

# The 9th IEEE RAS/EMBS International Conference on Biomedical Robotics & Biomechatronics August 21 – 24, 2022 | Seoul National University, Seoul, Korea

Poster Session 2-2	
Date / Time	Aug. 23 (Tue.), 2022 / 16:30-17:15
Room	Lobby (5F)

## [TuP2-2.1]

**Targeted Microparticle Delivery using Ultrasound Single Beam: A Preliminary Feasibility Study** Daewon Jung, Hiep Xuan Cao, Han-Sol Lee, Ho Yong Kim, Jong-Oh Park, and Byungjeon Kang

### [TuP2-2.2]

Ultrasound-Based Tracking and Autonomous Manipulation of Nanocluster in Water

Hiep Xuan Cao, Daewon Jung, Chang-Sei Kim, Jong-Oh Park, Eunpyo Choi, and Byungjeon Kang

## [TuP2-2.3]

Variable-Focus Acoustic Liquid Lens for Microparticle Mnipulation: Preliminary Study JIYUN NAN, Eunpyo Choi, Jong-Oh Park, and Byungjeon Kang

### [TuP2-2.4]

The Comparison of Homography Estimation Algorithms for Gastroscopic Images

Sang-Kun Chun, Byungwoo Cho, Jong-Oh Park, and Byungjeon Kang

### [TuP2-2.5]

Implantable Cardiovascular Biopotential Acquisition and Stimulation Circuit for Robotic Transcatheter Leadless Pacemaker

Kyeongsik Nam, Gyuri Choi, Hyungseup Kim, Mookyoung Yoo, Sangmin Lee, and Hyoungho Ko

## [TuP2-2.6]

A Platform for Real-Time Recording of Finger Forces and Surface EMG in Forearm Muscles

Agnes Grison, Aritra Kundu, Bruno Grandi Sgambato, Silvia Muceli, and Dario Farina

# [TuP2-2.7]

## Significance of Friction in Mechanical Impedance Estimation

Seongil Hwang, Hyunah Kang, and Sang Hoon Kang

## [TuP2-2.8]

## A Soft Bioelectronic Device for Stimulation of Peripheral Nerves

Hyunmin Moon, Byung Wook Park, and Sohee Kim



## [TuP2-2.9]

**Recording of Neural Signals from Peripheral Nerves using Flexible Penetrating Icroelectrode Arrays** Byung Wook Park, Jae-Won Jang, and Sohee Kim

#### [TuP2-2.10]

5-DOF Mobile Haptic Interface for Force Rendering

JuEun Choi, Sangeun Park, Usman Park, Youngjin Moon, and Jaesoon Choi

#### [TuP2-2.11]

Anatomical Landmarks Classification via Deep Learning for Upper Gastrointestinal Endoscopy Byungwoo Cho, Sang-Kun Chun, Jong-Oh Park, and Byungjeon Kang

#### [TuP2-2.12]

**Hybrid Robotic and Electrical Stimulation Training Enhances Performance and Reduces Mental Load** Lucille Cazenave, Martibn Einenkel, Aaron Yurkewich, Satoshi Endo, and Etienne Burdet

#### [TuP2-2.13]

Developing a Force Generation Assessment Tool: Implication for Improving Leg Function among Individuals with Stroke

Duguma Teshome Gemechu, Eunyoung Seo, Olga Valerevna Kim, Keun-Tae Kim, and Song Joo Lee

## [TuP2-2.14]

### Vibration Sensory Threshold Measurement using Mobile Devices

Rachel A. G. Adenekan, Alexis J. Lowber, Bryce N. Huerta, Allison M. Okamura, Kyle Yoshida, and Cara M. Nunez

#### [TuP2-2.15]

**Effects of Adaptation Sessions using a Split-Belt Treadmill: Implication for Gait Rehabilitation after Stroke** Olga Valerevna Kim, Duguma Teshome Gemechu, and Song Joo Lee

## [TuP2-2.16]

Feasibility of a Passive Wearable Device for Post-Stroke Shoulder Abduction Support

Elizabeth Vasquez, Cole Stewart Simpson, Genggeng Zhou, Grace Waguespack, Bryce N. Huerta, E. W. Hawkes, Maarten G. Lansberg, and Allison M. Okamura