Guray Erus

List of Publications by Year
in descending order

98 papers	6,370 citations	109321 35 h-index	76900 74 g-index
106 all docs	106 docs citations	106 times ranked	9414 citing authors

#	Article	IF	Citations
1	Effect of Intensive vs Standard Blood Pressure Control on Probable Dementia. JAMA - Journal of the American Medical Association, 2019, 321, 553.	7.4	786
2	White matter hyperintensities and imaging patterns of brain ageing in the general population. Brain, 2016, 139, 1164-1179.	7.6	314
3	Linked Sex Differences in Cognition and Functional Connectivity in Youth. Cerebral Cortex, 2015, 25, 2383-2394.	2.9	302
4	Association of Intensive vs Standard Blood Pressure Control With Cerebral White Matter Lesions. JAMA - Journal of the American Medical Association, 2019, 322, 524.	7.4	285
5	Harmonization of large MRI datasets for the analysis of brain imaging patterns throughout the lifespan. NeuroImage, 2020, 208, 116450.	4.2	260
6	Functional Maturation of the Executive System during Adolescence. Journal of Neuroscience, 2013, 33, 16249-16261.	3.6	225
7	Heterogeneous impact of motion on fundamental patterns of developmental changes in functional connectivity during youth. NeuroImage, 2013, 83, 45-57.	4.2	223
8	Mitigating head motion artifact in functional connectivity MRI. Nature Protocols, 2018, 13, 2801-2826.	12.0	211
9	MUSE: MUlti-atlas region Segmentation utilizing Ensembles of registration algorithms and parameters, and locally optimal atlas selection. NeuroImage, 2016, 127, 186-195.	4.2	210
10	Multi-Atlas Skull-Stripping. Academic Radiology, 2013, 20, 1566-1576.	2.5	196
11	Imaging Patterns of Brain Development and their Relationship to Cognition. Cerebral Cortex, 2015, 25, 1676-1684.	2.9	196
12	Right ventricle segmentation from cardiac MRI: A collation study. Medical Image Analysis, 2015, 19, 187-202.	11.6	189
13	MRI signatures of brain age and disease over the lifespan based on a deep brain network and 14â€‰468 individuals worldwide. Brain, 2020, 143, 2312-2324.	7.6	183
14	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, 8643-8648.	7.1	169
15	Two distinct neuroanatomical subtypes of schizophrenia revealed using machine learning. Brain, 2020, 143, 1027-1038.	7.6	158
16	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.	4.3	118
17	Structural Brain Abnormalities in Youth With Psychosis Spectrum Symptoms. JAMA Psychiatry, 2016, 73, 515.	11.0	116
18	Advanced brain aging: relationship with epidemiologic and genetic risk factors, and overlap with Alzheimer disease atrophy patterns. Translational Psychiatry, 2016, 6, e775-e775.	4.8	113

#	Article	IF	Citations
19	White matter lesions. Neurology, 2018, 91, e964-e975.	1.1	92
20	The Brain Chart of Aging: Machineâ€learning analytics reveals links between brain aging, white matter disease, amyloid burden, and cognition in the iSTAGING consortium of 10,216 harmonized MR scans. Alzheimer's and Dementia, 2021, 17, 89-102.	0.8	92
21	Brain and White Matter Hyperintensity Volumes After 10 Years of Random Assignment to Lifestyle Intervention. Diabetes Care, 2016, 39, 764-771.	8.6	79
22	Crowdsourced estimation of cognitive decline and resilience in Alzheimer's disease. Alzheimer's and Dementia, 2016, 12, 645-653.	0.8	72
23	White matter hyperintensities are more highly associated with preclinicalÂAlzheimer's disease than imaging and cognitive markers ofÂneurodegeneration. Alzheimer's and Dementia: Diagnosis, Assessment and Disease Monitoring, 2016, 4, 18-27.	2.4	71
24	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, 1429-1448.	4.5	69
25	Correlating Cognitive Decline with White Matter Lesion and Brain Atrophy Magnetic Resonance Imaging Measurements inÂAlzheimerâ€™s Disease. Journal of Alzheimer's Disease, 2015, 48, 987-994.	2.6	67
26	Vascular risk factors, cerebrovascular reactivity, and the default-mode brain network. NeuroImage, 2015, 115, 7-16.	4.2	67
27	Heterogeneity of structural and functional imaging patterns of advanced brain aging revealed via machine learning methods. Neurobiology of Aging, 2018, 71, 41-50.	3.1	67
28	Sex differences in brain aging and predictors of neurodegeneration in cognitively healthy older adults. Neurobiology of Aging, 2019, 81, 146-156.	3.1	67
29	Association of Midlife Hearing Impairment With Late-Life Temporal Lobe Volume Loss. JAMA Otolaryngology - Head and Neck Surgery, 2019, 145, 794.	2.2	65
30	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.	8.6	51
31	Effects of intensive versus standard blood pressure control on domain-specific cognitive function: a substudy of the SPRINT randomised controlled trial. Lancet Neurology, The, 2020, 19, 899-907.	10.2	50
32	Cardiorespiratory fitness and brain volume and white matter integrity. Neurology, 2015, 84, 2347-2353.	1.1	49
33	Longitudinally and inter-site consistent multi-atlas based parcellation of brain anatomy using harmonized atlases. NeuroImage, 2018, 166, 71-78.	4.2	47
34	Characterizing Heterogeneity in Neuroimaging, Cognition, Clinical Symptoms, and Genetics Among Patients With Late-Life Depression. JAMA Psychiatry, 2022, 79, 464.	11.0	47
35	Associations between cognitive and brain volume changes in cognitively normal older adults. NeuroImage, 2020, 223, 117289.	4.2	46
36	Association of Intensive vs Standard Blood Pressure Control With Magnetic Resonance Imaging Biomarkers of Alzheimer Disease. JAMA Neurology, 2021, 78, 568.	9.0	44

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37	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.	2.0	42
38	Deep Generative Medical Image Harmonization for Improving Crossâ€Site Generalization in Deep Learning Predictors. Journal of Magnetic Resonance Imaging, 2022, 55, 908-916.	3.4	38
39	A deep learning framework identifies dimensional representations of Alzheimerâ€™s Disease from brain structure. Nature Communications, 2021, 12, 7065.	12.8	38
40	Relationship betweenAPOEGenotype and Structural MRI Measures throughout Adulthood in the Study of Health in Pomerania Population-Based Cohort. American Journal of Neuroradiology, 2016, 37, 1636-1642.	2.4	36
41	Regional tractâ€specific white matter hyperintensities are associated withÂpatterns of agingâ€related brain atrophy via vascular risk factors, butÂalso independently. Alzheimer's and Dementia: Diagnosis, Assessment and Disease Monitoring, 2018, 10, 278-284.	2.4	35
42	Predictors of neurodegeneration differ between cognitively normal and subsequently impaired older adults. Neurobiology of Aging, 2019, 75, 178-186.	3.1	35
43	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.	4.2	35
44	State-dependent microstructural white matter changes in drug-naÃ¯ve patients with first-episode psychosis. Psychological Medicine, 2017, 47, 2613-2627.	4.5	34
45	Neurostructural Heterogeneity in Youths With Internalizing Symptoms. Biological Psychiatry, 2020, 87, 473-482.	1.3	34
46	A Multidimensional Neural Maturation Index Reveals Reproducible Developmental Patterns in Children and Adolescents. Journal of Neuroscience, 2020, 40, 1265-1275.	3.6	33
47	Precision diagnostics based on machine learning-derived imaging signatures. Magnetic Resonance Imaging, 2019, 64, 49-61.	1.8	31
48	Brain Magnetic Resonance Imaging Findings in Children and Young Adults With CKD. American Journal of Kidney Diseases, 2018, 72, 349-359.	1.9	29
49	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.	2.7	29
50	Multi-scale semi-supervised clustering of brain images: Deriving disease subtypes. Medical Image Analysis, 2022, 75, 102304.	11.6	28
51	Diagnostic potential of structural neuroimaging for depression from a multi-ethnic community sample. BJPsych Open, 2016, 2, 247-254.	0.7	27
52	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, 1.	1.5	26
53	Disparities in Diffuse Cortical White Matter Integrity Between Socioeconomic Groups. Frontiers in Human Neuroscience, 2019, 13, 198.	2.0	24
54	Lifetime discrimination burden, racial discrimination, and subclinical cerebrovascular disease among African Americans.. Health Psychology, 2019, 38, 63-74.	1.6	24

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55	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.	4.2	23
56	Individualized statistical learning from medical image databases: Application to identification of brain lesions. Medical Image Analysis, 2014, 18, 542-554.	11.6	22
57	Occupational cognitive complexity in earlier adulthood is associated with brain structure and cognitive health in midlife: The CARDIA study.. Neuropsychology, 2018, 32, 895-905.	1.3	22
58	Dorsolateral prefrontal cortex volume as a mediator between socioeconomic status and executive function.. Neuropsychology, 2018, 32, 985-995.	1.3	21
59	Association of Brain Volumes and White Matter Injury With Race, Ethnicity, and Cardiovascular Risk Factors: The Multiâ€Ethnic Study of Atherosclerosis. Journal of the American Heart Association, 2022, 11, e023159.	3.7	21
60	Sex differences in the association between amyloid and longitudinal brain volume change in cognitively normal older adults. NeuroImage: Clinical, 2019, 22, 101769.	2.7	20
61	Capturing heterogeneous group differences using mixture-of-experts: Application to a study of aging. NeuroImage, 2016, 125, 498-514.	4.2	18
62	Neurobiological support to the diagnosis of <scp>ADHD</scp> in stimulantâ€naÃ¯ve adults: pattern recognition analyses of <scp>MRI</scp> data. Acta Psychiatrica Scandinavica, 2017, 136, 623-636.	4.5	18
63	Cognitive Processing Speed Is Strongly Related to Driving Skills, Financial Abilities, and Other Instrumental Activities of Daily Living in Persons With Mild Cognitive Impairment and Mild Dementia. Journals of Gerontology - Series A Biological Sciences and Medical Sciences, 2021, 76, 1829-1838.	3.6	18
64	A layered approach to learning coordination knowledge in multiagent environments. Applied Intelligence, 2007, 27, 249-267.	5.3	17
65	Poor awareness of IADL deficits is associated with reduced regional brain volume in older adults with cognitive impairment. Neuropsychologia, 2019, 129, 372-378.	1.6	17
66	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.	1.8	14
67	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.	2.4	12
68	Brain age and Alzheimer's-like atrophy are domain-specific predictors of cognitive impairment in Parkinson's disease. Neurobiology of Aging, 2022, 109, 31-42.	3.1	12
69	Disentangling Alzheimerâ€™s disease neurodegeneration from typical brain ageing using machine learning. Brain Communications, 2022, 4, .	3.3	12
70	Skull-Stripping of Glioblastoma MRI Scans Using 3D Deep Learning. Lecture Notes in Computer Science, 2020, 11992, 57-68.	1.3	11
71	Sociodemographic disparities in corticolimbic structures. PLoS ONE, 2019, 14, e0216338.	2.5	10
72	How to involve structural modeling for cartographic object recognition tasks in high-resolution satellite images?. Pattern Recognition Letters, 2010, 31, 1109-1119.	4.2	9

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73	Abnormality Detection via Iterative Deformable Registration and Basis-Pursuit Decomposition. IEEE Transactions on Medical Imaging, 2016, 35, 1937-1951.	8.9	8
74	Association between urinary symptom severity and white matter plaque distribution in women with multiple sclerosis. Neurourology and Urodynamics, 2020, 39, 339-346.	1.5	8
75	Machine learning based imaging biomarkers in large scale population studies: A neuroimaging perspective. , 2020, , 379-399.		8
76	Changes in brain functional connectivity and cognition related to white matter lesion burden in hypertensive patients from SPRINT. Neuroradiology, 2021, 63, 913-924.	2.2	8
77	Red Cell Distribution Width, Anemia, and Brain Volumetric Outcomes Among Middle-Aged Adults. Journal of Alzheimer's Disease, 2021, 81, 711-727.	2.6	7
78	Brain Structure Among Middle-aged and Older Adults With Long-standing Type 1 Diabetes in the DCCT/EDIC Study. Diabetes Care, 2022, 45, 1779-1787.	8.6	7
79	Learning high-dimensional image statistics for abnormality detection on medical images. , 2010, , .		5
80	Automated segmentation of brain lesions by combining intensity and spatial information. , 2010, , .		4
81	Manifold-constrained embeddings for the detection of white matter lesions in brain MRI. , 2012, 2012, 562-565.		4
82	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.	3.4	4
83	Red cell distribution width, anemia and their associations with white matter integrity among middle-aged urban adults. Neurobiology of Aging, 2021, 105, 229-240.	3.1	4
84	Integrative radiomic analysis for pre-surgical prognostic stratification of glioblastoma patients: from advanced to basic MRI protocols. , 2020, 11315, .		4
85	The Role of Race in Relations of Social Support to Hippocampal Volumes Among Older Adults. Research on Aging, 2022, 44, 205-214.	1.8	3
86	Classification of Structural Cartographic Objects Using Edge-Based Features. , 2007, , 385-392.		3
87	Race, sex, and midâ€life changes in brain health: Cardia MRI substudy. Alzheimer's and Dementia, 2022, 18, 2428-2437.	0.8	3
88	What Makes New Ischemic Lesions Symptomatic after Aortic Valve Replacement?. Journal of Stroke and Cerebrovascular Diseases, 2017, 26, 2943-2948.	1.6	2
89	Elevated blood pressure is associated with advanced brain aging in midâ€life: A 30â€year followâ€up of The CARDIA Study. Alzheimer's and Dementia, 2023, 19, 924-932.	0.8	2
90	Automatic Learning of Structural Models of Cartographic Objects. Lecture Notes in Computer Science, 2005, , 273-280.	1.3	1

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91	Automated segmentation of cortical necrosis using awavelet based abnormality detection system. , 2011, 2011, 1391-1395.		1
92	Brain abnormality segmentation based onl₁-norm minimization. Proceedings of SPIE, 2014, , .	0.8	1
93	T195. Neuroanatomical Heterogeneity of Schizophrenia Quantified via Semi-Supervised Machine Learning Reveals Two Distinct Subtypes: Results From the PHENOM Consortium. Biological Psychiatry, 2019, 85, S205-S206.	1.3	1
94	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.	3.1	1
95	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.	2.0	1
96	Patterns of Structural Covariance Abnormalities and Clinical Correlations in Schizophrenia. Biological Psychiatry, 2021, 89, S371-S372.	1.3	0
97	Three Distinct Neuroanatomical Subtypes of Autism Spectrum Disorder, Revealed via Machine Learning, and Their Similarities With Schizophrenia Subtypes. Biological Psychiatry, 2021, 89, S374-S375.	1.3	0
98	P580. Two Schizophrenia Neuroanatomical Signatures From the PHENOM Consortium and Their Association With Psychopathology, Cognition, and Genetics in the Population-Level Samples. Biological Psychiatry, 2022, 91, S323-S324.	1.3	0