

7. Literaturverzeichnis

- Aaltonen, O., Eerola, O., Lang, A.H., Uusipaikka, E., Tuomainen, J. (1994). Automatic discrimination of phonetically relevant and irrelevant vowel parameters as reflected by mismatch negativity. *J Acoust Soc Am*, 96, 1489-1493.
- Alho, K. (1995). Cerebral generators of mismatch negativity (MMN) and its magnetic counterpart (MMNm) elicited by sound changes. *Ear Hear*, 16, 38-51.
- Alho, K., Sainio, K., Sajaniemi, N., Reiniainen, K., Näätänen, R. (1990). Event-related brain potential of human newborns to pitch change of an acoustic stimulus. *Electroencephalogr Clin Neurophysiol*, 77, 151-155.
- Alho, K., Sajaniemi, N., Niittyyuopio, T., Sainio, K., Näätänen, R. (1990a). ERPs to an auditory stimulus change in pre-term and full-term infants. In C. H. M. Brunia, A. W. K. Gaillard, A. Kok (Eds), *Psychophysiological brain research* (2, 139-142). Tilburg, The Netherlands: Tilburg University Press.
- Arbeitsgemeinschaft der Wissenschaftlichen Medizinischen Fachgesellschaften (AWMF) Leitlinien-Register (1998). Sprachentwicklungsstörung. *AWMF-Leitlinien-Register Nr. 049/006*.
- Arlinger, S., Walker, A. (1975). ERA and EEG-activity in sleeping infants. *Scand Audiol*, 4, 207-210.
- Atienza, M., Cantero, J.L., Escera, C. (2001). Auditory information during human sleep as revealed by event-related brain potentials. *Clinical Neurophysiology*, 112, 2031-2045.
- Atienza, M., Cantero, J.L., Gomez, C.M. (2001a). The initial orientation response during human REM sleep as revealed by the N1 component of auditory event-related potentials. *Int J Psychophysiol*, Jun 41 (2), 131-41.
- Barnet, A.B. (1975). Auditory evoked potentials during sleep in normal children from ten days to three years of age. *Electroencephalogr Clin Neurophysiol*, 39, 29-41.
- Barrett, K.A., Fulfs, J.M. (1998). Effect of gender on the mismatch negativity auditory evoked potential. *J Am Acad Audiol*, Dec; 9 (6), 444-51.
- Baumann, U., Schorn, K. (2001). Früherkennung kindlicher Hörschäden. *HNO*, 49, 118-125.
- Beasley, D.S., Maki, J.E., Orchik, D.J., (1976). Children's perception of time-compressed speech on two measures of speech discrimination. *J Speech Hear Disorders*, 41, 216-225.
- Banasich, A.A., Leevers, H. J., (unveröffentlichtes Arbeitsmaterial). Slowed processing of rapidly presented auditory cues in infancy: Implications for later language development. In J. Fagan, H. Haynes (Eds.). *Progress in Infancy Research*, (3), Mahwah, NJ: Lawrence Erlbaum Associates.
- Banasich, A.A., Spitz, R. V., Flax, J., Tallal, P. (1997). Early auditory temporal processing abilities and later language among children with a family history of language impairment. *Annual Meeting of the Cognitive Neuroscience Society*, Boston, Massachusetts, USA.
- Banasich, A.A., Tallal, P. (1996). Auditory temporal processing thresholds, habituation and recognition memory over the first year of life. *Infant Behavior and Development*, 19, 339-357.
- Banasich, A.A., Tallal, P. (2002) Infant discrimination of rapid auditory cues predicts later language impairment. *Behav Brain Res*, 136 (1), 31-49.
- Bidlingmaier, F. (1980). Sex differences in the secretion of gonadotropins and sex hormones in newborns and infants. *Fortschr Med*, Feb 21; 98 (7), 235-8.

- Bishop, D.V. (2000). How does the brain learn language? Insights from the study of children with and without language impairment. *Dev Med Child Neurol, Feb*, 42 (2), 133-42.
- Bishop, D.V., Adams, C. (1990). A prospective study of the relationship between specific language impairment, phonological disorders and reading retardation. *J Child Psychol Psychiatry*, 31 (7), 1027-1050.
- Bishop, D.V.M., North, T., Donlan, C. (1995). Genetic basis of specific language impairment: Evidence from a twin study. *Dev Med Child Neurol*, 37, 56-71.
- Böttcher-Gandor, C. Ullsperger, P. (1992). Mismatch negativity in event-related potentials to auditory stimuli as a function of varying interstimulusintervall. *Psychophysiology*, 29 (5), 546-550.
- Catts, H.W. (1993). The realationship between speech-language impairments and reading disabilities. *J Speech Hear Res*, 36, 948-58.
- Cheour, M., Alho, K., Ceponiene, R., Reinikainen, K., Sainio, K., Pohjavuori, M., Aaltonen, O., Näätänen, R. (1998). Maturation of mismatch negativity in infants. *Int J Psychophysiol*, 29, 217-226.
- Cheour, M., Ceponiene, R., Lehtokoski, A., Luuk, A., Allik, J., Alho, K., Näätänen, R. (1998a). Development of language-specific phoneme representation in the infant brain. *Nature Neuroscience*, 1, 351-353.
- Cheour, M., Ceponiene, R., Leppänen P., Alho K., Kujala T., Renlund M., Fellman V., Näätänen R. (2002). The auditory memory trace decays rapidly in newborns. *Scand Journal of Psychology*, 43, 33-39.
- Cheour, M., Korpilahti, P., Martynova, O., Lang, A.H. (2001). Mismatch Negativity and Late Discimorative Negativity in Investigating Speech Perception and Learning in Children and Infants. *Audiology Neurootol*, 6, 2-11.
- Cheour, M., Kushnerenko, E., Ceponiene, R. Fellman, V., Näätänen, R. (2002a). Electric brain responses obtained from newborn infants to changes in duration in complex harmonic tones. *Dev Neuropsychol*, 22 (2), 471-479.
- Cheour, M., Martynova, O., Näätänen, R., Errkola, R., Sillanpaa, M., Kero, P., Raz, A., Kaipio, M.L., Hiltunen, J., Aaltonen, O., Savela, J., Hamalainen, H. (2002b). Speech sounds learned by sleeping newborns. *Nature, Feb 7*, 415 (6872), 599-600.
- Cheour-Luhtanen, M., Alho, K., Kujala, T., Sainio, K., Reinikainen, K., Renlund, M., Aaltonen, O., Eerola, O., Näätänen, R. (1995). Mismatch negativity indicates vowel discrimination in newborns. *Hear Res*, 82, 53-58.
- Cheour-Luhtanen, M., Alho, K., Sainio, K., Rinne, T., Reinikainen, K., Pohjavuori, M., Renlund, M., Aaltonen, O., Eerola, O., Näätänen, R. (1996). The ontogenetically earliest discriminative response of the human brain. *Psychophysiology*, 33, 478-481.
- Coles, M.G.H., Rugg, M.D. (1996). Event-related brain potentials: An introduction. In Rugg, M. D. and Coles, M. G. H., *Electrophysiology of mind. Event-related brain potentials and cognition*. Oxford Psychology Series, Vol. 25, Oxford: Oxford University Press.
- Cooper, R., Osselton, J.W., Shaw, J.C. (1984). Elektroenzephalographie. 3. Auflage, Stuttgart, Fischer.
- Courchesne, E. (1990). Event related potentials. In J. Rohrbaugh, R., Parasuraman and Johnson, R. (Eds.), *Chronology of postnatal human development: Event related potentials, positron emision tomogrphy;myelinogenesis and synaptogenesis*. New Oxford University Verlag, 210-241.
- Cowan, N. (1984). On short and long auditory stores. *Psychol Bull*, 96, 341-370.
- Cowan, N., Winkler, I., Teder, W., Näätänen, R. (1993). Memory prerequisites of mismatch negativity in the auditory event-related potential (ERP). *J Exp Psychol Learn Mem Cogn*, 19, 909-921.

- Csepe, V. (1995). On the origin and development of the mismatch negativity. *Ear Hear, 16*, 91-104.
- Csepe, V., Karmos, G., Molnar, M. (1987). Evoked potential correlates of stimulus deviance during wakefulness and sleep in cat - animal model of mismatch negativity. *Electroencephalogr Clin Neurophysiol, 66*, 571-578.
- Curio, G., Neuloh, G., Numminen, J., Jousmäki, V., Hari, R. (2000). Speaking modivies voice-evoked activity in the human auditory cortex. *Human Brain Mapping, 9*, 183-191.
- Davis, S.M., McCroskey, R.L. (1980). Auditory fusion in children. *Child Dev 51 (1)*, 75-80.
- Dawson, G., Finley, C., Phillips, S., Lewy, A. (1989). A comparison of hemispheric asymmetries in speech-related brain potentials of autistic and dysphasic children. *Brain Lang, 37*, 26-41.
- Dehaene-Lambertz, G., Dehaene, S. (1994). Speed and cerebral correlates of syllable discrimination in infants. *Nature; 370*, 292-251.
- Denays, R., Tondeur, M., Foulon, M., Verstraeten, F., Ham, H., Piepsz, A., Noel, P. (1989). Regional blood flow in congenital dysphasia: Studies with Technetium-99m HM-PAO SPECT. *J Nuclear Medicine, 30*, 1825-1829.
- Duden (2001). Die deutsche Rechtschreibung, Auf der Grundlage der neuen amtlichen Rechtschreibregeln. 22. Auflage, Duden Band 1, Mannheim, Leipzig, Wien, Zürich, Dudenverlag.
- Duclaux, R., Challamel, M.J., Collet, L., Rouillet-Solignac, I., Revol, M. (1991). Hemispheric asymmetry of late auditory evoked responses induced by pitch changes in infants: influence of sleep stages. *Brain Res, Dec 6, 566 (1-2)*, 152-8.
- Eggermont, J.J. (1985). Evoked potentials as indicators of auditory maturation. *Acta Otolaryngol Suppl, 421*, 41-47.
- Eggermont, J.J. (1988). On the rate of maturation of sensory evoked potentials. *Acta Otolaryngol, 70*, 293-305.
- Eggermont, J.J. (1992). Development of auditory evoked potentials. *Acta Otolaryngol, 112*, 197-200.
- Ellingson, R.J., Danhay, T., Nelson, B., Lathrop, G.H. (1974). Variability of auditory evoked potentials in human newborns. *Electroencephalogr Clin Neurophysiol, 36*, 155-162.
- Elliot, L. L., Hammer, M. A., Scholl, M. E. (1989). Fine-grained auditory discrimination in normal children and children with language-learning problems. *J Speech Hear Res, 32*, 112-119.
- ERTS – V3.32c VGA/ERP (1997). Experimental Run Time System, Behringer.
- Gassler, N., Peuschel, T., Pankau, R. (2000). Pediatric reference values of estradiol, testosterone, lutropin, follitropin and prolactin. *Clin Lab, 46 (11-12)*, 553-60.
- Gauger, L.M., Lombardino, L.J., Leonard, C.M. (1997). Brain morphology in children with specific language impairment. *J Speech and Hearing Research, 40*, 1272-1284.
- Giard, M.H., Lavikainen, J., Reinikainen, K., Perrin, F., Bertrand, O., Pernier, J., Näätänen, R. (1995). Separate representations of stimulus frequency, intensity and duration in auditory sensory memory: an event-related potential and dipole-model analysis. *J Cogn Neurosci, 7*, 133-143.
- Giard, M.H., Perrin, F., Pernier, J., Bouchet, P. (1990). Brain generators implicated in the processing of auditory stimulus deviance: a topographic event-related potential study. *Psychophysiology, 27*, 627-640.
- Gopnik, M., Crago, M. (1991). Familial aggregation of a developmental language disorder. *Cognition, 39*, 1-50.

- Grimm, H. (1999). Störungen der Sprachentwicklung. *Göttingen, Hogrefe.*
- Gross, M., Dudenhausen, J.W., Rossi, R., Metschke, R., Ernst, A. (2002). Neugeborenen Hörscreening in Berlin – interdisziplinäre Berliner Initiative. In: *Berliner Ärzte, Heft 05/02*
- Holopainen, I.E., Korpilahti, P., Juottonen, K., Lang, H., Sillanpaa, M. (1997). Attenuated auditory event-related potential (mismatch negativity) in children with developmental dysphasia. *Neuropediatrics, 28*, 253-256.
- Huttenlocher, P.R., de Courten, C., Garey, L.J., Van der Loos, H. (1982). Synaptic development in human cerebral cortex. *Int J Neurol, 16-17*, 144-154.
- Kasai, K., Nakagome, K., Iwanami, A., Fukuda, M., Itoh, K., Koshida, I., Kato, N. (2002). No effect of gender on tonal and phonetic mismatch negativity in normal adults assessed by a high resolution EEG recording. *Brain Res Cogn Brain Res, May; 13 (3)*, 305-12.
- Kegel, G. (1996). Was kann die Spracherwerbsforschung aus der Sprachpathologieforschung lernen? - Das Beispiel der Zeitverarbeitung. In Ehlich, K. (Hrsg.), *Kindliche Sprachentwicklung. Konzepte und Empirie. Opladen: Westdeutscher Verlag.*
- Korpilahti, P., Lang, A.H. (1996). Electrophysiological correlates of auditory perception in normal and language impaired children. In *Annales Universitatis Turkuensis, Ser. D, Vol. 232 Medica-Odontologica. Turku: Painosalam Oy.*
- Korpilahti, P., Lang, H.A. (1994). Auditory ERP components and mismatch negativity in dysphasic children. *Electroencephalogr Clin Neurophysiol, 91*, 256-264.
- Korpilahti, P., Myllylä, A., Holopainen, I. (1998). Maturational and training-driven changes in the MMN in language impaired children. In Tervaniemi, M. and Escera, C. (Eds.), *Abstracts of the First International Workshop on MMN and its Clinical Applications. Helsinki, University of Helsinki.*
- Kraus, N., Koch, D.B., McGee, T.J., Nicol, T.G. and Cunningham, J., Speech-sound discrimination in school-age children: psychophysical and neurophysiologic measures, *J Speech Lang Hear Res, 42* (1999) 1042-1060.
- Kraus, N. and McGee, T. (1994). Auditory event- related potentials. In J. Katz (Ed.), *Handbook of clinical audiology, Williams & Wilkins, Baltimore, Hongkong, London, Munich, Tokyo, S. 403-423.*
- Kraus, N., McGee, T., Carrell, T., King, C., Littman, T., Nicol, T. (1994a). Discrimination of speech-like contrasts in the auditory thalamus and cortex. *J Acoust Soc Am, 96*, 2758-2768.
- Kraus, N., McGee, T., Carrell, T., Sharma, A., Micco, A., Nicol, T. (1993). Speech-evoked cortical potentials in children. *J Am Acad Audiol, 4*, 238-248.
- Kraus, N., McGee, T.J., Koch, D.B. (1998). Speech sound perception and learning: biologic bases. *Scand Audiol Suppl, 49*, 7-17.
- Kraus, N., McGee, T., Sharma, A., Carrell, T. and Nicol, T., Mismatch negativity event-related potential elicited by speech stimuli. *Ear Hear, 13* (1992) 158-164.
- Kropotov, J.D., Näätänen, R., Sevostianov, A.V., Alho, K., Reinikainen, K., Kropotova, O.V. (1995). Mismatch negativity to auditory stimulus change recorded directly from the human temporal cortex. *Psychophysiology, 32*, 418-422.
- Kuhl, P.K., Andruski, J.E., Chistovich, I.A., Chistovich, L.A., Kozhevnikova, E.V., Ryskina, V.L., Stolyarova, E.I., Sundberg, U., Lacerda, F. (1997). Cross-language analysis of phonetic units in language addressed to infants. *Science, 277*, 684-686.

- Kuhl, P.K., Williams, K.A., Lacerda, F., Stevens, K.N., Lindblom, B. (1992). Linguistic experience alters phonetic perception in infants by 6 month of age. *Science*, 255, 606-608.
- Kurtzberg, D., Stone, Ch.L., Vaughan, H.G. (1986). Cortical responses to speech sounds in the infant. *Evoked Potentials*, 513-520.
- Kurtzberg, D., Vaughan, H.G.J., Courchesne, E., Friedman, D., Harter, M.R., Putnam, L.E. (1984). Developmental aspects of Event-related Potentials. *Ann NY Acad Sci*; 425, 300-18.
- Kurtzberg, D., Vaughan, H.G.J., Kreuzer, J.A., Fliegler, K.Z. (1995). Developmental studies and clinical application of mismatch negativity: problems and prospects. *Ear Hear*, 16, 105-117.
- Kushnerenko, E., Cheour, M., Ceponiene, R. (2001). Central auditory processing of durational changes in complex speech patterns by newborns: an event related brain potential study. *Dev Neurophysiology*, 19, 83-97.
- Kushnerenko, E., Ceponiene, R., Balan, P., Fellman, V., Huotilaine, M., Näätänen, R. (2002). Maturation of the auditory event-related potentials during the first year of life. *NeuroReport*, 13, (1), 47-51.
- Kushnerenko, E., Ceponiene, R., Balan, P., Fellman, V., Näätänen, R. (2002a). Maturation of the auditory change detection response in infants: a longitudinal ERP study. *NeuroReport*, 13, 1843-1848.
- Leonard, L. (1998). Children with Specific Language Impairment. *Cambridge, MA, The MIT Press*.
- Leppänen, P.H.T., Choudhury, N., Benasich, A., Lyytinen, H. (unveröffentlichtes Arbeitsmaterial). Neuroimaging measures in the study of specific language impairments in children.
- Leppänen, P.H.T., Eklund, K.M., Lyytinen, H. (1997). Event related brain potentials to change in rapidly presented acoustic stimuli in newborns. *Dev Neuropsychology*, 13 (2), 175-204.
- Leppänen, P.H.T., Lyytinen, H. (1997a). Auditory Event-related Potentials in the Study of Developmental Language-Related Disorders. *Audiology Neuro Otology*, 2, 308-340.
- Leppänen, P.H.T., Pihko, E., Eklund, K.M. and Lyytinen, H. (1999). Cortical responses of infants with and without a genetic risk for dyslexia: II. Group effects. *NeuroReport*, 10, 969-973.
- Leppänen, P.H.T., Richardson, U., Pihko, E., Eklund, K.M., Guttorm, T. K., Aro, M., Lyytinen, H. (2002) Brain responses to changes in speech sound durations differ between infants with and without familial risk for dyslexia. *Dev Neuropsychol*, 22, 407-422.
- Lincoln, A.J., Courchesne, E., Harms, L., Allen, M. (1995). Sensory modulation of auditory stimuli in children with autism and receptive developmental language disorder: event-related brain potential evidence. *J Autism Dev Disord*, 25, 521-539.
- Livingstone, M. (1993). Parallel processing in the visual system and the brain: Is one of the subsystems selectively affected in dyslexia? In Galaburda, A.M. (Ed.), *Dyslexia and Development: Neurobiological Aspects of Extra-Ordinary Brains*, Harvard University Press, Cambridge, 237-256.
- Loewy, D.H., Campbell, K.B., Bastien, C. (1996). The mismatch negativity to frequency deviant stimuli during natural sleep. *Electroencephalogr Clin Neurophysiol*, 98, 493-501.
- Lou, H.C., Hendriksen, L., Bruhn, P. (1984). Focal cerebral hypo-perfusion in children with dysphasia and/or attention deficit disorder. *Archives of Neurology*, 41, 825-829.
- Ludlow, C.L., Cooper, J.A. (1983). Genetic aspects of speech and language disorders. *New York: Academic Press*.

- Mantysalo, S., Näätänen, R. (1987). The duration of a neuronal trace of an auditory stimulus as indicated by event-related potentials. *Biol Psychol*, 24, 183-195.
- Martynova, O., Kirjavainen, J., Cheour, M. (2003). Mismatch negativity and late discriminative negativity in sleeping human newborns. *Neurosci Lett*, 340 (2), 75-78.
- Mason, S.M., Mellor, D.H. (1984). Brainstem, middlelatency and latecortical evoked potentials in children with speech and language disorders. *Electroencephalogr Clin Neurophysiol*, 59, 297-309.
- McArthur, G.M., Hogben, J.H., Edwards, V.T., Heath, S.M., Mengler, E.D. (2000). On the "specifics" of specific reading disability and specific language impairment. *J Child Psychol Psychiatry*, 41 (7), 869-74.
- McGee, T., Kraus, N., Nicol, T. (1997). Is it really a mismatch negativity? An assessment of methods for determining response validity in individual subjects. *Electroencephalogr Clin Neurophysiol*, 104, 359-368.
- Mody, M., Studdert-Kennedy, M., Brady, S. (1997). Speech perception deficits in poor readers: auditory processing or phonological coding? *J Exp Child Psychology*, 64, 199-231.
- Morrongiello, B.A., Trehub, S.E. (1987). Age-related changes in auditory temporal perception. *Journal of Experimental Child Psychology*, 44, 413-426.
- Morr, M. L., Shafer, V. L., Kreuzer, J. A., Kurtzberg, D. (2002). Maturation of Mismatch Negativity in typically developing infants and preschool children. *Ear Hear*, 23, 118-136.
- Näätänen, R. (1992). Attention and brain function, Hillsdale, NJ: Lawrence Erlbaum-Verlag.
- Näätänen, R. (1995). The mismatch negativity: a powerful tool for cognitive neuroscience. *Ear Hear*, 16, 6-18.
- Näätänen, R. (2003). Mismatch Negativity: clinical research and possible applications. *Int J Psychophysiol*, 48, 179-188.
- Näätänen, R., Gaillard, A.W., Mantysalo, S. (1978). Early selective-attention effect on evoked potential reinterpreted. *Acta Psychol*, Jul 42 (4), 313-29.
- Näätänen, R., Paavilainen, P., Alho, K., Reinikainen, K., Sams, M. (1989). Do event-related potentials reveal the mechanism of the auditory sensory memory in the human brain? *Neurosci Lett*, 98, 217-221.
- Näätänen, R., Paavilainen, P., Reinikainen, K. (1989a). Do event-related potentials to infrequent decrements in duration of auditory stimuli demonstrate a memory trace in man? *Neurosci Lett*, 107, 347-352.
- Näätänen, R., Paavilainen, P., Tiitinen, H., Jiang, D., Alho, K. (1993). Attention and mismatch negativity. *Psychophysiology*, 30, 436-450.
- Näätänen, R. and Picton, T. (1987). The N1 wave of the human electric and magnetic response to sound: a review and an analysis of the component structure. *Psychophysiology*, 24, 375-425.
- Näätänen, R., Schröger, E., Karakas, S., Tervaniemi, M., Paavilainen, P. (1993a). Development of a memory trace for a complex sound in the human brain. *Neuroreport*, 4, 503-506.
- Näätänen, R., Winkler, I. (1999). The concept of auditory stimulus representation in cognitive neuroscience. *Psychol Bull*, 125, 826-859.
- Neville, H.J., Coffey, S.A., Holcomb, P.J., Tallal, P. (1993). The neurobiology of sensory and language processing in language-impaired children. *J Cogn Neurosci*, 5, 235-253.
- Nickisch, A., Gross, M. (1987). Diagnostik bei Sprachentwicklungsstörungen. *HNO*, 35, 445-450.

- Niedermeyer, E., Silva da F.L. (1999). Electroencephalography, Basic principles, clinical applications, and related fields. 4. Edition, Baltimore Md. [u.a.], Williams and Wilkins.
- Nielsen-Bohlman, L., Knight, R.T., Woods, D.L., Woodward, K. (1991). Differential auditory processing continues during sleep. *Electroencephalogr Clin Neurophysiol*, Oct 79 (4), 281-90.
- Novak, G.P., Kurtzberg, D., Kreuzer, J.A., Vaughan H.G.J. (1989). Cortical responses to speech sounds and their formants in normal infants: Maturation sequence and spatiotemporal analysis. *Electroenceph Clin Neurophysiol*, 73, 295-305.
- Nubel, K., (2002). Objektivierung auditorischer Diskriminationsleistungen während des Spracherwerbs. In M. Gross (Ed.), *Aktuelle Phoniatisch-pädaudiologische Aspekte, Supplementum zu Band 9, Heidelberg, Median*.
- O'Brien, E. K., Zhang, X., Nishimura, C., Tomblin, J.B., Murray J.C. (2003). Association of specific language impairment (SLI) to the region of 7q31. *Am J Genet*, Jun, 72, (6), 1536-43.
- Ohlrich, E.S., Barnet, A.B., Weiss, I.P. and Shanks, B.L. (1978). Auditory evoked potential development in early childhood: a longitudinal study. *Electroencephalogr Clin Neurophysiol*, 44, 411-423.
- Olsho, L.W., Koch, E.G., Halpin, C.F. (1987). Level and age effects in infant frequency discrimination. *Journal of the Acoustical Society of America*, 82, 454-464.
- Paavilainen, P., Degerman, A., Takegata, R., Winkler, I. (2003). Spectral and temporal stimulus characteristics in the processing of abstract auditory features. *Neuroreport*, 14, 715-718.
- Paavilainen, P., Karlsson, M.L., Reinikainen, K., Näätänen, R. (1989). Mismatch negativity to change in spatial location of an auditory stimulus. *Electroencephalogr Clin Neurophysiol*, 73, 129-141.
- Pang, E.W., Edmonds, G.E., Desjardins, R., Khan, S.C., Trainor, L.J., Taylor, M.J. (1998). Mis match negativity to speech stimuli in 8-month-old infants and adults. *Int J Psychophysiol*, 29, 227-236.
- Pekkonen, E., Rinne, T., Näätänen, R. (1995). Variability and replicability of the mismatch negativity. *Electroencephalogr Clin Neurophysiol*, 96, 546-554.
- Pihko, E., Leppänen, P., Eklund, K.M., Cheour, M., Guttorm, K.T., Lyytinen, H. (1999). Cortical responses of infants with and without a genetic risk for dyslexia: I. Age effects. *NeuroReport*, 10, 901-905.
- Plante, E. (1991). MRI findings in the parents and siblings of specifically language-impaired boys. *Brain and Language*, 41, 67-80.
- Plante, E., Swisher, L., Vance, R., Rapcsak, S. (1991). MRI findings in boys with specific language impairment. *Brain Lang*, 41, 52-66.
- Pröschel, U., Eysholt, U. (1995). Untersuchungen zur Spezifität und Sensitivität transiente click-evozierter otoakustischer Emissionen (TEOAE). *Laryngol Rhinol Otol*, 74 (8), 481-488.
- Sallinen, M., Kaartinen, J., Lyytinen, H. (1996). Processing of auditory stimuli during tonic and phasic periods of REM sleep as revealed by event-related brain potentials. *J Sleep Res*, 5, 220-228.
- Sams, M., Hari, R., Rif, J., Knuutila, J., (1993). The human auditory sensory memory trace persists about 10 sec: neuromagnetic evidence. *J. Cogn Neurosci*, 5, 363-370.
- Sams, M., Kaukoranta, E., Hamalainen, M., Näätänen, R. (1991). Cortical activity elicited by changes in auditory stimuli: different sources for the magnetic N100m and mismatch responses. *Psychophysiology*, 28, 21-29.

- Sams, M., Paavilainen, P., Alho, K., Näätänen, R. (1985). Auditory frequency discrimination and event-related potentials. *Electroencephalogr Clin Neurophysiol*, 62, 437-448.
- Schöler, H., Fromm, W., Kany, W. (1998). Spezifische Sprachentwicklungsstörungen und Sprachlernen. Erscheinungsformen, Verlauf, Folgerungen für Diagnostik und Therapie. Heidelberg, Winter-Universitätsverlag.
- Schröger, E., Winkler, I. (1995). Presentation rate and magnitude of stimulus deviance effect on human pre-attentive change detection. *Neurosci Lett*, 93 (3), 185-188.
- Shafer, V.L., Morr, M.L., Kreuzer J.A., Kurtzberg, D. (2000). Maturation of mismatch negativity in school-age children. *Ear Hear*, 21 (3), 242-251.
- Shucard, D. W., Shucard, J.L., Thomas, G.T. (1987). Auditoriy event-related potentials in waking infants and adults: a developmental perspective. *Electroencephalogr Clin Neurophysiol*, 68, 303-310.
- Silva, P.A. (1980). The prevalence stability and significance of developmental language delay in preschool children. *Dev Med Child Neurol*, 22, 768-777.
- Stromswold, K. (1998). Genetic of spoken language disorders. *Human Biology*, 70, 297-324.
- Tallal, P. (1980). Auditory temporal perception, phonics, and reading disabilities in children. *Brain Lang*, 9, 182-198.
- Tallal, P. (2000). Experimental studies of language learning impairments: From research to remediation. In D. M. Bishop and L. B. Leonard (Eds.). *Speech and language impairments in children: Causes, characteristics, intervention and outcome*. Philadelphia, PA: Psychology Press.
- Tallal, P., Newcombe, F. (1978). Impairment of auditory perception and language comprehension in dysphasia. *Brain Lang*, 5, 13-24.
- Tallal, P., Piercy, M. (1973). Defects of non-verbal auditory perception in children with developmental aphasia. *Nature*, 241, 468-469.
- Tallal, P., Piercy, M. (1973a). Developmental aphasia: Impaired rate of non-verbal processing as a function of sensory modality. *Neuropsychologia*, 11, 389-398.
- Tallal, P., Piercy, M. (1974). Developmental dysphasia: Rate of auditory processing and selective impairment of consonant perception. *Neuropsychologia*, 12, 83-93.
- Tallal, P., Piercy, M. (1975). Developmental dysphasia: The perception of brief vowels and extended stop-consonants. *Neuropsychologia*, 13, 69-74.
- Tallal, P., Stark, R.E., Mellits, E. D. (1985). Identification of language-impaired children on the basis of rapid perception and production skills. *Brain Lang*, 25, 314-322.
- Tallal, P., Stark, R.E., Mellits, E. D. (1985a). The relationship between auditory temporal analysis and receptive language development: Evidence from studies of developmental language disorder. *Neuropsychologia*, 23, 527-534.
- Tapanainen, J., Huhtaniemi, I., Koivisto, M., Kujansuu, E., Tuimala, R., Vihko, R. (1984). Hormonal changes during the perinatal period: FSH, prolactin and some steroid hormones in the cord blood and peripheral serum of preterm and fullterm female infants. *J Steroid Biochem*, May 20 (5), 1153-6.
- Tervaniemi, M., Maury, S., Näätänen, R. (1994). Neural representations of abstract stimulus features in the human brain as reflected by the mismatch negativity. *Neuroreport*, 5, 844-846.

- Tomblin, J.B. (1989). Familial concentrations of developmental language impairment. *J Speech and Hearing Disorders, 54*, 287-295.
- Tomblin, T.B., Buckwalter, P.R. (1998). Heritability of poor language achievement among twins. *J Speech Lang Hear Res, Feb, 41 (1)*, 188-99.
- Tonnquist-Uhlen, I. (1996). Topography of auditory evoked cortical potentials in children with severe language impairment. *Scand Audiol Suppl, 44*, 1-40.
- Trainor, L.J., Samuel S.S., Desjardins, R.N., Sonnadara, R.R. (2001). Measuring temporal resolution in infants using mismatch negativity. *NeuroReport, 12*, 2443-2448.
- Turnbull, J.P., Loparo, K.A., Johnson, M.W., Scher, M.S. (2001). Automated detection of tracé alternant during sleep in healthy full-term neonates using discrete wavelet transform. *Clin Neurophysiol, 112*, 1893-1900.
- Uwer, R., von Suchodoletz, W. (2000). Stability of Mismatch negativities children. *Clin Neurophysiol, Jan 111 (1)*, 45-52.
- Van der Lely, H.K., Stollwerck, L. (1996). A grammatical specific language impairment in children: an autosomal dominant inheritance? *Brain Lang, 52 (3)*, 484-504.
- Vaughan, H.G., Kurtzberg, D. (1992). Electrophysiological indices of human brain maturation and cognitive development. In M.R.N.C. Gunnar (Ed.), *Minnesota symposia on child psychology, Vol. 24, Lawrence Erlbaum Associates, Hillsdale*, 1-36.
- Velasco, M., Velasco, F. and Velasco, A.L. (1989). Intracranial studies on potential generators of some vertex auditory evoked potentials in man. *Stereotact Funct Neurosurg, 53*, 49-73.
- Warburton, P., Baird, G., Chen, W., Morris, K., Jacobs, B.W., Hodgson, S., Docherty, Z. (2000). Support for linkage of autism and specific language impairment to 7q3 from two chromosome rearrangements involving band 7q31. *Am J Med Genet, Apr 3, 96 (2)*, 228-34.
- Werner, L.A., Marean, G. H., Halpin, C. F., Spetner, N.B., Gillenwater, J.M. (1992). Infant auditory acuity: gap detection. *Child Dev, 63 (2)*, 260-272.
- Winkler, I., Kujala, T., Tiitinen, H., Sivonen, P., Alku, P., Lehtokoski, A., Czigler, I., Csepe, V., Ilmoniemi, R.J., Näätänen, R. (1999). Brain responses reveal the learning of foreign language phonemes. *Psychophysiology, 36*, 638-642.
- Wright, B. A., Lombardino L. J., King, W. M., Puranik, C. S., Leonard, C. M., Merzenich, M. M. (1997). Deficits in auditory temporal and spectral resolution in language-impaired children. *Nature, May, 387 (6629)*, 176-178.
- Yabe, H., Tervaniemi, M., Reinikainen, K., Näätänen, R. (1997). Temporal window of integration revealed by MMN to sound omission. *Neuroreport, 8*, 1971-1974.