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Effects of a valgus unloader brace in the medial meniscectomized knee joint: a biomechanical study

Journal of Orthopaedic Surgery and Research

SUTD Author: Duraisamy Shriram and Karupppasamy Subburaj

"This study provides a novel methodological platform to evaluate the biomechanical changes (kinetics and kinematics) in the knee joint caused by a valgus unloader brace as well as other mechanical intervention."

--- Duraisamy Shriram



Guanidine-Copper Complex Catalyzed Allylic Borylation for the Enantioconvergent Synthesis of Tertiary Cyclic Allylboronates

Angewandte Chemie

SUTD Author: Margaret Tan Siu Min and Richmond Lee

"Enantioenriched cyclic allylboronates were synthesised from racemic allylic bromides using a guanidine-copper catalyst in an enantioconvergent substitution reaction. Computational modelling showed that each starting enantiomer proceeded through a different reaction pathway to generate the same product in a rare example of a direct enantioconvergent transformation."

--- Margaret Tan Siu Min



Understanding the Lifestyle of Older Population: Mobile Crowdsensing Approach

IEEE Transactions on Computational Social Systems

SUTD Author: Sumudu Hasala Marakkalage, Serhad Sarica, Billy Pik Lik Lau, Sanjana Kadaba Viswanath, Chau Yuen, Belinda Yuen and Jianxi Luo

"This paper presents an approach to understand the daily lifestyle of elderly in Singapore, through mobile crowdsensing. By using sensor fusion and user profiling techniques, we analyze the data collected from a smartphone-based application, to identify different groups of elderly, their points of interest (POI), and their travel behaviour."

--- Sumudu Hasala Marakkalage

Area- and Power-Efficient Nearly-Linear Phase Response IIR Filter by Iterative Convex Optimization
IEEE Access

SUTD Author: Gelei Deng and Jiaxuan Zhang

Digital Audio Signature for 3D Printing Integrity
IEEE Transactions on Information Forensics and Security

SUTD Author: Jinghui Toh

Dual-Ion Electrochemical Deionization System with Binder-Free Aerogel Electrodes
Small

SUTD Author: Weiyun Zhao, Meng Ding, Lu Guo, and Hui Ying Yang

In-plane coherent control of plasmon resonances for plasmonic switching and encoding
Light-Science & Applications

SUTD Author: Joel K. W. Yang

Multiple access mmwave design for uav-aided 5g communications
IEEE Wireless Communications

SUTD Author: Lingjie Duan

Push button design requirements and relations to button architecture elements
International Journal of Industrial Ergonomics

SUTD Author: Arlindo Silva

Recycling of vitrimer blends with tunable thermomechanical properties
RSC Advances

SUTD Author: Biao Zhang, Chao Yuan, Wang Zhang, Martin L. Dunn, and Qi Ge

Some Double Sums Involving Ratios of Binomial Coefficients Arising From Urn Models
Journal of Integer Sequences

SUTD Author: James G. Wan

Stereocontrol in the synthesis of cyclic amino acids: a new ligand for directed hydrogenation through hydrogen bonding
Organic & Biomolecular Chemistry

SUTD Author: Bao Nguyen Do Doan

Thermomechanical residual stress evaluation in multi-crystalline silicon solar cells of photovoltaic modules with different encapsulation polymers using synchrotron X-ray microdiffraction
Solar Energy Materials and Solar Cells

SUTD Author: Sasi KumarTippabhotla, Andrew A.O.Tay, and Arief Suriadi Budiman

Unmasking Clever Hans predictors and assessing what machines really learn
Nature Communications

SUTD Author: Alexander Binder

Weyl-loop half-metal in Li₃(FeO₃)₂
Physical Review B

SUTD Author: Cong Chen, Zhi-Ming Yu, Si Li, Xian-Lei Sheng, and Shengyuan A. Yang

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