

Neural constraints on learning

Nature

512, 423-426

DOI: [10.1038/nature13665](https://doi.org/10.1038/nature13665)

Citation Report

#	ARTICLE	IF	CITATIONS
1	Combining Decoder Design and Neural Adaptation in Brain-Machine Interfaces. <i>Neuron</i> , 2014, 84, 665-680.	3.8	144
2	Putting limits on learning. <i>Nature Reviews Neuroscience</i> , 2014, 15, 631-631.	4.9	1
3	Training spiking neural networks with the improved grey-level co-occurrence matrix algorithm for texture analysis. , 2015, , .		0
4	Training spiking neural networks with the improved Grey-Level Co-occurrence Matrix algorithm for texture analysis. , 2015, , .		0
5	Internal models for interpreting neural population activity during sensorimotor control. <i>ELife</i> , 2015, 4, .	2.8	41
6	Spatial diversity of spontaneous activity in the cortex. <i>Frontiers in Neural Circuits</i> , 2015, 9, 48.	1.4	11
7	Advancing brain-machine interfaces: moving beyond linear state space models. <i>Frontiers in Systems Neuroscience</i> , 2015, 9, 108.	1.2	15
8	Leveraging historical knowledge of neural dynamics to rescue decoder performance as neural channels are lost: "Decoder hysteresis", 2015, 2015, 1061-6.		3
9	Long-term training modifies the modular structure and organization of walking balance control. <i>Journal of Neurophysiology</i> , 2015, 114, 3359-3373.	0.9	122
10	Brain "computer interface control along instructed paths. <i>Journal of Neural Engineering</i> , 2015, 12, 016015.	1.8	11
11	Brain computer interface learning for systems based on electrocorticography and intracortical microelectrode arrays. <i>Frontiers in Integrative Neuroscience</i> , 2015, 9, 40.	1.0	38
12	Extracting Low-Dimensional Latent Structure from Time Series in the Presence of Delays. <i>Neural Computation</i> , 2015, 27, 1825-1856.	1.3	32
13	A Neural Mechanism for Background Information-Gated Learning Based on Axonal-Dendritic Overlaps. <i>PLoS Computational Biology</i> , 2015, 11, e1004155.	1.5	5
14	Translating the science into practice. <i>Progress in Brain Research</i> , 2015, 218, 331-360.	0.9	60
15	Neuroplasticity subserving the operation of brain "machine interfaces. <i>Neurobiology of Disease</i> , 2015, 83, 161-171.	2.1	21
16	Grasping with the Press of a Button: Grasp-selective Responses in the Human Anterior Intraparietal Sulcus Depend on Nonarbitrary Causal Relationships between Hand Movements and End-effector Actions. <i>Journal of Cognitive Neuroscience</i> , 2015, 27, 1146-1160.	1.1	9
17	Brain-Machine Interfaces beyond Neuroprosthetics. <i>Neuron</i> , 2015, 86, 55-67.	3.8	102
18	System identification of brain-machine interface control using a cursor jump perturbation. , 2015, , .		5

#	ARTICLE	IF	CITATIONS
19	Single-trial dynamics of motor cortex and their applications to brain-machine interfaces. <i>Nature Communications</i> , 2015, 6, 7759.	5.8	148
20	Recasting brain-machine interface design from a physical control system perspective. <i>Journal of Computational Neuroscience</i> , 2015, 39, 107-118.	0.6	12
21	On Synaptic Circuits, Memory, and Kumquats. <i>New England Journal of Medicine</i> , 2015, 373, 1170-1172.	13.9	2
22	Structural constraints on learning in the neural network. <i>Journal of Neurophysiology</i> , 2015, 114, 2555-2557.	0.9	1
23	Uniform and Non-uniform Perturbations in Brain-Machine Interface Task Elicit Similar Neural Strategies. <i>Frontiers in Systems Neuroscience</i> , 2016, 10, 70.	1.2	4
24	Suboptimal Muscle Synergy Activation Patterns Generalize their Motor Function across Postures. <i>Frontiers in Computational Neuroscience</i> , 2016, 10, 7.	1.2	15
25	Toward an Integration of Deep Learning and Neuroscience. <i>Frontiers in Computational Neuroscience</i> , 2016, 10, 94.	1.2	400
26	Intracortical Brain-Machine Interfaces Advance Sensorimotor Neuroscience. <i>Frontiers in Neuroscience</i> , 2016, 10, 291.	1.4	22
27	A Sliced Inverse Regression (SIR) Decoding the Forelimb Movement from Neuronal Spikes in the Rat Motor Cortex. <i>Frontiers in Neuroscience</i> , 2016, 10, 556.	1.4	4
28	Persistence of reduced neuromotor noise in long-term motor skill learning. <i>Journal of Neurophysiology</i> , 2016, 116, 2922-2935.	0.9	21
29	Extracellular voltage threshold settings can be tuned for optimal encoding of movement and stimulus parameters. <i>Journal of Neural Engineering</i> , 2016, 13, 036009.	1.8	30
30	Comparing offline decoding performance in physiologically defined neuronal classes. <i>Journal of Neural Engineering</i> , 2016, 13, 026004.	1.8	8
31	Modeling distinct sources of neural variability driving neuroprosthetic control. , 2016, 2016, 3068-3071.		0
32	Editorial overview: Neurobiology of cognitive behavior: Complexity of neural computation and cognition. <i>Current Opinion in Neurobiology</i> , 2016, 37, v-viii.	2.0	0
33	Robust neuronal dynamics in premotor cortex during motor planning. <i>Nature</i> , 2016, 532, 459-464.	13.7	380
34	Large-Scale Fluorescence Calcium-Imaging Methods for Studies of Long-Term Memory in Behaving Mammals. <i>Cold Spring Harbor Perspectives in Biology</i> , 2016, 8, a021824.	2.3	43
35	Neuro-prosthetic interplay. <i>Physics of Life Reviews</i> , 2016, 17, 47-49.	1.5	2
36	Similar coding of freely chosen and externally cued intentions in a fronto-parietal network. <i>NeuroImage</i> , 2016, 134, 450-458.	2.1	46

#	ARTICLE	IF	CITATIONS
37	Voluntary control of intracortical oscillations for reconfiguration of network activity. Scientific Reports, 2016, 6, 36255.	1.6	8
39	Reorganization between preparatory and movement population responses in motor cortex. Nature Communications, 2016, 7, 13239.	5.8	273
40	Key considerations in designing a somatosensory neuroprosthesis. Journal of Physiology (Paris), 2016, 110, 402-408.	2.1	31
41	A control-theoretic approach to brain-computer interface design. , 2016, , .		1
42	Adaptive neuron-to-EMG decoder training for FES neuroprostheses. Journal of Neural Engineering, 2016, 13, 046009.	1.8	12
43	Single-trial decoding of intended eye movement goals from lateral prefrontal cortex neural ensembles. Journal of Neurophysiology, 2016, 115, 486-499.	0.9	18
44	Long-Term Stability of Motor Cortical Activity: Implications for Brain Machine Interfaces and Optimal Feedback Control. Journal of Neuroscience, 2016, 36, 3623-3632.	1.7	80
45	Toward the neural implementation of structure learning. Current Opinion in Neurobiology, 2016, 37, 99-105.	2.0	84
46	Towards a fourth spatial dimension of brain activity. Cognitive Neurodynamics, 2016, 10, 189-199.	2.3	51
47	Brain-computer interfaces for dissecting cognitive processes underlying sensorimotor control. Current Opinion in Neurobiology, 2016, 37, 53-58.	2.0	82
48	Movement: How the Brain Communicates with the World. Cell, 2016, 164, 1122-1135.	13.5	92
49	Primary motor cortex of the parkinsonian monkey: altered encoding of active movement. Brain, 2016, 139, 127-143.	3.7	59
50	Inference and Decoding of Motor Cortex Low-Dimensional Dynamics via Latent State-Space Models. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2016, 24, 272-282.	2.7	56
51	Rapid control and feedback rates enhance neuroprosthetic control. Nature Communications, 2017, 8, 13825.	5.8	88
52	Decoding Local Field Potentials for Neural Interfaces. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2017, 25, 1705-1714.	2.7	52
53	Workshops of the Sixth International Brain-computer Interface Meeting: brain-computer interfaces past, present, and future. Brain-Computer Interfaces, 2017, 4, 3-36.	0.9	24
54	Rapid Integration of Artificial Sensory Feedback during Operant Conditioning of Motor Cortex Neurons. Neuron, 2017, 93, 929-939.e6.	3.8	71
55	Navigating the Neural Space in Search of the Neural Code. Neuron, 2017, 93, 1003-1014.	3.8	205

#	ARTICLE	IF	CITATIONS
56	A unified model of human semantic knowledge and its disorders. <i>Nature Human Behaviour</i> , 2017, 1, .	6.2	117
57	Emergence of Coordinated Neural Dynamics Underlies Neuroprosthetic Learning and Skillful Control. <i>Neuron</i> , 2017, 93, 955-970.e5.	3.8	86
58	Review: Human Intracortical Recording and Neural Decoding for Brain-Computer Interfaces. <i>IEEE Transactions on Neural Systems and Rehabilitation Engineering</i> , 2017, 25, 1687-1696.	2.7	80
59	Inference in the age of big data: Future perspectives on neuroscience. <i>NeuroImage</i> , 2017, 155, 549-564.	2.1	161
60	Motor Cortical Visuomotor Feedback Activity Is Initially Isolated from Downstream Targets in Output-Null Neural State Space Dimensions. <i>Neuron</i> , 2017, 95, 195-208.e9.	3.8	90
61	Physiological properties of brain-machine interface input signals. <i>Journal of Neurophysiology</i> , 2017, 118, 1329-1343.	0.9	38
62	Neural Manifolds for the Control of Movement. <i>Neuron</i> , 2017, 94, 978-984.	3.8	410
63	BCI Use and Its Relation to Adaptation in Cortical Networks. <i>IEEE Transactions on Neural Systems and Rehabilitation Engineering</i> , 2017, 25, 1697-1704.	2.7	14
64	Variational Latent Gaussian Process for Recovering Single-Trial Dynamics from Population Spike Trains. <i>Neural Computation</i> , 2017, 29, 1293-1316.	1.3	79
65	Interfacing to the brain's motor decisions. <i>Journal of Neurophysiology</i> , 2017, 117, 1305-1319.	0.9	36
66	Population activity statistics dissect subthreshold and spiking variability in V1. <i>Journal of Neurophysiology</i> , 2017, 118, 29-46.	0.9	5
67	Brain-Machine Interfaces: From Basic Science to Neuroprostheses and Neurorehabilitation. <i>Physiological Reviews</i> , 2017, 97, 767-837.	13.1	409
68	Feedback control policies employed by people using intracortical brain-computer interfaces. <i>Journal of Neural Engineering</i> , 2017, 14, 016001.	1.8	41
69	Stable population coding for working memory coexists with heterogeneous neural dynamics in prefrontal cortex. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, 394-399.	3.3	289
70	Parsing learning in networks using brain-machine interfaces. <i>Current Opinion in Neurobiology</i> , 2017, 46, 76-83.	2.0	43
71	Highlights from the 2017 meeting of the Society for Neural Control of Movement (Dublin, Ireland). <i>European Journal of Neuroscience</i> , 2017, 46, 2141-2148.	1.2	3
72	Behaviorally Selective Engagement of Short-Latency Effector Pathways by Motor Cortex. <i>Neuron</i> , 2017, 95, 683-696.e11.	3.8	123
73	Stirred, Not Shaken: Motor Control with Partially Mixed Selectivity. <i>Neuron</i> , 2017, 95, 479-481.	3.8	2

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74	Structure in neural population recordings: an expected byproduct of simpler phenomena?. <i>Nature Neuroscience</i> , 2017, 20, 1310-1318.	7.1	134
75	Leveraging neural dynamics to extend functional lifetime of brain-machine interfaces. <i>Scientific Reports</i> , 2017, 7, 7395.	1.6	33
76	What can neuronal populations tell us about cognition?. <i>Current Opinion in Neurobiology</i> , 2017, 46, 48-57.	2.0	9
77	Cryptographic decoding of movement. <i>Nature Biomedical Engineering</i> , 2017, 1, 929-930.	11.6	0
78	Relating accumulator model parameters and neural dynamics. <i>Journal of Mathematical Psychology</i> , 2017, 76, 156-171.	1.0	25
79	The need for calcium imaging in nonhuman primates: New motor neuroscience and brain-machine interfaces. <i>Experimental Neurology</i> , 2017, 287, 437-451.	2.0	45
80	Commentary: Emergence of a Stable Cortical Map for Neuroprosthetic Control. <i>Frontiers in Neuroscience</i> , 2017, 11, 642.	1.4	0
81	Shaping Reality through Mental Rehearsal. <i>Neuron</i> , 2018, 97, 998-1000.	3.8	2
82	A Comparison of Intention Estimation Methods for Decoder Calibration in Intracortical Brain-Computer Interfaces. <i>IEEE Transactions on Biomedical Engineering</i> , 2018, 65, 2066-2078.	2.5	19
83	Evidence for a neural law of effect. <i>Science</i> , 2018, 359, 1024-1029.	6.0	44
84	Volitional Modulation of Primary Visual Cortex Activity Requires the Basal Ganglia. <i>Neuron</i> , 2018, 97, 1356-1368.e4.	3.8	44
85	The negotiated equilibrium model of spinal cord function. <i>Journal of Physiology</i> , 2018, 596, 3469-3491.	1.3	43
86	Neural Population Dynamics Underlying Motor Learning Transfer. <i>Neuron</i> , 2018, 97, 1177-1186.e3.	3.8	100
87	Population coding of grasp and laterality-related information in the macaque fronto-parietal network. <i>Scientific Reports</i> , 2018, 8, 1710.	1.6	31
88	Rapid calibration of an intracortical brain-computer interface for people with tetraplegia. <i>Journal of Neural Engineering</i> , 2018, 15, 026007.	1.8	95
89	Rewiring the connectome: Evidence and effects. <i>Neuroscience and Biobehavioral Reviews</i> , 2018, 88, 51-62.	2.9	65
90	Intracortical recording stability in human brain-computer interface users. <i>Journal of Neural Engineering</i> , 2018, 15, 046016.	1.8	100
91	Optimizing the Usability of Brain-Computer Interfaces. <i>Neural Computation</i> , 2018, 30, 1323-1358.	1.3	5

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92	Learning by neural reassociation. <i>Nature Neuroscience</i> , 2018, 21, 607-616.	7.1	170
93	Set in one's thoughts. <i>Nature Neuroscience</i> , 2018, 21, 459-460.	7.1	0
94	Can We Predict Who Will Respond to Neurofeedback? A Review of the Inefficacy Problem and Existing Predictors for Successful EEG Neurofeedback Learning. <i>Neuroscience</i> , 2018, 378, 155-164.	1.1	127
95	Model and experiments to optimize co-adaptation in a simplified myoelectric control system. <i>Journal of Neural Engineering</i> , 2018, 15, 026006.	1.8	18
96	Decoding spoken phonemes from sensorimotor cortex with high-density ECoG grids. <i>NeuroImage</i> , 2018, 180, 301-311.	2.1	89
97	Information Processing Across Behavioral States: Modes of Operation and Population Dynamics in Rodent Sensory Cortex. <i>Neuroscience</i> , 2018, 368, 214-228.	1.1	24
98	Computational Neuroscience: Mathematical and Statistical Perspectives. <i>Annual Review of Statistics and Its Application</i> , 2018, 5, 183-214.	4.1	48
99	Brain-Computer Interface with Inhibitory Neurons Reveals Subtype-Specific Strategies. <i>Current Biology</i> , 2018, 28, 77-83.e4.	1.8	25
100	Neural Prostheses for Reaching and Grasping. , 2018, , .		0
101	Condition-Dependent Neural Dimensions Progressively Shift during Reach to Grasp. <i>Cell Reports</i> , 2018, 25, 3158-3168.e3.	2.9	30
102	Same lesson, varied choices by frontal cortex. <i>Nature Neuroscience</i> , 2018, 21, 1648-1650.	7.1	2
103	Single Neuron Firing Rate Statistics in Motor Cortex During Execution and Observation of Movement. , 2018, 2018, 981-986.		0
104	Optimizing the learning rate for adaptive estimation of neural encoding models. <i>PLoS Computational Biology</i> , 2018, 14, e1006168.	1.5	32
105	Training in Use of Brain-Machine Interface-Controlled Robotic Hand Improves Accuracy Decoding Two Types of Hand Movements. <i>Frontiers in Neuroscience</i> , 2018, 12, 478.	1.4	12
106	Deep learning reaches the motor system. <i>Nature Methods</i> , 2018, 15, 772-773.	9.0	2
107	Highlights from the 28th Annual Meeting of the Society for the Neural Control of Movement. <i>Journal of Neurophysiology</i> , 2018, 120, 1671-1679.	0.9	7
108	Modularity speeds up motor learning by overcoming mechanical bias in musculoskeletal geometry. <i>Journal of the Royal Society Interface</i> , 2018, 15, 20180249.	1.5	13
109	A Neural Population Mechanism for Rapid Learning. <i>Neuron</i> , 2018, 100, 964-976.e7.	3.8	132

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110	Latent Factors and Dynamics in Motor Cortex and Their Application to Brain-Machine Interfaces. <i>Journal of Neuroscience</i> , 2018, 38, 9390-9401.	1.7	81
111	Cortical population activity within a preserved neural manifold underlies multiple motor behaviors. <i>Nature Communications</i> , 2018, 9, 4233.	5.8	189
112	Inferring single-trial neural population dynamics using sequential auto-encoders. <i>Nature Methods</i> , 2018, 15, 805-815.	9.0	388
113	Super-wide-field two-photon imaging with a micro-optical device moving in post-objective space. <i>Nature Communications</i> , 2018, 9, 3550.	5.8	44
114	Single reach plans in dorsal premotor cortex during a two-target task. <i>Nature Communications</i> , 2018, 9, 3556.	5.8	61
115	A control-theoretic system identification framework and a real-time closed-loop clinical simulation testbed for electrical brain stimulation. <i>Journal of Neural Engineering</i> , 2018, 15, 066007.	1.8	71
116	Mood variations decoded from multi-site intracranial human brain activity. <i>Nature Biotechnology</i> , 2018, 36, 954-961.	9.4	164
117	Neural data science: accelerating the experiment-analysis-theory cycle in large-scale neuroscience. <i>Current Opinion in Neurobiology</i> , 2018, 50, 232-241.	2.0	68
118	Cognition as a Window into Neuronal Population Space. <i>Annual Review of Neuroscience</i> , 2018, 41, 77-97.	5.0	48
119	Emergent coordination with a brain-machine interface: implications for the neural basis of motor learning. <i>Journal of Neurophysiology</i> , 2018, 120, 889-892.	0.9	0
120	Music Evolution in the Laboratory: Cultural Transmission Meets Neurophysiology. <i>Frontiers in Neuroscience</i> , 2018, 12, 246.	1.4	11
121	Different population dynamics in the supplementary motor area and motor cortex during reaching. <i>Nature Communications</i> , 2018, 9, 2754.	5.8	77
122	Data-Driven Transducer Design and Identification for Internally-Paced Motor Brain Computer Interfaces: A Review. <i>Frontiers in Neuroscience</i> , 2018, 12, 540.	1.4	5
123	Emergent coordination underlying learning to reach to grasp with a brain-machine interface. <i>Journal of Neurophysiology</i> , 2018, 119, 1291-1304.	0.9	8
124	Myoelectric control with abstract decoders. <i>Journal of Neural Engineering</i> , 2018, 15, 056003.	1.8	41
125	Brain-Machine Interfaces: Powerful Tools for Clinical Treatment and Neuroscientific Investigations. <i>Neuroscientist</i> , 2019, 25, 139-154.	2.6	51
126	Personalized adaptive instruction design (PAID) for brain-computer interface using reinforcement learning and deep learning: simulated data study. <i>Brain-Computer Interfaces</i> , 2019, 6, 36-48.	0.9	3
127	Neural manifolds: from basic science to practical improvements in brain-computer interfaces. , 2019, , .		1

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128	Bayesian Computation through Cortical Latent Dynamics. <i>Neuron</i> , 2019, 103, 934-947.e5.	3.8	146
129	Learning outside the box. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019, 116, 15316-15318.	3.3	1
130	Revealing neural correlates of behavior without behavioral measurements. <i>Nature Communications</i> , 2019, 10, 4745.	5.8	96
131	Low-Dimensional Motor Cortex Dynamics Preserve Kinematics Information During Unconstrained Locomotion in Nonhuman Primates. <i>Frontiers in Neuroscience</i> , 2019, 13, 1046.	1.4	14
132	Neuroscience out of control: control-theoretic perspectives on neural circuit dynamics. <i>Current Opinion in Neurobiology</i> , 2019, 58, 122-129.	2.0	19
133	A point-process matched filter for event detection and decoding from population spike trains. <i>Journal of Neural Engineering</i> , 2019, 16, 066016.	1.8	20
134	Learning active sensing strategies using a sensory brain-machine interface. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019, 116, 17509-17514.	3.3	17
135	Neural Correlates of Control of a Kinematically Redundant Brain-Machine Interface*. , 2019, , .		3
136	Large-Scale Neural Consolidation in BMI Learning*. , 2019, , .		3
137	Early stages of sensorimotor map acquisition: learning with free exploration, without active movement or global structure. <i>Journal of Neurophysiology</i> , 2019, 122, 1708-1720.	0.9	4
138	Brain-machine interfaces from motor to mood. <i>Nature Neuroscience</i> , 2019, 22, 1554-1564.	7.1	157
139	Bridging large-scale neuronal recordings and large-scale network models using dimensionality reduction. <i>Current Opinion in Neurobiology</i> , 2019, 55, 40-47.	2.0	51
140	Principled BCI Decoder Design and Parameter Selection Using a Feedback Control Model. <i>Scientific Reports</i> , 2019, 9, 8881.	1.6	28
141	High-dimensional geometry of population responses in visual cortex. <i>Nature</i> , 2019, 571, 361-365.	13.7	370
142	Age-related deficits in motor learning are associated with altered motor exploration strategies. <i>Neuroscience</i> , 2019, 412, 40-47.	1.1	9
143	Large-scale changes in cortical dynamics triggered by repetitive somatosensory electrical stimulation. <i>Journal of NeuroEngineering and Rehabilitation</i> , 2019, 16, 59.	2.4	6
144	Accurate Estimation of Neural Population Dynamics without Spike Sorting. <i>Neuron</i> , 2019, 103, 292-308.e4.	3.8	195
145	Perturbing low dimensional activity manifolds in spiking neuronal networks. <i>PLoS Computational Biology</i> , 2019, 15, e1007074.	1.5	24

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146	New neural activity patterns emerge with long-term learning. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 15210-15215.	3.3	145
147	Larval experience of stable fly, <i>Stomoxys calcitrans</i> Linnaeus, 1758 (Diptera: Tj ETQq1 1 0.784314 rgBT /Overlock 1 44, 690-701.	1.1	1
148	Effective learning is accompanied by high-dimensional and efficient representations of neural activity. Nature Neuroscience, 2019, 22, 1000-1009.	7.1	27
149	Sparse model-based estimation of functional dependence in high-dimensional field and spike multiscale networks. Journal of Neural Engineering, 2019, 16, 056022.	1.8	24
150	Dynamic network modeling and dimensionality reduction for human ECoG activity. Journal of Neural Engineering, 2019, 16, 056014.	1.8	43
151	Speech synthesis from neural decoding of spoken sentences. Nature, 2019, 568, 493-498.	13.7	518
152	A Multiscale Dynamical Modeling and Identification Framework for Spike-Field Activity. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2019, 27, 1128-1138.	2.7	28
153	Effect of deactivation of activity patterns related to smoking cue reactivity on nicotine addiction. Brain, 2019, 142, 1827-1841.	3.7	21
154	Intrinsic Variable Learning for Brain-Machine Interface Control by Human Anterior Intraparietal Cortex. Neuron, 2019, 102, 694-705.e3.	3.8	31
155	Towards the neural population doctrine. Current Opinion in Neurobiology, 2019, 55, 103-111.	2.0	186
156	Motor Learning. , 2019, 9, 613-663.		393
157	Estimating Multiscale Direct Causality Graphs in Neural Spike-Field Networks. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2019, 27, 857-866.	2.7	25
158	Analyzing biological and artificial neural networks: challenges with opportunities for synergy?. Current Opinion in Neurobiology, 2019, 55, 55-64.	2.0	71
159	Volitional control of single-electrode high gamma local field potentials by people with paralysis. Journal of Neurophysiology, 2019, 121, 1428-1450.	0.9	12
160	Distinct types of neural reorganization during long-term learning. Journal of Neurophysiology, 2019, 121, 1329-1341.	0.9	40
161	Cortical Areas Interact through a Communication Subspace. Neuron, 2019, 102, 249-259.e4.	3.8	239
162	Medial prefrontal cortex population activity is plastic irrespective of learning. Journal of Neuroscience, 2019, 39, 1370-17.	1.7	13
163	Age-dependent differences in learning to control a robot arm using a body-machine interface. Scientific Reports, 2019, 9, 1960.	1.6	10

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164	Considerations in using recurrent neural networks to probe neural dynamics. <i>Journal of Neurophysiology</i> , 2019, 122, 2504-2521.	0.9	16
165	Bridging Single Neuron Dynamics to Global Brain States. <i>Frontiers in Systems Neuroscience</i> , 2019, 13, 75.	1.2	28
166	Toward a comprehensive understanding of the neural mechanisms of decoded neurofeedback. <i>NeuroImage</i> , 2019, 188, 539-556.	2.1	69
167	A Tradeoff in the Neural Code across Regions and Species. <i>Cell</i> , 2019, 176, 597-609.e18.	13.5	71
168	An orderly single-trial organization of population dynamics in premotor cortex predicts behavioral variability. <i>Nature Communications</i> , 2019, 10, 216.	5.8	26
169	Multiscale modeling and decoding algorithms for spike-field activity. <i>Journal of Neural Engineering</i> , 2019, 16, 016018.	1.8	22
170	Closed-loop cortical control of virtual reach and posture using Cartesian and joint velocity commands. <i>Journal of Neural Engineering</i> , 2019, 16, 026011.	1.8	14
171	Distance and direction, but not light cues, support response reversal learning. <i>Learning and Behavior</i> , 2019, 47, 38-46.	0.5	2
172	Reconfiguring Motor Circuits for a Joint Manual and BCI Task. <i>IEEE Transactions on Neural Systems and Rehabilitation Engineering</i> , 2020, 28, 248-257.	2.7	7
173	Neural reinforcement: re-entering and refining neural dynamics leading to desirable outcomes. <i>Current Opinion in Neurobiology</i> , 2020, 60, 145-154.	2.0	45
174	Long-term stability of cortical population dynamics underlying consistent behavior. <i>Nature Neuroscience</i> , 2020, 23, 260-270.	7.1	204
175	The Transition from Evaluation to Selection Involves Neural Subspace Reorganization in Core Reward Regions. <i>Neuron</i> , 2020, 105, 712-724.e4.	3.8	45
176	Cortico-cerebellar interactions during goal-directed behavior. <i>Current Opinion in Neurobiology</i> , 2020, 65, 27-37.	2.0	22
177	From unstable input to robust output. <i>Nature Biomedical Engineering</i> , 2020, 4, 665-667.	11.6	5
178	Rational thoughts in neural codes. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 29311-29320.	3.3	14
179	Structure in Neural Activity during Observed and Executed Movements Is Shared at the Neural Population Level, Not in Single Neurons. <i>Cell Reports</i> , 2020, 32, 108006.	2.9	30
180	Brain-Machine Interfaces: A Tale of Two Learners. <i>IEEE Systems, Man, and Cybernetics Magazine</i> , 2020, 6, 12-19.	1.2	45
181	Adenosine A2A receptor blockade improves neuroprosthetic learning by volitional control of population calcium signal in M1 cortical neurons. <i>Neuropharmacology</i> , 2020, 178, 108250.	2.0	5

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182	Unexpected complexity of everyday manual behaviors. Nature Communications, 2020, 11, 3564.	5.8	31
183	Single-trial cross-area neural population dynamics during long-term skill learning. Nature Communications, 2020, 11, 4057.	5.8	35
184	Plasticity of muscle synergies through fractionation and merging during development and training of human runners. Nature Communications, 2020, 11, 4356.	5.8	68
185	Unconscious reinforcement learning of hidden brain states supported by confidence. Nature Communications, 2020, 11, 4429.	5.8	25
186	Operant conditioning of motor cortex neurons reveals neuron-subtype-specific responses in a brain-machine interface task. Scientific Reports, 2020, 10, 19992.	1.6	6
187	Guiding functional reorganization of motor redundancy using a body-machine interface. Journal of NeuroEngineering and Rehabilitation, 2020, 17, 61.	2.4	9
188	Exemplar learning reveals the representational origins of expert category perception. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 11167-11177.	3.3	7
189	A Mode-Jumping Algorithm for Bayesian Factor Analysis. Journal of the American Statistical Association, 2022, 117, 277-290.	1.8	6
190	A Geometric Characterization of Population Coding in the Prefrontal Cortex and Hippocampus during a Paired-Associate Learning Task. Journal of Cognitive Neuroscience, 2020, 32, 1455-1465.	1.1	4
191	Dimensional Reduction in Evolving Spin-Glass Model: Correlation of Phenotypic Responses to Environmental and Mutational Changes. Physical Review Letters, 2020, 124, 218101.	2.9	9
192	The Motor Cortex Has Independent Representations for Ipsilateral and Contralateral Arm Movements But Correlated Representations for Grasping. Cerebral Cortex, 2020, 30, 5400-5409.	1.6	19
193	Encoding primitives generation policy learning for robotic arm to overcome catastrophic forgetting in sequential multi-tasks learning. Neural Networks, 2020, 129, 163-173.	3.3	4
194	Classification of Individual Finger Movements Using Intracortical Recordings in Human Motor Cortex. Neurosurgery, 2020, 87, 630-638.	0.6	14
195	Brain-computer interfaces for basic neuroscience. Handbook of Clinical Neurology / Edited By P J Vinken and G W Bruyn, 2020, 168, 233-247.	1.0	2
196	General principles of machine learning for brain-computer interfacing. Handbook of Clinical Neurology / Edited By P J Vinken and G W Bruyn, 2020, 168, 311-328.	1.0	10
197	Computation Through Neural Population Dynamics. Annual Review of Neuroscience, 2020, 43, 249-275.	5.0	319
198	A neural network for online spike classification that improves decoding accuracy. Journal of Neurophysiology, 2020, 123, 1472-1485.	0.9	11
199	Reevaluating the Role of Persistent Neural Activity in Short-Term Memory. Trends in Cognitive Sciences, 2020, 24, 242-258.	4.0	52

#	ARTICLE	IF	CITATIONS
200	Variable specificity of memory trace reactivation during hippocampal sharp wave ripples. <i>Current Opinion in Behavioral Sciences</i> , 2020, 32, 126-135.	2.0	24
201	Self-reorganization of neuronal activation patterns in the cortex under brain-machine interface and neural operant conditioning. <i>Neuroscience Research</i> , 2020, 156, 279-292.	1.0	7
202	Restoring the Sense of Touch Using a Sensorimotor Demultiplexing Neural Interface. <i>Cell</i> , 2020, 181, 763-773.e12.	13.5	94
203	Dimensionality, information and learning in prefrontal cortex. <i>PLoS Computational Biology</i> , 2020, 16, e1007514.	1.5	29
204	Stabilization of a brain-computer interface via the alignment of low-dimensional spaces of neural activity. <i>Nature Biomedical Engineering</i> , 2020, 4, 672-685.	11.6	118
205	Experts, but not novices, exhibit StartReact indicating experts use the reticulospinal system more than novices. <i>Journal of Motor Behavior</i> , 2021, 53, 128-134.	0.5	5
206	Modeling behaviorally relevant neural dynamics enabled by preferential subspace identification. <i>Nature Neuroscience</i> , 2021, 24, 140-149.	7.1	77
207	Neuroprosthetics: an outlook on active challenges toward clinical adoption. <i>Journal of Neurophysiology</i> , 2021, 125, 105-109.	0.9	3
208	State Primitive Learning to Overcome Catastrophic Forgetting in Robotics. <i>Cognitive Computation</i> , 2021, 13, 394-402.	3.6	3
209	A Network Perspective on Sensorimotor Learning. <i>Trends in Neurosciences</i> , 2021, 44, 170-181.	4.2	23
210	The sensory representation of causally controlled objects. <i>Neuron</i> , 2021, 109, 677-689.e4.	3.8	18
211	Shared internal models for feedforward and feedback control of arm dynamics in non-human primates. <i>European Journal of Neuroscience</i> , 2021, 53, 1605-1620.	1.2	8
212	Direction and Constraint in Phenotypic Evolution: Dimension Reduction and Global Proportionality in Phenotype Fluctuation and Responses. , 2021, , 35-58.		2
213	Decoding upper limb kinematics from primary motor cortical representations for intracortical brain-machine interfaces. , 2021, , .		0
214	Neural manifold under plasticity in a goal driven learning behaviour. <i>PLoS Computational Biology</i> , 2021, 17, e1008621.	1.5	30
216	Extracting single-trial neural interaction using latent dynamical systems model. <i>Molecular Brain</i> , 2021, 14, 32.	1.3	0
217	Treatment Efficacy and Clinical Effectiveness of EEG Neurofeedback as a Personalized and Multimodal Treatment in ADHD: A Critical Review. <i>Neuropsychiatric Disease and Treatment</i> , 2021, Volume 17, 637-648.	1.0	18
220	The geometry of neuronal representations during rule learning reveals complementary roles of cingulate cortex and putamen. <i>Neuron</i> , 2021, 109, 839-851.e9.	3.8	12

#	ARTICLE	IF	CITATIONS
223	Learning is shaped by abrupt changes in neural engagement. <i>Nature Neuroscience</i> , 2021, 24, 727-736.	7.1	39
224	Anterior cingulate and putamen neurons flexibly learn whether a hot dog is a sandwich. <i>Neuron</i> , 2021, 109, 747-750.	3.8	0
227	Operant conditioning reveals task-specific responses of single neurons in a brain-machine interface. <i>Journal of Neural Engineering</i> , 2021, 18, 045003.	1.8	1
229	A Framework for Optimizing Co-adaptation in Body-Machine Interfaces. <i>Frontiers in Neurorobotics</i> , 2021, 15, 662181.	1.6	12
231	An artificial intelligence that increases simulated brain-machine computer interface performance. <i>Journal of Neural Engineering</i> , 2021, 18, 046053.	1.8	6
232	Brain-Machine Interfaces: Closed-Loop Control in an Adaptive System. <i>Annual Review of Control, Robotics, and Autonomous Systems</i> , 2021, 4, 167-189.	7.5	10
234	Differential neural plasticity of individual fingers revealed by fMRI neurofeedback. <i>Journal of Neurophysiology</i> , 2021, 125, 1720-1734.	0.9	3
235	Epidural cerebellar stimulation drives widespread neural synchrony in the intact and stroke perilesional cortex. <i>Journal of NeuroEngineering and Rehabilitation</i> , 2021, 18, 89.	2.4	10
236	Dendritic calcium signals in rhesus macaque motor cortex drive an optical brain-computer interface. <i>Nature Communications</i> , 2021, 12, 3689.	5.8	38
237	Improving scalability in systems neuroscience. <i>Neuron</i> , 2021, 109, 1776-1790.	3.8	14
239	Modeling of hyper-adaptability: from motor coordination to rehabilitation. <i>Advanced Robotics</i> , 2021, 35, 802-817.	1.1	5
240	A prototype closed-loop brain-machine interface for the study and treatment of pain. <i>Nature Biomedical Engineering</i> , 2023, 7, 533-545.	11.6	29
241	Chronic wireless neural population recordings with common marmosets. <i>Cell Reports</i> , 2021, 36, 109379.	2.9	11
243	Dynamic Network Analysis Demonstrates the Formation of Stable Functional Networks During Rule Learning. <i>Cerebral Cortex</i> , 2021, 31, 5511-5525.	1.6	4
244	Generalizable cursor click decoding using grasp-related neural transients. <i>Journal of Neural Engineering</i> , 2021, 18, 0460e9.	1.8	8
245	The population doctrine in cognitive neuroscience. <i>Neuron</i> , 2021, 109, 3055-3068.	3.8	103
247	Strengths and challenges of longitudinal non-human primate neuroimaging. <i>NeuroImage</i> , 2021, 236, 118009.	2.1	12
249	Mapping between sound, brain and behaviour: four-level framework for understanding rhythm processing in humans and non-human primates. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , 2021, 376, 20200325.	1.8	17

#	ARTICLE	IF	CITATIONS
250	A modular strategy for next-generation upper-limb sensory-motor neuroprostheses. <i>Med</i> , 2021, 2, 912-937.	2.2	16
252	Stable representation of a naturalistic movie emerges from episodic activity with gain variability. <i>Nature Communications</i> , 2021, 12, 5170.	5.8	18
253	Neurophysiology of Remembering. <i>Annual Review of Psychology</i> , 2022, 73, 187-215.	9.9	25
254	Neural tuning and representational geometry. <i>Nature Reviews Neuroscience</i> , 2021, 22, 703-718.	4.9	80
255	The science and engineering behind sensitized brain-controlled bionic hands. <i>Physiological Reviews</i> , 2022, 102, 551-604.	13.1	32
257	Bridging neuronal correlations and dimensionality reduction. <i>Neuron</i> , 2021, 109, 2740-2754.e12.	3.8	24
259	Building population models for large-scale neural recordings: Opportunities and pitfalls. <i>Current Opinion in Neurobiology</i> , 2021, 70, 64-73.	2.0	20
260	Motor-like neural dynamics in two parietal areas during arm reaching. <i>Progress in Neurobiology</i> , 2021, 205, 102116.	2.8	13
261	Task-relevant and task-irrelevant variability causally shape error-based motor learning. <i>Neural Networks</i> , 2021, 142, 583-596.	3.3	9
262	Extreme neural machines. <i>Neural Networks</i> , 2021, 144, 639-647.	3.3	5
263	Brain state kinematics and the trajectory of task performance improvement. <i>NeuroImage</i> , 2021, 243, 118510.	2.1	4
265	Measurement, manipulation and modeling of brain-wide neural population dynamics. <i>Nature Communications</i> , 2021, 12, 633.	5.8	23
266	Multiscale low-dimensional motor cortical state dynamics predict naturalistic reach-and-grasp behavior. <i>Nature Communications</i> , 2021, 12, 607.	5.8	44
267	Finding Kinematics-Driven Latent Neural States From Neuronal Population Activity for Motor Decoding. <i>IEEE Transactions on Neural Systems and Rehabilitation Engineering</i> , 2021, 29, 2027-2036.	2.7	1
268	Intracortical Brain-“Machine Interfaces. , 2020, , 185-221.		5
269	Maximum entropy models as a tool for building precise neural controls. <i>Current Opinion in Neurobiology</i> , 2017, 46, 120-126.	2.0	27
270	Learning to control the brain through adaptive closed-loop patterned stimulation. <i>Journal of Neural Engineering</i> , 2020, 17, 056007.	1.8	17
304	Emerging ideas and tools to study the emergent properties of the cortical neural circuits for voluntary motor control in non-human primates. <i>F1000Research</i> , 2019, 8, 749.	0.8	18

#	ARTICLE	IF	CITATIONS
305	Encoder-Decoder Optimization for Brain-Computer Interfaces. PLoS Computational Biology, 2015, 11, e1004288.	1.5	23
306	Higher-Order Synaptic Interactions Coordinate Dynamics in Recurrent Networks. PLoS Computational Biology, 2016, 12, e1005078.	1.5	30
307	Scaling Properties of Dimensionality Reduction for Neural Populations and Network Models. PLoS Computational Biology, 2016, 12, e1005141.	1.5	76
308	Tensor Analysis Reveals Distinct Population Structure that Parallels the Different Computational Roles of Areas M1 and V1. PLoS Computational Biology, 2016, 12, e1005164.	1.5	46
309	Stimulus-Driven Population Activity Patterns in Macaque Primary Visual Cortex. PLoS Computational Biology, 2016, 12, e1005185.	1.5	42
310	Self-regulation strategy, feedback timing and hemodynamic properties modulate learning in a simulated fMRI neurofeedback environment. PLoS Computational Biology, 2017, 13, e1005681.	1.5	50
311	Population activity structure of excitatory and inhibitory neurons. PLoS ONE, 2017, 12, e0181773.	1.1	24
312	Deficits in Prediction Ability Trigger Asymmetries in Behavior and Internal Representation. Frontiers in Psychiatry, 2020, 11, 564415.	1.3	6
313	Constraints on neural redundancy. ELife, 2018, 7, .	2.8	56
314	Mechanisms of fMRI neurofeedback. , 2021, , 287-313.		1
315	The eyes reflect an internal cognitive state hidden in the population activity of cortical neurons. Cerebral Cortex, 2022, 32, 3331-3346.	1.6	6
317	Mean-field approximations of networks of spiking neurons with short-term synaptic plasticity. Physical Review E, 2021, 104, 044310.	0.8	14
318	How learning unfolds in the brain: toward an optimization view. Neuron, 2021, 109, 3720-3735.	3.8	19
320	Neural implementations of Bayesian inference. Current Opinion in Neurobiology, 2021, 70, 121-129.	2.0	13
321	Volitional control of individual neurons in the human brain. Brain, 2021, 144, 3651-3663.	3.7	7
322	Compartmentalized dynamics within a common multi-area mesoscale manifold represent a repertoire of human hand movements. Neuron, 2022, 110, 154-174.e12.	3.8	19
325	Central nervous system physiology. Clinical Neurophysiology, 2021, 132, 3043-3083.	0.7	12
326	Attention improves information flow between neuronal populations without changing the communication subspace. Current Biology, 2021, 31, 5299-5313.e4.	1.8	16

#	ARTICLE	IF	CITATIONS
343	Deciphering the Neuronal Population Code. , 2020, , 519-534.		0
350	Cortical Control of Virtual Self-Motion Using Task-Specific Subspaces. Journal of Neuroscience, 2022, 42, 220-239.	1.7	10
351	Role of Brain Cortex Plasticity in the Use of Neural Interfaces. Human Physiology, 2020, 46, 752-759.	0.1	0
354	Skilled independent control of individual motor units via a non-invasive neuromuscular machine interface. Journal of Neural Engineering, 2021, 18, 066019.	1.8	28
355	Timescales of local and cross-area interactions during neuroprosthetic learning. Journal of Neuroscience, 2021, 41, JN-RM-1397-21.	1.7	1
358	Model-based decoupling of evoked and spontaneous neural activity in calcium imaging data. PLoS Computational Biology, 2020, 16, e1008330.	1.5	14
359	Neuronal Activity Distributed in Multiple Cortical Areas during Voluntary Control of the Native Arm or a Brain-Computer Interface. ENeuro, 2020, 7, .	0.9	2
360	Neural population geometry: An approach for understanding biological and artificial neural networks. Current Opinion in Neurobiology, 2021, 70, 137-144.	2.0	112
361	Silent Synapses in Cocaine-Associated Memory and Beyond. Journal of Neuroscience, 2021, 41, 9275-9285.	1.7	7
362	Sequential and efficient neural-population coding of complex task information. Neuron, 2022, 110, 328-349.e11.	3.8	37
363	Hybrid dedicated and distributed coding in PMd/M1 provides separation and interaction of bilateral arm signals. PLoS Computational Biology, 2021, 17, e1009615.	1.5	3
364	Estimating the dimensionality of the manifold underlying multi-electrode neural recordings. PLoS Computational Biology, 2021, 17, e1008591.	1.5	32
366	Rapid adaptation of brain computer interfaces to new neuronal ensembles or participants via generative modelling. Nature Biomedical Engineering, 2023, 7, 546-558.	11.6	15
368	Neuronal Activity Distributed in Multiple Cortical Areas during Voluntary Control of the Native Arm or a Brain-Computer Interface. ENeuro, 2020, 7, ENEURO.0376-20.2020.	0.9	4
369	Neuronal population activity dynamics reveal a low-dimensional signature of operant learning in Aplysia. Communications Biology, 2022, 5, 90.	2.0	3
370	Orthogonal representations for robust context-dependent task performance in brains and neural networks. Neuron, 2022, 110, 1258-1270.e11.	3.8	77
371	Modeling multiscale causal interactions between spiking and field potential signals during behavior. Journal of Neural Engineering, 2022, 19, 026001.	1.8	11
372	Estimating null and potent modes of feedforward communication in a computational model of cortical activity. Scientific Reports, 2022, 12, 742.	1.6	2

#	ARTICLE	IF	CITATIONS
373	Going beyond primary motor cortex to improve brain-computer interfaces. Trends in Neurosciences, 2022, 45, 176-183.	4.2	37
374	Real-Time Functional MRI in the Treatment of Mental Health Disorders. Annual Review of Clinical Psychology, 2022, 18, 125-154.	6.3	11
375	A Real-Time Hardware Experiment Platform for Closed-Loop Electrophysiology. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2022, 30, 380-389.	2.7	1
376	Motor BMIs Have Entered the Clinical Realm. , 2022, , 1-37.		1
379	Why do customers want to learn? Antecedents and outcomes of customer learning. European Journal of Marketing, 2022, 56, 677-703.	1.7	5
380	Task space exploration improves adaptation after incompatible virtual surgeries. Journal of Neurophysiology, 2022, 127, 1127-1146.	0.9	13
381	Neural Algorithms and Circuits for Motor Planning. Annual Review of Neuroscience, 2022, 45, 249-271.	5.0	28
382	From Parametric Representation to Dynamical System: Shifting Views of the Motor Cortex in Motor Control. Neuroscience Bulletin, 2022, 38, 796-808.	1.5	12
383	Principles of human movement augmentation and the challenges in making it a reality. Nature Communications, 2022, 13, 1345.	5.8	34
385	Closed-loop neuromodulation for studying spontaneous activity and causality. Trends in Cognitive Sciences, 2022, 26, 290-299.	4.0	12
390	Nonlinear reconfiguration of network edges, topology and information content during an artificial learning task. Brain Informatics, 2021, 8, 26.	1.8	4
391	Priority coding in the visual system. Nature Reviews Neuroscience, 2022, 23, 376-388.	4.9	19
392	Neural excursions from manifold structure explain patterns of learning during human sensorimotor adaptation. ELife, 2022, 11, .	2.8	11
410	Transition from predictable to variable motor cortex and striatal ensemble patterning during behavioral exploration. Nature Communications, 2022, 13, 2450.	5.8	8
412	Preserved cortical somatotopic and motor representations in tetraplegic humans. Current Opinion in Neurobiology, 2022, 74, 102547.	2.0	7
415	Computational role of exploration noise in error-based de novo motor learning. Neural Networks, 2022, 153, 349-372.	3.3	3
416	Cognitive experience alters cortical involvement in goal-directed navigation. ELife, 0, 11, .	2.8	10
417	SURRL: Structural Unsupervised Representations for Robot Learning. IEEE Transactions on Cognitive and Developmental Systems, 2023, 15, 819-831.	2.6	1

#	ARTICLE	IF	CITATIONS
422	Navigating the Statistical Minefield of Model Selection and Clustering in Neuroscience. <i>ENeuro</i> , 2022, 9, ENEURO.0066-22.2022.	0.9	1
423	BCImat: a Matlab-based framework for Intracortical Brain-Computer Interfaces and their simulation with an artificial spiking neural network. <i>Journal of Open Source Software</i> , 2022, 7, 3956.	2.0	1
424	The spectrum of covariance matrices of randomly connected recurrent neuronal networks with linear dynamics. <i>PLoS Computational Biology</i> , 2022, 18, e1010327.	1.5	10
426	Local field potentials reflect cortical population dynamics in a region-specific and frequency-dependent manner. <i>ELife</i> , 0, 11, .	2.8	24
431	Stability of motor representations after paralysis. <i>ELife</i> , 0, 11, .	2.8	8
432	Selective modulation of cortical population dynamics during neuroprosthetic skill learning. <i>Scientific Reports</i> , 2022, 12, .	1.6	4
433	Small, correlated changes in synaptic connectivity may facilitate rapid motor learning. <i>Nature Communications</i> , 2022, 13, .	5.8	7
434	Volitional Generation of Reproducible, Efficient Temporal Patterns. <i>Brain Sciences</i> , 2022, 12, 1269.	1.1	1
435	Beyond the brain-computer interface: Decoding brain activity as a tool to understand neuronal mechanisms subtending cognition and behavior. <i>Frontiers in Neuroscience</i> , 0, 16, .	1.4	3
437	De novo motor learning of a bimanual control task over multiple days of practice. <i>Journal of Neurophysiology</i> , 2022, 128, 982-993.	0.9	11
438	Motor cortical influence relies on task-specific activity covariation. <i>Cell Reports</i> , 2022, 40, 111427.	2.9	8
441	Clinical neuroscience and neurotechnology: An amazing symbiosis. <i>IScience</i> , 2022, 25, 105124.	1.9	3
442	Cognition and the single neuron: How cell types construct the dynamic computations of frontal cortex. <i>Current Opinion in Neurobiology</i> , 2022, 77, 102630.	2.0	12
443	Emergence of Distinct Neural Subspaces in Motor Cortical Dynamics during Volitional Adjustments of Ongoing Locomotion. <i>Journal of Neuroscience</i> , 2022, 42, 9142-9157.	1.7	3
444	Flexible neural control of motor units. <i>Nature Neuroscience</i> , 2022, 25, 1492-1504.	7.1	31
445	Estimating Intrinsic Manifold Dimensionality to Classify Task-Related Information in Human and Non-Human Primate Data. , 2022, , .		0
446	Decoding the Time Course of Spatial Information from Spiking and Local Field Potential Activities in the Superior Colliculus. <i>ENeuro</i> , 2022, 9, ENEURO.0347-22.2022.	0.9	5
447	<i>De novo</i> brain-computer interfacing deforms manifold of populational neural activity patterns in human cerebral cortex. <i>ENeuro</i> , 0, , ENEURO.0145-22.2022.	0.9	0

#	ARTICLE	IF	CITATIONS
450	Neural Manifold Modulated Continual Reinforcement Learning for Musculoskeletal Robots. IEEE Transactions on Cognitive and Developmental Systems, 2024, 16, 86-99.	2.6	2
451	Aligning latent representations of neural activity. Nature Biomedical Engineering, 2023, 7, 337-343.	11.6	4
453	Arithmetic value representation for hierarchical behavior composition. Nature Neuroscience, 2023, 26, 140-149.	7.1	4
454	Conserved structures of neural activity in sensorimotor cortex of freely moving rats allow cross-subject decoding. Nature Communications, 2022, 13, .	5.8	4
455	Population codes enable learning from few examples by shaping inductive bias. ELife, 0, 11, .	2.8	2
457	Residual dynamics resolves recurrent contributions to neural computation. Nature Neuroscience, 2023, 26, 326-338.	7.1	10
458	The centrality of population-level factors to network computation is demonstrated by a versatile approach for training spiking networks. Neuron, 2023, 111, 631-649.e10.	3.8	20
459	Probing the flexible internal state transition and low-dimensional manifold dynamics of human brain with acupuncture. Biomedical Signal Processing and Control, 2023, 82, 104494.	3.5	1
460	Dimensionality reduction of calcium-imaged neuronal population activity. Nature Computational Science, 2023, 3, 71-85.	3.8	4
462	Brain-Machine Interfaces: From Restoring Sensorimotor Control to Augmenting Cognition. , 2023, , 1343-1380.		0
463	Motor BMIs Have Entered the Clinical Realm. , 2023, , 1381-1417.		0
464	Cortical reorganization in the adult primary sensorimotor cortex. , 2024, , .		0
465	Achieving Transfer from Mathematics Learning. Education Sciences, 2023, 13, 161.	1.4	1
466	Parallel movement planning is achieved via an optimal preparatory state in motor cortex. Cell Reports, 2023, 42, 112136.	2.9	6
468	STDP-based associative memory formation and retrieval. Journal of Mathematical Biology, 2023, 86, .	0.8	1
470	Neural Plasticity in Sensorimotor Brain-Machine Interfaces. Annual Review of Biomedical Engineering, 2023, 25, 51-76.	5.7	2
473	Extended Stability and Control Strategies for Impulsive and Fractional Neural Networks: A Review of the Recent Results. Fractal and Fractional, 2023, 7, 289.	1.6	5
475	Emergence of a predictive model in the hippocampus. Neuron, 2023, 111, 1952-1965.e5.	3.8	3

#	ARTICLE	IF	CITATIONS
476	Schema formation in a neural population subspace underlies learning-to-learn in flexible sensorimotor problem-solving. Nature Neuroscience, 2023, 26, 879-890.	7.1	13
480	Neurotechnologies to restore hand functions. , 2023, 1, 390-407.		5
484	Intracortical brain-computer interfaces in primates: a review and outlook. Biomedical Engineering Letters, 2023, 13, 375-390.	2.1	2
494	A Closed-Loop Electrophysiological Hardware Prototype to Estimate and Control Neuronal States. , 2023, , .		0
517	Applying Neural Manifold Constraint on Point Process Model for Neural Spike Prediction *. , 2023, , .		0
527	A Novel KL Divergence Optimization Method for Aligning Neural Population Patterns During Task Learning. , 2023, , .		0