Nuno M Garcia

List of Publications by Year
in descending order

163	1,995	361413	345221
papers	citations	20 h-index	36 g-index

176	176	176	1926
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Improving Activity Recognition Accuracy in Ambient-Assisted Living Systems by Automated Feature Engineering. IEEE Access, 2017, 5, 5262-5280.	4.2	128
2	From Data Acquisition to Data Fusion: A Comprehensive Review and a Roadmap for the Identification of Activities of Daily Living Using Mobile Devices. Sensors, 2016, 16, 184.	3.8	123
3	Internet of Things Architectures, Technologies, Applications, Challenges, and Future Directions for Enhanced Living Environments and Healthcare Systems: A Review. Electronics (Switzerland), 2019, 8, 1081.	3.1	103
4	A Framework for Malicious Traffic Detection in IoT Healthcare Environment. Sensors, 2021, 21, 3025.	3.8	77
5	A Research on the Classification and Applicability of the Mobile Health Applications. Journal of Personalized Medicine, 2020, 10, 11.	2.5	69
6	Air Pollution Prediction with Multi-Modal Data and Deep Neural Networks. Remote Sensing, 2020, 12, 4142.	4.0	57
7	A Telemedicine Robot System for Assisted and Independent Living. Sensors, 2019, 19, 834.	3.8	51
8	Towards an accurate sleep apnea detection based on ECG signal: The quintessential of a wise feature selection. Applied Soft Computing Journal, 2019, 83, 105568.	7.2	49
9	Towards 5G-Enabled Self Adaptive Green and Reliable Communication in Intelligent Transportation System. IEEE Transactions on Intelligent Transportation Systems, 2021, 22, 5223-5231.	8.0	49
10	Classification techniques on computerized systems to predict and/or to detect Apnea: A systematic review. Computer Methods and Programs in Biomedicine, 2017, 140, 265-274.	4.7	46
11	Identification of activities of daily living through data fusion on motion and magnetic sensors embedded on mobile devices. Pervasive and Mobile Computing, 2018, 47, 78-93.	3.3	39
12	Data-based algorithms and models using diabetics real data for blood glucose and hypoglycaemia prediction â€“ A systematic literature review. Artificial Intelligence in Medicine, 2021, 118, 102120.	6.5	39
13	Pattern Recognition Techniques for the Identification of Activities of Daily Living Using a Mobile Device Accelerometer. Electronics (Switzerland), 2020, 9, 509.	3.1	33
14	A Two-Fold Machine Learning Approach to Prevent and Detect IoT Botnet Attacks. IEEE Access, 2021, 9, 163412-163430.	4.2	32
15	Towards Machine Learning Enabled Security Framework for IoT-based Healthcare. , 2019, , .		31
16	Validation Techniques for Sensor Data in Mobile Health Applications. Journal of Sensors, 2016, 2016, 1-9.	1.1	30
17	Clinical decision support systems for chronic diseases: A Systematic literature review. Computer Methods and Programs in Biomedicine, 2020, 195, 105565.	4.7	29
18	A Cost Analysis of Implementing a Blockchain Architecture in a Smart Grid Scenario Using Sidechains. Sensors, 2020, 20, 843.	3.8	29

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19	Approach for the Development of a Framework for the Identification of Activities of Daily Living Using Sensors in Mobile Devices. Sensors, 2018, 18, 640.	3.8	25
20	Version Reporting and Assessment Approaches for New and Updated Activity and Heart Rate Monitors. Sensors, 2019, 19, 1705.	3.8	25
21	Homogeneous Data Normalization and Deep Learning: A Case Study in Human Activity Classification. Future Internet, 2020, 12, 194.	3.8	23
22	Recognition of Activities of Daily Living and Environments Using Acoustic Sensors Embedded on Mobile Devices. Electronics (Switzerland), 2019, 8, 1499.	3.1	22
23	Prediction of Atrial Fibrillation using artificial intelligence on Electrocardiograms: A systematic review. Computer Science Review, 2021, 39, 100334.	15.3	22
24	Recognition of Activities of Daily Living Based on Environmental Analyses Using Audio Fingerprinting Techniques: A Systematic Review. Sensors, 2018, 18, 160.	3.8	21
25	Classifier Precision Analysis for Sleep Apnea Detection Using ECG Signals. IEEE Access, 2020, 8, 200477-200485.	4.2	21
26	Rural Healthcare IoT Architecture Based on Low-Energy LoRa. International Journal of Environmental Research and Public Health, 2021, 18, 7660.	2.6	21
27	Automation in Systematic, Scoping and Rapid Reviews by an NLP Toolkit: A Case Study in Enhanced Living Environments. Lecture Notes in Computer Science, 2019, , 1-18.	1.3	18
28	Android Library for Recognition of Activities of Daily Living: Implementation Considerations, Challenges, and Solutions. Open Bioinformatics Journal, 2018, 11, 61-88.	1.0	18
29	Pain Assessmentâ€“Can it be Done with a Computerised System? A Systematic Review and Meta-Analysis. International Journal of Environmental Research and Public Health, 2016, 13, 415.	2.6	17
30	Comparison of machine learning techniques for the identification of human activities from inertial sensors available in a mobile device after the application of data imputation techniques. Computers in Biology and Medicine, 2021, 135, 104638.	7.0	17
31	Sleep apnea detection using a feed-forward neural network on ECG signal. , 2016, , .		16
32	Is The Timed-Up and Go Test Feasible in Mobile Devices? A Systematic Review. Electronics (Switzerland), 2020, 9, 528.	3.1	16
33	Introduction to the AAL and ELE Systems. , 2017, , 1-16.		15
34	Mobile Applications for Training Plan Using Android Devices: A Systematic Review and a Taxonomy Proposal. Information (Switzerland), 2020, 11, 343.	2.9	15
35	Literature on Applied Machine Learning in Metagenomic Classification: A Scoping Review. Biology, 2020, 9, 453.	2.8	15
36	Enhanced Just-in-Time: A New Resource Reservation Protocol for Optical Burst Switching Networks. Proceedings - International Symposium on Computers and Communications, 2007, , .	0.0	14

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37	A review of thermal methods and technologies for diabetic foot assessment. Expert Review of Medical Devices, 2015, 12, 439-448.	2.8	14
38	Identification of Activities of Daily Living Using Sensors Available in off-the-shelf Mobile Devices: Research and Hypothesis. Advances in Intelligent Systems and Computing, 2016, , 121-130.	0.6	14
39	Brain Computer Interface Systems for Neurorobotics: Methods and Applications. BioMed Research International, 2017, 2017, 1-2.	1.9	14
40	Machine learning for the evaluation of the presence of heart disease. Procedia Computer Science, 2020, 177, 432-437.	2.0	14
41	Improving Human Activity Monitoring by Imputation of Missing Sensory Data: Experimental Study. Future Internet, 2020, 12, 155.	3.8	14
42	The Ethernet Frame Payload Size and Its Effect on IPv4 and IPv6 Traffic. , 2008, , .		13
43	Promotion of Healthy Nutrition and Physical Activity Lifestyles for Teenagers: A Systematic Literature Review of The Current Methodologies. Journal of Personalized Medicine, 2020, 10, 12.	2.5	13
44	Limitations of the Use of Mobile Devices and Smart Environments for the Monitoring of Ageing People. , 2018, , .		13
45	Mobile 5P-Medicine Approach for Cardiovascular Patients. Sensors, 2021, 21, 6986.	3.8	13
46	Accurate Range-Free Localization Algorithms Based on PSO for Wireless Sensor Networks. IEEE Access, 2021, 9, 149906-149924.	4.2	13
47	On the Performance of Shortest Path Routing Algorithms for Modeling and Simulation of Static Source Routed Networks -- an Extension to the Dijkstra Algorithm. , 2007, , .		12
48	Validation of a method for the estimation of energy expenditure during physical activity using a mobile device accelerometer. Journal of Ambient Intelligence and Smart Environments, 2018, 10, 315-326.	1.4	12
49	Measurement of Results of Functional Reach Test with Sensors: A Systematic Review. Electronics (Switzerland), 2020, 9, 1078.	3.1	12
50	Analysis of the Results of Heel-Rise Test with Sensors: A Systematic Review. Electronics (Switzerland), 2020, 9, 1154.	3.1	12
51	A Roadmap to the Design of a Personal Digital Life Coach. Advances in Intelligent Systems and Computing, 2016, , 21-27.	0.6	12
52	Machine Learning Approaches to Automated Medical Decision Support Systems. Advances in Computational Intelligence and Robotics Book Series, 2015, , 183-203.	0.4	12
53	Technological Solutions for Sign Language Recognition: A Scoping Review of Research Trends, Challenges, and Opportunities. IEEE Access, 2022, 10, 40979-40998.	4.2	12
54	PRICHAIN: A Partially Decentralized Implementation of UbiPri Middleware Using Blockchain. Sensors, 2019, 19, 4483.	3.8	11

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55	Promotion of Healthy Lifestyles to Teenagers with Mobile Devices: A Case Study in Portugal. Healthcare (Switzerland), 2020, 8, 315.	2.0	11
56	Activities of Daily Living and Environment Recognition Using Mobile Devices: A Comparative Study. Electronics (Switzerland), 2020, 9, 180.	3.1	11
57	An Experimental Study on the Validity and Reliability of a Smartphone Application to Acquire Temporal Variables during the Single Sit-to-Stand Test with Older Adults. Sensors, 2021, 21, 2050.	3.8	11
58	Experimental Study on Wound Area Measurement with Mobile Devices. Sensors, 2021, 21, 5762.	3.8	11
59	Acquisition of Multiple Physiological Parameters During Physical Exercise. International Journal of E-Health and Medical Communications, 2011, 2, 37-49.	1.6	10
60	ubiSleep: An ubiquitous sensor system for sleep monitoring. , 2016, , .		10
61	Real-time wireless UWB sensor network for person monitoring. , 2017, , .		10
62	Identification of Diseases Based on the Use of Inertial Sensors: A Systematic Review. Electronics (Switzerland), 2020, 9, 778.	3.1	10
63	Using Different Models of Machine Learning to Predict Attendance at Medical Appointments. Journal of Information Systems Engineering and Management, 2020, 5, em0122.	0.7	10
64	Aging at Work: A Review of Recent Trends and Future Directions. International Journal of Environmental Research and Public Health, 2020, 17, 7659.	2.6	9
65	E-Health. Advances in Electronic Government, Digital Divide, and Regional Development Book Series, 0, , 302-326.	0.2	9
66	TICE.Healthy: A perspective on medical information integration. , 2014, , .		8
67	AAL and ELE Platform Architecture. , 2017, , 171-209.		8
68	How to Get a Badge? Unlock Your Mind : Motivation through Student Empowerment. , 2019, , .		8
69	Prediction of Attendance at Medical Appointments Based on Machine Learning. , 2020, , .		8
70	Machine Learning Techniques with ECG and EEG Data: An Exploratory Study. Computers, 2020, 9, 55.	3.3	8
71	A review of frameworks on continuous data acquisition for e-Health and m-Health. , 2019, , .		7
72	Circular Economy for Clothes Using Web and Mobile Technologiesâ€"A Systematic Review and a Taxonomy Proposal. Information (Switzerland), 2020, 11, 161.	2.9	7

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73	Towards Detecting Pneumonia Progression in COVID-19 Patients by Monitoring Sleep Disturbance Using Data Streams of Non-Invasive Sensor Networks. Sensors, 2021, 21, 3030.	3.8	7
74	Keeping Children Safe Online With Limited Resources: Analyzing What is Seen and Heard. IEEE Access, 2021, 9, 132723-132732.	4.2	7
75	Mobile Applications for the Promotion and Support of Healthy Nutrition and Physical Activity Habits: A Systematic Review, Extraction of Features and Taxonomy Proposal. Open Bioinformatics Journal, 2019, 12, 50-71.	1.0	7
76	Identification of Daily Activites and Environments Based on the AdaBoost Method Using Mobile Device Data: A Systematic Review. Electronics (Switzerland), 2020, 9, 192.	3.1	7
77	Wound Area Assessment using Mobile Application. , 2015, , .		7
78	Big data reduction using RBFNN: A predictive model for ECG waveform for eHealth platform integration. , 2014, , .		6
79	Keyed User Datagram Protocol: Concepts and Operation of an Almost Reliable Connectionless Transport Protocol. IEEE Access, 2019, 7, 18951-18963.	4.2	6
80	Agile Scrum Scaling Practices for Large Scale Software Development. , 2019, , .		6
81	Activities of daily living with motion: A dataset with accelerometer, magnetometer and gyroscope data from mobile devices. Data in Brief, 2020, 33, 106628.	1.0	6
82	Detection of diseases based on Electrocardiography and Electroencephalography signals embedded in different devices: An exploratory study. Brazilian Journal of Development, 2020, 6, 27212-27231.	0.1	6
83	A New Architecture for Optical Burst Switched Networks Based on a Common Control Channel. , 0, , .		5
84	A new architectural approach for optical burst switching networks based on a common control channel. Optical Switching and Networking, 2007, 4, 173-188.	2.0	5
85	Lightweight portable sensors for health care. , 2010, , .		5
86	Matching Requirements for Ambient Assisted Living and Enhanced Living Environments with Networking Technologies. , 2017, , 91-121.		5
87	Limitations of Energy Expenditure Calculation Based on a Mobile Phone Accelerometer. , 2017, , .		5
88	A Systematic Investigation of Models for Color Image Processing in Wound Size Estimation. Computers, 2021, 10, 43.	3.3	5
89	Mobile Applications for the Promotion and Support of Healthy Nutrition and Physical Activity Habits: A Systematic Review, Extraction of Features and Taxonomy Proposal. Open Bioinformatics Journal, 2019, 13, 50-71.	1.0	5
90	Towards a Fully Automated Bracelet for Health Emergency Solution. , 2018, , .		5

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91	Ethical Issues in Software Requirements Engineering. , 2022, 1, 31-52.		5
92	Electrocardiography, electromyography, and accelerometry signals collected with BITalino while swimming: Device assembly and preliminary results. , 2016, , .		4
93	CoviHealth. , 2019, , .		4
94	A Brief Review on the Sensor Measurement Solutions for the Ten-Meter Walk Test. Computers, 2021, 10, 49.	3.3	4
95	Mobile application for Inclusive Tourism. , 2021, , .		4
96	Multi-Sensor Mobile Platform for the Recognition of Activities of Daily Living and their Environments based on Artificial Neural Networks. , 2018, , .		4
97	Measurement of the Reaction Time in the 30-S Chair Stand Test using the Accelerometer Sensor Available in off-the-Shelf Mobile Devices. , 2018, , .		4
98	Assessment of Burst Assembly Algorithms using Real IPv4 Data Traces. , 2006, , .		3
99	Performance of Optical Burst Switched Networks for Grid Applications. , 2007, , .		3
100	Context-awareness for mobility management: A systems survey for healthcare monitoring. , 2011, , .		3
101	Scaffolding students on connecting STEM and interaction design: Case study in Tallinn University Summer School. , 2018, , .		3
102	Smartphone-based automatic measurement of the results of the Timed-Up and Go test. , 2019, , .		3
103	Data acquisition of timed-up and go test with older adults: accelerometer, magnetometer, electrocardiography and electroencephalography sensorsâ€™ data. Data in Brief, 2020, 32, 106306.	1.0	3
104	A Review on the Artificial Intelligence Algorithms for the Recognition of Activities of Daily Living Using Sensors in Mobile Devices. Advances in Intelligent Systems and Computing, 2020, , 685-713.	0.6	3
105	Machine Learning Approaches to Automated Medical Decision Support Systems. , 0, , 1653-1673.		3
106	Calculation of Jump Flight Time using a Mobile Device. , 2015, , .		3
107	Hypoglycaemia Prediction Models With Auto Explanation. IEEE Access, 2022, 10, 57930-57941.	4.2	3
108	Daily motionless activities: A dataset with accelerometer, magnetometer, gyroscope, environment, and GPS data. Scientific Data, 2022, 9, 105.	5.3	3

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109	Measuring and Profiling IP Traffic. , 2007, , .		2
110	Development of a low power wireless network to support elderly people based on eZ430-Chronos and SimpliciTI. , 2014, , .		2
111	QoS performance analysis of non-slotted and slotted optical burst switched networks. , 2015, , .		2
112	Elderly mobility analysis during Timed Up and Go test using biosignals. , 2016, , .		2
113	Cloud computing as technological solutions for higher education institutions: Adoption readiness assessment model: Reseach in-progress. , 2017, , .		2
114	Identification of Activities of Daily Living through Artificial Intelligence: an accelerometry-based approach. Procedia Computer Science, 2020, 175, 308-314.	2.0	2
115	Identification of Warning Situations in Road Using Cloud Computing Technologies and Sensors Available in Mobile Devices: A Systematic Review. Electronics (Switzerland), 2020, 9, 416.	3.1	2
116	Towards QoE Optimization in Medical Multimedia Services for Decentralized IoT-based Applications. , 2020, , .		2
117	Smartphones as Multipurpose Intelligent Objects for AAL: Two Case Studies. Lecture Notes of the Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering, 2017, , 125-134.	0.3	2
118	Artificial Neural Learning Based on Big Data Process for eHealth Applications. Advances in Web Technologies and Engineering Book Series, 2015, , 291-306.	0.4	2
119	Framework for the Recognition of Activities of Daily Living and Their Environments in the Development of a Personal Digital Life Coach. , 2018, , .		2
120	Recognition of Activities of Daily Living Based on a Mobile Data Source Framework. Studies in Computational Intelligence, 2021, , 321-335.	0.9	2
121	Importance of Personalized Health-Care Models: A Case Study in Activity Recognition. Studies in Health Technology and Informatics, 2018, 249, 185-188.	0.3	2
122	A New Architecture for Optical Burst Switching Networks Based on Cooperative Control. , 2009, , .		1
123	Algorithms for Extraction and Visualization of Metadata from Domain Name Server Records. , 2010, , .		1
124	Study on the performance of slotted and non-slotted Optical Burst Switched networks. , 2013, , .		1
125	Cloud Based Smart Living System Prototype. , 2017, , 147-170.		1
126	End-Users Testing of Enhanced Living Environment Platform and Services. , 2017, , 427-440.		1

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127	Identification of Real and Imaginary Movements in EEG Using Machine Learning Models. IFMBE Proceedings, 2020, , 469-474.	0.3	1
128	PRIPRO:Solution for user profile control and management based on data privacy. , 2020, , .		1
129	Approach for the Development of a System for COVID-19 Preliminary Test. Lecture Notes of the Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering, 2021, , 117-124.	0.3	1
130	Computerised Sentiment Analysis on Social Networks. Two Case Studies: FIFA World Cup 2018 and Cristiano Ronaldo Joining Juventus. Advances in Intelligent Systems and Computing, 2021, , 126-140.	0.6	1
131	Indoor and outdoor environmental data: A dataset with acoustic data acquired by the microphone embedded on mobile devices. Data in Brief, 2021, 36, 107051.	1.0	1
132	6LoWPAN: Interconnecting Objects with IPv6. , 2013, , 485-510.		1
133	An Off-the-Shelf Platform for Automatic and Interactive Text Messaging Using Short Message Service. Lecture Notes in Computer Science, 2014, , 489-500.	1.3	1
134	TICE.Healthy: IntegraÃ§Ã£o de soluÃ§Ãµes TIC para a "SaÃºde e Qualidade de Vida". RISTI - Revista Iberica De Sistemas E Tecnologias De Informacao, 2014, , .	0.2	1
135	Cloud Adoption Readiness Assessment Framework for Small and Medium Enterprises in Developing Economies - Evidential Reasoning Approach. , 2018, , .		1
136	Is the Overfitting in a Neural Network a Reliable Model for the Recognition of Activities of Daily Living?. , 2019, , .		1
137	Control and Prevention of Personal Stress. , 2020, , .		1
138	Personal Digital Life Coach for Physical Therapy. , 2020, , .		1
139	Artificial Neural Learning Based on Big Data Process for eHealth Applications. , 0, , 1524-1540.		1
140	Simulation in Medical School Education. Studies in Health Technology and Informatics, 2017, 242, 1034-1036.	0.3	1
141	Monitoring of Cardiovascular Diseases: An Analysis of the Mobile Applications Available in the Google Play Store. Electronics (Switzerland), 2022, 11, 1881.	3.1	1
142	Optical Communications Research Activities at COM RD1 Siemens S.A.. Fiber and Integrated Optics, 2005, 24, 395-410.	2.5	0
143	Performance assessment of optical burst switching networks based on a common control channel with distributed control. , 2009, , .		0
144	The effect of time slot parameters on slotted optical burst switched networks. , 2011, , .		0

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145	Metabolic.Care: A hardware and software platform to monitor and assess diabetic foot condition. , 2014, , .		0
146	A validated multidisciplinary study on the assessment of SMS messages as a mean to improve self-efficacy in university students. , 2014, , .		0
147	Energy-Harvesting Methods for Medical Devices. , 2014, , 327-356.		0
148	A data fusion model to evaluate computerized pain diaries on anxiety and depression assessment. , 2016, , .		0
149	Contribution of biosignals for emotional analysis on image perception. , 2016, , .		0
150	Cloud-Oriented Domain for AAL. , 2017, , 271-286.		0
151	Mobile Device Approach for the Measurement of Jump Flight Time. Lecture Notes in Computer Science, 2021, , 372-375.	1.3	0
152	CoviHealth: A Pilot Study with Teenagers in Schools of Centre of Portugal. Lecture Notes of the Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering, 2021, , 139-147.	0.3	0
153	Issues on Performance Assessment of Optical Burst Switched Networks: Burst Loss Versus Packet Loss Metrics. Lecture Notes in Computer Science, 2006, , 778-786.	1.3	0
154	Analyzing the Academic Approaches to Learning of Portuguese College Students Through the Psychometric Study of a Questionnaire. Communications in Computer and Information Science, 2016, , 365-375.	0.5	0
155	Metabolic.Care: A Novel Solution Based on a Thermography for Detection of Diabetic Foot. Advances in Intelligent Systems and Computing, 2016, , 113-119.	0.6	0
156	Cloud Suitability Assessment Method for Application Software. , 2017, , .		0
157	TV White Space Spectrum Administration. , 2018, , 97-117.		0
158	Breast Skin Temperature Evaluation in Lactating and Non-lactating Women by Thermography: An Exploratory Study. Lecture Notes in Computational Vision and Biomechanics, 2019, , 317-322.	0.5	0
159	Mobile Applications Dedicated for Cardiac Patients: Research of Available Resources. Intelligent Systems Reference Library, 2020, , 107-119.	1.2	0
160	Diabetes Disease through Machine Learning: A comparative study. , 2020, , .		0
161	Teenagers from Centre of Portugal: Nutrition and Physical Activity Data. , 2020, , .		0
162	Acquisition of Multiple Physiological Parameters During Physical Exercise. , 0, , 102-113.		0

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163	Can the Eight Hop Test Be Measured with Sensors? A Systematic Review. Sensors, 2022, 22, 3582.	3.8	0