Christoph Braun

List of Publications by Year in descending order

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141 papers 11,221 citations

45 h-index 30848 102 g-index

147 all docs

 $\begin{array}{c} 147 \\ \text{docs citations} \end{array}$

times ranked

147

10632 citing authors

#	Article	IF	CITATIONS
1	Event-Related Brain Potentials Following Incorrect Feedback in a Time-Estimation Task: Evidence for a "Generic―Neural System for Error Detection. Journal of Cognitive Neuroscience, 1997, 9, 788-798.	1.1	1,301
2	Coherence of gamma-band EEG activity as a basis for associative learning. Nature, 1999, 397, 434-436.	13.7	836
3	Review of the BCI Competition IV. Frontiers in Neuroscience, 2012, 6, 55.	1.4	686
4	Extensive reorganization of primary somatosensory cortex in chronic back pain patients. Neuroscience Letters, 1997, 224, 5-8.	1.0	628
5	Motor learning elicited by voluntary drive. Brain, 2003, 126, 866-872.	3.7	555
6	Think to Move: a Neuromagnetic Brain-Computer Interface (BCI) System for Chronic Stroke. Stroke, 2008, 39, 910-917.	1.0	537
7	Hand Movement Direction Decoded from MEG and EEG. Journal of Neuroscience, 2008, 28, 1000-1008.	1.7	376
8	An MEG-based brain–computer interface (BCI). Neurolmage, 2007, 36, 581-593.	2.1	360
9	The musician's brain: functional imaging of amateurs and professionals during performance and imagery. Neurolmage, 2003, 20, 1817-1829.	2.1	318
10	Adaptive AR modeling of nonstationary time series by means of Kalman filtering. IEEE Transactions on Biomedical Engineering, 1998, 45, 553-562.	2.5	260
11	The polar average reference effect: a bias in estimating the head surface integral in EEG recording. Clinical Neurophysiology, 1999, 110, 1149-1155.	0.7	248
12	Combination of Brain-Computer Interface Training and Goal-Directed Physical Therapy in Chronic Stroke: A Case Report. Neurorehabilitation and Neural Repair, 2010, 24, 674-679.	1.4	189
13	The Truth about Lying: Inhibition of the Anterior Prefrontal Cortex Improves Deceptive Behavior. Cerebral Cortex, 2010, 20, 205-213.	1.6	181
14	A review on directional information in neural signals for brain-machine interfaces. Journal of Physiology (Paris), 2009, 103, 244-254.	2.1	162
15	Prestimulus oscillatory power and connectivity patterns predispose conscious somatosensory perception. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, E417-25.	3.3	161
16	Somatosensory event-related potentials to painful and non-painful stimuli: effects of attention. Pain, 1989, 38, 303-312.	2.0	157
17	Chronic stroke recovery after combined BCI training and physiotherapy: A case report. Psychophysiology, 2011, 48, 578-582.	1.2	152
18	Mapping entrained brain oscillations during transcranial alternating current stimulation (tACS). Neurolmage, 2016, 140, 89-98.	2.1	144

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19	REG-ICA: A hybrid methodology combining Blind Source Separation and regression techniques for the rejection of ocular artifacts. Biomedical Signal Processing and Control, 2011, 6, 291-300.	3.5	140
20	Influence of social support and emotional context on pain processing and magnetic brain responses in fibromyalgia. Arthritis and Rheumatism, 2004, 50, 4035-4044.	6.7	135
21	Differential Activation in Somatosensory Cortex for Different Discrimination Tasks. Journal of Neuroscience, 2000, 20, 446-450.	1.7	117
22	The cortical somatotopic map and phantom phenomena in subjects with congenital limb atrophy and traumatic amputees with phantom limb pain. European Journal of Neuroscience, 1998, 10, 1095-1102.	1.2	115
23	How the brain reacts to social stress (exclusion) – A scoping review. Neuroscience and Biobehavioral Reviews, 2017, 80, 80-88.	2.9	105
24	A Placebo-Controlled Randomized Crossover Trial of the N-Methyl-d-Aspartic Acid Receptor Antagonist, Memantine, in Patients with Chronic Phantom Limb Pain. Anesthesia and Analgesia, 2004, 98, 408-413.	1.1	104
25	A test of brain electrical source analysis (BESA): a simulation study. Electroencephalography and Clinical Neurophysiology, 1994, 91, 295-310.	0.3	100
26	Functional Organization of Primary Somatosensory Cortex Depends on the Focus of Attention. Neurolmage, 2002, 17, 1451-1458.	2.1	92
27	Two types of exerciseâ€induced neuroplasticity in congenital hemiparesis: a transcranial magnetic stimulation, functional <scp>MRI</scp> , and magnetoencephalography study. Developmental Medicine and Child Neurology, 2013, 55, 941-951.	1.1	92
28	Dynamic organization of the somatosensory cortex induced by motor activity. Brain, 2001, 124, 2259-2267.	3.7	80
29	Somatosensory system in two types of motor reorganization in congenital hemiparesis: Topography and function. Human Brain Mapping, 2009, 30, 776-788.	1.9	80
30	A portable auditory P300 brain–computer interface with directional cues. Clinical Neurophysiology, 2013, 124, 327-338.	0.7	80
31	Coherent corticomuscular oscillations originate from primary motor cortex: Evidence from patients with early brain lesions. Human Brain Mapping, 2006, 27, 789-798.	1.9	77
32	Bilateral representations of touch in the primary somatosensory cortex. Cognitive Neuropsychology, 2016, 33, 48-66.	0.4	68
33	Plasticity of premotor cortico-muscular coherence in severely impaired stroke patients with hand paralysis. NeuroImage: Clinical, 2017, 14, 726-733.	1.4	68
34	Behavioral significance of input-dependent plasticity of human somatosensory cortex. NeuroReport, 2003, 14, 543-546.	0.6	65
35	The Contribution of Primary and Secondary Somatosensory Cortices to the Representation of Body Parts and Body Sides: An fMRI Adaptation Study. Journal of Cognitive Neuroscience, 2012, 24, 2306-2320.	1.1	62
36	tACS Phase Locking of Frontal Midline Theta Oscillations Disrupts Working Memory Performance. Frontiers in Cellular Neuroscience, 2016, 10, 120.	1.8	61

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37	Neurophysiological differences between perception and imagery. Cognitive Brain Research, 1994, 2, 77-86.	3.3	60
38	Comparing Tactile Pattern and Vibrotactile Frequency Discrimination: A Human fMRI Study. Journal of Neurophysiology, 2010, 103, 3115-3122.	0.9	59
39	Temporal Windows in Visual Processing: "Prestimulus Brain State―and "Poststimulus Phase Reset― Segregate Visual Transients on Different Temporal Scales. Journal of Neuroscience, 2014, 34, 1554-1565.	1.7	58
40	Lateralized alpha-band cortical networks regulate volitional modulation of beta-band sensorimotor oscillations. NeuroImage, 2014, 87, 147-153.	2.1	55
41	Differences Between MEG and High-Density EEG Source Localizations Using a Distributed Source Model in Comparison to fMRI. Brain Topography, 2015, 28, 87-94.	0.8	55
42	The distribution of mislocalizations across fingers demonstrates training-induced neuroplastic changes in somatosensory cortex. Experimental Brain Research, 2001, 139, 435-442.	0.7	53
43	Gender differences in response to pictures of nudes: a magnetoencephalographic study. Biological Psychology, 2003, 63, 129-147.	1.1	50
44	BOLD Adaptation in Vibrotactile Stimulation: Neuronal Networks Involved in Frequency Discrimination. Journal of Neurophysiology, 2007, 97, 264-271.	0.9	49
45	Gamma-band MEG activity to coherent motion depends on task-driven attention. NeuroReport, 1999, 10, 1997-2000.	0.6	48
46	Magnetoencephalography Reveals a Widespread Increase in Network Connectivity in Idiopathic/Genetic Generalized Epilepsy. PLoS ONE, 2015, 10, e0138119.	1.1	48
47	Modeling extended sources of event-related potentials using anatomical and physiological constraints. Human Brain Mapping, 1999, 8, 182-193.	1.9	47
48	Crossed cortico-spinal motor control after capsular stroke. European Journal of Neuroscience, 2007, 25, 2935-2945.	1.2	45
49	Early integration of bilateral touch in the primary somatosensory cortex. Human Brain Mapping, 2015, 36, 1506-1523.	1.9	45
50	The right hand knows what the left hand is feeling. Experimental Brain Research, 2005, 162, 366-373.	0.7	44
51	Predicting the recognition of natural scenes from single trial MEG recordings of brain activity. Neurolmage, 2008, 42, 1056-1068.	2.1	44
52	Quantifying the Link between Anatomical Connectivity, Gray Matter Volume and Regional Cerebral Blood Flow: An Integrative MRI Study. PLoS ONE, 2011, 6, e14801.	1.1	42
53	Multimodal effective connectivity analysis reveals seizure focus and propagation in musicogenic epilepsy. Neurolmage, 2015, 113, 70-77.	2.1	41
54	Cerebral processing of words and the development of chronic pain. Psychophysiology, 1997, 34, 474-481.	1.2	40

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55	Effects of co-activation on cortical organization and discrimination performance. NeuroReport, 2004, 15, 2669-2672.	0.6	40
56	Task-specific plasticity of somatosensory cortex in patients with writer's cramp. NeuroImage, 2003, 20, 1329-1338.	2.1	39
57	Can magnetoencephalography track the afferent information flow along white matter thalamo-cortical fibers?. Neurolmage, 2012, 60, 1092-1105.	2.1	39
58	Biofeedback of somatosensory event-related potentials: can individual pain sensations be modified by biofeedback-induced self-control of event-related potentials?. Pain, 1988, 35, 205-213.	2.0	37
59	Feature-specific electrophysiological correlates of texture segregation. Vision Research, 2003, 43, 7-19.	0.7	37
60	Increased Functional MEG Connectivity as a Hallmark of MRI-Negative Focal and Generalized Epilepsy. Brain Topography, 2018, 31, 863-874.	0.8	37
61	Weighted Phase Lag Index and Graph Analysis: Preliminary Investigation of Functional Connectivity during Resting State in Children. Computational and Mathematical Methods in Medicine, 2012, 2012, 1-8.	0.7	36
62	Reliability of Magnetoencephalography and High-Density Electroencephalography Resting-State Functional Connectivity Metrics. Brain Connectivity, 2019, 9, 539-553.	0.8	36
63	EEG correlates of coordinate processing during intermanual transfer. Experimental Brain Research, 2004, 159, 161-171.	0.7	34
64	The dynamics of visual pattern masking in natural scene processing: A magnetoencephalography study. Journal of Vision, 2005, 5, 10.	0.1	33
65	Waves of regret: A meg study of emotion and decision-making. Neuropsychologia, 2013, 51, 38-51.	0.7	31
66	Periventricular leukomalacia specifically affects cortical MEG response to biological motion. Annals of Neurology, 2006, 59, 415-419.	2.8	30
67	Instrument specific brain activation in sensorimotor and auditory representation in musicians. Neurolmage, 2013, 74, 37-44.	2.1	30
68	Activity patterns of human somatosensory cortex adapt dynamically to stimulus properties. NeuroReport, 2000, 11, 2977-2980.	0.6	29
69	Cerebro-muscular and cerebro-cerebral coherence in patients with pre- and perinatally acquired unilateral brain lesions. Neurolmage, 2007, 37, 1301-1314.	2.1	29
70	Feeling before knowing why: The role of the orbitofrontal cortex in intuitive judgments—an MEG study. Cognitive, Affective and Behavioral Neuroscience, 2014, 14, 1271-1285.	1.0	29
71	Neuromagnetic activity in medial parietooccipital cortex reflects the perception of visual motion during eye movements. Neurolmage, 2004, 21, 593-600.	2.1	28
72	Cortical processing of near-threshold tactile stimuli: An MEG study. Psychophysiology, 2010, 47, 523-534.	1.2	28

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73	Inferior frontal gyrus links visual and motor cortices during a visuomotor precision grip force task. Brain Research, 2016, 1650, 252-266.	1.1	28
74	Volitional Control of Neuromagnetic Coherence. Frontiers in Neuroscience, 2012, 6, 189.	1.4	27
75	Somatotopy and temporal dynamics of sensorimotor interactions: evidence from double afferent inhibition. European Journal of Neuroscience, 2015, 41, 1459-1465.	1.2	26
76	Prestimulus oscillatory alpha power and connectivity patterns predispose perceptual integration of an audio and a tactile stimulus. Human Brain Mapping, 2015, 36, 3486-3498.	1.9	26
77	Cortical activation during word reading and picture naming in dyslexic and non-reading-impaired children. Clinical Neurophysiology, 2006, 117, 1085-1097.	0.7	25
78	Neural Correlates of Finger Gnosis. Journal of Neuroscience, 2014, 34, 9012-9023.	1.7	25
79	Misleading functional magnetic resonance imaging mapping of the cortical hand representation in a 4-year-old boy with an arteriovenous malformation of the central region. Journal of Neurosurgery: Pediatrics, 2009, 4, 333-338.	0.8	24
80	Confidence interval of single dipole locations based on EEG data. Brain Topography, 1997, 10, 31-39.	0.8	23
81	Coordinate processing during the left-to-right hand transfer investigated by EEG. Experimental Brain Research, 2006, 168, 547-556.	0.7	23
82	Neuromagnetic Response to Body Motion and Brain Connectivity. Journal of Cognitive Neuroscience, 2009, 21, 837-846.	1.1	23
83	Cortical processing of near-threshold tactile stimuli in a paired-stimulus paradigm - an MEG study. European Journal of Neuroscience, 2011, 34, 641-651.	1.2	23
84	Reconstruction of extended cortical sources for EEG and MEG based on a Monte-Carlo-Markov-chain estimator. Human Brain Mapping, 2003, 18, 100-110.	1.9	22
85	The temporal sequence of magnetic brain activity for food categorization and memorization $\hat{a}\in$ " an exploratory study. Neurolmage, 2010, 52, 1584-1591.	2.1	22
86	Cortical correlates of susceptibility to upper limb freezing in Parkinson's disease. Clinical Neurophysiology, 2016, 127, 2386-2393.	0.7	22
87	Neuromuscular correlates of subthalamic stimulation and upper limb freezing in Parkinson's disease. Clinical Neurophysiology, 2016, 127, 610-620.	0.7	21
88	Learned control of inter-hemispheric connectivity: Effects on bimanual motor performance. Human Brain Mapping, 2017, 38, 4353-4369.	1.9	20
89	The involvement of ipsilateral temporoparietal cortex in tactile pattern working memory as reflected in beta event-related desynchronization. Neurolmage, 2007, 37, 1362-1370.	2.1	19
90	The Tactile Window to Consciousness is Characterized by Frequency-Specific Integration and Segregation of the Primary Somatosensory Cortex. Scientific Reports, 2016, 6, 20805.	1.6	19

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91	Stimulation artifact source separation (SASS) for assessing electric brain oscillations during transcranial alternating current stimulation (tACS). NeuroImage, 2021, 228, 117571.	2.1	19
92	Distinguishable neural correlates of verbs and nouns: A MEG study on homonyms. Neuropsychologia, 2014, 54, 87-97.	0.7	18
93	Involvement of top-down networks in the perception of facial emotions: A magnetoencephalographic investigation. Neurolmage, 2020, 222, 117075.	2.1	17
94	The mind of the mnemonists: An MEG and neuropsychological study of autistic memory savants. Behavioural Brain Research, 2010, 215, 114-121.	1.2	16
95	Effects of Aversive Stimuli on Prospective Memory. An Event-Related fMRI Study. PLoS ONE, 2011, 6, e26290.	1.1	16
96	Hyperexcitatory activity in visual cortex in homonymous hemianopia after stroke. Clinical Neurophysiology, 2001, 112, 336-343.	0.7	15
97	Objective Measurement of Tactile Mislocalization. IEEE Transactions on Biomedical Engineering, 2005, 52, 728-735.	2.5	15
98	Electromagnetic evidence of altered visual processing in autism. Neuropsychologia, 2011, 49, 3011-3017.	0.7	15
99	Multivariate EEG spectral analysis evidences the functional link between motor and visual cortex during integrative sensorimotor tasks. Biomedical Signal Processing and Control, 2012, 7, 221-227.	3.5	15
100	Optically pumped magnetometers reveal fasciculations non-invasively. Clinical Neurophysiology, 2021, 132, 2681-2684.	0.7	15
101	Classical Conditioning of Pain Responses. International Journal of Neuroscience, 1994, 78, 21-32.	0.8	14
102	Effects of water on cortical excitability in humans. European Journal of Neuroscience, 2002, 15, 528-538.	1.2	14
103	Source Activity Correlation Effects on LCMV Beamformers in a Realistic Measurement Environment. Computational and Mathematical Methods in Medicine, 2012, 2012, 1-8.	0.7	14
104	Cortical correlates of perceptual decision making during tactile spatial pattern discrimination. Human Brain Mapping, 2015, 36, 3339-3350.	1.9	14
105	Concurrent use of somatotopic and external reference frames in a tactile mislocalization task. Brain and Cognition, 2017, 111, 25-33.	0.8	14
106	Know Thyself: Behavioral Evidence for a Structural Representation of the Human Body. PLoS ONE, 2009, 4, e5418.	1.1	14
107	Feeling for space or for time: Task-dependent modulation of the cortical representation of identical vibrotactile stimuli. Neuroscience Letters, 2010, 480, 143-147.	1.0	13
108	Trading off stimulus salience for identity: A cueing approach to disentangle visual selection strategies. Vision Research, 2015, 113, 116-124.	0.7	12

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109	Detecting a Cortical Fingerprint of Parkinson's Disease for Closed-Loop Neuromodulation. Frontiers in Neuroscience, 2016, 10, 110.	1.4	11
110	Heritability of Magnetoencephalography Phenotypes Among Patients With Genetic Generalized Epilepsy and Their Siblings. Neurology, 2021, 97, e166-e177.	1.5	11
111	A somatosensoryâ€toâ€motor cascade of cortical areas engaged in perceptual decision making during tactile pattern discrimination. Human Brain Mapping, 2017, 38, 1172-1181.	1.9	10
112	Pain-related cerebral potentials in patients with frontal or parietal lobe lesions. Neuroscience Letters, 1995, 197, 137-140.	1.0	9
113	Modulation of Visual Stimulus Discrimination by Sustained Focal Attention: An MEG Study. , 2006, 47, 1225.		9
114	Biofeedback of Visual Evoked Potentials. International Journal of Neuroscience, 1986, 29, 291-303.	0.8	8
115	Combined electrophysiological and morphological phenotypes in patients with genetic generalized epilepsy and their healthy siblings. Epilepsia, 2022, 63, 1643-1657.	2.6	8
116	Neural mechanisms of savant calendar calculating in autism: An MEG-study of few single cases. Brain and Cognition, 2014, 90, 157-164.	0.8	7
117	Phosphene perception and pupillary responses to sinusoidal electrostimulation - For an objective measurement of retinal function. Experimental Eye Research, 2018, 176, 210-218.	1.2	7
118	Effects of hydration and hyperventilation on cortical complexity. Experimental Brain Research, 2003, 150, 341-355.	0.7	6
119	Mislocalization of nearâ€threshold tactile stimuli in humans: a central or peripheral phenomenon?. European Journal of Neuroscience, 2011, 33, 499-508.	1.2	6
120	Decoding Performance for Hand Movements: EEG vs. MEG. Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 2007, 2007, 5346-8.	0.5	5
121	Detecting nonlinear causal interactions between dynamical systems by non-uniform embedding of multiple time series., 2010, 2010, 102-5.		5
122	Hydraulic Driven Fast and Precise Nonmagnetic Tactile Stimulator for Neurophysiological and MEG Measurements. IEEE Transactions on Biomedical Engineering, 2012, 59, 2852-2858.	2.5	5
123	Timing matters! The neural signature of intuitive judgments differs according to the way information is presented. Consciousness and Cognition, 2015, 38, 71-87.	0.8	5
124	Effects of motor activity on the organization of primary somatosensory cortex. NeuroReport, 2006, 17, 39-43.	0.6	4
125	Abnormal Reactivity of the Primary Somatosensory Cortex During the Experience of Pain in Complex Regional Pain Syndrome: A Magnetoencephalograhic Case Study. Neurocase, 2006, 12, 280-285.	0.2	4
126	Spontaneous preâ€stimulus oscillatory activity shapes the way we look: A concurrent imaging and eyeâ€movement study. European Journal of Neuroscience, 2019, 49, 137-149.	1,2	4

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127	Oscillatory Potentials in Achromatopsia as a Tool for Understanding Cone Retinal Functions. International Journal of Molecular Sciences, 2021, 22, 12717.	1.8	4
128	Concurrent stable and unstable cortical correlates of human wrist movements. Human Brain Mapping, 2014, 35, 3867-3879.	1.9	3
129	A Tactile Virtual Reality for the Study of Active Somatosensation. Frontiers in Integrative Neuroscience, 2020, 14, 5.	1.0	3
130	Chapter 6 Coherence, cortico-cortical. Handbook of Clinical Neurophysiology, 2003, 1, 77-85.	0.0	2
131	Brain processes associated with target finding. Cognitive Brain Research, 2005, 25, 926-935.	3.3	2
132	Cortical Reorganization after Damage to the Central Nervous System. Neuro-Ophthalmology, 2009, 33, 142-148.	0.4	2
133	Enhancing the Signal of Corticomuscular Coherence. Computational and Mathematical Methods in Medicine, 2012, 2012, 1-10.	0.7	2
134	Differential enhancement of motor excitability with active and passive motor training. NeuroImage, 2001, 13, 1217.	2.1	1
135	Do cortical maps depend on the timing of sensory input? Experimental evidence and computational model. Biological Cybernetics, 2006, 94, 110-117.	0.6	1
136	Recognition Memory for High and Low Associative Stimuli in Autistic Individuals with Outstanding Memory Skill. Scandinavian Journal of Child and Adolescent Psychiatry and Psychology, 2013, 1, 43-50.	0.3	1
137	Selective attention modulates somatosensory cortex organization. NeuroImage, 2001, 13, 1134.	2.1	0
138	Reply: Periventricular leukomalacia disrupts brain connectivity. Annals of Neurology, 2006, 60, 269-270.	2.8	0
139	The Neural Correlates of Morphosyntactic Processes: A MEG Study of Noun and Verb Homophones. Procedia, Social and Behavioral Sciences, 2010, 6, 94-95.	0.5	0
140	A Non-Magnetic Rotating Disk Stimulator for the Study of Neuromagnetic Correlates of Sensorimotor Interaction. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2015, 23, 1078-1084.	2.7	0
141	A set of electroencephalographic (EEG) data recorded during amplitude-modulated transcranial alternating current stimulation (AM-tACS) targeting 10-Hz steady-state visually evoked potentials (SSVEP). Data in Brief, 2021, 36, 107011.	0.5	0