Kalanit Grill-Spector

List of Publications by Year
in descending order

117 papers	16,704 citations	50170 46 h-index	35952 97 g-index
140 all docs	140 docs citations	140 times ranked	10600 citing authors

#	Article	IF	Citations
1	Repetition and the brain: neural models of stimulus-specific effects. Trends in Cognitive Sciences, 2006, 10, 14-23.	4.0	2,126
2	The lateral occipital complex and its role in object recognition. Vision Research, 2001, 41, 1409-1422.	0.7	1,178
3	Differential Processing of Objects under Various Viewing Conditions in the Human Lateral Occipital Complex. Neuron, 1999, 24, 187-203.	3.8	1,104
4	fMR-adaptation: a tool for studying the functional properties of human cortical neurons. Acta Psychologica, 2001, 107, 293-321.	0.7	978
5	THE HUMAN VISUAL CORTEX. Annual Review of Neuroscience, 2004, 27, 649-677.	5.0	941
6	The fusiform face area subserves face perception, not generic within-category identification. Nature Neuroscience, 2004, 7, 555-562.	7.1	841
7	The functional architecture of the ventral temporal cortex and its role in categorization. Nature Reviews Neuroscience, 2014, 15, 536-548.	4.9	656
8	The dynamics of object-selective activation correlate with recognition performance in humans. Nature Neuroscience, 2000, 3, 837-843.	7.1	529
9	The neural basis of object perception. Current Opinion in Neurobiology, 2003, 13, 159-166.	2.0	503
10	Differential development of high-level visual cortex correlates with category-specific recognition memory. Nature Neuroscience, 2007, 10, 512-522.	7.1	465
11	A sequence of object-processing stages revealed by fMRI in the human occipital lobe. Human Brain Mapping, 1998, 6, 316-328.	1.9	438
12	Visual Recognition. Psychological Science, 2005, 16, 152-160.	1.8	419
13	Cue-Invariant Activation in Object-Related Areas of the Human Occipital Lobe. Neuron, 1998, 21, 191-202.	3.8	386
14	Electrical Stimulation of Human Fusiform Face-Selective Regions Distorts Face Perception. Journal of Neuroscience, 2012, 32, 14915-14920.	1.7	327
15	High-resolution imaging reveals highly selective nonface clusters in the fusiform face area. Nature Neuroscience, 2006, 9, 1177-1185.	7.1	266
16	Sparsely-distributed organization of face and limb activations in human ventral temporal cortex. NeuroImage, 2010, 52, 1559-1573.	2.1	262
17	Apparent thinning of human visual cortex during childhood is associated with myelination. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 20750-20759.	3.3	231
18	The mid-fusiform sulcus: A landmark identifying both cytoarchitectonic and functional divisions of human ventral temporal cortex. NeuroImage, 2014, 84, 453-465.	2.1	212

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19	The Functional Neuroanatomy of Human Face Perception. Annual Review of Vision Science, 2017, 3, 167-196.	2.3	186
20	Attention Reduces Spatial Uncertainty in Human Ventral Temporal Cortex. Current Biology, 2015, 25, 595-600.	1.8	185
21	Neural representations of faces and limbs neighbor in human high-level visual cortex: evidence for a new organization principle. Psychological Research, 2013, 77, 74-97.	1.0	182
22	Global Similarity and Pattern Separation in the Human Medial Temporal Lobe Predict Subsequent Memory. Journal of Neuroscience, 2013, 33, 5466-5474.	1.7	182
23	Electrical Stimulation of the Left and Right Human Fusiform Gyrus Causes Different Effects in Conscious Face Perception. Journal of Neuroscience, 2014, 34, 12828-12836.	1.7	177
24	Relating Retinotopic and Object-Selective Responses in Human Lateral Occipital Cortex. Journal of Neurophysiology, 2008, 100, 249-267.	0.9	165
25	Functionally Defined White Matter Reveals Segregated Pathways in Human Ventral Temporal Cortex Associated with Category-Specific Processing. Neuron, 2015, 85, 216-227.	3.8	161
26	Temporal Processing Capacity in High-Level Visual Cortex Is Domain Specific. Journal of Neuroscience, 2015, 35, 12412-12424.	1.7	152
27	Microstructural proliferation in human cortex is coupled with the development of face processing. Science, 2017, 355, 68-71.	6.0	150
28	Autism and the development of face processing. Clinical Neuroscience Research, 2006, 6, 145-160.	0.8	147
29	Not one extrastriate body area: Using anatomical landmarks, hMT+, and visual field maps to parcellate limb-selective activations in human lateral occipitotemporal cortex. NeuroImage, 2011, 56, 2183-2199.	2.1	147
30	Differential development of the ventral visual cortex extends through adolescence. Frontiers in Human Neuroscience, 2010, 3, 80.	1.0	146
31	fMRI-Adaptation and Category Selectivity in Human Ventral Temporal Cortex: Regional Differences Across Time Scales. Journal of Neurophysiology, 2010, 103, 3349-3365.	0.9	146
32	Object-Selective Cortex Exhibits Performance-Independent Repetition Suppression. Journal of Neurophysiology, 2006, 95, 995-1007.	0.9	138
33	Toward direct visualization of the internal shape representation space by fMRI. Cognitive, Affective and Behavioral Neuroscience, 1998, 26, 309-321.	1.2	138
34	The improbable simplicity of the fusiform face area. Trends in Cognitive Sciences, 2012, 16, 251-254.	4.0	134
35	Developmental neuroimaging of the human ventral visual cortex. Trends in Cognitive Sciences, 2008, 12, 152-162.	4.0	132
36	Corresponding ECoG and fMRI category-selective signals in human ventral temporal cortex. Neuropsychologia, 2016, 83, 14-28.	0.7	105

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37	Development differentially sculpts receptive fields across early and high-level human visual cortex. Nature Communications, 2018, 9, 788.	5.8	102
38	Representation of Shapes, Edges, and Surfaces Across Multiple Cues in the Human Visual Cortex. Journal of Neurophysiology, 2008, 99, 1380-1393.	0.9	96
39	The Cytoarchitecture of Domain-specific Regions in Human High-level Visual Cortex. Cerebral Cortex, 2017, 27, 146-161.	1.6	94
40	Two New Cytoarchitectonic Areas on the Human Mid-Fusiform Gyrus. Cerebral Cortex, 2017, 27, bhv225.	1.6	91
41	Defining the most probable location of the parahippocampal place area using cortex-based alignment and cross-validation. NeuroImage, 2018, 170, 373-384.	2.1	71
42	Development of Neural Sensitivity to Face Identity Correlates with Perceptual Discriminability. Journal of Neuroscience, 2016, 36, 10893-10907.	1.7	68
43	The representation of object viewpoint in human visual cortex. NeuroImage, 2009, 45, 522-536.	2.1	66
44	The Fusiform Face Area is Enlarged in Williams Syndrome. Journal of Neuroscience, 2010, 30, 6700-6712.	1.7	63
45	A cross-validated cytoarchitectonic atlas of the human ventral visual stream. NeuroImage, 2018, 170, 257-270.	2.1	63
46	Extensive childhood experience with PokÃ©mon suggests eccentricity drives organization of visual cortex. Nature Human Behaviour, 2019, 3, 611-624.	6.2	63
47	Encoding model of temporal processing in human visual cortex. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, E11047-E11056.	3.3	62
48	Where Is Human V4? Predicting the Location of hV4 and VO1 from Cortical Folding. Cerebral Cortex, 2014, 24, 2401-2408.	1.6	61
49	The functional neuroanatomy of face perception: from brain measurements to deep neural networks. Interface Focus, 2018, 8, 20180013.	1.5	58
50	Task alters category representations in prefrontal but not high-level visual cortex. NeuroImage, 2017, 155, 437-449.	2.1	55
51	Selectivity of Adaptation in Single Units: Implications for fMRI Experiments. Neuron, 2006, 49, 170-171.	3.8	54
52	Experience Shapes the Development of Neural Substrates of Face Processing in Human Ventral Temporal Cortex. Cerebral Cortex, 2017, 27, bhv314.	1.6	54
53	A Probabilistic Functional Atlas of Human Occipito-Temporal Visual Cortex. Cerebral Cortex, 2021, 31, 603-619.	1.6	53
54	The Face-Processing Network Is Resilient to Focal Resection of Human Visual Cortex. Journal of Neuroscience, 2016, 36, 8425-8440.	1.7	49

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55	On object selectivity and the anatomy of the human fusiform gyrus. NeuroImage, 2018, 173, 604-609.	2.1	49
56	The evolution of face processing networks. Trends in Cognitive Sciences, 2015, 19, 240-241.	4.0	48
57	White matter microstructure on diffusion tensor imaging is associated with conventional magnetic resonance imaging findings and cognitive function in adolescents born preterm. Developmental Medicine and Child Neurology, 2012, 54, 809-814.	1.1	45
58	Faceâ€likeness and image variability drive responses in human faceâ€selective ventral regions. Human Brain Mapping, 2012, 33, 2334-2349.	1.9	40
59	A preference for mathematical processing outweighs the selectivity for Arabic numbers in the inferior temporal gyrus. NeuroImage, 2018, 175, 188-200.	2.1	38
60	Neural adaptation to faces reveals racial outgroup homogeneity effects in early perception. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 14532-14537.	3.3	37
61	Differential spatial computations in ventral and lateral face-selective regions are scaffolded by structural connections. Nature Communications, 2021, 12, 2278.	5.8	37
62	Cortical recycling in high-level visual cortex during childhood development. Nature Human Behaviour, 2021, 5, 1686-1697.	6.2	36
63	Fine-Scale Spatial Organization of Face and Object Selectivity in the Temporal Lobe: Do Functional Magnetic Resonance Imaging, Optical Imaging, and Electrophysiology Agree?. Journal of Neuroscience, 2008, 28, 11796-11801.	1.7	34
64	Object Recognition. Current Directions in Psychological Science, 2008, 17, 73-79.	2.8	32
65	White matter myelination during early infancy is linked to spatial gradients and myelin content at birth. Nature Communications, 2022, 13, 997.	5.8	29
66	Ultra-high-resolution fMRI of Human Ventral Temporal Cortex Reveals Differential Representation of Categories and Domains. Journal of Neuroscience, 2020, 40, 3008-3024.	1.7	28
67	Separate lanes for adding and reading in the white matter highways of the human brain. Nature Communications, 2019, 10, 3675.	5.8	25
68	Differential sustained and transient temporal processing across visual streams. PLoS Computational Biology, 2019, 15, e1007011.	1.5	25
69	Sulcal Depth in the Medial Ventral Temporal Cortex Predicts the Location of a Place-Selective Region in Macaques, Children, and Adults. Cerebral Cortex, 2021, 31, 48-61.	1.6	24
70	Holistic face recognition is an emergent phenomenon of spatial processing in face-selective regions. Nature Communications, 2021, 12, 4745.	5.8	22
71	Learning to Read Increases the Informativeness of Distributed Ventral Temporal Responses. Cerebral Cortex, 2019, 29, 3124-3139.	1.6	21
72	Development of population receptive fields in the lateral visual stream improves spatial coding amid stable structural-functional coupling. NeuroImage, 2019, 188, 59-69.	2.1	20

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73	White matter fascicles and cortical microstructure predict reading-related responses in human ventral temporal cortex. NeuroImage, 2021, 227, 117669.	2.1	16
74	Infantsâ€™ cortex undergoes microstructural growth coupled with myelination during development. Communications Biology, 2021, 4, 1191.	2.0	15
75	Semantic versus perceptual priming in fusiform cortex. Trends in Cognitive Sciences, 2001, 5, 227-228.	4.0	13
76	fMRI Adaptation: A Tool for Studying Visual Representations in the Primate Brain. , 2005, , 173-188.		13
77	Feature saliency and feedback information interactively impact visual category learning. Frontiers in Psychology, 2015, 6, 74.	1.1	9
78	Diverse Temporal Dynamics of Repetition Suppression Revealed by Intracranial Recordings in the Human Ventral Temporal Cortex. Cerebral Cortex, 2020, 30, 5988-6003.	1.6	9
79	Establishing the functional relevancy of white matter connections in the visual system and beyond. Brain Structure and Function, 2022, 227, 1347-1356.	1.2	8
80	Spatiotemporal information during unsupervised learning enhances viewpoint invariant object recognition. Journal of Vision, 2015, 15, 7.	0.1	7
81	X-Chromosome Insufficiency Alters Receptive Fields across the Human Early Visual Cortex. Journal of Neuroscience, 2019, 39, 8079-8088.	1.7	7
82	Attention enhances category representations across the brain with strengthened residual correlations to ventral temporal cortex. NeuroImage, 2022, 249, 118900.	2.1	7
83	White matter connections of high-level visual areas predict cytoarchitecture better than category-selectivity in childhood, but not adulthood. Cerebral Cortex, 2023, 33, 2485-2506.	1.6	7
84	What Has fMRI Taught Us About Object Recognition?. , 0, , 102-128.		6
85	Learning the 3-D structure of objects from 2-D views depends on shape, not format. Journal of Vision, 2016, 16, 7.	0.1	6
86	Deos the Bairn Not Raed Ervey Lteter by Istlef, but the Wrod as a Wlohe?. Neuron, 2009, 62, 161-162.	3.8	5
87	Data on a cytoarchitectonic brain atlas: effects of brain template and a comparison to a multimodal atlas. Data in Brief, 2017, 12, 327-332.	0.5	5
88	The Functional Neuroanatomy of Face Processing: Insights from Neuroimaging and Implications for Deep Learning. Advances in Computer Vision and Pattern Recognition, 2017, , 3-31.	0.9	5
89	The Interplay between Feature-Saliency and Feedback Information in Visual Category Learning Tasks. , 2012, 2012, 420-425.		4
90	Occipital Lobe. , 2003, , 653-660.		3

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91	Synchrony upon repetition: One or multiple neural mechanisms?. Cognitive Neuroscience, 2012, 3, 243-244.	0.6	3
92	The structure of depressive symptoms and characteristics and their relation to overall severity in major depressive disorder. Psychiatry Research, 2020, 294, 113399.	1.7	3
93	Combined Neural Tuning in Human Ventral Temporal Cortex Resolves the Perceptual Ambiguity of Morphed 2D Images. Cerebral Cortex, 2020, 30, 4882-4898.	1.6	2
94	Gray Matter Thinning in Ventral Temporal Cortex from Childhood to Adulthood is Associated with Increased Myelination. Journal of Vision, 2018, 18, 542.	0.1	2
95	Human visual cortex as a window into the developing brain. Journal of Vision, 2019, 19, 17.	0.1	2
96	Representation of Objects. , 2013, , .		1
97	Task modulates category selectivity along a gradient from occipitotemporal cortex to prefrontal cortex in word- and face-selective regions. Journal of Vision, 2015, 15, 1170.	0.1	1
98	Differential representation of category and task information across high level visual cortex and ventro-lateral prefrontal cortex. Journal of Vision, 2016, 16, 256.	0.1	1
99	Macroanatomical alignment improves the intersubject consistency of cytoarchitectonic regions in the human ventral stream. Journal of Vision, 2016, 16, 179.	0.1	1
100	Development differentially sculpts population receptive fields across human visual cortex. Journal of Vision, 2017, 17, 608.	0.1	1
101	Selectivity to limbs in ventral temporal cortex decreases during childhood as selectivity to faces and words increases. Journal of Vision, 2020, 20, 152.	0.1	1
102	Near-perfect prediction of reaction time for face gender judgments based on activity in ventral temporal cortex. Journal of Vision, 2015, 15, 753.	0.1	0
103	Neural discriminability for face identity improves from childhood to adulthood. Journal of Vision, 2015, 15, 1190.	0.1	0
104	Learning invariant object representations: asymmetric transfer of learning across line drawings and 3D cues. Journal of Vision, 2015, 15, 1088.	0.1	0
105	Macromolecular proliferation in human high-level visual cortex constrains development of function and behavior. Journal of Vision, 2016, 16, 383.	0.1	0
106	Probabilistic Atlas of Category-Selective Regions of Ventral Temporal Cortex. Journal of Vision, 2016, 16, 253.	0.1	0
107	Training a deep convolutional neural network with multiple face sizes and positions, but not resolutions, is necessary for generating invariant face recognition across these transformations. Journal of Vision, 2017, 17, 247.	0.1	0
108	Development of neural sensitivity to face identity correlates with perceptual discriminability. Journal of Vision, 2017, 17, 23.	0.1	0

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109	Eccentricity drives developmental organization of human high-level visual cortex. Journal of Vision, 2018, 18, 1149.	0.1	0
110	Prefrontal and category-selective ventro-temporal regions exhibit differential interactions between stimulus visibility and task. Journal of Vision, 2018, 18, 389.	0.1	0
111	A preference for mathematical tasks outweighs the selectivity for Arabic numbers in the inferior temporal gyrus. Journal of Vision, 2018, 18, 551.	0.1	0
112	Differential responses across body- and face-selective cortex predict visual categorization behavior. Journal of Vision, 2018, 18, 1091.	0.1	0
113	Ultra-high-resolution fMRI reveals differential representation of categories and domains across lateral and medial ventral temporal cortex. Journal of Vision, 2019, 19, 249a.	0.1	0
114	How learning to read affects the function and structure of ventral temporal cortex. Journal of Vision, 2019, 19, 4c.	0.1	0
115	Differential white matter connections to ventral and lateral occipito-temporal face-selective regions underlie differences in visual field coverage. Journal of Vision, 2019, 19, 54b.	0.1	0
116	Population receptive field measurements of stimulus-driven effects in face-selective areas. Journal of Vision, 2019, 19, 258c.	0.1	0
117	White matter anatomy and cortical microstructure predict reading-related responses in ventral temporal cortex. Journal of Vision, 2020, 20, 201.	0.1	0