



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

**YOUNG RESEARCHER CONTEST**

No.	ID	Young Researcher	Authors	Title
1.	8	Adrian-Valentin Panaintescu	Vlad Constantin Craciun, Adrian Valentin Panaintescu, Radu Marian Leter and Mihaela Luca	Clustering 3D Tracking in Zebrafish Laboratory Trials
2.	9	Sergiu Ceica	Sergiu Ceica and Stefan Daniel Achirei	Predicting the Time from Diagnosis to Treatment in Breast Cancer
3.	11	Alexandru Robert Vlasiu	Alexandru Robert Vlasiu, Marc Frincu, Daniela Chioibas, Sarius Mocan and Marin Gabor	Classifying Mental Disabilities from Virtual Reality Behavioral Data using Machine Learning
4.	15	Danilo Praticò	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
5.	33	Abdelghani Halimi	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
6.	34	Michele Giuseppe Di Cesare	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
7.	36	Iva Klimešová	Iva Klimešová, Ján Lešták, Karel Hána, Tomáš Veselý and Pavel Smrčka	Head-Level Obstacle Detector for Visually Impaired
8.	39	Leontýna Varvařovská	Leontýna Varvařovská, Andrei Bejan, Alexandru Anisie and Taťána Jarošíková	Optimization of Parameters for Fluorescent Carbon Nanodots Preparation

9.	43	Rajat Nagpal	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 <sub>2</sub> O nanostructures coated with Zeolitic Imidazolate Frameworks
10	44	Sergiu Tulbure	Sergiu Tulbure	EMC and EMI Issues of Mixed Sensor - Control Boards for Medical Devices
11	46	Cosmina Stalidi	George Suciu, Cosmina Stalidi, Carmen Mustata, Ioan Cosma, Ecaterina Grecu and Eduard-Cristian Popovici	Wearable Devices and IoT: Advancing Continuous Health Monitoring and Management
12	49	Francesco Romano	Francesco Romano, David Perpetuini, Daniela Cardone and Arcangelo Merla	Machine Learning-Based Estimation of POMA Scores from EMG and Kinematic Data in Stroke Patients
13	53	Ka Yee Hung	Ka Yee Hung, Ya Chi Lee and Mei-Ju Su	Enhancing Antibiotic Stewardship with Power BI Visualization Dashboards: A User Experience Evaluation
14	56	Ainhoa Ruiz-Vitte	Ainhoa Ruiz-Vitte, Alberto Comesaña, Blanca Larraga, Eduardo Rocón and Álvaro Gutiérrez	Deep Learning for Continuous Recognition of Activities of Daily Living
15	73	Marina Loulaki	Marina Loulaki, Athanasios Kiourtis, Argyro Mavrogiorgou and Dimosthenis Kyriazis	Addressing Complex Data Integration and Harmonization Scenarios
16	74	Victor Solís-García	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.
17	77	Ligia-Gabriela Boazu	Ligia-Gabriela Boazu, Marian-Alexandru Petraru and Otilia Zvoristeanu	Deep Learning-Based Retinal Blood Vessel Segmentation Using U-Net Architecture
18	78	Anca-Ioana Tătaru	Anca-Ioana Tătaru, Mihaela Baritz, Angela Repanovici, Luciana Cristea, Mirela Gabriela Apostoaie and Adrian Catalin Lungu	Integrated modules for monitoring walking cycle at different stages
19	83	Michele Giuseppe Di Cesare	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
20	84	Sara Quattrocelli	Sara Quattrocelli, Arcangelo Merla, Daniela Cardone and David Perpetuini	Advanced Machine Learning Approaches for Classifying Parkinson's Disease Using fNIRS Data from Gait Analysis
21	88	Rodrigo Garcia	Rodrigo Garcia, Rocío Cabral, Leandro Díaz, Agustina Pérez, Francisco Veirano and Pablo Pérez-Nicoli	Versatile, Low-Cost Interface Device for Keyboard and Mouse Emulation

22	90	Aleksas Vaitulevičius	Aleksas Vaitulevičius, Jolita Bernatavičienė and Povilas Treigys	nnU-Net: Investigation of Attention Mechanism for Prostate Zone Segmentation Task
23	97	Iliuță Miruna-Elena	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
24	105	Tomáš Krajča	Tomáš Krajča, Stanislav Mareček, Iva Bublíková, Tereza Hubená and Radim Krupicka	SnakeMaker A Preview Of User-Friendly Tool For Biomedical Data Processing
25	109	Rita Granata	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
26	115	Vittorio Santoriello	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
27	119	R. Banu Prakash	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
28	120	Alexandra Ștefania Mihai	Alexandra Ștefania Mihai, Oana Geman and Roxana Todorean	Innovative approaches to EEG in the ear – a Short Review
29	121	Aria Makhija	Aria Makhija	Leveraging ResNet-50 for Precision Toxicity Classification in Plants: A Vision-Based Approach to Safeguard Public Health
30	123	Mirabela-Roxana Daicu	Mirabela-Roxana Daicu, Elise Margot Jaegle, Simona Palumbo, Oana Geman and Dragoș Ionuț Vicoveanu	Intelligent system for detecting medical instruments used in surgery
31	126	Daniel Constantin Ailenei	Daniel Constantin Ailenei, Oana Geman, Dragos-Ionuț Vicoveanu and Roxana Todorean	From EMG to BCI Controlled Prosthetic Hand in Rehabilitation Therapy, using a NextMind device
32	127	Sara Sharghilavan	Sara Sharghilavan, Oana Geman and Roxana Todorean	Speech Perception, Speech Attention: ERP Case Study Based on Open BCI