



Issue 47 (September 2023)

Faculty Achievement



Department of Materials Science and Engineering

Prof Alex JEN and his research team have recently published a paper entitled Synergistic Nanoconfinement and In-Situ Poling for Active Self-Assembly of Piezoelectric Biomolecular Films in *Nature Communications*. This study provides valuable insights into the intricate processes underlying film formation, with profound implications for the advancement of biomolecular materials.

Faculty Achievement



Department of Electrical Engineering

Prof Michael TSE and his collaborator from Southeast University received the prestigious 2022 IEEE Transactions on Power Electronics Prize Paper Award for their impactful work titled Hybrid IPT Coupler with High Tolerance to Pad Misalignment. This paper presents an innovative solution for enhancing the performance of hybrid inductive power transfer couplers.

Faculty Achievement



Department of Electrical Engineering

Prof Hong YAN's Centre for Intelligent Multidimensional Data Analysis Limited (CIMDA) has been honoured with the Bronze Prize in the "Health Care & Well-Being" category at the 2nd Smart Age Awards (2022). Their winning project "CIMDA Care" is an AI-powered elderly care system featuring 3D animations that engage elderlies in exercises, singing, dancing, music composition, and chat with avatars. The award, presented by the Golden Age Foundation, recognises initiatives that enhance the quality of elderly life and promote independent and dignified aging.

Faculty Achievement



Department of Materials Science and Engineering

A paper titled Temperature-pressure phase diagram of confined monolayer water/ice at first-principles accuracy with a machine-learning force field by Prof ZENG Xiaocheng and his research team was featured in *Nature Communications*.

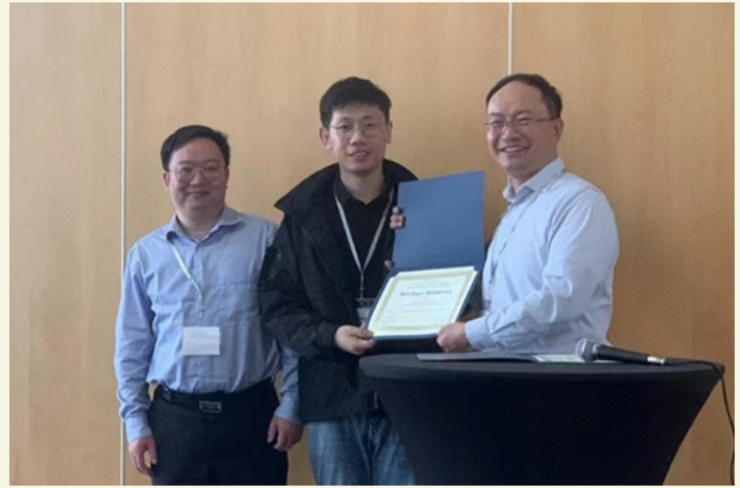
Faculty Achievement



Department of Materials Science and Engineering

A team led by Prof ZHI Chunyi published a paper entitled Lean-water hydrogel electrolyte for zinc ion batteries in *Nature Communications*.

Student Achievement



Department of Computer Science

Mr LI Ruoxiang, a PhD Computer Science student under the guidance of Prof GUAN Nan and Prof Jason XUE, and his collaborators at Hon Hai Research Institute and Wayne State University achieved the Best Paper Runner-up at the First IEEE International Conference on Mobility: Operations, Services, and Technologies (MOST 2023). Their paper, titled Modeling and Property Analysis of the Message Synchronization Policy in ROS, presented significant research outcomes in autonomous driving systems.