Takeo Watanabe

List of Publications by Year in descending order

79 papers	6,204 citations	81900 39 h-index	74163 75 g-index
90 all docs	90 docs citations	90 times ranked	4297 citing authors

#	Article	IF	Citations
1	Perceptual learning without perception. Nature, 2001, 413, 844-848.	27.8	520
2	Perceptual Learning Incepted by Decoded fMRI Neurofeedback Without Stimulus Presentation. Science, 2011, 334, 1413-1415.	12.6	422
3	Advances in visual perceptual learning and plasticity. Nature Reviews Neuroscience, 2010, 11, 53-60.	10.2	356
4	A unified model for perceptual learning. Trends in Cognitive Sciences, 2005, 9, 329-334.	7.8	303
5	Rewards Evoke Learning of Unconsciously Processed Visual Stimuli in Adult Humans. Neuron, 2009, 61, 700-707.	8.1	293
6	Different Dynamics of Performance and Brain Activation in the Time Course of Perceptual Learning. Neuron, 2008, 57, 827-833.	8.1	280
7	Is subliminal learning really passive?. Nature, 2003, 422, 36-36.	27.8	261
8	Perceptual Learning: Toward a Comprehensive Theory. Annual Review of Psychology, 2015, 66, 197-221.	17.7	257
9	Perceptual learning rules based on reinforcers and attention. Trends in Cognitive Sciences, 2010, 14, 64-71.	7.8	241
10	Advances in fMRI Real-Time Neurofeedback. Trends in Cognitive Sciences, 2017, 21, 997-1010.	7.8	190
11	Greater plasticity in lower-level than higher-level visual motion processing in a passive perceptual learning task. Nature Neuroscience, 2002, 5, 1003-1009.	14.8	188
12	Night Watch in One Brain Hemisphere during Sleep Associated with the First-Night Effect in Humans. Current Biology, 2016, 26, 1190-1194.	3.9	186
13	Greater Disruption Due to Failure of Inhibitory Control on an Ambiguous Distractor. Science, 2006, 314, 1786-1788.	12.6	184
14	Overlearning hyperstabilizes a skill by rapidly making neurochemical processing inhibitory-dominant. Nature Neuroscience, 2017, 20, 470-475.	14.8	146
15	Temporally Extended Dopamine Responses to Perceptually Demanding Reward-Predictive Stimuli. Journal of Neuroscience, 2010, 30, 10692-10702.	3.6	145
16	Attention-Regulated Activity in Human Primary Visual Cortex. Journal of Neurophysiology, 1998, 79, 2218-2221.	1.8	133
17	The phenomenon of task-irrelevant perceptual learning. Vision Research, 2009, 49, 2604-2610.	1.4	132
18	Location-Specific Cortical Activation Changes during Sleep after Training for Perceptual Learning. Current Biology, 2009, 19, 1278-1282.	3.9	120

#	Article	IF	Citations
19	Task-specific disruption of perceptual learning. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 14895-14900.	7.1	104
20	Task-irrelevant learning occurs only when the irrelevant feature is weak. Current Biology, 2008, 18, R516-R517.	3.9	100
21	Learning to Associate Orientation with Color in Early Visual Areas by Associative Decoded fMRI Neurofeedback. Current Biology, 2016, 26, 1861-1866.	3.9	97
22	Enhanced Spontaneous Oscillations in the Supplementary Motor Area Are Associated with Sleep-Dependent Offline Learning of Finger-Tapping Motor-Sequence Task. Journal of Neuroscience, 2013, 33, 13894-13902.	3.6	80
23	Toward a comprehensive understanding of the neural mechanisms of decoded neurofeedback. NeuroImage, 2019, 188, 539-556.	4.2	69
24	Perceptual learning, aging, and improved visual performance in early stages of visual processing. Journal of Vision, 2010, 10, 4-4.	0.3	62
25	Complementary contributions of non-REM and REM sleep to visual learning. Nature Neuroscience, 2020, 23, 1150-1156.	14.8	60
26	Differential Activation Patterns in the Same Brain Region Led to Opposite Emotional States. PLoS Biology, 2016, 14, e1002546.	5.6	57
27	Separate Processing of Different Global-Motion Structures in Visual Cortex Is Revealed by fMRI. Current Biology, 2005, 15, 2027-2032.	3.9	56
28	Perceptual learning. Current Biology, 2010, 20, R46-R48.	3.9	56
29	Twoâ€stage model in perceptual learning: toward a unified theory. Annals of the New York Academy of Sciences, 2014, 1316, 18-28.	3.8	56
30	Resetting capacity limitations revealed by long-lasting elimination of attentional blink through training. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 12242-12247.	7.1	55
31	Location specific sleep spindle activity in the early visual areas and perceptual learning. Vision Research, 2014, 99, 162-171.	1.4	55
32	Two cases requiring external reinforcement in perceptual learning. Journal of Vision, 2006, 6, 9.	0.3	54
33	Interference and feature specificity in visual perceptual learning. Vision Research, 2009, 49, 2611-2623.	1.4	52
34	Consolidation and reconsolidation share behavioural and neurochemical mechanisms. Nature Human Behaviour, 2018, 2, 507-513.	12.0	50
35	White matter in the older brain is more plastic than in the younger brain. Nature Communications, 2014, 5, 5504.	12.8	48
36	Requirement for high-level processing in subliminal learning. Current Biology, 2005, 15, R753-R755.	3.9	47

#	Article	IF	Citations
37	Real-Time Strategy Video Game Experience and Visual Perceptual Learning. Journal of Neuroscience, 2015, 35, 10485-10492.	3.6	47
38	Seeing what is not there shows the costs of perceptual learning. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 9080-9085.	7.1	44
39	Effect of spatial distance to the task stimulus on task-irrelevant perceptual learning of static Gabors. Journal of Vision, 2007, 7, 2.	0.3	40
40	When attention interrupts learning: Inhibitory effects of attention on TIPL. Vision Research, 2009, 49, 2586-2590.	1.4	37
41	Decoding Reveals Plasticity in V3A as a Result of Motion Perceptual Learning. PLoS ONE, 2012, 7, e44003.	2.5	37
42	Roles of attention in perceptual learning from perspectives of psychophysics and animal learning. Learning and Behavior, 2009, 37, 126-132.	1.0	33
43	Neuroimaging Evidence for 2 Types of Plasticity in Association with Visual Perceptual Learning. Cerebral Cortex, 2016, 26, 3681-3689.	2.9	29
44	Perceptual Learning and Aging: Improved Performance for Low-Contrast Motion Discrimination. Frontiers in Psychology, 2013, 4, 66.	2.1	26
45	Age-Related Declines of Stability in Visual Perceptual Learning. Current Biology, 2014, 24, 2926-2929.	3.9	23
46	Category-Induced Transfer of Visual Perceptual Learning. Current Biology, 2019, 29, 1374-1378.e3.	3.9	23
47	Task Attention Facilitates Learning of Task-Irrelevant Stimuli. PLoS ONE, 2012, 7, e35946.	2.5	22
48	Reward does not facilitate visual perceptual learning until sleep occurs. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 959-968.	7.1	21
49	Task-Dependent Changes of the Psychophysical Motion-Tuning Functions in the Course of Perceptual Learning. Perception, 2004, 33, 1139-1147.	1.2	20
50	The first-night effect suppresses the strength of slow-wave activity originating in the visual areas during sleep. Vision Research, 2014, 99, 154-161.	1.4	20
51	Optimization of perceptual learning: Effects of task difficulty and external noise in older adults. Vision Research, 2014, 99, 37-45.	1.4	20
52	Supervised Learning Occurs in Visual Perceptual Learning of Complex Natural Images. Current Biology, 2020, 30, 2995-3000.e3.	3.9	20
53	Frequent Video Game Players Resist Perceptual Interference. PLoS ONE, 2015, 10, e0120011.	2.5	19
54	Feature-Specific Awake Reactivation in Human V1 after Visual Training. Journal of Neuroscience, 2018, 38, 9648-9657.	3.6	17

#	Article	IF	Citations
55	Fundamental Differences in Visual Perceptual Learning between Children and Adults. Current Biology, 2021, 31, 427-432.e5.	3.9	15
56	Recent progress in perceptual learning research. Wiley Interdisciplinary Reviews: Cognitive Science, 2012, 3, 293-299.	2.8	14
57	Visual perceptual learning by operant conditioning training follows rules of contingency. Visual Cognition, 2015, 23, 147-160.	1.6	14
58	Post-training TMS abolishes performance improvement and releases future learning from interference. Communications Biology, 2019, 2, 320.	4.4	14
59	Perceptual learning: Functions, mechanisms, and applications. Vision Research, 2009, 49, 2531-2534.	1.4	13
60	Monocular deprivation boosts long-term visual plasticity. Current Biology, 2012, 22, R291-R292.	3.9	13
61	Trained-featureâ€“specific offline learning by sleep in an orientation detection task. Journal of Vision, 2019, 19, 12.	0.3	12
62	Role of endogenous and exogenous attention in task-relevant visual perceptual learning. PLoS ONE, 2020, 15, e0237912.	2.5	12
63	Early Visual Cortex Stimulation Modifies Well-Consolidated Perceptual Gains. Cerebral Cortex, 2021, 31, 138-146.	2.9	11
64	Reward eliminates retrieval-induced forgetting. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 17326-17329.	7.1	10
65	The DecNef collection, fMRI data from closed-loop decoded neurofeedback experiments. Scientific Data, 2021, 8, 65.	5.3	9
66	Dual mechanisms governing reward-driven perceptual learning. F1000Research, 2015, 4, 764.	1.6	6
67	Selectiveness of the exposure-based perceptual learning: What to learn and what not to learn. Learning & Perception, 2009, 1, 89-98.	2.4	6
68	Perceptual learning of task-irrelevant features depends on the sensory context. Scientific Reports, 2019, 9, 1666.	3.3	5
69	Visual perceptual learning of a primitive feature in human V1/V2 as a result of unconscious processing, revealed by decoded functional MRI neurofeedback (DecNef). Journal of Vision, 2021, 21, 24.	0.3	5
70	Can attenuation of attentional blink also evoke removal of repetition blindness?. Vision Research, 2014, 99, 141-147.	1.4	4
71	Coregistration of magnetic resonance spectroscopy and polysomnography for sleep analysis in human subjects. STAR Protocols, 2021, 2, 100974.	1.2	4
72	Preference suppression caused by misattribution of task-irrelevant subliminal motion. Proceedings of the Royal Society B: Biological Sciences, 2012, 279, 3443-3448.	2.6	2

#	Article	IF	Citations
73	Is perceptual learning associated with changes in a sensory region?. F1000 Biology Reports, 2012, 4, 24.	4.0	2
74	Neuroscience: When perceptual learning occurs. Nature Human Behaviour, 2017, 1, .	12.0	2
75	Effects of stimulus and task structure on temporal perceptual learning. Scientific Reports, 2021, 11, 668.	3.3	2
76	A behavioral training protocol using visual perceptual learning to improve a visual skill. STAR Protocols, 2021, 2, 100240.	1.2	1
77	V3A takes over a job of MT+ after training on a visual task. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 6092-6093.	7.1	0
78	fMRI neurofeedback for perception and attention. , 2021, , 85-105.		0
79	The facilitation of learning and memory by sleep. , 2021, , .		0