Opher Donchin

List of Publications by Year
in descending order

75 papers	4,191 citations	136950 32 h-index	128289 60 g-index
89 all docs	89 docs citations	89 times ranked	3608 citing authors

#	Article	IF	Citations
1	Mini-review: The Role of the Cerebellum in Visuomotor Adaptation. Cerebellum, 2022, 21, 306-313.	2.5	35
2	Recognition of natural objects in the archerfish. Journal of Experimental Biology, 2022, 225, .	1.7	4
3	Prolonged feedback duration does not affect implicit recalibration in a visuomotor rotation task. ENeuro, 2022, , ENEURO.0447-21.2022.	1.9	1
4	Methods matter: Your measures of explicit and implicit processes in visuomotor adaptation affect your results. European Journal of Neuroscience, 2021, 53, 504-518.	2.6	48
5	Measures of explicit and implicit in motor learning: what we know and what we donâ€™t. Neuroscience and Biobehavioral Reviews, 2021, 128, 558-568.	6.1	16
6	Individual differences in error-related frontal midline theta activity during visuomotor adaptation. NeuroImage, 2021, 245, 118699.	4.2	4
7	Representation of edges, head direction, and swimming kinematics in the brain of freely-navigating fish. Scientific Reports, 2020, 10, 14762.	3.3	50
8	A Revised Computational Neuroanatomy for Motor Control. Journal of Cognitive Neuroscience, 2020, 32, 1823-1836.	2.3	26
9	A Neuroanatomically Grounded Optimal Control Model of the Compensatory Eye Movement System in Mice. Frontiers in Systems Neuroscience, 2020, 14, 13.	2.5	5
10	Intermanual transfer of visuomotor adaptation is related to awareness. PLoS ONE, 2019, 14, e0220748.	2.5	30
11	Long-range neural inhibition and stimulus competition in the archerfish optic tectum. Journal of Comparative Physiology A: Neuroethology, Sensory, Neural, and Behavioral Physiology, 2019, 205, 537-552.	1.6	2
12	How to help cerebellar patients make the most of their remaining learning capacities. Brain, 2019, 142, 492-495.	7.6	7
13	TMS motor mapping: Comparing the absolute reliability of digital reconstruction methods to the golden standard. Brain Stimulation, 2019, 12, 309-313.	1.6	29
14	Eye Movements during Visuomotor Adaptation Represent Only Part of the Explicit Learning. ENeuro, 2019, 6, ENEURO.0308-19.2019.	1.9	13
15	Cerebellar transcranial direct current stimulation interacts with BDNF Val66Met in motor learning. Brain Stimulation, 2018, 11, 759-771.	1.6	14
16	Individual Differences in Motor Noise and Adaptation Rate Are Optimally Related. ENeuro, 2018, 5, ENEURO.0170-18.2018.	1.9	28
17	Long Pauses in Cerebellar Interneurons in Anesthetized Animals. Cerebellum, 2017, 16, 293-305.	2.5	0
18	Wireless electrophysiology of the brain of freely swimming goldfish. Journal of Neuroscience Methods, 2017, 278, 76-86.	2.5	26

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19	Cerebellar patients do not benefit from cerebellar or M1 transcranial direct current stimulation during force-field reaching adaptation. Journal of Neurophysiology, 2017, 118, 732-748.	1.8	43
20	Individual Movement Variability Magnitudes Are Explained by Cortical Neural Variability. Journal of Neuroscience, 2017, 37, 9076-9085.	3.6	51
21	Representing delayed force feedback as a combination of current and delayed states. Journal of Neurophysiology, 2017, 118, 2110-2131.	1.8	14
22	Effector-Invariant Movement Encoding in the Human Motor System. Journal of Neuroscience, 2017, 37, 9054-9063.	3.6	33
23	Cerebellar tDCS does not improve performance in probabilistic classification learning. Experimental Brain Research, 2017, 235, 421-428.	1.5	12
24	Cerebellar tDCS Does Not Enhance Performance in an Implicit Categorization Learning Task. Frontiers in Psychology, 2017, 08, 476.	2.1	16
25	Impairment of Long-Term Plasticity of Cerebellar Purkinje Cells Eliminates the Effect of Anodal Direct Current Stimulation on Vestibulo-Ocular Reflex Habituation. Frontiers in Neuroscience, 2017, 11, 444.	2.8	12
26	Impact of Transcranial Direct Current Stimulation (tDCS) on Neuronal Functions. Frontiers in Neuroscience, 2016, 10, 550.	2.8	73
27	Superposition Violations in the Compensatory Eye Movement System. , 2016, 57, 3554.		4
28	Stimulation of PPC Affects the Mapping between Motion and Force Signals for Stiffness Perception But Not Motion Control. Journal of Neuroscience, 2016, 36, 10545-10559.	3.6	27
29	Lesion-Symptom Mapping. , 2016, , 489-497.		1
30	Awareness of Sensorimotor Adaptation to Visual Rotations of Different Size. PLoS ONE, 2015, 10, e0123321.	2.5	89
31	Cerebellar Transcranial Direct Current Stimulation Effects on Saccade Adaptation. Neural Plasticity, 2015, 2015, 1-9.	2.2	27
32	Pharmacological study of direction selectivity in the archer fish retina. Journal of Integrative Neuroscience, 2015, 14, 473-490.	1.7	2
33	Behavioural and neural basis of anomalous motor learning in children with autism. Brain, 2015, 138, 784-797.	7.6	117
34	Spontaneous Activity Does Not Predict Morphological Type in Cerebellar Interneurons. Journal of Neuroscience, 2015, 35, 1432-1442.	3.6	12
35	Pop-out in visual search of moving targets in the archer fish. Nature Communications, 2015, 6, 6476.	12.8	60
36	Ageing shows a pattern of cerebellar degeneration analogous, but not equal, to that in patients suffering from cerebellar degenerative disease. NeuroImage, 2015, 116, 196-206.	4.2	32

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37	Asymmetric generalization in adaptation to target displacement errors in humans and in a neural network model. Journal of Neurophysiology, 2015, 113, 2360-2375.	1.8	2
38	Dissociating Visual and Motor Directional Selectivity Using Visuomotor Adaptation. Journal of Neuroscience, 2015, 35, 6813-6821.	3.6	56
39	Structural correlates of motor adaptation deficits in patients with acute focal lesions of the cerebellum. Experimental Brain Research, 2014, 232, 2847-2857.	1.5	24
40	Cerebellar involvement in categorisation: a bipolar tDCS study.. Brain Stimulation, 2014, 7, e4.	1.6	2
41	Polarity-dependent effects of trans-cranial direct current stimulation (tDCS) in cerebellar learning depends on the state of neuronal network. Brain Stimulation, 2014, 7, e3.	1.6	2
42	Visual receptive field properties of cells in the optic tectum of the archer fish. Journal of Neurophysiology, 2013, 110, 748-759.	1.8	20
43	Into the Square and out of the Box: The effects of Quadrato Motor Training on Creativity and Alpha Coherence. PLoS ONE, 2013, 8, e55023.	2.5	43
44	Lesion-Symptom Mapping of the Human Cerebellum. , 2013, , 1627-1656.		3
45	Deficient Use of Visual Information in Estimating Hand Position in Cerebellar Patients. Journal of Neuroscience, 2012, 32, 16274-16284.	3.6	19
46	Haptic Human-Robot Interaction. IEEE Transactions on Haptics, 2012, 5, 193-195.	2.7	3
47	Cerebellar regions involved in adaptation to force field and visuomotor perturbation. Journal of Neurophysiology, 2012, 107, 134-147.	1.8	164
48	Correlations in state space can cause sub-optimal adaptation of optimal feedback control models. Journal of Computational Neuroscience, 2012, 32, 297-307.	1.0	6
49	Archer fish fast hunting maneuver may be guided by directionally selective retinal ganglion cells. European Journal of Neuroscience, 2012, 35, 436-444.	2.6	20
50	Time Production and EEG Alpha Revisited. NeuroQuantology, 2009, 7, .	0.2	16
51	Forward models and state estimation in compensatory eye movements. Frontiers in Cellular Neuroscience, 2009, 3, 13.	3.7	25
52	Pausing Purkinje cells in the cerebellum of the awake cat. Frontiers in Systems Neuroscience, 2009, 3, 2.	2.5	58
53	Current advances in lesion-symptom mapping of the human cerebellum. Neuroscience, 2009, 162, 836-851.	2.3	72
54	Adaptation to Visuomotor Rotation and Force Field Perturbation Is Correlated to Different Brain Areas in Patients With Cerebellar Degeneration. Journal of Neurophysiology, 2009, 101, 1961-1971.	1.8	192

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55	Motor Adaptation as a Process of Reoptimization. Journal of Neuroscience, 2008, 28, 2883-2891.	3.6	283
56	Acquisition of internal models of motor tasks in children with autism. Brain, 2008, 131, 2894-2903.	7.6	98
57	Internal Models and Contextual Cues: Encoding Serial Order and Direction of Movement. Journal of Neurophysiology, 2005, 93, 786-800.	1.8	49
58	Where in the brain does the forward model lurk?. Behavioral and Brain Sciences, 2004, 27, 402-403.	0.7	0
59	Learning Dynamics of Reaching. Frontiers in Neuroscience, 2004, , .	0.0	7
60	Learned Dynamics of Reaching Movements Generalize From Dominant to Nondominant Arm. Journal of Neurophysiology, 2003, 89, 168-176.	1.8	290
61	A Gain-Field Encoding of Limb Position and Velocity in the Internal Model of Arm Dynamics. PLoS Biology, 2003, 1, e25.	5.6	108
62	A zetetic's perspective on gesture, speech, and the evolution of right-handedness. Behavioral and Brain Sciences, 2003, 26, .	0.7	0
63	Quantifying Generalization from Trial-by-Trial Behavior of Adaptive Systems that Learn with Basis Functions: Theory and Experiments in Human Motor Control. Journal of Neuroscience, 2003, 23, 9032-9045.	3.6	415
64	Single-Unit Activity Related to Bimanual Arm Movements in the Primary and Supplementary Motor Cortices. Journal of Neurophysiology, 2002, 88, 3498-3517.	1.8	112
65	Mechanisms Influencing Acquisition and Recall of Motor Memories. Journal of Neurophysiology, 2002, 88, 2114-2123.	1.8	116
66	A Real-Time State Predictor in Motor Control: Study of Saccadic Eye Movements during Unseen Reaching Movements. Journal of Neuroscience, 2002, 22, 7721-7729.	3.6	143
67	Timing of bimanual movements in human and non-human primates in relation to neuronal activity in primary motor cortex and supplementary motor area. Experimental Brain Research, 2002, 146, 322-335.	1.5	40
68	Neuronal populations in primary motor cortex encode bimanual arm movements. European Journal of Neuroscience, 2002, 15, 1371-1380.	2.6	81
69	Local field potentials related to bimanual movements in the primary and supplementary motor cortices. Experimental Brain Research, 2001, 140, 46-55.	1.5	62
70	Neural interactions between motor cortical hemispheres during bimanual and unimanual arm movements. European Journal of Neuroscience, 2001, 14, 1881-1896.	2.6	99
71	Who Tells One Hand What the Other Is Doing. Neuron, 1999, 23, 15-18.	8.1	42
72	Primary motor cortex is involved in bimanual coordination. Nature, 1998, 395, 274-278.	27.8	265

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73	Interleukin-1 Inhibits Sexual Behavior in Female but Not in Male Rats. Brain, Behavior, and Immunity, 1995, 9, 220-233.	4.1	92
74	Behavioral Effects of Interleukin-1Î²: Modulation by Gender, Estrus Cycle, and Progesterone. Brain, Behavior, and Immunity, 1995, 9, 234-241.	4.1	54
75	Behavioral effects of lipopolysaccharide in rats: involvement of endogenous opioids. Brain Research, 1994, 648, 80-86.	2.2	102