Risto NÃ¤Ã¤tÃ¤nen

List of Publications by Year
in descending order

240 papers	32,037 citations	88 h-index	172 g-index
		3933	4432
241 all docs	241 docs citations	241 times ranked	10381 citing authors

#	Article	IF	Citations
1	The N1 Wave of the Human Electric and Magnetic Response to Sound: A Review and an Analysis of the Component Structure. Psychophysiology, 1987, 24, 375-425.	2.4	2,857
2	The role of attention in auditory information processing as revealed by event-related potentials and other brain measures of cognitive function. Behavioral and Brain Sciences, 1990, 13, 201-233.	0.7	1,514
3	Language-specific phoneme representations revealed by electric and magnetic brain responses. Nature, 1997, 385, 432-434.	27.8	1,091
4	The concept of auditory stimulus representation in cognitive neuroscience.. Psychological Bulletin, 1999, 125, 826-859.	6.1	939
5	Event-related potentials in clinical research: Guidelines for eliciting, recording, and quantifying mismatch negativity, P300, and N400. Clinical Neurophysiology, 2009, 120, 1883-1908.	1.5	934
6	Neural Mechanisms of Involuntary Attention to Acoustic Novelty and Change. Journal of Cognitive Neuroscience, 1998, 10, 590-604.	2.3	758
7	â€˜Primitive intelligenceâ€™ in the auditory cortex. Trends in Neurosciences, 2001, 24, 283-288.	8.6	726
8	Neuronal responses to magnetic stimulation reveal cortical reactivity and connectivity. NeuroReport, 1997, 8, 3537-3540.	1.2	675
9	Processing negativity: An evoked-potential reflection.. Psychological Bulletin, 1982, 92, 605-640.	6.1	631
10	Early selective-attention effects on the evoked potential: A critical review and reinterpretation. Biological Psychology, 1979, 8, 81-136.	2.2	593
11	The mismatch negativity (MMN): towards the optimal paradigm. Clinical Neurophysiology, 2004, 115, 140-144.	1.5	581
12	The perception of speech sounds by the human brain as reflected by the mismatch negativity (MMN) and its magnetic equivalent (MMNm). Psychophysiology, 2001, 38, 1-21.	2.4	576
13	Development of language-specific phoneme representations in the infant brain. Nature Neuroscience, 1998, 1, 351-353.	14.8	564
14	Memory-based or afferent processes in mismatch negativity (MMN): A review of the evidence. Psychophysiology, 2005, 42, 25-32.	2.4	533
15	The Mismatch Negativity. Ear and Hearing, 1995, 16, 6-18.	2.1	446
16	Auditory processing that leads to conscious perception: A unique window to central auditory processing opened by the mismatch negativity and related responses. Psychophysiology, 2011, 48, 4-22.	2.4	368
17	Do event-related potentials reveal the mechanism of the auditory sensory memory in the human brain?. Neuroscience Letters, 1989, 98, 217-221.	2.1	335
18	Adaptive modeling of the unattended acoustic environment reflected in the mismatch negativity event-related potential. Brain Research, 1996, 742, 239-252.	2.2	318

#	Article	IF	Citations
19	Intermodal selective attention. II. Effects of attentional load on processing of auditory and visual stimuli in central space. Electroencephalography and Clinical Neurophysiology, 1992, 82, 356-368.	0.3	313
20	Development of a memory trace for a complex sound in the human brain. NeuroReport, 1993, 4, 503-506.	1.2	307
21	Memory prerequisites of mismatch negativity in the auditory event-related potential (ERP).. Journal of Experimental Psychology: Learning Memory and Cognition, 1993, 19, 909-921.	0.9	297
22	Right hemisphere dominance of different mismatch negativities. Electroencephalography and Clinical Neurophysiology, 1991, 78, 466-479.	0.3	289
23	Mismatch negativity-a unique measure of sensory processing in audition. International Journal of Neuroscience, 1995, 80, 317-337.	1.6	287
24	Memory Traces for Words as Revealed by the Mismatch Negativity. NeuroImage, 2001, 14, 607-616.	4.2	277
25	Brain responses reveal the learning of foreign language phonemes. Psychophysiology, 1999, 36, 638-642.	2.4	261
26	Maturation of cortical sound processing as indexed by event-related potentials. Clinical Neurophysiology, 2002, 113, 870-882.	1.5	258
27	Temporal window of integration revealed by MMN to sound omission. NeuroReport, 1997, 8, 1971-1974.	1.2	255
28	Do event-related potentials to infrequent decrements in duration of auditory stimuli demonstrate a memory trace in man?. Neuroscience Letters, 1989, 107, 347-352.	2.1	254
29	The discrimination of and orienting to speech and non-speech sounds in children with autism. Brain Research, 2005, 1066, 147-157.	2.2	250
30	Mismatch negativity to change in spatial location of an auditory stimulus. Electroencephalography and Clinical Neurophysiology, 1989, 73, 129-141.	0.3	241
31	The duration of a neuronal trace of an auditory stimulus as indicated by event-related potentials. Biological Psychology, 1987, 24, 183-195.	2.2	225
32	Short-Term Habituation and Dishabituation of the Mismatch Negativity of the ERP. Psychophysiology, 1984, 21, 434-441.	2.4	222
33	Deviant Matters: Duration, Frequency, and Intensity Deviants Reveal Different Patterns of Mismatch Negativity Reduction in Early and Late Schizophrenia. Biological Psychiatry, 2008, 63, 58-64.	1.3	221
34	Cross-modal reorganization of human cortical functions. Trends in Neurosciences, 2000, 23, 115-120.	8.6	218
35	Measurement of extensive auditory discrimination profiles using the mismatch negativity (MMN) of the auditory event-related potential (ERP). Clinical Neurophysiology, 2007, 118, 177-185.	1.5	216
36	Mismatch negativity: clinical research and possible applications. International Journal of Psychophysiology, 2003, 48, 179-188.	1.0	214

#	Article	IF	Citations
37	Central auditory dysfunction in schizophrenia as revealed by the mismatch negativity (MMN) and its magnetic equivalent MMNm: a review. International Journal of Neuropsychopharmacology, 2009, 12, 125.	2.1	211
38	Newborn infants can organize the auditory world. Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 11812-11815.	7.1	186
39	Superior Formation of Cortical Memory Traces for Melodic Patterns in Musicians. Learning and Memory, 2001, 8, 295-300.	1.3	185
40	Human somatosensory evoked potentials to mechanical pulses and vibration: contributions of SI and SII somatosensory cortices to P50 and P100 components. Electroencephalography and Clinical Neurophysiology, 1990, 75, 13-21.	0.3	184
41	The mismatch negativity: an index of cognitive decline in neuropsychiatric and neurological diseases and in ageing. Brain, 2011, 134, 3435-3453.	7.6	180
42	Pre-attentive detection of vowel contrasts utilizes both phonetic and auditory memory representations. Cognitive Brain Research, 1999, 7, 357-369.	3.0	177
43	Representation of abstract attributes of auditory stimuli in the human brain. NeuroReport, 1992, 3, 1149-1151.	1.2	175
44	Temporal window of integration of auditory information in the human brain. Psychophysiology, 1998, 35, 615-619.	2.4	168
45	Neural representations of abstract stimulus features in the human brain as reflected by the mismatch negativity. NeuroReport, 1994, 5, 844-846.	1.2	167
46	Mismatch Negativity (MMN) as an Index of Cognitive Dysfunction. Brain Topography, 2014, 27, 451-466.	1.8	163
47	Musical scale properties are automatically processed in the human auditory cortex. Brain Research, 2006, 1117, 162-174.	2.2	162
48	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
49	Frequency change detection in human auditory cortex. Journal of Computational Neuroscience, 1999, 6, 99-120.	1.0	157
50	Learning-induced neural plasticity of speech processing before birth. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 15145-15150.	7.1	156
51	Implications of ERP data for psychological theories of attention. Biological Psychology, 1988, 26, 117-163.	2.2	152
52	Mismatch negativity (MMN): perspectives for application. International Journal of Psychophysiology, 2000, 37, 3-10.	1.0	151
53	Heschl's Gyrus, Posterior Superior Temporal Gyrus, and Mid-Ventrolateral Prefrontal Cortex Have Different Roles in the Detection of Acoustic Changes. Journal of Neurophysiology, 2007, 97, 2075-2082.	1.8	149
54	The perception of speech sounds by the human brain as reflected by the mismatch negativity (MMN) and its magnetic equivalent (MMNm). Psychophysiology, 2001, 38, 1-21.	2.4	146

#	Article	IF	Citations
55	Top-down effects can modify the initially stimulus-driven auditory organization. Cognitive Brain Research, 2002, 13, 393-405.	3.0	143
56	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
57	Brain mechanism of selective listening reflected by event-related potentials. Electroencephalography and Clinical Neurophysiology - Evoked Potentials, 1987, 68, 458-470.	2.0	137
58	Automatic auditory intelligence: An expression of the sensoryâ€“cognitive core of cognitive processes. Brain Research Reviews, 2010, 64, 123-136.	9.0	135
59	Basic auditory dysfunction in dyslexia as demonstrated by brain activity measurements. Psychophysiology, 2000, 37, 262-266.	2.4	134
60	Cortical Activity Elicited by Changes in Auditory Stimuli: Different Sources for the Magnetic N1OOm and Mismatch Responses. Psychophysiology, 1991, 28, 21-29.	2.4	131
61	Event-Related Potentials and Autonomic Responses to a Change in Unattended Auditory Stimuli. Psychophysiology, 1992, 29, 523-534.	2.4	128
62	The diminishing time-uncertainty with the lapse of time after the warning signal in reaction-time experiments with varying fore-periods. Acta Psychologica, 1970, 34, 399-419.	1.5	126
63	Deficient auditory processing in children with Asperger Syndrome, as indexed by event-related potentials. Neuroscience Letters, 2003, 338, 197-200.	2.1	126
64	A method for generating natural-sounding speech stimuli for cognitive brain research. Clinical Neurophysiology, 1999, 110, 1329-1333.	1.5	124
65	Frequency discrimination at different frequency levels as indexed by electrophysiological and behavioral measures. Cognitive Brain Research, 2004, 20, 26-36.	3.0	124
66	The sound of music: Differentiating musicians using a fast, musical multi-feature mismatch negativity paradigm. Neuropsychologia, 2012, 50, 1432-1443.	1.6	121
67	Word-specific cortical activity as revealed by the mismatch negativity. Psychophysiology, 2004, 41, 106-112.	2.4	118
68	Preattentive extraction of abstract feature conjunctions from auditory stimulation as reflected by the mismatch negativity (MMN). Psychophysiology, 2001, 38, 359-365.	2.4	117
69	Event-Related Potentials to Infrequent Changes in Synthesized Phonetic Stimuli. Journal of Cognitive Neuroscience, 1990, 2, 344-357.	2.3	115
70	Analysis of speech sounds is left-hemisphere predominant at 100â€“150 ms after sound onset. NeuroReport, 1999, 10, 1113-1117.	1.2	112
71	Abstract phoneme representations in the left temporal cortex: magnetic mismatch negativity study. NeuroReport, 2002, 13, 1813-1816.	1.2	110
72	The auditory sensory memory trace decays rapidlyin newborns. Scandinavian Journal of Psychology, 2002, 43, 33-39.	1.5	109

#	Article	IF	Citations
73	Event-related brain potentials reflect traces of echoic memory in humans. Perception & Psychophysics, 1993, 53, 443-449.	2.3	108
74	Grammar Processing Outside the Focus of Attention: an MEG Study. Journal of Cognitive Neuroscience, 2003, 15, 1195-1206.	2.3	107
75	Visual mismatch negativity (vMMN): A review and meta-analysis of studies in psychiatric and neurological disorders. Cortex, 2016, 80, 76-112.	2.4	107
76	Effects of auditory distraction on electrophysiological brain activity and performance in children aged 8-13 years. Psychophysiology, 2004, 41, 30-36.	2.4	106
77	Effects of an NMDA-receptor antagonist MK-801 on an MMN-like response recorded in anesthetized rats. Brain Research, 2008, 1203, 97-102.	2.2	106
78	The adaptive brain: A neurophysiological perspective. Progress in Neurobiology, 2010, 91, 55-67.	5.7	106
79	Separate Neural Processing of Timbre Dimensions in Auditory Sensory Memory. Journal of Cognitive Neuroscience, 2006, 18, 1959-1972.	2.3	103
80	Grouping of Sequential Soundsâ€"An Event-Related Potential Study Comparing Musicians and Nonmusicians. Journal of Cognitive Neuroscience, 2004, 16, 331-338.	2.3	101
81	Neural plasticity in processing of sound location by the early blind: an event-related potential study. Electroencephalography and Clinical Neurophysiology - Evoked Potentials, 1992, 84, 469-472.	2.0	100
82	Mismatch Negativity Outside Strong Attentional Focus: A Commentary on Woldorff et al. (1991). Psychophysiology, 1991, 28, 478-484.	2.4	97
83	Event-related potential features indexing central auditory discrimination by newborns. Cognitive Brain Research, 2002, 13, 101-113.	3.0	96
84	Processing acoustic change and novelty in newborn infants. European Journal of Neuroscience, 2007, 26, 265-274.	2.6	95
85	Evoked potential, EEG, and slow potential correlates of selective attention. Acta Psychologica, 1970, 33, 178-192.	1.5	92
86	The Effect of Small Variation of the Frequent Auditory Stimulus on the Event-Related Brain Potential to the Infrequent Stimulus. Psychophysiology, 1990, 27, 228-235.	2.4	92
87	The mismatch negativity in evaluating central auditory dysfunction in dyslexia. Neuroscience and Biobehavioral Reviews, 2001, 25, 535-543.	6.1	92
88	Cognition and Eventâ€Related Potentials. Annals of the New York Academy of Sciences, 1984, 425, 24-38.	3.8	90
89	Small Pitch Separation and the Selective-Attention Effect on the ERP. Psychophysiology, 1986, 23, 189-197.	2.4	90
90	Auditory organization of sound sequences by a temporal or numerical regularityâ€"a mismatch negativity study comparing musicians and non-musicians. Cognitive Brain Research, 2005, 23, 270-276.	3.0	90

#	Article	IF	Citations
91	Mismatch negativity to slight pitch changes outside strong attentional focus. Biological Psychology, 1993, 37, 23-41.	2.2	89
92	Interactions between Transient and Long-Term Auditory Memory as Reflected by the Mismatch Negativity. Journal of Cognitive Neuroscience, 1996, 8, 403-415.	2.3	89
93	Distinct Gamma-Band Evoked Responses to Speech and Non-Speech Sounds in Humans. Journal of Neuroscience, 2002, 22, RC211-RC211.	3.6	89
94	Separation of contamination caused by coil clicks from responses elicited by transcranial magnetic stimulation. Clinical Neurophysiology, 1999, 110, 982-985.	1.5	88
95	Implicit, Intuitive, and Explicit Knowledge of Abstract Regularities in a Sound Sequence: An Event-related Brain Potential Study. Journal of Cognitive Neuroscience, 2006, 18, 1292-1303.	2.3	88
96	Human auditory-cortex mechanisms of preattentive sound discrimination. Neuroscience Letters, 2000, 280, 87-90.	2.1	86
97	Mismatch negativity (MMN) deficiency: A break-through biomarker in predicting psychosis onset. International Journal of Psychophysiology, 2015, 95, 338-344.	1.0	86
98	Effects of Haloperidol on Selective Attention A Combined Whole-Head MEG and High-Resolution EEG Study. Neuropsychopharmacology, 2001, 25, 498-504.	5.4	85
99	Neuronal populations in the human brain extracting invariant relationships from acoustic variance. Neuroscience Letters, 1999, 265, 179-182.	2.1	84
100	Mismatch negativity shows that 3â€“6-year-old children can learn to discriminate non-native speech sounds within two months. Neuroscience Letters, 2002, 325, 187-190.	2.1	84
101	A kind of auditory â€˜primitive intelligenceâ€™ already present at birth. European Journal of Neuroscience, 2005, 21, 3201-3204.	2.6	84
102	New fast mismatch negativity paradigm for determining the neural prerequisites for musical ability. Cortex, 2011, 47, 1091-1098.	2.4	84
103	Event-related potentials reveal how non-attended complex sound patterns are represented by the human brain. Neuroscience Letters, 1992, 146, 183-186.	2.1	79
104	Event-related potentials reveal a memory trace for temporal features. NeuroReport, 1993, 5, 310-312.	1.2	79
105	Long-term exposure to noise impairs cortical sound processing and attention control. Psychophysiology, 2004, 41, 875-881.	2.4	78
106	Training the Brain to Weight Speech Cues Differently: A Study of Finnish Second-language Users of English. Journal of Cognitive Neuroscience, 2010, 22, 1319-1332.	2.3	78
107	Fast multi-feature paradigm for recording several mismatch negativities (MMNs) to phonetic and acoustic changes in speech sounds. Biological Psychology, 2009, 82, 219-226.	2.2	77
108	Speech-sound discrimination in neonates as measured with MEG. NeuroReport, 2004, 15, 2089-2092.	1.2	76

#	Article	IF	Citations
109	Auditory magnetic responses of healthy newborns. NeuroReport, 2003, 14, 1871-1875.	1.2	75
110	Reading skill and neural processing accuracy improvement after a 3-hour intervention in preschoolers with difficulties in reading-related skills. Brain Research, 2012, 1448, 42-55.	2.2	75
111	Automatic time perception in the human brain for intervals ranging from milliseconds to seconds. Psychophysiology, 2004, 41, 660-663.	2.4	74
112	Brain activity index of distractibility in normal school-age children. Neuroscience Letters, 2001, 314, 147-150.	2.1	73
113	Temporal constraints of auditory event synthesis. NeuroReport, 1998, 9, 495-499.	1.2	71
114	Temporal integration of auditory stimulus deviance as reflected by the mismatch negativity. Neuroscience Letters, 1999, 264, 161-164.	2.1	70
115	Native and foreign vowel discrimination as indexed by the mismatch negativity (MMN) response. Neuroscience Letters, 2003, 352, 25-28.	2.1	70
116	Mismatch negativity (MMN) as biomarker predicting psychosis in clinically at-risk individuals. Biological Psychology, 2016, 116, 36-40.	2.2	70
117	Children's Auditory Event-Related Potentials Index Sound Complexity and â€œSpeechnessâ€• International Journal of Neuroscience, 2001, 109, 245-260.	1.6	69
118	The role of blind humansâ€™ visual cortex in auditory change detection. Neuroscience Letters, 2005, 379, 127-131.	2.1	69
119	Criteria for determining whether mismatch responses exist in animal models: Focus on rodents. Biological Psychology, 2016, 116, 28-35.	2.2	69
120	Stimulus selection during auditory spatial attention as expressed by event-related potentials. Biological Psychology, 1987, 24, 153-162.	2.2	68
121	Magnetoencephalography in studies of human cognitive brain function. Trends in Neurosciences, 1994, 17, 389-395.	8.6	68
122	Linguistic relevance of duration within the native language determines the accuracy of speech-sound duration processing. Cognitive Brain Research, 2003, 16, 492-495.	3.0	68
123	Abnormal pattern of cortical speech feature discrimination in 6-year-old children at risk for dyslexia. Brain Research, 2010, 1335, 53-62.	2.2	65
124	Phonetic invariance in the human auditory cortex. NeuroReport, 1993, 4, 1356-1358.	1.2	64
125	Auditory Discrimination After Left-Hemisphere Stroke. Stroke, 2003, 34, 1746-1751.	2.0	63
126	Mismatch negativity (MMN) as an index of central auditory system plasticity. International Journal of Audiology, 2008, 47, S16-S20.	1.7	63

#	Article	IF	Citations
127	Preattentive auditory context effects. Cognitive, Affective and Behavioral Neuroscience, 2003, 3, 57-77.	2.0	61
128	Mismatch negativity subcomponents and ethyl alcohol. Biological Psychology, 1996, 43, 13-25.	2.2	60
129	Auditory discrimination profiles of speech sound changes in 6-year-old children as determined with the multi-feature MMN paradigm. Clinical Neurophysiology, 2009, 120, 916-921.	1.5	60
130	vMMN for schematic faces: automatic detection of change in emotional expression. Frontiers in Human Neuroscience, 2013, 7, 714.	2.0	60
131	Event-related potentials in auditory backward recognition masking: A new way to study the neurophysiological basis of sensory memory in humans. Neuroscience Letters, 1992, 140, 239-242.	2.1	59
132	Practiced musical style shapes auditory skills. Annals of the New York Academy of Sciences, 2012, 1252, 139-146.	3.8	59
133	Neurophysiologic correlates of deficient phonological representations and object naming in prematurely born children. Clinical Neurophysiology, 2004, 115, 179-187.	1.5	57
134	The processing of speech and non-speech sounds in aphasic patients as reflected by the mismatch negativity (MMN). Neuroscience Letters, 2004, 366, 235-240.	2.1	57
135	Mismatch negativity (MMN) elicited by changes in phoneme length: A cross-linguistic study. Brain Research, 2006, 1072, 175-185.	2.2	56
136	Low Dose of Ethanol Suppresses Mismatch Negativity of Auditory Event-Related Potentials. Alcoholism: Clinical and Experimental Research, 1995, 19, 607-610.	2.4	55
137	Stimulus duration and the sensory memory trace: An event-related potential study. Biological Psychology, 1993, 35, 139-152.	2.2	54
138	Preattentive representation of feature conjunctions for concurrent spatially distributed auditory objects. Cognitive Brain Research, 2005, 25, 169-179.	3.0	53
139	Auditory cortical change detection in adults with Asperger syndrome. Neuroscience Letters, 2007, 414, 136-140.	2.1	53
140	Binaural information can converge in abstract memory traces. Psychophysiology, 1998, 35, 483-487.	2.4	52
141	The additivity of the auditory feature analysis in the human brain as indexed by the mismatch negativity: 1+1â‰ˆ2 but 1+1+1<3. Neuroscience Letters, 2001, 301, 179-182.	2.1	52
142	Can Echoic Memory Store Two Traces Simultaneously? A Study of Event-Related Brain Potentials. Psychophysiology, 1992, 29, 337-349.	2.4	51
143	Auditory stream segregation processes operate similarly in school-aged children and adults. Hearing Research, 2001, 153, 108-114.	2.0	50
144	Strongly focused attention and auditory event-related potentials. Biological Psychology, 1994, 38, 73-90.	2.2	49

#	Article	IF	Citations
145	Human auditory cortex tracks task-irrelevant sound sources. NeuroReport, 2003, 14, 2053-2056.	1.2	49
146	Sound complexity and â€˜speechnessâ€™ effects on pre-attentive auditory discrimination in children. International Journal of Psychophysiology, 2002, 43, 199-211.	1.0	48
147	Increased Distractibility by Task-Irrelevant Sound Changes in Abstinent Alcoholics. Alcoholism: Clinical and Experimental Research, 2000, 24, 1850-1854.	2.4	47
148	Automatic and controlled processing of acoustic and phonetic contrasts. Hearing Research, 2004, 190, 128-140.	2.0	47
149	The mismatch negativity (MMN) with no standard stimulus. Clinical Neurophysiology, 2010, 121, 1043-1050.	1.5	46
150	The transient 40-Hz response, mismatch negativity, and attentional processes in humans. Progress in Neuro-Psychopharmacology and Biological Psychiatry, 1997, 21, 751-771.	4.8	45
151	Event-related brain potentials reveal covert distractibility in closed head injuries. NeuroReport, 1999, 10, 2125-2129.	1.2	44
152	Speech-sound duration processing in a second language is specific to phonetic categories. Brain and Language, 2005, 92, 26-32.	1.6	44
153	The mismatch negativity to changes in speech sounds at the age of three months. Developmental Neuropsychology, 1997, 13, 167-174.	1.4	43
154	Early Visual Evoked Potentials and Mismatch Negativity in Alzheimer's Disease and Mild Cognitive Impairment. Journal of Alzheimer's Disease, 2015, 44, 397-408.	2.6	42
155	Neuromagnetic responses of the human auditory cortex to short frequency glides. Neuroscience Letters, 1991, 121, 43-46.	2.1	41
156	The auditory transient 40-Hz response is insensitive to changes in stimulus features. NeuroReport, 1994, 6, 190-192.	1.2	41
157	Timbre Similarity: Convergence of Neural, Behavioral, and Computational Approaches. Music Perception, 1998, 16, 223-241.	1.1	40
158	Mismatch negativity to changes in a continuous tone with regularly varying frequencies. Electroencephalography and Clinical Neurophysiology - Evoked Potentials, 1994, 92, 140-147.	2.0	39
159	The newborn human brain binds sound features together. NeuroReport, 2003, 14, 2117-2119.	1.2	38
160	Object representation in the human auditory system. European Journal of Neuroscience, 2006, 24, 625-634.	2.6	38
161	Changes in acoustic features and their conjunctions are processed by separate neuronal populations. NeuroReport, 2001, 12, 525-529.	1.2	37
162	Preattentive processing of spectral, temporal, and structural characteristics of acoustic regularities: A mismatch negativity study. Psychophysiology, 2001, 38, 92-98.	2.4	37

#	Article	IF	Citations
163	Mismatch Negativity Brain Response as an Index of Speech Perception Recovery in Cochlear-Implant Recipients. Audiology and Neuro-Otology, 2004, 9, 160-162.	1.3	37
164	Children's performance on pseudoword repetition depends on auditory trace quality: Evidence from event-related potentials.. Developmental Psychology, 1999, 35, 709-720.	1.6	36
165	Linguistic processing in visual and modality-nonspecific brain areas: PET recordings during selective attention. Cognitive Brain Research, 2004, 20, 309-322.	3.0	36
166	The MMN as a viable and objective marker of auditory development in CI users. Hearing Research, 2017, 353, 57-75.	2.0	36
167	Effects of ethanol and auditory distraction on forced choice reaction time. Alcohol, 1996, 13, 153-156.	1.7	35
168	Auditory cortex evoked magnetic fields and lateralization of speech processing. NeuroReport, 2000, 11, 2893-2896.	1.2	35
169	Deficient speech-sound processing, as shown by the electrophysiologic brain mismatch negativity response, and naming ability in prematurely born children. Neuroscience Letters, 2003, 348, 5-8.	2.1	34
170	Suppression of Mismatch Negativity by Backward Masking Predicts Impaired Working-Memory Performance in Alcoholics. Alcoholism: Clinical and Experimental Research, 1999, 23, 1507-1514.	2.4	33
171	Hemispheric lateralization in an analysis of speech sounds. Cognitive Brain Research, 2000, 10, 119-124.	3.0	33
172	Electric brain response to sound repetition in humans: an index of long-term-memory â€“ trace formation?. Neuroscience Letters, 2002, 318, 49-51.	2.1	32
173	Effects of prosodic familiarity on the automatic processing of words in the human brain. International Journal of Psychophysiology, 2009, 73, 362-368.	1.0	32
174	Unattended and attended visual change detection of motion as indexed by event-related potentials and its behavioral correlates. Frontiers in Human Neuroscience, 2013, 7, 476.	2.0	32
175	Temporal integration: intentional sound discrimination does not modulate stimulus-driven processes in auditory event synthesis. Clinical Neurophysiology, 2002, 113, 1909-1920.	1.5	31
176	Selective attention to human voice enhances brain activity bilaterally in the superior temporal sulcus. Brain Research, 2006, 1075, 142-150.	2.2	31
177	Brain responses reveal the learning of foreign language phonemes. Psychophysiology, 1999, 36, 638-642.	2.4	31
178	Dose-related effect of alcohol on mismatch negativity and reaction time performance. Alcohol, 1995, 12, 491-495.	1.7	30
179	Auditory Sensory Impairment in Children With Oral Clefts as Indexed by Auditory Event-Related Potentials. Journal of Craniofacial Surgery, 2002, 13, 554-566.	0.7	30
180	The N1 hypothesis and irrelevant sound: evidence from token set size effects. Cognitive Brain Research, 2003, 18, 39-47.	3.0	30

#	Article	IF	Citations
181	Phonetic training and non-native speech perception â€" New memory traces evolve in just three days as indexed by the mismatch negativity (MMN) and behavioural measures. International Journal of Psychophysiology, 2015, 97, 23-29.	1.0	30
182	Newborn human brain identifies repeated auditory feature conjunctions of low sequential probability. European Journal of Neuroscience, 2004, 20, 2819-2821.	2.6	28
183	Plastic cortical changes induced by learning to communicate with non-speech sounds. NeuroReport, 2003, 14, 1683-1687.	1.2	27
184	Testâ€"retest stability of the magnetic mismatch response (MMNm). Clinical Neurophysiology, 2005, 116, 1897-1905.	1.5	27
185	Effects of naltrexone and ethanol on auditory event-related brain potentials. Alcohol, 1998, 15, 105-111.	1.7	26
186	Context modulates processing of speech sounds in the right auditory cortex of human subjects. Neuroscience Letters, 2002, 331, 91-94.	2.1	26
187	Event-Related Brain Potentials in Selective Listening to Frequent and Rare Stimuli. Psychophysiology, 1990, 27, 73-86.	2.4	25
188	Simultaneous storage of two complex temporal sound patterns in auditory sensory memory. NeuroReport, 2002, 13, 1747-1751.	1.2	25
189	The mismatch negativity as a measure of auditory stream segregation in a simulated â€œcocktail-partyâ€• scenario: effect of age. Neurobiology of Aging, 2015, 36, 3029-3037.	3.1	25
190	Comprehensive auditory discrimination profiles recorded with a fast parametric musical multi-feature mismatch negativity paradigm. Clinical Neurophysiology, 2016, 127, 2065-2077.	1.5	25
191	The mismatch negativity and reaction time as indices of the perceptual distance between the corresponding vowels of two related languages. Cognitive Brain Research, 2003, 16, 250-256.	3.0	24
192	Language context and phonetic change detection. Cognitive Brain Research, 2003, 17, 833-844.	3.0	24
193	Semantic processing in comatose patients with intact temporal lobes as reflected by the N400 event-related potential. Neuroscience Letters, 2010, 474, 88-92.	2.1	24
194	Hemispheric processing of duration changes in speech and non-speech sounds. NeuroReport, 2004, 15, 1683-1686.	1.2	23
195	Electric brain responses indicate preattentive processing of abstract acoustic regularities in children. NeuroReport, 2003, 14, 1411-1415.	1.2	22
196	Restingâ€state glutamatergic neurotransmission is related to the peak latency of the auditory mismatch negativity (MMN) for duration deviants: An ¹Hâ€MRSâ€EEG study. Psychophysiology, 2015, 52, 1131-1139.	2.4	22
197	Adenosine A 1 /A 2a receptors mediate suppression of mismatch negativity by ethanol in humans. Neuroscience Letters, 2000, 278, 57-60.	2.1	21
198	Selective Acceleration of Auditory Processing in Chronic Alcoholics during Abstinence. Alcoholism: Clinical and Experimental Research, 1998, 22, 605-609.	2.4	20

#	Article	IF	Citations
199	Fast parametric evaluation of central speech-sound processing with mismatch negativity (MMN). International Journal of Psychophysiology, 2013, 87, 103-110.	1.0	20
200	Numerical discrimination in newborn infants as revealed by eventâ€related potentials to tone sequences. European Journal of Neuroscience, 2009, 30, 1620-1624.	2.6	19
201	Different kinds of bilinguals â€“ Different kinds of brains: The neural organisation of two languages in one brain. Brain and Language, 2012, 121, 261-266.	1.6	19
202	Training in Morse code enhances involuntary attentional switching to acoustic frequency: Evidence from ERPs. Brain Research, 2006, 1073-1074, 417-424.	2.2	17
203	No effects of mobile phone use on cortical auditory changeâ€detection in children: An ERP study. Bioelectromagnetics, 2010, 31, 191-199.	1.6	17
204	The Mismatch Negativity (MMN). , 2011, , .		17
205	Electrophysiological Indicators of the Age-Related Deterioration in the Sensitivity to Auditory Duration Deviance. Frontiers in Aging Neuroscience, 2016, 8, 2.	3.4	17
206	Automatic and attention-dependent processing of auditory stimulus information. Behavioral and Brain Sciences, 1990, 13, 261-288.	0.7	16
207	Time course of loudness in tone patterns is automatically represented by the human brain. Neuroscience Letters, 1995, 202, 117-120.	2.1	16
208	Common neural mechanism for processing onset-to-onset intervals and silent gaps in sound sequences. NeuroReport, 2001, 12, 1783-1787.	1.2	16
209	The Mismatch Negativity. Journal of Psychophysiology, 2007, 21, 133-137.	0.7	16
210	Somatosensory mismatch negativity: a new clinical tool for developmental neurological research?. Developmental Medicine and Child Neurology, 2009, 51, 930-931.	2.1	15
211	Basic auditory dysfunction in dyslexia as demonstrated by brain activity measurements. Psychophysiology, 2000, 37, 262-266.	2.4	14
212	Dose-dependent suppression by ethanol of transient auditory 40-Hz response. Psychopharmacology, 2000, 148, 132-135.	3.1	13
213	Preperceptual Human Number Sense for Sequential Sounds, as Revealed by Mismatch Negativity Brain Response?. Cerebral Cortex, 2007, 17, 2777-2779.	2.9	13
214	Preattentive auditory information processing under exposure to the 902 MHz GSM mobile phone electromagnetic field: A mismatch negativity (MMN) study. Bioelectromagnetics, 2009, 30, 241-248.	1.6	13
215	The Mismatch Negativity and Its Magnetic Equivalent: An Index of Language Impairment or More General Cognitive Decline in Autism?. Biological Psychiatry, 2011, 70, 212-213.	1.3	13
216	Pre-attentive representation of sound duration in the human brain. Psychophysiology, 2006, 43, 272-276.	2.4	11

#	Article	IF	Citations
217	Mismatch and processing negativities in auditory stimulus processing and selection. Behavioral and Brain Sciences, 1991, 14, 764-768.	0.7	10
218	Phoneme quality and quantity are processed independently in the human brain. NeuroReport, 2005, 16, 1857-1860.	1.2	10
219	Electrophysiological evidence for change detection in speech sound patterns by anesthetized rats. Frontiers in Neuroscience, 2014, 8, 374.	2.8	10
220	Rapid categorization of sound objects in anesthetized rats as indexed by the electrophysiological mismatch response. Psychophysiology, 2014, 51, 1195-1199.	2.4	9
221	Phonological processing differences in bilinguals and monolinguals. International Journal of Psychophysiology, 2013, 87, 8-12.	1.0	8
222	Passive exposure to speech sounds induces long-term memory representations in the auditory cortex of adult rats. Scientific Reports, 2016, 6, 38904.	3.3	8
223	Preattentive extraction of abstract feature conjunctions from auditory stimulation as reflected by the mismatch negativity (MMN). Psychophysiology, 2001, 38, 359-365.	2.4	8
224	Native and foreign vowel discrimination as indexed by the mismatch negativity (MMN) response. Neuroscience Letters, 2003, 352, 25-25.	2.1	6
225	The Mismatch Negativity and Information Processing. Advances in Psychology, 1985, 25, 161-176.	0.1	5
226	Auditory Environment and Change Detection as Indexed by the Mismatch Negativity (MMN). , 2003, , 1-22.		5
227	Selective Information Processing and Event-Related Brain Potentials. Advances in Psychology, 1985, 25, 73-93.	0.1	4
228	Mismatch negativity reflects numbers of tones of specific frequencies in humans. Neuroscience Letters, 2008, 436, 138-140.	2.1	3
229	Neuromagnetic Responses of the Human Auditory Cortex to Different Types of Infrequent Deviant Stimuli. , 1989, , 125-128.		2
230	Mismatch Negativity. , 2003, , 343-VIII.		2
231	One's Advantage and Perceptual Errors: A Demonstration of Motivational Bias. Journal of Psychology: Interdisciplinary and Applied, 1986, 120, 225-228.	1.6	1
232	The perception of speech sounds by the human brain as reflected by the mismatch negativity brain response. International Congress Series, 2002, 1232, 97-105.	0.2	1
233	Welcoming Address of the Vice-President (Academic Affairs) at the Opening Ceremonies of the 11th World Congress of Psychophysiology, I.O.P., 2002. International Journal of Psychophysiology, 2003, 48, 87-88.	1.0	1
234	Aging and non-native speech perception: A phonetic training study. Neuroscience Letters, 2021, 740, 135430.	2.1	1

#	Article	IF	Citations
235	Differences in Pre-Attentive Processes of Sound Intensity Change Between High- and Low-Sensation Seekers. Journal of Psychophysiology, 2017, 31, 29-37.	0.7	1
236	Association of lifetime major depressive disorder with enhanced attentional sensitivity measured with P3 response in young adult twins. Biological Psychology, 2022, 171, 108345.	2.2	1
237	Event-Related Potentials in Search of the Mystery of the Human Brain: Some Perspectives for the Research of the Mind. Advances in Psychology, 1984, 18, 273-314.	0.1	0
238	Welcoming address of the Vice-President (Academic Affairs) at the opening ceremonies of the 14th World Congress of Psychophysiology, â€“ the Olympics of the Brain â€“ I.O.P. 2008. International Journal of Psychophysiology, 2009, 73, 81.	1.0	0
239	Auditory Processing in Asperger Syndrome Children. International Journal of Circumpolar Health, 2001, 60, 40-40.	1.2	0
240	Speech vs. Non-Speech Processing in Infantile Autism. International Journal of Circumpolar Health, 2001, 60, 63-63.	1.2	0