Poster Session 1-1	
Date / Time	Aug. 22 (Mon.), 2022 / 15:45-16:30
Room	Lobby (5F)

[MoP1-1.1]

Sensorless Impedance Control for the TWIN Lower Limb Exoskeleton: A Preliminary Study

Alessia Sacchini, Federico Tessari, Christian Vassallo, Stefano Maludrottu, Elena De Momi, Matteo Laffranchi, and Lorenzo De Michieli

[MoP1-1.2]

Walking and Standing with an Exoskeleton for the Lower Limbs: Effects of Mass and Inertia on Gait and Postural Control

Pedro Parik-Americano, João Pedro Pinho, Fabia Camile dos Santos, Camila Taira, Guilherme Silva Umemura, and Arturo Forner-Cordero

[MoP1-1.3]

Motor Performance Index for Evaluation of Distributed Pattern in Multi-Channel EEG

Hojun Jeong and Jonghyun Kim

[MoP1-1.4]

Development of a Soft Inflatable Exosuit for Knee Flexion Assistance

Ibrahim Mohammed Hasan, Emiliano Quinones Yumbla, and Wenlong Zhang

[MoP1-1.5]

Model-Based Control for Gait Assistance in the Frontal Plane

Vahid Firouzi, Omid Mohseni, and Maziar A. Sharbafi

[MoP1-1.6]

Modeling and Characterization of 3D Printed Flexible Mesh Structure for Wearable Interface

Binghao Lu, Jirui Fu, Saba M. Hosseini, and Joon-Hyuk Park

[MoP1-1.7]

Soft Tactile SkIn: Tactile Sensor System to Soften Robots

Taiki Majima and Kazunori Takashio

[MoP1-1.8]

A Hybrid Swing-Assistive Electro-Hydrostatic Bionic Knee Design

Marco Puliti, Federico Tessari, Renato Galluzzi, Simone Traverso, Andrea Tonoli, Lorenzo De Michieli, and Matteo Laffranchi

[MoP1-1.9]

Travelling Wave Locomotion of a Tensegrity Robotic Snake based on Self-Excitation Controllers

Xin Li, Jingfeng He, and Alexandre Pitti

[MoP1-1.10]

Design and Control of a Variable Buoyancy Module for a Serial ROV

Santiago Noriega and Hernando Leon-Rodriguez

[MoP1-1.11]

Comparison of In-Home Robotic Companion Pet Use in South Korea and the United States: A Case Study

Casey C. Bennett, Cedomir Stanojevic, Seongcheol Kim, Selma Sabanovic, Jinjae Lee, Jennifer A. Piatt, Janghoon Yu, and Jiyeong Oh

[MoP1-1.12]

Stairs and Ramps Ascent and Descent: How to Design Feasible Gait Patterns for a Powered Lower-Limb Exoskeleton

Christian Vassallo, Gaia Zinni, Stefano Maludrottu, Matteo Laffranchi, and Lorenzo De Michieli

[MoP1-1.13]

Evaluation of the User Command Interface, an Adaptable Setup System for Industrial Exoskeletons

Olmo A. Moreno Franco, Jesus Ortiz, and Darwin G. Caldwell

[MoP1-1.14]

A Magnetically-Controlled 3D-Printed Helical Microrobot for Application in Photothermal Treatment of Cancer Cells

Van Du Nguyen, Kim Tien Nguyen, Shirong Zheng, Chang-Sei Kim, Byungjeon Kang, Doyeon Bang, Jong-Oh Park, and Eunpyo Choi

[MoP1-1.15]

Design of a Force Sensing Needle Guide for an MRI-Compatible Robotic Prostate Biopsy System

Rongrong Liu and Seong Young Ko

[MoP1-1.16]

Evaluation of Haptic Interaction in Mirror Game by a Cerebellum Inspired Virtual Player

Önay Karaca, Amr Okasha, Atacan Duman, Umut Candan, and Kutluk B. Arıkan

[MoP1-1.17]

Proportional Control of a Soft Cable-Driven Exoskeleton via a Myoelectrical Interface Enables Force-Controlled Finger Motions

Jonas Walter, Paul Roßmanith, Daniela Souza de Oliveira, Sebastian Reitelshöfer, Alessandro Del Vecchio, and Jorg Franke

[MoP1-1.18]

Electromyography-Based, Robust Hand Motion Classification Employing Temporal Multi-Channel Vision Transformers

Ricardo V. Godoy, Gustavo J. G. Lahr, Anany Dwivedi, Tharik J. S. Reis, Paulo H. Polegato, Marcelo Becker, Glauco A. P. Caurin, and Minas Liarokapis