Franco Pestilli

List of Publications by Year
in descending order

83 papers	3,831 citations	172457 29 h-index	161849 54 g-index
117 all docs	117 docs citations	117 times ranked	3798 citing authors

#	Article	IF	Citations
1	Visual Information Routes in the Posterior Dorsal and Ventral Face Network Studied with Intracranial Neurophysiology and White Matter Tract Endpoints. Cerebral Cortex, 2022, 32, 342-366.	2.9	11
2	Mapping the Microstructure and Striae of the Human Olfactory Tract with Diffusion MRI. Journal of Neuroscience, 2022, 42, 58-68.	3.6	10
3	A taxonomy of the brainâ€™s white matter: twenty-one major tracts for the 21st century. Cerebral Cortex, 2022, 32, 4524-4548.	2.9	17
4	International data governance for neuroscience. Neuron, 2022, 110, 600-612.	8.1	28
5	A massive 7T fMRI dataset to bridge cognitive neuroscience and artificial intelligence. Nature Neuroscience, 2022, 25, 116-126.	14.8	129
6	Multi-Contrast Magnetic Resonance Imaging of Visual White Matter Pathways in Patients With Glaucoma. , 2022, 63, 29.		4
7	Development of white matter tracts between and within the dorsal and ventral streams. Brain Structure and Function, 2022, 227, 1457-1477.	2.3	10
8	Understanding structureâ€“function relationships in the mammalian visual system: part two. Brain Structure and Function, 2022, , .	2.3	0
9	GPU-accelerated connectome discovery at scale. Nature Computational Science, 2022, 2, 298-306.	8.0	1
10	Classifyber, a robust streamline-based linear classifier for white matter bundle segmentation. NeuroImage, 2021, 224, 117402.	4.2	26
11	V1 Projection Zone Signals in Human Macular Degeneration Depend on Task Despite Absence of Visual Stimulus. Current Biology, 2021, 31, 406-412.e3.	3.9	14
12	The human endogenous attentional control network includes a ventro-temporal cortical node. Nature Communications, 2021, 12, 360.	12.8	34
13	In defense of decentralized research data management. Neuroforum, 2021, .	0.3	14
14	Collegiate athlete brain data for white matter mapping and network neuroscience. Scientific Data, 2021, 8, 56.	5.3	4
15	White matter alterations in glaucoma and monocular blindness differ outside the visual system. Scientific Reports, 2021, 11, 6866.	3.3	11
16	Age dependency and lateralization in the three branches of the human superior longitudinal fasciculus. Cortex, 2021, 139, 116-133.	2.4	18
17	A single mode of population covariation associates brain networks structure and behavior and predicts individual subjectsâ€™ age. Communications Biology, 2021, 4, 943.	4.4	1
18	Chiasmal malformations dataset: a unique neuroimaging testbed. Journal of Vision, 2021, 21, 2507.	0.3	0

#	Article	IF	Citations
19	Tractography dissection variability: What happens when 42 groups dissect 14 white matter bundles on the same dataset?. NeuroImage, 2021, 243, 118502.	4.2	94
20	CHIASM, the human brain albinism and achiasma MRI dataset. Scientific Data, 2021, 8, 308.	5.3	6
21	Tractostorm: The what, why, and how of tractography dissection reproducibility. Human Brain Mapping, 2020, 41, 1859-1874.	3.6	59
22	Bundle analytics, a computational framework for investigating the shapes and profiles of brain pathways across populations. Scientific Reports, 2020, 10, 17149.	3.3	57
23	Open science, communal culture, and womenâ€™s participation in the movement to improve science. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 24154-24164.	7.1	36
24	Perspectives given by structural connectivity bridge the gap between structure and function. Brain Structure and Function, 2020, 225, 1189-1192.	2.3	10
25	The visual white matter connecting human area prostriata and the thalamus is retinotopically organized. Brain Structure and Function, 2020, 225, 1839-1853.	2.3	13
26	Spatial organization of occipital white matter tracts in the common marmoset. Brain Structure and Function, 2020, 225, 1313-1326.	2.3	14
27	Triple visual hemifield maps in a case of optic chiasm hypoplasia. NeuroImage, 2020, 215, 116822.	4.2	10
28	Predicting Neural Response Latency of the Human Early Visual Cortex from MRI-Based Tissue Measurements of the Optic Radiation. ENeuro, 2020, 7, ENEURO.0545-19.2020.	1.9	10
29	Anatomy of nerve fiber bundles at micrometer-resolution in the vervet monkey visual system. ELife, 2020, 9, .	6.0	23
30	Inter-individual Differences in Occipital Alpha Oscillations Correlate with White Matter Tissue Properties of the Optic Radiation. ENeuro, 2020, 7, ENEURO.0224-19.2020.	1.9	17
31	A large white matter bundle connecting area prostriata and visual thalamus in humans. Journal of Vision, 2020, 20, 1233.	0.3	0
32	Associative white matter connecting the dorsal and ventral posterior human cortex. Brain Structure and Function, 2019, 224, 2631-2660.	2.3	51
33	Methods for analysis of brain connectivity: An IFCN-sponsored review. Clinical Neurophysiology, 2019, 130, 1833-1858.	1.5	106
34	ReAl-LiFE: Accelerating the Discovery of Individualized Brain Connectomes on GPUs. Proceedings of the AAAI Conference on Artificial Intelligence, 2019, 33, 630-638.	4.9	5
35	Quantifying nerve decussation abnormalities in the optic chiasm. NeuroImage: Clinical, 2019, 24, 102055.	2.7	19
36	Anatomically-Informed Multiple Linear Assignment Problems for White Matter Bundle Segmentation. , 2019, , .		3

#	Article	IF	Citations
37	Open data on industry payments to healthcare providers reveal potential hidden costs to the public. Nature Communications, 2019, 10, 4314.	12.8	15
38	The open diffusion data derivatives, brain data upcycling via integrated publishing of derivatives and reproducible open cloud services. Scientific Data, 2019, 6, 69.	5.3	69
39	Diffusivity and quantitative T1 profile of human visual white matter tracts after retinal ganglion cell damage. NeuroImage: Clinical, 2019, 23, 101826.	2.7	29
40	Comparative neuroanatomy: Integrating classic and modern methods to understand association fibers connecting dorsal and ventral visual cortex. Neuroscience Research, 2019, 146, 1-12.	1.9	16
41	Functionally defined white matter of the macaque monkey brain reveals a dorso-ventral attention network. ELife, 2019, 8, .	6.0	43
42	Computational neuroanatomy of human stratum proprium of interparietal sulcus. Brain Structure and Function, 2018, 223, 489-507.	2.3	19
43	Comparing fMRI activation during smooth pursuit eye movements among contact sport athletes, non-contact sport athletes, and non-athletes. NeuroImage: Clinical, 2018, 18, 413-424.	2.7	17
44	Framework for shape analysis of white matter fiber bundles. NeuroImage, 2018, 167, 466-477.	4.2	20
45	Microstructural properties of the vertical occipital fasciculus explain the variability in human stereoacuity. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 12289-12294.	7.1	34
46	Age-related macular degeneration affects the optic radiation white matter projecting to locations of retinal damage. Brain Structure and Function, 2018, 223, 3889-3900.	2.3	33
47	Human white matter and knowledge representation. PLoS Biology, 2018, 16, e2005758.	5.6	16
48	Shape Analysis of White Matter Tracts via the Laplace-Beltrami Spectrum. Lecture Notes in Computer Science, 2018, , 195-206.	1.3	3
49	Occipital White Matter Tracts in Human and Macaque. Cerebral Cortex, 2017, 27, 3346-3359.	2.9	73
50	Shape-Attributes of Brain Structures as Biomarkers for Alzheimerâ€™s Disease. Journal of Alzheimer's Disease, 2017, 56, 287-295.	2.6	16
51	Face percept formation in human ventral temporal cortex. Journal of Neurophysiology, 2017, 118, 2614-2627.	1.8	23
52	Multidimensional encoding of brain connectomes. Scientific Reports, 2017, 7, 11491.	3.3	33
53	DTI measures identify mild and moderate TBI cases among patients with complex health problems: A receiver operating characteristic analysis of U.S. veterans. NeuroImage: Clinical, 2017, 16, 1-16.	2.7	27
54	MPI-LiFE: Designing High-Performance Linear Fascicle Evaluation of Brain Connectome with MPI. , 2017, , .		1

#	Article	IF	Citations
55	The visual white matter: The application of diffusion MRI and fiber tractography to vision science. Journal of Vision, 2017, 17, 4.	0.3	66
56	Ensemble Tractography. PLoS Computational Biology, 2016, 12, e1004692.	3.2	101
57	White Matter Diffusion of Major Fiber Tracts Implicated in Autism Spectrum Disorder. Brain Connectivity, 2016, 6, 691-699.	1.7	33
58	White-Matter Tract Connecting Anterior Insula to Nucleus Accumbens Correlates with Reduced Preference for Positively Skewed Gambles. Neuron, 2016, 89, 63-69.	8.1	84
59	A Major Human White Matter Pathway Between Dorsal and Ventral Visual Cortex. Cerebral Cortex, 2016, 26, 2205-2214.	2.9	139
60	Test-retest measurements and digital validation for in vivo neuroscience. Scientific Data, 2015, 2, 140057.	5.3	17
61	Evaluating the Accuracy of Diffusion MRI Models in White Matter. PLoS ONE, 2015, 10, e0123272.	2.5	67
62	Human blindsight is mediated by an intact geniculo-extrastriate pathway. ELife, 2015, 4, .	6.0	119
63	A review of the mechanisms by which attentional feedback shapes visual selectivity. Brain Structure and Function, 2015, 220, 1237-1250.	2.3	24
64	Saccade Planning Evokes Topographically Specific Activity in the Dorsal and Ventral Streams. Journal of Neuroscience, 2015, 35, 245-252.	3.6	48
65	Functionally Defined White Matter Reveals Segregated Pathways in Human Ventral Temporal Cortex Associated with Category-Specific Processing. Neuron, 2015, 85, 216-227.	8.1	161
66	Altered white matter in early visual pathways of humans with amblyopia. Vision Research, 2015, 114, 48-55.	1.4	51
67	Self-portraits of the brain: cognitive science, data visualization, and communicating brain structure and function. Trends in Cognitive Sciences, 2015, 19, 462-474.	7.8	19
68	White Matter Consequences of Retinal Receptor and Ganglion Cell Damage. Investigative Ophthalmology and Visual Science, 2014, 55, 6976-6986.	3.3	65
69	Differing effects of attention in single-units and populations are well predicted by heterogeneous tuning and the normalization model of attention. Frontiers in Computational Neuroscience, 2014, 8, 12.	2.1	35
70	The vertical occipital fasciculus: A century of controversy resolved by in vivo measurements. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, E5214-23.	7.1	221
71	Using fMRI to characterize how cortex represents limb motions. BMC Neuroscience, 2014, 15, .	1.9	0
72	Evaluation and statistical inference for human connectomes. Nature Methods, 2014, 11, 1058-1063.	19.0	225

#	Article	IF	Citations
73	Speed discrimination predicts word but not pseudo-word reading rate in adults and children. Brain and Language, 2014, 138, 27-37.	1.6	7
74	LiFE: Linear Fascicle Evaluation a new technology to study visual connectomes. Journal of Vision, 2014, 14, 1122-1122.	0.3	5
75	Measuring and modelling of diffusion and white-matter tracts. Journal of Vision, 2014, 14, 1461-1461.	0.3	0
76	Functionally-defined white matter selectively predicts face- and place-processing performance. Journal of Vision, 2014, 14, 602-602.	0.3	0
77	Attentional Enhancement via Selection and Pooling of Early Sensory Responses in Human Visual Cortex. Neuron, 2011, 72, 832-846.	8.1	170
78	A population-coding model of attentionâ€™s influence on contrast response: Estimating neural effects from psychophysical data. Vision Research, 2009, 49, 1144-1153.	1.4	95
79	Attention trades off spatial acuity. Vision Research, 2009, 49, 735-745.	1.4	139
80	Functional Imaging with Reinforcement, Eyetracking, and Physiological Monitoring. Journal of Visualized Experiments, 2008, , .	0.3	2
81	How do attention and adaptation affect contrast sensitivity?. Journal of Vision, 2007, 7, 9.	0.3	102
82	Attention enhances contrast sensitivity at cued and impairs it at uncued locations. Vision Research, 2005, 45, 1867-1875.	1.4	227
83	Transient Attention Enhances Perceptual Performance and fMRI Response in Human Visual Cortex. Neuron, 2005, 45, 469-477.	8.1	178