



## Studierendentagung Lübeck 2024

Postersessions  
6<sup>th</sup> of March, 2024

Postersession 1	
36	<i>Vivian Mohr, Lisa Marshall</i> Local variations in ultrafine particles – A pilot study –
20	<i>Frauke H. Niebel, Jorge Chacon-Caldera, Alex C. Barksdale, Monika Sliwiak, Lawrence L. Wald, Matthias Graeser</i> Design, assembly, and validation of a magnetic particle imaging low-noise amplifier
31	<i>Bettina Uliczka, Josef Ingenerf, Joshua Wiedekopf, Lorenz Rosenau</i> Pathwalker - a tool for supporting interactive analytics on FHIR data
70	<i>Baris Bargu, Sarvesh Thakur, Pepijn Klooster, Gereon Hüttmann, Dierck Hillmann</i> Optimization of the triggering sequence in Phase Sensitive Full Field Swept Source OCT
123	<i>Abeer Eisa Khalid Omer, Jonas Osburg</i> Optical Pose Detection of a Cable-Driven Parallel Robot
97	<i>Marcel Zulim</i> Development and validation of a process for the reprocessing of components of a washer-disinfector for endoscopes
110	<i>Maja Fritzi Saidl, Marcus Heldmann, Baldrun Köhncke</i> Factorial structure in Executive Functions: A replication study
69	<i>Anne Tichy, Mourad Zoubir</i> Development and Validation of the Preference for Automation Adaption Scale (PAAS)
104	<i>Luisa Winzer, Tim Schrills</i> Assessing the Impact of AI Capability Feedback and Reliability in LLM-Assisted Error Detection
107	<i>Svea Kaduk, Fabienne Aust, Lena Heinemann, Maik Holtz, Vera Hagemann, Corinna Peifer</i> Researching the Effect of Collective Efficacy on Team Flow in High Responsibility Teams: A Focus on Firefighting Operations
109	<i>Karl Benjamin Bieber, Kirsten Handschuch, Fabienne Aust, Corinna Peifer</i> The Relationship between Work-Related Stressors, Flow and the Role of Strengths Use
121	<i>Gerwin Akpadji, Ulrike Krämer, Martin Göttlich, Emily Fitzgibbon</i> Analysing the neural foundations of ego- and altercentricity bias and their association with judgement of emotional states
47	<i>Nitish Panchpor, Ankit Malhotra, Agnes Weimer, Kerstin Lüdtke-Buzug</i> Pilot Study for Coating of Superparamagnetic Iron Oxide Nanoparticles using Single Emulsion
57	<i>Rebecca Kantorek, Hong Phuc Vo, Steven Seeger, Jorge Roser, Magdalena Rafecas</i> Detector Efficiency Correction for the MERMAID Scanner Prototype
90	<i>Simeon Placzek, Andreas Deresch</i> X-Ray Spectrometry with Photon Counting Detectors



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18	<i>David Melenberg, Nele Blum, Thorsten M. Buzug, Maik Stille</i> Cinematic Rendering Methods of Dental-CBCT-Data using Visualization Toolkit
82	<i>Gustav Krumnow, Tilo Jonathan Wöbber, Cem Adiyaman, Jannis Hagenah, Georg Männel</i> Latency Assessment of Console Input for a Virtualized Robotic Surgical Simulation
120	<i>Jakob Greten, Ngoc Thinh Nguyen</i> Safe navigation with polytopic-based tools
100	<i>Martin Rolfs, Emmanuel Brau, Floris Ernst, David Hamilton</i> Refurbishment Scheme of a High Vacuum Tight Flange Seal with a Redundant Robot at ITER
37	<i>Hauke Budig, Nikolaus Ammann</i> Multi-Sensor Calibration on a Pan-Tilt-Unit System for Unmanned Aerial Vehicles
38	<i>Hannah Lück, Thomas Pisch, Javad Ghofrani</i> Human-Robot Interaction in Industry: A Practical Approach on Integrating a Cobot into an Existing Workflow
64	<i>Robin Holland, Gabriel Gomez, Hendrik Husstedt</i> A web-based listening test suite for an immersive listening lab
66	<i>Herwig Nicolaus, Michael Anywar, Santiago Pazmino Pinto, Hannes Ulrich, Jan Schladetzky, Ann-Kristin Kock-Schoppenhauer, Josef Ingenerf</i> Integration of the Oncologic Base Data Set into the UKSH Medical Data Integration Center
85	<i>Laura Meyenborg, Josef Ingenerf, Jonas Schön</i> Structured data for the legal electronic health record using a FHIR-based clinical data repository
67	<i>Rghia Fakrun</i> SWOT Analysis of Utilizing Medical Device Log Data into Post-Market Activities According to the EU Medical Device Regulation
52	<i>George Makhoulchahin, Robert Wendlandt</i> Probability Filtering for AI Monocular Video Motion Analysis
76	<i>Corinna Warnecke, Björn Bargstädt, Andreas Kater</i> Dilute Injection of Anesthetic Gases to Reduce an Unintended Bolus
12	<i>Christopher Carlisle, Joerg Schroeter and Robert Wendlandt</i> Finite Element Analysis of Fracture Plates for Periprosthetic Humerus Fractures: An Evaluation and Comparison of Non-linear Effects and Design Improvements
71	<i>Lea Peuckert, Thomas Friedrich</i> Construction of a Test Rig to Quantify the Cutting Characteristics of Additively Manufactured Phantoms
88	<i>Finjas Künnemann, Robert Wendlandt</i> Accurate Estimation of Yield Stress from Bending Test and FEM Analysis
73	<i>Nils Stumpf, Florian-Lennert Lau, Stefan Fischer</i> Review of CPU-Requirements in Medical Nanonetworks



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Postersession 2	
74	<i>Lea Antonia Rossa, Michael Scharfschwerdt, Stephan Ensminger, Anas Aboud</i> Concept Study for the Development of a Motionless Skin Lead-through for the Energy Supply of an Implanted Ventricular Assist Device
80	<i>Jonathan Ahnfeldt, Stefan Müller</i> Optimizing Anaesthesia Devices: Temperature Sensor Integration for Enhanced Safety
108	<i>Ricus Gattermann, Sarah Jessen</i> Influence of a multimodal stimulus presentation on emotion perception
91	<i>Annika Quack, Jens Lembke, Hauke Paulsen</i> Reduction of interference noises on the adjustable-pressure-limiting valve of an anaesthesia machine
92	<i>Kim Paulke, Jochen Behrends, Thomas Scholzen, Linda Zemke, Norbert Reiling, Inken Wohlers</i> Dimensionality Reduction for Innovative Cell-View Imaging Supported Flow Cytometry Data
105	<i>Marike Kallweit</i> Developmental Acquisition, and Processing of Immunoassay Data through an Automated Laboratory Analyzer – Expanding and Optimizing a Dashboard Visualization
27	<i>Eleana Noti, Alexander Altmann, Ramtin Rahmanzadeh</i> Characterization of porphyrin-based sensor films to improve food safety of black tiger shrimps
24	<i>Andra-Karina Poetschki, Eric Seifert, Selma Bolterauer, Ralf Brinkmann</i> Laser induced microbubbles in blood vessel phantoms
14	<i>Rafat Saeed, Maik Rahlves, Dirk Grosenick</i> Estimation of Absorption Using Spatially Resolved Spectroscopy Method
23	<i>Allegra Behr, Philipp Lamminger, Robert Huber</i> Development of an optical distance measurement system for fiber Fabry-Pérot tunable filters
56	<i>Michael Kurenkov, Tobias Klass, Georg Schildbach</i> Advancing Automotive ECU Software Validation: Automated Testing in a Software-in-the-Loop Environment for Enhanced Efficiency and Robustness
4	<i>Nina Cassandra Wieggers, Sebastian Germer, Christiane Rudolph, Katharina Rausch, Natalie Rath, Heinz Handels</i> A Comparison of Imputation Techniques to Improve Lung Cancer Survival Estimation
46	<i>Bansari Shah</i> Quantifying Spatial Resolution in Magnetic Particle Imaging Through Analysis of FFL Sinogram Data
122	<i>Liesa Kunert</i> Creating a Graphical User Interface as Clickdummy with Simple Directmedia Layer Library in C++



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111	<i>Sai Pavan Kumar Reddy Nusuma, Marian Himstedt</i> VTK-Enabled Depth Rendering for Enhanced Bronchoscopy Guidance Using CT Images
21	<i>Manuel Herbst, Martin Leucker, Lennart Landt</i> Implementation of an interface between a foot switch and an augmented reality device based on the SDC standard
11	<i>Svea J. Wilken, Gillian Cadde, Steven W. Magennis</i> Structures and dynamics of DNA three-way junctions: The role of interrupts in hairpins formed by CAG repeats
17	<i>Yannik Kasprzak, Jessica Rückert, Niclas Ludolph, Hauke Paulsen</i> Investigation of different reaction coordinates in MD simulations of the Ala9 peptide at different pressures and temperatures
16	<i>Vincent Raphael Jansen, Ahmed Mahmoudi</i> Are Transformers Better KITTI Detectors Than YOLO?: A Comparative Study of Object Detectors for Mobile Applications
44	<i>Maria Angela Qato</i> Magnetic Particle Imaging, Quantification and Reduction of Artefacts for non-ideal FFL Positions
81	<i>Alen James, Ahmed Mahmoudi, Mladen Berekovic</i> Simulation-based Fault Analysis in Object Detection Models
116	<i>Ratul Hassan, Monika Schneider, Anna Natrup, Stefan Müller</i> Implementation of a Declaration of Conformity (DoC) Process in the Process of Registration for Medical Devices in Compliance with European Regulations for a Medical Device Manufacturer
59	<i>Elise Sophie Banach, Markus Gödker</i> Assessing Driving Situation Complexity: Development and Pilot Evaluation of a Short Questionnaire with Traffic Psychology Experts
129	<i>Emily Leah Fitzgibbon, Ulrike Krämer, Martin Göttlich, Gerwin Akpadji</i> Investigating right supramarginal gyrus activations and behavioral scores in the FFEB-paradigm
126	<i>Max-Ole Bastian von Waldow, Floris Ernst, Eduard Marti Bigorra</i> Practical Palletizing with RealWorld Considerations
115	<i>Muhammad Junaid, Jochen Lindermayr</i> Mobile Robots for Machine Maintenance and Tending
128	<i>Julia Röller, Karsten Hiltawsky</i> Literature Research on Medical Technology Products for Monitoring Perioperative Processes in Anesthesia
6	<i>Greta Göttling, Eduard Weber</i> Construction of an endurance test rig for pressure regulators with associated pre-tests
49	<i>Sevda Golkar</i> Advancing Prostate Transurethral Resectoscope Testing: Enhancing Hydrogel-Based Tissue Mimics and Ensuring Storage Stability



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50	<i>Sujay Mukherjee, Cem Adiyaman, Jannis Hagenah, Georg Männel, Dennis Kundrat, Dennis Wendt, Floris Ernst</i>
	Towards the Development of a Robotic System for Automated Surgical Trocar Insertion
19	<i>Hassan Shayea, Christian Weihsbach, Ziad Al-Haj Hemidi, Mattias P. Heinrich</i>
	Examining the synthesization of physically plausible MRI images