

澳門科學技術發展基金與國家自然科學基金委員會聯合科研資助  
2023年度獲批項目

Financiamento para Projectos de FDCT-NSFC em 2023

| 序號<br>N.º | 檔案編號<br>N.º de Projecto | 申請實體<br>Entidade Beneficiária                                                                                                    | 項目負責人<br>O Responsável de<br>Projectode | 研究項目<br>Finalidade                                                                                                                                                                 |
|-----------|-------------------------|----------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1         | 0006/2023/AFJ           | 鏡湖醫院慈善會<br>Associação de Beneficência do Hospital<br>Kiang Wu                                                                    | 謝學斌<br>Xie, Xuebin                      | 基於群體學習的晚期鼻咽癌預後預測及治療方案推薦<br>Prognosis prediction and treatment recommendation for advanced<br>nasopharyngeal carcinoma based on swarm learning                                      |
| 2         | 0009/2023/AFJ           | 澳門科技大學基金會-澳門科技大學<br>Fundação Universidade de Ciência e<br>Tecnologia de Macau – Universidade de<br>Ciência e Tecnologia de Macau | 鍾恬<br>Zhong, Tian                       | 給體-受體型共軛聚合物納米纖維及其多模式抗菌材料<br>Donor-acceptor conjugated polymer nanofibers and their multi-<br>mode antimicrobial materials                                                          |
| 3         | 0010/2023/AFJ           | 澳門科技大學基金會-澳門科技大學<br>Fundação Universidade de Ciência e<br>Tecnologia de Macau – Universidade de<br>Ciência e Tecnologia de Macau | 周劍超<br>Chow, Kim Chiu                   | 火星地表風沙過程動力學及應用研究<br>Research on the Dynamics of Surface Dust Processes of on Mars<br>and its Application                                                                           |
| 4         | 0023/2023/AFJ           | 澳門大學<br>Universidade de Macau                                                                                                    | 潘暉<br>Pan, Hui                          | 低成本高效穩定的質子交換膜電解水製氫催化劑及膜電極研究<br>Design and fabrication of cost-effective and stable proton exchange<br>membrane water splitting electrocatalysts and membrane electrode<br>assembly |
| 5         | 0024/2023/AFJ           | 澳門大學<br>Universidade de Macau                                                                                                    | 王春明<br>Wang, Chunming                   | 脾內再生肝組織治療單基因遺傳性肝病<br>Intrasplenic regeneration of liver tissue for the treatment of<br>monogenic liver diseases                                                                    |
| 6         | 0029/2023/AFJ           | 澳門大學<br>Universidade de Macau                                                                                                    | 陳美婉<br>Chen, Meiwan                     | 雙靶向核衛星納米顆粒調節巨噬細胞動態平衡用於腫瘤免疫<br>治療<br>Dual-targeted core-satellite nanoparticles regulate macrophage<br>homeostasis for cancer immunotherapy                                         |

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| 7         | 0031/2023/AFJ           | 澳門大學<br>Universidade de Macau                                                                                                    | 黎永杰<br>Li, Yongjie                      | 基於“溶液相-單顆粒-<br>氣溶膠”的大氣有機物液相氧化實驗及外場研究<br>Laboratory and field investigations on aqueous-phase oxidation of<br>atmospheric organic compounds based on bulk-solution, single-<br>particle, and suspended-acerosol experiments                                                |
| 8         | 0043/2023/AFJ           | 澳門理工大學<br>Universidade Politécnica de Macau                                                                                      | 劉煥香<br>Liu, Huanxiang                   | 高通量藥物發現大模型關鍵技術研究<br>Key Technology Development of Large Model for High<br>Throughput Drug Discovery                                                                                                                                                                       |
| 9         | 0048/2023/AFJ           | 澳門科技大學基金會-澳門科技大學<br>Fundação Universidade de Ciência e<br>Tecnologia de Macau – Universidade de<br>Ciência e Tecnologia de Macau | 吳其標<br>Wu, Qibiao                       | 結直腸癌脾氣虧虛、濕熱瘀毒證易轉移的分子機制及仙連解<br>毒方的預防作用研究<br>The molecular mechanisms of high metastasis propensity in<br>colorectal cancer with spleen deficiency, damp-heat, and blood<br>stasis syndrome and the preventive role of Xianlian Jiedu decoction<br>in preventing metastasis |
| 10        | 0065/2023/AFJ           | 澳門科技大學基金會-澳門科技大學<br>Fundação Universidade de Ciência e<br>Tecnologia de Macau – Universidade de<br>Ciência e Tecnologia de Macau | 歐清東<br>Ou, Qingdong                     | 基於變換光學的極化激元調控及應用研究<br>Research on polaritons and their applications based on<br>transformation optics                                                                                                                                                                     |
| 11        | 0067/2023/AFJ           | 澳門大學<br>Universidade de Macau                                                                                                    | 孔慧<br>Kong, Hui                         | 動態開放環境下智能無人系統的場景感知與理解<br>Scene perception and understanding of intelligent unmanned system<br>in dynamic open environment                                                                                                                                                 |

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| 12        | 0068/2023/AFJ           | 澳門大學<br>Universidade de Macau                                                                                              | 郭善知<br>Kuok, Sin Chi                    | 基於概率機器學習向量式有限元信息物理系統的大跨橋樑結構健康診斷與預警<br>Long-Span Bridge Structural Health Diagnosis and Prognosis Based on Cyber-Physical Systems of Probabilistic Machine Learning and Vector Form Intrinsic Finite Element |
| 13        | 0070/2023/AFJ           | 澳門大學<br>Universidade de Macau                                                                                              | 許冠南<br>Hui, Kwun Nam                    | 近鄰金屬單原子在CO <sub>2</sub> 電還原制乙酸/乙醇反應中的距離效應研究<br>Research on the distance effect of neighboring metal single atoms for the electrochemical reduction of carbon dioxide into acetic acid/ethanol               |
| 14        | 0092/2023/AFJ           | 澳門大學<br>Universidade de Macau                                                                                              | 諸嫣<br>Zhu, Yan                          | 高精度低延時混合架構模數轉換器集成電路關鍵技術研究<br>Research on key technologies of high-precision and low-latency hybrid analog-to-digital converter integrated circuits                                                          |
| 15        | 0096/2023/AFJ           | 澳門科技大學基金會-澳門科技大學<br>Fundação Universidade de Ciência e Tecnologia de Macau – Universidade de Ciência e Tecnologia de Macau | 李宗津<br>Li, Zongjin                      | 濱海地區廢棄混凝土再生設計理論與應用關鍵技術<br>Design theory and application technique of recycled concrete in a coastal region                                                                                                  |
| 16        | 0107/2023/AFJ           | 澳門大學<br>Universidade de Macau                                                                                              | 王雙鵬<br>Wang, Shuangpeng                 | QLED顯示工作狀態下的材料和器件分析方法研究<br>Analysis Techniques on Material and Device of QLED under Display Working State                                                                                                   |
| 17        | 0110/2023/AFJ           | 澳門大學<br>Universidade de Macau                                                                                              | 周昶行<br>Chao, Chong Hang                 | Sin3家族轉錄抑制複合物調控染色質結構動態變化的分子機制研究<br>Structural and functional studies of Sin3 histone deacetylase complex                                                                                                    |

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| 18        | 0111/2023/AFJ           | 澳門科技大學基金會-澳門科技大學<br>Fundação Universidade de Ciência e<br>Tecnologia de Macau – Universidade de<br>Ciência e Tecnologia de Macau | 韓子天<br>Hon, Chi Tin                     | 基於自適應Fourier分解模型的人季節性流感病毒血凝素蛋白<br>抗原進化精準預測研究<br>Adaptive Fourier Decomposition Model-based Seasonal Influenza<br>Virus Hemagglutinin Protein Antigenicity Evolution Prediction<br>Study |