Mohamed Elgendi

List of Publications by Citations

83 papers	**2,295** citations
24 h-index	**46** g-index
92 ext. papers	**3,274** ext. citations
4.7 avg, IF	**6.07** L-index

#	Paper	IF	Citations
83	On the analysis of fingertip photoplethysmogram signals. *Current Cardiology Reviews*, **2012**, 8, 14-25	2.4	538
82	The use of photoplethysmography for assessing hypertension. *Npj Digital Medicine*, **2019**, 2, 60	15.7	147
81	Revisiting QRS detection methodologies for portable, wearable, battery-operated, and wireless ECG systems. *PLoS ONE*, **2014**, 9, e84018	3.7	131
80	Fast QRS detection with an optimized knowledge-based method: evaluation on 11 standard ECG databases. *PLoS ONE*, **2013**, 8, e73557	3.7	123
79	Optimal Signal Quality Index for Photoplethysmogram Signals. *Bioengineering*, **2016**, 3,	5.3	96
78	Systolic peak detection in acceleration photoplethysmograms measured from emergency responders in tropical conditions. *PLoS ONE*, **2013**, 8, e76585	3.7	81
77	Photoplethysmography and Deep Learning: Enhancing Hypertension Risk Stratification. *Biosensors*, **2018**, 8,	5.9	58
76	Efficient ECG Compression and QRS Detection for E-Health Applications. *Scientific Reports*, **2017**, 7, 459	4.9	51
75	Detection of a and b waves in the acceleration photoplethysmogram. *BioMedical Engineering OnLine*, **2014**, 13, 139	4.1	51
74	Hypertension Assessment via ECG and PPG Signals: An Evaluation Using MIMIC Database. *Diagnostics*, **2018**, 8,	3.8	49
73	A new, short-recorded photoplethysmogram dataset for blood pressure monitoring in China. *Scientific Data*, **2018**, 5, 180020	8.2	47
72	An optimal filter for short photoplethysmogram signals. *Scientific Data*, **2018**, 5, 180076	8.2	45
71	Detection of c, d, and e waves in the acceleration photoplethysmogram. *Computer Methods and Programs in Biomedicine*, **2014**, 117, 125-36	6.9	44
70	Can Photoplethysmography Replace Arterial Blood Pressure in the Assessment of Blood Pressure?. *Journal of Clinical Medicine*, **2018**, 7,	5.1	38
69	Cuffless Single-Site Photoplethysmography for Blood Pressure Monitoring. *Journal of Clinical Medicine*, **2020**, 9,	5.1	36
68	Toward Generating More Diagnostic Features from Photoplethysmogram Waveforms. *Diseases (Basel, Switzerland)*, **2018**, 6,	4.4	36
67	Hypertension Assessment Using Photoplethysmography: A Risk Stratification Approach. *Journal of Clinical Medicine*, **2018**, 8,	5.1	32

66	Multi-Site Photoplethysmography Technology for Blood Pressure Assessment: Challenges and Recommendations. *Journal of Clinical Medicine*, **2019**, 8,	5.1	30
65	Fast T Wave Detection Calibrated by Clinical Knowledge with Annotation of P and T Waves. *Sensors*, **2015**, 15, 17693-714	3.8	30
64	A hybrid feature selection approach for the early diagnosis of Alzheimer's disease. *Journal of Neural Engineering*, **2015**, 12, 016018	5	29
63	Robust detection of epileptic seizures based on L1-penalized robust regression of EEG signals. *Expert Systems With Applications*, **2018**, 104, 153-167	7.8	27
62	Standard terminologies for photoplethysmogram signals. *Current Cardiology Reviews*, **2012**, 8, 215-9	2.4	27
61	How Effective Is Pulse Arrival Time for Evaluating Blood Pressure? Challenges and Recommendations from a Study Using the MIMIC Database. *Journal of Clinical Medicine*, **2019**, 8,	5.1	25
60	Subliminal Priming-State of the Art and Future Perspectives. *Behavioral Sciences (Basel, Switzerland)*, **2018**, 8,	2.3	25
59	Improving Remote Health Monitoring: A Low-Complexity ECG Compression Approach. *Diagnostics*, **2018**, 8,	3.8	24
58	A Proof-of-Concept Study: Simple and Effective Detection of P and T Waves in Arrhythmic ECG Signals. *Bioengineering*, **2016**, 3,	5.3	24
57	Optimization of EEG frequency bands for improved diagnosis of Alzheimer disease. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2011**, 2011, 6087-91	0.9	22
56	Frequency analysis of photoplethysmogram and its derivatives. *Computer Methods and Programs in Biomedicine*, **2015**, 122, 503-12	6.9	19
55	Assessing Anxiety Disorders Using Wearable Devices: Challenges and Future Directions. *Brain Sciences*, **2019**, 9,	3.4	18
54	Diagnosis of Alzheimer's disease from EEG by means of synchrony measures in optimized frequency bands. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2012**, 2012, 4266-70	0.9	18
53	R wave detection using Coiflets wavelets **2009**,		17
52	A New Recommender System for 3D E-Commerce: An EEG Based Approach. *Journal of Advanced Management Science*, **2013**, 1, 61-65	2.2	17
51	Spectral analysis of the heart sounds in children with and without pulmonary artery hypertension. *International Journal of Cardiology*, **2014**, 173, 92-9	3.2	15
50	A Robust QRS Complex Detection Algorithm Using Dynamic Thresholds **2008**,		15
49	A Six-Step Framework on Biomedical Signal Analysis for Tackling Noncommunicable Diseases: Current and Future Perspectives. *JMIR Biomedical Engineering*, **2016**, 1, e1	1.3	15

30	Effect of Subliminal Lexical Priming on the Subjective Perception of Images: A Machine Learning Approach. *PLoS ONE*, **2016**, 11, e0148332	3.7	8
29	Active right atrial emptying fraction predicts reduced survival and increased adverse events in childhood pulmonary arterial hypertension. *International Journal of Cardiology*, **2018**, 271, 306-311	3.2	8
28	Acoustic diagnosis of pulmonary hypertension: automated speech- recognition-inspired classification algorithm outperforms physicians. *Scientific Reports*, **2016**, 6, 33182	4.9	7
27	The Voice of the Heart: Vowel-Like Sound in Pulmonary Artery Hypertension. *Diseases (Basel, Switzerland)*, **2018**, 6,	4.4	6
26	Towards Investigating Global Warming Impact on Human Health Using Derivatives of Photoplethysmogram Signals. *International Journal of Environmental Research and Public Health*, **2015**, 12, 12776-91	4.6	6
25	Hyperoxia Reduces Oxygen Consumption in Children with Pulmonary Hypertension. *Pediatric Cardiology*, **2017**, 38, 959-964	2.1	5
24	Scientists need data visualization training. *Nature Biotechnology*, **2017**, 35, 990-991	44.5	5
23	Merging Digital Medicine and Economics: Two Moving Averages Unlock Biosignals for Better Health. *Diseases (Basel, Switzerland)*, **2018**, 6,	4.4	5
22	Differential effects of the blood pressure state on pulse rate variability and heart rate variability in critically ill patients. *Npj Digital Medicine*, **2021**, 4, 82	15.7	5
21	Temporal correction of detected R-peaks in ECG signals: A crucial step to improve QRS detection algorithms. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2015**, 2015, 522-5	0.9	4
20	Assessment of Hypertension Using Clinical Electrocardiogram Features: A First-Ever Review. *Frontiers in Medicine*, **2020**, 7, 583331	4.9	4
19	From Auditory and Visual to Immersive Neurofeedback: Application to Diagnosis of Alzheimers Disease **2014**, 63-97		4
18	PPGSynth: An Innovative Toolbox for Synthesizing Regular and Irregular Photoplethysmography Waveforms. *Frontiers in Medicine*, **2020**, 7, 597774	4.9	3
17	Recognition of T waves in ECG signals **2009**,		3
16	P wave demarcation in electrocardiogram **2009**,		3
15	The Evaluation of Deep Neural Networks and X-Ray as a Practical Alternative for Diagnosis and Management of COVID-19		3
14	Impact of Data Transformation: An ECG Heartbeat Classification Approach. *Frontiers in Digital Health*, **2020**, 2, 610956	2.3	2
13	Cooperative multicasting based on superposition and layered coding. *IET Communications*, **2014**, 8, 267-277	2

12	On the effect of subliminal priming on subjective perception of images: a machine learning approach. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2014**, 2014, 5438-41	0.9	2
11	Applying the APG to measure Heart Rate Variability **2010**,		2
10	A pilot study: Can heart rate variability (HRV) be determined using short-term photoplethysmograms?. *F1000Research*, **2016**, 5, 2354	3.6	2
9	Real-Time Wireless Sonification of Brain Signals **2013**, 175-181		2
8	Measurement of Oxygen Consumption in Critically Ill Children: Breath-by-Breath Method vs Mass Spectrometry. *American Journal of Critical Care*, **2016**, 25, 243-8	1.7	2
7	Classification of blood pressure in critically ill patients using photoplethysmography and machine learning. *Computer Methods and Programs in Biomedicine*, **2021**, 208, 106222	6.9	2
6	Ethnic disparities in publicly-available pulse oximetry databases. *Communications Medicine*, **2022**, 2,		2
5	High performance EEG feature extraction for fast epileptic seizure detection **2017**,		1
4	The Striking Need for Age Diverse Pulse Oximeter Databases.. *Frontiers in Medicine*, **2021**, 8, 782422	4.9	1
3	Machine Learning Revealed New Correlates of Chronic Pelvic Pain in Women. *Frontiers in Digital Health*, **2020**, 2, 600604	2.3	0
2	Robust Reconstruction of Electrocardiogram Using Photoplethysmography: A Subject-Based Model.. *Frontiers in Physiology*, **2022**, 13, 859763	4.6	0
1	Preliminary study for localizing c, d and e waves in photoplethysmogram signals. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2014**, 2014, 62-5	0.9	