

POSTER

2023

27th International Student Scientific Conference Poster 2022

Results of the Best Poster Award

Biomedical Engineering

1. Simon Lyra, Christoph Weiss: Deep Learning-Based Region Extraction for Photoplethysmography Imaging
1. Sebastian Dill, Maurice Rohr: mnmDTW: An extension to Dynamic Time Warping for Camera-based Movement Error Localization
2. Patrik Průčka: Analysis of skin responsivity to allergy test with photoplethysmography imaging
2. Simon Walzel: Perfusion index measured continuously and simultaneously on all five fingers of the hand
3. Urban Jacobs: Development and Validation of an Impedance Cardiography System for Integration into a Ventricular Assist Device
3. Christoph Weiss: Detection of Basic Emotions by Automated Facial Expression Monitoring

Communications

1. Marek ZIKMUND: Photobleaching Effect on the Erbium-Doped Optical Fibers
2. Cosima A. ERMERT: Short-Term Memory Performance under Gender and Spatial Audio-Visual Mismatch
3. Jana ZIMANOVÁ: Fabrication of the Optical Structures Using Direct Laser Writing

Electronics and Instrumentation

1. Michal Kočí: Room temperature ethanol detection using carbon materials
2. Jan Šedivý, David Vagner: Spherical MEMS microphone array with FPGA communication unit
3. Martin Urban: Use of circular transistor in bandgap voltage reference and effect on the standard deviation of reference voltage in 0.18 μ m CMOS technology
4. Martin Stastny, Francesco Daghero: Extended Abstract: Automatic Generation of Analog Layout from Netlist

History of Science

1. Michael Dudzik: The Cassini family and the mapping of France (1684–1744)
1. David Hamr: Technological and industrial aspects of the introduction and operation of Clock networks in Czechoslovakia
2. Jorge Alonso Rodriguez Ortiz: The Colombian Standard Steam Locomotive: The transmission and circulation of technical knowledge and technology transfer. The case of British engineer Paul C. Dewhurst's designs and its manufacture at Škoda (1923-1929).
2. Martin Hrtus: Prof. František Rieger and his air raid siren systém
3. David Pazdera: A Firearm as a Basis for Historical Research of the Period 1945–1989
3. Prokop Jandek: Changes in promotion of artificial fertilizers in the context of business interests of family firm A. Schram
4. Jonas Heck, Christian Dreier: Towards an Immersive Audio-visual Model of Copacabana for Future Urban Studies

Informatics and Cybernetics

1. Felix Keppler: Multi-Robot Trajectory Coordination and Disturbance Handling for Complex Vehicle Combinations

Management

1. Adam Kubín: Analysis of the key legislation for the development of the district heating sector in the EU
2. Lenka Obermajerová: Combining the Lean Canvas with Design Thinking in a new product design process

Natural Sciences

1. Leoš Ondriš: Effect of montmorillonite type nanofiller on structure of thermoplastic starch-based nanocomposites during one-year-storage
2. Julia Seitz, Karin Loh: A Listening Experiment to Study Intentional Switching of Auditory Selective Attention in Preschool Children
3. Simona Saporová: Effect of plasticizers on morphology and molecular mobility of TPS/MMT nanocomposites studied using NMR

Power Engineering

1. Florian Krause: Model-Based Comparison of Algorithms for Determining the State-of-Charge of Batteries under Realistic Conditions
2. Tim Falkenstein: Scanning Acoustic Microscope as a Tool for Defect Detection in Lithium-Ion Roundcells
3. Lukáš Michl: Photopolymers for stereolithography