Richard F Betzel

List of Publications by Year
in descending order

67 papers	9,591 citations	87888 38 h-index	106344 65 g-index
93 all docs	93 docs citations	93 times ranked	7672 citing authors

#	Article	IF	Citations
1	Uncovering individual differences in fine-scale dynamics of functional connectivity. Cerebral Cortex, 2023, 33, 2375-2394.	2.9	15
2	Edges in brain networks: Contributions to models of structure and function. Network Neuroscience, 2022, 6, 1-28.	2.6	30
3	Network neuroscience and the connectomics revolution. , 2022, , 25-58.		10
4	Benchmarking functional connectivity by the structure and geometry of the human brain. Network Neuroscience, 2022, 6, 937-949.	2.6	5
5	Cortico-subcortical interactions in overlapping communities of edge functional connectivity. NeuroImage, 2022, 250, 118971.	4.2	14
6	Social cognitive network neuroscience. Social Cognitive and Affective Neuroscience, 2022, 17, 510-529.	3.0	8
7	Individualized event structure drives individual differences in whole-brain functional connectivity. NeuroImage, 2022, 252, 118993.	4.2	46
8	Local structure-function relationships in human brain networks across the lifespan. Nature Communications, 2022, 13, 2053.	12.8	58
9	Diurnal variations of resting-state fMRI data: A graph-based analysis. NeuroImage, 2022, 256, 119246.	4.2	16
10	Edge-centric analysis of stroke patients: An alternative approach for biomarkers of lesion recovery. NeuroImage: Clinical, 2022, 35, 103055.	2.7	15
11	Time-resolved structure-function coupling in brain networks. Communications Biology, 2022, 5, .	4.4	31
12	Dynamic expression of brain functional systems disclosed by fine-scale analysis of edge time series. Network Neuroscience, 2021, 5, 405-433.	2.6	54
13	Brain network dynamics during working memory are modulated by dopamine and diminished in schizophrenia. Nature Communications, 2021, 12, 3478.	12.8	69
14	QSIPrep: an integrative platform for preprocessing and reconstructing diffusion MRI data. Nature Methods, 2021, 18, 775-778.	19.0	127
15	Organizing principles of the C.Âelegans contactome. Cell Systems, 2021, 12, 689-691.	6.2	0
16	Subject identification using edge-centric functional connectivity. NeuroImage, 2021, 238, 118204.	4.2	24
17	Modularity maximization as a flexible and generic framework for brain network exploratory analysis. NeuroImage, 2021, 244, 118607.	4.2	22
18	Modular origins of high-amplitude cofluctuations in fine-scale functional connectivity dynamics. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	37

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19	The diversity and multiplexity of edge communities within and between brain systems. Cell Reports, 2021, 37, 110032.	6.4	25
20	Benchmarking Measures of Network Controllability on Canonical Graph Models. Journal of Nonlinear Science, 2020, 30, 2195-2233.	2.1	27
21	Development of structureâ€“function coupling in human brain networks during youth. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 771-778.	7.1	296
22	Questions and controversies in the study of time-varying functional connectivity in resting fMRI. Network Neuroscience, 2020, 4, 30-69.	2.6	364
23	Edge-centric functional network representations of human cerebral cortex reveal overlapping system-level architecture. Nature Neuroscience, 2020, 23, 1644-1654.	14.8	167
24	High-amplitude cofluctuations in cortical activity drive functional connectivity. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 28393-28401.	7.1	159
25	Organizing principles of whole-brain functional connectivity in zebrafish larvae. Network Neuroscience, 2020, 4, 234-256.	2.6	30
26	Linking Structure and Function in Macroscale Brain Networks. Trends in Cognitive Sciences, 2020, 24, 302-315.	7.8	477
27	Space-independent community and hub structure of functional brain networks. NeuroImage, 2020, 211, 116612.	4.2	29
28	Temporal fluctuations in the brainâ€™s modular architecture during movie-watching. NeuroImage, 2020, 213, 116687.	4.2	44
29	Community structure of the creative brain at rest. NeuroImage, 2020, 210, 116578.	4.2	24
30	The modular organization of brain cortical connectivity across the human lifespan. NeuroImage, 2020, 218, 116974.	4.2	52
31	Temporal sequences of brain activity at rest are constrained by white matter structure and modulated by cognitive demands. Communications Biology, 2020, 3, 261.	4.4	88
32	Optimization of energy state transition trajectory supports the development of executive function during youth. ELife, 2020, 9, .	6.0	47
33	The community structure of functional brain networks exhibits scale-specific patterns of inter- and intra-subject variability. NeuroImage, 2019, 202, 115990.	4.2	85
34	Structural, geometric and genetic factors predict interregional brain connectivity patterns probed by electrocorticography. Nature Biomedical Engineering, 2019, 3, 902-916.	22.5	94
35	Distance-dependent consensus thresholds for generating group-representative structural brain networks. Network Neuroscience, 2019, 3, 475-496.	2.6	119
36	Stability of spontaneous, correlated activity in mouse auditory cortex. PLoS Computational Biology, 2019, 15, e1007360.	3.2	21

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37	Tracking mood fluctuations with functional network patterns. Social Cognitive and Affective Neuroscience, 2019, 14, 47-57.	3.0	16
38	Cliques and cavities in the human connectome. Journal of Computational Neuroscience, 2018, 44, 115-145.	1.0	215
39	Diversity of meso-scale architecture in human and non-human connectomes. Nature Communications, 2018, 9, 346.	12.8	124
40	Driving the brain towards creativity and intelligence: A network control theory analysis. Neuropsychologia, 2018, 118, 79-90.	1.6	76
41	From Maps to Multi-dimensional Network Mechanisms of Mental Disorders. Neuron, 2018, 97, 14-31.	8.1	146
42	Network-Based Asymmetry of the Human Auditory System. Cerebral Cortex, 2018, 28, 2655-2664.	2.9	51
43	Modeling and interpreting mesoscale network dynamics. NeuroImage, 2018, 180, 337-349.	4.2	101
44	Structureâ€“function relationships during segregated and integrated network states of human brain functional connectivity. Brain Structure and Function, 2018, 223, 1091-1106.	2.3	103
45	Fluctuations between high- and low-modularity topology in time-resolved functional connectivity. NeuroImage, 2018, 180, 406-416.	4.2	52
46	Linked dimensions of psychopathology and connectivity in functional brain networks. Nature Communications, 2018, 9, 3003.	12.8	323
47	Specificity and robustness of long-distance connections in weighted, interareal connectomes. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, E4880-E4889.	7.1	171
48	Multi-scale brain networks. NeuroImage, 2017, 160, 73-83.	4.2	445
49	The modular organization of human anatomical brain networks: Accounting for the cost of wiring. Network Neuroscience, 2017, 1, 42-68.	2.6	136
50	Optimal trajectories of brain state transitions. NeuroImage, 2017, 148, 305-317.	4.2	143
51	Modular Segregation of Structural Brain Networks Supports the Development of Executive Function in Youth. Current Biology, 2017, 27, 1561-1572.e8.	3.9	305
52	Positive affect, surprise, and fatigue are correlates of network flexibility. Scientific Reports, 2017, 7, 520.	3.3	140
53	Optimized connectome architecture for sensory-motor integration. Network Neuroscience, 2017, 1, 415-430.	2.6	29
54	Generative models for network neuroscience: prospects and promise. Journal of the Royal Society Interface, 2017, 14, 20170623.	3.4	89

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55	Human Connectomics across the Life Span. Trends in Cognitive Sciences, 2017, 21, 32-45.	7.8	189
56	Optimally controlling the human connectome: the role of network topology. Scientific Reports, 2016, 6, 30770.	3.3	190
57	Network-Level Structure-Function Relationships in Human Neocortex. Cerebral Cortex, 2016, 26, 3285-3296.	2.9	260
58	The flexible brain. Brain, 2016, 139, 2110-2112.	7.6	31
59	Dynamic fluctuations coincide with periods of high and low modularity in resting-state functional brain networks. NeuroImage, 2016, 127, 287-297.	4.2	235
60	Modular Brain Networks. Annual Review of Psychology, 2016, 67, 613-640.	17.7	1,012
61	Generative models of the human connectome. NeuroImage, 2016, 124, 1054-1064.	4.2	259
62	Cooperative and Competitive Spreading Dynamics on the Human Connectome. Neuron, 2015, 86, 1518-1529.	8.1	309
63	A Network Convergence Zone in the Hippocampus. PLoS Computational Biology, 2014, 10, e1003982.	3.2	89
64	Resting-brain functional connectivity predicted by analytic measures of network communication. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 833-838.	7.1	530
65	Changes in structural and functional connectivity among resting-state networks across the human lifespan. NeuroImage, 2014, 102, 345-357.	4.2	696
66	Multi-scale community organization of the human structural connectome and its relationship with resting-state functional connectivity. Network Science, 2013, 1, 353-373.	1.0	104
67	Exploring the Morphospace of Communication Efficiency in Complex Networks. PLoS ONE, 2013, 8, e58070.	2.5	131