

Prosthesis

Date / Time Aug. 24 (Wed.), 2022 / 10:00-11:30

Room Room 515

Session Chair Jiyeon Kang (*SUNY Buffalo*)

[WeO1B.1]

10:00-10:15

Empirical Validation of an Auxetic Structured Foot with the Powered Transfemoral Prosthesis

Woolim Hong, Namita Anil Kumar, Shawanee Patrick, Hui-Jin Um, Heon-Su Kim, Hak-Sung Kim, and Pilwon Hur

[WeO1B.2]

10:15-10:30

A Low-Cost 3D Printed Prosthetic Hand with a Sensory Feedback Interface

Yair Herbst, Derick Sivakumaran, Yoav Medan, and Alon Wolf

[WeO1B.3]

10:30-10:45

A Lightweight Transradial Prosthetic Emulator for Optimizing Prosthetic Wrist Design

Souvik Poddar and Jiyeon Kang

[WeO1B.4]

10:45-11:00

The PrHand: Functional Assessment of an Underactuated Soft-Robotic Prosthetic Hand

Laura De Arco, Orion Ramos, Marcela Múnera, Mehran Moazen, Helge Wurdemann, and Carlos A. Cifuentes

[WeO1B.5]

11:00-11:15

Effects of Modulation Coefficient Adjustment on Energy Regeneration of Damping Torque Controlled Transtibial Prosthesis

Wenduo Zhu, Jingeng Mai, and Qining Wang

[WeO1B.6]

11:15-11:30

A Multi-Body Model of an Upper-Limb Prosthesis for Grip Force Estimation and Related Object Interaction Application

Giulia Bruni, Anna Bucchieri, Federico Tessari, Nicolò Boccardo, Andrea Marinelli, Elena De Momi, Matteo Laffranchi, and Lorenzo De Michieli