

E-HEALTH AND BIOENGINEERING CONFERENCE - EHB 2024, 12-th edition, Iași, Romania, November 14-15, 2024

PROGRAM OF PAPERS PRESENTATIONS

THURSDAY, 14 November

Medical devices, Instrumentation, Measurements I (MD I), Moderators: Felix Adochiei, Florin-Ciprian Argatu

THURSDAY, 14 November, 10:30-13:00, Room I - Entresol

1.	3	MD	Iustina-Bianca Bulai and Otilia Zvoristeanu	Enhancing Learning and Therapy for Children with Autism: Innovative Activities with the NAO Robot	ONSITE
2.	6	MD	Paul Tota, Mircea-Florin Vaida, Gelu Ovidiu Tirian, Romulus Mircea Terebes and Ligia Chiorean	Mental Monitoring Using a Portable Electroencephalography Device for an Educational Telepresence Robot	ONSITE
3.	15	MD	Domenico De Carlo, Filippo Laganà, Danilo Praticò and Salvatore Andrea Pullano	Development of an Integrated System for Remote Monitoring of Circuit Integrity in Biomedical Devices	ONLINE
4.	17	MD	Rodica Holonec, Laura Grindei and Laszlo Rapolti	A Comprehensive Investigation of Volleyball Movements Using Electromyography and Visual Tracking Techniques	ONSITE
5.	19	MD	Radu-Nicolae Pietraru, Adriana Olteanu, Alexandru Stefan Velicu and Robert-Alexandru Craciun	Healing IoT Data for Indoor Air Quality Using Artificial Intelligence	ONLINE
6.	44	MD	Sergiu Tulbure	EMC and EMI Issues of Mixed Sensor - Control Boards for Medical Devices	ONLINE
7.	75	MD	Vencislav Nastev, Kristina Bliznakova, Nikolay Dukov and Zhivko Bliznakov	Application and Initial Evaluation of an Innovative Technology for the Creation of 3D Anatomical Objects	ONLINE
8.	128	MD	Mihai Aron, Teofil Ilie Ursache, Gladiola Petroiu, Cristian Rotariu	Cardiac Condition Detection Model using Alexnet and Time-Frequency Representation of ECG Signals	ONSITE
9.	129	MD	Daniela Goldan, Mihai Aron, Teofil Ilie Ursache, Gladiola Petroiu, Cristian Rotariu	Non-Invasive Device For Hearing Rehabilitation	ONSITE

Decision support systems, Artificial Intelligence, Bioinformatics I (DSS-AI I); Moderators: Diana Lungeanu, Cătălin Stoean

THURSDAY, 14 November, 10:30-13:00, Room II - Orion

1.	4	DSS-AI	Melika Ghasemi, Reza Boostani and Amir Jabbari Lak	A Brief Review on EEG-based Diagnosis of Parkinson's Disease using Deep Learning Models	ONLINE
2.	8	DSS-AI	Vlad Constantin Craciun, Adrian Valentin Panaintescu, Radu Marian Lefter and Mihaela Luca	Clustering 3D Tracking in Zebrafish Laboratory Trials	ONSITE
3.	9	DSS-AI	Sergiu Ceica and Stefan Daniel Achirei	Predicting the Time from Diagnosis to Treatment in Breast Cancer	ONSITE
4.	11	DSS-AI	Alexandru Robert Vlasiu, Marc Frincu, Daniel Chioibas, Darius Mocan and Marin Gabor	Classifying Mental Disabilities from Virtual Reality Behavioral Data using Machine Learning	ONLINE
5.	13	DSS-AI	Evelin-Henrietta Dulf, Gabriel Costenar, Alexandru-George Berciu and Levente Kovacs	Application Development for Personalized Cancer Treatment	ONLINE
6.	28	DSS-AI	René Baranyi, Lukas Weber, Christoph Aigner, Vanessa Hohenegger, Sylvia Winkler and Thomas Grechenig	Voice-Controlled Serious Game: Design Insights for a Speech Therapy Application	ONLINE
7.	30	DSS-AI	Iulian Secrieru, Carolina Țâmbală, Elena Guțuleac, Olga Popcova and Alina Spătaru	IDI to Enhance the Longevity of the Knowledge Bases Established on Scoring Systems	ONSITE

Biomedical Signal and Speech Processing (SP), ONLINE; Moderators: Monica-Claudia Dobrea, Marius Zbancioc

THURSDAY, 14 November, 10:30-13:00, Room III - Clio

1.	24	SP	Mădălina-Giorgiana Murariu, Mihaela Gavrilă, Ramona-Florica Dorobanțu and Daniela Tărniceriu	Epilepsy Detection Through EEG Sub-band Classification Using Empirical Wavelet Transform and Statistical Features	ONLINE
2.	34	SP	Michele Giuseppe Di Cesare, David Perpetuini, Daniela Cardone and Arcangelo Merla	Exploring The Impact of Soundscapes on Emotional States: A Data Driven Approach on Environmental Noise Recordings	ONLINE
3.	48	SP	Jakub Vybulka, Petr Jezdik, Matias Ebel, Adam Kalina and Radek Janca	Enhancing the Mapping of Irritative Network in Focal Cortical Dysplasia: Sorting Multifocal Interictal Epileptiform Discharges	ONLINE
4.	49	SP	Francesco Romano, David Perpetuini, Daniela Cardone and Arcangelo Merla	Machine Learning-Based Estimation of POMA Scores from EMG and Kinematic Data in Stroke Patients	ONLINE

5.	83	SP	Michele Giuseppe Di Cesare, Daniela Cardone, Arcangelo Merla and David Perpetuini	Advancing Voice Authentication: Insights from Cepstral Coefficients and Recursive Feature Elimination in Speech Signal	ONLINE
6.	108	SP	Alexe Ciurea, Cristina Manoila and Bogdan Ionescu	EEG Denoising with Channel Ranking and Selection	ONLINE
7.	127	SP	Sara Sharghilavan, Oana Geman and Roxana Todorean	Speech Perception, Speech Attention: ERP Case Study Based on Open BCI	ONLINE

Medical devices, Instrumentation, Measurements II (MD II), Moderators: Cristian Foşalău, Dan Marius Dobrea

THURSDAY, 14 November, 14:30-17:00, Room I – Entresol

1.	79	MD	Giuseppe Carluccio, Eros Montin, Riccardo Lattanzi, Michalis Latoussakis and Christopher Collins	Deep Learning Networks Trained with Eccentric and Concentric Cylinders to Estimate the Electric Fields	ONLINE
2.	80	MD	Eros Montin, Giuseppe Carluccio, Christopher Collins and Riccardo Lattanzi	A Serverless Implementation of a Tool for Temperature and SAR Estimation (TESS 2.0)	ONLINE
3.	84	MD	Sara Quattrocelli, Arcangelo Merla, Daniela Cardone and David Perpetuini	Advanced Machine Learning Approaches for Classifying Parkinson's Disease Using fNIRS Data from Gait Analysis	ONLINE
4.	95	MD	David Perpetuini, Sabrina Iarlori, Daniela Cardone, Manish Chinthakindi, Luca Cavanini, Alessandro Freddi, Francesco Ferracuti, Andrea Monteriù, Arcangelo Merla and Michele Tritto	Thermal Imaging for Real-Time Monitoring of Stress and Engagement in Autonomous and Manual Smart Wheelchair Navigation	ONLINE
5.	103	MD	Viktoria Petkova, Desislava Konstantinova and Nikolay Dukov	Prototype of a Surgical Template Based on CBCT Scan and Produced with Additive Technology	ONLINE
6.	114	MD	Vittorio Santoriello, Arturo Cuomo, Michela D'Antò, Giuseppe D'Agostino, Rita Granata, Fabrizio Clemente, Francesco Amato, Maria Romano and Alfonso Maria Ponsiglione	Multidimensional Assessment of Advanced Systems for Managing Difficult Intubation	ONLINE
7.	120	MD	Alexandra Ştefania Mihai, Oana Geman and Roxana Todorean	Innovative Approaches to EEG in the Ear – a Short Review	ONLINE
8.	102	MI-DM	Viktoria Petkova and Nikolay Dukov	Creation of 3D Printed Anatomical Models for Teaching Purposes of Dentistry Students	ONLINE
9.	88	MD	Rodrigo Garcia, Rocío Cabral, Leandro Díaz, Agustina Pérez, Francisco Veirano and Pablo Pérez-Nicoli	Versatile, Low-Cost Interface Device for Keyboard and Mouse Emulation	ONSITE

Decision support systems, Artificial Intelligence, Bioinformatics II (DSS-AI II); Moderators: Daniela Zaharie, Dragoş Arotăriței

THURSDAY, 14 November, 14:30-17:00, Room II - Orion

1.	31	DSS-AI	Yahaya Idris Abubakar, Mamadou Dia, Patrick Siarry and Alice Othmani	Post-Traumatic Stress Disorder Detection Through Video Sequences: A Transformer-Based Approach for e-Health Application	ONSITE
2.	32	DSS-AI	Shahin Amiriparian, Maurice Gerczuk, Justina Lutz, Wolfgang Strube, Irina Papazova, Alkomiet Hasan, Alexander Kathan and Bjorn W. Schuller	Non-Invasive Suicide Risk Prediction Through Speech Analysis	ONLINE
3.	33	DSS-AI	Abdelghani Halimi, Nesma Houmani, Sonia Garcia-Salicetti, Ilias Kounis and Audrey Coilly	Predicting Waitlist Mortality for Liver Transplant Candidates: A Comparative Analysis between Statistical scores and Machine Learning Models	ONLINE
4.	51	DSS-AI	Mubaris Nadeem, Lisa Bender, Christian Weber and Kai Hahn	Knowledge Fusion through Ambient Smart Living Technology and Telemonitoring in Emergency Response	ONSITE
5.	56	DSS-AI	Ainhoa Ruiz-Vitte, Alberto Comesaña, Blanca Larraga, Eduardo Rocón and Álvaro Gutiérrez	Deep Learning for Continuous Recognition of Activities of Daily Living	ONLINE
6.	62	DSS-AI	Andreea Maria Guşatu, Ana Mihaela Vasilevschi, Marilena Ianculescu and Cristian Mihail Petrache	Emotional Health Monitoring as a Key Module within the NeuroPredict Platform	ONSITE
7.	66	MD	Robert Gabriel Lupu, Adrian Burlacu, Ovidiu Catarama and Ionut Sopon	Robotic Assisted Immersive Therapy System for Stroke Rehabilitation	ONSITE
8.	73	DSS-AI	Marina Loulaki, Athanasios Kiourtis, Argyro Mavrogiorgou and Dimosthenis Kyriazis	Addressing Complex Data Integration and Harmonization Scenarios	ONLINE
9.	121	DSS-AI	Aria Makhija	Leveraging ResNet-50 for Precision Toxicity Classification in Plants: A Vision-Based Approach to Safeguard Public Health	ONLINE

Technical and Economic Aspects of Healthcare (WS 1); Moderators: Martin Rožánek, Petr Kudrna

THURSDAY, 14 November, 14:30-16:00, Room III - Clio

1.	36	WS1	Iva Klimešová, Ján Lešták, Karel Hána, Tomáš Veselý and Pavel Smrčka	Head-Level Obstacle Detector for Visually Impaired	ONLINE
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2.	89	WS1	Robert LeMoyne and Timothy Mastroianni	Implementation of a Smartwatch with Machine Learning for Ascertaining Efficacy of Deep Brain Stimulation for Parkinson's Disease Treatment	ONLINE
3.	101	WS1	Martina Homolková, Šimon Walzel and Martin Rožánek	Wearables for Monitoring of Vital Signs in Healthcare	ONSITE
4.	122	WS1	Aneta Benešová, Martina Homolková, Ondřej Gajdoš, Tereza Boudová and Vojtěch Kamenský	Rotator Cuff Suture Repair: Insights into Cost-Effectiveness and Patient Clinical Outcomes	ONSITE
5.	125	WS1	Petr Kudrna	SpO2 histograms - valuable tools for assessing oxygen saturation stability of newborns	ONSITE

FRIDAY, 15 November

Decision support systems, Artificial Intelligence, III (DSS-AI III); Moderators: Ruxandra Stoean, Cristina Dascalu

FRIDAY, 15 November, 8:00-10:00, Room I - Entresol

1.	92	DSS-AI	Corina Căușan and Mircea Petic	The Role of Digitalization in the Development of Activities Oriented to Increase the Quality of Life	ONSITE
2.	96	DSS-AI	David Perpetuini, Sabrina Iarlori, Daniela Cardone, Manish Chinthakindi, Giovanna Bubbico, Michele Giuseppe Di Cesare, Andrea Monteriù, Arcangelo Merla and Michele Tritto	Comparative Evaluation of Psychophysiological State in Psychologists vs. Tablet-Based Administration of the Mini-Mental Test Through Thermal Imaging	ONLINE
3.	105	DSS-AI	Tomáš Krajča, Stanislav Mareček, Iva Bublíková, Tereza Hubená and Radim Krupicka	SnakeMaker, a Preview of User-Friendly Tool for Biomedical Data Processing	ONSITE
4.	110	DSS-AI	Elena-Claudia Maftai, Otilia Zvorișteanu, Hariton-Nicolae Costin, Silviu-Ioan Bejinariu, Florin Rotaru, Vasile Manta and Ramona Luca	Automated Assessment of Medical Rehabilitation of Gait by Means of Video Processing in Cloud Environment	ONSITE
5.	111	DSS-AI	Ana Bălan	Revolutionizing Medical Data Management with Secure Self-Sovereign Applications for Patient Empowerment	ONLINE
6.	112	DSS-AI	Andreea Cozuc, Andreea Oltean, Irina Mocanu and Oana Cramariuc	Combining GANs and Federated Learning for Privacy Protection	ONLINE
7.	116	DSS-AI	Oana Stirbu, Serban Teodor Nicolescu, Ioana-Raluca Adochiei, Cosmin Bănică, Daniela Dolhascu and Felix Constantin Adochiei	AI Algorithm for Assessing Levels of Dissimulation through EEG and Physiological Data Analysis	ONLINE
8.	90	DSS-AI	Aleksas Vaitulevičius, Jolita Bernatavičienė and Povilas Treigys	nnU-Net: Investigation of Attention Mechanism for Prostate Zone Segmentation Task	ONLINE

Biomaterials, Biotechnologies, and Food Industry (BB I); Moderators: Liliana Vereștiuc, Maria Butnaru**FRIDAY, 15 November, 8:00-10:00, Room II - Orion**

1.	16	BB	Olga Macagonova, Adrian Cociug, Tatiana Taralunga, Tudor Braniste, Liliana Vereștiuc and Viorel Nacu	Xenogeneic Small Intestine Submucosa Surface Modification During Processing for Tissue Engineering	ONLINE
2.	39	BB	Leontyna Varvařovská, Andrei Bejan, Alexandru Anisie and Tařana Jarořiková	Optimization of Parameters for Fluorescent Carbon Nanodots Preparation	ONSITE
3.	43	BB	Rajat Nagpal, Maxim Chiriac, Masaya Sugihara, Dinu Litra, Nicolai Ababii, Nicolae Magariu, Cristian Lupan, Veaceslav Zinicovschi, Rob Ameloot and Oleg Lupan	Sensory Properties of CuO/Cu ₂ O Nanostructures Coated with Zeolitic Imidazolate Frameworks	ONLINE
4.	50	BB	Ancuta Elena Prisacaru, Cristina Ghinea and Sergiu Paduret	Organoleptic and Physico-chemical Changes of Butter During Storage	ONLINE
5.	65	BB	Ioana Duceac, Roxana Amarandi, Fulga Tanasa, Gabriela Ailiesei, Sergiu Coseri, Rares Stiufiuc and Brandusa Dragoi	Evaluation of Liposomal Stability on Spontaneous Oxidation by Spectroscopic Methods	ONLINE
6.	67	BB	Florin Dimitriu	Research on Advances in production of Human Dentition and Dental Bridges using Additive Manufacturing (Metal 3D Printing)	ONLINE

Biomechanics I (BM I), ONLINE, Moderators: Emil Budescu, Barbu Braun**FRIDAY, 15 November, 8:00-10:00, Room III - Clio**

1.	22	BM	Raul Donaire, Shelsy Zambrano, Shiyang Li and Karla Reyes	Validation of Blaze-Pose as Model in the Analysis of Lower Extremities During Gait	ONLINE
2.	45	BM	Katherine Dayana Alberto Serrano, José Daniel Martinez Silva and Karla Miriam Reyes Leiva	Finite Element Analysis on Solid Ankle-Foot Orthosis with Additive Manufacturing Materials	ONLINE
3.	29	BM	Giuseppe Prisco, Maria Agnese Pirozzi, Francesco Mercaldo, Antonella Santone, Mario Cesarelli, Fabrizio Esposito, Paolo Gargiulo, Francesco Amato and Leandro Donisi	Postural Sway Parameters Are Useful to Discriminate Biomechanical Risk Classes Associated with Load Lifting	ONLINE
4.	71	BM	Michela Russo, Martina Mestizia, Marianna Amboni, Federico Di Filippo, Noemi Pisani, Umberto De Marca, Rocco Capuano, Maria Di Gregorio, Maria Romano, Francesco Amato and Carlo Ricciardi	Subclinical Gait Differences in Multiple Sclerosis with mild disability: Spatiotemporal Analysis During Single and Dual Task	ONLINE

5.	72	BM	Adrian Cătălin Lungu, Luciana Cristea, Mihaela Ioana Baritz, Barbu Braun, Anca Ioana Tataru and Alexandra Maria Lazar	Ophthalmic Lenses Assessment for Ultraviolet Radiation Protection	ONLINE
6.	76	BM	Mirela Gabriela Apostoaie, Mihaela Ioana Baritz, Barbu Braun, Angela Repanovici, Alexandra Lazăr and Gyory Bodi	Simulation of Comfort Behavior During the Gait Cycle of People with Low Vision	ONLINE

BCI Systems: Online and Offline Feature Display on a 3D Head Model

Assistive technologies for people with disabilities WS2/AT; Moderators: Marian Poboroniuc, Dănuț Irimia

FRIDAY, 15 November, 11:00-12:00, online workshop (Room I - Entresol)

1.	63	WS2/AT	Alina Roxana Miron, Iulia-Adelina Bonceag and Marian-Silviu Poboroniuc	Preliminary Results on Designing Mechatronic Devices for Pelvic Muscles Floor Assessment	ONLINE
2.	86	WS2/AT	Alexandru Mitocaru, Alexandru Buzamat and Marian Silviu Poboroniuc	Brain Computer Interface Controlled Humanoid Robot	ONLINE

Medical imaging and Image processing I (MIIP I), *Moderators: Tudor Barbu, Silviu Bejinariu*

FRIDAY, 15 November, 12:00-14:00, Room I - Entresol

1.	5	MIIP	Serhan Turgul, Saumya Reni, İzzet Kale, Jaya Shrivastava and Peter Chiodini	A Hybrid Adaptive Object Identification Algorithm for Neglected Tropical Disease Diagnosis	ONLINE
2.	14	MIIP	Keun Ho Kim	Application of an Optimal Color Correction Method Adapted to Lighting Conditions in a Daily-Use Tongue Diagnosis System	ONLINE
3.	18	MIIP	Marina Adriana Mercioni, Stefan Holban and Raluca Dumache	Novel Activation Function Design for Multiple Sclerosis Detection in Medical Imaging	ONLINE
4.	23	MIIP	Tudor Barbu and Lucian Murgu	Comparison between Novel Machine and Deep Learning-based Skin Tumor Recognition Techniques	ONSITE
5.	27	MIIP	Otilia Zvoristeanu, Dimitrie-Cristian Fodor, Vasile-Ion Manta, Neculai-Eugen Seghedin, Ștefan-Daniel Achirei and Dragoș-Florin Chitariu	A Computer Vision-Based Solution for Assessing Prosthetic Leg Length Discrepancy	ONSITE
6.	47	MIIP	Atsushi Nomura	Inhibitor-Driven Reaction-Diffusion Algorithm for Retinal Image Segmentation and Blood Flow Visualization	ONSITE
7.	57	MIIP	Anca Ignat, Ioan Păvăloi and Cristina Diana Nita	SURF and Texture Classification on Occluded Hand Images	ONLINE

8.	61	MIIP	Corina Petean, Virginia Sandulescu and Ovidiu Bica	Emotion Detection from Face Images Using Deep Learning Techniques	ONSITE
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Biomaterials, Biotechnologies, and Food Industry (BB II); Moderators: Vera Bălan, Andreea Luca

FRIDAY, 15 November, 12:00-13:30, Room II – Orion

1.	68	BB	Cristina Ghinea, Ancuta Elena Prisacaru and Ana Leahu	Life Cycle Assessment of Chicken Meat Production: a Romanian Case Study	ONLINE
2.	85	BB	Isabelle Metaxa, Aurelia Nica, Ștefan-Mihai Petrea, Ira-Adeline Simionov and Alina Antache	Utilization of <i>Hermetia illucens</i> (Linnaeus,1758)) as an Alternative Feed in Aquatic and Terrestrial Zootechny: Implications for Sustainable Food Production and Human Health Safety	ONLINE
3.	91	BB	Nica Aurelia, Metaxa Isabelle, Ira-Adeline Simionov, Alina Antache and Stefan Mihai Petrea	A Review of Advances in the Dietary Inclusion of <i>Hermetia Illucens</i> in Fish Feeds	ONLINE
4.	98	BB	Irina Gradinaru, Alexandra Bargan and Bianca-Iulia Ciubotaru	Calcium Hydroxide Liners Enhanced with Silver Nanoparticles Doped Hydroxyapatite-Initial Assesment	ONLINE
5.	113	BB	Madalina Simion, Ina Turcan, Tudor Alexandru Filip and Marius Andrei Olariu	Monitoring Yeast Cells Behaviors by Electrical Impedance Spectroscopy	ONLINE

Biomechanics II (BM II), ONLINE; Moderators: Mihaela Baritz, Daniela-Mariana Barbu

FRIDAY, 15 November, 12:00-13:30, Room III - Clio

1.	78	BM	Anca-Ioana Tătaru, Mihaela Baritz, Angela Repanovici, Luciana Cristea, Mirela Gabriela Apostoae and Adrian Catalin Lungu	Integrated Modules for Monitoring Walking Cycle at Different Stages	ONLINE
2.	93	BM	Omar Valladolid Garcia and Rudy Lapeer	Contact-constrained Finite Element Analysis to Evaluate Obstetric Forceps Placement	ONLINE
3.	104	BM	Nataliya Grigorova, Daniela Kaloyanova, Nikolay Dukov and Kristina Bliznakova	Ultrasound Breast Phantom for Breast Biopsy Training	ONLINE
4.	115	BM	Vittorio Santoriello, Lorena Guerrini, Federica Pescaglia, Marco Recenti, Ida Maruotto, Carmine Gelormini, Carlo Ricciardi, Alfonso Maria Ponsiglione, Maria Romano, Francesco Amato and Paolo Gargiulo	New Paradigm in Postural Control Response: A Dual Approach using Center of Pressure and Electroencephalography	ONLINE

5.	106	BM	Armando Josué Piña Díaz, Mauricio Aarón Pérez Romero, Adrián Estéban Mejía García, Mario Cesar Maya-Rodriguez and Mario Antonio Lopez-Pacheco	Development of an Orthopedic Insole with Pressure Sensors for Automated Assessment of Flat Foot in Children	ONLINE
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Medical imaging and Image processing II (MIIP II), Moderators: Anca Andreea Morar, Mircea Vaida

FRIDAY, 15 November, 15:30-17:30, Room I - Entresol

1.	74	MIIP	Juan Carlos Sánchez-Pérez, Mauricio Mussi-Villareal, Victor Solís-García, Umberto León-Domínguez, Pablo Mir, Juan Francisco Martín-Rodríguez and Antonio Martínez-Torteya	A Vision-Based Approach for the Automated Evaluation of the Moca Clock-Drawing Test using a YOLO Neural Network	ONLINE
2.	119	MIIP	R. Banu Prakash, V. Dhilip Kumar, Oana Geman and Roxana Todorean	Advanced Differential Rendering-Based Auto-Calibration Framework for 3D Colonoscopy: Integrating Single and Multi-Frame Methodologies for Enhanced Intrinsic-Extrinsic Parameter Optimization	ONLINE
3.	77	MIIP	Ligia-Gabriela Boazu, Marian-Alexandru Petraru and Otilia Zvoristeanu	Deep Learning-Based Retinal Blood Vessel Segmentation Using U-Net Architecture	ONSITE
4.	81	MIIP	Ktistina Bliznakova and Zhivko Bliznakov	A Novel Breast Phantom Created using GPU-Based Voxelization for X-Ray Breast Imaging Research	ONLINE
5.	82	MIIP	Daniel-Mihai Armanda, Alin-Gabriel Cococi, Radu Dogaru and Ioana Dogaru	Skin Cancer Detection Using Constrained Neural Networks and the Development of an Optimized Technical Infrastructure for Resource-Efficient Diagnosis	ONLINE
6.	107	MIIP	Tobias Vogelsang, Alexander Woyczyk, Filip Packań, Jonas Kolonko, Alwin Hoffmann, Björn Schuller, Shahin Amiriparian and Sebastian Zauseder	Preliminary Analysis on the Usage of Hyperspectral Reconstruction for Imaging Photoplethysmography and Heart rate Detection	ONSITE
7.	123	MIIP	Mirabela-Roxana Daicu, Elise Margot Jaegle, Simona Palumbo, Oana Geman and Dragoş Ionuţ Vicoveanu	Intelligent System for Detecting Medical Instruments Used in Surgery	ONLINE

Medical devices, Instrumentation, Measurements III (MD III), Moderators: Radu Adrian Munteanu, Călin Corciovă

FRIDAY, 15 November, 15:30-16:15, Room II - Orion

1.	117	MD	Ioana-Raluca Adochiei, Matei Popescu, Florin Argatu, Gladiola G. Petroiu and Felix Constantin Adochiei	Intraocular Pressure Determining System Based on Rebound Tonometry	ONSITE
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2.	118	MD	Felix Constantin Adochiei, David-Andrei Dumitrescu, George Seritan, Florin Ciprian Argatu, Bogdan-Adrian Enache and Ioana-Raluca Adochiei	IoT-Based Real-Time Electrocardiogram Monitoring and Recording System	ONSITE
3.	126	MD	Daniel Constantin Ailenei, Oana Geman, Dragos-Ionut Vicoveanu and Roxana Todorean	From EMG to BCI Controlled Prosthetic Hand in Rehabilitation Therapy, using a NextMind Device	ONLINE

Medicine and Informatics (MI), ONLINE; Moderators: Marcel Costuleanu, Adina Carmen Ilie

FRIDAY, 15 November, 15:30-17:30, Room III – Clio

1.	41	MI	Blanca Larraga-García, Verónica Ruiz Bejerano, Federico Álvarez and Álvaro Gutiérrez	Real-time cognitive load measurement system of dual-tasking for first responders	ONLINE
2.	53	MI	Ka Yee Hung, Ya Chi Lee and Mei-Ju Su	Enhancing Antibiotic Stewardship with Power BI Visualization Dashboards: A User Experience Evaluation	ONLINE
3.	55	MI	Leonard Gabriel Mitu, Angela Repanovici and Ileana Pantea	Scientometric Analysis of Research Trends in Nano Patches for Insulin Monitoring: Insights from Web of Science Using VOSviewer	ONLINE
4.	60	MI	Cristian-Catalin Gavat and Afrodita Doina Marculescu	New Visible Quantitative Spectrophotometric Determination of Zolpidem from Tablets. Regression Statistics Analysis	ONLINE
5.	70	MI	Maria Ursachi-Bolota, Mihaela Gavrila, Roxana-Emanuela Ambrozie, Maria-Raluca Munteanu, Sorana-Caterina Anton and Emil Anton	Oxidative Stress Assesmennt in Preterm Premature Rupture of Membranes (Pprom) - A New Challenge	ONLINE
6.	87	MI	Zhemín An, Juan Huang and Fredric Garner	Evidence-Based Reasoning in Medical Assessment: Collaborating with Physicians in Practicing Argument Development and Evidence Marshalling	ONLINE
7.	94	MI	Sabinne-Marie Albișteanu, Adina Carmen Ilie, Ramona Ștefaniu, Ana-Maria Turcu, Gabriela Grigoraș, Anca Iuliana Pîslaru and Ioana Dana Alexa	Implications of Bioimpedance in Determining Body Composition Analysis	ONLINE
8.	97	MI	Iliuță Miruna-Elena, Trentesaux Damien, Eugen Pop and Mihnea-Alexandru Moisescu	Integration of Generative Artificial Intelligence in Medicine - first steps toward an ethical risk management methodology	ONSITE
9.	124	MI	Lubomír Štěpánek	Exploring Dunbar's Number through COVID-19: Analyzing Daily Testing and Case Dynamics in Dunbar-sized Groups and Their Impact on Twitter Sentiment via Granger Causality	ONSITE

Telemedicine, e/m/p-Health, Wearable systems (TM), ONLINE; Moderators: Radu Bozomitu, Sorin Puşcoci

FRIDAY, 15 November, 16:15-18:00, Room II - Orion

1.	25	TM	Mihaela Gavrilă, Madalina-Giorgiana Murariu, Roxana-Emanuela Ambrozie and Daniela Tarniceriu	Monitoring Health Traffic Participants Using a IoT Smart Band Integrated with a Data Collection Platform secured with Blockchain	ONLINE
2.	46	TM	George Suci, Cosmina Stalidi, Carmen Mustata, Ioan Cosma, Ecaterina Grecu and Eduard-Cristian Popovici	Wearable Devices and IoT: Advancing Continuous Health Monitoring and Management	ONLINE
3.	52	TM	Gabriela Ivanus and Angela Repanovici	Case Studies on SMEs in E-Health	ONLINE
4.	54	TM	Marilena Ianculescu, Victor Ştefan Constantin, Elena Anca Paraschiv and Adriana Alexandru	Design and Development of Comprehensive Health Tracking Devices for Enhanced Health Monitoring	ONLINE
5.	64	TM	Ovidiu Bica, Dragos Nicolau and Lidia Bajenaru	Enhancing Health Monitoring Security: A Robust Solution with Automated Periodic Re-Authentication	ONSITE
6.	109	TM	Granata Rita, Michela D'Antò, Mimma Castaldo, Arturo Cuomo, Marco Cascella, Vittorio Santoriello, Alessandra Franco, Alfonso Maria Ponsiglione, Maria Romano and Francesco Amato	Quantitative Analysis of Benefits of the Tele-Visit Services in Pain Therapy	ONLINE

Environmental Protection and Health (EPH), ONLINE, Moderators: Laura Bulgariu, Irina Gabriela Cara

FRIDAY, 15 November, 17:30-18:00, Room III - Clio

1.	2	EPH	Elena Fasniuc Pereu and Laura Bulgariu	Retention of Rifaximin from Aqueous Solution by Adsorption on PET Fibers	ONLINE
2.	35	EPH	Loredana Munteanu, Gabriela Antoaneta Apostolescu and Laura Bulgariu	Modeling Phosphate Anion Biosorption by Green Marine Algae Biomass	ONLINE

REGULAR SESSIONS	
Assistive technologies for people with disabilities (Workshop)	WS2/AT
Biomaterials, Biotechnologies and Food Industry	BB
Biomechanics	BM
Biomedical Signal and Speech Processing	SP
Decision support systems, Artificial Intelligence, Bioinformatics	DSS-AI
Environmental Protection and Health	EPH
Medical devices, Instrumentation, Measurements	MD
Medical imaging and Image processing	MIIP
Medicine and Informatics	MI
Telemedicine, e/m/p-Health, Wearable systems	TM