

## Poster - BMS24/AUTOMED24 (Room E1.04)

1	N. Huhs*, N. Kalashtari, C. Hornberger, J. Kraitl, and O. Simanski "Application of LiDAR and neuromorphic vision in ambient assisted living environments"
2	N. Licini*, B. Sonzogni, P. Abuin, F. Previdi, A.H. Gonzalez, and A. Ferramosca "Artificial Pancreas under stable MPC: including the Physical Activity effect"
3	M. Wiartalla*, C. Lübke, S. Leonhardt, M. Walter, R. Kopp, S. Kowalewski, and A. Stollenwerk "A survey on requirements for safety and control concepts of artificial implantable lungs"
4	A. F. Frigge* and A. Medvedev "Targeting fiber tracts in deep brain stimulation: optimal contact configurations"
5	M. Kargeti* "Metabolic State of Bacterial Cells: Deciphered through a Simple Mathematical Model"
6	C. Ramírez-Mazo*, L. Gómez-Echavarría, L- Lema-Pérez, and S. Röblitz A semi-mechanistic mathematical model on the interactions between the ovulatory-menstrual cycle and the metabolic and cardiovascular system
7	M. Schiavo, T. Mendonça*, and A. Visioli "On the individualized PIDA tuning for the automatic control of neuromuscular blockade"
8	M. Ragni, P. A. Mongini, L. Magni, and C. Toffanin* "Multiple Model Predictor for Type 1 Diabetes"
9	R. Schmid*, E. F. Picka, H. Arabian, K. Moeller, and V. Wagner-Hartl "Evaluation of Emotional Everyday Scenarios for the Development of a Digital Health Application"
10	N. M. Shiroma*, L. F. Alves Ferreira, J. R. Pecora, A. L. Campos Mariani, and M. Tsuzuki "Development of Assistive Technology Using Gametherapy for Congenital Clubfoot Treatment"
11	T. Jochim*, A. Żurawski, N. Stecher, A. Heinke, and H. Malberg "Differentiating between structural and functional spinal deformities in children and adolescents using machine learning"
12	O. Karadimas*, P. Karvelis, and C. D. Stylios "Vector Representation of Biological Data Using Machine Learning"
13	S. Chakraborty*, R. Swaminathan, and S. IITM "An Explainable Machine Learning Model for Differentiation of Glioma Sub-types using MR Image Texture Analysis of Cerebral Edema"
14	N. Stecher*, A. Heinke, A. Ł. Żurawski, L. Richter, M. R. Harder, and H. Malberg "Scoliosis assessment from trunk rotation based on torsobarography using machine learning"
15	A. Tschirschky*, T. Jochim, A. Heinke, A. Żurawski, and H. Malberg "Comparing gait parameters for right-convex scoliosis patients with and without brace"
16	J. Dohndorf*, N. Stecher, A. Heinke, and H. Malberg "Experimental determination of the transmission behavior of a pressure sensor array for torsobarography in posture analysis"
17	J. Sewell*, C. Zhou, and J. G. Chase "Identifiable Model Derivation and Verification for a 2D Knee Joint Analysis"

18	<b>S. Sundar* and R. Swaminathan</b> "Estimation of Muscle Fatigue Progression based on Modified Lempel Ziv Complexity"
19	<b>L. Burger*, S. Ulrich, and H. Mozaffari-Jovein</b> "Development of osseointegrative implants with drug delivery function for medical technology"
20	<b>S. Pilehvar*, R. Heidari, and H. Mozaffari-Jovein</b> "Influence of the hybrid process on the vertical bond strength of 3D-printed PEEK implants"
21	<b>L. Gottschalk*, S. Müller, and V. Bucher</b> "Analysis of wireless data transfer methods for subcutaneous medical implants"
22	<b>D. Obergfell*, R. Bösinger, and B. Azarhoushang</b> "Creating antireflective surfaces through ultrashort pulsed laser microstructuring"
23	<b>B. Qeshta* and H.P. Deigner</b> "Synthesis and Characterization Formation of Disulfide Cross-Linked and Thiazolidine Ring Hyaluronic Acid Hydrogels"
24	<b>V. Pfannschmidt*, M. Buglowski, M. Grüne, F. Hammer, O. Braun, M. Hütten, S. Kowalewski, M. Schöberer, and A. Stollenwerk</b> "An interconnected modular setup for in-vivo evaluation of automated mechanical ventilation"
25	<b>A. Döcke*, S. Mogdans, S. Kromnik, and H. Malberg</b> "In vitro test setup for continuous evaluation of oxygenators for extracorporeal circulation"
26	<b>S. Fonck*, S. Fritsch, S. Kowalewski, and A. Stollenwerk</b> "Modular ML-Framework to develop and compare AI models for ARDS classification"
27	<b>J. Hofman*, J. Bamboschek, N. Fix, and K. Möller</b> "Implementation of adapted volume distribution in the basic dynamic Hickling Model"
28	<b>C. Ionescu*, R. M.C. De Keyser, E. Yumuk, D. Copot, and M. Neckebroek</b> "An Adaptive Control Structure to Mitigate Lack of Feasibility in Systems with Poor Identifiability. Case Study on General Anesthesia"
29	<b>J. A.Clifton*, E. F. S. Guy, R. Chen, T. Caljé-van der Klei, L. Holder-Pearson, K. Moeller, and J. G. Chase</b> "Aeration with Increasing PEEP in Smokers, Vapers, and Asthmatics"
30	<b>R. Chen*, A. Lovas, S. Krueger-Ziolek, P. Bakos, and K. Moeller</b> "Monitoring spontaneous breathing during apnea testing with electrical impedance tomography"
31	<b>E. Petrovs, A. Okss, and A. Katashev*</b> "Effect of moisture on human tissue impedance measurement using textile electrodes"
32	<b>A. Battistel*, J. Wilkie, R. Chen, and K. Möller</b> "A multifrequency image reconstruction for electrical impedance tomography to retain tissue spectral information"
33	<b>A. Battistel*, A.C. Özen, J. Wilkie, R. Chen, D. von Elverfeldt, and K. Möller</b> "Enhance electrical impedance tomography with magnetic readings"
34	<b>N. Fix* &amp; H. Helin, T. Billoud, D. von Elverfeldt, F. Goldschmidtboeing, M. Weigt and M. Pichotka</b> "Photon-counting super-sampled imaging using piezoelectric motors"
35	<b>P. Jadhav* and R. Swaminathan</b> "A Nomogram Based Risk Classification System for Comorbid Conditions Using Multiple Fluid Biomarkers"