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# ICBME 2026

## ORAL & KEYNOTE PRESENTATION SCHEDULE

33rd National & 11th International Iranian Conference on Biomedical Engineering

Date
18 & 19 November

## HALL 1 (18 November-27 Aban)

| Presentation Time | Paper ID | Presenter | Paper Title |
|---|---|---|---|
| 11:00-11:20 | 1059 | Hatef Mohammadi Alashti | **Technical session: AI & Digital Health in Biomedical Engineering**<br>Machine Learning for Discriminating Extreme Flow-Diverter-Induced Velocity Responses from Intracranial Aneurysm Morphology |
| 11:20-11:40 | 1297 | Sobhan Hojjati | Visual Attention and Scene Exploration Across Age Groups: Contributions of Scene-Dependent and Object-Specific Features |
| 12:40-13:00 | 1100 | Mahla Khodaverdi | Lexical Signatures of the Conscientious Mind |
| 12:00-12:40 | **Keynote Speaker** | | |
| 12:40-14:00 | **Lunch & Break** | | |
| 14:00-14:20 | 1345 | Kamran Kazemi | ECSR-Swin: Edge and Complementary Skip Refinement for Stroke Lesion Segmentation |
| 14:20-14:40 | 1366 | Mohammad Mehdi Sehat | Multimodal Radiomics for Lesion vs. Non-Lesional VOI Classification on [68Ga]Ga-PSMA-11 PET/CT: A Patient-Level Analysis |
| 14:40-15:00 | 1035 | Maliheh Fayaz Izadi | From Stimulus Priors to Online Personalization: Leakage-Aware, Standards-Informed Affect Prediction |
| 15:00-15:20 | 1276 | Narges Nasehi | Interpretable Autism Detection via Local Fibonacci Patterns |
| 15:20-15:40 | 1359 | Hossein Ezzatzadeh | Reproducibility and Damage-Threshold Sensitivity of a Water-Cooled Microwave Ablation Antenna Model |
| 15:40-16:10 | **Break, Exhibition & Group 1 Poster Presentations** | | |
| 16:10-16:30 | 1239 | Amir Reza Hamidi | **Technical session: Biosensors and Wearable Devices**<br>A Quantitative $T_1$-Relaxometry Design Framework for NV-Based Ferritin Biosensors: Optimal Dark Time and Readout-Repetition Requirements |
| 16:30-16:50 | 1605 | Saba Arjmandnia | Design and Evaluation of a Textile-Mesh Liquid Crystal Aptasensor for Amyloid-β Detection in a Complex Biological Serum Matrix: Fetal Bovine Serum |
| 16:50-17:10 | 1154 | Mehran Soltani | A Wearable Microfluidic Biosensor for Non-Invasive Sweat Glucose Monitoring: Mass Transport Governs Sensitivity and Linear Range |
| 17:10-17:30 | 1588 | Saeed Heidari | Flexible and Mechanically Robust ZnO Nanoparticle-Reinforced Double-Network Hydrogel for Biomedical Sensing |

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## ORAL & KEYNOTE PRESENTATION SCHEDULE

33rd National & 11th International Iranian Conference on Biomedical Engineering

Date
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## HALL 2 (18 November-27 Aban)

| Presentation Time | Paper ID | Presenter | Paper Title |
|---|---|---|---|
| 11:00-11:40 | | | **Technical session: Biomedical Signal and Medical Image Processing** |
| | | | **Keynote Speaker** |
| 11:40-12:00 | 1062 | Aliasghar Bagheri Tirtashi | Robust EEG and s-EMG Fusion for Hand Gesture Recognition Using Cross-Attention |
| 12:00-12:20 | 1282 | Parham Talebkhameh | A Metric Learning Approach for Multilevel Cognitive Workload Classification in Hybrid EEG-fNIRS Signals |
| 12:20-12:40 | 1561 | Amir Abdolhosseini | An Efficient Wavelet-Attention Module for CNNs in Pancreatic Cancer Classification Using Endoscopic Ultrasound |
| 12:40-14:00 | **Lunch & Break** | | |
| 14:00-14:20 | 1236 | Arezoo Pasand | HiCaps-EEG: Reliability-Aware Fusion of Hierarchical Semantic and Capsule Representations for EEG Visual Decoding |
| 14:20-14:40 | 1181 | Amirhossein Bagheri Baboukani | Validation-Calibrated Position-Dependent Bidirectional Fusion for Sparse 2-D ECG Reconstruction |
| 14:40-15:00 | 1567 | Sayed Morteza Nourian Najafabadi | Stabilized Scalp Current Density for Multi-Source EEG Localization: Simulation and Recorded-EEG Evaluation |
| 15:00-15:20 | 1339 | Alireza Nourbakhsh | Deep Local Time-Series Alignment Using Inspectable Piecewise-Linear Warping |
| 15:20-15:40 | 1216 | Shayan Ghasembeiky | Lightweight Order-Statistic Gate for Transformer-Based Breast Ultrasound Lesion Segmentation |
| 15:40-16:10 | **Break, Exhibition & Group 2 Poster Presentations** | | |
| 16:10-16:30 | 1570 | Atoosa Naeij Nouri | Changes in Prefrontal Hemodynamics Within and Across Nine Sessions of Foot-Drawing Practice |
| 16:30-16:50 | 1061 | Alaa Hajr | FBD-Mamba: Component-Aware Facial Behavioral Dynamics Modeling for Contactless Stress Recognition |
| 16:50-17:10 | 1581 | Yeganeh Valizadeh | Self-Reported Asymmetric Ocular Symptoms in Virtual Education: A Comparative Study of Students and Teachers |
| 17:10-17:30 | 1316 | Mahdi Mollaei | Differences in ERP Source Activity Between Children With Developmental Dyslexia and Typically Developing Readers During VCPT |

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## HALL 3 (18 November-27 Aban)

| Presentation Time | Paper ID | Presenter / Keynote Speaker | Paper / Keynote Talk Title |
|---|---|---|---|
| 11:00-11:20 | 1569 | Seyed Alireza Ensaniat | **Technical session: Biomaterials, Tissue Engineering and Regenerative Medicine**<br>PLLA Top-Coating on Plasma Electrolytic Oxidized Ti-6Al-4V: Effects on Surface Morphology, Wettability, and MG-63 Cell Adhesion |
| 11:20-11:40 | 1500 | Fereydoun Oukati sadeq | Evaluation of Microstructure and In Vitro Biocompatibility of Ti-Modified CoCrMo Alloys for Orthopedic Implant Applications |
| 11:40-12:00 | 1555 | Mohammad Rezaei | An Injectable Carboxymethyl Chitosan/Alginate Hydrogel Incorporating Quercetin-Loaded ZIF-8 and Hydroxyapatite for Bone Tissue Engineering |
| 12:00-12:20 | 1090 | Mahdi Cheraghian | Development of a Self-Assembled Hyaluronic Acid Guest-Host Hydrogel through β-Cyclodextrin-Cholic Acid Interactions |
| 12:20-12:40 | 1363 | Zahra Alihosseini | Development and Characterization of Polymer Films Based on Thiolated Poly(vinyl alcohol)/Poly(glycerol sebacate) for Tissue Adhesive Applications |
| 12:40-14:00 | **Lunch & Break** | | |
| 14:00-14:20 | 1083 | Zohre Mojiri | **Technical session: Biomedical Signal and Medical Image Processing**<br>Speech Source Localization Using Spectral Order Pattern Coherence Factor for DOA Estimation |
| 14:20-14:40 | 1101 | Nazila Eshghi | Robust Alterations in Dynamic Theta-Band EEG Community Organization in Alzheimer's Disease |
| 14:40-15:00 | 1175 | Yalda Khodarahmi | Context-Aware Bi-GRU Temporal Modelling for Sleep Stage Classification using Single-Channel EEG |
| 15:40-16:10 | Break, Exhibition & Group 1 Poster Presentations | | |
| 16:10-16:30 | 1381 | Aisa Rassoli | Experimental Characterization of the Viscoelastic Behavior of Aortic Allografts Using Stress Relaxation Tests |
| 16:30-16:50 | 1611 | Mohammad Hadi Esteki | Poroelastic Modeling of Cell Swelling and Shrinkage Behavior |
| 15:50-16:10 | 1190 | Erfan Abdolrazagh | Study of the Effect of Collagen Fiber Architecture and Distribution on the Swelling Behavior of Engineered Cartilage during Interstitial Growth Using the Finite Element Method |
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## HALL 4 (18 November-27 Aban)

| Presentation Time | Paper ID | Presenter / Keynote Speaker | Paper / Keynote Talk Title |
|---|---|---|---|
| 11:00-12:00 | | | **Technical session: Biomechanics, Medical Robotics and Sports Engineering** |
| | **Keynote Speaker** | | |
| 12:00-12:20 | 1591 | Mohammad Olyai | Friction Memory as a Hidden Actuator: Exact Reachability and Certified Low-Effort Holding in a Single-Motor Tendon Finger |
| 12:20-12:40 | 1594 | Ashkan Jelodar | A Hysteresis-Aware Recurrent Observer for Sensorless Posture Estimation in a Single-Motor Underactuated Tendon-Driven Finger |
| 12:00-12:20 | 1195 | Maryam Hosseini | Friction Memory as a Hidden Actuator: Exact Reachability and Certified Low-Effort Holding in a Single-Motor Tendon Finger |
| | | | |
| 12:40-14:00 | **Lunch & Break** | | |
| 14:00-14:40 | 1603 | Mohsen Setayeshmehr | **Technical session: Additive Manufacturing for Biomedical Applications**<br>ECM Derived hybrid Gel Bioinks for Cartilage Bioprinting: A Comparative Study of Thiol-Ene and Photo-Ionic Hydrogel Systems |
| 14:40-15:00 | 1476 | Mohammad Mahdi Taghvaei | Investigation of the Effect of Zinc Oxide Nanoparticles on the Structural, Mechanical, and Antibacterial Properties of PLA/ZnO Scaffolds Fabricated by Robocasting |
| 15:00-15:20 | 1302 | Majid Hajihosseinali | 3D-printed composite scaffolds with HA-BG coatings for bone tissue engineering: physicochemical properties |
| 15:20-15:40 | 1411 | Shaghayegh Rastghalam | Comparative Investigation of Mechanical Performance of 3D-Printed Polycaprolactone and Polylactic Acid Scaffolds for Bone Repair: A Finite Element and Experimental Study |
| 15:40-16:10 | **Break, Exhibition & Group 1 Poster Presentations** | | |
| 16:10-16:30 | 1250 | Maryam Hoshiaripour | **Technical session: Biomechanics, Medical Robotics and Sports Engineering**<br>Innovation-Gated Adaptive Kalman-ML Fusion for Safe Trajectory Generation in a dVRK-Inspired Surgical Task |
| 16:30-16:50 | 1353 | Yassaman Djafari | Topological State-Space Characterization and Self-Organizing Feature Mapping of Trunk Dynamics Following Exercise Interventions in Females |
| 16:50-17:10 | 1328 | Pourya Dorostkar Rouhani | Effects of Static and Dynamic Sport Participation on Center-of-Pressure Postural Balance Parameters in Young and Older Adults with Low Back Pain |
| 17:10-17:30 | 1205 | Hesam Hashemi | Multi-Objective Optimization of Orthodontic Miniscrew Geometry for Primary Stability and Bone Preservation |
| | | | |

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## ORAL & KEYNOTE PRESENTATION SCHEDULE

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## HALL 5 (18 November-27 Aban)

| Presentation Time | Paper ID | Presenter / Keynote Speaker | Paper / Keynote Talk Title |
|---|---|---|---|
| 11:00-11:20 | 1143 | Amirmohammad Sattari | **Technical session: Physiological Modeling, Cardiopulmonary Systems**<br>Parametric Hemodynamic Analysis of Coronary Artery Stenosis in the Left Anterior Descending Artery Using CFD and FSI |
| 11:20-11:40 | 1179 | Fatemeh Niknejad | Astrocyte endfoot permeability limits interstitial convection in the murine cortex: a finite-element analysis of the arteriole-venule unit |
| 11:40-12:00 | 1317 | Zahra Rahmani Samani | Osteocyte Mechanotransduction Under Progressive Bone Material Deterioration: A Two-Way Fluid-Structure Interaction Study |
| 12:00-12:20 | 1264 | Nadia Hassanpour | **Technical session: Neural Engineering and Rehabilitation Technologies**<br>Anesthetic Dependent Modulation of Transcranial Ultrasound Evoked Motor Responses in Mice: A Comparative Study of Urethane and Ketamine |
| 12:20-12:40 | 1268 | Ali Abedi | Transverse and Longitudinal Neuronal Polarization under Electrical Fields Coupling with Neuronal Membrane based on Neural Capability Theory |
| 12:40-14:00 | **Lunch & Break** | | |
| 14:00-14:20 | 1539 | Behzad Yousefipour | A Three-Region Neural Mass Model Linking Auditory Habituation and Mismatch Responses through Dynamic Hierarchical Connectivity |
| 14:20-14:40 | 1322 | Amirali Rezaei | Position-Dependent Ankle Dynamic Stiffness in an Individual With Cerebral Palsy: Comparison of Parameter-Varying and Time-Invariant System Identification |
| 14:40-15:00 | 1340 | Vahideh Sadat Sadeghi | Evaluation of a CPPLL for Real STN Beta-Band Tracking for Closed-Loop DBS Applications |
| 15:00-15:20 | 1490 | Fazel SarKheirKhiabani | Preliminary Simulation and Noise-Limited Detectability of Biomagnetic Fields from Epileptic-Like Neuronal Synchrony |
| 15:20-15:40 | 1377 | Mahrad Pouryosef Miandoab | Machine Learning Analysis of tDCS-Assisted Gait Rehabilitation in Subacute Stroke Using Longitudinal Functional Outcomes |
| 15:40-16:10 | **Break, Exhibition & Group 1 Poster Presentations** | | |
| 16:10-16:30 | 1723 | Ahdieh Aghaz | **Technical session: Medical Imaging and Molecular Imaging**<br>Spatial Resolution Improvement using Gantry Wobbling in Preclinical PET: Monte Carlo Study |
| 16:30-16:50 | 1138 | Amirreza Jodeiry | Geometry-Aware Anisotropic Total Variation Regularization for Limited-View Photoacoustic Tomography |
| 16:50-16:50 | 1198 | Elnaz Rostami Siahpoush | Artifact Suppression In Reflection-Mode Ultrasound Computed Tomography |

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| Presentation Time | Paper ID | Presenter / Keynote Speaker | Paper / Keynote Talk Title |
|---|---|---|---|
| 16:50-17:10 | 1431 | Sana Radman | A Region-Level Cleaning Pipeline for Quilt-1M Histopathology Image-Text Dataset |

## HALL 1 (18 November-28 Aban)

| Presentation Time | Paper ID | Presenter / Keynote Speaker | Paper / Keynote Talk Title |
|---|---|---|---|
| 8:30-8:50 | 1077 | Atabak Mohammadi Moazed | **Technical session: Biosensors and Wearable Devices**<br>Design and Numerical Simulation of a Magnetic Semi-Disk-Based Magnetophoretic Microfluidic Chip for Controlled Microparticle Pairing |
| 8:50:9:10 | 1469 | Reyhaneh Rafiei Vardanjani | Evaluation of Textile Electrodes Based on Conductive Yarns for Continuous Electrocardiogram Signal Monitoring |
| 9:10-9:30 | 1647 | Zahra Mostajabi | Rod Coaxial Antenna as a Sensor for Microwave Ablation: A Feasibility Study of Full-Spectrum S_11 Learning for Temperature and Qualitative Coagulation Assessment |
| 9:30-9:50 | 1246 | Amirmasoud Rismanchian | Leakage-Aware Explainable Machine Learning with Temporal Validation for At-Presentation Severity Stratification of Scorpion Envenomation Using Nationwide Brazilian Surveillance Data |
| 9:50-10:10 | 1141 | Kourosh Alimadadi | FEM-Based Evaluation of Subperiosteal Implant-Induced Jawbone Remodeling Using Two Reference-Based Remodeling Approaches |
| 10:10-10:30 | 1013 | Zahra Haghi Sarabi | A Synergistic BiLSTM-AlexNet Model for Discriminating Preictal and Ictal States in Epileptic EEG Signals |
| 10:30-11:10 | **Break, Exhibition & Group 2 Poster Presentations** | | |
| 11:30- 11:50 | | | **Technical session: Biosensors and Wearable Devices**<br>**Keynote Speaker** |
| 11:50-12:10 | 1557 | Zahra Rahimi | Beyond Model Comparison: Investigating Input Information and Cross-Patient Generalization in Transformer-Based Blood Glucose Forecasting |
| 12:10-12:30 | 1571 | Fereshteh Amourizi | A Wearable Microneedle Platform for Parallel Interstitial Fluid Sampling and Electrochemical Biosensing of Beta-Hydroxybutyrate |
| 12:30-12:50 | 1482 | Nahid Salimiyan | Preparation of a 3D-printable and self-healing nanocomposite hydrogel based on MXene/Starch/Polyethylene glycol/Polyvinyl alcohol via Schiff base linkages for human health monitoring sensor |
| 12:50-14:00 | **Lunch & Break** | | |
| 14:00-14:20 | 1350 | Saba Mostajabodavati | Machine learning-assisted liquid crystal-based aptasensor for the specific detection of whole-cell Escherichia coli in water and food |

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| Presentation Time | Paper ID | Presenter / Keynote Speaker | Paper / Keynote Talk Title |
|---|---|---|---|
| 14:20-14:40 | 1232 | Mohammad Mahdi Moeini Manesh | Simultaneous Measurement of Single-Lead ECG and Electrode-Tissue Impedance for Motion Artifact Analysis |
| 14:40-15 | 1380 | Mehran Ebrahimi | Design and Finite Element Simulation of a Single-Mode Optical Fiber-Based Sensor for the Detection of Bacterial Infections Using an Evanescent Field |
| 15:00-15:20 | 1354 | Ali Kashefi | Fabrication of a 3D-Printable and Self-Healing Schiff-Base Composite Hydrogel Reinforced with rGO as a Flexible Wearable Strain Sensor |
| 15:20-16:30 | **Break, Exhibition & Group 3 Poster Presentations** | | |
| 16:30-17:30 | **Best Thesis Final Pitch** | | |
| 17:30- 19 | **Closing and Award Ceremony** | | |

## HALL 2 (18 November-28 Aban)

| Presentation Time | Paper ID | Presenter | Paper / Keynote Talk Title |
|---|---|---|---|
| 8:30-9:30 | | | **Technical session: AI & Digital Health in Biomedical Engineering** |
| | | | **Keynote Speaker** |
| 9:30-9:50 | 1025 | Zahra Sabzevari | A Standalone Digital-Health App for ISO/IEC TR 24027 AI Fairness Auditing: Development and a Coronary Artery Disease Case Study |
| 9:50-10:10 | 1159 | Alireza Ganjkarimi | Non-contact Heart Rate Signal Estimation from Facial Videos Using Spatiotemporal Attention-Based Deep Learning Networks |
| 10:10-10:30 | 1480 | Parisa Rashidi khaniabadi | Evaluating Agreement Among Explainability Methods for Respiratory Sound Classification |
| 10:30-11:10 | **Break, Exhibition & Group 2 Poster Presentations** | | |
| 11:10-12:00 | | | **Technical session: Bioinformatics, and Personalized Medicine** |
| | | | **Keynote Speaker** |
| 12:00-12:20 | 1629 | Mahdie Soltani | Patient-Disjoint Physiology-Guided CycleGAN Translation of Multichannel Preictal EEG Toward Ictal Dynamics |
| 12:20-12:40 | 1470 | Mohammad Roustaei | PersianMed-Invariance: Evaluating the Robustness of Open Language Models to Equivalent Linguistic Representations in Persian Medical Question Answering |
| 12:40-14 | **Lunch & Break** | | |
| 14-14:40 | | | **Invited talk** |

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| Presentation Time | Paper ID | Presenter | Paper / Keynote Talk Title |
|---|---|---|---|
| 14:40-15 | 1066 | Yekta Afzali | Directional EEG Microstate Dynamics in Parkinson's Disease: A Multisite Resting-State Study |
| 15-15:20 | 1296 | Mandana Sadat Ghafourian | PDE-Derived Spatial Representation of B-Mode Ultrasound for Quantitative Characterization of Hepatic Steatosis |
| 15:20-16:30 | **Break, Exhibition & Group 3 Poster Presentations** | | |
| 16:30-17:30 | **Best Thesis Final Pitch** | | |
| 17:30- 19 | **Closing and Award Ceremony** | | |

## HALL 3 (18 November-28 Aban)

| Presentation Time | 3Paper ID | Presenter / Keynote Speaker | Paper Title |
|---|---|---|---|
| 8:30-8:50 | 1261 | Kourosh Alimadadi | **Technical session: Biomechanics and Rehabilitation Technologies** |
| | | | FEM-Based Evaluation of Subperiosteal Implant-Induced Jawbone Remodeling Using Two Reference-Based Remodeling Approaches |
| 8:50-9:10 | 1342 | Moin Karimi | Design and Finite Element Assessment of two Novel Constrained Acetabular Mechanisms for Revision Hip Reconstruction |
| 9:10-9:30 | 1489 | Saeed Salehi Pourbavarsad | Effect of Test Temperature on the Tangent Modulus of the Ovine Temporomandibular Joint Disc under Uniaxial Tension |
| 9:30-9:50 | 1423 | Mohammad Arjmandkia | Musculoskeletal Model-Based Model Predictive Control for Assist-as-Needed Robotic Elbow Rehabilitation |
| 9:50-10:10 | 1459 | Solmaz Mojadam Mofrad | In Vitro Mechanical Variability in Interference-Screw Fixation Across Graft Preservation Histories and Fixation Configurations in a Bovine Tendon-Polyurethane Bone Model |
| 10:10-10:30 | 1492 | Amirhossein Ghasemi | Experimental Characterization of Cortical and Cancellous Bone Surrogates for Orthopedic Surgical Training |
| 10:30-11:10 | **Break, Exhibition & Group 2 Poster Presentations** | | |
| 11:10-11:50 | | | **Technical session: Biomaterials, Tissue Engineering** |
| | | | **Invited Talk** |
| 11:50-12:10 | 1225 | Kiana Mohagheghiyan | A Functionalized Bio-MOF for Enhanced Wound Healing |
| 12:10-12:30 | 1553 | Mahshid Shokri | A Biomimetic Adhesive Dopamine-Conjugated Carboxymethyl Cellulose and Quaternized Chitosan based hydrogel for Rapid Hemostasis in Surgical Wounds |

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| Presentation Time | 3Paper ID | Presenter / Keynote Speaker | Paper Title |
|---|---|---|---|
| 12:10-12:30 | 1330 | Mahsa Mohammadzadeh | Effect of Polyethylene Glycol Surface Modification on the Photothermal Performance and Biocompatibility of Gold Nanorods |
| 12:50-14:00 | **Lunch & Break** | | |
| 14:00-14:30 | **Keynote Speaker** | | |
| 14:30-14:50 | 1248 | Hossein Faramarzi | Coarse-Grained Molecular Dynamics Analysis of Sequence-Dependent Mobility in Peptide Amphiphile Assemblies |
| 14:50-15:10 | 1031 | Soheil Nazari Moghaddam | Development of a $TiO_2$-Integrated PCL/Chitosan Electrospun Nanofibrous Scaffold for NIR-Responsive Localized Skin Cancer Therapy |
| 15:10-15:30 | 1479 | Fatemeh Dehghan Banadaki | Synthesis and Characterization of Copper Selenide Nanocomposite Eutectogel for Biomedical Applications |
| 15:30-16:30 | **Break, Exhibition & Group 3 Poster Presentations** | | |
| 16:30-17:30 | **Best Thesis Final Pitch** | | |
| 17:30- 19 | **Closing and Award Ceremony** | | |

## HALL 4 (18 November-28 Aban)

| Presentation Time | Paper ID | Presenter / Keynote Speaker | Paper / Keynote Talk Title |
|---|---|---|---|
| 8:30-9:20 | | | **Technical session: Biomechanics of Cornea** |
| | | | **Invited Talk** |
| 9:20-10:10 | | | **Technical session: Biomaterials, Tissue Engineering** |
| | | | **Keynote Speaker** |
| 10:10-10:30 | 1364 | Elaheh Jooybar | Sulfated Hyaluronic Acid Microgels for Growth Factor Delivery and Enhanced Cell-Material Interactions |
| 10:30-11:10 | **Break, Exhibition & Group 2 Poster Presentations** | | |
| 11:10-11:30 | 1199 | Neda Kalantar | **Technical session: Smart Drug Delivery and Therapeutic Technologies** |
| | | | Privacy-Preserving Artificial Pancreas Control for Type 1 Diabetes: A Transition-Aware Finite-History Realization |
| 11:30-12:50 | 1173 | Afshin Alibabaie | A Modular Bioactive Type I Collagen Microgel Platform Enabled by Riboflavin-Mediated Photocrosslinking and Post-Fabrication Platelet Lysate Loading |
| 11:50-12:10 | 1649 | Seyed Ali Golmohammadi | Development of a Ca-Modified Zn-Gallic Acid BioMOF for Controlled Berberine Delivery under Diverse Medium Conditions |

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| Presentation Time | Paper ID | Presenter / Keynote Speaker | Paper / Keynote Talk Title |
|---|---|---|---|
| 12:10-12:30 | 1226 | Soheil Mahdavi | Microcavity-Enhanced Vortex Micromixer for Drug Encapsulation and Delivery |
| 12:30-12:50 | 1517 | Shima Abarghoe | Development of a Hybrid Porous Silicon-Gelatin Optical Nanosensor for Rapid Antibiotic Susceptibility Testing Using Reflectometric Interference Spectroscopy |
| 12:50-14 | **Lunch & Break** | | |
| 14-14:40 | | | **Invited Talk** |
| 14:40-15:00 | 1046 | Alireza Heydari | Particle Size and Operating Temperature Effects on Critical Capture in Bulk-Superconducting Magnetic Drug Targeting for Lung Cancer |
| 15-15:20 | 1516 | Zahra Zarezade | Numerical Investigation of the Effect of Channel Curvature on the Focusing Positions of Sub-Micron Particles in Viscoelastic Microfluidic Flows |
| 15:20-16:30 | **Break, Exhibition & Group 3 Poster Presentations** | | |
| 16:30-17:30 | **Best Thesis Final Pitch** | | |
| 17:30- 19:00 | **Closing and Award Ceremony** | | |

## HALL 5 (18 November-28 Aban)

| Presentation Time | Paper ID | Presenter / Keynote Speaker | Paper / Keynote Talk Title |
|---|---|---|---|
| 8:30-8:50 | 1365 | Mehran Jahed | **Technical session: Biomedical Signal and Medical Image Processing** |
| | | | Label-Free Latent Manifold Alignment for Robust Cross-Subject sEMG Wrist Gesture Recognition |
| 8:50-9:10 | 1334 | Hassan Al-Mujtaba Thamer Musa Al-Madhati | Subject-Independent Stress Detection from ECG, EDA, and Respiration: A Three-Branch Stacking Approach with Leakage Prevention |
| 9:10-9:30 | 1373 | Mohammad Reza Esmaeilian | Impact of Transfer Learning and Ensemble CNN on Multi-class Upper-limb Motor Execution EEG Decoding |
| 9:30-9:50 | 1589 | Elias Ebrahimzadeh | An Optimized BiLSTM Network with Grasshopper Algorithm for EEG-Based OCD Diagnosis |
| 9:50-10:10 | 1224 | Amir Basuti | Leveraging Frozen Time-Series Foundation Models for IMU-Based Freezing of Gait Detection |
| 10:10-10:30 | 1325 | Ali Bashirgonbadi | An Edge-Centric Framework for Linking Structural Connectivity to Dynamic Functional Connectivity |
| 10:30-11:10 | **Break, Exhibition & Group 2 Poster Presentations** | | |
| | | | **Technical session: Biomedical Signal and Medical Image Processing** |

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| Presentation Time | Paper ID | Presenter / Keynote Speaker | Paper / Keynote Talk Title |
|---|---|---|---|
| 11:10-11:30 | 1279 | Ghazal Mogharehzadeh-Isfahani | Automated Detection of Inhibition Zones and Antibiotic Identification in Antibiogram Plates Using Deep Learning |
| 11:30-11:50 | 1344 | Moein Yeganeh | Robust ECG Image Digitization Through Background Segmentation, Lead Layout Identification, and Missing-Sample-Aware Evaluation |
| 11:50-12:10 | 1410 | Amir Hossein Jalalzadeh | Ordinal HER2 Grading from H&E Histopathology Images Using a Pathology Foundation Model |
| 12:10-12:30 | 1417 | Sajad Jabarzadeh Ghandilu | Leakage-Aware Hybrid Melanoma Classification Using Deep Embeddings and Statistical Dermoscopic Profiling |
| 12:30-12:50 | 1508 | Fatemeh Jafari | CFDS-Net: Connected Frequency-Sparse Dual Swin Network for Mammographic Mass Segmentation |
| 12:50-14 | **Lunch & Break** | | |
| 14-14:20 | 1640 | Solmaz Mojadam Mofrad | **Technical session: Biomechanics and Rehabilitation Technologies**<br>Association Between Graft-Tunnel Clearance and Mechanical Behavior of Double-Bundle Interference Screw Fixation Constructs: A Biomechanical Study |
| 14:20-14:40 | 1204 | Mohadese Rajaeirad | Bone Remodeling Changes the Mechanical Stability of Orthodontic Miniscrews Beyond Primary Stability |
| 15:00-15:20 | 1395 | Milad Safari | Evaluating Endpoint-Anchored Bidirectional ARAP for Three-Dimensional Tracking of a Flexible Cable Under Occlusion |
| 15:20-16:30 | Break, Exhibition & Group 3 Poster Presentations | | |
| 16:30-17:30 | Best thesis final pitch | | |
| 17:30- 19 | Closing and Award Ceremony | | |