

Martin Cerny

List of Publications by Year in descending order

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Version: 2024-02-01

78
papers

738
citations

840119

11
h-index

676716

22
g-index

87
all docs

87
docs citations

87
times ranked

766
citing authors

#	ARTICLE	IF	CITATIONS
1	A review of methods for non-invasive and continuous blood pressure monitoring: Pulse transit time method is promising?. <i>Irbm</i> , 2014, 35, 271-282.	3.7	199
2	HomeCare â€” Smart embedded biotelemetry system. , 2007, , 711-714.		46
3	Thermal Energy Harvesting on the Bodily Surfaces of Arms and Legs through a Wearable Thermo-Electric Generator. <i>Sensors</i> , 2018, 18, 1927.	2.1	36
4	Recent Trends, Technical Concepts and Components of Computer-Assisted Orthopedic Surgery Systems: A Comprehensive Review. <i>Sensors</i> , 2019, 19, 5199.	2.1	33
5	Sensitivity analysis and application of transducers. , 2008, , .		32
6	Noninvasive Continuous Blood Pressure Estimation From Pulse Transit Time: A Review of the Calibration Models. <i>IEEE Reviews in Biomedical Engineering</i> , 2022, 15, 138-151.	13.1	31
7	Methods for derivation of orthogonal leads from 12-lead electrocardiogram: A review. <i>Biomedical Signal Processing and Control</i> , 2015, 19, 23-34.	3.5	25
8	Sensor Network for Measurement and Analysis on Medical Devices Quality Control. <i>Communications in Computer and Information Science</i> , 2011, , 182-196.	0.4	24
9	Recent Trends, Construction, and Applications of Smart Textiles and Clothing for Monitoring of Health Activity: A Comprehensive Multidisciplinary Review. <i>IEEE Reviews in Biomedical Engineering</i> , 2022, 15, 36-60.	13.1	21
10	The HomeCare and Circadian rhythm. , 2008, , .		20
11	The circadian cycle monitoring. , 2008, , .		20
12	Control Methods for Transradial Prostheses Based on Remnant Muscle Activity and Its Relationship with Proprioceptive Feedback. <i>Sensors</i> , 2020, 20, 4883.	2.1	16
13	Assessment of postural stability in stable and unstable conditions. <i>Acta of Bioengineering and Biomechanics</i> , 2017, 19, 89-94.	0.2	14
14	Advanced Experimental Medical Diagnostic System Design and Realization. <i>Elektronika Ir Elektrotechnika</i> , 2012, 117, .	0.4	13
15	Intra- and inter-session reliability of traditional and entropy-based variables describing stance on a wobble board. <i>Medical Engineering and Physics</i> , 2017, 50, 29-34.	0.8	12
16	Circadian Rhythm Monitoring in HomeCare Systems. <i>IFMBE Proceedings</i> , 2009, , 950-953.	0.2	10
17	The proposal of the smart home care solution with KNX components. , 2015, , .		9
18	Review: Development and Technical Design of Tangible User Interfaces in Wide-Field Areas of Application. <i>Sensors</i> , 2021, 21, 4258.	2.1	9

#	ARTICLE	IF	CITATIONS
19	Emergency horn detection using embedded systems. , 2016, , .		8
20	Prediction Model of Alcohol Intoxication from Facial Temperature Dynamics Based on K-Means Clustering Driven by Evolutionary Computing. Symmetry, 2019, 11, 995.	1.1	8
21	Continuous Noninvasive Blood Pressure Measurement by Near Infra Red CCD Camera and Pulse Transmit Time Systems. , 2010, , .		7
22	Notice of Retraction: Movement Activity Monitoring of Elderly People. , 2010, , .		7
23	Human Body Energy Harvesting Solutions for Wearable Technologies. , 2018, , .		7
24	Towards to Optimal Wavelet Denoising Schemeâ€”A Novel Spatial and Volumetric Mapping of Wavelet-Based Biomedical Data Smoothing. Sensors, 2020, 20, 5301.	2.1	6
25	Mathematical Model Based on the Shape of Pulse Waves Measured at a Single Spot for the Non-Invasive Prediction of Blood Pressure. Processes, 2020, 8, 442.	1.3	6
26	ActimedARM - Design of a wearable system to monitor daily actimetry. , 2013, 2013, 1851-4.		5
27	Measurement and Diagnosis Assessment of Plethysmographycal Record. IFMBE Proceedings, 2011, , 320-323.	0.2	5
28	Automatic Ranking of Eye Movement in Electrooculographic Records. , 2010, , .		4
29	Individualization of a vectorcardiographic model by a particle swarm optimization. Biomedical Signal Processing and Control, 2015, 22, 65-73.	3.5	4
30	Pulse wave velocity measurement; developing process of new measuring device. , 2015, , .		4
31	The New Approach for The Model of Cardiovascular System. IFAC-PapersOnLine, 2018, 51, 48-53.	0.5	4
32	Current Automatic Methods for Knee Cartilage Segmentation: A Review. , 2019, , .		4
33	A New Approach for Testing Fetal Heart Rate Monitors. Sensors, 2020, 20, 4139.	2.1	4
34	Battery check test on pacemaker by advanced technique. , 2014, , .		3
35	Estimation of walked distance using inertial sensors under real conditions. , 2016, 2016, 3147-3150.		3
36	Segmentation of Articular Cartilage and Early Osteoarthritis based on the Fuzzy Soft Thresholding Approach Driven by Modified Evolutionary ABC Optimization and Local Statistical Aggregation. Symmetry, 2019, 11, 861.	1.1	3

#	ARTICLE	IF	CITATIONS
37	Autonomous Segmentation and Modeling of Brain Pathological Findings Based on Iterative Segmentation from MR Images. Lecture Notes in Computer Science, 2019, , 324-335.	1.0	3
38	Investigation of a Possibility of ECG and PPG Common Measurement. IFMBE Proceedings, 2019, , 851-855.	0.2	3
39	Process of Multi Technical Education in Biomedical Engineers Curricula. , 2008, , .		2
40	Objective evaluation of body displacements during activities using the wearable inertial system ActimedARM. , 2014, 2014, 5972-5.		2
41	Dry contact less surface electrodes for bioelectrical measurements. , 2014, , .		2
42	Main motivation for installation of new living laboratory for health. , 2015, , .		2
43	A Proposal of Optimal Wavelet Filter Design for EGG Signal Decomposition based on Modified ABC Evolutionary Optimization. , 2019, , .		2
44	Design and Analysis of LMMSE Filter for MR Image Data. Lecture Notes in Computer Science, 2019, , 336-348.	1.0	2
45	Application to train cognitive skills according to the CHC intelligence model. AIP Conference Proceedings, 2019, , .	0.3	2
46	Quantitative and Comparative Analysis of Effectivity and Robustness for Enhanced and Optimized Non-Local Mean Filter Combining Pixel and Patch Information on MR Images of Musculoskeletal System. Sensors, 2021, 21, 4161.	2.1	2
47	Segmentation of Vascular Calcifications and Statistical Analysis of Calcium Score. Lecture Notes in Computer Science, 2017, , 455-464.	1.0	2
48	Multiregional Soft Segmentation Driven by Modified ABC Algorithm and Completed by Spatial Aggregation: Volumetric, Spatial Modelling and Features Extraction of Articular Cartilage Early Loss. Lecture Notes in Computer Science, 2018, , 385-394.	1.0	2
49	Analysis and Modelling of Heel Bone Fracture with Using of Active Contour Driven by Gaussian Energy and Features Extraction. Lecture Notes in Computer Science, 2018, , 405-414.	1.0	2
50	Smart Communication Adviser for Remote Users. Lecture Notes of the Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering, 2013, , 141-150.	0.2	2
51	Detection and Dynamical Tracking of Temperature Facial Distribution Caused by Alcohol Intoxication with Using of Modified OTSU Regional Segmentation. Lecture Notes in Computer Science, 2018, , 357-366.	1.0	2
52	Proposal of Physical Model of Cardiovascular System; Improvement of Mock Circulatory Loop. IFMBE Proceedings, 2019, , 505-508.	0.2	2
53	Multidisciplinary Education of Biomedical Engineers. IFMBE Proceedings, 2009, , 2155-2158.	0.2	2
54	Make life easier based on detection of eyes movements; laboratory measurement. IFAC-PapersOnLine, 2015, 48, 268-271.	0.5	1

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55	Analysis and modeling of alcohol intoxication from IR images based on multiregional image segmentation and correlation with breath analysis. , 2017, , .		1
56	Segmentation and modeling of scattered RTG irradiation on quality of skiagraphy images in clinical conditions. , 2017, , .		1
57	Fuzzy Classification of Handâ€™s Motion. IFAC-PapersOnLine, 2018, 51, 354-359.	0.5	1
58	Optimization of Laser Therapy Parameters in Dependence of Spot Size. IFAC-PapersOnLine, 2018, 51, 360-365.	0.5	1
59	Electrooculography as a Tool For Managing Application. , 2018, , .		1
60	Biomedical Engineering Education under European Union Support. IFMBE Proceedings, 2011, , 16-19.	0.2	1
61	Objective Measurement of Hypertrophic Scars using Skin Colorimeter. , 2017, , .		1
62	Detection and Segmentation of Retinal Lesions in Retcam 3 Images Based on Active Contours Driven by Statistical Local Features. Advances in Electrical and Electronic Engineering, 2019, 17, .	0.2	1
63	A Quantitative and Comparative Analysis of Edge Detectors for Biomedical Image Identification Within Dynamical Noise Effect. Lecture Notes in Computer Science, 2020, , 90-101.	1.0	1
64	A Novel Method for the Detection of QRS Complex Using Vectorcardiographic Octants. , 2021, , .		1
65	Software tool for direction deflection recognition based on patient's postural dysfunction. , 2010, , .		0
66	Intravenous catheter transfer function distortion testing. , 2013, , .		0
67	Validation of Inverted Pendulum model for gait length calculation. , 2015, , .		0
68	Defibrillator educational devices. , 2017, , .		0
69	Analysis and Dynamical Simulation of Heart Rate Influence upon Physical Load. Lecture Notes in Computer Science, 2017, , 325-333.	1.0	0
70	Modeling and objectification of blood vessel calcification with using of multiregional segmentation. Vietnam Journal of Computer Science, 2018, 5, 279-289.	1.0	0
71	Modeling and Features Extraction of Blood Vessels based on Soft Regional Segmentation. IFAC-PapersOnLine, 2018, 51, 366-371.	0.5	0
72	Sensor based solution for cranial remodeling orthosis. , 2018, , .		0

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73	Multipurpose Sensor for Human Movement Analysis. , 2018, , .		0
74	Modeling of Articular Cartilage with Goal of Early Osteoarthritis Extraction Based on Local Fuzzy Thresholding Driven by Fuzzy C-Means Clustering. Lecture Notes in Computer Science, 2019, , 289-299.	1.0	0
75	Modeling and Features Extraction of Heel Bone Fracture Reparation Dynamical Process from X-Ray Images Based on Time Iteration Segmentation Model Driven by Gaussian Energy. Lecture Notes in Computer Science, 2019, , 300-310.	1.0	0
76	Model Kidney Function in Stabilizing of Blood Pressure. Lecture Notes in Computer Science, 2016, , 430-439.	1.0	0
77	Modeling of Blood Perfusion in Dependence of Scanning Angle from LDPI Data. , 2017, , .		0
78	Classification of Myopotentials of Hand's Motions to Control Applications. IFMBE Proceedings, 2019, , 155-158.	0.2	0