Francisco J MartÃ-nez-Murcia

List of Publications by Year
in descending order

83 papers	1,751 citations	331670 21 h-index	302126 39 g-index
86 all docs	86 docs citations	86 times ranked	1623 citing authors

#	Article	IF	Citations
1	Complex network modeling of EEG band coupling in dyslexia: An exploratory analysis of auditory processing and diagnosis. Knowledge-Based Systems, 2022, 240, 108098.	7.1	12
2	Quantifying Differences Between Affine and Nonlinear Spatial Normalization of FP-CIT Spect Images. International Journal of Neural Systems, 2022, 32, 2250019.	5.2	12
3	Temporal Phase Synchrony Disruption inÂDyslexia: Anomaly Patterns inÂAuditory Processing. Lecture Notes in Computer Science, 2022, , 13-22.	1.3	2
4	Deep residual transfer learning for automatic diagnosis and grading of diabetic retinopathy. Neurocomputing, 2021, 452, 424-434.	5.9	44
5	Statistical Agnostic Mapping: A framework in neuroimaging based on concentration inequalities. Information Fusion, 2021, 66, 198-212.	19.1	19
6	Temporal EigenPAC for Dyslexia Diagnosis. Lecture Notes in Computer Science, 2021, , 45-56.	1.3	0
7	Modelling Brain Connectivity Networks by Graph Embedding for Dyslexia Diagnosis. Lecture Notes in Computer Science, 2021, , 97-106.	1.3	0
8	Detecting Phase-Synchrony Connectivity Anomalies in EEG Signals. Application to Dyslexia Diagnosis. Sensors, 2021, 21, 7061.	3.8	5
9	Studying the Manifold Structure of Alzheimer's Disease: A Deep Learning Approach Using Convolutional Autoencoders. IEEE Journal of Biomedical and Health Informatics, 2020, 24, 17-26.	6.3	127
10	Autosomal dominantly inherited alzheimer disease: Analysis of genetic subgroups by machine learning. Information Fusion, 2020, 58, 153-167.	19.1	17
11	Granger causality-based information fusion applied to electrical measurements from power transformers. Information Fusion, 2020, 57, 59-70.	19.1	9
12	Expectationâ€“Maximization algorithm for finite mixture of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si57.svg"><mml:mrow><mml:mi>Î±</mml:mi></mml:mrow></mml:math>-stable distributions. Neurocomputing, 2020, 413, 210-216.	5.9	16
13	Advances in multimodal data fusion in neuroimaging: Overview, challenges, and novel orientation. Information Fusion, 2020, 64, 149-187.	19.1	235
14	Morphological Characterization of Functional Brain Imaging by Isosurface Analysis in Parkinsonâ€™s Disease. International Journal of Neural Systems, 2020, 30, 2050044.	5.2	24
15	EEG Connectivity Analysis Using Denoising Autoencoders for the Detection of Dyslexia. International Journal of Neural Systems, 2020, 30, 2050037.	5.2	21
16	Artificial intelligence within the interplay between natural and artificial computation: Advances in data science, trends and applications. Neurocomputing, 2020, 410, 237-270.	5.9	121
17	Optimized One vs One Approach in Multiclass Classification for Early Alzheimerâ€™s Disease and Mild Cognitive Impairment Diagnosis. IEEE Access, 2020, 8, 96981-96993.	4.2	19
18	Dyslexia Diagnosis by EEG Temporal and Spectral Descriptors: An Anomaly Detection Approach. International Journal of Neural Systems, 2020, 30, 2050029.	5.2	28

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19	Longitudinal correlation between neurofilament light chain and UMSARS in Multiple System Atrophy. Clinical Neurology and Neurosurgery, 2020, 195, 105924.	1.4	3
20	Dyslexia Detection from EEG Signals Using SSA Component Correlation andÂConvolutional Neural Networks. Lecture Notes in Computer Science, 2020, , 655-664.	1.3	3
21	A Neural Approach to Ordinal Regression for the Preventive Assessment of Developmental Dyslexia. Lecture Notes in Computer Science, 2020, , 620-630.	1.3	0
22	Deep Convolutional Autoencoders vs PCA in a Highly-Unbalanced Parkinsonâ€™s Disease Dataset: A DaTSCAN Study. Advances in Intelligent Systems and Computing, 2019, , 47-56.	0.6	12
23	Classification Improvement for Parkinsonâ€™s Disease Diagnosis Using the Gradient Magnitude in DaTSCAN SPECT Images. Advances in Intelligent Systems and Computing, 2019, , 100-109.	0.6	1
24	Periodogram Connectivity of EEG Signals for the Detection of Dyslexia. Lecture Notes in Computer Science, 2019, , 350-359.	1.3	9
25	An Anomaly Detection Approach for Dyslexia Diagnosis Using EEG Signals. Lecture Notes in Computer Science, 2019, , 369-378.	1.3	9
26	Label aided deep ranking for the automatic diagnosis of Parkinsonian syndromes. Neurocomputing, 2019, 330, 162-171.	5.9	5
27	Support Vector Machine Failure in Imbalanced Datasets. Lecture Notes in Computer Science, 2019, , 412-419.	1.3	1
28	Assisted Diagnosis of Parkinsonism Based on the Striatal Morphology. International Journal of Neural Systems, 2019, 29, 1950011.	5.2	24
29	A Machine Learning Approach to Reveal the NeuroPhenotypes of Autisms. International Journal of Neural Systems, 2019, 29, 1850058.	5.2	31
30	Empirical Functional PCA for 3D Image Feature Extraction Through Fractal Sampling. International Journal of Neural Systems, 2019, 29, 1850040.	5.2	12
31	Comparison Between Affine and Non-affine Transformations Applied to I$$^{[123]}$$-FP-CIT SPECT Images Used for Parkinsonâ€™s Disease Diagnosis. Lecture Notes in Computer Science, 2019, , 379-388.	1.3	3
32	Retinal Blood Vessel Segmentation by Multi-channel Deep Convolutional Autoencoder. Advances in Intelligent Systems and Computing, 2019, , 37-46.	0.6	1
33	Assessing Mild Cognitive Impairment Progression using a Spherical Brain Mapping of Magnetic Resonance Imaging. Journal of Alzheimer's Disease, 2018, 65, 713-729.	2.6	9
34	Ensemble of random forests One vs. Rest classifiers for MCI and AD prediction using ANOVA cortical and subcortical feature selection and partial least squares. Journal of Neuroscience Methods, 2018, 302, 47-57.	2.5	69
35	Segmentation of Molecular Neuroimages Using Hidden Markov Random Fields in Order to Improve the Assisted Diagnosis of Neurodegenerative Diseases. , 2018, , .		0
36	[123I]FP-CIT SPECT brain imaging for Parkinsonâ€™s diagnosis using contour lines. , 2018, , .		1

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37	Using deep neural networks along with dimensionality reduction techniques to assist the diagnosis of neurodegenerative disorders. Logic Journal of the IGPL, 2018, 26, 618-628.	1.5	27
38	Analysis of I[123]-Ioflupane SPECT intensity iso-surfaces to assist the diagnosis of Parkinsonism. , 2018, , .		1
39	Ensemble classification of heterogeneous biomarkers in the diagnosis of Parkinsonism. , 2018, , .		0
40	Using Early Acquisitions of Amyloid-PET as a Surrogate of FDG-PET: A Machine Learning Based Approach. , 2018, , .		0
41	Convolutional Neural Networks for Neuroimaging in Parkinsonâ€™s Disease: Is Preprocessing Needed?. International Journal of Neural Systems, 2018, 28, 1850035.	5.2	73
42	Robust Ensemble Classification Methodology for I123-Ioflupane SPECT Images and Multiple Heterogeneous Biomarkers in the Diagnosis of Parkinson's Disease. Frontiers in Neuroinformatics, 2018, 12, 53.	2.5	47
43	Case-based statistical learning applied to SPECT image classification. , 2017, , .		2
44	Case-Based Statistical Learning: A Non Parametric Implementation Applied to SPECT Images. Lecture Notes in Computer Science, 2017, , 305-313.	1.3	0
45	Analysis of ¹⁸F-DMFP-PET data using Hidden Markov Random Field and the Gaussian distribution to assist the diagnosis of Parkinsonism. Proceedings of SPIE, 2017, , .	0.8	0
46	A semi-supervised learning approach for model selection based on class-hypothesis testing. Expert Systems With Applications, 2017, 90, 40-49.	7.6	14
47	Case-Based Statistical Learning: A Non-Parametric Implementation With a Conditional-Error Rate SVM. IEEE Access, 2017, 5, 11468-11478.	4.2	31
48	Assisting the Diagnosis of Neurodegenerative Disorders Using Principal Component Analysis and TensorFlow. Advances in Intelligent Systems and Computing, 2017, , 43-52.	0.6	2
49	On the brain structure heterogeneity of autism: Parsing out acquisition site effects with significanceâ€weighted principal component analysis. Human Brain Mapping, 2017, 38, 1208-1223.	3.6	35
50	Discriminative Sparse Features for Alzheimer's Disease Diagnosis Using Multimodal Image Data. Current Alzheimer Research, 2017, 15, 67-79.	1.4	16
51	Preprocessing of 18F-DMFP-PET Data Based on Hidden Markov Random Fields and the Gaussian Distribution. Frontiers in Aging Neuroscience, 2017, 9, 326.	3.4	12
52	Multivariate Analysis of 18F-DMFP PET Data to Assist the Diagnosis of Parkinsonism. Frontiers in Neuroinformatics, 2017, 11, 23.	2.5	32
53	Functional Brain Imaging Synthesis Based on Image Decomposition and Kernel Modeling: Application to Neurodegenerative Diseases. Frontiers in Neuroinformatics, 2017, 11, 65.	2.5	15
54	A Heavy Tailed Expectation Maximization Hidden Markov Random Field Model with Applications to Segmentation of MRI. Frontiers in Neuroinformatics, 2017, 11, 66.	2.5	1

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55	On a Heavy-Tailed Intensity Normalization of the Parkinsonâ€™s Progression Markers Initiative Brain Database. Lecture Notes in Computer Science, 2017, , 298-304.	1.3	1
56	A 3D Convolutional Neural Network Approach for the Diagnosis of Parkinsonâ€™s Disease. Lecture Notes in Computer Science, 2017, , 324-333.	1.3	25
57	Automatic Separation of Parkinsonian Patients and Control Subjects Based on the Striatal Morphology. Lecture Notes in Computer Science, 2017, , 345-352.	1.3	3
58	Learning Longitudinal MRI Patterns by SICE and Deep Learning: Assessing the Alzheimerâ€™s Disease Progression. Communications in Computer and Information Science, 2017, , 413-424.	0.5	14
59	Evaluating Alzheimerâ€™s Disease Diagnosis Using Texture Analysis. Communications in Computer and Information Science, 2017, , 470-481.	0.5	4
60	Simulating functional brain images in Alzheimer's disease. , 2016, , .		0
61	Magnetic resonance image classification using nonnegative matrix factorization and ensemble tree learning techniques. , 2016, , .		2
62	Statistical feature selection and classification models for Alzheimer's disease progression assessment. , 2016, , .		0
63	MRI brain segmentation using hidden Markov random fields with alpha-stable distributions. , 2016, , .		2
64	PETRA: A web-based system supporting computer aided diagnosis of alzheimer's disease. , 2016, , .		1
65	A Structural Parametrization of the Brain Using Hidden Markov Models-Based Paths in Alzheimerâ€™s Disease. International Journal of Neural Systems, 2016, 26, 1650024.	5.2	24
66	Ensemble Tree Learning Techniques for Magnetic Resonance Image Analysis. Smart Innovation, Systems and Technologies, 2016, , 395-404.	0.6	4
67	Automated Diagnosis of Parkinsonian Syndromes by Deep Sparse Filtering-Based Features. Smart Innovation, Systems and Technologies, 2016, , 249-258.	0.6	14
68	A Spherical Brain Mapping of MR Images for the Detection of Alzheimer's Disease. Current Alzheimer Research, 2016, 13, 575-588.	1.4	25
69	An Optimal Approach for Selecting Discriminant Regions for the Diagnosis of Alzheimer's Disease. Current Alzheimer Research, 2016, 13, 838-844.	1.4	8
70	A Volumetric Radial LBP Projection of MRI Brain Images for the Diagnosis of Alzheimerâ€™s Disease. Lecture Notes in Computer Science, 2015, , 19-28.	1.3	3
71	Building a FP-CIT SPECT Brain Template Using a Posterization Approach. Neuroinformatics, 2015, 13, 391-402.	2.8	31
72	Automatic ROI Selection in Structural Brain MRI Using SOM 3D Projection. PLoS ONE, 2014, 9, e93851.	2.5	28

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73	Automatic detection of Parkinsonism using significance measures and component analysis in DaTSCAN imaging. Neurocomputing, 2014, 126, 58-70.	5.9	49
74	Application of Empirical Mode Decomposition (EMD) on DaTSCAN SPECT images to explore Parkinson Disease. Expert Systems With Applications, 2013, 40, 2756-2766.	7.6	63
75	Parametrization of textural patterns in123I-ioflupane imaging for the automatic detection of Parkinsonism. Medical Physics, 2013, 41, 012502.	3.0	43
76	Functional activity maps based on significance measures and Independent Component Analysis. Computer Methods and Programs in Biomedicine, 2013, 111, 255-268.	4.7	19
77	LVQ-SVM based CAD tool applied to structural MRI for the diagnosis of the Alzheimerâ€™s disease. Pattern Recognition Letters, 2013, 34, 1725-1733.	4.2	75
78	Texture Features Based Detection of Parkinsonâ€™s Disease on DaTSCAN Images. Lecture Notes in Computer Science, 2013, , 266-277.	1.3	8
79	Automatic Orientation of Functional Brain Images for Multiplataform Software. Lecture Notes in Computer Science, 2013, , 406-411.	1.3	0
80	Intensity normalization of FP-CIT SPECT in patients with Parkinsonism using the α-stable distribution. , 2012, , .		2
81	Computer Aided Diagnosis tool for Alzheimerâ€™s Disease based on Mannâ€“Whitneyâ€“Wilcoxon U-Test. Expert Systems With Applications, 2012, 39, 9676-9685.	7.6	86
82	Analysis of Spect Brain Images Using Wilcoxon and Relative Entropy Criteria and Quadratic Multivariate Classifiers for the Diagnosis of Alzheimerâ€™s Disease. Lecture Notes in Computer Science, 2011, , 41-48.	1.3	0
83	Computer-Aided Diagnosis in Neuroimaging. , 0, , .		4