

Alex D Leow

List of Publications by Year in descending order

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Version: 2024-02-01

133
papers

6,200
citations

71102

41
h-index

76900

74
g-index

144
all docs

144
docs citations

144
times ranked

8609
citing authors

#	ARTICLE	IF	CITATIONS
1	Brain structure and obesity. <i>Human Brain Mapping</i> , 2010, 31, 353-364.	3.6	555
2	Tensor-based morphometry as a neuroimaging biomarker for Alzheimer's disease: An MRI study of 676 AD, MCI, and normal subjects. <i>NeuroImage</i> , 2008, 43, 458-469.	4.2	317
3	Voxelwise genome-wide association study (vGWAS). <i>NeuroImage</i> , 2010, 53, 1160-1174.	4.2	239
4	A commonly carried allele of the obesity-related <i>FTO</i> gene is associated with reduced brain volume in the healthy elderly. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2010, 107, 8404-8409.	7.1	227
5	Tracking Alzheimer's Disease. <i>Annals of the New York Academy of Sciences</i> , 2007, 1097, 183-214.	3.8	209
6	Longitudinal stability of MRI for mapping brain change using tensor-based morphometry. <i>NeuroImage</i> , 2006, 31, 627-640.	4.2	198
7	Predicting Mood Disturbance Severity with Mobile Phone Keystroke Metadata: A BiAffect Digital Phenotyping Study. <i>Journal of Medical Internet Research</i> , 2018, 20, e241.	4.3	179
8	Statistical Properties of Jacobian Maps and the Realization of Unbiased Large-Deformation Nonlinear Image Registration. <i>IEEE Transactions on Medical Imaging</i> , 2007, 26, 822-832.	8.9	174
9	Increased volume of the amygdala and hippocampus in bipolar patients treated with lithium. <i>NeuroReport</i> , 2008, 19, 221-224.	1.2	165
10	Alzheimer's Disease Neuroimaging Initiative: A one-year follow up study using tensor-based morphometry correlating degenerative rates, biomarkers and cognition. <i>NeuroImage</i> , 2009, 45, 645-655.	4.2	159
11	3D characterization of brain atrophy in Alzheimer's disease and mild cognitive impairment using tensor-based morphometry. <i>NeuroImage</i> , 2008, 41, 19-34.	4.2	149
12	Inverse Consistent Mapping in 3D Deformable Image Registration: Its Construction and Statistical Properties. <i>Lecture Notes in Computer Science</i> , 2005, 19, 493-503.	1.3	144
13	Genome-wide analysis reveals novel genes influencing temporal lobe structure with relevance to neurodegeneration in Alzheimer's disease. <i>NeuroImage</i> , 2010, 51, 542-554.	4.2	141
14	Impaired Inter-Hemispheric Integration in Bipolar Disorder Revealed with Brain Network Analyses. <i>Biological Psychiatry</i> , 2013, 73, 183-193.	1.3	136
15	Depressive Symptoms in Mild Cognitive Impairment Predict Greater Atrophy in Alzheimer's Disease-Related Regions. <i>Biological Psychiatry</i> , 2012, 71, 814-821.	1.3	135
16	Optimizing power to track brain degeneration in Alzheimer's disease and mild cognitive impairment with tensor-based morphometry: An ADNI study of 515 subjects. <i>NeuroImage</i> , 2009, 48, 668-681.	4.2	129
17	Shared white matter alterations across emotional disorders: A voxel-based meta-analysis of fractional anisotropy. <i>NeuroImage: Clinical</i> , 2016, 12, 1022-1034.	2.7	116
18	Three-dimensional brain growth abnormalities in childhood-onset schizophrenia visualized by using tensor-based morphometry. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2008, 105, 15979-15984.	7.1	113

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19	Quantitative Tract-Specific Measures of Uncinate and Cingulum in Major Depression Using Diffusion Tensor Imaging. <i>Neuropsychopharmacology</i> , 2012, 37, 959-967.	5.4	107
20	Unbiased tensor-based morphometry: Improved robustness and sample size estimates for Alzheimer's disease clinical trials. <i>NeuroImage</i> , 2013, 66, 648-661.	4.2	103
21	Fluid Registration of Diffusion Tensor Images Using Information Theory. <i>IEEE Transactions on Medical Imaging</i> , 2008, 27, 442-456.	8.9	98
22	DeepMood. , 2017, , .		96
23	Structural MRI and Brain Development. <i>International Review of Neurobiology</i> , 2005, 67, 285-323.	2.0	86
24	Mapping Alzheimer's disease progression in 1309 MRI scans: Power estimates for different inter-scan intervals. <i>NeuroImage</i> , 2010, 51, 63-75.	4.2	79
25	Graph Theory Analysis of Cortical-Subcortical Networks in Late-Life Depression. <i>American Journal of Geriatric Psychiatry</i> , 2014, 22, 195-206.	1.2	78
26	Accurate measurement of brain changes in longitudinal MRI scans using tensor-based morphometry. <i>NeuroImage</i> , 2011, 57, 5-14.	4.2	77
27	Detecting brain growth patterns in normal children using tensor-based morphometry. <i>Human Brain Mapping</i> , 2009, 30, 209-219.	3.6	73
28	How does angular resolution affect diffusion imaging measures?. <i>NeuroImage</i> , 2010, 49, 1357-1371.	4.2	70
29	3D pattern of brain abnormalities in Fragile X syndrome visualized using tensor-based morphometry. <i>NeuroImage</i> , 2007, 34, 924-938.	4.2	68
30	Comparing 3 T and 1.5 T MRI for tracking Alzheimer's disease progression with tensor-based morphometry. <i>Human Brain Mapping</i> , 2010, 31, 499-514.	3.6	66
31	Apolipoprotein E Genotype is Associated with Temporal and Hippocampal Atrophy Rates in Healthy Elderly Adults: A Tensor-Based Morphometry Study1. <i>Journal of Alzheimer's Disease</i> , 2011, 23, 433-442.	2.6	65
32	Differentiating Prenatal Exposure to Methamphetamine and Alcohol versus Alcohol and Not Methamphetamine using Tensor-Based Brain Morphometry and Discriminant Analysis. <i>Journal of Neuroscience</i> , 2010, 30, 3876-3885.	3.6	64
33	Resting-state theta band connectivity and graph analysis in generalized social anxiety disorder. <i>NeuroImage: Clinical</i> , 2017, 13, 24-32.	2.7	64
34	DTI tractography and white matter fiber tract characteristics in euthymic bipolar I patients and healthy control subjects. <i>Brain Imaging and Behavior</i> , 2013, 7, 129-139.	2.1	59
35	Connectome signatures of neurocognitive abnormalities in euthymic bipolar I disorder. <i>Journal of Psychiatric Research</i> , 2015, 68, 37-44.	3.1	58
36	Investigating brain community structure abnormalities in bipolar disorder using path length associated community estimation. <i>Human Brain Mapping</i> , 2014, 35, 2253-2264.	3.6	57

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37	The significance of negative correlations in brain connectivity. <i>Journal of Comparative Neurology</i> , 2017, 525, 3251-3265.	1.6	53
38	Brain growth rate abnormalities visualized in adolescents with autism. <i>Human Brain Mapping</i> , 2013, 34, 425-436.	3.6	51
39	Comparing registration methods for mapping brain change using tensor-based morphometry. <i>Medical Image Analysis</i> , 2009, 13, 679-700.	11.6	48
40	Abnormal Brain Network Organization in Body Dysmorphic Disorder. <i>Neuropsychopharmacology</i> , 2013, 38, 1130-1139.	5.4	48
41	Regional brain volume differences in symptomatic and presymptomatic carriers of familial Alzheimer's disease mutations. <i>Journal of Neurology, Neurosurgery and Psychiatry</i> , 2013, 84, 154-162.	1.9	47
42	Effects of mood and aging on keystroke dynamics metadata and their diurnal patterns in a large open-science sample: A BiAffect iOS study. <i>Journal of the American Medical Informatics Association: JAMIA</i> , 2020, 27, 1007-1018.	4.4	46
43	Angular versus spatial resolution trade-offs for diffusion imaging under time constraints. <i>Human Brain Mapping</i> , 2013, 34, 2688-2706.	3.6	45
44	Patterns of Brain Atrophy in Clinical Variants of Frontotemporal Lobar Degeneration. <i>Dementia and Geriatric Cognitive Disorders</i> , 2013, 35, 34-50.	1.5	42
45	White Matter Tract Integrity of Anterior Limb of Internal Capsule in Major Depression and Type 2 Diabetes. <i>Neuropsychopharmacology</i> , 2013, 38, 1451-1459.	5.4	41
46	MRI-based brain atrophy rates in ADNI phase 2: acceleration and enrichment considerations for clinical trials. <i>Neurobiology of Aging</i> , 2016, 37, 26-37.	3.1	39
47	Standard atlas space for C57BL/6J neonatal mouse brain. <i>Anatomy and Embryology</i> , 2005, 210, 245-263.	1.5	36
48	Topology Preserving Log-Unbiased Nonlinear Image Registration: Theory and Implementation. , 2007, , .		34
49	Let your fingers do the talking: Passive typing instability predicts future mood outcomes. <i>Bipolar Disorders</i> , 2018, 20, 285-288.	1.9	33
50	Fractional anisotropy derived from the diffusion tensor distribution function boosts power to detect Alzheimer's disease deficits. <i>Magnetic Resonance in Medicine</i> , 2017, 78, 2322-2333.	3.0	31
51	Sequential Keystroke Behavioral Biometrics for Mobile User Identification via Multi-view Deep Learning. <i>Lecture Notes in Computer Science</i> , 2017, , 228-240.	1.3	29
52	Multi-view Clustering with Graph Embedding for Connectome Analysis. , 2017, , .		28
53	Fractional Order Generalization of Anomalous Diffusion as a Multidimensional Extension of the Transmission Line Equation. <i>IEEE Journal on Emerging and Selected Topics in Circuits and Systems</i> , 2013, 3, 432-441.	3.6	27
54	Constructing the resting state structural connectome. <i>Frontiers in Neuroinformatics</i> , 2013, 7, 30.	2.5	26

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55	White matter microstructure in body dysmorphic disorder and its clinical correlates. <i>Psychiatry Research - Neuroimaging</i> , 2013, 211, 132-140.	1.8	25
56	The intrinsic geometry of the human brain connectome. <i>Brain Informatics</i> , 2015, 2, 197-210.	3.0	24
57	Impact of interventions targeting anxiety and depression in adults with asthma. <i>Journal of Asthma</i> , 2022, 59, 273-287.	1.7	24
58	t-BNE: Tensor-based Brain Network Embedding. , 2017, , 189-197.		23
59	Cognitive and connectome properties detectable through individual differences in graphomotor organization. <i>Neuropsychologia</i> , 2016, 85, 301-309.	1.6	22
60	A Framework for Quantifying Node-Level Community Structure Group Differences in Brain Connectivity Networks. <i>Lecture Notes in Computer Science</i> , 2012, 15, 196-203.	1.3	20
61	Neuroanatomical Correlates of Emotional Blunting in Behavioral Variant Frontotemporal Dementia and Early-Onset Alzheimer's Disease. <i>Journal of Alzheimer's Disease</i> , 2014, 41, 793-800.	2.6	20
62	Brain Connectivity in Late-Life Depression and Aging Revealed by Network Analysis. <i>American Journal of Geriatric Psychiatry</i> , 2015, 23, 642-650.	1.2	20
63	dpMood: Exploiting Local and Periodic Typing Dynamics for Personalized Mood Prediction. , 2018, , .		19
64	From Return of Information to Return of Value: Ethical Considerations when Sharing Individual-Level Research Data. <i>Journal of Alzheimer's Disease</i> , 2019, 71, 1081-1088.	2.6	19
65	Identification of Discriminative Subgraph Patterns in fMRI Brain Networks in Bipolar Affective Disorder. <i>Lecture Notes in Computer Science</i> , 2015, , 105-114.	1.3	18
66	NeuroCave: A web-based immersive visualization platform for exploring connectome datasets. <i>Network Neuroscience</i> , 2018, 2, 344-361.	2.6	18
67	From Default Mode Network to the Basal Configuration: Sex Differences in the Resting-State Brain Connectivity as a Function of Age and Their Clinical Correlates. <i>Frontiers in Psychiatry</i> , 2018, 9, 365.	2.6	18
68	Aberrant pulvinar effective connectivity in generalized social anxiety disorder. <i>Medicine (United States)</i> , 2017, 96, 107-114.	1.0	17
69	A Novel Measure of Fractional Anisotropy Based on the Tensor Distribution Function. <i>Lecture Notes in Computer Science</i> , 2009, 12, 845-852.	1.3	16
70	Altered structural brain connectome in young adult fragile X premutation carriers. <i>Human Brain Mapping</i> , 2014, 35, 4518-4530.	3.6	15
71	Differentiating weight-restored anorexia nervosa and body dysmorphic disorder using neuroimaging and psychometric markers. <i>PLoS ONE</i> , 2019, 14, e0213974.	2.5	13
72	Asymmetric and symmetric unbiased image registration: Statistical assessment of performance. , 2008, .		12

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73	A systems biology approach to the digital behaviorome. <i>Current Opinion in Systems Biology</i> , 2020, 20, 8-16.	2.6	12
74	Naturalistic smartphone keyboard typing reflects processing speed and executive function. <i>Brain and Behavior</i> , 2021, 11, e2363.	2.2	12
75	Measuring embeddedness: Hierarchical scale-dependent information exchange efficiency of the human brain connectome. <i>Human Brain Mapping</i> , 2015, 36, 3653-3665.	3.6	11
76	EEG based functional connectivity reflects cognitive load during emotion regulation. , 2016, , .		11
77	Baseline connectome modular abnormalities in the childhood phase of a longitudinal study on individuals with chromosome 22q11.2 deletion syndrome. <i>Human Brain Mapping</i> , 2018, 39, 232-248.	3.6	11
78	Altered dynamic electroencephalography connectome phase-space features of emotion regulation in social anxiety. <i>NeuroImage</i> , 2019, 186, 338-349.	4.2	11
79	Connectome Signatures of Hyperexcitation in Cognitively Intact Middle-Aged Female APOE- ϵ 4 Carriers. <i>Cerebral Cortex</i> , 2020, 30, 6350-6362.	2.9	11
80	Differential information content in staggered multiple shell hardi measured by the tensor distribution function. , 2011, , .		10
81	Multidimensional imaging techniques for prediction of treatment response in major depressive disorder. <i>Progress in Neuro-Psychopharmacology and Biological Psychiatry</i> , 2019, 91, 38-48.	4.8	10
82	Exact Combinatorial Inference for Brain Images. <i>Lecture Notes in Computer Science</i> , 2018, , 629-637.	1.3	10
83	Multi-resolutional Brain Network Filtering and Analysis via Wavelets on Non-Euclidean Space. <i>Lecture Notes in Computer Science</i> , 2013, 16, 643-651.	1.3	10
84	Predicting clinically relevant changes in bipolar disorder outside the clinic walls based on pervasive technology interactions via smartphone typing dynamics. <i>Pervasive and Mobile Computing</i> , 2022, 83, 101598.	3.3	10
85	Federated Multi-view Learning for Private Medical Data Integration and Analysis. <i>ACM Transactions on Intelligent Systems and Technology</i> , 2022, 13, 1-23.	4.5	9
86	Semi-supervised Tensor Factorization for Brain Network Analysis. <i>Lecture Notes in Computer Science</i> , 2016, , 17-32.	1.3	8
87	Real-Time Monitoring: A Key Element in Personalized Health and Precision Health. <i>Focus (American Tj ETQq1 1 0.784314 rgBT /Overl</i>	0.8	8
88	The Effects of Bipolar Disorder Risk on a Mobile Phone Keystroke Dynamics Based Biomarker of Brain Age. <i>Frontiers in Psychiatry</i> , 2021, 12, 739022.	2.6	8
89	Inferring excitation-inhibition dynamics using a maximum entropy model unifying brain structure and function. <i>Network Neuroscience</i> , 2022, 6, 420-444.	2.6	8
90	Thought Chart: Tracking Dynamic EEG Brain Connectivity with Unsupervised Manifold Learning. <i>Lecture Notes in Computer Science</i> , 2016, , 149-157.	1.3	7

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91	BRAINtrinsic: A Virtual Reality-Compatible Tool for Exploring Intrinsic Topologies of the Human Brain Connectome. Lecture Notes in Computer Science, 2015, , 67-76.	1.3	7
92	Brain Dynamics Through the Lens of Statistical Mechanics by Unifying Structure and Function. Lecture Notes in Computer Science, 2019, , 503-511.	1.3	7
93	White matter integrity measured by fractional anisotropy correlates poorly with actual individual fiber anisotropy. , 2009, , .		6
94	Investigating the separate and interactive associations of trauma and depression on brain structure: implications for cognition and aging. International Journal of Geriatric Psychiatry, 2017, 32, 1190-1199.	2.7	6
95	The impact of depression medications on oral antidiabetic drug adherence in patients with diabetes and depression. Journal of Diabetes and Its Complications, 2018, 32, 492-500.	2.3	6
96	EEG Classification based on Image Configuration in Social Anxiety Disorder. , 2019, , .		6
97	Potential depression and antidepressant-response biomarkers in human lymphoblast cell lines from treatment-responsive and treatment-resistant subjects: roles of SSRIs and omega-3 polyunsaturated fatty acids. Molecular Psychiatry, 2021, 26, 2402-2414.	7.9	6
98	Analyzing multi-fiber reconstruction in high angular resolution diffusion imaging using the tensor distribution function. , 2009, , .		5
99	Sex differences in the transcription of glutamate transporters in major depression and suicide.. Journal of Affective Disorders, 2020, 277, 244-252.	4.1	5
100	Graph theoretical measures of the uncinate fasciculus subnetwork as predictors and correlates of treatment response in a transdiagnostic psychiatric cohort. Psychiatry Research - Neuroimaging, 2020, 299, 111064.	1.8	5
101	Semantic Linkages of Obsessions From an International Obsessive-Compulsive Disorder Mobile App Data Set: Big Data Analytics Study. Journal of Medical Internet Research, 2021, 23, e25482.	4.3	5
102	Hierarchical Structural Mapping for Globally Optimized Estimation of Functional Networks. Lecture Notes in Computer Science, 2012, 15, 228-236.	1.3	5
103	Intrinsic Geometry Visualization for the Interactive Analysis of Brain Connectivity Patterns. IS&T International Symposium on Electronic Imaging, 2016, 2016, 1-8.	0.4	5
104	Multiphase Segmentation of Deformation using Logarithmic Priors. , 2007, , .		4
105	481. Predicting Mood Disturbance Severity in Bipolar Subjects with Mobile Phone Keystroke Dynamics and Metadata. Biological Psychiatry, 2017, 81, S196.	1.3	4
106	A Hierarchical Graph Learning Model for Brain Network Regression Analysis. Frontiers in Neuroscience, 0, 16, .	2.8	4
107	TempoCave: Visualizing Dynamic Connectome Datasets to Support Cognitive Behavioral Therapy. , 2019, , .		3
108	Risk of Diabetes Hospitalization or Diabetes Drug Intensification in Patients With Depression and Diabetes Using Second-Generation Antipsychotics Compared to Other Depression Therapies. primary care companion for CNS disorders, The, 2018, 20, .	0.6	3

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109	Validating unbiased registration on longitudinal MRI scans from the Alzheimer’S Disease neuroimaging initiative (ADNI). , 2008, , .		2
110	Probabilistic multi-tensor estimation using the Tensor Distribution Function. , 2008, , .		2
111	A Traffic Analysis Perspective on Communication in the Brain. , 2017, , .		2
112	Thought Chart: tracking the thought with manifold learning during emotion regulation. Brain Informatics, 2018, 5, 7.	3.0	2
113	247. BiAffect: Passive Monitoring of Psychomotor ActivityÂin Mood Disorders Using Mobile Keystroke Kinematics. Biological Psychiatry, 2019, 85, S102-S103.	1.3	2
114	QUANTIFYING DEFORMATION USING INFORMATION THEORY: THE LOG-UNBIASED NONLINEAR REGISTRATION. , 2007, , .		1
115	Multimodal unbiased image matching via mutual information. , 2008, , .		1
116	Diffusion tensor distribution function metrics boost power to detect deficits in Alzheimer's disease. , 2016, , .		1
117	Improved clinical diffusion MRI reliability using a tensor distribution function compared to a single tensor. , 2017, , .		1
118	Cross-diagnostic Prediction of Dimensional Psychiatric Phenotypes in Anorexia Nervosa and Body Dysmorphic Disorder Using Multimodal Neuroimaging and Psychometric Data. Lecture Notes in Computer Science, 2018, , 92-99.	1.3	1
119	A Generalized Framework of Pathlength Associated Community Estimation for Brain Structural Network. , 2020, 2020, 288-291.		1
120	rest2vec: Vectorizing the resting-state functional connectome using graph embedding. NeuroImage, 2021, 226, 117538.	4.2	1
121	Network Diffusion Embedding Reveals Transdiagnostic Subnetwork Disruption and Potential Treatment Targets in Internalizing Psychopathologies. Cerebral Cortex, 2022, 32, 1823-1839.	2.9	1
122	Phase Angle Spatial Embedding (PhASE). Lecture Notes in Computer Science, 2018, , 367-374.	1.3	1
123	Revisiting power-law estimation with applications to real-world human typing dynamics. Physica A: Statistical Mechanics and Its Applications, 2022, 599, 127384.	2.6	1
124	Structure-Preserving Graph Kernel for Brain Network Classification. , 2022, , .		1
125	Landmark matching on the sphere using distance functions. , 2006, 2006, 450-453.		0
126	The tensor distribution function. , 2008, , .		0

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127	Tensor distribution function. Proceedings of SPIE, 2008, , .	0.8	0
128	Segmenting crossing fiber geometries using fluid mechanics tensor distribution function tractography. , 2009, , .		0
129	Multivariate analysis of eigenvalues and eigenvectors in tensor based morphometry. Proceedings of SPIE, 2015, , .	0.8	0
130	944. Structural Connectivity Correlates of CBT and SSRI Response in a Transdiagnostic Sample: A Preliminary RDoC Study. Biological Psychiatry, 2017, 81, S382.	1.3	0
131	56. Connectomic Correlates of ECT Treatment and Response. Biological Psychiatry, 2017, 81, S23-S24.	1.3	0
132	Can't Stop Remembering: Neural Decoding of Representations of the Deceased Predicts Subsequent Intrusive Thinking and Coping Strategies. Biological Psychiatry: Cognitive Neuroscience and Neuroimaging, 2017, 2, 384-385.	1.5	0
133	S6. Digital Cognitive Assessment in Psychiatry Research. Biological Psychiatry, 2019, 85, S299.	1.3	0