

October 2020

IMPact@SUTD is a regular update featuring works by SUTD Faculty, Researchers, Students and Research Centres/Labs. We hope to create awareness of the Research by SUTD within the SUTD community and beyond. Share with us your SUTD works today so that we can include it in our next update.

CONGRATULATIONS!

Dr Lee Chee Huei , and Dr Yajuan Julia Zhu for being awarded the Advance Higher Education – Fellowship*

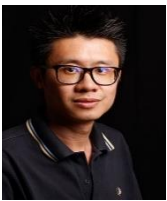
**The Advance Higher Education Fellowship recognizes personal and institutional commitment to excellence in learning and teaching in global higher education and offers professional recognition in the categories of Associate Fellow, Fellow, Senior Fellow and Principal Fellow. Fellowship recognizes effective, substantive and high-quality teaching that support student learning and demonstrates a broad understanding of effective teaching and learning approaches which contribute to significant student learning and excellence in teaching.*



Dr Lee Chee Huei (Senior Lecturer)
Engineering Product Development
Science, Mathematics and
Technology



Dr Yajuan Julia Zhu (Senior Lecturer)
Science, Mathematics &
Technology



Challenges and prospects for negawatt trading in light of recent technological developments
Nature Energy

SUTD Author: Chau Yuen

"Negawatt trading, despite being first introduced in the mid-80s, has remained elusive. However, in light of recent technological developments, negawatt trading is starting to be a reality. This Nature Energy paper looked at the challenges to wide-scale negawatt trading and explain how recent technological developments can address those challenges."

--- Chau Yuen



Meaning of age-friendly neighbourhood: An exploratory study with older adults and key informants in Singapore Cities

SUTD Author: Md Rashed Bhuyan, Anna P. Lane, Špela Močnik, and Belinda Yuen

"This study illuminates the meaning of age-friendly neighbourhoods as perceived by domain experts and older adults themselves in rapidly ageing Singapore. Both experts and older participants made reference to not just the physical but also the social environments and the intangible qualities of inclusiveness, safety and sense of place."

--- Md Rashed Bhuyan



The impact of social stratification on morbidity during the COVID-19 pandemic
International Journal of Sociology and Social Policy

SUTD Author: Nilanjan Raghunath

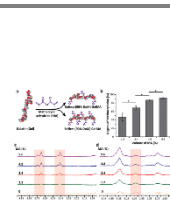
"Socioeconomic status (SES) has been known to be associated with many aspects of social life such as health. We argue that social stratification remains relevant in understanding differentials in health during a pandemic, as countries globally have encouraged or enforced social distancing and remote work measures."

--- Nilanjan Raghunath



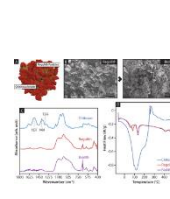
A Generic Future Mobility Sensing System for Travel Data Collection, Management, Fusion, and Visualization
IEEE Transactions on Intelligent Transportation Systems

SUTD Author: Lynette Cheah



Cell Migration and Breast Cancer Metastasis in Biomimetic Extracellular Matrices with Independently Tunable Stiffness
Advanced Functional Materials

SUTD Author: Jyothsna and Javier G Fernandez



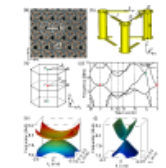
Martian biolith: A bioinspired regolith composite for closed-loop extraterrestrial manufacturing
Plos One

SUTD Author: Ng Shiwei, Stylianos Dritsas, and Javier G. Fernandez



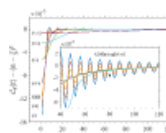
A Spatial Livability Index for dense urban centers
Environment and Planning B-Urban Analytics and City Science

SUTD Author: Francisco Benita and Bige Tunçer



Ideal Unconventional Weyl Point in a Chiral Photonic Metamaterial
Physical Review Letters

SUTD Author: Xiaolong Feng, Yue-Xin Huang and Shengyuan A. Yang



Melting of the critical behavior of a Tomonaga-Luttinger liquid under dephasing
Physical Review B

SUTD Author: Ryan Tan and Dario Poletti



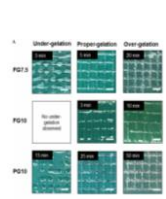
Asthmatic versus healthy child classification based on cough and vocalised /a:/ sounds
Journal of the Acoustical Society of America

SUTD Author: Balamurali B. T., Saumitra Kapoor, Dorien Herremans, and Jer-Ming Chen



Improved control strategy for Cuk converter assisted wind-driven SEIG for DC nanogrid
IET Electric Power Applications

SUTD Author: Rajvir Kaur



Preheating of Gelatin Improves its Printability with Transglutaminase in Direct Ink Writing 3D Printing
International Journal of Bioprinting

SUTD Author: Justin Jia Yao Tan, Cheng Pau Lee, and Michinao Hashimoto