

## Literaturverzeichnis

1. **Ammirati, M.**, Vick, N., Lioa, Y., Cric, I., Mikhael, M.: Effect of the extent of surgical resection on survival and quality of life in patients with supratentorial glioblastomas and anaplastic astrocytomas. *Neurosurgery* 1987, 21: 201-206.
2. **Andersen, G.J.**: Perception of self-motion: Psychophysical and computational approaches. *Psychological Bulletin* 1986, 99 No1: 52-65.
3. **Andersen, R.A.**, Essick, G.K., Siegel, R. M.: Encoding of spatial location by posterior parietal neurons. *Science* 1985, 30: 456-458.
4. **Andersen, R.A.**, Snyder, L.H., Bradley, D.C., Xing, J.: Multimodal representation of space in the posterior parietal cortex and its use in planning movement. *Annu Rev Neurosci* 1997a, 20: 303-330.
5. **Andersen, R.A.**: Neural mechanism of visual motion perception in primates. *Neuron* 1997b, 18: 865-872.
6. **Andersen, R.A.**, Shenoy, K.V., Snyder, L.H., Bradley, D.C., Crowell, J. A.: The contributions of vestibular signals to the representations of space in the posterior parietal cortex. *Ann N Y Acad Sci* 1999, 871: 282-292.
7. **Anderson, K.C.**, Siegel, R. M.: Optic flow selectivity in the anterior superior temporal polysensory area, STPa, of the behaving monkey. *Journal of Neurosci* 1999, 19 No 7: 2681-2692.
8. **Bailey P.**, von Bonin, G.: The isocortex of man. University of Illinois Press, Urbana, Ill 1951.
9. **Bandettini, P.**, Jesmanowicz, A., Hyde, J. S.: Processing strategies for time-course data sets in functional MRI of the human brain. *Magnet Reson Med* 1993, 30: 161-173.
10. **Bandettini, P.**, Wong, E.C., Hinks, R.S., Tikofsky, R.S. Hyde, J. S.: Time course EPI of human brain function during task activation. *Magnet Reson Med* 1992, 25: 390-397.
11. **Barbas, H.**, Pandya, D. N.: Architecture and frontal cortical connections of the premotor cortex (area 6) in the rhesus monkey. *Journal of comparative Neurology* 1987, 256: 211-228.

- 
12. **Battaglia-Mayer, A.**, Ferraina, S., Genovesio, A., Marconi, B., Squatrito, S., Molinari, M., Lacquaniti, F., Caminiti, R.: Eye-hand coordination during reaching. II. An analysis of the relationship between visuomanual signals in parietal cortex and parieto-frontal association projections. *Cereb Cortex* 2001, 11: 528-544.
  13. **Bellemann, M.E.**, Spitzer, M., Brix, G., Kammer, T., Loose, R., Schwartz, A., Gückel, F.: Neurofunktionelle MR-Bildgebung höherer kognitiver Leistungen des menschlichen Gehirns. *Radiologie Springer Verlag* 1995, 35: 272-282.
  14. **Belliveau, J.W.**, Kennedy, D.N., McKinstry R.C., Buchbinder, B.R., Weisskoff, R.M., Cohen, M.S., Vevea, J.M., Brady, T.J., Rosen, B.R.: Functional Mapping of the Human Visual corex by Magnetic Resonance Imaging. *Science* 1991, 254: 716-719.
  15. **Bench, C.J.**, Frith, C.D., Grasby, P.M., Friston, K.J., Paulesu, E., Frackowiak, R.S.J., Dolan, R.J.: Investigation of the functional anatomy of attention using the stroop test. *Neuropsychologia* 1993, 31 No 9: 907-922.
  16. **Berger, S.M.**, Cohen, W.A., Ojemann, G. A.: Correlation of motor cortex brain mapping data with magnetic resonance imaging. *Journal of Neurosurgery* 1990, 72: 383-387.
  17. **Bisiach, E.**, Geminiani, G., Berti, A., Rusconi, M. L.: Perceptual and premotor factors of unilateral neglect. *Neurology* 1990, 40: 1278-1281.
  18. **Blatt, G.J.**, Andersen, R.A., Stoner, G. R.: Visual receptive field organization and cortico-cortical connections of the lateral intraparietal area (area LIP) in the Macaque. *Journal of Comparative Neurology* 1990, 229: 421-445.
  19. **Bossom, J.**: Movement without proprioception. *Brain Research* 1974, 71: 285-296.
  20. **Bottini, G.**, Sterzi, R., Paulesu, E., Vallar, G., Cappa, S.F., Erminio, F., Passingham, R.E., Frith, C.D., Frackowiak, R.S.: Identification of the central vestibular projections in man: a positron emission tomography activation study. *Exp Brain Res* 1994, 99: 164-169.
  21. **Boussaoud, D.**: Primate premotor cortex: Modulation of preparatory neuronal activity by gaze angle. *Journal of Neurophysiology* 1995, 73: 886-890.
  22. **Boussaoud, D.**, Wise, S.P.: Primate frontal cortex: effects of stimulus and movement. *Exp Brain Res* 1993 (a), 95: 28-40.

- 
- 23. **Boussaoud, D.**, Wise, S.P.: Primate frontal cortex: neuronal activity following attentional versus intentional cues. *Exp Brain Res* 1993, (b), 95: 15-27.
  - 24. **Brandt, T.**, Bartenstein, P., Janek, A., Dietrich, M.: Visual motion stimulation activates the parieto-insular vestibular cortex. *Brain* 1998, 121: 1749-1758.
  - 25. **Brandt, T.**, Dietrich, M.: The vestibular cortex. Its locations, functions, and disorders. *Ann. N.Y. Acad. Sci.* 1999, 871: 293-312.
  - 26. **Bremmer, F.**, Schlack, A., Shah, N.J., Zafiris, O., Kubischik, M., Hoffmann, K.-P., Zilles, K., Fink, G.R.: Polymodal motion processing in posterior parietal and premotor Cortex: A human fMRI study strongly implies equivalencies between humans and monkeys. *Neuron* 2001, 29: 287-296.
  - 27. **Brodmann, K.**: Beiträge zur histologischen Lokalisation der Grosshirnrinde. Dritte Mitteilung: Die Rindenfelder der niederen Affen. *J Psychol. Neurol. (Leipzig)* 1905, 4: 177-226.
  - 28. **Brodmann, K.**: Vergleichende Lokalisationslehre der Grosshirnrinde in ihren Prinzipien dargestellt auf Grund des Zellenbaus. Leipzig: J A Barth 1909.
  - 29. **Brotchie, P.R.**, Andersen, R.A., Snyder, L.H., Goodman, S. J.: Head position signals used by parietal neurons to encode locations of visual stimuli. *Nature* 1995, 375: 232-235.
  - 30. **Büchel, C.**, Josephs, O., Rees, G., Turner, R., Frith, C.D., Friston, K. J.: The functional anatomy of attention to visual motion; A functional MRI study. *Brain* 1998, 121: 1281-1294.
  - 31. **Bucher, S.F.**, Seelos, K.C., Stehling, M.K., Oertel, W.H., Reiser, M.: Möglichkeiten der technischen und methodischen Optimierung der funktionellen Magnetresonanztomographie. *Radiologie Springer Verlag* 1995, 35: 228-236.
  - 32. **Cabeza, R.**, Nyberg, L.: Imaging cognition II: An empirical review of 275 PET and fMRI studies. *Journal of Cognitive Neuroscience* 2000, 12 No 1: 1-47.
  - 33. **Campbell A.W.**: Histological studies on the localization of cerebral function. Cambridge University Press 1905

34. **Cavada, C.**, Goldman-Rakic, P.S.: Posterior parietal cortex in rhesus monkey: I. Parcellation of areas based on distinctive limbic and sensory corticocortical connections. *Journal of Comparative Neurology* 1989, 287: 393-421.
35. **Cavada, C.**: The visual parietal areas in the macaque monkey: Current structural knowledge and ignorance. *NeuroImage* 2001, 14: 21-26.
36. **Ciric, I.**, Ammirati, M., Vick, N., Mikhael, M.: Supratentorial gliomas: surgical considerations and immediate postoperative results. Gross total resection versus partial resection. *Neurosurgery* 1987, 21: 21-26.
37. **Cohen, M.S.**, Kosslyn, S.M., Breiter, H.C., DiGirolamo, G.J., Thompson, W.L., Anderson, A.K., Bookheimer, S.Y., Rosen, B.R. and Belliveau, J.W.: Changes in cortical activity during mental rotation - A mapping study using functional MRI. *Brain* 1996, 119: 89-100.
38. **Corbetta, M.**, Miezin, F.M., Dobmeyer, S., Shulman, G.L., Petersen, S.E.: Attentional modulation of neural processing of shape, color, and velocity in humans. *Science* 1990, 248: 1556-1558.
39. **Corbetta, M.**, Miezin, F.M., Dobmeyer, S., Shulman, G.L., Petersen, S.E.: Selective and divided attention during visual discrimination of shape, color, and speed: Functional anatomy by Positron Emission Tomography. *Journal of Neuroscience* 1991, 11: 2383-2402.
40. **Corbetta, M.**, Miezin, F.M., Shulman, G.L., Petersen, S.E.: A PET Study of visuospatial attention. *Journal of Neuroscience* 1993, 13 No 3: 1202-1226.
41. **Damasio, H.**: Human brain anatomy in computerized images. Oxford University Press 1995, 121-122.
42. **De Jong, B.M.**, Shipp, S., Skidmore, B., Frackowiak, R.S.J., Zeki, S.: The cerebral activity related to the visual perception of forward motion in depth. *Brain* 1994, 117: 1039-1054.
43. **De Waele, C.**, Baudonnier, P.M., Lepecq, J.C., Tran Ba Huy, P, Vidal, P.P.: Vestibular projections in the human cortex. *Exp Brain Res* 2001, 141: 541-551.

- 
- 44. **DeYoe, E.D.**, Bandettini, P., Neitz, J., Miller, D., Wina, P.: Functional magnetic resonance imaging (fMRT) of the human brain. *Journal of Neuroscience Methods* 1994, 54: 171-187.
  - 45. **Dietrich, M.**, Brandt, T.: Brain activation studies on visual-vestibular and ocular motor interaction. *Current Opinion in Neurology* 2000, 13: 13-18.
  - 46. **Ebeling, U.**, Reulen, H. -J.: Space-occupying lesions of the sensori-motor region. *Advances and Technical Standards in Neurosurgery*, Vol. 22, Springer Verlag 1995, 138-176.
  - 47. **Ferraina, S.**, Battaglia-Mayer, A., Genovesio, A., Marconi, B., Onorati P., Caminiti, R.: Early coding of visuomanual coordination during reaching in parietal area PEc. *J Neurophysiol* 2001, 85: 462-467.
  - 48. **Fink, G.R.**, Frackowiak, R.S.J., Pietrzyk, U., Passingham, R. E.: Multiple nonprimary motor areas in the Human Cortex. *Journal of Neurophysiol* 1997, 77: 2164-2174.
  - 49. **Fox, P.T.**, Raichle, M.E.: Focal physiological uncoupling of cerebral blood flow and oxidative metabolism during somatosensory stimulation in human subjects. *Proc Natl Acad Sci. USA* 1986, 83: 1140-1144.
  - 50. **Frahm, J.**, Merboldt, K.-D., Hänicke, W.: Functional MRI of human brain activation at high spatial resolution. *Magnet Reson Med* 1993, 29: 139-144.
  - 51. **Fredrickson, J.M.**, Figge, U., Scheid, P., Kornhuber, H. H.: Vestibular nerve projection to the cerebral cortex of the rhesus monkey. *Exp Brain Res* 1966, 2: 318-327.
  - 52. **Freitag, L.**, Grennlee, M.W., Lacina, T., Scheffler, K., Radü, E.W.: Effect of eye movements on the magnitude of functional magnetic resonance imaging responses in extrastriate cortex during visual motion perception. *Exp Brain Res* 1998, 119: 409-414.
  - 53. **Freund, H.J.**, Hummelsheim, H.: Premotor cortex in man: Evidence for innervation of proximal limb muscles. *Exp Brain Res* 1984, 53: 479-482.
  - 54. **Freund, H.J.**, Hummelsheim, H.: Lesions of premotor cortex in man. *Brain* 1985, 108: 697-733.
  - 55. **Fulton, J.F.**: Definition of the motor and premotor areas. *Brain Res* 1935, 58: 311-316.

- 
- 56. **Geesaman, B.J.**, Andersen, R. A.: The analysis of complex motions patterns by form/cue invariant MSTd neurons. *Journal of Neuroscience* 1996, 16 No 15: 4716-4732.
  - 57. **Gerardin, F.**, Sirigu, A., Lehericy, S., Poline, J.-B., Gaymard, B., Marsault, C., Agid, Y., Le Bihan, D.: Partially overlapping neural networks for real and imagined hand movements. *Cereb Cortex* 2000, 10: 1093-1104.
  - 58. **Geyer, S.**, Matelli, M., Luppino, G., Zilles, K.: Functional neuroanatomy of the primate isocortical motor system. *Anat Embryol* 2000, 202: 443-474.
  - 59. **Gibson, J.J.**: Perception of the visual world. Boston Houghton Mifflin 1950
  - 60. **Goldman-Rakic, P.S.**: Topography of cognition: Parallel distributed networks in primate association cortex. *Annu Rev Neurosci* 1988, 11: 137-56.
  - 61. **Goodale M.A.**: Visuomotor control: Where does vision end and action begin? *Current Biology* 1998, 8: 489-491.
  - 62. **Grafton, S.T.**, Fagg, A.H., Arbib, M.A.: Dorsal premotor cortex and conditional movement selection: A PET functional mapping study. *Journal of Neurophysiol* 1998, 79: 1092-1097.
  - 63. **Graziano, M.S.A.**, Andersen, R.A., Snowden, R. J.: Tuning of MST neurons to spiral motions. *Journal of Neuroscience* 1994, 14 No1: 54-67
  - 64. **Greenlee, M.W.**, Smith, A. T.: Detection and discrimination of first- and second-order motion in patients with unilateral brain damage. *J of Neurosci* 1997, 17 No 2: 804-818.
  - 65. **Grumme, T.**, Kluge, W., Kretzschmar, K., Roesler, A.: Cerebral and spinal computed tomography. Blackwell Science, Third Edition, 24.
  - 66. **Grüsser, O.J.**, Pause, M., Schreiter, U.: Vestibular neurones in the parieto-insular cortex of monkeys (*Macaca fascicularis*): visual and neck receptor responses. *Journal of Physiol* 1990, 430: 559-583.
  - 67. **Guldin, W.O.**, Grüsser, O.-J.: Is there a vestibular cortex? *Trends in Neurosciences* 1998, 21 No 6: 254-258.
  - 68. **Hallett, M.**, Sadato, N., Honda, M., Ishii, K., Waldvogel, D., Bushara, K: Functional MRI of the sensorimotor system. Aus Diagnostic Imaging, Functional MRI. Springer Verlag 2000. Hrsg: Moonen, C.T.W.; Bandettini, P.A.: Kapitel 31.

69. **Halsband, U.**, Freund, H. J.: Premotor cortex and conditional motor learning in man. *Brain* 1990, 113: 207-222.
70. **Halsband, U.**, Passingham, P. E.: The role of premotor and parietal cortex in the direction of action. *Brain Res* 1982, 240: 368-372.
71. **Halsband, U.**, Passingham, P. E.: Premotor cortex and the conditions for movement in monkey (*Macaca fascicularis*). *Behav Brain Res* 1985, 18: 269-277.
72. **Heilman, K.M.**, Van Den Abell, T.: Right hemisphere dominance for attention: The mechanism underlying hemispheric asymmetries of inattention (neglect). *Neurology* 1980, 30: 327-330.
73. **Hines, M.**: Significance of precentral motor cortex. P.Berg (Edit.): *The precentral cortex*, Oxford University Press 1929.
74. **Hodgson, T.L.**, Kennard, C.: Disorders of higher visual function and hemi-spatial neglect. *Current Opinion in Neurology* 2000, 13: 7-12.
75. **Hoell, T.**, Oltmanns, F., Schilling, A., Stockhausen, A., Wolf, K.J., Brock, M.: Improvement of functional magnet resonance imaging by a novel fibre-optic device and 3D-software. *Interventional Neuroradiology* 1999, 5:67-73.
76. **Hyvärinen, J.**: Regional distribution of functions in parietal association area 7 of the monkey. *Brain Res* 1981, 206: 287-303.
77. **Hyvärinen, J.**: Posterior parietal lobe of the primate brain. *Physiological Review* 1982, 62 No 3: 1060-1129.
78. **Jackson, J.H.**: *Selected Writings of J.H. Jackson*. Edited by J. Taylor. London Hodder and Stoughton 1932, 2 Vols.
79. **Johnson, P.B.**, Ferraina, S., Bianchi, L., Caminiti: Coritcal networks for visual reaching: Physiological and anatomical organization of frontal and parietal lobe arm regions. *Cereb Cortex* 1996, 6 No 2: 102-119.
80. **Jones, E.G.**, Powell, T. P. S.: An anatomical study of converging sensory pathways within the cerebral cortex of the monkey. *Brain* 1970, 93: 793-820.
81. **Karnath, H.-O.**: Spatial orientation and the representation of space with parietal lobe lesions. *Phil. Trans. R. Soc. Lond. B.* 1997, 352: 1411-1419.

- 
- 82. **Kawano, K.**, Sasaki, M., Yamashita, M.: Response properties of neurons in osterior parietal cortex of monkey during visual-vestibular stimulation. I. Visual tracking neurons. *Journal of Neurophysiology* 1984, 51 No 2: 340-351.
  - 83. **Kleinschmidt, A.**, Hänicke, W., Requardt, M., Merboldt, K.D., Frahm, J.: Strategien der Datenanalyse in Hirnaktivierungsstudien mit funktioneller MR-Tomografie. *Radiologie Springer Verlag* 1995, 35: 242-251.
  - 84. **Kombos, T.**, Suess, O., Ciklatekerlio, O., Brock, M.: Monitoring of intraoperative motor evoked potentials to increase the safety of surgery in and around the motor cortex. *Journal of Neurosurgery* 2001, 95 No 4: 608-614.
  - 85. **Kosslyn, S.M.**, Alpert, N.M., Thompson, W.L., Malkovic, V., Weise, S.B., Chabris, C.F., Hamilton, S.E., Rauch, S.L., Buonanno, F.S.: Visual mental imagery activates topographically organized visual cortex: PET investigations. *Journal of Cognitive Neuroscience* 1993, 5 No 3: 263-287.
  - 86. **Kwong, K.K.**, Belliveau, J.W., Chesler, D.A., Goldberg, I.E., Weisskoff, R.M., Poncelet, B.P., Kennedy, D.N., Hoppel, B.E., Cohen, M.S., Turner, R., Cheng, H.-M., Brady, T.J., Rosen, B.R.: Dynamic magnetic resonance imaging of human brain activity during primary sensory stimulation. *Proc Natl. Acad. Sci. USA* 1992, 89: 5675-5679.
  - 87. **Lamm, C.**, Windischberger, C., Leodolter, U., Moser, E., Bauer, H.: Evidence of pre-motor cortex activity during dynamic visuospatial imagery from single-trial functional magnetic resonance imaging and event-related slow cortical potentials. *NeuroImage* 2001, 14: 268-283.
  - 88. **Lehericy, S.**, Duffau, H., Cornu, P., Capelle, L., Pidoux, B. et.al.: Correspondence between functional magnetic resonance imaging somatotopy and individual brain anatomy of the central region: Comparison with intraoperative stimulation in patients with brain tumors. *Journal of Neurosurgery* 2000, 92: 589-598.
  - 89. **Li L.**, Warren, W.H.: Perception of heading during rotation: sufficiency of dense motion parallax and reference objects. *Vision Research* 2000, 40: 3873-3894.
  - 90. **Luppino, G.**, Matelli, M., Camarda, R.M., Gallese, V., Rizzolatti, G.: Multiple representations of body movements in the mesial area 6 and the adjacent cingulate cortex: An

intracortical microstimulation study in the macaque monkey. *Journal of Comparative Neurology* 1991, 311: 463-482.

91. **Luppino, G.**, Matelli, M., Camarda, R.M., Gallese, V., Rizzolatti, G.: Corticocortical connections of area F3 (SMA-proper) and area F6 (pre-SMA) in the macaque monkey. *Journal of Comparative Neurology* 1993, 338: 114-140.
92. **Luppino, G.**, Rizzolatti, G.: The organization of the frontal cortex. *News Physiol Sci* 2000, 15: 219-224.
93. **Mäkelä, J.**, Kirveskari, E., Seppä, M., Hämäläinen, M., Forss, N., Avikainen, S., Al-lonen, O., Salenius, S., Kovala, T., Randell, T., Jääskeläinen, J., Hari, R.: Three-dimensional integration of brain anatomy and functon to facilitate intraoperative navigation around the sensorimotor strip. *Human Brain Mapping* 2001, 12: 180-192.
94. **Marconi, B.**, Genovesio, A., Battaglia-Mayer, A., Ferraina, S., Squatrito, S., Molinari, M., Lacquaniti, F., Caminiti, R.: Eye-hand coordination during reaching. I. Anatomical relationships between parietal and frontal Cortex. *Cereb Cortex* 2001, 11: 513-527.
95. **Matelli, M.**, Govoni, P., Galletti, C., Kutz, D.F., Luppino, G.: Superior area 6 afferents from the superior parietal lobule in the macaque monkey. *Journal of Comparative Neurology* 1998, 402 No 3: 327-352.
96. **Matelli, M.**, Luppino, G.: Functional anatomy of human motor cortical areas. *Hand-book of Neuropsychology*, chapter 2, 1997, 11: 9-26.
97. **Matelli, M.**, Luppino, G., Rizzolatti, G.: Architecture of the superior and mesial area 6 and the adjacent cingulate cortex in the macaque monkey. *Journal of Comparative Neurology* 1991, 311: 445-462.
98. **Maunsell, J.H.R.**, Van Essen, D.C.: The connections of the middle temporal visual area (MT) and their relationship to a cortical hierarchy in the macaque monkey. *Journal of Neurosci* 1983, 3: 2563-2586.
99. **Mesulam, M.M.**: Large-scale neurocognitive network and distributed processing for attention, language, and memory. *Annals of Neurology* 1990, 28 No 5: 597-613.
100. **Moscovitch, M.**, Behrmann, M.: Coding of spatial information in the somatosensory system: Evidence from patients with neglect following parietal lobe damage. *Journal of Cognitive Neuroscience* 1994, 6 No 2: 151-155.

101. **Motter B.C.**, Mountcastle, V.B: The functional properties of the light-sensitive neurons of the posterior parietal cortex studied in waking monkeys: Foveal sparing and opponent vector organization. *Journal of Neuroscience* 1981, 1 No 1: 3-26.
102. **Mountcastle, V.B.**, Andersen, R. A., Motter B.C.: The influence of attentive fixation upon the excitability of the light-sensitive neurons of the posterior parietal cortex. *Journal of Neuroscience* 1981, 1 No 11: 1218-1235.
103. **Nobre, A.C.**, Sebestyen, G.N., Gitelman, D.R., Mesulam, M.M., Frackowiak, R.S.J., Frith, C. D.: Functional localization of the system for visuospatial attention using positron emission tomography. *Brain* 1997, 120: 515-533.
104. **Ogawa, S.**, Lee, A.S., Kay, A.R., Tank, D. W.: Brain magnetic resonance imaging with contrast dependent on blood oxygenation. *Proc Natl. Acad. Sci. USA* 1990, 87: 9868-9872.
105. **Ogawa, S.**, Menon, R.S., Tank, D.W., Kim, S.-G., Merkle, H., Ellermann, J.M., Ugurbil, K.: Functional brain mapping by blood oxygenation level-dependent contrast magnetic resonance imaging. *Biophys Journal* 1993, 64: 803-812.
106. **Ogawa, S.**, Tank, D.W., Menon, R.S., Ellermann, J.M., Kim, S.G., Merkle H., Ugurbil, K.: Intrinsic signal changes accompanying sensory stimulation: Functional brain mapping with magnetic resonance imaging. *Proc Natl. Acad. Sci. USA* 1992, 89: 5951-5955.
107. **Ojemann, J.G.**, Miller, J.W., Silbergeld, D.L.: Preserved function in brain invaded by tumor. *Neurosurgery* 1996, 39: 253-258.
108. **Pandya, D.N.**, Seltzer, B.: Intrinsic connections and architectonics of posterior parietal cortex in the rhesus monkey. *Journal of Comparative Neurology* 1982, 204: 196-210.
109. **Pandya, D.N.**, Kuypers, H.G.J.M.: Corticocortical connections in the Rhesus monkey. *Brain Res* 1969a, 13: 13-36.
110. **Pandya, D.N.**, Vignolo, L. A.: Interhemispheric projections of the parietal lobe in the Rhesus monkey. *Brain Res* 1969b, 15: 49-65.
111. **Paradis, A.L.**, Cornilleau-Peres, V., Droulez, J., van de Moortele, P.F., Lobel, E., Berthoz, A., Le Bihan, D., Poline, J.B.: Visual perception of motion and 3-D structure from motion: an fMRI Study. *Cereb Cortex* 2000, 10 N0 8: 772-783.

112. **Penfield, W.**, Boldrey, E.: Somatic motor and sensory representation in the cerebral cortex. *Brain* 1937, 60: 389-443.
113. **Penfield, W.**, Welch, K.: The supplementary cortex of man. A clinical study of localization of function. *A.M.A. Archives of Neurology and Psychiatry* 1951, 66: 289-317.
114. **Petersen, S.E.**, Robinson, D.L., Morris, J. D.: Contributions of the pulvinar to visual spatial attention. *Neurophysiology* 1987, 25 No 1A: 97-105.
115. **Petrides, M.**, Pandya, D.N.: Projections to the frontal cortex from the posterior parietal region in the rhesus monkey. *Journal of Comparative Neurology* 1984, 228: 105-116.
116. **Peuskens, H.**, Sunaert, S., Dupont, P., Van Hecke, P., Orban, G.A.: Human brain regions involved in heading estimation. *Journal of Neuroscience* 2001, 21 No 7: 2451-2461.
117. **Phinney, R.E.**, Siegel, R. M.: Speed selectivity for optic flow in Area 7a of the behaving monkey. *Cereb Cortex* 2000, 10: 413-421.
118. **Posner, M.I.**: The attention system of the human brain. *Annu Rev Neurosci* 1990, 13: 25-42.
119. **Posner, M.I.**, Walker, J.A., Friedrich, F.J., Rafal, R. D.: Effects of parietal injury on covert orienting of attention. *Journal of Neuroscience* 1984, 4 No 7: 1863-1874.
120. **Puce, A.**, Constable, R.T., Luby, M.L., McCarthy, G., Nobre, A.C., Spencer, D.D., Gore, J.C., Allison, T.: Functional magnetic resonance imaging of sensory and motor cortex: comparison with electrophysiological localization. *Journal of Neurosurgery* 1995, 83: 262-270.
121. **Pujol, J.**, Conesa, G., Deus, J., Veendrell, P., Isamat, F., Zannoli, G., Martí-Vilati, J., Capdevila, A.: Presurgical identifikation of the primary sensorimotor cortex by functional magnetic resonance imaging. *J Neurosurgery* 1996, 84: 7-13.
122. **Rao, S.M.**, Harrington, D.I., Haaland, K.Y., Bobholz, J.A., Cox, R.W., Binder, J.R.: Distributed neural systems underlying the timing of movements. *Journal of Neuroscience* 1997, 17: 5528-5535.
123. **Rizzolatti, G.**, Lupino, G., Matelli, M.: The organization of the cortical motor system: new concepts. *Electroencephalography and clinical Neurophysiology* 1998, 106: 283-296.

- 
124. **Roth, R.**, Decety, J., Raybaudi, M., Massarelli, R., DelonMartin, C., Segebarth, C., Morand, S., Gemignangi, A., Decrops, N., Jeannerod, M.: Possible involvement of primary motor cortex in mentally simulated movement: A functional magnetic resonance imaging study. *Neuro Report* 1996, 7: 1280-1284.
125. **Rushworth, M.F.S.**, Ellison, A., Walsh, V.: Complementary localization and lateralization of orienting and motor attention. *Nature neuroscience* 2001 (a), 4 No 6: 656-661.
126. **Rushworth, M.S.F.**, Krams, M., Passingham, R.E.: The attentional role of the left parietal cortex: The distinct lateralization and localization of motor attention in the human brain. *J of Cognitive Neuroscience* 2001 (b), 13 No 5: 698-710.
127. **Rushworth, M.S.F.**, Paus, T., Sipila, P.K.: Attention system and the organization of the human parietal cortex. *Journal of Neurosci* 2001 (c), 21 No 4: 5262-5271.
128. **Sakata, H.**, Shibutani, H., Ito, Y., Tsurugai, K.: Parietal cortical neurons responding to rotary movement of visual stimulus in space. *Exp Brain Res* 1986, 61: 658-663.
129. **Sakata, H.**, Shibutani, H., Kawano, K.: Parietal neurons with dual sensitivity to real and induced movements of visual target. *Neurosciencse Letters* 1978, 9: 165-169.
130. **Sakata, H.**, Shibutani, H., Kawano, K., Harrington, T. L.: Neural mechanism of space vision in the parietal association cortex of the monkey. *Vision Research* 1985, 25 No 3: 453-463.
131. **Schad, L.R.**: Funktionelle Magnetresonanztomographie (fMRT) Teil 1: Grundlagen und Messtechniken. *Der Radiologe* 2002a, 42: 659-669.
132. **Schad, L.R.**: Funktionelle Magnetresonanztomographie (fMRT) Teil 2: Datenanalyse und Anwendungen. *Der Radiologe* 2002b, 42: 756-764.
133. **Schlaug, G.**, Knorr, U., Seitz, R.J.: Inter-subject variability of cerebral activation in acquiring a motor skill: a positron emission tmomography. *Exp Brain Res* 1994, 98: 523-534.
134. **Seeger, W.**: The microsurgical approach to the target areas of the brain. Springer Verlag 1993.
135. **Shipp, S.**, Blanton, M., Zeki, S.: A visuo-somatotmotor pathway through superior parietal cortex in the macaque monkey: cortical connections of areas V6 and V6A. *Eur Journal of Neurosci* 1998, 10: 3171-3198.

- 
136. **Squatrito, S.**, Raffi, M., Maioli, M.G., Battaglia-Mayer, A.: Visual motion responses of neurons in the caudal area PE of macaque monkey. *Journal of Neurosci* 2001, 21: 1-5.
137. **Stephan, K.M.**, Fink, G.R., Passingham, R.E., Silbersweig, D., Ceballos-Baumann, A.O., Frith, C.D., Frackowiak, R.S.J.: Functional anatomy of the mental representation of upper extremity movements in healthy subjects. *Journal of Neurophysiology* 1995, 73 No. 1: 373-386.
138. **Stoffregen, T.A.**: Flow structure versus retinal location in the optical control of stance. *Journal of Exp Psychol* 1985, 5: 554-565.
139. **Sunaert, S.**, Van Hecke, P., Marchal, G, Orban, G. A.: Motion-responsive regions of the brain. *Exp Brain Res* 1999, 127: 355-370.
140. **Suzuki, M.**, Kitano, H., Ito, R., Kitanishi, T., Yazawa, Y., Ogawa, T., Shiino, A., Kita-jima, K.: Cortical and subcortical vestibular response to caloric stimulation detected by functional Magnetic Resonance Imaging. *Cogn Brain Res* 2001, 12: 441-449.
141. **Tamraz, J.C.**, Comair, Y. G.: *Atlas of regional anatomy of the brain using MRI*. Springer Verlag 2000.
142. **Tanne-Gariepy, J.**, Rouiller, E. M., Boussaoud, D.: Parietal inputs to dorsal versus ventral premotor areas in the macaque monkey: evidence for largely segregated visuo-motor pathways. *Exp Brain Res* Online first, 2002.
143. **Tootell, R.B.H.**, Reppas, J.B., Dale, A.M., Look, R.B., Sereno, M.I., Malach, R., Brady, T.J., Rosen, B.R.: Visual motion aftereffect in human cortical area MT revealed by functional magnetic resonance imaging. *Nature* 1995a, 375: 139-141.
144. **Tootell, R.B.H.**, Reppas, J.B., Kwong, K. K., Malach, R., Born, R.T., Brady, T.J., Rosen, B.R., Belliveau, J.W: Functional analysis of human MT and related visual cortical areas using magnetic resonance imaging. *Journal Neuroscience* 1995b, 15: 3215-3230.
145. **Trevarthen,C.B.**: Two mechanisms of vision in primates. *Psychol Forsch* 1968, 31: 299-337.
146. **Turano, K.**, Wang, X.: Visual discrimination between a curved and straight path of self motion: Effects of forward speed. *Vision Research* 1994, 34 No 1: 107-114.
147. **Ungerleider, L.G.**, Desimone, R: Cortical connections of visual area MT in the macaque. *Journal of Comp Neurol* 1986, 248: 190-222.

- 
148. **Ungerleider, L.G.**, Mishkin, M: Two cortical visual system. In: Analysis of Visual Behavior, by Ingle, Goodale, Mansfield 1982, MIT Press: 549-586.
149. **Van Essen, D.C.**, Maunsell, J.: Hierarchical organization and functional streams in the visual cortex. Trends in Neurosciences 1983, 6: 370-375.
150. **Vogt, O.**, Vogt, C.: Ergebnisse unserer Hirnforschung. Journal of Psychol Neurol 1919, 25: 277-462.
151. **Von Economo, C.**, Koskinas, G.N.: Die Cytoarchitektonik der Hirnrinde des erwachsenen Menschen. Springer, Wien 1925.
152. **Warren, W.H.**, Kurtz, K.J.: The role of central and peripheral vision in perceiving the direction of self-motion. Perception and Psychophysics 1992, 51 No 5: 443-454.
153. **Watson, J.D.G.**, Myers, R., Frackowiak, R.S.J., Hajnal, J.V., Woods ,R.P., Mazziotta, R.P., Shipp, S., Zeki, S.: Area V5 of the human brain: Evidence from a combined study using Positron Emission Tomography and Magnetic Resonance Imaging. Cereb Cortex 1993, 3 No 2: 79-94.
154. **Weinrich, M.**, Wise, S.P., Mauritz, K.-H.: A neurophysiological study of the premotor cortex in the rhesus monkey. Brain 1984, 107: 385-414.
155. **Wiesendanger, M.**: Organization of secondary motor areas of the cerebral cortex. J.M.Brookhart & V.B Mountcastle (Eds.). Structure and function of the cerebral motor cortex. Oxford University Press 1981, 1121-1147.
156. **Wise, S.P.**: The Primate premotor cortex: Past, present, and preparatory. Annu Rev Neurosci 1985, 8: 1-19.
157. **Wise, S.P.**, Boussaoud, D., Johnson, P.B., Caminiti, R.: Premotor and parietal cortex: Corticocortical connectivity and combinatorial computations. Annu Rev Neurosci 1997, 20: 25-42.
158. **Wise, S.P.**, di Pellegrino, G., Boussaoud, D.,: The premotor cortex and nonstandard sensorimotor mapping. Can. Journal Physiol. Pharmacol. 1996, 74: 469-482.
159. **Woolsey, C.N.**, Settlage, P.H., Meyer, D.R., Sencer, W., Pinto Hamuy, T., Travis, A.M.: Patterns of localization in precentral and 'supplementary' motor areas and their relation to the concept of a premotor area. Res Publ Assoc Nerv Ment Diss 1952, 30: 238-264.

160. **Yetkin, F.Z.**, Mueller, W.M., Morris, G.L., McAuliffe, T.L., Ulmer, J.L., Cox, R.W.: Functional MR activation correlated with intraoperative cortical mapping. *Am J Neuroradiol* 1997, 18: 1311-1315.
161. **Yoursy, T.A.**, Schmid, U.D., Alkadi, H., Schmidt, D., Peraud, A., Buettner, A., Winkler, P.: Localization of the motor hand area to a knob on the precentral gyrus. A landmark. *Brain* 1997, 120: 141-157.
162. **Zeki, S.**, Watson, J.D.G., Lueck, C.J., Friston, K.J., Kennard, C., Frackowiak, R.S.J.: A direct demonstration of functional spezialisaton in human visual cortex. *Journal of Neuroscience* 1991, 11: 641-649.
163. **Zihl, J.**, Von Cramon, D., Mai, N., Schmid, C.: Disturbance of movement vision after bilateral posterior brain damage: further evidence and follow-up observations. *Brain* 1991, 114: 2235-2252.
164. **Zilles, K.**, Schlaug, G., Geyer, S., Luppino, G., Matelli, M., Qu, M., Schleicher, A., Schormann, T.: Anatomy and transmitter receptors of the supplementary motor areas in the human and nonhuman primate brain. Luders, H.O. (Edit.) *Supplementary Sensorimotor Area* 1996, Lippincott-Raven, Philadelphia: 29-43.