

DAY 1 - 21/06/2023

Oral Session 1 MORNING (10:15 – 11:30)

Time	Authors	Title	Track
10:15	Alessio Luschi, Paolo Nesi and Ernesto Iadanza	Health Information Technology Adverse Events Identification and Classification with Natural Language Processing and Deep Learning	Track 1 - E-health and Clinical Engineering
10:30	Enrico Longato, Erica Tavazzi, Adriano Chiò, Giovanni Sparacino and Barbara Di Camillo	Dynamic Bayesian Networks and Transfer Learning Enable the Development of Deep Sequence-Based Models on Small-Sample Data	Track 1 - E-health and Clinical Engineering
10:45	Giulia Olla, Giulia Sedda, Annalisa Bonfiglio, Sebastiano Traccis and Danilo Pani	EyeLab: a user-friendly Matlab tool for real-time monitoring of eye movements	Track 1 - E-health and Clinical Engineering
11:00	Eleonora Manzoni, Jacopo Pavan, Mirco Rampazzo and Simone Del Favero	Multi-Input Multi-Output Model Predictive Control for Drugs Delivery in Clinical Anesthesia	Track 2 - Physiological and Neural System Modelling
11.15	Piergiuseppe Liuzzi, Bahia Hakiki, Antonello Grippo, Francesca Cecchi and Andrea Mannini	Non-linear analysis of HRV reveal lower signal complexity in patients with a prolonged Disorder of Consciousness	Track 2 - Physiological and Neural System Modelling

Oral Session 1 AFTERNOON (14:30 – 15:15)

Time	Authors	Title	Track
14:30	Daniele Pastorelli, Debora Dallera, Emanuele Persico, Massimo Bellato, Gabriella Cusella	Study and characterization of bile acid biosensors in engineered probiotic bacteria	Track 9 - Bioinformatics and Synthetic Biology

	Maria, Lorenzo Pasotti and Paolo Magni		
14:45	Elisa Gaetan, Chiara Cimolato, Luca Schenato and Massimo Bellato	Modeling metabolic overload effects in bacterial growth rate in synthetic biology	Track 9 - Bioinformatics and Synthetic Biology
15:00	Paola Paci	The long story of SWIM methodology: from grapevine to personalised medicine	Track 9 - Bioinformatics and Synthetic Biology

Poster Session 1 (12:30 – 14:30)

ID #	Authors	Title	Track
2095	Jose Albites-Sanabria, Pierpaolo Palumbo, Jorunn L. Helbostad, Luca Palmerini and Lorenzo Chiari	Wearable-based Sit-to-Stand transfers in Older Adults: context differences between in-lab and home-based assessments	Track 1 - E-health and Clinical Engineering
2674	Marco Orrù, Elisa Pitzalis, Giulia Baldazzi, Graziana Viola and Danilo Pani	A novel tool for the annotation of bipolar electrograms for cardiac electrophysiology	Track 1 - E-health and Clinical Engineering
3270	Luca Cossu, Lorenzo Carlo Causin, Andrea Facchinetti and Giacomo Cappon	Design and Evaluation of an Intuitive Administration Dashboard for a Platform used to Monitor Clinical Trials	Track 1 - E-health and Clinical Engineering
3754	Chiara Giangregorio, Emilia Ambrosini and Simona Ferrante	Automatic extraction of acoustic features to predict Alzheimer's disease among English-speaking subjects	Track 1 - E-health and Clinical Engineering
3832	Paola Picozzi, Gian Luca Viganò, Matteo Verga, Martina Capuzzo, Claudia Duri, Lucia Maria Ignotti, Sara De Paola and Veronica Cimolin	Development of an Integrated Software System for Medical Equipment Management: the experience of the Spedali Civili Hospital	Track 1 - E-health and Clinical Engineering

3958	Ugo Lomoio, Patrizia Vizza, Raffaele Giancotti, Giuseppe Tradigo, Salvatore Petrolo, Sergio Flesca, Pietro Hiram Guzzi and Pierangelo Veltri	A tool to perform semi-supervised anomaly detection and annotation on 15 lead ECG signals	Track 1 - E-health and Clinical Engineering
4362	Isotta Trescato, Erica Tavazzi, Martina Vettoretti, Rosario Vasta, Adriano Chiò and Barbara Di Camillo	Identifying Extreme Profiles in Amyotrophic Lateral Sclerosis Patients at Diagnosis through Archetypal Analysis	Track 1 - E-health and Clinical Engineering
4423	Michele Atzeni, Caterina Grisi, Giacomo Cappon and Martina Vettoretti	Assessing Personal Exposure to Airborne Particulate Matter with Wearable Sensors and Ventilation Rate Models	Track 1 - E-health and Clinical Engineering
4962	Simona Pascucci, Michela Franzò, Veronica Mari, Alessia Biondi, Stefania Ceccarelli, Fabiano Bini, Franco Marinozzi, Enrico Ciminello, Paola Ciccarelli, Paola Laricchiuta, Eugenio Carrani and Marina Torre	Key points to design the MDs Library of a National implant Registry: lesson learned from the Italian experience	Track 1 - E-health and Clinical Engineering
5475	Mauro Giacomini, Sara Mora, Elena Lazarova, Norbert Maggi and Carmelina Ruggiero	Improving data quality in healthcare: medical informatics tools and standards	Track 1 - E-health and Clinical Engineering
5707	Emanuele Tauro, Enrico Gianluca Caiani, Giacomo Galuzzi, Margot Mazziotti, Fosco Cancelliere and Grzegorz Bilo	Commercial Smart Virtual Assistants to support medication adherence in chronic patients: a preliminary usability study	Track 1 - E-health and Clinical Engineering
6455	Francesco Goretti, Alberto Vassia Marzullo, Massimo Milli and Ernesto Iadanza	Prediction of Atrial Fibrillation using Deep Learning techniques	Track 1 - E-health and Clinical Engineering
6553	Elena Bardi, Carola Butera, Luca Pozzi, Marta Gandolla,	3D upper limbs tracking through inertial sensors: calibration, methodology, and validation	Track 1 - E-health and Clinical Engineering

	Francesco Braghin and Emilia Ambrosini		
6598	Francesca Longhin, Alessandro Guazzo, Enrico Longato, Diego Boscarino, Dino Paladin, Nicola Ferro and Barbara Di Camillo	Manual and automatic identification of ACMG evidence in scientific papers	Track 1 - E-health and Clinical Engineering
7425	Erica Tavazzi, Davide Albertini and Martina Vettoretti	Development of predictive models for short-term prediction of disability progression in multiple sclerosis	Track 1 - E-health and Clinical Engineering
7918	Nicola Cortese, Anna Procopio, Salvatore De Rosa, Giovanni Canino, Alessio Merola, Jolanda Sabatino, Claudia Critelli, Ciro Indolfi, Francesco Amato and Carlo Cosentino	A Distributed Multi-Centric Application for the Analysis of Cardiac Biomarkers	Track 1 - E-health and Clinical Engineering
8263	Emilia Scalona, Doriana De Marco, Gianluca Rossetto, Martina Mosso, Pietro Avanzini, Maddalena Fabbri-Destro, Giuseppe Andreoni and Nicola Francesco Lopomo	Quantifying the contribution of single joint kinematics to the overall ergonomic discomfort	Track 1 - E-health and Clinical Engineering
8927	Chiara Piazzalunga, Alice Donati and Simona Ferrante	Co-design of a points-based reward system to boost motivation in children and improve adherence to learning serious games	Track 1 - E-health and Clinical Engineering
9081	Alessio Luschi, Laura Gatti, Eleonora Tiribilli, Elena Denisova, Leonardo Manetti, Leonardo Bocchi and Ernesto Iadanza	Risk management in a medical device software: evaluation of the usability characteristics of a 3D viewer for reporting	Track 1 - E-health and Clinical Engineering
128	Rachele Fabbri, Arti Ahluwalia and Chiara Magliaro	A computational platform to assess the metabolic-electrophysiological behaviour of neurons cultured in monolayers	Track 2 - Physiological and Neural System Modelling

903	Giulia Maria Boiani, Sergio Solinas, Giacomo Preti, Aurora Manini, Michele Migliore, Jonathan Mapelli and Daniela Gandolfi	Full-scale point-neuron model of the mouse hippocampal microcircuits	Track 2 - Physiological and Neural System Modelling
1643	Melissa Monti, Sophie Molholm and Cristiano Cuppini	A neural model of sensory interactions in young neurotypical and ASD children	Track 2 - Physiological and Neural System Modelling
2052	Giovanni Chiarion and Luca Mesin	Functional Connectivity of the EEG in epilepsy: a single case study	Track 2 - Physiological and Neural System Modelling
2223	Carlo Balsamello, Silvio Pianca, Antonio Bellasi, Carla Colturi, Gianvincenzo Melfa, Giuseppe Rombolà, Reto Venzin, Pietro Cippà, Giustina Casagrande and Maria Laura Costantino	The prediction of the patient's response to hemodialysis treatment: Dialysis vs InterACTIVE-HD 2.0 experience	Track 2 - Physiological and Neural System Modelling
2231	Jacopo Bonet, Roberto Visentin, Martina Vettoretti, Andrea Facchinetti and Chiara Dalla Man	Smart Titration of Long-Acting Insulin in Insulin-Naïve Type 2 Diabetic Subjects	Track 2 - Physiological and Neural System Modelling
2297	Linda Lastrico, Alessandro Carfi, Francesco Rea, Fulvio Mastrogiovanni and Alessandra Sciutti	Toward Implicit Communication of Object Properties for Human-Robot Interaction	Track 2 - Physiological and Neural System Modelling
3240	Federica Goffi, Pierluigi Reali, Adele Ferro, Viviana Pescuma, Giandomenico Schiena, Ylenia Barone, Paolo Enrico, Yvan Torrente, Fabio Triulzi, Anna Maria Bianchi, Paolo Brambilla and Eleonora Maggioni	Brain-heart interaction: an ECG-fMRI integrated study in physiology and major depressive disorder	Track 2 - Physiological and Neural System Modelling
3525	Mario Severino, Pierluigi Selvaggi, Martin Osugo, Ottavia	Modelling cerebral blood flow and neuroreceptor occupancy in dopamine blocking studies	Track 2 - Physiological and Neural System Modelling

	Dipasquale, Uzma Zahid, Thomas Whitehurst, Ellis Onwordi, Ben Statton, Tiago Reis Marques, Robin Murray, Mitul Mehta, Oliver Howes and Mattia Veronese		
4750	Daniele Andrean, Francesco Da Ros, Mario Mazzucato, Morten Gram Pedersen and Roberto Visentin	Modeling Doxorubicin Treatment Effect in Multiple Myeloma	Track 2 - Physiological and Neural System Modelling
5470	Danilo Benozzo, Giorgia Baron, Giacomo Baggio, Alessandro Gozzi, Maurizio Corbetta, Alessandro Chiuso, Sandro Zampieri and Alessandra Bertoldo	Single region contribution to the brain dynamic (in)stability	Track 2 - Physiological and Neural System Modelling
5715	Alberto Antonietti, Paolla Furquim Daud and Alessandra Pedrocchi	A multiscale computational approach to replicate the full-scale mouse striatum model	Track 2 - Physiological and Neural System Modelling
5855	Edoardo Faggionato, Paolo Denti, Anna Largajolli, Alessandra Bertoldo and Chiara Dalla Man	A Comprehensive Nonlinear Mixed Effects Model of Glucose, Insulin, and C-Peptide Interaction during IVGTT	Track 2 - Physiological and Neural System Modelling
6007	Matteo Baldan, Francesco Da Ros, Mario Mazzucato, Morten Gram Pedersen and Roberto Visentin	Model Assessment of Doxorubicin Pharmacokinetics in Multiple Myeloma	Track 2 - Physiological and Neural System Modelling
6329	Paolo Peruzzo and Francesca Maria Susin	Numerical simulations of the cerebrospinal flow through the Sylvius aqueduct modeled as a diffuser/nozzle pump	Track 2 - Physiological and Neural System Modelling
6753	Micaela Morettini, Agnese Piersanti, Christian Göbl, Laura Burattini and Andrea Tura	Mathematical model of glucagon kinetics during an oral glucose tolerance test based on a dual regulation mechanism	Track 2 - Physiological and Neural System Modelling

7894	Lorenzo Gaetano Amato, Alberto Arturo Vergani, Michael Lassi, Riccardo Mannella, Valentina Bessi, Antonello Grippo and Alberto Mazzoni	Network model accounts for evolution of EEG functional connectivity in patients with cognitive decline	Track 2 - Physiological and Neural System Modelling
8166	Matteo Martin and Morten Gram Pedersen	Noise-Induced Dynamics and Stochastic Slow Manifolds in the Bistable Xiong-Ferrell Model	Track 2 - Physiological and Neural System Modelling
9875	Marco Prenassi, Manuel Ellero, Annamaria Caruso and Sara Marceglia	From data to knowledge: definition of an exploratory dataset for deep brain stimulation	Track 2 - Physiological and Neural System Modelling
9921	Marta Carrara, Pietro Antenucci and Manuela Ferrario	How to assess vascular dysfunction during septic shock and resuscitation	Track 2 - Physiological and Neural System Modelling
250	Maria Vittoria Mascolini, Joseph Vannel Fotso Fogang, Valentina Salomoni, Chiara Giulia Fontanella, Emanuele Luigi Carniel and Arturo Nicola Natali	A novel artificial urinary sphincter and comparison with reference device	Track 3 - Biomechanics and prosthetics
522	Manfredo Atzori, Henning Müller, Alessandro Buosi, Franco Reggiani, Jacopo Lazzaro, Giosuè Alberti, Cesare Tiengo, Franco Bassetto and Nicola Petrone	A dexterous hand prosthesis based on additive manufacturing	Track 3 - Biomechanics and prosthetics
545	Dario Colli and Gianni Pedrizzetti	Adaptation of cardiac deformation pattern during exercise in children	Track 3 - Biomechanics and prosthetics
768	Serena Anglese, Mauro Lo Rito, Antonio Rosato, Valentina Ceserani, Giovanni Maria Formato, Ariel Fernando Pascaner and Michele Conti	Development of novel computational tool to support surgical planning for the treatment of Anomalous Aortic Origin of the Coronary Arteries (AAOCA)	Track 3 - Biomechanics and prosthetics

1175	Andrada Pica, Andrea Marinozzi, Franco Marinozzi and Fabiano Bini	3D Finite Element Analysis of a Percolating Cluster inside the Mineralized Collagen Fibril	Track 3 - Biomechanics and prosthetics
1299	Simone Borrelli, Giovanni Putame, Alberto Audenino, Andrea Ferro, Stefano Marone and Mara Terzini	The effect of CFR-PEEK cross-link in short fixation for the stabilization of lumbar metastasis: an in-vitro comparative study	Track 3 - Biomechanics and prosthetics
1517	Federica Camuncoli, Luca Barni, Sebastiano Nutarelli, Jacopo Emanuele Rocchi, Matteo Barcillesi, Irene Di Dio, Andrea Sambruni and Manuela Galli	Inertial measurements unit validation for countermovement jump (CMJ) tests in athletes	Track 3 - Biomechanics and prosthetics
1533	Giuseppe Zullo, Elisa Baldoin, Andrey Koptuyug, Mikael Bäckström and Nicola Petrone	Advances in the development of a instrumented head surrogate for brain injury investigation	Track 3 - Biomechanics and prosthetics
1894	Giacomo Fabris, Mattia Scapinello, Samira Breban, Sara Barbacane, Gianluca Migliore, Andrea Cutti and Nicola Petrone	Towards a Wearable System for Complete Collection of Clamp Loads in Transfemoral Paralympic Sprinters	Track 3 - Biomechanics and prosthetics
2152	Elena Pegolo, Elena Carraro, Federica Cibir, Fabiola Spolaor, Francesca Salmin, Andrea Lizio, Maria Chiara Frisoni, Stefano Becchiati, Valeria Sansone and Zimi Sawacha	Face mobility analysis in Spinal Muscular Atrophy	Track 3 - Biomechanics and prosthetics
2328	Roberta Scuoppo, Stefano Cannata, Caterina Gandolfo and Salvatore Pasta	Structural Simulation of Transcatheter Heart Valve in Transcatheter Heart Valve	Track 3 - Biomechanics and prosthetics

2504	Nicoletta Curcio, Antonio Rosato, Daniela Mazzaccaro, Michele Conti and Giulia Matrone	A Workflow for Biomechanical Simulation of Patient-specific Atherosclerotic Carotid Artery	Track 3 - Biomechanics and prosthetics
3321	Ilaria Toniolo, Maria Vittoria Mascolini, Simona Neri, Antonella Peruffo, Anna Perazzi and Chiara Giulia Fontanella	Experimental Analysis of the biomechanics of healthy porcine corneas	Track 3 - Biomechanics and prosthetics
3779	Fabrizio Crascì, Stefano Cannata, Caterina Gandolfo and Salvatore Pasta	Numerical Analysis of the Bicaval Transcatheter System for the Treatment of Severe Tricuspid Regurgitation	Track 3 - Biomechanics and prosthetics
4482	Sofia Pettenuzzo, Alice Berardo, Elisa Belluzzi, Assunta Pozzuoli, Pietro Ruggieri, Emanuele Luigi Carniel and Chiara Giulia Fontanella	Biomechanical characterization of human plantar fascia through experimental tests	Track 3 - Biomechanics and prosthetics
6187	Francesca Gariboldi, Mattia Scapinello, Nicola Petrone, Gian Luca Migliore, Gregorio Teti and Andrea Giovanni Cutti	Static strength of lower-limb prosthetic sockets for the activities of daily living	Track 3 - Biomechanics and prosthetics
6353	Silvia Spadoni, Silvia Todros, Michael Magnussen, Dominique Scaglioni, Anna Urciuolo, Nicola Elvassore and Piero Pavan	Computational modelling of the contractile behavior of cardiomyocytes on hydrogel scaffolds for cardiac tissue regeneration	Track 3 - Biomechanics and prosthetics
6743	Lorenza Bonaldi, Chiara Giulia Fontanella, Carmelo Pirri, Carla Stecco and Alice Berardo	The biomechanical behaviour of fascial system: Superficial VS Deep Fascia	Track 3 - Biomechanics and prosthetics
7023	Sara Barbacane, Samira Giuliana Breban, Giacomo Fabris, Mattia Scapinello, Roberto Di Marco, Giuseppe	Analysis of an Elite Amputee Paralympic Sprinter in Track Running Pilot Tests	Track 3 - Biomechanics and prosthetics

	<p>Marcolin, Gian Luca Migliore, Andrea Giovanni Cutti and Nicola Petrone</p>		
7206	<p>Valentina Ceserani, Mauro Lo Rito, Giovanni Maria Formato, Mauro Luca Agnifili, Antonio Rosato, Ariel Fernando Pascaner and Michele Conti</p>	<p>Lumped-parameter hemodynamic model as a non-invasive tool to assess coronary blood flow in AAOCA</p>	<p>Track 3 - Biomechanics and prosthetics</p>
7999	<p>Samira Giuliana Breban, Sara Barbacane, Valerio Pelusi, Roberto Di Marco, Giuseppe Marcolin, Andrea Giovanni Cutti and Nicola Petrone</p>	<p>Comparative Analysis of Steady and Resisted Accelerated Treadmill Running of an Elite Amputee Paralympic Sprinter</p>	<p>Track 3 - Biomechanics and prosthetics</p>
8545	<p>Emilia Scalona, Gianluca Rossetto, Martina Mosso, Maristella Francesca Saccomanno, Giuseppe Milano and Nicola Francesco Lopomo</p>	<p>Integrated Protocol for Multidimensional In Vivo Assessment of Glenohumeral Joint Function during Dynamic Tasks</p>	<p>Track 3 - Biomechanics and prosthetics</p>
8994	<p>Giacomo Villa, Marta Galeotti, Foivos Papaioannou, Veronica Cimolin and Manuela Galli</p>	<p>Motor performances evaluation of female soccer players from AC Trento Women</p>	<p>Track 3 - Biomechanics and prosthetics</p>
9042	<p>Chiara Falsina, Melania Maglio, Nicola Francesco Lopomo, Gianluca Giavaresi, Alberto Grassi, Stefano Zaffagnini, Massimiliano Baleani, Gregorio Marchiori and Matteo Berni</p>	<p>Development of a contrast-enhanced micro tomography protocol for human meniscus: a pilot study</p>	<p>Track 3 - Biomechanics and prosthetics</p>

9149	Antonio Rosato, Mauro Lo Rito, Giovanni Maria Formato, Serena Anglese, Valentina Ceserani, Ariel Fernando Pascaner and Michele Conti	Biomechanical assessment of the anomalous coronary compression by patient-specific finite element analysis	Track 3 - Biomechanics and prosthetics
9676	Vittoria Civilini, Vincenzo Giacalone, Alberto L. Audenino and Mara Terzini	Mechanical evaluation of synthetic meshes: definition and verification of a rigorous test protocol	Track 3 - Biomechanics and prosthetics
9693	Chiara Catalano, Stefano Cannata, Caterina Gandolfo and Salvatore Pasta	An Inverse Analysis for the Assessment of Material Properties of TAVI Patients	Track 3 - Biomechanics and prosthetics
9817	Roberto Gemelli, Martina Todesco, Emanuele Luigi Carniel, Gino Gerosa and Andrea Bagno	Mechanical characterization of hybrid membrane suitable for biomedical application	Track 3 - Biomechanics and prosthetics
2930	Martina Vescio, Matteo Bulloni, Andrea Brendolan and Linda Pattini	Exploring heterogeneity in lymphoid malignancies from mouse to human gene expression profiles	Track 9 - Bioinformatics and Synthetic Biology
3085	Caterina Alfano, Lorenzo Farina and Manuela Petti	Network-based integration of clinical, imaging and molecular biomarkers of dementia	Track 9 - Bioinformatics and Synthetic Biology
3938	Flavio Fontana, Piera Mancini, Ermes Botte, Chiara Magliaro and Arti Ahluwalia	Genetic Algorithms for the identification and design of physiologically relevant 3D constructs	Track 9 - Bioinformatics and Synthetic Biology
4324	Anna Procopio, Elvira Parrotta, Stefania Scalise, Nicola Cortese, Alessio Merola, Francesco Amato, Giovanni Cuda and Carlo Cosentino	A preliminary version of a Genome-Scale Metabolic Model for Induced Human Pluripotent Stem Cells (hiPSCs)	Track 9 - Bioinformatics and Synthetic Biology
4995	Andrea Ricci, Alfonso Gautieri, Giulia Di Rocco and Carlo Augusto Bortolotti	Giving new life to seafood waste: in silico engineering of a chitinolytic LPMO enzyme	Track 9 - Bioinformatics and Synthetic Biology

5161	Ermes Botte, Piera Mancini, Chiara Magliaro and Arti Ahluwalia	Oxygen metabolism in in vitro ecosystems	Track 9 - Bioinformatics and Synthetic Biology
5649	Debora Dallera, Stefano Quaranta, Davide De Marchi, Giovanni Cipriano, Paolo Magni and Lorenzo Pasotti	A bioinformatic pipeline for identifying bacterial constitutive promoters based on transcriptomic data analysis	Track 9 - Bioinformatics and Synthetic Biology
5791	Carlo Alberto Rossi, Ana Vinuela, Jochen M. Schwenk, Ewan R. Pearson, Andrea Mari and Roberto Bizzotto	Longitudinal relationships between proteomics and beta-cell dysfunction in type 2 diabetes: an IMI direct study	Track 9 - Bioinformatics and Synthetic Biology
6041	Veronica Zatta, Massimo Bellato, Alice Pegoraro, Giulia Bernabè, Sara Letrari, Astghik Stepanyan, Barbara Di Camillo, Paola Brun and Ignazio Castagliuolo	Lipid Droplets associated genes link HSV-1 infection to neurodegeneration pathways	Track 9 - Bioinformatics and Synthetic Biology
6600	Massimo Bellato, Marco Cappellato, Andrea Calzavara, Alessandro Lucchiarì, Sara Rebecca and Barbara Di Camillo	Simulating microbial communities' evolution via Agent base modelling: a Python tool	Track 9 - Bioinformatics and Synthetic Biology
7032	Alessandro Bernardi, Massimo Bellato, Riccardo Antonello, Barbara Di Camillo, Luca Schenato and Simone Del Favero	Automated control of bioreactors: An hardware-in-the-loop proof of concept test towards an experimental facility	Track 9 - Bioinformatics and Synthetic Biology
7936	Francesca Usai, Giada Loi, Franca Scocozza, Massimo Bellato, Paolo Magni, Michele Conti and Lorenzo Pasotti	A workflow for the construction of reproducible living biosensors built by printing bacterial materials	Track 9 - Bioinformatics and Synthetic Biology
8626	Chiara Cimolato, Gianluca Selvaggio, Massimo Bellato, Luca Marchetti and Luca Schenato	Uncovering quorum sensing and quenching structural properties: a systems biology approach	Track 9 - Bioinformatics and Synthetic Biology

9059	Federica Conte, Giulia Ficon and Paola Paci	Bioinformatics analyses to identify molecular gene signatures associated with breast cancer phenotypes	Track 9 - Bioinformatics and Synthetic Biology
9879	Giulia Ficon, Federica Conte and Paola Paci	A network-based algorithm for identifying drug repurposing opportunities for complex diseases	Track 9 - Bioinformatics and Synthetic Biology

DAY 2 - 22/06/2023

Oral Session 2 MORNING (9:00 – 11:00)

Time	Authors	Title	Track
9:00	Alice Perego, Alice Pezzinga, Emilia Bellina and Luigi La Barbera	Assessment of a parametric thoracic spine model for the generation of in silico cohorts	Track 3 - Biomechanics and prosthetics
9:15	Simone Ranaldi, Leonardo Gizzi, Giacomo Severini and Cristiano De Marchis	Synergy-dependent patterns of reaction forces in sit-to-stand movements	Track 3 - Biomechanics and prosthetics
9:30	Anna Ramella, Francesco Migliavacca, Jose Felix Rodriguez Matas, Erica Mariani, Tim J. Mandigers, Daniele Bissacco, Antonio Freyrie, Santi Trimarchi and Giulia Luraghi	A numerical finite element methodology of the EVAR procedure	Track 3 - Biomechanics and prosthetics
9:45	Felicia Roffo, Alfonso Maria Ponsiglione, Paolo Antonio Netti and Enza Torino	coupled Hydrodynamic Flow Focusing to design Lipid-Polymer NPs (LiPoNs) for theranostics	Track 6 - Neural Engineering and Micro and Nano-technologies
10:00	Cristian Brandi, Sergio Spanò, Gian Carlo Cardarilli, Enrico Verona, Luca Businaro, Paolo Bisegna, Adele De Ninno and Federica Caselli	Development of a microfluidic system for impedance-based cell sorting	Track 6 - Neural Engineering and Micro and Nano-technologies
10:15	Valentina Galletta, Emma Chiaramello, Serena Fiocchi, Alessandra Marrella, Giulia Suarato, Marta Bonato, Marta Parazzini and Paolo Ravazzani	Magnetolectric nanoparticles as promising tools for motor nerve stimulation	Track 6 - Neural Engineering and Micro and Nano-technologies
10:30	Federico Bologna, Alberto Audenino and Mara Terzini	Reducing bone plates standard fatigue test time with an analytical runout load prediction	Track 8 - Design and Validation of Biomedical Devices
10:45	Erika Roventini, Giulia Ballardini, Aliria Poliziani, Lorenzo Arrico and Leonardo Ricotti	Zwitterionic coatings for an implantable artificial pancreas	Track 8 - Design and Validation of Biomedical Devices

Oral Session 3 MORNING (11:30 – 12:30)

Time	Authors	Title	Track
11:30	Augusto Bonilauri, Alice Pirastru, Francesca Sangiuliano Intra, Sara Isernia, Marta Cazzoli, Valeria Blasi, Giuseppe Baselli and Francesca Baglio	Development of a novel surface-based approach to quantify fNIRS-fMRI spatial correspondence	Track 5 - Biomedical Signal and Image Processing
11:45	Elena Idi, Eleonora Manzoni, Andrea Facchinetti, Giovanni Sparacino and Simone Del Favero	Supervised Learning-based Detection of Pressure-induced Failures in Continuous Glucose Sensors	Track 5 - Biomedical Signal and Image Processing
12:00	Roberta Saputo, Laura Sparacino, Riccardo Pernice, Francesca Gelpi, Vlasta Bari, Alberto Porta and Luca Faes	Assessment of cerebral autoregulation in patients undergoing anaesthesia with propofol: a comparison among spontaneous variability methods	Track 5 - Biomedical Signal and Image Processing
12:15	Michael Lassi, Carlo Fabbiani, Salvatore Mazzeo, Rachele Burali, Alberto Arturo Vergani, Giulia Giacomucci, Valentina Moschini, Filippo Emiliani, Maenia Scarpino, Silvia Bagnoli, Assunta Ingannato, Benedetta Nacmias, Sonia Padiglioni, Silvestro Micera, Sandro Sorbi, Antonello Grippo, Valentina Bessi and Alberto Mazzoni	Early stages of cognitive decline are characterized by different EEG microstates dynamics	Track 5 - Biomedical Signal and Image Processing

Oral Session 3 AFTERNOON (15:30 – 16:45)

Time	Authors	Title	Track
15:30	Katerina Iskra, Aleksander Miladinovic, Milos Ajcevic, Laura Munaretto, Jacopo Giulio Rizzi, Marco Merlo and Agostino Accardo	Discriminatory power of Global Longitudinal Strain and Left Ventricular Ejection Fraction for Identification of Dilated Cardiomyopathy	Track 5 - Biomedical Signal and Image Processing
15:45	Serena Moscato, Silvia Orlandi, Andrea Giannelli, Rita Ostan, Silvia Varani and Lorenzo Chiari	Autonomic response to virtual reality in oncological patients in real-world context	Track 5 - Biomedical Signal and Image Processing

16:00	Andrea Costanzo Palmisciano, Maximiliano Mollura, Riccardo Barbieri and Luca Mainardi	Quantitative validation of an automatic videoPPG technique during autonomic elicitations	Track 5 - Biomedical Signal and Image Processing
16:15	Ester Bruno, Simone Cauzzo, Alejandro Callara, Arti Ahluwalia, Chiara Magliaro and Nicola Vanello	Hessian-based neck tracing of dendritic spines: a preliminary study on confocal images	Track 5 - Biomedical Signal and Image Processing
16:30	Francesco Branciforti, Kristen Meiburger, Elisa Zavattaro, Federica Veronese, Vanessa Tarantino, Paola Savoia and Massimo Salvi	Quality enhancement of dermatological images using GANs: a proof of concept	Track 5 - Biomedical Signal and Image Processing

Poster Session 2 (12:30 – 14:30)

ID #	Authors	Title	Track
210	Manuela Moretto, Ilaria Di Vico, Agnese Tamanti, Giovanni Tomelleri, Daniel Martins, Ottavia Dipasquale, Mattia Veronese, Alessandra Bertoldo, Sarah Ottaviani, Francesca Benedetta Pizzini, Michele Tinazzi and Marco Castellaro	Associations between fatigue and functional connectivity of dopamine and noradrenaline circuits in Parkinson's disease	Track 5 - Biomedical Signal and Image Processing
270	Stefano Franceschini, Michele Ambrosanio, Maria Maddalena Autorino, Vito Pascazio and Fabio Baselice	Breast Cancer Detection via Two-dimensional Ultrasound Tomography	Track 5 - Biomedical Signal and Image Processing
367	Matteo Moro, Vito Paolo Pastore, Giorgia Marchesi, Luca Garello, Chiara Tacchino, Paolo Moretti, Matilde Inglese, Francesca Odone and Maura Casadio	Computer Vision and Deep Learning for Human Motion Analysis	Track 5 - Biomedical Signal and Image Processing
484	Camilla Sala, Camillo Porcaro, Stephen D. Mayhew and Andrew Bagshaw	fMRI characterization of intrinsic brain networks relevant for motor control with and without visual feedback by fractal dimension	Track 5 - Biomedical Signal and Image Processing

626	Fiorella Anna Lombardi, Paola Pisani, Alessandra Natale, Ernesto Casciaro, Fabiola Rosa Contaldo, Roberto Franchini, Maurizio Muratore, Francesco Conversano and Sergio Casciaro	Radiofrequency Echographic Multi Spectrometry for Fragility Fracture prediction through Fragility Score	Track 5 - Biomedical Signal and Image Processing
1288	Giulia Saccomano, Francesco Brun, Diego Dreossi, Giuliana Tromba, Luca Brombal and Maurizio Pinamonti	Towards 3D Virtual Histology of melanoma tissue by means of lab-based X-ray Phase Contrast Computed Micro-Tomography	Track 5 - Biomedical Signal and Image Processing
1682	Serena Moscato, Wenchao Zhu, Yikang Guo, Sagar Kamarthi, Carin Ann Colebaugh, Kristin L. Schreiber, Robert Randolph Edwards, Richard D. Urman, Yan Xiao, Lorenzo Chiari and Yingzi Lin	Comparison of autonomic signals between healthy subjects and chronic low back pain patients at rest and during noxious stimulation	Track 5 - Biomedical Signal and Image Processing
1979	Alessandro Pasquale De Rosa, Alessandro d'Ambrosio, Chiara Marzi, Mario Cirillo, Alvino Bisecco, Manuela Altieri, Stefano Diciotti, Maria Assunta Rocca, Nicola De Stefano, Patrizia Pantano, Massimo Filippi, Gioacchino Tedeschi, Antonio Gallo and Fabrizio Esposito	XGBoost vs. TabPFN in Neuroimaging Machine Learning-based analysis	Track 5 - Biomedical Signal and Image Processing
2048	Gianluca Rho, Alejandro Luis Callara, Cinzia Cecchetto, Roberto Garofalo, Tommaso Lomonaco, Enzo Pasquale Scilingo and Alberto Greco	Effect of EDA-driven sympathetic responses on the central processing of faces cued by hedonic odors: a preliminary ERP study	Track 5 - Biomedical Signal and Image Processing
2115	Roberto Billardello, Francesca Cordella, Francesca Leone, Federico Mereu, Emanuele Gruppioni and Loredana Zollo	Comparative analysis of EMG-based classifiers for recognizing hand/wrist gestures and forces	Track 5 - Biomedical Signal and Image Processing
2487	Manuel Maggio, Tommaso	Osteoporosis Identification at Lumbar	Track 5 - Biomedical

	De Marco, Francesco Conversano, Giulia Macchia, Ivan Primitivo, Fiorella Lombardi, Paola Pisani and Sergio Casciaro	Vertebrae through a Neural Network Classifier	Signal and Image Processing
2856	Giulio Steyde, Edoardo Spairani, Beniamino Daniele, Giovanni Magenes and Maria Gabriella Signorini	Cardiotocography in antenatal fetal monitoring of diabetes-complicated pregnancies	Track 5 - Biomedical Signal and Image Processing
2931	Simone Papallo, Ester Riccio, Alessandro Pasquale De Rosa, Mario Cirillo, Francesco Amato, Mario Sansone and Fabrizio Esposito	Control Theory Measures for Dynamic Analyses of Human Functional Connectome Data	Track 5 - Biomedical Signal and Image Processing
3077	Ilaria Quattrociochi, Donatella Mattia, Angela Riccio, Mariagrazia D'Ippolito, Marta Aloisi, Rita Formisano and Jlenia Toppi	EEG-based quantitative measures to support the clinical diagnosis of disorders of consciousness	Track 5 - Biomedical Signal and Image Processing
3179	Stefano Franceschini, Maria Maddalena Autorino, Michele Ambrosanio, Vito Pascazio and Fabio Baselice	A Novel Authentication System Based on Hand Gesture Ultrasound Signatures	Track 5 - Biomedical Signal and Image Processing
3298	Tommaso Ciceri, Letizia Squarcina, Adele Ferro, Florian Montano, Alessandra Bertoldo, Nicola Persico, Simona Boito, Fabio Triulzi, Giorgio Conte, Paolo Brambilla and Denis Peruzzo	A comparative study of Super-Resolution reconstruction methods in fetal MRI	Track 5 - Biomedical Signal and Image Processing
3396	Agnese Sbröllini, Sofia Romagnoli, Emanuela Teresina Locati, Micaela Morettini and Laura Burattini	Brugada Syndrome: Characterization of QT Interval Components and Correction	Track 5 - Biomedical Signal and Image Processing
3449	Ilaria Marcantoni, Giusi Piccolantonio, Elena Vitti, Gabriele Polonara, Mojgan Ghoushi, Marco Valenti, Luca Reversi, Nicoletta Foschi, Simona Lattanzi, Laura	Interhemispheric functional connectivity: an fMRI study in two split-brain patients	Track 5 - Biomedical Signal and Image Processing

	Burattini and Mara Fabri		
3468	Antonio Colucci, Giusy Peluso, Fiorella Anna Lombardi, Mauro Bellone, Francesco Conversano, Roberto Franchini, Paola Pisani, Italo Epicoco, Massimo Cafaro and Sergio Casciaro	A convolutional neural network to identify osteoporosis from femoral echographic scans: a preliminary study	Track 5 - Biomedical Signal and Image Processing
4021	Marta Iovino, Michal Javorka, Luca Faes and Riccardo Pernice	Comparison of Machine Learning Approaches for Physiological States Classification Using Heart Rate and Pulse Rate Variability Indices	Track 5 - Biomedical Signal and Image Processing
4223	Andrea Gerardo Russo, Assunta Ciarlo, Francesco Di Salle, Mario Sansone, Gioacchino Tedeschi and Fabrizio Esposito	Bayesian Surprise from a Deep Learning Model of Italian Language to Model Neural Activity	Track 5 - Biomedical Signal and Image Processing
4348	Luca Soliveri, Michela Bozzetto, Paolo Brambilla, Anna Caroli and Andrea Remuzzi	The role of hemodynamics in arteriovenous fistula remodelling and failure. A CFD longitudinal study	Track 5 - Biomedical Signal and Image Processing
4420	Andrea Pitzus, Giulia Baldazzi, Graziana Viola, Luigi Raffo and Danilo Pani	Abnormal Ventricular Potentials Identification Using a Siamese Neural Network	Track 5 - Biomedical Signal and Image Processing
4425	Francesca Angelone, Alfonso Maria Ponsiglione, Maria Paola Belfiore, Gianluca Gatta, Roberto Grassi, Francesco Amato and Mario Sansone	Evaluation of breast density variability between right and left breasts	Track 5 - Biomedical Signal and Image Processing
4448	Simone Kresevic, Milos Ajcevic, Mauro Giuffrè, Pierpaolo Pupa, Carlo Moretto, Simone Pennini, Lory Saveria Crocè and Agostino Accardo	Estimating the degree of Non-Alcoholic Fatty Live Disease (NAFLD) from ultrasound images: preliminary results	Track 5 - Biomedical Signal and Image Processing

4679	Luigi Antelmi, Antonio Colucci, Fiorella Anna Lombardi, Alessia Centonze, Tommaso De Marco, Francesco Conversano, Paola Pisani and Sergio Casciaro	Soft-tissue alterations identified with a CNN trained with simulated ultrasound images integrating expert knowledge	Track 5 - Biomedical Signal and Image Processing
4739	Federica Cruciani, Ettore Cinquetti, Lorenza Brusini, Anonino Aparo, Carlo Combi, Ilaria Boscolo Galazzo and Gloria Menegaz	Exploring the potential of MCVAE for patients stratification and skewed data compensation across the AD continuum	Track 5 - Biomedical Signal and Image Processing
4743	Marta Gaviraghi, Baris Kanber, Antonio Ricciardi, Fulvia Palesi, Francesco Grussu, Carmen Tur, Alberto Calvi, Rebecca Samson and Claudia Angela Michela Gandini Wheeler-Kingshott	A deep learning network from downsampled diffusion-weighted MRI k-space to image-space	Track 5 - Biomedical Signal and Image Processing
4797	Jiaying Liu, Anna Corti, Giuseppina Calareso, Valentina Corino and Luca Mainardi	Distinguishing lymph nodes in head and neck cancer patients using MRI-based radiomics	Track 5 - Biomedical Signal and Image Processing
4987	Maria Maddalena Autorino, Stefano Franceschini, Michele Ambrosanio, Fabio Baselice and Vito Pascazio	A deep learning approach for the analysis of voxel composition in magnetic resonance imaging	Track 5 - Biomedical Signal and Image Processing
5208	Letizia Squarcina, Giuseppe Delvecchio, Matilde Pavan, Cinzia Perlini, Marcella Bellani, Antonio Lasalvia, Annamaria Finardi, Mirella Ruggeri, Roberto Furlan and Paolo Brambilla	Association between inflammation and brain microstructure in First Episode Psychosis investigated with DTI	Track 5 - Biomedical Signal and Image Processing
5303	Giovanni Corvini, Silvia Conforto, Simone Ranaldi, Maurizio Schmid and Daniele Bibbo	Analysis of muscular activity of a cashier during different modalities of human robot collaboration	Track 5 - Biomedical Signal and Image Processing
5531	Daniela De Luca, Sara Moccia, Raffaele Mazziotti, Leonardo Lupori, Tommaso	Machine learning-based classification of cortical response to visual stimuli recorded with an ECoG array in mice: a case study	Track 5 - Biomedical Signal and Image Processing

	Pizzorusso and Silvestro Micera		
5579	Cristian Drudi, Maximiliano Mollura and Riccardo Barbieri	Effects of State Representation on a Reinforcement Learning Based Decision Support System	Track 5 - Biomedical Signal and Image Processing
5692	Daniela Cardone, David Perpetuini, Michele Tritto, Sergio Nocco, Alessandro Tiberio and Arcangelo Merla	Driver drowsiness detection relying on infrared thermal imaging: a machine learning approach	Track 5 - Biomedical Signal and Image Processing
5865	Edoardo Maria Polo, Maximiliano Mollura, Alessia Paglialonga and Riccardo Barbieri	Decoding Emotions through Music: A Physiological Analysis of Emotion Recognition	Track 5 - Biomedical Signal and Image Processing
6198	Alessio Giacomel, Daniel Martins, Giovanna Nordio, Rubaida Easmin, Oliver Howes, Steven C.R. Williams, Federico Turkheimer, Marius de Groot, Ottavia Dipasquale and Mattia Veronese	Assessing Multisite PET Neuroimaging Harmonisation for Normative Modelling	Track 5 - Biomedical Signal and Image Processing
6319	Alfonso Maria Ponsiglione, Annarita Tedesco, Noemi Pisani, Leandro Donisi, Carlo Ricciardi, Maria Romano and Francesco Amato	A Multiparameter Statistical Approach for Cardiotocographic Signals Analysis	Track 5 - Biomedical Signal and Image Processing
6370	Laura Marzetti, Alessio Basti, Roberto Guidotti, Guido Nolte and Vittorio Pizzella	Disclosing brain functional connections with multi-dimensional approaches	Track 5 - Biomedical Signal and Image Processing
6380	Ettore Cinquetti, Ilaria Siviero, Silvia Francesca Storti and Gloria Menegaz	Enhancing Safety in Industry 4.0: The Use of Passive Brain Computer Interfaces for Vigilance Monitoring	Track 5 - Biomedical Signal and Image Processing
6402	Francesco Giardini, Eleonora Barcali, Martino De Santis, Benedetta Olmi, Erica Lazzeri, Cosimo Nardi and Leonardo Bocchi	Optimization of a cardiac tissue segmentation pipeline in murine whole-heart reconstructions	Track 5 - Biomedical Signal and Image Processing
6448	Marco Carbonaro, Robin Rohlén, Silvia Seoni, Kristen	Combining high-density electromyography and ultrafast ultrasound to assess individual	Track 5 - Biomedical Signal and Image

	Meiburger, Taian Vieira, Christer Grönlund and Alberto Botter	motor unit properties in vivo	Processing
6514	Assunta Ciarlo, Andrea G. Russo, Andrea Viggiano, Carmine Secondulfo, Francesco Di Salle, Fabrizio Esposito and Antonietta Canna	Tensor-based morphometry of T1 weighted brain images reveals subtle volume enlargement of temporalis muscles	Track 5 - Biomedical Signal and Image Processing
6559	Alice Giubergia, Sara Mascheretti, Valentina Lampis, Tommaso Ciceri, Francesca Maccarone, Martina Villa, Chiara Andreola, Filippo Arrigoni, Alessandra Bertoldo and Denis Peruzzo	Pseudo resting-state investigation from task-evoked functional MRI signals	Track 5 - Biomedical Signal and Image Processing
6869	Alberto Morelli, Leonardo Bocchi and Piergiorgio Francia	Phase synchronization between breathing and ppg signals in sleep events recordings of adult subjects	Track 5 - Biomedical Signal and Image Processing
7227	Maria Colpo, Erica Silvestri, Umberto Villani, Mariagiulia Anglani, Diego Cecchin, Maurizio Corbetta and Alessandra Bertoldo	Impact of diffusion connectivity metrics on white matter abnormalities in glioma	Track 5 - Biomedical Signal and Image Processing
7317	Simona Di Meo, Giulia Bertuzzi, Giulia Matrone, Giovanni Magenes and Marco Pasian	Millimeter-Waves Imaging for Breast Cancer Detection: Development of Analytical Models	Track 5 - Biomedical Signal and Image Processing
7363	Antonio Nocera, Federica Verdini, Sandro Fioretti, Gianluca Ciattaglia, Michela Raimondi, Laura Burattini, Linda Senigagliesi and Ennio Gambi	mmWave Radars Data Processing for Gait Parameters Extraction	Track 5 - Biomedical Signal and Image Processing
7430	Francesco Marzola, Nens van Alfen, Massimo Salvi, Jonne Doorduyn and Kristen Meiburger	Synthesis of ultrasound images from semantic labels with controllable texture features	Track 5 - Biomedical Signal and Image Processing

7517	Eleonora Lupi, Marta Gaviraghi, Simone Rancati, Fulvia Palesi, Francesco Grussu, Marco Battiston, Carmen Tur, Alberto Calvi, Sara Collorone, Antonio Ricciardi, Ferran Padros, Baris Kanber, Egidio D'Angelo, Rebecca Samson and Claudia Am Gandini Wheeler-Kingshott	Myelin quantification in Magnetic Resonance Imaging	Track 5 - Biomedical Signal and Image Processing
7604	Giovanna Nordio, Rubaida Easmin, Alessio Giacomel, Ottavia Dipasquale, Daniel Martins, Astrid Schiulaz, Steven Williams, Federico Turkheimer, Oliver Howes and Mattia Veronese	Automated quantification of FDOPA PET using XNAT	Track 5 - Biomedical Signal and Image Processing
7618	Michele Ambrosanio, Martina Teresa Bevacqua, Tommaso Isernia, Joe Lo Vetri and Vito Pascazio	Experimental Microwave Imaging of Human Forearm	Track 5 - Biomedical Signal and Image Processing
7914	Elena Hilary Rondoni, Matteo Pizzinga, Francesca Lanzarini, Monica Maranesi, Davide Albertini, Luca Bonini and Alberto Mazzoni	K-medoid clustering of premotor firing patterns supports fine decoding of macaque reach-and-grasp	Track 5 - Biomedical Signal and Image Processing
7919	Valentina Visani, Valerio Natale, Annalisa Colombi, Agnese Tamanti, Alessandra Bertoldo, Corina Marjin, Giuseppe Kenneth Ricciardi, Francesca Benedetta Pizzini, Massimiliano Calabrese and Marco Castellaro	Impact of model selection procedure on Deep Neural Networks ensemble for the Choroid Plexus segmentation in Multiple Sclerosis	Track 5 - Biomedical Signal and Image Processing
7923	Giulia Nanto, Alexa Berto, Luigi Dall'Olmo, Christian Ciolfi, Filippo Scolaro, Mauro Alaibac, Simone Mocellin, Antonio Galgaro and Fabio Scarpa	3D moles mapping and analysis for automatic melanoma detection	Track 5 - Biomedical Signal and Image Processing

7942	Andrea Farabbi, Luigi Pizzulli, Eleonora Sala, Letizia Santini and Luca Mainardi	Error perception in different environments: Monitor vs Augmented Reality	Track 5 - Biomedical Signal and Image Processing
7954	Francesca Peveri, Gabriele Arnulfo, Silvio Paolo Sabatini and Andrea Canessa	Time-frequency analysis of brain response to 3D slant texture and stereo cues	Track 5 - Biomedical Signal and Image Processing
8050	Michele Ambrosanio, Stefano Franceschini, Maria Maddalena Autorino, Fabio Baselice and Vito Pascazio	Breast Cancer Imaging at Microwave Frequencies via Neural Networks	Track 5 - Biomedical Signal and Image Processing
8305	Andrea Ranieri, Floriana Pichiorri, Emma Colamarino, Valeria de Seta, Donatella Mattia and Jlenia Toppi	On the use of PARAFAC algorithm in group network analysis: a simulation study	Track 5 - Biomedical Signal and Image Processing
8606	Edoardo Spairani, Giulio Steyde, Beniamino Daniele, Maria Gabriella Signorini and Giovanni Magenes	Hidden Markov Models for the identification of fetal phases in CTG recordings	Track 5 - Biomedical Signal and Image Processing
8710	Alberto Arturo Vergani, Carlo Fabbiani, Salvatore Mazzeo, Rachele Burali, Michael Lassi, Giulia Giacomucci, Valentina Moschini, Filippo Emiliani, Maenia Scarpino, Silvia Bagnoli, Assunta Ingannato, Benedetta Nacmias, Sonia Padiglioni, Sandro Sorbi, Antonello Grippo, Valentina Bessi and Alberto Mazzoni	P300 event-related potential in patients with cognitive decline correlates with task performance	Track 5 - Biomedical Signal and Image Processing
8813	Maria Rubega, Matilde Paramento, Stefano Masiero and Emanuela Formaggio	Cortical correlates in upright static balance in adolescent idiopathic scoliosis	Track 5 - Biomedical Signal and Image Processing
8920	Virginia Filippi, Edoardo Paolini, Federica Cruciani, Lorenza Brusini, Francesco Dal Santo, Gloria Menegaz, Ilaria Boscolo Galazzo and Silvia Francesca Storti	Decoding the interplay between brain structural and functional connectivity in Alzheimer's disease	Track 5 - Biomedical Signal and Image Processing
9079	Roberto Guidotti, Alessio	Closing the loop between neurostimulation	Track 5 - Biomedical

	Basti, Giulia Pieramico, Antea D'Andrea, Gian Luca Romani, Vittorio Pizzella and Laura Marzetti	and control theory	Signal and Image Processing
9118	Paolo Tasca, Francesca Salis, Samanta Rosati, Gabriella Balestra and Andrea Cereatti	A machine learning approach for stride speed estimation based on a head-mounted IMU	Track 5 - Biomedical Signal and Image Processing
9255	Alessandra Calcagno, Stefania Coelli, Federico Temporiti, Manuela Galli, Roberto Gatti and Anna Maria Bianchi	Differences in cortical reorganization during visuo-motor tasks executed with the dominant and non-dominant hands	Track 5 - Biomedical Signal and Image Processing
9275	Marco Romanato, Francesco Di Nardo, Fabiola Spolaor, Daniele Volpe, Sandro Fioretti and Zimi Sawacha	Alteration of muscle recruitment in Parkinson's disease assessed by EMG-based occurrence frequency	Track 5 - Biomedical Signal and Image Processing
9378	Monica Roascio, Rosella Trò, Dario Arnaldi, Francesco Famà, Pietro Mattioli, Ki-Young Jung and Gabriele Arnulfo	Altered EEG amplitude coupling correlates to cognitive dysfunction in iRBD patients	Track 5 - Biomedical Signal and Image Processing
9451	Barbara Puccio, Ugo Lomoio, Raffaele Giancotti, Mattia Cannistrà, Sergio Flesca, Francesco Scala, Giuseppe Tradigo, Pietro Hiram Guzzi, Pierangelo Veltri and Patrizia Vizza	Validating biomedical and clinical data via an annotations based framework: experiences within the PON VQA project	Track 5 - Biomedical Signal and Image Processing
9564	David Perpetuini, Daniela Cardone, Michele Tritto, Sergio Nocco, Alessandro Tiberio and Arcangelo Merla	Drivers' mental workload assessment based on machine learning applied to multimodal physiological data	Track 5 - Biomedical Signal and Image Processing
9616	Elisa Pellizzari, Francesco Prendin, Giacomo Cappon, Giovanni Sparacino and Andrea Facchinetti	Algorithm based on the "dynamic risk" concept allows ahead-of-time suggestion of corrective insulin boluses in type 1 diabetes therapies employing continuous glucose monitors	Track 5 - Biomedical Signal and Image Processing
9625	Giulia Pagnin, Giorgia Baron, Erica Silvestri, Alessandro Chiuso, Diego Cecchin,	Assessing the impact of brain gliomas on effective connectivity gradients	Track 5 - Biomedical Signal and Image Processing

	Maurizio Corbetta and Alessandra Bertoldo		
9628	Giulia Vallini, Erica Silvestri, Alessandro Panciera, Marco Aiello and Alessandra Bertoldo	Assessment of the effects of parcellation and frequency band on the definition of functional hubs in rsfMRI	Track 5 - Biomedical Signal and Image Processing
9630	Francesca Lo Iacono, Martina Minotti, Marco Guglielmo, Marco Penso, Maria Ludovica Carerj, Gianluca Pontone and Valentina D.A. Corino	Radiomic analysis of Epicardial Adipose Tissue in cardiac MRI for hospitalization risk assessment	Track 5 - Biomedical Signal and Image Processing
9852	Nicolas Emiliani, Federico Babini, Chiara Gulotta, Giovanni Badiali, Emanuela Marcelli and Laura Cercenelli	Augmented Reality to Evaluate Temporo-Mandibular Joint Alterations in Orthognathic Patients	Track 5 - Biomedical Signal and Image Processing
9971	Rocco Morello, Maria Giovanna Di Trani, Andrea Dall'Asta, Francesco Conversano, Paola Pisani, Marco Di Paola, Tullio Ghi and Sergio Casciaro	Transfer learning approaches to classify foetal occiput positions on transperineal ultrasound images	Track 5 - Biomedical Signal and Image Processing
9988	Federica Giorgini, Stefano Diciotti and Chiara Marzi	The hidden structural complexity of the human cerebral cortex	Track 5 - Biomedical Signal and Image Processing
285	Samuele Fiorenza, Paolo Antonio Netti and Enza Torino	Prediction of injectables' stability leveraging inline analysis and machine learning	Track 6 - Neural Engineering and Micro and Nano-technologies
717	Marika Sperduti, Nevio Luigi Tagliamonte, Costantino Casale, Paolo Antonio Netti and Loredana Zollo	A testbed for mechanical and thermal stimulation in studies of somatosensory functions	Track 6 - Neural Engineering and Micro and Nano-technologies
1988	Simona Silvestri, Eugenia Romano, Paolo Antonio Netti and Enza Torino	Engineering of biological entities through dynamic perturbations of lipidic membranes.	Track 6 - Neural Engineering and Micro and Nano-technologies
2419	Elena Aprea, Alice Giannotti, Outman Akouissi and Silvestro Micera	Mechanical validation of an innovative intrafascicular neural interface to restore urinary bladder dysfunctions	Track 6 - Neural Engineering and Micro and Nano-technologies

2649	Giulia Parodi, Michela Chiappalone and Sergio Martinoia	Development of excitatory neuronal networks derived from human induced pluripotent stem cells	Track 6 - Neural Engineering and Micro and Nano-technologies
3258	Oswaldo Bortone, Paolo A. Netti and Enza Torino	A novel microfluidic-based approach to study protein stability behavior in highly concentrated and viscous (HCV) systems	Track 6 - Neural Engineering and Micro and Nano-technologies
3798	Marta Carè, Federico Barban, Mattia Di Florio, Rosaria Greco, Cristina Tassorelli and Michela Chiappalone	Towards personalized electroceutical therapy: electrophysiological investigations in a pre-clinical model of ischemic lesion	Track 6 - Neural Engineering and Micro and Nano-technologies
4474	Angela Costagliola Di Polidoro, Joost Haeck, Laura Mezzanotte, Martine Lamfers and Enza Torino	Boosted transport of Theranostic Angiopep-2 engineered crosslinked Hyaluronic Acid NanoParticles (Thera-ANG-cHANPs) in glioblastoma cells	Track 6 - Neural Engineering and Micro and Nano-technologies
8032	Simone Perottoni, Alessandro Bonacina, Ruben Dell'Oro, Francesca Donnalaja, Lucia Boeri, Luca Magagnin, Diego Albani and Carmen Giordano	Integrated sensors for real-time monitoring of biological barriers in engineered cell culture dynamic in vitro models	Track 6 - Neural Engineering and Micro and Nano-technologies
8074	Fabio Terranova, Andrea Spanu, Annalisa Bonfiglio and Sergio Martinoia	PEDOT:PSS ink-jet printed microelectrodes on paper: towards low-cost and green MEA devices	Track 6 - Neural Engineering and Micro and Nano-technologies
8821	Andrea Andolfi, Pietro Arnaldi, Donatella Di Lisa, Monica Frega, Sergio Martinoia and Laura Pastorino	Photosensitive pattern to control geometry and activity of a neural network	Track 6 - Neural Engineering and Micro and Nano-technologies
8885	Silvia Gallucci, Martina Benini, Marta Bonato, Emma Chiaramello, Serena Fiocchi, Gabriella Tognola and Marta Parazzini	Exposure Assessment of Young People to Wearable Antennas at 5G frequencies	Track 6 - Neural Engineering and Micro and Nano-technologies
9528	Martina Brofiga, Francesca Callegari, Fabio Poggio, Ilaria Donati della Lunga, Letizia Cerutti, Mariateresa Tedesco	Interconnected brain regions-on-a-chip: role of connectivity and heterogeneity in the electrophysiological activity	Track 6 - Neural Engineering and Micro and Nano-technologies

	and Paolo Massobrio		
9857	Martina Benini, Marta Bonato, Silvia Gallucci, Serena Fiocchi, Emma Chiaramello, Marta Parazzini and Gabriella Tognola	Comparison of RF exposure levels in 5G-V2X and ITS-5.9 GHz vehicular connectivity	Track 6 - Neural Engineering and Micro and Nano-technologies
9858	Vinícius Cota, Gianluca Federici, Gabriele Arnulfo and Michela Chiappalone	Profiling of phase-amplitude couplings across sleep for personalized neuroengineering systems	Track 6 - Neural Engineering and Micro and Nano-technologies

DAY 3 - 23/06/2023

Oral Session 4 MORNING (9:00 – 11:00)

Time	Authors	Title	Track
09:00	Elena Zeni, Paola Brun, Leonardo Cassari, Giovanna Iucci, Antonio Gloria, Annj Zamuner and Monica Dettin	Peptide-functionalized chitosan sponges for bone tissue regeneration	Track 4 - Biomaterials, Cell & Tissue Engineering, Biofabrication
09:15	Donatella Di Lisa, Lorenzo Muzzi, Elena Dellacasa, Monica Frega, Sergio Martinoia and Laura Pastorino	Innovation in neuronal cell culture: from adhesion to maturation, chitosan promotes developing nervous system	Track 4 - Biomaterials, Cell & Tissue Engineering, Biofabrication
09:30	Alessio Esposito, Irene Chiesa, Claudia Dell'Amico, Marco Onorati and Carmelo De Maria	Development of analytical models to predict self-folding of 4D bioprinted scaffold	Track 4 - Biomaterials, Cell & Tissue Engineering, Biofabrication
09:45	Francesco Iacoponi, Fabio Orlando, Soria Gasparini, Tiziano Pratellesi, Andrea Cafarelli and Leonardo Ricotti	Dose-controlled low-intensity pulsed ultrasound and pulsed electromagnetic fields stimulations modulate inflammation in human macrophages	Track 4 - Biomaterials, Cell & Tissue Engineering, Biofabrication
10:00	Elena Carrara, Sofia Poloni, Chiara Emma Campiglio, Elisa Riceputi, Michela Bozzetto and Andrea Remuzzi	In vitro exposure of endothelial cells to mechanical vibrations	Track 4 - Biomaterials, Cell & Tissue Engineering, Biofabrication
10:15	Nina Bono, Federica Ponti, Luca Russo, Paolo Bigini, Diego Mantovani and Gabriele Candiani	Vibropolyfection: boosting polymer-mediated gene delivery by mechanical cell loading	Track 4 - Biomaterials, Cell & Tissue Engineering, Biofabrication
10:30	Mara Scattolini, Andrea Tigrini, Federica Verdini, Sandro Fioretti, Laura Burattini, Micaela Morettini and Alessandro Mengarelli	A Reliable User-Independent Motion Intent Detection from Transient EMG Data for Shoulder Joint	Track 7 - Biorobotics, rehabilitation & Assistive Technologies
10:45	Martina Lapresa, Emilio Maria Romano, Loredana Zollo and Francesca Cordella	Performance Evaluation of the Gloreha Sinfonia Device in Bimanual Modality	Track 7 - Biorobotics, rehabilitation & Assistive Technologies

Poster Session 3 (12:30 – 14:30)

ID #	Authors	Title	Track
261	Marta Confalonieri, Silvia Barbon, Elena Stocco, Veronica Macchi, Raffaele De Caro, Silvia Todros, Andrea Porzionato and Piero Giovanni Pavan	Composite scaffolds based on polyvinyl alcohol and acellular cartilage matrix for hemophilic arthropathy treatment	Track 4 - Biomaterials, Cell & Tissue Engineering, Biofabrication
521	Elena Bianchi, Cecilia Crescioli, Paola De Stefano, Gabriele Dubini and Alessandro F. M. Pellegata	Micropatterned PDMS substrates for cellular mechanotransduction modelling	Track 4 - Biomaterials, Cell & Tissue Engineering, Biofabrication
619	Giovanni Perotto, Federica Ponti, Giulio Saroglia, Stefania Marcuzzo, Eleonora Giagnorio, Giuseppe Lauria Pinter, Elena Rosini, Luigi De Nardo, Athanassia Athanassiou, Gabriele Candiani and Nina Bono	Cell encapsulation into silk fibroin microgels	Track 4 - Biomaterials, Cell & Tissue Engineering, Biofabrication
657	Alessandra Maria Anna Rando, Lorenzo Pietro Coppadoro, Sabrina Nicolò, Maria Lombardi, Chiara Foglieni, Gianfranco Beniamino Fiore and Monica Soncini	Tuning the features of microphysiological systems for biomimetic intestinal in vitro models	Track 4 - Biomaterials, Cell & Tissue Engineering, Biofabrication
705	Ignazio Niosi, Lorenzo Vannozzi, Diego Trucco, Silvia Farè and Leonardo Ricotti	Injectable gelatin-based photocurable fiber-reinforced hydrogel for the treatment of osteochondral defects	Track 4 - Biomaterials, Cell & Tissue Engineering, Biofabrication
1305	Giovanni Lo Bello, Roberto Raiteri, Elena Dellacasa, Orietta Monticelli, Maria Luisa Cristina and Laura Pastorino	Green-Based Anti-Biofilm Nanoformulations Against Bacterial Contaminations In Nosocomial Environments	Track 4 - Biomaterials, Cell & Tissue Engineering, Biofabrication
1552	Salvatore D'Alessandro, Andrada Pica, Franco Marinozzi, Fabiano Bini and Gianluca Cidonio	Near Field Electrospinning Process Using a Multi-Axis Robot	Track 4 - Biomaterials, Cell & Tissue Engineering, Biofabrication

1617	Martina Todesco, Roberto Luisetto, Martina Casarin, Saima Jalil Imran, Gino Gerosa, Chiara Giulia Fontanella and Andrea Bagno	Biological evaluation in vitro and in vivo of hybrid membrane to assess biomedical application	Track 4 - Biomaterials, Cell & Tissue Engineering, Biofabrication
1627	Francesco Urciuolo, Giorgia Imparato, Vincenza de Gregorio and Paolo Antonio Netti	Bio-fabrication of in vitro tissues possessing organ-specific endogenous extracellular matrices	Track 4 - Biomaterials, Cell & Tissue Engineering, Biofabrication
1693	Chiara Merli, Claudia Capitini, Martino Calamai, Gabriele Frediani, Federico Carpi and Caterina Credi	Hydrogel-based photopolymers for 3D printing of scaffolds by bench-top stereolithography	Track 4 - Biomaterials, Cell & Tissue Engineering, Biofabrication
1899	Eugenia Spessot, Aurora Battistella, Antonella Motta and Devid Maniglio	Assessment of printability on autoclaved biomaterial inks for extrusion bioprinting	Track 4 - Biomaterials, Cell & Tissue Engineering, Biofabrication
2814	Alessandro Cordiale, Mattia Ballerini, Luigi Nezi, Paola Occhetta and Marco Rasponi	Intestinal epithelium on chip for absorption studies	Track 4 - Biomaterials, Cell & Tissue Engineering, Biofabrication
3109	Francesco Lopresti, Vincenzo La Carrubba, Simona Campora and Giulio Gherzi	Effect of Chitosan coating on PLA electrospun scaffolds for bone tissue engineering	Track 4 - Biomaterials, Cell & Tissue Engineering, Biofabrication
3209	Edmondo Battista, Sabrina Napoletano, Maria Isabella Maremonti, David Dannhauser, Paolo Antonio Netti and Filippo Causa	Microgels as a Biosensing Platform	Track 4 - Biomaterials, Cell & Tissue Engineering, Biofabrication
3333	Piera Mancini, Ermes Botte, Chiara Magliaro and Arti Ahluwalia	Experimental and computational pipeline for identifying oxygen metabolic rate parameters in 2D and 3D in vitro constructs	Track 4 - Biomaterials, Cell & Tissue Engineering, Biofabrication
3532	Stefania Villani, Sanosh Kunjalukkal Padmanabhan, Mariangela Stoppa, Rossella Nisi, Antonio Licciulli, Pietro Alifano and Christian Demitri	Antibacterial activity of bacterial cellulose based wound care paste	Track 4 - Biomaterials, Cell & Tissue Engineering, Biofabrication
3720	Tatiana Mencarini, Eleonora Puce, Mariagrazia Calogiuri, Mariangela Scavone, Silvia Bozzi and Alberto Redaelli	Microfluidic system for a label-free, real-time functional assessment of thrombotic risk	Track 4 - Biomaterials, Cell & Tissue Engineering, Biofabrication

3849	Maria Isabella Maremonti, David Dannhauser, Valeria Panzetta, Paolo Antonio Netti and Filippo Causa	In-flow viscoelastic compression to probe single-cell biomechanical properties	Track 4 - Biomaterials, Cell & Tissue Engineering, Biofabrication
4163	Chiara Cimmino, Paolo Antonio Netti and Maurizio Ventre	Mesenchymal Stem Cell Response to Micropatterns and Dynamic Topographies	Track 4 - Biomaterials, Cell & Tissue Engineering, Biofabrication
4166	Amedeo Franco Bonatti, Irene Chiesa, Gabriele Maria Fortunato, Aurora De Acutis, Giovanni Vozzi and Carmelo De Maria	Cell-aware optimization of the extrusion-based bioprinting process	Track 4 - Biomaterials, Cell & Tissue Engineering, Biofabrication
4203	Costanza Daddi, Matteo Baggiani, Matteo Nicoletta, Simone Micalizzi, Gabriele Maria Fortunato, Aurora De Acutis, Carmelo De Maria, Marco Onorati and Giovanni Vozzi	3D bioprinting as a tool for the early correction of leather defects in the tanning industry	Track 4 - Biomaterials, Cell & Tissue Engineering, Biofabrication
4236	Giorgia Imparato, Claudia Mazio, Francesco Urciuolo and Paolo Antonio Netti	An engineered breast cancer model on chip for personalized and multiple drug therapy	Track 4 - Biomaterials, Cell & Tissue Engineering, Biofabrication
4293	Vittoria Marini, Fabiola Marino, Flaminia Aliberti, Maurilio Sampaolesi and Yoke Chin Chai	RNA Sequencing analysis to study Duchenne dilated cardiomyopathy in patient-derived 3D organoid models	Track 4 - Biomaterials, Cell & Tissue Engineering, Biofabrication
5246	Valeria Panzetta, Crescenzo Frascogna, Claudia Mazio, Francesco Catuogno, Giorgia Imparato, Francesco Urciuolo and Paolo Antonio Netti	Mechanobiology of lung adenocarcinoma: a preliminary study	Track 4 - Biomaterials, Cell & Tissue Engineering, Biofabrication
5312	Cecilia Palma, Bianca Aterini, Carlotta Catozzi, Luigi Nezi, Silvia Lopa, Teresa Manzo, Marco Rasponi and Paola Occhetta	A microfluidic platform to unravel immune cells cross-talk in rheumatoid arthritis	Track 4 - Biomaterials, Cell & Tissue Engineering, Biofabrication
5453	Elisa Batoni, Gabriele Maria Fortunato, Andrea Guerra, Giovanni Vozzi and Carmelo De Maria	Valve-jet technology for robotic-based in situ bioprinting applications	Track 4 - Biomaterials, Cell & Tissue Engineering, Biofabrication

5641	Martina Casarin, Martina Todesco, Chiara Giulia Fontanella, Alessandro Morlacco, Fabrizio Dal Moro and Andrea Bagno	Cryopreservation effects on biological tissues: histological and mechanical assessments	Track 4 - Biomaterials, Cell & Tissue Engineering, Biofabrication
5658	Ginevra Pegollo, Simone Micalizzi, Aurora De Acutis, Carmelo De Maria and Giovanni Vozzi	Design and fabrication of a novel bioreactor for the engineering of tendon/ligament-to-bone interfaces	Track 4 - Biomaterials, Cell & Tissue Engineering, Biofabrication
6002	Elena Lagreca, Raffaele Vecchione, Raffaele Crispino and Paolo Antonio Netti	Biological validation of thiolated food grade secondary oil in water nanoemulsions with enhanced mucus-adhesion properties in Intestine-on-a-chip model	Track 4 - Biomaterials, Cell & Tissue Engineering, Biofabrication
6388	Aurora De Acutis, Costanza Daddi, Francesco Biagini, Emanuele Russello, Marco Calvigioni, Emilia Ghelardi, Carmelo De Maria and Giovanni Vozzi	Design and fabrication of a micro-dialyser for the study of the gut microbiota-tissues cross-talk	Track 4 - Biomaterials, Cell & Tissue Engineering, Biofabrication
6512	Giovanni Paolo Stola, Elena Marcello, Camilla Paoletti, Letizia Nicoletti and Valeria Chiono	Natural polymer-based bioinks exploiting internal gelation mechanism for cardiac tissue engineering	Track 4 - Biomaterials, Cell & Tissue Engineering, Biofabrication
6570	Paolo Signorello, Ludovica Cacopardo, Nicole Guazzelli, Irene Nicolai, Federica Viti, Paolo Gandullia, Robert Heuckeroth and Arti Ahluwalia	Design and fabrication of an intestinal phantom to mimic intestinal tone and motility	Track 4 - Biomaterials, Cell & Tissue Engineering, Biofabrication
6597	Maria Antonia Cassa, Gianluca Ciardelli, Piergiorgio Gentile and Irene Carmagnola	Nanostructured coatings with bacteria-triggered antimicrobial response for medical devices	Track 4 - Biomaterials, Cell & Tissue Engineering, Biofabrication
6739	Elia Pederzani, Chiara Emma Campiglio, Marta Ripamonti, Maichael Esposito, Angela Rizzo, Alice Caldiroli, Stefania Adele Riboldi, Andrea Remuzzi, Gianfranco Beniamino Fiore and Monica Soncini	An advanced culture system to investigate electrospun graft biomechanisms for vascular tissue engineering	Track 4 - Biomaterials, Cell & Tissue Engineering, Biofabrication

6899	Lorenzo Guidi, Elisabetta Rosellini, Giovanni Vozzi, Luigi Lazzeri, Maria Grazia Cascone, Carmelo De Maria, Gabriele Maria Fortunato and Anna Lapomarda	3D printing of a nanomaterials-embedded gelatin/pectin hydrogel for the development of an in vitro drug testing platform	Track 4 - Biomaterials, Cell & Tissue Engineering, Biofabrication
6968	Giacomo Cretti, Marco Rasponi, Roberta Visone, Udo Kraushaar and Paola Occhetta	Optimization of advanced setups with integrated readouts for evaluation of cardiac toxicity in a heart on chip device	Track 4 - Biomaterials, Cell & Tissue Engineering, Biofabrication
7017	Leonardo Cassari, Annj Zamuner, Grazia Maria Lucia Messina, Martina Marsotto, Hao-Chen Chang, Trevor Coward, Chiara Battocchio, Giovanni Marletta, Lucy Di Silvio and Monica Dettin	Peptide anchoring methods for PEEK surfaces	Track 4 - Biomaterials, Cell & Tissue Engineering, Biofabrication
7020	Giovanni Protopapa, Nina Bono, Roberta Visone, Fabio D'Alessandro, Marco Rasponi and Gabriele Candiani	Design and validation of a microfluidic cartridge to prepare non-viral gene delivery complexes	Track 4 - Biomaterials, Cell & Tissue Engineering, Biofabrication
7191	Beatrice Masante, Giovanni Putame, Andrea Tancredi Lugas, Marta Tosini, Ilaria Roato, Federico Mussano, Mara Terzini, Alberto Audenino and Diana Massai	Biomimetic platform for investigating in vitro the cell biological response to mechanical stretching – periodontal ligament stem cell application	Track 4 - Biomaterials, Cell & Tissue Engineering, Biofabrication
7541	Elisa Batoni, Carmelo De Maria and Giovanni Vozzi	Evaluation of the optimal pore size for 3D printed bone scaffolds in a perfusion bioreactor	Track 4 - Biomaterials, Cell & Tissue Engineering, Biofabrication
7545	Gabriele Maria Fortunato, Michele Molisani, Giovanni Vozzi and Carmelo De Maria	Extrusion control strategy for robotic-based in situ bioprinting	Track 4 - Biomaterials, Cell & Tissue Engineering, Biofabrication
7699	Ivana Dragojlov, Simone Vesentini and Elisa Fasoli	Effects of different degumming methods on the quality of sericin samples	Track 4 - Biomaterials, Cell & Tissue Engineering, Biofabrication
7794	Annj Zamuner, Leonardo Cassari, Monica Dettin, Maria Teresa Conconi and Elisabetta Sieni	Engineering the tumor environment in vitro using peptide-enriched, hyaluronic acid-based hydrogels	Track 4 - Biomaterials, Cell & Tissue Engineering, Biofabrication

7863	Nicole Guazzelli, Ludovica Cacopardo, Valentina Inghirami and Arti Ahluwalia	Multiscale computational models for predicting hydrogel viscoelastic properties	Track 4 - Biomaterials, Cell & Tissue Engineering, Biofabrication
8423	Andrea Alliaud, Monica Boffito, Rosella Laurano, Susanna Sartori and Gianluca Ciardelli	Engineering of poly(urethane)-based porous constructs for cardiac tissue model design	Track 4 - Biomaterials, Cell & Tissue Engineering, Biofabrication
9016	Matteo Pitton, Chiara Liguori and Silvia Farè	FRESH approach for the development of 3D channel network in 3D in vitro models	Track 4 - Biomaterials, Cell & Tissue Engineering, Biofabrication
9273	Ilaria Parodi, Silvia Scaglione, Marco Massimo Fato and Rodolfo Repetto	Mathematical model of nutrients transport and cell growth in a bioprinted hydrogel	Track 4 - Biomaterials, Cell & Tissue Engineering, Biofabrication
9966	Maria Testa, Francesco Lopresti, Olga Manna, Stefano Burgio, Giorgia Intilli, Alberto Fucarino and Vincenzo La Carrubba	Rapid prototyping of a microfluidic platform for nasal mucosa models	Track 4 - Biomaterials, Cell & Tissue Engineering, Biofabrication
313	Elena Mongiardini, Emma Colamarino, Floriana Pichiorri, Andrea Ranieri, Jlenia Toppi, Donatella Mattia and Febo Cincotti	Brain-Computer Interface assisted Motor Imagery training in post-stroke rehabilitation: longitudinal study of the EEG sensorimotor rhythms	Track 7 - Biorobotics, rehabilitation & Assistive Technologies
534	Pietro Benvenuti, Erika Rovini, Laura Fiorini and Filippo Cavallo	A multimodal wearable system for Human Activity Recognition during daily activities	Track 7 - Biorobotics, rehabilitation & Assistive Technologies
637	Serena Cerfoglio, Paolo Capodaglio, Paolo Rossi, Federica Verme, Gabriele Boldini, Viktoria Cvetkova, Manuela Galli and Veronica Cimolin	Effectiveness of a home-based tele-rehabilitation program for post-Covid patients: preliminary results	Track 7 - Biorobotics, rehabilitation & Assistive Technologies
642	Mattia Pesenti, Roberto Schinelli, Alberto Antonietti, Marta Gandolla and Alessandra Pedrocchi	Virtual prototyping of a robotic chess player for play therapy	Track 7 - Biorobotics, rehabilitation & Assistive Technologies
757	Simone Onorati, Federica Semproni, Linda Paternò, Giada Casagrande, Veronica Iacovacci and Arianna Mencias	A hydraulic implantable artificial detrusor for controlled bladder voiding	Track 7 - Biorobotics, rehabilitation & Assistive Technologies

1141	Valerio Antonio Arcobelli, Kevin Marcaccini, Poula Hassaballah, Luca Tonin, Stefano Tortora and Silvia Orlandi	Brain signals in semi-immersive and immersive VR environments: a feasibility study	Track 7 - Biorobotics, rehabilitation & Assistive Technologies
1250	Gabriele Frediani and Federico Carpi	Wearable tactile display of softness for virtual reality	Track 7 - Biorobotics, rehabilitation & Assistive Technologies
2077	Cecilia De Vicariis, Laura Bandini, Vinil T. Chackochan and Vittorio Sanguineti	Computational joint action: dynamical models to understand the development of joint coordination	Track 7 - Biorobotics, rehabilitation & Assistive Technologies
2124	Angela Peloso, Rossella Damiano, Emiliano Votta and Elena De Momi	Fast path replanning in a dynamic environment in percutaneous cardiac interventions	Track 7 - Biorobotics, rehabilitation & Assistive Technologies
2698	Laura Santos, Martina Murgo, Bárbara Silva, Alice Geminiani, Arianna Caglio, Silvia Annunziata, Catarina Barata, José Santos-Victor and Alessandra Pedrocchi	An attention classifier for the evaluation of a robotic therapy in children with Autism Spectrum Disorder	Track 7 - Biorobotics, rehabilitation & Assistive Technologies
2907	Clemente Lauretti, Francesca Cordella, Ilenia Saltarelli and Loredana Zollo	A safe robot control for semi-autonomous pedicle tapping	Track 7 - Biorobotics, rehabilitation & Assistive Technologies
3501	Fulvio Missoni and Andrea Canessa	Evaluating Spatial Hearing in Virtual Reality Environment	Track 7 - Biorobotics, rehabilitation & Assistive Technologies
3653	Laura Bandini, Cecilia De Vicariis, Maria Cristina Novello, Carlo Chiorri and Vittorio Sanguineti	A cloud-based mobile platform to monitor and counteract cognitive decline	Track 7 - Biorobotics, rehabilitation & Assistive Technologies
4195	Elisa Miskey, Fabio Rizzoglio, Amy Bellitto, Antonino Massone, Davide Russo, Giorgio Carlini, Maura Casadio and Camilla Pierella	Non-linear dimensionality-reduction approach for powered wheelchair control	Track 7 - Biorobotics, rehabilitation & Assistive Technologies
4902	Ilaria Giuseppina Porco, Sergio Mauro Gavino Solinas, Aldo Lazich and Ugo Della Croce	A preliminary test of a novel method for the real time estimation of foot displacement using MIMUs attached to the foot	Track 7 - Biorobotics, rehabilitation & Assistive Technologies

4991	Ludovico Ferreri, Enea Parimbelli, Irene Aprile and Silvana Quaglini	Understanding user needs for robotics assisted cognitive and physical rehabilitation	Track 7 - Biorobotics, rehabilitation & Assistive Technologies
5148	Simona Pascucci, Valerio Margani, Michela Franzò, Matteo Curcio, Alberto Polsinelli, Rita Talamonti, Maurizio Barbara, Franco Marinozzi and Fabiano Bini	Assessment of Balance disorder and vestibular dysfunction using Mixed Reality	Track 7 - Biorobotics, rehabilitation & Assistive Technologies
7662	Ke Fan, Giancarlo Ferrigno and Elena De Momi	A Safe Reinforcement Learning platform for Autonomous Robotic Tissue Approaching	Track 7 - Biorobotics, rehabilitation & Assistive Technologies
9176	Maria Cristina Bisi, Alice Masini, Stefania Toselli, Sofia Marini, Laura Bragonzoni, Andrea Cecilian, Marcello Lanari, Alessandra Sansavini, Alessia Tessari, Davide Gori, Laura Dallolio and Rita Stagni	Sensor-based Assessment of Gross and Fine Motor Development in Primary School Children	Track 7 - Biorobotics, rehabilitation & Assistive Technologies
9329	Carlo La Viola, Laura Fiorini, Gianmaria Mancioffi and Filippo Cavallo	Personality Traits Influence the Perception of a Robotic Arm endowed with Social Cues	Track 7 - Biorobotics, rehabilitation & Assistive Technologies
9715	Federica Ferrari, Davide Savona, Eleonora Guanziroli, Franco Molteni, Alessandra Pedrocchi and Emilia Ambrosini	A motor-assisted recumbent trike for cycling training in neurological patients	Track 7 - Biorobotics, rehabilitation & Assistive Technologies
9824	Diletta Balta, Ilaria Giuseppina Porco, Hsinhung Kuo, Jing Wang, Olga Morozova, Manon Schladen, Andrea Cereatti, Peter Lum and Ugo Della Croce	An improved method for the characterization of infants' general movements using a RGB-Depth sensor and a deep neural network tracking processing tool	Track 7 - Biorobotics, rehabilitation & Assistive Technologies
790	Camilla Gironi, Laura Cercenelli, Barbara Bortolani, Nicolas Emiliani, Lorenzo Tartarini and Emanuela Marcelli	Ex Vivo Animal Evaluation of IntraValvular Impedance Sensing Applied to Biological Heart Valve Prostheses	Track 8 - Design and Validation of Biomedical Devices
877	Andrea Cataldo, Raissa Schiavoni, Antonio Masciullo and Christian Demitri	Wearable sensor for in-vivo skin hydration monitoring	Track 8 - Design and Validation of Biomedical Devices

1245	Chiara Catalano, Stefano Cannata, Caterina Gandolfo and Salvatore Pasta	Establishing Computational Modeling Credibility in Patients Undergoing TAVI	Track 8 - Design and Validation of Biomedical Devices
1872	Omar Zahalka, Chiara Catalano, Tahir Turgut, Nils Gotzen, Stefano Cannata, Caterina Gandolfo and Salvatore Pasta	Mechanical Properties of Polyamide 12 for the use in Balloon-Expandable Transcatheter Heart Valves	Track 8 - Design and Validation of Biomedical Devices
1905	Gabriele Maria Fortunato, Francesca Tonelli, Alberto Greco, Nicola Carbonaro, Aldo Casani and Carmelo De Maria	Patient-specific phantom for home haemodialysis	Track 8 - Design and Validation of Biomedical Devices
2412	Francesca Berti, Linda Carpenedo, Camilla Boldrin and Luigi La Barbera	A response surface-based approach to predict spinal rod contouring parameters	Track 8 - Design and Validation of Biomedical Devices
2747	Sofia Sirolli, Leonardo Ricotti and Andrea Cafarelli	Highly controlled ultrasound-mediated drug delivery experiments: an in vitro set-up	Track 8 - Design and Validation of Biomedical Devices
3877	Cecilia Vivarelli, Rosaria Falsaperla, Giancarlo Burriesci, Federica Censi, Giovanni Calcagnini and Eugenio Mattei	Exposure set-up for assessing the far-field electromagnetic immunity levels of active implantable medical devices	Track 8 - Design and Validation of Biomedical Devices
4853	Lorenzo Zucchini, Milos Ajcevic and Agostino Accardo	Temperature influence on reflectance photometers for bilirubin measurement	Track 8 - Design and Validation of Biomedical Devices
5763	Mara Coduri, Andrea Calandrino, Giulia Addiego Mobilio, Elisa Grasso, Matteo Pescio, Paolo Rossi, Giorgio Carlini, Marco Chirico, Fabio Solari, Manuela Chessa, Maura Casadio and Serena Ricci	Combination of VR and manikins to improve medical training	Track 8 - Design and Validation of Biomedical Devices
5884	Noemi Giordano, Gabriella Balestra, Samanta Rosati and Marco Knaflitz	Usability of a multi-sensor array for the application of electro-phonocardiography in home care	Track 8 - Design and Validation of Biomedical Devices
5942	Cristina Oldani, Nina Bono, Alice Caldiroli, Stefania Adele Riboldi and Gabriele Candiani	Physiologically relevant in vitro experiments: degradation kinetics of a pool of enzymes	Track 8 - Design and Validation of Biomedical Devices

6646	Marta Baccarella and Salvatore Pasta	Multiscale Modelling of Platelet Activation in Membrane Oxygenation Systems	Track 8 - Design and Validation of Biomedical Devices
6654	Greta Bertola, Ludovica Cacopardo, Florinda Coro, Carmelo De Maria and Arti Ahluwalia	Engineering a smart intrauterine device based on pH-controlled copper release.	Track 8 - Design and Validation of Biomedical Devices
6694	Maria Isabella Maremonti, David Dannhauser, Paolo Antonio Netti and Filippo Causa	Circulating tumour cells deformability measurement in microfluidics	Track 8 - Design and Validation of Biomedical Devices
6890	Florinda Coro, Amedeo Franco Bonatti, Gabriele Maria Fortunato, Ilenia Gulino, Lucia Arcarisi, Maria Elena Lippi, Valentina Calderai, Gionatan Gallo, Maurizio Palmieri, Pietro Ducange, Cinzia Bernardeschi, Gabriele Tomei, Paolo De Simone, Arti Devi Ahluwalia and Carmelo De Maria	Open-source as an enabling approach for the introduction of artificial intelligence in healthcare	Track 8 - Design and Validation of Biomedical Devices
6941	Luca Ciriello, Alessandro Belluzzo, Andrea Grassi and Tomaso Villa	A method for the evaluation of cervical surgical instrumentation reliability through a computational and experimental approach	Track 8 - Design and Validation of Biomedical Devices
7035	David Dannhauser, Maria Isabella Maremonti, Paolo Antonio Netti and Filippo Causa	Microfluidic platform for cell classification from optical signatures via machine learning	Track 8 - Design and Validation of Biomedical Devices
7435	Marco Mercuri, Ilde Lorato, Tom Torfs and Felice Crupi	Remote In-Bed Monitoring of Vital Signs Using Radar Technology	Track 8 - Design and Validation of Biomedical Devices
8045	Carlotta Salvatori, Leonardo Ricotti and Lorenzo Vannozzi	A novel concept of steerable catheters actuated by muscle cells: the BioMeld project	Track 8 - Design and Validation of Biomedical Devices
9963	Ilaria Guidetti, Francesco De Gaetano, Diego Gallo, Umberto Morbiducci and Maria Laura Costantino	Development of a computational model to estimate the hemolysis risk associated with hemodialysis catheters	Track 8 - Design and Validation of Biomedical Devices