Dimitrios I Fotiadis

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/5261678/publications.pdf

Version: 2024-02-01

276 papers 7,401 citations

94381 37 h-index 69214 77 g-index

283 all docs

283 docs citations

times ranked

283

8891 citing authors

#	Article	IF	CITATIONS
1	Review of Eye Tracking Metrics Involved in Emotional and Cognitive Processes. IEEE Reviews in Biomedical Engineering, 2023, 16, 260-277.	13.1	60
2	Diagnostic accuracy and usability of the EMBalance decision support system for vestibular disorders in primary care: proof of concept randomised controlled study results. Journal of Neurology, 2022, 269, 2584-2598.	1.8	5
3	ICU admission and mortality classifiers for COVID-19 patients based on subgroups of dynamically associated profiles across multiple timepoints. Computers in Biology and Medicine, 2022, 141, 105176.	3.9	2
4	Addressing the clinical unmet needs in primary Sjögren's Syndrome through the sharing, harmonization and federated analysis of 21 European cohorts. Computational and Structural Biotechnology Journal, 2022, 20, 471-484.	1.9	7
5	Disease Progression of Hypertrophic Cardiomyopathy: Modeling Using Machine Learning. JMIR Medical Informatics, 2022, 10, e30483.	1.3	5
6	Towards a Digital Twin of Coronary Stenting: A Suitable and Validated Image-Based Approach for Mimicking Patient-Specific Coronary Arteries. Electronics (Switzerland), 2022, 11, 502.	1.8	5
7	Clinical picture, outcome and predictive factors of lymphoma in primary Sjögren's syndrome: results from a harmonized dataset (1981–2021). Rheumatology, 2022, 61, 3576-3585.	0.9	19
8	Management of Obese Pediatric Patients in the Digital Era. , 2022, , 492-517.		0
9	Editorial: Verification and Validation of in silico Models for Biomedical Implantable Devices. Frontiers in Medical Technology, 2022, 4, 856067.	1.3	O
10	A Multimodal Approach for the Risk Prediction of Intensive Care and Mortality in Patients with COVID-19. Diagnostics, 2022, 12, 56.	1.3	5
11	Detailed behaviour of endothelial wall shear stress across coronary lesions from non-invasive imaging with coronary computed tomography angiography. European Heart Journal Cardiovascular Imaging, 2022, 23, 1708-1716.	0.5	3
12	Bayesian Inference-Based Gaussian Mixture Models With Optimal Components Estimation Towards Large-Scale Synthetic Data Generation for <i>In Silico</i> Clinical Trials. IEEE Open Journal of Engineering in Medicine and Biology, 2022, 3, 108-114.	1.7	1
13	Machine Learning Coronary Artery Disease Prediction Based on Imaging and Non-Imaging Data. Diagnostics, 2022, 12, 1466.	1.3	2
14	Optimal Localization of a Novel Shifted 1T-Ring Based Microwave Ablation Probe in Hepatocellular Carcinoma. IEEE Transactions on Biomedical Engineering, 2021, 68, 505-514.	2.5	16
15	Accurate Monitoring of Parkinson's Disease Symptoms With a Wearable Device During COVID-19 Pandemic. In Vivo, 2021, 35, 2327-2330.	0.6	10
16	A computational workflow for the detection of candidate diagnostic biomarkers of Kawasaki disease using time-series gene expression data. Computational and Structural Biotechnology Journal, 2021, 19, 3058-3068.	1.9	8
17	The Smart-Insole Dataset: Gait Analysis Using Wearable Sensors with a Focus on Elderly and Parkinson's Patients. Sensors, 2021, 21, 2821.	2.1	40
18	A machine learning-based pipeline for modeling medical, socio-demographic, lifestyle and self-reported psychological traits as predictors of mental health outcomes after breast cancer diagnosis: An initial effort to define resilience effects. Computers in Biology and Medicine, 2021, 131, 104266.	3.9	27

#	Article	IF	Citations
19	Recommendation to Use Wearable-Based mHealth in Closed-Loop Management of Acute Cardiovascular Disease Patients During the COVID-19 Pandemic. IEEE Journal of Biomedical and Health Informatics, 2021, 25, 903-908.	3.9	24
20	Salivary Biomarkers for Diagnosis and Therapy Monitoring in Patients with Heart Failure. A Systematic Review. Diagnostics, 2021, 11, 824.	1.3	7
21	Simulated versus physical bench tests. Medicine (United States), 2021, 100, e26198.	0.4	3
22	A computational pipeline for data augmentation towards the improvement of disease classification and risk stratification models: A case study in two clinical domains. Computers in Biology and Medicine, 2021, 134, 104520.	3.9	10
23	A biomarker for lymphoma development in Sjogren's syndrome: Salivary gland focus score. Journal of Autoimmunity, 2021, 121, 102648.	3.0	24
24	Towards the development of a unified virtual population model in hypertrophic cardiomyopathy. , 2021, , .		0
25	A hybrid data harmonization workflow using word embeddings for the interlinking of heterogeneous cross-domain clinical data structures. , 2021, , .		1
26	SmartFFR, a New Functional Index of Coronary Stenosis: Comparison With Invasive FFR Data. Frontiers in Cardiovascular Medicine, 2021, 8, 714471.	1.1	6
27	Deep learning for diabetic retinopathy detection and classification based on fundus images: A review. Computers in Biology and Medicine, 2021, 135, 104599.	3.9	119
28	A machine learning-based risk stratification model for ventricular tachycardia and heart failure in hypertrophic cardiomyopathy. Computers in Biology and Medicine, 2021, 135, 104648.	3.9	27
29	Impact of Endothelial Shear Stress on Absorption Process of Resorbable Magnesium Scaffold: A BIOSOLVE-II Substudy. Cardiovascular Revascularization Medicine, 2021, 29, 9-15.	0.3	6
30	Relationship of Endothelial Shear Stress with Plaque Features with Coronary CT Angiography and Vasodilating Capability with PET. Radiology, 2021, 300, 549-556.	3.6	13
31	A Novel Approach to Generate a Virtual Population of Human Coronary Arteries for In Silico Clinical Trials of Stent Design. IEEE Open Journal of Engineering in Medicine and Biology, 2021, 2, 201-209.	1.7	5
32	Machine Learning Approaches on High Throughput NGS Data to Unveil Mechanisms of Function in Biology and Disease. Cancer Genomics and Proteomics, 2021, 18, 605-626.	1.0	11
33	Foot Pressure Wearable Sensors for Freezing of Gait Detection in Parkinson's Disease. Sensors, 2021, 21, 128.	2.1	38
34	Applied machine learning in cancer research: A systematic review for patient diagnosis, classification and prognosis. Computational and Structural Biotechnology Journal, 2021, 19, 5546-5555.	1.9	47
35	Education on palliative care for Parkinson patients: development of the "Best care for people with late-stage Parkinson's disease―curriculum toolkit. BMC Medical Education, 2021, 21, 538.	1.0	8
36	A Machine Learning Approach for Chronic Heart Failure Diagnosis. Diagnostics, 2021, 11, 1863.	1.3	21

#	Article	IF	CITATIONS
37	A prospective multicenter study assessing humoral immunogenicity and safety of the mRNA SARS-CoV-2 vaccines in Greek patients with systemic autoimmune and autoinflammatory rheumatic diseases. Journal of Autoimmunity, 2021, 125, 102743.	3.0	45
38	Three-Dimensional Reconstruction of Carotid Arteries Using Computed Tomography Angiography. IFMBE Proceedings, 2021 , $1130-1136$.	0.2	0
39	Investigation of Drug Eluting Stents Performance Through in silico Modeling. IFMBE Proceedings, 2021, , 712-721.	0.2	3
40	Diagnostic accuracy and usability of the EMBalance decision support system for vestibular disorders in primary care: proof of concept randomised controlled study results. Journal of Neurology, 2021, , .	1.8	0
41	Configurable Offline Sensor Placement Identification for a Medical Device Monitoring Parkinson's Disease. Sensors, 2021, 21, 7801.	2.1	7
42	Serum Biomarkers in Carotid Artery Disease. Diagnostics, 2021, 11, 2143.	1.3	8
43	3D Reconstruction and Volume Estimation of Food using Stereo Vision Techniques. , 2021, , .		7
44	Clustering based Segmentation of MR Images for the Delineation and Monitoring of Multiple Sclerosis Progression. , 2021, , .		0
45	Computational modeling of atherosclerotic plaque progression in carotid lesions with moderate degree of stenosis*., 2021, 2021, 4209-4212.		5
46	The clinical and technical impact of the HarmonicSS project. Clinical and Experimental Rheumatology, 2021, , .	0.4	0
47	Combined seronegativity in Sjögren's syndrome. Clinical and Experimental Rheumatology, 2021, , .	0.4	0
48	Investigation of the drug release time from the biodegrading coating of an everolimus eluting stent., 2021, 2021, 1698-1701.		0
49	Multiple additive regression trees with hybrid loss for classification tasks across heterogeneous clinical data in distributed environments: a case study., 2021, 2021, 1670-1673.		4
50	A federated AI strategy for the classification of patients with Mucosa Associated Lymphoma Tissue (MALT) lymphoma across multiple harmonized cohorts. , 2021, 2021, 1666-1669.		0
51	Variational Gaussian Mixture Models with robust Dirichlet concentration priors for virtual population generation in hypertrophic cardiomyopathy: a comparison study., 2021, 2021, 1674-1677.		3
52	Exploring the Acceptability and Feasibility of Providing a Balance Tele-Rehabilitation Programme to Older Adults at Risk for Falls: An Initial Assessment. , 2021, 2021, 6915-6919.		1
53	A proof-of-concept study for the prediction of the de-novo atherosclerotic plaque development using finite elements [*] ., 2021, 2021, 4354-4357.		0
54	A Machine Learning Model for the Identification of High risk Carotid Atherosclerotic Plaques. , 2021, 2021, 2266-2269.		5

#	Article	IF	CITATIONS
55	Combined seronegativity in SjĶgren's syndrome. Clinical and Experimental Rheumatology, 2021, 39, 80-84.	0.4	8
56	The clinical and technical impact of the HarmonicSS project. Clinical and Experimental Rheumatology, 2021, 39, 17-19.	0.4	3
57	Error Propagation in the Simulation of Atherosclerotic Plaque Growth and the Prediction of Atherosclerotic Disease Progression. Diagnostics, 2021, 11, 2306.	1.3	1
58	Point-of-Care Testing Devices for Heart Failure Analyzing Blood and Saliva Samples. IEEE Reviews in Biomedical Engineering, 2020, 13, 17-31.	13.1	11
59	Utility of Multimodality Intravascular Imaging and the Local Hemodynamic Forces to Predict Atherosclerotic DiseaseÂProgression. JACC: Cardiovascular Imaging, 2020, 13, 1021-1032.	2.3	32
60	Enhanced Multifactorial Biomechanical Stress Metrics to Predict Plaque Rupture. JACC: Cardiovascular Imaging, 2020, 13, 817-819.	2.3	2
61	Cancer classification from time series microarray data through regulatory Dynamic Bayesian Networks. Computers in Biology and Medicine, 2020, 116, 103577.	3.9	33
62	Site specific prediction of PCI stenting based on imaging and biomechanics data using gradient boosting tree ensembles., 2020, 2020, 2812-2815.		0
63	Evaluating the Performance of Balance Physiotherapy Exercises Using a Sensory Platform: The Basis for a Persuasive Balance Rehabilitation Virtual Coaching System. Frontiers in Digital Health, 2020, 2, 545885.	1.5	8
64	Optimal Power for Microwave Slotted Probes in Ablating Different Hepatocellular Carcinoma Sizes. Computers in Biology and Medicine, 2020, 127, 104101.	3.9	11
65	Simulation of atherosclerotic plaque growth using computational biomechanics and patient-specific data. Scientific Reports, 2020, 10, 17409.	1.6	22
66	Prediction of the development of coronary atherosclerotic plaques using computational modeling in 3D reconstructed coronary arteries., 2020, 2020, 2808-2811.		2
67	The TAXINOMISIS Project: A multidisciplinary approach for the development of a new risk stratification model for patients with asymptomatic carotid artery stenosis. European Journal of Clinical Investigation, 2020, 50, e13411.	1.7	7
68	Design and implementation of in silico clinical trial for Bioresorbable Vascular Scaffolds. , 2020, 2020, 2675-2678.		2
69	Sjögren's Syndrome: The Clinical Spectrum of Male Patients. Journal of Clinical Medicine, 2020, 9, 2620.	1.0	26
70	Primary Sjögren's Syndrome of Early and Late Onset: Distinct Clinical Phenotypes and Lymphoma Development. Frontiers in Immunology, 2020, 11, 594096.	2.2	45
71	A Review of Virtual Coaching Systems in Healthcare: Closing the Loop With Real-Time Feedback. Frontiers in Digital Health, 2020, 2, 567502.	1.5	16
72	Decision Support for Medication Change of Parkinson's Disease Patients. Computer Methods and Programs in Biomedicine, 2020, 196, 105552.	2.6	9

#	Article	IF	Citations
73	Microsurgery training: A combined educational program. Injury, 2020, 51, S131-S134.	0.7	9
74	A Domain Enriched Deep Learning Approach to Classify Atherosclerosis Using Intravascular Ultrasound Imaging. IEEE Journal on Selected Topics in Signal Processing, 2020, 14, 1210-1220.	7.3	20
75	Designing interoperable telehealth platforms: bridging IoT devices with cloud infrastructures. Enterprise Information Systems, 2020, 14, 1194-1218.	3.3	27
76	Prognostic factors of Rapid symptoms progression in patients with newly diagnosed parkinson's disease. Artificial Intelligence in Medicine, 2020, 103, 101807.	3.8	21
77	Types and sources of medical and other related data. , 2020, , 19-65.		6
78	Medical data harmonization. , 2020, , 137-183.		2
79	Machine learning and data analytics. , 2020, , 227-309.		3
80	Overcoming the Barriers That Obscure the Interlinking and Analysis of Clinical Data Through Harmonization and Incremental Learning. IEEE Open Journal of Engineering in Medicine and Biology, 2020, 1, 83-90.	1.7	9
81	A cloud-based platform for the non-invasive management of coronary artery disease. Enterprise Information Systems, 2020, 14, 1102-1123.	3.3	13
82	Predicting Lymphoma Development by Exploiting Genetic Variants and Clinical Findings in a Machine Learning-Based Methodology With Ensemble Classifiers in a Cohort of Sjögren's Syndrome Patients. IEEE Open Journal of Engineering in Medicine and Biology, 2020, 1, 49-56.	1.7	4
83	Feasibility and Utility of mHealth for the Remote Monitoring of Parkinson Disease: Ancillary Study of the PD_manager Randomized Controlled Trial. JMIR MHealth and UHealth, 2020, 8, e16414.	1.8	33
84	Utilizing Incremental Learning for the Prediction of Disease Outcomes Across Distributed Clinical Data: A Framework and a Case Study. IFMBE Proceedings, 2020, , 823-831.	0.2	1
85	A Training Tool to support the management and diagnosis of Sjögren's syndrome. Clinical and Experimental Rheumatology, 2020, 38 Suppl 126, 174-179.	0.4	O
86	Angiographic derived endothelial shear stress: a new predictor of atherosclerotic disease progression. European Heart Journal Cardiovascular Imaging, 2019, 20, 314-322.	0.5	11
87	Short-term prediction of glucose in type 1 diabetes using kernel adaptive filters. Medical and Biological Engineering and Computing, 2019, 57, 27-46.	1.6	21
88	Cohort Harmonization and Integrative Analysis From a Biomedical Engineering Perspective. IEEE Reviews in Biomedical Engineering, 2019, 12, 303-318.	13.1	15
89	A Three-Dimensional Quantification of Calcified and Non-calcified Plaque Based on Computed Tomography Coronary Angiography Images: Comparison with Virtual Histology Intravascular Ultrasound. IFMBE Proceedings, 2019, , 207-211.	0.2	1
90	The effect of the hip joint endoprosthesis length after a total hip arthroplasty: A biomechanical study. Journal of Orthopaedics, Trauma and Rehabilitation, 2019, 26, 61-66.	0.1	1

#	Article	IF	CITATIONS
91	Predicting lymphoma outcomes and risk factors in patients with primary Sjögren's Syndrome using gradient boosting tree ensembles. , 2019, 2019, 2165-2168.		8
92	When vestibular rehabilitation can assist: findings with use of data mining. , 2019, , .		0
93	A biomechanical study of the effect of weight loading conditions on the mechanical environment of the hip joint endoprosthesis. Clinical Biomechanics, 2019, 70, 197-202.	0.5	2
94	A computational multi-level atherosclerotic plaque growth model for coronary arteries., 2019, 2019, 5010-5013.		10
95	Characterization of functionally significant coronary artery disease by a coronary computed tomography angiography-based index: a comparison with positron emission tomography. European Heart Journal Cardiovascular Imaging, 2019, 20, 897-905.	0.5	18
96	A three-dimensional quantification of calcified and non-calcified plaques in coronary arteries based on computed tomography coronary angiography images: Comparison with expert's annotations and virtual histology intravascular ultrasound. Computers in Biology and Medicine, 2019, 113, 103409.	3.9	20
97	Achieving adherence in home-based rehabilitation with novel human machine interactions that stimulate community-dwelling older adults. , 2019, , .		5
98	HEARTEN KMS – A knowledge management system targeting the management of patients with heart failure. Journal of Biomedical Informatics, 2019, 94, 103203.	2.5	16
99	Implications of the local haemodynamic forces on the phenotype of coronary plaques. Heart, 2019, 105, 1078-1086.	1.2	14
100	Medical data quality assessment: On the development of an automated framework for medical data curation. Computers in Biology and Medicine, 2019, 107, 270-283.	3.9	67
101	Effect of ultrasound on bone fracture healing: A computational mechanobioregulatory model. Journal of the Acoustical Society of America, 2019, 145, 1048-1059.	0.5	9
102	Editorial commentary: The pleiotropic effect of statins on the atherosclerotic plaque and coronary heart disease. Trends in Cardiovascular Medicine, 2019, 29, 456-457.	2.3	5
103	Site specific prediction of atherosclerotic plaque progression using computational biomechanics and machine learning., 2019, 2019, 6998-7001.		6
104	Automatic Estimation of the Nutritional Composition of Foods as Part of the GlucoseML Type 1 Diabetes Self-Management System. , 2019, , .		4
105	Predictive Models of Coronary Artery Disease Based on Computational Modeling: The SMARTool System., 2019, 2019, 7002-7005.		5
106	Unsupervised Seizure Detection based on Rhythmical Activity and Spike Detection in EEG Signals. , 2019, , .		4
107	Generation of Virtual Patients for in Silico Cardiomyopathies Drug Development. , 2019, , .		5
108	Atherosclerotic Plaque Growth Prediction in Coronary Arteries using a Computational Multi-level Model: The Effect of Diabetes. , 2019, , .		3

7

#	Article	IF	Citations
109	Noninvasive CT-based hemodynamic assessment of coronary lesions derived from fast computational analysis: a comparison against fractional flow reserve. European Radiology, 2019, 29, 2117-2126.	2.3	28
110	Virtual Functional Assessment of Coronary Stenoses Using Intravascular Ultrasound Imaging: A Proof-of-Concept Pilot Study. Heart Lung and Circulation, 2019, 28, e33-e36.	0.2	7
111	A Review of Automated Methodologies for the Detection of Epileptic Episodes Using Long-Term EEG Signals. , 2019, , 1464-1496.		2
112	Management of Obese Pediatric Patients in the Digital Era. Advances in Healthcare Information Systems and Administration Book Series, 2019, , 72-97.	0.2	0
113	Computer Predictive Model for Plaque Formation and Progression in the Artery. , 2019, , 220-245.		0
114	mHealth Environments for Chronic Disease Management. , 2019, , 659-677.		0
115	Enhancing medical data quality through data curation: a case study in primary Sjögren's syndrome. Clinical and Experimental Rheumatology, 2019, 37 Suppl 118, 90-96.	0.4	2
116	Sj \tilde{A} ¶gren's syndrome towards precision medicine: the challenge of harmonisation and integration of cohorts. Clinical and Experimental Rheumatology, 2019, 37 Suppl 118, 175-184.	0.4	4
117	FCLAB: An EEGLAB module for performing functional connectivity analysis on single-subject EEG data. , 2018, , .		1
118	A novel chronoamperometric immunosensor for rapid detection of TNF- \hat{l}_{\pm} in human saliva. Sensors and Actuators B: Chemical, 2018, 266, 477-484.	4.0	58
119	Virtual Resting Pd/Pa From Coronary Angiography and Blood Flow Modelling: Diagnostic Performance Against Fractional Flow Reserve. Heart Lung and Circulation, 2018, 27, 377-380.	0.2	7
120	Art care: A multi-modality coronary 3D reconstruction and hemodynamic status assessment software. Technology and Health Care, 2018, 26, 187-193.	0.5	8
121	A robust unsupervised epileptic seizure detection methodology to accelerate large EEG database evaluation. Biomedical Signal Processing and Control, 2018, 40, 275-285.	3.5	29
122	3D reconstruction of coronary arteries and atherosclerotic plaques based on computed tomography angiography images. Biomedical Signal Processing and Control, 2018, 40, 286-294.	3.5	40
123	KardiaTool: An Integrated POC Solution for Non-invasive Diagnosis and Therapy Monitoring of Heart Failure Patients., 2018, 2018, 3878-3881.		5
124	Towards the Establishment of a Biomedical Ontology for the Primary Sjögren's Syndrome. , 2018, 2018, 4089-4092.		4
125	A Machine Learning Approach for the Prediction of the Progression of Cardiovascular Disease based on Clinical and Non-Invasive Imaging Data. , 2018, 2018, 6108-6111.		7
126	Background and Preview. , 2018, , 1-14.		1

#	Article	IF	CITATIONS
127	A Clinical Decision Support Platform for the Risk Stratification, Diagnosis, and Prediction of Coronary Artery Disease Evolution., 2018, 2018, 4556-4559.		8
128	Acceptability to patients, carers and clinicians of an mHealth platform for the management of Parkinson's disease (PD_Manager): study protocol for a pilot randomised controlled trial. Trials, 2018, 19, 492.	0.7	23
129	A Long Short-Term Memory deep learning network for the prediction of epileptic seizures using EEG signals. Computers in Biology and Medicine, 2018, 99, 24-37.	3.9	399
130	Effect of ultrasound on bone fracture healing: A computational bioregulatory model. Computers in Biology and Medicine, 2018, 100, 74-85.	3.9	11
131	Nonlinear Models of Glucose Concentration. , 2018, , 131-151.		2
132	A decision support system based on rapid progression rules to enhance baseline evaluation of Parkinson's disease patients. , 2018 , , .		1
133	A decision support system for Parkinson disease management: expert models for suggesting medication change. Journal of Decision Systems, 2018, 27, 164-172.	2.2	15
134	Prediction of atherosclerotic disease progression using LDL transport modelling: a serial computed tomographic coronary angiographic study. European Heart Journal Cardiovascular Imaging, 2017, 18, 11-18.	0.5	40
135	Natural History of Carotid Atherosclerosis in Relation to the Hemodynamic Environment. Angiology, 2017, 68, 109-118.	0.8	19
136	Stents: Biomechanics, Biomaterials, and Insights from Computational Modeling. Annals of Biomedical Engineering, 2017, 45, 853-872.	1.3	53
137	Estimation of New York Heart Association class in heart failure patients based on machine learning techniques. , 2017, , .		5
138	Available Computational Techniques to Model Atherosclerotic Plaque Progression Implementing a Multi-Level Approach., 2017,, 39-55.		0
139	A computational pipeline for deciphering the molecular mechanisms of oral cancer progression. , 2017, , .		0
140	Electrochemical biosensor platform for TNF- $\hat{l}\pm$ cytokines detection in both artificial and human saliva: Heart failure. Sensors and Actuators B: Chemical, 2017, 251, 1026-1033.	4.0	75
141	The Evolution of mHealth Solutions for Heart Failure Management. Advances in Experimental Medicine and Biology, 2017, 1067, 353-371.	0.8	9
142	Numerical evaluation of the backward propagating acoustic field in healing long bones. Journal of the Acoustical Society of America, 2017, 142, 962-973.	0.5	3
143	Functional assessment of lesion severity without using the pressure wire: coronary imaging and blood flow simulation. Expert Review of Cardiovascular Therapy, 2017, 15, 863-877.	0.6	2
144	PD_Manager: an mHealth platform for Parkinson's disease patient management. Healthcare Technology Letters, 2017, 4, 102-108.	1.9	66

#	Article	IF	Citations
145	A novel hybrid approach for reconstruction of coronary bifurcations using angiography and OCT., 2017, 2017, 588-591.		7
146	Validation Using Histological and Micro-CT Data. , 2017, , 167-180.		0
147	Prediction of Atherosclerotic Plaque Development in an In Vivo Coronary Arterial Segment Based on a Multilevel Modeling Approach. IEEE Transactions on Biomedical Engineering, 2017, 64, 1721-1730.	2.5	32
148	Heart Failure: Diagnosis, Severity Estimation and Prediction of Adverse Events Through Machine Learning Techniques. Computational and Structural Biotechnology Journal, 2017, 15, 26-47.	1.9	150
149	Discrimination of Preictal and Interictal Brain States from Long-Term EEG Data., 2017, , .		22
150	Kernel-based adaptive learning improves accuracy of glucose predictive modelling in type 1 diabetes: A proof-of-concept study., 2017, 2017, 2765-2768.		5
151	In Silico Assessment of the effects of Material on Stent Deployment. , 2017, 2017, 462-467.		3
152	An mhealth Platform to Evaluate Glycaemic Variability in Type 1 Diabetes., 2017,,.		0
153	Estimation of Heart Failure Patients Medication Adherence through the Utilization of Saliva and Breath Biomarkers and Data Mining Techniques. , 2017, , .		3
154	Propagation of Segmentation and Imaging System Errors., 2017, , 151-166.		1
155	Plaque Characterization Methods Using Computed Tomography. , 2017, , 115-129.		4
156	Conclusions and Future Trends. , 2017, , 199-212.		0
157	Methods for Three-Dimensional Reconstruction of Coronary Arteries and Plaque. , 2017, , 131-150.		0
158	HMMs in Protein Fold Classification. Methods in Molecular Biology, 2017, 1552, 13-27.	0.4	2
159	The effect of coronary bifurcation and haemodynamics in prediction of atherosclerotic plaque development: a serial computed tomographic coronary angiographic study. EuroIntervention, 2017, 13, e1084-e1091.	1.4	17
160	mHealth Environments for Chronic Disease Management. , 2017, , 821-839.		0
161	Computational Study of the Effect of Cortical Porosity on Ultrasound Wave Propagation in Healthy and Osteoporotic Long Bones. Materials, 2016, 9, 205.	1.3	4
162	Monitoring of motor and non-motor symptoms of Parkinson's disease through a mHealth platform. , 2016, 2016, 663-666.		30

#	Article	IF	Citations
163	Tremor UPDRS estimation in home environment. , 2016, 2016, 3642-3645.		15
164	Non-linear dynamic modeling of glucose in type 1 diabetes with kernel adaptive filters. , 2016, 2016, 5897-5900.		11
165	Prediction of oral cancer recurrence using dynamic Bayesian networks., 2016, 2016, 5275-5278.		6
166	Gene-based pathway enrichment analysis of oral squamous cell carcinoma patients. , 2016, , .		1
167	Three-dimensional reconstruction of coronary arteries and plaque morphology using CT angiography $\hat{a} \in \text{``comparison and registration with IVUS. BMC Medical Imaging, 2016, 16, 9.}$	1.4	34
168	Prediction of time dependent survival in HF patients after VAD implantation using pre- and post-operative data. Computers in Biology and Medicine, 2016, 70, 99-105.	3.9	4
169	A generalized methodology for the gridding of microarray images with rectangular or hexagonal grid. Signal, Image and Video Processing, 2016, 10, 719-728.	1.7	5
170	Noninvasive Prediction of Atherosclerotic Progression: The PROSPECT-MSCT Study. JACC: Cardiovascular Imaging, 2016, 9, 1009-1011.	2.3	27
171	A Review of Automated Methodologies for the Detection of Epileptic Episodes Using Long-Term EEG Signals. Advances in Medical Diagnosis, Treatment, and Care, 2016, , 231-261.	0.1	5
172	The Contribution of mHealth in the Care of Obese Pediatric Patients. Advances in Healthcare Information Systems and Administration Book Series, 2016, , 126-146.	0.2	2
173	mHealth Environments for Chronic Disease Management. Advances in Medical Diagnosis, Treatment, and Care, 2016, , 518-535.	0.1	2
174	Computer Predictive Model for Plaque Formation and Progression in the Artery. Advances in Medical Diagnosis, Treatment, and Care, 2016, , 279-300.	0.1	0
175	In-silico evaluation of cortical porosity by tangential axial transmission. , 2015, , .		1
176	Patient-Specific Simulation of Coronary Artery Pressure Measurements: An <i>In Vivo</i> Three-Dimensional Validation Study in Humans. BioMed Research International, 2015, 2015, 1-11.	0.9	28
177	Quantitative micro-CT based coronary artery profiling using interactive local thresholding and cylindrical coordinates. Technology and Health Care, 2015, 23, 557-570.	0.5	7
178	An analytical study on guided wave propagation in bone-mimicking plates using Mindlin's Form II gradient elasticity. , $2015, $, .		0
179	High-frequency cortical backscatter reveals cortical microstructure - A simulation study. , 2015, , .		5
180	Numerical simulation of high-frequency ultrasound scattering on articular cartilage cellular structure. , 2015 , , .		0

#	Article	IF	CITATIONS
181	The effect of cortical bone porosity on ultrasonic backscattering parameters. , 2015, , .		4
182	Diagnosis of balance disorders using decision support systems based on data mining techniques. , 2015, , .		1
183	Design and implementation of processes for the primary care in the healthcare system of Greece. , 2015, , .		1
184	A computational study of ligaments effect in middle ear chain anatomy behavior. , 2015, , .		2
185	A mathematical model for bone healing predictions under the ultrasound effect. , 2015, , .		2
186	Online prediction of glucose concentration in type 1 diabetes using extreme learning machines. , 2015, 2015, 3262-5.		20
187	Computerized methodology for micro-CT and histological data inflation using an IVUS based translation map. Computers in Biology and Medicine, 2015, 65, 168-176.	3.9	2
188	Impact of local endothelial shear stress on neointima and plaque following stent implantation in patients with ST-elevation myocardial infarction: A subgroup-analysis of the COMFORTABLE AMI–IBIS 4 trial. International Journal of Cardiology, 2015, 186, 178-185.	0.8	28
189	A computer-aided automated methodology for the detection and classification of occlusal caries from photographic color images. Computers in Biology and Medicine, 2015, 62, 119-135.	3.9	46
190	Evaluation of short-term predictors of glucose concentration in type 1 diabetes combining feature ranking with regression models. Medical and Biological Engineering and Computing, 2015, 53, 1305-1318.	1.6	69
191	Error propagation in the characterization of atheromatic plaque types based on imaging. Computer Methods and Programs in Biomedicine, 2015, 121, 161-174.	2.6	12
192	A Bayesian Network-based approach for discovering oral cancer candidate biomarkers. , 2015, 2015, 7663-6.		2
193	Machine learning applications in cancer prognosis and prediction. Computational and Structural Biotechnology Journal, 2015, 13, 8-17.	1.9	2,059
194	Assessment of optimized Markov models in protein fold classification. Journal of Bioinformatics and Computational Biology, 2014, 12, 1450016.	0.3	5
195	Wearability Assessment of a Wearable System for Parkinson's Disease Remote Monitoring Based on a Body Area Network of Sensors. Sensors, 2014, 14, 17235-17255.	2.1	88
196	PERFORM: A System for Monitoring, Assessment and Management of Patients with Parkinson's Disease. Sensors, 2014, 14, 21329-21357.	2.1	139
197	Reconstruction of Cochlea Based on Micro-CT and Histological Images of the Human Inner Ear. BioMed Research International, 2014, 2014, 1-7.	0.9	18
198	A dynamic Bayesian network approach for time-specific survival probability prediction in patients after ventricular assist device implantation., 2014, 2014, 3172-5.		1

#	Article	IF	Citations
199	Methodology for fully automated segmentation and plaque characterization in intracoronary optical coherence tomography images. Journal of Biomedical Optics, 2014, 19, 026009.	1.4	87
200	Currently available methodologies for the processing of intravascular ultrasound and optical coherence tomography images. Expert Review of Cardiovascular Therapy, 2014, 12, 885-900.	0.6	11
201	Application of an effective medium theory for modeling ultrasound wave propagation in healing long bones. Ultrasonics, 2014, 54, 1219-1230.	2.1	26
202	Short- and Long-Term Implications of a Bioresorbable Vascular Scaffold Implantation on the Local Endothelial Shear Stress Patterns. JACC: Cardiovascular Interventions, 2014, 7, 100-101.	1.1	11
203	Effect of the Endothelial Shear Stress Patterns on Neointimal Proliferation Following Drug-Eluting Bioresorbable Vascular Scaffold Implantation. JACC: Cardiovascular Interventions, 2014, 7, 315-324.	1.1	108
204	A wearable system for long-term ubiquitous monitoring of common motor symptoms in patients with Parkinson's disease., 2014,,.		7
205	An Ambient Intelligent monitoring system to improve the independency of the elderly with balance disorders indoors. , 2014 , , .		2
206	Wearable systems and mobile applications for diabetes disease management. Health and Technology, 2014, 4, 101-112.	2.1	37
207	Modeling and simulation of speed selection on left ventricular assist devices. Computers in Biology and Medicine, 2014, 51, 128-139.	3.9	13
208	Standardized evaluation methodology and reference database for evaluating IVUS image segmentation. Computerized Medical Imaging and Graphics, 2014, 38, 70-90.	3.5	105
209	Modifications of the construction and voting mechanisms of the Random Forests Algorithm. Data and Knowledge Engineering, 2013, 87, 41-65.	2.1	30
210	A Glucose Model Based on Support Vector Regression for the Prediction of Hypoglycemic Events Under Free-Living Conditions. Diabetes Technology and Therapeutics, 2013, 15, 634-643.	2.4	55
211	EEG epileptic seizure detection using k-means clustering and marginal spectrum based on ensemble empirical mode decomposition. , 2013, , .		24
212	Hybrid Intravascular Imaging. Journal of the American College of Cardiology, 2013, 61, 1369-1378.	1.2	80
213	Automatic detection of freezing of gait events in patients with Parkinson's disease. Computer Methods and Programs in Biomedicine, 2013, 110, 12-26.	2.6	166
214	Detection of occlusal caries based on digital image processing. , 2013, , .		13
215	Short-term vs. long-term analysis of diabetes data: Application of machine learning and data mining techniques. , 2013, , .		8
216	A hybrid plaque characterization method using intravascular ultrasound images. Technology and Health Care, 2013, 21, 199-216.	0.5	8

#	Article	IF	Citations
217	Patient-specific computational modeling of subendothelial LDL accumulation in a stenosed right coronary artery: effect of hemodynamic and biological factors. American Journal of Physiology - Heart and Circulatory Physiology, 2013, 304, H1455-H1470.	1.5	42
218	SIFEM project: Semantic infostructure interlinking an open source finite element tool and libraries with a model repository for the multi-scale modelling of the inner-ear. , 2013, , .		0
219	A new methodology for accurate 3-dimensional coronary artery reconstruction using routine intravascular ultrasound and angiographic data: implications for widespread assessment of endothelial shear stress in humans. EuroIntervention, 2013, 9, 582-593.	1.4	67
220	In vivo assessment of the three-dimensional haemodynamic micro-environment following drug-eluting bioresorbable vascular scaffold implantation in a human coronary artery: fusion of frequency domain optical coherence tomography and angiography. EuroIntervention, 2013, 9, 890-890.	1.4	17
221	Two-dimensional simulations of wave propagation in healing long bones based on scanning acoustic microscopy images. , 2012, , .		2
222	A Gaussian Mixture Model to detect suction events in rotary blood pumps. , 2012, , .		6
223	Novel methodology for 3D reconstruction of carotid arteries and plaque characterization based upon magnetic resonance imaging carotid angiography data. Magnetic Resonance Imaging, 2012, 30, 1068-1082.	1.0	23
224	A multiscale and multiparametric approach for modeling the progression of oral cancer. BMC Medical Informatics and Decision Making, 2012, 12, 136.	1.5	33
225	An automated methodology for levodopa-induced dyskinesia: Assessment based on gyroscope and accelerometer signals. Artificial Intelligence in Medicine, 2012, 55, 127-135.	3.8	76
226	Spot addressing for microarray images structured in hexagonal grids. Computer Methods and Programs in Biomedicine, 2012, 106 , $1-13$.	2.6	12
227	A Novel Semiautomated Atherosclerotic Plaque Characterization Method Using Grayscale Intravascular Ultrasound Images: Comparison With Virtual Histology. IEEE Transactions on Information Technology in Biomedicine, 2012, 16, 391-400.	3.6	37
228	Assessment of Tremor Activity in the Parkinson's Disease Using a Set of Wearable Sensors. IEEE Transactions on Information Technology in Biomedicine, 2012, 16, 478-487.	3.6	183
229	Real-Time Driver's Stress Event Detection. IEEE Transactions on Intelligent Transportation Systems, 2012, 13, 221-234.	4.7	108
230	Exploring the effect of arterial geometry in a realistic 3D coronary arterial model., 2011,,.		0
231	Towards Driver's State Recognition on Real Driving Conditions. International Journal of Vehicular Technology, 2011, 2011, 1-14.	1.1	69
232	The Effect of Shear Stress on Neointimal Response Following Sirolimus- and Paclitaxel-Eluting Stent Implantation Compared With Bare-Metal Stents in Humans. JACC: Cardiovascular Interventions, 2010, 3, 1181-1189.	1.1	67
233	Automated Levodopa-induced dyskinesia assessment. , 2010, 2010, 2411-4.		30
234	Data analysis of Genome-Wide Association studies (GWAS) concerning rheumatoid arthritis and multiple sclerosis. , 2010, , .		0

#	Article	lF	CITATIONS
235	Quantification of the effect of Percutaneous Coronary Angioplasty on a stenosed Right Coronary Artery. , $2010, , .$		0
236	Semi unsupervised M-FISH chromosome image classification. , 2010, , .		4
237	A decision support tool for optimal Levodopa administration in Parkinson's disease., 2010,,.		4
238	DETRENDING OF HRV SIGNALS BASED ON THE BAYESIAN FRAMEWORK AND A NON STATIONARY MODEL FOR THE NON TREND COMPONENT. , 2010, , .		0
239	Velocity dispersion of guided waves propagating in a free gradient elastic plate: Application to cortical bone. Journal of the Acoustical Society of America, 2009, 125, 3414-3427.	0.5	87
240	INTREPID, a biosignal-based system for the monitoring of patients with anxiety disorders. , 2009, , .		4
241	An optimized sequential pattern matching methodology for sequence classification. Knowledge and Information Systems, 2009, 19, 249-264.	2.1	17
242	Improving the protein fold recognition accuracy of a reduced state-space hidden Markov model. Computers in Biology and Medicine, 2009, 39, 907-914.	3.9	18
243	An automated method for gridding and clustering-based segmentation of cDNA microarray images. Computerized Medical Imaging and Graphics, 2009, 33, 40-49.	3.5	29
244	Relationship of shear stress with in-stent restenosis: Bare metal stenting and the effect of brachytherapy. International Journal of Cardiology, 2009, 134, 25-32.	0.8	41
245	Data mining for blood glucose prediction and knowledge discovery in diabetic patients: The METABO diabetes modeling and management system., 2009, 2009, 5633-6.		51
246	Developing a genomic-based point-of-care diagnostic system for rheumatoid arthritis and multiple sclerosis., 2009, 2009, 827-30.		5
247	PERFORM: A platform for monitoring and management of chronic neurodegenerative diseases: The Parkinson and Amyotrophic Lateral Sclerosis case. , 2009, , .		8
248	A template-based method for the estimation of Event Related Potentials using the Bayesian linear model. , 2009, , .		0
249	Mining sequential patterns for protein fold recognition. Journal of Biomedical Informatics, 2008, 41, 165-179.	2.5	36
250	A region based decorrelation stretching method: Application to multispectral chromosome image classification. , 2008, , .		8
251	Point-of-care monitoring and diagnostics for autoimmune diseases. , 2008, , .		0
252	A sparse variational Bayesian approach for fMRI data analysis. , 2008, , .		3

#	Article	IF	Citations
253	An automated supervised method for the diagnosis of Alzheimer 4×2019 ; s disease based on fMRI data using weighted voting schemes. , 2008, , .		4
254	An automatic region based methodology for facial expression recognition. Conference Proceedings IEEE International Conference on Systems, Man, and Cybernetics, 2008, , .	0.0	25
255	Ultrasonic monitoring of bone fracture healing. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2008, 55, 1243-1255.	1.7	75
256	Automated fuzzy model generation through weight and fuzzification parameters $\mbox{\it kamp;\#x2019;}$ optimization. , 2008, , .		1
257	Systematic elicitation of sequence patterns associated with non-proline cis peptide bonds. , 2008, , .		0
258	Intelligent patient profiling for diagnosis, staging and treatment selection in colon cancer., 2008,,.		6
259	ECG Diagnosis Using Decision Support Systems. , 2008, , 744-754.		0
260	Region Based Segmentation and Classification of Multispectral Chromosome Images. Proceedings of the IEEE Symposium on Computer-Based Medical Systems, 2007, , .	0.0	12
261	A Time-Frequency Based Method for the Detection of Epileptic Seizures in EEG Recordings. Proceedings of the IEEE Symposium on Computer-Based Medical Systems, 2007, , .	0.0	11
262	Sequence-based protein structure prediction using a reduced state-space hidden Markov model. Computers in Biology and Medicine, 2007, 37, 1211-1224.	3.9	28
263	An Automated Method for Gridding in Microarray Images. , 2006, 2006, 5876-9.		6
264	Epileptic Spike Detection Using a Kalman Filter Based Approach. Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 2006, , .	0.5	1
265	A Watershed Based Segmentation Method for Multispectral Chromosome Images Classification. Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 2006, , .	0.5	2
266	An Automated Method for Gridding in Microarray Images. Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 2006, , .	0.5	0
267	A Comparison of Methodologies for Fuzzy Expert System Creation - Application to Arrhythmic Beat Classification. Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 2006, , .	0.5	0
268	The Effects of Phase Resetting Technique in Cardiac Models. Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 2006, , .	0.5	0
269	A method for 3D reconstruction of coronary arteries using biplane angiography and intravascular ultrasound images. Computerized Medical Imaging and Graphics, 2005, 29, 597-606.	3.5	88
270	An Automated Method for Lumen and Media–Adventitia Border Detection in a Sequence of IVUS Frames. IEEE Transactions on Information Technology in Biomedicine, 2004, 8, 131-141.	3.6	83

#	Article	IF	Citations
271	HYSTERESIS MODELING AND APPLICATIONS. , 2004, , .		1
272	MODELS FOR GENE REGULATORY NETWORKS: A REVERSE ENGINEERING APPROACH. , 2004, , .		0
273	AUTOMATED DIAGNOSIS AND QUANTIFICATION OF RHEUMATOID ARTHRITIS USING MRI., 2004, , .		O
274	IVUS Image Processing Methodologies. Advances in Bioinformatics and Biomedical Engineering Book Series, 0, , 36-54.	0.2	2
275	Computer-Aided Diagnosis of Cardiac Arrhythmias. , 0, , 305-313.		0
276	Computational Analysis of Proteins. , 0, , 227-256.		0