Boris A Gutman

List of Publications by Year
in descending order

92	5,327	94433 37	102487 66
papers	citations	h-index	g-index

96	96	96	8368
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Cortical Brain Abnormalities in 4474 Individuals With Schizophrenia and 5098 Control Subjects via the Enhancing Neuro Imaging Genetics Through Meta Analysis (ENIGMA) Consortium. Biological Psychiatry, 2018, 84, 644-654.	1.3	627
2	The genetic architecture of the human cerebral cortex. Science, 2020, 367, .	12.6	450
3	ENIGMA and global neuroscience: A decade of large-scale studies of the brain in health and disease across more than 40 countries. Translational Psychiatry, 2020, 10, 100.	4.8	365
4	Novel genetic loci associated with hippocampal volume. Nature Communications, 2017, 8, 13624.	12.8	250
5	ENIGMA and the individual: Predicting factors that affect the brain in 35 countries worldwide. NeuroImage, 2017, 145, 389-408.	4.2	173
6	Magnetic resonance imaging in Alzheimer's Disease Neuroimaging Initiative 2. Alzheimer's and Dementia, 2015, 11, 740-756.	0.8	142
7	Optimizing power to track brain degeneration in Alzheimer's disease and mild cognitive impairment with tensor-based morphometry: An ADNI study of 515 subjects. NeuroImage, 2009, 48, 668-681.	4.2	129
8	When more is less: Associations between corpus callosum size and handedness lateralization. NeuroImage, 2010, 52, 43-49.	4.2	127
9	ENIGMA MDD: seven years of global neuroimaging studies of major depression through worldwide data sharing. Translational Psychiatry, 2020, 10, 172.	4.8	121
10	Neuroimaging Study Designs, Computational Analyses and Data Provenance Using the LONI Pipeline. PLoS ONE, 2010, 5, e13070.	2.5	120
11	Automatic clustering of white matter fibers in brain diffusion MRI with an application to genetics. NeuroImage, 2014, 100, 75-90.	4.2	117
12	Surface-based TBM boosts power to detect disease effects on the brain: An N=804 ADNI study. NeuroImage, 2011, 56, 1993-2010.	4.2	109
13	Federated Learning in Distributed Medical Databases: Meta-Analysis of Large-Scale Subcortical Brain Data. , 2019, , .		107
14	Unbiased tensor-based morphometry: Improved robustness and sample size estimates for Alzheimer's disease clinical trials. NeuroImage, 2013, 66, 648-661.	4.2	103
15	Global and regional alterations of hippocampal anatomy in longâ€term meditation practitioners. Human Brain Mapping, 2013, 34, 3369-3375.	3.6	97
16	Multivariate tensor-based morphometry on surfaces: Application to mapping ventricular abnormalities in HIV/AIDS. NeuroImage, 2010, 49, 2141-2157.	4.2	90
17	Surface fluid registration of conformal representation: Application to detect disease burden and genetic influence on hippocampus. NeuroImage, 2013, 78, 111-134.	4.2	83
18	Heritability of the shape of subcortical brain structures in the general population. Nature Communications, 2016, 7, 13738.	12.8	78

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19	Accurate measurement of brain changes in longitudinal MRI scans using tensor-based morphometry. NeuroImage, 2011, 57, 5-14.	4.2	77
20	Effect of Electroconvulsive Therapy on Striatal Morphometry in Major Depressive Disorder. Neuropsychopharmacology, 2016, 41, 2481-2491.	5.4	74
21	The link between callosal thickness and intelligence in healthy children and adolescents. NeuroImage, 2011, 54, 1823-1830.	4.2	67
22	Comparing 3 T and 1.5 T MRI for tracking Alzheimer's disease progression with tensorâ€based morphometry. Human Brain Mapping, 2010, 31, 499-514.	3.6	66
23	Mapping 22q11.2 Gene Dosage Effects on Brain Morphometry. Journal of Neuroscience, 2017, 37, 6183-6199.	3.6	65
24	Subcortical shape alterations in major depressive disorder: Findings from the ENIGMA major depressive disorder working group. Human Brain Mapping, 2022, 43, 341-351.	3.6	64
25	Genetic influence of apolipoprotein E4 genotype on hippocampal morphometry: An N = 725 surfaceâ€based Alzheimer's disease neuroimaging initiative study. Human Brain Mapping, 2014, 35, 3903-3918.	3.6	62
26	Bi-directional changes in fractional anisotropy after experiment TBI: Disorganization and reorganization?. NeuroImage, 2016, 133, 129-143.	4.2	62
27	Genetic correlations and genome-wide associations of cortical structure in general population samples of 22,824 adults. Nature Communications, 2020, 11, 4796.	12.8	61
28	Disease classification with hippocampal shape invariants. Hippocampus, 2009, 19, 572-578.	1.9	59
29	Maximizing power to track Alzheimer's disease and MCI progression by LDA-based weighting of longitudinal ventricular surface features. NeuroImage, 2013, 70, 386-401.	4.2	59
30	Influence of APOE Genotype on Hippocampal Atrophy over Time - An N=1925 Surface-Based ADNI Study. PLoS ONE, 2016, 11, e0152901.	2.5	59
31	Smaller hippocampal CA1 subfield volume in posttraumatic stress disorder. Depression and Anxiety, 2018, 35, 1018-1029.	4.1	58
32	<scp>FreeSurfer</scp>â€based segmentation of hippocampal subfields: A review of methods and applications, with a novel quality control procedure for <scp>ENIGMA</scp> studies and other collaborative efforts. Human Brain Mapping, 2022, 43, 207-233.	3.6	57
33	Combined Effects of Alzheimer Risk Variants in theCLUandApoEGenes on Ventricular Expansion Patterns in the Elderly. Journal of Neuroscience, 2014, 34, 6537-6545.	3.6	56
34	Mapping Subcortical Brain Alterations in 22q11.2 Deletion Syndrome: Effects of Deletion Size and Convergence With Idiopathic Neuropsychiatric Illness. American Journal of Psychiatry, 2020, 177, 589-600.	7.2	55
35	International Multicenter Analysis of Brain Structure Across Clinical Stages of Parkinson's Disease. Movement Disorders, 2021, 36, 2583-2594.	3.9	54
36	Physical activity, inflammation, and volume of the aging brain. Neuroscience, 2014, 273, 199-209.	2.3	53

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37	Studying ventricular abnormalities in mild cognitive impairment with hyperbolic Ricci flow and tensor-based morphometry. NeuroImage, 2015, 104, 1-20.	4.2	42
38	Susceptibility of brain atrophy to TRIB3 in Alzheimerâ€™s disease, evidence from functional prioritization in imaging genetics. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 3162-3167.	7.1	41
39	CUDA optimization strategies for compute- and memory-bound neuroimaging algorithms. Computer Methods and Programs in Biomedicine, 2012, 106, 175-187.	4.7	40
40	Volumetric and shape analyses of subcortical structures in United States service members with mild traumatic brain injury. Journal of Neurology, 2016, 263, 2065-2079.	3.6	40
41	Applying surface-based hippocampal morphometry to study APOE-E4 allele dose effects in cognitively unimpaired subjects. NeuroImage: Clinical, 2019, 22, 101744.	2.7	40
42	MRI-based brain atrophy rates in ADNI phase 2: acceleration and enrichment considerations for clinical trials. Neurobiology of Aging, 2016, 37, 26-37.	3.1	39
43	A <scp>metaâ€analysis</scp> of deep brain structural shape and asymmetry abnormalities in 2,833 individuals with schizophrenia compared with 3,929 healthy volunteers via the <scp>ENIGMA Consortium</scp>. Human Brain Mapping, 2022, 43, 352-372.	3.6	39
44	Mapping abnormal subcortical brain morphometry in an elderly HIV + cohort. NeuroImage: Clinical, 2015, 9, 564-573.	2.7	37
45	Machine learning on high dimensional shape data from subcortical brain surfaces: A comparison of feature selection and classification methods. Pattern Recognition, 2017, 63, 731-739.	8.1	37
46	Hemispheric brain asymmetry differences in youths with attention-deficit/hyperactivity disorder. NeuroImage: Clinical, 2018, 18, 744-752.	2.7	35
47	Shape matching with medial curves and 1-D group-wise registration. , 2012, , .		33
48	Subcortical surface morphometry in substance dependence: An ENIGMA addiction working group study. Addiction Biology, 2020, 25, e12830.	2.6	33
49	Mapping ventricular expansion onto cortical gray matter in older adults. Neurobiology of Aging, 2015, 36, S32-S41.	3.1	32
50	Effects of copy number variations on brain structure and risk for psychiatric illness: Largeâ€scale studies from the<scp>ENIGMA</scp>working groups on<scp>CNVs</scp>. Human Brain Mapping, 2022, 43, 300-328.	3.6	30
51	Medial demons registration localizes the degree of genetic influence over subcortical shape variability: An N= 1480 meta-analysis. , 2015, 2015, 1402-1406.		29
52	The apolipoprotein E epsilon 4 allele is associated with ventricular expansion rate and surface morphology in dementia and normal aging. Neurobiology of Aging, 2014, 35, 1309-1317.	3.1	26
53	Applying sparse coding to surface multivariate tensor-based morphometry to predict future cognitive decline. , 2016, 2016, 646-650.		25
54	Empowering imaging biomarkers of Alzheimer's disease. Neurobiology of Aging, 2015, 36, S69-S80.	3.1	22

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55	A Family of Fast Spherical Registration Algorithms for Cortical Shapes. Lecture Notes in Computer Science, 2013, , 246-257.	1.3	22
56	Remote Changes in Cortical Excitability after Experimental Traumatic Brain Injury and Functional Reorganization. Journal of Neurotrauma, 2018, 35, 2448-2461.	3.4	20
57	Structural and functional neuroimaging phenotypes in dysbindin mutant mice. NeuroImage, 2012, 62, 120-129.	4.2	19
58	Applying surface-based morphometry to study ventricular abnormalities of cognitively unimpaired subjects prior to clinically significant memory decline. NeuroImage: Clinical, 2020, 27, 102338.	2.7	18
59	Hyperbolic Space Sparse Coding with Its Application on Prediction of Alzheimerâ€™s Disease in Mild Cognitive Impairment. Lecture Notes in Computer Science, 2016, 9900, 326-334.	1.3	17
60	Continuous representations of brain connectivity using spatial point processes. Medical Image Analysis, 2017, 41, 32-39.	11.6	16
61	Subcortical shape and neuropsychological function among U.S. service members with mild traumatic brain injury. Brain Imaging and Behavior, 2019, 13, 377-388.	2.1	16
62	Carriers of a common variant in the dopamine transporter gene have greater dementia risk, cognitive decline, and faster ventricular expansion. Alzheimer's and Dementia, 2015, 11, 1153-1162.	0.8	15
63	Subregional Hippocampal Morphology and Psychiatric Outcome in Adolescents Who Were Born Very Preterm and at Term. PLoS ONE, 2015, 10, e0130094.	2.5	14
64	Disease and genetic contributions toward local tissue volume disturbances in schizophrenia: A tensorâ€based morphometry study. Human Brain Mapping, 2012, 33, 2081-2091.	3.6	13
65	Mapping Dynamic Changes in Ventricular Volume onto Baseline Cortical Surfaces in Normal Aging, MCI, and Alzheimerâ€™s Disease. Lecture Notes in Computer Science, 2013, 8159, 84-94.	1.3	13
66	Mapping abnormal subcortical neurodevelopment in a cohort of Thai children with HIV. NeuroImage: Clinical, 2019, 23, 101810.	2.7	11
67	A Riemannian Framework for Intrinsic Comparison of Closed Genus-Zero Shapes. Lecture Notes in Computer Science, 2015, 24, 205-218.	1.3	10
68	Partial least squares modelling for imaging-genetics in Alzheimer's disease: Plausibility and generalization. , 2016, , .		9
69	Striatal morphology and neurocognitive dysfunction in Huntington disease: The IMAGE-HD study. Psychiatry Research - Neuroimaging, 2019, 291, 1-8.	1.8	9
70	Registering Cortical Surfaces Based on Whole-Brain Structural Connectivity and Continuous Connectivity Analysis. Lecture Notes in Computer Science, 2014, 17, 161-168.	1.3	9
71	High-Dimensional Mapping of Cognition to the Brain Using Voxel-Based Morphometry and Subcortical Shape Analysis. Journal of Alzheimer's Disease, 2019, 71, 141-152.	2.6	8
72	Multi-Site Meta-Analysis of Morphometry. IEEE/ACM Transactions on Computational Biology and Bioinformatics, 2019, 16, 1508-1514.	3.0	7

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73	A Continuous Model of Cortical Connectivity. Lecture Notes in Computer Science, 2016, 9900, 157-165.	1.3	7
74	A single nucleotide polymorphism associated with reduced alcohol intake in the RASGRF2 gene predicts larger cortical volumes but faster longitudinal ventricular expansion in the elderly. Frontiers in Aging Neuroscience, 2013, 5, 93.	3.4	6
75	Information-theoretic characterization of blood panel predictors for brain atrophy and cognitive decline in the elderly. , 2015, 2015, 980-984.		6
76	Morphometric analysis of hippocampus and lateral ventricle reveals regional difference between cognitively stable and declining persons. , 2016, 2016, 14-18.		5
77	Data-driven cluster selection for subcortical shape and cortical thickness predicts recovery from depressive symptoms. , 2017, 2017, 502-506.		5
78	Reply to: New Meta- and Mega-analyses of Magnetic Resonance Imaging Findings in Schizophrenia: Do They Really Increase Our Knowledge About the Nature of the Disease Process?. Biological Psychiatry, 2019, 85, e35-e39.	1.3	5
79	Subcortical brain structures and the risk of dementia in the Rotterdam Study. Alzheimer's and Dementia, 2023, 19, 646-657.	0.8	5
80	Machine Learning for Large-Scale Quality Control of 3D Shape Models in Neuroimaging. Lecture Notes in Computer Science, 2017, 10541, 371-378.	1.3	4
81	Predicting future cognitive decline with hyperbolic stochastic coding. Medical Image Analysis, 2021, 70, 102009.	11.6	2
82	A transformation similarity constraint for groupwise nonlinear registration in longitudinal neuroimaging studies. Proceedings of SPIE, 2015, 9413, .	0.8	1
83	Shared imaging biomarkers across Alzheimerâ€™s and Parkinsonâ€™s disease. Alzheimer's and Dementia, 2020, 16, e046542.	0.8	1
84	Optimizing Connectivity-Driven Brain Parcellation Using Ensemble Clustering. Brain Connectivity, 2020, 10, 183-194.	1.7	1
85	Constraining Disease Progression Models Using Subject Specific Connectivity Priors. Lecture Notes in Computer Science, 2019, , 106-116.	1.3	1
86	Utilizing a Novel 3D Surface Mapping Technology to Evaluate Craniofacial Morphology. , 2015, , .		0
87	Approximating principal genetic components of subcortical shape. , 2017, 2017, 1226-1230.		0
88	Structural connectome validation using pairwise classification. , 2017, , .		0
89	Landmark-Free Three-dimensional Quantification of Morphological Variation and Shape Change in the Mouse Mandible: Methodological Development and Application. , 2017, , .		0
90	Individual connectome priors improve neuroimagingâ€based Alzheimerâ€™s progression modeling. Alzheimer's and Dementia, 2020, 16, e046717.	0.8	0

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91	Secure multivariate large-scale multi-centric analysis through on-line learning: an imaging genetics case study. , 2017, , .		0
92	Connectivity-Driven Brain Parcellation via Consensus Clustering. Lecture Notes in Computer Science, 2018, , 117-126.	1.3	0