

List of projects obtained via CityUSRI in 2013:

Source: Ministry of Science and Technology (國家科學技術部)

Principal Investigator (Department/Research Centre)	Project Title 項目名稱	Funding (in RMB)
Prof LAM Kwan Sing Paul (Department of Biology and Chemistry)	Integrated Technology Development for Algal Bloom Online Monitoring and Validations in Lake Tai 水華在綫監測設備的集成和應用示範	800,000
Prof LU Jian (Department of Mechanical and Biomedical Engineering)	Research on the stability of hierarchical nanostructured metals and investigation of some industrial applications of hierarchical nanostructured metals 多級納米結構的穩定性研究及部分多級納米金屬材料的工業應用探索	3,830,000
Prof XUE Quan (Department of Electronic Engineering)	Implantable Quasi-lumped Parameter Functional Cell – Theory and Construction Method 植入式准集總分佈參數功能細胞的理論研究和構建方法	1,600,000

Source: National Natural Science Foundation (國家自然科學基金委員會)

Principal Investigator (Department/Research Centre)	Project Title 項目名稱	Funding (in RMB)
Dr CHAN Sze Chun (Department of Electronic Engineering)	Nonlinear Dynamics of Fiber Bragg Grating Feedback on Vertical-Cavity Surface-Emitting Lasers 布拉格光柵反饋垂直腔面發射激光器的非線性動力學研究	260,000
Dr CHEN Ting Hsuan (Department of Mechanical and Biomedical Engineering)	Investigation of mechanical factors for cancer cell physiology and therapeutics using microscale torque and micropatterning 借由微尺度轉矩與細胞圖案化研究力學效應對癌細胞生理影響與治療策略	250,000
Prof CHEN Youhua Frank (Department of Management Sciences)	Theoretical Foundations of Contemporary Logistics Management for Harmonized Development of Economy, Society and Environment 面向經濟、社會和環境協調發展的物流系統基礎理論	2,800,000
Prof CHIANG Kin Seng (Department of Electronic Engineering)	Development of polymer optical waveguide mode-division multiplexers 聚合物平面光波導模分複用器的研製	820,000
Dr CHIN Kwai Sang (Department of Systems Engineering and Engineering Management)	Market structure and market strategies of effective remanufacturing systems and its integrated management 有效再製造系統的市場結構與市場策略及其集成管理	570,000

Principal Investigator (Department/Research Centre)	Project Title 項目名稱	Funding (in RMB)
Dr HE Xiaoqiao (Department of Civil and Architectural Engineering)	Bi-stable characteristic of FGM shell structures under the piezoelectric feedback control 基於壓電反饋控制下的功能梯度殼的雙穩態研究	780,000
Dr LAI Chi Keung Alvin (Department of Civil and Architectural Engineering)	Effects of Riblets and Electrostatic Field on Fine Particle Deposition in the Ventilation Duct 通風管道內稜紋溝槽壁面和靜電場對細顆粒物沉積效應研究	800,000
Prof LI Juan Julie (Department of Marketing)	Inter-firm Relationship Repair after Non-cooperative Incidents in Supply Chain: The Effects of Governance Mechanisms and Moderating Role of Dependence and Perceived Justice 不合作事件後供應鏈成員間關係修復：治理機制的影響及依賴結構和感知公平的調節作用	190,000
Dr LIANG Xiaoying (Department of Management Sciences)	Product compatibility, price evolution and market structure for the e-book reader market 基於動態博弈的電子閱讀器市場產品兼容、價格演化及市場結構均衡研究	210,000
Prof LIEW Kim Meow (Department of Civil and Architectural Engineering)	Modeling of the Mechanical Properties of Carbon Nanotube Reinforced Concrete 碳納米管增強混凝土複合材料的力學性能分析與研究	800,000
Dr LO Ming Fai (Department of Physics and Materials Science)	Charge transfer complex in organic-inorganic composite with new electronic/optical properties and its application in solar cell 電荷轉移配合物電子與光學性質研究及其在小分子太陽能電池中的應用	250,000
Dr LO Pik Kwan Peggy (Department of Biology and Chemistry)	Targeted Delivery of Drug-Loaded DNA nanocages to Mitochondria in Living Cells for Cancer Therapy 以癌症治療為目的的載藥 DNA 納米籠到癌細胞線粒體的靶向遞送	260,000
Dr LU Yang (Department of Mechanical and Biomedical Engineering)	Size-dependent mechanical properties of 1-D metallic nanomaterials 基於尺度效應的一維金屬納米材料的機械性能研究	250,000
Prof MA Jian (Department of Information Systems)	Lean Research Management Information Systems 精細化科研管理信息系統研究	560,000
Prof MA Jian (Department of Information Systems)	Computer-aided Reviewer Assignment: Methods and Applications 計算機輔助指派方法與應用研究	650,000

Principal Investigator (Department/Research Centre)	Project Title 項目名稱	Funding (in RMB)
Dr MAK Yim Ling (State Key Laboratory in Marine Pollution of CityU)	Biotransformation and bioaccumulation of ciguatoxins in coral reef fishes 雪卡毒素在珊瑚魚的轉化及累積	270,000
Dr TANG Yongbing (Department of Physics and Materials Science)	Controllable synthesis, doping, and device application of large-area AlN one-dimensional nanostructure arrays on various substrates 多種襯底上 AlN 一維納米結構陣列的大面積可控制備及其摻雜與器件應用研究	250,000
Dr WANG Feng (Department of Physics and Materials Science)	Expanding the Scope of Upconversion: from Emission Tuning to 3-D Bioimaging 上轉換研究方向的拓展：從發光調控到三維生物成像	250,000
Dr WANG Feng (Department of Physics and Materials Science)	Controlled Synthesis and Application in Light-controlled Drug Release and Medical Imagings of Multifunctional Rare Earth Upconversion Nanocomposites Containing Gadolinium 多功能含釷稀土上轉換納米複合材料的控制合成及其在光控釋藥和醫學影像方面的應用	750,000
Dr WANG Jianfeng Jeff (Department of Civil and Architectural Engineering)	Experimental and numerical investigation into the nature of sand particle breakage 砂土破碎本質的試驗與模擬研究	800,000
Prof WANG Lusheng (Department of Computer Science)	Algorithms for Identification of Mutant Regions 染色體突變區間的識別算法研究	730,000
Dr WU Jiajun (State Key Laboratory in Marine Pollution of CityU)	The dynamic distribution and chronic toxicity of Pacific Ciguatoxin-1 in mice 雪卡毒素(P-CTX-1)在小鼠體內的動態分佈及慢性毒性研究	250,000
Dr WU Yufei (Department of Civil and Architectural Engineering)	Characterization of Interfacial Properties for Strengthening of RC Beams with SMAT Steel Sheet 納米高強片材加固混凝土樑的界面力學特性研究	800,000
Prof XI Ning (Department of Mechanical and Biomedical Engineering)	Study on graphene cutting based on real-time force as a sensor feedback 基於力反饋的石墨烯納米加工方法研究	790,000
Prof XIE Min (Department of Systems Engineering and Engineering Management)	The Research of Adaptive TBE Control Charts for Monitoring Processes with Multiple Characteristics 面向多變數生產過程的動態 TBE 控制圖設計與分析	570,000

Principal Investigator (Department/Research Centre)	Project Title 項目名稱	Funding (in RMB)
Prof XUE Quan (Department of Electronic Engineering)	Dielectric Microstrip Line - A New Transmission Line for Millimeter Wave and Terahertz 介質微帶線 — 應用於毫米波及太赫茲的新型傳輸線研究	880,000
Dr ZHANG Kaili (Department of Mechanical and Biomedical Engineering)	Investigation on the mechanisms of nanoenergetics-on-a-chip that is based on thin film microheater and nanoenergetic materials 基於薄膜加熱器和納米含能材料的含能芯片機理研究	860,000
Prof ZHANG Wenjun (Department of Physics and Materials Science)	Study on the mechanism of high-efficiency thermionic emission based on diamond and cubic boron nitride films 基於金剛石與立方氮化硼薄膜的高效熱電子發射機理研究	800,000
Dr ZHANG Xiaoling (Department of Public Policy)	Driving chain in implementing green technologies for Housing construction and the transformation mechanism for real estate development business performance 住房建設實施綠色技術的驅動鏈及房地產開發企業績效轉化機制研究	200,000
Dr ZHOU Haichao (Department of Biology and Chemistry)	Mangrove plant polyphenols in intertidal zone: Their transformations and effects on carbon and nitrogen mineralization 潮間帶紅樹植物多酚的轉化途徑及其對碳氮礦化的影響機制	260,000
Dr ZHOU Qiang (Department of Systems Engineering and Engineering Management)	Experimental Designs for Computer Models with Complex Characteristics 針對具有複雜特性計算機模型的試驗設計	220,000
Dr ZHOU Wen (School of Energy and Environment)	Relationship between moisture budget over East Asia-western North Pacific and two types of ENSO cycle and its decadal variation 亞太地區水汽收支與兩類 ENSO 循環的相互關係及其年代際變化研究	900,000
Dr ZHU Guangyu (Department of Biology and Chemistry)	Design, synthesis, and mechanism study of dual-targeting platinum anticancer complexes 雙靶點鉑類抗腫瘤配合物的設計合成及其分子機制研究	750,000

Source: Guangdong Provincial Department of Science and Technology (廣東省科技廳)

Principal Investigator (Department/Research Centre)	Project Title 項目名稱	Funding (in RMB)
Prof Andrey L ROGACH (Department of Physics and Materials Science)	Development and Small Batch Production of High Efficient Low Toxic Colloidal Quantum Dots for Optoelectronic Applications 面向能源光電領域的高效低毒膠體量 子點的研製與小批量生產	140,000
Prof CHAN Chi Hou (Department of Electronic Engineering)	Microwave Reflectivity Measurements and Parameter Extractions 電磁參數和微波反射率測量	190,000

Source: Guangdong Natural Science Foundation (廣東省自然科學基金管理委員會)

Principal Investigator (Department/Research Centre)	Project Title 項目名稱	Funding (in RMB)
Dr CHOW Chi Yin Ted (Department of Computer Science)	Towards Location-based Services in Vehicular Ad-hoc Networks 面向車載自組網(VANET)的位置服務 究	50,000

Source: Science Technology and Innovation Committee of Shenzhen Municipality (深圳市
科技創新委員會)

Principal Investigator (Department/Research Centre)	Project Title 項目名稱	Funding (in RMB)
Prof CHAN Kwok Sum (Department of Physics and Materials Science)	A study of graphene spintronic devices 石墨烯自旋電子器件的研究	50,000
Dr CHAN Lai Leo (State Key Laboratory in Marine Pollution of CityU)	Development, optimization and validation of key techniques for mass culture of toxic Gambierdiscus spp. for isolation and purification of ciguateroxins 用於高產雪卡毒素的有毒網比甲藻批 量養殖技術研究	400,000
Dr CHAN Lai Leo (State Key Laboratory in Marine Pollution of CityU)	Study of the key factors that influence the flux of ciguatera toxins through marine food webs 西加毒素在海洋食物鏈傳遞之關鍵因 數研究	50,000
Dr CHIU Chi Yuen Bernard (Department of Electronic Engineering)	Development and generation of carotid atlases for quantitative and localized monitoring and assessment of carotid artery disease 對頸動脈疾病進行定量監測和評估的 頸動脈圖集	50,000

Principal Investigator (Department/Research Centre)	Project Title 項目名稱	Funding (in RMB)
Dr FANG Yulin (Department of Information Systems)	Use of Digital Artifacts, Knowledge Coordination and Performance in Highly Virtual Teams 高度虛擬化團隊中數位人工製品的使用、知識協同和團隊績效研究	50,000
Dr HO Chung Yin Johnny (Department of Physics and Materials Science)	Mechanistic investigation of the diameter and growth orientation dependence for the enhanced GaAs nanowire solar cells 砷化鎵納米線的尺寸與生長方向對其光伏特性的影響機制研究	50,000
Prof KWONG Tak Wu Sam (Department of Computer Science)	Research on Theories of Resource Allocation and Decision Making for Multiview Video Coding 多視點視頻編碼中的資源分配與目標決策相關理論研究	50,000
Dr LAM Chung Wah (State Key Laboratory in Marine Pollution of CityU)	Assessment of conventional & emerging halogenated flame retardants in two estuaries of China: Pearl River Delta and Yangtze River Delta 中國珠江與長江河口地區傳統及新興鹵系阻燃劑環境分佈特徵與生態風險評估	50,000
Dr LAM Chung Wah (State Key Laboratory in Marine Pollution of CityU)	Assessment of antibiotics in sewage and characterization of antibiotic-degrading bacteria 城市污水中抗生素的檢測及其降解菌研究	200,000
Prof LAM Kwan Sing Paul (Department of Biology and Chemistry)	Marine environmental science conference and SMART inauguration 海洋環境科學學術交流會暨深圳海洋研究與技術聯盟成立儀式	100,000
Prof LAM Kwan Sing Paul (Department of Biology and Chemistry)	Assessment and characterization of novel and unknown per- and polyfluorinated compounds in Pearl River and Yangtze River Delta 珠江三角洲和長江三角洲新型與未知全氟化合物污染狀況及其生態風險	50,000
Dr LAU Yiu Keung Raymond (Department of Information Systems)	Research on a Multi-level Multi-aspect Opinion Mining Method 情境中多層次方面的觀點挖掘技術研究	100,000
Prof LEE Chun Sing (Department of Physics and Materials Science)	Design, Preparation and Photovoltaic Performance of Tandem Solar Cells Based on Core/Shell Nanocable Arrays 串聯式一維核殼結構納米陣列太陽能電池的設計、製備和光伏性能研究	50,000

Principal Investigator (Department/Research Centre)	Project Title 項目名稱	Funding (in RMB)
Prof LI Ying (Department of Biology and Chemistry)	Acute and chronic neurotoxic actions on brain neuron and astrocyte correlated with cognitive deficits in rats 急性及慢性蓄積性雪卡中毒對大鼠腦神經元、膠質細胞和腦認知功能損害的研究	150,000
Prof LI Qiusheng (Department of Civil and Architectural Engineering)	Comprehensive investigation of boundary layer wind fields by field measurement, wind tunnel testing and numerical simulation 強/颱風邊界層風場的實測、風洞試驗和數值模擬綜合研究	50,000
Dr LI Yangyang (Department of Physics and Materials Science)	Electrochemically constructed porous metal rugate filters as perfect absorbers in the visible-IR regime 電化學法製備金屬多孔 rugate 濾波片來實現在可見-紅外區完美吸收器	50,000
Dr LI You Fu (Department of Mechanical and Biomedical Engineering)	Novel Methodology of multidimensional PIR imaging with the integration of reference structure tomography and autonomous mobile 自主移動與參考結構層析成像融合實現多維紅外成像的新方法	50,000
Prof LIM Chee Wah (Department of Civil and Architectural Engineering)	Generalized Symplectic Approach for Structure Nonlinear Axial Vibration and Control: Theory, Numerical Analysis and Experiment 廣義辛方法結構非線性軸向振動與控制的理論、數值與實驗	50,000
Dr LIU Jialiang (Information and Communication Technology Centre)	Design of monopole patch antenna for wireless mobile communication system 適用於多種無線移動通信系統的單極子貼片天線設計	50,000
Prof MA Jian (Department of Information Systems)	Research on Personalized Recommendation Methods in Research Communities 科研創新社區網路中基於用戶特徵的推薦方法研究	94,000
Prof MA Jian (Department of Information Systems)	A Social Approach to Normalization of Research Keywords 社會化方法規範學科關鍵字	87,000
Prof MA Jian (Department of Information Systems)	A Hybrid Approach to Solve Project Reviewer Assignment Problem 基於多元信息集成的項目評議人智能指派方法研究	50,000
Dr NGO Chong Wah (Department of Computer Science)	On the Fusion of Heterogeneous Modalities for Large-Scale Multimedia Search 面向大規模多媒體檢索的異構多模態融合技術研究	50,000

Principal Investigator (Department/Research Centre)	Project Title 項目名稱	Funding (in RMB)
Dr Antonio RUOTOLO (Department of Physics and Materials Science)	Microwave spintronic nano-oscillators 自旋基微波震盪器的研究	50,000
Dr SHI Peng (Department of Mechanical and Biomedical Engineering)	Coculture Based Cellular Microarrays for High-throughput Synaptogenesis Assays 基於共培養微陣列的神經突觸功能的 檢測芯片及其在高通量篩選的應用	50,000
Dr SUN Hongyan (Department of Biology and Chemistry)	Development and Application of Novel Microarray Immobilization Technology 新型生物芯片固定化技術的研究與應 用	50,000
Dr SUN Mingliang (Department of Physics and Materials Science)	High efficiency Benzo-dithiophene polymer solar cells materials and devices 高效苯並二噻吩聚合物太陽電池材料 與器件研究	100,000
Prof Nora F Y TAM (Department of Biology and Chemistry)	Purification efficiency and mechanism of long-term operation of constructed mangrove wetland sewage treatment system 紅樹林人工濕地淨化系統的長期有效 性及機制研究	400,000
Dr TAN Chee Wei (Department of Computer Science)	Adaptive Spectrum Access Resource Allocation in Cognitive Radio Networks 動態資源優化分配在認知蜂窩網路中 的研究	50,000
Dr WANG Feng (Department of Physics and Materials Science)	Novel luminescent nanocomposite: Synthesis and photoelectric conversion applications 新型複合稀土發光材料的可控合成及 其光電轉換應用的基礎研究	100,000
Dr WANG Jianfeng (Department of Civil and Architectural Engineering)	Development of a Micromechanics-based Predictive Model for Interphase Systems via a Critical State Soil Mechanics Approach 用臨界狀態土力學的方法創建土-結構 物相界面系統的基於微觀力學的行為 預測模型	43,000
Dr WANG Jianping (Department of Computer Science)	Research on Theory and Key Technologies of Network Virtualization Oriented Progressive Repair and Joint Restoration 面向網路虛擬化的漸進修復與協同恢 復的理論與關鍵技術研究	50,000
Dr WANG Yu (Department of Civil and Architectural Engineering)	Reliability Analysis of Slope Stability with Subset Simulation and Probabilistic Failure Analysis 基於子集模擬和概率失效分析的邊坡 可靠度分析及風險評估	50,000

Principal Investigator (Department/Research Centre)	Project Title 項目名稱	Funding (in RMB)
Dr WANG Zuankai (Department of Mechanical and Biomedical Engineering)	Fundamental study of phase change phenomena on micro/nanostructured surfaces 基於微納米材料表面的相變現象的基礎研究	50,000
Prof YAN Houmin (Department of Management Sciences)	Group buying and inventory control with customer choices 基於顧客選擇行為的團購商業運作模式與庫存優化研究	50,000
Prof YANG Mengsu (Department of Biology and Chemistry)	Regulation of Osteogenesis in adult stem cells by functionalized silicon nanowire arrays and the underlying molecular mechanisms 功能化硅納米線陣列調控成體幹細胞的成骨分化及機理探討	100,000
Prof YANG Mengsu (Department of Biology and Chemistry)	The Design and Construction of the Nanoprobes for Screening of Lung Cancers 用於肺癌早期檢測的納米探針的設計和構築	50,000
Prof YANG Zhilin (Department of Marketing)	Antecedents and Consequences of Embedded Ties as a Governance Strategy in Marketing Channels: A Longitudinal and Dyadic Study 嵌入關係作為營銷渠道中企業間治理機制：對其成因及後果的雙邊動態研究	99,000
Dr ZHI Chunyi (Department of Physics and Materials Science)	Highly thermally conductive insulating polymer composites for electronic packaging based on BN nanostructures 基於氮化硼微納米結構的電子器件封裝用高導熱絕緣聚合物複合材料	100,000
Dr ZHOU Wen (School of Energy and Environment)	The Decadal Variability of Persistent Drought over South China and its Association with Water Vapor Transport Anomalies 我國南方持續性乾旱年代際變化與水汽輸送異常	140,000

Source: Shenzhen Nanshan Science and Technology Innovation Bureau (深圳市南山區科技創新局)

Principal Investigator (Department/Research Centre)	Project Title 項目名稱	Funding (in RMB)
Dr ZHANG Guanglie (Department of Mechanical and Biomedical Engineering)	Optically-induced dielectrophoresis biochip for cancer cell separation and pharmacodynamics testing 基於光誘導介電泳生物芯片的癌細胞篩選與藥效檢測技術研發	2,000,000
Prof Leon J ZHAO (Department of Information Systems)	Exploring the usage of cloud services to enhance competitiveness of enterprises 發動云服務技術手段推動企業發展的措施研究	100,000

Other sources:

Principal Investigator (Department/Research Centre)	Project Title 項目名稱	Source of Funding	Funding (in RMB)
Prof CHIANG Kin Seng (Department of Electronic Engineering)	Development of graphene-based fiber-optic devices 石墨烯薄膜光纖器件的設計與實現工藝研究	Wuxi Chengdian Optical Fiber Sensing Technology Co. Ltd.	200,000
Dr LAI W C King (Department of Mechanical and Biomedical Engineering)	Development of Graphene-based Infrared Nanosensors 面向紅外探測的石墨烯納米器件製造及成像技術	State Key Laboratory of Robotics	80,000
Dr LAM Chung Wah (State Key Laboratory in Marine Pollution of CityU)	Method Development and Determination of Antibiotic Compounds in Shenzhen Source Water 深圳水環境樣品中抗生素檢測方法開發及含量測定	Shenzhen Academy of Environmental Sciences	190,000
Dr LAM Chung Wah (State Key Laboratory in Marine Pollution of CityU)	Training Program for Analysis of Emerging Pollutants in Source Water 水體中新型污染物檢測技術培訓	Shenzhen Academy of Environmental Sciences	60,000

Principal Investigator (Department/Research Centre)	Project Title 項目名稱	Source of Funding	Funding (in RMB)
Prof LAM Kwan Sing Paul (Department of Biology and Chemistry)	Start-up fund for research centre (Research Centre for the Oceans and Human Health) 研發中心扶持資金經 費 (海洋與人類健康 研究中心)	Shenzhen Virtual University Park Service Centre	100,000
Dr Steve H WONG (Department of Electronic Engineering)	Subsidy for Research Students (Information and Communication Technology Centre) 研究生實習經費 (信 息與通信科技中心)	Shenzhen Virtual University Park Service Centre	50,000
Dr ZHANG Kaili (Department of Mechanical and Biomedical Engineering)	Experimental investigation on the design, fabrication and ignition performance of nanoenergetic array based microchips 納米含能陣列微芯片 的設計、製備與點火 性能試驗研究	Institute of Chemical Materials, China Academy of Engineering Physics	200,000