Frank Sengpiel

List of Publications by Year
in descending order

76 papers	3,569 citations	159358 30 h-index	143772 57 g-index
78 all docs	78 docs citations	78 times ranked	3273 citing authors

#	Article	IF	Citations
1	Recruitment of frontal sensory circuits during visual discrimination. Cell Reports, 2022, 39, 110932.	2.9	0
2	Cortical and Striatal Electroencephalograms and Apomorphine Effects in the FUS Mouse Model of Amyotrophic Lateral Sclerosis. Journal of Alzheimer's Disease, 2021, 81, 1429-1443.	1.2	1
3	Contrast adaptation and interocular transfer in cortical cells: A re-analysis & a two-stage gain-control model of binocular combination. Vision Research, 2021, 185, 29-49.	0.7	7
4	Spatial memory deficits initiated by agroclavine injection or olfactory bulbectomy in rats are characterized by different levels of long-term potentiation expression in the hippocampus. International Journal of Neuroscience, 2020, 130, 1225-1229.	0.8	1
5	Loss of Midbrain Dopamine Neurons and Altered Apomorphine EEG Effects in the 5xFAD Mouse Model of Alzheimerâ€™s Disease. Journal of Alzheimer's Disease, 2019, 70, 241-256.	1.2	26
6	Plasticity in Adult Mouse Visual Cortex Following Optic Nerve Injury. Cerebral Cortex, 2019, 29, 1767-1777.	1.6	13
7	Mammillothalamic Disconnection Alters Hippocampocortical Oscillatory Activity and Microstructure: Implications for Diencephalic Amnesia. Journal of Neuroscience, 2019, 39, 6696-6713.	1.7	36
8	Spatial summation across the visual field in strabismic and anisometropic amblyopia. Scientific Reports, 2018, 8, 3858.	1.6	5
9	Animal models of amblyopia. Visual Neuroscience, 2018, 35, E017.	0.5	14
10	Optophysiological Characterisation of Inner Retina Responses with High-Resolution Optical Coherence Tomography. Scientific Reports, 2018, 8, 1813.	1.6	9
11	Overview: neuroplasticity and synaptic function in neuropsychiatric disorders. Journal of Physiology, 2018, 596, 2745-2746.	1.3	2
12	Spatial Memory Engram in the Mouse Retrosplenial Cortex. Current Biology, 2018, 28, 1975-1980.e6.	1.8	87
13	Enhancement of visual cortex plasticity by dark exposure. Philosophical Transactions of the Royal Society B: Biological Sciences, 2017, 372, 20160159.	1.8	27
14	Intrahippocampal Pathways Involved in Learning/Memory Mechanisms are Affected by Intracerebral Infusions of Amyloid-Î²25-35 Peptide and Hydrated Fullerene C60 in Rats. Journal of Alzheimer's Disease, 2017, 58, 711-724.	1.2	15
15	Immunization Against Specific Fragments of Neurotrophin p75 Receptor Protects Forebrain Cholinergic Neurons in the Olfactory Bulbectomized Mice. Journal of Alzheimer's Disease, 2016, 53, 289-301.	1.2	11
16	Comparable reduction in Zif268 levels and cytochrome oxidase activity in the retrosplenial cortex following mammillothalamic tract lesions. Neuroscience, 2016, 330, 39-49.	1.1	15
17	Neuroprotective Effects of Hydrated Fullerene C60: Cortical and Hippocampal EEG Interplay in an Amyloid-Infused Rat Model of Alzheimer's Disease. Journal of Alzheimer's Disease, 2015, 45, 217-233.	1.2	38
18	A novel system for the classification of diseased retinal ganglion cells. Visual Neuroscience, 2014, 31, 373-380.	0.5	5

#	Article	IF	Citations
19	Plasticity of the Visual Cortex and Treatment of Amblyopia. Current Biology, 2014, 24, R936-R940.	1.8	51
20	Stripe-rearing changes multiple aspects of the structure of primary visual cortex. NeuroImage, 2014, 95, 305-319.	2.1	2
21	Amblyopia: Out of the Dark, Into the Light. Current Biology, 2013, 23, R195-R196.	1.8	3
22	Effects of Digesting Chondroitin Sulfate Proteoglycans on Plasticity in Cat Primary Visual Cortex. Journal of Neuroscience, 2013, 33, 234-243.	1.7	47
23	The Development and Activity-Dependent Expression of Aggrecan in the Cat Visual Cortex. Cerebral Cortex, 2013, 23, 349-360.	1.6	31
24	The Role of GluA1 in Ocular Dominance Plasticity in the Mouse Visual Cortex. Journal of Neuroscience, 2013, 33, 15220-15225.	1.7	20
25	Homeostatic plasticity mechanisms are required for juvenile, but not adult, ocular dominance plasticity. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 1311-1316.	3.3	120
26	Effects of different forms of monocular deprivation on primary visual cortex maps. Visual Neuroscience, 2012, 29, 247-253.	0.5	3
27	Experienceâ€dependent regulation of functional maps and synaptic protein expression in the cat visual cortex. European Journal of Neuroscience, 2012, 35, 1281-1294.	1.2	18
28	Effects of nootropics on the EEG in conscious rats and their modification by glutamatergic inhibitors. Brain Research Bulletin, 2011, 85, 123-132.	1.4	10
29	Cortical and hippocampal EEG effects of neurotransmitter agonists in spontaneously hypertensive vs. kainate-treated rats. Brain Research, 2011, 1383, 154-168.	1.1	14
30	Protection against deprivation amblyopia depends on relative not absolute daily binocular exposure. Journal of Vision, 2011, 11, 13-13.	0.1	18
31	Experimental Models of Amblyopia: Insights for Prevention and Treatment. Strabismus, 2011, 19, 87-90.	0.4	13
32	Daily mixed visual experience that prevents amblyopia in cats does not always allow the development ofgood binocular depth perception. Journal of Vision, 2009, 9, 22-22.	0.1	19
33	Neural mechanisms of recovery following early visual deprivation. Philosophical Transactions of the Royal Society B: Biological Sciences, 2009, 364, 383-398.	1.8	52
34	Interocular Transfer of Adaptation in the Primary Visual Cortex. Cerebral Cortex, 2009, 19, 1835-1843.	1.6	16
35	Natural scene statistics and the structure of orientation maps in the visual cortex. NeuroImage, 2009, 47, 157-172.	2.1	10
36	Apomorphine-induced differences in cortical and striatal EEG and their glutamatergic mediation in 6-hydroxydopamine-treated rats. Experimental Brain Research, 2008, 191, 277-287.	0.7	13

#	Article	IF	Citations
37	Direct, Live Imaging of Cortical Spreading Depression and Anoxic Depolarisation Using a Fluorescent, Voltage-Sensitive Dye. Journal of Cerebral Blood Flow and Metabolism, 2008, 28, 251-262.	2.4	60
38	Binocular Vision: Only Half a Brain Needed. Current Biology, 2008, 18, R1054-R1056.	1.8	1
39	Brief daily binocular vision prevents monocular deprivation effects in visual cortex. European Journal of Neuroscience, 2007, 25, 270-280.	1.2	37
40	Monocular deprivation reduces reliability of visual cortical responses to binocular disparity stimuli. European Journal of Neuroscience, 2007, 26, 3553-3563.	1.2	13
41	The critical period. Current Biology, 2007, 17, R742-R743.	1.8	31
42	Visual Cortical Recovery From Reverse Occlusion Depends on Concordant Binocular Experience. Journal of Neurophysiology, 2006, 95, 1718-1726.	0.9	17
43	Short periods of concordant binocular vision prevent the development of deprivation amblyopia. European Journal of Neuroscience, 2006, 23, 2458-2466.	1.2	26
44	Motion perception is learned, not innate. Nature Neuroscience, 2006, 9, 591-592.	7.1	3
45	Visual Cortex: Overcoming a No-Go for Plasticity. Current Biology, 2005, 15, R1000-R1002.	1.8	5
46	Strabismic Suppression Is Mediated by Inhibitory Interactions in the Primary Visual Cortex. Cerebral Cortex, 2005, 16, 1750-1758.	1.6	105
47	Intracortical Origins of Interocular Suppression in the Visual Cortex. Journal of Neuroscience, 2005, 25, 6394-6400.	1.7	71
48	Limited Protection of the Primary Visual Cortex from the Effects of Monocular Deprivation by Strabismus. Cerebral Cortex, 2005, 15, 1822-1833.	1.6	8
49	Contrast invariance of functional maps in cat primary visual cortex. Journal of Vision, 2004, 4, 1.	0.1	27
50	Functional Reorganization of Visual Cortex Maps after Ischemic Lesions Is Accompanied by Changes in Expression of Cytoskeletal Proteins and NMDA and GABAA Receptor Subunits. Journal of Neuroscience, 2004, 24, 1812-1821.	1.7	47
51	Vision: In the Brain of the Beholder. Current Biology, 2004, 14, R997-R999.	1.8	1
52	Optical imaging of intrinsic signals: recent developments in the methodology and its applications. Journal of Neuroscience Methods, 2004, 136, 1-21.	1.3	114
53	Brief Daily Periods of Binocular Vision Prevent Deprivation-Induced Acuity Loss. Current Biology, 2003, 13, 1704-1708.	1.8	44
54	Reorganization of Visual Cortical Maps after Focal Ischemic Lesions. Journal of Cerebral Blood Flow and Metabolism, 2003, 23, 811-820.	2.4	30

#	Article	IF	Citations
55	The Role of Activity in Development of the Visual System. Current Biology, 2002, 12, R818-R826.	1.8	125
56	Orientation specificity of contrast adaptation in visual cortical pinwheel centres and iso-orientation domains. European Journal of Neuroscience, 2002, 15, 876-886.	1.2	21
57	Correlated binocular activity guides recovery from monocular deprivation. Nature, 2002, 416, 430-433.	13.7	77
58	Title is missing!. Brain and Mind, 2001, 2, 39-54.	0.6	6
59	Cortical plasticity: Learning while you sleep?. Current Biology, 2001, 11, R647-R650.	1.8	5
60	Visual perception: An alternative view of perceptual rivalry. Current Biology, 2000, 10, R482-R485.	1.8	7
61	Principal Component Analysis and Blind Separation of Sources for Optical Imaging of Intrinsic Signals. NeuroImage, 2000, 11, 482-490.	2.1	69
62	Influence of experience on orientation maps in cat visual cortex. Nature Neuroscience, 1999, 2, 727-732.	7.1	199
63	Visual perception: Spotlight on the primary visual cortex. Current Biology, 1999, 9, R318-R321.	1.8	29
64	The `Ideal Homunculus': decoding neural population signals. Trends in Neurosciences, 1998, 21, 259-265.	4.2	221
65	Intrinsic and environmental factors in the development of functional maps in cat visual cortex. Neuropharmacology, 1998, 37, 607-621.	2.0	40
66	Different mechanisms underlie three inhibitory phenomena in cat area 17. Vision Research, 1998, 38, 2067-2080.	0.7	138
67	Responses of neurons in primary and inferior temporal visual cortices to natural scenes. Proceedings of the Royal Society B: Biological Sciences, 1997, 264, 1775-1783.	1.2	366
68	Binocular rivalry: Ambiguities resolved. Current Biology, 1997, 7, R447-R450.	1.8	14
69	Characteristics of surround inhibition in cat area 17. Experimental Brain Research, 1997, 116, 216-228.	0.7	195
70	Functional architecture of area 17 in normal and monocularly deprived marmosets (Callithrix) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 142	0.5	48
71	The neural basis of suppression and amblyopia in strabismus. Eye, 1996, 10, 250-258.	1.1	115
72	Interocular suppression in cat striate cortex is not orientation selective. NeuroReport, 1995, 6, 2235-2239.	0.6	31

#	Article	IF	Citations
73	Interocular suppression in the primary visual cortex: a possible neural basis of binocular rivalry. Vision Research, 1995, 35, 179-195.	0.7	142
74	Interocular control of neuronal responsiveness in cat visual cortex. Nature, 1994, 368, 847-850.	13.7	101
75	Visual response properties and afferents of nucleus of the optic tract in the ferret. Experimental Brain Research, 1990, 83, 178-89.	0.7	41
76	Effects of early monocular deprivation on response properties and afferents of nucleus of the optic tract in the ferret. Experimental Brain Research, 1990, 83, 190-9.	0.7	3