Nikolaus Kriegeskorte

List of Publications by Year
in descending order

110 papers	21,411 citations	38660 50 h-index	29081 104 g-index
142 all docs	142 docs citations	142 times ranked	14418 citing authors

#	Article	IF	Citations
1	Face dissimilarity judgments are predicted by representational distance in morphable and image-computable models. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, .	3.3	14
2	Distinct fronto-temporal substrates of distributional and taxonomic similarity among words: evidence from RSA of BOLD signals. NeuroImage, 2021, 224, 117408.	2.1	27
3	FFA and OFA Encode Distinct Types of Face Identity Information. Journal of Neuroscience, 2021, 41, 1952-1969.	1.7	43
4	An ecologically motivated image dataset for deep learning yields better models of human vision. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	67
5	Semantic Data Set Construction from Human Clustering and Spatial Arrangement. Computational Linguistics, 2021, 47, 69-116.	2.5	6
6	The representational dynamics of perceived voice emotions evolve from categories to dimensions. Nature Human Behaviour, 2021, 5, 1203-1213.	6.2	19
7	Promises and challenges of human computational ethology. Neuron, 2021, 109, 2224-2238.	3.8	37
8	Comparing representational geometries using whitened unbiased-distance-matrix similarity. Neurons, Behavior, Data Analysis, and Theory, 2021, 5, .	1.8	20
9	Neural tuning and representational geometry. Nature Reviews Neuroscience, 2021, 22, 703-718.	4.9	80
10	Capturing the objects of vision with neural networks. Nature Human Behaviour, 2021, 5, 1127-1144.	6.2	25
11	Recurrent neural networks can explain flexible trading of speed and accuracy in biological vision. PLoS Computational Biology, 2020, 16, e1008215.	1.5	65
12	Individual differences among deep neural network models. Nature Communications, 2020, 11, 5725.	5.8	62
13	The brain produces mind by modeling. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 29299-29301.	3.3	7
14	Rapid event-related, BOLD fMRI, non-human primates (NHP): choose two out of three. Scientific Reports, 2020, 10, 7485.	1.6	9
15	Inferring exemplar discriminability in brain representations. PLoS ONE, 2020, 15, e0232551.	1.1	27
16	Going in circles is the way forward: the role of recurrence in visual inference. Current Opinion in Neurobiology, 2020, 65, 176-193.	2.0	53
17	Controversial stimuli: Pitting neural networks against each other as models of human cognition. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 29330-29337.	3.3	53
18	A unifying framework for understanding neural tuning and representational geometry. Journal of Vision, 2020, 20, 235.	0.1	0

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19	Peeling the Onion of Brain Representations. Annual Review of Neuroscience, 2019, 42, 407-432.	5.0	84
20	Faces and voices in the brain: A modality-general person-identity representation in superior temporal sulcus. NeuroImage, 2019, 201, 116004.	2.1	30
21	Analysing linear multivariate pattern transformations in neuroimaging data. PLoS ONE, 2019, 14, e0223660.	1.1	20
22	A deep learning framework for neuroscience. Nature Neuroscience, 2019, 22, 1761-1770.	7.1	563
23	Rapid Invariant Encoding of Scene Layout in Human OPA. Neuron, 2019, 103, 161-171.e3.	3.8	50
24	Interpreting encoding and decoding models. Current Opinion in Neurobiology, 2019, 55, 167-179.	2.0	117
25	The spatiotemporal neural dynamics underlying perceived similarity for real-world objects. NeuroImage, 2019, 194, 12-24.	2.1	48
26	Distinct representations of basic taste qualities in human gustatory cortex. Nature Communications, 2019, 10, 1048.	5.8	56
27	Neural network models and deep learning. Current Biology, 2019, 29, R231-R236.	1.8	276
28	Recurrence is required to capture the representational dynamics of the human visual system. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 21854-21863.	3.3	266
29	Cognitive Computational Neuroscience: A New Conference for an Emerging Discipline. Trends in Cognitive Sciences, 2018, 22, 365-367.	4.0	22
30	GLMdenoise improves multivariate pattern analysis of fMRI data. NeuroImage, 2018, 183, 606-616.	2.1	31
31	Prospective motion correction improves the sensitivity of fMRI pattern decoding. Human Brain Mapping, 2018, 39, 4018-4031.	1.9	15
32	Cognitive computational neuroscience. Nature Neuroscience, 2018, 21, 1148-1160.	7.1	266
33	Deep convolutional neural networks, features, and categories perform similarly at explaining primate high-level visual representations. , 2018, , .		10
34	Fixed versus mixed RSA:ÂExplaining visual representations by fixed and mixed feature sets from shallow and deep computational models. Journal of Mathematical Psychology, 2017, 76, 184-197.	1.0	66
35	Representational Similarity Mapping of Distributional Semantics in Left Inferior Frontal, Middle Temporal, and Motor Cortex. Cerebral Cortex, 2017, 27, 294-309.	1.6	62
36	Best practices in data analysis and sharing in neuroimaging using MRI. Nature Neuroscience, 2017, 20, 299-303.	7.1	482

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37	Local opposite orientation preferences in V1: fMRI sensitivity to fine-grained pattern information. Scientific Reports, 2017, 7, 7128.	1.6	10
38	Building machines that adapt and compute like brains. Behavioral and Brain Sciences, 2017, 40, e269.	0.4	7
39	Recurrent Convolutional Neural Networks: A Better Model of Biological Object Recognition. Frontiers in Psychology, 2017, 8, 1551.	1.1	144
40	Deep Convolutional Neural Networks Outperform Feature-Based But Not Categorical Models in Explaining Object Similarity Judgments. Frontiers in Psychology, 2017, 8, 1726.	1.1	93
41	Representational models: A common framework for understanding encoding, pattern-component, and representational-similarity analysis. PLoS Computational Biology, 2017, 13, e1005508.	1.5	231
42	Adjudicating between face-coding models with individual-face fMRI responses. PLoS Computational Biology, 2017, 13, e1005604.	1.5	36
43	Categorical selectivity in the visual pathway revealed by fMRI in awake macaques. Journal of Vision, 2017, 17, 231.	0.1	0
44	Representational Distance Learning for Deep Neural Networks. Frontiers in Computational Neuroscience, 2016, 10, 131.	1.2	30
45	Perception and Processing of Faces in the Human Brain Is Tuned to Typical Feature Locations. Journal of Neuroscience, 2016, 36, 9289-9302.	1.7	58
46	Inferring brain-computational mechanisms with models of activity measurements. Philosophical Transactions of the Royal Society B: Biological Sciences, 2016, 371, 20160278.	1.8	45
47	Grid Cells for Conceptual Spaces?. Neuron, 2016, 92, 280-284.	3.8	7
48	Perceptual similarity of visual patterns predicts dynamic neural activation patterns measured with MEG. NeuroImage, 2016, 132, 59-70.	2.1	85
49	Reliability of dissimilarity measures for multi-voxel pattern analysis. NeuroImage, 2016, 137, 188-200.	2.1	413
50	Visual features as stepping stones toward semantics: Explaining object similarity in IT and perception with non-negative least squares. Neuropsychologia, 2016, 83, 201-226.	0.7	73
51	Similarity, not complexity, determines visual working memory performance.. Journal of Experimental Psychology: Learning Memory and Cognition, 2015, 41, 1884-1892.	0.7	13
52	The brain of the beholder: honouring individual representational idiosyncrasies. Language, Cognition and Neuroscience, 2015, 30, 367-379.	0.7	21
53	Deep Neural Networks: A New Framework for Modeling Biological Vision and Brain Information Processing. Annual Review of Vision Science, 2015, 1, 417-446.	2.3	741
54	Visual representations are dominated by intrinsic fluctuations correlated between areas. NeuroImage, 2015, 114, 275-286.	2.1	57

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55	Retrieval induces adaptive forgetting of competing memories via cortical pattern suppression. Nature Neuroscience, 2015, 18, 582-589.	7.1	227
56	Faciotopyâ€"A face-feature map with face-like topology in the human occipital face area. Cortex, 2015, 72, 156-167.	1.1	68
57	Intersubject information mapping: revealing canonical representations of complex natural stimuli. ScienceOpen Research, 2015, .	0.6	1
58	A Toolbox for Representational Similarity Analysis. PLoS Computational Biology, 2014, 10, e1003553.	1.5	715
59	Reaction Time for Object Categorization Is Predicted by Representational Distance. Journal of Cognitive Neuroscience, 2014, 26, 132-142.	1.1	72
60	Deep Supervised, but Not Unsupervised, Models May Explain IT Cortical Representation. PLoS Computational Biology, 2014, 10, e1003915.	1.5	908
61	The Emergence of Semantic Meaning in the Ventral Temporal Pathway. Journal of Cognitive Neuroscience, 2014, 26, 120-131.	1.1	81
62	What's there, distinctly, when and where?. Nature Neuroscience, 2014, 17, 332-333.	7.1	5
63	Unique semantic space in the brain of each beholder predicts perceived similarity. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 14565-14570.	3.3	139
64	Population coding of affect across stimuli, modalities and individuals. Nature Neuroscience, 2014, 17, 1114-1122.	7.1	272
65	Representational geometry: integrating cognition, computation, and the brain. Trends in Cognitive Sciences, 2013, 17, 401-412.	4.0	730
66	Abstract Encoding of Auditory Objects in Cortical Activity Patterns. Cerebral Cortex, 2013, 23, 2025-2037.	1.6	81
67	Choosing the Rules: Distinct and Overlapping Frontoparietal Representations of Task Rules for Perceptual Decisions. Journal of Neuroscience, 2013, 33, 11852-11862.	1.7	71
68	Awake reactivation predicts memory in humans. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 21159-21164.	3.3	181
69	Intrinsic Structure of Visual Exemplar and Category Representations in Macaque Brain. Journal of Neuroscience, 2013, 33, 11346-11360.	1.7	31
70	Representational dynamics of object vision: The first 1000 ms. Journal of Vision, 2013, 13, 1-1.	0.1	261
71	Human Object-Similarity Judgments Reflect and Transcend the Primate-IT Object Representation. Frontiers in Psychology, 2013, 4, 128.	1.1	120
72	fMRI orientation decoding in V1 does not require global maps or globally coherent orientation stimuli. Frontiers in Psychology, 2013, 4, 493.	1.1	65

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73	Distance-Based Partial Least Squares Analysis. Springer Proceedings in Mathematics and Statistics, 2013, , 131-145.	0.1	2
74	Direction-Sensitive Codes for Observed Head Turns in Human Superior Temporal Sulcus. Cerebral Cortex, 2012, 22, 735-744.	1.6	31
75	Spatiotemporal Searchlight Representational Similarity Analysis in EMEG Source Space. , 2012, , .		31
76	Episodic Reinstatement in the Medial Temporal Lobe. Journal of Neuroscience, 2012, 32, 18150-18156.	1.7	191
77	Categorical, Yet Graded - Single-Image Activation Profiles of Human Category-Selective Cortical Regions. Journal of Neuroscience, 2012, 32, 8649-8662.	1.7	59
78	Seeing patterns through the hemodynamic veil â€" The future of pattern-information fMRI. NeuroImage, 2012, 62, 1249-1256.	2.1	31
79	Inverse MDS: Inferring Dissimilarity Structure from Multiple Item Arrangements. Frontiers in Psychology, 2012, 3, 245.	1.1	151
80	Open Evaluation: A Vision for Entirely Transparent Post-Publication Peer Review and Rating for Science. Frontiers in Computational Neuroscience, 2012, 6, 79.	1.2	53
81	An emerging consensus for open evaluation: 18 visions for the future of scientific publishing. Frontiers in Computational Neuroscience, 2012, 6, 94.	1.2	32
82	Auditory motion direction encoding in auditory cortex and highâ€level visual cortex. Human Brain Mapping, 2012, 33, 969-978.	1.9	54
83	Pattern-information analysis: From stimulus decoding to computational-model testing. NeuroImage, 2011, 56, 411-421.	2.1	179
84	Utilizing temporal information in fMRI decoding: Classifier using kernel regression methods. NeuroImage, 2011, 58, 560-571.	2.1	26
85	A Head View-Invariant Representation of Gaze Direction in Anterior Superior Temporal Sulcus. Current Biology, 2011, 21, 1817-1821.	1.8	103
86	Patternâ€information fMRI: New questions which it opens up and challenges which face it. International Journal of Imaging Systems and Technology, 2010, 20, 31-41.	2.7	40
87	Everything You Never Wanted to Know about Circular Analysis, but Were Afraid to Ask. Journal of Cerebral Blood Flow and Metabolism, 2010, 30, 1551-1557.	2.4	190
88	Face-Identity Change Activation Outside the Face System: â€œRelease from Adaptationâ€•May Not Always Indicate Neuronal Selectivity. Cerebral Cortex, 2010, 20, 2027-2042.	1.6	66
89	High-Level Visual Object Representations Are Constrained by Position. Cerebral Cortex, 2010, 20, 2916-2925.	1.6	155
90	Comparison of multivariate classifiers and response normalizations for pattern-information fMRI. NeuroImage, 2010, 53, 103-118.	2.1	419

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91	Interpreting brain images: reflections on an adolescent field. Trends in Cognitive Sciences, 2010, 14, 475-476.	4.0	1
92	How does an fMRI voxel sample the neuronal activity pattern: Compact-kernel or complex spatiotemporal filter?. NeuroImage, 2010, 49, 1965-1976.	2.1	168
93	Relating population-code representations between man, monkey, and computational models. Frontiers in Neuroscience, 2009, 3, 363-373.	1.4	72
94	Circular analysis in systems neuroscience: the dangers of double dipping. Nature Neuroscience, 2009, 12, 535-540.	7.1	2,379
95	Revealing representational content with pattern-information fMRIâ€"an introductory guide. Social Cognitive and Affective Neuroscience, 2009, 4, 101-109.	1.5	374
96	Artifactual timeâ€course correlations in echoâ€planar fMRI with implications for studies of brain function. International Journal of Imaging Systems and Technology, 2008, 18, 345-349.	2.7	19
97	Matching Categorical Object Representations in Inferior Temporal Cortex of Man and Monkey. Neuron, 2008, 60, 1126-1141.	3.8	1,215
98	The Arrow of Time: How Does the Brain Represent Natural Temporal Structure?. Journal of Neuroscience, 2008, 28, 7933-7935.	1.7	0
99	Representational similarity analysis â€" connecting the branches of systems neuroscience. Frontiers in Systems Neuroscience, 2008, 2, 4.	1.2	2,012
100	Individual faces elicit distinct response patterns in human anterior temporal cortex. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 20600-20605.	3.3	464
101	Neural correlates of trust. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 20084-20089.	3.3	313
102	Analyzing for information, not activation, to exploit high-resolution fMRI. NeuroImage, 2007, 38, 649-662.	2.1	244
103	Combining the tools: Activation- and information-based fMRI analysis. NeuroImage, 2007, 38, 666-668.	2.1	51
104	The neuroscientific exploitation of high-resolution functional magnetic resonance imaging. , 2006, 2006, 21-4.		1
105	Information-based functional brain mapping. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 3863-3868.	3.3	1,918
106	Primary Visual Cortex Activity along the Apparent-Motion Trace Reflects Illusory Perception. PLoS Biology, 2005, 3, e265.	2.6	196
107	Cortical capacity constraints for visual working memory: dissociation of fMRI load effects in a fronto-parietal network. NeuroImage, 2003, 20, 1518-1530.	2.1	292
108	Human Cortical Object Recognition from a Visual Motion Flowfield. Journal of Neuroscience, 2003, 23, 1451-1463.	1.7	53

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109	Apparent Motion: Event-Related Functional Magnetic Resonance Imaging of Perceptual Switches and States. Journal of Neuroscience, 2002, 22, RC219-RC219.	1.7	102
110	An Efficient Algorithm for Topologically Correct Segmentation of the Cortical Sheet in Anatomical MR Volumes. NeuroImage, 2001, 14, 329-346.	2.1	218