

# Best Paper Award

[IEEE RAS EMBS Best paper Awards]  
BP-MO3 – Room HS 8

Tuesday 3 September

ORAL SESSIONS

**Morning ORAL Sessions (10:50 – 12:05): Parallel oral sessions (Talks: 10 min + 2 min Q&A).**

# Best Student Paper Award

[IEEE RAS EMBS Best Student Paper Awards]  
BSP-AF3 – Room HS 8

Tuesday 3 September

ORAL SESSIONS

**Afternoon ORAL Sessions (13:30 – 14:45): Parallel oral sessions (talks: 10 min + 2 min Q&A).**

# Best posters

Monday September 2  
POSTER SESSION 1

**Afternoon Poster Sessions (15:50 – 17:00).**

Tuesday September 3  
Poster Session 2

**Afternoon Poster Sessions (16:35 – 17:50).**

# Best Paper Awards Finalists

Tuesday 3 September  
ORAL SESSIONS

Morning ORAL Sessions (10:50 – 12:05): Parallel oral sessions  
(Talks: 10 min + 2 min Q&A).

[IEEE RAS EMBS Best paper Awards] BP-MO3 – Room HS 8

**Paper ID**

**Authors**

**Title**

185	Schumacher, Pierre; Krause, Lorenz; Schneider, Jan; Büchler, Dieter; Martius, Georg; Haeufle, Daniel Florian Benedict	Learning to Control Emulated Muscles in Real Robots: Towards Exploiting Bio-Inspired Actuator Morphology
326	Eveld, Maura; Van Asseldonk, Edwin; Van der Kooij, Herman	A disturbance-cancelling approach for exoskeleton balance assistance
118	De Vicariis, Cecilia; Ivanova, Ekaterina; Sanguineti, Vittorio; Burdet, Etienne	Haptic Communication in a Redundant Sensorimotor Interactive Task
261	Abdulali, Arsen; Costa Cornella, Aliex; Sirithunge, Chapa; Iida, Fumiya	Effect of Material Viscosity on Tactile Compliance Discrimination
48	Smyrnakis, Nikolaos; Karakostas, Tasos; Cotton, R. James	Advancing Monocular Video-Based Gait Analysis Using Motion Imitation with Physics-Based Simulation
187	Marx, Lennard; Groenhuis, Vincent; Stramigioli, Stefano; Niu, Kenan	Augmented-Reality based digital twin to control an MR safe robot for breast biopsy: A benchmark study

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Paper ID	Authors	Title
57	Marsh, David Michael; Puliti, Marco; Goldfarb, Michael	A Novel Swing Assistance Control Approach for a Powered Transfemoral Prosthesis
113	Polizzotto, Maria Grazia; Zaidi, Ahmed Zohaib; Paterno, Linda; Menciassi, Arianna	Self-adaptive upper limb prosthetic socket
201	van der Mijle Meijer, Joep Kobus; Mulder, Iris; Ligtenberg, Leendert-Jan Wouter; Liefers, Herman Remco; Magdanz, Veronika; Khalil, Islam S.M.	Controlled Locomotion of IRONSperm Clusters: Evaluating Maneuverability with X-Ray-Guided Magnetic Fields
75	Gonzalez cely, aura ximena; blanco-diaz, cristian felipe; delisle rodriguez, denis; bastos filho, teodiano freire	EEG-Based Multiclass Classification for Recognizing Pedaling Velocities: A Promising Approach for Brain-Computer Interface-Enhanced Lower-Limb Robotic Rehabilitation
169	Tamai, Hayato; Sankai, Yoshiyuki; Uehara, Akira; Kawamoto, Hiroaki	The Development of Anorectal and Core Activation Method with Wearable Cyborg HAL for Defecation Disorder Treatment
279	Deng, Yuanzhe; Roshanfar, Majid; Mayer, Haley; He, Changyan; Drake, James; Looi, Thomas; Diller, Eric D.	Towards Bimanual Operation of Magnetically Actuated Surgical Instruments

# Best Poster Paper Awards Finalists

Monday September 2 **Afternoon Poster Sessions (15:50 – 17:00).**  
POSTER SESSION 1

**Paper ID** **Authors** **Title**

112	Heremans, François; Evrard, Jeanne; Langlois, David; Ronsse, Renaud	A lightweight and compact lockable parallel spring enhances the performance of a powered ankle-foot prosthesis
199	Bottin-Noonan, Joel; Alici, Gursel; Sreenivasa, Manish	Characterization of stiffness and damping properties of a Soft Torque Assistive Bio-inspired Lower Limb Exosuit (STABLE)
106	Ingraham, Kimberly; Feldner, Heather; Steele, Katherine	An Instrumented 'Explorer Mini' for Quantitative Analysis of Toddlers Using Powered Mobility for Exploratory, Mobile, and Digital Play

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Tuesday September 3 **Afternoon Poster Sessions (16:35 – 17:50).**  
Poster Session 2

**Paper ID** **Authors** **Title**

313	Iverson, Juliana; Rabe, Kaitlin G.; Fey, Nicholas	Task Dependent Sonomyography Signal Features Extracted with Task Independent Non-Negative Matrix Factorization Decomposition are Sensitive to Ambulation Mode
257	Cravero, Grazia; Siri, Debora; Moro, Matteo; Ricci, Serena; Pierella, Camilla; Canessa, Andrea; Preiti, Deborah; De Grandis, Elisa; Nobili, Lino; Casadio, Maura	A personalized driving simulator for the assessment of adolescents with attention deficit hyperactivity disorder
278	Josse, Eva; Gaultier, Pierre-Louis; Kager, Simone; Cheng, Hsiao-ju; Gassert, Roger; Lamercy, Olivier	Optimizing digital health metrics to quantify functional upper limb movements with inertial measurement units