

# David C Van Essen

## List of Publications by Citations

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146  
papers

30,917  
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74  
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159  
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159  
ext. papers

39,604  
ext. citations

11.8  
avg, IF

7.37  
L-index

#	Paper	IF	Citations
146	The WU-Minn Human Connectome Project: an overview. <i>NeuroImage</i> , <b>2013</b> , 80, 62-79	7.9	2585
145	The minimal preprocessing pipelines for the Human Connectome Project. <i>NeuroImage</i> , <b>2013</b> , 80, 105-24	7.9	2298
144	A multi-modal parcellation of human cerebral cortex. <i>Nature</i> , <b>2016</b> , 536, 171-178	50.4	2046
143	A tension-based theory of morphogenesis and compact wiring in the central nervous system. <i>Nature</i> , <b>1997</b> , 385, 313-8	50.4	1265
142	A Population-Average, Landmark- and Surface-based (PALS) atlas of human cerebral cortex. <i>NeuroImage</i> , <b>2005</b> , 28, 635-62	7.9	948
141	Resting-state fMRI in the Human Connectome Project. <i>NeuroImage</i> , <b>2013</b> , 80, 144-68	7.9	865
140	Mapping human cortical areas in vivo based on myelin content as revealed by T1- and T2-weighted MRI. <i>Journal of Neuroscience</i> , <b>2011</b> , 31, 11597-616	6.6	808
139	Function in the human connectome: task-fMRI and individual differences in behavior. <i>NeuroImage</i> , <b>2013</b> , 80, 169-89	7.9	779
138	The visual field representation in striate cortex of the macaque monkey: asymmetries, anisotropies, and individual variability. <i>Vision Research</i> , <b>1984</b> , 24, 429-48	2.1	766
137	Hierarchical organization and functional streams in the visual cortex. <i>Trends in Neurosciences</i> , <b>1983</b> , 6, 370-375	13.3	698
136	Corticocortical connections of visual, sensorimotor, and multimodal processing areas in the parietal lobe of the macaque monkey. <i>Journal of Comparative Neurology</i> , <b>2000</b> , 428, 112-37	3.4	662
135	Advances in diffusion MRI acquisition and processing in the Human Connectome Project. <i>NeuroImage</i> , <b>2013</b> , 80, 125-43	7.9	596
134	Functional connectomics from resting-state fMRI. <i>Trends in Cognitive Sciences</i> , <b>2013</b> , 17, 666-82	14	560
133	Temporally-independent functional modes of spontaneous brain activity. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2012</b> , 109, 3131-6	11.5	555
132	A positive-negative mode of population covariation links brain connectivity, demographics and behavior. <i>Nature Neuroscience</i> , <b>2015</b> , 18, 1565-7	25.5	551
131	Pushing spatial and temporal resolution for functional and diffusion MRI in the Human Connectome Project. <i>NeuroImage</i> , <b>2013</b> , 80, 80-104	7.9	534
130	Comparative mapping of higher visual areas in monkeys and humans. <i>Trends in Cognitive Sciences</i> , <b>2004</b> , 8, 315-24	14	487

129	The Human Connectome Project's neuroimaging approach. <i>Nature Neuroscience</i> , <b>2016</b> , 19, 1175-87	25.5	482
128	Defining functional areas in individual human brains using resting functional connectivity MRI. <i>NeuroImage</i> , <b>2008</b> , 41, 45-57	7.9	449
127	Similar patterns of cortical expansion during human development and evolution. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2010</b> , 107, 13135-40	11.5	415
126	Parcellations and hemispheric asymmetries of human cerebral cortex analyzed on surface-based atlases. <i>Cerebral Cortex</i> , <b>2012</b> , 22, 2241-62	5.1	410
125	Surface-based and probabilistic atlases of primate cerebral cortex. <i>Neuron</i> , <b>2007</b> , 56, 209-25	13.9	398
124	Segregation of efferent connections and receptive field properties in visual area V2 of the macaque. <i>Nature</i> , <b>1985</b> , 317, 58-61	50.4	395
123	Mapping human visual cortex with positron emission tomography. <i>Nature</i> , <b>1986</b> , 323, 806-9	50.4	376
122	MSM: a new flexible framework for Multimodal Surface Matching. <i>NeuroImage</i> , <b>2014</b> , 100, 414-26	7.9	347
121	Mapping visual cortex in monkeys and humans using surface-based atlases. <i>Vision Research</i> , <b>2001</b> , 41, 1359-78	2.1	344
120	Mapping of architectonic subdivisions in the macaque monkey, with emphasis on parieto-occipital cortex. <i>Journal of Comparative Neurology</i> , <b>2000</b> , 428, 79-111	3.4	340
119	Cortical high-density counterstream architectures. <i>Science</i> , <b>2013</b> , 342, 1238406	33.3	334
118	Best practices in data analysis and sharing in neuroimaging using MRI. <i>Nature Neuroscience</i> , <b>2017</b> , 20, 299-303	25.5	312
117	Canonical genetic signatures of the adult human brain. <i>Nature Neuroscience</i> , <b>2015</b> , 18, 1832-44	25.5	301
116	Informatics and data mining tools and strategies for the human connectome project. <i>Frontiers in Neuroinformatics</i> , <b>2011</b> , 5, 4	3.9	288
115	Topographic organization of the middle temporal visual area in the macaque monkey: representational biases and the relationship to callosal connections and myeloarchitectonic boundaries. <i>Journal of Comparative Neurology</i> , <b>1987</b> , 266, 535-55	3.4	284
114	Stereopsis activates V3A and caudal intraparietal areas in macaques and humans. <i>Neuron</i> , <b>2003</b> , 39, 555-68	13.9	267
113	The representation of the visual field in parvicellular and magnocellular layers of the lateral geniculate nucleus in the macaque monkey. <i>Journal of Comparative Neurology</i> , <b>1984</b> , 226, 544-64	3.4	263
112	Trends and properties of human cerebral cortex: correlations with cortical myelin content. <i>NeuroImage</i> , <b>2014</b> , 93 Pt 2, 165-75	7.9	262

111	Response modulation by texture surround in primate area V1: correlates of "popout" under anesthesia. <i>Visual Neuroscience</i> , <b>1999</b> , 16, 15-34	1.7	251
110	A predictive network model of cerebral cortical connectivity based on a distance rule. <i>Neuron</i> , <b>2013</b> , 80, 184-97	13.9	248
109	A surface-based analysis of hemispheric asymmetries and folding of cerebral cortex in term-born human infants. <i>Journal of Neuroscience</i> , <b>2010</b> , 30, 2268-76	6.6	228
108	Measuring macroscopic brain connections in vivo. <i>Nature Neuroscience</i> , <b>2015</b> , 18, 1546-55	25.5	225
107	Using Diffusion Tractography to Predict Cortical Connection Strength and Distance: A Quantitative Comparison with Tracers in the Monkey. <i>Journal of Neuroscience</i> , <b>2016</b> , 36, 6758-70	6.6	225
106	Windows on the brain: the emerging role of atlases and databases in neuroscience. <i>Current Opinion in Neurobiology</i> , <b>2002</b> , 12, 574-9	7.6	222
105	Human Connectome Project informatics: quality control, database services, and data visualization. <i>NeuroImage</i> , <b>2013</b> , 80, 202-19	7.9	221
104	Alterations in brain structure and neurodevelopmental outcome in preterm infants hospitalized in different neonatal intensive care unit environments. <i>Journal of Pediatrics</i> , <b>2014</b> , 164, 52-60.e2	3.6	216
103	Cortical folding abnormalities in autism revealed by surface-based morphometry. <i>Journal of Neuroscience</i> , <b>2007</b> , 27, 11725-35	6.6	211
102	The processing of visual shape in the cerebral cortex of human and nonhuman primates: a functional magnetic resonance imaging study. <i>Journal of Neuroscience</i> , <b>2004</b> , 24, 2551-65	6.6	209
101	Computerized mappings of the cerebral cortex: a multiresolution flattening method and a surface-based coordinate system. <i>Journal of Cognitive Neuroscience</i> , <b>1996</b> , 8, 1-28	3.1	205
100	Neurons in monkey visual area V2 encode combinations of orientations. <i>Nature Neuroscience</i> , <b>2007</b> , 10, 1313-21	25.5	179
99	Surface-based approaches to spatial localization and registration in primate cerebral cortex. <i>NeuroImage</i> , <b>2004</b> , 23 Suppl 1, S97-107	7.9	162
98	Heritability of fractional anisotropy in human white matter: a comparison of Human Connectome Project and ENIGMA-DTI data. <i>NeuroImage</i> , <b>2015</b> , 111, 300-11	7.9	159
97	Spatially constrained hierarchical parcellation of the brain with resting-state fMRI. <i>NeuroImage</i> , <b>2013</b> , 76, 313-24	7.9	158
96	Using temporal ICA to selectively remove global noise while preserving global signal in functional MRI data. <i>NeuroImage</i> , <b>2018</b> , 181, 692-717	7.9	155
95	Multiple processing streams in occipitotemporal visual cortex. <i>Nature</i> , <b>1994</b> , 371, 151-4	50.4	152
94	Symmetry of cortical folding abnormalities in Williams syndrome revealed by surface-based analyses. <i>Journal of Neuroscience</i> , <b>2006</b> , 26, 5470-83	6.6	150

93	Cortical parcellations of the macaque monkey analyzed on surface-based atlases. <i>Cerebral Cortex</i> , <b>2012</b> , 22, 2227-40	5.1	138
92	Hierarchical Heterogeneity across Human Cortex Shapes Large-Scale Neural Dynamics. <i>Neuron</i> , <b>2019</b> , 101, 1181-1194.e13	13.9	137
91	The impact of traditional neuroimaging methods on the spatial localization of cortical areas. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2018</b> , 115, E6356-E6365	11.5	130
90	The role of long-range connections on the specificity of the macaque interareal cortical network. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2013</b> , 110, 5187-92	11.5	126
89	Antibody labeling of functional subdivisions in visual cortex: Cat-301 immunoreactivity in striate and extrastriate cortex of the macaque monkey. <i>Visual Neuroscience</i> , <b>1990</b> , 5, 67-81	1.7	125
88	Multimodal surface matching with higher-order smoothness constraints. <i>NeuroImage</i> , <b>2018</b> , 167, 453-465	5.9	124
87	Cortical connections of areas V3 and VP of macaque monkey extrastriate visual cortex. <i>Journal of Comparative Neurology</i> , <b>1997</b> , 379, 21-47	3.4	122
86	Computational methods for reconstructing and unfolding the cerebral cortex. <i>Cerebral Cortex</i> , <b>1995</b> , 5, 506-17	5.1	107
85	Quantitative assessment of prefrontal cortex in humans relative to nonhuman primates. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2018</b> , 115, E5183-E5192	11.5	107
84	Spatial Embedding and Wiring Cost Constrain the Functional Layout of the Cortical Network of Rodents and Primates. <i>PLoS Biology</i> , <b>2016</b> , 14, e1002512	9.7	105
83	The relationship between spatial configuration and functional connectivity of brain regions. <i>ELife</i> , <b>2018</b> , 7,	8.9	105
82	Extending the Human Connectome Project across ages: Imaging protocols for the Lifespan Development and Aging projects. <i>NeuroImage</i> , <b>2018</b> , 183, 972-984	7.9	101
81	Correspondences between retinotopic areas and myelin maps in human visual cortex. <i>NeuroImage</i> , <b>2014</b> , 99, 509-24	7.9	93
80	The Mouse Cortical Connectome, Characterized by an Ultra-Dense Cortical Graph, Maintains Specificity by Distinct Connectivity Profiles. <i>Neuron</i> , <b>2018</b> , 97, 698-715.e10	13.9	88
79	Neurite imaging reveals microstructural variations in human cerebral cortical gray matter. <i>NeuroImage</i> , <b>2018</b> , 182, 488-499	7.9	87
78	Comparing surface-based and volume-based analyses of functional neuroimaging data in patients with schizophrenia. <i>NeuroImage</i> , <b>2008</b> , 41, 835-48	7.9	87
77	Competition favouring inactive over active motor neurons during synapse elimination. <i>Nature</i> , <b>1987</b> , 328, 422-6	50.4	85
76	A Domain-General Cognitive Core Defined in Multimodally Parcellated Human Cortex. <i>Cerebral Cortex</i> , <b>2020</b> , 30, 4361-4380	5.1	82

75	Neural activity in areas V1, V2 and V4 during free viewing of natural scenes compared to controlled viewing. <i>NeuroReport</i> , <b>1998</b> , 9, 2153-8	1.7	81
74	Ventral posterior visual area of the macaque: visual topography and areal boundaries. <i>Journal of Comparative Neurology</i> , <b>1986</b> , 252, 139-53	3.4	77
73	Cortical cartography and Caret software. <i>NeuroImage</i> , <b>2012</b> , 62, 757-64	7.9	74
72	The Lifespan Human Connectome Project in Aging: An overview. <i>NeuroImage</i> , <b>2019</b> , 185, 335-348	7.9	74
71	Cartography and connectomes. <i>Neuron</i> , <b>2013</b> , 80, 775-90	13.9	73
70	The Lifespan Human Connectome Project in Development: A large-scale study of brain connectivity development in 5-21 year olds. <i>NeuroImage</i> , <b>2018</b> , 183, 456-468	7.9	71
69	The Human Connectome Project 7 Tesla retinotopy dataset: Description and population receptive field analysis. <i>Journal of Vision</i> , <b>2018</b> , 18, 23	0.4	69
68	Corticocortical and thalamocortical information flow in the primate visual system. <i>Progress in Brain Research</i> , <b>2005</b> , 149, 173-85	2.9	67
67	Response profiles to texture border patterns in area V1. <i>Visual Neuroscience</i> , <b>2000</b> , 17, 421-36	1.7	65
66	Synaptic dynamics at the neuromuscular junction: mechanisms and models. <i>Journal of Neurobiology</i> , <b>1990</b> , 21, 223-49		64
65	Surface-based atlases of cerebellar cortex in the human, macaque, and mouse. <i>Annals of the New York Academy of Sciences</i> , <b>2002</b> , 978, 468-79	6.5	63
64	Parcellating Cerebral Cortex: How Invasive Animal Studies Inform Noninvasive Mapmaking in Humans. <i>Neuron</i> , <b>2018</b> , 99, 640-663	13.9	62
63	The heritability of multi-modal connectivity in human brain activity. <i>ELife</i> , <b>2017</b> , 6,	8.9	62
62	ConnectomeDB--Sharing human brain connectivity data. <i>NeuroImage</i> , <b>2016</b> , 124, 1102-1107	7.9	59
61	Cerebral cortical folding, parcellation, and connectivity in humans, nonhuman primates, and mice. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2019</b> ,	11.5	59
60	Cortical structural abnormalities in very preterm children at 7 years of age. <i>NeuroImage</i> , <b>2015</b> , 109, 469-799		56
59	Dynamic patterns of cortical expansion during folding of the preterm human brain. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2018</b> , 115, 3156-3161	11.5	56
58	Comparison of cortical folding measures for evaluation of developing human brain. <i>NeuroImage</i> , <b>2016</b> , 125, 780-790	7.9	56

57	Accelerating the Evolution of Nonhuman Primate Neuroimaging. <i>Neuron</i> , <b>2020</b> , 105, 600-603	13.9	51
56	Development of connections within and between areas V1 and V2 of macaque monkeys. <i>Journal of Comparative Neurology</i> , <b>1996</b> , 372, 327-42	3.4	51
55	Visual activation in prefrontal cortex is stronger in monkeys than in humans. <i>Journal of Cognitive Neuroscience</i> , <b>2004</b> , 16, 1505-16	3.1	50
54	The Brain Analysis Library of Spatial maps and Atlases (BALSA) database. <i>NeuroImage</i> , <b>2017</b> , 144, 270-274	7.9	49
53	The Mind of a Mouse. <i>Cell</i> , <b>2020</b> , 182, 1372-1376	56.2	49
52	Development and Evolution of Cerebral and Cerebellar Cortex. <i>Brain, Behavior and Evolution</i> , <b>2018</b> , 91, 158-169	1.5	47
51	In vivo architectonics: a cortico-centric perspective. <i>NeuroImage</i> , <b>2014</b> , 93 Pt 2, 157-64	7.9	44
50	On navigating the human cerebral cortex: response to Rn praise of tedious anatomyR. <i>NeuroImage</i> , <b>2007</b> , 37, 1050-4; discussion 1066-8	7.9	39
49	Blur into focus. <i>Nature</i> , <b>1990</b> , 343, 419-20	50.4	36
48	Ciftify: A framework for surface-based analysis of legacy MR acquisitions. <i>NeuroImage</i> , <b>2019</b> , 197, 818-826	7.9	34
47	PARALLEL PROCESSING OF VISUAL INFORMATION <b>1990</b> , 103-128		33
46	The nervous system of the leech. <i>Scientific American</i> , <b>1974</b> , 230, 38-48	0.5	31
45	The human connectome in health and psychopathology. <i>World Psychiatry</i> , <b>2015</b> , 14, 154-7	14.4	30
44	Neuromuscular Synapse Elimination <b>1982</b> , 333-376		29
43	Towards HCP-Style macaque connectomes: 24-Channel 3T multi-array coil, MRI sequences and preprocessing. <i>NeuroImage</i> , <b>2020</b> , 215, 116800	7.9	28
42	Classification of temporal ICA components for separating global noise from fMRI data: Reply to Power. <i>NeuroImage</i> , <b>2019</b> , 197, 435-438	7.9	26
41	Diffusion Tensor Model links to Neurite Orientation Dispersion and Density Imaging at high b-value in Cerebral Cortical Gray Matter. <i>Scientific Reports</i> , <b>2019</b> , 9, 12246	4.9	25
40	The nonhuman primate neuroimaging and neuroanatomy project. <i>NeuroImage</i> , <b>2021</b> , 229, 117726	7.9	21

39	Lost in localization--but found with foci?!. <i>NeuroImage</i> , <b>2009</b> , 48, 14-7	7.9	19
38	Surface-Based Analyses of the Human Cerebral Cortex <b>1999</b> , 337-361		17
37	Scaling of human brain size. <i>Science</i> , <b>2018</b> , 360, 1184-1185	33.3	16
36	Towards a quantitative, probabilistic neuroanatomy of cerebral cortex. <i>Cortex</i> , <b>2004</b> , 40, 211-2	3.8	16
35	Anatomical evidence for the posterior boundary of area 2 in the macaque monkey. <i>Somatosensory &amp; Motor Research</i> , <b>1999</b> , 16, 382-90	1.2	15
34	The Human Connectome Project: A retrospective. <i>NeuroImage</i> , <b>2021</b> , 244, 118543	7.9	15
33	A 2020 view of tension-based cortical morphogenesis. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2020</b> ,	11.5	13
32	Author response: The relationship between spatial configuration and functional connectivity of brain regions <b>2018</b> ,		12
31	Genomic kinship construction to enhance genetic analyses in the human connectome project data. <i>Human Brain Mapping</i> , <b>2019</b> , 40, 1677-1688	5.9	11
30	Brain/MINDS beyond human brain MRI project: A protocol for multi-level harmonization across brain disorders throughout the lifespan. <i>NeuroImage: Clinical</i> , <b>2021</b> , 30, 102600	5.3	10
29	Early Postnatal Myelin Content Estimate of White Matter via T1w/T2w Ratio. <i>Proceedings of SPIE</i> , <b>2015</b> , 9417,	1.7	9
28	Competitive elimination of neuromuscular synapses. <i>Nature</i> , <b>1988</b> , 331, 21-22	50.4	8
27	A Domain-general Cognitive Core defined in Multimodally Parcellated Human Cortex		8
26	Modelling white matter in gyral blades as a continuous vector field. <i>NeuroImage</i> , <b>2021</b> , 227, 117693	7.9	8
25	A gyral coordinate system predictive of fibre orientations. <i>NeuroImage</i> , <b>2018</b> , 176, 417-430	7.9	7
24	The HCP 7T Retinotopy Dataset: Description and pRF Analysis		7
23	Lost in Space: The Impact of Traditional Neuroimaging Methods on the Spatial Localization of Cortical Areas		6
22	Minimal specifications for non-human primate MRI: Challenges in standardizing and harmonizing data collection. <i>NeuroImage</i> , <b>2021</b> , 236, 118082	7.9	6



21	Corticocortical connections of visual, sensorimotor, and multimodal processing areas in the parietal lobe of the macaque monkey <b>2000</b> , 428, 112		6
20	Comparative connectomics of the primate social brain. <i>NeuroImage</i> , <b>2021</b> , 245, 118693	7.9	5
19	Cause and effect in cortical folding. <i>Nature Reviews Neuroscience</i> , <b>2007</b> , 8, 989-989	13.5	4
18	Integrated software for surface-based analyses of cerebral cortex. <i>NeuroImage</i> , <b>2001</b> , 13, 148	7.9	4
17	Morphological Identification of Simple, Complex and Hypercomplex Cells in the Visual Cortex of the Cat <b>1973</b> , 189-198		4
16	Hierarchical Heterogeneity Across Human Cortex Shapes Large-Scale Neural Dynamics		4
15	Reply to Barton and Montgomery: A case for preferential prefrontal cortical expansion. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2019</b> , 116, 5-6	11.5	4
14	Lack of topography in the spinal cord projection to the rabbit soleus muscle. <i>Journal of Comparative Neurology</i> , <b>1995</b> , 351, 404-14	3.4	3
13	Author response: The heritability of multi-modal connectivity in human brain activity <b>2017</b> ,		3
12	Mapping of architectonic subdivisions in the macaque monkey, with emphasis on parieto-occipital cortex <b>2000</b> , 428, 79		3
11	Visual cortex: cartography, connectivity, and concurrent processing. <i>Current Biology</i> , <b>1992</b> , 2, 236	6.3	2
10	Brain/MINDS Beyond Human Brain MRI Project: A Protocol for Multi-Site Harmonization across Brain Disorders Throughout the Lifespan		2
9	Towards HCP-Style Macaque Connectomes: 24-Channel 3T Multi-Array Coil, MRI Sequences and Preprocessing		2
8	Transmit Field Bias Correction of T1w/T2w Myelin Maps		2
7	Toward next-generation primate neuroscience: A collaboration-based strategic plan for integrative neuroimaging. <i>Neuron</i> , <b>2021</b> ,	13.9	1
6	Multimodal Surface Matching with Higher-Order Smoothness Constraints?		1
5	Is Neuroscience FAIR? A Call for Collaborative Standardisation of Neuroscience Data.. <i>Neuroinformatics</i> , <b>2022</b> , 1	3.2	0
4	Anatomical variability, multi-modal coordinate systems, and precision targeting in the marmoset brain.. <i>NeuroImage</i> , <b>2022</b> , 250, 118965	7.9	0

- 3 Leslie Ungerleider, 1946-2020: Who, what, and where. *Proceedings of the National Academy of Sciences of the United States of America*, **2021**, 118, e2102784118 11.5 0
- 2 A spatially embedded cortical connectome reveals complex transformations.. *Neuron*, **2022**, 110, 185-1873.9
- 1 Visual Cortex, Extrastriate **1988**, 80-81