

Theory for the development of neuron selectivity: orientation interaction in visual cortex

Journal of Neuroscience

2, 32-48

DOI: [10.1523/jneurosci.02-01-00032.1982](https://doi.org/10.1523/jneurosci.02-01-00032.1982)

Citation Report

#	ARTICLE	IF	CITATIONS
1	Classification of sonar signals using Bayesian networks. , 0, , .		0
2	Wavelet projection pursuit for feature extraction and cloud detection in AVIRIS and AVHRR imagery. , 0, , .		2
3	Outline of a theory for the ontogenesis of iso-orientation domains in visual cortex. Biological Cybernetics, 1982, 45, 49-56.	0.6	75
4	Neural population modeling and psychology: A review. Mathematical Biosciences, 1983, 66, 1-86.	0.9	71
5	Statistical mechanics of neocortical interactions. Dynamics of synaptic modification. Physical Review A, 1983, 28, 395-416.	1.0	115
6	Synaptic Arrangements in the Ventral Posterolateral Nucleus of the Squirrel. Brain, Behavior and Evolution, 1983, 22, 165-174.	0.9	3
7	A test of Hebb's postulate at identified synapses which mediate classical conditioning in Aplysia. Journal of Neuroscience, 1984, 4, 1217-1224.	1.7	99
8	A model for generalization and specification by single neurons. Biological Cybernetics, 1984, 51, 169-179.	0.6	2
9	Hebb synaptic plasticity. Progress in Neurobiology, 1984, 22, 89-102.	2.8	54
11	Eye-specific segregation of optic afferents in mammals, fish, and frogs: The role of activity. Cellular and Molecular Neurobiology, 1985, 5, 5-34.	1.7	43
12	Feature Discovery by Competitive Learning*. Cognitive Science, 1985, 9, 75-112.	0.8	797
13	Development and properties of neural networks. Contemporary Physics, 1985, 26, 125-145.	0.8	17
14	Minds, modules and schemas: A response to Chomsky. New Ideas in Psychology, 1986, 4, 203-210.	1.2	1
15	From basic network principles to neural architecture: emergence of orientation-selective cells.. Proceedings of the National Academy of Sciences of the United States of America, 1986, 83, 8390-8394.	3.3	239
16	Neuron learning to brain organization. Cell Biophysics, 1986, 9, 103-144.	0.4	0
17	A Connectionist Machine for Genetic Hillclimbing. Kluwer International Series in Engineering and Computer Science, 1987, , .	0.2	380
18	A physiological basis for a theory of synapse modification. Science, 1987, 237, 42-48.	6.0	498
19	Associative and Competitive Principles of Learning and Development: The Temporal Unfolding and Stability of Stm and Ltm Patterns. Advances in Psychology, 1987, 42, 449-485.	0.1	6

#	ARTICLE	IF	CITATIONS
20	Cortical dynamics of three-dimensional form, color, and brightness perception: II. Binocular theory. Perception & Psychophysics, 1987, 41, 117-158.	2.3	283
21	A self-organizing neural network sharing features of the mammalian visual system. Biological Cybernetics, 1987, 55, 333-343.	0.6	15
22	Competitive Learning: From Interactive Activation to Adaptive Resonance. Cognitive Science, 1987, 11, 23-63.	0.8	1,115
24	Spontaneous symmetry-breaking energy functions and the emergence of orientation selective cortical cells. Biological Cybernetics, 1988, 59, 23-31.	0.6	29
25	Blockade of intracortical inhibition in kitten striate cortex: Effects on receptive field properties and associated loss of ocular dominance plasticity. Experimental Brain Research, 1988, 73, 285-96.	0.7	96
26	A cellular analogue of visual cortical plasticity. Nature, 1988, 333, 367-370.	13.7	300
27	A connectionist model for material handling. Robotics and Computer-Integrated Manufacturing, 1988, 4, 643-654.	6.1	8
28	Nonlinear neural networks: Principles, mechanisms, and architectures. Neural Networks, 1988, 1, 17-61.	3.3	1,392
29	Neural plasticity without postsynaptic action potentials: less-active inputs become dominant when kitten visual cortical cells are pharmacologically inhibited.. Proceedings of the National Academy of Sciences of the United States of America, 1988, 85, 3623-3627.	3.3	266
30	Mean-field theory of a neural network.. Proceedings of the National Academy of Sciences of the United States of America, 1988, 85, 1973-1977.	3.3	23
31	THE WELLCOME PRIZE LECTURE FROM SINGLE CELLS TO SIMPLE CIRCUITS IN THE CEREBRAL CORTEX. Quarterly Journal of Experimental Physiology (Cambridge, England), 1988, 73, 637-702.	1.0	194
32	Chapter 1 The development of functional connections between transplanted embryonic and mature cortical neurons. Progress in Brain Research, 1988, 78, 3-11.	0.9	5
33	Binocular competition affects the pattern and intensity of ocular activation columns in the visual cortex of cats. Visual Neuroscience, 1989, 2, 391-407.	0.5	14
34	Self-organizing neural network architectures for computing visual depth from motion parallax. , 1989, , .		11
35	A biochemical correlate of the critical period for synaptic modification in the visual cortex. Science, 1989, 246, 673-675.	6.0	160
36	Neural network principles for theoretical psychology. Behavior Research Methods, 1989, 21, 213-224.	1.3	15
37	Connectionist learning procedures. Artificial Intelligence, 1989, 40, 185-234.	3.9	1,070
38	Stereo boundary fusion by cortical complex cells: A system of maps, filters, and feedback networks for multiplexing distributed data. Neural Networks, 1989, 2, 29-51.	3.3	48

#	ARTICLE	IF	CITATIONS
39	Neural network models for pattern recognition and associative memory. <i>Neural Networks</i> , 1989, 2, 243-257.	3.3	364
40	Optimal unsupervised learning in a single-layer linear feedforward neural network. <i>Neural Networks</i> , 1989, 2, 459-473.	3.3	1,347
41	Must what goes up come down?. <i>Nature</i> , 1989, 339, 175-176.	13.7	19
42	Associative long-term depression in the hippocampus induced by hebbian covariance. <i>Nature</i> , 1989, 339, 215-218.	13.7	450
43	Ocular dominance column development: analysis and simulation. <i>Science</i> , 1989, 245, 605-615.	6.0	636
44	A mechanism for the Hebb and the anti-Hebb processes underlying learning and memory.. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 1989, 86, 9574-9578.	3.3	1,001
45	Long-term synaptic changes produced by a cellular analog of classical conditioning in <i>Aplysia</i> . <i>Science</i> , 1990, 249, 420-423.	6.0	75
46	Simulation and hardware implementation of competitive learning neural networks. , 1990, , 189-204.		5
47	Different voltage-dependent thresholds for inducing long-term depression and long-term potentiation in slices of rat visual cortex. <i>Nature</i> , 1990, 347, 69-72.	13.7	867
48	Small networks of empirically derived adaptive elements simulate some higher-order features of classical conditioning. <i>Neural Networks</i> , 1990, 3, 507-523.	3.3	27
49	Associative synaptic potentiation and depression: Quantification of dissociable modifications in the hippocampal dentate gyrus favors a particular class of synaptic modification equations. <i>Synapse</i> , 1990, 5, 33-47.	0.6	17
50	Analysis of the two-dimensional receptive fields learned by the Generalized Hebbian Algorithm in response to random input. <i>Biological Cybernetics</i> , 1990, 63, 221-228.	0.6	31
51	Self-organizing neural networks for perception of visual motion. <i>Neural Networks</i> , 1990, 3, 45-74.	3.3	65
52	Molecular and morphological changes in the cat lateral geniculate nucleus and visual cortex induced by visual deprivation are revealed by monoclonal antibodies Cat-304 and Cat-301. <i>Journal of Neuroscience</i> , 1990, 10, 3014-3024.	1.7	119
53	Disruption of experience-dependent synaptic modifications in striate cortex by infusion of an NMDA receptor antagonist. <i>Journal of Neuroscience</i> , 1990, 10, 909-925.	1.7	468
54	CONNECTIONIST LEARNING PROCEDURES This chapter appeared in Volume 40 of <i>Artificial Intelligence</i> in 1989, reprinted with permission of North-Holland Publishing. It is a revised version of Technical Report CMU-CS-87-115, which has the same title and was prepared in June 1987 while the author was at Carnegie Mellon University. The research was supported by contract N00014-86-K-00167 from the Office of Naval Research and by grant IST-8520359 from the National Science Foundation., , 1990, , 555-610.		196
55	A self-organizing scale-sensitive neural network. , 1990, , .		8
56	A simulation of somatosensory cortical map plasticity. , 1990, , .		1

#	ARTICLE	IF	CITATIONS
57	Perceptual Neural Organization: Some Approaches Based on Network Models and Information Theory. Annual Review of Neuroscience, 1990, 13, 257-281.	5.0	232
58	Optimal Plasticity from Matrix Memories: What Goes Up Must Come Down. Neural Computation, 1990, 2, 85-93.	1.3	189
59	N-methyl-D-aspartate-evoked calcium uptake by kitten visual cortex maintained in vitro. Experimental Brain Research, 1990, 80, 252-9.	0.7	51
60	Excitatory amino acids receptors of cerebellar purkinje cells: Development and plasticity. Progress in Biophysics and Molecular Biology, 1991, 55, 31-46.	1.4	62
61	Learning and memory. Brain Research Reviews, 1991, 16, 193-220.	9.1	133
62	Generalization and specialization in artificial neural networks. Progress in Neurobiology, 1991, 37, 383-431.	2.8	6
63	A neural network approach to statistical pattern classification by 'semiparametric' estimation of probability density functions. IEEE Transactions on Neural Networks, 1991, 2, 366-377.	4.8	165
64	What determines the capacity of autoassociative memories in the brain?. Network: Computation in Neural Systems, 1991, 2, 371-397.	2.2	246
65	Stimulation of Phosphoinositide Turnover by Excitatory Amino Acids.. Annals of the New York Academy of Sciences, 1991, 627, 42-56.	1.8	34
66	Neural network modelling. Physics in Medicine and Biology, 1991, 36, 1259-1317.	1.6	48
67	A model for self-organization of receptive fields and orientation-selective columns in the striate cortex. Neuroscience Research, 1991, 11, 155-178.	1.0	2
68	Supervised and unsupervised feature extraction from a cochlear model for speech recognition. , 0, , .		6
69	Feature Extraction using an Unsupervised Neural Network. , 1991, , 310-318.		0
70	Synaptic plasticity in visual cortex: comparison of theory with experiment. Journal of Neurophysiology, 1991, 66, 1785-1804.	0.9	127
71	<title>Adaptive neural methods for multiplexing oriented edges</title>. , 1991, , .		1
72	<title>Challenges of vision theory: self-organization of neural mechanisms for stable steering of object-grouping data in visual motion perception</title>. , 1991, 1569, 200.		0
73	Spatial Signaling in the Development and Function of Neural Connections. Cerebral Cortex, 1991, 1, 199-220.	1.6	175
74	Correlations in high dimensional or asymmetric data sets: Hebbian neuronal processing. Neural Networks, 1991, 4, 337-347.	3.3	53

#	ARTICLE	IF	CITATIONS
75	Mathematical theory of neural learning. <i>New Generation Computing</i> , 1991, 8, 281-294.	2.5	30
76	Synaptic mechanisms for long-term depression. <i>Current Biology</i> , 1991, 1, 38-40.	1.8	8
77	Blockade of NMDA receptors unmasks a long-term depression in synaptic efficacy in rat prefrontal neurons in vitro. <i>Experimental Brain Research</i> , 1991, 85, 621-4.	0.7	109
78	Optimising synaptic learning rules in linear associative memories. <i>Biological Cybernetics</i> , 1991, 65, 253-265.	0.6	63
79	Reverse-Hebb plasticity leads to optimization and association in a simulated visual cortex. <i>Visual Neuroscience</i> , 1991, 6, 507-518.	0.5	8
80	A Biologically Supported Error-Correcting Learning Rule. <i>Neural Computation</i> , 1991, 3, 201-212.	1.3	65
81	Initial synaptic efficacy influences induction and expression of long-term changes in transmission.. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 1991, 88, 4299-4303.	3.3	77
82	Inverse-step competitive learning. , 1991, , .		0
83	Pairing of pre- and postsynaptic activities in cerebellar Purkinje cells induces long-term changes in synaptic efficacy in vitro.. <i>Journal of Physiology</i> , 1991, 432, 123-141.	1.3	233
84	Dependence of cortical plasticity on correlated activity of single neurons and on behavioral context. <i>Science</i> , 1992, 257, 1412-1415.	6.0	389
85	Lateral inhibition neural networks for classification of simulated radar imagery. , 0, , .		8
86	Dynamic properties of neural networks with adapting synapses. <i>Network: Computation in Neural Systems</i> , 1992, 3, 267-283.	2.2	63
87	Stimulus-Dependent Assembly Formation of Oscillatory Responses: III. Learning. <i>Neural Computation</i> , 1992, 4, 666-681.	1.3	22
88	Homosynaptic long-term depression in area CA1 of hippocampus and effects of N-methyl-D-aspartate receptor blockade.. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 1992, 89, 4363-4367.	3.3	1,527
89	Classification of simulated radar imagery using lateral inhibition neural networks. , 0, , .		5
90	Long-term potentiation and long-term depression in the neocortex. <i>Progress in Neurobiology</i> , 1992, 39, 209-228.	2.8	331
91	Office of Naval Research contributions to neural networks and signal processing in oceanic engineering. <i>IEEE Journal of Oceanic Engineering</i> , 1992, 17, 299-307.	2.1	16
92	Cellular analogs of visual cortical epigenesis. I. Plasticity of orientation selectivity. <i>Journal of Neuroscience</i> , 1992, 12, 1280-1300.	1.7	103

#	ARTICLE	IF	CITATIONS
93	Cellular analogs of visual cortical epigenesis. II. Plasticity of binocular integration. <i>Journal of Neuroscience</i> , 1992, 12, 1301-1318.	1.7	61
95	Information maintenance and statistical dependence reduction in simple neural networks. <i>Biological Cybernetics</i> , 1992, 67, 469-477.	0.6	17
96	A neural network model of competitive learning which converges to the global equilibrium. <i>Systems and Computers in Japan</i> , 1992, 23, 49-68.	0.2	0
97	Objective function formulation of the BCM theory of visual cortical plasticity: Statistical connections, stability conditions. <i>Neural Networks</i> , 1992, 5, 3-17.	3.3	260
98	Physiological constraints on the formal representation of neurons. <i>Journal of Statistical Planning and Inference</i> , 1992, 33, 67-98.	0.4	1
99	The influence of prior synaptic activity on the induction of long-term potentiation. <i>Science</i> , 1992, 255, 730-733.	6.0	393
100	Connectionist models: Proceedings of the 1990 summer school. <i>Artificial Intelligence</i> , 1993, 62, 117-127.	3.9	1
101	Continuous-time global computer vision with analog, specialized, and interacting neural networks. <i>Information Sciences</i> , 1993, 70, 5-25.	4.0	0
102	Prediction using unsupervised learning. <i>Physica D: Nonlinear Phenomena</i> , 1993, 67, 151-165.	1.3	1
103	On the combination of supervised and unsupervised learning. <i>Physica A: Statistical Mechanics and Its Applications</i> , 1993, 200, 655-661.	1.2	2
104	An n-level field theory of biological neural networks. <i>Journal of Mathematical Biology</i> , 1993, 31, 771-795.	0.8	24
105	Least mean square error reconstruction principle for self-organizing neural-nets. <i>Neural Networks</i> , 1993, 6, 627-648.	3.3	326
106	Model of competitive learning based upon a generalized energy function. <i>Neural Networks</i> , 1993, 6, 1095-1103.	3.3	6
107	Tetanization during GABAA receptor activation induces long-term depression in visual cortex slices. <i>Neuropharmacology</i> , 1993, 32, 511-513.	2.0	9
108	Nitric oxide and hippocampal synaptic plasticity. <i>Biochemical Pharmacology</i> , 1993, 46, 777-785.	2.0	95
109	Long-term depression of excitatory synaptic transmission and its relationship to long-term potentiation. <i>Trends in Neurosciences</i> , 1993, 16, 480-487.	4.2	726
110	Normal and amnesic learning, recognition and memory by a neural model of cortico-hippocampal interactions. <i>Trends in Neurosciences</i> , 1993, 16, 131-137.	4.2	246
111	NMDA-receptor-dependent synaptic plasticity: multiple forms and mechanisms. <i>Trends in Neurosciences</i> , 1993, 16, 521-527.	4.2	820

#	ARTICLE	IF	CITATIONS
112	Long-term depression in cerebral cortex: a possible substrate of "forgetting" that should not be forgotten. <i>Neuroscience Research</i> , 1993, 16, 263-270.	1.0	67
113	Age dependence of homosynaptic non-NMDA mediated long-term depression in field CA1 of rat hippocampal slices. <i>Developmental Brain Research</i> , 1993, 75, 253-260.	2.1	19
114	Computational Models of the Neural Bases of Learning and Memory. <i>Annual Review of Neuroscience</i> , 1993, 16, 667-706.	5.0	92
115	Applications and extensions of unsupervised BCM projection pursuit for time-dependent classification. , 0, , .		0
116	Long-term depression: not so depressing after all.. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 1993, 90, 3121-3123.	3.3	56
117	Physiological Modeling of the Visual Cortex. <i>Reviews in the Neurosciences</i> , 1993, 4, 95-111.	1.4	0
118	Three-Dimensional Object Recognition Using an Unsupervised BCM Network: The Usefulness of Distinguishing Features. <i>Neural Computation</i> , 1993, 5, 61-74.	1.3	49
119	Low level modeling of the development of directionally selective microcircuits in cat striate cortex. , 0, , .		1
120	Experience-dependent plasticity in adult rat barrel cortex.. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 1993, 90, 2082-2086.	3.3	272
121	Minimum entropy methods in neural networks: competition and selective responses by entropy minimization. , 0, , .		7
122	Self-Organizing Neural Networks for Stable Control of Autonomous Behavior in A Changing World. <i>North-Holland Mathematical Library</i> , 1993, , 139-197.	0.1	3
123	Chapter 18 Cortical convergence of ON- and OFF-pathways and functional adaptation of receptive field organization in cat area 17. <i>Progress in Brain Research</i> , 1993, 95, 191-205.	0.9	10
124	Chapter 19 Temporal covariance of postsynaptic membrane potential and synaptic input " role in synaptic efficacy in visual cortex. <i>Progress in Brain Research</i> , 1993, 95, 207-223.	0.9	13
125	Chapter 37 Neuronal representations, assemblies and temporal coherence. <i>Progress in Brain Research</i> , 1993, 95, 461-474.	0.9	49
126	Information processing by a perceptron in an unsupervised learning task. <i>Network: Computation in Neural Systems</i> , 1993, 4, 295-312.	2.2	22
127	Bidirectional long-term modification of synaptic effectiveness in the adult and immature hippocampus. <i>Journal of Neuroscience</i> , 1993, 13, 2910-2918.	1.7	554
128	Discussion of the Paper by Ripley. <i>Journal of the Royal Statistical Society Series B: Methodological</i> , 1994, 56, 437-456.	0.8	0
129	Homosynaptic long-term depression in the visual cortex. <i>Journal of Neuroscience</i> , 1994, 14, 3404-3412.	1.7	257

#	ARTICLE	IF	CITATIONS
130	An innocuous bias in whisker use in adult rats modifies receptive fields of barrel cortex neurons. <i>Journal of Neuroscience</i> , 1994, 14, 6978-6991.	1.7	157
131	Asynchronous pre- and postsynaptic activity induces associative long-term depression in area CA1 of the rat hippocampus in vitro.. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 1994, 91, 1148-1152.	3.3	191
132	Influence Function Analysis of PCA and BCM Learning. <i>Neural Computation</i> , 1994, 6, 1276-1288.	1.3	2
133	The Role of Constraints in Hebbian Learning. <i>Neural Computation</i> , 1994, 6, 100-126.	1.3	418
134	Role of the visual environment in the formation of receptive fields according to the BCM theory. <i>Progress in Brain Research</i> , 1994, 102, 287-301.	0.9	4
135	Models of Neural Networks. <i>Physics of Neural Networks</i> , 1994, , .	0.1	14
136	Rules for the cortical map of ocular dominance and orientation columns. <i>Neural Networks</i> , 1994, 7, 883-894.	3.3	27
137	Simulation of visual cortex development under lid-suture conditions: enhancement of response specificity by a reverse-Hebb rule in the absence of spatially patterned input. <i>Biological Cybernetics</i> , 1994, 70, 303-309.	0.6	0
138	Confocal laser scanning microscopy reveals voltage-gated calcium signals within hippocampal dendritic spines. <i>Journal of Neurobiology</i> , 1994, 25, 220-233.	3.7	71
139	Unsupervised BCM projection pursuit algorithms for classification of simulated radar presentations. <i>Neural Networks</i> , 1994, 7, 709-728.	3.3	18
140	Neural network models of cortical functions based on the computational properties of the cerebral cortex. <i>Journal of Physiology (Paris)</i> , 1994, 88, 291-308.	2.1	14
141	3-D vision and figure-ground separation by visual cortex. <i>Perception & Psychophysics</i> , 1994, 55, 48-121.	2.3	450
142	Plasticity in auditory cortical circuitry. <i>Current Opinion in Neurobiology</i> , 1994, 4, 580-587.	2.0	74
143	The nature and origin of orientation specificity in neurons of the visual pathways. <i>Progress in Neurobiology</i> , 1994, 43, 381-437.	2.8	34
144	Ensemble methods for automatic masking of clouds in AVIRIS imagery. , 0, , .		4
145	Face recognition using a hybrid supervised/unsupervised neural network. , 0, , .		3
146	Decoding neuronal firing and modelling neural networks. <i>Quarterly Reviews of Biophysics</i> , 1994, 27, 291-331.	2.4	115
147	Dynamic synaptic modification threshold: computational model of experience-dependent plasticity in adult rat barrel cortex.. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 1994, 91, 4791-4795.	3.3	41

#	ARTICLE	IF	CITATIONS
148	A model of dendritic spine Ca ²⁺ concentration exploring possible bases for a sliding synaptic modification threshold.. Proceedings of the National Academy of Sciences of the United States of America, 1994, 91, 3941-3945.	3.3	79
149	Hebbian learning is jointly controlled by electrotonic and input structure. Network: Computation in Neural Systems, 1994, 5, 1-19.	2.2	10
150	A model of prenatal acquisition of speech parameters.. Proceedings of the National Academy of Sciences of the United States of America, 1994, 91, 7473-7476.	3.3	42
151	Formation of receptive fields in realistic visual environments according to the Bienenstock, Cooper, and Munro (BCM) theory.. Proceedings of the National Academy of Sciences of the United States of America, 1994, 91, 7797-7801.	3.3	121
152	Cooperative interactions among afferents govern the induction of homosynaptic long-term depression in the hippocampus.. Proceedings of the National Academy of Sciences of the United States of America, 1995, 92, 11637-11641.	3.3	54
153	The discovery of structure by multi-stream networks of local processors with contextual guidance. Network: Computation in Neural Systems, 1995, 6, 225-246.	2.2	103
154	An integrated approach to the study of object features in visual recognition. Network: Computation in Neural Systems, 1995, 6, 603-618.	2.2	0
155	A learning rule for extracting spatio-temporal invariances. Network: Computation in Neural Systems, 1995, 6, 429-436.	2.2	53
156	Synaptic Plasticity: A molecular mechanism for metaplasticity. Current Biology, 1995, 5, 1334-1338.	1.8	58
157	Reduction of the threshold for long-term potentiation by prior theta-frequency synaptic activity. Hippocampus, 1995, 5, 52-59.	0.9	73
158	Plasticity of AMPA and NMDA receptor-mediated epileptiform activity in a chronic model of temporal lobe epilepsy. Epilepsy Research, 1995, 21, 95-107.	0.8	38
159	A model for long-term potentiation and depression. Journal of Computational Neuroscience, 1995, 2, 335-343.	0.6	15
160	Synaptic plasticity induced in single neurones of the primary somatosensory cortex in vivo. Experimental Brain Research, 1995, 107, 241-53.	0.7	7
161	A critical period for long-term potentiation at thalamocortical synapses. Nature, 1995, 375, 325-328.	13.7	644
162	Simultaneous Expression of Long-term Depression of NMDA and Long-term Potentiation of AMPA Receptor-mediated Synaptic Responses in the CA1 Area of the Kainic Acid-lesioned Hippocampus. European Journal of Neuroscience, 1995, 7, 1651-1655.	1.2	22
163	Adaptive perceptual pattern recognition by self-organizing neural networks: Context, uncertainty, multiplicity, and scale. Neural Networks, 1995, 8, 335-362.	3.3	35
164	Selective responses by entropy minimization. Mathematical and Computer Modelling, 1995, 21, 143-157.	2.0	0
165	Induction and reversal of long-term potentiation by low- and high- intensity theta pattern stimulation. Journal of Neuroscience, 1995, 15, 5402-5410.	1.7	87

#	ARTICLE	IF	CITATIONS
166	Self-association and Hebbian learning in linear neural networks. IEEE Transactions on Neural Networks, 1995, 6, 1165-1184.	4.8	11
167	Transient protein kinase C activation primes long-term depression and suppresses long-term potentiation of synaptic transmission in hippocampus.. Proceedings of the National Academy of Sciences of the United States of America, 1995, 92, 1724-1728.	3.3	46
168	Neural Correlates of Learning in the Prefrontal Cortex of the Monkey: A Predictive Model. Cerebral Cortex, 1995, 5, 135-147.	1.6	52
169	Stability of a basic biological neural circuit. , 0, , .		1
170	Dynamically reconfigurable Projection Pursuit ensembles for cloud detection in AVIRIS imagery. , 0, , .		4
171	Independent mechanisms for long-term depression of AMPA and NMDA responses. Neuron, 1995, 15, 417-426.	3.8	125
172	Mechanism for a sliding synaptic modification threshold. Neuron, 1995, 15, 1-4.	3.8	248
173	The ascending neuromodulatory systems in learning by reinforcement: comparing computational conjectures with experimental findings. Brain Research Reviews, 1995, 21, 219-245.	9.1	73
174	CaMKII regulates the frequency-response function of hippocampal synapses for the production of both LTD and LTP. Cell, 1995, 81, 891-904.	13.5	572
175	Impairment of spatial but not contextual memory in CaMKII mutant mice with a selective loss of hippocampal ltp in the range of the \hat{I} frequency. Cell, 1995, 81, 905-915.	13.5	470
176	Long-Term Synaptic Depression. Annual Review of Neuroscience, 1995, 18, 319-357.	5.0	458
177	Temporal constraints in associative synaptic plasticity in hippocampus and neocortex. Canadian Journal of Physiology and Pharmacology, 1995, 73, 1295-1311.	0.7	21
178	Pruning projection pursuit models for improved cloud detection in AVIRIS imagery. , 0, , .		3
179	Potentiation or depression of synaptic efficacy in the dentate gyrus is determined by the relationship between the conditioned and unconditioned stimulus in a classical conditioning paradigm in rats. Behavioural Brain Research, 1995, 70, 15-29.	1.2	31
180	Neural competition and statistical mechanics. Proceedings of the Royal Society B: Biological Sciences, 1996, 263, 601-606.	1.2	7
181	Glutamate-dependent long-term presynaptic changes in corticostriatal excitability. Neuroscience, 1996, 73, 109-119.	1.1	17
182	The development of topography in the visual cortex: a review of models. Network: Computation in Neural Systems, 1996, 7, 161-247.	2.2	216
183	Impaired Hippocampal Representation of Space in CA1-Specific NMDAR1 Knockout Mice. Cell, 1996, 87, 1339-1349.	13.5	561

#	ARTICLE	IF	CITATIONS
184	Evidence for the Hebbian hypothesis in experience-dependent physiological plasticity of neocortex: a critical review. <i>Brain Research Reviews</i> , 1996, 22, 191-228.	9.1	96
185	Ca ²⁺ Signaling Requirements for Long-Term Depression in the Hippocampus. <i>Neuron</i> , 1996, 16, 825-833.	3.8	403
186	Developmental Down-Regulation of LTD in Cortical Layer IV and Its Independence of Modulation by Inhibition. <i>Neuron</i> , 1996, 16, 1097-1106.	3.8	106
187	Synaptic Economics: Competition and Cooperation in Synaptic Plasticity. <i>Neuron</i> , 1996, 17, 371-374.	3.8	272
188	Synaptic Activity and the Construction of Cortical Circuits. <i>Science</i> , 1996, 274, 1133-1138.	6.0	2,745
189	Adaptive object detection from multisensor data. , 0, , .		4
190	Texture feature extraction by wavelet projection pursuit for cloud detection in AVIRIS and AVHRR imagery. , 0, , .		1
191	Feature extraction in acoustic signals using the BCM learning rule. , 0, , .		4
192	Classification using feature extraction based on time-frequency analysis and BCM theory. , 0, , .		1
193	Receptive-field plasticity in the adult auditory cortex induced by Hebbian covariance. <i>Journal of Neuroscience</i> , 1996, 16, 861-875.	1.7	95
195	A Canonical Microfunction for Learning Perceptual Invariances. <i>Perception</i> , 1996, 25, 207-220.	0.5	42
197	Chapter 15 The role of excitatory amino acid transmission in development and plasticity of SI barrel cortex. <i>Progress in Brain Research</i> , 1996, 108, 219-234.	0.9	13
198	Chapter 17 Developmental mechanisms for regulating signal amplification at excitatory synapses in the neocortex. <i>Progress in Brain Research</i> , 1996, 108, 245-262.	0.9	7
199	Long-term modifications of synaptic efficacy in the human inferior and middle temporal cortex.. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 1996, 93, 8011-8015.	3.3	118
200	Chapter 14 Nmda-receptor-dependent synaptic plasticity in the visual cortex. <i>Progress in Brain Research</i> , 1996, 108, 205-218.	0.9	47
201	Cooperative interactions in the induction of long-term potentiation and depression of synaptic excitation between hippocampal CA3-CA1 cell pairs in vitro.. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 1996, 93, 11225-11230.	3.3	85
202	A synaptic basis for memory storage in the cerebral cortex. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 1996, 93, 13453-13459.	3.3	269
203	Learning the distribution of object trajectories for event recognition. <i>Image and Vision Computing</i> , 1996, 14, 609-615.	2.7	346

#	ARTICLE	IF	CITATIONS
204	A kinetic mechanism for nicotinic acetylcholine receptors based on multiple allosteric transitions. <i>Biological Cybernetics</i> , 1996, 75, 361-379.	0.6	124
205	A mathematical model of activity-dependent, anatomical segregation induced by competition for neurotrophic support. <i>Biological Cybernetics</i> , 1996, 75, 463-470.	0.6	14
206	Dynamics of functional connectivity in visual cortical networks: An overview. <i>Journal of Physiology (Paris)</i> , 1996, 90, 113-139.	2.1	35
207	The involvement of brain-derived neurotrophic factor in hippocampal long-term potentiation revealed by gene targeting experiments. <i>Journal of Physiology (Paris)</i> , 1996, 90, 157-164.	2.1	96
208	A discussion of activity-dependent forms of synaptic weakening and their possible role in ocular dominance plasticity. <i>Journal of Physiology (Paris)</i> , 1996, 90, 167-170.	2.1	4
209	Mechanisms for regulating synaptic efficiency in the visual cortex. <i>Journal of Physiology (Paris)</i> , 1996, 90, 179-184.	2.1	7
210	Progress in understanding NMDA-receptor-dependent synaptic plasticity in the visual cortex. <i>Journal of Physiology (Paris)</i> , 1996, 90, 223-227.	2.1	29
211	Developmental processes and the pathophysiology of mental retardation. <i>Mental Retardation and Developmental Disabilities Research Reviews</i> , 1996, 2, 197-208.	3.5	0
212	LTD, LTP, and the sliding threshold for long-term synaptic plasticity. <i>Hippocampus</i> , 1996, 6, 35-42.	0.9	137
213	NMDA Receptor-dependent LTD in different subfields of hippocampus in vivo and in vitro. , 1996, 6, 43-51.		65
214	Frequency dependence of long-term potentiation and depression in the dentate gyrus of the freely moving rat. , 1996, 6, 118-124.		9
215	Face recognition using a hybrid supervised/unsupervised neural network. <i>Pattern Recognition Letters</i> , 1996, 17, 67-76.	2.6	58
216	Unsupervised neural network learning procedures for feature extraction and classification. <i>Applied Intelligence</i> , 1996, 6, 185-203.	3.3	51
217	Bidirectional modification of CA1 synapses in the adult hippocampus in vivo. <i>Nature</i> , 1996, 381, 163-166.	13.7	170
218	Associative, bidirectional modifications at the hippocampal mossy fibre-CA3 synapse. <i>Nature</i> , 1996, 381, 429-434.	13.7	39
219	Strengths and weaknesses in memory. <i>Nature</i> , 1996, 381, 471-472.	13.7	19
220	Axonal Processes and Neural Plasticity. II: Adult Somatosensory Maps. <i>Cerebral Cortex</i> , 1996, 6, 789-793.	1.6	11
221	Associative Synaptic Plasticity in Hippocampus and Visual Cortex: Cellular Mechanisms and Functional Implications. <i>Reviews in the Neurosciences</i> , 1996, 7, 29-46.	1.4	24

#	ARTICLE	IF	CITATIONS
222	Functional Significance of Long-Term Potentiation for Sequence Learning and Prediction. Cerebral Cortex, 1996, 6, 406-416.	1.6	285
223	Axonal Processes and Neural Plasticity. I: Ocular Dominance Columns. Cerebral Cortex, 1996, 6, 781-788.	1.6	50
224	Learning stereo disparity using temporal smoothness constraints: A computational model. Spatial Vision, 1996, 10, 15-29.	1.4	0
225	A Nonlinear Hebbian Network that Learns to Detect Disparity in Random-Dot Stereograms. Neural Computation, 1996, 8, 545-566.	1.3	33
226	Learning Perceptually Salient Visual Parameters Using Spatiotemporal Smoothness Constraints. Neural Computation, 1996, 8, 1463-1492.	1.3	60
227	Marr's Theory of the Neocortex as a Self-Organizing Neural Network. Neural Computation, 1997, 9, 911-936.	1.3	9
228	Novel projection pursuit indices for feature extraction and classification: An inter-comparison in a remote sensing application. , 0, , .		4
229	Alternating monocular exposure increases the spacing of ocularity domains in area 17 of cats. Visual Neuroscience, 1997, 14, 929-938.	0.5	23
230	In search of common foundations for cortical computation. Behavioral and Brain Sciences, 1997, 20, 657-683.	0.4	368
231	Sonar signal classification using the BCM learning algorithm. , 0, , .		0
232	Stability and discriminative properties of the AMI model. , 0, , .		0
233	Activation Functions, Computational Goals, and Learning Rules for Local Processors with Contextual Guidance. Neural Computation, 1997, 9, 895-910.	1.3	53
234	A model of ocular dominance column development by competition for trophic factor. Proceedings of the National Academy of Sciences of the United States of America, 1997, 94, 9944-9949.	3.3	51
235	Nitric oxide: what can it compute?. Network: Computation in Neural Systems, 1997, 8, 1-16.	2.2	10
236	Plasticity in adult sensory cortex: a review. Network: Computation in Neural Systems, 1997, 8, R33-R76.	2.2	12
237	Hebbian learning and the development of direction selectivity: the role of geniculate response timings. Network: Computation in Neural Systems, 1997, 8, 195-214.	2.2	26
239	Neurotransmitter Release and Synaptic Plasticity. Advances in Organ Biology, 1997, , 171-191.	0.1	0
240	Self-Organization, Plasticity, and Low-Level Visual Phenomena in a Laterally Connected Map Model of the Primary Visual Cortex. Psychology of Learning and Motivation - Advances in Research and Theory, 1997, 36, 257-308.	0.5	22

#	ARTICLE	IF	CITATIONS
241	Learning as Extraction of Low-Dimensional Representations. Psychology of Learning and Motivation - Advances in Research and Theory, 1997, 36, 353-380.	0.5	36
243	Optimal feature extraction techniques to improve classification performance, with application to sonar signals. , 0, , .		1
244	Axonal processes and neural plasticity. III. Competition for dendrites. Philosophical Transactions of the Royal Society B: Biological Sciences, 1997, 352, 1975-1983.	1.8	3
246	Silent Synapses during Development of Thalamocortical Inputs. Neuron, 1997, 18, 269-280.	3.8	457
248	BCM network develops orientation selectivity and ocular dominance in natural scene environment. Vision Research, 1997, 37, 3339-3342.	0.7	30
249	The "independent components" of natural scenes are edge filters. Vision Research, 1997, 37, 3327-3338.	0.7	1,860
250	Information: In the stimulus or in the context?. Behavioral and Brain Sciences, 1997, 20, 698-700.	0.4	5
251	Metaplasticity: A new vista across the field of synaptic plasticity. Progress in Neurobiology, 1997, 52, 303-323.	2.8	340
252	Reinforcement learning by Hebbian synapses with adaptive thresholds. Neuroscience, 1997, 81, 303-319.	1.1	52
253	Is synchronization necessary and is it sufficient?. Behavioral and Brain Sciences, 1997, 20, 683-684.	0.4	23
254	Progress toward an understanding of cortical computation. Behavioral and Brain Sciences, 1997, 20, 703-714.	0.4	28
255	Nonlinear computation and dynamic cognitive generalities. Behavioral and Brain Sciences, 1997, 20, 688-689.	0.4	0
256	Topologic organization of context fields for sensorimotor coordination. Behavioral and Brain Sciences, 1997, 20, 693-693.	0.4	0
257	Information theory: The Holy Grail of cortical computation?. Behavioral and Brain Sciences, 1997, 20, 698-698.	0.4	3
258	On the normalization of coherent contrast and the semantics of synchronization. Behavioral and Brain Sciences, 1997, 20, 697-698.	0.4	0
259	Binding by synchronisation: A task-dependence hypothesis. Behavioral and Brain Sciences, 1997, 20, 685-686.	0.4	1
260	Word recognition in the split brain and PET studies of spatial stimulus-response compatibility support contextual integration. Behavioral and Brain Sciences, 1997, 20, 690-691.	0.4	0
261	Internal context and top-down processing. Behavioral and Brain Sciences, 1997, 20, 691-692.	0.4	1

#	ARTICLE	IF	CITATIONS
262	Glucocorticoid Receptor Activation Lowers the Threshold for NMDA-Receptor-Dependent Homosynaptic Long-Term Depression in the Hippocampus Through Activation of Voltage-Dependent Calcium Channels. Journal of Neurophysiology, 1997, 78, 1-9.	0.9	93
263	Closing over too much. Behavioral and Brain Sciences, 1997, 20, 692-692.	0.4	0
264	Transient Synaptic Potentiation in the Visual Cortex. I. Cellular Mechanisms. Journal of Neurophysiology, 1997, 77, 1269-1283.	0.9	23
265	Heterosynaptic LTD and Depotentiation in the Medial Perforant Path of the Dentate Gyrus in the Freely Moving Rat. Journal of Neurophysiology, 1997, 77, 571-578.	0.9	73
266	Schizophrenia as a model of context-deficient cortical computation. Behavioral and Brain Sciences, 1997, 20, 696-697.	0.4	60
267	Support for grouping-by-synchronization, the context-field, and its mechanisms, but doubt in the use of information theory by the cortex. Behavioral and Brain Sciences, 1997, 20, 686-687.	0.4	0
268	Principles of cortical synchronization. Behavioral and Brain Sciences, 1997, 20, 689-690.	0.4	21
269	Synthesizing synchrony versus dissecting dissonance. Behavioral and Brain Sciences, 1997, 20, 700-700.	0.4	0
270	Synchronization, binding, multiscale dynamic processing, and neuron sociology. Behavioral and Brain Sciences, 1997, 20, 694-695.	0.4	1
271	On the computational basis of synchronized codes. Behavioral and Brain Sciences, 1997, 20, 700-701.	0.4	0
272	Do the biological details matter?. Behavioral and Brain Sciences, 1997, 20, 684-685.	0.4	1
273	Local attractor dynamics will introduce further information to synchronous neuronal fields. Behavioral and Brain Sciences, 1997, 20, 701-702.	0.4	4
274	Context dependent feature groups, a proposal for object representation. Behavioral and Brain Sciences, 1997, 20, 702-703.	0.4	0
275	Synchronizing oscillations: Coding by concurrence and by sequence. Behavioral and Brain Sciences, 1997, 20, 690-690.	0.4	0
276	Synchronicity and its use in the brain. Behavioral and Brain Sciences, 1997, 20, 695-696.	0.4	7
277	An internal teacher for neural computation. Behavioral and Brain Sciences, 1997, 20, 687-688.	0.4	0
278	'Tis all in pieces (separate RFs and CFs), all coherence gone. Behavioral and Brain Sciences, 1997, 20, 693-694.	0.4	0
279	Transient Synaptic Potentiation in the Visual Cortex. II. Developmental Regulation. Journal of Neurophysiology, 1997, 77, 1284-1293.	0.9	13

#	ARTICLE	IF	CITATIONS
280	Reverse Effects of Conditioning Produced by Two Different Unconditioned Stimuli on Thalamocortical Transmission. <i>Journal of Neurophysiology</i> , 1997, 77, 1663-1678.	0.9	6
281	Studies on Long-Term Depression in Area CA1 of the Anesthetized and Freely Moving Rat. <i>Journal of Neuroscience</i> , 1997, 17, 4820-4828.	1.7	54
282	Serotonin facilitates synaptic plasticity in kitten visual cortex: an in vitro study. <i>Developmental Brain Research</i> , 1997, 101, 299-304.	2.1	83
283	RC3/neurogranin, a postsynaptic calpacitin for setting the response threshold to calcium influxes. <i>Molecular Neurobiology</i> , 1997, 15, 131-163.	1.9	196
284	A Comparative Study of Two Neural Methods of Exploratory Projection Pursuit. <i>Neural Networks</i> , 1997, 10, 257-262.	3.3	15
285	An Integrated Model for Activity-dependent Synaptic Modifications. <i>Neural Networks</i> , 1997, 10, 413-421.	3.3	36
286	Consciousness and neural cognizers: a review of some recent approaches. <i>Neural Networks</i> , 1997, 10, 1303-1316.	3.3	4
287	Retinal neurocomputing principles for real time track identification. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 1997, 389, 258-263.	0.7	0
288	Age-associated changes in Ca ²⁺ -dependent processes: Relation to hippocampal synaptic plasticity. , 1997, 7, 602-612.		173
289	Homeostasis or synaptic plasticity?. <i>Nature</i> , 1998, 391, 845-846.	13.7	40
290	A signal for I ² -cell failure. <i>Nature</i> , 1998, 391, 846-847.	13.7	7
291	Activity-dependent scaling of quantal amplitude in neocortical neurons. <i>Nature</i> , 1998, 391, 892-896.	13.7	1,944
292	Enhanced long-term potentiation and impaired learning in mice with mutant postsynaptic density-95 protein. <i>Nature</i> , 1998, 396, 433-439.	13.7	1,054
293	Long-term synaptic plasticity between pairs of individual CA3 pyramidal cells in rat hippocampal slice cultures. <i>Journal of Physiology</i> , 1998, 507, 237-247.	1.3	490
294	Neural networks as systems for recognizing patterns. <i>Journal of Mathematical Sciences</i> , 1998, 89, 1406-1457.	0.1	4
295	Feature-based classification of myoelectric signals using artificial neural networks. <i>Medical and Biological Engineering and Computing</i> , 1998, 36, 485-489.	1.6	41
296	A neural network model for the development of simple and complex cell receptive fields within cortical maps of orientation and ocular dominance. <i>Neural Networks</i> , 1998, 11, 189-208.	3.3	40
297	A bottom up approach towards the acquisition and expression of sequential representations applied to a behaving real-world device: Distributed Adaptive Control III. <i>Neural Networks</i> , 1998, 11, 1531-1549.	3.3	81

#	ARTICLE	IF	CITATIONS
298	Synaptic metaplasticity and the local charge effect in postsynaptic densities. Trends in Neurosciences, 1998, 21, 97-102.	4.2	20
299	Stress: metaplastic effects in the hippocampus. Trends in Neurosciences, 1998, 21, 505-509.	4.2	385
300	Six principles for biologically based computational models of cortical cognition. Trends in Cognitive Sciences, 1998, 2, 455-462.	4.0	274
301	Long-Term Depression at Thalamocortical Synapses in Developing Rat Somatosensory Cortex. Neuron, 1998, 21, 347-357.	3.8	161
302	Activity and Synaptic Receptor Targeting. Neuron, 1998, 21, 459-462.	3.8	89
303	BDNF Has Opposite Effects on the Quantal Amplitude of Pyramidal Neuron and Interneuron Excitatory Synapses. Neuron, 1998, 21, 521-530.	3.8	425
304	A Role for cAMP in Long-Term Depression at Hippocampal Mossy Fiber Synapses. Neuron, 1998, 21, 837-845.	3.8	154
305	Allosteric Receptors after 30 Years. Neuron, 1998, 21, 959-980.	3.8	424
307	Modeling memory: what do we learn from attractor neural networks?. Comptes Rendus De L'Académie Des Sciences Série 3, Sciences De La Vie, 1998, 321, 249-252.	0.8	4
308	Brain-derived neurotrophic factor alters the synaptic modification threshold in visual cortex. Neuropharmacology, 1998, 37, 571-579.	2.0	113
309	Hebbian-like functional plasticity in the auditory cortex of the behaving monkey. Neuropharmacology, 1998, 37, 633-655.	2.0	56
310	Theory: Foundations of Artificial Neural Networks. Substance Use and Misuse, 1998, 33, 17-199.	0.7	16
311	Multimodality exploration by an unsupervised projection pursuit neural network. IEEE Transactions on Neural Networks, 1998, 9, 464-472.	4.8	8
312	Classification of underwater mammals using feature extraction based on time-frequency analysis and BCM theory. IEEE Transactions on Signal Processing, 1998, 46, 1202-1207.	3.2	54
313	CORTICAL PLASTICITY: From Synapses to Maps. Annual Review of Neuroscience, 1998, 21, 149-186.	5.0	1,886
314	Receptive Field Formation in Natural Scene Environments: Comparison of Single-Cell Learning Rules. Neural Computation, 1998, 10, 1797-1813.	1.3	49
315	Synaptic Delay Learning in Pulse-Coupled Neurons. Neural Computation, 1998, 10, 555-565.	1.3	30
316	Competition for Neurotrophic Factors: Mathematical Analysis. Neural Computation, 1998, 10, 1939-1981.	1.3	22

#	ARTICLE	IF	CITATIONS
317	Toward a Biophysically Plausible Bidirectional Hebbian Rule. <i>Neural Computation</i> , 1998, 10, 499-520.	1.3	10
318	Behavioral constraints in the development of neuronal properties: a cortical model embedded in a real-world device. <i>Cerebral Cortex</i> , 1998, 8, 346-361.	1.6	114
319	Chapter 12 Modulation of LTP induction by NMDA receptor activation and nitric oxide release. <i>Progress in Brain Research</i> , 1998, 118, 173-182.	0.9	53
320	Stable State Analysis of an Immune Network Model. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 1998, 08, 1285-1301.	0.7	6
321	Allosteric Transitions of the Acetylcholine Receptor. <i>Advances in Protein Chemistry</i> , 1998, 51, 121-184.	4.4	57
322	Slow stochastic Hebbian learning of classes of stimuli in a recurrent neural network. <i>Network: Computation in Neural Systems</i> , 1998, 9, 123-152.	2.2	55
323	On the matter of rules. <i>Network: Computation in Neural Systems</i> , 1998, 9, R1-R52.	2.2	30
324	Development of localized oriented receptive fields by learning a translation-invariant code for natural images. <i>Network: Computation in Neural Systems</i> , 1998, 9, 219-234.	2.2	6
325	Synaptic Modifications in Cultured Hippocampal Neurons: Dependence on Spike Timing, Synaptic Strength, and Postsynaptic Cell Type. <i>Journal of Neuroscience</i> , 1998, 18, 10464-10472.	1.7	3,916
326	Chapter 13 Dynamic modulation of cerebral cortex synaptic function by nitric oxide. <i>Progress in Brain Research</i> , 1998, 118, 183-198.	0.9	37
327	Plasticity of neuronal response properties in adult cat striate cortex. <i>Visual Neuroscience</i> , 1998, 15, 177-196.	0.5	33
328	Competition for Neurotrophic Factors: Ocular Dominance Columns. <i>Journal of Neuroscience</i> , 1998, 18, 5850-5858.	1.7	42
329	Model of Cortical-Basal Ganglionic Processing: Encoding the Serial Order of Sensory Events. <i>Journal of Neurophysiology</i> , 1998, 79, 3168-3188.	0.9	214
330	Correlation-Based Development of Ocularly Matched Orientation and Ocular Dominance Maps: Determination of Required Input Activities. <i>Journal of Neuroscience</i> , 1998, 18, 9870-9895.	1.7	86
331	Experience-Dependent Plasticity of Adult Rat S1 Cortex Requires Local NMDA Receptor Activation. <i>Journal of Neuroscience</i> , 1998, 18, 10196-10206.	1.7	87
332	Suppression of NMDA Receptor Function Using Antisense DNA Blocks Ocular Dominance Plasticity While Preserving Visual Responses. <i>Journal of Neurophysiology</i> , 1998, 80, 1021-1032.	0.9	123
333	Adult Cortical Dynamics. <i>Physiological Reviews</i> , 1998, 78, 467-485.	13.1	424
334	Primed Facilitation of Homosynaptic Long-Term Depression and Depotentiation in Rat Hippocampus. <i>Journal of Neuroscience</i> , 1998, 18, 887-894.	1.7	73

#	ARTICLE	IF	CITATIONS
335	Hippocampal Synaptic Plasticity in Mice Overexpressing an Embryonic Subunit of the NMDA Receptor. <i>Journal of Neuroscience</i> , 1998, 18, 4177-4188.	1.7	95
336	Neural Learning Rules for the Vestibulo-Ocular Reflex. <i>Journal of Neuroscience</i> , 1998, 18, 9112-9129.	1.7	191
337	Inhibitory Control of LTP and LTD: Stability of Synapse Strength. <i>Journal of Neurophysiology</i> , 1999, 81, 1559-1566.	0.9	104
338	Chemically Induced, Activity-Independent LTD Elicited by Simultaneous Activation of PKG and Inhibition of PKA. <i>Journal of Neurophysiology</i> , 1999, 82, 1577-1589.	0.9	37
339	Arginine Analogs Modify Signal Detection by Neurons in the Visual Cortex. <i>Journal of Neuroscience</i> , 1999, 19, 5528-5548.	1.7	38
340	A Neurotrophic Model of the Development of the Retinogeniculocortical Pathway Induced by Spontaneous Retinal Waves. <i>Journal of Neuroscience</i> , 1999, 19, 7951-7970.	1.7	40
341	Priming-Induced Shift in Synaptic Plasticity in the Rat Hippocampus. <i>Journal of Neurophysiology</i> , 1999, 82, 2024-2028.	0.9	111
342	Experimental and theoretical evidence for a similar localization of words encoded through different modalities. <i>Behavioral and Brain Sciences</i> , 1999, 22, 285-286.	0.4	0
343	Hebb's other postulate at work on words. <i>Behavioral and Brain Sciences</i> , 1999, 22, 288-289.	0.4	26
344	Word versus task representation in neural networks. <i>Behavioral and Brain Sciences</i> , 1999, 22, 286-287.	0.4	4
345	Other brain effects of words. <i>Behavioral and Brain Sciences</i> , 1999, 22, 287-288.	0.4	25
346	Cell assemblies as building blocks of larger cognitive structures. <i>Behavioral and Brain Sciences</i> , 1999, 22, 292-293.	0.4	6
347	Locating meaning in interaction, not in the brain. <i>Behavioral and Brain Sciences</i> , 1999, 22, 304-305.	0.4	5
348	Words do not stand alone: Do not ignore a word's role when examining patterns of activation. <i>Behavioral and Brain Sciences</i> , 1999, 22, 289-290.	0.4	3
349	Toward a cognitive neuroscience of language. <i>Behavioral and Brain Sciences</i> , 1999, 22, 307-327.	0.4	2
350	Modulation of Long-Term Synaptic Depression in Visual Cortex by Acetylcholine and Norepinephrine. <i>Journal of Neuroscience</i> , 1999, 19, 1599-1609.	1.7	314
351	The neurobiology of knowledge retrieval. <i>Behavioral and Brain Sciences</i> , 1999, 22, 303-303.	0.4	32
352	Thought as word dynamics. <i>Behavioral and Brain Sciences</i> , 1999, 22, 295-295.	0.4	0

#	ARTICLE	IF	CITATIONS
353	Bihemispheric representation, foveal splitting, and visual word recognition. Behavioral and Brain Sciences, 1999, 22, 300-301.	0.4	0
354	Which phonology? Evidence for a dissociation between articulatory and auditory phonology from word-form deafness. Behavioral and Brain Sciences, 1999, 22, 290-291.	0.4	0
355	Words in the brain are not just labelled concepts. Behavioral and Brain Sciences, 1999, 22, 280-282.	0.4	48
356	Function and content words evoke different brain potentials. Behavioral and Brain Sciences, 1999, 22, 282-284.	0.4	1
357	Homogeneous neural networks cannot provide complex cognitive functions. Behavioral and Brain Sciences, 1999, 22, 293-293.	0.4	1
358	On computational and behavioral evidence regarding Hebbian transcortical cell assemblies. Behavioral and Brain Sciences, 1999, 22, 302-302.	0.4	0
359	Unifying cell assembly theory with observations of brain dynamics. Behavioral and Brain Sciences, 1999, 22, 297-298.	0.4	1
360	Flexible neural circuitry in word processing. Behavioral and Brain Sciences, 1999, 22, 299-300.	0.4	30
361	Only time can tell " words in context. Behavioral and Brain Sciences, 1999, 22, 300-300.	0.4	26
362	The dynamics of language. Behavioral and Brain Sciences, 1999, 22, 284-285.	0.4	0
363	Dondersian dreams in brain-mappers' minds, or, still no cross-fertilization between mind mappers and cognitive modelers?. Behavioral and Brain Sciences, 1999, 22, 293-295.	0.4	3
364	Words ~ sentences = ?. Behavioral and Brain Sciences, 1999, 22, 298-299.	0.4	0
365	What else should a neurobiological theory of language account for?. Behavioral and Brain Sciences, 1999, 22, 291-292.	0.4	1
366	What, where, and how "big" is a word?. Behavioral and Brain Sciences, 1999, 22, 295-296.	0.4	1
367	Re-assembling the brain: Are cell assemblies the brain's language for recovery of function?. Behavioral and Brain Sciences, 1999, 22, 284-284.	0.4	1
368	A spy to spy on a spy: From type to token representation with cell assemblies. Behavioral and Brain Sciences, 1999, 22, 306-307.	0.4	3
369	Semantic typing via neuronal assemblies. Behavioral and Brain Sciences, 1999, 22, 296-297.	0.4	0
370	Structure and dynamics of language representation. Behavioral and Brain Sciences, 1999, 22, 304-304.	0.4	3

#	ARTICLE	IF	CITATIONS
371	Early effects of semantic meaning on electrical brain activity. Behavioral and Brain Sciences, 1999, 22, 301-302.	0.4	30
372	Gamma band suppression by pseudowords: Evidence for lexical cell assemblies?. Behavioral and Brain Sciences, 1999, 22, 305-306.	0.4	0
373	An LTP/LTD perspective on learning rules. , 0, , .		0
374	A computational model of synaptic metaplasticity. , 0, , .		6
375	The role of presynaptic activity in monocular deprivation: Comparison of homosynaptic and heterosynaptic mechanisms. Proceedings of the National Academy of Sciences of the United States of America, 1999, 96, 1083-1087.	3.3	43
376	Words in the brain's language. Behavioral and Brain Sciences, 1999, 22, 253-279.	0.4	1,120
377	Molecular Correlates of Topographic Reorganization in Primary Visual Cortex Following Retinal Lesions. Cerebral Cortex, 1999, 9, 238-248.	1.6	44
378	A Nitric Oxide-Independent and beta -Adrenergic Receptor-Sensitive Form of Metaplasticity Limits theta -Frequency Stimulation-Induced LTP in the Hippocampal CA1 Region. Learning and Memory, 1999, 6, 619-633.	0.5	14
379	The Role of Dendritic Filtering in Associative Long-Term Synaptic Plasticity. Learning and Memory, 1999, 6, 422-447.	0.5	48
380	Bidirectional, experience-dependent regulation of N-methyl-D-aspartate receptor subunit composition in the rat visual cortex during postnatal development. Proceedings of the National Academy of Sciences of the United States of America, 1999, 96, 12876-12880.	3.3	348
381	Effects of noradrenaline on frequency tuning of auditory cortex neurons during wakefulness and slow-wave sleep. European Journal of Neuroscience, 1999, 11, 2134-2150.	1.2	86
382	Prior short-term synaptic disinhibition facilitates long-term potentiation and suppresses long-term depression at CA1 hippocampal synapses. European Journal of Neuroscience, 1999, 11, 4059-4069.	1.2	23
383	Dendritic spine changes associated with hippocampal long-term synaptic plasticity. Nature, 1999, 399, 66-70.	13.7	1,556
384	A family of mammalian Na ⁺ -dependent L-ascorbic acid transporters. Nature, 1999, 399, 70-75.	13.7	822
389	Monocular deprivation induces homosynaptic long-term depression in visual cortex. Nature, 1999, 397, 347-350.	13.7	219
390	In vivo regulation of axon extension and pathfinding by growth-cone calcium transients. Nature, 1999, 397, 350-355.	13.7	448
391	Rapid, experience-dependent expression of synaptic NMDA receptors in visual cortex in vivo. Nature Neuroscience, 1999, 2, 352-357.	7.1	519
392	Plasticity in the intrinsic excitability of cortical pyramidal neurons. Nature Neuroscience, 1999, 2, 515-520.	7.1	697

#	ARTICLE	IF	CITATIONS
393	Antidromic Spikes Drive Hebbian Learning in an Artificial Dendritic Tree. <i>Analog Integrated Circuits and Signal Processing</i> , 1999, 18, 141-152.	0.9	6
394	Computational model of the effects of stochastic conditioning on the induction of long-term potentiation and depression. <i>Biological Cybernetics</i> , 1999, 81, 291-298.	0.6	5
395	Lateral connectivity as a scaffold for developing orientation preference maps. <i>Neurocomputing</i> , 1999, 26-27, 381-387.	3.5	3
396	Cortical plasticity: Is it time for a change?. <i>Current Biology</i> , 1999, 9, R640-R643.	1.8	13
397	Experimental Realization of a Signal Transduction Algorithm. <i>Journal of Theoretical Biology</i> , 1999, 200, 39-48.	0.8	12
398	Is the development of orientation selectivity instructed by activity?. , 1999, 41, 44-57.		57
399	Activity-dependent regulation of receptive field properties of cat area 17 by supervised Hebbian learning. <i>Journal of Neurobiology</i> , 1999, 41, 69-82.	3.7	59
400	Molecular basis for induction of ocular dominance plasticity. , 1999, 41, 83-91.		102
401	Synaptic plasticity at thalamocortical synapses in developing rat somatosensory cortex: LTP, LTD, and silent synapses. , 1999, 41, 92-101.		185
402	Developmental regulation of synaptic mechanisms that may contribute to learning and memory. <i>Mental Retardation and Developmental Disabilities Research Reviews</i> , 1999, 5, 60-71.	3.5	1
403	Computational approaches to neural reward and development. <i>Mental Retardation and Developmental Disabilities Research Reviews</i> , 1999, 5, 86-99.	3.5	12
404	Selective Pruning of More Active Afferents When Cat Visual Cortex Is Pharmacologically Inhibited. <i>Neuron</i> , 1999, 22, 375-381.	3.8	82
405	Involvement of hippocampal synaptic plasticity in age-related memory decline. <i>Brain Research Reviews</i> , 1999, 30, 236-249.	9.1	285
406	Homeostatic plasticity in neuronal networks: the more things change, the more they stay the same. <i>Trends in Neurosciences</i> , 1999, 22, 221-227.	4.2	714
407	BDNF Regulates the Maturation of Inhibition and the Critical Period of Plasticity in Mouse Visual Cortex. <i>Cell</i> , 1999, 98, 739-755.	13.5	1,072
408	Long-Term Potentiation and Depression Induced by a Stochastic Conditioning of a Model Synapse. <i>Biophysical Journal</i> , 1999, 77, 1234-1243.	0.2	19
409	Connectionist modeling of speech perception.. <i>Psychological Bulletin</i> , 1999, 125, 410-436.	5.5	23
410	Memory for serial order: A network model of the phonological loop and its timing.. <i>Psychological Review</i> , 1999, 106, 551-581.	2.7	718

#	ARTICLE	IF	CITATIONS
411	Solutions of the BCM learning rule in a network of lateral interacting nonlinear neurons. <i>Network: Computation in Neural Systems</i> , 1999, 10, 111-121.	2.2	20
412	Development of directionally selective microcircuits in striate cortex. <i>Lecture Notes in Computer Science</i> , 1999, , 53-64.	1.0	2
413	Computational study of experience-dependent plasticity in adult rat cortical barrel-column. <i>Network: Computation in Neural Systems</i> , 1999, 10, 303-323.	2.2	8
414	A Comparison of Natural-Image-Based Models of Simple-Cell Coding. <i>Perception</i> , 2000, 29, 1017-1040.	0.5	30
415	Stable Hebbian Learning from Spike Timing-Dependent Plasticity. <i>Journal of Neuroscience</i> , 2000, 20, 8812-8821.	1.7	657
416	Two sites of synaptic integration: relevant for learning?. , 2000, , .		2
417	Learning with two sites of synaptic integration. <i>Network: Computation in Neural Systems</i> , 2000, 11, 25-39.	2.2	58
418	Evidence for the involvement of TNF and NF- κ B in hippocampal synaptic plasticity. , 2000, 35, 151-159.		444
419	Differential effects of neurotrophins on ocular dominance plasticity in developing and adult cat visual cortex. <i>European Journal of Neuroscience</i> , 2000, 12, 3315-3330.	1.2	36
420	Experience-dependent plasticity of visual acuity in rats. <i>European Journal of Neuroscience</i> , 2000, 12, 3781-3786.	1.2	57
421	A learning rule for dynamic recruitment and decorrelation. <i>Neural Networks</i> , 2000, 13, 1-9.	3.3	22
422	Diverse receptive fields in the lateral geniculate nucleus during thalamocortical development. <i>Nature Neuroscience</i> , 2000, 3, 608-616.	7.1	103
423	Competitive Hebbian learning through spike-timing-dependent synaptic plasticity. <i>Nature Neuroscience</i> , 2000, 3, 919-926.	7.1	2,193
424	Synaptic plasticity: taming the beast. <i>Nature Neuroscience</i> , 2000, 3, 1178-1183.	7.1	1,822
425	Calcium stores regulate the polarity and input specificity of synaptic modification. <i>Nature</i> , 2000, 408, 584-588.	13.7	575
426	Synaptic learning models of map separation in the hippocampus. <i>Neurocomputing</i> , 2000, 32-33, 379-384.	3.5	8
427	A spike based learning rule for generation of invariant representations. <i>Journal of Physiology (Paris)</i> , 2000, 94, 539-548.	2.1	5
428	How can squint change the spacing of ocular dominance columns?. <i>Journal of Physiology (Paris)</i> , 2000, 94, 525-537.	2.1	13

#	ARTICLE	IF	CITATIONS
429	Linking Hebb's coincidence-detection to memory formation. <i>Current Opinion in Neurobiology</i> , 2000, 10, 266-273.	2.0	190
430	Natural patterns of activity and long-term synaptic plasticity. <i>Current Opinion in Neurobiology</i> , 2000, 10, 172-180.	2.0	274
431	Nitric oxide, impulse activity, and neurotrophins in visual system development11Published on the World Wide Web on 16 August 2000.. <i>Brain Research</i> , 2000, 886, 15-32.	1.1	42
432	Learning cortical topography from spatiotemporal stimuli. <i>Biological Cybernetics</i> , 2000, 82, 173-187.	0.6	31
433	Visual channels, Hebbian assemblies and the effect of Hebb's rule. <i>Biological Cybernetics</i> , 2000, 82, 401-413.	0.6	2
434	Transient Removal of Extracellular Mg ²⁺ Elicits Persistent Suppression of LTP at Hippocampal CA1 Synapses Via PKC Activation. <i>Journal of Neurophysiology</i> , 2000, 84, 1279-1288.	0.9	21
435	An Associational Model of Birdsong Sensorimotor Learning I. Efference Copy and the Learning of Song Syllables. <i>Journal of Neurophysiology</i> , 2000, 84, 1204-1223.	0.9	134
436	Structured Long-Range Connections Can Provide a Scaffold for Orientation Maps. <i>Journal of Neuroscience</i> , 2000, 20, 1119-1128.	1.7	42
437	Synaptic Activity Modulates the Induction of Bidirectional Synaptic Changes in Adult Mouse Hippocampus. <i>Journal of Neuroscience</i> , 2000, 20, 2451-2458.	1.7	127
438	Estradiol Modulates Long-Term Synaptic Depression in Female Rat Hippocampus. <i>Journal of Neurophysiology</i> , 2000, 84, 1800-1808.	0.9	34
439	Cannabinoids Modulate Synaptic Strength and Plasticity at Glutamatergic Synapses of Rat Prefrontal Cortex Pyramidal Neurons. <i>Journal of Neurophysiology</i> , 2000, 83, 3287-3293.	0.9	259
440	Auditory Thalamus Neurons During Sleep: Changes in Frequency Selectivity, Threshold, and Receptive Field Size. <i>Journal of Neurophysiology</i> , 2000, 84, 934-952.	0.9	89
441	Formation of Direction Selectivity in Natural Scene Environments. <i>Neural Computation</i> , 2000, 12, 1057-1066.	1.3	22
442	Conditional information analysis. , 2000, , .		1
443	Feature extraction from colour and stereo images using ICA. , 2000, , .		3
444	Independent component analysis applied to feature extraction from colour and stereo images. <i>Network: Computation in Neural Systems</i> , 2000, 11, 191-210.	2.2	146
445	MEMORIES AND MEMORY: A PHYSICIST'S APPROACH TO THE BRAIN. <i>International Journal of Modern Physics A</i> , 2000, 15, 4069-4082.	0.5	14
446	Spike-Driven Synaptic Plasticity: Theory, Simulation, VLSI Implementation. <i>Neural Computation</i> , 2000, 12, 2227-2258.	1.3	184

#	ARTICLE	IF	CITATIONS
447	Sensory deprivation without competition yields modest alterations of short-term synaptic dynamics. Proceedings of the National Academy of Sciences of the United States of America, 2000, 97, 12864-12868.	3.3	31
448	Statistics of lateral geniculate nucleus (LGN) activity determine the segregation of ON/OFF subfields for simple cells in visual cortex. Proceedings of the National Academy of Sciences of the United States of America, 2000, 97, 12875-12879.	3.3	11
449	Estradiol Enhances the Induction of Homosynaptic Long-Term Depression in the CA1 Region of the Adult, Ovariectomized Rat. Neurobiology of Learning and Memory, 2000, 73, 180-187.	1.0	37
450	Synaptic Plasticity and Memory: An Evaluation of the Hypothesis. Annual Review of Neuroscience, 2000, 23, 649-711.	5.0	2,363
451	17 β -estradiol suppresses expression of long-term depression in aged rats. Brain Research Bulletin, 2000, 53, 783-787.	1.4	73
452	Roles of NMDA receptor activity and nitric oxide production in brain development. Brain Research Reviews, 2000, 32, 476-509.	9.1	309
453	On the design of neural networks in the brain by genetic evolution. Progress in Neurobiology, 2000, 61, 557-579.	2.8	63
454	Timing-Based LTP and LTD at Vertical Inputs to Layer II/III Pyramidal Cells in Rat Barrel Cortex. Neuron, 2000, 27, 45-56.	3.8	583
455	Columnar distribution of serotonin-dependent plasticity within kitten striate cortex. Proceedings of the National Academy of Sciences of the United States of America, 2000, 97, 1841-1844.	3.3	62
456	Experience-dependent Plasticity of Rat Barrel Cortex: Redistribution of Activity across Barrel-columns. Cerebral Cortex, 2000, 10, 23-31.	1.6	78
457	Intrinsic Stabilization of Output Rates by Spike-Based Hebbian Learning. Neural Computation, 2001, 13, 2709-2741.	1.3	147
458	Synaptic Modification by Correlated Activity: Hebb's Postulate Revisited. Annual Review of Neuroscience, 2001, 24, 139-166.	5.0	1,322
459	A Hebbian feedback covariance learning paradigm for self-tuning optimal control. IEEE Transactions on Systems, Man, and Cybernetics, 2001, 31, 173-186.	5.5	14
460	Changes in neuronal excitability and synaptic function in a chronic model of temporal lobe epilepsy. Neuroscience, 2001, 103, 17-26.	1.1	15
461	Long-term depression: a cascade of induction and expression mechanisms. Progress in Neurobiology, 2001, 65, 339-365.	2.8	224
462	Neuromodulatory control of interacting medial temporal lobe and neocortex in memory consolidation and working memory. Behavioural Brain Research, 2001, 126, 65-80.	1.2	5
463	Transient translocation of conventional protein kinase C isoforms and persistent downregulation of atypical protein kinase M $\bar{1}\eta$ in long-term depression. Molecular Brain Research, 2001, 95, 146-152.	2.5	34
464	Visual Experience and Deprivation Bidirectionally Modify the Composition and Function of NMDA Receptors in Visual Cortex. Neuron, 2001, 29, 157-169.	3.8	360

#	ARTICLE	IF	CITATIONS
465	Cortical Development and Remapping through Spike Timing-Dependent Plasticity. <i>Neuron</i> , 2001, 32, 339-350.	3.8	433
466	Rate, Timing, and Cooperativity Jointly Determine Cortical Synaptic Plasticity. <i>Neuron</i> , 2001, 32, 1149-1164.	3.8	1,022
467	The effect of autonomous alpha-CaMKII expression on sensory responses and experience-dependent plasticity in mouse barrel cortex. <i>Neuropharmacology</i> , 2001, 41, 771-778.	2.0	20
468	Effect of transgenic overexpression of NR2B on NMDA receptor function and synaptic plasticity in visual cortex. <i>Neuropharmacology</i> , 2001, 41, 762-770.	2.0	70
469	Inducible and Reversible Enhancement of Learning, Memory, and Long-Term Potentiation by Genetic Inhibition of Calcineurin. <i>Cell</i> , 2001, 104, 675-686.	13.5	440
470	A new simple α -OH neuron model as a principal component analyzer. , 0, , .		0
471	Bidirectional Synaptic Plasticity Correlated With the Magnitude of Dendritic Calcium Transients Above a Threshold. <i>Journal of Neurophysiology</i> , 2001, 85, 399-406.	0.9	128
472	Time-Dependent Reversal of Long-Term Potentiation by Low-Frequency Stimulation at the Hippocampal Mossy Fiber-CA3 Synapses. <i>Journal of Neuroscience</i> , 2001, 21, 3705-3714.	1.7	69
473	Role of Inhibition in Cortical Reorganization of the Adult Raccoon Revealed by Microiontophoretic Blockade of GABA _A Receptors. <i>Journal of Neurophysiology</i> , 2001, 86, 94-103.	0.9	46
474	Postsynaptic Depolarization Scales Quantal Amplitude in Cortical Pyramidal Neurons. <i>Journal of Neuroscience</i> , 2001, 21, RC170-RC170.	1.7	114
475	Self-Organized Synaptic Plasticity Contributes to the Shaping of \hat{I}^3 and \hat{I}^2 Oscillations <i>In Vitro</i> . <i>Journal of Neuroscience</i> , 2001, 21, 9053-9067.	1.7	58
476	LTD Induction in Adult Visual Cortex: Role of Stimulus Timing and Inhibition. <i>Journal of Neuroscience</i> , 2001, 21, 2308-2319.	1.7	38
477	Effects of monocular deprivation and reverse suture on orientation maps can be explained by activity-instructed development of geniculocortical connections. <i>Visual Neuroscience</i> , 2001, 18, 821-834.	0.5	29
478	Chapter 3 BDNF/trkB signaling in the developmental sculpting of visual connections. <i>Progress in Brain Research</i> , 2001, 134, 35-49.	0.9	30
479	Effects of Early Visual Experience and Diurnal Rhythms on BDNF mRNA and Protein Levels in the Visual System, Hippocampus, and Cerebellum. <i>Journal of Neuroscience</i> , 2001, 21, 3923-3931.	1.7	122
480	Diversity of receptive field changes in auditory cortex during natural sleep. <i>European Journal of Neuroscience</i> , 2001, 14, 1865-1880.	1.2	98
481	Stress, hippocampal plasticity, and spatial learning. <i>Synapse</i> , 2001, 40, 180-183.	0.6	82
482	Competitive Hebbian learning and the hippocampal place cell system: Modeling the interaction of visual and path integration cues. <i>Hippocampus</i> , 2001, 11, 216-239.	0.9	29

#	ARTICLE	IF	CITATIONS
483	The New Associationism: A Neural Explanation for the Predictive Powers of Cerebral Cortex. <i>Brain and Mind</i> , 2001, 2, 161-194.	0.6	36
484	Paradoxical Signal Transduction in Neurobiological Systems. <i>Molecular Neurobiology</i> , 2001, 24, 145-168.	1.9	24
485	Growth and repair: Instantiating a biologically inspired model of neuronal development on the Khepera robot. <i>Robotics and Autonomous Systems</i> , 2001, 36, 149-169.	3.0	6
486	Beyond parallel fiber LTD: the diversity of synaptic and non-synaptic plasticity in the cerebellum. <i>Nature Neuroscience</i> , 2001, 4, 467-475.	7.1	557
487	An experimental test of the role of postsynaptic calcium levels in determining synaptic strength using perirhinal cortex of rat. <i>Journal of Physiology</i> , 2001, 532, 459-466.	1.3	147
488	A mechanism of signal transduction operating with opiate receptors. <i>Neurocomputing</i> , 2001, 38-40, 53-64.	3.5	2
489	Initial recovery of vision after early monocular deprivation in kittens is faster when both eyes are open. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2001, 98, 11662-11667.	3.3	45
490	Progress in Understanding the Factors Regulating Reversibility of Long-term Potentiation. <i>Reviews in the Neurosciences</i> , 2001, 12, 51-68.	1.4	95
491	A stochastic competitive learning algorithm. , 0, , .		3
492	A biophysical model of bidirectional synaptic plasticity: Dependence on AMPA and NMDA receptors. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2001, 98, 12772-12777.	3.3	137
493	A Statistical Theory of Long-Term Potentiation and Depression. <i>Neural Computation</i> , 2001, 13, 87-111.	1.3	12
494	An Algorithm for Modifying Neurotransmitter Release Probability Based on Pre- and Postsynaptic Spike Timing. <i>Neural Computation</i> , 2001, 13, 35-67.	1.3	180
495	Theory for normal and impaired experience-dependent plasticity in neocortex of adult rats. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2001, 98, 2797-2802.	3.3	23
496	Heterosynaptic metaplasticity in the hippocampus in vivo: A BCM-like modifiable threshold for LTP. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2001, 98, 10924-10929.	3.3	145
497	Competition in the development of nerve connections: a review of models. <i>Network: Computation in Neural Systems</i> , 2001, 12, 1-47.	2.2	68
498	A simple biologically inspired principal component analyzer-ModH neuron model. , 0, , .		0
499	Local Circuit Properties Underlying Cortical Reorganization. <i>Journal of Neurophysiology</i> , 2002, 88, 1288-1301.	0.9	66
500	Age and stimulation frequency affect the transition from long-term depression to long-term potentiation in the freely moving rat. , 0, , .		0

#	ARTICLE	IF	CITATIONS
501	Multiplicative Synaptic Normalization and a Nonlinear Hebb Rule Underlie a Neurotrophic Model of Competitive Synaptic Plasticity. <i>Neural Computation</i> , 2002, 14, 1311-1322.	1.3	28
502	Self-Organization in the Basal Ganglia with Modulation of Reinforcement Signals. <i>Neural Computation</i> , 2002, 14, 819-844.	1.3	20
503	Regulation of synaptic plasticity in memory and memory decline with aging. <i>Progress in Brain Research</i> , 2002, 138, 283-303.	0.9	46
504	Dynamical model of long-term synaptic plasticity. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2002, 99, 10132-10137.	3.3	90
505	Rate and timing in cortical synaptic plasticity. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , 2002, 357, 1851-1857.	1.8	28
506	Machine Psychology: Autonomous Behavior, Perceptual Categorization and Conditioning in a Brain-based Device. <i>Cerebral Cortex</i> , 2002, 12, 818-830.	1.6	73
507	A unified model of NMDA receptor-dependent bidirectional synaptic plasticity. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2002, 99, 10831-10836.	3.3	576
509	Synaptic plasticity in the diabetic brain: advanced aging?. <i>Progress in Brain Research</i> , 2002, 138, 305-314.	0.9	23
510	Learning sensory maps with real-world stimuli in real time using a biophysically realistic learning rule. <i>IEEE Transactions on Neural Networks</i> , 2002, 13, 619-632.	4.8	12
511	Derivation of the Visual Contrast Response Function by Maximizing Information Rate. <i>Neural Computation</i> , 2002, 14, 527-542.	1.3	13
512	A Bayesian attractor network with incremental learning. <i>Network: Computation in Neural Systems</i> , 2002, 13, 179-194.	2.2	45
513	Bidirectional plasticity of excitatory postsynaptic potential (EPSP)-spike coupling in CA1 hippocampal pyramidal neurons. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2002, 99, 14512-14517.	3.3	131
514	A neural approach to adaptive behavior and multi-sensor action selection in a mobile device. , 0, , .		1
515	Rearrangement of receptive field topography after intracortical and peripheral stimulation: the role of plasticity in inhibitory pathways. <i>Network: Computation in Neural Systems</i> , 2002, 13, 1-40.	2.2	8
516	Transition from long-term depression to long-term potentiation as a function of stimulation frequency in the freely moving rat. , 0, , .		2
517	Artificial Neural Network Learning: A Comparative Review. <i>Lecture Notes in Computer Science</i> , 2002, , 300-313.	1.0	24
518	Spatio-temporal plasticity of cortical receptive fields in response to repetitive visual stimulation in the adult cat. <i>Neuroscience</i> , 2002, 112, 195-215.	1.1	21
519	A problem with Hebb and local spikes. <i>Trends in Neurosciences</i> , 2002, 25, 433-435.	4.2	62

#	ARTICLE	IF	CITATIONS
520	Propofol facilitates the development of long-term depression (LTD) and impairs the maintenance of long-term potentiation (LTP) in the CA1 region of the hippocampus of anesthetized rats. <i>Neuroscience Letters</i> , 2002, 324, 181-184.	1.0	54
521	Targeted Disruption of RC3 Reveals a Calmodulin-Based Mechanism for Regulating Metaplasticity in the Hippocampus. <i>Journal of Neuroscience</i> , 2002, 22, 5525-5535.	1.7	89
522	Segregation of on and off Retinogeniculate Connectivity Directed by Patterned Spontaneous Activity. <i>Journal of Neurophysiology</i> , 2002, 88, 2311-2321.	0.9	42
523	Protein Synthesis Is Required for the Enhancement of Long-Term Potentiation and Long-Term Memory by Spaced Training. <i>Journal of Neurophysiology</i> , 2002, 87, 2770-2777.	0.9	179
524	Long-Range Synchronization of \hat{I}^3 and \hat{I}^2 Oscillations and the Plasticity of Excitatory and Inhibitory Synapses: A Network Model. <i>Journal of Neurophysiology</i> , 2002, 88, 1634-1654.	0.9	117
525	Small Conductance Ca^{2+} -Activated K^{+} Channels Modulate Synaptic Plasticity and Memory Encoding. <i>Journal of Neuroscience</i> , 2002, 22, 10163-10171.	1.7	249
526	The Role of Activity in Development of the Visual System. <i>Current Biology</i> , 2002, 12, R818-R826.	1.8	125
527	Simulation of spiking neural networks " architectures and implementations. <i>Neurocomputing</i> , 2002, 48, 647-679.	3.5	30
528	Establishing retinotopy by lateral-inhibition type homogeneous neural fields. <i>Neurocomputing</i> , 2002, 48, 313-322.	3.5	17
529	Optimal spontaneous activity in neural network modeling. <i>Neurocomputing</i> , 2002, 44-46, 591-595.	3.5	0
530	Synaptic modification in neural circuits: A timely action. <i>BioEssays</i> , 2002, 24, 212-222.	1.2	22
531	Complexity of calcium signaling in synaptic spines. <i>BioEssays</i> , 2002, 24, 1130-1144.	1.2	94
532	Alterations in the balance of protein kinase and phosphatase activities and age-related impairments of synaptic transmission and long-term potentiation. <i>Hippocampus</i> , 2002, 12, 787-802.	0.9	61
533	Effect of GABAB receptor blockade on receptive fields of raccoon somatosensory cortical neurons during reorganization. <i>Experimental Brain Research</i> , 2002, 145, 150-157.	0.7	19
534	Dissociating ocular dominance column development and ocular dominance plasticity: a neurotrophic model. <i>Biological Cybernetics</i> , 2002, 86, 281-292.	0.6	5
535	A spin-glass-like Lyapunov function for a neurotrophic model of neuronal development. <i>Biological Cybernetics</i> , 2002, 86, 473-481.	0.6	2
536	Spatiotemporal specificity of synaptic plasticity: cellular rules and mechanisms. <i>Biological Cybernetics</i> , 2002, 87, 319-332.	0.6	69
537	Beyond spike timing: the role of nonlinear plasticity and unreliable synapses. <i>Biological Cybernetics</i> , 2002, 87, 344-355.	0.6	40

#	ARTICLE	IF	CITATIONS
538	Spike-timing-dependent plasticity: common themes and divergent vistas. <i>Biological Cybernetics</i> , 2002, 87, 446-458.	0.6	89
539	What can the hippocampal representation of environmental geometry tell us about Hebbian learning?. <i>Biological Cybernetics</i> , 2002, 87, 356-372.	0.6	39
540	Spike timing dependent synaptic plasticity in biological systems. <i>Biological Cybernetics</i> , 2002, 87, 392-403.	0.6	131
541	Converging evidence for a simplified biophysical model of synaptic plasticity. <i>Biological Cybernetics</i> , 2002, 87, 383-391.	0.6	68
542	Excitotoxic Mechanisms of Apoptosis in the Mammalian Visual System Following Monocular Visual Deprivation. <i>Basic and Clinical Pharmacology and Toxicology</i> , 2002, 91, 153-157.	0.0	4
543	Activity-dependent receptive field changes in the surround of adult cat visual cortex lesions. <i>European Journal of Neuroscience</i> , 2002, 15, 1585-1596.	1.2	32
544	NMDA receptor-mediated metaplasticity during the induction of long-term depression by low-frequency stimulation. <i>European Journal of Neuroscience</i> , 2002, 15, 1819-1826.	1.2	84
545	BDNF attenuates hippocampal LTD via activation of phospholipase C: implications for a vertical shift in the frequency-response curve of synaptic plasticity. <i>European Journal of Neuroscience</i> , 2002, 16, 145-148.	1.2	63
546	Hippocampal long-term depression as an index of spatial working memory. <i>European Journal of Neuroscience</i> , 2002, 16, 970-974.	1.2	68
547	Change in bi-directional plasticity at CA1 synapses in hippocampal slices taken from 6-hydroxydopamine-treated rats: the role of endogenous norepinephrine. <i>European Journal of Neuroscience</i> , 2002, 16, 1117-1128.	1.2	54
548	Neuromodulation and plasticity in an autonomous robot. <i>Neural Networks</i> , 2002, 15, 761-774.	3.3	71
549	Correlated binocular activity guides recovery from monocular deprivation. <i>Nature</i> , 2002, 416, 430-433.	13.7	77
550	Spike-timing-dependent synaptic modification induced by natural spike trains. <i>Nature</i> , 2002, 416, 433-438.	13.7	702
551	Spike-based synaptic plasticity and the emergence of direction selective simple cells: simulation results. <i>Journal of Computational Neuroscience</i> , 2002, 13, 167-186.	0.6	49
552	Rapid eye movement sleep deprivation modifies expression of long-term potentiation in visual cortex of immature rats. <i>Neuroscience</i> , 2002, 110, 431-443.	1.1	143
553	Stable Neural Attractors Formation: Learning Rules and Network Dynamics. <i>Neural Processing Letters</i> , 2003, 18, 1-16.	2.0	7
554	Dynamical synaptic plasticity: a model and connection to some experiments. <i>Biological Cybernetics</i> , 2003, 88, 229-235.	0.6	6
555	Models describing nonlinear interactions in graded neuron synapses. <i>Biological Cybernetics</i> , 2003, 88, 380-386.	0.6	2

#	ARTICLE	IF	CITATIONS
556	Biophysical model of synaptic plasticity dynamics. <i>Biological Cybernetics</i> , 2003, 89, 214-226.	0.6	67
557	A competitive model for spectral plasticity in the outer retina. <i>Neurocomputing</i> , 2003, 50, 407-418.	3.5	0
558	Calcium as the associative signal for a model of Hebbian plasticity: application to multi-input environments. <i>Neurocomputing</i> , 2003, 52-54, 437-440.	3.5	3
559	Mouse visual cortex. <i>Current Opinion in Neurobiology</i> , 2003, 13, 413-420.	2.0	71
560	Acetylcholine-dependent potentiation of temporal frequency representation in the barrel cortex does not depend on response magnitude during conditioning. <i>Journal of Physiology (Paris)</i> , 2003, 97, 431-439.	2.1	15
561	Brain plasticity and ion channels. <i>Journal of Physiology (Paris)</i> , 2003, 97, 403-414.	2.1	110
562	Homeostatic plasticity in the CNS: synaptic and intrinsic forms. <i>Journal of Physiology (Paris)</i> , 2003, 97, 391-402.	2.1	130
563	Synaptic gain control and homeostasis. <i>Current Opinion in Neurobiology</i> , 2003, 13, 560-567.	2.0	199
564	Active decay of composite excitatory postsynaptic potentials in hippocampal slices from young rats. <i>Brain Research</i> , 2003, 973, 44-55.	1.1	8
565	Extracellular GABA concentrations in area 17 of cat visual cortex during topographic map reorganization following binocular central retinal lesioning. <i>Brain Research</i> , 2003, 976, 100-108.	1.1	30
566	Developmental plasticity of mouse visual acuity. <i>European Journal of Neuroscience</i> , 2003, 17, 167-173.	1.2	162
567	Direct and indirect interactions between cannabinoid CB1 receptor and group II metabotropic glutamate receptor signalling in layer V pyramidal neurons from the rat prefrontal cortex. <i>European Journal of Neuroscience</i> , 2003, 17, 981-990.	1.2	27
568	Chronic unpredictable stress impairs long-term potentiation in rat hippocampal CA1 area and dentate gyrus in vitro. <i>European Journal of Neuroscience</i> , 2003, 17, 1928-1934.	1.2	230
569	Fimbrial control of bidirectional synaptic plasticity of medial perforant path-dentate transmission. <i>Synapse</i> , 2003, 47, 163-168.	0.6	11
570	Cyclic AMP/GMP-dependent modulation of Ca ²⁺ channels sets the polarity of nerve growth-cone turning. <i>Nature</i> , 2003, 423, 990-995.	13.7	350
571	Molecular mechanism for loss of visual cortical responsiveness following brief monocular deprivation. <i>Nature Neuroscience</i> , 2003, 6, 854-862.	7.1	301
572	Bidirectional synaptic plasticity: from theory to reality. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , 2003, 358, 649-655.	1.8	222
573	On the Choice of a Sparse Prior. <i>Reviews in the Neurosciences</i> , 2003, 14, 53-62.	1.4	8

#	ARTICLE	IF	CITATIONS
574	Characterization of hippocampal synaptic plasticity in the freely behaving neonatal rat. , 0, , .		0
575	Synaptic plasticity and cell cycle activation in neurons are alternative effector pathways: the 'Dr. Jekyll and Mr. Hyde concept' of Alzheimer's disease or the yin and yang of neuroplasticity. Progress in Neurobiology, 2003, 71, 83-248.	2.8	176
576	Calcineurin in memory and bidirectional plasticity. Biochemical and Biophysical Research Communications, 2003, 311, 1195-1208.	1.0	172
577	Effects of stimulus frequency and age on bidirectional synaptic plasticity in the dentate gyrus of freely moving rats. Experimental Neurology, 2003, 182, 497-506.	2.0	35
578	Impact of aging on hippocampal function: plasticity, network dynamics, and cognition. Progress in Neurobiology, 2003, 69, 143-179.	2.8	644
579	Roles of amyloid precursor protein and its fragments in regulating neural activity, plasticity and memory. Progress in Neurobiology, 2003, 70, 1-32.	2.8	620
580	Compatibility of bidirectional synaptic plasticity on hippocampo-prefrontal cortex pathway in rats. Neuroscience Letters, 2003, 345, 69-71.	1.0	20
581	Bidirectional Changes in Spatial Dendritic Integration Accompanying Long-Term Synaptic Modifications. Neuron, 2003, 37, 463-472.	3.8	122
582	NMDA Receptor-Dependent Ocular Dominance Plasticity in Adult Visual Cortex. Neuron, 2003, 38, 977-985.	3.8	422
583	Activity Driven Adaptive Stochastic Resonance. Physical Review Letters, 2003, 90, 120602.	2.9	50
584	Relating STDP to BCM. Neural Computation, 2003, 15, 1511-1523.	1.3	301
586	Design of a neuromorphic Hebbian synapse using analog VLSI. , 0, , .		3
587	Introduction. Philosophical Transactions of the Royal Society B: Biological Sciences, 2003, 358, 607-611.	1.8	91
588	Long-Term Plasticity of Intrinsic Excitability: Learning Rules and Mechanisms. Learning and Memory, 2003, 10, 456-465.	0.5	441
589	Spike-driven Synaptic Plasticity for Learning Correlated Patterns of Mean Firing Rates. Reviews in the Neurosciences, 2003, 14, 73-84.	1.4	23
590	Stability of negative-image equilibria in spike-timing-dependent plasticity. Physical Review E, 2003, 68, 021923.	0.8	15
591	A new simple α -OH neuron model as a biologically plausible principal component analyzer. IEEE Transactions on Neural Networks, 2003, 14, 853-859.	4.8	12
592	Brain-derived neurotrophic factor-dependent unmasking of "silent" synapses in the developing mouse barrel cortex. Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 13069-13074.	3.3	98

#	ARTICLE	IF	CITATIONS
593	The Effect of Noise on a Class of Energy-Based Learning Rules. <i>Neural Computation</i> , 2003, 15, 1621-1640.	1.3	6
594	An Analysis of Synaptic Normalization in a General Class of Hebbian Models. <i>Neural Computation</i> , 2003, 15, 937-963.	1.3	18
595	N-methyl-D-aspartate receptor blockade during development lowers long-term potentiation threshold without affecting dynamic range of CA3-CA1 synapses. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2003, 100, 5503-5508.	3.3	16
596	Conditional Information Control to Maximize and Minimize Information. <i>International Journal of Smart Engineering System Design</i> , 2003, 5, 187-202.	0.2	0
597	A brief history of the Hebbian learning rule.. <i>Canadian Psychology</i> , 2003, 44, 5-9.	1.4	18
598	Lesions of Mature Barrel Field Cortex Interfere with Sensory Processing and Plasticity in Connected Areas of the Contralateral Hemisphere. <i>Journal of Neuroscience</i> , 2003, 23, 10378-10387.	1.7	39
599	Apoptosis in the Mechanisms of Neuronal Plasticity in the Developing Visual System. <i>European Journal of Ophthalmology</i> , 2003, 13, 36-43.	0.7	18
600	Enhancement of Associative Long-Term Potentiation by Activation of \hat{I}^2 -Adrenergic Receptors at CA1 Synapses in Rat Hippocampal Slices. <i>Journal of Neuroscience</i> , 2003, 23, 4173-4181.	1.7	100
601	A Conditioned Stressful Environment Causes Short-Term Metaplastic-Like Changes in the Rat Nucleus Accumbens. <i>Journal of Neurophysiology</i> , 2003, 90, 3224-3231.	0.9	9
602	Induction Properties of Synaptic Plasticity in Rat Prefrontal Neurons. , 2004, , 85-106.		0
603	Texture discrimination by an autonomous mobile brain-based device with whiskers. , 2004, , .		16
604	Spike-Timing-Dependent Plasticity: The Relationship to Rate-Based Learning for Models with Weight Dynamics Determined by a Stable Fixed Point. <i>Neural Computation</i> , 2004, 16, 885-940.	1.3	73
605	Random walks for spike-timing-dependent plasticity. <i>Physical Review E</i> , 2004, 70, 021916.	0.8	5
606	Long-term depression is reliably induced in rats at 30 days of age. , 2004, 2004, 4600-2.		0
607	Selective Modulation of Some Forms of Schaffer Collateral-CA1 Synaptic Plasticity in Mice With a Disruption of the CPEB-1 Gene. <i>Learning and Memory</i> , 2004, 11, 318-327.	0.5	142
608	Amygdala stimulation modulates hippocampal synaptic plasticity. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2004, 101, 14270-14275.	3.3	79
609	Understanding the Neural Basis of Amblyopia. <i>Neuroscientist</i> , 2004, 10, 106-117.	2.6	114
610	TMS Induced Plasticity in Human Cortex. <i>Reviews in the Neurosciences</i> , 2004, 15, 253-66.	1.4	163

#	ARTICLE	IF	CITATIONS
611	The Kinetic Profile of Intracellular Calcium Predicts Long-Term Potentiation and Long-Term Depression. <i>Journal of Neuroscience</i> , 2004, 24, 9847-9861.	1.7	91
612	Visual Binding Through Reentrant Connectivity and Dynamic Synchronization in a Brain-based Device. <i>Cerebral Cortex</i> , 2004, 14, 1185-1199.	1.6	59
613	A Morphological Correlate of Synaptic Scaling in Visual Cortex. <i>Journal of Neuroscience</i> , 2004, 24, 6928-6938.	1.7	131
614	Climbing Neuronal Activity as an Event-Based Cortical Representation of Time. <i>Journal of Neuroscience</i> , 2004, 24, 3295-3303.	1.7	133
615	Changes in corticothalamic modulation of receptive fields during peripheral injury-induced reorganization. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2004, 101, 7135-7140.	3.3	9
616	Synaptic homeostasis and input selectivity follow from a calcium-dependent plasticity model. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2004, 101, 14943-14948.	3.3	89
617	A Learning Rule for Local Synaptic Interactions Between Excitation and Shunting Inhibition. <i>Neural Computation</i> , 2004, 16, 2507-2532.	1.3	4
618	Plasticity of the Hippocampal Place Cell Representation. <i>Reviews in the Neurosciences</i> , 2004, 15, 309-31.	1.4	32
619	Distinct mechanisms of bidirectional activity-dependent synaptic plasticity in superficial and deep layers of rat entorhinal cortex. <i>European Journal of Neuroscience</i> , 2004, 19, 2003-2007.	1.2	26
620	Effects of inescapable stress on LTP in the amygdala versus the dentate gyrus of freely behaving rats. <i>European Journal of Neuroscience</i> , 2004, 19, 1887-1894.	1.2	103
621	Hebbian learning and development. <i>Developmental Science</i> , 2004, 7, 141-148.	1.3	111
622	Long-term synaptic morphometry changes after induction of long-term potentiation and long-term depression in the dentate gyrus of awake rats are not simply mirror phenomena. <i>European Journal of Neuroscience</i> , 2004, 19, 2310-2318.	1.2	23
623	Frequency-dependent requirement for calcium store-operated mechanisms in induction of homosynaptic long-term depression at hippocampus CA1 synapses. <i>European Journal of Neuroscience</i> , 2004, 19, 2881-2887.	1.2	29
624	A proportional but slower NMDA potentiation follows AMPA potentiation in LTP. <i>Nature Neuroscience</i> , 2004, 7, 518-524.	7.1	139
625	Modulation of spike timing by sensory deprivation during induction of cortical map plasticity. <i>Nature Neuroscience</i> , 2004, 7, 534-541.	7.1	169
626	Rapid and persistent modulation of actin dynamics regulates postsynaptic reorganization underlying bidirectional plasticity. <i>Nature Neuroscience</i> , 2004, 7, 1104-1112.	7.1	728
627	Homeostatic plasticity in the developing nervous system. <i>Nature Reviews Neuroscience</i> , 2004, 5, 97-107.	4.9	2,027
628	Synapses between parallel fibres and stellate cells express long-term changes in synaptic efficacy in rat cerebellum. <i>Journal of Physiology</i> , 2004, 554, 707-720.	1.3	91

#	ARTICLE	IF	CITATIONS
629	Nerve growth factor favours long-term depression over long-term potentiation in layer II-III neurones of rat visual cortex. <i>Journal of Physiology</i> , 2004, 559, 497-506.	1.3	9
630	Synaptic basis for developmental plasticity in somatosensory cortex. <i>Current Opinion in Neurobiology</i> , 2004, 14, 89-95.	2.0	117
631	The effect of acute stress on LTP and LTD induction in the hippocampal CA1 region of anesthetized rats at three different ages. <i>Brain Research</i> , 2004, 1005, 187-192.	1.1	43
632	A Dynamical Model of Fast Cortical Reorganization. <i>Journal of Computational Neuroscience</i> , 2004, 16, 177-201.	0.6	9
633	Learning Modifies Subsequent Induction of Long-Term Potentiation-Like and Long-Term Depression-Like Plasticity in Human Motor Cortex. <i>Journal of Neuroscience</i> , 2004, 24, 1666-1672.	1.7	519
634	THE NEURAL BASIS OF TEMPORAL PROCESSING. <i>Annual Review of Neuroscience</i> , 2004, 27, 307-340.	5.0	816
635	Endocannabinoid-Mediated Metaplasticity in the Hippocampus. <i>Neuron</i> , 2004, 43, 871-881.	3.8	274
636	LTP and LTD. <i>Neuron</i> , 2004, 44, 5-21.	3.8	3,364
637	Bidirectional Parallel Fiber Plasticity in the Cerebellum under Climbing Fiber Control. <i>Neuron</i> , 2004, 44, 691-700.	3.8	381
638	How Monocular Deprivation Shifts Ocular Dominance in Visual Cortex of Young Mice. <i>Neuron</i> , 2004, 44, 917-923.	3.8	349
639	Role of the group III metabotropic glutamate receptor in LTP, depotentiation and LTD in the dentate gyrus of freely moving rats. <i>Neuropharmacology</i> , 2004, 46, 160-170.	2.0	41
640	A Molecular Mechanism for Stabilization of Learning-Induced Synaptic Modifications. <i>Neuron</i> , 2004, 41, 185-192.	3.8	145
641	Learning and Memory: Basic Mechanisms. , 2004, , 499-574.		4
642	Preconditioning of Low-Frequency Repetitive Transcranial Magnetic Stimulation with Transcranial Direct Current Stimulation: Evidence for Homeostatic Plasticity in the Human Motor Cortex. <i>Journal of Neuroscience</i> , 2004, 24, 3379-3385.	1.7	659
643	Spike Timing Dependent Plasticity of Rat Hippocampal and Cortical Synapses and Control by Muscarinic Transmission. , 2005, , 33-47.		0
644	Drivers of brain plasticity. <i>Current Opinion in Neurology</i> , 2005, 18, 667-674.	1.8	144
645	Transsynaptic Dialogue Between Excitatory and Inhibitory Hippocampal Synapses via Endocannabinoids. , 2005, , 221-235.		0
646	Encoding Multielement Scenes: Statistical Learning of Visual Feature Hierarchies.. <i>Journal of Experimental Psychology: General</i> , 2005, 134, 521-537.	1.5	157

#	ARTICLE	IF	CITATIONS
647	Donald O. Hebb's synapse and learning rule: a history and commentary. <i>Neuroscience and Biobehavioral Reviews</i> , 2005, 28, 851-874.	2.9	108
648	Do Stress and Long-Term Potentiation Share the Same Molecular Mechanisms?. <i>Molecular Neurobiology</i> , 2005, 32, 223-236.	1.9	42
649	Spatial Navigation and Causal Analysis in a Brain-Based Device Modeling Cortical-Hippocampal Interactions. <i>Neuroinformatics</i> , 2005, 3, 197-222.	1.5	87
650	The Dynamics of Perceptual Learning: An Incremental Reweighting Model.. <i>Psychological Review</i> , 2005, 112, 715-743.	2.7	274
651	Diabetes mellitus concomitantly facilitates the induction of long-term depression and inhibits that of long-term potentiation in hippocampus. <i>European Journal of Neuroscience</i> , 2005, 22, 169-178.	1.2	73
652	Homer β 1 enhances spike-induced calcium influx via L-type calcium channels in neocortex pyramidal cells. <i>European Journal of Neuroscience</i> , 2005, 22, 1338-1348.	1.2	38
653	Activity-dependent decrease of excitability in rat hippocampal neurons through increases in lh. <i>Nature Neuroscience</i> , 2005, 8, 1542-1551.	7.1	337
654	Defective place cell activity in nociceptin receptor knockout mice with elevated NMDA receptor-dependent long-term potentiation. <i>Journal of Physiology</i> , 2005, 565, 579-591.	1.3	22
655	Dynamic synapses as archives of synaptic history: state-dependent redistribution of synaptic efficacy in the rat hippocampal CA1. <i>Journal of Physiology</i> , 2005, 566, 143-160.	1.3	14
656	Factors determining the precision of the correlated firing generated by a monosynaptic connection in the cat visual pathway. <i>Journal of Physiology</i> , 2005, 567, 1057-1078.	1.3	18
657	Electrical and Chemical Long-term Depression Do Not Attenuate Low-Mg ²⁺ -induced Epileptiform Activity in the Entorhinal Cortex. <i>Epilepsia</i> , 2005, 46, 509-516.	2.6	16
658	Spike-timing dependent plasticity as a mechanism for ocular dominance shift. <i>Neurocomputing</i> , 2005, 65-66, 181-188.	3.5	1
659	Spatiotemporal visualization of long-term potentiation and depression in the hippocampal CA1 area. <i>Hippocampus</i> , 2005, 15, 68-78.	0.9	20
660	Corticosterone shifts different forms of synaptic potentiation in opposite directions. <i>Hippocampus</i> , 2005, 15, 697-703.	0.9	87
661	A Learning Rule to Model the Development of Orientation Selectivity in Visual Cortex. <i>Neural Processing Letters</i> , 2005, 21, 1-20.	2.0	5
662	Interactions Between LTP- and LTD-Inducing Stimulation in the Sensorimotor Cortex of the Awake Freely Moving Rat. <i>Journal of Neurophysiology</i> , 2005, 93, 548-556.	0.9	23
663	Retrograde Messengers in Long-Term Plasticity of Presynaptic Glutamate Release in Hippocampus. , 2005, , 273-303.		0
664	A Learning Rule for the Emergence of Stable Dynamics and Timing in Recurrent Networks. <i>Journal of Neurophysiology</i> , 2005, 94, 2275-2283.	0.9	72

#	ARTICLE	IF	CITATIONS
665	Molecular Switches at the Synapse Emerge from Receptor and Kinase Traffic. <i>PLoS Computational Biology</i> , 2005, 1, e20.	1.5	115
666	Synaptic and Temporal Ensemble Interpretation of Spike-Timing-Dependent Plasticity. <i>Neural Computation</i> , 2005, 17, 2316-2336.	1.3	24
667	Calcium Time Course as a Signal for Spike-Timing-Dependent Plasticity. <i>Journal of Neurophysiology</i> , 2005, 93, 2600-2613.	0.9	156
668	Neural plasticity of mushroom body-extrinsic neurons in the honeybee brain. <i>Journal of Experimental Biology</i> , 2005, 208, 4317-4332.	0.8	79
669	Graded bidirectional synaptic plasticity is composed of switch-like unitary events. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2005, 102, 9679-9684.	3.3	206
670	Competition in neurite outgrowth and the development of nerve connections. <i>Progress in Brain Research</i> , 2005, 147, 81-99.	0.9	13
671	Self-organization, Learning and Language. , 0, , .		0
672	Field Programmable Gate Array Implementation of Neuronal Ion Channel Dynamics. , 0, , .		5
673	Characterizing functional hippocampal pathways in a brain-based device as it solves a spatial memory task. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2005, 102, 2111-2116.	3.3	77
674	Homosynaptic and Heterosynaptic Inhibition of Synaptic Tagging and Capture of Long-Term Potentiation by Previous Synaptic Activity. <i>Journal of Neuroscience</i> , 2005, 25, 7221-7231.	1.7	68
675	Intracellular Calcium Regulation by Burst Discharge Determines Bidirectional Long-Term Synaptic Plasticity at the Cerebellum Input Stage. <i>Journal of Neuroscience</i> , 2005, 25, 4813-4822.	1.7	105
676	A Role for Protein Phosphatases 1, 2A, and 2B in Cerebellar Long-Term Potentiation. <i>Journal of Neuroscience</i> , 2005, 25, 10768-10772.	1.7	142
677	Generalized Bienenstock-Cooper-Munro rule for spiking neurons that maximizes information transmission. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2005, 102, 5239-5244.	3.3	97
678	Unilateral photoreceptor rescue can improve the ability of the opposite, untreated, eye to drive cortical cells in a retinal degeneration model. <i>Visual Neuroscience</i> , 2005, 22, 37-43.	0.5	4
679	Statistical Learning of Visual Feature Hierarchies. , 0, , .		9
680	Hippocampal Synaptic Metaplasticity Requires Inhibitory Autophosphorylation of Ca ²⁺ /Calmodulin-Dependent Kinase II. <i>Journal of Neuroscience</i> , 2005, 25, 7697-7707.	1.7	55
681	A model of bidirectional synaptic plasticity: From signaling network to channel conductance. <i>Learning and Memory</i> , 2005, 12, 423-432.	0.5	68
682	Limited Protection of the Primary Visual Cortex from the Effects of Monocular Deprivation by Strabismus. <i>Cerebral Cortex</i> , 2005, 15, 1822-1833.	1.6	8

#	ARTICLE	IF	CITATIONS
683	The 5-Hydroxytryptamine ₄ Receptor Exhibits Frequency-dependent Properties in Synaptic Plasticity and Behavioural Metaplasticity in the Hippocampal CA1 Region In vivo. <i>Cerebral Cortex</i> , 2005, 15, 1037-1043.	1.6	90
684	Homeostatic-like plasticity of the primary motor hand area is impaired in focal hand dystonia. <i>Brain</i> , 2005, 128, 1943-1950.	3.7	193
685	Temporal Sequence Learning, Prediction, and Control: A Review of Different Models and Their Relation to Biological Mechanisms. <i>Neural Computation</i> , 2005, 17, 245-319.	1.3	173
686	Learning Arbitrary Functions with Spike-Timing Dependent Plasticity Learning Rule. , 0, , .		0
687	Hippocampal LTP is reliably induced by low frequency stimulation in freely behaving neonatal rats. , 2005, , .		0
688	Developmental regulation of cognitive abilities: Modified composition of a molecular switch turns on associative learning. <i>Progress in Neurobiology</i> , 2005, 76, 189-211.	2.8	159
689	Homeostatic plasticity and NMDA receptor trafficking. <i>Trends in Neurosciences</i> , 2005, 28, 229-238.	4.2	319
690	Map Plasticity in Somatosensory Cortex. <i>Science</i> , 2005, 310, 810-815.	6.0	517
692	Spiking perceptrons. <i>IEEE Transactions on Neural Networks</i> , 2006, 17, 803-807.	4.8	13
693	A comparison between habituation and conscience mechanism in self-organizing maps. <i>IEEE Transactions on Neural Networks</i> , 2006, 17, 807-810.	4.8	14
694	A cost-function approach to rival penalized competitive learning (RPCL). <i>IEEE Transactions on Systems, Man, and Cybernetics</i> , 2006, 36, 722-737.	5.5	53
695	Homeostatic effects of plasma valproate levels on corticospinal excitability changes induced by 1Hz rTMS in patients with juvenile myoclonic epilepsy. <i>Clinical Neurophysiology</i> , 2006, 117, 1217-1227.	0.7	50
696	Modeling Synaptic Dynamics Driven by Receptor Lateral Diffusion. <i>Biophysical Journal</i> , 2006, 91, 2405-2415.	0.2	103
697	Neurobiology and Complex Biosystem Modeling. , 2006, , 463-482.		0
698	A Spin Glass Model of Path Integration in Rat Medial Entorhinal Cortex. <i>Journal of Neuroscience</i> , 2006, 26, 4266-4276.	1.7	548
699	Glia-Derived d-Serine Controls NMDA Receptor Activity and Synaptic Memory. <i>Cell</i> , 2006, 125, 775-784.	13.5	789
700	DisA, a Busy Bee That Monitors Chromosome Integrity. <i>Cell</i> , 2006, 125, 641-643.	13.5	4
701	Astrocytes Put down the Broom and Pick up the Baton. <i>Cell</i> , 2006, 125, 639-641.	13.5	9

#	ARTICLE	IF	CITATIONS
702	A Role in Learning for SRF: Deletion in the Adult Forebrain Disrupts LTD and the Formation of an Immediate Memory of a Novel Context. <i>Neuron</i> , 2006, 50, 127-143.	3.8	190
703	Synaptic Memories Upside Down: Bidirectional Plasticity at Cerebellar Parallel Fiber-Purkinje Cell Synapses. <i>Neuron</i> , 2006, 52, 227-238.	3.8	349
704	Short exposure to an enriched environment accelerates plasticity in the barrel cortex of adult rats. <i>Neuroscience</i> , 2006, 140, 659-672.	1.1	34
705	Task-specific hand dystonia: can too much plasticity be bad for you?. <i>Trends in Neurosciences</i> , 2006, 29, 192-199.	4.2	306
707	Long-term potentiation and long-term depression. , 0, , 60-78.		1
708	Neurophysiological theory of Kamin blocking in fear conditioning.. <i>Behavioral Neuroscience</i> , 2006, 120, 337-352.	0.6	10
711	Long-lasting modulation of the induction of LTD and LTP in rat hippocampal CA1 by behavioural stress and environmental enrichment. <i>European Journal of Neuroscience</i> , 2006, 23, 261-272.	1.2	209
712	Altered signaling pathways underlying abnormal hippocampal synaptic plasticity in the Ts65Dn mouse model of Down syndrome. <i>Journal of Neurochemistry</i> , 2006, 98, 1266-1277.	2.1	78
713	Simple fall-off pattern of correlated neural activity in the developing lateral geniculate nucleus. <i>Nature Neuroscience</i> , 2006, 9, 1541-1548.	7.1	24
714	Path integration and the neural basis of the 'cognitive map'. <i>Nature Reviews Neuroscience</i> , 2006, 7, 663-678.	4.9	1,826
715	A theoretical network model to analyse neurogenesis and synaptogenesis in the dentate gyrus. <i>Neural Networks</i> , 2006, 19, 1490-1505.	3.3	52
716	Stress effects in the hippocampus: Synaptic plasticity and memory. <i>Stress</i> , 2006, 9, 1-11.	0.8	217
717	The Isolation, Primacy, and Recency Effects Predicted by an Adaptive LTD/LTP Threshold in Postsynaptic Cells. <i>Cognitive Science</i> , 2006, 30, 243-275.	0.8	8
718	The K-complex and slow oscillation in terms of a mean-field cortical model. <i>Journal of Computational Neuroscience</i> , 2006, 21, 243-257.	0.6	46
719	A simulation model for compensatory plasticity in the prefrontal cortex inducing a cortico-cortical dysconnection in early brain development. <i>Journal of Neural Transmission</i> , 2006, 113, 695-710.	1.4	17
720	Properties of long-term synaptic plasticity and metaplasticity in organotypic slice cultures of rat hippocampus. <i>Experimental Brain Research</i> , 2006, 170, 522-531.	0.7	15
721	Allosteric receptors after 30 years. <i>Rendiconti Lincei</i> , 2006, 17, 59-96.	1.0	2
722	Contribution of lateral interactions in V1 to organization of response properties. <i>Vision Research</i> , 2006, 46, 2703-2720.	0.7	19

#	ARTICLE	IF	CITATIONS
723	Perceptual learning without feedback in non-stationary contexts: Data and model. <i>Vision Research</i> , 2006, 46, 3177-3197.	0.7	95
724	Lifelong learning: ocular dominance plasticity in mouse visual cortex. <i>Current Opinion in Neurobiology</i> , 2006, 16, 451-459.	2.0	116
725	Blocking L-type calcium channels enhances long-term depression induced by low-frequency stimulation at hippocampal CA1 synapses. <i>Brain Research</i> , 2006, 1124, 28-36.	1.1	6
726	Synaptic plasticity and phosphorylation. , 2006, 112, 810-832.		192
727	Altered plasticity of the human motor cortex in Parkinson's disease. <i>Annals of Neurology</i> , 2006, 59, 60-71.	2.8	187
728	Effects of neonatal dexamethasone treatment on hippocampal synaptic function. <i>Annals of Neurology</i> , 2006, 59, 939-951.	2.8	24
729	Chapter 3 Long-term potentiation (LTP)-like plasticity and learning in human motor cortex – investigations with transcranial magnetic stimulation (TMS). <i>Supplements To Clinical Neurophysiology</i> , 2006, 59, 19-25.	2.1	32
730	The two sides of associative plasticity in writer's cramp. <i>Brain</i> , 2006, 129, 2709-2721.	3.7	186
731	Understanding mirror neurons. <i>Interaction Studies</i> , 2006, 7, 197-232.	0.4	60
732	The Boundary Vector Cell Model of Place Cell Firing and Spatial Memory. <i>Reviews in the Neurosciences</i> , 2006, 17, 71-97.	1.4	316
733	Stable Competitive Dynamics Emerge from Multispike Interactions in a Stochastic Model of Spike-Timing-Dependent Plasticity. <i>Neural Computation</i> , 2006, 18, 2414-2464.	1.3	24
734	How Inhibitory Oscillations Can Train Neural Networks and Punish Competitors. <i>Neural Computation</i> , 2006, 18, 1577-1610.	1.3	107
735	A Model for Integrating Elementary Neural Functions into Delayed-Response Behavior. <i>PLoS Computational Biology</i> , 2006, 2, e25.	1.5	11
736	Complexities and uncertainties of neuronal network function. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , 2006, 361, 81-99.	1.8	39
737	NMDA Receptor NR2 Subunit Dependence of the Slow Component of Magnesium Unblock. <i>Journal of Neuroscience</i> , 2006, 26, 5825-5834.	1.7	77
738	Role of the Neurogranin Concentrated in Spines in the Induction of Long-Term Potentiation. <i>Journal of Neuroscience</i> , 2006, 26, 7337-7347.	1.7	88
739	The Endurance and Selectivity of Spatial Patterns of Long-Term Potentiation/Depression in Dendrites under Homeostatic Synaptic Plasticity. <i>Journal of Neuroscience</i> , 2006, 26, 13474-13484.	1.7	28
741	Strongly Improved Stability and Faster Convergence of Temporal Sequence Learning by Using Input Correlations Only. <i>Neural Computation</i> , 2006, 18, 1380-1412.	1.3	60

#	ARTICLE	IF	CITATIONS
742	Cooperation of spike timing-dependent and heterosynaptic plasticities in neural networks: A Fokker-Planck approach. <i>Chaos</i> , 2006, 16, 023105.	1.0	8
743	Synaptic Plasticity In Vitro and In Silico: Insights into an Intracellular Signaling Maze. <i>Physiology</i> , 2006, 21, 289-296.	1.6	8
744	Homeostatic shutdown of long-term potentiation in the adult hippocampus. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2006, 103, 11039-11044.	3.3	42
745	Triplets of Spikes in a Model of Spike Timing-Dependent Plasticity. <i>Journal of Neuroscience</i> , 2006, 26, 9673-9682.	1.7	515
746	BIOPHYSICAL AND PHENOMENOLOGICAL MODELS OF MULTIPLE SPIKE INTERACTIONS IN SPIKE-TIMING DEPENDENT PLASTICITY. <i>International Journal of Neural Systems</i> , 2006, 16, 79-97.	3.2	56
747	A homeostatic rule for inhibitory synapses promotes temporal sharpening and cortical reorganization. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2006, 103, 16526-16531.	3.3	12
748	NMDA-Dependent, But Not Group I Metabotropic Glutamate Receptor-Dependent, Long-Term Depression at Schaffer Collateral-CA1 Synapses Is Associated with Long-Term Reduction of Release from the Rapidly Recycling Presynaptic Vesicle Pool. <i>Journal of Neuroscience</i> , 2006, 26, 10270-10280.	1.7	37
749	A Provable Secure Key Management Program for Wireless Sensor Network. , 2007, , .		0
750	Construct a Real-time Selective Neural Group Network Controller for Internet-Based Teleoperation System. , 2007, , .		8
751	Persistence of Experience-Induced Homeostatic Synaptic Plasticity through Adulthood in Superficial Layers of Mouse Visual Cortex. <i>Journal of Neuroscience</i> , 2007, 27, 6692-6700.	1.7	216
752	Hippocampal long-term depression mediates acute stress-induced spatial memory retrieval impairment. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2007, 104, 11471-11476.	3.3	205
753	Timing-Dependent Modulation of Associative Plasticity by General Network Excitability in the Human Motor Cortex. <i>Journal of Neuroscience</i> , 2007, 27, 3807-3812.	1.7	198
754	Experiential Modification of the Trigeminal Reflex Blink Circuit. <i>Journal of Neuroscience</i> , 2007, 27, 10414-10422.	1.7	16
755	Intrinsic, Light-Independent and Visual Activity-Dependent Mechanisms Cooperate in the Shaping of the Field Response in Rat Visual Cortex. <i>Journal of Neuroscience</i> , 2007, 27, 8422-8429.	1.7	25
756	Molecular activity underlying working memory. <i>Learning and Memory</i> , 2007, 14, 554-563.	0.5	97
757	Synergies Between Intrinsic and Synaptic Plasticity Mechanisms. <i>Neural Computation</i> , 2007, 19, 885-909.	1.3	165
758	A New Principle for Information Storage in an Enzymatic Pathway Model. <i>PLoS Computational Biology</i> , 2007, 3, e124.	1.5	18
759	The Adult Visual Cortex Expresses Dynamic Synaptic Plasticity That Is Driven by the Light/Dark Cycle. <i>Journal of Neuroscience</i> , 2007, 27, 8414-8421.	1.7	36

#	ARTICLE	IF	CITATIONS
760	Multispike Interactions in a Stochastic Model of Spike-Timing-Dependent Plasticity. <i>Neural Computation</i> , 2007, 19, 1362-1399.	1.3	13
761	Spike-Timing-Dependent Plasticity in Balanced Random Networks. <i>Neural Computation</i> , 2007, 19, 1437-1467.	1.3	284
762	Neural networks with transient state dynamics. <i>New Journal of Physics</i> , 2007, 9, 109-109.	1.2	31
763	Reinforcement Learning, Spike-Time-Dependent Plasticity, and the BCM Rule. <i>Neural Computation</i> , 2007, 19, 2245-2279.	1.3	46
764	Simple spontaneously active Hebbian learning model: Homeostasis of activity and connectivity, and consequences for learning and epileptogenesis. <i>Physical Review E</i> , 2007, 76, 041909.	0.8	27
765	Neuroendocrinology of Stress. , 2007, , 571-593.		8
766	Hippocampal Metaplasticity Induced by Deficiency in the Extracellular Matrix Glycoprotein Tenascin-R. <i>Journal of Neuroscience</i> , 2007, 27, 6019-6028.	1.7	68
767	Evolving Connectionist Systems. , 2007, , .		11
768	Deprivation-induced synaptic depression by distinct mechanisms in different layers of mouse visual cortex. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2007, 104, 1383-1388.	3.3	145
769	Retrospective and prospective responses arising in a modeled hippocampus during maze navigation by a brain-based device. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2007, 104, 3556-3561.	3.3	43
770	Modelling collective phenomena in neuroscience. <i>Interdisciplinary Science Reviews</i> , 2007, 32, 177-184.	1.0	3
771	SENSORY INTEGRATION AND REMAPPING IN A MODEL OF THE MEDIAL TEMPORAL LOBE DURING MAZE NAVIGATION BY A BRAIN-BASED DEVICE. <i>Journal of Integrative Neuroscience</i> , 2007, 06, 403-431.	0.8	21
772	Dynamically Sliding Threshold Model Reproduces the Initial-Strength Dependence of Spike-Timing Dependent Synaptic Plasticity. <i>Journal of the Physical Society of Japan</i> , 2007, 76, 114802.	0.7	0
773	A neural network model of retrieval-induced forgetting.. <i>Psychological Review</i> , 2007, 114, 887-953.	2.7	188
774	Long-term depression: multiple forms and implications for brain function. <i>Trends in Neurosciences</i> , 2007, 30, 176-184.	4.2	248
775	Glia: they make your memories stick!. <i>Trends in Neurosciences</i> , 2007, 30, 417-424.	4.2	121
776	Activity-Dependent Plasticity of the NMDA-Receptor Fractional Ca ²⁺ Current. <i>Neuron</i> , 2007, 53, 17-24.	3.8	89
777	Obligatory Role of NR2A for Metaplasticity in Visual Cortex. <i>Neuron</i> , 2007, 53, 495-502.	3.8	169

#	ARTICLE	IF	CITATIONS
778	Ca ²⁺ Requirements for Cerebellar Long-Term Synaptic Depression: Role for a Postsynaptic Leaky Integrator. <i>Neuron</i> , 2007, 54, 787-800.	3.8	106
779	Homeostatic Regulation of Eye-Specific Responses in Visual Cortex during Ocular Dominance Plasticity. <i>Neuron</i> , 2007, 54, 961-972.	3.8	298
780	Ubiquitous Plasticity and Memory Storage. <i>Neuron</i> , 2007, 56, 582-592.	3.8	171
781	Long-Term Potentiation in Rat Hippocampal Neurons Is Accompanied by Spatially Widespread Changes in Intrinsic Oscillatory Dynamics and Excitability. <i>Neuron</i> , 2007, 56, 1061-1075.	3.8	234
782	The relation between spike-timing dependent plasticity and Ca ²⁺ dynamics in the hippocampal CA1 network. <i>Neuroscience</i> , 2007, 145, 80-87.	1.1	31
783	Electrical stimulation protocols for hippocampal synaptic plasticity and neuronal hyper-excitability: Are they effective or relevant?. <i>Experimental Neurology</i> , 2007, 204, 1-13.	2.0	144
784	Emotion Enhances Learning via Norepinephrine Regulation of AMPA-Receptor Trafficking. <i>Cell</i> , 2007, 131, 160-173.	13.5	462
785	Developmental synaptic plasticity at the thalamocortical input to barrel cortex: Mechanisms and roles. <i>Molecular and Cellular Neurosciences</i> , 2007, 34, 493-502.	1.0	63
786	Distinguishing Causal Interactions in Neural Populations. <i>Neural Computation</i> , 2007, 19, 910-933.	1.3	90
787	Optimality Model of Unsupervised Spike-Timing-Dependent Plasticity: Synaptic Memory and Weight Distribution. <i>Neural Computation</i> , 2007, 19, 639-671.	1.3	41
788	Plastic processes in the dentate gyrus: a computational perspective. <i>Progress in Brain Research</i> , 2007, 163, 417-451.	0.9	20
789	A Model for Fitting the Yield Curve Based on a Continuous Penalty Function. , 2007, , .		0
790	Differential Modulation of Motor Cortical Plasticity and Excitability in Early and Late Phases of Human Motor Learning. <i>Journal of Neuroscience</i> , 2007, 27, 12058-12066.	1.7	274
791	Asymmetric Synaptic Plasticity Based on Arbitrary Pre- and Postsynaptic Timing Spikes Using Finite State Model. <i>Neural Networks (IJCNN), International Joint Conference on</i> , 2007, , .	0.0	2
792	A novel energy efficient and reliable clustering algorithm in wireless sensor networks. , 2007, , .		3
793	Learning mechanism for column formation in the olfactory bulb. <i>Frontiers in Integrative Neuroscience</i> , 2007, 1, 12.	1.0	16
794	“Heterosynaptic” LTD in the Dentate Gyrus of Anesthetized Rat Requires Homosynaptic Activity. <i>Journal of Neurophysiology</i> , 2007, 98, 1048-1051.	0.9	40
797	Learning in a geometric model of place cell firing. <i>Hippocampus</i> , 2007, 17, 786-800.	0.9	45

#	ARTICLE	IF	CITATIONS
799	Direction selectivity of simple cells in the primary visual cortex: Comparison of two alternative mathematical models. I: Response to drifting gratings. <i>Computers in Biology and Medicine</i> , 2007, 37, 398-414.	3.9	4
800	Fast heterosynaptic learning in a robot food retrieval task inspired by the limbic system. <i>BioSystems</i> , 2007, 89, 294-299.	0.9	8
801	Experience-dependent recovery of vision following chronic deprivation amblyopia. <i>Nature Neuroscience</i> , 2007, 10, 1134-1136.	7.1	192
802	Is there a future for therapeutic use of transcranial magnetic stimulation?. <i>Nature Reviews Neuroscience</i> , 2007, 8, 559-567.	4.9	594
803	Search for fMRI BOLD signals in networks of spiking neurons. <i>European Journal of Neuroscience</i> , 2007, 25, 1882-1892.	1.2	5
804	Homeostatic plasticity in human motor cortex demonstrated by two consecutive sessions of paired associative stimulation. <i>European Journal of Neuroscience</i> , 2007, 25, 3461-3468.	1.2	151
805	Continuous white noise exposure during and after auditory critical period differentially alters bidirectional thalamocortical plasticity in rat auditory cortex <i>in vivo</i> . <i>European Journal of Neuroscience</i> , 2007, 26, 2576-2584.	1.2	40
806	Direct reinforcement learning, spike time dependent plasticity and the BCM rule. <i>BMC Neuroscience</i> , 2007, 8, .	0.8	1
807	Plastic and metaplastic changes in the CA1 and subicular projections to the entorhinal cortex. <i>Brain Research</i> , 2007, 1147, 124-139.	1.1	14
808	Experience-Driven Axon Retraction without Binocular Imbalance in Developing Visual Cortex. <i>Current Biology</i> , 2007, 17, 37-42.	1.8	14
809	A neuronal model of the language cortex. <i>Neurocomputing</i> , 2007, 70, 1914-1919.	3.5	36
810	Induction of synaptic depression by high-frequency stimulation in area CA1 of the rat hippocampus: Modeling and experimental studies. <i>Neurocomputing</i> , 2007, 70, 2055-2059.	3.5	4
811	Modeling L-LTP based on changes in concentration of pCREB transcription factor. <i>Neurocomputing</i> , 2007, 70, 2035-2040.	3.5	15
812	Effects of Hebbian learning on the dynamics and structure of random networks with inhibitory and excitatory neurons. <i>Journal of Physiology (Paris)</i> , 2007, 101, 136-148.	2.1	50
813	Rapid plasticity follows whisker pairing in barrel cortex of the awake rat. <i>Experimental Brain Research</i> , 2007, 177, 1-14.	0.7	12
814	Transcranial magnetic stimulation and synaptic plasticity: experimental framework and human models. <i>Experimental Brain Research</i> , 2007, 180, 583-593.	0.7	268
815	Going Beyond a Mean-field Model for the Learning Cortex: Second-Order Statistics. <i>Journal of Biological Physics</i> , 2007, 33, 213-246.	0.7	2
816	Computational consequences of experimentally derived spike-time and weight dependent plasticity rules. <i>Biological Cybernetics</i> , 2007, 96, 615-623.	0.6	21

#	ARTICLE	IF	CITATIONS
817	Reliable computing with unreliable components: Using separable environments to stabilize long-term information storage. <i>Physica D: Nonlinear Phenomena</i> , 2008, 237, 1196-1206.	1.3	2
818	Learning by structural remodeling in a class of single cell models. <i>Journal of Computational Neuroscience</i> , 2008, 25, 282-295.	0.6	2
819	Causal networks in simulated neural systems. <i>Cognitive Neurodynamics</i> , 2008, 2, 49-64.	2.3	65
820	Phenomenological models of synaptic plasticity based on spike timing. <i>Biological Cybernetics</i> , 2008, 98, 459-478.	0.6	455
821	The emergence of grid cells: Intelligent design or just adaptation?. <i>Hippocampus</i> , 2008, 18, 1256-1269.	0.9	264
822	Chapter 8 Synaptic plasticity in learning and memory: Stress effects in the hippocampus. <i>Progress in Brain Research</i> , 2008, 169, 145-158.	0.9	210
823	Genetic control of experienceâ€dependent plasticity in the visual cortex. <i>Genes, Brain and Behavior</i> , 2008, 7, 915-923.	1.1	35
824	Spike timingâ€dependent plasticity: a learning rule for dendritic integration in rat CA1 pyramidal neurons. <i>Journal of Physiology</i> , 2008, 586, 779-793.	1.3	108
825	Protein kinase CK2 modulates synaptic plasticity by modification of synaptic NMDA receptors in the hippocampus. <i>Journal of Physiology</i> , 2008, 586, 3195-3206.	1.3	39
826	Bidirectional longâ€term motor cortical plasticity and metaplasticity induced by quadripulse transcranial magnetic stimulation. <i>Journal of Physiology</i> , 2008, 586, 3927-3947.	1.3	239
827	Mechanisms of response homeostasis during retinocollicular map formation. <i>Journal of Physiology</i> , 2008, 586, 4363-4369.	1.3	22
828	Repetitive transcranial magnetic stimulation: faster or longer is not necessarily more. <i>Journal of Physiology</i> , 2008, 586, 3733-3734.	1.3	9
829	Metaplasticity: tuning synapses and networks for plasticity. <i>Nature Reviews Neuroscience</i> , 2008, 9, 387-387.	4.9	842
830	GABAB receptor activation mediates frequency-dependent plasticity of developing GABAergic synapses. <i>Nature Neuroscience</i> , 2008, 11, 1410-1418.	7.1	182
831	SK2 channel plasticity contributes to LTP at Schaffer collateralâ€CA1 synapses. <i>Nature Neuroscience</i> , 2008, 11, 170-177.	7.1	207
832	A neuroanatomically grounded Hebbianâ€learning model of attentionâ€language interactions in the human brain. <i>European Journal of Neuroscience</i> , 2008, 27, 492-513.	1.2	116
833	Targetâ€cellâ€specific bidirectional synaptic plasticity at hippocampal output synapses. <i>European Journal of Neuroscience</i> , 2008, 27, 1111-1118.	1.2	25
834	Long-term depression in the superior cervical ganglion of the rat. <i>Brain Research</i> , 2008, 1234, 25-31.	1.1	8

#	ARTICLE	IF	CITATIONS
835	Modifying motor learning through gating and homeostatic metaplasticity. <i>Brain Stimulation</i> , 2008, 1, 60-66.	0.7	230
836	Controversy: Noninvasive and invasive cortical stimulation show efficacy in treating stroke patients. <i>Brain Stimulation</i> , 2008, 1, 370-382.	0.7	131
837	Diabetes-, stress- and ageing-related changes in synaptic plasticity in hippocampus and neocortex – The same metaplastic process?. <i>European Journal of Pharmacology</i> , 2008, 585, 153-162.	1.7	44
838	Limited impact of homeostatic plasticity on motor learning in humans. <i>Neuropsychologia</i> , 2008, 46, 2122-2128.	0.7	155
839	Prior state of cortical activity influences subsequent practicing of a visuomotor coordination task. <i>Neuropsychologia</i> , 2008, 46, 3157-3161.	0.7	47
840	Ionotropic Glutamate Receptors in Synaptic Plasticity. , 2008, , 179-246.		2
841	Alzheimer's Disease Drugs: An Application of the Hormetic Dose-Response Model. <i>Critical Reviews in Toxicology</i> , 2008, 38, 419-451.	1.9	64
842	Synaptic Plasticity: Multiple Forms, Functions, and Mechanisms. <i>Neuropsychopharmacology</i> , 2008, 33, 18-41.	2.8	1,434
843	Antistress Effect of TRPV1 Channel on Synaptic Plasticity and Spatial Memory. <i>Biological Psychiatry</i> , 2008, 64, 286-292.	0.7	143
844	Deafferentation of neighbouring motor cortex areas does not further enhance saturated practice-dependent plasticity in healthy adults. <i>Clinical Neurophysiology</i> , 2008, 119, 886-891.	0.7	6
845	Principles of therapeutic use of transcranial and epidural cortical stimulation. <i>Clinical Neurophysiology</i> , 2008, 119, 2179-2184.	0.7	125
846	Structural And Functional Organization Of The Synapse. , 2008, , .		8
847	Design Principles and Constraints Underlying the Construction of Brain-Based Devices. <i>Lecture Notes in Computer Science</i> , 2007, , 157-166.	1.0	11
848	LTD – Synaptic Depression and Memory Storage. , 2008, , 327-365.		2
849	Disruption of AMPA Receptor Endocytosis Impairs the Extinction, but not Acquisition of Learned Fear. <i>Neuropsychopharmacology</i> , 2008, 33, 2416-2426.	2.8	144
850	Interpreting voltage-sensitivity of gap junctions as a mechanism of cardiac memory. <i>Mathematical Biosciences</i> , 2008, 212, 132-148.	0.9	7
851	The sliding threshold of modification hypothesis: Application to the effect of hypothyroidism or chronic psychosocial stress and nicotine on synaptic plasticity. <i>Neuroscience Letters</i> , 2008, 430, 203-206.	1.0	11
852	Muscle-specific variations in use-dependent crossed-facilitation of corticospinal pathways mediated by transcranial direct current (DC) stimulation. <i>Neuroscience Letters</i> , 2008, 441, 153-157.	1.0	15

#	ARTICLE	IF	CITATIONS
853	Cannabinoid Receptor Blockade Reveals Parallel Plasticity Mechanisms in Different Layers of Mouse Visual Cortex. <i>Neuron</i> , 2008, 58, 340-345.	3.8	94
854	Tumor Necrosis Factor- $\hat{\pm}$ Mediates One Component of Competitive, Experience-Dependent Plasticity in Developing Visual Cortex. <i>Neuron</i> , 2008, 58, 673-680.	3.8	369
855	Sensory Deprivation Unmasks a PKA-Dependent Synaptic Plasticity Mechanism that Operates in Parallel with CaMKII. <i>Neuron</i> , 2008, 60, 861-874.	3.8	43
856	State-Dependent cAMP Sensitivity of Presynaptic Function Underlies Metaplasticity in a Hippocampal Feedforward Inhibitory Circuit. <i>Neuron</i> , 2008, 60, 980-987.	3.8	63
857	Regulation of NMDA receptor subunit expression and its implications for LTD, LTP, and metaplasticity. <i>Neuropharmacology</i> , 2008, 55, 1081-1094.	2.0	570
858	Spatial learning in the holeboard impairs an early phase of long-term potentiation in the rat hippocampal CA1-region. <i>Neurobiology of Learning and Memory</i> , 2008, 89, 545-551.	1.0	11
859	Extracellular matrix in plasticity and epileptogenesis. <i>Neuron Glia Biology</i> , 2008, 4, 235-247.	2.0	95
860	Dendritic Excitability and Synaptic Plasticity. <i>Physiological Reviews</i> , 2008, 88, 769-840.	13.1	607
861	Bayesian Spiking Neurons II: Learning. <i>Neural Computation</i> , 2008, 20, 118-145.	1.3	53
862	The Hippocampal CA1 Region and Dentate Gyrus Differentiate between Environmental and Spatial Feature Encoding through Long-Term Depression. <i>Cerebral Cortex</i> , 2008, 18, 968-977.	1.6	134
863	Homeostatic Metaplasticity of the Motor Cortex is Altered during Headache-Free Intervals in Migraine with Aura. <i>Cerebral Cortex</i> , 2008, 18, 2701-2705.	1.6	68
864	Phasic Voluntary Movements Reverse the Aftereffects of Subsequent Theta-Burst Stimulation in Humans. <i>Journal of Neurophysiology</i> , 2008, 100, 2070-2076.	0.9	136
865	Synaptic Plasticity from Visual Cortex to Hippocampus: Systems Integration in Spatial Information Processing. <i>Neuroscientist</i> , 2008, 14, 584-597.	2.6	50
866	METAPLASTICITY: NEW INSIGHTS THROUGH ELECTROPHYSIOLOGICAL INVESTIGATIONS. <i>Journal of Integrative Neuroscience</i> , 2008, 07, 315-336.	0.8	30
867	Activity-Induced Polo-Like Kinase 2 Is Required for Homeostatic Plasticity of Hippocampal Neurons during Epileptiform Activity. <i>Journal of Neuroscience</i> , 2008, 28, 6583-6591.	1.7	93
868	Coupled Phosphatase and Kinase Switches Produce the Tristability Required for Long-Term Potentiation and Long-Term Depression. <i>Journal of Neuroscience</i> , 2008, 28, 13132-13138.	1.7	87
869	Establishment of a Scaffold for Orientation Maps in Primary Visual Cortex of Higher Mammals. <i>Journal of Neuroscience</i> , 2008, 28, 249-257.	1.7	33
870	Synapse elimination accompanies functional plasticity in hippocampal neurons. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2008, 105, 3123-3127.	3.3	163

#	ARTICLE	IF	CITATIONS
871	Bell-Shaped D-Serine Actions on Hippocampal Long-Term Depression and Spatial Memory Retrieval. <i>Cerebral Cortex</i> , 2008, 18, 2391-2401.	1.6	86
872	Sensorimotor reorganization by proprioceptive training in musician's dystonia and writer's cramp. <i>Neurology</i> , 2008, 70, 304-315.	1.5	72
873	Tag-Trigger-Consolidation: A Model of Early and Late Long-Term-Potentiation and Depression. <i>PLoS Computational Biology</i> , 2008, 4, e1000248.	1.5	110
874	Sustained Activities and Retrieval in a Computational Model of the Perirhinal Cortex. <i>Journal of Cognitive Neuroscience</i> , 2008, 20, 1993-2005.	1.1	8
875	Sleeping Our Way to Weight Normalization and Stable Learning. <i>Neural Computation</i> , 2008, 20, 3111-3130.	1.3	8
876	Temporal Dynamics of Rate-Based Synaptic Plasticity Rules in a Stochastic Model of Spike-Timing-Dependent Plasticity. <i>Neural Computation</i> , 2008, 20, 2253-2307.	1.3	17
877	Homeostatic Metaplasticity in the Human Somatosensory Cortex. <i>Journal of Cognitive Neuroscience</i> , 2008, 20, 1517-1528.	1.1	39
878	SWAT: An unsupervised SNN training algorithm for classification problems. , 2008, , .		7
879	Novel Trends in Brain Science. , 2008, , .		1
880	Implementing homeostatic plasticity in VLSI networks of spiking neurons. , 2008, , .		21
881	NMDA Receptors and Brain Development. <i>Frontiers in Neuroscience</i> , 2008, , 1-15.	0.0	15
882	Neural Computation Theories of Learning. , 2008, , 667-679.		1
883	Abnormal reorganization in focal hand dystonia – sensory and motor training programs to retrain cortical function. <i>NeuroRehabilitation</i> , 2008, 23, 43-53.	0.5	40
884	Towards a General Theory of Neural Computation Based on Prediction by Single Neurons. <i>PLoS ONE</i> , 2008, 3, e3298.	1.1	43
885	Modulating the granularity of category formation by global cortical states. <i>Frontiers in Computational Neuroscience</i> , 2008, 2, 1.	1.2	29
886	A Biophysical Model of Synaptic Plasticity and Metaplasticity Can Account for the Dynamics of the Backward Shift of Hippocampal Place Fields. <i>Journal of Neurophysiology</i> , 2008, 100, 983-992.	0.9	13
887	Visual experience and plasticity of the visual cortex: a role for epigenetic mechanisms. <i>Frontiers in Bioscience - Landmark</i> , 2008, 13, 3000.	3.0	18
888	A Hebbian Learning Rule Mediates Asymmetric Plasticity in Aligning Sensory Representations. <i>Journal of Neurophysiology</i> , 2008, 100, 1067-1079.	0.9	14

#	ARTICLE	IF	CITATIONS
889	Recovery From Monocular Deprivation Using Binocular Deprivation. <i>Journal of Neurophysiology</i> , 2008, 100, 2217-2224.	0.9	23
890	Memory Retention and Spike-Timing-Dependent Plasticity. <i>Journal of Neurophysiology</i> , 2009, 101, 2775-2788.	0.9	56
891	Inducing Homeostatic-Like Plasticity in Human Motor Cortex Through Converging Corticocortical Inputs. <i>Journal of Neurophysiology</i> , 2009, 102, 3180-3190.	0.9	54
892	Synaptic Mechanisms of Activity-Dependent Remodeling in Visual Cortex during Monocular Deprivation. <i>Journal of Experimental Neuroscience</i> , 2009, 2, JEN.S2559.	2.3	8
893	Synaptic Plasticity: Cerebellum. , 2009, , 741-745.		0
894	Unconjugated Bilirubin Exposure Impairs Hippocampal Long-Term Synaptic Plasticity. <i>PLoS ONE</i> , 2009, 4, e5876.	1.1	38
895	Experience-driven formation of parts-based representations in a model of layered visual memory. <i>Frontiers in Computational Neuroscience</i> , 2009, 3, 15.	1.2	8
896	How balance between LTP and LTD can be controlled in spike-timing-dependent learning rule. , 2009, , .		2
897	Metaplastic Regulation of Long-Term Potentiation/Long-Term Depression Threshold by Activity-Dependent Changes of NR2A/NR2B Ratio. <i>Journal of Neuroscience</i> , 2009, 29, 8764-8773.	1.7	95
898	Equalization of Ocular Dominance Columns Induced by an Activity-Dependent Learning Rule and the Maturation of Inhibition. <i>Journal of Neuroscience</i> , 2009, 29, 6514-6525.	1.7	15
899	Induction of Cortical Plastic Changes in Wrist Muscles by Paired Associative Stimulation in the Recovery Phase of Stroke Patients. <i>Neurorehabilitation and Neural Repair</i> , 2009, 23, 366-372.	1.4	74
900	Plasticity between Neuronal Pairs in Layer 4 of Visual Cortex Varies with Synapse State. <i>Journal of Neuroscience</i> , 2009, 29, 15286-15298.	1.7	29
901	Homeostatic and Nonhomeostatic Modulation of Learning in Human Motor Cortex. <i>Journal of Neuroscience</i> , 2009, 29, 5597-5604.	1.7	168
902	Receptive Field Self-Organization in a Model of the Fine Structure in V1 Cortical Columns. <i>Neural Computation</i> , 2009, 21, 2805-2845.	1.3	21
903	Word Learning by an Extended BAM Network. , 2009, , .		0
904	Spiking Neurons Can Learn to Solve Information Bottleneck Problems and Extract Independent Components. <i>Neural Computation</i> , 2009, 21, 911-959.	1.3	17
905	A theory of the influence of eye movements on the refinement of direction selectivity in the cat's primary visual cortex. <i>Network: Computation in Neural Systems</i> , 2009, 20, 197-232.	2.2	3
906	Spike-Based Reinforcement Learning in Continuous State and Action Space: When Policy Gradient Methods Fail. <i>PLoS Computational Biology</i> , 2009, 5, e1000586.	1.5	82

#	ARTICLE	IF	CITATIONS
907	Molecular mechanisms of experience-dependent plasticity in visual cortex. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , 2009, 364, 341-355.	1.8	113
908	Introduction. Sensory learning: from neural mechanisms to rehabilitation. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , 2009, 364, 279-283.	1.8	5
909	Toward a microscopic model of bidirectional synaptic plasticity. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2009, 106, 14091-14095.	3.3	23
910	The ratio of NR2A/B NMDA receptor subunits determines the qualities of ocular dominance plasticity in visual cortex. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2009, 106, 5377-5382.	3.3	96
911	Rate coding of spike-timing dependent plasticity: Activity-variation-timing dependent plasticity (AVTDP). <i>Neurocomputing</i> , 2009, 72, 1361-1368.	3.5	0
912	How Gibbs distributions may naturally arise from synaptic adaptation mechanisms. <i>BMC Neuroscience</i> , 2009, 10, .	0.8	0
913	Neuromodulation as a robot controller. <i>IEEE Robotics and Automation Magazine</i> , 2009, 16, 72-80.	2.2	49
914	Advances in understanding visual cortex plasticity. <i>Current Opinion in Neurobiology</i> , 2009, 19, 298-304.	2.0	27
915	Short-term (2 to 5h) dark exposure lowers long-term potentiation (LTP) induction threshold in rat primary visual cortex. <i>Brain Research</i> , 2009, 1276, 58-66.	1.1	19
916	Consensus paper: Use of transcranial magnetic stimulation to probe motor cortex plasticity in dystonia and levodopa-induced dyskinesia. <i>Brain Stimulation</i> , 2009, 2, 108-117.	0.7	21
917	Transcranial direct current stimulation: A new tool for the treatment of depression?. <i>Journal of Affective Disorders</i> , 2009, 117, 137-145.	2.0	89
918	Opioid withdrawal for 4 days prevents synaptic depression induced by low dose of morphine or naloxone in rat hippocampal CA1 area in vivo. <i>Hippocampus</i> , 2010, 20, 335-343.	0.9	8
919	Modulatory metaplasticity induced by pregnenolone sulfate in the rat hippocampus: A leftward shift in LTP/LTD frequency curve. <i>Hippocampus</i> , 2010, 20, 499-512.	0.9	25
920	How Gibbs Distributions May Naturally Arise from Synaptic Adaptation Mechanisms. A Model-Based Argumentation. <i>Journal of Statistical Physics</i> , 2009, 136, 565-602.	0.5	11
921	A proposition on memes and meta-memes in computing for higher-order learning. <i>Memetic Computing</i> , 2009, 1, 85-100.	2.7	108
922	Cognitive Computation with Autonomously Active Neural Networks: An Emerging Field. <i>Cognitive Computation</i> , 2009, 1, 77-90.	3.6	61
923	Recruitment and Consolidation of Cell Assemblies for Words by Way of Hebbian Learning and Competition in a Multi-Layer Neural Network. <i>Cognitive Computation</i> , 2009, 1, 160-176.	3.6	47
924	Priming theta-burst repetitive transcranial magnetic stimulation with low- and high-frequency stimulation. <i>Experimental Brain Research</i> , 2009, 195, 307-315.	0.7	72

#	ARTICLE	IF	CITATIONS
925	Heterosynaptic plasticity in the neocortex. <i>Experimental Brain Research</i> , 2009, 199, 377-390.	0.7	46
926	Short-duration transcranial random noise stimulation induces blood oxygenation level dependent response attenuation in the human motor cortex. <i>Experimental Brain Research</i> , 2009, 198, 439-444.	0.7	53
927	Synaptic plasticity in the adult visual cortex is regulated by the metabotropic glutamate receptor, mGluR5. <i>Experimental Brain Research</i> , 2009, 199, 391-399.	0.7	15
928	Amyloid β -protein fragments 25-35 and 31-35 potentiate long-term depression in hippocampal CA1 region of rats in vivo. <i>Synapse</i> , 2009, 63, 206-214.	0.6	54
929	Differential induction of bidirectional long-term changes in neurotransmitter release by frequency-coded patterns at the cerebellar input. <i>Journal of Physiology</i> , 2009, 587, 5843-5857.	1.3	70
930	Primary motor cortical metaplasticity induced by priming over the supplementary motor area. <i>Journal of Physiology</i> , 2009, 587, 4845-4862.	1.3	75
931	CaMKII controls the direction of plasticity at parallel fiber-Purkinje cell synapses. <i>Nature Neuroscience</i> , 2009, 12, 823-825.	7.1	116
932	Unlinked mental retardation: focus on synaptic function and plasticity. <i>Journal of Neurochemistry</i> , 2009, 109, 1-14.	2.1	51
933	Modulation of LTP/LTD balance in STDP by an activity-dependent feedback mechanism. <i>Neural Networks</i> , 2009, 22, 527-535.	3.3	11
934	A method for chronic stimulation of cortical organotypic cultures using implanted electrodes. <i>Journal of Neuroscience Methods</i> , 2009, 176, 136-143.	1.3	9
935	Bidirectional synaptic mechanisms of ocular dominance plasticity in visual cortex. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , 2009, 364, 357-367.	1.8	169
936	Associative memory models: from the cell-assembly theory to biophysically detailed cortex simulations. <i>Trends in Neurosciences</i> , 2009, 32, 178-186.	4.2	136
937	Differential Effects of Excitatory and Inhibitory Plasticity on Synaptically Driven Neuronal Input-Output Functions. <i>Neuron</i> , 2009, 61, 774-785.	3.8	91
938	Expression of Long-Term Plasticity at Individual Synapses in Hippocampus Is Graded, Bidirectional, and Mainly Presynaptic: Optical Quantal Analysis. <i>Neuron</i> , 2009, 62, 242-253.	3.8	135
939	Metaplasticity Governs Natural Experience-Driven Plasticity of Nascent Embryonic Brain Circuits. <i>Neuron</i> , 2009, 64, 240-250.	3.8	36
940	History Matters: Illuminating Metaplasticity in the Developing Brain. <i>Neuron</i> , 2009, 64, 155-157.	3.8	2
941	A Stretch from the Periphery Helps Brain Clocks Feel the Daily Heat. <i>Neuron</i> , 2009, 64, 157-160.	3.8	2
942	Regulation of long-term depression by increases in [guanosine 3',5'-cyclic monophosphate] in the hippocampal CA1 region of freely behaving rats. <i>Neuroscience</i> , 2009, 158, 159-166.	1.1	3

#	ARTICLE	IF	CITATIONS
943	A specific role for group II metabotropic glutamate receptors in hippocampal long-term depression and spatial memory. <i>Neuroscience</i> , 2009, 158, 149-158.	1.1	39
944	Long-term potentiation of the responses to parallel fiber stimulation in mouse cerebellar cortex in vivo. <i>Neuroscience</i> , 2009, 162, 713-722.	1.1	37
945	Sensory activity differentially modulates N-methyl-d-aspartate receptor subunits 2A and 2B in cortical layers. <i>Neuroscience</i> , 2009, 163, 920-932.	1.1	16
946	Synaptic plasticity in the subiculum. <i>Progress in Neurobiology</i> , 2009, 89, 334-342.	2.8	40
947	Methods of therapeutic cortical stimulation. <i>Neurophysiologie Clinique</i> , 2009, 39, 1-14.	1.0	114
948	Neurophysiological mechanisms of electroconvulsive therapy for depression. <i>Neuroscience Research</i> , 2009, 64, 3-11.	1.0	55
949	Metaplasticity. , 2009, , 819-826.		2
950	Cortical Plasticity and Learning: Mechanisms and Models. , 2009, , 183-188.		0
951	Effect of correlated lateral geniculate nucleus firing rates on predictions for monocular eye closure versus monocular retinal inactivation. <i>Physical Review E</i> , 2009, 80, 061915.	0.8	7
952	Self-Organization in the developing nervous system: Theoretical models. <i>HFSP Journal</i> , 2009, 3, 176-185.	2.5	14
953	Physical stress differs from psychosocial stress in the pattern and time-course of behavioral responses, serum corticosterone and expression of plasticity-related genes in the rat. <i>Stress</i> , 2009, 12, 412-425.	0.8	52
954	Synaptic Mechanisms for Plasticity in Neocortex. <i>Annual Review of Neuroscience</i> , 2009, 32, 33-55.	5.0	591
955	Reviews: Mechanisms Mediating Brain Plasticity: IGF1 and Adult Hippocampal Neurogenesis. <i>Neuroscientist</i> , 2009, 15, 134-148.	2.6	119
956	Chapter 1 Theoretical Models of Neural Circuit Development. <i>Current Topics in Developmental Biology</i> , 2009, 87, 1-51.	1.0	37
957	Modulation of Effects of Intermittent Theta Burst Stimulation Applied Over Primary Motor Cortex (M1) by Conditioning Stimulation of the Opposite M1. <i>Journal of Neurophysiology</i> , 2009, 102, 766-773.	0.9	34
958	Invasive Cortical Stimulation to Promote Recovery of Function After Stroke. <i>Stroke</i> , 2009, 40, 1926-1931.	1.0	137
959	Rules of Engagement: Factors That Regulate Activity-Dependent Synaptic Plasticity During Neural Network Development. <i>Biological Bulletin</i> , 2010, 219, 81-99.	0.7	43
960	Simply longer is not better: reversal of theta burst after-effect with prolonged stimulation. <i>Experimental Brain Research</i> , 2010, 204, 181-187.	0.7	252

#	ARTICLE	IF	CITATIONS
961	Emergence of network structure due to spike-timing-dependent plasticity in recurrent neuronal networks V: self-organization schemes and weight dependence. <i>Biological Cybernetics</i> , 2010, 103, 365-386.	0.6	27
962	1ÅHz rTMS preconditioned by tDCS over the primary motor cortex in Parkinsonâ€™s disease: effects on bradykinesia of arm and hand. <i>Journal of Neural Transmission</i> , 2010, 117, 207-216.	1.4	39
963	On the Induction of Postsynaptic Granule Cellâ€™Purkinje Neuron LTP and LTD. <i>Cerebellum</i> , 2010, 9, 284-290.	1.4	28
964	Progress in neural plasticity. <i>Science China Life Sciences</i> , 2010, 53, 322-329.	2.3	32
965	The Neurobiological Basis of Cognition: Identification by Multi-Input, Multioutput Nonlinear Dynamic Modeling. <i>Proceedings of the IEEE</i> , 2010, 98, 356-374.	16.4	66
966	Mechanism-based approaches to treating fragile X. , 2010, 127, 78-93.		121
967	Assessment of different induction protocols to elicit long-term depression (LTD) in the rat visual cortex in vivo. <i>Brain Research</i> , 2010, 1318, 33-41.	1.1	10
968	Frequency-dependent changes in synaptic plasticity and brain-derived neurotrophic factor (BDNF) expression in the CA1 to perirhinal cortex projection. <i>Brain Research</i> , 2010, 1326, 51-61.	1.1	12
969	The free-energy principle: a unified brain theory?. <i>Nature Reviews Neuroscience</i> , 2010, 11, 127-138.	4.9	4,902
970	Extending the bandwidth of longâ€™term plasticity at the cerebellar input stage. <i>Journal of Physiology</i> , 2010, 588, 5-6.	1.3	2
971	Reversal of plasticity-like effects in the human motor cortex. <i>Journal of Physiology</i> , 2010, 588, 3683-3693.	1.3	63
972	Metaplasticity of horizontal connections in the vicinity of focal laser lesions in rat visual cortex. <i>Journal of Physiology</i> , 2010, 588, 4695-4703.	1.3	17
973	Thetaâ€™burst stimulation over primary motor cortex degrades early motor learning. <i>European Journal of Neuroscience</i> , 2010, 31, 585-592.	1.2	45
974	Continuous and intermittent transcranial magnetic theta burst stimulation modify tactile learning performance and cortical protein expression in the rat differently. <i>European Journal of Neuroscience</i> , 2010, 32, 1575-1586.	1.2	59
975	Metaplasticity of the human trigeminal blink reflex. <i>European Journal of Neuroscience</i> , 2010, 32, 1707-1714.	1.2	15
976	A computational model of basal ganglia and its role in memory retrieval in rewarded visual memory tasks. <i>Frontiers in Computational Neuroscience</i> , 2010, 4, .	1.2	14
977	Spike timing-dependent plasticity as the origin of the formation of clustered synaptic efficacy engrams. <i>Frontiers in Computational Neuroscience</i> , 2010, 4, .	1.2	13
978	STDP in recurrent neuronal networks. <i>Frontiers in Computational Neuroscience</i> , 2010, 4, .	1.2	64

#	ARTICLE	IF	CITATIONS
979	Closed-Form Treatment of the Interactions between Neuronal Activity and Timing-Dependent Plasticity in Networks of Linear Neurons. <i>Frontiers in Computational Neuroscience</i> , 2010, 4, 134.	1.2	2
980	Spike-timing dependent plasticity and the cognitive map. <i>Frontiers in Computational Neuroscience</i> , 2010, 4, 142.	1.2	12
981	STDP in Adaptive Neurons Gives Close-To-Optimal Information Transmission. <i>Frontiers in Computational Neuroscience</i> , 2010, 4, 143.	1.2	23
982	Limits to the development of feed-forward structures in large recurrent neuronal networks. <i>Frontiers in Computational Neuroscience</i> , 2010, 4, 160.	1.2	35
983	Functional Roles of Distributed Synaptic Clusters in the Mitralâ€“Granule Cell Network of the Olfactory Bulb. <i>Frontiers in Integrative Neuroscience</i> , 2010, 4, 122.	1.0	31
984	Homeostatic plasticity and STDP: keeping a neuron's cool in a fluctuating world. <i>Frontiers in Synaptic Neuroscience</i> , 2010, 2, 5.	1.3	157
985	STDP and mental retardation: dysregulation of dendritic excitability in Fragile X syndrome. <i>Frontiers in Synaptic Neuroscience</i> , 2010, 2, 10.	1.3	20
986	The activity requirements for spike timing-dependent plasticity in the hippocampus. <i>Frontiers in Synaptic Neuroscience</i> , 2010, 2, 11.	1.3	56
987	STDP: spiking, timing, rates and beyond. <i>Frontiers in Synaptic Neuroscience</i> , 2010, 2, 14.	1.3	3
988	Temporal modulation of spike-timing-dependent plasticity. <i>Frontiers in Synaptic Neuroscience</i> , 2010, 2, 19.	1.3	57
989	Voltage and spike timing interact in STDP - a unified model. <i>Frontiers in Synaptic Neuroscience</i> , 2010, 2, 25.	1.3	72
990	Rate and pulse based plasticity governed by local synaptic state variables. <i>Frontiers in Synaptic Neuroscience</i> , 2010, 2, 33.	1.3	35
991	Plasticity resembling spike-timing dependent synaptic plasticity: the evidence in human cortex. <i>Frontiers in Synaptic Neuroscience</i> , 2010, 2, 34.	1.3	94
992	Spike timing dependent plasticity in the intact brain: counteracting spurious spike coincidences.. <i>Frontiers in Synaptic Neuroscience</i> , 2010, 4, 137.	1.3	17
993	Timing is not everything: neuromodulation opens the STDP gate. <i>Frontiers in Synaptic Neuroscience</i> , 2010, 2, 146.	1.3	206
994	A Re-Examination of Hebbian-Covariance Rules and Spike Timing-Dependent Plasticity in Cat Visual Cortex in vivo. <i>Frontiers in Synaptic Neuroscience</i> , 2010, 2, 147.	1.3	32
995	From Hebb Rules to Spike-Timing-Dependent Plasticity: A Personal Account. <i>Frontiers in Synaptic Neuroscience</i> , 2010, 2, 151.	1.3	7
996	Distinct effects of perceptual quality on auditory word recognition, memory formation and recall in a neural model of sequential memory. <i>Frontiers in Systems Neuroscience</i> , 2010, 4, 14.	1.2	26

#	ARTICLE	IF	CITATIONS
997	Rewiring neural interactions by micro-stimulation. <i>Frontiers in Systems Neuroscience</i> , 2010, 4, .	1.2	76
998	Associative Stimulation of the Supraorbital Nerve Fails to Induce Timing-Specific Plasticity in the Human Blink Reflex. <i>PLoS ONE</i> , 2010, 5, e13602.	1.1	14
999	Computational Analysis of the Impact of Chronic Stress on Intrinsic and Synaptic Excitability in the Hippocampus. <i>Journal of Neurophysiology</i> , 2010, 103, 3070-3083.	0.9	30
1000	Hebbian Analysis of the Transformation of Medial Entorhinal Grid-Cell Inputs to Hippocampal Place Fields. <i>Journal of Neurophysiology</i> , 2010, 103, 3167-3183.	0.9	91
1001	Spike timing dependent plasticity: a consequence of more fundamental learning rules. <i>Frontiers in Computational Neuroscience</i> , 2010, 4, .	1.2	95
1002	Reconciling the STDP and BCM Models of Synaptic Plasticity in a Spiking Recurrent Neural Network. <i>Neural Computation</i> , 2010, 22, 2059-2085.	1.3	18
1003	Bidirectional Regulation of Hippocampal Long-Term Synaptic Plasticity and Its Influence on Opposing Forms of Memory. <i>Journal of Neuroscience</i> , 2010, 30, 3813-3825.	1.7	82
1004	Eigenvalue distributions for a class of covariance matrices with application to Bienenstock-Cooper-Munro neurons under noisy conditions. <i>Physical Review E</i> , 2010, 81, 051917.	0.8	2
1005	Moderate Excitation Leads to Weakening of Perceptual Representations. <i>Cerebral Cortex</i> , 2010, 20, 2760-2770.	1.6	80
1006	Pyramidal Neuron Conductance State Gates Spike-Timing-Dependent Plasticity. <i>Journal of Neuroscience</i> , 2010, 30, 15713-15725.	1.7	19
1007	AN STDP TRAINING ALGORITHM FOR A SPIKING NEURAL NETWORK WITH DYNAMIC THRESHOLD NEURONS. <i>International Journal of Neural Systems</i> , 2010, 20, 463-480.	3.2	27
1008	Autonomous CaMKII Can Promote either Long-Term Potentiation or Long-Term Depression, Depending on the State of T305/T306 Phosphorylation. <i>Journal of Neuroscience</i> , 2010, 30, 8704-8709.	1.7	114
1009	A Reward-Modulated Hebbian Learning Rule Can Explain Experimentally Observed Network Reorganization in a Brain Control Task. <i>Journal of Neuroscience</i> , 2010, 30, 8400-8410.	1.7	104
1010	The <i>h</i> Current Is a Candidate Mechanism for Regulating the Sliding Modification Threshold in a BCM-Like Synaptic Learning Rule. <i>Journal of Neurophysiology</i> , 2010, 104, 1020-1033.	0.9	87
1011	Dual Coding with STDP in a Spiking Recurrent Neural Network Model of the Hippocampus. <i>PLoS Computational Biology</i> , 2010, 6, e1000839.	1.5	29
1012	PDZ protein mediated activity-dependent LTP/LTD developmental switch at rat retinocollicular synapses. <i>American Journal of Physiology - Cell Physiology</i> , 2010, 298, C1572-C1582.	2.1	5
1013	Short-Term Effects of Single Repetitive TMS Sessions on Auditory Evoked Activity in Patients With Chronic Tinnitus. <i>Journal of Neurophysiology</i> , 2010, 104, 1497-1505.	0.9	59
1014	Intrinsic Stability of Temporally Shifted Spike-Timing Dependent Plasticity. <i>PLoS Computational Biology</i> , 2010, 6, e1000961.	1.5	51

#	ARTICLE	IF	CITATIONS
1015	Independent Component Analysis in Spiking Neurons. PLoS Computational Biology, 2010, 6, e1000757.	1.5	78
1016	Quadripulse stimulation â€“ A new patterned rTMS. Restorative Neurology and Neuroscience, 2010, 28, 419-424.	0.4	35
1017	Promoting neurological recovery of function via metaplasticity. Future Neurology, 2010, 5, 21-26.	0.9	21
1018	Hebbian Plasticity and Homeostasis in a Model of Hypercolumn of the Visual Cortex. Neural Computation, 2010, 22, 1837-1859.	1.3	6
1019	SWAT: A Spiking Neural Network Training Algorithm for Classification Problems. IEEE Transactions on Neural Networks, 2010, 21, 1817-1830.	4.8	148
1020	Replicating experimental spike and rate based neural learning in CMOS. , 2010, , .		18
1021	Transcranial Magnetic Stimulation: From Neurophysiology to Pharmacology, Molecular Biology and Genomics. Neuroscientist, 2010, 16, 210-221.	2.6	32
1022	A neuroeconomic theory of bidirectional synaptic plasticity and addiction. Medical Hypotheses, 2010, 75, 356-358.	0.8	7
1023	6-Hz primed low-frequency rTMS to contralesional M1 in two cases with middle cerebral artery stroke. Neuroscience Letters, 2010, 469, 338-342.	1.0	26
1024	Bidirectional synaptic plasticity in response to single or paired pulse activation of NMDA receptors. Neuroscience Research, 2010, 67, 108-116.	1.0	5
1025	Occlusion of bidirectional plasticity by preceding low-frequency stimulation in the human motor cortex. Clinical Neurophysiology, 2010, 121, 594-602.	0.7	56
1027	Preserved memory capacities in aged Lou/C/Jall rats. Neurobiology of Aging, 2010, 31, 129-142.	1.5	41
1028	Involvement of inositol-1,4,5-trisphosphate receptors in the bidirectional synaptic plasticity induced in hippocampal CA1 neurons by 1â€“10 Hz low-frequency stimulation. Neuroscience, 2010, 168, 346-358.	1.1	11
1029	C-type natriuretic peptide modulates bidirectional plasticity in hippocampal area CA1 in vitro. Neuroscience, 2010, 169, 8-22.	1.1	25
1030	Dendritic ion channel trafficking and plasticity. Trends in Neurosciences, 2010, 33, 307-316.	4.2	121
1031	Cerebellar molecular layer interneurons â€“ computational properties and roles in learning. Trends in Neurosciences, 2010, 33, 524-532.	4.2	121
1032	A Non-Markovian Random Walk Underlies a Stochastic Model of Spike-Timing-Dependent Plasticity. Neural Computation, 2010, 22, 1180-1230.	1.3	7
1033	The Hippocampal Formation in Schizophrenia. American Journal of Psychiatry, 2010, 167, 1178-1193.	4.0	507

#	ARTICLE	IF	CITATIONS
1034	Functional Requirements for Reward-Modulated Spike-Timing-Dependent Plasticity. Journal of Neuroscience, 2010, 30, 13326-13337.	1.7	121
1035	Representation of input structure in synaptic weights by spike-timing-dependent plasticity. Physical Review E, 2010, 82, 021912.	0.8	8
1036	Conditional routing of information to the cortex: A model of the basal ganglia's role in cognitive coordination.. Psychological Review, 2010, 117, 541-574.	2.7	308
1037	A VIEW OF NEURAL NETWORKS AS DYNAMICAL SYSTEMS. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2010, 20, 1585-1629.	0.7	30
1038	A BCM Theory of Meta-Plasticity for Online Self-Reorganizing Fuzzy-Associative Learning. IEEE Transactions on Neural Networks, 2010, 21, 985-1003.	4.8	33
1039	Human activity detection using spiking neural networks regulated by a gene regulatory network. , 2010, , .		20
1040	Difference in Binocularity and Ocular Dominance Plasticity between GABAergic and Excitatory Cortical Neurons. Journal of Neuroscience, 2010, 30, 1551-1559.	1.7	84
1041	Modulation of motor learning and memory formation by non-invasive cortical stimulation of the primary motor cortex. Neuropsychological Rehabilitation, 2011, 21, 650-675.	1.0	50
1042	Modeling Activity-Dependent Plasticity in BCM Spiking Neural Networks With Application to Human Behavior Recognition. IEEE Transactions on Neural Networks, 2011, 22, 1952-1966.	4.8	29
1043	Physiological Basis of Transcranial Direct Current Stimulation. Neuroscientist, 2011, 17, 37-53.	2.6	1,292
1044	Règles de sécurité concernant la pratique de la stimulation magnétique transcrânienne en clinique et en recherche. Texte de consensus. Neurophysiologie Clinique, 2011, , .	1.0	0
1045	Probabilistic versus Incremental Presynaptic Learning in Biologically Plausible Synapses. Lecture Notes in Computer Science, 2011, , 80-89.	1.0	2
1046	The Mean Time to Express Synaptic Plasticity in Integrate-and-Express, Stochastic Models of Synaptic Plasticity Induction. Neural Computation, 2011, 23, 124-159.	1.3	7
1047	A history of spike-timing-dependent plasticity. Frontiers in Synaptic Neuroscience, 2011, 3, 4.	1.3	311
1048	Dendritic Spine Dynamics Regulate the Long-Term Stability of Synaptic Plasticity. Journal of Neuroscience, 2011, 31, 16142-16156.	1.7	67
1049	What is the appropriate description level for synaptic plasticity?. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 19103-19104.	3.3	7
1051	Bio-Inspired Self-Organizing Robotic Systems. Studies in Computational Intelligence, 2011, , .	0.7	7
1052	Review and unification of learning framework in Cog Ex Machina platform for memristive neuromorphic hardware. , 2011, , .		7

#	ARTICLE	IF	CITATIONS
1053	A Roadmap for Cognitive Development in Humanoid Robots. <i>Cognitive Systems Monographs</i> , 2011, , .	0.1	56
1054	Toward Fulfilling the Promise of Molecular Medicine in Fragile X Syndrome. <i>Annual Review of Medicine</i> , 2011, 62, 411-429.	5.0	244
1055	Hippocampal synaptic metaplasticity requires the activation of NR2B-containing NMDA receptors. <i>Brain Research Bulletin</i> , 2011, 84, 137-143.	1.4	24
1057	Modulation of cortical excitability induced by repetitive transcranial magnetic stimulation: Influence of timing and geometrical parameters and underlying mechanisms. <i>Progress in Neurobiology</i> , 2011, 93, 59-98.	2.8	338
1058	The rat perirhinal cortex: A review of anatomy, physiology, plasticity, and function. <i>Progress in Neurobiology</i> , 2011, 93, 522-548.	2.8	104
1059	Cholinergic modulation on spike timing-dependent plasticity in hippocampal CA1 network. <i>Neuroscience</i> , 2011, 192, 91-101.	1.1	47
1060	Lack of LTP-like plasticity in primary motor cortex in Parkinson's disease. <i>Experimental Neurology</i> , 2011, 227, 296-301.	2.0	106
1061	Cerebral â€œ Surface. , 2011, , 17-46.		1
1062	Synaptic state matching: a dynamical architecture for predictive internal representation and feature perception. <i>Nature Precedings</i> , 2011, , .	0.1	0
1063	Long-Term Potentiation at CA3â€œCA1 Hippocampal Synapses with Special Emphasis on Aging, Disease, and Stress. <i>Frontiers in Aging Neuroscience</i> , 2011, 3, 7.	1.7	115
1064	Excitatory, Inhibitory, and Structural Plasticity Produce Correlated Connectivity in Random Networks Trained to Solve Paired-Stimulus Tasks. <i>Frontiers in Computational Neuroscience</i> , 2011, 5, 37.	1.2	31
1065	Synaptic scaling in combination with many generic plasticity mechanisms stabilizes circuit connectivity. <i>Frontiers in Computational Neuroscience</i> , 2011, 5, 47.	1.2	80
1066	Experience-Induced Interocular Plasticity of Vision in Infancy. <i>Frontiers in Systems Neuroscience</i> , 2011, 5, 44.	1.2	7
1067	Learning with a Network of Competing Synapses. <i>PLoS ONE</i> , 2011, 6, e25048.	1.1	6
1068	Bidirectional Coupling between Astrocytes and Neurons Mediates Learning and Dynamic Coordination in the Brain: A Multiple Modeling Approach. <i>PLoS ONE</i> , 2011, 6, e29445.	1.1	109
1069	Development of cortical orientation selectivity in the absence of visual experience with contour. <i>Journal of Neurophysiology</i> , 2011, 106, 1923-1932.	0.9	9
1070	Short-term and long-term plasticity interaction in human primary motor cortex. <i>European Journal of Neuroscience</i> , 2011, 33, 1908-1915.	1.2	37
1071	New views of Arc, a master regulator of synaptic plasticity. <i>Nature Neuroscience</i> , 2011, 14, 279-284.	7.1	430

#	ARTICLE	IF	CITATIONS
1072	Modulation of cortical inhibition by rTMS – findings obtained from animal models. <i>Journal of Physiology</i> , 2011, 589, 4423-4435.	1.3	140
1073	Using theoretical models to analyse neural development. <i>Nature Reviews Neuroscience</i> , 2011, 12, 311-326.	4.9	104
1074	Abnormal plasticity in dystonia: Disruption of synaptic homeostasis. <i>Neurobiology of Disease</i> , 2011, 42, 162-170.	2.1	144
1075	Polarity and timing-dependent effects of transcranial direct current stimulation in explicit motor learning. <i>Neuropsychologia</i> , 2011, 49, 800-804.	0.7	378
1076	The enhancement of cortical excitability over the DLPFC before and during training impairs categorization in the prototype distortion task. <i>Neuropsychologia</i> , 2011, 49, 1974-1980.	0.7	47
1077	Temporal modulation of hippocampal excitatory transmission by corticosteroids and stress. <i>Frontiers in Neuroendocrinology</i> , 2011, 32, 25-42.	2.5	33
1078	Neural mechanisms and computations underlying stress effects on learning and memory. <i>Current Opinion in Neurobiology</i> , 2011, 21, 502-508.	2.0	59
1079	Synaptic mechanisms of sensorimotor learning in the cerebellum. <i>Current Opinion in Neurobiology</i> , 2011, 21, 609-615.	2.0	57
1080	Distinct mechanisms contribute to agonist and synaptically induced metabotropic glutamate receptor long-term depression. <i>European Journal of Pharmacology</i> , 2011, 667, 160-168.	1.7	6
1081	Exploring the effect of inducing long-term potentiation in the human motor cortex on motor learning. <i>Brain Stimulation</i> , 2011, 4, 137-144.	0.7	33
1082	Impact of repetitive theta burst stimulation on motor cortex excitability. <i>Brain Stimulation</i> , 2011, 4, 145-151.	0.7	94
1083	Outlasting corticomotor excitability changes induced by 25ÂHz whole-hand mechanical stimulation. <i>European Journal of Applied Physiology</i> , 2011, 111, 3051-3059.	1.2	37
1084	Non-invasive brain stimulation enhances fine motor control of the hemiparetic ankle: implications for rehabilitation. <i>Experimental Brain Research</i> , 2011, 209, 9-17.	0.7	129
1085	Inositol 1,4,5-Trisphosphate Receptor-Mediated Calcium Release in Purkinje Cells: From Molecular Mechanism to Behavior. <i>Cerebellum</i> , 2011, 10, 820-833.	1.4	23
1086	Plasticity and stability in recurrent neural networks. <i>BMC Neuroscience</i> , 2011, 12, .	0.8	0
1087	Self-organizing neural maps for multi-modal associations. <i>BMC Neuroscience</i> , 2011, 12, .	0.8	0
1088	Effects of light deprivation on visual evoked potentials in migraine without aura. <i>BMC Neurology</i> , 2011, 11, 91.	0.8	20
1089	Abnormal cortical and brain stem plasticity in Gilles de la Tourette syndrome. <i>Movement Disorders</i> , 2011, 26, 1703-1710.	2.2	47

#	ARTICLE	IF	CITATIONS
1090	Dendritic mechanisms controlling the threshold and timing requirement of synaptic plasticity. <i>Hippocampus</i> , 2011, 21, 288-297.	0.9	26
1091	Differential regulation of synaptic plasticity of the hippocampal and the hypothalamic inputs to the anterior thalamus. <i>Hippocampus</i> , 2011, 21, 1-8.	0.9	35
1092	Anatomical and sensory experiential determinants of synaptic plasticity in layer 2/3 pyramidal neurons of mouse barrel cortex. <i>Journal of Comparative Neurology</i> , 2011, 519, 2090-2124.	0.9	16
1093	Receptive field optimisation and supervision of a fuzzy spiking neural network. <i>Neural Networks</i> , 2011, 24, 247-256.	3.3	14
1094	A tutorial on computational cognitive neuroscience: Modeling the neurodynamics of cognition. <i>Journal of Mathematical Psychology</i> , 2011, 55, 273-289.	1.0	46
1095	Neural field theory of synaptic plasticity. <i>Journal of Theoretical Biology</i> , 2011, 285, 156-163.	0.8	33
1096	Pulsed magnetic field exposure induces lasting changes in neural network dynamics. <i>Neurocomputing</i> , 2011, 74, 2164-2175.	3.5	13
1097	Competing synapses with two timescales as a basis for learning and forgetting. <i>Europhysics Letters</i> , 2011, 95, 48008.	0.7	4
1098	lono-neuromorphic implementation of spike-timing-dependent synaptic plasticity. , 2011, 2011, 7274-7.		7
1099	Review of stability properties of neural plasticity rules for implementation on memristive neuromorphic hardware. , 2011, , .		5
1100	Artificial Neural Networks and Machine Learning â€“ ICANN 2011. <i>Lecture Notes in Computer Science</i> , 2011, , .	1.0	16
1102	Deficient Homeostatic Regulation of Practice-Dependent Plasticity in Writerâ€™s Cramp. <i>Cerebral Cortex</i> , 2011, 21, 1203-1212.	1.6	72
1103	A triplet spike-timingâ€“dependent plasticity model generalizes the Bienenstockâ€“Cooperâ€“Munro rule to higher-order spatiotemporal correlations. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2011, 108, 19383-19388.	3.3	158
1104	A synaptic organizing principle for cortical neuronal groups. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2011, 108, 5419-5424.	3.3	592
1105	Foundations on Natural and Artificial Computation. <i>Lecture Notes in Computer Science</i> , 2011, , .	1.0	0
1106	Time course of the induction of homeostatic plasticity generated by repeated transcranial direct current stimulation of the human motor cortex. <i>Journal of Neurophysiology</i> , 2011, 105, 1141-1149.	0.9	202
1107	Frequency-Dependent Changes in NMDAR-Dependent Synaptic Plasticity. <i>Frontiers in Computational Neuroscience</i> , 2011, 5, 38.	1.2	43
1108	Toward Multi-Scale Computational Modeling in Developmental Disability Research. <i>Neuropediatrics</i> , 2011, 42, 90-96.	0.3	8

#	ARTICLE	IF	CITATIONS
1109	Context-Dependent Encoding of Fear and Extinction Memories in a Large-Scale Network Model of the Basal Amygdala. PLoS Computational Biology, 2011, 7, e1001104.	1.5	50
1110	Spectral Analysis of Input Spike Trains by Spike-Timing-Dependent Plasticity. PLoS Computational Biology, 2012, 8, e1002584.	1.5	13
1111	Molecular Constraints on Synaptic Tagging and Maintenance of Long-Term Potentiation: A Predictive Model. PLoS Computational Biology, 2012, 8, e1002620.	1.5	52
1112	Soft-bound Synaptic Plasticity Increases Storage Capacity. PLoS Computational Biology, 2012, 8, e1002836.	1.5	24
1113	Functional Connectivity and Tuning Curves in Populations of Simultaneously Recorded Neurons. PLoS Computational Biology, 2012, 8, e1002775.	1.5	58
1114	Stable Learning in Stochastic Network States. Journal of Neuroscience, 2012, 32, 194-214.	1.7	25
1115	Long-term functional alterations in sports concussion. Neurosurgical Focus, 2012, 33, E8.	1.0	57
1116	Abnormal Changes of Synaptic Excitability in Migraine with Aura. Cerebral Cortex, 2012, 22, 2207-2216.	1.6	102
1117	Spike-Timing-Dependent Plasticity and Short-Term Plasticity Jointly Control the Excitation of Hebbian Plasticity without Weight Constraints in Neural Networks. Computational Intelligence and Neuroscience, 2012, 2012, 1-15.	1.1	3
1118	Hebbian Learning of Recurrent Connections: A Geometrical Perspective. Neural Computation, 2012, 24, 2346-2383.	1.3	9
1119	Learning Invariance from Natural Images Inspired by Observations in the Primary Visual Cortex. Neural Computation, 2012, 24, 1271-1296.	1.3	6
1120	Altered Bidirectional Plasticity and Reduced Implicit Motor Learning in Concussed Athletes. Cerebral Cortex, 2012, 22, 112-121.	1.6	110
1121	Simple Modification of Oja Rule Limits L_1 -Norm of Weight Vector and Leads to Sparse Connectivity. Neural Computation, 2012, 24, 724-743.	1.3	1
1122	Effect of synaptic plasticity on the structure and dynamics of disordered networks of coupled neurons. Physical Review E, 2012, 86, 011925.	0.8	24
1123	Calcium-Dependent But Action Potential-Independent BCM-Like Metaplasticity in the Hippocampus. Journal of Neuroscience, 2012, 32, 6785-6794.	1.7	49
1124	Dark Exposure Extends the Integration Window for Spike-Timing-Dependent Plasticity. Journal of Neuroscience, 2012, 32, 15027-15035.	1.7	47
1125	Replicating Receptive Fields of Simple and Complex Cells in Primary Visual Cortex in a Neuronal Network Model with Temporal and Population Sparseness and Reliability. Neural Computation, 2012, 24, 2700-2725.	1.3	6
1126	Lateralized central facilitation of trigeminal nociception in cluster headache. Neurology, 2012, 78, 985-992.	1.5	16

#	ARTICLE	IF	CITATIONS
1127	DANA: Distributed numerical and adaptive modelling framework. Network: Computation in Neural Systems, 2012, 23, 237-253.	2.2	14
1128	Consequences of Inhibiting Amyloid Precursor Protein Processing Enzymes on Synaptic Function and Plasticity. Neural Plasticity, 2012, 2012, 1-24.	1.0	37
1129	Maintenance of Synaptic Stability Requires Calcium-Independent Phospholipase A ₂ Activity. Neural Plasticity, 2012, 2012, 1-13.	1.0	18
1130	Effects of different forms of monocular deprivation on primary visual cortex maps. Visual Neuroscience, 2012, 29, 247-253.	0.5	3
1131	Glutamate Dysfunction in Hippocampus: Relevance of Dentate Gyrus and CA3 Signaling. Schizophrenia Bulletin, 2012, 38, 927-935.	2.3	118
1132	Unravelling homeostatic interactions in inhibitory and excitatory networks in human motor cortex. Journal of Physiology, 2012, 590, 5557-5558.	1.3	10
1133	Neurophysiology of Cortical Stimulation. International Review of Neurobiology, 2012, 107, 57-85.	0.9	40
1134	Temporal pattern recognition via temporal networks of temporal neurons. , 2012, , .		3
1135	Design and implementation of BCM rule based on spike-timing dependent plasticity. , 2012, , .		2
1136	NMDA Receptor-Dependent Long-Term Potentiation and Long-Term Depression (LTP/LTD). Cold Spring Harbor Perspectives in Biology, 2012, 4, a005710-a005710.	2.3	720
1137	Calcium control of triphasic hippocampal STDP. Journal of Computational Neuroscience, 2012, 33, 495-514.	0.6	15
1138	Dynamical Mean-Field Equations for a Neural Network with Spike Timing Dependent Plasticity. Journal of Statistical Physics, 2012, 148, 677-686.	0.5	1
1139	The Transcription Factor MEF2 Directs Developmental Visually Driven Functional and Structural Metaplasticity. Cell, 2012, 151, 41-55.	13.5	57
1140	A Molecular Link Tethering Neuronal Responses with the Past. Cell, 2012, 151, 9-11.	13.5	0
1141	Building a mechanistic model of the development and function of the primary visual cortex. Journal of Physiology (Paris), 2012, 106, 194-211.	2.1	44
1142	The role of metaplasticity mechanisms in regulating memory destabilization and reconsolidation. Neuroscience and Biobehavioral Reviews, 2012, 36, 1667-1707.	2.9	171
1143	Unsupervised Formation of Vocalization-Sensitive Neurons: A Cortical Model Based on Short-Term and Homeostatic Plasticity. Neural Computation, 2012, 24, 2579-2603.	1.3	17
1144	Shocking speech. Aphasiology, 2012, 26, 1077-1081.	1.4	4

#	ARTICLE	IF	CITATIONS
1145	Self-reorganizing TSK fuzzy inference system with BCM theory of meta-plasticity. , 2012, , .		1
1146	Frequency Selectivity Emerging from Spike-Timing-Dependent Plasticity. <i>Neural Computation</i> , 2012, 24, 2251-2279.	1.3	17
1147	Why is it hard to induce long-term depression?. , 2012, , .		2
1148	About the oscillatory possibilities of the dynamical systems. <i>Physica D: Nonlinear Phenomena</i> , 2012, 241, 1358-1391.	1.3	5
1149	Homeostatic Synaptic Plasticity: Local and Global Mechanisms for Stabilizing Neuronal Function. <i>Cold Spring Harbor Perspectives in Biology</i> , 2012, 4, a005736-a005736.	2.3	880
1150	Navigated rTMS for the treatment of tinnitus: A pilot study with assessment by fMRI and AEPs. <i>Neurophysiologie Clinique</i> , 2012, 42, 95-109.	1.0	22
1151	A forecast-based STDP rule suitable for neuromorphic implementation. <i>Neural Networks</i> , 2012, 32, 3-14.	3.3	28
1152	From modulated Hebbian plasticity to simple behavior learning through noise and weight saturation. <i>Neural Networks</i> , 2012, 34, 28-41.	3.3	25
1153	A novel brain-inspired neuro-fuzzy hybrid system for artificial ventilation modeling. <i>Expert Systems With Applications</i> , 2012, 39, 11808-11817.	4.4	2
1154	Bidirectional modulation of sensory cortical excitability by quadripulse transcranial magnetic stimulation (QPS) in humans. <i>Clinical Neurophysiology</i> , 2012, 123, 1415-1421.	0.7	25
1155	Paired associative stimulation increases motor cortex excitability more effectively than theta-burst stimulation. <i>Clinical Neurophysiology</i> , 2012, 123, 2220-2226.	0.7	51
1156	Horizons in LTP-like plasticity in human primary motor cortex. <i>Clinical Neurophysiology</i> , 2012, 123, 2111-2113.	0.7	7
1157	Analgesic effects of repetitive transcranial magnetic stimulation of the motor cortex in neuropathic pain: Influence of theta burst stimulation priming. <i>European Journal of Pain</i> , 2012, 16, 1403-1413.	1.4	95
1158	Prenatal stress alters hippocampal synaptic plasticity in young rat offspring through preventing the proteolytic conversion of pro- β -brain-derived neurotrophic factor (BDNF) to mature BDNF. <i>Journal of Physiology</i> , 2012, 590, 991-1010.	1.3	96
1159	Homeostatic metaplasticity of corticospinal excitatory and intracortical inhibitory neural circuits in human motor cortex. <i>Journal of Physiology</i> , 2012, 590, 5765-5781.	1.3	117
1160	The BCM theory of synapse modification at 30: interaction of theory with experiment. <i>Nature Reviews Neuroscience</i> , 2012, 13, 798-810.	4.9	314
1161	Modulation of Top-Down Control of Visual Attention by Cathodal tDCS over Right IPS. <i>Journal of Neuroscience</i> , 2012, 32, 16360-16368.	1.7	94
1162	The Spike-Timing Dependence of Plasticity. <i>Neuron</i> , 2012, 75, 556-571.	3.8	732

#	ARTICLE	IF	CITATIONS
1163	Stochastic Perturbation Methods for Spike-Timing-Dependent Plasticity. <i>Neural Computation</i> , 2012, 24, 1109-1146.	1.3	8
1164	Impairments of Synaptic Plasticity in Aged Animals and in Animal Models of Alzheimer's Disease. <i>Rejuvenation Research</i> , 2012, 15, 235-238.	0.9	30
1165	Learning and Memory: Commentary. , 2012, , 485-492.		1
1167	Bursts shape the NMDA-R mediated spike timing dependent plasticity curve: role of burst interspike interval and GABAergic inhibition. <i>Cognitive Neurodynamics</i> , 2012, 6, 421-441.	2.3	10
1168	Combined effects of LTP/LTD and synaptic scaling in formation of discrete and line attractors with persistent activity from non-trivial baseline. <i>Cognitive Neurodynamics</i> , 2012, 6, 499-524.	2.3	6
1169	Calcium as a Trigger for Cerebellar Long-Term Synaptic Depression. <i>Cerebellum</i> , 2012, 11, 706-717.	1.4	33
1170	Noninvertibility, Chaotic Coding, and Chaotic Multiplexity of Synaptically Modulated Neural Firing. <i>Neural Computation</i> , 2012, 24, 676-699.	1.3	2
1171	Synaptic tagging and capture in the living rat. <i>Nature Communications</i> , 2012, 3, 1246.	5.8	49
1172	Musical Training as a Framework for Brain Plasticity: Behavior, Function, and Structure. <i>Neuron</i> , 2012, 76, 486-502.	3.8	602
1173	Centering Neural Network Gradient Factors. <i>Lecture Notes in Computer Science</i> , 2012, , 205-223.	1.0	8
1174	Glial Tumor Necrosis Factor Alpha (TNF α) Generates Metaplastic Inhibition of Spinal Learning. <i>PLoS ONE</i> , 2012, 7, e39751.	1.1	49
1175	Selective Impairment of Some Forms of Synaptic Plasticity by Oligomeric Amyloid- β Peptide in the Mouse Hippocampus: Implication of Extrasynaptic NMDA Receptors. <i>Journal of Alzheimer's Disease</i> , 2012, 32, 183-196.	1.2	37
1176	Analysis of Synaptic Scaling in Combination with Hebbian Plasticity in Several Simple Networks. <i>Frontiers in Computational Neuroscience</i> , 2012, 6, 36.	1.2	20
1177	Does Spike-Timing-Dependent Synaptic Plasticity Couple or Decouple Neurons Firing in Synchrony?. <i>Frontiers in Computational Neuroscience</i> , 2012, 6, 55.	1.2	46
1178	The computational power of astrocyte mediated synaptic plasticity. <i>Frontiers in Computational Neuroscience</i> , 2012, 6, 93.	1.2	75
1179	Computational quest for understanding the role of astrocyte signaling in synaptic transmission and plasticity. <i>Frontiers in Computational Neuroscience</i> , 2012, 6, 98.	1.2	63
1180	Making Decisions with Unknown Sensory Reliability. <i>Frontiers in Neuroscience</i> , 2012, 6, 75.	1.4	63
1181	Ca ²⁺ -permeable AMPA receptors in homeostatic synaptic plasticity. <i>Frontiers in Molecular Neuroscience</i> , 2012, 5, 17.	1.4	58

#	ARTICLE	IF	CITATIONS
1182	On the Evolution of Memory: A Time for Clocks. <i>Frontiers in Molecular Neuroscience</i> , 2012, 5, 23.	1.4	16
1183	Spike-Timing-Dependent Plasticity: A Comprehensive Overview. <i>Frontiers in Synaptic Neuroscience</i> , 2012, 4, 2.	1.3	228
1184	Molecular Mechanisms in Synaptic Plasticity. , 0, , .		4
1185	Synaptic state matching: a dynamical architecture for predictive internal representation and feature perception. <i>Nature Precedings</i> , 2012, , .	0.1	0
1186	From motor cortex to visual cortex: The application of noninvasive brain stimulation to amblyopia. <i>Developmental Psychobiology</i> , 2012, 54, 263-273.	0.9	22
1187	Frequency dependency of NMDA receptor-dependent synaptic plasticity in the hippocampal CA1 region of freely behaving mice. <i>Hippocampus</i> , 2012, 22, 2238-2248.	0.9	38
1188	A frontier in the understanding of synaptic plasticity: Solving the structure of the postsynaptic density. <i>BioEssays</i> , 2012, 34, 599-608.	1.2	21
1189	Synaptic consolidation: an approach to long-term learning. <i>Cognitive Neurodynamics</i> , 2012, 6, 251-257.	2.3	42
1190	NMDA receptors and metaplasticity: Mechanisms and possible roles in neuropsychiatric disorders. <i>Neuroscience and Biobehavioral Reviews</i> , 2012, 36, 989-1000.	2.9	108
1191	Neural networks including microRNAs. <i>Neural Networks</i> , 2012, 25, 200-204.	3.3	5
1192	Contrast normalization contributes to a biologically-plausible model of receptive-field development in primary visual cortex (V1). <i>Vision Research</i> , 2012, 54, 49-60.	0.7	12
1193	Postnatal alterations in induction threshold and expression magnitude of long-term potentiation and long-term depression at hippocampal synapses. <i>Hippocampus</i> , 2012, 22, 188-199.	0.9	29
1194	Mechanical flutter stimulation induces a lasting response in the sensorimotor cortex as revealed with BOLD fMRI. <i>Human Brain Mapping</i> , 2013, 34, 2767-2774.	1.9	12
1195	Experience-Dependent Plasticity in the Central Nervous System. , 2013, , 553-576.		0
1196	New modalities of brain stimulation for stroke rehabilitation. <i>Experimental Brain Research</i> , 2013, 224, 335-358.	0.7	94
1197	20 Years of Computational Neuroscience. , 2013, , .		16
1198	GABA promotes the competitive selection of dendritic spines by controlling local Ca ²⁺ signaling. <i>Nature Neuroscience</i> , 2013, 16, 1409-1416.	7.1	183
1199	Dopaminergic Control of Long-Term Depression/Long-Term Potentiation Threshold in Prefrontal Cortex. <i>Journal of Neuroscience</i> , 2013, 33, 13914-13926.	1.7	39

#	ARTICLE	IF	CITATIONS
1200	Hebbian crosstalk and input segregation. <i>Journal of Theoretical Biology</i> , 2013, 337, 133-149.	0.8	3
1202	A Biological Gradient Descent for Prediction Through a Combination of STDP and Homeostatic Plasticity. <i>Neural Computation</i> , 2013, 25, 2815-2832.	1.3	17
1203	A Calcium-Based Simple Model of Multiple Spike Interactions in Spike-Timing-Dependent Plasticity. <i>Neural Computation</i> , 2013, 25, 1853-1869.	1.3	3
1204	Impaired Motor Cortex Responses in Non-Psychotic First-Degree Relatives of Schizophrenia Patients: A Cathodal tDCS Pilot Study. <i>Brain Stimulation</i> , 2013, 6, 821-829.	0.7	23
1205	Interaction Between Simultaneously Applied Neuromodulatory Interventions in Humans. <i>Brain Stimulation</i> , 2013, 6, 624-630.	0.7	44
1206	Heterosynaptic Plasticity Prevents Runaway Synaptic Dynamics. <i>Journal of Neuroscience</i> , 2013, 33, 15915-15929.	1.7	69
1207	Plasticity. <i>Handbook of Clinical Neurology</i> / Edited By P J Vinken and G W Bruyn, 2013, 116, 525-534.	1.0	9
1208	Transcranial magnetic stimulation in dystonia. <i>Handbook of Clinical Neurology</i> / Edited By P J Vinken and G W Bruyn, 2013, 116, 543-553.	1.0	12
1209	Brain stimulation in migraine. <i>Handbook of Clinical Neurology</i> / Edited By P J Vinken and G W Bruyn, 2013, 116, 585-598.	1.0	16
1210	Aquaporin-4 water channels and synaptic plasticity in the hippocampus. <i>Neurochemistry International</i> , 2013, 63, 702-711.	1.9	62
1211	Dendritic calcium signaling in cerebellar Purkinje cell. <i>Neural Networks</i> , 2013, 47, 11-17.	3.3	35
1212	Noninvasive brain stimulation in neurorehabilitation. <i>Handbook of Clinical Neurology</i> / Edited By P J Vinken and G W Bruyn, 2013, 116, 499-524.	1.0	69
1213	Diabetes mellitus- and ageing-induced changes in the capacity for long-term depression and long-term potentiation inductions: Toward a unified mechanism. <i>European Journal of Pharmacology</i> , 2013, 719, 161-169.	1.7	2
1214	Computational modelling of memory retention from synapse to behaviour. <i>Journal of Statistical Mechanics: Theory and Experiment</i> , 2013, 2013, P03007.	0.9	3
1215	Circuit reactivation dynamically regulates synaptic plasticity in neocortex. <i>Nature Communications</i> , 2013, 4, 2574.	5.8	26
1216	Nonlinear Decoding and Asymmetric Representation of Neuronal Input Information by CaMKII β and Calcineurin. <i>Cell Reports</i> , 2013, 3, 978-987.	2.9	85
1217	Neuromodulation for Brain Disorders: Challenges and Opportunities. <i>IEEE Transactions on Biomedical Engineering</i> , 2013, 60, 610-624.	2.5	148
1218	Emerging concepts in the physiological basis of dystonia. <i>Movement Disorders</i> , 2013, 28, 958-967.	2.2	360

#	ARTICLE	IF	CITATIONS
1219	Abnormal experimentally- and behaviorally-induced LTP-like plasticity in focal hand dystonia. <i>Experimental Neurology</i> , 2013, 240, 64-74.	2.0	47
1220	Mechanisms for Stable, Robust, and Adaptive Development of Orientation Maps in the Primary Visual Cortex. <i>Journal of Neuroscience</i> , 2013, 33, 15747-15766.	1.7	47
1221	One hertz repetitive transcranial magnetic stimulation over dorsal premotor cortex enhances offline motor memory consolidation for sequence-specific implicit learning. <i>European Journal of Neuroscience</i> , 2013, 38, 3071-3079.	1.2	23
1222	Live demonstration: Multiple-timescale plasticity in a neuromorphic system. , 2013, , .		2
1223	Dreaming of mathematical neuroscience for half a century. <i>Neural Networks</i> , 2013, 37, 48-51.	3.3	13
1224	Consciousness and the structuring property of typical data. <i>Complexity</i> , 2013, 18, 28-37.	0.9	20
1225	Modulation of synaptic plasticity by the coactivation of spatially distinct synaptic inputs in rat hippocampal CA1 apical dendrites. <i>Brain Research</i> , 2013, 1526, 1-14.	1.1	6
1226	Hippocampal long-term depression in freely behaving mice requires the activation of beta-adrenergic receptors. <i>Hippocampus</i> , 2013, 23, 1299-1308.	0.9	28
1227	Modeling binocular competition through Hebbian plasticity and constrained connectivity. <i>Neurocomputing</i> , 2013, 121, 195-206.	3.5	2
1228	Purinergic receptor- and gap junction-mediated intercellular signalling as a mechanism of heterosynaptic metaplasticity. <i>Neurobiology of Learning and Memory</i> , 2013, 105, 31-39.	1.0	15
1229	Modelling non-invasive brain stimulation in cognitive neuroscience. <i>Neuroscience and Biobehavioral Reviews</i> , 2013, 37, 1702-1712.	2.9	432
1230	Quadri-pulse stimulation induces stimulation frequency dependent cortical hemoglobin concentration changes within the ipsilateral motor cortical network. <i>Brain Stimulation</i> , 2013, 6, 40-48.	0.7	19
1231	Neural field theory of calcium dependent plasticity with applications to transcranial magnetic stimulation. <i>Journal of Theoretical Biology</i> , 2013, 324, 72-83.	0.8	29
1232	Unilateral skill acquisition induces bilateral NMDA receptor subunit composition shifts in the rat sensorimotor striatum. <i>Brain Research</i> , 2013, 1517, 77-86.	1.1	9
1233	Towards artificial neurons and synapses: a materials point of view. <i>RSC Advances</i> , 2013, 3, 3169.	1.7	171
1234	Darkness Alters Maturation of Visual Cortex and Promotes Fast Recovery from Monocular Deprivation. <i>Current Biology</i> , 2013, 23, 382-386.	1.8	91
1235	Emerging roles of metaplasticity in behaviour and disease. <i>Trends in Neurosciences</i> , 2013, 36, 353-362.	4.2	164
1236	Adenosine: setting the stage for plasticity. <i>Trends in Neurosciences</i> , 2013, 36, 248-257.	4.2	112

#	ARTICLE	IF	CITATIONS
1237	Biological Modeling. , 2013, , 2333-2354.		0
1238	Do biological synapses perform probabilistic computations?. Neurocomputing, 2013, 114, 24-31.	3.5	20
1239	On the biological plausibility of artificial metaplasticity learning algorithm. Neurocomputing, 2013, 114, 32-35.	3.5	13
1240	Matching Recall and Storage in Sequence Learning with Spiking Neural Networks. Journal of Neuroscience, 2013, 33, 9565-9575.	1.7	107
1241	Reciprocal Homosynaptic and Heterosynaptic Long-Term Plasticity of Corticogeniculate Projection Neurons in Layer VI of the Mouse Visual Cortex. Journal of Neuroscience, 2013, 33, 7787-7798.	1.7	18
1242	Three generic bistable scenarios of the interplay of voltage pulses and gene expression in neurons. Neural Networks, 2013, 44, 51-63.	3.3	4
1243	A neuromorphic VLSI design for spike timing and rate based synaptic plasticity. Neural Networks, 2013, 45, 70-82.	3.3	39
1244	Exendin (5-39), an antagonist of GLP-1 receptor, modulates synaptic transmission via glutamate uptake in the dentate gyrus. Brain Research, 2013, 1505, 1-10.	1.1	16
1245	Neural plasticity and its contribution to functional recovery. Handbook of Clinical Neurology / Edited By P J Vinken and G W Bruyn, 2013, 110, 3-12.	1.0	79
1246	Effects of lamotrigine on human motor cortex plasticity. Clinical Neurophysiology, 2013, 124, 148-153.	0.7	12
1247	Spike-based learning of transfer functions with the SpiNNaker neuromimetic simulator. , 2013, , .		1
1248	Moderate levels of activation lead to forgetting in the think/no-think paradigm. Neuropsychologia, 2013, 51, 2371-2388.	0.7	95
1249	Incorporating rapid neocortical learning of new schema-consistent information into complementary learning systems theory.. Journal of Experimental Psychology: General, 2013, 142, 1190-1210.	1.5	218
1250	Biologically plausible models of homeostasis and STDP: Stability and learning in spiking neural networks. , 2013, , .		25
1251	Endogenous hippocampal LTD that is enabled by spatial object recognition requires activation of NMDA receptors and the metabotropic glutamate receptor, mGlu5. Hippocampus, 2013, 23, 129-138.	0.9	61
1252	Initiation, Labile, and Stabilization Phases of Experience-Dependent Plasticity at Neocortical Synapses. Journal of Neuroscience, 2013, 33, 8483-8493.	1.7	16
1253	Priming Pharyngeal Motor Cortex by Repeated Paired Associative Stimulation. Neurorehabilitation and Neural Repair, 2013, 27, 355-362.	1.4	27
1254	Modeling the Formation Process of Grouping Stimuli Sets through Cortical Columns and Microcircuits to Feature Neurons. Computational Intelligence and Neuroscience, 2013, 2013, 1-10.	1.1	1

#	ARTICLE	IF	CITATIONS
1255	Synaptic Scaling Enables Dynamically Distinct Short- and Long-Term Memory Formation. PLoS Computational Biology, 2013, 9, e1003307.	1.5	43
1256	Transcranial Electrical Stimulation Accelerates Human Sleep Homeostasis. PLoS Computational Biology, 2013, 9, e1002898.	1.5	74
1257	Sensory optimization by stochastic tuning.. Psychological Review, 2013, 120, 798-816.	2.7	9
1258	Erasing the engram: The unlearning of procedural skills.. Journal of Experimental Psychology: General, 2013, 142, 710-741.	1.5	25
1259	Sparse Distributed Representation of Odors in a Large-scale Olfactory Bulb Circuit. PLoS Computational Biology, 2013, 9, e1003014.	1.5	37
1260	Synaptic Plasticity in Neural Networks Needs Homeostasis with a Fast Rate Detector. PLoS Computational Biology, 2013, 9, e1003330.	1.5	144
1261	The Convallis Rule for Unsupervised Learning in Cortical Networks. PLoS Computational Biology, 2013, 9, e1003272.	1.5	17
1262	Peripheral Neurostimulation and Specific Motor Training of Deep Abdominal Muscles Improve Posturomotor Control in Chronic Low Back Pain. Clinical Journal of Pain, 2013, 29, 814-823.	0.8	41
1263	MHC class I immune proteins are critical for hippocampus-dependent memory and gate NMDAR-dependent hippocampal long-term depression. Learning and Memory, 2013, 20, 505-517.	0.5	40
1264	Modulation of the boundary between hierarchically differentiated domains in a self-organizing neural system. Europhysics Letters, 2013, 101, 48004.	0.7	4
1265	Spike Timing-Dependent Plasticity. , 2013, , 155-181.		7
1266	A New Model of the Neuron for Biological Spiking Neural Network Suitable for Parallel Data Processing Realized in Hardware. Solid State Phenomena, 0, 199, 217-222.	0.3	0
1267	Cerebellar Processing of Sensory Inputs Primes Motor Cortex Plasticity. Cerebral Cortex, 2013, 23, 305-314.	1.6	113
1268	Advances in Cognitive Neurodynamics (III). , 2013, , .		5
1269	Heat-Evoked Experimental Pain Induces Long-Term Potentiation-Like Plasticity in Human Primary Motor Cortex. Cerebral Cortex, 2013, 23, 1942-1951.	1.6	41
1270	Input-specific learning rules at excitatory synapses onto hippocampal parvalbumin-expressing interneurons. Journal of Physiology, 2013, 591, 1809-1822.	1.3	52
1271	Mechanisms Underlying the Rules for Associative Plasticity at Adult Human Neocortical Synapses. Journal of Neuroscience, 2013, 33, 17197-17208.	1.7	104
1272	Short-term memory of TiO ₂ -based electrochemical capacitors: empirical analysis with adoption of a sliding threshold. Nanotechnology, 2013, 24, 384005.	1.3	33

#	ARTICLE	IF	CITATIONS
1273	The formation of categories and the representation of feature saliency: Analysis with a computational model trained with an Hebbian paradigm. <i>Journal of Integrative Neuroscience</i> , 2013, 12, 401-425.	0.8	4
1274	Synapse-specific and size-dependent mechanisms of spine structural plasticity accompanying synaptic weakening. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013, 110, E305-12.	3.3	136
1276	Pathophysiology of basal ganglia disorders: neurophysiological investigations. , 0, , 14-24.		0
1277	Energy consumption and entropy production in a stochastic formulation of BCM learning. <i>Journal of Physics: Conference Series</i> , 2013, 470, 012011.	0.3	0
1278	The adaptation of spike backpropagation delays in cortical neurons. <i>Frontiers in Cellular Neuroscience</i> , 2013, 7, 192.	1.8	17
1279	Global attractor alphabet of neural firing modes. <i>Journal of Neurophysiology</i> , 2013, 110, 907-915.	0.9	6
1280	Inflammation Subverts Hippocampal Synaptic Plasticity in Experimental Multiple Sclerosis. <i>PLoS ONE</i> , 2013, 8, e54666.	1.1	123
1281	A Calcium-Dependent Plasticity Rule for HCN Channels Maintains Activity Homeostasis and Stable Synaptic Learning. <i>PLoS ONE</i> , 2013, 8, e55590.	1.1	40
1282	Brain-Derived Neurotrophic Factor α A Major Player in Stimulation-Induced Homeostatic Metaplasticity of Human Motor Cortex?. <i>PLoS ONE</i> , 2013, 8, e57957.	1.1	63
1283	Gating of Long-Term Potentiation by Nicotinic Acetylcholine Receptors at the Cerebellum Input Stage. <i>PLoS ONE</i> , 2013, 8, e64828.	1.1	49
1284	A biologically plausible embodied model of action discovery. <i>Frontiers in Neurobotics</i> , 2013, 7, 4.	1.6	27
1285	The role of dendritic inhibition in shaping the plasticity of excitatory synapses. <i>Frontiers in Neural Circuits</i> , 2013, 6, 118.	1.4	47
1286	The cerebellar Golgi cell and spatiotemporal organization of granular layer activity. <i>Frontiers in Neural Circuits</i> , 2013, 7, 93.	1.4	85
1287	Patterned Brain Stimulation, What a Framework with Rhythmic and Noisy Components Might Tell Us about Recovery Maximization. <i>Frontiers in Human Neuroscience</i> , 2013, 7, 325.	1.0	18
1288	Non-Hebbian spike-timing-dependent plasticity in cerebellar circuits. <i>Frontiers in Neural Circuits</i> , 2012, 6, 124.	1.4	28
1289	Activity-Dependent NPAS4 Expression and the Regulation of Gene Programs Underlying Plasticity in the Central Nervous System. <i>Neural Plasticity</i> , 2013, 2013, 1-12.	1.0	27
1290	Tunable Low Energy, Compact and High Performance Neuromorphic Circuit for Spike-Based Synaptic Plasticity. <i>PLoS ONE</i> , 2014, 9, e88326.	1.1	14
1291	Pressure Pain Thresholds Increase after Preconditioning 1 Hz Repetitive Transcranial Magnetic Stimulation with Transcranial Direct Current Stimulation. <i>PLoS ONE</i> , 2014, 9, e92540.	1.1	13

#	ARTICLE	IF	CITATIONS
1292	Altered Synaptic Plasticity in Tourette's Syndrome and Its Relationship to Motor Skill Learning. PLoS ONE, 2014, 9, e98417.	1.1	37
1293	On the Correlation between Reservoir Metrics and Performance for Time Series Classification under the Influence of Synaptic Plasticity. PLoS ONE, 2014, 9, e101792.	1.1	9
1294	Overcoming Catastrophic Interference in Connectionist Networks Using Gram-Schmidt Orthogonalization. PLoS ONE, 2014, 9, e105619.	1.1	9
1295	Generating Functionals for Computational Intelligence: The Fisher Information as an Objective Function for Self-Limiting Hebbian Learning Rules. Frontiers in Robotics and AI, 2014, 1, .	2.0	12
1296	The timing of cognitive plasticity in physiological aging: a tDCS study of naming. Frontiers in Aging Neuroscience, 2014, 6, 131.	1.7	76
1297	Is neural hyperpolarization by cathodal stimulation always detrimental at the behavioral level?. Frontiers in Behavioral Neuroscience, 2014, 8, 226.	1.0	68
1298	Behavior control in the sensorimotor loop with short-term synaptic dynamics induced by self-regulating neurons. Frontiers in Neurorobotics, 2014, 8, 19.	1.6	15
1299	The meaning of spikes from the neuron's point of view: predictive homeostasis generates the appearance of randomness. Frontiers in Computational Neuroscience, 2014, 8, 49.	1.2	17
1300	A biologically plausible learning rule for the Infomax on recurrent neural networks. Frontiers in Computational Neuroscience, 2014, 8, 143.	1.2	6
1301	Engram formation in psychiatric disorders. Frontiers in Neuroscience, 2014, 8, 118.	1.4	7
1302	A unifying theory of synaptic long-term plasticity based on a sparse distribution of synaptic strength. Frontiers in Synaptic Neuroscience, 2014, 6, 3.	1.3	8
1303	Learning and Memory. , 2014, , 591-637.		10
1304	Long-term potentiation and long-term depression. , 0, , 50-62.		0
1305	Memories and Memory: A Physicist's Approach to the Brain. , 0, , 132-147.		2
1306	Heterosynaptic Modulation of Motor Cortical Plasticity in Human. Journal of Neuroscience, 2014, 34, 7314-7321.	1.7	41
1307	Homeostatic plasticity induced by brief activity deprivation enhances long-term potentiation in the mature rat hippocampus. Journal of Neurophysiology, 2014, 112, 3012-3022.	0.9	23
1308	Dose-Dependent Effects of Theta Burst rTMS on Cortical Excitability and Resting-State Connectivity of the Human Motor System. Journal of Neuroscience, 2014, 34, 6849-6859.	1.7	183
1309	Binocular Input Coincidence Mediates Critical Period Plasticity in the Mouse Primary Visual Cortex. Journal of Neuroscience, 2014, 34, 2940-2955.	1.7	29

#	ARTICLE	IF	CITATIONS
1310	Priming the Brain to Capitalize on Metaplasticity in Stroke Rehabilitation. <i>Physical Therapy</i> , 2014, 94, 139-150.	1.1	35
1311	Input Statistics and Hebbian Cross-Talk Effects. <i>Neural Computation</i> , 2014, 26, 654-692.	1.3	0
1312	The memristor-based associative learning network with retention loss. , 2014, , .		2
1313	Memory Maintenance in Synapses with Calcium-Based Plasticity in the Presence of Background Activity. <i>PLoS Computational Biology</i> , 2014, 10, e1003834.	1.5	28
1314	Occlusion of Low-Frequency-Induced, Heterosynaptic Long-Term Potentiation in the Rat Hippocampus In Vivo Following Spatial Training. <i>Cerebral Cortex</i> , 2014, 24, 3090-3096.	1.6	13
1315	Optimal Recall from Bounded Metaplastic Synapses: Predicting Functional Adaptations in Hippocampal Area CA3. <i>PLoS Computational Biology</i> , 2014, 10, e1003489.	1.5	17
1316	Spatiotemporal Computations of an Excitable and Plastic Brain: Neuronal Plasticity Leads to Noise-Robust and Noise-Constructive Computations. <i>PLoS Computational Biology</i> , 2014, 10, e1003512.	1.5	28
1317	The Organization of Plasticity in the Cerebellar Cortex: From Synapses to Control. <i>Progress in Brain Research</i> , 2014, 210, 31-58.	0.9	93
1318	Developmental Self-Construction and -Configuration of Functional Neocortical Neuronal Networks. <i>PLoS Computational Biology</i> , 2014, 10, e1003994.	1.5	24
1319	Multiprotocol-induced plasticity in artificial synapses. <i>Nanoscale</i> , 2014, 6, 15151-15160.	2.8	16
1320	Low-frequency stimulation induces long-term depression and slow onset long-term potentiation at perforant path-dentate gyrus synapses in vivo. <i>Journal of Neurophysiology</i> , 2014, 111, 1259-1273.	0.9	27
1321	Sisyphus effect in pulse-coupled excitatory neural networks with spike-timing-dependent plasticity. <i>Physical Review E</i> , 2014, 89, 062701.	0.8	8
1322	Sparse Coding and Lateral Inhibition Arising from Balanced and Unbalanced Dendrodendritic Excitation and Inhibition. <i>Journal of Neuroscience</i> , 2014, 34, 13701-13713.	1.7	44
1323	Long-Term Plasticity, <i>Biophysical Models</i> . , 2014, , 1-15.		0
1324	Enhanced AMPA receptor function promotes cerebellar long-term depression rather than potentiation. <i>Learning and Memory</i> , 2014, 21, 662-667.	0.5	12
1325	Inter-subject Variability of LTD-like Plasticity in Human Motor Cortex: A Matter of Preceding Motor Activation. <i>Brain Stimulation</i> , 2014, 7, 864-870.	0.7	86
1326	Neutralization of Nogo-A Enhances Synaptic Plasticity in the Rodent Motor Cortex and Improves Motor Learning in Vivo. <i>Journal of Neuroscience</i> , 2014, 34, 8685-8698.	1.7	71
1327	Differential regulation of NMDAR and NMDAR α -mediated metaplasticity by anandamide and 2 α -CAG in the hippocampus. <i>Hippocampus</i> , 2014, 24, 1601-1614.	0.9	18

#	ARTICLE	IF	CITATIONS
1328	Interplay between synaptic endocannabinoid signaling and metaplasticity in neuronal circuit function and dysfunction. <i>European Journal of Neuroscience</i> , 2014, 39, 1189-1201.	1.2	27
1329	GLYX-13, an NMDA receptor glycine site functional partial agonist enhances cognition and produces antidepressant effects without the psychotomimetic side effects of NMDA receptor antagonists. <i>Expert Opinion on Investigational Drugs</i> , 2014, 23, 243-254.	1.9	107
1330	MemFlash device: floating gate transistors as memristive devices for neuromorphic computing. <i>Semiconductor Science and Technology</i> , 2014, 29, 104011.	1.0	33
1331	Long-Term Potentiation at Cerebellar Parallel Fiber-Purkinje Cell Synapses Requires Presynaptic and Postsynaptic Signaling Cascades. <i>Journal of Neuroscience</i> , 2014, 34, 2355-2364.	1.7	69
1332	The Physiological Basis of Brain Stimulation. , 2014, , 145-177.		12
1333	Effects of Brain Stimulation on Declarative and Procedural Memories. , 2014, , 237-263.		3
1334	The role of inhibition in human motor cortical plasticity. <i>Neuroscience</i> , 2014, 278, 93-104.	1.1	53
1335	NMDA Receptor-Dependent Metaplasticity by High-Frequency Magnetic Stimulation. <i>Neural Plasticity</i> , 2014, 2014, 1-8.	1.0	10
1336	Neurobiomimetic constructs for intelligent unmanned systems and robotics. <i>Proceedings of SPIE</i> , 2014, , .	0.8	0
1337	Effects of HMG-CoA reductase inhibitors on learning and memory in the guinea pig. <i>European Journal of Pharmacology</i> , 2014, 723, 294-304.	1.7	13
1338	Computational modeling of neural plasticity for self-organization of neural networks. <i>BioSystems</i> , 2014, 125, 43-54.	0.9	25
1339	Interleukin-1 β Promotes Long-Term Potentiation in Patients with Multiple Sclerosis. <i>NeuroMolecular Medicine</i> , 2014, 16, 38-51.	1.8	64
1340	Multiscale Modeling and Synaptic Plasticity. <i>Progress in Molecular Biology and Translational Science</i> , 2014, 123, 351-386.	0.9	9
1341	Mechanisms of heterosynaptic metaplasticity. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , 2014, 369, 20130148.	1.8	73
1342	Post and pre-compensatory Hebbian learning for categorisation. <i>Cognitive Neurodynamics</i> , 2014, 8, 299-311.	2.3	7
1343	Numerical modelling of plasticity induced by transcranial magnetic stimulation. <i>Journal of Computational Neuroscience</i> , 2014, 36, 499-514.	0.6	25
1344	Targeting Chronic Recurrent Low Back Pain From the Top-down and the Bottom-up: A Combined Transcranial Direct Current Stimulation and Peripheral Electrical Stimulation Intervention. <i>Brain Stimulation</i> , 2014, 7, 451-459.	0.7	118
1345	Large-Scale Synthesis of Functional Spiking Neural Circuits. <i>Proceedings of the IEEE</i> , 2014, 102, 881-898.	16.4	53

#	ARTICLE	IF	CITATIONS
1346	Heterosynaptic Plasticity. <i>Neuroscientist</i> , 2014, 20, 483-498.	2.6	125
1347	Transcranial electrical stimulation modifies the neuronal response to psychosocial stress exposure. <i>Human Brain Mapping</i> , 2014, 35, 3750-3759.	1.9	53
1348	Contrasting forms of cocaine-evoked plasticity control components of relapse. <i>Nature</i> , 2014, 509, 459-464.	13.7	342
1349	Acute and chronic effects of ethanol on learning-related synaptic plasticity. <i>Alcohol</i> , 2014, 48, 1-17.	0.8	135
1350	Visual Development. , 2014, , .		17
1351	Evidence for metaplasticity in the human visual cortex. <i>Journal of Neural Transmission</i> , 2014, 121, 221-231.	1.4	52
1352	Reduced Threshold for Inhibitory Homeostatic Responses in Migraine Motor Cortex? A <scp>tDCS/TMS</scp> Study. <i>Headache</i> , 2014, 54, 663-674.	1.8	26
1353	Primed low-frequency repetitive transcranial magnetic stimulation and constraint-induced movement therapy in pediatric hemiparesis: a randomized controlled trial. <i>Developmental Medicine and Child Neurology</i> , 2014, 56, 44-52.	1.1	89
1354	Formation and maintenance of neuronal assemblies through synaptic plasticity. <i>Nature Communications</i> , 2014, 5, 5319.	5.8	246
1355	Implementation of memristive neural networks with spike-rate-dependent plasticity synapses. , 2014, , .		13
1356	Synaptic Plasticity. , 2014, , 533-561.		3
1357	Modeling the Dynamic Interaction of Hebbian and Homeostatic Plasticity. <i>Neuron</i> , 2014, 84, 497-510.	3.8	85
1358	Sensorimotor Deprivation Induces Interdependent Changes in Excitability and Plasticity of the Human Hand Motor Cortex. <i>Journal of Neuroscience</i> , 2014, 34, 7375-7382.	1.7	39
1359	Context-dependent savings in procedural category learning. <i>Brain and Cognition</i> , 2014, 92, 1-10.	0.8	12
1360	Spine Head Calcium as a Measure of Summed Postsynaptic Activity for Driving Synaptic Plasticity. <i>Neural Computation</i> , 2014, 26, 2194-2222.	1.3	7
1361	The penumbra of learning: A statistical theory of synaptic tagging and capture. <i>Network: Computation in Neural Systems</i> , 2014, 25, 97-115.	2.2	4
1362	Synaptic Stress and Pathogenesis of Neuropsychiatric Disorders. , 2014, , .		2
1363	Timing-dependent priming effects of tDCS on ankle motor skill learning. <i>Brain Research</i> , 2014, 1581, 23-29.	1.1	81

#	ARTICLE	IF	CITATIONS
1364	Dendritic spine heterogeneity and calcium dynamics in basolateral amygdala principal neurons. <i>Journal of Neurophysiology</i> , 2014, 112, 1616-1627.	0.9	9
1365	Bidirectional regulation of synaptic plasticity in the basolateral amygdala induced by the D1-like family of dopamine receptors and group II metabotropic glutamate receptors. <i>Journal of Physiology</i> , 2014, 592, 4329-4351.	1.3	26
1366	Emerging feed-forward inhibition allows the robust formation of direction selectivity in the developing ferret visual cortex. <i>Journal of Neurophysiology</i> , 2014, 111, 2355-2373.	0.9	19
1367	How the mechanisms of long-term synaptic potentiation and depression serve experience-dependent plasticity in primary visual cortex. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , 2014, 369, 20130284.	1.8	101
1368	Sequential Activity in Asymmetrically Coupled Winner-Take-All Circuits. <i>Neural Computation</i> , 2014, 26, 1973-2004.	1.3	8
1369	Cyclical changes of cortical excitability and metaplasticity in migraine: Evidence from a repetitive transcranial magnetic stimulation study. <i>Pain</i> , 2014, 155, 1070-1078.	2.0	89
1370	Evidence-based guidelines on the therapeutic use of repetitive transcranial magnetic stimulation (rTMS). <i>Clinical Neurophysiology</i> , 2014, 125, 2150-2206.	0.7	1,647
1371	GluA2-dependent AMPA receptor endocytosis and the decay of early and late long-term potentiation: possible mechanisms for forgetting of short- and long-term memories. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , 2014, 369, 20130141.	1.8	60
1372	From different neurophysiological methods to conflicting pathophysiological views in migraine: A critical review of literature. <i>Clinical Neurophysiology</i> , 2014, 125, 1721-1730.	0.7	50
1373	Neural field theory of synaptic metaplasticity with applications to theta burst stimulation. <i>Journal of Theoretical Biology</i> , 2014, 340, 164-176.	0.8	24
1374	Experience-dependent homeostatic synaptic plasticity in neocortex. <i>Neuropharmacology</i> , 2014, 78, 45-54.	2.0	52
1375	Dose-response curve of associative plasticity in human motor cortex and interactions with motor practice. <i>Journal of Neurophysiology</i> , 2014, 111, 594-601.	0.9	17
1376	Orientation selectivity based structure for texture classification. , 2014, , .		0
1377	Building animats: neurobiomimetic approach for cognitive systems. <i>Proceedings of SPIE</i> , 2014, , .	0.8	0
1378	What do we know about positive appraisals? Low cognitive cost, orbitofrontal-striatal connectivity, and only short-term bolstering of resilience. <i>Behavioral and Brain Sciences</i> , 2015, 38, e93.	0.4	0
1379	The importance of not only individual, but also community and society factors in resilience in later life. <i>Behavioral and Brain Sciences</i> , 2015, 38, e94.	0.4	11
1380	“œIf you want to understand something, try to change it” Social-psychological interventions to cultivate resilience. <i>Behavioral and Brain Sciences</i> , 2015, 38, e96.	0.4	2
1381	Rediscovering confidence as a mechanism and optimism as a construct. <i>Behavioral and Brain Sciences</i> , 2015, 38, e97.	0.4	2

#	ARTICLE	IF	CITATIONS
1382	The challenges of forecasting resilience. Behavioral and Brain Sciences, 2015, 38, e98.	0.4	6
1383	Cognitive trade-offs and the costs of resilience. Behavioral and Brain Sciences, 2015, 38, e99.	0.4	6
1384	Does a positive appraisal style work in all stressful situations and for all individuals?. Behavioral and Brain Sciences, 2015, 38, e100.	0.4	3
1385	The value of "negative" appraisals for resilience. Is positive (re)appraisal always good and negative always bad?. Behavioral and Brain Sciences, 2015, 38, e101.	0.4	7
1386	Rethinking reappraisal: Insights from affective neuroscience. Behavioral and Brain Sciences, 2015, 38, e102.	0.4	11
1387	The self in its social context: Why resilience needs company. Behavioral and Brain Sciences, 2015, 38, e104.	0.4	0
1388	Personality science, resilience, and posttraumatic growth. Behavioral and Brain Sciences, 2015, 38, e105.	0.4	5
1389	Resilience: Mediated by not one but many appraisal mechanisms. Behavioral and Brain Sciences, 2015, 38, e106.	0.4	2
1390	Careful operationalization and assessment are critical for advancing the study of the neurobiology of resilience. Behavioral and Brain Sciences, 2015, 38, e107.	0.4	0
1391	Appreciating methodological complexity and integrating neurobiological perspectives to advance the science of resilience. Behavioral and Brain Sciences, 2015, 38, e108.	0.4	4
1392	Resilience is more about being flexible than about staying positive. Behavioral and Brain Sciences, 2015, 38, e109.	0.4	13
1393	Knowledge and resilience. Behavioral and Brain Sciences, 2015, 38, e110.	0.4	1
1394	Adding network approaches to a neurobiological framework of resilience. Behavioral and Brain Sciences, 2015, 38, e111.	0.4	0
1395	Positive appraisal style: The mental immune system?. Behavioral and Brain Sciences, 2015, 38, e112.	0.4	3
1396	When at rest: "Event-free" active inference may give rise to implicit self-models of coping potential. Behavioral and Brain Sciences, 2015, 38, e114.	0.4	1
1397	Phenotypic programming as a distal cause of resilience. Behavioral and Brain Sciences, 2015, 38, e115.	0.4	0
1398	Integration of negative experiences: A neuropsychological framework for human resilience. Behavioral and Brain Sciences, 2015, 38, e116.	0.4	17
1399	Stability through variability: Homeostatic plasticity and psychological resilience. Behavioral and Brain Sciences, 2015, 38, e118.	0.4	4

#	ARTICLE	IF	CITATIONS
1400	Toward a translational neuropsychiatry of resilience. Behavioral and Brain Sciences, 2015, 38, e120.	0.4	0
1401	Broadening the definition of resilience and "reappraising" the use of appetitive motivation. Behavioral and Brain Sciences, 2015, 38, e121.	0.4	1
1402	Resilience: The role of accurate appraisal, thresholds, and socioenvironmental factors. Behavioral and Brain Sciences, 2015, 38, e122.	0.4	14
1403	Reappraisal and resilience to stress: Context must be considered. Behavioral and Brain Sciences, 2015, 38, e123.	0.4	11
1404	Social ecological complexity and resilience processes. Behavioral and Brain Sciences, 2015, 38, e124.	0.4	35
1405	Beyond resilience: Positive mental health and the nature of cognitive processes involved in positive appraisals. Behavioral and Brain Sciences, 2015, 38, e125.	0.4	2
1406	The temporal dynamics of resilience: Neural recovery as a biomarker. Behavioral and Brain Sciences, 2015, 38, e126.	0.4	4
1407	Do we know how stressed we are?. Behavioral and Brain Sciences, 2015, 38, e127.	0.4	0
1408	Heterogeneity of cognitive-neurobiological determinants of resilience. Behavioral and Brain Sciences, 2015, 38, e103.	0.4	5
1409	Quantifying resilience: Theoretical or pragmatic for translational research?. Behavioral and Brain Sciences, 2015, 38, e119.	0.4	2
1410	Animals can tell us more. Behavioral and Brain Sciences, 2015, 38, e117.	0.4	2
1411	Advancing empirical resilience research. Behavioral and Brain Sciences, 2015, 38, e128.	0.4	48
1412	Resilience and psychiatric epidemiology: Implications for a conceptual framework. Behavioral and Brain Sciences, 2015, 38, e95.	0.4	7
1413	Are positive appraisals always adaptive?. Behavioral and Brain Sciences, 2015, 38, e113.	0.4	6
1414	Competitive learning behavior in a stochastic neural network. Journal of the Korean Physical Society, 2015, 67, 1679-1685.	0.3	5
1415	The Use of Hebbian Cell Assemblies for Nonlinear Computation. Scientific Reports, 2015, 5, 12866.	1.6	29
1416	Non-invasive brain stimulation for Parkinson's disease: Current concepts and outlook 2015. NeuroRehabilitation, 2015, 37, 11-24.	0.5	52
1417	Trading model: Self reorganizing Fuzzy Associative Machine - forecasted MACD-Histogram (SeroFAM-fMACDH). , 2015, , .		2

#	ARTICLE	IF	CITATIONS
1418	Biorealistic Implementation of Synaptic Functions with Oxide Memristors through Internal Ionic Dynamics. <i>Advanced Functional Materials</i> , 2015, 25, 4290-4299.	7.8	360
1419	Action observation with kinesthetic illusion can produce human motor plasticity. <i>European Journal of Neuroscience</i> , 2015, 41, 1614-1623.	1.2	29
1420	Decision-making and action selection in insects: inspiration from vertebrate-based theories. <i>Frontiers in Behavioral Neuroscience</i> , 2015, 9, 216.	1.0	28
1421	Network-timing-dependent plasticity. <i>Frontiers in Cellular Neuroscience</i> , 2015, 9, 220.	1.8	14
1422	Anatomy and physiology of the thick-tufted layer 5 pyramidal neuron. <i>Frontiers in Cellular Neuroscience</i> , 2015, 9, 233.	1.8	143
1423	Enhanced polychronization in a spiking network with metaplasticity. <i>Frontiers in Computational Neuroscience</i> , 2015, 9, 9.	1.2	7
1424	Spiking neuron network Helmholtz machine. <i>Frontiers in Computational Neuroscience</i> , 2015, 9, 46.	1.2	8
1425	Homeostatic role of heterosynaptic plasticity: models and experiments. <i>Frontiers in Computational Neuroscience</i> , 2015, 9, 89.	1.2	78
1426	Learning structure of sensory inputs with synaptic plasticity leads to interference. <i>Frontiers in Computational Neuroscience</i> , 2015, 9, 103.	1.2	15
1427	An algorithm to predict the connectome of neural microcircuits. <i>Frontiers in Computational Neuroscience</i> , 2015, 9, 120.	1.2	98
1428	Models of Metaplasticity: A Review of Concepts. <i>Frontiers in Computational Neuroscience</i> , 2015, 9, 138.	1.2	61
1429	A Model of In vitro Plasticity at the Parallel Fiberâ€™Molecular Layer Interneuron Synapses. <i>Frontiers in Computational Neuroscience</i> , 2015, 9, 150.	1.2	12
1430	Shaping pseudoneglect with transcranial cerebellar direct current stimulation and music listening. <i>Frontiers in Human Neuroscience</i> , 2015, 9, 158.	1.0	17
1431	Combinations of stroke neurorehabilitation to facilitate motor recovery: perspectives on Hebbian plasticity and homeostatic metaplasticity. <i>Frontiers in Human Neuroscience</i> , 2015, 9, 349.	1.0	52
1432	ANNarchy: a code generation approach to neural simulations on parallel hardware. <i>Frontiers in Neuroinformatics</i> , 2015, 9, 19.	1.3	73
1433	A framework for plasticity implementation on the SpiNNaker neural architecture. <i>Frontiers in Neuroscience</i> , 2014, 8, 429.	1.4	45
1434	Visuo-motor integration in unresponsive wakefulness syndrome: A piece of the puzzle towards consciousness detection?. <i>Restorative Neurology and Neuroscience</i> , 2015, 33, 447-460.	0.4	13
1435	Emergence of Functional Specificity in Balanced Networks with Synaptic Plasticity. <i>PLoS Computational Biology</i> , 2015, 11, e1004307.	1.5	36

#	ARTICLE	IF	CITATIONS
1436	Augmenting LTP-Like Plasticity in Human Motor Cortex by Spaced Paired Associative Stimulation. PLoS ONE, 2015, 10, e0131020.	1.1	30
1437	The Leabra Cognitive Architecture. , 2015, , .		7
1438	Long-Term Spatiotemporal Reconfiguration of Neuronal Activity Revealed by Voltage-Sensitive Dye Imaging in the Cerebellar Granular Layer. Neural Plasticity, 2015, 2015, 1-13.	1.0	18
1439	Neuraminidase Inhibition Primes Short-Term Depression and Suppresses Long-Term Potentiation of Synaptic Transmission in the Rat Hippocampus. Neural Plasticity, 2015, 2015, 1-10.	1.0	10
1440	Modeling Neuron Selectivity Over Simple Midlevel Features for Image Classification. IEEE Transactions on Image Processing, 2015, 24, 2404-2414.	6.0	5
1441	Non-linear effects of transcranial direct current stimulation as a function of individual baseline performance: Evidence from biparietal tDCS influence on lateralized attention bias. Cortex, 2015, 69, 152-165.	1.1	127
1442	Bursts of transcranial electrical stimulation increase arousal in a continuous performance test. Neuropsychologia, 2015, 74, 127-136.	0.7	15
1443	Integrated plasticity at inhibitory and excitatory synapses in the cerebellar circuit. Frontiers in Cellular Neuroscience, 2015, 9, 169.	1.8	45
1444	Consensus Paper: Probing Homeostatic Plasticity of Human Cortex With Non-invasive Transcranial Brain Stimulation. Brain Stimulation, 2015, 8, 442-454.	0.7	138
1445	Consensus Paper: Probing Homeostatic Plasticity of Human Cortex With Non-invasive Transcranial Brain Stimulation. Brain Stimulation, 2015, 8, 993-1006.	0.7	103
1446	Resistant Against De-depression: LTD-Like Plasticity in the Human Motor Cortex Induced by Spaced cTBS. Cerebral Cortex, 2015, 25, 1724-1734.	1.6	61
1447	Effects of l-Dopa and pramipexole on plasticity induced by QPS in human motor cortex. Journal of Neural Transmission, 2015, 122, 1253-1261.	1.4	14
1448	Modulation of executive control in dual tasks with transcranial direct current stimulation (tDCS). Neuropsychologia, 2015, 68, 8-20.	0.7	30
1449	Continuous neural network with windowed Hebbian learning. Biological Cybernetics, 2015, 109, 321-332.	0.6	2
1450	A Digital Liquid State Machine With Biologically Inspired Learning and Its Application to Speech Recognition. IEEE Transactions on Neural Networks and Learning Systems, 2015, 26, 2635-2649.	7.2	130
1451	Synaptic Consolidation: From Synapses to Behavioral Modeling. Journal of Neuroscience, 2015, 35, 1319-1334.	1.7	42
1452	On the role of astroglial syncytia in self-repairing spiking neural networks. IEEE Transactions on Neural Networks and Learning Systems, 2015, 26, 2370-2380.	7.2	42
1453	Degeneration and Plasticity of the Optic Pathway in Alstrom Syndrome. American Journal of Neuroradiology, 2015, 36, 160-165.	1.2	11

#	ARTICLE	IF	CITATIONS
1454	Advances in Cognitive Neurodynamics (IV). <i>Advances in Cognitive Neurodynamics</i> , 2015, , .	0.1	3
1455	Two-Trace Model for Spike-Timing-Dependent Synaptic Plasticity. <i>Neural Computation</i> , 2015, 27, 672-698.	1.3	6
1456	Reversal of Practice-related Effects on Corticospinal Excitability has no Immediate Effect on Behavioral Outcome. <i>Brain Stimulation</i> , 2015, 8, 603-612.	0.7	31
1457	Further insights into the effect of BDNF genotype on non-invasive brain stimulation. <i>Clinical Neurophysiology</i> , 2015, 126, 1281-1283.	0.7	6
1458	A single computational model for many learning phenomena. <i>Cognitive Systems Research</i> , 2015, 36-37, 15-29.	1.9	1
1459	Variability of behavioural responses to transcranial magnetic stimulation: Origins and predictors. <i>Neuropsychologia</i> , 2015, 74, 137-144.	0.7	39
1460	A New Framework for Cortico-Striatal Plasticity: Behavioural Theory Meets In Vitro Data at the Reinforcement-Action Interface. <i>PLoS Biology</i> , 2015, 13, e1002034.	2.6	102
1461	The Formation of Multi-synaptic Connections by the Interaction of Synaptic and Structural Plasticity and Their Functional Consequences. <i>PLoS Computational Biology</i> , 2015, 11, e1004031.	1.5	60
1462	Self-organization of grid fields under supervision of place cells in a neuron model with associative plasticity. <i>Biologically Inspired Cognitive Architectures</i> , 2015, 13, 48-62.	0.9	18
1463	Delayed and Temporally Imprecise Neurotransmission in Reorganizing Cortical Microcircuits. <i>Journal of Neuroscience</i> , 2015, 35, 9024-9037.	1.7	17
1464	Predicting Cortical Dark/Bright Asymmetries from Natural Image Statistics and Early Visual Transforms. <i>PLoS Computational Biology</i> , 2015, 11, e1004268.	1.5	37
1465	Homeostatic Plasticity for Single Node Delay-Coupled Reservoir Computing. <i>Neural Computation</i> , 2015, 27, 1159-1185.	1.3	5
1466	Amblyopia and the binocular approach to its therapy. <i>Vision Research</i> , 2015, 114, 4-16.	0.7	171
1467	Analogous Synaptic Plasticity Profiles Emerge from Disparate Channel Combinations. <i>Journal of Neuroscience</i> , 2015, 35, 4691-4705.	1.7	56
1468	Efficacy and Time Course of Theta Burst Stimulation in Healthy Humans. <i>Brain Stimulation</i> , 2015, 8, 685-692.	0.7	208
1469	Plasticity of Cortical Excitatory-Inhibitory Balance. <i>Annual Review of Neuroscience</i> , 2015, 38, 195-219.	5.0	355
1470	Diverse synaptic plasticity mechanisms orchestrated to form and retrieve memories in spiking neural networks. <i>Nature Communications</i> , 2015, 6, 6922.	5.8	268
1471	Diverse impact of neuronal activity at $\hat{\nu}$ frequency on hippocampal long-term plasticity. <i>Journal of Neuroscience Research</i> , 2015, 93, 1330-1344.	1.3	7

#	ARTICLE	IF	CITATIONS
1472	Motor cortical plasticity induced by motor learning through mental practice. <i>Frontiers in Behavioral Neuroscience</i> , 2015, 9, 105.	1.0	84
1473	mGlu5 Acts As a Switch for Opposing Forms of Synaptic Plasticity at Mossy Fiber-CA3 and Commissural Associational-CA3 Synapses. <i>Journal of Neuroscience</i> , 2015, 35, 4999-5006.	1.7	22
1474	Brain-controlled neuromuscular stimulation to drive neural plasticity and functional recovery. <i>Current Opinion in Neurobiology</i> , 2015, 33, 95-102.	2.0	56
1475	Inhibitory and Excitatory Spike-Timing-Dependent Plasticity in the Auditory Cortex. <i>Neuron</i> , 2015, 86, 514-528.	3.8	169
1476	Early Visuomotor Integration Processes Induce LTP/LTD-Like Plasticity in the Human Motor Cortex. <i>Cerebral Cortex</i> , 2015, 25, 703-712.	1.6	30
1477	Demonstration of WDM weighted addition for principal component analysis. <i>Optics Express</i> , 2015, 23, 12758.	1.7	52
1478	Inferring learning rules from distributions of firing rates in cortical neurons. <i>Nature Neuroscience</i> , 2015, 18, 1804-1810.	7.1	87
1479	Networks that learn the precise timing of event sequences. <i>Journal of Computational Neuroscience</i> , 2015, 39, 235-254.	0.6	26
1480	Rhythmic Inhibition Allows Neural Networks to Search for Maximally Consistent States. <i>Neural Computation</i> , 2015, 27, 2510-2547.	1.3	10
1481	Novel plasticity rule can explain the development of sensorimotor intelligence. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, E6224-E6232.	3.3	22
1482	Evidence for glycinergic GluN1/GluN3 NMDA receptors in hippocampal metaplasticity. <i>Neurobiology of Learning and Memory</i> , 2015, 125, 265-273.	1.0	11
1483	Visual Orientation Selectivity Based Structure Description. <i>IEEE Transactions on Image Processing</i> , 2015, 24, 4602-4613.	6.0	60
1484	Defective Age-Dependent Metaplasticity in a Mouse Model of Alzheimer's Disease. <i>Journal of Neuroscience</i> , 2015, 35, 11346-11357.	1.7	54
1485	Cortical Correlates of Low-Level Perception: From Neural Circuits to Percepts. <i>Neuron</i> , 2015, 88, 110-126.	3.8	53
1486	Survey and evaluation of neural computation models for bio-integrated systems. <i>Nano Communication Networks</i> , 2015, 6, 155-165.	1.6	5
1487	A Reward-Maximizing Spiking Neuron as a Bounded Rational Decision Maker. <i>Neural Computation</i> , 2015, 27, 1686-1720.	1.3	9
1488	Astrocyte-mediated metaplasticity in the hippocampus: Help or hindrance?. <i>Neuroscience</i> , 2015, 309, 113-124.	1.1	25
1489	Programmable Spike-Timing-Dependent Plasticity Learning Circuits in Neuromorphic VLSI Architectures. <i>ACM Journal on Emerging Technologies in Computing Systems</i> , 2015, 12, 1-18.	1.8	16

#	ARTICLE	IF	CITATIONS
1490	The Homeostatic Interaction Between Anodal Transcranial Direct Current Stimulation and Motor Learning in Humans is Related to GABAA Activity. <i>Brain Stimulation</i> , 2015, 8, 898-905.	0.7	70
1491	A Comparison of Primed Low-frequency Repetitive Transcranial Magnetic Stimulation Treatments in Chronic Stroke. <i>Brain Stimulation</i> , 2015, 8, 1074-1084.	0.7	34
1492	Multiple forms of metaplasticity at a single hippocampal synapse during late postnatal development. <i>Developmental Cognitive Neuroscience</i> , 2015, 12, 145-154.	1.9	15
1493	Backward reasoning the formation rules. <i>Nature Neuroscience</i> , 2015, 18, 1705-1706.	7.1	2
1494	A neural network for learning the meaning of objects and words from a featural representation. <i>Neural Networks</i> , 2015, 63, 234-253.	3.3	17
1495	Transcranial Direct Current Stimulation Based Metaplasticity Protocols in Working Memory. <i>Brain Stimulation</i> , 2015, 8, 289-294.	0.7	38
1496	Biological context of Hebb learning in artificial neural networks, a review. <i>Neurocomputing</i> , 2015, 152, 27-35.	3.5	42
1497	Safety of Primed Repetitive Transcranial Magnetic Stimulation and Modified Constraint-Induced Movement Therapy in A Randomized Controlled Trial in Pediatric Hemiparesis. <i>Archives of Physical Medicine and Rehabilitation</i> , 2015, 96, S104-S113.	0.5	35
1498	Metaplasticity in Human Cortex. <i>Neuroscientist</i> , 2015, 21, 185-202.	2.6	181
1499	Distinct and simultaneously active plasticity mechanisms in mouse hippocampus during different phases of Morris water maze training. <i>Brain Structure and Function</i> , 2015, 220, 1273-1290.	1.2	20
1501	One parameter family of master equations for logistic growth and BCM theory. <i>Communications in Nonlinear Science and Numerical Simulation</i> , 2015, 20, 461-468.	1.7	4
1502	Triplet-based spike timing dependent plasticity (TSTDP) modeling using VHDL-AMS. <i>Neurocomputing</i> , 2015, 149, 1440-1444.	3.5	5
1503	Pathological brain plasticity and cognition in the offspring of males subjected to postnatal traumatic stress. <i>Molecular Psychiatry</i> , 2015, 20, 621-631.	4.1	96
1504	Metaplasticity in human primary somatosensory cortex: effects on physiology and tactile perception. <i>Journal of Neurophysiology</i> , 2016, 115, 2681-2691.	0.9	19
1505	Emerging Link between Alzheimer's Disease and Homeostatic Synaptic Plasticity. <i>Neural Plasticity</i> , 2016, 1-19.	1.0	67
1506	Synaptic Plasticity. , 2016, , 47-58.		6
1507	Opposing Effects of Neuronal Activity on Structural Plasticity. <i>Frontiers in Neuroanatomy</i> , 2016, 10, 75.	0.9	77
1508	Repetitive Transcranial Direct Current Stimulation Induced Excitability Changes of Primary Visual Cortex and Visual Learning Effects A Pilot Study. <i>Frontiers in Behavioral Neuroscience</i> , 2016, 10, 116.	1.0	42

#	ARTICLE	IF	CITATIONS
1509	Separate Ionotropic and Metabotropic Glutamate Receptor Functions in Depotential vs. LTP: A Distinct Role for Group1 mGluR Subtypes and NMDARs. <i>Frontiers in Cellular Neuroscience</i> , 2016, 10, 252.	1.8	14
1510	Homeostatic Plasticity Achieved by Incorporation of Random Fluctuations and Soft-Bounded Hebbian Plasticity in Excitatory Synapses. <i>Frontiers in Neural Circuits</i> , 2016, 10, 42.	1.4	12
1511	Drifting States and Synchronization Induced Chaos in Autonomous Networks of Excitable Neurons. <i>Frontiers in Computational Neuroscience</i> , 2016, 10, 98.	1.2	3
1512	Enhancing Nervous System Recovery through Neurobiologics, Neural Interface Training, and Neurorehabilitation. <i>Frontiers in Neuroscience</i> , 2016, 10, 584.	1.4	121
1513	Dentate gyrus and hilar region revisited. <i>Behavioral and Brain Sciences</i> , 2016, 39, e210.	0.4	2
1514	Induction and Consolidation of Calcium-Based Homo- and Heterosynaptic Potentiation and Depression. <i>PLoS ONE</i> , 2016, 11, e0161679.	1.1	14
1515	PLPP/CIN regulates bidirectional synaptic plasticity via GluN2A interaction with postsynaptic proteins. <i>Scientific Reports</i> , 2016, 6, 26576.	1.6	17
1516	GANEing traction: The broad applicability of NE hotspots to diverse cognitive and arousal phenomena. <i>Behavioral and Brain Sciences</i> , 2016, 39, e228.	0.4	16
1517	Bodily arousal differentially impacts stimulus processing and memory: Norepinephrine in interoception. <i>Behavioral and Brain Sciences</i> , 2016, 39, e205.	0.4	5
1518	What do we GANE with age?. <i>Behavioral and Brain Sciences</i> , 2016, 39, e218.	0.4	2
1519	Amplified selectivity in cognitive processing implements the neural gain model of norepinephrine function. <i>Behavioral and Brain Sciences</i> , 2016, 39, e206.	0.4	7
1520	Emotionally arousing context modulates the ERP correlates of neutral picture processing: An ERP test of the GANE model. <i>Behavioral and Brain Sciences</i> , 2016, 39, e225.	0.4	4
1521	Sliding threshold of spike rate dependent plasticity of a semiconducting polymer/electrolyte cell. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2016, 54, 2412-2417.	2.4	3
1522	The role of arousal in predictive coding. <i>Behavioral and Brain Sciences</i> , 2016, 39, e207.	0.4	11
1523	Does arousal enhance apical amplification and disamplification?. <i>Behavioral and Brain Sciences</i> , 2016, 39, e215.	0.4	6
1524	GANEing on emotion and emotion regulation. <i>Behavioral and Brain Sciences</i> , 2016, 39, e211.	0.4	0
1525	What BANE can offer GANE: Individual differences in function of hotspot mechanisms. <i>Behavioral and Brain Sciences</i> , 2016, 39, e226.	0.4	0
1526	Interactions of noradrenaline and cortisol and the induction of indelible memories. <i>Behavioral and Brain Sciences</i> , 2016, 39, e213.	0.4	1

#	ARTICLE	IF	CITATIONS
1528	The neurophysiological effects of single-dose theophylline in patients with chronic stroke: A double-blind, placebo-controlled, randomized cross-over study. Restorative Neurology and Neuroscience, 2016, 34, 799-813.	0.4	2
1529	Interplay of multiple synaptic plasticity features in filamentary memristive devices for neuromorphic computing. Scientific Reports, 2016, 6, 39216.	1.6	25
1530	Brain Plasticity and the Concept of Metaplasticity in Skilled Musicians. Advances in Experimental Medicine and Biology, 2016, 957, 197-208.	0.8	42
1531	A novel homeostatic plasticity model realized by random fluctuations in excitatory synapses. , 2016, , .		0
1532	For better or worse, or for a change?. Behavioral and Brain Sciences, 2016, 39, e203.	0.4	0
1533	Bidirectional synaptic plasticity can explain bidirectional retrograde effects of emotion on memory. Behavioral and Brain Sciences, 2016, 39, e224.	0.4	1
1534	Homeostatic Activity-Dependent Tuning of Recurrent Networks for Robust Propagation of Activity. Journal of Neuroscience, 2016, 36, 3722-3734.	1.7	18
1535	Is Motor Cortical Excitability Altered in People with Chronic Pain? A Systematic Review and Meta-Analysis. Brain Stimulation, 2016, 9, 488-500.	0.7	114
1536	What is memory? The present state of the engram. BMC Biology, 2016, 14, 40.	1.7	277
1537	Synaptic and extrasynaptic traces of long-term memory: the ID molecule theory. Reviews in the Neurosciences, 2016, 27, 575-598.	1.4	2
1538	Brain aerobic glycolysis and motor adaptation learning. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, E3782-91.	3.3	62
1539	Network Homeostasis and State Dynamics of Neocortical Sleep. Neuron, 2016, 90, 839-852.	3.8	259
1540	Neonatal Tissue Damage Promotes Spike Timing-Dependent Synaptic Long-Term Potentiation in Adult Spinal Projection Neurons. Journal of Neuroscience, 2016, 36, 5405-5416.	1.7	39
1541	Maintenance of balance between motor cortical excitation and inhibition after long-term training. Neuroscience, 2016, 336, 114-122.	1.1	24
1542	LTD-like molecular pathways in developmental synaptic pruning. Nature Neuroscience, 2016, 19, 1299-1310.	7.1	79
1543	Aerobic exercise abolishes cTBS-induced suppression of motor cortical excitability. Neuroscience Letters, 2016, 633, 215-219.	1.0	17
1544	Theta burst stimulation-induced LTP: Differences and similarities between the dorsal and ventral CA1 hippocampal synapses. Hippocampus, 2016, 26, 1542-1559.	0.9	36
1545	Synaptic electronics and neuromorphic computing. Science China Information Sciences, 2016, 59, 1.	2.7	76

#	ARTICLE	IF	CITATIONS
1546	Quasi-conscious multivariate systems. <i>Complexity</i> , 2016, 21, 125-147.	0.9	4
1547	The 5-hydroxytryptamine α_4 receptor enables differentiation of informational content and encoding in the hippocampus. <i>Hippocampus</i> , 2016, 26, 875-891.	0.9	22
1549	A theory of local learning, the learning channel, and the optimality of backpropagation. <i>Neural Networks</i> , 2016, 83, 51-74.	3.3	44
1550	The effect of coactivation of muscarinic and nicotinic acetylcholine receptors on LTD in the hippocampal CA1 network. <i>Brain Research</i> , 2016, 1649, 44-52.	1.1	20
1551	The Enhanced Rise and Delayed Fall of Memory in a Model of Synaptic Integration: Extension to Discrete State Synapses. <i>Neural Computation</i> , 2016, 28, 1927-1984.	1.3	7
1552	Memristors for Energy-Efficient New Computing Paradigms. <i>Advanced Electronic Materials</i> , 2016, 2, 1600090.	2.6	272
1553	Scalable Networks-on-Chip Interconnected Architecture for Astrocyte-Neuron Networks. <i>IEEE Transactions on Circuits and Systems I: Regular Papers</i> , 2016, 63, 2290-2303.	3.5	40
1554	The Geometry of Plasticity-Induced Sensitization in Inhibitory Rate Motifs. <i>Neural Computation</i> , 2016, 28, 1889-1926.	1.3	1
1555	Reaction-diffusion-like formalism for plastic neural networks reveals dissipative solitons at criticality. <i>Physical Review E</i> , 2016, 93, 062303.	0.8	1
1556	Natural Firing Patterns Imply Low Sensitivity of Synaptic Plasticity to Spike Timing Compared with Firing Rate. <i>Journal of Neuroscience</i> , 2016, 36, 11238-11258.	1.7	46
1557	Sleep recalibrates homeostatic and associative synaptic plasticity in the human cortex. <i>Nature Communications</i> , 2016, 7, 12455.	5.8	109
1558	Calcium threshold shift enables frequency-independent control of plasticity by an instructive signal. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016, 113, 13221-13226.	3.3	40
1559	Feedback control stabilization of critical dynamics via resource transport on multilayer networks: How glia enable learning dynamics in the brain. <i>Physical Review E</i> , 2016, 94, 042310.	0.8	20
1560	Stochastic Induction of Long-Term Potentiation and Long-Term Depression. <i>Scientific Reports</i> , 2016, 6, 30899.	1.6	18
1561	Cognitive control, dynamic salience, and the imperative toward computational accounts of neuromodulatory function. <i>Behavioral and Brain Sciences</i> , 2016, 39, e227.	0.4	5
1562	The Fluency Amplification Model supports the GANE principle of arousal enhancement. <i>Behavioral and Brain Sciences</i> , 2016, 39, e204.	0.4	5
1563	Once more with feeling: On the explanatory limits of the GANE model and the missing role of subjective experience. <i>Behavioral and Brain Sciences</i> , 2016, 39, e212.	0.4	0
1564	Competition elicits arousal and affect. <i>Behavioral and Brain Sciences</i> , 2016, 39, e220.	0.4	0

#	ARTICLE	IF	CITATIONS
1565	Effect of arousal on perception as studied through the lens of the motor correlates of sexual arousal. Behavioral and Brain Sciences, 2016, 39, e217.	0.4	1
1566	Emotional memory: From affective relevance to arousal. Behavioral and Brain Sciences, 2016, 39, e216.	0.4	9
1567	Calcium dependent plasticity applied to repetitive transcranial magnetic stimulation with a neural field model. Journal of Computational Neuroscience, 2016, 41, 107-125.	0.6	17
1568	Short-term immobilization influences use-dependent cortical plasticity and fine motor performance. Neuroscience, 2016, 330, 247-256.	1.1	20
1569	Controlling information flow and energy use via adaptive synaptogenesis. , 2016, , .		1
1570	Abnormal Mechanisms of Plasticity and Metaplasticity in Autism Spectrum Disorders and Fragile X Syndrome. Journal of Child and Adolescent Psychopharmacology, 2016, 26, 617-624.	0.7	33
1571	Recent History of Effector Use Modulates Practice-Dependent Changes in Corticospinal Excitability but Not Motor Learning. Brain Stimulation, 2016, 9, 584-593.	0.7	8
1572	Does computational neuroscience need new synaptic learning paradigms?. Current Opinion in Behavioral Sciences, 2016, 11, 61-66.	2.0	28
1573	Differences in central facilitation between episodic and chronic migraineurs in nociceptive-specific trigeminal pathways. Journal of Headache and Pain, 2016, 17, 35.	2.5	17
1574	A Review on Synergistic Learning. IEEE Access, 2016, 4, 119-134.	2.6	11
1575	Promoter-Specific Effects of DREADD Modulation on Hippocampal Synaptic Plasticity and Memory Formation. Journal of Neuroscience, 2016, 36, 3588-3599.	1.7	71
1576	d-Serine in the nucleus accumbens region modulates behavioral sensitization and extinction of conditioned place preference. Pharmacology Biochemistry and Behavior, 2016, 143, 44-56.	1.3	18
1577	Ten Years of Theta Burst Stimulation in Humans: Established Knowledge, Unknowns and Prospects. Brain Stimulation, 2016, 9, 323-335.	0.7	397
1578	Computational simulation of dentate gyrus granule cellâ€™s role of metaplasticity. Neurocomputing, 2016, 175, 300-309.	3.5	3
1579	Somatosensory-evoked potential modulation by quadripulse transcranial magnetic stimulation in patients with benign myoclonus epilepsy. Clinical Neurophysiology, 2016, 127, 1560-1567.	0.7	11
1580	Distributed Circuit Plasticity: New Clues for the Cerebellar Mechanisms of Learning. Cerebellum, 2016, 15, 139-151.	1.4	74
1581	Astrocytes: Orchestrating synaptic plasticity?. Neuroscience, 2016, 323, 43-61.	1.1	196
1582	Triplet Spike Time-Dependent Plasticity in a Floating-Gate Synapse. IEEE Transactions on Neural Networks and Learning Systems, 2017, 28, 778-790.	7.2	17

#	ARTICLE	IF	CITATIONS
1583	The serotonergic 5-HT ₄ receptor: A unique modulator of hippocampal synaptic information processing and cognition. <i>Neurobiology of Learning and Memory</i> , 2017, 138, 145-153.	1.0	72
1584	Emergent spatial synaptic structure from diffusive plasticity. <i>European Journal of Neuroscience</i> , 2017, 45, 1057-1067.	1.2	7
1585	A metaplasticity view of the interaction between homeostatic and Hebbian plasticity. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , 2017, 372, 20160155.	1.8	57
1586	Integrating Hebbian and homeostatic plasticity: introduction. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , 2017, 372, 20160413.	1.8	54
1587	STDP-Compatible Approximation of Backpropagation in an Energy-Based Model. <i>Neural Computation</i> , 2017, 29, 555-577.	1.3	56
1588	Neural plasticity and network remodeling: From concepts to pathology. <i>Neuroscience</i> , 2017, 344, 326-345.	1.1	30
1590	Dynamic aftereffects in supplementary motor network following inhibitory transcranial magnetic stimulation protocols. <i>NeuroImage</i> , 2017, 149, 285-294.	2.1	50
1591	Synaptic Plasticity with Memristive Nanodevices. <i>Cognitive Systems Monographs</i> , 2017, , 17-43.	0.1	6
1592	Motor training and the combination of action observation and peripheral nerve stimulation reciprocally interfere with the plastic changes induced in primary motor cortex excitability. <i>Neuroscience</i> , 2017, 348, 33-40.	1.1	28
1593	Emergent Dynamical Properties of the BCM Learning Rule. <i>Journal of Mathematical Neuroscience</i> , 2017, 7, 2.	2.4	17
1594	Interactions between synaptic homeostatic mechanisms: an attempt to reconcile BCM theory, synaptic scaling, and changing excitation/inhibition balance. <i>Current Opinion in Neurobiology</i> , 2017, 43, 87-93.	2.0	75
1595	Time-course and mechanisms of homeostatic plasticity in layers 2/3 and 5 of the barrel cortex. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , 2017, 372, 20160150.	1.8	32
1596	Biologically plausible learning in neural networks with modulatory feedback. <i>Neural Networks</i> , 2017, 88, 32-48.	3.3	10
1597	A spiking network that learns to extract spike signatures from speech signals. <i>Neurocomputing</i> , 2017, 240, 191-199.	3.5	37
1598	Neuronal pattern separation of motion-relevant input in LIP activity. <i>Journal of Neurophysiology</i> , 2017, 117, 738-755.	0.9	10
1599	Using Inspiration from Synaptic Plasticity Rules to Optimize Traffic Flow in Distributed Engineered Networks. <i>Neural Computation</i> , 2017, 29, 1204-1228.	1.3	7
1600	Selective TMS-induced modulation of functional connectivity correlates with changes in behavior. <i>NeuroImage</i> , 2017, 149, 361-378.	2.1	12
1601	Hebbian Spike-Timing Dependent Plasticity at the Cerebellar Input Stage. <i>Journal of Neuroscience</i> , 2017, 37, 2809-2823.	1.7	48

#	ARTICLE	IF	CITATIONS
1602	Hebbian plasticity requires compensatory processes on multiple timescales. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , 2017, 372, 20160259.	1.8	151
1603	The temporal paradox of Hebbian learning and homeostatic plasticity. <i>Current Opinion in Neurobiology</i> , 2017, 43, 166-176.	2.0	138
1604	Metaplasticity mechanisms restore plasticity and associativity in an animal model of Alzheimer's disease. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, 5527-5532.	3.3	48
1605	Low-frequency rTMS of the unaffected hemisphere in stroke patients: A systematic review. <i>Acta Neurologica Scandinavica</i> , 2017, 136, 585-605.	1.0	45
1606	Dopamine Receptors Differentially Control Binge Alcohol Drinking-Mediated Synaptic Plasticity of the Core Nucleus Accumbens Direct and Indirect Pathways. <i>Journal of Neuroscience</i> , 2017, 37, 5463-5474.	1.7	29
1607	Treating low back pain with combined cerebral and peripheral electrical stimulation: A randomized, double-blind, factorial clinical trial. <i>European Journal of Pain</i> , 2017, 21, 1132-1143.	1.4	47
1608	Neuronal Calcium Signaling, 2017, , 219-254.		0
1609	Online Meta-neuron based Learning Algorithm for a spiking neural classifier. <i>Information Sciences</i> , 2017, 414, 19-32.	4.0	11
1610	The spatial-temporal interaction in the LTP induction between layer IV to layer II/III and layer II/III to layer II/III connections in rats' visual cortex during the development. <i>Neuroscience</i> , 2017, 350, 39-53.	1.1	1
1611	Modulating motor cortical neuroplasticity with priming paired associative stimulation in young and old adults. <i>Clinical Neurophysiology</i> , 2017, 128, 763-769.	0.7	24
1612	Enhanced Just Noticeable Difference Model for Images With Pattern Complexity. <i>IEEE Transactions on Image Processing</i> , 2017, 26, 2682-2693.	6.0	118
1614	Fast unsupervised learning for visual pattern recognition using spike timing dependent plasticity. <i>Neurocomputing</i> , 2017, 249, 212-224.	3.5	30
1615	Preconditioning tDCS facilitates subsequent tDCS effect on skill acquisition in older adults. <i>Neurobiology of Aging</i> , 2017, 51, 31-42.	1.5	50
1616	The effects of intra-hippocampal L-thyroxine infusion on long-term potentiation and long-term depression: A possible role for the α 23 integrin receptor. <i>Journal of Neuroscience Research</i> , 2017, 95, 1621-1632.	1.3	11
1617	Big data and the industrialization of neuroscience: A safe roadmap for understanding the brain?. <i>Science</i> , 2017, 358, 470-477.	6.0	88
1618	Plasticity induced by non-invasive transcranial brain stimulation: A position paper. <i>Clinical Neurophysiology</i> , 2017, 128, 2318-2329.	0.7	276
1620	Increasing motor cortex plasticity with spaced paired associative stimulation at different intervals in older adults. <i>European Journal of Neuroscience</i> , 2017, 46, 2674-2683.	1.2	10
1621	NMDA Receptors in the Central Nervous System. <i>Methods in Molecular Biology</i> , 2017, 1677, 1-80.	0.4	105

#	ARTICLE	IF	CITATIONS
1622	Modeling somatic and dendritic spike mediated plasticity at the single neuron and network level. Nature Communications, 2017, 8, 706.	5.8	87
1623	Using tDCS priming to improve brain function: Can metaplasticity provide the key to boosting outcomes?. Neuroscience and Biobehavioral Reviews, 2017, 83, 155-159.	2.9	47
1624	Transcriptional correlates of memory maintenance following long-term sensitization of <i>Aplysia californica</i> . Learning and Memory, 2017, 24, 502-515.	0.5	16
1625	The associative brain at work: Evidence from paired associative stimulation studies in humans. Clinical Neurophysiology, 2017, 128, 2140-2164.	0.7	120
1626	THE NERVOUS SYSTEM: SOURCE PAR EXCELLENCE. Series on Bioengineering and Biomedical Engineering, 2017, , 253-303.	0.1	0
1627	Understanding neural circuit development through theory and models. Current Opinion in Neurobiology, 2017, 46, 39-47.	2.0	19
1628	Building machines that adapt and compute like brains. Behavioral and Brain Sciences, 2017, 40, e269.	0.4	7
1629	The importance of motivation and emotion for explaining human cognition. Behavioral and Brain Sciences, 2017, 40, e267.	0.4	39
1630	Back to the future: The return of cognitive functionalism. Behavioral and Brain Sciences, 2017, 40, e257.	0.4	1
1631	Adaptive Optimization of Visual Sensitivity. Journal of the Indian Institute of Science, 2017, 97, 423-434.	0.9	1
1632	Thinking like animals or thinking like colleagues?. Behavioral and Brain Sciences, 2017, 40, e263.	0.4	2
1633	Building on prior knowledge without building it in. Behavioral and Brain Sciences, 2017, 40, e268.	0.4	4
1634	Theories or fragments?. Behavioral and Brain Sciences, 2017, 40, e258.	0.4	3
1635	Children begin with the same start-up software, but their software updates are cultural. Behavioral and Brain Sciences, 2017, 40, e260.	0.4	3
1636	Autonomous development and learning in artificial intelligence and robotics: Scaling up deep learning to human-like learning. Behavioral and Brain Sciences, 2017, 40, e275.	0.4	6
1637	Human-like machines: Transparency and comprehensibility. Behavioral and Brain Sciences, 2017, 40, e276.	0.4	9
1638	Causal generative models are just a start. Behavioral and Brain Sciences, 2017, 40, e262.	0.4	4
1639	Social-motor experience and perception-action learning bring efficiency to machines. Behavioral and Brain Sciences, 2017, 40, e273.	0.4	0

#	ARTICLE	IF	CITATIONS
1640	Ingredients of intelligence: From classic debates to an engineering roadmap. Behavioral and Brain Sciences, 2017, 40, e281.	0.4	11
1641	Building machines that learn and think for themselves. Behavioral and Brain Sciences, 2017, 40, e255.	0.4	17
1642	Evidence from machines that learn and think like people. Behavioral and Brain Sciences, 2017, 40, e264.	0.4	2
1643	Understand the cogs to understand cognition. Behavioral and Brain Sciences, 2017, 40, e272.	0.4	1
1644	Strategies for replacing non-invasive brain stimulation sessions: recommendations for designing neurostimulation clinical trials. Expert Review of Medical Devices, 2017, 14, 633-649.	1.4	13
1645	Towards a hybrid brain based robot. , 2017, , .		0
1646	A synaptic plasticity rule providing a unified approach to supervised and unsupervised learning. , 2017, , .		3
1647	Performance optimization of echo state networks through principal neuron reinforcement. , 2017, , .		4
1648	The impact of accelerated high frequency rTMS on brain neurochemicals in treatment-resistant depression: Insights from 1H MR spectroscopy. Clinical Neurophysiology, 2017, 128, 1664-1672.	0.7	46
1649	An Architecture for the Acceleration of a Hybrid Leaky Integrate and Fire SNN on the Convey HC-2ex FPGA-Based Processor. , 2017, , .		5
1650	Evidence-based guidelines on the therapeutic use of transcranial direct current stimulation (tDCS). Clinical Neurophysiology, 2017, 128, 56-92.	0.7	1,213
1651	Blind 3D image quality assessment based on self-similarity of binocular features. Neurocomputing, 2017, 224, 128-134.	3.5	28
1652	Developmental metaplasticity in neural circuit codes of firing and structure. Neural Networks, 2017, 85, 182-196.	3.3	5
1653	Neurophysiology and Regulation of the Balance Between Excitation and Inhibition in Neocortical Circuits. Biological Psychiatry, 2017, 81, 821-831.	0.7	135
1654	Effects of Theta Burst Stimulation on Suprahyoid Motor Cortex Excitability in Healthy Subjects. Brain Stimulation, 2017, 10, 91-98.	0.7	14
1655	Building machines that learn and think like people. Behavioral and Brain Sciences, 2017, 40, e253.	0.4	978
1656	Benefits of embodiment. Behavioral and Brain Sciences, 2017, 40, e271.	0.4	2
1657	Long-Term Information Storage by the Interaction of Synaptic and Structural Plasticity. , 2017, , 343-360.		1

#	ARTICLE	IF	CITATIONS
1658	Digging deeper on "deep" learning: A computational ecology approach. Behavioral and Brain Sciences, 2017, 40, e256.	0.4	6
1659	Deep-learning networks and the functional architecture of executive control. Behavioral and Brain Sciences, 2017, 40, e261.	0.4	1
1660	What can the brain teach us about building artificial intelligence?. Behavioral and Brain Sciences, 2017, 40, e265.	0.4	3
1661	Building brains that communicate like machines. Behavioral and Brain Sciences, 2017, 40, e266.	0.4	2
1662	Intelligent machines and human minds. Behavioral and Brain Sciences, 2017, 40, e277.	0.4	0
1663	Crossmodal lifelong learning in hybrid neural embodied architectures. Behavioral and Brain Sciences, 2017, 40, e280.	0.4	1
1664	The humanness of artificial non-normative personalities. Behavioral and Brain Sciences, 2017, 40, e259.	0.4	5
1665	Avoiding frostbite: It helps to learn from others. Behavioral and Brain Sciences, 2017, 40, e279.	0.4	3
1666	The architecture challenge: Future artificial-intelligence systems will require sophisticated architectures, and knowledge of the brain might guide their construction. Behavioral and Brain Sciences, 2017, 40, e254.	0.4	5
1667	Will human-like machines make human-like mistakes?. Behavioral and Brain Sciences, 2017, 40, e270.	0.4	2
1668	The argument for single-purpose robots. Behavioral and Brain Sciences, 2017, 40, e274.	0.4	0
1669	The fork in the road. Behavioral and Brain Sciences, 2017, 40, e278.	0.4	0
1670	Metaplasticity. , 2017, , .		0
1671	Neocortical/Thalamic In Silico Models of Seizures and Epilepsy. , 2017, , 233-246.		4
1672	Plasticity and Memory in Cerebral Cortex. , 2017, , 233-262.		0
1673	Cocaine and Dysregulated Synaptic Transmission in the Bed Nucleus of the Stria Terminalis. , 2017, , 537-543.		1
1674	Commentary: Preconditioning tDCS facilitates subsequent tDCS effect on skill acquisition in older adults. Frontiers in Aging Neuroscience, 2017, 9, 84.	1.7	1
1675	A Neurocomputational Model of Goal-Directed Navigation in Insect-Inspired Artificial Agents. Frontiers in Neurorobotics, 2017, 11, 20.	1.6	26

#	ARTICLE	IF	CITATIONS
1676	Activation of the CREB/c-Fos Pathway during Long-Term Synaptic Plasticity in the Cerebellum Granular Layer. <i>Frontiers in Cellular Neuroscience</i> , 2017, 11, 184.	1.8	52
1677	Rules for Shaping Neural Connections in the Developing Brain. <i>Frontiers in Neural Circuits</i> , 2016, 10, 111.	1.4	46
1678	The Roles of Cortical Slow Waves in Synaptic Plasticity and Memory Consolidation. <i>Frontiers in Neural Circuits</i> , 2017, 11, 92.	1.4	44
1679	Equilibrium Propagation: Bridging the Gap between Energy-Based Models and Backpropagation. <i>Frontiers in Computational Neuroscience</i> , 2017, 11, 24.	1.2	183
1680	A Model of Fast Hebbian Spike Latency Normalization. <i>Frontiers in Computational Neuroscience</i> , 2017, 11, 33.	1.2	9
1681	Effects of More-Affected vs. Less-Affected Motor Cortex tDCS in Parkinson's Disease. <i>Frontiers in Human Neuroscience</i> , 2017, 11, 309.	1.0	32
1682	Neurodevelopmental Hypothesis about the Etiology of Autism Spectrum Disorders. <i>Frontiers in Human Neuroscience</i> , 2017, 11, 354.	1.0	36
1684	Functional Metaplasticity of Hippocampal Schaffer Collateral-CA1 Synapses Is Reversed in Chronically Epileptic Rats. <i>Neural Plasticity</i> , 2017, 2017, 1-8.	1.0	3
1685	The Longevity of Hippocampus-Dependent Memory Is Orchestrated by the Locus Coeruleus-Noradrenergic System. <i>Neural Plasticity</i> , 2017, 2017, 1-9.	1.0	70
1686	Timing-dependent LTP and LTD in mouse primary visual cortex following different visual deprivation models. <i>PLoS ONE</i> , 2017, 12, e0176603.	1.1	11
1687	Neural Computation Theories of Learning. <i>arXiv preprint arXiv:1705.05367</i> , 2017, , 579-589.		2
1688	A single-cell spiking model for the origin of grid-cell patterns. <i>PLoS Computational Biology</i> , 2017, 13, e1005782.	1.5	30
1689	Immediate effect of transcranial direct current stimulation combined with functional electrical stimulation on activity of the tibialis anterior muscle and balance of individuals with hemiparesis stemming from a stroke. <i>Journal of Physical Therapy Science</i> , 2017, 29, 2138-2146.	0.2	18
1691	Limits on lability: Boundaries of reconsolidation and the relationship to metaplasticity. <i>Neurobiology of Learning and Memory</i> , 2018, 154, 78-86.	1.0	39
1692	Full imitation of synaptic metaplasticity based on memristor devices. <i>Nanoscale</i> , 2018, 10, 5875-5881.	2.8	99
1693	Development of the Mechanisms Governing Midbrain Multisensory Integration. <i>Journal of Neuroscience</i> , 2018, 38, 3453-3465.	1.7	26
1694	Neuropeptide Y as a possible homeostatic element for changes in cortical excitability induced by repetitive transcranial magnetic stimulation. <i>Brain Stimulation</i> , 2018, 11, 797-805.	0.7	12
1695	Hippocampal plasticity mechanisms mediating experience-dependent learning change over time. <i>Neurobiology of Learning and Memory</i> , 2018, 150, 56-63.	1.0	8

#	ARTICLE	IF	CITATIONS
1696	Biophysical modeling of neural plasticity induced by transcranial magnetic stimulation. <i>Clinical Neurophysiology</i> , 2018, 129, 1230-1241.	0.7	42
1698	Evidence of the Homeostatic Regulation With the Combination of Transcranial Direct Current Stimulation and Physical Activity. <i>American Journal of Physical Medicine and Rehabilitation</i> , 2018, 97, 727-733.	0.7	9
1699	Video evidence of improved hand function following repetitive transcranial magnetic stimulation combined with physical therapy in stroke: a case report. <i>Clinical Case Reports (discontinued)</i> , 2018, 6, 792-797.	0.2	0
1700	Motor Learning Triggers Neuroplastic Processes While Awake and During Sleep. <i>Exercise and Sport Sciences Reviews</i> , 2018, 46, 152-159.	1.6	7
1701	Fault-Tolerant Learning in Spiking Astrocyte-Neural Networks on FPGAs. , 2018, , .		4
1702	How different priming stimulations affect the corticospinal excitability induced by noninvasive brain stimulation techniques: a systematic review and meta-analysis. <i>Reviews in the Neurosciences</i> , 2018, 29, 883-899.	1.4	28
1703	Effect of spike-timing-dependent plasticity on stochastic burst synchronization in a scale-free neuronal network. <i>Cognitive Neurodynamics</i> , 2018, 12, 315-342.	2.3	34
1704	The human pain system exhibits higher-order plasticity (metaplasticity). <i>Neurobiology of Learning and Memory</i> , 2018, 154, 112-120.	1.0	35
1705	Bio-inspired spiking neural network for nonlinear systems control. <i>Neural Networks</i> , 2018, 104, 15-25.	3.3	22
1706	Metaplasticity within the spinal cord: Evidence brain-derived neurotrophic factor (BDNF), tumor necrosis factor (TNF), and alterations in GABA function (ionic plasticity) modulate pain and the capacity to learn. <i>Neurobiology of Learning and Memory</i> , 2018, 154, 121-135.	1.0	16
1708	Metaplasticity: A Promising Tool to Disentangle Chronic Disorders of Consciousness Differential Diagnosis. <i>International Journal of Neural Systems</i> , 2018, 28, 1750059.	3.2	11
1709	The effects of theta burst stimulation (TBS) targeting the prefrontal cortex on executive functioning: A systematic review and meta-analysis. <i>Neuropsychologia</i> , 2018, 111, 344-359.	0.7	92
1710	Effects of Neuromodulation on Gait. <i>Biosystems and Biorobotics</i> , 2018, , 367-397.	0.2	0
1711	A Unifying Framework of Synaptic and Intrinsic Plasticity in Neural Populations. <i>Neural Computation</i> , 2018, 30, 945-986.	1.3	10
1712	Disruption of cortical synaptic homeostasis in individuals with chronic low back pain. <i>Clinical Neurophysiology</i> , 2018, 129, 1090-1096.	0.7	21
1713	Synaptic plasticity modulation by circulating peptides and metaplasticity: Involvement in Alzheimer's disease. <i>Pharmacological Research</i> , 2018, 130, 385-401.	3.1	38
1714	Mimicking Biological Synaptic Functionality with an Indium Phosphide Synaptic Device on Silicon for Scalable Neuromorphic Computing. <i>ACS Nano</i> , 2018, 12, 1656-1663.	7.3	96
1715	A novel adolescent chronic social defeat model: reverse-Resident-Intruder Paradigm (rRIP) in male rats. <i>Stress</i> , 2018, 21, 169-178.	0.8	6

#	ARTICLE	IF	CITATIONS
1716	High-intensity Aerobic Exercise Blocks the Facilitation of iTBS-induced Plasticity in the Human Motor Cortex. <i>Neuroscience</i> , 2018, 373, 1-6.	1.1	12
1717	Contextual Fear Extinction Induces Hippocampal Metaplasticity Mediated by Metabotropic Glutamate Receptor 5. <i>Cerebral Cortex</i> , 2018, 28, 4291-4304.	1.6	17
1718	Multicontact Co-operativity in Spike-Timing-Dependent Structural Plasticity Stabilizes Networks. <i>Cerebral Cortex</i> , 2018, 28, 1396-1415.	1.6	21
1719	Performance-monitoring integrated reweighting model of perceptual learning. <i>Vision Research</i> , 2018, 152, 17-39.	0.7	4
1720	How could stress lead to major depressive disorder?. <i>IBRO Reports</i> , 2018, 4, 38-43.	0.3	66
1721	Voltage dependence of synaptic plasticity is essential for rate based learning with short stimuli. <i>Scientific Reports</i> , 2018, 8, 4609.	1.6	2
1722	The Response of the Primary Motor Cortex to Neuromodulation is Altered in Chronic Low Back Pain: A Preliminary Study. <i>Pain Medicine</i> , 2018, 19, 1227-1236.	0.9	23
1723	Neural reuse of action perception circuits for language, concepts and communication. <i>Progress in Neurobiology</i> , 2018, 160, 1-44.	2.8	166
1724	Stochastic spike synchronization in a small-world neural network with spike-timing-dependent plasticity. <i>Neural Networks</i> , 2018, 97, 92-106.	3.3	18
1725	Synaptic Suppression Triplet-STDP Learning Rule Realized in Second-Order Memristors. <i>Advanced Functional Materials</i> , 2018, 28, 1704455.	7.8	183
1726	Neuronal oscillations: unavoidable and useful?. <i>European Journal of Neuroscience</i> , 2018, 48, 2389-2398.	1.2	98
1727	From altered synaptic plasticity to atypical learning: A computational model of Down syndrome. <i>Cognition</i> , 2018, 171, 15-24.	1.1	19
1728	Impact of NMDA Receptor Overexpression on Cerebellar Purkinje Cell Activity and Motor Learning. <i>ENeuro</i> , 2018, 5, ENEURO.0270-17.2018.	0.9	14
1729	Modeling Synaptic Plasticity in Hippocampus: A Calcium-Based Approach. <i>Springer Series in Computational Neuroscience</i> , 2018, , 615-644.	0.3	0
1730	Computational Examination of Synaptic Plasticity and Metaplasticity in Hippocampal Dentate Granule Neurons. <i>Springer Series in Computational Neuroscience</i> , 2018, , 701-737.	0.3	0
1731	Synaptic Plasticity at Hippocampal Synapses: Experimental Background. <i>Springer Series in Computational Neuroscience</i> , 2018, , 201-226.	0.3	5
1732	Stress, Trauma and Synaptic Plasticity. , 2018, , .		2
1733	Functioning of the Core Neural Network in Fear and Extinction. , 2018, , 163-182.		0

#	ARTICLE	IF	CITATIONS
1734	Time-multiplexed System-on-Chip using Fault-tolerant Astrocyte-Neuron Networks. , 2018, , .		6
1735	Random Neuronal Networks show homeostatic regulation of global activity while showing persistent changes in specific connectivity paths to theta burst stimuli. Scientific Reports, 2018, 8, 16568.	1.6	1
1736	Recurrent Spiking Neural Network Learning Based on a Competitive Maximization of Neuronal Activity. Frontiers in Neuroinformatics, 2018, 12, 79.	1.3	36
1737	Propagation delays determine neuronal activity and synaptic connectivity patterns emerging in plastic neuronal networks. Chaos, 2018, 28, 106308.	1.0	28
1738	Interplay of multiple pathways and activity-dependent rules in STDP. PLoS Computational Biology, 2018, 14, e1006184.	1.5	9
1739	Perspective: Uniform switching of artificial synapses for large-scale neuromorphic arrays. APL Materials, 2018, 6, .	2.2	26
1740	Transcranial Magnetic Stimulation of Rodents. Handbook of Behavioral Neuroscience, 2018, , 365-387.	0.7	4
1741	Special Considerations When Using Mice for InÂVivo Electrophysiology and Long-Term Studies of Hippocampal Synaptic Plasticity During Behavior. Handbook of Behavioral Neuroscience, 2018, 28, 63-84.	0.7	3
1742	Storing and retrieving long-term memories: cooperation and competition in synaptic dynamics. Advances in Physics: X, 2018, 3, 1480415.	1.5	2
1743	Reproducibility and sources of interindividual variability in the responsiveness to prefrontal continuous theta burst stimulation (cTBS). Neuroscience Letters, 2018, 687, 280-284.	1.0	8
1744	Dendritic processing of spontaneous neuronal sequences for single-trial learning. Scientific Reports, 2018, 8, 15166.	1.6	22
1745	Repetitive Transcranial Magnetic Stimulation for Upper Extremity Motor Recovery: Does It Help?. Current Neurology and Neuroscience Reports, 2018, 18, 97.	2.0	15
1746	On Practical Issues for Stochastic STDP Hardware With 1-bit Synaptic Weights. Frontiers in Neuroscience, 2018, 12, 665.	1.4	49
1747	Tutorial: Concepts for closely mimicking biological learning with memristive devices: Principles to emulate cellular forms of learning. Journal of Applied Physics, 2018, 124, .	1.1	60
1748	A bio-inspired SOSNN model for object recognition. , 2018, , .		4
1749	Theoretical Models of Neural Development. IScience, 2018, 8, 183-199.	1.9	14
1750	High frequency somatosensory stimulation in dystonia: Evidence for defective inhibitory plasticity. Movement Disorders, 2018, 33, 1902-1909.	2.2	43
1751	Tutorial: Neuromorphic spiking neural networks for temporal learning. Journal of Applied Physics, 2018, 124, .	1.1	23

#	ARTICLE	IF	CITATIONS
1752	Neural and Synaptic Array Transceiver: A Brain-Inspired Computing Framework for Embedded Learning. <i>Frontiers in Neuroscience</i> , 2018, 12, 583.	1.4	22
1753	Circuit Polarity Effect of Cortical Connectivity, Activity, and Memory. <i>Neural Computation</i> , 2018, 30, 3037-3071.	1.3	3
1754	Chaos in homeostatically regulated neural systems. <i>Chaos</i> , 2018, 28, 083104.	1.0	9
1755	Eligibility Traces and Plasticity on Behavioral Time Scales: Experimental Support of NeoHebbian Three-Factor Learning Rules. <i>Frontiers in Neural Circuits</i> , 2018, 12, 53.	1.4	174
1756	Homeostatic Plasticity and External Input Shape Neural Network Dynamics. <i>Physical Review X</i> , 2018, 8, .	2.8	38
1757	Intracortical facilitation within the migraine motor cortex depends on the stimulation intensity. A paired-pulse TMS study. <i>Journal of Headache and Pain</i> , 2018, 19, 65.	2.5	21
1758	Planar Array-Antenna with Improved Radiation Characteristic Using Spiral Shaped DGS. , 2018, , .		1
1759	Transcranial magnetic stimulation in obsessive-compulsive disorder: A focus on network mechanisms and state dependence. <i>NeuroImage: Clinical</i> , 2018, 19, 661-674.	1.4	47
1760	Metaplasticity in the Visual Cortex: Crosstalk Between Visual Experience and Reactive Oxygen Species. <i>Journal of Neuroscience</i> , 2018, 38, 5649-5665.	1.7	6
1761	A 4-Transistors/1-Resistor Hybrid Synapse Based on Resistive Switching Memory (RRAM) Capable of Spike-Rate-Dependent Plasticity (SRDP). <i>IEEE Transactions on Very Large Scale Integration (VLSI) Systems</i> , 2018, 26, 2806-2815.	2.1	26
1762	Anesthetics alleviate learning and memory impairment induced by electroconvulsive shock by regulation of NMDA receptor-mediated metaplasticity in depressive rats. <i>Neurobiology of Learning and Memory</i> , 2018, 155, 65-77.	1.0	13
1763	Optimal Combination of Anodal Transcranial Direct Current Stimulations and Motor Imagery Interventions. <i>Neural Plasticity</i> , 2018, 2018, 1-7.	1.0	5
1764	Effect of inhibitory spike-timing-dependent plasticity on fast sparsely synchronized rhythms in a small-world neuronal network. <i>Neural Networks</i> , 2018, 106, 50-66.	3.3	23
1765	Diversity of Astroglial Effects on Aging- and Experience-Related Cortical Metaplasticity. <i>Frontiers in Molecular Neuroscience</i> , 2018, 11, 239.	1.4	27
1766	Born to learn: The inspiration, progress, and future of evolved plastic artificial neural networks. <i>Neural Networks</i> , 2018, 108, 48-67.	3.3	73
1767	Intracellular Dynamics in Cuneate Nucleus Neurons Support Self-Stabilizing Learning of Generalizable Tactile Representations. <i>Frontiers in Cellular Neuroscience</i> , 2018, 12, 210.	1.8	30
1768	How Many Types of Dystonia? Pathophysiological Considerations. <i>Frontiers in Neurology</i> , 2018, 9, 12.	1.1	28
1769	Intra- and Inter-Regional Priming of Ipsilateral Human Primary Motor Cortex With Continuous Theta Burst Stimulation Does Not Induce Consistent Neuroplastic Effects. <i>Frontiers in Human Neuroscience</i> , 2018, 12, 123.	1.0	14

#	ARTICLE	IF	CITATIONS
1770	Understanding Synaptic Mechanisms in SrTiO ₃ RRAM Devices. IEEE Transactions on Electron Devices, 2018, 65, 3514-3520.	1.6	11
1771	The posterior parietal cortex and subjectively perceived confidence during memory retrieval. Learning and Memory, 2018, 25, 382-389.	0.5	9
1772	A feature-based neurocomputational model of semantic memory. Cognitive Neurodynamics, 2018, 12, 525-547.	2.3	9
1773	Regulation and Interaction of Multiple Types of Synaptic Plasticity in a Purkinje Neuron and Their Contribution to Motor Learning. Cerebellum, 2018, 17, 756-765.	1.4	26
1774	Experience-dependent plasticity in the lateral geniculate nucleus. Current Opinion in Neurobiology, 2018, 53, 22-28.	2.0	23
1775	Priming With Intermittent Theta Burst Transcranial Magnetic Stimulation Promotes Spinal Plasticity Induced by Peripheral Patterned Electrical Stimulation. Frontiers in Neuroscience, 2018, 12, 508.	1.4	20
1776	Nonequilibrium time dynamics of genetic evolution. Physical Review E, 2018, 98, 022403.	0.8	2
1777	Flexible Artificial Synaptic Devices Based on Collagen from Fish Protein with Spike-timing-Dependent Plasticity. Advanced Functional Materials, 2018, 28, 1800553.	7.8	124
1778	Attractor Dynamics in Networks with Learning Rules Inferred from In Vivo Data. Neuron, 2018, 99, 227-238.e4.	3.8	64
1779	Visual and Category Representations Shaped by the Interaction Between Inferior Temporal and Prefrontal Cortices. Cognitive Computation, 2018, 10, 687-702.	3.6	2
1780	Representation learning using event-based STDP. Neural Networks, 2018, 105, 294-303.	3.3	21
1781	Synaptic plasticity in human cortical circuits: cellular mechanisms of learning and memory in the human brain?. Current Opinion in Neurobiology, 2019, 54, 186-193.	2.0	100
1782	Slowdown of BCM plasticity with many synapses. Journal of Computational Neuroscience, 2019, 46, 141-144.	0.6	2
1783	Memristive Synapses and Neurons for Bioinspired Computing. Advanced Electronic Materials, 2019, 5, 1900287.	2.6	135
1784	Effect of multichannel transcranial direct current stimulation to reduce hypertonia in individuals with prolonged disorders of consciousness: A randomized controlled pilot study. Annals of Physical and Rehabilitation Medicine, 2019, 62, 418-425.	1.1	22
1785	Neural correlates of sparse coding and dimensionality reduction. PLoS Computational Biology, 2019, 15, e1006908.	1.5	71
1786	Cortical layer-specific critical dynamics triggering perception. Science, 2019, 365, .	6.0	447
1787	GABA Regulation of Burst Firing in Hippocampal Astrocyte Neural Circuit: A Biophysical Model. Frontiers in Cellular Neuroscience, 2019, 13, 335.	1.8	6

#	ARTICLE	IF	CITATIONS
1788	Synthesis of a hybrid brain for a humanoid robot. <i>Robotics and Autonomous Systems</i> , 2019, 119, 135-150.	3.0	0
1789	Adult-Onset Hypothyroidism Alters the Metaplastic Properties of Dentate Granule Cells by Decreasing Akt Phosphorylation. <i>Journal of Molecular Neuroscience</i> , 2019, 68, 647-657.	1.1	4
1790	Nonmonotonic Plasticity: How Memory Retrieval Drives Learning. <i>Trends in Cognitive Sciences</i> , 2019, 23, 726-742.	4.0	97
1791	Synaptic Plasticity. , 2019, , 287-329.		3
1792	Superconducting optoelectronic loop neurons. <i>Journal of Applied Physics</i> , 2019, 126, .	1.1	51
1793	Transcranial magnetic stimulation. <i>Handbook of Clinical Neurology</i> / Edited By P J Vinken and G W Bruyn, 2019, 160, 559-580.	1.0	113
1794	Grayscale Image Recognition Using Spike-Rate-Based Online Learning and Threshold Adjustment of Neurons in a Thin-Film Transistor-Type NOR Flash Memory Array. <i>Journal of Nanoscience and Nanotechnology</i> , 2019, 19, 6055-6060.	0.9	2
1795	Cortical Circuit Dynamics Are Homeostatically Tuned to Criticality In Vivo. <i>Neuron</i> , 2019, 104, 655-664.e4.	3.8	165
1796	Effects of HCN2 Mutations on Dendritic Excitability and Synaptic Plasticity: A Computational Study. <i>Neuroscience</i> , 2019, 423, 148-161.	1.1	2
1797	An Introduction to Probabilistic Spiking Neural Networks: Probabilistic Models, Learning Rules, and Applications. <i>IEEE Signal Processing Magazine</i> , 2019, 36, 64-77.	4.6	51
1798	Building an artificial neural network with neurons. <i>AIP Advances</i> , 2019, 9, .	0.6	7
1799	Recent Progress in Real-Time Adaptable Digital Neuromorphic Hardware. <i>Advanced Intelligent Systems</i> , 2019, 1, 1900030.	3.3	21
1800	Degeneracy in hippocampal physiology and plasticity. <i>Hippocampus</i> , 2019, 29, 980-1022.	0.9	62
1801	Efficacy of tRNS and 140ÂHz tACS on motor cortex excitability seemingly dependent on sensitivity to sham stimulation. <i>Experimental Brain Research</i> , 2019, 237, 2885-2895.	0.7	9
1802	The next generation of approaches to investigate the link between synaptic plasticity and learning. <i>Nature Neuroscience</i> , 2019, 22, 1536-1543.	7.1	104
1804	Input-Specific Metaplasticity in the Visual Cortex Requires Homer1a-Mediated mGluR5 Signaling. <i>Neuron</i> , 2019, 104, 736-748.e6.	3.8	25
1805	Bio-Inspired Evolutionary Model of Spiking Neural Networks in Ionic Liquid Space. <i>Frontiers in Neuroscience</i> , 2019, 13, 1085.	1.4	14
1806	The contribution of ion channels in input-output plasticity. <i>Neurobiology of Learning and Memory</i> , 2019, 166, 107095.	1.0	16

#	ARTICLE	IF	CITATIONS
1807	A Review of Acute Aerobic Exercise and Transcranial Direct Current Stimulation Effects on Cognitive Functions and Their Potential Synergies. <i>Frontiers in Human Neuroscience</i> , 2018, 12, 534.	1.0	45
1808	Plasticity in Adult Mouse Visual Cortex Following Optic Nerve Injury. <i>Cerebral Cortex</i> , 2019, 29, 1767-1777.	1.6	13
1809	Bio-realistic synaptic characteristics in the cone-shaped ZnO memristive device. <i>NPG Asia Materials</i> , 2019, 11, .	3.8	55
1810	A Neuronâ€“Glial Perspective forÂComputational Neuroscience. <i>Springer Series in Computational Neuroscience</i> , 2019, , 3-35.	0.3	9
1811	Synaptic memory devices from CoO/Nb:SrTiO ₃ junction. <i>Royal Society Open Science</i> , 2019, 6, 181098.	1.1	12
1812	Timing of Acupuncture during LTP-Like Plasticity Induced by Paired-Associative Stimulation. <i>Behavioural Neurology</i> , 2019, 2019, 1-10.	1.1	12
1813	Maternal Immune Activation in Pregnant Mice Produces Offspring with Altered Hippocampal Ripples. <i>Biological and Pharmaceutical Bulletin</i> , 2019, 42, 666-670.	0.6	3
1814	Principles underlying the input-dependent formation and organization of memories. <i>Network Neuroscience</i> , 2019, 3, 606-634.	1.4	13
1815	Sleep and Plasticity. <i>Handbook of Behavioral Neuroscience</i> , 2019, 30, 425-442.	0.7	1
1816	Sleep and Brain Development. <i>Handbook of Behavioral Neuroscience</i> , 2019, , 413-424.	0.7	2
1817	State-Dependent Effects of Ventromedial Prefrontal Cortex Continuous Thetaburst Stimulation on Cocaine Cue Reactivity in Chronic Cocaine Users. <i>Frontiers in Psychiatry</i> , 2019, 10, 317.	1.3	22
1818	Repetitive transcranial magnetic stimulation recovers cortical map plasticity induced by sensory deprivation due to deafferentiation. <i>Journal of Physiology</i> , 2019, 597, 4025-4051.	1.3	14
1819	Not all brain regions are created equal for improving bimanual coordination in individuals with chronic stroke. <i>Clinical Neurophysiology</i> , 2019, 130, 1218-1230.	0.7	9
1820	Intracellular calcium stores mediate metaplasticity at hippocampal dendritic spines. <i>Journal of Physiology</i> , 2019, 597, 3473-3502.	1.3	22
1821	A Theoretical Framework to Derive Simple, Firing-Rate-Dependent Mathematical Models of Synaptic Plasticity. <i>Frontiers in Computational Neuroscience</i> , 2019, 13, 26.	1.2	8
1822	Synaptic plasticity onto inhibitory neurons as a mechanism for ocular dominance plasticity. <i>PLoS Computational Biology</i> , 2019, 15, e1006834.	1.5	7
1823	A model of amygdala function following plastic changes at specific synapses during extinction. <i>Neurobiology of Stress</i> , 2019, 10, 100159.	1.9	14
1824	Effects of transcranial direct current stimulation on the rehabilitation of painful shoulder following a stroke: protocol for a randomized, controlled, double-blind, clinical trial. <i>Trials</i> , 2019, 20, 165.	0.7	5

#	ARTICLE	IF	CITATIONS
1825	Effective Augmentation of Creativity-Involving Productivity Consequent to Spontaneous Selectivity in Knowledge Acquisition. <i>Frontiers in Psychology</i> , 2019, 10, 600.	1.1	0
1826	Unsupervised learning by competing hidden units. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019, 116, 7723-7731.	3.3	88
1827	Cortical recruitment determines learning dynamics and strategy. <i>Nature Communications</i> , 2019, 10, 1479.	5.8	11
1828	Continual lifelong learning with neural networks: A review. <i>Neural Networks</i> , 2019, 113, 54-71.	3.3	1,365
1829	Treating Chronic Migraine With Neuromodulation: The Role of Neurophysiological Abnormalities and Maladaptive Plasticity. <i>Frontiers in Pharmacology</i> , 2019, 10, 32.	1.6	22
1830	Unconventional Inorganic-Based Memristive Devices for Advanced Intelligent Systems. <i>Advanced Materials Technologies</i> , 2019, 4, 1900080.	3.0	14
1831	Somatosensory and transcranial direct current stimulation effects on manual dexterity and motor cortex function: A metaplasticity study. <i>Brain Stimulation</i> , 2019, 12, 938-947.	0.7	4
1832	Synaptic retinoic acid receptor signaling mediates mTOR-dependent metaplasticity that controls hippocampal learning. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019, 116, 7113-7122.	3.3	40
1833	UAV-Based Motion Target Detection and Tracking Method in Dynamic Scenes. , 2019, , .		0
1834	Jazz Music Generation Based on Grammar and LSTM. , 2019, , .		5
1836	Computing a Minimal Set of t-Spanning Motion Primitives for Lattice Planners. , 2019, , .		5
1837	Construction of the bilateral system to connect micro and real worlds. , 2019, , .		0
1838	Message from the WETSEB 2019 Workshop Organizers. , 2019, , .		0
1840	Customers characterization: A pilot study for the incorporation of demand response programs. , 2019, , .		0
1841	Performance Analysis for TCP Protocols over mm Wave in 5G Cellular Networks. , 2019, , .		3
1842	Image Feature Description Based on Local Intensity Comparison. , 2019, , .		0
1843	A New Construction Method of Regeneration Tree for Single Node Fault Repair Mechanism in Distributed Storage System. , 2019, , .		0
1844	A 24.5-27 GHz GaN Power Amplifier MMIC with 4 W Maximum Saturation Output Power. , 2019, , .		4

#	ARTICLE	IF	CITATIONS
1845	3D-printable Perforated Dielectric Reflectarray in Ka-band. , 2019, , .		4
1846	MiSE 2019 Organizing Committee. , 2019, , .		0
1847	Framework Design and Software Implementation of Whole Process Risk Coordination Control for Power System. , 2019, , .		0
1848	Design of Motor Observer with Iron Loss and Parameter Identification. , 2019, , .		1
1849	An Approach for Team Composition in League of Legends using Genetic Algorithm. , 2019, , .		7
1850	S-Band Circularly polarized Transceiver Antenna for LEO Satellites. , 2019, , .		2
1851	A Novel Approach to Remove Ocular Artifact from EEG Signal. , 2019, , .		1
1852	Making Augmented Reality Learning Media In Conformation of Alkane and Cycloalkane Concepts. , 2019, , .		2
1853	A QoE-oriented Saliency-aware Approach for 360-degree Video Transmission. , 2019, , .		7
1854	Cavity based THz photoconductive switch: towards high average power. , 2019, , .		0
1856	ML-based Motion Estimation in Ultrasound Images Using Heavy-tailed Noise Distributions. , 2019, , .		0
1857	A Study of Relationship Between $V-t$ and $\tan\delta$ Characteristic on Epoxy Resin. , 2019, , .		1
1858	Study on Transient Thermal Characteristics of Epoxy Resin in Saturable Reactor. , 2019, , .		0
1859	FPGA Based Powerline and Baseline Interference Removal in Electrocardiogram Using Modified EWT-DWT Filtering. , 2019, , .		2
1860	Multi-Function Tibetan Input Method on Android. , 2019, , .		1
1861	Impact of Climate Change On Agricultural Production Decisions. , 2019, , .		0
1862	New Tendencies in the Validation of Non-formal and Informal Learning with Some Examples of Validation in the ICT Sector. , 2019, , .		0
1863	Distributed Downloading Strategy for Multi-Source Data Fusion in Edge-Enabled Vehicular Network : (Invited Paper). , 2019, , .		4

#	ARTICLE	IF	CITATIONS
1864	Aspect-Based Sentiment Analysis with Adjustments to Irrelevant Sentimental-Related Features. , 2019, , .		2
1865	BPMN Approach in Blockchain with Hyperledger Composer and Smart Contract: Reservation-Based Parking System. , 2019, , .		8
1866	Physical Synthesis of Flow-Based Microfluidic Biochips Considering Distributed Channel Storage. , 2019, , .		20
1867	Research on ZigBee wireless communication technology and its application. , 2019, , .		13
1868	On the Use of Wide Channels in WiFi Networks. , 2019, , .		0
1869	Asynchronous Subgradient-push Algorithm for Distributed optimization over Directed Graphs. , 2019, , .		0
1870	RangeNet ++: Fast and Accurate LiDAR Semantic Segmentation. , 2019, , .		560
1871	Combining Photometric Features and Relative Position to Detect and Track Target Person. , 2019, , .		1
1872	Relation between gamma oscillations and neuronal plasticity in the visual cortex. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 23317-23325.	3.3	58
1873	Mechanisms of Homeostatic Synaptic Plasticity in vivo. Frontiers in Cellular Neuroscience, 2019, 13, 520.	1.8	66
1874	Firing Rate Homeostasis Can Occur in the Absence of Neuronal Activity-Regulated Transcription. Journal of Neuroscience, 2019, 39, 9885-9899.	1.7	10
1875	Synaptic plasticity in an artificial Hebbian network exhibiting continuous, unsupervised, rapid learning. , 2019, , .		0
1876	From Learning to Consciousness: An Example Using Expected Float Entropy Minimisation. Entropy, 2019, 21, 60.	1.1	2
1877	Immunological Paradigms, Mechanisms, and Models: Conceptual Understanding Is a Prerequisite to Effective Modeling. Frontiers in Immunology, 2019, 10, 2522.	2.2	13
1878	Audio-visual experience strengthens multisensory assemblies in adult mouse visual cortex. Nature Communications, 2019, 10, 5684.	5.8	46
1879	Optimal Stimulation Protocol in a Bistable Synaptic Consolidation Model. Frontiers in Computational Neuroscience, 2019, 13, 78.	1.2	5
1880	Burst synchronization in a scale-free neuronal network with inhibitory spike-timing-dependent plasticity. Cognitive Neurodynamics, 2019, 13, 53-73.	2.3	20
1881	Homeostatic synaptic plasticity as a metaplasticity mechanism—a molecular and cellular perspective. Current Opinion in Neurobiology, 2019, 54, 44-53.	2.0	65

#	ARTICLE	IF	CITATIONS
1882	Low frequency pulse stimulation of Schaffer collaterals in Trpm4 ^{+/+} knockout rats differently affects baseline BOLD signals in target regions of the right hippocampus but not BOLD responses at the site of stimulation. <i>NeuroImage</i> , 2019, 188, 347-356.	2.1	9
1883	Advances and Challenges in Transcranial Magnetic Stimulation (TMS) Research on Motor Systems. , 2019, , 283-318.		2
1884	Bienstock, Cooper, and Munro Learning Rules Realized in Second-Order Memristors with Tunable Forgetting Rate. <i>Advanced Functional Materials</i> , 2019, 29, 1807316.	7.8	60
1885	Emerging memory technologies for neuromorphic computing. <i>Nanotechnology</i> , 2019, 30, 032001.	1.3	62
1886	A comprehensive survey of recent developments in neuronal communication and computational neuroscience. <i>Journal of Industrial Information Integration</i> , 2019, 13, 40-54.	4.3	8
1887	Efficient FPGA Implementations of Pair and Triplet-Based STDP for Neuromorphic Architectures. <i>IEEE Transactions on Circuits and Systems I: Regular Papers</i> , 2019, 66, 1558-1570.	3.5	38
1888	An Interclass Margin Maximization Learning Algorithm for Evolving Spiking Neural Network. <i>IEEE Transactions on Cybernetics</i> , 2019, 49, 989-999.	6.2	19
1889	Investigating the Evolution of a Neuroplasticity Network for Learning. <i>IEEE Transactions on Systems, Man, and Cybernetics: Systems</i> , 2019, 49, 2131-2143.	5.9	24
1890	Protocols of non-invasive brain stimulation for neuroplasticity induction. <i>Neuroscience Letters</i> , 2020, 719, 133437.	1.0	29
1891	Memory and plasticity impairment after binge drinking in adolescent rat hippocampus: GluN2A / GluN2B NMDA receptor subunits imbalance through HDAC2 . <i>Addiction Biology</i> , 2020, 25, e12760.	1.4	20
1892	Constructing multilayered neural networks with sparse, data-driven connectivity using biologically-inspired, complementary, homeostatic mechanisms. <i>Neural Networks</i> , 2020, 122, 68-93.	3.3	8
1893	Primal categories of neural polarity codes. <i>Cognitive Neurodynamics</i> , 2020, 14, 125-135.	2.3	1
1894	Applications of Emerging Memory Technology. <i>Springer Series in Advanced Microelectronics</i> , 2020, , .	0.3	6
1895	Greedy Edge-Wise Training of Resistive Switch Arrays. <i>Springer Series in Advanced Microelectronics</i> , 2020, , 177-190.	0.3	0
1896	Evolving Local Plasticity Rules for Synergistic Learning in Echo State Networks. <i>IEEE Transactions on Neural Networks and Learning Systems</i> , 2020, 31, 1363-1374.	7.2	22
1897	Emerging neuromorphic devices. <i>Nanotechnology</i> , 2020, 31, 092001.	1.3	177
1898	Neuromodulation in Headache and Facial Pain Management. <i>Headache</i> , 2020, , .	0.2	9
1899	Preconditioning cathodal transcranial direct current stimulation facilitates the neuroplastic effect of subsequent anodal transcranial direct current stimulation applied during cycling in young adults. <i>Neuroscience Letters</i> , 2020, 714, 134597.	1.0	4

#	ARTICLE	IF	CITATIONS
1900	Acute aerobic exercise and neuroplasticity of the motor cortex: A systematic review. <i>Journal of Science and Medicine in Sport</i> , 2020, 23, 408-414.	0.6	41
1901	Probing the relevance of repeated cathodal transcranial direct current stimulation over the primary motor cortex for prolongation of after-effects. <i>Journal of Physiology</i> , 2020, 598, 805-816.	1.3	23
1902	Development and binocular matching of orientation selectivity in visual cortex: a computational model. <i>Journal of Neurophysiology</i> , 2020, 123, 1305-1319.	0.9	8
1903	Cortical M1 plasticity and metaplasticity in patients with multiple sclerosis. <i>Multiple Sclerosis and Related Disorders</i> , 2020, 38, 101494.	0.9	12
1904	Simplified calcium signaling cascade for synaptic plasticity. <i>Neural Networks</i> , 2020, 123, 38-51.	3.3	8
1905	The Interplay of Synaptic Plasticity and Scaling Enables Self-Organized Formation and Allocation of Multiple Memory Representations. <i>Frontiers in Neural Circuits</i> , 2020, 14, 541728.	1.4	11
1906	Interleukin-1 β Alters Hebbian Synaptic Plasticity in Multiple Sclerosis. <i>International Journal of Molecular Sciences</i> , 2020, 21, 6982.	1.8	9
1907	Strategies for augmentation of high-frequency left-sided repetitive transcranial magnetic stimulation treatment of major depressive disorder. <i>Journal of Affective Disorders</i> , 2020, 277, 964-969.	2.0	15
1908	Randomized clinical trial comparing of transcranial direct current stimulation (tDCS) and transcutaneous electrical nerve stimulation (TENS) in knee osteoarthritis. <i>Neurophysiologie Clinique</i> , 2020, 50, 367-374.	1.0	12
1909	Brain Response Induced with Paired Associative Stimulation Is Related to Repetition Suppression of Motor Evoked Potential. <i>Brain Sciences</i> , 2020, 10, 674.	1.1	5
1910	Plasticity and Adaptation in Neuromorphic Biohybrid Systems. <i>IScience</i> , 2020, 23, 101589.	1.9	26
1911	Cerebellar transcranial direct current stimulation for learning a novel split-belt treadmill task: a randomised controlled trial. <i>Scientific Reports</i> , 2020, 10, 11853.	1.6	11
1912	How to Design Optimal Accelerated rTMS Protocols Capable of Promoting Therapeutically Beneficial Metaplasticity. <i>Frontiers in Neurology</i> , 2020, 11, 599918.	1.1	26
1913	Presynaptic inhibition rapidly stabilises recurrent excitation in the face of plasticity. <i>PLoS Computational Biology</i> , 2020, 16, e1008118.	1.5	9
1914	Is Purkinje Neuron Hyperpolarisation Important for Cerebellar Synaptic Plasticity? A Retrospective and Prospective Analysis. <i>Cerebellum</i> , 2020, 19, 869-878.	1.4	2
1915	Silent Synapse-Based Mechanisms of Critical Period Plasticity. <i>Frontiers in Cellular Neuroscience</i> , 2020, 14, 213.	1.8	17
1916	Sparse coding with a somato-dendritic rule. <i>Neural Networks</i> , 2020, 131, 37-49.	3.3	2
1917	Neuronal vector coding in spatial cognition. <i>Nature Reviews Neuroscience</i> , 2020, 21, 453-470.	4.9	93

#	ARTICLE	IF	CITATIONS
1918	A heuristic framework for perceptual saliency prediction. <i>Journal of Visual Communication and Image Representation</i> , 2020, 73, 102913.	1.7	0
1919	Bienenstock's Cooper's Munro Learning Rule Realized in Polysaccharide-Gated Synaptic Transistors with Tunable Threshold. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 50061-50067.	4.0	25
1920	The Effects of 1mA tACS and tRNS on Children/Adolescents and Adults: Investigating Age and Sensitivity to Sham Stimulation. <i>Neural Plasticity</i> , 2020, 2020, 1-14.	1.0	8
1921	Multicoding in neural information transfer suggested by mathematical analysis of the frequency-dependent synaptic plasticity in vivo. <i>Scientific Reports</i> , 2020, 10, 13974.	1.6	2
1922	Preconditioning human pharyngeal motor cortex enhances directional metaplasticity induced by repetitive transcranial magnetic stimulation. <i>Journal of Physiology</i> , 2020, 598, 5213-5230.	1.3	9
1923	Synaptic Plasticity in Cortical Inhibitory Neurons: What Mechanisms May Help to Balance Synaptic Weight Changes?. <i>Frontiers in Cellular Neuroscience</i> , 2020, 14, 204.	1.8	21
1924	Development and Reorganization of Orientation Representation in the Cat Visual Cortex: Experience-Dependent Synaptic Rewiring in Early Life. <i>Frontiers in Neuroinformatics</i> , 2020, 14, 41.	1.3	2
1925	Synaptic plasticity rules with physiological calcium levels. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 33639-33648.	3.3	58
1926	Polymer-Decorated 2D MoS ₂ Synaptic Transistors for Biological Bipolar Metaplasticities Emulation*. <i>Chinese Physics Letters</i> , 2020, 37, 088501.	1.3	30
1927	First Passage Time Memory Lifetimes for Multistate, Filter-Based Synapses. <i>Neural Computation</i> , 2020, 32, 1069-1143.	1.3	2
1928	Optimal Distribution of Spiking Neurons Over Multicore Neuromorphic Processors. <i>IEEE Access</i> , 2020, 8, 69426-69437.	2.6	4
1929	Synergistic excitability plasticity in cerebellar functioning. <i>FEBS Journal</i> , 2020, 287, 4557-4593.	2.2	15
1930	Device and Circuit Architectures for In-Memory Computing. <i>Advanced Intelligent Systems</i> , 2020, 2, 2000040.	3.3	100
1931	Probabilistically segregated neural circuits and subcritical linguistics. <i>Cognitive Neurodynamics</i> , 2020, 14, 837-848.	2.3	1
1932	Targeting Homeostatic Synaptic Plasticity for Treatment of Mood Disorders. <i>Neuron</i> , 2020, 106, 715-726.	3.8	107
1933	SPSNN: nth Order Sequence-Predicting Spiking Neural Network. <i>IEEE Access</i> , 2020, 8, 110523-110534.	2.6	4
1934	Postnatal Development of Visual Cortical Function in the Mammalian Brain. <i>Frontiers in Systems Neuroscience</i> , 2020, 14, 29.	1.2	20
1935	Global modulatory heterosynaptic mechanisms in bio-polymer electrolyte gated oxide neuron transistors. <i>Journal Physics D: Applied Physics</i> , 2020, 53, 435105.	1.3	12

#	ARTICLE	IF	CITATIONS
1936	The Path to and Impact of Disease Recognition with AI. IEEE Pulse, 2020, 11, 13-16.	0.1	2
1937	Determination of anodal tDCS duration threshold for reversal of corticospinal excitability: An investigation for induction of counter-regulatory mechanisms. Brain Stimulation, 2020, 13, 832-839.	0.7	56
1938	Complementary Metal-Oxide Semiconductor and Memristive Hardware for Neuromorphic Computing. Advanced Intelligent Systems, 2020, 2, 1900189.	3.3	78
1939	Effects of different transcranial direct current stimulation protocols on visuo-spatial contextual learning formation: evidence of homeostatic regulatory mechanisms. Scientific Reports, 2020, 10, 4622.	1.6	15
1940	Impact of Priming on Effectiveness of TMS in Detecting Language-eloquent Brain Areas in Tumor Patients. Journal of Neurological Surgery, Part A: Central European Neurosurgery, 2020, 81, 111-129.	0.4	4
1941	A Walking Assistive Device of the Ankle Joint Motion and the Control Method According to the Emotion Condition. , 2020, , .		2
1942	Electrophysiological Effects of Transcranial Direct Current Stimulation on Neural Activity in the Rat Motor Cortex. Frontiers in Neuroscience, 2020, 14, 495.	1.4	9
1943	Brain-inspired biodegradable pectin based proton conductor gated electronic synapse. Organic Electronics, 2020, 82, 105782.	1.4	11
1944	Competitive Learning in a Spiking Neural Network: Towards an Intelligent Pattern Classifier. Sensors, 2020, 20, 500.	2.1	36
1945	Supervised learning in spiking neural networks: A review of algorithms and evaluations. Neural Networks, 2020, 125, 258-280.	3.3	141
1946	Trust Based Secure Content Delivery in Vehicular Networks: A Bargaining Game Theoretical Approach. IEEE Transactions on Vehicular Technology, 2020, 69, 3267-3279.	3.9	22
1947	Towards the interpretation of complex visual hallucinations in terms of self-reorganization of neural networks. Neuroscience Research, 2020, 156, 147-158.	1.0	2
1948	Nonlinear Endmember Identification for Hyperspectral Imagery via Hyperpath-Based Simplex Growing and Fuzzy Assessment. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2020, 13, 351-366.	2.3	6
1949	Neurogranin stimulates Ca ²⁺ /calmodulin-dependent kinase II by suppressing calcineurin activity at specific calcium spike frequencies. PLoS Computational Biology, 2020, 16, e1006991.	1.5	18
1950	Transcranial magnetic stimulation in major depressive disorder: Response modulation and state dependency.. Journal of Affective Disorders, 2020, 266, 793-801.	2.0	11
1951	Threshold-Tunable, Spike-Rate-Dependent Plasticity Originating from Interfacial Proton Gating for Pattern Learning and Memory. ACS Applied Materials & Interfaces, 2020, 12, 7833-7839.	4.0	41
1952	Unsupervised Learning of Persistent and Sequential Activity. Frontiers in Computational Neuroscience, 2019, 13, 97.	1.2	16
1953	Bio-Inspired Approaches to Safety and Security in IoT-Enabled Cyber-Physical Systems. Sensors, 2020, 20, 844.	2.1	8

#	ARTICLE	IF	CITATIONS
1954	Neurohybrid Memristive CMOS-Integrated Systems for Biosensors and Neuroprosthetics. <i>Frontiers in Neuroscience</i> , 2020, 14, 358.	1.4	143
1955	Effect of interpopulation spike-timing-dependent plasticity on synchronized rhythms in neuronal networks with inhibitory and excitatory populations. <i>Cognitive Neurodynamics</i> , 2020, 14, 535-567.	2.3	18
1956	Somatodendritic consistency check for temporal feature segmentation. <i>Nature Communications</i> , 2020, 11, 1554.	5.8	13
1957	Experience and sleep-dependent synaptic plasticity: from structure to activity. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , 2020, 375, 20190234.	1.8	19
1958	Induction of long-term potentiation-like plasticity in the primary motor cortex with repeated anodal transcranial direct current stimulation – Better effects with intensified protocols?. <i>Brain Stimulation</i> , 2020, 13, 987-997.	0.7	57
1959	Effective Correlates of Motor Imagery Performance based on Default Mode Network in Resting-State. , 2020, , .		3
1960	Modelling acute and lasting effects of tDCS on epileptic activity. <i>Journal of Computational Neuroscience</i> , 2020, 48, 161-176.	0.6	11
1961	Hardware-Intrinsic Multi-Layer Security: A New Frontier for 5G Enabled IIoT. <i>Sensors</i> , 2020, 20, 1963.	2.1	16
1962	A Lightweight Neural Network for Monocular View Generation With Occlusion Handling. <i>IEEE Transactions on Pattern Analysis and Machine Intelligence</i> , 2021, 43, 1832-1844.	9.7	2
1963	The growth of cognition: Free energy minimization and the embryogenesis of cortical computation. <i>Physics of Life Reviews</i> , 2021, 36, 83-99.	1.5	21
1964	Primal-size neural circuits in meta-periodic interaction. <i>Cognitive Neurodynamics</i> , 2021, 15, 359-367.	2.3	0
1965	Characterising the orientation-specific pattern-onset visual evoked potentials in children with bilateral refractive amblyopia and non-amblyopic controls. <i>Documenta Ophthalmologica</i> , 2021, 142, 197-211.	1.0	3
1966	Activity-dependent long-term potentiation of electrical synapses in the mammalian thalamus. <i>Journal of Neurophysiology</i> , 2021, 125, 476-488.	0.9	11
1967	Neurophysiological and molecular approaches to understanding the mechanisms of learning and memory. <i>Journal of the Royal Society of New Zealand</i> , 2021, 51, 4-23.	1.0	1
1968	Human EEG and the mechanisms of memory: investigating long-term potentiation (LTP) in sensory-evoked potentials. <i>Journal of the Royal Society of New Zealand</i> , 2021, 51, 24-40.	1.0	12
1969	RNA-binding proteins balance brain function in health and disease. <i>Physiological Reviews</i> , 2021, 101, 1309-1370.	13.1	57
1970	Riluzole ameliorates soluble A β ¹⁻⁴² -induced impairments in spatial memory by modulating the glutamatergic/GABAergic balance in the dentate gyrus. <i>Progress in Neuro-Psychopharmacology and Biological Psychiatry</i> , 2021, 108, 110077.	2.5	10
1971	Memory retention in pyramidal neurons: a unified model of energy-based homo and heterosynaptic plasticity with homeostasis. <i>Cognitive Neurodynamics</i> , 2021, 15, 675-692.	2.3	2

#	ARTICLE	IF	CITATIONS
1972	Reversal of Temporal Discrimination in Cervical Dystonia after Low-Frequency Sensory Stimulation. <i>Movement Disorders</i> , 2021, 36, 761-766.	2.2	11
1973	Neural and phenotypic representation under the free-energy principle. <i>Neuroscience and Biobehavioral Reviews</i> , 2021, 120, 109-122.	2.9	13
1974	A Network Perspective on Sensorimotor Learning. <i>Trends in Neurosciences</i> , 2021, 44, 170-181.	4.2	23
1975	Synergies between synaptic and intrinsic plasticity in echo state networks. <i>Neurocomputing</i> , 2021, 432, 32-43.	3.5	12
1976	Hardware-Efficient Emulation of Leaky Integrate-and-Fire Model Using Template-Scaling-Based Exponential Function Approximation. <i>IEEE Transactions on Circuits and Systems I: Regular Papers</i> , 2021, 68, 350-362.	3.5	10
1977	Computational Modeling of Structural Synaptic Plasticity in Echo State Networks. <i>IEEE Transactions on Cybernetics</i> , 2022, 52, 11254-11266.	6.2	6
1978	The Cerebral Cortex: A Delay-Coupled Recurrent Oscillator Network?. <i>Natural Computing Series</i> , 2021, , 3-28.	2.2	3
1979	Acetylcholine Effects on STDP Induced on Spatial and Non-spatial Information in Dentate Gyrus. <i>Advances in Cognitive Neurodynamics</i> , 2021, , 83-88.	0.1	0
1980	A Synaptic-plasticity Model Inspired by Metabolic Energy. <i>Journal of Physics: Conference Series</i> , 2021, 1746, 012009.	0.3	0
1982	A Preliminary Analysis on Software Frameworks for the Development of Spiking Neural Networks. <i>Lecture Notes in Computer Science</i> , 2021, , 564-575.	1.0	2
1983	Neurobiological After-Effects of Low Intensity Transcranial Electric Stimulation of the Human Nervous System: From Basic Mechanisms to Metaplasticity. <i>Frontiers in Neurology</i> , 2021, 12, 587771.	1.1	37
1984	Energetics of stochastic BCM type synaptic plasticity and storing of accurate information. <i>Journal of Computational Neuroscience</i> , 2021, 49, 71-106.	0.6	9
1986	Adaptive Rewiring in Weighted Networks Shows Specificity, Robustness, and Flexibility. <i>Frontiers in Systems Neuroscience</i> , 2021, 15, 580569.	1.2	8
1987	Learning receptive field properties of complex cells in V1. <i>PLoS Computational Biology</i> , 2021, 17, e1007957.	1.5	7
1988	Energy Consumption and Entropy Production in a Stochastic Formulation of BCM Learning. <i>Journal of Computational Biology</i> , 2021, 28, 257-268.	0.8	0
1990	Adaptation of spontaneous activity in the developing visual cortex. <i>ELife</i> , 2021, 10, .	2.8	20
1991	Phase Change Random Access Memory for Neuro-Inspired Computing. <i>Advanced Electronic Materials</i> , 2021, 7, 2001241.	2.6	29
1992	Comparison of Pattern Discrimination Mechanisms of Hebbian and Spatiotemporal Learning Rules in Self-Organization. <i>Frontiers in Systems Neuroscience</i> , 2021, 15, 624353.	1.2	2

#	ARTICLE	IF	CITATIONS
1994	Auditory Beat Stimulation Modulates Memory-Related Single-Neuron Activity in the Human Medial Temporal Lobe. <i>Brain Sciences</i> , 2021, 11, 364.	1.1	4
1995	Subsequent Acupuncture Reverses the Aftereffects of Intermittent Theta-Burst Stimulation. <i>Frontiers in Neural Circuits</i> , 2021, 15, 675365.	1.4	1
1996	Constraint-induced intervention as an emergent phenomenon from synaptic competition in biological systems. <i>Journal of Computational Neuroscience</i> , 2021, 49, 175-188.	0.6	2
1997	Differences in brain structure and theta burst stimulation-induced plasticity implicate the corticomotor system in loss of function after musculoskeletal injury. <i>Journal of Neurophysiology</i> , 2021, 125, 1006-1021.	0.9	2
1998	Learning excitatory-inhibitory neuronal assemblies in recurrent networks. <i>ELife</i> , 2021, 10, .	2.8	24
1999	A computational framework for optimal control of a self-adjustive neural system with activity-dependent and homeostatic plasticity. <i>NeuroImage</i> , 2021, 230, 117805.	2.1	2
2000	Naturalistic Spike Trains Drive State-Dependent Homeostatic Plasticity in Superficial Layers of Visual Cortex. <i>Frontiers in Synaptic Neuroscience</i> , 2021, 13, 663282.	1.3	2
2001	Hebbian learning revisited and its inference underlying cognitive function. <i>Current Opinion in Behavioral Sciences</i> , 2021, 38, 96-102.	2.0	3
2002	The Immediate Early Gene Arc Is Not Required for Hippocampal Long-Term Potentiation. <i>Journal of Neuroscience</i> , 2021, 41, 4202-4211.	1.7	13
2003	Self-Organization Toward Criticality by Synaptic Plasticity. <i>Frontiers in Physics</i> , 2021, 9, .	1.0	50
2004	Preferential frequency-dependent induction of synaptic depression by the lateral perforant path and of synaptic potentiation by the medial perforant path inputs to the dentate gyrus. <i>Hippocampus</i> , 2021, 31, 957-981.	0.9	8
2005	Protein Phosphatase 2B Dual Function Facilitates Synaptic Integrity and Motor Learning. <i>Journal of Neuroscience</i> , 2021, 41, 5579-5594.	1.7	2
2006	Neural Functional Connectivity Reconstruction with Second-Order Memristor Network. <i>Advanced Intelligent Systems</i> , 2021, 3, 2000276.	3.3	9
2007	The Imbalanced Plasticity Hypothesis of Schizophrenia-Related Psychosis: A Predictive Perspective. <i>Cognitive, Affective and Behavioral Neuroscience</i> , 2021, 21, 679-697.	1.0	4
2008	Balanced networks under spike-time dependent plasticity. <i>PLoS Computational Biology</i> , 2021, 17, e1008958.	1.5	11
2010	Deep Predictive Learning in Neocortex and Pulvinar. <i>Journal of Cognitive Neuroscience</i> , 2021, 33, 1158-1196.	1.1	19
2011	Burst-dependent synaptic plasticity can coordinate learning in hierarchical circuits. <i>Nature Neuroscience</i> , 2021, 24, 1010-1019.	7.1	114
2012	Remodeling of the Homer-Shank interactome mediates homeostatic plasticity. <i>Science Signaling</i> , 2021, 14, .	1.6	12

#	ARTICLE	IF	CITATIONS
2013	Cortical and Subcortical Circuits for Cross-Modal Plasticity Induced by Loss of Vision. <i>Frontiers in Neural Circuits</i> , 2021, 15, 665009.	1.4	14
2014	Postsynaptic cell firing triggers bidirectional metaplasticity depending on the LTP induction protocol. <i>Journal of Neurophysiology</i> , 2021, 125, 1624-1635.	0.9	2
2015	Simulation and Modeling Methodologies: Enabler for Neuromorphic Computing Applications. , 2021, , .		0
2016	Quantized STDP-based online-learning spiking neural network. <i>Neural Computing and Applications</i> , 2021, 33, 12317-12332.	3.2	17
2017	A computational grid-to-place-cell transformation model indicates a synaptic driver of place cell impairment in early-stage Alzheimer's Disease. <i>PLoS Computational Biology</i> , 2021, 17, e1009115.	1.5	4
2019	Unsupervised changes in core object recognition behavior are predicted by neural plasticity in inferior temporal cortex. <i>ELife</i> , 2021, 10, .	2.8	9
2020	Transcranial Direct Current Stimulation Targeting the Ventromedial Prefrontal Cortex Reduces Reactive Aggression and Modulates Electrophysiological Responses in a Forensic Population. <i>Biological Psychiatry: Cognitive Neuroscience and Neuroimaging</i> , 2022, 7, 95-107.	1.1	11
2021	A functional model of adult dentate gyrus neurogenesis. <i>ELife</i> , 2021, 10, .	2.8	6
2022	Resonating neurons stabilize heterogeneous grid-cell networks. <i>ELife</i> , 2021, 10, .	2.8	8
2023	The Role of Training in Visual Number Sense. <i>Lecture Notes on Data Engineering and Communications Technologies</i> , 2022, , 681-687.	0.5	0
2024	Protocols for inducing homeostatic plasticity reflected in the corticospinal excitability in healthy human participants: A systematic review and meta-analysis. <i>European Journal of Neuroscience</i> , 2021, 54, 5444-5461.	1.2	8
2025	Subthreshold stimulation intensity is associated with greater clinical efficacy of intermittent theta-burst stimulation priming for Major Depressive Disorder. <i>Brain Stimulation</i> , 2021, 14, 1015-1021.	0.7	14
2026	Biomarkers Obtained by Transcranial Magnetic Stimulation in Neurodevelopmental Disorders. <i>Journal of Clinical Neurophysiology</i> , 2022, 39, 135-148.	0.9	13
2027	A Correspondence Between Normalization Strategies in Artificial and Biological Neural Networks. <i>Neural Computation</i> , 2021, 33, 3179-3203.	1.3	11
2029	Nonlinear Dendritic Coincidence Detection for Supervised Learning. <i>Frontiers in Computational Neuroscience</i> , 2021, 15, 718020.	1.2	0
2031	Network-centered homeostasis through inhibition maintains hippocampal spatial map and cortical circuit function. <i>Cell Reports</i> , 2021, 36, 109577.	2.9	7
2032	The influence of sensory experience on the glutamatergic synapse. <i>Neuropharmacology</i> , 2021, 193, 108620.	2.0	9
2033	Metaplastic Reinforcement of Long-Term Potentiation in Hippocampal Area CA2 by Cholinergic Receptor Activation. <i>Journal of Neuroscience</i> , 2021, 41, 9082-9098.	1.7	5

#	ARTICLE	IF	CITATIONS
2035	A Multiscale View of the Mechanisms Underlying Ketamine's Antidepressant Effects: An Update on Neuronal Calcium Signaling. <i>Frontiers in Behavioral Neuroscience</i> , 2021, 15, 749180.	1.0	9
2037	Current perspectives on the benefits, risks, and limitations of noninvasive brain stimulation (NIBS) for post-stroke dysphagia. <i>Expert Review of Neurotherapeutics</i> , 2021, 21, 1-12.	1.4	10
2038	Optimal plasticity for memory maintenance during ongoing synaptic change. <i>ELife</i> , 2021, 10, .	2.8	16
2039	Paired associative stimulations: Novel tools for interacting with sensory and motor cortical plasticity. <i>Behavioural Brain Research</i> , 2021, 414, 113484.	1.2	9
2040	SpikePropamine: Differentiable Plasticity in Spiking Neural Networks. <i>Frontiers in Neurobotics</i> , 2021, 15, 629210.	1.6	5
2041	From synapse to network: models of information storage and retrieval in neural circuits. <i>Current Opinion in Neurobiology</i> , 2021, 70, 24-33.	2.0	10
2042	Learning hierarchically-structured concepts. <i>Neural Networks</i> , 2021, 143, 798-817.	3.3	3
2043	Acute social and somatic stress alters cortical metaplasticity probed with non-invasive brain stimulation in humans. <i>International Journal of Psychophysiology</i> , 2021, 170, 1-5.	0.5	10
2044	Towards engineering in memristors for emerging memory and neuromorphic computing: A review. <i>Journal of Semiconductors</i> , 2021, 42, 013101.	2.0	56
2045	Spike-Timing-Dependent Plasticity With Activation-Dependent Scaling for Receptive Fields Development. <i>IEEE Transactions on Neural Networks and Learning Systems</i> , 2022, 33, 5215-5228.	7.2	2
2046	Dysregulation of excitatory neural firing replicates physiological and functional changes in aging visual cortex. <i>PLoS Computational Biology</i> , 2021, 17, e1008620.	1.5	6
2047	The role of astrocyte-mediated plasticity in neural circuit development and function. <i>Neural Development</i> , 2021, 16, 1.	1.1	78
2050	BCM-Type Synaptic Plasticity Model Using a Linear Summation of Calcium Elevations as a Sliding Threshold. <i>Lecture Notes in Computer Science</i> , 2006, , 19-29.	1.0	6
2051	Spike- Driven Synaptic Plasticity for Learning Correlated Patterns of Asynchronous Activity. <i>Lecture Notes in Computer Science</i> , 2002, , 241-247.	1.0	3
2052	Centering Neural Network Gradient Factors. <i>Lecture Notes in Computer Science</i> , 1998, , 207-226.	1.0	18
2053	Rule-injection hints as a means of improving network performance and learning time. <i>Lecture Notes in Computer Science</i> , 1990, , 120-129.	1.0	32
2054	Homeostatic Synaptic Plasticity. , 2008, , 535-552.		10
2055	How Local Cortical Processors that Maximize Coherent Variation could lay Foundations for Representation Proper. <i>Workshops in Computing</i> , 1995, , 117-133.	0.4	3

#	ARTICLE	IF	CITATIONS
2056	Hebbian Synaptic Plasticity: Evolution of the Contemporary Concept. Physics of Neural Networks, 1994, , 287-314.	0.1	7
2057	Coupling BCM and Neural Fields for the Emergence of Self-organization Consensus. Advances in Experimental Medicine and Biology, 2011, 718, 41-56.	0.8	3
2058	Still Looking for the Memories: Molecules and Synaptic Plasticity. , 2013, , 187-205.		1
2059	Neuron-Glial Interactions. , 2020, , 1-30.		4
2060	Hebbian Learning. , 2014, , 1-5.		4
2061	Self-Teaching Through Correlated Input. , 1993, , 437-441.		4
2062	Comparing Different Modeling Approaches of Visual Cortical Cell Characteristics. Cerebral Cortex, 1999, , 201-249.	0.6	3
2063	Experimental Basis for an Input/Output Model of the Hippocampal Formation. , 1994, , 29-53.		6
2064	Slow Cortical Potentials Reflect the Regulation of Cortical Excitability. , 1993, , 235-251.		62
2065	Calcium Signaling During Brain Aging and Its Influence on the Hippocampal Synaptic Plasticity. Advances in Experimental Medicine and Biology, 2020, 1131, 985-1012.	0.8	15
2066	Memristive in Situ Computing. , 2014, , 413-428.		2
2067	Integrating Molecular, Cellular, and Systems Approaches to Repairing the Brain After Stroke. Springer Series in Translational Stroke Research, 2018, , 365-382.	0.1	1
2068	Spiking Neural Computing in Memristive Neuromorphic Platforms. , 2019, , 691-728.		3
2069	Memory and Selectivity in Evolving Scale-Free Immune Networks. Lecture Notes in Computer Science, 2003, , 93-101.	1.0	6
2070	Modified Modulated Hebb-Oja Learning Rule: A Method for Biologically Plausible Principal Component Analysis. Lecture Notes in Computer Science, 2007, , 527-536.	1.0	1
2071	A Dynamical Model for Receptive Field Self-organization in V1 Cortical Columns. Lecture Notes in Computer Science, 2007, , 389-398.	1.0	3
2072	A Globally Asymptotically Stable Plasticity Rule for Firing Rate Homeostasis. Lecture Notes in Computer Science, 2008, , 567-576.	1.0	2
2073	Morphogenetic Robotics - An Evolutionary Developmental Approach to Morphological and Neural Self-Organization of Robotic Systems. Studies in Computational Intelligence, 2011, , 3-23.	0.7	2

#	ARTICLE	IF	CITATIONS
2074	Hebbian Learning of the Statistical and Geometrical Structure of Visual Input. Lecture Notes in Morphogenesis, 2014, , 335-366.	0.2	3
2075	Cooperation and Competition in Central Nervous System Development: A Unifying Approach. Springer Series in Synergetics, 1983, , 250-263.	0.2	5
2076	Neural Substrates of Binocular Form Perception: Filtering, Matching, Diffusion, and Resonance. Springer Series in Synergetics, 1983, , 274-298.	0.2	12
2078	Contextual Discrimination of Antigens by the Immune System: Towards a Unifying Hypothesis. , 1992, , 71-89.		10
2079	Neural Network Learning Algorithms. , 1989, , 291-300.		11
2080	Nonlinear Evolution Equations with a Convolution Term Involved in Some Neurophysiological Models. Lecture Notes in Biomathematics, 1985, , 341-347.	0.3	1
2081	Sensory Processing and Information Theory. , 1994, , 237-247.		4
2082	Contribution of Endogenous Acetylcholine to STDP Induction. Advances in Cognitive Neurodynamics, 2015, , 271-276.	0.1	3
2083	A self-organizing neural network sharing features of the mammalian visual system. Biological Cybernetics, 1987, 55, 333-343.	0.6	10
2084	The Neural Basis of Learning with Particular Reference to the Role of Synaptic Plasticity. , 1994, , 135-183.		9
2085	Spike timing-dependent plasticity. , 2020, , 127-141.		4
2086	Spatio-temporal dynamics of synaptic integration in cat visual cortical receptive fields. , 1996, , 143-199.		7
2087	Emotion in motion: A three-stage model of aversive classical conditioning. Neuroscience and Biobehavioral Reviews, 2020, 115, 363-377.	2.9	9
2088	Experience-Dependent Reorganization Drives Development of a Binocularly Unified Cortical Representation of Orientation. Neuron, 2020, 107, 338-350.e5.	3.8	32
2089	Feature Discovery by Competitive Learning*. , 1985, 9, 75.		320
2091	Plasticity and Cortical Reorganization Associated With Pain. Zeitschrift Fur Psychologie / Journal of Psychology, 2016, 224, 71-79.	0.7	11
2092	Negative emotional content disrupts the coherence of episodic memories.. Journal of Experimental Psychology: General, 2018, 147, 243-256.	1.5	65
2093	Solutions of the BCM learning rule in a network of lateral interacting nonlinear neurons. , 0, .		20

#	ARTICLE	IF	CITATIONS
2094	The development of topography in the visual cortex: a review of models. <i>Network: Computation in Neural Systems</i> , 1996, 7, 161-247.	2.2	240
2095	Development of localized oriented receptive fields by learning a translation-invariant code for natural images*. <i>Network: Computation in Neural Systems</i> , 1998, 9, 219-234.	2.2	12
2096	Structure and Function of Ligand-Gated Channels. , 1995, , 67-79.		1
2097	Synaptic Plasticity in Hippocampus and Neocortex: A Comparison. , 1995, , 98-108.		5
2119	The predictive brain: temporal coincidence and temporal order in synaptic learning mechanisms.. <i>Learning and Memory</i> , 1994, 1, 1-33.	0.5	128
2120	Effect of boundaries on grid cell patterns. <i>Physical Review Research</i> , 2020, 2, .	1.3	5
2121	Dissection of Bidirectional Synaptic Plasticity Into Saturable Unidirectional Processes. <i>Journal of Neurophysiology</i> , 2005, 94, 1565-1573.	0.9	64
2122	The Internet Diabetes Self-Management Workshop for American Indians and Alaska Natives. <i>Health Promotion Practice</i> , 2011, 12, 261-270.	0.9	9
2125	Neural Networks in Biomedical Signal Processing. <i>The Electrical Engineering Handbook</i> , 1999, , .	0.2	2
2126	The Concept of Metaplasticity. <i>Brain & Neurorehabilitation</i> , 2014, 7, 1.	0.4	2
2127	Adaptive Synaptogenesis Constructs Neural Codes That Benefit Discrimination. <i>PLoS Computational Biology</i> , 2015, 11, e1004299.	1.5	9
2128	A Three-Threshold Learning Rule Approaches the Maximal Capacity of Recurrent Neural Networks. <i>PLoS Computational Biology</i> , 2015, 11, e1004439.	1.5	16
2129	A Voltage-Based STDP Rule Combined with Fast BCM-Like Metaplasticity Accounts for LTP and Concurrent "Heterosynaptic" LTD in the Dentate Gyrus In Vivo. <i>PLoS Computational Biology</i> , 2015, 11, e1004588.	1.5	40
2130	Nonlinear Hebbian Learning as a Unifying Principle in Receptive Field Formation. <i>PLoS Computational Biology</i> , 2016, 12, e1005070.	1.5	46
2131	Linking structure and activity in nonlinear spiking networks. <i>PLoS Computational Biology</i> , 2017, 13, e1005583.	1.5	45
2132	Learning and executing goal-directed choices by internally generated sequences in spiking neural circuits. <i>PLoS Computational Biology</i> , 2017, 13, e1005669.	1.5	3
2133	Limited synapse overproduction can speed development but sometimes with long-term energy and discrimination penalties. <i>PLoS Computational Biology</i> , 2017, 13, e1005750.	1.5	7
2134	Structural Plasticity Can Produce Metaplasticity. <i>PLoS ONE</i> , 2009, 4, e8062.	1.1	27

#	ARTICLE	IF	CITATIONS
2135	Ca^{2+} and the C Terminus of SNAP-25 Are Necessary for Long-Term Depression of Transmitter Release. PLoS ONE, 2011, 6, e20500.	1.1	36
2136	Environmental Enrichment Promotes Plasticity and Visual Acuity Recovery in Adult Monocular Amblyopic Rats. PLoS ONE, 2012, 7, e34815.	1.1	39
2137	Information and Perception of Meaningful Patterns. PLoS ONE, 2013, 8, e69154.	1.1	15
2138	AHaH Computing—From Metastable Switches to Attractors to Machine Learning. PLoS ONE, 2014, 9, e85175.	1.1	38
2139	A Spiking Network Model of Decision Making Employing Rewarded STDP. PLoS ONE, 2014, 9, e90821.	1.1	22
2140	COMPUTATIONAL MODELING OF LONG-TERM DEPRESSION OF SYNAPTIC WEIGHTS: INSIGHTS FROM STDP, METAPLASTICITY AND SPONTANEOUS ACTIVITY. Neural Network World, 2012, 22, 161-180.	0.5	5
2142	Synaptic Plasticity, Metaplasticity and Depression. Current Neuropharmacology, 2017, 15, 71-86.	1.4	76
2143	Homeostatic Modulation of Stimulation-Dependent Plasticity in Human Motor Cortex. Physiological Research, 2011, 60, S107-S112.	0.4	16
2144	Mechanisms of induction and maintenance of spike-timing dependent plasticity in biophysical synapse models. Frontiers in Computational Neuroscience, 2010, 4, .	1.2	111
2145	Fear conditioning model predicts key temporal aspects of conditioned response production. Cognitive, Affective and Behavioral Neuroscience, 2000, 28, 303-313.	1.2	14
2146	Perirhinal-amygdala circuit-level computational model of temporal encoding in fear conditioning. Cognitive, Affective and Behavioral Neuroscience, 1999, 27, 1-25.	1.2	26
2147	Asynchronous Segregation of Cortical Circuits and Their Function: A Life-long Role for Synaptic Death. AIMS Neuroscience, 2017, 4, 87-101.	1.0	3
2148	Spike-timing dependent plasticity. Scholarpedia Journal, 2010, 5, 1362.	0.3	143
2149	Plastic-Adaptive Properties of Cortical Areas. , 0, , 311-350.		5
2150	A unified computational model for cortical post-synaptic plasticity. ELife, 2020, 9, .	2.8	29
2151	Learning from a Neuroscience Perspective. , 2021, , 732-736.		0
2152	Metaplasticity in the human swallowing system: clinical implications for dysphagia rehabilitation. Neurological Sciences, 2022, 43, 199-209.	0.9	6
2153	Preconditioning with Cathodal High-Definition Transcranial Direct Current Stimulation Sensitizes the Primary Motor Cortex to Subsequent Intermittent Theta Burst Stimulation. Neural Plasticity, 2021, 2021, 1-8.	1.0	3

#	ARTICLE	IF	CITATIONS
2154	Selective information acquisition with application to pattern classification. , 2000, , .		0
2155	Finite-State Reber Automaton and the Recurrent Neural Networks Trained in Supervised and Unsupervised Manner. Lecture Notes in Computer Science, 2001, , 737-742.	1.0	0
2156	Episodic Memory and Cognitive Map in a Rate Model Network of the Rat Hippocampus. Lecture Notes in Computer Science, 2001, , 1135-1140.	1.0	0
2157	Cooperative Information Control to Coordinate Competition and Cooperation. Lecture Notes in Computer Science, 2001, , 835-842.	1.0	0
2158	Timed Delivery of Reward Signals in an Autonomous Robot. , 2002, , 195-204.		0
2160	BICONN: A Binary Competitive Neural Network. Lecture Notes in Computer Science, 2003, , 430-437.	1.0	0
2161	A Competitive Neural Network based on dipoles. Lecture Notes in Computer Science, 2003, , 398-405.	1.0	6
2162	CBA generated receptive fields implemented in a Facial expression recognition task. Lecture Notes in Computer Science, 2003, , 734-741.	1.0	0
2163	A learning rule to model the development of orientation selectivity in visual cortex. Lecture Notes in Computer Science, 2003, , 190-197.	1.0	0
2164	LTD, Spike Timing and Somatosensory Barrel Cortex Plasticity. , 2003, , 229-240.		0
2165	Application of NEORON to the Location Dependence of Spike-Timing Dependent Plasticity on a Dendrite. The Brain & Neural Networks, 2005, 12, 94-99.	0.1	0
2166	An Unsupervised Learning Rule for Class Discrimination in a Recurrent Neural Network. Lecture Notes in Computer Science, 2006, , 415-424.	1.0	0
2167	A General Learning Rule for Network Modeling of Neuroimmune Interactome. Lecture Notes in Computer Science, 2006, , 286-292.	1.0	0
2168	Investigating STDP and LTP in a Spiking Neural Network. Lecture Notes in Computer Science, 2006, , 323-334.	1.0	0
2169	Neural Networks in Biomedical Signal Processing. The Electrical Engineering Handbook, 2006, , 7-1-7-14.	0.2	0
2170	Information Bottleneck Optimization and Independent Component Extraction with Spiking Neurons. , 2007, , 713-720.		2
2171	Activity-Dependent Plasticity In Gap Junctions as a Mechanism for Cardiac Memory. NeuroQuantology, 2007, 4, .	0.1	0
2172	BCM and Membrane Potential: Alternative Ways to Timing Dependent Plasticity. Lecture Notes in Computer Science, 2009, , 137-144.	1.0	3

#	ARTICLE	IF	CITATIONS
2174	Synaptic Plasticity at Hippocampal Synapses. , 2010, , 163-186.		0
2175	Online Self-reorganizing Neuro-fuzzy Reasoning in Interval-Forecasting for Financial Time-Series. Lecture Notes in Computer Science, 2010, , 523-534.	1.0	0
2176	Unlearning in the BCM Learning Rule for Plastic Self-organization in a Multi-modal Architecture. Lecture Notes in Computer Science, 2011, , 93-100.	1.0	1
2177	A Neuroeconomic Theory of Bidirectional Synaptic Plasticity And Addiction. SSRN Electronic Journal, 0, , .	0.4	0
2178	On the Biological Plausibility of Artificial Metaplasticity. Lecture Notes in Computer Science, 2011, , 119-128.	1.0	0
2179	Learning in a Distributed Software Architecture for Large-Scale Neural Modeling. Lecture Notes of the Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering, 2012, , 659-666.	0.2	0
2182	Influence of the Endogenous Acetylcholine on STDP Induction. , 2013, , 387-392.		0
2184	Receptive Field Modelling. , 2013, , 1-6.		0
2186	Synaptic State Matching: A Dynamical Architecture for Predictive Internal Representation and Feature Detection. PLoS ONE, 2013, 8, e72865.	1.1	1
2187	Concepts of Plasticity. , 2014, , 183-190.		0
2188	Receptive Field Modeling. , 2014, , 1-6.		0
2189	Spike-Timing-Dependent Plasticity, Learning Rules. , 2014, , 1-10.		1
2190	Constructing Complex Systems Via Activity-Driven Unsupervised Hebbian Self-Organization. Studies in Computational Intelligence, 2014, , 201-225.	0.7	1
2191	Long Term Depression in the Granule Cell-Purkinje Cell Synapse. , 2014, , 1-19.		0
2192	Synaptic Mechanisms and Cognitive Computations Underlying Stress Effects on Cognitive Function. , 2014, , 203-222.		0
2193	Neuron Learning to Brain Organization. , 1986, , 103-144.		0
2194	A Historical Perspective. , 1987, , 1-14.		0
2195	Theoretical Approaches and Cellular Analogs of Functional Plasticity in the Developing and Adult Vertebrate Visual Cortex. , 1990, , 153-165.		0

#	ARTICLE	IF	CITATIONS
2197	Competitive Learning: From Interactive Activation to Adaptive Resonance. , 1988, , 213-250.		23
2198	Visual Cortex: Window on the Biological Basis of Learning and Memory. , 1992, , 8-24.		0
2199	A Theoretical Approach to the Late Components of the Event-Related Brain Potential. , 1992, , 225-245.		2
2200	Cortical Maps. , 1992, , 451-457.		0
2201	Generation of Inhibitory Connections to Minimize Internal and External Entropy. , 1992, , 969-972.		1
2204	Plausible Self-Organizing Maps for Speech Recognition. , 1993, , 221-226.		1
2205	Outline of a Theory of Isocortex. , 1993, , 455-459.		3
2206	Hebbian Learning in Feedback Networks: Development Within Visual Cortex. , 1993, , 383-388.		0
2207	Psychologie de synth�se: les m�taphores de lâ€™esprit calculateur. , 1993, , 315-362.		1
2208	Tuning and Filtering in Associative Learning. , 1994, , 415-433.		0
2209	Preliminary aspects of the SAM theory of the Cerebral Neocortex. , 1994, , 293-298.		1
2210	Using adaptive synaptogenesis to model the development of ocular dominance in kitten visual cortex.. , 1994, , 139-144.		1
2211	Concepts of Plasticity. , 1995, , 155-164.		0
2212	A learning rule for extracting temporal invariances. Lecture Notes in Computer Science, 1995, , 189-194.	1.0	0
2213	CORTICAL PLASTICITY: THEORETICAL ANALYSIS, EXPERIMENTAL RESULTS. World Scientific Series in 20th Century Physics, 1995, , 104-119.	0.0	2
2214	AMI: A model of intelligence. Lecture Notes in Computer Science, 1996, , 181-192.	1.0	2
2215	Neuronale Repr�sentationen. , 1996, , 1-34.		0
2217	A Learning Sensorimotor Map of Arm Movements: a Step Toward Biological Arm Control. , 1997, , 61-86.		0

#	ARTICLE	IF	CITATIONS
2218	Effect of Binocular Cortical Misalignment on Networks of BCM and Oja Neurons. , 1997, , 491-495.		0
2221	Information Based Limits on Synaptic Growth in Hebbian Models. , 1997, , 309-313.		0
2222	A Hebbian Algorithm that Balances Information Rate and Neural Resource Consumption. , 1998, , 391-396.		0
2223	A Biological Mechanism for Synaptic Stability in Developing Neocortical Circuits. , 1998, , 349-354.		0
2224	Real-time Hebbian Learning from Autoencoder Features for Control Tasks. , 0, , .		1
2225	Optimal Measurement of Visual Motion Across Spatial and Temporal Scales. Intelligent Systems Reference Library, 2015, , 211-238.	1.0	0
2227	Current Trends in Memory Implantation and Rehabilitation. Trends in Augmentation of Human Performance, 2015, , 63-72.	0.4	1
2228	Modeling Neuronal Systems. , 2015, , 1-26.		0
2229	Learning via Synaptic Tuning. , 2015, , .		0
2230	Receptive Field Modeling. , 2015, , 2582-2586.		0
2233	Modeling Neuronal Systems. , 2016, , 2985-3010.		0
2234	Introduction: From Biological Experiments to Mathematical Models. Springer Theses, 2016, , 7-58.	0.0	0
2235	HVS-Inspired Dimensionality Reduction Model Based on Factor Analysis. Communications in Computer and Information Science, 2016, , 362-372.	0.4	1
2238	Robust and Adaptable Motor Command Representation with Sparse Coding. Lecture Notes in Computer Science, 2017, , 155-162.	1.0	0
2239	On Regulation of Neuro-spike Communication for Healthy Brain. Modeling and Optimization in Science and Technologies, 2017, , 207-240.	0.7	0
2240	Self-repairing Learning Rule for Spiking Astrocyte-Neuron Networks. Lecture Notes in Computer Science, 2017, , 384-392.	1.0	3
2241	Hardware Spiking Artificial Neurons, Their Response Function, and Noises. Cognitive Systems Monographs, 2017, , 1-16.	0.1	1
2243	Potential applications of three-dimensional bioprinting in regenerative medicine. , 0, , .		1

#	ARTICLE	IF	CITATIONS
2246	Molekulare Mechanismen von Lernen und Gedächtnis. , 2018, , 939-976.		0
2252	Deep Learning and Deep Knowledge Representation in the Human Brain. Springer Series on Bio- and Neurosystems, 2019, , 87-123.	0.2	0
2256	Autonomous Learning Paradigm for Spiking Neural Networks. Lecture Notes in Computer Science, 2019, , 737-744.	1.0	0
2257	Memristive In Situ Computing. , 2019, , 1005-1020.		1
2258	Long-Term Plasticity, Biophysical Models. , 2019, , 1-12.		0
2263	Chapter 1. The relevance of specific semantic categories in investigating the neural bases of abstract and concrete semantics. Human Cognitive Processing, 2019, , 17-42.	0.1	0
2267	Repetitive Transcranial Magnetic Stimulation. Headache, 2020, , 119-134.	0.2	0
2268	Meta-STDP Rule Stabilizes Synaptic Weights Under in Vivo-like Ongoing Spontaneous Activity in a Computational Model of CA1 Pyramidal Cell. Lecture Notes in Computer Science, 2020, , 670-680.	1.0	0
2277	Asymmetric Weights and Retrieval Practice in an Autoassociative Neural Network Model of Paired-Associate Learning. Neural Computation, 2021, 33, 3351-3360.	1.3	0
2278	Comparison of the subsequent LTP in hippocampal synapses primed by low frequency stimulations ranging from 0.5 to 5 Hz: An in vivo study. Neuroscience Letters, 2022, 767, 136311.	1.0	1
2283	Convolutional Neural Networks with Hebbian-Based Rules in Online Transfer Learning. Lecture Notes in Computer Science, 2020, , 35-49.	1.0	3
2286	Learning from a Neuroscience Perspective. , 2020, , 1-5.		0
2288	High-Accuracy Spiking Neural Network for Objective Recognition Based on Proportional Attenuating Neuron. Neural Processing Letters, 2022, 54, 1055-1073.	2.0	3
2291	Role of the Noradrenergic System in Synaptic Plasticity in the Hippocampus. , 2008, , 149-164.		0
2293	Concepts of Plasticity. , 2006, , 197-206.		0
2294	Metaplastizität. , 2007, , 543-551.		0
2295	Cooperative information control for self-organization maps. , 0, , .		0
2296	From Mechanisms to Analgesia: Towards the Use of Non-Invasive Neuromodulation for Pain Relief in the Clinic. , 0, , .		0

#	ARTICLE	IF	CITATIONS
2297	Short-term depression and long-term plasticity together tune sensitive range of synaptic plasticity. <i>PLoS Computational Biology</i> , 2020, 16, e1008265.	1.5	19
2308	N-of-1 Trial in Person with Pontine Stroke Receiving Repetitive Transcranial Magnetic Stimulation to Improve Hand Function. <i>Journal of Neuroimaging in Psychiatry & Neurology</i> , 2017, 2, 36-42.	0.4	0
2309	Transcranial Direct Current Stimulation (tDCS) Can Alter Cortical Excitability of the Lower Extremity in Healthy Participants: A Review and Methodological Study. , 2020, 1, .		0
2310	Sensory coding and contrast invariance emerge from the control of plastic inhibition over emergent selectivity. <i>PLoS Computational Biology</i> , 2021, 17, e1009566.	1.5	5
2311	Drifting assemblies for persistent memory: Neuron transitions and unsupervised compensation. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021, 118, .	3.3	21
2313	Numerical Simulation: Fluctuation in Background Synaptic Activity Regulates Synaptic Plasticity. <i>Frontiers in Systems Neuroscience</i> , 2021, 15, 771661.	1.2	0
2314	HillTau: A fast, compact abstraction for model reduction in biochemical signaling networks. <i>PLoS Computational Biology</i> , 2021, 17, e1009621.	1.5	2
2315	Bi-Anodal Transcranial Direct Current Stimulation Combined With Treadmill Walking Decreases Motor Cortical Activity in Young and Older Adults. <i>Frontiers in Aging Neuroscience</i> , 2021, 13, 739998.	1.7	5
2316	Neurons learn by predicting future activity. <i>Nature Machine Intelligence</i> , 2022, 4, 62-72.	8.3	33
2317	Transcranial magnetic stimulation as a tool to induce and explore plasticity in humans. <i>Handbook of Clinical Neurology</i> / Edited By P J Vinken and G W Bruyn, 2022, 184, 73-89.	1.0	14
2318	Increasing stimulus similarity drives nonmonotonic representational change in hippocampus. <i>ELife</i> , 2022, 11, .	2.8	22
2320	Predictive Neuronal Adaptation as a Basis for Consciousness. <i>Frontiers in Systems Neuroscience</i> , 2021, 15, 767461.	1.2	6
2321	Modulating intrinsic functional connectivity with visual cortex using low-frequency repetitive transcranial magnetic stimulation. <i>Brain and Behavior</i> , 2022, 12, e2491.	1.0	2
2323	A binocular synaptic network supports interocular response alignment in visual cortical neurons. <i>Neuron</i> , 2022, 110, 1573-1584.e4.	3.8	3
2324	A Simplified Plasticity Model Based on Synaptic Tagging and Capture Theory: Simplified STC. <i>Frontiers in Computational Neuroscience</i> , 2021, 15, 798418.	1.2	2
2325	Behavioral Timescale Cooperativity and Competitive Synaptic Interactions Regulate the Induction of Complex Spike Burst-Dependent Long-Term Potentiation. <i>Journal of Neuroscience</i> , 2022, 42, 2647-2661.	1.7	4
2326	Microglia-triggered hypoexcitability plasticity of pyramidal neurons in the rat medial prefrontal cortex. <i>Current Research in Neurobiology</i> , 2022, 3, 100028.	1.1	6
2327	Bidirectional synaptic plasticity rapidly modifies hippocampal representations. <i>ELife</i> , 2021, 10, .	2.8	66

#	ARTICLE	IF	CITATIONS
2328	Selective Information Control and Layer-Wise Partial Collective Compression for Multi-Layered Neural Networks. <i>Lecture Notes in Networks and Systems</i> , 2022, , 121-131.	0.5	0
2329	Prototype-Based Interpretation of the Functionality of Neurons in Winner-Take-All Neural Networks. <i>IEEE Transactions on Neural Networks and Learning Systems</i> , 2022, PP, 1-13.	7.2	2
2330	Postsynaptic Potential Energy as Determinant of Synaptic Plasticity. <i>Frontiers in Computational Neuroscience</i> , 2022, 16, 804604.	1.2	1
2331	A Hebbian Approach to Non-Spatial Prelinguistic Reasoning. <i>Brain Sciences</i> , 2022, 12, 281.	1.1	1
2332	Review of tDCS Configurations for Stimulation of the Lower-Limb Area of Motor Cortex and Cerebellum. <i>Brain Sciences</i> , 2022, 12, 248.	1.1	6
2333	Neural Circuits Underlying Social Fear in Rodents: An Integrative Computational Model. <i>Frontiers in Systems Neuroscience</i> , 2022, 16, 841085.	1.2	0
2334	Spike-Timing-Dependent Plasticity Mediated by Dopamine and its Role in Parkinson's Disease Pathophysiology. <i>Frontiers in Network Physiology</i> , 2022, 2, .	0.8	18
2335	Phasic Dopamine Changes and Hebbian Mechanisms during Probabilistic Reversal Learning in Striatal Circuits: A Computational Study. <i>International Journal of Molecular Sciences</i> , 2022, 23, 3452.	1.8	6
2338	The Impact of Sparse Coding on Memory Lifetimes in Simple and Complex Models of Synaptic Plasticity. <i>Biological Cybernetics</i> , 2022, , 1.	0.6	0
2339	Metastable dynamics of neural circuits and networks. <i>Applied Physics Reviews</i> , 2022, 9, 011313.	5.5	25
2340	Emergence of probabilistic representation in the neural network of primary visual cortex. <i>IScience</i> , 2022, 25, 103975.	1.9	3
2341	Enhancement of LTD-like plasticity by associative pairing of quadripulse magnetic stimulation with peripheral nerve stimulation. <i>Clinical Neurophysiology</i> , 2022, 138, 9-17.	0.7	5
2342	Dynamic resistive switching devices for neuromorphic computing. <i>Semiconductor Science and Technology</i> , 2022, 37, 024003.	1.0	12
2343	Heterosynaptic Plasticity and the Experience-Dependent Refinement of Developing Neuronal Circuits. <i>Frontiers in Neural Circuits</i> , 2021, 15, 803401.	1.4	12
2345	Synaptic memory requires CaMKII. <i>ELife</i> , 2021, 10, .	2.8	33
2373	Simulation of visual cortex development under lid-suture conditions: enhancement of response specificity by a reverse-Hebb rule in the absence of spatially patterned input. <i>Biological Cybernetics</i> , 1994, 70, 303-309.	0.6	0
2374	A Neuromorphic Normalization Algorithm for Stabilizing Synaptic Weights with Application to Dictionary Learning in LCA. , 2022, , .		1
2375	Cost-forced and repeated selective information minimization and maximization for multi-layered neural networks1. <i>International Journal of Hybrid Intelligent Systems</i> , 2022, , 1-27.	0.9	0

#	ARTICLE	IF	CITATIONS
2376	Effectiveness of Biologically Inspired Neural Network Models in Learning and Patterns Memorization. Entropy, 2022, 24, 682.	1.1	2
2378	Dominant role of adult neurogenesis-induced structural heterogeneities in driving plasticity heterogeneity in dentate gyrus granule cells. Hippocampus, 2022, 32, 488-516.	0.9	8
2380	Memristive brain-like computing. Wuli Xuebao/Acta Physica Sinica, 2022, 71, 140501.	0.2	1
2381	Developing a structural-based local learning rule for classification tasks using ionic liquid space-based reservoir. Neural Computing and Applications, 2022, 34, 15075-15093.	3.2	1
2382	Dendrites Help Mitigate the Plasticity-Stability Dilemma. SSRN Electronic Journal, 0, , .	0.4	1
2383	Study on the Effect of Different Transcranial Pulse Current Stimulation Intervention Programs for Eliminating Physical Fatigue. Applied Sciences (Switzerland), 2022, 12, 5609.	1.3	1
2386	Hebbian activity-dependent plasticity in white matter. Cell Reports, 2022, 39, 110951.	2.9	10
2387	Evolutionary neural networks for deep learning: a review. International Journal of Machine Learning and Cybernetics, 2022, 13, 3001-3018.	2.3	8
2388	Pre- and postsynaptically expressed spike-timing-dependent plasticity contribute differentially to neuronal learning. PLoS Computational Biology, 2022, 18, e1009409.	1.5	3
2389	Satisfiability transition in asymmetric neural networks. Journal of Physics A: Mathematical and Theoretical, 0, , .	0.7	3
2390	Brain Structural and Functional Alterations in Multiple Sclerosis-Related Fatigue: A Systematic Review. Neurology International, 2022, 14, 506-535.	1.3	14
2391	Neuron-Glial Interactions. , 2022, , 2412-2440.		0
2392	Evolving Dual-Threshold Bienenstock-Cooper-Munro Learning Rules in Echo State Networks. IEEE Transactions on Neural Networks and Learning Systems, 2024, 35, 1572-1583.	7.2	2
2393	Receptive Field Modeling. , 2022, , 2990-2995.		0
2394	Computing with nonvolatile memories for artificial intelligence. , 2022, , 305-334.		4
2395	Spike-Timing Dependent Plasticity, Learning Rules. , 2022, , 3262-3270.		0
2396	Hebbian Learning. , 2022, , 1529-1533.		0
2397	Long Term Depression in the Granule Cell-Purkinje Cell Synapse. , 2022, , 1926-1940.		0

#	ARTICLE	IF	CITATIONS
2398	Long-Term Plasticity, Biophysical Models. , 2022, , 1941-1952.		0
2399	Short-term arm immobilization modulates excitability of inhibitory circuits within, and between, primary motor cortices. Physiological Reports, 2022, 10, .	0.7	1
2401	Weight dependence in BCM leads to adjustable synaptic competition. Journal of Computational Neuroscience, 2022, 50, 431-444.	0.6	2
2403	Contributions by metaplasticity to solving the Catastrophic Forgetting Problem. Trends in Neurosciences, 2022, 45, 656-666.	4.2	11
2404	Second-Order Memristor Based on All-Oxide Multiferroic Tunnel Junction for Biorealistic Emulation of Synapses. Advanced Electronic Materials, 2022, 8, .	2.6	6
2406	A Biologically Inspired Neural Network Model to Gain Insight Into the Mechanisms of Post-Traumatic Stress Disorder and Eye Movement Desensitization and Reprocessing Therapy. Frontiers in Psychology, 0, 13, .	1.1	0
2407	Combining hypothesis- and data-driven neuroscience modeling in FAIR workflows. ELife, 0, 11, .	2.8	15
2408	Evidence of Neuroplastic Changes after Transcranial Magnetic, Electric, and Deep Brain Stimulation. Brain Sciences, 2022, 12, 929.	1.1	19
2409	Mechanisms and manifestations in musculoskeletal pain: from experimental to clinical pain settings. Pain, 2022, 163, S29-S45.	2.0	5
2410	A hybrid model to study how late long-term potentiation is affected by faulty molecules in an intraneuronal signaling network regulating transcription factor CREB. Integrative Biology (United Kingdom), 2022, 14, 1201010. doi:10.1093/ib/ibab010	1.0	4
2411	Neural Information Processing and Computations of Two-Input Synapses. Neural Computation, 2022, 34, 2102-2131.	1.3	2
2412	Adding a Second iTBS Block in 15 or 60 Min Time Interval Does Not Increase iTBS Effects on Motor Cortex Excitability and the Responder Rates. Brain Sciences, 2022, 12, 1064.	1.1	2
2413	A requirement for astrocyte IP3R2 signaling for whisker experience-dependent depression and homeostatic upregulation in the mouse barrel cortex. Frontiers in Cellular Neuroscience, 0, 16, .	1.8	3
2414	Soft self-healing resistive-based sensors inspired by sensory transduction in biological systems. Applied Materials Today, 2022, 29, 101638.	2.3	6
2415	Adaptive control of synaptic plasticity integrates micro- and macroscopic network function. Neuropsychopharmacology, 2023, 48, 121-144.	2.8	8
2417	How to incorporate biological insights into network models and why it matters. Journal of Physiology, 2023, 601, 3037-3053.	1.3	3
2418	HfO ₂ -based resistive switching memory devices for neuromorphic computing. Neuromorphic Computing and Engineering, 2022, 2, 042001.	2.8	21
2419	Metaplasticity: a key to visual recovery from amblyopia in adulthood?. Current Opinion in Ophthalmology, 2022, 33, 512-518.	1.3	5

#	ARTICLE	IF	CITATIONS
2420	Formation and computational implications of assemblies in neural circuits. <i>Journal of Physiology</i> , 2023, 601, 3071-3090.	1.3	9
2421	Synaptic plasticity in self-powered artificial striate cortex for binocular orientation selectivity. <i>Nature Communications</i> , 2022, 13, .	5.8	25
2422	Modified echo state network for prediction of nonlinear chaotic time series. <i>Nonlinear Dynamics</i> , 2022, 110, 3581-3603.	2.7	7
2423	Logarithmically scaled, gamma distributed neuronal spiking. <i>Journal of Physiology</i> , 2023, 601, 3055-3069.	1.3	4
2424	Visual cortex encodes timing information in humans and mice. <i>Neuron</i> , 2022, 110, 4194-4211.e10.	3.8	5
2425	Assessing the mechanisms of brain plasticity by transcranial magnetic stimulation. <i>Neuropsychopharmacology</i> , 2023, 48, 191-208.	2.8	37
2426	The dependence of acetylcholine on dynamic changes in the membrane potential and an action potential during spike timing-dependent plasticity induction in the hippocampus. <i>European Journal of Neuroscience</i> , 2022, 56, 5972-5986.	1.2	1
2427	The Role of the Number of Examples in Convolutional Neural Networks with Hebbian Learning. <i>Lecture Notes in Computer Science</i> , 2022, , 225-238.	1.0	0
2428	Modeling Neuronal Systems. , 2022, , 3353-3380.		0
2429	Serially Disentangled Learning for Multi-Layered Neural Networks. <i>Lecture Notes in Computer Science</i> , 2022, , 669-681.	1.0	0
2430	Min-Max Cost and Information Control in Multi-layered Neural Networks. <i>Lecture Notes in Networks and Systems</i> , 2023, , 1-17.	0.5	0
2431	Metaplasticity and non-invasive brain stimulation: the search for new biomarkers and directions for therapeutic neuromodulation. <i>Annals of Clinical and Experimental Neurology</i> , 2022, 16, 74-82.	0.1	1
2432	Correcting the hebbian mistake: Toward a fully error-driven hippocampus. <i>PLoS Computational Biology</i> , 2022, 18, e1010589.	1.5	6
2433	Structural spine plasticity: Learning and forgetting of odor-specific subnetworks in the olfactory bulb. <i>PLoS Computational Biology</i> , 2022, 18, e1010338.	1.5	0
2434	Synaptic memory survives molecular turnover. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2022, 119, .	3.3	12
2435	A multifarious exploration of synaptic tagging and capture hypothesis in synaptic plasticity: Development of an integrated mathematical model and computational experiments. <i>Journal of Theoretical Biology</i> , 2023, 556, 111326.	0.8	3
2436	Neuromodulatory effects of transcranial electrical stimulation on emotion regulation in internalizing psychopathologies. <i>Clinical Neurophysiology</i> , 2023, 145, 62-70.	0.7	1
2437	Synaptic plasticity in electro-polymerized PEDOT based memristors for neuromorphic application. <i>Journal of Materials Science: Materials in Electronics</i> , 2022, 33, 27053-27061.	1.1	1

#	ARTICLE	IF	CITATIONS
2438	Memristive/CMOS Devices for Neuromorphic Applications. Springer Handbooks, 2023, , 1167-1199.	0.3	0
2439	The interaction between metaplastic neuromodulation and fatigue in multiple sclerosis. Journal of the Neurological Sciences, 2023, 444, 120521.	0.3	0
2440	No need to forget, just keep the balance: Hebbian neural networks for statistical learning. Cognition, 2023, 230, 105176.	1.1	4
2441	Dynamic portfolio rebalancing with lag-optimised trading indicators using SeroFAM and genetic algorithms. Expert Systems With Applications, 2023, 216, 119440.	4.4	2
2445	Ionic-electronic halide perovskite memdiodes enabling neuromorphic computing with a second-order complexity. Science Advances, 2022, 8, .	4.7	8
2446	Emergence of radial orientation selectivity: Effect of cell density changes and eccentricity in a layered network. Frontiers in Computational Neuroscience, 0, 16, .	1.2	0
2447	Stability and learning in excitatory synapses by nonlinear inhibitory plasticity. PLoS Computational Biology, 2022, 18, e1010682.	1.5	6
2448	The calcineurin regulator Sarah enables distinct forms of homeostatic plasticity at the Drosophila neuromuscular junction. Frontiers in Synaptic Neuroscience, 0, 14, .	1.3	1
2449	A Scalable Neuristor Based on a Half-Wave Memristor Emulator. Journal of Circuits, Systems and Computers, 2023, 32, .	1.0	1
2454	Metaplasticity framework for cross-modal synaptic plasticity in adults. Frontiers in Synaptic Neuroscience, 0, 14, .	1.3	3
2455	Motor learning and tDCS: A systematic review on the dependency of the stimulation effect on motor task characteristics or tDCS assembly specifications. Neuropsychologia, 2023, 179, 108463.	0.7	5
2456	Long-term memory, synaptic plasticity and dopamine in rodent medial prefrontal cortex: Role in executive functions. Frontiers in Behavioral Neuroscience, 0, 16, .	1.0	8
2457	Plastic gating network: Adapting to personal development and individual differences in knowledge tracing. Information Sciences, 2023, 624, 761-776.	4.0	3
2458	The times they are a-changinâ€™™: a proposal on how brain flexibility goes beyond the obvious to include the concepts of â€œupwardâ€•and â€œdownwardâ€•to neuroplasticity. Molecular Psychiatry, 2023, 28, 977-992.	4.1	8
2459	An integrative systems biology view of host-pathogen interactions: The regulation of immunity and homeostasis is concomitant, flexible, and smart. Frontiers in Immunology, 0, 13, .	2.2	1
2460	Low frequency repetitive transcranial magnetic stimulation promotes plasticity of the visual cortex in adult amblyopic rats. Frontiers in Neuroscience, 0, 17, .	1.4	1
2461	Neurocognitive effects of stress: a metaparadigm perspective. Molecular Psychiatry, 2023, 28, 2750-2763.	4.1	7
2462	Computational models of stimulus equivalence: An intersection for the study of symbolic behavior. Journal of the Experimental Analysis of Behavior, 2023, 119, 407-425.	0.8	1

#	ARTICLE	IF	CITATIONS
2463	Synaptic self-organization of spatio-temporal pattern selectivity. PLoS Computational Biology, 2023, 19, e1010876.	1.5	2
2464	In-memory computing with emerging memory devices: Status and outlook. , 2023, 1, .		14
2465	Synapse with versatility based on the Pt /LaMnO ₃ /Pt heterojunction. Journal Physics D: Applied Physics, 2023, 56, 145102.	1.3	0
2466	Neural Field Continuum Limits and the Structure-Function Partitioning of Cognitive-Emotional Brain Networks. Biology, 2023, 12, 352.	1.3	1
2467	TMS and neocortical neurons: an integrative review on the micro-macro connection in neuroplasticity. , 2023, 14, 1-9.		1
2469	Deep learning - cancer genetics and application of deep learning to cancer oncology. Science and Technology, 2022, 60, 885-928.	0.1	0
2470	Brain Activity associated with taste stimulation: A mechanism for neuroplastic change?. Brain and Behavior, 2023, 13, .	1.0	3
2472	Effects of Paired Associative Stimulation on Cortical Plasticity in Agonist-Antagonist Muscle Representations. Brain Sciences, 2023, 13, 475.	1.1	0
2473	Noninvasive Brain Stimulation Techniques for Treatment-Resistant Depression. Psychiatric Clinics of North America, 2023, , .	0.7	0
2474	Modern Artificial Neural Networks: Is Evolution Cleverer?. Neural Computation, 2023, 35, 763-806.	1.3	7
2475	Strong Allee Effect Synaptic Plasticity Rule in an Unsupervised Learning Environment. Neural Computation, 2023, 35, 896-929.	1.3	0
2476	Endotaxis: A neuromorphic algorithm for mapping, goal-learning, navigation, and patrolling. ELife, 0, 12, .	2.8	0
2479	Spiking LCA in a Neural Circuit with Dictionary Learning and Synaptic Normalization. , 2023, , .		0
2480	Dendrites help mitigate the plasticity-stability dilemma. Scientific Reports, 2023, 13, .	1.6	2
2482	Cerebellar Transcranial Magnetic Stimulation in Cerebellar Ataxias. Contemporary Clinical Neuroscience, 2023, , 543-560.	0.3	0
2486	Frameworks for SNNs: A Review of Data Science-Oriented Software and Expansion of SpykeTorch. Communications in Computer and Information Science, 2023, , 227-238.	0.4	2
2517	Delay-Sensitive Local Plasticity in Echo State Networks. , 2023, , .		0
2519	Emulation of Learning Behavior in the Hippocampus: From Memristive Learning to Behavioral Tests. Springer Series on Bio- and Neurosystems, 2024, , 407-433.	0.2	0

#	ARTICLE	IF	CITATIONS
2524	Oxide Neuromorphic Transistors for Brain-like Computing. , 2023, , 530-554.		0
2525	Memristive Devices for Neuromorphic and Deep Learning Applications. , 2023, , 680-704.		0
2538	2D materials ratchet up biorealism in computing. Nature, 2023, 624, 534-536.	13.7	0
2540	Targeting metaplasticity mechanisms to promote sustained antidepressant actions. Molecular Psychiatry, 0, , .	4.1	1
2546	On the ability of standard and brain-constrained deep neural networks to support cognitive superposition: a position paper. Cognitive Neurodynamics, 0, , .	2.3	0