Antonio Fratini

List of Publications by Year
in descending order

61	982	516561 16	477173 29
papers	citations	h-index	g-index

68	68	68	1027
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Individual identification via electrocardiogram analysis. BioMedical Engineering OnLine, 2015, 14, 78.	1.3	100
2	Relevance of motion artifact in electromyography recordings during vibration treatment. Journal of Electromyography and Kinesiology, 2009, 19, 710-718.	0.7	90
3	A Piezoresistive Sensor to Measure Muscle Contraction and Mechanomyography. Sensors, 2018, 18, 2553.	2.1	83
4	Problems in Assessment of Novel Biopotential Front-End with Dry Electrode: A Brief Review. Machines, 2014, 2, 87-98.	1.2	77
5	An algorithm for FHR estimation from foetal phonocardiographic signals. Biomedical Signal Processing and Control, 2010, 5, 131-141.	3.5	48
6	Whole Body Vibration Treatments in Postmenopausal Women Can Improve Bone Mineral Density: Results of a Stimulus Focussed Meta-Analysis. PLoS ONE, 2016, 11, e0166774.	1.1	48
7	A Piezoresistive Array Armband With Reduced Number of Sensors for Hand Gesture Recognition. Frontiers in Neurorobotics, 2019, 13, 114.	1.6	48
8	Muscle motion and EMG activity in vibration treatment. Medical Engineering and Physics, 2009, 31, 1166-1172.	0.8	40
9	A comparison of denoising methods for X-ray fluoroscopic images. Biomedical Signal Processing and Control, 2012, 7, 550-559.	3.5	39
10	A wearable device for recording of biopotentials and body movements. , 2011, , .		34
11	Forcecardiography: A Novel Technique to Measure Heart Mechanical Vibrations onto the Chest Wall. Sensors, 2020, 20, 3885.	2.1	32
12	Subject identification via ECG fiducial-based systems: Influence of the type of QT interval correction. Computer Methods and Programs in Biomedicine, 2015, 121, 127-136.	2.6	29
13	Characterisation of the porcine eyeball as an in-vitro model for dry eye. Contact Lens and Anterior Eye, 2018, 41, 13-17.	0.8	29
14	Synthetic Biological Signals Machine-Generated by GPT-2 Improve the Classification of EEG and EMG Through Data Augmentation. IEEE Robotics and Automation Letters, 2021, 6, 3498-3504.	3.3	26
15	2D-3D Registration of CT Vertebra Volume to Fluoroscopy Projection: A Calibration Model Assessment. Eurasip Journal on Advances in Signal Processing, 2009, 2010, .	1.0	20
16	Cortical recruitment and functional dynamics in postural control adaptation and habituation during vibratory proprioceptive stimulation. Journal of Neural Engineering, 2019, 16, 026037.	1.8	18
17	PSD modifications of FHRV due to interpolation and CTG storage rate. Biomedical Signal Processing and Control, 2011, 6, 225-230.	3.5	16
18	Analysis and Modelling of Muscles Motion during Whole Body Vibration. Eurasip Journal on Advances in Signal Processing, 2009, 2010, .	1.0	15

#	Article	IF	Citations
19	Simulation of surface EMG for the analysis of muscle activity during whole body vibratory stimulation. Computer Methods and Programs in Biomedicine, 2014, 113, 314-322.	2.6	15
20	A Contactless Sensor for Pacemaker Pulse Detection: Design Hints and Performance Assessment. Sensors, 2018, 18, 2715.	2.1	13
21	On the Power Spectrum of Motor Unit Action Potential Trains Synchronized With Mechanical Vibration. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2018, 26, 646-653.	2.7	12
22	Bluetooth Portable Device for Continuous ECG and Patient Motion Monitoring During Daily Life. , 2007, , 369-372.		11
23	Postural Control Adaptation and Habituation During Vibratory Proprioceptive Stimulation: An HD-EEG Investigation of Cortical Recruitment and Kinematics. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2020, 28, 1381-1388.	2.7	11
24	Waveform type evaluation in congenital nystagmus. Computer Methods and Programs in Biomedicine, 2010, 100, 49-58.	2.6	10
25	Measurement of Intervertebral Cervical Motion by Means of Dynamic X-Ray Image Processing and Data Interpolation. International Journal of Biomedical Imaging, 2013, 2013, 1-7.	3.0	10
26	Medical emergency alarm dissemination in urban environments. Telematics and Informatics, 2014, 31, 511-517.	3.5	10
27	Cortical Pathways During Postural Control: New Insights From Functional EEG Source Connectivity. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2022, 30, 72-84.	2.7	10
28	Influence of QT correction on temporal and amplitude features for human identification via ECG. , 2013, , .		9
29	Individual identification using electrocardiogram morphology. , 2013, , .		7
30	Comments on the article â€œRectification of SEMG as a tool to demonstrate synchronous motor unit activity during vibrationâ€• Journal of Electromyography and Kinesiology, 2013, 23, 1250-1251.	0.7	6
31	Study on the Activation Speed and the Energy Consumption of â€œFedericaâ€•Prosthetic Hand. IFMBE Proceedings, 2020, , 594-603.	0.2	6
32	Toward a priori noise characterization for real-time edge-aware denoising in fluoroscopic devices. BioMedical Engineering OnLine, 2021, 20, 36.	1.3	5
33	Experimental Study to Improve â€œFedericaâ€•Prosthetic Hand and Its Control System. IFMBE Proceedings, 2020, , 586-593.	0.2	5
34	Characterisation of baseline oscillation in congenital nystagmus eye movement recordings. Biomedical Signal Processing and Control, 2009, 4, 102-107.	3.5	4
35	Detection of Foveation Windows and Analysis of Foveation Sequences in Congenital Nystagmus. IFMBE Proceedings, 2009, , 364-367.	0.2	4
36	Characterisation of the transient mechanical response and the electromyographical activation of lower leg muscles in whole body vibration training. Scientific Reports, 2022, 12, 6232.	1.6	4

#	Article	IF	Citations
37	Neuromuscular response to whole body vibration treatment during static and dynamic squat exercises. , 2012, , .		3
38	Investigating the role of capacitive coupling between the operating table and the return electrode of an electrosurgery unit in the modification of the current density distribution within the patientsâ€™ body. BioMedical Engineering OnLine, 2013, 12, 80.	1.3	3
39	A simulating software of fetal phonocardiographic signals. , 2010, , .		2
40	A lumped parameter model for the analysis of the motion of the muscles of the lower limbs under whole-body vibration. , 2013, , .		2
41	Muscle Movement and Electrodes Motion Artifact during Vibration Treatment. IFMBE Proceedings, 2008, , 103-106.	0.2	2
42	Cardiac arrhythmias and artifacts in fetal heart rate signals: detection and correction. , 2007, , 789-792.		2
43	Acceleration driven adaptive filter to remove motion artifact from EMG recordings in Whole Body Vibration. , 2007, , 990-993.		2
44	A Novel Image Quality Assessment Index for EdgeAware Noise Reduction in Low-Dose Fluoroscopy:Preliminary Results. , 2020, , .		2
45	Non-planar calibration phantoms for optical coherence tomography. , 2018, , .		2
46	Whole Body Vibration training: analysis and characterization. , 2009, , .		1
47	FCLAB: An EEGLAB module for performing functional connectivity analysis on single-subject EEG data. , 2018, , .		1
48	Quantitative performance comparison of derivative operators for intervertebral kinematics analysis. , 2020, , .		1
49	A prototype device for thermo-hygrometric assessment of neonatal incubators. , 2007, , 1096-1099.		1
50	Slow-Phase Onset Influence on Waveform Identification and Foveation Time Measure in Congenital Nystagmus. IFMBE Proceedings, 2009, , 1010-1013.	0.2	1
51	PSD modifications of FHRV due to CTG storage rate. , 2009, , .		0
52	Foveation time measure in Congenital Nystagmus through second order approximation of the slow phases. , 2010, , .		0
53	Electromyography in the Study of Muscle Reactions to Vibration Treatment. , 2012, , .		0
54	Spline interpolation to evaluate foveation parameters in Congenital Nystagmus recordings. , 2013, , .		0

#	Article	IF	Citations
55	Application of Ensemble Averaging to the Analysis of Electromyography Recordings under Whole Body Vibratory Stimulation. , 2014, , .		0
56	Suitability of a low cost system for quantitative motion capture applications. , 2015, , .		0
57	Assessment of cervical disk prosthesis by means of video-fluoroscopy image processing. , 2017, , .		0
58	A novel in-vitro complete anterior eye model: Preliminary results. Contact Lens and Anterior Eye, 2018, 41, S72.	0.8	0
59	Towards a Novel Way to Predict Deficits After a Brain Lesion: A Stroke Example. , 2019, , .		0
60	Analysis of Foveation Sequences in Congenital Nystagmus. IFMBE Proceedings, 2008, , 303-306.	0.2	0
61	Comparison of software developed for FHR extraction from PCG signals. IFMBE Proceedings, 2009, , 946-949.	0.2	0