

Mert Rory Sabuncu

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/5778682/publications.pdf>

Version: 2024-02-01

107
papers

17,883
citations

57631

44
h-index

34900

98
g-index

126
all docs

126
docs citations

126
times ranked

19263
citing authors

#	ARTICLE	IF	CITATIONS
1	NeuroGen: Activation optimized image synthesis for discovery neuroscience. <i>NeuroImage</i> , 2022, 247, 118812.	2.1	10
2	Predicting individual task contrasts from resting-state functional connectivity using a surface-based convolutional network. <i>NeuroImage</i> , 2022, 248, 118849.	2.1	12
3	Heritability of individualized cortical network topography. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021, 118, .	3.3	59
4	Cortical response to naturalistic stimuli is largely predictable with deep neural networks. <i>Science Advances</i> , 2021, 7, .	4.7	27
5	Magnetic Resonance Imaging Radiomics-Based Machine Learning Prediction of Clinically Significant Prostate Cancer in Equivocal \leq 3 Lesions. <i>Journal of Magnetic Resonance Imaging</i> , 2021, 54, 1466-1473.	1.9	24
6	Heritability and interindividual variability of regional structure-function coupling. <i>Nature Communications</i> , 2021, 12, 4894.	5.8	79
7	Deep neural networks and kernel regression achieve comparable accuracies for functional connectivity prediction of behavior and demographics. <i>NeuroImage</i> , 2020, 206, 116276.	2.1	187
8	Deep-Learning-Based Optimization of the Under-Sampling Pattern in MRI. <i>IEEE Transactions on Computational Imaging</i> , 2020, 6, 1139-1152.	2.6	74
9	Machine Learning Prediction of Stroke Mechanism in Embolic Strokes of Undetermined Source. <i>Stroke</i> , 2020, 51, e203-e210.	1.0	30
10	Machine Learning Methods Predict Individual Upper-Limb Motor Impairment Following Therapy in Chronic Stroke. <i>Neurorehabilitation and Neural Repair</i> , 2020, 34, 428-439.	1.4	43
11	Volumetric Landmark Detection with a Multi-Scale Shift Equivariant Neural Network. , 2020, , .		6
12	Sex classification using long-range temporal dependence of resting-state functional \leq MRI \leq time series. <i>Human Brain Mapping</i> , 2020, 41, 3567-3579.	1.9	21
13	Fidelity imposed network edit (FINE) for solving ill-posed image reconstruction. <i>NeuroImage</i> , 2020, 211, 116579.	2.1	31
14	Learning Conditional Deformable Shape Templates for Brain Anatomy. <i>Lecture Notes in Computer Science</i> , 2020, , 353-362.	1.0	5
15	Neural Network-Based Reconstruction in Compressed Sensing MRI Without Fully-Sampled Training Data. <i>Lecture Notes in Computer Science</i> , 2020, , 27-37.	1.0	10
16	Spatial Topography of Individual-Specific Cortical Networks Predicts Human Cognition, Personality, and Emotion. <i>Cerebral Cortex</i> , 2019, 29, 2533-2551.	1.6	430
17	Medical Image Imputation From Image Collections. <i>IEEE Transactions on Medical Imaging</i> , 2019, 38, 504-514.	5.4	33
18	Unsupervised learning of probabilistic diffeomorphic registration for images and surfaces. <i>Medical Image Analysis</i> , 2019, 57, 226-236.	7.0	191

#	ARTICLE	IF	CITATIONS
19	Multi-modal latent factor exploration of atrophy, cognitive and tau heterogeneity in Alzheimer's disease. <i>NeuroImage</i> , 2019, 201, 116043.	2.1	38
20	Image Registration in Medical Robotics and Intelligent Systems: Fundamentals and Applications. <i>Advanced Intelligent Systems</i> , 2019, 1, 1900048.	3.3	13
21	Machine Learning Enables High-Throughput Phenotyping for Analyses of the Genetic Architecture of Bulliform Cell Patterning in Maize. <i>G3: Genes, Genomes, Genetics</i> , 2019, 9, 4235-4243.	0.8	9
22	Resting brain dynamics at different timescales capture distinct aspects of human behavior. <i>Nature Communications</i> , 2019, 10, 2317.	5.8	208
23	Ensemble learning with 3D convolutional neural networks for functional connectome-based prediction. <i>NeuroImage</i> , 2019, 199, 651-662.	2.1	87
24	Machine learning in resting-state fMRI analysis. <i>Magnetic Resonance Imaging</i> , 2019, 64, 101-121.	1.0	135
25	Deep convolutional neural networks for segmenting 3D in vivo multiphoton images of vasculature in Alzheimer disease mouse models. <i>PLoS ONE</i> , 2019, 14, e0213539.	1.1	60
26	Global signal regression strengthens association between resting-state functional connectivity and behavior. <i>NeuroImage</i> , 2019, 196, 126-141.	2.1	292
27	The Shared Genetic Basis of Educational Attainment and Cerebral Cortical Morphology. <i>Cerebral Cortex</i> , 2019, 29, 3471-3481.	1.6	23
28	Unsupervised Deep Learning for Bayesian Brain MRI Segmentation. <i>Lecture Notes in Computer Science</i> , 2019, 11766, 356-365.	1.0	38
29	Reply to Risk and Zhu: Mixed-effects modeling as a principled approach to heritability analysis with repeat measurements. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, E123-E123.	3.3	0
30	Joint Analysis of Cortical Area and Thickness as a Replacement for the Analysis of the Volume of the Cerebral Cortex. <i>Cerebral Cortex</i> , 2018, 28, 738-749.	1.6	92
31	Dissociable influences of APOE ϵ 4 and polygenic risk of AD dementia on amyloid and cognition. <i>Neurology</i> , 2018, 90, e1605-e1612.	1.5	71
32	The human cortex possesses a reconfigurable dynamic network architecture that is disrupted in psychosis. <i>Nature Communications</i> , 2018, 9, 1157.	5.8	65
33	Polygenic Risk of Spasmodic Dysphonia is Associated With Vulnerable Sensorimotor Connectivity. <i>Cerebral Cortex</i> , 2018, 28, 158-166.	1.6	23
34	Subspecialization within default mode nodes characterized in 10,000 UK Biobank participants. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, 12295-12300.	3.3	125
35	An Unsupervised Learning Model for Deformable Medical Image Registration. , 2018, , .		414
36	Unsupervised Learning for Fast Probabilistic Diffeomorphic Registration. <i>Lecture Notes in Computer Science</i> , 2018, , 729-738.	1.0	178

#	ARTICLE	IF	CITATIONS
37	Is deep learning better than kernel regression for functional connectivity prediction of fluid intelligence?. , 2018, , .		18
38	Mid-space-independent deformable image registration. NeuroImage, 2017, 152, 158-170.	2.1	18
39	Diffeomorphic functional brain surface alignment: Functional demons. NeuroImage, 2017, 156, 456-465.	2.1	41
40	Heritability analysis with repeat measurements and its application to resting-state functional connectivity. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 5521-5526.	3.3	122
41	Tau and amyloid β proteins distinctively associate to functional network changes in the aging brain. Alzheimer's and Dementia, 2017, 13, 1261-1269.	0.4	90
42	Guest editorial of the IJCARS MICCAI 2016 special issue. International Journal of Computer Assisted Radiology and Surgery, 2017, 12, 1243-1244.	1.7	0
43	Population Based Image Imputation. Lecture Notes in Computer Science, 2017, 10265, 659-671.	1.0	17
44	Phenome-wide heritability analysis of the UK Biobank. PLoS Genetics, 2017, 13, e1006711.	1.5	191
45	Morphometricity as a measure of the neuroanatomical signature of a trait. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, E5749-56.	3.3	53
46	Bayesian model reveals latent atrophy factors with dissociable cognitive trajectories in Alzheimer's disease. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, E6535-E6544.	3.3	137
47	Multidimensional heritability analysis of neuroanatomical shape. Nature Communications, 2016, 7, 13291.	5.8	68
48	Polygenic risk of Alzheimer disease is associated with early- and late-life processes. Neurology, 2016, 87, 481-488.	1.5	159
49	Identifying Shared Brain Networks in Individuals by Decoupling Functional and Anatomical Variability. Cerebral Cortex, 2016, 26, 4004-4014.	1.6	68
50	A kernel machine method for detecting effects of interaction between multidimensional variable sets: An imaging genetics application. NeuroImage, 2015, 109, 505-514.	2.1	23
51	Massively expedited genome-wide heritability analysis (MEGHA). Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 2479-2484.	3.3	69
52	Clinical Prediction from Structural Brain MRI Scans: A Large-Scale Empirical Study. Neuroinformatics, 2015, 13, 31-46.	1.5	131
53	An algorithm for optimal fusion of atlases with different labeling protocols. NeuroImage, 2015, 106, 451-463.	2.1	16
54	Avoiding symmetry-breaking spatial non-uniformity in deformable image registration via a quasi-volume-preserving constraint. NeuroImage, 2015, 106, 238-251.	2.1	8

#	ARTICLE	IF	CITATIONS
55	Multi-atlas segmentation of biomedical images: A survey. <i>Medical Image Analysis</i> , 2015, 24, 205-219.	7.0	513
56	Mid-Space-Independent Symmetric Data Term for Pairwise Deformable Image Registration. <i>Lecture Notes in Computer Science</i> , 2015, 9350, 263-271.	1.0	1
57	Predictive Modeling of Anatomy with Genetic and Clinical Data. <i>Lecture Notes in Computer Science</i> , 2015, 9351, 519-526.	1.0	2
58	A Sparse Bayesian Learning Algorithm for Longitudinal Image Data. <i>Lecture Notes in Computer Science</i> , 2015, 9351, 411-418.	1.0	1
59	Event time analysis of longitudinal neuroimage data. <i>NeuroImage</i> , 2014, 97, 9-18.	2.1	28
60	Genetic variation of oxidative phosphorylation genes in stroke and Alzheimer's disease. <i>Neurobiology of Aging</i> , 2014, 35, 1956.e1-1956.e8.	1.5	17
61	A Cautionary Analysis of STAPLE Using Direct Inference of Segmentation Truth. <i>Lecture Notes in Computer Science</i> , 2014, 17, 398-406.	1.0	8
62	A Universal and Efficient Method to Compute Maps from Image-Based Prediction Models. <i>Lecture Notes in Computer Science</i> , 2014, 17, 353-360.	1.0	6
63	Improved inference in Bayesian segmentation using Monte Carlo sampling: Application to hippocampal subfield volumetry. <i>Medical Image Analysis</i> , 2013, 17, 766-778.	7.0	36
64	A Surface-based Analysis of Language Lateralization and Cortical Asymmetry. <i>Journal of Cognitive Neuroscience</i> , 2013, 25, 1477-1492.	1.1	188
65	A unified framework for cross-modality multi-atlas segmentation of brain MRI. <i>Medical Image Analysis</i> , 2013, 17, 1181-1191.	7.0	46
66	Individual Variability in Functional Connectivity Architecture of the Human Brain. <i>Neuron</i> , 2013, 77, 586-595.	3.8	949
67	On Removing Interpolation and Resampling Artifacts in Rigid Image Registration. <i>IEEE Transactions on Image Processing</i> , 2013, 22, 816-827.	6.0	28
68	Statistical analysis of longitudinal neuroimage data with Linear Mixed Effects models. <i>NeuroImage</i> , 2013, 66, 249-260.	2.1	298
69	Symmetric non-rigid image registration via an adaptive quasi-volume-preserving constraint. , 2013, 2013, 230-233.		5
70	Spatiotemporal linear mixed effects modeling for the mass-univariate analysis of longitudinal neuroimage data. <i>NeuroImage</i> , 2013, 81, 358-370.	2.1	111
71	In vivo characterization of the early states of the amyloid-beta network. <i>Brain</i> , 2013, 136, 2239-2252.	3.7	104
72	Joint Modeling of Imaging and Genetics. <i>Lecture Notes in Computer Science</i> , 2013, 23, 766-777.	1.0	27

#	ARTICLE	IF	CITATIONS
73	Example-Based Restoration of High-Resolution Magnetic Resonance Image Acquisitions. Lecture Notes in Computer Science, 2013, 16, 131-138.	1.0	18
74	A Probabilistic, Non-parametric Framework for Inter-modality Label Fusion. Lecture Notes in Computer Science, 2013, 16, 576-583.	1.0	1
75	On Feature Relevance in Image-Based Prediction Models: An Empirical Study. Lecture Notes in Computer Science, 2013, , 171-178.	1.0	1
76	An Improved Optimization Method for the Relevance Voxel Machine. Lecture Notes in Computer Science, 2013, , 147-154.	1.0	0
77	The Association between a Polygenic Alzheimer Score and Cortical Thickness in Clinically Normal Subjects. Cerebral Cortex, 2012, 22, 2653-2661.	1.6	145
78	Network assemblies in the functional brain. Current Opinion in Neurology, 2012, 25, 1.	1.8	35
79	A generative model for multi-atlas segmentation across modalities. , 2012, , 888-891.		21
80	A coding variant in CR1 interacts with APOE-É4 to influence cognitive decline. Human Molecular Genetics, 2012, 21, 2377-2388.	1.4	90
81	The Relevance Voxel Machine (RVoxM): A Self-Tuning Bayesian Model for Informative Image-Based Prediction. IEEE Transactions on Medical Imaging, 2012, 31, 2290-2306.	5.4	41
82	The influence of head motion on intrinsic functional connectivity MRI. NeuroImage, 2012, 59, 431-438.	2.1	2,209
83	Measuring and comparing brain cortical surface area and other areal quantities. NeuroImage, 2012, 61, 1428-1443.	2.1	157
84	Stepwise Connectivity of the Modal Cortex Reveals the Multimodal Organization of the Human Brain. Journal of Neuroscience, 2012, 32, 10649-10661.	1.7	253
85	A Generative Model for Probabilistic Label Fusion of Multimodal Data. Lecture Notes in Computer Science, 2012, 7509, 115-133.	1.0	12
86	The organization of the human cerebral cortex estimated by intrinsic functional connectivity. Journal of Neurophysiology, 2011, 106, 1125-1165.	0.9	6,420
87	The Dynamics of Cortical and Hippocampal Atrophy in Alzheimer Disease. Archives of Neurology, 2011, 68, 1040.	4.9	267
88	Modeling anatomical heterogeneity in populations. , 2011, , .		0
89	The Relevance Voxel Machine (RVoxM): A Bayesian Method for Image-Based Prediction. Lecture Notes in Computer Science, 2011, 14, 99-106.	1.0	19
90	Spherical Demons: Fast Diffeomorphic Landmark-Free Surface Registration. IEEE Transactions on Medical Imaging, 2010, 29, 650-668.	5.4	301

#	ARTICLE	IF	CITATIONS
91	Learning Task-Optimal Registration Cost Functions for Localizing Cytoarchitecture and Function in the Cerebral Cortex. IEEE Transactions on Medical Imaging, 2010, 29, 1424-1441.	5.4	57
92	A Generative Model for Image Segmentation Based on Label Fusion. IEEE Transactions on Medical Imaging, 2010, 29, 1714-1729.	5.4	423
93	Function-based Intersubject Alignment of Human Cortical Anatomy. Cerebral Cortex, 2010, 20, 130-140.	1.6	147
94	Robust Atlas-Based Segmentation of Highly Variable Anatomy: Left Atrium Segmentation. Lecture Notes in Computer Science, 2010, 6364, 85-94.	1.0	41
95	Selective Disruption of the Cerebral Neocortex in Alzheimer's Disease. PLoS ONE, 2010, 5, e12853.	1.1	69
96	Image-driven population analysis through mixture modeling. , 2009, , .		3
97	Image-Driven Population Analysis Through Mixture Modeling. IEEE Transactions on Medical Imaging, 2009, 28, 1473-1487.	5.4	68
98	Consistency Clustering: A Robust Algorithm for Group-wise Registration, Segmentation and Automatic Atlas Construction in Diffusion MRI. International Journal of Computer Vision, 2009, 85, 279-290.	10.9	38
99	A Unified Framework for MR Based Disease Classification. Lecture Notes in Computer Science, 2009, 21, 300-313.	1.0	39
100	Asymmetric Image-Template Registration. Lecture Notes in Computer Science, 2009, 12, 565-573.	1.0	26
101	Supervised Nonparametric Image Parcellation. Lecture Notes in Computer Science, 2009, 12, 1075-1083.	1.0	6
102	Nonparametric Mixture Models for Supervised Image Parcellation. , 2009, 12, 301-313.		3
103	Effects of registration regularization and atlas sharpness on segmentation accuracy. Medical Image Analysis, 2008, 12, 603-615.	7.0	82
104	Using Spanning Graphs for Efficient Image Registration. IEEE Transactions on Image Processing, 2008, 17, 788-797.	6.0	55
105	Analysis of Surfaces Using Constrained Regression Models. Lecture Notes in Computer Science, 2008, 11, 842-849.	1.0	3
106	Discovering Modes of an Image Population through Mixture Modeling. Lecture Notes in Computer Science, 2008, 11, 381-389.	1.0	30
107	A Robust Algorithm for Fiber-Bundle Atlas Construction. , 2007, , .		2