Jyrki LÃ¶tjÃ¶nen

List of Publications by Year
in descending order

97 papers	3,024 citations	186265 28 h-index	182427 51 g-index
101 all docs	101 docs citations	101 times ranked	4634 citing authors

#	Article	IF	Citations
1	A Comprehensive Panel of Three-Dimensional Models for Studies of Prostate Cancer Growth, Invasion and Drug Responses. PLoS ONE, 2010, 5, e10431.	2.5	299
2	Multi-Method Analysis of MRI Images in Early Diagnostics of Alzheimer's Disease. PLoS ONE, 2011, 6, e25446.	2.5	240
3	Robust whole-brain segmentation: Application to traumatic brain injury. Medical Image Analysis, 2015, 21, 40-58.	11.6	146
4	Differential diagnosis of neurodegenerative diseases using structural MRI data. NeuroImage: Clinical, 2016, 11, 435-449.	2.7	137
5	Measurement of hippocampal atrophy using 4D graph-cut segmentation: Application to ADNI. NeuroImage, 2010, 52, 109-118.	4.2	122
6	Global Burden of Small Vessel Disease–Related Brain Changes on MRI Predicts Cognitive and Functional Decline. Stroke, 2020, 51, 170-178.	2.0	115
7	Fast and robust extraction of hippocampus from MR images for diagnostics of Alzheimer's disease. NeuroImage, 2011, 56, 185-196.	4.2	109
8	Multi-template tensor-based morphometry: Application to analysis of Alzheimer's disease. NeuroImage, 2011, 56, 1134-1144.	4.2	88
9	A Disease State Fingerprint for Evaluation of Alzheimer's Disease. Journal of Alzheimer's Disease, 2011, 27, 163-176.	2.6	75
10	Brain volumes and cortical thickness on MRI in the Finnish Geriatric Intervention Study to Prevent Cognitive Impairment and Disability (FINGER). Alzheimer's Research and Therapy, 2019, 11, 53.	6.2	75
11	Circadian activity rhythm in demented and non-demented nursing-home residents measured by telemetric actigraphy. Journal of Sleep Research, 2005, 14, 61-68.	3.2	72
12	Quantification of Dynamic Morphological Drug Responses in 3D Organotypic Cell Cultures by Automated Image Analysis. PLoS ONE, 2014, 9, e96426.	2.5	68
13	Combination of Biomarkers: PET [<sup>18</sup>F]Flutemetamol Imaging and Structural MRI in Dementia and Mild Cognitive Impairment. Neurodegenerative Diseases, 2012, 10, 246-249.	1.4	52
14	Model extraction from magnetic resonance volume data using the deformable pyramid. Medical Image Analysis, 1999, 3, 387-406.	11.6	50
15	A 3-D model-based registration approach for the PET, MR and MCG cardiac data fusion. Medical Image Analysis, 2003, 7, 377-389.	11.6	50
16	Nonlinear dimensionality reduction combining MR imaging with non-imaging information. Medical Image Analysis, 2012, 16, 819-830.	11.6	50
17	Structural MRI in Frontotemporal Dementia: Comparisons between Hippocampal Volumetry, Tensor-Based Morphometry and Voxel-Based Morphometry. PLoS ONE, 2012, 7, e52531.	2.5	49
18	Improved Classification of Alzheimer's Disease Data via Removal of Nuisance Variability. PLoS ONE, 2012, 7, e31112.	2.5	46

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19	Methods of Artificial Enlargement of the Training Set for Statistical Shape Models. IEEE Transactions on Medical Imaging, 2008, 27, 1643-1654.	8.9	43
20	Design and Application of a Generic Clinical Decision Support System for Multiscale Data. IEEE Transactions on Biomedical Engineering, 2012, 59, 234-240.	4.2	40
21	Shape variability of the human striatum—Effects of age and gender. NeuroImage, 2007, 34, 85-93.	4.2	38
22	Five-class differential diagnostics of neurodegenerative diseases using random undersampling boosting. NeuroImage: Clinical, 2017, 15, 613-624.	2.7	38
23	Automatic sleep-wake and nap analysis with a new wrist worn online activity monitoring device vivago WristCare. Sleep, 2003, 26, 86-90.	1.1	38
24	The Association Between Distinct Frontal Brain Volumes and Behavioral Symptoms in Mild Cognitive Impairment, Alzheimer's Disease, and Frontotemporal Dementia. Frontiers in Neurology, 2019, 10, 1059.	2.4	37
25	Prediction models for dementia and neuropathology in the oldest old: the Vantaa 85+ cohort study. Alzheimer's Research and Therapy, 2019, 11, 11.	6.2	37
26	Detecting frontotemporal dementia syndromes using MRI biomarkers. NeuroImage: Clinical, 2019, 22, 101711.	2.7	35
27	Optimizing the Diagnosis of Early Alzheimer's Disease in Mild Cognitive Impairment Subjects. Journal of Alzheimer's Disease, 2012, 32, 969-979.	2.6	32
28	Predicting AD Conversion: Comparison between Prodromal AD Guidelines and Computer Assisted PredictAD Tool. PLoS ONE, 2013, 8, e55246.	2.5	31
29	Generalizability of the Disease State Index Prediction Model for Identifying Patients Progressing from Mild Cognitive Impairment to Alzheimer's Disease. Journal of Alzheimer's Disease, 2015, 44, 79-92.	2.6	31
30	Data-Driven Differential Diagnosis of Dementia Using Multiclass Disease State Index Classifier. Frontiers in Aging Neuroscience, 2018, 10, 111.	3.4	29
31	Serum Lipidomics Meets Cardiac Magnetic Resonance Imaging: Profiling of Subjects at Risk of Dilated Cardiomyopathy. PLoS ONE, 2011, 6, e15744.	2.5	28
32	Predicting Development of Alzheimer's Disease in Patients with Shunted Idiopathic Normal Pressure Hydrocephalus. Journal of Alzheimer's Disease, 2019, 71, 1233-1243.	2.6	28
33	Development of a Late-Life Dementia Prediction Index with Supervised Machine Learning in the Population-Based CAIDE Study. Journal of Alzheimer's Disease, 2016, 55, 1055-1067.	2.6	27
34	The PredictAD project: development of novel biomarkers and analysis software for early diagnosis of the Alzheimer's disease. Interface Focus, 2013, 3, 20120072.	3.0	26
35	Regional brain morphometry in patients with traumatic brain injury based on acute- and chronic-phase magnetic resonance imaging. PLoS ONE, 2017, 12, e0188152.	2.5	25
36	Association Between Later Life Lifestyle Factors and Alzheimer's Disease Biomarkers in Non-Demented Individuals: A Longitudinal Descriptive Cohort Study. Journal of Alzheimer's Disease, 2017, 60, 1387-1395.	2.6	24

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37	Thalamic Atrophy Without Whole Brain Atrophy Is Associated With Absence of 2-Year NEDA in Multiple Sclerosis. Frontiers in Neurology, 2019, 10, 459.	2.4	23
38	Impact of a clinical decision support tool on prediction of progression in early-stage dementia: a prospective validation study. Alzheimer's Research and Therapy, 2019, 11, 25.	6.2	23
39	Impact of a Clinical Decision Support Tool on Dementia Diagnostics in Memory Clinics: The PredictND Validation Study. Current Alzheimer Research, 2019, 16, 91-101.	1.4	23
40	Predicting Progression from Cognitive Impairment to Alzheimer's Disease with the Disease State Index. Current Alzheimer Research, 2015, 12, 69-79.	1.4	22
41	Multimodal analysis to predict shunt surgery outcome of 284 patients with suspected idiopathic normal pressure hydrocephalus. Acta Neurochirurgica, 2016, 158, 2311-2319.	1.7	21
42	Thalamic Atrophy Predicts 5-Year Disability Progression in Multiple Sclerosis. Frontiers in Neurology, 2020, 11, 606.	2.4	21
43	Nonfluoroscopic Localization of an Amagnetic Stimulation Catheter by Multichannel Magnetocardiography. PACE - Pacing and Clinical Electrophysiology, 1999, 22, 1210-1220.	1.2	20
44	Multi-class brain segmentation using atlas propagation and EM-based refinement. , 2012, , .		20
45	Midlife Insulin Resistance as a Predictor for Late-Life Cognitive Function and Cerebrovascular Lesions. Journal of Alzheimer's Disease, 2019, 72, 215-228.	2.6	20
46	Automatic MRI Quantifying Methods in Behavioral-Variant Frontotemporal Dementia Diagnosis. Dementia and Geriatric Cognitive Disorders Extra, 2018, 8, 51-59.	1.3	19
47	Evaluating combinations of diagnostic tests to discriminate different dementia types. Alzheimer's and Dementia: Diagnosis, Assessment and Disease Monitoring, 2018, 10, 509-518.	2.4	19
48	Disease State Fingerprint in Frontotemporal Degeneration with Reference to Alzheimer's Disease and Mild Cognitive Impairment. Journal of Alzheimer's Disease, 2013, 35, 727-739.	2.6	18
49	Reconstruction of 3-D Head Geometry From Digitized Point Sets: An Evaluation Study. IEEE Transactions on Information Technology in Biomedicine, 2004, 8, 377-386.	3.2	17
50	White Matter Hyperintensities and Cognitive Impairment in Healthy and Pathological Aging: A Quantified Brain MRI Study. Dementia and Geriatric Cognitive Disorders, 2019, 48, 297-307.	1.5	17
51	Correction of Motion Artifacts From Cardiac Cine Magnetic Resonance Images1. Academic Radiology, 2005, 12, 1273-1284.	2.5	14
52	Software Tool for Improved Prediction of Alzheimer's Disease. Neurodegenerative Diseases, 2012, 10, 149-152.	1.4	14
53	Integrating Biomarkers for Underlying Alzheimer's Disease in Mild Cognitive Impairment in Daily Practice: Comparison of a Clinical Decision Support System with Individual Biomarkers. Journal of Alzheimer's Disease, 2016, 50, 261-270.	2.6	14
54	Gait Disturbances are Associated with Increased Cognitive Impairment and Cerebrospinal Fluid Tau Levels in a Memory Clinic Cohort. Journal of Alzheimer's Disease, 2020, 76, 1061-1070.	2.6	13

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55	Metabolic Profiles Help Discriminate Mild Cognitive Impairment from Dementia Stage in Alzheimer's Disease. Journal of Alzheimer's Disease, 2020, 74, 277-286.	2.6	13
56	Using the Disease State Fingerprint Tool for Differential Diagnosis of Frontotemporal Dementia and Alzheimer's Disease. Dementia and Geriatric Cognitive Disorders Extra, 2016, 6, 313-329.	1.3	12
57	Associations of cognitive reserve and psychological resilience with cognitive functioning in subjects with cerebral white matter hyperintensities. European Journal of Neurology, 2021, 28, 2622-2630.	3.3	12
58	Construction of patient-specific surface models from MR images: application to bioelectromagnetism. Computer Methods and Programs in Biomedicine, 2003, 72, 167-178.	4.7	11
59	Application of the PredictAD Software Tool to Predict Progression in Patients with Mild Cognitive Impairment. Dementia and Geriatric Cognitive Disorders, 2012, 34, 344-350.	1.5	10
60	Synergistic associations of cognitive and motor impairments with functional outcome in covert cerebral small vessel disease. European Journal of Neurology, 2022, 29, 158-167.	3.3	10
61	A New Method for the Registration of Cardiac PET and MR Images Using Deformable Model Based Segmentation of the Main Thorax Structures. Lecture Notes in Computer Science, 2001, , 557-564.	1.3	9
62	Visual rating method and tensor-based morphometry in the diagnosis of mild cognitive impairment and Alzheimer's disease: a comparative magnetic resonance imaging study. Acta Radiologica, 2016, 57, 348-355.	1.1	9
63	Detecting Amyloid Positivity in Elderly With Increased Risk of Cognitive Decline. Frontiers in Aging Neuroscience, 2020, 12, 228.	3.4	9
64	cCOG: A web-based cognitive test tool for detecting neurodegenerative disorders. Alzheimer's and Dementia: Diagnosis, Assessment and Disease Monitoring, 2020, 12, e12083.	2.4	9
65	Evaluating 2-[18F]FDG-PET in differential diagnosis of dementia using a data-driven decision model. NeuroImage: Clinical, 2020, 27, 102267.	2.7	9
66	Identifying causative mechanisms linking early-life stress to psycho-cardio-metabolic multi-morbidity: The EarlyCause project. PLoS ONE, 2021, 16, e0245475.	2.5	9
67	Comparing Predictors of Conversion to Alzheimer's Disease Using the Disease State Index. Neurodegenerative Diseases, 2014, 13, 200-202.	1.4	8
68	Computer-assisted prediction of clinical progression in the earliest stages of AD. Alzheimer's and Dementia: Diagnosis, Assessment and Disease Monitoring, 2018, 10, 726-736.	2.4	8
69	Association between Deep Gray Matter Changes and Neurocognitive Function in Mild Cognitive Impairment and Alzheimer's Disease: A Tensor-Based Morphometric MRI Study. Dementia and Geriatric Cognitive Disorders, 2019, 48, 68-78.	1.5	8
70	Predicting Global Cognitive Decline in the General Population Using the Disease State Index. Frontiers in Aging Neuroscience, 2019, 11, 379.	3.4	8
71	Evaluating severity of white matter lesions from computed tomography images with convolutional neural network. Neuroradiology, 2020, 62, 1257-1263.	2.2	8
72	Brain volumes in relation to loneliness and social competence in preadolescents born very preterm. Brain and Behavior, 2020, 10, e01640.	2.2	8

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73	Grey matter atrophy in patients with benign multiple sclerosis. Brain and Behavior, 2022, 12, .	2.2	8
74	Selection of memory clinic patients for CSF biomarker assessment can be restricted to a quarter of cases by using computerized decision support, without compromising diagnostic accuracy. PLoS ONE, 2020, 15, e0226784.	2.5	7
75	Artificially Enlarged Training Set in Image Segmentation. Lecture Notes in Computer Science, 2006, 9, 75-82.	1.3	7
76	Validation of prognostic biomarker scores for predicting progression of dementia in patients with amnestic mild cognitive impairment. Nuclear Medicine Communications, 2018, 39, 297-303.	1.1	6
77	A novel CT-based automated analysis method provides comparable results with MRI in measuring brain atrophy and white matter lesions. Neuroradiology, 2021, 63, 2035-2046.	2.2	6
78	Evaluation of motion-correction methods for dual-gated cardiac positron emission tomography/computed tomography imaging. Nuclear Medicine Communications, 2016, 37, 956-968.	1.1	5
79	Model Library for Deformable Model-Based Segmentation of 3-D Brain MR-Images. Lecture Notes in Computer Science, 2002, , 540-547.	1.3	5
80	Prognostic value of complementary biomarkers of neurodegeneration in a mixed memory clinic cohort. PeerJ, 2020, 8, e9498.	2.0	5
81	Improved generation of probabilistic atlases for the expectation maximization classification. , 2011, , .		4
82	Reconstructing 3D Boundary Element Heart Models from 2D Biplane Fluoroscopy. Lecture Notes in Computer Science, 2001, , 17-23.	1.3	4
83	A MATLAB toolbox for classification and visualization of heterogenous multi-scale human data using the Disease State Fingerprint method. Studies in Health Technology and Informatics, 2013, 189, 77-82.	0.3	4
84	Consistent and robust 4D whole-brain segmentation: Application to traumatic brain injury. , 2014, , .		3
85	Longitudinal changes in the brain in mild cognitive impairment: a magnetic resonance imaging study using the visual rating method and tensor-based morphometry. Acta Radiologica, 2018, 59, 973-979.	1.1	3
86	Effects of White Matter Hyperintensities on Verbal Fluency in Healthy Older Adults and MCI/AD. Frontiers in Aging Neuroscience, 2021, 13, 614809.	3.4	3
87	Hippocampal atrophy in Alzheimer's disease. Neurodegenerative Disease Management, 2012, 2, 197-209.	2.2	2
88	Automatic quantification of CT images for traumatic brain injury. , 2014, , .		2
89	Multivariate Prediction of Hippocampal Atrophy in Alzheimer's Disease. Journal of Alzheimer's Disease, 2019, 68, 1453-1468.	2.6	2
90	Dynamic Probabilistic Atlas of Functional Brain Regions for Transcranial Magnetic Stimulation. Lecture Notes in Computer Science, 2008, 11, 543-550.	1.3	2

#	ARTICLE	IF	CITATIONS
91	Model-Based Segmentation of Reconstructed Dental X-Ray Volumes. , 2006, , .		1
92	Hippocampal atrophy rate using an expectation maximization classifier with a disease-specific prior. , 2012, , .		1
93	Extended boundary shift integral. , 2014, , .		1
94	A 3-D Model-Based Approach for the PET-Functional and MR-Anatomical Cardiac Imaging Data Fusion. Lecture Notes in Computer Science, 2001, , 83-90.	1.3	1
95	Individualized Geometric Model from Unorganized 3-D Points: An Application to Thorax Modeling. Lecture Notes in Computer Science, 2003, , 91-98.	1.3	1
96	Differential Dementia Diagnosis on Incomplete Data with Latent Trees. Lecture Notes in Computer Science, 2016, , 44-52.	1.3	1
97	Heterogeneous Biological Network Visualization System: Case Study in Context of Medical Image Data. Advances in Experimental Medicine and Biology, 2012, 736, 95-118.	1.6	0