Rafael Malach

List of Publications by Year
in descending order

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98 papers	16,868 citations	41344 49 h-index	34986 98 g-index
111 all docs	111 docs citations	111 times ranked	12560 citing authors

#	Article	IF	Citations
1	Resting-State Fluctuations Underlie Free and Creative Verbal Behaviors in the Human Brain. Cerebral Cortex, 2021, 31, 213-232.	2.9	13
2	Local neuronal relational structures underlying the contents of human conscious experience. Neuroscience of Consciousness, 2021, 2021, niab028.	2.6	17
3	The surprising role of the default mode network in naturalistic perception. Communications Biology, 2021, 4, 79.	4.4	40
4	Global waves synchronize the brainâ€™s functional systems with fluctuating arousal. Science Advances, 2021, 7, .	10.3	110
5	Hippocampal ripples and their coordinated dialogue with the default mode network during recent and remote recollection. Neuron, 2021, 109, 2767-2780.e5.	8.1	46
6	Face-Selective Units in Human Ventral Temporal Cortex Reactivate during Free Recall. Journal of Neuroscience, 2021, 41, 3386-3399.	3.6	16
7	How do the blind â€˜seeâ€™? The role of spontaneous brain activity in self-generated perception. Brain, 2021, 144, 340-353.	7.6	26
8	Inter-participant consistency of language-processing networks during abstract thoughts. NeuroImage, 2020, 211, 116626.	4.2	9
9	Studying the precuneus reveals structureâ€“functionâ€“affect correlation in long-term meditators. Social Cognitive and Affective Neuroscience, 2020, 15, 1203-1216.	3.0	8
10	Hippocampal sharp-wave ripples linked to visual episodic recollection in humans. Science, 2019, 365, .	12.6	149
11	Convergent evolution of face spaces across human face-selective neuronalÂgroups and deepÂconvolutional networks. Nature Communications, 2019, 10, 4934.	12.8	76
12	Where Does Time Go When You Blink?. Psychological Science, 2019, 30, 907-916.	3.3	10
13	The Noisy Brain: Power of Resting-State Fluctuations Predicts Individual Recognition Performance. Cell Reports, 2019, 29, 3775-3784.e4.	6.4	10
14	Resting-State Activity in High-Order Visual Areas as a Window into Natural Human Brain Activations. Cerebral Cortex, 2019, 29, 3618-3635.	2.9	12
15	<scp>A</scp>strocyte disruption of neurovascular communication is linked to cortical damage in an animal model of multiple sclerosis. Glia, 2018, 66, 1098-1117.	4.9	37
16	Quenching of spontaneous fluctuations by attention in human visual cortex. NeuroImage, 2018, 171, 84-98.	4.2	20
17	Motion cues modulate responses to emotion in movies. Scientific Reports, 2018, 8, 10881.	3.3	10
18	Spontaneously Emerging Patterns in Human Visual Cortex Reflect Responses to Naturalistic Sensory Stimuli. Cerebral Cortex, 2017, 27, bhv275.	2.9	43

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19	Representation of Multiple Body Parts in the Missing-Hand Territory of Congenital One-Handers. Current Biology, 2017, 27, 1350-1355.	3.9	71
20	Tuning face perception with electrical stimulation of the fusiform gyrus. Human Brain Mapping, 2017, 38, 2830-2842.	3.6	32
21	Invariant Temporal Dynamics Underlie Perceptual Stability in Human Visual Cortex. Current Biology, 2017, 27, 155-165.	3.9	28
22	Neuronal baseline shifts underlying boundary setting during free recall. Nature Communications, 2017, 8, 1301.	12.8	25
23	Increasing suppression of saccade-related transients along the human visual hierarchy. ELife, 2017, 6, .	6.0	16
24	Covert neurofeedback without awareness shapes cortical network spontaneous connectivity. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, E2413-20.	7.1	87
25	Alterations in task-induced activity and resting-state fluctuations in visual and DMN areas revealed in long-term meditators. NeuroImage, 2016, 135, 125-134.	4.2	56
26	Data for default network reduced functional connectivity in meditators, negatively correlated with meditation expertise. Data in Brief, 2016, 8, 910-914.	1.0	27
27	Trained to silence: Progressive signal inhibition during short visuo-motor training. NeuroImage, 2016, 143, 106-115.	4.2	8
28	Diminished Auditory Responses during NREM Sleep Correlate with the Hierarchy of Language Processing. PLoS ONE, 2016, 11, e0157143.	2.5	27
29	Astrocyte morphology is confined by cortical functional boundaries in mammals ranging from mice to human. ELife, 2016, 5, .	6.0	26
30	Human intracranial recordings link suppressed transients rather than 'filling-in' to perceptual continuity across blinks. ELife, 2016, 5, .	6.0	40
31	Intracranial recordings reveal transient response dynamics during information maintenance in human cerebral cortex. Human Brain Mapping, 2015, 36, 3988-4003.	3.6	15
32	Repetitive speech elicits widespread deactivation in the human cortex: the â€œ<scp>M</scp>antraâ€• effect?. Brain and Behavior, 2015, 5, e00346.	2.2	26
33	The idiosyncratic brain: distortion of spontaneous connectivity patterns in autism spectrum disorder. Nature Neuroscience, 2015, 18, 302-309.	14.8	364
34	Coupling between pupil fluctuations and resting-state fMRI uncovers a slow build-up of antagonistic responses in the human cortex. NeuroImage, 2015, 106, 414-427.	4.2	116
35	Differential Magnetic Resonance Neurofeedback Modulations across Extrinsic (Visual) and Intrinsic (Default-Mode) Nodes of the Human Cortex. Journal of Neuroscience, 2015, 35, 2588-2595.	3.6	40
36	Brain activity correlates with emotional perception induced by dynamic avatars. NeuroImage, 2015, 122, 306-317.	4.2	27

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37	Spontaneous Fluctuations and Non-linear Ignitions: Two Dynamic Faces of Cortical Recurrent Loops. Neuron, 2015, 88, 194-206.	8.1	82
38	A unifying principle underlying the extracellular field potential spectral responses in the human cortex. Journal of Neurophysiology, 2015, 114, 505-519.	1.8	171
39	Normalisation of brain connectivity through compensatory behaviour, despite congenital hand absence. ELife, 2015, 4, .	6.0	41
40	Save the Global: Global Signal Connectivity as a Tool for Studying Clinical Populations with Functional Magnetic Resonance Imaging. Brain Connectivity, 2014, 4, 395-403.	1.7	160
41	Exemplar Selectivity Reflects Perceptual Similarities in the Human Fusiform Cortex. Cerebral Cortex, 2014, 24, 1879-1893.	2.9	67
42	The emotionâ€“action link? Naturalistic emotional stimuli preferentially activate the human dorsal visual stream. NeuroImage, 2014, 84, 254-264.	4.2	52
43	Deconstructing the default: Cortical subdivision of the default mode/intrinsic system during selfâ€related processing. Human Brain Mapping, 2014, 35, 1491-1502.	3.6	49
44	Neurocognitive biases and the patterns of spontaneous correlations in the human cortex. Trends in Cognitive Sciences, 2013, 17, 606-615.	7.8	109
45	Modeling the electrical field created by mass neural activity. Neural Networks, 2013, 40, 44-51.	5.9	10
46	Resting state functional connectivity reflects abnormal task-activated patterns in a developmental object agnosic. NeuroImage, 2013, 70, 189-198.	4.2	24
47	Spatial and Object-Based Attention Modulates Broadband High-Frequency Responses across the Human Visual Cortical Hierarchy. Journal of Neuroscience, 2013, 33, 1228-1240.	3.6	48
48	The Day-After Effect: Long Term, Hebbian-Like Restructuring of Resting-State fMRI Patterns Induced by a Single Epoch of Cortical Activation. Journal of Neuroscience, 2013, 33, 9488-9497.	3.6	100
49	Emergence of Sensory Patterns during Sleep Highlights Differential Dynamics of REM and Non-REM Sleep Stages. Journal of Neuroscience, 2013, 33, 14715-14728.	3.6	20
50	Selectivity of audiovisual ECoG responses revealed under naturalistic stimuli in the human cortex. Journal of Neurophysiology, 2013, 109, 2272-2281.	1.8	9
51	A Widely Distributed Spectral Signature of Task-Negative Electrocorticography Responses Revealed during a Visuomotor Task in the Human Cortex. Journal of Neuroscience, 2012, 32, 10458-10469.	3.6	42
52	Targeting the functional properties of cortical neurons using fMR-adaptation. NeuroImage, 2012, 62, 1163-1169.	4.2	42
53	Neuronal reflections and subjective awareness. Advances in Consciousness Research, 2012, , 21-36.	0.2	6
54	Reduction in Inter-Hemispheric Connectivity in Disorders of Consciousness. PLoS ONE, 2012, 7, e37238.	2.5	48

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55	Coupling between spontaneous (resting state) fMRI fluctuations and human oculo-motor activity. NeuroImage, 2011, 58, 213-225.	4.2	33
56	Stimulus-free thoughts induce differential activation in the human default network. NeuroImage, 2011, 54, 1692-1702.	4.2	53
57	Conscious perception and the frontal lobes: comment on Lau and Rosenthal. Trends in Cognitive Sciences, 2011, 15, 507.	7.8	6
58	Disrupted Neural Synchronization in Toddlers with Autism. Neuron, 2011, 70, 1218-1225.	8.1	341
59	Global Functional Connectivity Deficits in Schizophrenia Depend on Behavioral State. Journal of Neuroscience, 2011, 31, 12972-12981.	3.6	60
60	The Link between fMRI-BOLD Activation and Perceptual Awareness Is â€œStream-Invariantâ€•in the Human Visual System. Cerebral Cortex, 2011, 21, 2829-2837.	2.9	87
61	Reliability of cortical activity during natural stimulation. Trends in Cognitive Sciences, 2010, 14, 40-48.	7.8	511
62	Perceptual shape sensitivity to upright and inverted faces is reflected in neuronal adaptation. NeuroImage, 2010, 50, 383-395.	4.2	57
63	Seeing with Profoundly Deactivated Mid-level Visual Areas: Non-hierarchical Functioning in the Human Visual Cortex. Cerebral Cortex, 2009, 19, 1687-1703.	2.9	57
64	Neural â€œIgnitionâ€• Enhanced Activation Linked to Perceptual Awareness in Human Ventral Stream Visual Cortex. Neuron, 2009, 64, 562-574.	8.1	242
65	Interhemispheric correlations of slow spontaneous neuronal fluctuations revealed in human sensory cortex. Nature Neuroscience, 2008, 11, 1100-1108.	14.8	442
66	Data-driven clustering reveals a fundamental subdivision of the human cortex into two global systems. Neuropsychologia, 2008, 46, 540-553.	1.6	169
67	Internally Generated Reactivation of Single Neurons in Human Hippocampus During Free Recall. Science, 2008, 322, 96-101.	12.6	394
68	Regionally-specific adaptation dynamics in human object areas. NeuroImage, 2008, 39, 1926-1937.	4.2	33
69	Class Information Predicts Activation by Object Fragments in Human Object Areas. Journal of Cognitive Neuroscience, 2008, 20, 1189-1206.	2.3	45
70	Enhanced Category Tuning Revealed by Intracranial Electroencephalograms in High-Order Human Visual Areas. Journal of Neuroscience, 2007, 27, 6234-6242.	3.6	65
71	Extrinsic and Intrinsic Systems in the Posterior Cortex of the Human Brain Revealed during Natural Sensory Stimulation. Cerebral Cortex, 2007, 17, 766-777.	2.9	327
72	The measurement problem in consciousness research. Behavioral and Brain Sciences, 2007, 30, 516-517.	0.7	23

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73	Sub-exemplar Shape Tuning in Human Face-Related Areas. Cerebral Cortex, 2007, 17, 325-338.	2.9	101
74	Coupling between Neuronal Firing Rate, Gamma LFP, and BOLD fMRI Is Related to Interneuronal Correlations. Current Biology, 2007, 17, 1275-1285.	3.9	513
75	Widespread functional connectivity and fMRI fluctuations in human visual cortex in the absence of visual stimulation. NeuroImage, 2006, 30, 1313-1324.	4.2	194
76	When the Brain Loses Its Self: Prefrontal Inactivation during Sensorimotor Processing. Neuron, 2006, 50, 329-339.	8.1	576
77	Negative BOLD Differentiates Visual Imagery and Perception. Neuron, 2005, 48, 859-872.	8.1	197
78	Coupling Between Neuronal Firing, Field Potentials, and fMRI in Human Auditory Cortex. Science, 2005, 309, 951-954.	12.6	900
79	One Picture Is Worth at Least a Million Neurons. Current Biology, 2004, 14, 996-1001.	3.9	64
80	Functional analysis of the periphery effect in human building related areas. Human Brain Mapping, 2004, 22, 15-26.	3.6	66
81	THE HUMAN VISUAL CORTEX. Annual Review of Neuroscience, 2004, 27, 649-677.	10.7	941
82	Intersubject Synchronization of Cortical Activity During Natural Vision. Science, 2004, 303, 1634-1640.	12.6	1,487
83	Sensing the invisible: differential sensitivity of visual cortex and amygdala to traumatic context. NeuroImage, 2003, 19, 587-600.	4.2	201
84	Large-Scale Mirror-Symmetry Organization of Human Occipito-Temporal Object Areas. Neuron, 2003, 37, 1027-1041.	8.1	303
85	Contrast Sensitivity in Human Visual Areas and Its Relationship to Object Recognition. Journal of Neurophysiology, 2002, 87, 3102-3116.	1.8	200
86	Analysis of the Neuronal Selectivity Underlying Low fMRI Signals. Current Biology, 2002, 12, 964-972.	3.9	131
87	Centerâ€“periphery organization of human object areas. Nature Neuroscience, 2001, 4, 533-539.	14.8	651
88	fMR-adaptation: a tool for studying the functional properties of human cortical neurons. Acta Psychologica, 2001, 107, 293-321.	1.5	978
89	Vase or Face? A Neural Correlate of Shape-Selective Grouping Processes in the Human Brain. Journal of Cognitive Neuroscience, 2001, 13, 744-753.	2.3	146
90	The dynamics of object-selective activation correlate with recognition performance in humans. Nature Neuroscience, 2000, 3, 837-843.	14.8	529

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91	Differential Processing of Objects under Various Viewing Conditions in the Human Lateral Occipital Complex. Neuron, 1999, 24, 187-203.	8.1	1,104
92	A sequence of object-processing stages revealed by fMRI in the human occipital lobe. Human Brain Mapping, 1998, 6, 316-328.	3.6	438
93	New images from human visual cortex. Trends in Neurosciences, 1996, 19, 481-489.	8.6	312
94	Visual motion aftereffect in human cortical area MT revealed by functional magnetic resonance imaging. Nature, 1995, 375, 139-141.	27.8	627
95	Cortical columns as devices for maximizing neuronal diversity. Trends in Neurosciences, 1994, 17, 101-104.	8.6	95
96	Cortical hierarchy reflected in the organization of intrinsic connections in macaque monkey visual cortex. Journal of Comparative Neurology, 1993, 334, 19-46.	1.6	239
97	Dendritic sampling across processing streams in monkey striate cortex. Journal of Comparative Neurology, 1992, 315, 303-312.	1.6	48
98	Development of visual callosal connections in neonatally enucleated rats. Journal of Comparative Neurology, 1987, 260, 321-348.	1.6	102