Maurizio Schmid

List of Publications by Year
in descending order

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114 papers	2,137 citations	201658 27 h-index	265191 42 g-index
121 all docs	121 docs citations	121 times ranked	2736 citing authors

#	Article	IF	Citations
1	A novel Sensitivity Index from the Flow Velocity Variation in Quality Control for PW Doppler: a preliminary study. , 2021, , .		2
2	Doppler Flow phantom Stability Assessment through STFT Technique in Medical PW Doppler: a preliminary study. , 2021, , .		1
3	Generalization of a wavelet-based algorithm to adaptively detect activation intervals in weak and noisy myoelectric signals. Biomedical Signal Processing and Control, 2020, 58, 101838.	5.7	4
4	ECG Waveforms Reconstruction based on Equivalent Time Sampling. , 2020, , .		4
5	Progression of muscular co-activation and gait variability in children with Duchenne muscular dystrophy: A 2-year follow-up study. Clinical Biomechanics, 2020, 78, 105101.	1.2	6
6	Smartphone-Based Answering to School Subject Questions Alters Gait in Young Digital Natives. Frontiers in Public Health, 2020, 8, 187.	2.7	0
7	Prosocial Virtual Reality, Empathy, and EEG Measures: A Pilot Study Aimed at Monitoring Emotional Processes in Intergroup Helping Behaviors. Applied Sciences (Switzerland), 2020, 10, 1196.	2.5	30
8	Lifting Activity Assessment Using Kinematic Features and Neural Networks. Applied Sciences (Switzerland), 2020, 10, 1989.	2.5	23
9	The Influence of Different Levels of Cognitive Engagement on the Seated Postural Sway. Electronics (Switzerland), 2020, 9, 601.	3.1	1
10	Short-Term Effects of Mitigation Measures for the Containment of the COVID-19 Outbreak: An Experience From Northern Italy. Disaster Medicine and Public Health Preparedness, 2020, 14, e3-e4.	1.3	15
11	Investigating the Determinants of High Case-Fatality Rate for Coronavirus Disease 2019 in Italy. Disaster Medicine and Public Health Preparedness, 2020, 14, e1-e2.	1.3	8
12	Gait stability indicators as extracted by a single wearable inertial sensor in young adolescents during smartphone use. , 2019, , .		0
13	A Novel Technique to Design and Optimize Performances of Custom Load Cells for Sport Gesture Analysis. Irbm, 2019, 40, 201-210.	5.6	4
14	Optimizing the Scale of a Wavelet-Based Method for the Detection of Gait Events from a Waist-Mounted Accelerometer under Different Walking Speeds. Sensors, 2019, 19, 1869.	3.8	16
15	Automated Segmentation of Colorectal Tumor in 3D MRI Using 3D Multiscale Densely Connected Convolutional Neural Network. Journal of Healthcare Engineering, 2019, 2019, 1-11.	1.9	25
16	Using the frequency signature to detect muscular activity in weak and noisy myoelectric signals. Biomedical Signal Processing and Control, 2019, 52, 69-76.	5.7	7
17	Wearable-based Temporal Parameters of Gait in Circuitous Routes under Dual-Task Conditions. , 2019, 2019, 1224-1227.		0
18	Mr Image Processing to Predict Complete Responders by Evaluating the Tumor Regression Grade: A Sensitivity Analysis. , 2019, , .		0

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19	Gait Ratios and Variability Indices to Quantify the Effect of Using Smartphones in Dual-Task Walking. IFMBE Proceedings, 2019, , 573-578.	0.3	0
20	Differentiating the Effects of Motor and Cognitive Dual-Tasks on Gait Performance of Young Healthy Subjects. Biosystems and Biorobotics, 2019, , 278-282.	0.3	1
21	Computer Aided Effective Prediction of Complete Responders After Radiochemotherapy Based on Tumor Regression Grade Estimated by MR Imaging. Lecture Notes in Computational Vision and Biomechanics, 2019, , 257-266.	0.5	1
22	Lifting activity assessment using surface electromyographic features and neural networks. International Journal of Industrial Ergonomics, 2018, 66, 1-9.	2.6	36
23	Haralickâ€™s texture features for the prediction of response to therapy in colorectal cancer: a preliminary study. Radiologia Medica, 2018, 123, 161-167.	7.7	38
24	Strain gauges position optimization in designing custom load cells for sport gesture analysis. , 2018, , .		2
25	Human Body Energy Harvesting Solutions for Wearable Technologies. , 2018, , .		7
26	Effect of different smartphone uses on posture while seating and standing. , 2018, , .		7
27	Assessing the influence of SNR and pre-processing filter bandwidth on the extraction of different muscle co-activation indexes from surface EMG data. Journal of Electromyography and Kinesiology, 2018, 43, 184-192.	1.7	15
28	Effect of Task Failure on Intermuscular Coherence Measures in Synergistic Muscles. Applied Bionics and Biomechanics, 2018, 2018, 1-13.	1.1	10
29	Automatic segmentation of colorectal cancer in 3D MRI by combining deep learning and 3D level-set algorithm-a preliminary study. , 2018, , .		5
30	Thermal Energy Harvesting on the Bodily Surfaces of Arms and Legs through a Wearable Thermo-Electric Generator. Sensors, 2018, 18, 1927.	3.8	36
31	Wavelet-based detection of gait events from inertial sensors: analysis of sensitivity to scale choice. , 2018, , .		0
32	IMU-Based Classification of Parkinson's Disease From Gait: A Sensitivity Analysis on Sensor Location and Feature Selection. IEEE Journal of Biomedical and Health Informatics, 2018, 22, 1765-1774.	6.3	141
33	Segmenting MR Images by Level-Set Algorithms for Perspective Colorectal Cancer Diagnosis. Lecture Notes in Computational Vision and Biomechanics, 2018, , 396-406.	0.5	4
34	Haralick's Texture Analysis Applied to Colorectal T2-Weighted MRI: A Preliminary Study of Significance for Cancer Evolution. , 2017, , .		14
35	Nanogenerators for Human Body Energy Harvesting. Trends in Biotechnology, 2017, 35, 610-624.	9.3	149
36	A preliminary study on the validation of anautomatic measurement method for functional reach assessment by stereophotogrammetry. , 2017, , .		5

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37	Gait parameters are differently affected by concurrent smartphone-based activities with scaled levels of cognitive effort. PLoS ONE, 2017, 12, e0185825.	2.5	28
38	Time-to-Boundary Function to Study the Development of Upright Stance Control in Children. Open Biomedical Engineering Journal, 2017, 11, 49-58.	0.5	4
39	Measurements of Generated Energy/Electrical Quantities from Locomotion Activities Using Piezoelectric Wearable Sensors for Body Motion Energy Harvesting. Sensors, 2016, 16, 524.	3.8	50
40	Proficient brain for optimal performance: the MAP model perspective. PeerJ, 2016, 4, e2082.	2.0	73
41	Wearable PVDF transducer for biomechanical energy harvesting and gait cycle detection. , 2016, , .		10
42	Spatio-temporal gait parameters as estimated from wearable sensors placed at different waist levels. , 2016, , .		8
43	A Preliminary Comparison of Two Different Methods for Objective Uniformity Evaluation in Diagnostic Ultrasound Imaging. IFMBE Proceedings, 2016, , 476-481.	0.3	1
44	Neuro-Mechanics of Recumbent Leg Cycling in Post-Acute Stroke Patients. Annals of Biomedical Engineering, 2016, 44, 3238-3251.	2.5	32
45	Evaluation of a Motion-Based Platform for Practicing Phonological Awareness of Preschool Children. Journal of Educational Computing Research, 2016, 54, 595-618.	5.5	12
46	Neuro-mechanics of muscle coordination during recumbent pedaling in post-acute stroke patients. , 2015, 2015, 246-9.		2
47	Time to boundary function to assess upright stance in blind children. , 2015, 2015, 3468-71.		3
48	Pre-Processing Effect on the Accuracy of Event-Based Activity Segmentation and Classification through Inertial Sensors. Sensors, 2015, 15, 23095-23109.	3.8	23
49	The Effect of Continuous and Discretized Presentations of Concurrent Augmented Visual Biofeedback on Postural Control in Quiet Stance. PLoS ONE, 2015, 10, e0132711.	2.5	10
50	Can a Visual Biofeedback system based on predictive information improve postural performance?. , 2015, 2015, 6951-4.		2
51	A Neural Network Embedded System for Real-time Estimation of Muscle Forces. Procedia Computer Science, 2015, 51, 60-69.	2.0	7
52	Varying behavior of different window sizes on the classification of static and dynamic physical activities from a single accelerometer. Medical Engineering and Physics, 2015, 37, 705-711.	1.7	62
53	Intermuscular coherence contributions in synergistic muscles during pedaling. Experimental Brain Research, 2015, 233, 1907-1919.	1.5	52
54	Real time event-based segmentation to classify locomotion activities through a single inertial sensor. , 2015, , .		10

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55	Neural Networks for Muscle Forces Prediction in Cycling. Algorithms, 2014, 7, 621-634.	2.1	7
56	A new microcontroller-based system to optimize the digital conversion of signals originating from load cells built-in into pedals. , 2014, , .		5
57	Comparing different visual biofeedbacks in static posturography. , 2014, , .		2
58	A two-step model to optimise transcutaneous electrical stimulation of the human upper arm. COMPEL - the International Journal for Computation and Mathematics in Electrical and Electronic Engineering, 2014, 33, 1329-1345.	0.9	11
59	Attentional Focus and Functional Connectivity in Cycling: An EEG Case Study. IFMBE Proceedings, 2014, , 137-140.	0.3	15
60	ERD/ERS Patterns of Shooting Performance within the Multi-Action Plan Model. IFMBE Proceedings, 2014, , 141-144.	0.3	2
61	The Effect of Window Length on the Classification of Dynamic Activities through a Single Accelerometer. , 2014, , .		9
62	Efficacy of TtB-Based Visual Biofeedback in Upright Stance Trials. IFMBE Proceedings, 2014, , 1755-1758.	0.3	3
63	EMG and Kinematics Assessment of Postural Responses during Balance Perturbation on a 3D Robotic Platform: Preliminary Results in Children with Hemiplegia. IFMBE Proceedings, 2014, , 69-72.	0.3	3
64	A Neural Minimum Input Model to Reconstruct the Electrical Cortical Activity. IFMBE Proceedings, 2014, , 639-642.	0.3	0
65	Within-day and between-day repeatability of measurements with an electronic nose in patients with COPD. Journal of Breath Research, 2013, 7, 017103.	3.0	75
66	Inter-individual variability of forces and modular muscle coordination in cycling: A study on untrained subjects. Human Movement Science, 2013, 32, 1480-1494.	1.4	45
67	The influence of haptic feedback on hand movement regularity in elderly adults. , 2013, , .		0
68	How to assess performance in cycling: the multivariate nature of influencing factors and related indicators. Frontiers in Physiology, 2013, 4, 116.	2.8	31
69	CFSO³: A New Supervised Swarm-Based Optimization Algorithm. Mathematical Problems in Engineering, 2013, 2013, 1-13.	1.1	25
70	Classification of ECG patterns for diagnostic purposes by means of Neural Networks and Support Vector Machines. , 2013, , .		5
71	Feedback of mechanical effectiveness induces adaptations in motor modules during cycling. Frontiers in Computational Neuroscience, 2013, 7, 35.	2.1	43
72	SVM versus MAP on Accelerometer Data to Distinguish among Locomotor Activities Executed at Different Speeds. Computational and Mathematical Methods in Medicine, 2013, 2013, 1-7.	1.3	16

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73	A Comparison between Influence of Visual and Haptic Feedback on Jerk Indicators in Hand Exercises. Biosystems and Biorobotics, 2013, , 317-320.	0.3	1
74	Muscle synergies are consistent when pedaling under different biomechanical demands. , 2012, 2012, 3308-11.		18
75	Neuromuscular adaptations during submaximal prolonged cycling. , 2012, 2012, 3612-5.		10
76	Analysis of different image-based biofeedback models for improving cycling performances. , 2012, , .		16
77	A free geometry model-independent neural eye-gaze tracking system. Journal of NeuroEngineering and Rehabilitation, 2012, 9, 82.	4.6	24
78	Novel formulation of a double threshold algorithm for the estimation of muscle activation intervals designed for variable SNR environments. Journal of Electromyography and Kinesiology, 2012, 22, 878-885.	1.7	44
79	An optimized method for tremor detection and temporal tracking through repeated second order moment calculations on the surface EMG signal. Medical Engineering and Physics, 2012, 34, 1268-1277.	1.7	17
80	Quantitative color analysis for capillaroscopy image segmentation. Medical and Biological Engineering and Computing, 2012, 50, 567-574.	2.8	9
81	Early recognition of upper limb motor tasks through accelerometers: real-time implementation of a DTW-based algorithm. Computers in Biology and Medicine, 2011, 41, 164-172.	7.0	45
82	Detection of tremor bursts from the sEMG Signal: An optimization procedure for different detection methods. , 2011, 2011, 7508-11.		2
83	A SNR-independent formulation of a double threshold algorithm for the estimation of muscle activation intervals. , 2011, 2011, 7500-3.		2
84	An adaptive Kalman-based Bayes estimation technique to classify locomotor activities in young and elderly adults through accelerometers. Medical Engineering and Physics, 2010, 32, 849-859.	1.7	27
85	Strength-Duration Properties of the Upper Limb under Surface Electrical Stimulation for Rehabilitation. Mechatronic Systems and Control, 2010, 7, .	0.2	1
86	Biologically inspired modelling for the control of the upper limb movements: from concept studies to future applications. Frontiers in Neurorobotics, 2009, 3, 3.	2.8	8
87	A sensorized glove for hand rehabilitation. , 2009, , .		2
88	Assessing the feasibility of classifying toe-walking severity in children with cerebral palsy using a sensorized shoe. , 2009, 2009, 5163-6.		4
89	The Median Point DTW Template to Classify Upper Limb Gestures at Different Speeds. IFMBE Proceedings, 2009, , 63-66.	0.3	4
90	Reinforcing motor re-training and rehabilitation through games: a machine-learning perspective. Frontiers in Neuroengineering, 2009, 2, 3.	4.8	2

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91	Markerless Human Motion Analysis in Gaussâ€“Laguerre Transform Domain: An Application to Sit-To-Stand in Young and Elderly People. IEEE Transactions on Information Technology in Biomedicine, 2009, 13, 207-216.	3.2	36
92	An adaptive blink detector to initialize and update a view-basedremote eye gaze tracking system in a natural scenario. Pattern Recognition Letters, 2009, 30, 1144-1150.	4.2	34
93	Motor unit firing characteristics in patients with amyotrophic lateral sclerosis. , 2009, , .		7
94	Characterization of motor unit behavior in patients with amyotrophic lateral sclerosis. , 2009, , .		7
95	Tremor control during movement of the upper limb using artificial neural networks. IFMBE Proceedings, 2009, , 72-75.	0.3	2
96	A neural tracking and motor control approach to improve rehabilitation of upper limb movements. Journal of NeuroEngineering and Rehabilitation, 2008, 5, 5.	4.6	23
97	A neural-based remote eye gaze tracker under natural head motion. Computer Methods and Programs in Biomedicine, 2008, 92, 66-78.	4.7	55
98	Stability limits in the assessment of postural control through the Time-to-Boundary function. Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 2007, 2007, 6126-9.	0.5	7
99	A bio-inspired controller of an upper arm model in a perturbed environment. , 2007, , .		8
100	Classification of Motor Activities through Derivative Dynamic Time Warping applied on Accelerometer Data. Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 2007, 2007, 4930-3.	0.5	41
101	A biologically inspired neural network controller for ballistic arm movements. Journal of NeuroEngineering and Rehabilitation, 2007, 4, 33.	4.6	18
102	Cognitive load affects postural control in children. Experimental Brain Research, 2007, 179, 375-385.	1.5	51
103	Study of muscular deformation based on surface slope estimation. , 2006, 6064, 271.		4
104	A markerless sub-pixel motion estimation technique to reconstruct kinematics and estimate the centre of mass in posturography. Medical Engineering and Physics, 2006, 28, 719-726.	1.7	27
105	Difference in sensorimotor adaptation to horizontal and vertical mirror distortions during ballistic arm movements. Human Movement Science, 2006, 25, 310-325.	1.4	13
106	A neural approach to extract foreground from human movement images. Computer Methods and Programs in Biomedicine, 2006, 82, 73-80.	4.7	4
107	How much can we trust the electromechanical delay estimated by using electromyography?. , 2006, 2006, 1256-9.		13
108	Coarse-to-fine markerless gait analysis based on PCA and Gauss-Laguerre decomposition. , 2005, , .		1

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109	The development of postural strategies in children: a factorial design study. Journal of NeuroEngineering and Rehabilitation, 2005, 2, 29.	4.6	46
110	Respiration and postural sway: detection of phase synchronizations and interactions. Human Movement Science, 2004, 23, 105-119.	1.4	54
111	Posture kinematics reconstruction and body model creation. , 2004, , .		1
112	A Neural-based Model for the Control of the Arm During Planar Ballistic Movements. CISM International Centre for Mechanical Sciences, Courses and Lectures, 2004, , 59-65.	0.6	0
113	The sensitivity of posturographic parameters to acquisition settings. Medical Engineering and Physics, 2002, 24, 623-631.	1.7	68
114	Hemodynamics as a possible internal mechanical disturbance to balance. Gait and Posture, 2001, 14, 28-35.	1.4	65