Giulio Tononi

List of Publications by Year in descending order

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#	Article	IF	CITATIONS
1	The why and how of sleep-dependent synaptic down-selection. Seminars in Cell and Developmental Biology, 2022, 125, 91-100.	2.3	28
2	Identification of ultrastructural signatures of sleep and wake in the fly brain. Sleep, 2022, 45, .	0.6	5
3	Episodic thought distinguishes spontaneous cognition in waking from REM and NREM sleep. Consciousness and Cognition, 2022, 97, 103247.	0.8	5
4	Measuring Stimulus-Evoked Neurophysiological Differentiation in Distinct Populations of Neurons in Mouse Visual Cortex. ENeuro, 2022, 9, ENEURO.0280-21.2021.	0.9	5
5	IIT, half masked and half disfigured. Behavioral and Brain Sciences, 2022, 45, e60.	0.4	3
6	Quantifying arousal and awareness in altered states of consciousness using interpretable deep learning. Nature Communications, 2022, 13, 1064.	5.8	29
7	Lucid dreaming occurs in activated rapid eye movement sleep, not a mixture of sleep and wakefulness. Sleep, 2022, 45, .	0.6	18
8	Restricted truncal sagittal movements of rapid eye movement behaviour disorder. Npj Parkinson's Disease, 2022, 8, 26.	2.5	11
9	Neural fatigue due to intensive learning is reversed by a nap but not by quiet waking. Sleep, 2021, 44, .	0.6	14
10	A high-density electroencephalography study reveals abnormal sleep homeostasis in patients with rapid eye movement sleep behavior disorder. Scientific Reports, 2021, 11, 4758.	1.6	20
11	Mechanism Integrated Information. Entropy, 2021, 23, 362.	1.1	22
12	Net decrease in spine-surface GluA1-containing AMPA receptors after post-learning sleep in the adult mouse cortex. Nature Communications, 2021, 12, 2881.	5.8	29
13	Two-Way Communication in Lucid REM Sleep Dreaming. Trends in Cognitive Sciences, 2021, 25, 427-428.	4.0	5
14	Effects of Severe Sleep Disruption on the Synaptic Ultrastructure of Young Mice. ENeuro, 2021, 8, ENEURO.0077-21.2021.	0.9	6
15	Extended Visual Sequence Learning Leaves a Local Trace in the Spontaneous EEG. Frontiers in Neuroscience, 2021, 15, 707828.	1.4	2
16	Causal reductionism and causal structures. Nature Neuroscience, 2021, 24, 1348-1355.	7.1	20
17	Of maps and grids. Neuroscience of Consciousness, 2021, 2021, niab022.	1.4	8
18	Sleep and emotion processing in paediatric posttraumatic stress disorder: A pilot investigation. Journal of Sleep Research, 2021, 30, e13261.	1.7	7

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19	Computing Integrated Information ($\hat{l}_1^{})$ in Discrete Dynamical Systems with Multi-Valued Elements. Entropy, 2021, 23, 6.	1.1	11
20	Consciousness and the fallacy of misplaced objectivity. Neuroscience of Consciousness, 2021, 2021, niab032.	1.4	22
21	Sleep and synaptic downâ€selection. European Journal of Neuroscience, 2020, 51, 413-421.	1.2	117
22	Fear in dreams and in wakefulness: Evidence for day/night affective homeostasis. Human Brain Mapping, 2020, 41, 840-850.	1.9	30
23	EEG microstates of dreams. Scientific Reports, 2020, 10, 17069.	1.6	53
24	Local Sleep Slow-Wave Activity Colocalizes With the Ictal Symptomatogenic Zone in a Patient With Reflex Epilepsy: A High-Density EEG Study. Frontiers in Systems Neuroscience, 2020, 14, 549309.	1.2	1
25	Prior Practice Affects Movement-Related Beta Modulation and Quiet Wake Restores It to Baseline. Frontiers in Systems Neuroscience, 2020, 14, 61.	1.2	13
26	A measure for intrinsic information. Scientific Reports, 2020, 10, 18803.	1.6	20
27	Integrity of Corpus Callosum Is Essential for the Cross-Hemispheric Propagation of Sleep Slow Waves: A High-Density EEG Study in Split-Brain Patients. Journal of Neuroscience, 2020, 40, 5589-5603.	1.7	29
28	Self-regulated critical brain dynamics originate from high frequency-band activity in the MEG. PLoS ONE, 2020, 15, e0233589.	1.1	7
29	Effects of sleep and waking on the synaptic ultrastructure. Philosophical Transactions of the Royal Society B: Biological Sciences, 2020, 375, 20190235.	1.8	31
30	Slow wave oscillations in Schizophrenia First-Degree Relatives: A confirmatory analysis and feasibility study on slow wave traveling. Schizophrenia Research, 2020, 221, 37-43.	1.1	10
31	The evolving view of replay and its functions in wake and sleep. SLEEP Advances, 2020, 1, zpab002.	0.1	28
32	Sleep Deprivation by Exposure to Novel Objects Increases Synapse Density and Axon–Spine Interface in the Hippocampal CA1 Region of Adolescent Mice. Journal of Neuroscience, 2019, 39, 6613-6625.	1.7	69
33	Causal Composition: Structural Differences among Dynamically Equivalent Systems. Entropy, 2019, 21, 989.	1.1	22
34	Linking the need to sleep with synaptic function. Science, 2019, 366, 189-190.	6.0	20
35	Graph Theoretical Analysis of Cortical Networks based on Conscious Experience. , 2019, 2019, 3373-3376.		2
36	What Caused What? A Quantitative Account of Actual Causation Using Dynamical Causal Networks. Entropy, 2019, 21, 459.	1.1	39

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37	A fast and general method to empirically estimate the complexity of brain responses to transcranial and intracranial stimulations. Brain Stimulation, 2019, 12, 1280-1289.	0.7	64
38	Connectivity differences between consciousness and unconsciousness in non-rapid eye movement sleep: a TMS–EEG study. Scientific Reports, 2019, 9, 5175.	1.6	64
39	Visual imagery and visual perception induce similar changes in occipital slow waves of sleep. Journal of Neurophysiology, 2019, 121, 2140-2152.	0.9	21
40	Regional Delta Waves In Human Rapid Eye Movement Sleep. Journal of Neuroscience, 2019, 39, 2686-2697.	1.7	104
41	Why Does Space Feel the Way it Does? Towards a Principled Account of Spatial Experience. Entropy, 2019, 21, 1160.	1.1	85
42	Evidence for sleep-dependent synaptic renormalization in mouse pups. Sleep, 2019, 42, .	0.6	20
43	Causal Connectivity According to Conscious Experience in Non-Rapid Eye Movement Sleep. , 2019, , .		1
44	Assessing recurrent interactions in cortical networks: Modeling EEG response to transcranial magnetic stimulation. Journal of Neuroscience Methods, 2019, 312, 93-104.	1.3	8
45	When is an action caused from within? Quantifying the causal chain leading to actions in simulated agents. , 2019, , .		1
46	Encephalopathy related to Status Epilepticus during slow Sleep: a link with sleep homeostasis?. Epileptic Disorders, 2019, 21, 62-70.	0.7	15
47	Increased lucid dream frequency in long-term meditators but not following mindfulness-based stress reduction training Psychology of Consciousness: Theory Research, and Practice, 2019, 6, 40-54.	0.3	11
48	Myelin modifications after chronic sleep loss in adolescent mice. Sleep, 2018, 41, .	0.6	75
49	Sleep endophenotypes of schizophrenia: slow waves and sleep spindles in unaffected first-degree relatives. NPJ Schizophrenia, 2018, 4, 2.	2.0	41
50	Spatio-temporal analysis of EEG signal during consciousness using convolutional neural network. , 2018, , .		9
51	Human Rapid Eye Movement Sleep Shows Local Increases in Low-Frequency Oscillations and Global Decreases in High-Frequency Oscillations Compared to Resting Wakefulness. ENeuro, 2018, 5, ENEURO.0293-18.2018.	0.9	29
52	Evoked Alpha Power is Reduced in Disconnected Consciousness During Sleep and Anesthesia. Scientific Reports, 2018, 8, 16664.	1.6	28
53	Frequent lucid dreaming associated with increased functional connectivity between frontopolar cortex and temporoparietal association areas. Scientific Reports, 2018, 8, 17798.	1.6	27
54	Sleep and Wake Affect Glycogen Content and Turnover at Perisynaptic Astrocytic Processes. Frontiers in Cellular Neuroscience, 2018, 12, 308.	1.8	31

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55	Dreaming in NREM Sleep: A High-Density EEG Study of Slow Waves and Spindles. Journal of Neuroscience, 2018, 38, 9175-9185.	1.7	93
56	Differentiation Analysis of Continuous Electroencephalographic Activity Triggered by Video Clip Contents. Journal of Cognitive Neuroscience, 2018, 30, 1108-1118.	1.1	9
57	Regulation of cortical activity and arousal by the matrix cells of the ventromedial thalamic nucleus. Nature Communications, 2018, 9, 2100.	5.8	78
58	Metabolomic analysis of mouse prefrontal cortex reveals upregulated analytes during wakefulness compared to sleep. Scientific Reports, 2018, 8, 11225.	1.6	40
59	Local and Widespread Slow Waves in Stable NREM Sleep: Evidence for Distinct Regulation Mechanisms. Frontiers in Human Neuroscience, 2018, 12, 248.	1.0	121
60	Black-boxing and cause-effect power. PLoS Computational Biology, 2018, 14, e1006114.	1.5	48
61	Acute effects of meditation training on the waking and sleeping brain: Is it all about homeostasis?. European Journal of Neuroscience, 2018, 48, 2310-2321.	1.2	11
62	PyPhi: A toolbox for integrated information theory. PLoS Computational Biology, 2018, 14, e1006343.	1.5	56
63	Reduced sleep spindle activity point to a TRN-MD thalamus-PFC circuit dysfunction in schizophrenia. Schizophrenia Research, 2017, 180, 36-43.	1.1	94
64	Ultrastructural evidence for synaptic scaling across the wake/sleep cycle. Science, 2017, 355, 507-510.	6.0	438
65	Measures of metabolism and complexity in the brain of patients with disorders of consciousness. NeuroImage: Clinical, 2017, 14, 354-362.	1.4	133
66	The neural correlates of dreaming. Nature Neuroscience, 2017, 20, 872-878.	7.1	430
67	Sleep Loss Promotes Astrocytic Phagocytosis and Microglial Activation in Mouse Cerebral Cortex. Journal of Neuroscience, 2017, 37, 5263-5273.	1.7	281
68	Special report : Can we copy the brain? - Can we quantify machine consciousness?. IEEE Spectrum, 2017, 54, 64-69.	0.5	5
69	Local aspects of sleep and wakefulness. Current Opinion in Neurobiology, 2017, 44, 222-227.	2.0	156
70	The Phenomenal Contents and Neural Correlates of Spontaneous Thoughts across Wakefulness, NREM Sleep, and REM Sleep. Journal of Cognitive Neuroscience, 2017, 29, 1766-1777.	1.1	43
71	Are the Neural Correlates of Consciousness in the Front or in the Back of the Cerebral Cortex? Clinical and Neuroimaging Evidence. Journal of Neuroscience, 2017, 37, 9603-9613.	1.7	360
72	Role of Somatostatin-Positive Cortical Interneurons in the Generation of Sleep Slow Waves. Journal of Neuroscience, 2017, 37, 9132-9148.	1.7	118

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73	Network Properties in Transitions of Consciousness during Propofol-induced Sedation. Scientific Reports, 2017, 7, 16791.	1.6	112
74	How causal analysis can reveal autonomy in models of biological systems. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2017, 375, 20160358.	1.6	41
75	Selective neuronal lapses precede human cognitive lapses following sleep deprivation. Nature Medicine, 2017, 23, 1474-1480.	15.2	142
76	Sleep Consolidates Motor Learning of Complex Movement Sequences in Mice. Sleep, 2017, 40, .	0.6	32
77	Are we underestimating the richness of visual experience?. Neuroscience of Consciousness, 2017, 2017, niw023.	1.4	43
78	EEG Differentiation Analysis and Stimulus Set Meaningfulness. Frontiers in Psychology, 2017, 8, 1748.	1.1	16
79	Higher Arc Nucleus-to-Cytoplasm Ratio during Sleep in the Superficial Layers of the Mouse Cortex. Frontiers in Neural Circuits, 2017, 11, 60.	1.4	10
80	Beta Oscillatory Changes and Retention of Motor Skills during Practice in Healthy Subjects and in Patients with Parkinson's Disease. Frontiers in Human Neuroscience, 2017, 11, 104.	1.0	49
81	Plasticity in the Structure of Visual Space. ENeuro, 2017, 4, ENEURO.0080-17.2017.	0.9	13
82	Region-Specific Dissociation between Cortical Noradrenaline Levels and the Sleep/Wake Cycle. Sleep, 2016, 39, 143-154.	0.6	56
83	Integrated Information and State Differentiation. Frontiers in Psychology, 2016, 7, 926.	1.1	31
84	Effects of Chronic Sleep Restriction during Early Adolescence on the Adult Pattern of Connectivity of Mouse Secondary Motor Cortex. ENeuro, 2016, 3, ENEURO.0053-16.2016.	0.9	20
85	Why Does Sleep Slow-Wave Activity Increase After Extended Wake? Assessing the Effects of Increased Cortical Firing During Wake and Sleep. Journal of Neuroscience, 2016, 36, 12436-12447.	1.7	60
86	Scalp and Source Power Topography in Sleepwalking and Sleep Terrors: A High-Density EEG Study. Sleep, 2016, 39, 1815-1825.	0.6	59
87	Integrated information theory: from consciousness to its physical substrate. Nature Reviews Neuroscience, 2016, 17, 450-461.	4.9	930
88	Neural correlates of consciousness: progress and problems. Nature Reviews Neuroscience, 2016, 17, 307-321.	4.9	966
89	Synaptic refinement during development and its effect on slow-wave activity: a computational study. Journal of Neurophysiology, 2016, 115, 2199-2213.	0.9	22
90	Stratification of unresponsive patients by an independently validated index of brain complexity. Annals of Neurology, 2016, 80, 718-729.	2.8	309

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91	What Are Sleep Spindle Deficits Telling Us About Schizophrenia?. Biological Psychiatry, 2016, 80, 577-578.	0.7	4
92	Posterior and anterior cortex — where is the difference that makes the difference?. Nature Reviews Neuroscience, 2016, 17, 666-666.	4.9	51
93	Functional split brain in a driving/listening paradigm. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 14444-14449.	3.3	35
94	Optimizing detection and analysis of slow waves in sleep EEG. Journal of Neuroscience Methods, 2016, 274, 1-12.	1.3	61
95	Contribution of sleep to the repair of neuronal DNA double-strand breaks: evidence from flies and mice. Scientific Reports, 2016, 6, 36804.	1.6	58
96	Consciousness and cortical responsiveness: a within-state study during non-rapid eye movement sleep. Scientific Reports, 2016, 6, 30932.	1.6	51
97	Loss of Sleep Affects the Ultrastructure of Pyramidal Neurons in the Adolescent Mouse Frontal Cortex. Sleep, 2016, 39, 861-874.	0.6	37
98	Regional Patterns of Elevated Alpha and High-Frequency Electroencephalographic Activity during Nonrapid Eye Movement Sleep in Chronic Insomnia: A Pilot Study. Sleep, 2016, 39, 801-812.	0.6	76
99	Can the macro beat the micro? Integrated information across spatiotemporal scales. Neuroscience of Consciousness, 2016, 2016, niw012.	1.4	75
100	Responses in Rat Core Auditory Cortex are Preserved during Sleep Spindle Oscillations. Sleep, 2016, 39, 1069-1082.	0.6	56
101	Propofol anesthesia reduces Lempel-Ziv complexity of spontaneous brain activity in rats. Neuroscience Letters, 2016, 628, 132-135.	1.0	78
102	Sleep reverts changes in human gray and white matter caused by wake-dependent training. NeuroImage, 2016, 129, 367-377.	2.1	50
103	Local Slow Waves in Superficial Layers of Primary Cortical Areas during REM Sleep. Current Biology, 2016, 26, 396-403.	1.8	150
104	A reply to Barrett (2016). Philosophical Transactions of the Royal Society B: Biological Sciences, 2016, 371, 20150452.	1.8	1
105	Phase-locked loop for precisely timed acoustic stimulation during sleep. Journal of Neuroscience Methods, 2016, 259, 101-114.	1.3	83
106	Effects of partial sleep deprivation on slow waves during non-rapid eye movement sleep: A high density EEG investigation. Clinical Neurophysiology, 2016, 127, 1436-1444.	0.7	26
107	Short Meditation Trainings Enhance Non-REM Sleep Low-Frequency Oscillations. PLoS ONE, 2016, 11, e0148961.	1.1	28
108	High Resolution Topography of Age-Related Changes in Non-Rapid Eye Movement Sleep Electroencephalography. PLoS ONE, 2016, 11, e0149770.	1.1	42

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109	Transcriptome profiling of sleeping, waking, and sleep deprived adult heterozygous Aldh1L1–eCFP-L10a mice. Genomics Data, 2015, 6, 114-117.	1.3	11
110	Practice changes beta power at rest and its modulation during movement in healthy subjects but not in patients with <scp>P</scp> arkinson's disease. Brain and Behavior, 2015, 5, e00374.	1.0	56
111	Altered prefrontal activity and connectivity predict different cognitive deficits in schizophrenia. Human Brain Mapping, 2015, 36, 4539-4552.	1.9	25
112	The Intrinsic Cause-Effect Power of Discrete Dynamical Systems—From Elementary Cellular Automata to Adapting Animats. Entropy, 2015, 17, 5472-5502.	1.1	39
113	Stimulus Set Meaningfulness and Neurophysiological Differentiation: A Functional Magnetic Resonance Imaging Study. PLoS ONE, 2015, 10, e0125337.	1.1	69
114	Auditory Responses and Stimulus-Specific Adaptation in Rat Auditory Cortex are Preserved Across NREM and REM Sleep. Cerebral Cortex, 2015, 25, 1362-1378.	1.6	102
115	Cortical Development, Electroencephalogram Rhythms, and the Sleep/Wake Cycle. Biological Psychiatry, 2015, 77, 1071-1078.	0.7	95
116	TMS Enhances Retention of a Motor Skill in Parkinson's Disease. Brain Stimulation, 2015, 8, 224-230.	0.7	32
117	Lempel-Ziv complexity of cortical activity during sleep and waking in rats. Journal of Neurophysiology, 2015, 113, 2742-2752.	0.9	94
118	Topographic deficits in alpha-range resting EEG activity and steady state visual evoked responses in schizophrenia. Schizophrenia Research, 2015, 168, 145-152.	1.1	37
119	Rethinking segregation and integration: contributions of whole-brain modelling. Nature Reviews Neuroscience, 2015, 16, 430-439.	4.9	483
120	Sleep and Synaptic Homeostasis. Sleep, 2015, 38, 161-162.	0.6	44
121	Neural and Behavioral Correlates of Extended Training during Sleep Deprivation in Humans: Evidence for Local, Task-Specific Effects. Journal of Neuroscience, 2015, 35, 4487-4500.	1.7	108
122	Consciousness: here, there and everywhere?. Philosophical Transactions of the Royal Society B: Biological Sciences, 2015, 370, 20140167.	1.8	394
123	Sleep- and wake-dependent changes in neuronal activity and reactivity demonstrated in fly neurons using in vivo calcium imaging. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 4785-4790.	3.3	76
124	Single-neuron activity and eye movements during human REM sleep and awake vision. Nature Communications, 2015, 6, 7884.	5.8	100
125	Effects of sleep and wake on astrocytes: clues from molecular and ultrastructural studies. BMC Biology, 2015, 13, 66.	1.7	144
126	Consciousness and Complexity during Unresponsiveness Induced by Propofol, Xenon, and Ketamine. Current Biology, 2015, 25, 3099-3105.	1.8	308

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127	Integrated information theory. Scholarpedia Journal, 2015, 10, 4164.	0.3	94
128	Evolution of Integrated Causal Structures in Animats Exposed to Environments of Increasing Complexity. PLoS Computational Biology, 2014, 10, e1003966.	1.5	71
129	From the Phenomenology to the Mechanisms of Consciousness: Integrated Information Theory 3.0. PLoS Computational Biology, 2014, 10, e1003588.	1.5	657
130	Sleep and the Price of Plasticity: From Synaptic and Cellular Homeostasis to Memory Consolidation and Integration. Neuron, 2014, 81, 12-34.	3.8	1,673
131	Quantifying Cortical EEG Responses to TMS in (Un)consciousness. Clinical EEG and Neuroscience, 2014, 45, 40-49.	0.9	116
132	Gerald M. Edelman (1929–2014). Science, 2014, 344, 1457-1457.	6.0	2
133	Diaschisis: past, present, future. Brain, 2014, 137, 2408-2422.	3.7	624
134	Plastic Changes Following Imitation-Based Speech and Language Therapy for Aphasia. Neurorehabilitation and Neural Repair, 2014, 28, 129-138.	1.4	59
135	Reversal of cortical information flow during visual imagery as compared to visual perception. NeuroImage, 2014, 100, 237-243.	2.1	90
136	Modeling Resting-State Functional Networks When the Cortex Falls Asleep: Local and Global Changes. Cerebral Cortex, 2014, 24, 3180-3194.	1.6	65
137	The Dynamics of Cortical Neuronal Activity in the First Minutes after Spontaneous Awakening in Rats and Mice. Sleep, 2014, 37, 1337-1347.	0.6	44
138	Regional Reductions in Sleep Electroencephalography Power in Obstructive Sleep Apnea: A High-Density EEG Study. Sleep, 2014, 37, 399-407.	0.6	65
139	Developmental Patterns of Sleep Slow Wave Activity and Synaptic Density in Adolescent Mice. Sleep, 2014, 37, 689-700.	0.6	38
140	Two Distinct Synchronization Processes in the Transition to Sleep: A High-Density Electroencephalographic Study. Sleep, 2014, 37, 1621-1637.	0.6	137
141	Enhancement of sleep slow waves: underlying mechanisms and practical consequences. Frontiers in Systems Neuroscience, 2014, 8, 208.	1.2	179
142	Sleep and Consciousness. , 2013, , 133-182.		21
143	Prolonged wakefulness alters neuronal responsiveness to local electrical stimulation of the neocortex in awake rats. Journal of Sleep Research, 2013, 22, 239-250.	1.7	42
144	Effects of Sleep and Wake on Oligodendrocytes and Their Precursors. Journal of Neuroscience, 2013, 33, 14288-14300.	1.7	213

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145	Quantifying causal emergence shows that macro can beat micro. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 19790-19795.	3.3	180
146	What can neurons do for their brain? Communicate selectivity with bursts. Theory in Biosciences, 2013, 132, 27-39.	0.6	20
147	Sleep/wake dependent changes in cortical glucose concentrations. Journal of Neurochemistry, 2013, 124, 79-89.	2.1	39
148	Concomitant BDNF and sleep slow wave changes indicate ketamine-induced plasticity in major depressive disorder. International Journal of Neuropsychopharmacology, 2013, 16, 301-311.	1.0	176
149	Disrupted directed connectivity along the cingulate cortex determines vigilance after sleep deprivation. Neurolmage, 2013, 79, 213-222.	2.1	30
150	The Minimal Complexity of Adapting Agents Increases with Fitness. PLoS Computational Biology, 2013, 9, e1003111.	1.5	31
151	A Theoretically Based Index of Consciousness Independent of Sensory Processing and Behavior. Science Translational Medicine, 2013, 5, 198ra105.	5.8	839
152	Sleep Patterns and Homeostatic Mechanisms in Adolescent Mice. Brain Sciences, 2013, 3, 318-343.	1.1	63
153	Sleep-Dependent Synaptic Down-Selection (I): Modeling the Benefits of Sleep on Memory Consolidation and Integration. Frontiers in Neurology, 2013, 4, 143.	1.1	64
154	Experienced Mindfulness Meditators Exhibit Higher Parietal-Occipital EEG Gamma Activity during NREM Sleep. PLoS ONE, 2013, 8, e73417.	1.1	82
155	Neural Activations during Visual Sequence Learning Leave a Trace in Post-Training Spontaneous EEG. PLoS ONE, 2013, 8, e65882.	1.1	38
156	Assessing sleep consciousness within subjects using a serial awakening paradigm. Frontiers in Psychology, 2013, 4, 542.	1.1	115
157	Local Experience-Dependent Changes in the Wake EEG after Prolonged Wakefulness. Sleep, 2013, 36, 59-72.	0.6	178
158	Sleep-Dependent Synaptic Down-Selection (II): Single-Neuron Level Benefits for Matching, Selectivity, and Specificity. Frontiers in Neurology, 2013, 4, 148.	1.1	27
159	Conserved Functional Connectivity but Impaired Effective Connectivity of Thalamocortical Circuitry in Schizophrenia. Brain Connectivity, 2012, 2, 311-319.	0.8	13
160	Death by Sleepwalker. Scientific American Mind, 2012, 23, 38-41.	0.0	3
161	Recovery of cortical effective connectivity and recovery of consciousness in vegetative patients. Brain, 2012, 135, 1308-1320.	3.7	400
162	Time to Be SHY? Some Comments on Sleep and Synaptic Homeostasis. Neural Plasticity, 2012, 2012, 1-12.	1.0	93

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163	Extracellular Levels of Lactate, but Not Oxygen, Reflect Sleep Homeostasis in the Rat Cerebral Cortex. Sleep, 2012, 35, 909-919.	0.6	43
164	Connectivity Changes Underlying Spectral EEG Changes during Propofol-Induced Loss of Consciousness. Journal of Neuroscience, 2012, 32, 7082-7090.	1.7	272
165	Reduction of EEG Theta Power and Changes in Motor Activity in Rats Treated with Ceftriaxone. PLoS ONE, 2012, 7, e34139.	1.1	19
166	A Neuromorphic Architecture for Object Recognition and Motion Anticipation Using Burst-STDP. PLoS ONE, 2012, 7, e36958.	1.1	21
167	Multivariate autoregressive models with exogenous inputs for intracerebral responses to direct electrical stimulation of the human brain. Frontiers in Human Neuroscience, 2012, 6, 317.	1.0	32
168	Altered slow wave activity in major depressive disorder with hypersomnia: A high density EEG pilot study. Psychiatry Research - Neuroimaging, 2012, 201, 240-244.	0.9	34
169	Unresponsiveness ≠Unconsciousness. Anesthesiology, 2012, 116, 946-959.	1.3	371
170	Electrophysiological correlates of sleep homeostasis in freely behaving rats. Progress in Brain Research, 2011, 193, 17-38.	0.9	97
171	Temporal dynamics of cortical sources underlying spontaneous and peripherally evoked slow waves. Progress in Brain Research, 2011, 193, 201-218.	0.9	113
172	Human brain connectivity during single and paired pulse transcranial magnetic stimulation. NeuroImage, 2011, 54, 90-102.	2.1	204
173	A postsleep decline in auditory evoked potential amplitude reflects sleep homeostasis. Clinical Neurophysiology, 2011, 122, 1549-1555.	0.7	18
174	Regional Slow Waves and Spindles in Human Sleep. Neuron, 2011, 70, 153-169.	3.8	794
175	Molecular neurobiology of sleep. Handbook of Clinical Neurology / Edited By P J Vinken and G W Bruyn, 2011, 98, 191-203.	1.0	19
176	Temporal Evolution of Oscillatory Activity Predicts Performance in a Choice-Reaction Time Reaching Task. Journal of Neurophysiology, 2011, 105, 18-27.	0.9	82
177	Propofol Anesthesia and Sleep: A High-Density EEG Study. Sleep, 2011, 34, 283-291.	0.6	326
178	Functional connectivity in slow-wave sleep: identification of synchronous cortical activity during wakefulness and sleep using time series analysis of electroencephalographic data. Journal of Sleep Research, 2011, 20, 496-505.	1.7	15
179	A Test for Consciousness. Scientific American, 2011, 304, 44-47.	1.0	76
180	Local sleep in awake rats. Nature, 2011, 472, 443-447.	13.7	708

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181	Antidepressant effects of selective slow wave sleep deprivation in major depression: A high-density EEG investigation. Journal of Psychiatric Research, 2011, 45, 1019-1026.	1.5	106
182	Synaptic Potentiation and Sleep Need: Clues from Molecular and Electrophysiological Studies. Current Topics in Medicinal Chemistry, 2011, 11, 2472-2482.	1.0	47
183	Sleep and waking modulate spine turnover in the adolescent mouse cortex. Nature Neuroscience, 2011, 14, 1418-1420.	7.1	267
184	The Thalamic Reticular Nucleus and Schizophrenia. Schizophrenia Bulletin, 2011, 37, 306-315.	2.3	199
185	Electrophysiological correlates of behavioural changes in vigilance in vegetative state and minimally conscious state. Brain, 2011, 134, 2222-2232.	3.7	128
186	Sleep and Synaptic Homeostasis: Structural Evidence in <i>Drosophila</i> . Science, 2011, 332, 1576-1581.	6.0	315
187	Sleep Spindles in Humans: Insights from Intracranial EEG and Unit Recordings. Journal of Neuroscience, 2011, 31, 17821-17834.	1.7	422
188	Modulation of Gamma and Theta Spectral Amplitude and Phase Synchronization Is Associated with the Development of Visuo-Motor Learning. Journal of Neuroscience, 2011, 31, 14810-14819.	1.7	90
189	Integrated Information Increases with Fitness in the Evolution of Animats. PLoS Computational Biology, 2011, 7, e1002236.	1.5	84
190	The Cortical Topography of Local Sleep. Current Topics in Medicinal Chemistry, 2011, 11, 2438-2446.	1.0	45
191	Local Use-Dependent Sleep; Synthesis of the New Paradigm. Current Topics in Medicinal Chemistry, 2011, 11, 2490-2492.	1.0	83
192	Acquisition and retention of motor sequences: the effects of time of the day and sleep. Archives Italiennes De Biologie, 2011, 149, 303-12.	0.1	23
193	Estimation of Cortical Connectivity From EEG Using State-Space Models. IEEE Transactions on Biomedical Engineering, 2010, 57, 2122-2134.	2.5	71
194	Brain responses evoked by high-frequency repetitive transcranial magnetic stimulation: An event-related potential study. Brain Stimulation, 2010, 3, 2-14.	0.7	64
195	Effects of Anesthesia on the Response to Sleep Deprivation. Sleep, 2010, 33, 1659-1667.	0.6	45
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