Risto J Ilmoniemi

List of Publications by Year in descending order

284 papers	31,713 citations	7568 77 h-index	4885 168 g-index
310 all docs	310 docs citations	310 times ranked	17099 citing authors

#	Article	IF	Citations
1	Safety, ethical considerations, and application guidelines for the use of transcranial magnetic stimulation in clinical practice and research. Clinical Neurophysiology, 2009, 120, 2008-2039.	1.5	4,364
2	Magnetoencephalographyâ€"theory, instrumentation, and applications to noninvasive studies of the working human brain. Reviews of Modern Physics, 1993, 65, 413-497.	45.6	3,939
3	Interpreting magnetic fields of the brain: minimum norm estimates. Medical and Biological Engineering and Computing, 1994, 32, 35-42.	2.8	1,692
4	Language-specific phoneme representations revealed by electric and magnetic brain responses. Nature, 1997, 385, 432-434.	27.8	1,091
5	Long-Range Temporal Correlations and Scaling Behavior in Human Brain Oscillations. Journal of Neuroscience, 2001, 21, 1370-1377.	3.6	937
6	Signal-space projection method for separating MEG or EEG into components. Medical and Biological Engineering and Computing, 1997, 35, 135-140.	2.8	701
7	Neuronal responses to magnetic stimulation reveal cortical reactivity and connectivity. NeuroReport, 1997, 8, 3537-3540.	1.2	675
8	Functional links between motor and language systems. European Journal of Neuroscience, 2005, 21, 793-797.	2.6	622
9	Safety and recommendations for TMS use in healthy subjects and patient populations, with updates on training, ethical and regulatory issues: Expert Guidelines. Clinical Neurophysiology, 2021, 132, 269-306.	1.5	553
10	Separate Time Behaviors of the Temporal and Frontal Mismatch Negativity Sources. NeuroImage, 2000, 12, 14-19.	4.2	445
11	Responses of the primary auditory cortex to pitch changes in a sequence of tone pips: Neuromagnetic recordings in man. Neuroscience Letters, 1984, 50, 127-132.	2.1	413
12	Human posterior auditory cortex gates novel sounds to consciousness. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 6809-6814.	7.1	395
13	Brain Signatures of Meaning Access in Action Word Recognition. Journal of Cognitive Neuroscience, 2005, 17, 884-892.	2.3	361
14	Prestimulus Oscillations Enhance Psychophysical Performance in Humans. Journal of Neuroscience, 2004, 24, 10186-10190.	3.6	350
15	Methodology for Combined TMS and EEG. Brain Topography, 2010, 22, 233-248.	1.8	339
16	Signal-space projections of MEG data characterize both distributed and well-localized neuronal sources. Electroencephalography and Clinical Neurophysiology, 1995, 95, 189-200.	0.3	324
17	Somatosensory evoked cerebral magnetic fields from SI and SII in man. Electroencephalography and Clinical Neurophysiology, 1984, 57, 254-263.	0.3	320
18	Consensus paper: Combining transcranial stimulation with neuroimaging. Brain Stimulation, 2009, 2, 58-80.	1.6	299

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19	Processing of novel sounds and frequency changes in the human auditory cortex: Magnetoencephalographic recordings. Psychophysiology, 1998, 35, 211-224.	2.4	280
20	Memory Traces for Words as Revealed by the Mismatch Negativity. NeuroImage, 2001, 14, 607-616.	4.2	277
21	Clinical utility and prospective of TMSâ€“EEG. Clinical Neurophysiology, 2019, 130, 802-844.	1.5	276
22	The effect of stimulus intensity on brain responses evoked by transcranial magnetic stimulation. Human Brain Mapping, 2004, 21, 154-164.	3.6	263
23	Brain responses reveal the learning of foreign language phonemes. Psychophysiology, 1999, 36, 638-642.	2.4	261
24	The role of the coil click in TMS assessed with simultaneous EEG. Clinical Neurophysiology, 1999, 110, 1325-1328.	1.5	247
25	Face-selective processing in human extrastriate cortex around 120 ms after stimulus onset revealed by magneto- and electroencephalography. Neuroscience Letters, 1998, 253, 147-150.	2.1	229
26	Instrumentation for the measurement of electric brain responses to transcranial magnetic stimulation. Medical and Biological Engineering and Computing, 1999, 37, 322-326.	2.8	224
27	Spatiotemporal Activity of a Cortical Network for Processing Visual Motion Revealed by MEG and fMRI. Journal of Neurophysiology, 1999, 82, 2545-2555.	1.8	217
28	SQUID magnetometers for low-frequency applications. Journal of Low Temperature Physics, 1989, 76, 287-386.	1.4	193
29	Ipsi- and contralateral EEG reactions to transcranial magnetic stimulation. Clinical Neurophysiology, 2002, 113, 175-184.	1.5	192
30	Superior Formation of Cortical Memory Traces for Melodic Patterns in Musicians. Learning and Memory, 2001, 8, 295-300.	1.3	185
31	Design, construction, and performance of a large-volume magnetic shield. IEEE Transactions on Magnetics, 1982, 18, 260-270.	2.1	183
32	Temporal window of integration of auditory information in the human brain. Psychophysiology, 1998, 35, 615-619.	2.4	168
33	Visual cortex activation in blind humans during sound discrimination. Neuroscience Letters, 1995, 183, 143-146.	2.1	166
34	Tonotopic auditory cortex and the magnetoencephalographic (MEG) equivalent of the mismatch negativity. Psychophysiology, 1993, 30, 537-540.	2.4	164
35	Discrimination of Speech and of Complex Nonspeech Sounds of Different Temporal Structure in the Left and Right Cerebral Hemispheres. NeuroImage, 2000, 12, 657-663.	4.2	158
36	Modulation of electroencephalographic responses to transcranial magnetic stimulation: evidence for changes in cortical excitability related to movement. European Journal of Neuroscience, 2003, 18, 1206-1212.	2.6	158

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37	Frequency change detection in human auditory cortex. Journal of Computational Neuroscience, 1999, 6, 99-120.	1.0	157
38	Electrophysiological evidence for cross-modal plasticity in humans with early- and late-onset blindness. Psychophysiology, 1997, 34, 213-216.	2.4	155
39	Background acoustic noise and the hemispheric lateralization of speech processing in the human brain: magnetic mismatch negativity study. Neuroscience Letters, 1998, 251, 141-144.	2.1	141
40	Functional Specialization of the Human Auditory Cortex in Processing Phonetic and Musical Sounds: A Magnetoencephalographic (MEG) Study. NeuroImage, 1999, 9, 330-336.	4.2	141
41	Testâ€“retest reliability of mismatch negativity for duration, frequency and intensity changes. Clinical Neurophysiology, 1999, 110, 1388-1393.	1.5	138
42	Significance of the second somatosensory cortex in sensorimotor integration. NeuroReport, 1996, 7, 1009-1012.	1.2	137
43	Face-specific responses from the human inferior occipito-temporal cortex. Neuroscience, 1997, 77, 49-55.	2.3	137
44	Combined mapping of human auditory EEG and MEG responses. Electroencephalography and Clinical Neurophysiology - Evoked Potentials, 1998, 108, 370-379.	2.0	132
45	Prefrontal transcranial magnetic stimulation produces intensity-dependent EEG responses in humans. NeuroImage, 2005, 24, 955-960.	4.2	132
46	Processing of complex sounds in the human auditory cortex as revealed by magnetic brain responses. Psychophysiology, 1996, 33, 369-375.	2.4	129
47	Activation of multiple cortical areas in response to somatosensory stimulation: Combined magnetoencephalographic and functional magnetic resonance imaging. , 1999, 8, 13-27.		129
48	A novel mechanism for evoked responses in the human brain. European Journal of Neuroscience, 2007, 25, 3146-3154.	2.6	123
49	Stimulus-induced change in long-range temporal correlations and scaling behaviour of sensorimotor oscillations. European Journal of Neuroscience, 2004, 19, 203-218.	2.6	121
50	Sensorimotor Cortex Localization: Comparison of Magnetoencephalography, Functional MR Imaging, and Intraoperative Cortical Mapping. Radiology, 2006, 241, 213-222.	7.3	120
51	The Effect of Stimulus Parameters on TMSâ€“EEG Muscle Artifacts. Brain Stimulation, 2013, 6, 371-376.	1.6	118
52	Hemispheric lateralization in preattentive processing of speech sounds. Neuroscience Letters, 1998, 258, 9-12.	2.1	114
53	Dopamine modulates involuntary attention shifting and reorienting: an electromagnetic study. Clinical Neurophysiology, 2002, 113, 1894-1902.	1.5	112
54	EEG oscillations and magnetically evoked motor potentials reflect motor system excitability in overlapping neuronal populations. Clinical Neurophysiology, 2010, 121, 492-501.	1.5	112

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55	Spatiotemporal dynamics of neural language processing: an MEG study using minimum-norm current estimates. NeuroImage, 2003, 20, 1020-1025.	4.2	111
56	Abstract phoneme representations in the left temporal cortex: magnetic mismatch negativity study. NeuroReport, 2002, 13, 1813-1816.	1.2	110
57	Functional differences between auditory cortices of the two hemispheres revealed by whole-head neuromagnetic recordings. Human Brain Mapping, 1993, 1, 48-56.	3.6	107
58	Grammar Processing Outside the Focus of Attention: an MEG Study. Journal of Cognitive Neuroscience, 2003, 15, 1195-1206.	2.3	107
59	Hybrid ultraâ€lowâ€field MRI and magnetoencephalography system based on a commercial wholeâ€head neuromagnetometer. Magnetic Resonance in Medicine, 2013, 69, 1795-1804.	3.0	106
60	Reproducibility in TMSâ€“EEG studies: A call for data sharing, standard procedures and effective experimental control. Brain Stimulation, 2019, 12, 787-790.	1.6	106
61	Seeing faces activates three separate areas outside the occipital visual cortex in man. Neuroscience, 1991, 43, 287-290.	2.3	104
62	Removal of large muscle artifacts from transcranial magnetic stimulation-evoked EEG by independent component analysis. Medical and Biological Engineering and Computing, 2011, 49, 397-407.	2.8	104
63	Sampling theory for neuromagnetic detector arrays. IEEE Transactions on Biomedical Engineering, 1993, 40, 859-869.	4.2	101
64	Distinct differences in cortical reactivity of motor and prefrontal cortices to magnetic stimulation. Clinical Neurophysiology, 2004, 115, 583-588.	1.5	101
65	Dynamic Neuroimaging of Brain Function. Journal of Clinical Neurophysiology, 1995, 12, 432-449.	1.7	98
66	Alcohol Reduces Prefrontal Cortical Excitability in Humans: A Combined TMS and EEG Study. Neuropsychopharmacology, 2003, 28, 747-754.	5.4	96
67	The relationship between peripheral and early cortical activation induced by transcranial magnetic stimulation. Neuroscience Letters, 2010, 478, 24-28.	2.1	95
68	Automatic and robust noise suppression in EEG and MEG: The SOUND algorithm. NeuroImage, 2018, 166, 135-151.	4.2	92
69	Tryptophan Depletion Effects on EEG and MEG Responses Suggest Serotonergic Modulation of Auditory Involuntary Attention in Humans. NeuroImage, 2002, 16, 1052-1061.	4.2	91
70	Selective localization of alpha brain activity with neuromagnetic measurements. Electroencephalography and Clinical Neurophysiology, 1984, 58, 569-572.	0.3	90
71	Distinct Gamma-Band Evoked Responses to Speech and Non-Speech Sounds in Humans. Journal of Neuroscience, 2002, 22, RC211-RC211.	3.6	89
72	Separation of contamination caused by coil clicks from responses elicited by transcranial magnetic stimulation. Clinical Neurophysiology, 1999, 110, 982-985.	1.5	88

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73	Ethanol Modulates Cortical Activity: Direct Evidence with Combined TMS and EEG. NeuroImage, 2001, 14, 322-328.	4.2	88
74	Inherited Auditory-Cortical Dysfunction in Twin Pairs Discordant for Schizophrenia. Biological Psychiatry, 2006, 60, 612-620.	1.3	88
75	Experimental Characterization of the Electric Field Distribution Induced by TMS Devices. Brain Stimulation, 2015, 8, 582-589.	1.6	87
76	Comparison of spherical and realistically shaped boundary element head models for transcranial magnetic stimulation navigation. Clinical Neurophysiology, 2013, 124, 1995-2007.	1.5	86
77	Focusing and targeting of magnetic brain stimulation using multiple coils. Medical and Biological Engineering and Computing, 1998, 36, 297-301.	2.8	85
78	Interhemispheric phase synchrony and amplitude correlation of spontaneous beta oscillations in human subjects: a magnetoencephalographic study. NeuroReport, 2001, 12, 2487-2491.	1.2	85
79	The Spatial and Temporal Distortion of Magnetic Fields Applied Inside a Magnetically Shielded Room. IEEE Transactions on Magnetics, 2012, 48, 53-61.	2.1	84
80	Multi-locus transcranial magnetic stimulationâ€"theory and implementation. Brain Stimulation, 2018, 11, 849-855.	1.6	84
81	Estimates of visually evoked cortical currents. Electroencephalography and Clinical Neurophysiology, 1992, 82, 225-236.	0.3	82
82	Suppression of transient 40-Hz auditory response by haloperidol suggests modulation of human selective attention by dopamine D2 receptors. Neuroscience Letters, 2000, 292, 29-32.	2.1	82
83	Age-related functional differences between auditory cortices. NeuroReport, 1995, 6, 1803-1806.	1.2	78
84	Tracking speech comprehension in space and time. NeuroImage, 2006, 31, 1297-1305.	4.2	76
85	Activation of ipsilateral primary sensorimotor cortex by median nerve stimulation. NeuroReport, 1995, 6, 2589-2593.	1.2	75
86	Dynamics of mu-rhythm suppression caused by median nerve stimulation: a magnetoencephalographic study in human subjects. Neuroscience Letters, 2000, 294, 163-166.	2.1	75
87	Prefrontal TMS produces smaller EEG responses than motor-cortex TMS: implications for rTMS treatment in depression. Psychopharmacology, 2005, 181, 16-20.	3.1	74
88	Brain activity index of distractibility in normal school-age children. Neuroscience Letters, 2001, 314, 147-150.	2.1	73
89	Somatotopic blocking of sensation with navigated transcranial magnetic stimulation of the primary somatosensory cortex. Human Brain Mapping, 2005, 26, 100-109.	3.6	71
90	Models of source currents in the brain. Brain Topography, 1993, 5, 331-336.	1.8	68

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91	Magnetoencephalography in studies of human cognitive brain function. Trends in Neurosciences, 1994, 17, 389-395.	8.6	68
92	Bilateral changes in excitability of sensorimotor cortices during unilateral movement: Combined electroencephalographic and transcranial magnetic stimulation study. Neuroscience, 2008, 152, 1119-1129.	2.3	68
93	Accelerometer-based method for correcting signal baseline changes caused by motion artifacts in medical near-infrared spectroscopy. Journal of Biomedical Optics, 2011, 16, 087005.	2.6	68
94	Recovering TMS-evoked EEG responses masked by muscle artifacts. NeuroImage, 2016, 139, 157-166.	4.2	68
95	SQUIDs in biomagnetism: a roadmap towards improved healthcare. Superconductor Science and Technology, 2016, 29, 113001.	3.5	67
96	A four-channel squid magnetometer for brain research. Electroencephalography and Clinical Neurophysiology, 1984, 58, 467-473.	0.3	66
97	Minimum-energy Coils for Transcranial Magnetic Stimulation: Application to Focal Stimulation. Brain Stimulation, 2015, 8, 124-134.	1.6	65
98	Transformation of multichannel magnetocardiographic signals to standard grid form. IEEE Transactions on Biomedical Engineering, 1995, 42, 72-78.	4.2	64
99	Evidence for Dissociation of Spatial and Nonspatial Auditory Information Processing. NeuroImage, 2001, 14, 1268-1277.	4.2	64
100	Noise affects speech-signal processing differently in the cerebral hemispheres. NeuroReport, 1999, 10, 2189-2192.	1.2	63
101	Projecting out muscle artifacts from TMS-evoked EEG. NeuroImage, 2011, 54, 2706-2710.	4.2	60
102	Coil design for real and sham transcranial magnetic stimulation. IEEE Transactions on Biomedical Engineering, 2000, 47, 145-148.	4.2	59
103	Coil optimisation for transcranial magnetic stimulation in realistic head geometry. Brain Stimulation, 2017, 10, 795-805.	1.6	59
104	Replicability of MEG and EEG measures of the auditory N1/N1m-response. Electroencephalography and Clinical Neurophysiology - Evoked Potentials, 1998, 108, 291-298.	2.0	58
105	Specific changes in somatosensory evoked magnetic fields during recovery from sensorimotor stroke. Annals of Neurology, 2000, 47, 353-360.	5.3	58
106	MEG-compatible multichannel EEG electrode array. Electroencephalography and Clinical Neurophysiology, 1996, 99, 568-570.	0.3	57
107	Electromagnetic responses of the human auditory cortex generated by sensory-memory based processing of tone-frequency changes. Neuroscience Letters, 1999, 276, 169-172.	2.1	57
108	Neurodynamic Studies on Emotional and Inverted Faces in an Oddball Paradigm. Brain Topography, 2003, 16, 265-268.	1.8	57

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109	Predicting Alzheimer's disease severity by means of TMSâ€“EEG coregistration. Neurobiology of Aging, 2019, 80, 38-45.	3.1	56
110	Effects of voluntary hyperventilation on cortical sensory responses. Experimental Brain Research, 1999, 125, 248-254.	1.5	55
111	Activation in the anterior left auditory cortex associated with phonological analysis of speech input: localization of the phonological mismatch negativity response with MEG. Cognitive Brain Research, 2004, 21, 106-113.	3.0	53
112	Effects of interstimulus interval on somatosensory evoked magnetic fields (SEFs): a hypothesis concerning SEF generation at the primary sensorimotor cortex. Electroencephalography and Clinical Neurophysiology - Evoked Potentials, 1996, 100, 479-487.	2.0	52
113	Memory-related processing of complex sound patterns in human auditory cortex. NeuroReport, 1993, 4, 391-394.	1.2	51
114	Interaction between representations of different features of auditory sensory memory. NeuroReport, 1993, 4, 1279.	1.2	50
115	Temporary and longer term retention of acoustic information. Psychophysiology, 2002, 39, 530-534.	2.4	49
116	Uncovering neural independent components from highly artifactual TMS-evoked EEG data. Journal of Neuroscience Methods, 2012, 209, 144-157.	2.5	49
117	Somatosensory evoked magnetic fields to median nerve stimulation: interhemispheric differences in a normal population. Electroencephalography and Clinical Neurophysiology - Evoked Potentials, 1997, 104, 480-487.	2.0	48
118	Resersal of cerebral asymmetry in schizophrenia measured with magnetoencephalography. Schizophrenia Research, 1998, 30, 209-219.	2.0	48
119	Local and remote functional connectivity of neocortex under the inhibition influence. NeuroImage, 2004, 22, 1390-1406.	4.2	48
120	Enhancement of GABA-related signalling is associated with increase of functional connectivity in human cortex. Human Brain Mapping, 2004, 22, 27-39.	3.6	47
121	EEG minimum-norm estimation compared with MEG dipole fitting in the localization of somatosensory sources at S1. Clinical Neurophysiology, 2004, 115, 534-542.	1.5	46
122	The rt-TEP tool: real-time visualization of TMS-Evoked Potentials to maximize cortical activation and minimize artifacts. Journal of Neuroscience Methods, 2022, 370, 109486.	2.5	46
123	EEG responses to combined somatosensory and transcranial magnetic stimulation. Clinical Neurophysiology, 2001, 112, 19-24.	1.5	45
124	Avoiding eddy-current problems in ultra-low-field MRI with self-shielded polarizing coils. Journal of Magnetic Resonance, 2011, 212, 154-60.	2.1	44
125	Human somatosensory cortical activation strengths: comparison between males and females and age-related changes. Brain Research, 1999, 818, 196-203.	2.2	43
126	Impaired preconscious auditory processing and cognitive functions in Alzheimer's disease. Clinical Neurophysiology, 1999, 110, 1942-1947.	1.5	41

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127	The interplay of lorazepam-induced brain oscillations: microstructural electromagnetic study. Clinical Neurophysiology, 2004, 115, 674-690.	1.5	41
128	Minimum-norm estimation in a boundary-element torso model. Medical and Biological Engineering and Computing, 1994, 32, 43-48.	2.8	40
129	Sustained fields of tones and glides reflect tonotopy of the auditory cortex. NeuroReport, 1995, 6, 841-844.	1.2	40
130	Parallel input makes the brain run faster. NeuroImage, 2008, 40, 1792-1797.	4.2	40
131	The impact of improved MEGâ€“MRI co-registration on MEG connectivity analysis. NeuroImage, 2019, 197, 354-367.	4.2	40
132	Closed-loop optimization of transcranial magnetic stimulation with electroencephalography feedback. Brain Stimulation, 2022, 15, 523-531.	1.6	40
133	Automated search of stimulation targets with closed-loop transcranial magnetic stimulation. NeuroImage, 2020, 220, 117082.	4.2	38
134	Multi-locus transcranial magnetic stimulation system for electronically targeted brain stimulation. Brain Stimulation, 2022, 15, 116-124.	1.6	38
135	Transcutaneous Vagus Nerve Stimulation Modulates Tinnitus-Related Beta- and Gamma-Band Activity. Ear and Hearing, 2015, 36, e76-e85.	2.1	37
136	A consensus statement on relative merits of EEG and MEG. Electroencephalography and Clinical Neurophysiology, 1992, 82, 317-319.	0.3	36
137	Theory of multichannel magnetic stimulation: toward functional neuromuscular rehabilitation. IEEE Transactions on Biomedical Engineering, 1999, 46, 646-651.	4.2	36
138	Transcranial magnetic stimulation as a tool for cognitive studies. Scandinavian Journal of Psychology, 2001, 42, 297-306.	1.5	36
139	From objective to subjective. NeuroReport, 1995, 6, 2317-2320.	1.2	35
140	AlzheimerÊ¼s disease affects parallel processing between the auditory cortices. NeuroReport, 1996, 7, 1365-1368.	1.2	35
141	Coil optimization for magnetic brain stimulation. Annals of Biomedical Engineering, 1997, 25, 840-849.	2.5	35
142	Auditory cortex evoked magnetic fields and lateralization of speech processing. NeuroReport, 2000, 11, 2893-2896.	1.2	35
143	Source-based artifact-rejection techniques available in TESA, an open-source TMSâ€“EEG toolbox. Brain Stimulation, 2020, 13, 1349-1351.	1.6	35
144	Combining rTMS With Intensive Language-Action Therapy in Chronic Aphasia: A Randomized Controlled Trial. Frontiers in Neuroscience, 2018, 12, 1036.	2.8	34

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145	Pitch change of a continuous tone activates two distinct processes in human auditory cortex: a study with whole-head magnetometer. Electroencephalography and Clinical Neurophysiology - Evoked Potentials, 1995, 96, 93-96.	2.0	33
146	Somatosensory evoked magnetic fields: relation to pre-stimulus mu rhythm. Clinical Neurophysiology, 2000, 111, 1227-1233.	1.5	33
147	Early cortical responses are sensitive to changes in face stimuli. Brain Research, 2010, 1346, 155-164.	2.2	33
148	Solving the problem of concomitant gradients in ultra-low-field MRI. Journal of Magnetic Resonance, 2010, 207, 213-219.	2.1	33
149	The impact of artifact removal approaches on TMSâ€“EEG signal. NeuroImage, 2021, 239, 118272.	4.2	33
150	Spontaneous Hemodynamic Oscillations during Human Sleep and Sleep Stage Transitions Characterized with Near-Infrared Spectroscopy. PLoS ONE, 2011, 6, e25415.	2.5	32
151	Transcranial Magnetic Stimulation: Applications for Neuropsychopharmacology. Journal of Psychopharmacology, 2004, 18, 257-261.	4.0	31
152	Brain responses reveal the learning of foreign language phonemes. Psychophysiology, 1999, 36, 638-642.	2.4	31
153	Truncated RAP-MUSIC (TRAP-MUSIC) for MEG and EEG source localization. NeuroImage, 2018, 167, 73-83.	4.2	30
154	Multi-trial evoked EEG and independent component analysis. Journal of Neuroscience Methods, 2014, 228, 15-26.	2.5	29
155	Auditory selective attention modulated by tryptophan depletion in humans. Neuroscience Letters, 2003, 340, 181-184.	2.1	28
156	Dealing with artifacts in TMS-evoked EEG. , 2015, 2015, 230-3.		28
157	Short-interval intracortical inhibition in human primary motor cortex: A multi-locus transcranial magnetic stimulation study. NeuroImage, 2019, 203, 116194.	4.2	28
158	Somatosensory evoked magnetic fields from the primary somatosensory cortex (SI) in acute stroke. Clinical Neurophysiology, 1999, 110, 916-923.	1.5	27
159	Magnetoencephalographic (MEG) localization of the auditory N400m: effects of stimulus duration. NeuroReport, 2001, 12, 249-253.	1.2	27
160	Plastic cortical changes induced by learning to communicate with non-speech sounds. NeuroReport, 2003, 14, 1683-1687.	1.2	27
161	Testâ€“retest stability of the magnetic mismatch response (MMNm). Clinical Neurophysiology, 2005, 116, 1897-1905.	1.5	27
162	All-planar SQUIDs and pickup coils for combined MEG and MRI. Superconductor Science and Technology, 2011, 24, 075020.	3.5	27

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163	Biopotential amplifier for simultaneous operation with biomagnetic instruments. Medical and Biological Engineering and Computing, 1997, 35, 402-408.	2.8	26
164	Context modulates processing of speech sounds in the right auditory cortex of human subjects. Neuroscience Letters, 2002, 331, 91-94.	2.1	26
165	Magnetic-field modeling with surface currents. Part I. Physical and computational principles of bfieldtools. Journal of Applied Physics, 2020, 128, .	2.5	26
166	Serotonin Modulates Early Cortical Auditory Processing in Healthy Subjects. Evidence from MEG with Acute Tryptophan Depletion. Neuropsychopharmacology, 2002, 27, 862-868.	5.4	25
167	Magnetometer Position Indicator for Multichannel MEG. , 1989, , 693-696.		24
168	MEG versus EEG localization test. Annals of Neurology, 1991, 30, 222-223.	5.3	24
169	Somatosensory Evoked Magnetic Fields From Primary Sensorimotor Cortex in Juvenile Neuronal Ceroid Lipofuscinosis. Journal of Child Neurology, 1997, 12, 355-360.	1.4	24
170	Magnetic field modeling with surface currents. Part II. Implementation and usage of bfieldtools. Journal of Applied Physics, 2020, 128, .	2.5	24
171	Estimates of Neuronal Current Distributions. Acta Oto-Laryngologica, 1991, 111, 80-87.	0.9	23
172	Noninvasive extraction of microsecondâ€scale dynamics from human motor cortex. Human Brain Mapping, 2018, 39, 2405-2411.	3.6	23
173	TMS with fast and accurate electronic control: Measuring the orientation sensitivity of corticomotor pathways. Brain Stimulation, 2022, 15, 306-315.	1.6	23
174	TMS-evoked changes in brain-state dynamics quantified by using EEG data. Frontiers in Human Neuroscience, 2013, 7, 155.	2.0	22
175	Characterizing the local oscillatory content of spontaneous cortical activity during mental imagery. Cognitive Brain Research, 1995, 2, 243-249.	3.0	21
176	Preserved stimulus deviance detection in Alzheimer's disease. NeuroReport, 2001, 12, 1649-1652.	1.2	21
177	Differences between auditory evoked responses recorded during spatial and nonspatial working memory tasks. NeuroImage, 2003, 20, 1181-1192.	4.2	21
178	Current-density imaging using ultra-low-field MRI with zero-field encoding. Magnetic Resonance Imaging, 2014, 32, 766-770.	1.8	21
179	Spatial sampling of MEG and EEG based on generalized spatial-frequency analysis and optimal design. NeuroImage, 2021, 245, 118747.	4.2	21
180	Temporal span of human echoic memory and mismatch negativity. NeuroReport, 1999, 10, 1305-1308.	1.2	20

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181	Electroencephalogram and repetitive transcranial magnetic stimulation. Depression and Anxiety, 2000, 12, 166-169.	4.1	20
182	Scopolamine reduces the P35m and P60m deflections of the human somatosensory evoked magnetic fields. NeuroReport, 2001, 12, 619-623.	1.2	20
183	Mismatch negativity indexes auditory temporal resolution: evidence from event-related potential (ERP) and event-related field (ERF) recordings. Cognitive Brain Research, 2003, 17, 685-691.	3.0	20
184	Phase shift detection in thalamocortical oscillations using magnetoencephalography in humans. Neuroscience Letters, 2004, 362, 48-52.	2.1	20
185	Cortical generators of slow evoked responses elicited by spatial and nonspatial auditory working memory tasks. Clinical Neurophysiology, 2005, 116, 1644-1654.	1.5	20
186	Temperature dependence of relaxation times and temperature mapping in ultra-low-field MRI. Journal of Magnetic Resonance, 2013, 235, 50-57.	2.1	20
187	Conductive shield for ultra-low-field magnetic resonance imaging: Theory and measurements of eddy currents. Journal of Applied Physics, 2014, 115, 103902.	2.5	19
188	Processing of novel sounds and frequency changes in the human auditory cortex: Magnetoencephalographic recordings. Psychophysiology, 1998, 35, 211-224.	2.4	19
189	Current-density imaging using ultra-low-field MRI with adiabatic pulses. Magnetic Resonance Imaging, 2014, 32, 54-59.	1.8	18
190	Blind Source Separation of Event-Related EEG/MEG. IEEE Transactions on Biomedical Engineering, 2017, 64, 2054-2064.	4.2	18
191	Individual Activation Patterns After the Stimulation of Different Motor Areas: A Transcranial Magnetic Stimulationâ€“Electroencephalography Study. Brain Connectivity, 2018, 8, 420-428.	1.7	18
192	Method for locating a small magnetic object in the human body. IEEE Transactions on Biomedical Engineering, 1988, 35, 561-564.	4.2	17
193	Basic Principles of Navigated TMS. , 2017, , 3-29.		17
194	Magnetic-Stimulation-Related Physiological Artifacts in Hemodynamic Near-Infrared Spectroscopy Signals. PLoS ONE, 2011, 6, e24002.	2.5	17
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