Ana L N Fred

List of Publications by Year
in descending order

115 papers	3,239 citations	489802 18 h-index	232693 48 g-index
126 all docs	126 docs citations	126 times ranked	3258 citing authors

#	Article	IF	Citations
1	EmotiphAI: a biocybernetic engine for real-time biosignals acquisition in a collective setting. Neural Computing and Applications, 2023, 35, 5721-5736.	3.2	2
2	Impact of sampling rate and interpolation on photoplethysmography and electrodermal activity signals' waveform morphology and feature extraction. Neural Computing and Applications, 2023, 35, 5661-5677.	3.2	10
3	Automatic detection of cyclic alternating pattern. Neural Computing and Applications, 2022, 34, 11097-11107.	3.2	17
4	A dissimilarity-based approach to automatic classification of biosignal modalities. Applied Soft Computing Journal, 2022, 115, 108203.	4.1	1
5	Mobile Applications for Epilepsy: Where Are We? Where Should We Go? A Systematic Review. Signals, 2022, 3, 40-65.	1.2	4
6	A Low-Complexity R-peak Detection Algorithm with Adaptive Thresholding for Wearable Devices. , 2021, , .		6
7	Smartphone-based Content Annotation for Ground Truth Collection in Affective Computing. , 2021, , .		3
8	Neuroorganoleptics: Organoleptic Testing Based on Psychophysiological Sensing. Foods, 2021, 10, 1974.	1.9	2
9	ECG Biometrics Using Deep Learning and Relative Score Threshold Classification. Sensors, 2020, 20, 4078.	2.1	26
10	Morphological autoencoders for apnea detection in respiratory gating radiotherapy. Computer Methods and Programs in Biomedicine, 2020, 195, 105675.	2.6	1
11	Emotion Assessment Using Feature Fusion and Decision Fusion Classification Based on Physiological Data: Are We There Yet?. Sensors, 2020, 20, 4723.	2.1	36
12	ScientIST: Biomedical Engineering Experiments Supported by Mobile Devices, Cloud and IoT. Signals, 2020, 1, 110-120.	1.2	3
13	A Wearable System for Electrodermal Activity Data Acquisition in Collective Experience Assessment. , 2020, , .		3
14	R-peak Detector Benchmarking using FieldWiz Device and Physionet Databases. , 2020, , .		0
15	Benchmarking of the BITalino biomedical toolkit against an established gold standard. Healthcare Technology Letters, 2019, 6, 32-36.	1.9	61
16	Positive and Negative Evidence Accumulation Clustering for Sensor Fusion: An Application to Heartbeat Clustering. Sensors, 2019, 19, 4635.	2.1	8
17	A Review, Current Challenges, and Future Possibilities on Emotion Recognition Using Machine Learning and Physiological Signals. IEEE Access, 2019, 7, 140990-141020.	2.6	138
18	Biosignal-Based Multimodal Emotion Recognition in a Valence-Arousal Affective Framework Applied to Immersive Video Visualization. , 2019, 2019, 3577-3583.		11

#	Article	IF	Citations
19	Towards Continuous User Recognition by Exploring Physiological Multimodality: An Electrocardiogram (ECG) and Blood Volume Pulse (BVP) Approach. , 2018, , .		3
20	Real-Time Pervasive Monitoring System for Ambulatory Patients. , 2018, , .		0
21	Smart-Wearables and Heart-Rate Assessment Accuracy. , 2018, , .		3
22	Automatic Detection of a Phases for CAP Classification. , 2018, , .		8
23	Discrimination of Alzheimerâ€™s Disease using longitudinal information. Data Mining and Knowledge Discovery, 2017, 31, 1006-1030.	2.4	3
24	Experimental characterization and analysis of the BITalino platforms against a reference device. , 2017, 2017, 2418-2421.		21
25	Context-Aware Person Re-Identification in the Wild Via Fusion of Gait and Anthropometric Features. , 2017, , .		14
26	Evaluating Template Uniqueness in ECG Biometrics. Lecture Notes in Electrical Engineering, 2016, , 111-123.	0.3	9
27	Unsupervised Analysis of Morphological ECG Features for Attention Detection. Studies in Computational Intelligence, 2016, , 437-453.	0.7	6
28	Efficient Evidence Accumulation Clustering for Large Datasets. , 2016, , .		1
29	Generic Biometry Algorithm Based on Signal Morphology Information: Application in the Electrocardiogram Signal. Advances in Intelligent Systems and Computing, 2015, , 301-310.	0.5	6
30	Off-the-person electrocardiography: performance assessment and clinical correlation. Health and Technology, 2015, 4, 309-318.	2.1	42
31	Probabilistic consensus clustering using evidence accumulation. Machine Learning, 2015, 98, 331-357.	3.4	34
32	Consensus of Clusterings Based on High-Order Dissimilarities. , 2015, , 313-351.		3
33	Semi-Supervised Consensus Clustering for ECG Pathology Classification. Lecture Notes in Computer Science, 2015, , 150-164.	1.0	4
34	CardioWheel: ECG Biometrics on the Steering Wheel. Lecture Notes in Computer Science, 2015, , 267-270.	1.0	20
35	A MAP Approach to Evidence Accumulation Clustering. Advances in Intelligent Systems and Computing, 2015, , 85-100.	0.5	4
36	Introducing Negative Evidence in Ensemble Clustering Application in Automatic ECG Analysis. Lecture Notes in Computer Science, 2015, , 54-69.	1.0	0

#	Article	IF	Citations
37	Diagnosing Alzheimerâ€™s Disease: Automatic Extraction and Selection of Coherent Regions in FDG-PET Images. Communications in Computer and Information Science, 2015, , 101-112.	0.4	0
38	Spectral and Time Domain Parameters for The Classification of Atrial Fibrillation. , 2015, , .		1
39	Identifying regions of interest for discriminating Alzheimer's disease from mild cognitive impairment. , 2014, , .		5
40	Constraint acquisition methods for data clustering. Intelligent Data Analysis, 2014, 18, S47-S64.	0.4	1
41	Performance Comparison of Low-cost Hardware Platforms Targeting Physiological Computing Applications. Procedia Technology, 2014, 17, 399-406.	1.1	18
42	Biosignals for Everyone. IEEE Pervasive Computing, 2014, 13, 64-71.	1.1	63
43	HiMotion: a new research resource for the study of behavior, cognition, and emotion. Multimedia Tools and Applications, 2014, 73, 345-375.	2.6	8
44	BIT: Biosignal Igniter Toolkit. Computer Methods and Programs in Biomedicine, 2014, 115, 20-32.	2.6	23
45	ECG biometrics: A template selection approach. , 2014, , .		3
46	Harnessing the Power of Biosignals. Computer, 2014, 47, 74-77.	1.2	3
47	Check Your Biosignals Here: A new dataset for off-the-person ECG biometrics. Computer Methods and Programs in Biomedicine, 2014, 113, 503-514.	2.6	82
48	A web-based platform for biosignal visualization and annotation. Multimedia Tools and Applications, 2014, 70, 433-460.	2.6	10
49	Evaluation of a Context-Aware Application for Mobile Robot Control Mediated by Physiological Data: The ToBITas Case Study. Lecture Notes in Computer Science, 2014, , 147-154.	1.0	3
50	Learning Similarities by Accumulating Evidence in a Probabilistic Way. Lecture Notes in Computer Science, 2014, , 596-603.	1.0	0
51	Paper-Based Inkjet Electrodes. Lecture Notes in Computer Science, 2014, , 59-70.	1.0	3
52	Feature Extraction in Pet Images for the Diagnosis of Alzheimerâ€™s Disease. , 2014, , .		0
53	Novel fiducial and nonâ€fiducial approaches to electrocardiogramâ€based biometric systems. IET Biometrics, 2013, 2, 64-75.	1.6	65
54	A Unifying Approach to ECG Biometric Recognition Using the Wavelet Transform. Lecture Notes in Computer Science, 2013, , 53-62.	1.0	7

#	Article	IF	Citations
55	Consensus Clustering Using Partial Evidence Accumulation. Lecture Notes in Computer Science, 2013, , 69-78.	1.0	6
56	Finger ECG signal for user authentication: Usability and performance. , 2013, , .		58
57	Learning Similarities from Examples Under the Evidence Accumulation Clustering Paradigm. , 2013, , 85-117.		7
58	Adaptive Evidence Accumulation Clustering Using the Confidence of the Objects' Assignments. Lecture Notes in Computer Science, 2013, , 70-87.	1.0	1
59	Towards the Detection of Deception in Interactive Multimedia Environments. Lecture Notes in Computer Science, 2013, , 65-76.	1.0	1
60	Consensus Clustering with Robust Evidence Accumulation. Lecture Notes in Computer Science, 2013, , 307-320.	1.0	6
61	Comparative Study of Medical-grade and Off-the-Person ECG Systems. , 2013, , .		2
62	Dominant Set Approach to ECG Biometrics. Lecture Notes in Computer Science, 2013, , 535-542.	1.0	0
63	Off-the-Person Electrocardiography. , 2013, , .		2
64	Dissimilarity Increments Distribution in the Evidence Accumulation Clustering Framework. Lecture Notes in Computer Science, 2013, , 535-542.	1.0	0
65	Clustering Algorithm for Human Behavior Recognition Based on Biosignal Analysis. , 2013, , 212-224.		0
66	Daily wind power profiles determination using clustering algorithms. , 2012, , .		4
67	Feature extraction for psychophysiological load assessment in unconstrained scenarios. , 2012, 2012, 4784-7.		5
68	ECG-based biometrics: A real time classification approach. , 2012, , .		21
69	Mode Seeking Clustering by KNN and Mean Shift Evaluated. Lecture Notes in Computer Science, 2012, , 51-59.	1.0	9
70	Electrodermal response propagation time as a potential psychophysiological marker. , 2012, 2012, 6756-9.		4
71	In-vehicle driver recognition based on hand ECG signals. , 2012, , .		25
72	Statistical modeling of dissimilarity increments for d-dimensional data: Application in partitional clustering. Pattern Recognition, 2012, 45, 3061-3071.	5.1	17

#	Article	IF	Citations
73	k-Nearest Neighbor Classification Using Dissimilarity Increments. Lecture Notes in Computer Science, 2012, , 27-33.	1.0	3
74	EXPERIMENTAL APPARATUS FOR FINGER ECG BIOMETRICS. , 2012, , .		0
75	Unveiling the Biometric Potential of Finger-Based ECG Signals. Computational Intelligence and Neuroscience, 2011, 2011, 1-8.	1.1	373
76	Average Cluster Consistency for Cluster Ensemble Selection. Communications in Computer and Information Science, 2011, , 133-148.	0.4	2
77	Study and evaluation of a single differential sensor design based on electro-textile electrodes for ECG biometrics applications. , 2011, , .		30
78	Agents and Artificial Intelligence. Communications in Computer and Information Science, 2011, , .	0.4	1
79	Multimodal biosignal sensor data handling for emotion recognition. , 2011, , .		41
80	On the Distribution of Dissimilarity Increments. Lecture Notes in Computer Science, 2011, , 192-199.	1.0	3
81	Hierarchical Clustering with High Order Dissimilarities. Lecture Notes in Computer Science, 2011, , 280-293.	1.0	5
82	A Generative Dyadic Aspect Model for Evidence Accumulation Clustering. Lecture Notes in Computer Science, 2011, , 104-116.	1.0	4
83	Clustering Data with Temporal Evolution: Application to Electrophysiological Signals. Communications in Computer and Information Science, 2011, , 101-115.	0.4	2
84	A Study of Embedding Methods under the Evidence Accumulation Framework. Lecture Notes in Computer Science, 2011, , 290-305.	1.0	1
85	One-Lead ECG-based Personal Identification Using Ziv-Merhav Cross Parsing. , 2010, , .		51
86	Automatic K-complex detection using Hjorth parameters and fuzzy decision. , 2010, , .		9
87	On Consensus Clustering Validation. Lecture Notes in Computer Science, 2010, , 385-394.	1.0	3
88	On the Scalability of Evidence Accumulation Clustering. , 2010, , .		6
89	Pairwise Probabilistic Clustering Using Evidence Accumulation. Lecture Notes in Computer Science, 2010, , 395-404.	1.0	12
90	Towards the Development of a Thyroid Ultrasound Biometric Scheme Based on Tissue Echo-morphological Features. Communications in Computer and Information Science, 2010, , 286-298.	0.4	4

#	Article	IF	Citations
91	Cluster validation using a probabilistic attributed graph. , 2008, , .		6
92	Uncertainty based classification fusion - a soft-biometrics test case. , 2008, , .		0
93	One Lead ECG Based Personal Identification with Feature Subspace Ensembles. Lecture Notes in Computer Science, 2007, , 770-783.	1.0	28
94	Webbiometrics: User Verification Via Web Interaction. , 2007, , .		17
95	Collective Agents and Collective Intentionality Using the EDA Model. , 2007, , .		4
96	Feature Subspace Ensembles: A Parallel Classifier Combination Scheme Using Feature Selection. , 2007, , 261-270.		10
97	Learning Pairwise Similarity for Data Clustering. , 2006, , .		29
98	Ensemble Methods in the Clustering of String Patterns. , 2005, , .		7
99	Combining multiple clusterings using evidence accumulation. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2005, 27, 835-850.	9.7	969
100	<title>A behavioral biometric system based on human-computer interaction</title>. , 2004, , .		113
101	The ENN Project - A Telematics Experience in Neurology. Das ENN-Projekt - Erfahrungen mit Telematik in der Neurologie. Somnologie, 2004, 8, 3-13.	0.9	0
102	A new cluster isolation criterion based on dissimilarity increments. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2003, 25, 944-958.	9.7	68
103	A User Authentication Technic Using a~Web Interaction Monitoring System. Lecture Notes in Computer Science, 2003, , 246-254.	1.0	5
104	Similarity Measures and Clustering of String Patterns. Combinatorial Optimization, 2003, , 155-193.	0.7	2
105	Pattern recognition in information systems. Pattern Recognition, 2002, 35, 2671-2672.	5.1	2
106	Evidence Accumulation Clustering Based on the K-Means Algorithm. Lecture Notes in Computer Science, 2002, , 442-451.	1.0	62
107	Finding Consistent Clusters in Data Partitions. Lecture Notes in Computer Science, 2001, , 309-318.	1.0	193
108	A User-Friendly Development Tool for Medical Diagnosis Based on Bayesian Networks. , 2001, , 113-118.		9

#	Article	IF	Citations
109	Syntax-Directed Translation Schemes for Multi-Agent Systems Conversation Modelling. , 2001, , 94-100.		1
110	Partitional vs Hierarchical Clustering Using a Minimum Grammar Complexity Approach. Lecture Notes in Computer Science, 2000, , 193-202.	1.0	18
111	Computation of Substring Probabilities in Stochastic Grammars. Lecture Notes in Computer Science, 2000, , 103-114.	1.0	8
112	A Comparative Study of String Dissimilarity Measures in Structural Clustering. , 1999, , 385-394.		8
113	Clustering of sequences using a minimum grammar complexity criterion. Lecture Notes in Computer Science, 1996, , 107-116.	1.0	5
114	Analysis of Consensus Partition in Cluster Ensemble. , 0, , .		75
115	A Novel Technique for Fingerprint Feature Extraction Using Fixed Size Templates. , 0, , .		3