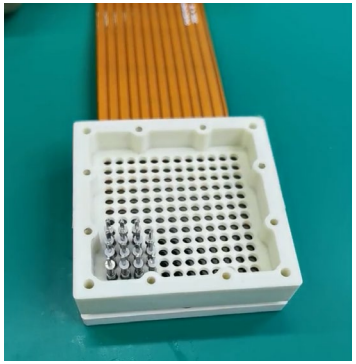
香港城市大學 City University of Hong Kong

創科無限・引領未來
Venture Beyond Boundaries

The 2nd HK Tech 300 National Start-up Competition – 12 Winning Start-ups
第二屆 HK Tech 300 全國創新創業千萬大賽——12 間優勝初創

有關比賽詳情 More about the Competition: https://www.cityu.edu.hk/hktech300/zh-hk/national-start-up-competition

(按英文名稱排序 In alphabetical order)

初創 Start-up	簡介 Introduction	
北京聯芯創智科技有限公司 **Beijing Rising IC Co., Ltd.**  • **金獎 (Gold Award)** • **科技創新大獎 (Technology Innovation Award)**	聯芯創智專注於自主研發壓電材料，以及高精度微型驅動器的產業化。微型驅動器不但用於光刻機的超高精度控制，更用於低軌衛星之間的激光通信對準系統，技術壁壘極高，全球只有兩家海外企業擁有該技術。 微型驅動器還用於手機鏡頭控制，目前已為三間頂尖的手機生產商提供產品，國內沒有其他公司能夠提供類似解決方案，而手機用微型驅動器市場高達千億。微型驅動器另可用於汽車、無人機以及機器人的鏡頭。目前已獲得三星集團投資及清華大學種子基金的支持。 壓電微型驅動器還可用於 GPU 散熱降溫節能（英偉達 NVIDIA 是公司的核心客戶）、醫學領域和元宇宙觸覺反饋應用，市場規模可高達萬億。 光刻機和低軌衛星應用是國家戰略方向，醫療和手機應用都是為人們健康向善的方向，為國家和人民貢獻技術。公司目前實現了芯片級的壓電微型驅動器量產，以及各種鏡頭的高精度控制應用，成為高精度控制的領軍者，將快速發展成為獨角獸企業。	Rising IC focuses on the research and development of piezoelectric materials and the industrialisation of high-precision micro-actuators, which provide ultra-high-precision control for lithography machines and laser communication alignment systems between low-orbit satellites. Only two overseas companies in the world possess this technology. The micro-actuators are also used for mobile phone lens control and are currently supplied to the top three mobile phone manufacturers. No other domestic company can offer a similar solution, and the market for micro-actuators used in mobile phones is worth hundreds of billions of dollars. The micro-actuators can also be used in lenses for automobiles, drones and robots. The company has secured investment from Samsung Group and seed fund support from Tsinghua University. The piezoelectric micro-actuators also have applications in GPU cooling and energy-saving (NVIDIA is a core client of the company), the medical field, and haptic feedback applications in the metaverse, with a market scale that could reach trillions. Applications in lithography machines and low-orbit satellites are part of the national strategic direction, and medical and mobile applications align with the goal of promoting health and well-being, further contributing to the country and society through the company's technology. Rising IC has now achieved mass production of chip-level piezoelectric micro-actuators and high-precision control applications for various lenses, establishing itself as a leader in high-precision control and rapidly developing into a unicorn company.

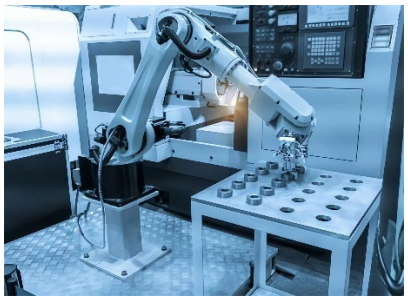
使用的城大專利 (CityUHK Patent Used) – Method of Controlling a Drive System, a Controller for Controlling a Drive System, a Drive System and an Assembly Comprising a Controller, a Drive System and a Permanent Magnet Synchronous Motor
發明者 (Inventors) – 劉春華、劉森軼 (Liu Chunhua, Liu Senyi)

資料由初創提供 Information provided by the start-ups

初創 Start-up	簡介 Introduction	
氫新科技（深圳）有限公司 **Deephytec Co., Ltd.** 	氫新科技致力於高溫質子交換膜燃料電池小型化技術與產業化，並擁有完全自主知識產權的獨特高溫金屬雙極板技術，以及先進量產高溫膜電極工藝。 公司產品可大幅度提升高溫質子交換膜燃料電池的比功率，滿足各類空中、地面、水面以及水下移動運載工具、應急備用電源等領域應用要求，讓高溫質子交換膜燃料電池首次在國內的移動運載領域具備實用價值。 同時，氫新科技可以大幅降低對氫氣純度的要求，通過應用非純氫的燃料電池端技術，變革帶動低成本氫儲運技術的發展，為低成本氫能儲運技術發展提供一個新思路，亦可承接甲醇或其他綠色液態燃料儲運用路線，實現讓燃料電池技術真正的低成本應用。	Deephytec is committed to the miniaturisation technology and industrialisation of high-temperature proton exchange membrane fuel cells (HT-PEMFCs). It has completely independent intellectual property ownership of HT-PEMFC metallic bipolar plate fabrication technology, as well as HT-PEMFC membrane electrode assembly mass production technology. Deephytec's technology can significantly enhance the specific power of HT-PEMFC stacks, thereby meeting the performance requirements for applications including aerial, ground, surface and underwater mobile transport vehicles, as well as backup power systems. This technology significantly lowers the requirements for the purity of hydrogen fuel. This makes the application of reformed hydrogen-rich gaseous fuels from methanol and other green liquid fuels practical and could significantly reduce the cost of hydrogen storage and transportation, thus achieving the low-cost application of fuel cell technology.

使用的城大專利 (CityUHK Patent Used) – 一種選擇性捕集 CO2 的吸附劑及其制備與應用 (An adsorbent for CO2 capture from N2 or CH4)*
發明者 (Inventors) – 尚進、孫明哲、王天琪 (Shang Jin, Sun Mingzhem, Wang Tianqi)

初創 Start-up	簡介 Introduction	
飛涅爾儀器（深圳）有限公司 **Fresnel Instrumentation (Shenzhen) Limited** 	飛涅爾儀器以電子光學和儀器工程為基礎的精密測量為技術核心，致力為全球範圍內的高校、企業和研究機構提供國際領先技術的掃描透射電子顯微鏡、光電聯用多尺度環境顯微鏡等高端科學儀器的製造，及相關技術訂製化支持和測試服務。 公司集合深港台三地研究及工程領域優質創新型人才，力圖在粵港澳大灣區打造高端精密儀器裝備製造產業基地。 公司依托於香港城市大學、香港城市大學深圳福田研究院（現更名為「香港城市大學物質科學研究院（福田）」）聯合共建，得益於其世界領先的學術氛圍與多學科交叉的科研創新人才培養，以技術研發為先導，主要產業以緊湊型/落地型脈沖空錐像差修正掃描透射電鏡，以及光電聯用多尺度環境顯微鏡製造、生產和創新，滿足半導體產業、生物醫藥產業和材料科學研究者需求。 通過國際一流的產學研一體化團隊建設及大灣區兩岸三地通力合作，以香港城市大學陳福榮講座教授團隊 30 多年的技術成果，公司力圖在未來 3 至 5 年內建成代表世界級電子光學精密儀器設備生產水平的產學研一體化基地。	Fresnel Instrumentation (Shenzhen) Limited specialises in precision measurement based on electron optics and instrumentation engineering. It is committed to providing internationally leading-edge scientific instruments, such as scanning transmission electron microscopes, correlative multi-scale environmental microscopes, and customised technical support and testing services for universities, enterprises and research institutions worldwide. The company includes top-tier innovative talent in the research and engineering fields from Shenzhen, Hong Kong and Taiwan, and aims to establish a leading manufacturing base for high-end precision instruments in the Guangdong-Hong Kong-Macao Greater Bay Area (GBA). The company is benefiting from the world-class academic environment in cross-disciplinary research and innovation talent cultivation at City University of Hong Kong (CityUHK) and the CityU Shenzhen Futian Research Institute (currently called the CityU Matter Research Institute (Futian)). Led by its technological research and development, the company is focusing on manufacturing, producing and innovating compact/classic pulsed hollow-cone aberration-corrected scanning transmission electron microscopes and correlative multi-scale environmental microscopes to meet demand in the semiconductor industry, biomedical industry and materials science research sector. With its world-class integrated industry-academia-research team, along with collaborative efforts across the GBA, the company is poised for significant growth. Building on over 30 years of technological achievements of Professor Chen Fu-Rong's team at CityUHK, the company aims to establish an integrated base for industry, academia and research that represents world-class production levels of electron-optical precision instruments within the next three to five years.	
使用的城大專利 (CityUHK Patent Used) – Electron Gun and Apparatus Incorporating the Same **發明者 (Inventors)** – 陳福榮、薛又峻、Li Pei-En、Tsang Ying-Shuo (Chen Fu-Rong, Hsueh Yu-Chun, Li Pei-En, Tsang Ying-Shuo)		

初創 Start-up	簡介 Introduction	
湖南禾福文化科技有限公司 **Hunan Hefu Culture Technology Co., Ltd.** 	禾福科技是一家專注於人工智能（AI）、機器視覺與邊緣計算技術的科技型企業，依托於團隊多年的技術積累和產業實踐經驗，公司致力於為客戶提供工業領域軟硬一體的全棧解決方案。 公司聚焦於工業智能製造和嵌入式終端設備的研發，產品和服務覆蓋了從底層硬件到上層應用的完整鏈條，包括： • 高性能機器視覺引擎：利用先進的圖像處理和深度學習技術，實現對複雜環境下的快速準確識別與分析； • 邊緣智能終端：結合邊緣計算技術，提供低延遲、高可靠性的數據處理能力，支持實時決策與控制； • 多機協同智能系統：開發多機協同工作的智能終端，實現在複雜場景下的高效協作和作業調度。 公司將持續深耕 AI、機器視覺與邊緣計算領域，不斷拓展應用場景，為各行各業帶來更智能、更高效的解決方案，並相信隨著技術的進步和市場需求的增長，公司將迎來更大的發展機遇。	Hefu Technology is a technology enterprise that focuses on artificial intelligence (AI), machine vision and edge computing technology. Benefiting from years of the team's technical accumulation and industrial practical experience, the company is committed to providing customers with full-stack solutions integrating software and hardware in the industrial field. The company focuses on the research and development of industrial intelligent manufacturing and embedded terminal equipment. Its products and services cover the complete chain, from underlying hardware to numerous applications, including: • A high-performance machine vision engine: Using advanced image processing and deep-learning technology to achieve rapid and accurate identification and analysis of complex environments; • Edge intelligent terminal: Combined with edge computing technology, providing low-latency, highly reliable data-processing capabilities to support real-time decision-making and control; • Multi-machine cooperative intelligent system: Developing a multi-machine cooperative intelligent terminal to achieve efficient collaboration and job scheduling in complex scenarios. The company will continue to deepen its research in the field of AI, machine vision and edge computing, and expand application scenarios to bring smarter and more efficient solutions to people from all walks of life. With technological advances and the growth in market demand, the company will usher in greater development opportunities.
使用的城大專利 (CityUHK Patent Used) – 用於從單一的圖像生成多視圖像的方法 (Method for Generating Multi-view Images from a Single Image)* **發明者 (Inventors)** – 曾偉明 (Peter Tsang Wai-ming)		

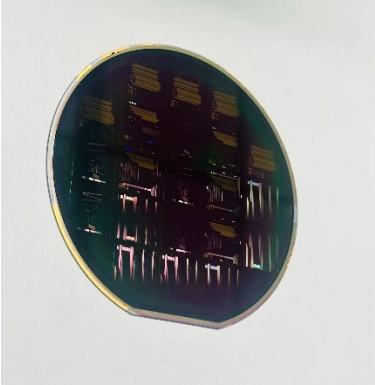
初創 Start-up	簡介 Introduction	
藍鉑醫療科技發展（蘇州）有限公司 **LMBO Medical Technology Development (Suzhou) Co., Ltd.**  • **銅獎 (Bronze Award)** • **最具社會影響力大獎 (Best Social Impact Award)**	藍鉑的願景是解決目前國際上輸血病毒/細菌輸注感染的痛點問題，實現輸血安全保障化。 公司在聯合創始人呂茂民博士的發明專利基礎上深入鑽研，研發出血漿/血小板成份病原體滅活系統（血漿/血小板成份病原體滅活光照櫃、一次性醫用血漿/血小板病毒滅活輸血器材）。在充分有效滅活血液成分病原體/病毒之際，使血漿有效成份損失率低於國際標準，填補國內的空白，處於世界領先同等水平。 公司在張家港建設了 3000 平方米的 GMP 標準生產工廠。血漿成份病原體滅活系統產品，已在深圳市醫療器械檢測中心完成檢測，血小板成份病原體滅活系統已於八月完成送檢。產品將於 2025 年 12 月前獲得四張國內三類醫療器械注冊證書，而公司也在積極推進 CE 認證。公司於 2023 年獲得了張家港市領軍人才獎及張家港政府 900 萬項目專項支持資金，並以 8500 萬人民幣估值完成了 A 輪二千萬元融資。 血液成份病原體滅活是行業內翹首以盼的產品，行業門檻高，競爭賽道窄，依托關聯公司已有的真實客戶滿意度、客戶關係及穩定的銷售渠道，公司將立足中國（目標 70% 市場），並積極開拓國際市場。公司期望於 2026 年實現淨利潤 3000 萬元以上、2028 年淨利潤一億元以上，成功實現 IPO。	LMBO's vision is to solve the current international pain points of viral and bacterial transfusion-transmitted infections and to achieve transfusion safety. Based on a patent invented by Dr Lu Maomin, Co-Founder of LMBO, the company developed a plasma/platelet component pathogen inactivation system (including a plasma/platelet component pathogen inactivation light cabinet and disposable medical plasma/platelet virus inactivation transfusion equipment). The loss rate of plasma active ingredients is lower than the international standard, filling the domestic gap, and is at a world-leading level. The company built a 3000 m^2 GMP-standard production plant in Zhangjiagang. The plasma component pathogen inactivation system products have been tested in the Shenzhen Medical Device Testing Center, and the platelet component pathogen inactivation system was submitted for testing in August. The product is expected to obtain four domestic Class III medical device registration certificates before December 2025 and continues to actively pursue CE certification. In 2023, the company won the Zhangjiagang City Leading Talent Award and was awarded RMB 9 million from the Zhangjiagang Government project special support fund. LMBO completed RMB 20 million Series A financing at a pre-money valuation of RMB 85 million. Blood component pathogen inactivation is a highly anticipated product in the industry. The industry threshold is high, the competition track is narrow, and it relies on customer satisfaction and customer relationships of the associated companies, as well as stable sales channels. The company will focus on the Chinese market (targeting a 70% market share), while actively exploring the international market. LMBO aims to achieve a net profit of over RMB 30 million in 2026 and over RMB 100 million in 2028, and to complete an IPO.
使用的城大專利 (CityUHK Patent Used) – 一種滅菌型塗層前體及其制法和應用* **發明者 (Inventors)** – 姚希、侯昌順 (Yao Xi, Hou Changshun)		

初創 Start-up	簡介 Introduction	
上海晶擎能源科技有限公司 **Shanghai Fuelture Energy Co., Ltd.** 	上海晶擎能源科技有限公司，是一家深耕綠色能源領域的前沿企業，通過持續創新複合材料與電化學材料技術，推動全球能源結構的綠色轉型。 公司專注於開發獨立分布式綠色能源產品，特別是以甲醇為燃料的燃料電池系統，旨在為全球用戶提供高效、清潔、經濟的能源解決方案，以應對氣候變化挑戰，促進可持續發展。目前，公司的甲醇燃料電池獨立不間斷電源已進入市場推廣階段，並成功應用於多個示範項目中，獲得了用戶的高度認可。公司不斷優化產品性能，提升用戶體驗，同時積極拓展國內外市場，加速產品的商業化進程。 自成立以來，公司憑藉其卓越的技術實力和創新能力，贏得了業界的廣泛關注與好評。公司已成功獲得多輪風險投資，資金實力顯著增強。更值得一提的是，公司已入選國家及全球多個知名孵化計劃，為公司的快速發展提供了強而有力的支持。	Shanghai Fuelture Energy Technology Co., Ltd. is a cutting-edge enterprise deeply engaged in the field of green energy. Through continuous innovation in composite materials and electrochemical materials technology, it promotes the green transformation of the global energy structure. The company focuses on developing independent distributed green energy products, especially fuel cell systems using methanol as fuel, to provide efficient, clean and economical energy solutions for global users, help address climate change challenges and promote sustainable development. The company's methanol fuel cell independent uninterruptible power supply has entered the market promotion stage and has been successfully applied in multiple demonstration projects, gaining strong recognition from users. It has continuously optimised product performance, enhanced the user experience, and actively expanded domestic and international markets to accelerate the commercialisation process of its products. Since its establishment, the company has won widespread attention and praise from the industry due to its outstanding technical strengths and innovation capabilities. The company has obtained multiple rounds of venture capital, significantly strengthening its financial position. The company has been selected for multiple well-known incubation programs at the national and global levels, providing strong support for its rapid development.
使用的城大專利 (CityUHK Patent Used) – Method for Surface Modification of Nanoparticles **發明者 (Inventors)** – 王鋒、孔巍、孫天瀛 (Wand Feng, Kong Wei, Sun Tianying)		

初創 Start-up	簡介 Introduction	
深圳華焊生物科技有限公司 **Shenzhen Hua Han Biotechnology Co., Ltd.** 	華焊生物作為醫療器械領域的創新先鋒，專注於生物焊接技術的創新研發與應用實踐。公司匯聚了來自臨床醫學、生物醫學、自動化設備以及信息學等多個學科領域的頂尖專家，共同打造了一個多學科交叉融合的高科技研發平台。 憑藉自主知識產權，華焊生物成功研發了革命性的外科共享多功能生物焊接儀，具備減少手術時間、出血量少、快速康復等特點。這一創新成果不僅突破了傳統外科手術技術的諸多局限，更為微創手術的實施與患者的快速康復提供了創新的解決方案。 通過不斷的技術革新，華焊生物致力於推動焊接生物學的體系建設，引領生物焊接技術的全球發展趨勢，為全球醫療行業帶來深遠的影響。華焊生物的願景是通過不懈的科技進步，為患者帶來更安全、更高效的醫療方案，同時為醫療專業人士提供更為先進的手術工具，共同開創醫學的新紀元。	Hua Han Biotech, a vanguard of innovation in the field of medical devices, is dedicated to innovative research and development and practical applications of bio-welding technology. The company has assembled a team of top experts from various disciplines, including clinical medicine, biomedical science, automated equipment and informatics, to jointly create a high-tech R&D platform that integrates multiple disciplines. Armed with its proprietary intellectual property, Hua Han Biotech developed a revolutionary multifunctional biological welding instrument for surgical use, resulting in benefits such as reduced operating time, minimal bleeding and swift recovery. This innovative achievement breaks through numerous limitations of traditional surgical techniques and offers an innovative solution for the implementation of minimally invasive surgery and rapid patient rehabilitation. Through continuous technological innovation, Hua Han Biotech is committed to promoting the construction of a welding biology system and leading the global development trend of bio-welding technology, to have a profound impact on the global medical industry. The vision of Hua Han Biotech is to provide safer and more efficient medical solutions for patients through unremitting technological progress, while providing medical professionals with more advanced surgical tools to jointly usher in a new era of medicine.
使用的城大專利 (CityUHK Patent Used) – 一種滅菌型塗層前體及其制法和應用* **發明者 (Inventors)** – 姚希、侯昌順 (Yao Xi, Hou Changshun)		

初創 Start-up	簡介 Introduction	
花俠溫控科技（蘇州）有限公司 **Sino Thermal Control Technology (Suzhou) Co., Ltd.** 	花俠溫控科技（蘇州）有限公司是一家專注於溫控技術記憶合金材料深度開發的的初創企業。其主要目標是通過創新和研發，提供高效、可靠的溫控解決方案，以滿足不同行業的需求。 公司的主打產品是記憶合金可調彎電控導絲，能廣泛應用在醫療微創領域。記憶合金電控可調彎導管導絲屬於微創介入手術中最尖端的輔助器械，該技術在國內屬於首創，與國際同類技術於相同起跑線。 記憶合金電控導管導絲的研發具有新穎性、先進性和獨創性，為此花俠溫控公司成功申請了兩項發明專利和兩項實用新型專利。該技術的推廣可以為患者減輕痛苦，降低手術難度，縮短手術時間、提高醫院手術室的使用率。 目前，公司計劃開始天使輪融資，未來計劃加速產品商業化進程，積極拓展市場，與更多行業夥伴合作，進一步深化記憶合金材料的研發應用，特別是對其核心產品——記憶合金電控導管的持續優化和新功能開發，以滿足日益增長的市場需求。同時，公司還將關注環境保護和社會責任，致力為社會創造更大價值。	Sino Thermal Control Technology (Suzhou) Co., Ltd. is a start-up company specialising in the in-depth development of temperature control technology and shape memory alloy (SMA) materials. The company's main goal is to provide efficient and reliable temperature control solutions to meet the needs of different industries through innovation, research and development. Its flagship product is deflectable bending electrically controlled guidewire made of SMA wire, which can be widely used in the field of minimally invasive medical procedures. The SMA electrically controlled deflectable catheter guidewire is the most cutting-edge auxiliary device in minimally invasive interventional surgery. The release of this technology is a domestic first, and it is on par with that of its international counterparts. The development of the SMA electrically controlled deflectable catheter guidewire is novel, advanced and original. As a result, Sino Thermal Control Company has been granted two invention patents and two utility model patents. This technology can alleviate patient pain, reduce the difficulty and intensity of surgery for doctors, shorten surgery time, and improve hospital operating room utilisation rates.

使用的城大專利 (CityUHK Patent Used) – 一種超分子聚合物、自修復疏油塗層及其制備方法與應用
發明者 (Inventors) – 姚希、易波 (Yao Xi, Yi Bo)

初創 Start-up	簡介 Introduction	
蘇州啟光晟火科技有限公司 **Suzhou Qiguang Shenghuo Technology Co., Ltd.** 	蘇州啟光晟火科技有限公司成立於 2024 年 1 月，位於江蘇省蘇州市，是首個為國內解決矽基光計算芯片技術難題的解決方案，致力實現全鏈條國產替代，並達到國際領先水平。 公司憑藉在集成光電子領域的開創性技術和全球領先的光子邏輯運算研發團隊，致力於在後摩爾定律時代，為客戶提供算力躍遷的解決方案，賦能 AI 智能時代浪潮。 公司在北京科技大學、中國科學院半導體研究所擁有研發基地，擁有四類可訂製化產品。公司推出的產品是光計算核心芯片，上面集成了光子濾波、光學邏輯運算、全光再生等功能，實現了八通道混疊集成，運算速率可達 100Gbps 以上，實現國際先進水平。 公司推出光計算配套的核心器件，包括激光器和薄膜鈮酸鋰調制器，成功應用於衛星通信上，助力光計算機一體化成型。 公司擁有核心自主知識產權，申請發明專利 20 多項，高水平論文 20 多篇，科技部重點研發計劃近十項，均與高速光電子器件息息相關，並成功應用於中科院蘇州納米所、中際旭創等多個企業項目中，為企業營收數億元。	Suzhou Qiguang Shenghuo Technology Co., Ltd., established in January 2024, is located in Suzhou City, Jiangsu province. It offers the first domestic solution to the technical problems of silicon-based optical computing chips, achieving domestic substitution in the entire industry chain and reaching the leading international level. With pioneering technology in the field of integrated optoelectronics and the world's leading photonic logic computing research and development team, the company is committed to providing its clients with solutions for computing power transition in the post-Moore's Law era, enabling the era of AI intelligence. The company has R&D bases in the University of Science and Technology Beijing and the Institute of Semiconductors of the Chinese Academy of Sciences, and has four types of customisable products, including optical computing core chips, which integrate photon filtering, optical logic operation, all-optical regeneration and other functions to achieve 8-channel aliasing integration. The computing speed can reach more than 100Gbps, reaching the advanced international level. The company launched optical computing supporting core devices, including lasers and a thin film lithium niobate modulator, which have been successfully applied to satellite communications to assist in the integration of optical computers. The company has core independent intellectual property rights, has applied for more than 20 invention patents, has published more than 20 high-level papers, and has been involved in nearly 10 key research and development programs of the Ministry of Science and Technology, all of which are closely related to high-speed optoelectronic devices. It has been involved in many projects with enterprises such as the Suzhou Nano Institute of the Chinese Academy of Sciences and Zhongji Xuchuang, with revenue of hundreds of millions of yuan.
使用的城大專利 (CityUHK Patent Used) – Doped Polymetric Optical Waveguide Amplifiers **發明者 (Inventors)** – 潘裕斌、黃詠嫻 (Edwin Pun Yue Bun, Polis Wong Wing Han)		

初創 Start-up	簡介 Introduction	
泰康諾生物科技有限公司 **Taikangnuo Biotechnology Limited**   	泰康諾生物科技是一家由香港城市大學 HK Tech 300 種子基金孵化的數字生物醫療健康公司，團隊成員主要為香港城市大學神經科學系的博士及博士後。 團隊開發了結合多模態 AI 大模型的雲平台「Animism™」，實現腦疾病的神經行為表徵識別與分析，賦能藥企及醫療機構以達到藥物篩選和健康監測的降本增效。目前「Animism™」擁有超過十款針對中樞神經系統的自動化行為學分析模塊，覆蓋了實驗動物、寵物、畜牧以及患者等多個領域，部分已實現盈利。公司正服務於亞太地區、美國及歐洲的數十位客戶，並與多家上市藥企和三甲醫院建立了長期合作。 團隊已發表三篇知名 SCI 期刊和申報兩件中美專利。獲得了香港資訊及通訊創新獎、香港科技大學 GBA 青年創新特等獎，並獲邀加入 2024 年 NVIDIA 初創加速計劃。 團隊計劃於 2024 年底入駐香港科學園，並加速布局「Animism™」在神經退行性疾病的多個適應症，幫助更多生物科技公司實現管線推進。同時加速「Animism™」與智能硬件結合實現產品的規模化。計劃於 2024 年底針對腦卒中患者的產品進行 FDA/NMPA 申報。	Taikangnuo (TKN) Biotech is a digital biomedical company incubated as a seed funding team by HK Tech 300 of City University of Hong Kong (CityUHK). The team comprises PhD and postdoctoral fellows from the Department of Neuroscience of CityUHK. TKN developed Animism™, a multimodal AI large model cloud platform focusing on the recognition and analysis of behavioural representations of brain diseases. The company has more than 10 automated behavioural analysis modules, covering multiple fields, such as lab animals, pets, livestock and patients. It has global clients and is cooperating with many medical institutions.

使用的城大專利 (CityUHK Patent Used) – 基於視頻的自動化癲癇發作識別平臺用於臨牀前的藥物開發 (Video-Based Automated Recognition Of Epileptic Seizure in Rodents in Home Cages)
發明者 (Inventors) – 賀菊方、任俊名、肖洲鍵、楊雨潔、張育嘉、Micky Tortorella、車力佳、何玲、Yoon Ezra Ginn、張梦凡 (He Jufang, Ren Junming, Xiao Zhoujian, Yang Yujie, Zhang Yujia, Micky Tortorella, Che Lijia, He Ling, Yoon Ezra Ginn, Zhang Mengfan)

資料由初創提供 Information provided by the start-ups

初創 Start-up	簡介 Introduction	
無錫北微微電子有限公司 **Wuxi BEWIS Microelectronics LLC** 	無錫北微微電子是一家聚焦智能駕駛領域的高科技初創公司，憑藉其在慣性芯片及封裝微系統領域的深厚積累，致力於打破行業技術壁壘。公司核心產品為高精度六軸 IMU 芯片，集成衛星導航，實現深耦合組合導航，滿足複雜環境下的精準定位需求。 技術創新方面，無錫北微微電子掌握了八吋線生產工藝、低噪聲數模混合電路設計、高穩定性封裝工藝等核心技術，確保產品成本效益與高性能的完美結合。特別是在溫度補償與抗沖擊性能上，公司產品均達到行業領先水平，符合 AECQ-100 標準與 ASIL-B 級要求。 公司已成功推出集成 SOC 芯片與 GIP100 算法的產品，大幅提升導航精度與穩定性。此外，團隊還在北鬥-慣性組合導航微系統小型化、高動態 MEMS 慣性器件等方面取得突破性進展，引領行業技術發展。 展望未來，無錫北微微電子將持續深化技術研發，優化產品性能，加速市場拓展，攜手行業夥伴共同推進智能駕駛技術的發展，為人類出行安全與便利貢獻力量。	Wuxi BEWIS Microelectronics Company is a high-tech start-up focusing on the field of intelligent driving. Leveraging its deep expertise in inertial chips and packaging microsystems, the company is dedicated to breaking through industry technological barriers. Its core product is a high-precision six-axis IMU (Inertial Measurement Unit) chip, used in satellite navigation to achieve tightly coupled integrated navigation, meeting precise positioning needs under complex environmental conditions. In terms of technological innovation, Wuxi BEWIS Microelectronics has mastered core technologies such as 8-inch line production processes, low-noise analogy-digital hybrid circuit design, and high-stability packaging processes, providing an ideal combination of cost-effective, high-performance products. In particular, the company's products have reached industry-leading levels in temperature compensation and shock resistance, complying with AECQ-100 standards and ASIL-B requirements. The company successfully launched products integrating System on Chip (SOC) and GIP100 algorithms, significantly improving navigation accuracy and stability. The team has also made breakthrough progress in miniaturising BeiDou-inertial integrated navigation microsystems and developing high-dynamic MEMS inertial devices, leading the development of industry technology. Looking to the future, Wuxi BEWIS Microelectronics will continue to deepen its technological research and development, optimise product performance and accelerate market expansion. Working together with its industry partners, it will promote the development of intelligent driving technologies and contribute to human travel safety and convenience.
使用的城大專利 (CityUHK Patent Used) – 基於近場光的納米尺度成像系統、三維成像方法和裝置 (A Near-Field Optical Nano-Scale 3D Imaging Method) * **發明者 (Inventors)** –李文榮、張光烈、陳猛 (Li Wenjung, Zhang Guanglie, Chen Meng)		

初創 Start-up	簡介 Introduction	
珠海粵聚粵昇科技有限公司 **Zhuhai MOORE TECH Co., Ltd.**  • **銀獎 (Silver Award)**	公司的產品是新一代 AI 驅動的新能源生物識別數字芯片，是國內唯一將此技術實現產業化的團隊，解決國家卡脖子技術難題，填補國內空白，替代國外芯片。公司的芯片不僅用於 3D 生物安全指紋傳感器和手持式超聲儀，同時具有萬物互聯特點，包括生物識別銀行卡和元宇宙觸覺反饋等應用。 目前最重要的應用領域是動力電池無損檢測，未來會成為每一輛新能源汽車的標配，形成車聯網安全監測應用。同時服務於儲能系統監測，帶來萬億市場。該芯片還可以用於汽車主動安全、水下探測、機器人測距、各種鏡頭清潔、激光雷達控制和打印機頭等。 公司已為比亞迪和寧德時代提供超聲波無損檢測系統，同時為邁瑞醫療提供基於公司芯片的手持式超聲儀探頭，也在逐步打造自己的整機系統，未來手持式超聲儀將進入千家萬戶。目前客戶包括 GE、比亞迪、寧德時代、邁瑞醫療、京東方和華為等，公司很快能夠實現百億市值。目前已獲得中關村科學城種子基金支持和創客中國全國總決賽二等獎。	Moore Tech has developed a new generation of AI-driven, new energy biometric digital chips. It is the only company in the country that has successfully industrialised this technology, addressing critical technical challenges and filling a significant domestic gap by replacing foreign chips. Its chips are utilised in 3D biometric security fingerprint sensors and handheld ultrasound devices and feature Internet of Things capabilities, supporting applications such as biometric identification bank cards and haptic feedback in the metaverse. Currently, its most important application involves the non-destructive testing of power batteries, which is set to become standard in every new energy vehicle, enabling safety monitoring in the Internet of Vehicles. Its technology is also used to monitor energy-storage systems, tapping into a trillion-dollar market. Its chips also have versatile applications in areas such as automotive active safety, underwater detection, robotic ranging, lens cleaning, LiDAR control and printer heads. Moore Tech is already supplying ultrasonic non-destructive testing systems to BYD and CATL, and handheld ultrasound device probes using its chips to Mindray Medical. It is gradually developing its own complete machine systems, with the vision of handheld ultrasound devices soon in every household. Its current client base includes industry leaders such as GE, BYD, CATL, Mindray Medical, BOE and Huawei. With strong momentum, Moore Tech is on track to achieve a market valuation in the billions. It has received support from the Zhongguancun Science City Seed Fund and secured second place in the National Maker China Finals.
使用的城大專利 (CityUHK Patent Used) – System and Method for Photoacoustic Imaging and Ultrasound Imaging **發明者 (Inventors)** – 王立代教授、張雅超 (Wang Lidai, Zhang Yachao)		

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