

Poster Session 1-2

Date / Time Aug. 22 (Mon.), 2022 / 16:30-17:15

Room Lobby (5F)

[MoP1-2.1]

Experimental Evaluation of a Stiffness-Fault-Tolerant Control Strategy on an Elastic Actuator for Wearable Robotics

Rodrigo J. Velasco-Guillen, Victor Grosu, Bram Vanderborght, Josep M. Font-Llagunes, and Philipp Beckerle

[MoP1-2.2]

A Unity-Based Da Vinci Robot Simulator for Surgical Training

Ke Fan, Aldo Marzullo, Nicolò Pasini, Alberto Rota, Matteo Pecorella, Giancarlo Ferrigno, and Elena De Momi

[MoP1-2.3]

CNN-Based Controller for Multi-DoF Prosthetic Wrist using sEMG Data during Activities of Daily Living

Mohamed Fazil, Zixia Meng, and Jiyeon Kang

[MoP1-2.4]

Paralinguistic Cues in Speech to Adapt Robot Behavior in Human-Robot Interaction

Ashita Ashok, Jakub Pawlak, Sarwar Paplu, Zuhair Zafar, and Karsten Berns

[MoP1-2.5]

3D Phononic Crystal-Based pH Sensor Advanced with Machine Learning

Syed Muhammad Anas Ibrahim, Zhang Fang, Jaehyun Kim, and Jungyul Park

[MoP1-2.6]

Stress Detection of Children with Autism using Physiological Signals in Kaspar Robot-Based Intervention Studies

Buket Coşkun, Pinar Uluer, Elif Toprak, Duygun Erol Barkana, Hatice Kose, Tatjana Zorcec, Ben Robins, and Agnieszka Landowska

[MoP1-2.7]

Admittance Control of Wearable Robotic Brace for Dynamic Trunk Support

Xingzhao Guo, Zhihao Zhou, and Qining Wang

[MoP1-2.8]

Passive Exosuit Emulator for Material Handling Applications

Siddharth Bhardwaj, Akshayraj B. Shinde, Randheer Singh, and Vineet Vashista

[MoP1-2.9]

Six-DOF Localization using Magnetic Induction Effect for Automated Locomotion of an Active Capsule Endoscope

Manh Cuong Hoang, Jayoung Kim, Jong-Oh Park, and Chang-Sei Kim

[MoP1-2.10]

RobHeart: Soft Robot for Heart-Like Volumetric Stress on Seeded Cardiac Cells

Alberto Villani, Giulio Ciucci, Andrea Colliva, Sara Marullo, Serena Zacchigna, and Domenico Prattichizzo

[MoP1-2.11]

A Multiscale Approach for Evaluating the Effects of Focused Ultrasound Sensory Stimulation on the Central Nervous System in Prosthetics

Alessia Scarpelli, Mattia Stefano, Francesca Cordella, and Loredana Zollo

[MoP1-2.13]

Wearable Elastic Networks for Customized Multijoint Torque Fields

Partha Ryali, Beatrice Malizia, Courtney Celian, Tommaso Carella, Daniel McDermed, Rohith Erukulla, and James L. Patton

[MoP1-2.14]

Assessing Changes in Human Gait with a Mobile Tethered Pelvic Assist Device (mTPAD) in Transparent Mode with Hand Holding Conditions

Danielle M. Stramel and Sunil K. Agrawal

[MoP1-2.15]

Development of a Compliant Joint Based Upper Limb Exoskeleton for Stable Tele Manipulation: CJ EXO

Bhivraj Suthar, Zubair Mohd, Sachin Kansal, and Sudipto Mukherjee

[MoP1-2.16]

Design of Pediatric Robot to Simulate Infant Biomechanics for Neuro-Developmental Assessment in a Sensorized Gym

Jal Panchal, O. Francis Sowande, Laura Prosser, and Michelle J. Johnson

[MoP1-2.17]

Fiber-Bragg-Grating Based Force Sensor with Dual Structure for Minimally Invasive Surgery

Jeongwon Lee and Sungwook Yang