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### 2024

# Advancements in Textile-Based sEMG Sensors for Muscle Fatigue Detection: A Journey from Material Evolution to Technological Integration.

Medagedara MH, Ranasinghe A, Lalitharatne TD, Gopura RARC and Nandasiri GK. Acs Sensors vol. 9, (9) 4380-4401. American Chemical Society (Acs).

## Corrigendum to Developments in circular external fixators: A review [Injury, Volume 54 Issue 12 (2023), 111157].

Widanage KND, De Silva MJ, Lalitharatne TD, Bull AMJ and Gopura RARC. Injury vol. 55, (3). Elsevier.

### 2023

#### Developments in circular external fixators: A review.

Widanage KND, De Silva MJ, Lalitharatne TD, Bull AMJ and Gopura RARC. Injury vol. 54, (12). Elsevier.

#### Vocal pain expression augmentation for a robopatient.

Protpagorn N, Lalitharatne TD, Costi L and Iida F. Frontiers in Robotics and Ai vol. 10, Frontiers.

#### Editorial: EMG/EEG signals-based control of assistive and rehabilitation robots, volume II.

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#### DeforMoBot: A Bio-Inspired Deformable Mobile Robot for Navigation Among Obstacles.

Mulvey BW, Lalitharatne TD and Nanayakkara T. *IEEE Robotics and Automation Letters vol.* 8, (6) 3827-3834. *Institute of Electrical and Electronics Engineers (IEEE).* 

#### Robotic Simulators for Tissue Examination Training With Multimodal Sensory Feedback.

He L, Maiolino P, Leong F, Lalitharatne TD, de Lusignan S, Ghajari M, Iida F and Nanayakkara T. *IEEE Reviews in Biomedical Engineering vol. 16, 514-529.Institute of Electrical and Electronics Engineers (IEEE).* 

## 2022

#### Face mediated humanrobot interaction for remote medical examination.

Lalitharatne TD, Costi L, Hashem R, Nisky I, Jack RE, Nanayakkara T and Iida F. *Scientific Reports vol. 12, (1). Springer Nature.* 

Simulating dynamic facial expressions of pain from visuo-haptic interactions with a robotic patient. Tan Y, Rérolle S, Lalitharatne TD, van Zalk N, Jack RE and Nanayakkara T. *Scientific Reports vol. 12, (1).Springer Nature.* 

#### Origami Inspired Design for Capsule Endoscope to Retrograde Using Intestinal Peristalsis.

Ge Y, Lalitharatne TD and Nanayakkara T. *IEEE Robotics and Automation Letters vol. 7, (2) 5429-5435.Institute of Electrical and Electronics Engineers (IEEE).* 

## 2021

## A thin-walled vacuum actuator (ThinVAc) and the development of multi-filament actuators for soft robotic applications.

Kulasekera AL, Arumathanthri RB, Chathuranga DS, Gopura RARC and Lalitharatne TD. Sensors and Actuators a *Physical vol. 332, Elsevier*.

#### In situ 4D tomography image analysis framework to follow sintering within 3Dprinted glass scaffolds.

Kondarage AI, Poologasundarampillai G, Nommeots Nomm A, Lee PD, Lalitharatne TD, Nanayakkara ND, Jones JR and Karunaratne A. *Journal of The American Ceramic Society vol.* 105, (3) 1671-1684. Wiley.

## Comparative Analysis of Model-Based Predictive Shared Control for Delayed Operation in Object Reaching and Recognition Tasks With Tactile Sensing.

Costi L, Scimeca L, Maiolino P, Lalitharatne TD, Nanayakkara T, Hashem R and Iida F. *Frontiers in Robotics and Ai* vol. 8, *Frontiers*.

#### Portable Acquisition of Auditory ERPs: A Pilot Study of Premature Infants.

Phillips JP, Pirrung CJ, Weerasinghe I, Kanishka GK, Satharasinghe Y, Lalitharatne TD, Cavanagh JF, Kodituwakku P and Wanigasinghe J. *Pediatric Neurology vol. 122, 84-88.Elsevier*.

#### MorphFace: A Hybrid Morphable Face for a Robopatient.

Lalitharatne TD, Tan Y, He L, Leong F, Van Zalk N, de Lusignan S, Iida F and Nanayakkara T. *IEEE Robotics and Automation Letters vol.* 6, (2) 643-650. *Institute of Electrical and Electronics Engineers (IEEE)*.

## A Low-Profile Vacuum Actuator (LPVAc) With Integrated Inductive Displacement Sensing for a Novel Sit-to-Stand Assist Exosuit.

Kulasekera AL, Arumathanthri RB, Chathuranga DS, Gopura RARC and Lalitharatne TD. *IEEE Access vol. 9*, 117067-117079.*Institute of Electrical and Electronics Engineers (IEEE)*.

### 2020

## Facial Expression Rendering in Medical Training Simulators: Current Status and Future Directions.

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### 2018

#### An Underactuated Linkage Finger Mechanism for Hand Prostheses.

H. MCMH, R. ARCG and Thilina DL. *Modern Mechanical Engineering vol.* 08, (02) 121-139. Scientific Research Publishing.

### 2017

#### Adaptive Foot in LowerLimb Prostheses. Weerakkody TH, Lalitharatne TD and Gopura RARC. *Journal of Robotics vol. 2017, (1) 1-15.Hindawi.*

### 2013

## Towards Hybrid EEG-EMG-Based Control Approaches to be Used in Bio-robotics Applications: Current Status, Challenges and Future Directions.

Lalitharatne TD, Teramoto K, Hayashi Y and Kiguchi K. Paladyn Journal of Behavioral Robotics vol. 4, (2) 147-154. De Gruyter.

**Estimation of Forearm Supination/Pronation Motion Based on EEG Signals to Control an Artificial Arm.** KIGUCHI K, LALITHARATNE TD and HAYASHI Y. *Journal of Advanced Mechanical Design Systems and Manufacturing vol. 7, (1).Japan Society of Mechanical Engineers.* 

## Evaluation of Fuzzy-Neuro Modifiers for Compensation of the Effects of Muscle Fatigue on EMG-Based Control to be Used in Upper-Limb Power-Assist Exoskeletons.

LALITHARATNE TD, TERAMOTO K, HAYASHI Y, NANAYAKKARA T and KIGUCHI K. Journal of Advanced Mechanical Design Systems and Manufacturing vol. 7, (4). Japan Society of Mechanical Engineers.