

Publications

Dr. rer. nat. Günter Ehret

Publication of Books as Editor/Translator

Kanwal, J., Ehret, G., eds. (2006). *Behavior and Neurodynamics for Auditory Communication*. Cambridge, Cambridge University Press.

Ehret, G., Romand, R., eds. (1997). *The Central Auditory System*. New York, Oxford University Press.

Ehret, G., Ehret, I. (1979). Translation of the book by Aubrey Manning *An Introduction to Animal Behaviour (3rd edition)*. German edition: *Verhaltensforschung, eine Einführung*. Heidelberg, Springer-Verlag.

Publications in Journals with Peer Review

112. Duarte-Guterman, P., Skandalis, D.A., Merkl, A., Geissler, D.B., Ehret, G. (2025). Brain aromatase and its relationship with parental experience and behavior in male mice. *Front. Neurosci.* 19:1502764. DOI: 10.3389/fnins.2025.1502764.

111. Romand, R., Ehret, G. (2023). Neuro-functional modeling of near-death experiences in contexts of altered states of consciousness. *Front. Psychol.*, open access. DOI: 10.3389/fpsyg.2022.846159.

110. Ehret, G., Romand, R. (2022). Awareness and consciousness in humans and animals – neural and behavioral correlates in an evolutionary perspective. *Front. Syst. Neurosci.*, open access. DOI 10.3389/fnsys.2022.941534.

109. Grabrucker, S., Pagano, J., Schweizer, J., Urrutia-Ruiz, C., Schön, M., Thome, K., Ehret, G., Grabrucker, A.M., Zhang, R., Hengerer, B., Bockmann, J., Verpelli, C., Sala, C., Boeckers, T.M. (2021). Activation of the medial preoptic area (MPOA) ameliorates loss of maternal behavior in a *shank2* mouse model for autism. *EMBO J.*, **e104267**.

108. Egorova, M.A., Akimov, A.G., Khorunzhii, G.D., Ehret, G. (2020). Frequency response areas of neurons in the mouse inferior colliculus. III. Time-domain responses: constancy, dynamics, and precision in relation to spectral resolution, and perception in the time domain. *PLoS ONE*, **15(10)**: e0240853. Doi: org/10.1371/journal.pone.0240853.

107. Liu, X., Zhang, O., Chen, A., Hu, K., Ehret, G., Yan, J. (2019). Corticofugal augmentation of the auditory brainstem response with respect to cortical preference. *Front. Syst. Neurosci.*, **13:39**. doi: 10.3389/fnsys.2019.00039.

106. Geissler, D.B., Weiler, E., Ehret, G. (2018). Adaptation and spectral enhancement at auditory perceptual boundaries – Measurements via temporal precision of auditory brainstem potentials. *PLoS ONE*, **13(12)**: e0208935. Doi: 10.1371/journal.pone.0208935.

105. Akimov, A.G., Egorova, M.A., Ehret, G. (2017). Spectral Summation and facilitation in on- and off-responses for optimized representation of communication calls in mouse inferior colliculus. *Eur. J. Neurosci.*, **45**, 440-459. doi:10.1111/ejn.13488.
104. Geissler, D.B., Schmidt, H.S., Ehret, G. (2016). Knowledge about sounds – Context-specific meaning differently activates cortical hemispheres, auditory cortical fields, and layers in house mice. *Front. Neurosci.*, **10**. doi: 10.3389/fnins.2016.00098.
103. Gaub, S., Fisher, S.E., Ehret, G. (2016). Ultrasonic vocalizations of adult male Foxp2-mutant mice: behavioral contexts of arousal and emotion. *Genes Brain Behav.*, **15**, 243-259.
102. Grabrucker, S., Jannetti, L., Echert, M., Gaub, S., Chhabra, R., Pfaender, S., Mangus K., Reddy, P.P., Rankovic, V., Schmeisser, M.J., Kreutz, M.R., Ehret, G., Boeckers, T.M., Grabrucker, A.M. (2014). Zinc deficiency dysregulates the synaptic ProSAP/Shank scaffold and might contribute to autism spectrum disorders. *Brain*, **137**, 137-152.
101. Joachimsthaler, B., Uhlmann, M., Miller, F., Ehret, G., Kurt, S. (2014). Quantitative analysis of neuronal response properties in primary and higher-order auditory cortical fields of awake house mice (*Mus musculus*). *Eur. J. Neurosci.*, **39**, 904-918.
100. Geissler, D.B., Schmidt, H.S., Ehret, G. (2013). Limbic brain activation for maternal auditory perception and responding is different in mothers and virgin females. *J. Physiol. Paris*, **107**, 62-71.
99. Kurt, S., Fisher, S.E., Ehret, G. (2012). Foxp2 mutations impair auditory-motor association learning. *PLoS ONE*, **7**(3): e33130. doi: 10.1371/journal.pone.0033130.
98. Hoenig, K., Müller, C., Herrnberger, B., Sim, E.-J., Spitzer, M., Ehret, G., Kiefer, M. (2011). Neuroplasticity of semantic representations for musical instruments in professional musicians. *NeuroImage*, **56**, 1714-1725.
97. Kurt, S., Ehret, G. (2010). Auditory discrimination learning and knowledge transfer in mice depends on task difficulty. *Proc. Natl. Acad. Sci. USA*, **107**, 8481-8485.
96. Gaub, S., Groszer, M., Fisher, S.E., Ehret, G. (2010). The structure of innate vocalizations in *Foxp2*-deficient mouse pups. *Genes Brain Behav.*, **9**, 390-401.
95. Ehret, G. (2009). New perspectives of information transformation through the auditory cortical layers. *Proc. Natl. Acad. Sci. USA*, **106**, 21463-21464.
94. Kurt, S., Groszer, M., Fisher, S.E., Ehret, G. (2009). Modified sound-evoked brainstem potentials in Foxp2 mutant mice. *Brain Res.*, **1289**, 30-36.
93. Ehret, G., Schmid, C. (2009). Reproductive cycle-dependent plasticity of perception of acoustic meaning in mice. *Physiol. & Behav.*, **96**, 428-433.
92. Egorova, M., Ehret, G. (2008). Tonotopy and inhibition in the midbrain inferior colliculus shape spectral resolution of sounds in critical bands. *Eur. J. Neurosci.*, **28**, 675-692.
91. Groszer, M., Keays, D.A., Deacon, R.M.j., de Bono, J.P., Gaub, S., Baum, M., French, C.A., Nicod, J., Coventry, J.A., Enard, W., Fray, M., Brown, S.D.M., Nolan, P., Flint, J., Pääbo, S., Channon, K.M.,

- Eilers, J., Ehret, G., Rawlins, J.N.P., Fisher, S.E. (2008). Impaired motor learning and cerebellar synaptic plasticity in *Foxp2* R552H heterozygous mice. *Current Biology*, **18**, 354-362.
90. Egorova, M., Vartanyan, I., Ehret, G. (2006). Frequency response areas of mouse inferior colliculus neurons II. Critical bands. *NeuroReport*, **17**, 1783-1786.
89. Hage, S.R., Jürgens, U., Ehret, G. (2006). Audio-vocal interaction in the pontine brainstem during self-initiated vocalization in the squirrel monkey. *Eur. J. Neurosci.*, **23**, 3297-3308.
88. Gaub, S.C., Ehret, G. (2005). Grouping in auditory temporal perception and vocal production is mutually adapted: the case of wriggling calls of mice. *J. Comp. Physiol. A*, **191**, 1131-1135.
87. Liener, K., Wunderlich, A., Ehret, G., Bachor, E. (2005). Messungen zum Lärmschutz bei der funktionellen MR-Tomographie. *Laryngo-Rhino-Otol.*, **84**, 108-112.
86. Ehret, G. (2005). Infant rodent ultrasounds - a gate to the understanding of sound communication. *Behav. Genet.*, **35**, 19-29.
85. Yan, J., Zhang, Y., Ehret, G. (2005). Corticofugal shaping of frequency tuning curves in the central nucleus of the inferior colliculus of mice. *J. Neurophysiol.*, **93**, 71-83.
84. Geissler, D.B., Ehret, G. (2004). Auditory perception vs. recognition: representation of complex communication sounds in the mouse auditory cortical fields. *Eur. J. Neurosci.*, **19**, 1027-1040.
83. Hage, S.R., Ehret, G. (2003). Mapping responses to frequency sweeps and tones in the inferior colliculus of house mice. *Eur. J. Neurosci.*, **18**, 2301-2312.
82. Ehret, G., Egorova, M., Hage, S.R., Müller, B.A. (2003). Spatial map of frequency tuning-curve shapes in the mouse inferior colliculus. *NeuroReport*, **14**, 1365-1369.
81. Egorova M.A., Vartanyan, I.A., Ehret, G. (2002). Neural critical bands and inhibition in the auditory midbrain of house mouse (*Mus domesticus*). *Dokl. Biol. Sci.*, **382**, 5-7.
80. Herrnberger, B., Kempf, S., Ehret, G. (2002). Basic maps in the auditory midbrain. *Biol. Cybernetics* **87**, 231-240.
79. Yan, J., Ehret, G. (2002). Corticofugal modulation of midbrain sound processing in the house mouse. *Eur. J. Neurosci.*, **16**, 119-128.
78. Geißler, D.B., Ehret, G. (2002). Time-critical formant integration for perception of communication calls in mice. *Proc. Natl. Acad. Sci. USA*, **99**, 9021-9025.
77. Reisert, I., Karolczak, M., Beyer, C., Just, W., Maxson, S.C., Ehret, G. (2002). SRY does not fully reverse female into male behavior towards pups. *Behav. Genet.*, **32**, 103-111.
76. Ehret, G., Riecke, S. (2002). Mice and humans perceive multiharmonic communication sounds in the same way. *Proc. Natl. Acad. Sci. USA*, **99**, 479-482.
75. Yan, J., Ehret, G. (2001). Corticofugal induction of egocentric reorganization of tonotopy in the mouse auditory midbrain (colliculus inferior). *NeuroReport*, **12**, 3313-3316.

74. Egorova, M., Ehret, G., Vartanian, I., Esser, K.-H. (2001). Frequency response areas of neurons in the mouse inferior colliculus I. Threshold- and tuning characteristics. *Exp. Brain Res.*, **140**, 145-161.
73. Ehret, G. (2001). Adaptations in the mouse auditory system for perception of ultrasonic communication calls. *J. Evol. Biochem. Physiol.*, **37**, 562-568.
72. Vartanian, I.A., Egorova, M.A., Ehret,G. (2000). Critical bandwidths of different types of neurons in the mouse auditory midbrain. *Dokl. Biol.Sci.*, **373**, 364-366.
71. Ehret, G., Schreiner, C.E. (2000). Regional variations of noise-induced changes in operating range in cat AI. *Hearing Res.*, **141**, 107-116.
70. Vartanian, I., Egorova, M.A., Ehret, G. (1999). Expression of the main properties of critical bands in the neuronal activity of posterior quadrigemini in mice. *Dokl.Biol Sci.*, **368**, 437-439.
69. Fichtel I., Ehret, G. (1999). Perception and recognition discriminated in the mouse auditory cortex by c-fos labeling. *NeuroReport*, **10**, 2341-2345.
68. Reetz, G., Ehret, G. (1999). Inputs from three brainstem sources to identified neurons of the mouse inferior colliculus slice. *Brain Res.*, **816**, 527-543.
67. Herrnberger, B., Ehret, G. (1998). Linearity or separability? *Behav. Brain Sci.*, **21**, 269-270.
66. Ehret, G., Fichtel, I., Esser, K. (1997). Plasticity in the auditory system of mammals. *Biomedical Res.*, **18**, Suppl. 1, 3-16.
65. Ehret G. (1997). The auditory cortex. *J. Comp. Physiol. A.*, **181**, 547-557.
64. Ehret, G., Schreiner, C. E. (1997). Frequency resolution and spectral integration (critical band analysis) in single units of the cat primary auditory cortex. *J. Comp. Physiol. A.*, **181**, 635-650.
63. Stiebler, I., Neulist, R., Fichtel, I., Ehret, G. (1997). The auditory cortex of the house mouse: left-right differences, tonotopic organization and quantitative analysis of frequency representation. *J. Comp. Physiol A.*, **181**, 559-571.
62. Wiemann, M., Ehret, G. (1997). Thymic nurse cells: entry of exogenous horseradish peroxidase via a transcytotic route. *Acta Anat.*, **157**, 20-26.
61. Scharmann, M. G., Klump, G. M., Ehret, G. (1995). Discrimination training in a go/nogo-procedure alters the 2-deoxyglucose pattern in the starling's forebrain. *Brain Res.*, **628**, 83-92.
60. Pfalzer, S., Ehret, G. (1995). Social integration of a bonobo mother and her dependent daughter into an unfamiliar group. *Primates*, **36**, 349 – 360.
59. Ehret, G., Buckenmaier, J. (1994). Estrogen-receptor occurrence in the female mouse brain: effects of maternal experience, ovariectomy, estrogen and anosmia. *J. Physiol. Paris*, **88**, 315 – 329.
58. Ehret, G., Keilwerth, E., Kamada, T. (1994). The lung-eardrum pathway in three treefrog and four dendrobatid frog species: some properties of sound transmission. *J. Exp. Biol.*, **195**, 329-343.
57. Ehret, G., Romand R. (1994). Development of tonotopy in the inferior colliculus II: 2-DG measurements in kitten *Eur. J. Neurosci.*, **6**, 1589 – 1595.

56. Romand, R., Hirning-Folz, U., Ehret, G. (1994). N-myc expression in the embryonic cochlea of the mouse. *Hearing Res.*, **72**, 53 – 58.
55. Ehret, G., Jürgens, A., Koch, M. (1993). Oestrogen-receptor occurrence in the male mouse brain: modulation by paternal experience. *NeuroReport*, **4**, 1247 – 1250.
54. Wiemann, M., Ehret G. (1993). Subcellular localization of immunoreactive oxytocin within thymic epithelial cells of the male mouse. *Cell. Tiss. Res.*, **273**, 78-87.
53. Hofstetter, K. M., Ehret, G. (1992). The auditory cortex of the mouse: connections of the ultrasonic field. *J. Comp. Neurol.*, **323**, 370 – 386.
52. Ehret, G., Romand, R. (1992). Development of tone response thresholds, latencies and tuning in the mouse inferior colliculus. *Dev. Brain Res.*, **67**, 317 – 326.
51. Romand, R., Ehret, G. (1992). Development of tonotopy, thresholds, latencies and tuning in the mouse inferior colliculus. *J. Phys. III, Suppl.*, **Vol. 2**, 181 – 184.
50. Ehret, G. (1992). Categorical perception of mouse-pup ultrasounds in the temporal domain. *Anim. Behav.*, **43**, 409 – 416.
49. Ehret, G., Koch, M., Jirikowski, G. F. (1991). Hormone, ZNS und Fortpflanzungsverhalten. *Allergologie*, **14**, 383 – 394.
48. Ehret, G., Fischer, R. (1991). Neuronal activity and tonotopy in the auditory system visualized by c-fos gene expression. *Brain Res.*, **567**, 350 – 354.
47. Koch, M., Ehret, G. (1991). Parental behavior in the mouse: effects of lesions in the entorhinal/piriform cortex. *Behav. Brain Res.*, **42**, 99 – 105.
46. Romand, R., Ehret, G. (1990). Development of tonotopy in the inferior colliculus I. Electrophysiological mapping in house mice. *Dev. Brain Res.*, **54**, 221 – 234.
45. Ehret, G., Tautz, J., Schmitz, B., Narins, P. M. (1990). Hearing through the lungs: lung-eardrum transmission of sound in the frog *Eleutherodactylus coqui*. *Naturwissenschaften*, **77**, 192 – 194.
44. Ehret, G. (1989). Categorical/continuous perception: a phenomenon pressed into different models. *Behav. Brain Sci.*, **12**, 763 – 764.
43. Koch, M., Ehret, G. (1989). Estradiol and parental experience, but not prolactin are necessary for ultrasound recognition and pup-retrieving in the mouse. *Physiol. Behav.*, **45**, 771 – 776.
42. Koch, M., Ehret, G. (1989). Immunocytochemical localization and quantitation of estrogen-binding cells in male and female (virgin, pregnant, lactating) mouse brain. *Brain Res.*, **489**, 101 – 112.
41. Ehret, G., Koch, M. (1989). Ultrasound-induced parental behaviour in house mice is controlled by female sex hormones and parental experience. *Ethology*, **80**, 81 – 93.
40. Ehret, G., Merzenich, M. M. (1988). Neuronal discharge rate is unsuitable for encoding sound intensity at the inferior colliculus level. *Hearing Res.*, **35**, 1 – 8.

39. Ehret, G., Merzenich, M. M. (1988). Complex sound analysis (frequency resolution, filtering and spectral integration) by single units of the inferior colliculus of the cat. *Brain Res. Revs.*, **13**, 139 – 163.
38. Wegener, S., Schmidt, W. J., Ehret, G. (1988). Haloperidol- and apomorphine - induced changes in pup searching behaviour of house mice. *Psychopharmacology*, **95**, 271 – 275.
37. Narins, P. M., Ehret, G., Tautz, J. (1988). Accessory pathway for sound transfer in a neotropical frog. *Proc. Natl. Acad. Sci. USA*, **85**, 1508 – 1512.
36. Ehret, G. (1987). Networks with evolutionary potential. *Behav. Brain. Sci.*, **10**, 376 – 377.
35. Ehret, G. (1987). Left hemisphere advantage in the mouse brain for ultrasound recognition in a communicative context. *Nature*, **325**, 249 – 251.
34. Ehret, G., Koch, M., Markl, H., Haack, B. (1987). Sex and parental experience determine the onset of an instinctive behavior in mice. *Naturwissenschaften*, **74**, 47.
33. Ehret, G., Bernecker, C. (1986). Low-frequency sound communication by mouse pups (Mus musculus): Wriggling calls release maternal behaviour. *Anim. Behav.*, **34**, 821 – 830.
32. Ehret, G., Moffat, A. J. M. (1985). Inferior colliculus of the house mouse III. Response probabilities and thresholds of single units to synthesized mouse calls compared to tone and noise bursts. *J. Comp. Physiol. A*, **156**, 637 – 644.
31. Ehret, G., Moffat, A. J. M. (1985). Inferior colliculus of the house mouse II. Single unit responses to tones, noise and tone-noise combinations as a function of sound intensity. *J. Comp. Physiol. A*, **156**, 619 – 635.
30. Stiebler, I., Ehret, G. (1985). Inferior colliculus of the house mouse I. A quantitative study of tonotopic organization, frequency representation and tone-threshold distribution. *J. Comp. Neurol.*, **238**, 65 – 76.
29. Ehret, G. (1985). Behavioral studies on auditory development in mammals in relation to higher nervous system functioning. *Acta Otolaryngol. Suppl.*, **421**, 31 – 40.
28. Ehret, G., Merzenich, M. M. (1985). Auditory midbrain responses parallel spectral integration phenomena. *Science*, **227**, 1245 – 1247.
27. Romand, R., Ehret, G. (1984). Development of sound production in normal, isolated and deafened kittens during the first postnatal months. *Dev. Psychobiol.*, **17**, 629- 649.
26. Ehret, G. (1984). Disregarding vertebrates is neither useful nor necessary. *Behav. Brain Sci.*, **7**, 385 – 386.
25. Ehret, G., Moffat, A. J. M. (1984). Noise masking of tone responses and critical ratios in single units of the mouse cochlear nerve and cochlear nucleus. *Hearing Res.*, **14**, 45 – 57.
24. Ehret, G., Haack, B. (1984). Motivation and arousal influence sound-induced maternal pup-retrieving behavior in lactating house mice. *Z. Tierpsychol.*, **65**, 25 – 39.

23. Ehret, G., Dreyer, A. (1984). Localization of tones and noise in the horizontal plane by unrestrained house mice (*Mus musculus*). *J. Exp. Biol.*, **109**, 163 -174.
22. Ehret, G., Moffat, A. J. M., Capranica, R. R. (1983). Two-tone suppression in auditory nerve fibers of the green treefrog (*Hyla cinerea*). *J. Acoust. Soc. Am.*, **73**, 2093 – 2095.
21. Ehret, G., Haack, B. (1982). Ultrasound recognition in house mice: Key-stimulus configuration and recognition mechanisms. *J. Comp. Physiol. A*, **148**, 245 – 251.
20. Ehret, G., Moffat, A. J. M., Tautz, J. (1982). Behavioral determination of frequency resolution in the ear of the cricket, *Teleogryllus oceanicus*. *J. Comp. Physiol. A*, **148**, 237 – 244.
19. Ehret, G., Haack, B. (1981). Categorical perception of mouse pup ultrasound by lactating females. *Naturwissenschaften*, **68**, 208 – 209.
18. Ehret, G., Romand, R. (1981). Postnatal development of absolute auditory thresholds in the kitten. *J. Comp. Physiol. Psychol.*, **95**, 304 – 311.
17. Ehret, G. (1980). Development of sound communication in mammals. *Advanc. Study Behav.*, **11**, 179 – 225.
16. Ehret, G., Capranica, R. R. (1980). Masking patterns and filter characteristics of auditory nerve fibers in the green treefrog (*Hyla cinerea*). *J. Comp. Physiol. A*, **141**, 1 – 12.
15. Ehret, G., Gerhardt, H. C. (1980). Auditory masking and effects of noise on responses of the green treefrog (*Hyla cinerea*) to synthetic mating calls. *J. Comp. Physiol. A*, **141**, 13 – 18.
14. Ehret, G. (1979). Quantitative analysis of nerve fiber densities in the cochlea of the house mouse (*Mus musculus*). *J. Comp. Neurol.*, **183**, 77 – 88.
13. Ehret, G. (1979). Correlation between cochlear hair cell loss and shifts of masked and absolute behavioral auditory thresholds in the house mouse. *Acta Otolaryngol.*, **87**, 28 – 38.
12. Ehret, G. (1978). Stiffness gradient along the basilar membrane as a basis for spatial frequency analysis within the cochlea. *J. Acoust. Soc. Am.*, **64**, 1723 – 1726.
11. Ehret, G. (1977). Postnatal development in the acoustic system of the house mouse in the light of developing masked thresholds. *J. Acoust. Soc. Am.*, **62**, 143 – 148.
10. Ehret, G., Frankenreiter, M. (1977). Quantitative analysis of cochlear structures in the house mouse in relation to mechanisms of acoustical information processing. *J. Comp. Physiol. A*, **122**, 65 – 85.
9. Ehret, G. (1977). Comparative psychoacoustics: perspectives of peripheral sound analysis in mammals. *Naturwissenschaften*, **64**, 461 – 470.
8. Ehret, G. (1976). Temporal auditory summation for pure tones and white noise in the house mouse (*Mus musculus*). *J. Acoust. Soc. Am.*, **59**, 1421 – 1427.

7. Ehret, G. (1976). Development of absolute auditory thresholds in the house mouse (*Mus musculus*). *J. Amer. Audiol. Soc.*, **1**, 179 – 184.
6. Ehret, G. (1976). Critical bands and filter characteristics in the ear of the house mouse (*Mus musculus*). *Biol. Cybernet.*, **24**, 35 – 42.
5. Ehret, G. (1975). Masked auditory thresholds, critical ratios, and scales of the basilar membrane of the house mouse (*Mus musculus*). *J. Comp. Physiol. A*, **103**, 329 – 341.
4. Ehret, G. (1975). Frequency and intensity difference limens and non-linearities in the ear of the house mouse (*Mus musculus*). *J. Comp. Physiol. A*, **102**, 321 – 336.
3. Ehret, G. (1975). Schallsignale der Hausmaus (*Mus musculus*). *Behaviour*, **52**, 38 – 56.
2. Ehret, G. (1974). Age-dependent hearing loss in normal hearing mice. *Naturwissenschaften*, **61**, 506-507.
1. Markl, H., Ehret, G. (1973). Die Hörschwelle der Maus (*Mus musculus*). Eine kritische Wertung der Methoden zur Bestimmung der Hörschwelle eines Säugetiers. *Z. Tierpsychol.*, **33**, 274 – 286.

Publications of Book Chapters with Peer Review

35. Ehret, G. (2018). Characteristics of vocalization in adult mice. In *Handbook of Ultrasonic Vocalization. Chapter 18*. (S. M. Brudzynski, ed.), London, Academic Press, pp. 187-195.
34. Ehret, G. (2013). Sound communication in house mice: emotions in their voices and ears? In *Evolution of Emotional Communication: From Sounds in Nonhuman Mammals to Speech and Music in Man*. (E. Altenmüller, S. Schmidt, E. Zimmermann, eds.), Oxford, Oxford University Press, pp. 63-74.
33. Ehret, G., Göpfert, M.C. (2013). Auditory systems. In *Neurosciences*. (C.G. Galizia, P.-M. Lledo, eds.), Berlin, Springer, pp. 337-362.
32. Kanwal, J.S., Ehret, G. (2011). Communication sounds and their cortical representation. In *The Auditory Cortex*. (J.A. Winer, C.E. Schreiner, eds.), New York, Springer, pp. 343-368.
31. Ehret, G., Kurt, S. (2010). Selective perception and recognition of vocal signals. In *Handbook of Mammalian Vocalization*. (S.M. Brudzynski, ed.), Oxford, Academic Press, pp. 125-134.
30. Ehret, G. (2009). Tonotopic organization (maps). In *Encyclopedia of Neuroscience*. (M.D. Binder, N. Hirokawa, U. Windhorst, M.C. Hirsch, eds.), Heidelberg, Springer-Verlag, part 20, pp. 4083-4088.
29. Hage, S.R., Jürgens, U., Ehret, G. (2007). The olivocochlear system takes part in audio-vocal interaction. In *Hearing – from Sensory Processing to Perception*. (B. Kollmeier, G. Klump, V.

Hohmann, U. Langemann, M. Mauermann, S. Uppenkamp, J. Verhey, eds.), Heidelberg, Springer-Verlag, pp. 191-198.

28. Egorova, M., Vartanyan, I., Ehret, G. (2007). Neural representation of frequency resolution in the mouse auditory midbrain. In *Hearing – from Sensory Processing to Perception*. (B. Kollmeier, G. Klump, V. Hohmann, U. Langemann, M. Mauermann, S. Uppenkamp, J. Verhey, eds.), Heidelberg, Springer-Verlag, pp. 199-205.
27. Kanwal, J.S., Ehret, G. (2006). Neural adaptations and plasticity: summary and discussion. In *Behavior and Neurodynamics for Auditory Communication*. (J.S. Kanwal, G. Ehret, eds.), Cambridge, Cambridge University Press, pp. 334-345.
26. Ehret, G., Kanwal, J.S. (2006). Behavioral and physiologic adaptations: summary and discussion. In *Behavior and Neurodynamics for Auditory Communication*. (J.S. Kanwal, G. Ehret, eds.), Cambridge, Cambridge University Press, pp. 115-120.
25. Ehret, G. (2006b). Common rules of communication sound perception. In *Behavior and Neurodynamics for Auditory Communication*. (J.S. Kanwal, G. Ehret, eds.), Cambridge, Cambridge University Press, pp. 85-114.
24. Ehret, G. (2006a). Hemisphere dominance of brain function – which functions are lateralized and why? In *23 Problems in Systems Neuroscience*. (L. van Hemmen, T. J. Sejnowski, eds.), New York, Oxford University Press, pp. 44-61.
23. Ehret, G., Schreiner, C.E. (2005). Spectral and intensity coding in the auditory midbrain. In *The Inferior Colliculus*. (J.A. Winer, C.E. Schreiner, eds.), New York, Springer, pp. 312-345.
22. Ehret, G., Geissler, D.B. (2005). Communication-call representation in the mouse auditory cortex: perception vs. recognition. In *Plasticity and Signal Representation in the Auditory System*. (J. Syka, M.M. Merzenich, eds.), New York, Springer, pp. 85-96.
21. Ehret, G., Hage, S.R., Egorova, M., Müller, B.A. (2004). Auditory maps in the midbrain: the inferior colliculus. In *Auditory Signal Processing: Physiology, Psychoacoustics, and Models* (D. Pressnitzer, A. de Cheveigné, S. McAdams, L. Collet, eds.), New York, Springer, pp. 162-168.
20. Geissler, D.B., Ehret, G. (2004). Time-critical frequency integration of complex communication sounds in the auditory cortex of the mouse. In *Auditory Signal Processing: Physiology, Psychoacoustics, and Models*. (D. Pressnitzer, A. de Cheveigné, S. McAdams, L. Collet, eds.), New York, Springer, pp. 258-264.
19. Ehret, G. (1998). Motorische Koordination und sensorische Integration. In *Enzyklopädie der Psychologie, Band C,I,7: Vergleichende Psychobiologie*. (E. Irle, H. Markowitsch, eds.), Göttingen, Hogrefe, pp. 459-539.
18. Ehret, G. (1998). Organization of neuronal activity in brainstem nuclei. In *Clinical Psychoacoustics*. (S. Nielzén, O. Olsson, eds.), Lund, Lund University Press, pp. 27-43.

17. Ehret, G. (1997). The auditory midbrain, a "shunting-yard" of acoustical information processing. In *The Central Auditory System*. (G. Ehret, R. Romand, eds.), New York, Oxford University Press, pp. 259-316.
16. Romand, R., Ehret, G. (1996). Modification of frequency representation in the cochlear nucleus during the postnatal development in kitten. A deoxyglucose study. In *Cochlear Nucleus, Structure and Function in Relation to Modeling*. (W. A. Ainsworth, E.F. Evans, C.M. Hackney, eds.), London, JAI Press, pp. 193-211.
15. Ehret, G. (1996). Auditorische Systeme. In *Neurowissenschaft (Kapitel 16)*. (J. Dudel, R. Menzel, R. F. Schmidt, eds.), Berlin, Springer-Verlag, pp. 353-381.
14. Ehret, G. (1995). Auditory frequency resolution in mammals: From neuronal representation to perception. In *Advances in Hearing Research*. (G. A. Manley, G. M. Klump, C. Köppl, H. Fastl, H. Oeckinghaus, eds.), Singapore, World Scientific, pp. 387 – 397.
13. Ehret, G. (1992). Preadaptations in the auditory system of mammals for phoneme perception. In *The Auditory Processing of Speech. From Sounds to Words*. (M.E.H. Schouten, ed.), Berlin, Mouton de Gruyter, pp. 99-112.
12. Ehret, G. (1992). Le mésencéphale auditif, une "gare de triage" du traitement de l'information acoustique. In *Anatomie et Physiologie du Système Auditif Central*. (R. Romand, ed.), Paris, INSERM-EMI, pp. 151 – 181.
11. Ehret, G. (1990). Development of behavioral responses to sound. In *Development of Sensory Systems in Mammals*. (J. R. Coleman, ed.), New York, Wiley, pp. 289 – 315.
10. Ehret, G. (1989). Hearing in the mouse. In *The Comparative Psychology of Audition: Perceiving Complex Sounds*. (R. J. Dooling, S. H. Hulse, eds.), Hillsdale, Lawrence Erlbaum, pp. 3 – 32.
9. Ehret, G. (1988b). Frequency resolution, spectral filtering and integration on the neuronal level. In *Auditory Function. Neurobiological Bases of Hearing*. (G. M. Edelman, W. E. Gall, W. M. Cowan, eds.), New York, Wiley, pp. 363 – 384.
8. Ehret, G. (1988a). Auditory development: Psychophysical and behavioral aspects. In *Handbook of Human Growth and Developmental Biology Vol 1, Part B*, (E. Meisami, P. S. Timiras, eds.), Boca Raton, CRC Press, pp. 141 – 154.
7. Ehret, G. (1987). Categorical perception of sound signals: facts and hypotheses from animal studies. In *Categorical Perception*. (S. Harnad, ed.), Cambridge, Cambridge University Press, pp. 301 – 331.
6. Ehret, G. (1984). Demonstration der innerartlichen Kommunikation mit Ultraschall-Lauten bei der Hausmaus. In *Verhaltensphysiologischer Grundkurs*. (W. Nachtigall, ed.), Weinheim, Verlag Chemie, pp. 144 – 149.

5. Ehret, G. (1983d). Auditory processing and perception of ultrasound in house mice. In *Advances in Vertebrate Neuroethology*. (J. P. Ewert, R. R. Capranica, D. J. Ingle, eds.), New York, Plenum Press, pp. 911 – 918.
4. Ehret, G. (1983c). Development of hearing and response behavior to sound stimuli: behavioral studies. In *Development of Auditory and Vestibular Systems*. (R. Romand, ed.), New York, Academic Press, pp. 211 – 237.
3. Haack, B., Markl, H. Ehret, G. (1983). Sound communication between parents and offspring. In *The Auditory Psychobiology of the Mouse*. (J. F. Willott, ed.), Springfield, Thomas, pp. 57 – 97.
2. Ehret G.(1983b). Peripheral anatomy and physiology II. In *The Auditory Psychobiology of the Mouse*. (J. F. Willott, ed.), Springfield, Thomas, pp. 170 – 200.
1. Ehret, G. (1983a). Psychophysics. In *The Auditory Psychobiology of the Mouse*. (J. F. Willott, ed.), Springfield, Thomas, pp. 13 – 56.

Other Scientific Publications

12. Ehret, G. (2011). Die Evolution zum Menschen. In *Deszendenztheorie und Darwinismus in den Wissenschaften vom Menschen (= Kulturanamnesen, 1)*. (H.-K. Keul, M. Krischel, eds.), Stuttgart, Franz Steiner Verlag, pp. 53-62.
11. Egorova, M.A., Vartanyan, I.A., Ehret, G. (2004). Frequency selectivity of neurons in the mouse auditory midbrain at the broadband noise background. *Sens. Systems*, **18**, 218-225.
10. Egorova, M., Vartanian, I., Ehret, G. (2002). Neurophysiological correlates of critical bands in the auditory midbrain. *Sens. Systems*, **16**, 3-12.
9. Ehret, G. (2002). Die Maus als Tiermodell in der Hörforschung. In *Tierexperimentelle Forschung – Erkenntnisse und Möglichkeiten*. (B. Jilge, B. Kuhnt, E. Kunz, R. Lübbe, eds.), Ulm, University of Ulm, pp. 28-34.
8. Ehret G. (1999). Kategoriale Wahrnehmung im Zeitbereich - von Mäuselauten zur menschlichen Sprache. *Z. Audiol.*, **Suppl.II**, 13-16.
7. Ehret, G. (1998). Von Mäusen, Affen und Menschen – Schritte in der Evolution zur Sprache. In *Interdisziplinäre Beiträge zur Kommunikation und zum Mensch-Technik-Verhältnis*. (C. Stadelhofer, Hrsg.), Bielefeld, Kleine Verlag, pp. 58-68.
6. Ehret, G., Scheich, H. (1995). Central auditory processing. In *Learning and Memory. (Proc. 23. Göttingen Neurobiology Conf. Vol. I)*, (N. Elsner, R. Menzel, eds), Stuttgart, Thieme, pp. 386-389.
5. Romand, R., Ehret, G. (1992). Development of tonotopy, thresholds, latencies and tuning in the mouse inferior colliculus. *J. Phys. III, Suppl.*, **Vol. 2**, 181 – 184.

4. Ehret, G. (1989). Von Mäusen, Affen und Menschen - Schritte in der Evolution zur Sprache. *Universitas*, **44**, 245 – 254.
3. Ehret, G. (1988). Physiologische Grundlagen der Entwicklung akustischer Kommunikation bei Säugetieren. *Verh. Dtsch. Zool. Ges.*, **81**, 97 – 111.
2. Ehret, G., Dreyer, A. (1984). Sound localization in the horizontal plane by the house mouse (*Mus musculus*). In *Orientation and Localization in Engineering and Biology*. (D. Varju, H. U. Schnitzler, eds.), Berlin, Springer Verlag, pp. 60 – 62.
1. Ehret, G. (1983). Leistungen des Gehörs: Auf dem Weg zum Verständnis von Analyse- und Erkennungsmechanismen. In *Biologie Aktuell II*. (H. Plattner, ed.), Konstanz, Universitätsverlag, pp. 129 – 152.