

# Bertrand Thirion

## List of Publications by Year in descending order

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103  
papers

9,939  
citations

87401

40  
h-index

53065

89  
g-index

107  
all docs

107  
docs citations

107  
times ranked

14221  
citing authors

#	ARTICLE	IF	CITATIONS
1	Tackling the Complexity of Lesion-Symptoms Mapping: How to Bridge the Gap Between Data Scientists and Clinicians?. <i>Acta Neurochirurgica Supplementum</i> , 2022, 134, 195-203.	0.5	3
2	Synthetic FLAIR as a Substitute for FLAIR Sequence in Acute Ischemic Stroke. <i>Radiology</i> , 2022, 303, 153-159.	3.6	13
3	How to remove or control confounds in predictive models, with applications to brain biomarkers. <i>GigaScience</i> , 2022, 11, .	3.3	23
4	Comprehensive decoding mental processes from Web repositories of functional brain images. <i>Scientific Reports</i> , 2022, 12, 7050.	1.6	3
5	Brain topography beyond parcellations: Local gradients of functional maps. <i>NeuroImage</i> , 2021, 229, 117706.	2.1	21
6	Functional annotation of human cognitive states using deep graph convolution. <i>NeuroImage</i> , 2021, 231, 117847.	2.1	40
7	Extracting representations of cognition across neuroimaging studies improves brain decoding. <i>PLoS Computational Biology</i> , 2021, 17, e1008795.	1.5	12
8	Tissue outcome prediction in hyperacute ischemic stroke: Comparison of machine learning models. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2021, 41, 3085-3096.	2.4	10
9	Decoding with confidence: Statistical control on decoder maps. <i>NeuroImage</i> , 2021, 234, 117921.	2.1	2
10	From deep brain phenotyping to functional atlas. <i>Current Opinion in Behavioral Sciences</i> , 2021, 40, 201-212.	2.0	5
11	Functional Magnetic Resonance Imaging Data Augmentation Through Conditional ICA. <i>Lecture Notes in Computer Science</i> , 2021, , 491-500.	1.0	2
12	Subject-specific segregation of functional territories based on deep phenotyping. <i>Human Brain Mapping</i> , 2021, 42, 841-870.	1.9	11
13	An empirical evaluation of functional alignment using inter-subject decoding. <i>NeuroImage</i> , 2021, 245, 118683.	2.1	12
14	Population modeling with machine learning can enhance measures of mental health. <i>GigaScience</i> , 2021, 10, .	3.3	23
15	Individual Brain Charting dataset extension, second release of high-resolution fMRI data for cognitive mapping. <i>Scientific Data</i> , 2020, 7, 353.	2.4	21
16	Inference and Prediction Diverge in Biomedicine. <i>Patterns</i> , 2020, 1, 100119.	3.1	42
17	Fine-grain atlases of functional modes for fMRI analysis. <i>NeuroImage</i> , 2020, 221, 117126.	2.1	64
18	Patterns of autism symptoms: hidden structure in the ADOS and ADI-R instruments. <i>Translational Psychiatry</i> , 2020, 10, 257.	2.4	19

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19	Variability in the analysis of a single neuroimaging dataset by many teams. <i>Nature</i> , 2020, 582, 84-88.	13.7	634
20	Multi-scale network regression for brain phenotype associations. <i>Human Brain Mapping</i> , 2020, 41, 2553-2566.	1.9	24
21	Multi-subject MEG/EEG source imaging with sparse multi-task regression. <i>NeuroImage</i> , 2020, 220, 116847.	2.1	11
22	NeuroQuery, comprehensive meta-analysis of human brain mapping. <i>ELife</i> , 2020, 9, .	2.8	105
23	Mapping the asynchrony of cortical maturation in the infant brain: A MRI multi-parametric clustering approach. <i>NeuroImage</i> , 2019, 185, 641-653.	2.1	49
24	Brain-based ranking of cognitive domains to predict schizophrenia. <i>Human Brain Mapping</i> , 2019, 40, 4487-4507.	1.9	25
25	SmartPulse, a machine learning approach for calibration-free dynamic RF shimming: Preliminary study in a clinical environment. <i>Magnetic Resonance in Medicine</i> , 2019, 82, 2016-2031.	1.9	16
26	Local Optimal Transport for Functional Brain Template Estimation. <i>Lecture Notes in Computer Science</i> , 2019, , 237-248.	1.0	7
27	The functional database of the ARCHI project: Potential and perspectives. <i>NeuroImage</i> , 2019, 197, 527-543.	2.1	6
28	Population shrinkage of covariance (PoSCE) for better individual brain functional-connectivity estimation. <i>Medical Image Analysis</i> , 2019, 54, 138-148.	7.0	19
29	Benchmarking functional connectome-based predictive models for resting-state fMRI. <i>NeuroImage</i> , 2019, 192, 115-134.	2.1	243
30	Recursive Nearest Agglomeration (ReNA): Fast Clustering for Approximation of Structured Signals. <i>IEEE Transactions on Pattern Analysis and Machine Intelligence</i> , 2019, 41, 669-681.	9.7	7
31	PyBIDS: Python tools for BIDS datasets. <i>Journal of Open Source Software</i> , 2019, 4, 1294.	2.0	32
32	Stochastic Subsampling for Factorizing Huge Matrices. <i>IEEE Transactions on Signal Processing</i> , 2018, 66, 113-128.	3.2	16
33	FReM " Scalable and stable decoding with fast regularized ensemble of models. <i>NeuroImage</i> , 2018, 180, 160-172.	2.1	19
34	Different shades of default mode disturbance in schizophrenia: Subnodal covariance estimation in structure and function. <i>Human Brain Mapping</i> , 2018, 39, 644-661.	1.9	38
35	Decoding fMRI activity in the time domain improves classification performance. <i>NeuroImage</i> , 2018, 180, 203-210.	2.1	7
36	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

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37	Atlases of cognition with large-scale human brain mapping. PLoS Computational Biology, 2018, 14, e1006565.	1.5	74
38	Patterns of schizophrenia symptoms: hidden structure in the PANSS questionnaire. Translational Psychiatry, 2018, 8, 237.	2.4	14
39	Inter-subject Registration of Functional Images: Do We Need Anatomical Images?. Frontiers in Neuroscience, 2018, 12, 64.	1.4	34
40	Shared endo-phenotypes of default mode dysfunction in attention deficit/hyperactivity disorder and autism spectrum disorder. Translational Psychiatry, 2018, 8, 133.	2.4	59
41	Individual Brain Charting, a high-resolution fMRI dataset for cognitive mapping. Scientific Data, 2018, 5, 180105.	2.4	100
42	Best practices in data analysis and sharing in neuroimaging using MRI. Nature Neuroscience, 2017, 20, 299-303.	7.1	482
43	Distinct alterations in Parkinson's medication-state and disease-state connectivity. NeuroImage: Clinical, 2017, 16, 575-585.	1.4	38
44	Towards a faster randomized parcellation based inference. , 2017, , .		1
45	Neuroimaging Research: From Null-Hypothesis Falsification to Out-of-Sample Generalization. Educational and Psychological Measurement, 2017, 77, 868-880.	1.2	8
46	Joint prediction of multiple scores captures better individual traits from brain images. NeuroImage, 2017, 158, 145-154.	2.1	35
47	Seeing it all: Convolutional network layers map the function of the human visual system. NeuroImage, 2017, 152, 184-194.	2.1	248
48	Assessing and tuning brain decoders: Cross-validation, caveats, and guidelines. NeuroImage, 2017, 145, 166-179.	2.1	568
49	Deriving reproducible biomarkers from multi-site resting-state data: An Autism-based example. NeuroImage, 2017, 147, 736-745.	2.1	499
50	Formal Models of the Network Co-occurrence Underlying Mental Operations. PLoS Computational Biology, 2016, 12, e1004994.	1.5	73
51	Connectivity-based parcellation: Critique and implications. Human Brain Mapping, 2015, 36, 4771-4792.	1.9	246
52	Robust regression for large-scale neuroimaging studies. NeuroImage, 2015, 111, 431-441.	2.1	14
53	Improving Sparse Recovery on Structured Images with Bagged Clustering. , 2015, , .		5
54	Data-driven HRF estimation for encoding and decoding models. NeuroImage, 2015, 104, 209-220.	2.1	55

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55	Graph-Based Inter-Subject Pattern Analysis of fMRI Data. PLoS ONE, 2014, 9, e104586.	1.1	29
56	Machine learning for neuroimaging with scikit-learn. Frontiers in Neuroinformatics, 2014, 8, 14.	1.3	1,422
57	Machine learning patterns for neuroimaging-genetic studies in the cloud. Frontiers in Neuroinformatics, 2014, 8, 31.	1.3	11
58	Which fMRI clustering gives good brain parcellations?. Frontiers in Neuroscience, 2014, 8, 167.	1.4	265
59	How machine learning is shaping cognitive neuroimaging. GigaScience, 2014, 3, 28.	3.3	95
60	Bayesian estimation of probabilistic atlas for tissue segmentation. Irbm, 2014, 35, 27-32.	3.7	2
61	Probabilistic atlas and geometric variability estimation to drive tissue segmentation. Statistics in Medicine, 2014, 33, 3576-3599.	0.8	4
62	Interoperable atlases of the human brain. NeuroImage, 2014, 99, 525-532.	2.1	78
63	Randomized parcellation based inference. NeuroImage, 2014, 89, 203-215.	2.1	13
64	A Framework for Inter-Subject Prediction of Functional Connectivity From Structural Networks. IEEE Transactions on Medical Imaging, 2013, 32, 2200-2214.	5.4	29
65	Hyperfrontality and hypoconnectivity during refreshing in schizophrenia. Psychiatry Research - Neuroimaging, 2013, 211, 226-233.	0.9	14
66	Schizophrenia as a Network Disease: Disruption of Emergent Brain Function in Patients with Auditory Hallucinations. PLoS ONE, 2013, 8, e50625.	1.1	28
67	Cohort-Level Brain Mapping: Learning Cognitive Atoms to Single Out Specialized Regions. Lecture Notes in Computer Science, 2013, 23, 438-449.	1.0	10
68	Decoding Visual Percepts Induced by Word Reading with fMRI. , 2012, , .		6
69	Detecting outliers in high-dimensional neuroimaging datasets with robust covariance estimators. Medical Image Analysis, 2012, 16, 1359-1370.	7.0	49
70	Very large fMRI study using the IMAGEN database: Sensitivityâ€“specificity and population effect modeling in relation to the underlying anatomy. NeuroImage, 2012, 61, 295-303.	2.1	39
71	An empirical comparison of surface-based and volume-based group studies in neuroimaging. NeuroImage, 2012, 63, 1443-1453.	2.1	76
72	Significant correlation between a set of genetic polymorphisms and a functional brain network revealed by feature selection and sparse Partial Least Squares. NeuroImage, 2012, 63, 11-24.	2.1	96

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73	Multiscale Mining of fMRI Data with Hierarchical Structured Sparsity. SIAM Journal on Imaging Sciences, 2012, 5, 835-856.	1.3	50
74	A supervised clustering approach for fMRI-based inference of brain states. Pattern Recognition, 2012, 45, 2041-2049.	5.1	107
75	A Novel Sparse Graphical Approach for Multimodal Brain Connectivity Inference. Lecture Notes in Computer Science, 2012, 15, 707-714.	1.0	35
76	Improving Accuracy and Power with Transfer Learning Using a Meta-analytic Database. Lecture Notes in Computer Science, 2012, 15, 248-255.	1.0	6
77	Phase delays within visual cortex shape the response to steady-state visual stimulation. NeuroImage, 2011, 54, 1919-1929.	2.1	30
78	Robust clustering of massive tractography datasets. NeuroImage, 2011, 54, 1975-1993.	2.1	126
79	Total Variation Regularization for fMRI-Based Prediction of Behavior. IEEE Transactions on Medical Imaging, 2011, 30, 1328-1340.	5.4	113
80	Early Maturation of the Linguistic Dorsal Pathway in Human Infants. Journal of Neuroscience, 2011, 31, 1500-1506.	1.7	149
81	Multi-subject Dictionary Learning to Segment an Atlas of Brain Spontaneous Activity. Lecture Notes in Computer Science, 2011, 22, 562-573.	1.0	119
82	A group model for stable multi-subject ICA on fMRI datasets. NeuroImage, 2010, 51, 288-299.	2.1	135
83	Detection of Brain Functional-Connectivity Difference in Post-stroke Patients Using Group-Level Covariance Modeling. Lecture Notes in Computer Science, 2010, 13, 200-208.	1.0	93
84	Imaging Genetics: Bio-Informatics and Bio-Statistics Challenges. , 2010, , 101-110.		5
85	Accurate Definition of Brain Regions Position through the Functional Landmark Approach. Lecture Notes in Computer Science, 2010, 13, 241-248.	1.0	3
86	Deciphering Cortical Number Coding from Human Brain Activity Patterns. Current Biology, 2009, 19, 1608-1615.	1.8	216
87	A disconnection account of Gerstmann syndrome: Functional neuroanatomy evidence. Annals of Neurology, 2009, 66, 654-662.	2.8	72
88	Recruitment of an Area Involved in Eye Movements During Mental Arithmetic. Science, 2009, 324, 1583-1585.	6.0	367
89	An Automatic Valuation System in the Human Brain: Evidence from Functional Neuroimaging. Neuron, 2009, 64, 431-439.	3.8	370
90	A fully Bayesian approach to the parcel-based detection-estimation of brain activity in fMRI. NeuroImage, 2008, 41, 941-969.	2.1	76

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91	Structural Analysis of fMRI Data Revisited: Improving the Sensitivity and Reliability of fMRI Group Studies. IEEE Transactions on Medical Imaging, 2007, 26, 1256-1269.	5.4	46
92	Analysis of a large fMRI cohort: Statistical and methodological issues for group analyses. NeuroImage, 2007, 35, 105-120.	2.1	481
93	Mixed-effect statistics for group analysis in fMRI: A nonparametric maximum likelihood approach. NeuroImage, 2007, 38, 501-510.	2.1	28
94	Fast reproducible identification and large-scale databasing of individual functional cognitive networks. BMC Neuroscience, 2007, 8, 91.	0.8	112
95	High Level Group Analysis of FMRI Data Based on Dirichlet Process Mixture Models. Lecture Notes in Computer Science, 2007, 20, 482-494.	1.0	13
96	Detection of signal synchronizations in resting-state fMRI datasets. NeuroImage, 2006, 29, 321-327.	2.1	69
97	Inverse retinotopy: Inferring the visual content of images from brain activation patterns. NeuroImage, 2006, 33, 1104-1116.	2.1	277
98	Dealing with the shortcomings of spatial normalization: Multi-subject parcellation of fMRI datasets. Human Brain Mapping, 2006, 27, 678-693.	1.9	166
99	Combined permutation test and mixed-effect model for group average analysis in fMRI. Human Brain Mapping, 2006, 27, 402-410.	1.9	37
100	Finding Landmarks in the Functional Brain: Detection and Use for Group Characterization. Lecture Notes in Computer Science, 2005, 8, 476-483.	1.0	10
101	Feature characterization in fMRI data: the Information Bottleneck approach. Medical Image Analysis, 2004, 8, 403-419.	7.0	21
102	Dynamical components analysis of fMRI data through kernel PCA. NeuroImage, 2003, 20, 34-49.	2.1	48
103	Robust Statistics for Nonparametric Group Analysis in fMRI. , 0, , .		11