| Section I (10:20–11:50) | |
|---|---|
| **Artificial Intelligence in Biomedical Engineering and Applications** | |
| **B-001** | Translational Multimodal Biosensing Platform for Clinical Affective Monitoring Based on Physiological Signals and Dual-Modality Facial Imaging |
| **B-003** | An Application Study of Non-contact Optical Sensing in Deep Learning-based Voice Pathology Detection |
| **B-008** | AI-driven process-tolerant BioFET sensing model for precise biliary atresia diagnosis of infants with a single drop of blood |
| **B-010** | Deep learning-assisted cytopathological analysis for assessing tumor content of endobronchial ultrasound bronchoscopy-guided lung biopsy |

| Section II (14:00–15:20) | |
|---|---|
| **Artificial Intelligence in Biomedical Engineering and Applications** | |
| **B-014** | Machine Learning-driven Gait-assisted Self-powered Wearable Sensing System for Advanced Healthcare Monitoring |
| **B-015** | Quantitative Assessment of Training Load and Fatigue Using Multi-Channel PPG and Deep Feature Learning |
| **B-016** | Simulation of the Cortical-Basal Ganglia-Thalamic Loop and Generative Adversarial Network-based Neural Signal Translation for Adaptive Deep Brain Stimulation in Parkinson's Disease |
| **B-017** | Integration of Multi Point Tongue Pressure Analysis and AI-Driven Intraoral Tongue Localization for Oral Phase Dysphagia Assessment |
| **B-018** | A Novel Robotic Ultrasound System with Hybrid AI Model for DOS Assessment in AVF in Hemodialysis Patients |

| Section III (15:40–17:00) | |
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| **Artificial Intelligence in Biomedical Engineering and Applications** | |
| **B-025** | Multispectral Generation Based on Proximal Policy Optimization for Photobiomodulation Therapy |
| **B-027** | ARDScope: A Multimodal Deep Learning Platform for Mortality and Fibrosis Prediction in Acute Respiratory Distress Syndrome |
| **B-028** | CTS-ContextNet: A Spatio-Temporal Context-Aware Network for Automatic CTS Diagnosis from Ultrasound Imaging |
| **B-030** | Brain Structural-Functional Coupling Classifies Age |
| **B-032** | Intelligent Triboelectric Wearable Belt with Integrated AI for Continuous Respiration Monitoring |

| Section IV (09:50–11:30) | |
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| **Artificial Intelligence in Biomedical Engineering and Applications** | |
| **B-034** | Speech-Based Parkinson's Disease Screening Using Propensity Score-Adjusted SVM and Acoustic Feature Optimization |
| **B-037** | Vessel-BloomSeg: A Vessel Feature–aware Deep Segmentation Network to Overcome Blooming Artifacts in Coronary CT Angiography |
| **B-038** | Multi-channel Rotational Electric Field Repetitive Transcranial Magnetic Stimulation (rTMS) with Integrated GAI for decision-making |
| **B-039** | Integration of an Economical, Deployable Intelligent Digital Droplet Sensing Device with Raspberry Pi-based YOLOv11 for Rapid Droplet Recognition to Detect Biomarker Gene Changes of Traumatic Brain Injury |