. 馮慧平.洪國永.楊永欽.彭坤增.鄭春德	一種牙植體表面處理的方法	中華民國	I 394559	2013.5.1-2030.10.6
27.史德智, 許禮汎,王殿臣,洪國永,阮弼群	電化學供電方法及其裝置	中華民國	I410624	2013.10.1 2029.12.22
28.史德智, 許禮汎,王殿臣,洪國永,阮弼群	電化學供電方法及其裝置	中國大陸	I268416	2013.9.11
29.洪國永;曾繁根	immersion lithography apparatus and tank thereof	美國	US 8,755,029	2014.6.17
30.洪國永、吳品賢、林憲維、楊正峯	具精密對準之傾斜曝光機構	中華民國	I461856	2014.11.21-2028.9.23
31.洪國永;曾繁根	lens device and method of manufacturing the same	美國	US 9,036,271 B2	2015.05.19
32.彭顯智；林沛彥；**洪國永**	製備微奈米探針設備及方法	中華民國	I530688	2016.04.21-2034.11.17
33.洪國永；馮慧平；賴泓成	經表面處理的人工骨材及其表面處理	中華民國	I584788	2017.6.1-2033.1.24
34.洪國永;朱承軒;廖浩延;吳姝恂	濕熱敷袋	中華民國	I745268	2021.11.1-2041.7.7
35.洪國永, 朱承軒;廖浩延;黃世欽	光學感測引流設備	中華民國	I783888	2022/03/15