Christos Davatzikos

List of Publications by Year in Descending Order

414 papers	27,537 citations	83 h-index	155 g-index
460 ext. papers	34,042 ext. citations	6.5 avg, IF	7.22 L-index

#	Paper	IF	Citations
414	Mid-life epigenetic age, neuroimaging brain age, and cognitive function: coronary artery risk development in young adults (CARDIA) study.. *Aging*, **2022**, 14, 1691-1712	5.6	1
413	Metabolic and Physiologic MR Imaging in Distinguishing True Progression from Pseudoprogression in Patients with Glioblastoma.. *NMR in Biomedicine*, **2022**, e4719	4.4	1
412	Characterizing Heterogeneity in Neuroimaging, Cognition, Clinical Symptoms, and Genetics Among Patients With Late-Life Depression.. *JAMA Psychiatry*, **2022**,	14.5	1
411	Impact of deformable registration methods for prediction of recurrence free survival response to neoadjuvant chemotherapy in breast cancer: Results from the ISPY 1/ACRIN 6657 trial.. *Translational Oncology*, **2022**, 20, 101411	4.9	0
410	Harmonizing Functional Connectivity Reduces Scanner Effects in Community Detection.. *NeuroImage*, **2022**, 119198	7.9	0
409	Longitudinal associations between energy utilization and brain volumes in cognitively normal middle aged and older adults.. *Scientific Reports*, **2022**, 12, 6472	4.9	
408	Dissociable multi-scale patterns of development in personalized brain networks.. *Nature Communications*, **2022**, 13, 2647	17.4	1
407	IMG-15. Radiomic Profiling of Pediatric Low-Grade Glioma Improves Risk Stratification Beyond Clinical Measures. *Neuro-Oncology*, **2022**, 24, i80-i80	1	
406	Leveraging machine learning predictive biomarkers to augment the statistical power of clinical trials with baseline magnetic resonance imaging. *Brain Communications*, **2021**, 3, fcab264	4.5	0
405	Multi-scale semi-supervised clustering of brain images: Deriving disease subtypes. *Medical Image Analysis*, **2021**, 75, 102304	15.4	1
404	Embracing the disharmony in medical imaging: A Simple and effective framework for domain adaptation. *Medical Image Analysis*, **2021**, 76, 102309	15.4	3
403	A deep learning framework identifies dimensional representations of Alzheimer's Disease from brain structure. *Nature Communications*, **2021**, 12, 7065	17.4	2
402	Open-source Software Sustainability Models: Initial White Paper From the Informatics Technology for Cancer Research Sustainability and Industry Partnership Working Group. *Journal of Medical Internet Research*, **2021**, 23, e20028	7.6	1
401	Red Cell Distribution Width, Anemia, and Brain Volumetric Outcomes Among Middle-Aged Adults. *Journal of Alzheimer's Disease*, **2021**, 81, 711-727	4.3	2
400	Association of Intensive vs Standard Blood Pressure Control With Magnetic Resonance Imaging Biomarkers of Alzheimer Disease: Secondary Analysis of the SPRINT MIND Randomized Trial. *JAMA Neurology*, **2021**, 78, 568-577	17.2	14
399	Bile acid synthesis, modulation, and dementia: A metabolomic, transcriptomic, and pharmacoepidemiologic study. *PLoS Medicine*, **2021**, 18, e1003615	11.6	10
398	Cognitive and neuroimaging profiles of older adults with dual decline in memory and gait speed. *Neurobiology of Aging*, **2021**, 97, 49-55	5.6	9

397	Neurocognitive and functional heterogeneity in depressed youth. *Neuropsychopharmacology*, **2021**, 46, 783-790	8.7	3
396	Left ventricular segmental strain and the prediction of cancer therapy-related cardiac dysfunction. *European Heart Journal Cardiovascular Imaging*, **2021**, 22, 418-426	4.1	0
395	Structural and Functional Brain Parameters Related to Cognitive Performance Across Development: Replication and Extension of the Parieto-Frontal Integration Theory in a Single Sample. *Cerebral Cortex*, **2021**, 31, 1444-1463	5.1	9
394	The Brain Chart of Aging: Machine-learning analytics reveals links between brain aging, white matter disease, amyloid burden, and cognition in the iSTAGING consortium of 10,216 harmonized MR scans. *Alzheimerls and Dementia*, **2021**, 17, 89-102	1.2	30
393	Computational Diagnostics of GBM Tumors in the Era of Radiomics and Radiogenomics. *Lecture Notes in Computer Science*, **2021**, 30-38	0.9	0
392	Estimating Glioblastoma Biophysical Growth Parameters Using Deep Learning Regression. *Lecture Notes in Computer Science*, **2021**, 12658, 157-167	0.9	0
391	Structural brain measures linked to clinical phenotypes in major depression replicate across clinical centres. *Molecular Psychiatry*, **2021**, 26, 2764-2775	15.1	4
390	Reply: From ŝoose fittingSto high-performance, uncertainty-aware brain-age modelling. *Brain*, **2021**, 144, e32	11.2	1
389	Quantification of tumor microenvironment acidity in glioblastoma using principal component analysis of dynamic susceptibility contrast enhanced MR imaging. *Scientific Reports*, **2021**, 11, 15011	4.9	1
388	Patent Foramen Ovale Closure Decreases the Incidence but Not the Size of New Brain Infarction on Magnetic Resonance Imaging: An Analysis of the REDUCE Trial. *Stroke*, **2021**, 52, 3419-3426	6.7	0
387	Machine Learning Using Multiparametric Magnetic Resonance Imaging Radiomic Feature Analysis to Predict Ki-67 in World Health Organization Grade I Meningiomas. *Neurosurgery*, **2021**, 89, 928-936	3.2	1
386	Tau pathology mediates age effects on medial temporal lobe structure. *Neurobiology of Aging*, **2021**, 109, 135-144	5.6	1
385	Red cell distribution width, anemia and their associations with white matter integrity among middle-aged urban adults. *Neurobiology of Aging*, **2021**, 105, 229-240	5.6	0
384	Deep Generative Medical Image Harmonization for Improving Cross-Site Generalization in Deep Learning Predictors. *Journal of Magnetic Resonance Imaging*, **2021**,	5.6	3
383	Changes in brain functional connectivity and cognition related to white matter lesion burden in hypertensive patients from SPRINT. *Neuroradiology*, **2021**, 63, 913-924	3.2	1
382	Dimensional connectomics of anxious misery, a human connectome study related to human disease: Overview of protocol and data quality. *NeuroImage: Clinical*, **2020**, 28, 102489	5.3	3
381	Vitamin D, Folate, and Cobalamin Serum Concentrations Are Related to Brain Volume and White Matter Integrity in Urban Adults. *Frontiers in Aging Neuroscience*, **2020**, 12, 140	5.3	0
380	Analysis of MRI Data in Diagnostic Neuroradiology. *Annual Review of Biomedical Data Science*, **2020**, 3, 365-390	5.6	2

379	Integrated Biophysical Modeling and Image Analysis: Application to Neuro-Oncology. *Annual Review of Biomedical Engineering*, **2020**, 22, 309-341	12	21
378	The Image Biomarker Standardization Initiative: Standardized Quantitative Radiomics for High-Throughput Image-based Phenotyping. *Radiology*, **2020**, 295, 328-338	20.5	734
377	Cancer Imaging Phenomics via CaPTk: Multi-Institutional Prediction of Progression-Free Survival and Pattern of Recurrence in Glioblastoma. *JCO Clinical Cancer Informatics*, **2020**, 4, 234-244	5.2	12
376	Structural brain networks in remitted psychotic depression. *Neuropsychopharmacology*, **2020**, 45, 1223-1231	8.7	2
375	Association of hippocampal volume polygenic predictor score with baseline and change in brain volumes and cognition among cognitively healthy older adults. *Neurobiology of Aging*, **2020**, 94, 81-88	5.6	0
374	Brain extraction on MRI scans in presence of diffuse glioma: Multi-institutional performance evaluation of deep learning methods and robust modality-agnostic training. *NeuroImage*, **2020**, 220, 117081	7.9	11
373	Longitudinal ComBat: A method for harmonizing longitudinal multi-scanner imaging data. *NeuroImage*, **2020**, 220, 117129	7.9	32
372	MRI signatures of brain age and disease over the lifespan based on a deep brain network and 14 468 individuals worldwide. *Brain*, **2020**, 143, 2312-2324	11.2	58
371	Two distinct neuroanatomical subtypes of schizophrenia revealed using machine learning. *Brain*, **2020**, 143, 1027-1038	11.2	53
370	Individual Variation in Functional Topography of Association Networks in Youth. *Neuron*, **2020**, 106, 340-353.e8	13.9	61
369	Overall survival prediction in glioblastoma patients using structural magnetic resonance imaging (MRI): advanced radiomic features may compensate for lack of advanced MRI modalities. *Journal of Medical Imaging*, **2020**, 7, 031505	2.6	11
368	A Deep Network for Joint Registration and Reconstruction of Images with Pathologies. *Lecture Notes in Computer Science*, **2020**, 12436, 342-352	0.9	4
367	Integrative radiomic analysis for pre-surgical prognostic stratification of glioblastoma patients: from advanced to basic MRI protocols. *Proceedings of SPIE*, **2020**, 11315,	1.7	1
366	Optimization of energy state transition trajectory supports the development of executive function during youth. *ELife*, **2020**, 9,	8.9	19
365	Multi-institutional noninvasive in vivo characterization of , 1p/19q, and EGFRvIII in glioma using neuro-Cancer Imaging Phenomics Toolkit (neuro-CaPTk). *Neuro-Oncology Advances*, **2020**, 2, iv22-iv34	0.9	4
364	The Cancer Imaging Phenomics Toolkit (CaPTk): Technical Overview. *Lecture Notes in Computer Science*, **2020**, 11993, 380-394	0.9	12
363	MAGIC: Multi-scale Heterogeneity Analysis and Clustering for Brain Diseases. *Lecture Notes in Computer Science*, **2020**, 678-687	0.9	2
362	Neurostructural Heterogeneity in Youths With Internalizing Symptoms. *Biological Psychiatry*, **2020**, 87, 473-482	7.9	12

361	Imaging signatures of glioblastoma molecular characteristics: A radiogenomics review. *Journal of Magnetic Resonance Imaging*, **2020**, 52, 54-69	5.6	26
360	Estimating regional cerebral blood flow using resting-state functional MRI via machine learning. *Journal of Neuroscience Methods*, **2020**, 331, 108528	3	1
359	Harmonization of large MRI datasets for the analysis of brain imaging patterns throughout the lifespan. *NeuroImage*, **2020**, 208, 116450	7.9	79
358	Widespread Morphometric Abnormalities in Major Depression: Neuroplasticity and Potential for Biomarker Development. *Neuroimaging Clinics of North America*, **2020**, 30, 85-95	3	2
357	Associations between cognitive and brain volume changes in cognitively normal older adults. *NeuroImage*, **2020**, 223, 117289	7.9	15
356	A comparison of Freesurfer and multi-atlas MUSE for brain anatomy segmentation: Findings about size and age bias, and inter-scanner stability in multi-site aging studies. *NeuroImage*, **2020**, 223, 117248	7.9	5
355	Disentangling Heterogeneity in Alzheimer's Disease and Related Dementias Using Data-Driven Methods. *Biological Psychiatry*, **2020**, 88, 70-82	7.9	29
354	Inflammatory markers and imaging patterns of advanced brain aging in the general population. *Brain Imaging and Behavior*, **2020**, 14, 1108-1117	4.1	13
353	Neurobiological Divergence of the Positive and Negative Schizophrenia Subtypes Identified on a New Factor Structure of Psychopathology Using Non-negative Factorization: An International Machine Learning Study. *Biological Psychiatry*, **2020**, 87, 282-293	7.9	24
352	CLAIRE: A DISTRIBUTED-MEMORY SOLVER FOR CONSTRAINED LARGE DEFORMATION DIFFEOMORPHIC IMAGE REGISTRATION. *SIAM Journal of Scientific Computing*, **2019**, 41, C548-C584	2.6	14
351	Addressing heterogeneity (and homogeneity) in treatment mechanisms in depression and the potential to develop diagnostic and predictive biomarkers. *NeuroImage: Clinical*, **2019**, 24, 101997	5.3	7
350	Accelerated cortical thinning within structural brain networks is associated with irritability in youth. *Neuropsychopharmacology*, **2019**, 44, 2254-2262	8.7	12
349	Emerging Applications of Artificial Intelligence in Neuro-Oncology. *Radiology*, **2019**, 290, 607-618	20.5	87
348	Effect of Intensive vs Standard Blood Pressure Control on Probable Dementia: A Randomized Clinical Trial. *JAMA - Journal of the American Medical Association*, **2019**, 321, 553-561	27.4	449
347	Evidence for Dissociable Linkage of Dimensions of Psychopathology to Brain Structure in Youths. *American Journal of Psychiatry*, **2019**, 176, 1000-1009	11.9	27
346	Arterial Spin Labeling and Dynamic Susceptibility Contrast-enhanced MR Imaging for evaluation of arteriovenous shunting and tumor hypoxia in glioblastoma. *Scientific Reports*, **2019**, 9, 8747	4.9	4
345	Sex differences in brain aging and predictors of neurodegeneration in cognitively healthy older adults. *Neurobiology of Aging*, **2019**, 81, 146-156	5.6	36
344	Precision diagnostics based on machine learning-derived imaging signatures. *Magnetic Resonance Imaging*, **2019**, 64, 49-61	3.3	14

343	Sociodemographic disparities in corticolimbic structures. *PLoS ONE*, **2019**, 14, e0216338	3.7	6
342	Multi-stage Association Analysis of Glioblastoma Gene Expressions with Texture and Spatial Patterns. *Lecture Notes in Computer Science*, **2019**, 11383, 239-250	0.9	5
341	Sex differences in the association between amyloid and longitudinal brain volume change in cognitively normal older adults. *NeuroImage: Clinical*, **2019**, 22, 101769	5.3	14
340	Association of Intensive vs Standard Blood Pressure Control With Cerebral White Matter Lesions. *JAMA - Journal of the American Medical Association*, **2019**, 322, 524-534	27.4	146
339	White Matter Lesion Penumbra Shows Abnormalities on Structural and Physiologic MRIs in the Coronary Artery Risk Development in Young Adults Cohort. *American Journal of Neuroradiology*, **2019**, 40, 1291-1298	4.4	4
338	Prediction of Treatment Response to Neoadjuvant Chemotherapy for Breast Cancer via Early Changes in Tumor Heterogeneity Captured by DCE-MRI Registration. *Scientific Reports*, **2019**, 9, 12114	4.9	21
337	Disparities in Diffuse Cortical White Matter Integrity Between Socioeconomic Groups. *Frontiers in Human Neuroscience*, **2019**, 13, 198	3.3	9
336	Neuroimaging Findings in US Government Personnel With Possible Exposure to Directional Phenomena in Havana, Cuba. *JAMA - Journal of the American Medical Association*, **2019**, 322, 336-347	27.4	16
335	Association of Midlife Hearing Impairment With Late-Life Temporal Lobe Volume Loss. *JAMA Otolaryngology - Head and Neck Surgery*, **2019**, 145, 794-802	3.9	32
334	Patient-Specific Registration of Pre-operative and Post-recurrence Brain Tumor MRI Scans. *Lecture Notes in Computer Science*, **2019**, 11383, 105-114	0.9	1
333	Radiomics-based identification of peritumoral infiltration in de novo glioblastoma imaging presents targets amenable for potential targeted extended resection: A neurosurgical survey.. *Journal of Clinical Oncology*, **2019**, 37, e13573-e13573	2.2	2
332	Skull-Stripping of Glioblastoma MRI Scans Using 3D Deep Learning. *Lecture Notes in Computer Science*, **2019**, 11992, 57-68	0.9	4
331	Lifetime discrimination burden, racial discrimination, and subclinical cerebrovascular disease among African Americans. *Health Psychology*, **2019**, 38, 63-74	5	16
330	Differential cortical microstructural maturation in the preterm human brain with diffusion kurtosis and tensor imaging. *Proceedings of the National Academy of Sciences of the United States of America*, **2019**, 116, 4681-4688	11.5	32
329	Multivariate Analysis of Preoperative Magnetic Resonance Imaging Reveals Transcriptomic Classification of Glioblastoma Patients. *Frontiers in Computational Neuroscience*, **2019**, 13, 81	3.5	4
328	Predictors of neurodegeneration differ between cognitively normal and subsequently impaired older adults. *Neurobiology of Aging*, **2019**, 75, 178-186	5.6	21
327	Motion artifact in studies of functional connectivity: Characteristics and mitigation strategies. *Human Brain Mapping*, **2019**, 40, 2033-2051	5.9	69
326	Sex differences in estimated brain metabolism in relation to body growth through adolescence. *Journal of Cerebral Blood Flow and Metabolism*, **2019**, 39, 524-535	7.3	14

325	Gestational Age is Dimensionally Associated with Structural Brain Network Abnormalities Across Development. *Cerebral Cortex*, **2019**, 29, 2102-2114	5.1	12
324	Neuroanatomical heterogeneity of schizophrenia revealed by semi-supervised machine learning methods. *Schizophrenia Research*, **2019**, 214, 43-50	3.6	19
323	Evaluation of non-negative matrix factorization of grey matter in age prediction. *NeuroImage*, **2018**, 173, 394-410	7.9	53
322	Brain Cancer Imaging Phenomics Toolkit (brain-CaPTk): An Interactive Platform for Quantitative Analysis of Glioblastoma. *Lecture Notes in Computer Science*, **2018**, 10670, 133-145	0.9	15
321	Radiomic MRI signature reveals three distinct subtypes of glioblastoma with different clinical and molecular characteristics, offering prognostic value beyond IDH1. *Scientific Reports*, **2018**, 8, 5087	4.9	83
320	Brain Magnetic Resonance Imaging Findings in Children and Young Adults With CKD. *American Journal of Kidney Diseases*, **2018**, 72, 349-359	7.4	19
319	Diminished Cortical Thickness Is Associated with Impulsive Choice in Adolescence. *Journal of Neuroscience*, **2018**, 38, 2471-2481	6.6	26
318	Characterization of active and infiltrative tumorous subregions from normal tissue in brain gliomas using multiparametric MRI. *Journal of Magnetic Resonance Imaging*, **2018**, 48, 938-950	5.6	21
317	Quantitative assessment of structural image quality. *NeuroImage*, **2018**, 169, 407-418	7.9	129
316	Multisite Machine Learning Analysis Provides a Robust Structural Imaging Signature of Schizophrenia Detectable Across Diverse Patient Populations and Within Individuals. *Schizophrenia Bulletin*, **2018**, 44, 1035-1044	1.3	77
315	Elevated Markers of Inflammation Are Associated With Longitudinal Changes in Brain Function in Older Adults. *Journals of Gerontology - Series A Biological Sciences and Medical Sciences*, **2018**, 73, 770-778	6.4	34
314	In vivo evaluation of EGFRvIII mutation in primary glioblastoma patients via complex multiparametric MRI signature. *Neuro-Oncology*, **2018**, 20, 1068-1079	1	55
313	MIDAS: Regionally linear multivariate discriminative statistical mapping. *NeuroImage*, **2018**, 174, 111-126	7.9	8
312	White matter microstructure, white matter lesions, and hypertension: An examination of early surrogate markers of vascular-related brain change in midlife. *NeuroImage: Clinical*, **2018**, 18, 753-761	5.3	16
311	Linked dimensions of psychopathology and connectivity in functional brain networks. *Nature Communications*, **2018**, 9, 3003	17.4	169
310	White matter lesions: Spatial heterogeneity, links to risk factors, cognition, genetics, and atrophy. *Neurology*, **2018**, 91, e964-e975	6.5	50
309	Epidermal Growth Factor Receptor Extracellular Domain Mutations in Glioblastoma Present Opportunities for Clinical Imaging and Therapeutic Development. *Cancer Cell*, **2018**, 34, 163-177.e7	24.3	79
308	Network changes associated with transdiagnostic depressive symptom improvement following cognitive behavioral therapy in MDD and PTSD. *Molecular Psychiatry*, **2018**, 23, 2314-2323	15.1	20

307	SPARCL1 Accelerates Symptom Onset in Alzheimer's Disease and Influences Brain Structure and Function During Aging. *Journal of Alzheimerls Disease*, **2018**, 61, 401-414	4.3	12
306	Cancer imaging phenomics toolkit: quantitative imaging analytics for precision diagnostics and predictive modeling of clinical outcome. *Journal of Medical Imaging*, **2018**, 5, 011018	2.6	64
305	Non-invasive determination of the O6-methylguanine-DNA-methyltransferase (MGMT) promoter methylation status in glioblastoma (GBM) using magnetic resonance imaging (MRI).. *Journal of Clinical Oncology*, **2018**, 36, 2051-2051	2.2	5
304	APOE, thought disorder, and SPARE-AD predict cognitive decline in established Parkinson's disease. *Movement Disorders*, **2018**, 33, 289-297	7	24
303	Longitudinally and inter-site consistent multi-atlas based parcellation of brain anatomy using harmonized atlases. *NeuroImage*, **2018**, 166, 71-78	7.9	36
302	Radiomic signature of infiltration in peritumoral edema predicts subsequent recurrence in glioblastoma: implications for personalized radiotherapy planning. *Journal of Medical Imaging*, **2018**, 5, 021219	2.6	44
301	Mitigating head motion artifact in functional connectivity MRI. *Nature Protocols*, **2018**, 13, 2801-2826	18.8	84
300	Classification of multi-site MR images in the presence of heterogeneity using multi-task learning. *NeuroImage: Clinical*, **2018**, 19, 476-486	5.3	20
299	PDE-constrained optimization in medical image analysis. *Optimization and Engineering*, **2018**, 19, 765-812	2.1	20
298	HYDRA: Revealing heterogeneity of imaging and genetic patterns through a multiple max-margin discriminative analysis framework. *NeuroImage*, **2017**, 145, 346-364	7.9	64
297	Common Dimensional Reward Deficits Across Mood and Psychotic Disorders: A Connectome-Wide Association Study. *American Journal of Psychiatry*, **2017**, 174, 657-666	11.9	92
296	Correlations of atrial diameter and frontooccipital horn ratio with ventricle size in fetal ventriculomegaly. *Journal of Neurosurgery: Pediatrics*, **2017**, 19, 300-306	2.1	7
295	Improved brain tumor segmentation by utilizing tumor growth model in longitudinal brain MRI. *Proceedings of SPIE*, **2017**, 10134,	1.7	12
294	Detection of EGFRvIII in Glioblastoma via Perfusion Magnetic Resonance Imaging Signature Consistent with Deep Peritumoral Infiltration: The -Index. *Clinical Cancer Research*, **2017**, 23, 4724-4734	12.9	57
293	A review on neuroimaging-based classification studies and associated feature extraction methods for Alzheimer's disease and its prodromal stages. *NeuroImage*, **2017**, 155, 530-548	7.9	279
292	Patterns of coordinated cortical remodeling during adolescence and their associations with functional specialization and evolutionary expansion. *Proceedings of the National Academy of Sciences of the United States of America*, **2017**, 114, 3527-3532	11.5	59
291	Benchmarking of participant-level confound regression strategies for the control of motion artifact in studies of functional connectivity. *NeuroImage*, **2017**, 154, 174-187	7.9	501
290	Subject-Specific Structural Parcellations Based on Randomized AB-divergences. *Lecture Notes in Computer Science*, **2017**, 10433, 407-415	0.9	2

289	Advancing The Cancer Genome Atlas glioma MRI collections with expert segmentation labels and radiomic features. *Scientific Data*, **2017**, 4, 170117	8.2	893
288	Differential Associations of Socioeconomic Status With Global Brain Volumes and White Matter Lesions in African American and White Adults: the HANDLS SCAN Study. *Psychosomatic Medicine*, **2017**, 79, 327-335	3.7	21
287	Effect of Cerebral Embolic Protection Devices on CNS Infarction in Surgical Aortic Valve Replacement: A Randomized Clinical Trial. *JAMA - Journal of the American Medical Association*, **2017**, 318, 536-547	27.4	43
286	Volumetric Analysis from a Harmonized Multisite Brain MRI Study of a Single Subject with Multiple Sclerosis. *American Journal of Neuroradiology*, **2017**, 38, 1501-1509	4.4	62
285	Association between serum neuron-specific enolase, age, overweight, and structural MRI patterns in 901 subjects. *Translational Psychiatry*, **2017**, 7, 1272	8.6	8
284	A framework for scalable biophysics-based image analysis **2017**,		7
283	Riccati-Regularized Precision Matrices for Neuroimaging. *Lecture Notes in Computer Science*, **2017**, 10265, 275-286	0.9	
282	Heterogeneity of neuroanatomical patterns in prodromal Alzheimer's disease: links to cognition, progression and biomarkers. *Brain*, **2017**, 140, 735-747	11.2	80
281	CHIMERA: Clustering of Heterogeneous Disease Effects via Distribution Matching of Imaging Patterns. *IEEE Transactions on Medical Imaging*, **2016**, 35, 612-21	11.7	39
280	Imaging patterns predict patient survival and molecular subtype in glioblastoma via machine learning techniques. *Neuro-Oncology*, **2016**, 18, 417-25	1	174
279	Capturing heterogeneous group differences using mixture-of-experts: Application to a study of aging. *NeuroImage*, **2016**, 125, 498-514	7.9	14
278	Structured Outlier Detection in Neuroimaging Studies with Minimal Convex Polytopes. *Lecture Notes in Computer Science*, **2016**, 9900, 300-307	0.9	
277	NIMG-20. IMAGING PATTERN ANALYSIS REVEALS THREE DISTINCT PHENOTYPIC SUBTYPES OF GBM WITH DIFFERENT SURVIVAL RATES. *Neuro-Oncology*, **2016**, 18, vi128-vi128	1	8
276	Relationship between APOE Genotype and Structural MRI Measures throughout Adulthood in the Study of Health in Pomerania Population-Based Cohort. *American Journal of Neuroradiology*, **2016**, 37, 1636-42	4.4	25
275	Peripheral sphingolipids are associated with variation in white matter microstructure in older adults. *Neurobiology of Aging*, **2016**, 43, 156-63	5.6	12
274	Midlife and Late-Life Cardiorespiratory Fitness and Brain Volume Changes in Late Adulthood: Results From the Baltimore Longitudinal Study of Aging. *Journals of Gerontology - Series A Biological Sciences and Medical Sciences*, **2016**, 71, 124-30	6.4	17
273	Structural Brain Abnormalities in Youth With Psychosis Spectrum Symptoms. *JAMA Psychiatry*, **2016**, 73, 515-24	14.5	79
272	Abnormality Detection via Iterative Deformable Registration and Basis-Pursuit Decomposition. *IEEE Transactions on Medical Imaging*, **2016**, 35, 1937-51	11.7	7

271	Imaging genomics in cancer research: limitations and promises. *British Journal of Radiology*, **2016**, 89, 20151030	3.4	72
270	White matter hyperintensities and imaging patterns of brain ageing in the general population. *Brain*, **2016**, 139, 1164-79	11.2	212
269	Addressing Confounding in Predictive Models with an Application to Neuroimaging. *International Journal of Biostatistics*, **2016**, 12, 31-44	1.3	22
268	MUSE: MUlti-atlas region Segmentation utilizing Ensembles of registration algorithms and parameters, and locally optimal atlas selection. *NeuroImage*, **2016**, 127, 186-195	7.9	113
267	An Alzheimer's Disease-Derived Biomarker Signature Identifies Parkinson's Disease Patients with Dementia. *PLoS ONE*, **2016**, 11, e0147319	3.7	18
266	GLISTRboost: Combining Multimodal MRI Segmentation, Registration, and Biophysical Tumor Growth Modeling with Gradient Boosting Machines for Glioma Segmentation. *Lecture Notes in Computer Science*, **2016**, 9556, 144-155	0.9	41
265	Development of an itemwise efficiency scoring method: Concurrent, convergent, discriminant, and neuroimaging-based predictive validity assessed in a large community sample. *Psychological Assessment*, **2016**, 28, 1529-1542	5.3	6
264	Effects of Hormone Therapy on Brain Volumes Changes of Postmenopausal Women Revealed by Optimally-Discriminative Voxel-Based Morphometry. *PLoS ONE*, **2016**, 11, e0150834	3.7	19
263	Imaging Surrogates of Infiltration Obtained Via Multiparametric Imaging Pattern Analysis Predict Subsequent Location of Recurrence of Glioblastoma. *Neurosurgery*, **2016**, 78, 572-80	3.2	84
262	Segmentation of Gliomas in Pre-operative and Post-operative Multimodal Magnetic Resonance Imaging Volumes Based on a Hybrid Generative-Discriminative Framework. *Lecture Notes in Computer Science*, **2016**, 10154, 184-194	0.9	19
261	Nuquantus: Machine learning software for the characterization and quantification of cell nuclei in complex immunofluorescent tissue images. *Scientific Reports*, **2016**, 6, 23431	4.9	11
260	Diagnostic potential of structural neuroimaging for depression from a multi-ethnic community sample. *BJPsych Open*, **2016**, 2, 247-254	5	15
259	Brain and White Matter Hyperintensity Volumes After 10 Years of Random Assignment to Lifestyle Intervention. *Diabetes Care*, **2016**, 39, 764-71	14.6	59
258	White matter hyperintensities are more highly associated with preclinical Alzheimer's disease than imaging and cognitive markers of neurodegeneration. *Alzheimer's and Dementia: Diagnosis, Assessment and Disease Monitoring*, **2016**, 4, 18-27	5.2	48
257	Population-based MRI atlases of spatial distribution are specific to patient and tumor characteristics in glioblastoma. *NeuroImage: Clinical*, **2016**, 12, 34-40	5.3	36
256	Control-group feature normalization for multivariate pattern analysis of structural MRI data using the support vector machine. *NeuroImage*, **2016**, 132, 157-166	7.9	14
255	GLISTRboost: Combining Multimodal MRI Segmentation, Registration, and Biophysical Tumor Growth Modeling with Gradient Boosting Machines for Glioma Segmentation. *Lecture Notes in Computer Science*, **2016**, 144-155	0.9	28
254	Crowdsourced estimation of cognitive decline and resilience in Alzheimer's disease. *Alzheimer's and Dementia*, **2016**, 12, 645-53	1.2	58

253	Detecting neuroimaging biomarkers for schizophrenia: a meta-analysis of multivariate pattern recognition studies. *Neuropsychopharmacology*, **2015**, 40, 1742-51	8.7	134
252	Interpreting support vector machine models for multivariate group wise analysis in neuroimaging. *Medical Image Analysis*, **2015**, 24, 190-204	15.4	35
251	A low cost approach for brain tumor segmentation based on intensity modeling and 3D Random Walker. *Biomedical Signal Processing and Control*, **2015**, 22, 19-30	4.9	27
250	Memory, executive, and multidomain subtle cognitive impairment: clinical and biomarker findings. *Neurology*, **2015**, 85, 144-53	6.5	28
249	Breast DCE-MRI Kinetic Heterogeneity Tumor Markers: Preliminary Associations With Neoadjuvant Chemotherapy Response. *Translational Oncology*, **2015**, 8, 154-62	4.9	37
248	Quantification of tumor changes during neoadjuvant chemotherapy with longitudinal breast DCE-MRI registration **2015**,		1
247	Vascular risk factors, cerebrovascular reactivity, and the default-mode brain network. *NeuroImage*, **2015**, 115, 7-16	7.9	43
246	A Bayesian Approach to Sparse Model Selection in Statistical Shape Models. *SIAM Journal on Imaging Sciences*, **2015**, 8, 858-887	1.9	8
245	Design and methods of the NiCK study: neurocognitive assessment and magnetic resonance imaging analysis of children and young adults with chronic kidney disease. *BMC Nephrology*, **2015**, 16, 66	2.7	13
244	Nonlinear Association Between Cerebrospinal Fluid and Florbetapir F-18 Amyloid Measures Across the Spectrum of Alzheimer Disease. *JAMA Neurology*, **2015**, 72, 571-81	17.2	73
243	Automated tumor volumetry using computer-aided image segmentation. *Academic Radiology*, **2015** , 22, 653-661	4.3	33
242	Common and Dissociable Dysfunction of the Reward System in Bipolar and Unipolar Depression. *Neuropsychopharmacology*, **2015**, 40, 2258-68	8.7	149
241	Individualized differential diagnosis of schizophrenia and mood disorders using neuroanatomical biomarkers. *Brain*, **2015**, 138, 2059-73	11.2	99
240	T1rho MRI and CSF biomarkers in diagnosis of Alzheimer's disease. *NeuroImage: Clinical*, **2015**, 7, 598-604	5.3	21
239	Towards an Individualized Delineation of Functional Neuroanatomy. *Neuron*, **2015**, 87, 471-3	13.9	20
238	Suspected non-AD pathology in mild cognitive impairment. *Neurobiology of Aging*, **2015**, 36, 3152-3162	5.6	49
237	Heterogeneity of structural brain changes in subtypes of schizophrenia revealed using magnetic resonance imaging pattern analysis. *Schizophrenia Bulletin*, **2015**, 41, 74-84	1.3	51
236	Identifying Sparse Connectivity Patterns in the brain using resting-state fMRI. *NeuroImage*, **2015**, 105, 286-99	7.9	65

235	Finding imaging patterns of structural covariance via Non-Negative Matrix Factorization. *NeuroImage*, **2015**, 108, 1-16	7.9	56
234	Imaging patterns of brain development and their relationship to cognition. *Cerebral Cortex*, **2015**, 25, 1676-84	5.1	133
233	Linked Sex Differences in Cognition and Functional Connectivity in Youth. *Cerebral Cortex*, **2015**, 25, 2383-94	5.1	209
232	Right ventricle segmentation from cardiac MRI: a collation study. *Medical Image Analysis*, **2015**, 19, 187-202	13.4	144
231	Connectome and Maturation Profiles of the Developing Mouse Brain Using Diffusion Tensor Imaging. *Cerebral Cortex*, **2015**, 25, 2696-706	5.1	15
230	Correlating Cognitive Decline with White Matter Lesion and Brain Atrophy Magnetic Resonance Imaging Measurements in Alzheimer's Disease. *Journal of Alzheimer's Disease*, **2015**, 48, 987-94	4.3	55
229	Deformable registration for quantifying longitudinal tumor changes during neoadjuvant chemotherapy. *Magnetic Resonance in Medicine*, **2015**, 73, 2343-56	4.4	22
228	Vascular factors and multiple measures of early brain health: CARDIA brain MRI study. *PLoS ONE*, **2015**, 10, e0122138	3.7	71
227	NIMG-05IDENTIFICATION OF IMAGING SIGNATURES OF THE EPIDERMAL GROWTH FACTOR RECEPTOR VARIANT III (EGFRvIII) IN GLIOBLASTOMA. *Neuro-Oncology*, **2015**, 17, v154.1-v154	1	4
226	A superpixel-based framework for automatic tumor segmentation on breast DCE-MRI **2015**,		4
225	Methodology to study the three-dimensional spatial distribution of prostate cancer and their dependence on clinical parameters. *Journal of Medical Imaging*, **2015**, 2, 037502	2.6	6
224	Spatial patterns of structural brain changes in type 2 diabetic patients and their longitudinal progression with intensive control of blood glucose. *Diabetes Care*, **2015**, 38, 97-104	14.6	40
223	A Robust Energy Minimization Algorithm for MS-Lesion Segmentation. *Lecture Notes in Computer Science*, **2015**, 9474, 521-530	0.9	0
222	Classification of MRI under the Presence of Disease Heterogeneity using Multi-Task Learning: Application to Bipolar Disorder. *Lecture Notes in Computer Science*, **2015**, 9349, 125-132	0.9	5
221	Disentangling Disease Heterogeneity with Max-Margin Multiple Hyperplane Classifier. *Lecture Notes in Computer Science*, **2015**, 9349, 702-709	0.9	3
220	Estimating Patient Specific Templates for Pre-operative and Follow-Up Brain Tumor Registration. *Lecture Notes in Computer Science*, **2015**, 222-229	0.9	2
219	Evaluation of prostate segmentation algorithms for MRI: the PROMISE12 challenge. *Medical Image Analysis*, **2014**, 18, 359-73	15.4	294
218	Depressive symptoms, symptom dimensions, and white matter lesion volume in older adults: a longitudinal study. *American Journal of Geriatric Psychiatry*, **2014**, 22, 1469-77	6.5	21

217	Effect of hypoglycemia on brain structure in people with type 2 diabetes: epidemiological analysis of the ACCORD-MIND MRI trial. *Diabetes Care*, **2014**, 37, 3279-85	14.6	15
216	Accelerated brain aging in schizophrenia and beyond: a neuroanatomical marker of psychiatric disorders. *Schizophrenia Bulletin*, **2014**, 40, 1140-53	1.3	235
215	Change in brain and lesion volumes after CEE therapies: the WHIMS-MRI studies. *Neurology*, **2014**, 82, 427-34	6.5	33
214	Comparative evaluation of registration algorithms in different brain databases with varying difficulty: results and insights. *IEEE Transactions on Medical Imaging*, **2014**, 33, 2039-65	11.7	97
213	Neuroimaging of the Philadelphia neurodevelopmental cohort. *NeuroImage*, **2014**, 86, 544-53	7.9	307
212	Effect of diabetes on brain structure: the action to control cardiovascular risk in diabetes MR imaging baseline data. *Radiology*, **2014**, 272, 210-6	20.5	30
211	PORTR: Pre-operative and post-recurrence brain tumor registration. *IEEE Transactions on Medical Imaging*, **2014**, 33, 651-67	11.7	26
210	Non-locally regularized segmentation of multiple sclerosis lesion from multi-channel MRI data. *Magnetic Resonance Imaging*, **2014**, 32, 1058-66	3.3	18
209	Individualized statistical learning from medical image databases: application to identification of brain lesions. *Medical Image Analysis*, **2014**, 18, 542-54	15.4	18
208	Integration and relative value of biomarkers for prediction of MCI to AD progression: spatial patterns of brain atrophy, cognitive scores, APOE genotype and CSF biomarkers. *NeuroImage: Clinical*, **2014**, 4, 164-73	5.3	88
207	Multiplicative intrinsic component optimization (MICO) for MRI bias field estimation and tissue segmentation. *Magnetic Resonance Imaging*, **2014**, 32, 913-23	3.3	248
206	Impact of puberty on the evolution of cerebral perfusion during adolescence. *Proceedings of the National Academy of Sciences of the United States of America*, **2014**, 111, 8643-8	11.5	122
205	Multimodal magnetic resonance imaging study of treatment-naïve adults with attention-deficit/hyperactivity disorder. *PLoS ONE*, **2014**, 9, e110199	3.7	15
204	Neuroanatomical classification in a population-based sample of psychotic major depression and bipolar I disorder with 1 year of diagnostic stability. *BioMed Research International*, **2014**, 2014, 706157	3	38
203	Brain abnormality segmentation based onl1-norm minimization **2014**,		1
202	Pattern analysis of dynamic susceptibility contrast-enhanced MR imaging demonstrates peritumoral tissue heterogeneity. *Radiology*, **2014**, 273, 502-10	20.5	69
201	Analysis of spatio-temporal brain imaging patterns by Hidden Markov Models and serial MRI images. *Human Brain Mapping*, **2014**, 35, 4777-94	5.9	11
200	Neuronal injury biomarkers and prognosis in ADNI subjects with normal cognition. *Acta Neuropathologica Communications*, **2014**, 2, 26	7.3	65

199	Cognitive function and brain structure in persons with type 2 diabetes mellitus after intensive lowering of blood pressure and lipid levels: a randomized clinical trial. *JAMA Internal Medicine*, **2014** , 174, 324-33	11.5	112
198	Cross-sectional and longitudinal association of body mass index and brain volume. *Human Brain Mapping*, **2014**, 35, 75-88	5.9	73
197	Sex differences in the effect of puberty on hippocampal morphology. *Journal of the American Academy of Child and Adolescent Psychiatry*, **2014**, 53, 341-50.e1	7.2	71
196	CSF Apo-E levels associate with cognitive decline and MRI changes. *Acta Neuropathologica*, **2014**, 127, 621-32	14.3	51
195	Combining generative models for multifocal glioma segmentation and registration. *Lecture Notes in Computer Science*, **2014**, 17, 763-70	0.9	45
194	Supervised block sparse dictionary learning for simultaneous clustering and classification in computational anatomy. *Lecture Notes in Computer Science*, **2014**, 17, 446-53	0.9	1
193	Discriminative sparse connectivity patterns for classification of fMRI Data. *Lecture Notes in Computer Science*, **2014**, 17, 193-200	0.9	6
192	The five factors of personality and regional cortical variability in the Baltimore longitudinal study of aging. *Human Brain Mapping*, **2013**, 34, 2829-40	5.9	116
191	Deformable medical image registration: a survey. *IEEE Transactions on Medical Imaging*, **2013**, 32, 1153-90	11.7	818
190	Memory decline shows stronger associations with estimated spatial patterns of amyloid deposition progression than total amyloid burden. *Neurobiology of Aging*, **2013**, 34, 2835-42	5.6	22
189	Multi-atlas skull-stripping. *Academic Radiology*, **2013**, 20, 1566-76	4.3	135
188	Analytic estimation of statistical significance maps for support vector machine based multi-variate image analysis and classification. *NeuroImage*, **2013**, 78, 270-83	7.9	75
187	Clinical and multimodal biomarker correlates of ADNI neuropathological findings. *Acta Neuropathologica Communications*, **2013**, 1, 65	7.3	110
186	Neuroanatomical pattern classification in a population-based sample of first-episode schizophrenia. *Progress in Neuro-Psychopharmacology and Biological Psychiatry*, **2013**, 43, 116-25	5.5	42
185	Heterogeneous impact of motion on fundamental patterns of developmental changes in functional connectivity during youth. *NeuroImage*, **2013**, 83, 45-57	7.9	167
184	Deriving statistical significance maps for support vector regression using medical imaging data. *International Workshop on Pattern Recognition in NeuroImaging*, **2013**, 2013, 13-16		4
183	Optimally-Discriminative Voxel-Based Morphometry significantly increases the ability to detect group differences in schizophrenia, mild cognitive impairment, and Alzheimer's disease. *NeuroImage*, **2013**, 79, 94-110	7.9	26
182	Computer-aided assessment of regional abdominal fat with food residue removal in CT. *Academic Radiology*, **2013**, 20, 1413-21	4.3	17

181	Cognitive and functional resilience despite molecular evidence of Alzheimer's disease pathology. *Alzheimer's and Dementia*, **2013**, 9, e89-95	1.2	35
180	Systematic review of structural and functional neuroimaging findings in children and adults with CKD. *Clinical Journal of the American Society of Nephrology: CJASN*, **2013**, 8, 1429-48	6.9	56
179	Unsupervised learning of functional network dynamics in resting state fMRI. *Lecture Notes in Computer Science*, **2013**, 23, 426-37	0.9	54
178	Functional maturation of the executive system during adolescence. *Journal of Neuroscience*, **2013**, 33, 16249-61	6.6	168
177	CLASSIFYING MEDICAL IMAGES USING MORPHOLOGICAL APPEARANCE MANIFOLDS **2013**, 2013, 744-747	1.5	1
176	IDENTIFYING PATTERNS IN TEMPORAL VARIATION OF FUNCTIONAL CONNECTIVITY USING RESTING STATE FMRI **2013**, 2013, 1086-1089	1.5	6
175	ODVBA-C: Optimally-Discriminative Voxel-Based Analysis of Continuous Variables. *International Workshop on Pattern Recognition in NeuroImaging*, **2013**, 2013, 161-164		
174	Relationship between plasma analytes and SPARE-AD defined brain atrophy patterns in ADNI. *PLoS ONE*, **2013**, 8, e55531	3.7	32
173	Imaging-based biomarkers of cognitive performance in older adults constructed via high-dimensional pattern regression applied to MRI and PET. *PLoS ONE*, **2013**, 8, e85460	3.7	10
172	Extracting evolving pathologies via spectral clustering. *Lecture Notes in Computer Science*, **2013**, 23, 680-91	0.9	2
171	Segmentation of the left ventricle using distance regularized two-layer level set approach. *Lecture Notes in Computer Science*, **2013**, 16, 477-84	0.9	19
170	A Bayesian Approach for Construction of Sparse Statistical Shape Models Using Dirichlet Distribution. *Lecture Notes in Computer Science*, **2013**, 144-152	0.9	
169	Generative-discriminative basis learning for medical imaging. *IEEE Transactions on Medical Imaging*, **2012**, 31, 51-69	11.7	52
168	JointMMCC: joint maximum-margin classification and clustering of imaging data. *IEEE Transactions on Medical Imaging*, **2012**, 31, 1124-40	11.7	12
167	A composite multivariate polygenic and neuroimaging score for prediction of conversion to Alzheimer's disease. *International Workshop on Pattern Recognition in NeuroImaging*, **2012**, 105-108		5
166	Correspondence between in vivo (11)C-PiB-PET amyloid imaging and postmortem, region-matched assessment of plaques. *Acta Neuropathologica*, **2012**, 124, 823-31	14.3	86
165	Alcohol consumption and premotor corpus callosum in older adults. *European Neuropsychopharmacology*, **2012**, 22, 704-10	1.2	16
164	NONRIGID VOLUME REGISTRATION USING SECOND-ORDER MRF MODEL **2012**, 2012, 708-711	1.5	1

163	Sparse dictionary learning of resting state fMRI networks. *International Workshop on Pattern Recognition in NeuroImaging*, **2012**, 73-76		20
162	FEATURE RANKING BASED NESTED SUPPORT VECTOR MACHINE ENSEMBLE FOR MEDICAL IMAGE CLASSIFICATION **2012**, 146-149	1.5	19
161	Multivariate fMRI Analysis using Optimally-Discriminative Voxel-Based Analysis. *International Workshop on Pattern Recognition in NeuroImaging*, **2012**, 2012, 33-36		3
160	Longitudinal imaging pattern analysis (SPARE-CD index) detects early structural and functional changes before cognitive decline in healthy older adults. *Neurobiology of Aging*, **2012**, 33, 2733-45	5.6	26
159	GLISTR: glioma image segmentation and registration. *IEEE Transactions on Medical Imaging*, **2012**, 31, 1941-54	11.7	149
158	Combining Outlier Detection with Random Walker for Automatic Brain Tumor Segmentation. *International Federation for Information Processing*, **2012**, 26-35		6
157	Plasma clusterin concentration is associated with longitudinal brain atrophy in mild cognitive impairment. *NeuroImage*, **2012**, 59, 212-7	7.9	108
156	Dynamic Bayesian network modeling for longitudinal brain morphometry. *NeuroImage*, **2012**, 59, 2330-8	7.9	29
155	Alzheimer's disease pattern of brain atrophy predicts cognitive decline in Parkinson's disease. *Brain* , **2012**, 135, 170-80	11.2	122
154	Midlife obesity and trajectories of brain volume changes in older adults. *Human Brain Mapping*, **2012**, 33, 2204-10	5.9	53
153	Early recognition and disease prediction in the at-risk mental states for psychosis using neurocognitive pattern classification. *Schizophrenia Bulletin*, **2012**, 38, 1200-15	1.3	105
152	Association of social engagement with brain volumes assessed by structural MRI. *Journal of Aging Research*, **2012**, 2012, 512714	2.3	20
151	MANIFOLD-CONSTRAINED EMBEDDINGS FOR THE DETECTION OF WHITE MATTER LESIONS IN BRAIN MRI **2012**, 2012, 562-565	1.5	3
150	Validation of DRAMMS among 12 Popular Methods in Cross-Subject Cardiac MRI Registration. *Lecture Notes in Computer Science*, **2012**, 7359, 209-219	0.9	10
149	Fuzzy Multi-channel Clustering with Individualized Spatial Priors for Segmenting Brain Lesions and Infarcts. *International Federation for Information Processing*, **2012**, 76-85		1
148	Nonlinear Discriminant Graph Embeddings for Detecting White Matter Lesions in FLAIR MRI. *Lecture Notes in Computer Science*, **2012**, 94-102	0.9	
147	Joint segmentation and deformable registration of brain scans guided by a tumor growth model. *Lecture Notes in Computer Science*, **2011**, 14, 532-40	0.9	29
146	Morphological Classification: Application to Cardiac MRI of Tetralogy of Fallot. *Lecture Notes in Computer Science*, **2011**, 6666, 180-187	0.9	5

145	Semi-supervised pattern classification of medical images: application to mild cognitive impairment (MCI). *NeuroImage*, **2011**, 55, 1109-19	7.9	94
144	Functional principal component model for high-dimensional brain imaging. *NeuroImage*, **2011**, 58, 772-84	7.9	55
143	Semi-supervised cluster analysis of imaging data. *NeuroImage*, **2011**, 54, 2185-97	7.9	30
142	Lack of association between 11C-PiB and longitudinal brain atrophy in non-demented older individuals. *Neurobiology of Aging*, **2011**, 32, 2123-30	5.6	37
141	Prediction of MCI to AD conversion, via MRI, CSF biomarkers, and pattern classification. *Neurobiology of Aging*, **2011**, 32, 2322.e19-27	5.6	387
140	T(1) MRI in Alzheimer's disease: detection of pathological changes in medial temporal lobe. *Journal of Neuroimaging*, **2011**, 21, e86-90	2.8	24
139	Morphological appearance manifolds for group-wise morphometric analysis. *Medical Image Analysis* , **2011**, 15, 814-29	15.4	6
138	Effects of intensive glucose lowering on brain structure and function in people with type 2 diabetes (ACCORD MIND): a randomised open-label substudy. *Lancet Neurology, The*, **2011**, 10, 969-77	24.1	356
137	Deformable registration of glioma images using EM algorithm and diffusion reaction modeling. *IEEE Transactions on Medical Imaging*, **2011**, 30, 375-90	11.7	70
136	ODVBA: optimally-discriminative voxel-based analysis. *IEEE Transactions on Medical Imaging*, **2011**, 30, 1441-54	11.7	28
135	T1rho (T1) MR imaging in Alzheimer's disease and Parkinson's disease with and without dementia. *Journal of Neurology*, **2011**, 258, 380-5	5.5	44
134	Investigating machine learning techniques for MRI-based classification of brain neoplasms. *International Journal of Computer Assisted Radiology and Surgery*, **2011**, 6, 821-8	3.9	49
133	Pattern Analysis in Neuroimaging: Beyond Two-Class Categorization. *International Journal of Imaging Systems and Technology*, **2011**, 21, 173-178	2.5	2
132	Application of machine learning methods to describe the effects of conjugated equine estrogens therapy on region-specific brain volumes. *Magnetic Resonance Imaging*, **2011**, 29, 546-53	3.3	19
131	DRAMMS: Deformable registration via attribute matching and mutual-saliency weighting. *Medical Image Analysis*, **2011**, 15, 622-39	15.4	255
130	UNDERSTANDING HETEROGENEITY IN NORMAL OLDER ADULT POPULATIONS VIA CLUSTERING OF LONGITUDINAL DATA **2011**, 1101-1104	1.5	1
129	AUTOMATED SEGMENTATION OF CORTICAL NECROSIS USING A WAVELET BASED ABNORMALITY DETECTION SYSTEM **2011**, 2011, 1391-1395	1.5	1
128	Multi-parametric analysis and registration of brain tumors: constructing statistical atlases and diagnostic tools of predictive value. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2011**, 2011, 6979-81	0.9	2

127	Genetic risk factors for longitudinal changes in structural MRI in former organolead workers. *Journal of Aging Research*, **2011**, 2011, 362189	2.3	1
126	DISEASE CLASSIFICATION AND PREDICTION VIA SEMI-SUPERVISED DIMENSIONALITY REDUCTION **2011**, 2011, 1086-1090	1.5	14
125	Semi-Supervised Pattern Classification: Application to Structural MRI of Alzheimer's Disease. *International Workshop on Pattern Recognition in NeuroImaging*, **2011**, 2011, 1-4		21
124	Narrow band region-scalable fitting model for image segmentation in the presence of intensity inhomogeneities **2011**,		1
123	Multilevel Functional Principal Component Analysis for High-Dimensional Data. *Journal of Computational and Graphical Statistics*, **2011**, 20, 852-873	1.4	40
122	Imaging as a Surrogate for the Early Prediction and Assessment of Treatment Response through the Analysis of 4-D Texture Ensembles (ISEPARATE). *Lecture Notes in Computer Science*, **2011**, 164-173	0.9	1
121	Regularized tensor factorization for multi-modality medical image classification. *Lecture Notes in Computer Science*, **2011**, 14, 17-24	0.9	10
120	Pattern based morphometry. *Lecture Notes in Computer Science*, **2011**, 14, 459-66	0.9	6
119	Multi-Kernel Classification for Integration of Clinical and Imaging Data: Application to Prediction of Cognitive Decline in Older Adults. *Lecture Notes in Computer Science*, **2011**, 7009, 26-34	0.9	6
118	Groupwise Morphometric Analysis Based on High Dimensional Clustering. *IEEE Computer Society Conference on Computer Vision and Pattern Recognition Workshops*, **2010**, 2010, 47-54	1.3	1
117	Intima-media thickness and regional cerebral blood flow in older adults. *Stroke*, **2010**, 41, 273-9	6.7	27
116	Use of neuroanatomical pattern regression to predict the structural brain dynamics of vulnerability and transition to psychosis. *Schizophrenia Research*, **2010**, 123, 175-87	3.6	44
115	Automated segmentation of brain lesions by combining intensity and spatial information **2010**,		4
114	O2-05-01: Clusterin, an amyloid chaperone protein in plasma is associated with longitudinal brain atrophy in mild cognitive impairment **2010**, 6, S106-S107		
113	High-dimensional pattern regression using machine learning: from medical images to continuous clinical variables. *NeuroImage*, **2010**, 50, 1519-35	7.9	138
112	Learning high-dimensional image statistics for abnormality detection on medical images **2010**,		4
111	Application of trace-norm and low-rank matrix decomposition for computational anatomy **2010**,		2
110	An EM algorithm for brain tumor image registration: A tumor growth modeling based approach **2010**,		3

109	Evaluation of cumulative lead dose and longitudinal changes in structural magnetic resonance imaging in former organolead workers. *Journal of Occupational and Environmental Medicine*, **2010**, 52, 407-14	2	10
108	DTI-DROID: Diffusion tensor imaging-deformable registration using orientation and intensity descriptors. *International Journal of Imaging Systems and Technology*, **2010**, 20, 99-107	2.5	13
107	GRAM: A framework for geodesic registration on anatomical manifolds. *Medical Image Analysis*, **2010**, 14, 633-42	15.4	89
106	Spatio-temporal analysis of brain MRI images using hidden Markov models. *Lecture Notes in Computer Science*, **2010**, 13, 160-8	0.9	6
105	Simultaneous geometric--iconic registration. *Lecture Notes in Computer Science*, **2010**, 13, 676-83	0.9	19
104	Optimally-discriminative voxel-based analysis. *Lecture Notes in Computer Science*, **2010**, 13, 257-65	0.9	1
103	Quantification of brain maturation and growth patterns in C57BL/6J mice via computational neuroanatomy of diffusion tensor images. *Cerebral Cortex*, **2009**, 19, 675-87	5.1	56
102	Longitudinal progression of Alzheimer's-like patterns of atrophy in normal older adults: the SPARE-AD index. *Brain*, **2009**, 132, 2026-35	11.2	196
101	Use of neuroanatomical pattern classification to identify subjects in at-risk mental states of psychosis and predict disease transition. *Archives of General Psychiatry*, **2009**, 66, 700-12		321
100	Early marker for Alzheimer's disease: hippocampus T1rho (T(1rho)) estimation. *Journal of Magnetic Resonance Imaging*, **2009**, 29, 1008-12	5.6	50
99	Classification of brain tumor type and grade using MRI texture and shape in a machine learning scheme. *Magnetic Resonance in Medicine*, **2009**, 62, 1609-18	4.4	491
98	Frontal Atrophy and Attention Deficits in Older Adults with a History of Elevated Depressive Symptoms. *Brain Imaging and Behavior*, **2009**, 3, 358	4.1	8
97	Sampling the spatial patterns of cancer: optimized biopsy procedures for estimating prostate cancer volume and Gleason Score. *Medical Image Analysis*, **2009**, 13, 609-20	15.4	20
96	MRI-based classification of brain tumor type and grade using SVM-RFE **2009**,		20
95	Baseline and longitudinal patterns of brain atrophy in MCI patients, and their use in prediction of short-term conversion to AD: results from ADNI. *NeuroImage*, **2009**, 44, 1415-22	7.9	410
94	Morphological appearance manifolds in computational anatomy: groupwise registration and morphological analysis. *NeuroImage*, **2009**, 45, S73-85	7.9	26
93	Non-diffeomorphic registration of brain tumor images by simulating tissue loss and tumor growth. *NeuroImage*, **2009**, 46, 762-74	7.9	65
92	DRAMMS: deformable registration via attribute matching and mutual-saliency weighting. *Lecture Notes in Computer Science*, **2009**, 21, 50-62	0.9	18

91	A general and unifying framework for feature construction, in image-based pattern classification. *Lecture Notes in Computer Science*, **2009**, 21, 423-34	0.9	23
90	Efficient large deformation registration via geodesics on a learned manifold of images. *Lecture Notes in Computer Science*, **2009**, 12, 680-7	0.9	31
89	Biomechanically-constrained 4D estimation of myocardial motion. *Lecture Notes in Computer Science*, **2009**, 12, 257-65	0.9	17
88	Computational Neuroanatomy Using Shape Transformations **2009**, 293-304		
87	A comparative study of biomechanical simulators in deformable registration of brain tumor images. *IEEE Transactions on Biomedical Engineering*, **2008**, 55, 1233-6	5	30
86	ORBIT: a multiresolution framework for deformable registration of brain tumor images. *IEEE Transactions on Medical Imaging*, **2008**, 27, 1003-17	11.7	71
85	Unaffected family members and schizophrenia patients share brain structure patterns: a high-dimensional pattern classification study. *Biological Psychiatry*, **2008**, 63, 118-24	7.9	102
84	Detection of prodromal Alzheimer's disease via pattern classification of magnetic resonance imaging. *Neurobiology of Aging*, **2008**, 29, 514-23	5.6	300
83	Spatial patterns of brain atrophy in MCI patients, identified via high-dimensional pattern classification, predict subsequent cognitive decline. *NeuroImage*, **2008**, 39, 1731-43	7.9	383
82	Structural and functional biomarkers of prodromal Alzheimer's disease: a high-dimensional pattern classification study. *NeuroImage*, **2008**, 41, 277-85	7.9	242
81	T1rho MRI of Alzheimer's disease. *NeuroImage*, **2008**, 41, 1199-205	7.9	59
80	Brain Tumor Interaction Biophysical Models for Medical Image Registration. *SIAM Journal of Scientific Computing*, **2008**, 30, 3050-3072	2.6	32
79	Computer-assisted segmentation of white matter lesions in 3D MR images using support vector machine. *Academic Radiology*, **2008**, 15, 300-13	4.3	187
78	Multiparametric tissue characterization of brain neoplasms and their recurrence using pattern classification of MR images. *Academic Radiology*, **2008**, 15, 966-77	4.3	127
77	Are brain volumes based on magnetic resonance imaging mediators of the associations of cumulative lead dose with cognitive function?. *American Journal of Epidemiology*, **2008**, 167, 429-37	3.8	17
76	Multiparametric tissue abnormality characterization using manifold regularization **2008**,		1
75	Parallel optimization of tumor model parameters for fast registration of brain tumor images **2008**,		3
74	Spatial normalization of diffusion tensor images based on anisotropic segmentation **2008**,		3

73	Three-dimensional sonography with needle tracking: role in diagnosis and treatment of prostate cancer. *Journal of Ultrasound in Medicine*, **2008**, 27, 895-905	2.9	30
72	Feature selection and classification of multiparametric medical images using bagging and SVM **2008**,		2
71	Offering to share: how to put heads together in autism neuroimaging. *Journal of Autism and Developmental Disorders*, **2008**, 38, 2-13	4.6	25
70	An image-driven parameter estimation problem for a reaction-diffusion glioma growth model with mass effects. *Journal of Mathematical Biology*, **2008**, 56, 793-825	2	166
69	Measuring brain lesion progression with a supervised tissue classification system. *Lecture Notes in Computer Science*, **2008**, 11, 620-7	0.9	53
68	Targeted prostate biopsy using statistical image analysis. *IEEE Transactions on Medical Imaging*, **2007**, 26, 779-88	11.7	48
67	COMPARE: classification of morphological patterns using adaptive regional elements. *IEEE Transactions on Medical Imaging*, **2007**, 26, 93-105	11.7	277
66	On analyzing diffusion tensor images by identifying manifold structure using isomaps. *IEEE Transactions on Medical Imaging*, **2007**, 26, 772-8	11.7	28
65	Registering histologic and MR images of prostate for image-based cancer detection. *Academic Radiology*, **2007**, 14, 1367-81	4.3	67
64	PROBABILISTIC SEGMENTATION OF BRAIN TUMORS BASED ON MULTI-MODALITY MAGNETIC RESONANCE IMAGES **2007**,		14
63	Low-constant parallel algorithms for finite element simulations using linear octrees **2007**,		27
62	A robust framework for soft tissue simulations with application to modeling brain tumor mass effect in 3D MR images. *Physics in Medicine and Biology*, **2007**, 52, 6893-908	3.8	36
61	Manifold Learning Techniques in Image Analysis of High-dimensional Diffusion Tensor Magnetic Resonance Images **2007**,		5
60	Relations of brain volumes with cognitive function in males 45 years and older with past lead exposure. *NeuroImage*, **2007**, 37, 633-41	7.9	33
59	Anatomical equivalence class: a morphological analysis framework using a lossless shape descriptor. *IEEE Transactions on Medical Imaging*, **2007**, 26, 619-31	11.7	8
58	Statistical representation of high-dimensional deformation fields with application to statistically constrained 3D warping. *Medical Image Analysis*, **2006**, 10, 740-51	15.4	74
57	A novel 2D-3D registration algorithm for aligning fluoro images with 3D pre-op CT/MR images **2006** , 6141, 760		18
56	Diagnosis of brain abnormality using both structural and functional MR images. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society*, **2006**, Suppl, 6585-8		5

55	Diagnosis of brain abnormality using both structural and functional MR images. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society*, **2006**, 2006, 1044-7		9
54	Simulation of tissue atrophy using a topology preserving transformation model. *IEEE Transactions on Medical Imaging*, **2006**, 25, 649-52	11.7	51
53	CLASSIC: consistent longitudinal alignment and segmentation for serial image computing. *NeuroImage*, **2006**, 30, 388-99	7.9	97
52	Simulating deformations of MR brain images for validation of atlas-based segmentation and registration algorithms. *NeuroImage*, **2006**, 33, 855-66	7.9	73
51	Puberty-related influences on brain development. *Molecular and Cellular Endocrinology*, **2006**, 254-255, 154-62	4.4	228
50	Hypercortisolism in alcohol dependence and its relation to hippocampal volume loss. *Journal of Studies on Alcohol and Drugs*, **2006**, 67, 861-7		32
49	Hippocampus volume loss due to chronic heavy drinking. *Alcoholism: Clinical and Experimental Research*, **2006**, 30, 1866-70	3.7	127
48	Deformable registration of brain tumor images via a statistical model of tumor-induced deformation. *Medical Image Analysis*, **2006**, 10, 752-63	15.4	73
47	Quantification of facial expressions using high-dimensional shape transformations. *Journal of Neuroscience Methods*, **2005**, 141, 61-73	3	29
46	Whole-brain morphometric study of schizophrenia revealing a spatially complex set of focal abnormalities. *Archives of General Psychiatry*, **2005**, 62, 1218-27		217
45	Voxel-based morphometric analysis using shape transformations. *International Review of Neurobiology*, **2005**, 66, 125-46	4.4	5
44	Finite element modeling of brain tumor mass-effect from 3D medical images. *Lecture Notes in Computer Science*, **2005**, 8, 400-8	0.9	46
43	Spatiotemporal maturation patterns of murine brain quantified by diffusion tensor MRI and deformation-based morphometry. *Proceedings of the National Academy of Sciences of the United States of America*, **2005**, 102, 6978-83	11.5	71
42	Using the fast marching method to extract curves with given global properties. *Lecture Notes in Computer Science*, **2005**, 8, 870-7	0.9	1
41	Deformable registration of brain tumor images via a statistical model of tumor-induced deformation. *Lecture Notes in Computer Science*, **2005**, 8, 263-70	0.9	4
40	Statistical representation and simulation of high-dimensional deformations: application to synthesizing brain deformations. *Lecture Notes in Computer Science*, **2005**, 8, 500-8	0.9	6
39	Determining correspondence in 3-D MR brain images using attribute vectors as morphological signatures of voxels. *IEEE Transactions on Medical Imaging*, **2004**, 23, 1276-91	11.7	42
38	Optimized prostate biopsy via a statistical atlas of cancer spatial distribution. *Medical Image Analysis*, **2004**, 8, 139-50	15.4	60

37	A Bayesian morphometry algorithm. *IEEE Transactions on Medical Imaging*, **2004**, 23, 723-37	11.7	13
36	Estimating topology preserving and smooth displacement fields. *IEEE Transactions on Medical Imaging*, **2004**, 23, 868-80	11.7	53
35	Morphological classification of brains via high-dimensional shape transformations and machine learning methods. *NeuroImage*, **2004**, 21, 46-57	7.9	269
34	Measuring temporal morphological changes robustly in brain MR images via 4-dimensional template warping. *NeuroImage*, **2004**, 21, 1508-17	7.9	94
33	Deformable registration of cortical structures via hybrid volumetric and surface warping. *NeuroImage*, **2004**, 22, 1790-801	7.9	97
32	Why voxel-based morphometric analysis should be used with great caution when characterizing group differences. *NeuroImage*, **2004**, 23, 17-20	7.9	362
31	Automated morphometric study of brain variation in XXY males. *NeuroImage*, **2004**, 23, 648-53	7.9	70
30	Automatic classification of sulcal regions of the human brain cortex using pattern recognition **2003**,		14
29	Computer-assisted imaging to assess brain structure in healthy and diseased brains. *Lancet Neurology, The*, **2003**, 2, 79-88	24.1	312
28	Spatial normalization of diffusion tensor fields. *Magnetic Resonance in Medicine*, **2003**, 50, 175-82	4.4	126
27	Very high-resolution morphometry using mass-preserving deformations and HAMMER elastic registration. *NeuroImage*, **2003**, 18, 28-41	7.9	134
26	Segmentation of prostate boundaries from ultrasound images using statistical shape model. *IEEE Transactions on Medical Imaging*, **2003**, 22, 539-51	11.7	176
25	Hierarchical active shape models, using the wavelet transform. *IEEE Transactions on Medical Imaging*, **2003**, 22, 414-23	11.7	144
24	Longitudinal magnetic resonance imaging studies of older adults: a shrinking brain. *Journal of Neuroscience*, **2003**, 23, 3295-301	6.6	962
23	Imaging cortical association tracts in the human brain using diffusion-tensor-based axonal tracking. *Magnetic Resonance in Medicine*, **2002**, 47, 215-23	4.4	480
22	Using a statistical shape model to extract sulcal curves on the outer cortex of the human brain. *IEEE Transactions on Medical Imaging*, **2002**, 21, 513-24	11.7	68
21	Is the spatial distribution of brain lesions associated with closed-head injury in children predictive of subsequent development of posttraumatic stress disorder?. *Radiology*, **2002**, 224, 345-51	20.5	21
20	Spatial normalization of spine MR images for statistical correlation of lesions with clinical symptoms. *Radiology*, **2002**, 224, 919-26	20.5	12

19	Morphometric analysis of cortical sulci using parametric ribbons: a study of the central sulcus. *Journal of Computer Assisted Tomography*, **2002**, 26, 298-307	2.2	43
18	HAMMER: hierarchical attribute matching mechanism for elastic registration. *IEEE Transactions on Medical Imaging*, **2002**, 21, 1421-39	11.7	771
17	Measuring size and shape of the hippocampus in MR images using a deformable shape model. *NeuroImage*, **2002**, 15, 422-34	7.9	101
16	A framework for callosal fiber distribution analysis. *NeuroImage*, **2002**, 17, 1131-43	7.9	116
15	Accuracy and sensitivity of detection of activation foci in the brain via statistical parametric mapping: a study using a PET simulator. *NeuroImage*, **2001**, 13, 176-84	7.9	25
14	Voxel-based morphometry using the RAVENS maps: methods and validation using simulated longitudinal atrophy. *NeuroImage*, **2001**, 14, 1361-9	7.9	330
13	A Statistical Atlas of Prostate Cancer for Optimal Biopsy. *Lecture Notes in Computer Science*, **2001**, 416-424	2.9	8
12	Statistical atlases **2001**, 240-250		
11	Is the spatial distribution of brain lesions associated with closed-head injury predictive of subsequent development of attention-deficit/hyperactivity disorder? Analysis with brain-image database. *Radiology*, **1999**, 213, 389-94	20.5	104
10	Convexity analysis of active contour problems. *Image and Vision Computing*, **1999**, 17, 27-36	3.7	17
9	An image-processing system for qualitative and quantitative volumetric analysis of brain images. *Journal of Computer Assisted Tomography*, **1998**, 22, 827-37	2.2	214
8	A probabilistic ribbon model for shape analysis of the cerebral sulci: application to the central sulcus. *Journal of Computer Assisted Tomography*, **1998**, 22, 962-71	2.2	26
7	Finding parametric representations of the cortical sulci using an active contour model. *Medical Image Analysis*, **1997**, 1, 295-315	15.4	74
6	Spatial transformation and registration of brain images using elastically deformable models. *Computer Vision and Image Understanding*, **1997**, 66, 207-22	4.3	254
5	A computerized approach for morphological analysis of the corpus callosum. *Journal of Computer Assisted Tomography*, **1996**, 20, 88-97	2.2	234
4	Spatial normalization of 3D brain images using deformable models. *Journal of Computer Assisted Tomography*, **1996**, 20, 656-65	2.2	164
3	Measurement of radiotracer concentration in brain gray matter using positron emission tomography: MRI-based correction for partial volume effects. *Journal of Cerebral Blood Flow and Metabolism*, **1992**, 12, 571-83	7.3	543
2	Structural and functional brain parameters related to cognitive performance across development: Replication and extension of the parieto-frontal integration theory in a single sample		1

List of Publications

1 Longitudinal ComBat: A Method for Harmonizing Longitudinal Multi-scanner Imaging Data 2