Fermín Segovia Román

List of Publications by Year
in descending order

72 papers	2,033 citations	257450 24 h-index	243625 44 g-index
74 all docs	74 docs citations	74 times ranked	1753 citing authors

#	Article	IF	Citations
1	Autosomal dominantly inherited alzheimer disease: Analysis of genetic subgroups by machine learning. Information Fusion, 2020, 58, 153-167.	19.1	17
2	[123I]FP-CIT SPECT brain imaging for Parkinson's diagnosis using contour lines. , 2018, , .		1
3	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
4	Case-based statistical learning applied to SPECT image classification. , 2017, , .		2
5	Assisting the Diagnosis of Neurodegenerative Disorders Using Principal Component Analysis and TensorFlow. Advances in Intelligent Systems and Computing, 2017, , 43-52.	0.6	2
6	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
7	Multivariate Analysis of 18F-DMFP PET Data to Assist the Diagnosis of Parkinsonism. Frontiers in Neuroinformatics, 2017, 11, 23.	2.5	32
8	A 3D Convolutional Neural Network Approach for the Diagnosis of Parkinson's Disease. Lecture Notes in Computer Science, 2017, , 324-333.	1.3	25
9	Automatic Separation of Parkinsonian Patients and Control Subjects Based on the Striatal Morphology. Lecture Notes in Computer Science, 2017, , 345-352.	1.3	3
10	Multiclass classification of18F-DMFP-PET data to assist the diagnosis of parkinsonism. , 2016, , .		6
11	Combining Feature Extraction Methods to Assist the Diagnosis of Alzheimer's Disease. Current Alzheimer Research, 2016, 13, 831-837.	1.4	3
12	An Optimal Approach for Selecting Discriminant Regions for the Diagnosis of Alzheimer's Disease. Current Alzheimer Research, 2016, 13, 838-844.	1.4	8
13	Distinguishing Parkinson's disease from atypical parkinsonian syndromes using PET data and a computer system based on support vector machines and Bayesian networks. Frontiers in Computational Neuroscience, 2015, 9, 137.	2.1	23
14	Support for distinct subcomponents of spatial working memory: A double dissociation between spatial–simultaneous and spatial–sequential performance in unilateral neglect. Cognitive Neuropsychology, 2015, 32, 14-28.	1.1	19
15	Early diagnosis of Alzheimer×³s disease based on partial least squares, principal component analysis and support vector machine using segmented MRI images. Neurocomputing, 2015, 151, 139-150.	5.9	214
16	Identifying endophenotypes of autism: a multivariate approach. Frontiers in Computational Neuroscience, 2014, 8, 60.	2.1	27
17	PET imaging analysis using a parcelation approach and multiple kernel classification. , 2014, , .		3
18	Visual neglect: Is there a relationship between impaired spatial working memory and re-cancellation?. Experimental Brain Research, 2014, 232, 3333-3343.	1.5	19

#	ARTICLE	IF	CITATIONS
19	Cortical and subcortical contributions to state- and strength-based perceptual judgments. Neuropsychologia, 2014, 64, 145-156.	1.6	3
20	Combining PET Images and Neuropsychological Test Data for Automatic Diagnosis of Alzheimer's Disease. PLoS ONE, 2014, 9, e88687.	2.5	31
21	Early diagnosis of Alzheimer's disease based on Partial Least Squares and Support Vector Machine. Expert Systems With Applications, 2013, 40, 677-683.	7.6	39
22	Automatic Differentiation between Alzheimer's Disease and Mild Cognitive Impairment Combining PET Data and Psychological Scores. , 2013, , .		1
23	Automatic Orientation of Functional Brain Images for Multiplataform Software. Lecture Notes in Computer Science, 2013, , 406-411.	1.3	0
24	Automatic assistance to Parkinson's disease diagnosis in DaTSCAN SPECT imaging. Medical Physics, 2012, 39, 5971-5980.	3.0	92
25	A DSP embedded system. Application to digital communication systems. , 2012, , .		1
26	Intensity normalization of FP-CIT SPECT in patients with Parkinsonism using the α-stable distribution. , 2012, , .		2
27	Improved Parkinsonism diagnosis using a partial least squares based approach. Medical Physics, 2012, 39, 4395-4403.	3.0	55
28	Posters Group 1. European Journal of Nuclear Medicine and Molecular Imaging, 2012, 39, 384-497.	6.4	3
29	A comparative study of feature extraction methods for the diagnosis of Alzheimer's disease using the ADNI database. Neurocomputing, 2012, 75, 64-71.	5.9	55
30	Two approaches to selecting set of voxels for the diagnosis of Alzheimer's disease using brain SPECT images. , 2011, 21, 746-755.		4
31	18F-FDG PET imaging analysis for computer aided Alzheimer's diagnosis. Information Sciences, 2011, 181, 903-916.	6.9	101
32	GMM based SPECT image classification for the diagnosis of Alzheimer's disease. Applied Soft Computing Journal, 2011, 11, 2313-2325.	7.2	80
33	Computer aided diagnosis of Alzheimer's disease using component based SVM. Applied Soft Computing Journal, 2011, 11, 2376-2382.	7.2	59
34	Principal component analysis-based techniques and supervised classification schemes for the early detection of Alzheimer's disease. Neurocomputing, 2011, 74, 1260-1271.	5.9	141
35	Effective Diagnosis of Alzheimer's Disease by Means of Distance Metric Learning and Random Forest. Lecture Notes in Computer Science, 2011, , 59-67.	1.3	3
36	Feature selection using factor analysis for Alzheimer's diagnosis using PET images. Medical Physics, 2010, 37, 6084-6095.	3.0	63

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37	Projecting independent components of SPECT images for computer aided diagnosis of Alzheimer's disease. Pattern Recognition Letters, 2010, 31, 1342-1347.	4.2	38
38	Machine learning for very early Alzheimer's Disease diagnosis; a ^{18}F-FDG and PiB PET comparison. , 2010, , .		4
39	Alzheimer's disease detection in functional images using 2D Gabor wavelet analysis. Electronics Letters, 2010, 46, 556.	1.0	13
40	Improving the convergence rate in affine registration of PET brain images using histogram matching. , 2010, , .		0
41	Computer-aided diagnosis of Alzheimer's disease using support vector machines and classification trees. Physics in Medicine and Biology, 2010, 55, 2807-2817.	3.0	50
42	Computer aided diagnosis system for the Alzheimer's disease based on partial least squares and random forest SPECT image classification. Neuroscience Letters, 2010, 472, 99-103.	2.1	110
43	Classification of functional brain images using a GMM-based multi-variate approach. Neuroscience Letters, 2010, 474, 58-62.	2.1	40
44	Analysis of SPECT brain images for the diagnosis of Alzheimer's disease based on NMF for feature extraction. Neuroscience Letters, 2010, 479, 192-196.	2.1	18
45	Early Alzheimer's disease diagnosis using partial least squares and random forests. , 2010, , .		6
46	Selecting Regions of Interest in SPECT Images Using Wilcoxon Test for the Diagnosis of Alzheimer's Disease. Lecture Notes in Computer Science, 2010, , 446-451.	1.3	9
47	Effective Diagnosis of Alzheimer's Disease by Means of Association Rules. Lecture Notes in Computer Science, 2010, , 452-459.	1.3	9
48	Partial Least Squares for Feature Extraction of SPECT Images. Lecture Notes in Computer Science, 2010, , 476-483.	1.3	1
49	NMF-Based Analysis of SPECT Brain Images for the Diagnosis of Alzheimer's Disease. Lecture Notes in Computer Science, 2010, , 468-475.	1.3	0
50	Skewness as feature for the diagnosis of Alzheimer's disease using SPECT images. , 2009, , .		3
51	Computer aided diagnosis of the Alzheimer's disease combining SPECT-based feature selection and random forest classifiers. , 2009, , .		13
52	Neurological image classification for the Alzheimer's Disease diagnosis using Kernel PCA and Support Vector Machines. , 2009, , .		7
53	Automatic selection of ROIs using a model-based clustering approach. , 2009, , .		2
54	fMRI data analysis using a novel clustering technique. , 2009, , .		1

#	Article	IF	Citations
55	Alzheimer's diagnosis using eigenbrains and support vector machines. Electronics Letters, 2009, 45, 342.	1.0	56
56	Analysis of SPECT brain images for the diagnosis of Alzheimer's disease using moments and support vector machines. Neuroscience Letters, 2009, 461, 60-64.	2.1	35
57	SVM-based computer-aided diagnosis of the Alzheimer's disease using t-test NMSE feature selection with feature correlation weighting. Neuroscience Letters, 2009, 461, 293-297.	2.1	123
58	SVM-based CAD system for early detection of the Alzheimer's disease using kernel PCA and LDA. Neuroscience Letters, 2009, 464, 233-238.	2.1	107
59	SPECT image classification using random forests. Electronics Letters, 2009, 45, 604.	1.0	35
60	Automatic tool for Alzheimer's disease diagnosis using PCA and Bayesian classification rules. Electronics Letters, 2009, 45, 389.	1.0	82
61	SPECT image classification based on NMSE feature correlation weighting and SVM. , 2009, , .		7
62	Multivariate approaches for Alzheimer's disease diagnosis using Bayesian classifiers. , 2009, , .		8
63	Effective Detection of the Alzheimer Disease by Means of Coronal NMSE SVM Feature Classification. Lecture Notes in Computer Science, 2009, , 337-344.	1.3	4
64	Functional Brain Image Classification Techniques for Early Alzheimer Disease Diagnosis. Lecture Notes in Computer Science, 2009, , 150-157.	1.3	5
65	Classification of SPECT Images Using Clustering Techniques Revisited. Lecture Notes in Computer Science, 2009, , 168-178.	1.3	4
66	SPECT Image Classification Techniques for Computer Aided Diagnosis of the Alzheimer Disease. Lecture Notes in Computer Science, 2009, , 941-948.	1.3	4
67	Automatic System for Alzheimerâ€™s Disease Diagnosis Using Eigenbrains and Bayesian Classification Rules. Lecture Notes in Computer Science, 2009, , 949-956.	1.3	9
68	Automatic Classification System for the Diagnosis of Alzheimer Disease Using Component-Based SVM Aggregations. Lecture Notes in Computer Science, 2009, , 402-409.	1.3	7
69	Early Detection of the Alzheimer Disease Combining Feature Selection and Kernel Machines. Lecture Notes in Computer Science, 2009, , 410-417.	1.3	8
70	Computer Aided Diagnosis of Alzheimer Disease Using Support Vector Machines and Classification Trees. Lecture Notes in Computer Science, 2009, , 418-425.	1.3	4
71	Selecting Regions of Interest for the Diagnosis of Alzheimer Using Brain SPECT Images. Lecture Notes in Computer Science, 2009, , 399-406.	1.3	0
72	Analysis of Brain SPECT Images for the Diagnosis of Alzheimer Disease Using First and Second Order Moments. Lecture Notes in Computer Science, 2009, , 124-133.	1.3	0