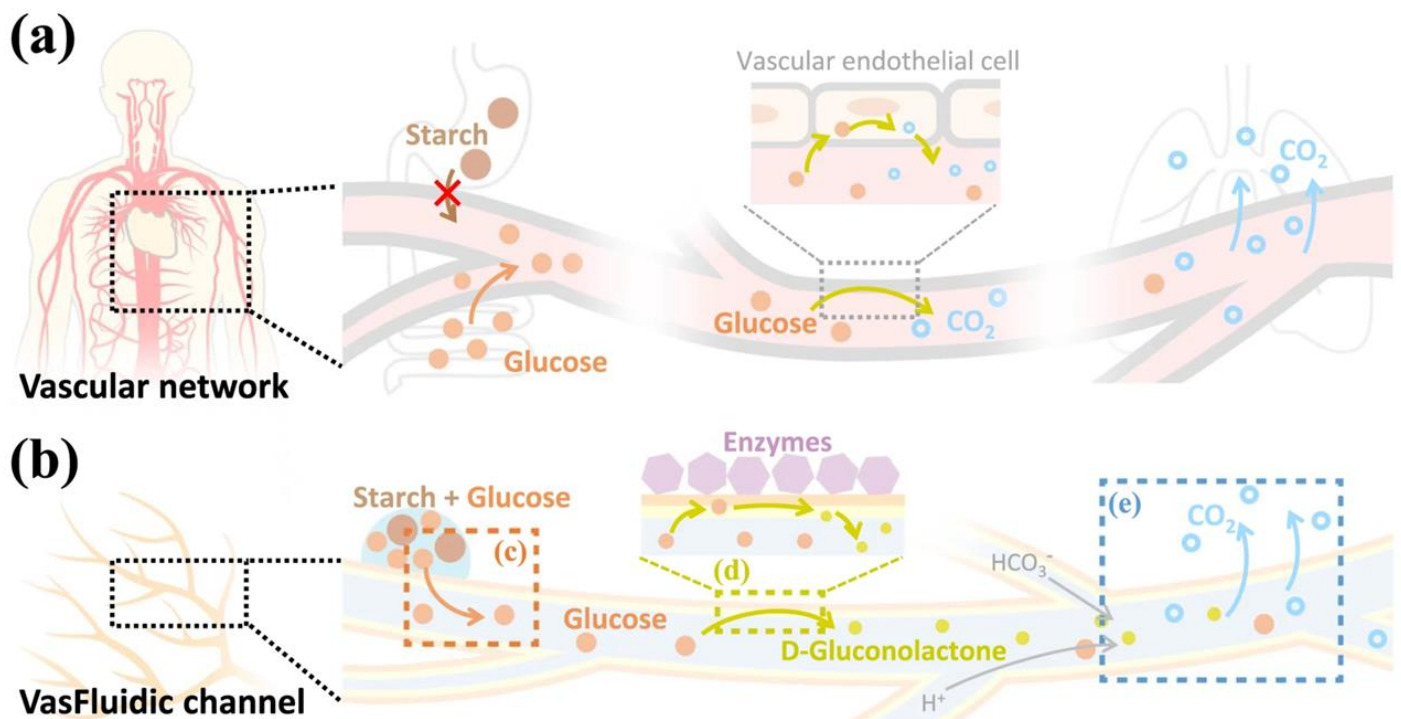




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RESEARCH

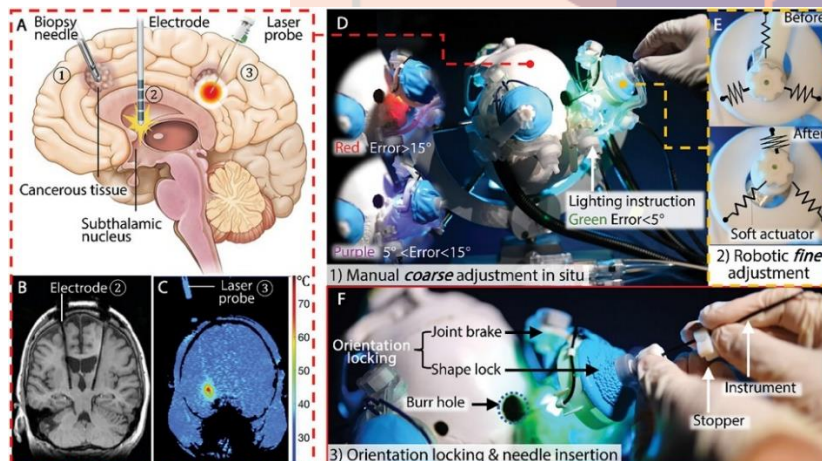
VasFluidics: Vascular network-inspired fluidic system



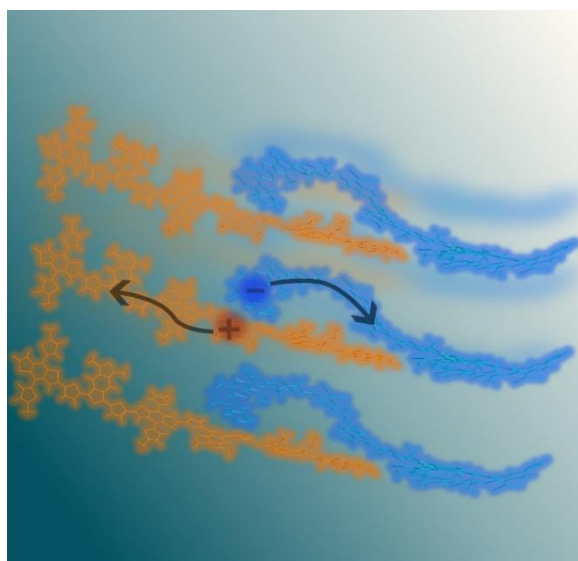
Professor Anderson H.C. Shum and his Microfluidics and Soft Matter Team worked on the research for the topic “Vascular network-inspired fluidic system (VasFluidics) with spatially functionalizable membranous walls”. The research has been published by Nature Communications on February 16, 2024....[Read more](#)

Interactive Multi-Stage Robotic Positioner for Intra-Operative MRI-Guided Stereotactic Neurosurgery

A research team led by Professor Ka-Wai Kwok has developed an interactive multi-stage robotic positioner for stereotactic neurosurgery, guided by intra-operative magnetic resonance (MR) imaging (MRI). Initial results have been published in the international journal *Advanced Science*....[Read more](#)



Stabilizing the donor-acceptor interface of organic solar cells



Professor Philip C.Y. Chow and his team published a paper on “The role of interfacial donor–acceptor percolation in efficient and stable all-polymer solar cells” in *Nature Communications* on February 8, 2024...[Read more](#)

"A high-current hydrogel generator with engineered mechanoionic asymmetry", a paper in Nature Communications

Professor Lizhi Xu and his team worked on the research for the topic "A high-current hydrogel generator with engineered mechanoionic asymmetry". The research findings were recently published in Nature Communications on February 19, 2024....[Read more](#)



High-throughput measurement of elastic moduli of microfibers by rope coiling



Professor Anderson Shum and his team develop a novel and promising method for assessing the flexibility of elastic microfibers at high throughput. The research was published in the prestigious scientific journal Proceedings of the National Academy of Sciences (PNAS) in March 2024....[Read more](#)

One-photon three-dimensional printed fused silica glass with sub-micron features

Professor Yang Lu and his collaborators reported a new approach using one-photon micro-stereolithography (OpSL)-based 3D printing to create transparent and high-performance fused silica glass components with complex, 3D sub-micron architectures. This technology has promising prospects in micro-optics, microfluidics, mechanical metamaterials, and engineered surfaces. The research was recently published in the Nature Communications in March 2024....[Read more](#)



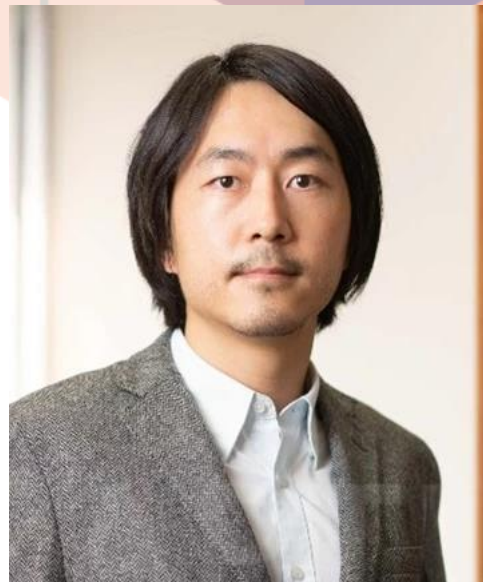
"High-throughput measurement of elastic moduli of microfibers by rope coiling", a paper in PNAS



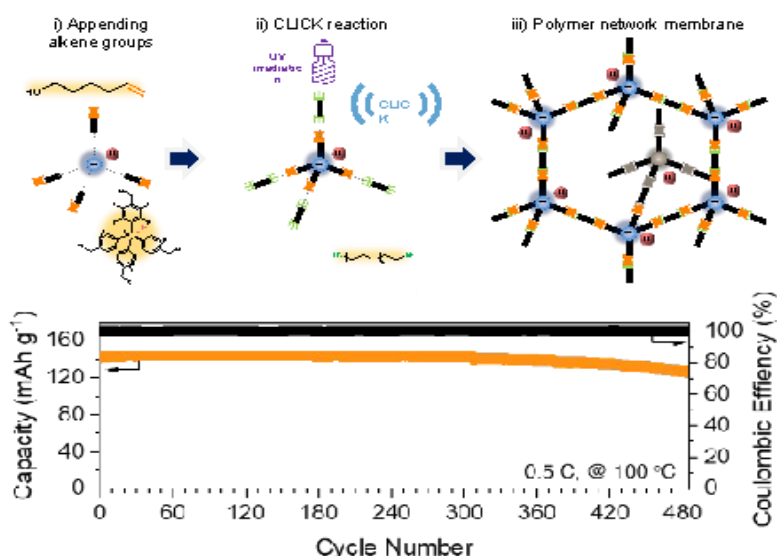
Professor Anderson Shum and his team worked on the research for the topic "High-throughput measurement of elastic moduli of microfibers by rope coiling". The research findings were recently published in PNAS on March 13, 2024....[Read more](#)

Pushing thermal conductivity to its lower limit in crystals with simple structures", a paper in Nature Communications

Professor Yue Chen and his collaborators worked on the research for the topic "Pushing thermal conductivity to its lower limit in crystals with simple structures". The research findings were recently published in Nature Communications on April 8, 2024...[Read more](#)



Accelerated Selective Li⁺ Transports Assisted by Microcrack-Free Anionic Network Polymer Membranes for Long Cyclable Lithium Metal Batteries



Professor Shin Dong-Myeong and his team work on research for development of new anionic network polymer electrolytes for long cyclable lithium metal batteries under high temperature. This work entitled "Accelerated Selective Li⁺ Transports Assisted by Microcrack-Free Anionic Network Polymer Membranes for Long Cyclable Lithium Metal Batteries" has been published in Advanced Science....[Read more](#)

AWARDS

Highly Cited Researchers 2023

Among the fifty academics of the University of Hong Kong being named "Highly Cited Researchers of 2023" by Clarivate Analytics, three are from Mechanical Engineering: Professor Yuguo Li, Professor Lance Lain-Jong Li and Professor Xiaobo Yin.

Highly Cited Researchers are selected for their exceptional research performance, determined by the production of multiple highly cited papers that rank in the top 1% by citations for field and publication year in Web of Science during 2012-2022. ...

[Read more](#)



Awards from Pitching Corner by ABIC



Professor Anderson Shum and their teams received Professional Judges' Choice Award from the Pitching Corner event organised by The Advanced Biomedical Instrumentation Centre (ABIC) at the University of Hong Kong (HKU) for the project "Saliva Mental: Dog Wellness Assessment Bal"l...

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HKU Scholars in the Top 1% 2023

This list recognises HKU researchers ranked by Clarivate Analytics in the top 1% worldwide by citations in at least one of the 22 research fields. Data is drawn from Essential Science Indicators (ESI). Among the 167 HKU scholars on the list for the year 2023, 10 are from Department of Mechanical Engineering...[Read more](#)



Recognition to engineering scholars for excellence in research and teaching



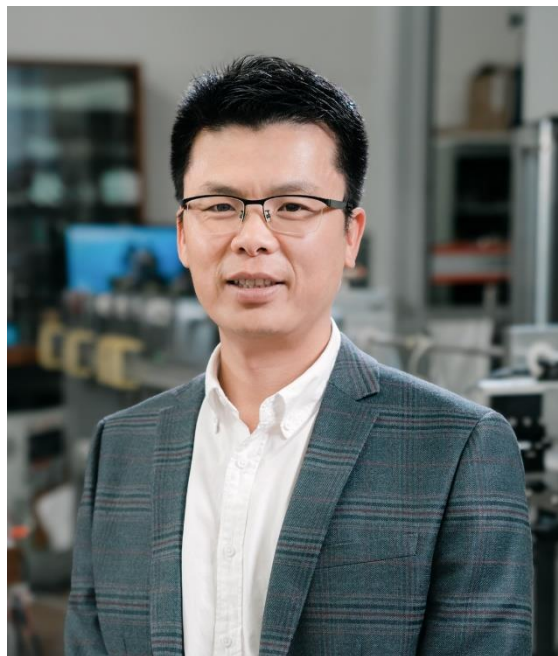
Professor Fu Zhang and Professor Yuguo Li received the Outstanding Young Researcher Award and Knowledge Exchange Excellence Award respectively...[Read more](#)

Professor Mingxin Huang's research project awarded in research funding

Professor Mingxin Huang received Innovation and Technology Fund (ITF) for the project "Development of Tailor Welded Blanks for Automotive Safety Components with High Fracture Toughness"...[Read more](#)

Professor Mingxin Huang received Hong Kong Engineering Science and Technology Award 2023

Congratulations to Professor Mingxin Huang for receiving the Hong Kong Engineering Science and Technology Award 2023 by the Hong Kong Academy of Engineering Sciences in recognition of his outstanding research achievements in materials science and engineering, particularly in the field of metals and alloys...[Read more](#)



Professor Alfonso Ngan received The HKIE Grand Award 2024

Congratulations to Professor Alfonso Ngan for receiving The HKIE Grand Award – Invention category with the project titled “Rate-jump method for nanomechanical testing” from Hong Kong Institution of Engineers (HKIE) on March 15, 2024.

The HKIE Grand Award 2024 aims to recognise the achievements and contributions of the engineering profession towards the development of Hong Kong...[Read more](#)



Member of Academia Europaea 2024



Professor James Lam, was honored to be elected in March 2024 as a Foreign Member of Academia Europaea (The Academy of Europe). He was elected under the section of Physics & Engineering Sciences for his contribution to control sciences. Professor Lam is one of only two elected Foreign Members in Asia in this section for the current year.... [Read more](#)

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