

# Literatur

- Ade, F. (1983). Characterization of textures by 'Eigenfilters'. *Signal Processing*, 5, 451-457.
- Adler, F. H. (1959). *Physiology of the eye: Clinical application*. St. Louis: Mosby.
- Ahmed, N. & Rao, K. R. (1975). *Orthogonal transforms for digital signal processing*. Berlin, Heidelberg, New York: Springer.
- Alexander, K. R., Xie, W. & Derlacki, D. J. (1993). The effect of contrast polarity on letter identification. *Vision Research*, 17, 2491-2497.
- Alexander, K. R., Xie, W. & Derlacki, D. J. (1994). Spatial-frequency characteristics of letter identification. *Journal of the Optical Society of America A*, 11, 2375-2382.
- Alexander, K. R., Xie, W. & Derlacki, D. J. (1997). Visual acuity and contrast sensitivity for individual Sloan letters. *Vision Research*, 37, 813-819.
- Allport, A. (1989). Visual attention. In M. I. Posner (Ed.), *Foundations of cognitive science* (pp. 631-682). Cambridge, MA: MIT Press.
- Amsler, M. (1947). L'examen qualitatif de la fonction maculaire. *Ophthalmologica*, 114, 248-261.
- Anderson, J. R. (1996). *Kognitive Psychologie: eine Einführung (Cognitive psychology and its implications)*. Heidelberg: Spektrum Akademischer Verlag.
- Anstis, S. M. (1974). A chart demonstrating variations in acuity with retinal position. *Vision Research*, 14, 589-592.
- Appelman, I. B. & Mayzner, M. S. (1982). Application of geometric models to letter recognition: Distance and density. *Journal of Experimental Psychology: General*, 111, 60-100.
- Arbib, M. A. (1995). *The handbook of brain theory and neural networks*. Cambridge, MA: MIT Press (A Bradford Book)
- Atkinson, J., Anker, S., Evans, C. & McIntyre, A. (1987). The Cambridge Crowding Cards for preschool visual acuity testing. In M. Lenk-Schäfer (Ed.), *Transactions of the Sixth International Orthoptic Congress, Harrogate, England* (pp. 482-486).
- Atkinson, J., Pimm-Smith, E., Evans, C., Harding, G. & Braddick, O. (1986). Visual crowding in young children. *Documenta Ophthalmologica Proceedings Series*, 45, 201-213.
- Aubert, H. & Foerster (1857). Beiträge zur Kenntniss des indirecten Sehens. (I). Untersuchungen über den Raumsinn der Retina. *Archiv für Ophthalmologie*, 3, 1-37.
- Aulhorn, E. (1960). Sehschärfepfung am Perimeter. *Berichte der Deutschen Ophthalmologischen Gesellschaft*, 63, 285-288.
- Aulhorn, E. (1964). Über die Beziehung zwischen Lichtsinn und Sehschärfe. *Albrecht von Graefes Archiv für klinische und experimentelle Ophthalmologie*, 167, 4-74.

- Aulhorn, E. & Harms, H. (1972). Visual perimetry. In D. Jameson & L. M. Hurvich (Eds.), *Handbook of sensory physiology, Vol. VII/4: Visual psychophysics* (pp. 102-145). Berlin: Springer.
- Aulhorn, E. L. & Köst, G. (1989). Noise-field campimetry: a new perimetric method (snow field campimetry). In A. Heijl (Ed.), *Perimetry update 1988/1989* (pp. 331-336). Amsterdam: Kugler & Ghedini.
- Averbach, E. & Coriell, A. S. (1961). Short-term memory in vision. *The Bell System Technical Journal*, 40, 309-328.
- Azzopardi, P. & Cowey, A. (1993). Preferential representation of the fovea in the primary visual cortex. *Nature*, 361, 719-721.
- Azzopardi, P. & Cowey, A. (1996). Models of ganglion cell topography in the retina of macaque monkeys and their application to sensory cortical scaling. *Neuroscience*, 72, 617-625.
- Azzopardi, P. & Cowey, A. (1996). The overrepresentation of the fovea and adjacent retina in the striate cortex and dorsal lateral geniculate nucleus of the macaque monkey. *Neuroscience*, 72, 627-639.
- Azzopardi, P., Jones, K. E. & Cowey, A. (1999). Uneven mapping of magnocellular and parvocellular projections from the lateral geniculate nucleus to the striate cortex in the macaque monkey. *Vision Research*, 39, 2179-2189.
- Bach, M. (1997). Anti-aliasing and dithering in the 'Freiburg Visual Acuity Test'. *Spatial Vision*, 11, 85-89.
- Bach, M., Meigen, T. & Strasburger, H. (1997). Raster scan cathode ray tubes for vision research – limits of resolution in space, time and intensity, and some solutions. *Spatial Vision*, 10, 403-414.
- Bachmann, G. & Fahle, M. (2000). Component perimetry: a fast method to detect visual field defects caused by brain lesions. *Investigative Ophthalmology and Visual Science*, 41, 2870-2886.
- Balliet, R., Blood, K. M. & Bach-y-Rita, P. (1985). Visual field rehabilitation in the cortically blind? *Journal of Neurology, Neurosurgery and Psychiatry*, 48, 1113-1124.
- Barlow, H. B. (1958). Temporal and spatial summation in human vision at different background intensities. *Journal of Physiology*, 141, 337-359.
- Barrow, H. G. & Tenenbaum, J. M. (1986). Computational approaches to vision. In K. R. Boff, L. Kaufman & J. P. Thomas (Eds.), *Handbook of perception and human performance, Vol. II: Cognitive processes and performance* (pp. 38-1 - 38-70). New York: John Wiley.
- Barth, E., Caelli, T. & Zetsche, C. (1993). Image encoding, labelling and reconstruction from differential geometry. *Computer Vision, Graphics, and Image Processing: Graphical models and image processing*, 55, 428-446.
- Barth, E., Zetsche, C. & Rentschler, I. (1998). Intrinsic two-dimensional features as textons. *Journal of the Optical Society of America A*, 15, 1723-1732.

- Bartlett, N. R. (1965). Thresholds as dependent on some energy relations and characteristics of the subject. In C. H. Graham (Ed.), *Vision and visual perception* (pp. 154-184). New York: John Wiley.
- Basler, A. (1906). Über das Sehen von Bewegungen: I. Mitteilung. Die Wahrnehmung kleinster Bewegungen. *Pflügers Archiv für Physiologie*, 115, 582-601.
- Basler, A. (1908). Über das Sehen von Bewegungen: II. Mitteilung. Die Wahrnehmung kleinster Bewegungen bei Ausschluss aller Vergleichsgegenstände. *Pflügers Archiv für Physiologie*, 124, 313-335.
- Baumgardt, E. (1972). Threshold quantal problems. In D. Jameson & L. M. Hurvich (Eds.), *Handbook of sensory physiology, Vol. VII/4: Visual psychophysics* (pp. 29-55). Berlin: Springer.
- Baumgartner, G. (1990). Where do visual signals become a perception? In J. C. Eccles & O. Creutzfeldt (Eds.), *The principles of design and operation of the brain* (pp. 99-118). Civitas Vaticana: Pontificiae Academiae Scientiarum.
- Baumgartner, G. (1992). Gehirn und Bewusstsein. *Schweizerische Medizinische Wochenschrift*, 122, 4-10.
- Beard, B. L., Levi, D. M. & Klein, S. A. (1997). Vernier acuity with non-simultaneous targets: the cortical magnification factor estimated by psychophysics. *Vision Research*, 37, 325-346.
- Bebie, H., Fankhauser, F. & Spahr, J. (1976). Static perimetry: Accuracy and fluctuations. *Acta Ophthalmologica*, 54, 339-348.
- Beck, R. W., Diehl, L., Cleary, P. A. & Group, O. N. S. (1993). The Pelli-Robson letter chart: Normative data for young adults. *Clinical Vision Sciences*, 8, 207-210.
- Behar, J., Porat, M. & Zeevi, Y. Y. (1988). The importance of localized phase in vision and image representation. *Visual Communications and Image Processing. SPIE Proc. Vol. 1001* (pp. 61-68). Bellingham, WA: SPIE.
- Bender, M. B. & Krieger, H. P. (1951). Visual function in perimetrically blind fields. *Archives of Neurology and Psychiatry*, 65, 72-79.
- Bennett, P. J. (1992). The effects of lateral masking on the discriminatino of lines and edges in the periphery. *Investigative Ophthalmology and Visual Science*, 33 (Suppl.), 1349.
- Bennett, P. J. & Banks, M. S. (1987). Sensitivity loss in odd-symmetric mechanisms and phase anomalies in peripheral vision. *Nature*, 326, 873-876.
- Berry, G. A. (1889). Bemaerkinger om retrobulbaer neuritis med specielt hensyn till klarhedssansens tilstand vid denne ledelse. *Royal London Ophthalmic Hospital Reports and Journal of Ophthalmic Medicine and Surgery*, 12.
- Beyerstein, B. L. & Freeman, R. (1977). Lateral spatial interaction in humans with abnormal visual experience. *Vision Research*, 17, 1029.
- Bijl, P., Koenderink, J. J. & Kappers, A. M. L. (1992). Deviations from strict  $M$  scaling. *Journal of the Optical Society of America*, 9, 1233-1239.
- Biscaldi, M., Fischer, B., Hartnegg, K. & Gutjahr, G. (2000). Voluntary saccadic control and fixation in dyslexia. *Perception*, 29, 509-521.

- Biscaldi, M., Fischer, B. & Stuhr, V. (1996). Human express-saccade makers are impaired at suppressing visually-evoked saccades. *Journal of Neurophysiology*, 76, 199-214.
- Bjork, E. L. & Murray, J. T. (1977). On the nature of input channels in visual processing. *Psychological Review*, 84, 472-484.
- Blachman, N. (1992). *Mathematica: A practical approach*. Englewood Cliffs, New Jersey: Prentice Hall.
- Blackwell, H. R. (1972). Luminance difference thresholds. In D. Jameson & L. M. Hurvich (Eds.), *Handbook of sensory physiology, Vol. VII/4: Visual psychophysics* (pp. 78-101). Berlin: Springer.
- Blakemore, C. (1990). *Vision: coding and efficiency*. Cambridge: Cambridge University Press.
- Blatherwick, P. & Hallett, P. E. (1989). Distinctiveness of peripheral coloured borders studied by a spatial measure. In J. J. Kulikowski, C. M. Dickinson & I. J. Murray (Eds.), *Seeing contour and colour* (pp. 274-281). Oxford: Pergamon Press.
- Blommaert, F. J. & Timmers, H. (1987). Letter recognition at low contrast levels: effects of letter size. *Perception*, 16, 421-432.
- Boff, K. R., Kaufman, L. & Thomas, J. P. (1986). *Handbook of perception and human performance*. Vol. I: Sensory processes and perception. New York: John Wiley.
- Boff, K. R., Kaufman, L. & Thomas, J. P. (1986). *Handbook of perception and human performance*. Vol. II: Cognitive processes and performance. New York: John Wiley.
- Bondarko, V. M. & Danilova, M. V. (1995). Crowding effect: different surroundings and different sizes of test stimuli. *Perception*, 24, Suppl., 124c.
- Bondarko, V. M. & Danilova, M. V. (1997). What spatial frequency do we use to detect the orientation of a Landolt C? *Vision Research*, 37, 2153-2156.
- Bouma, H. (1970). Interaction effects in parafoveal letter recognition. *Nature*, 226, 177-178.
- Bouma, H. (1971). Visual recognition of isolated lower-case letters. *Vision Research*, 11, 459-474.
- Bouma, H. (1973). Visual interference in the parafoveal recognition of initial and final letters of words. *Vision Research*, 13, 767-782.
- Bouma, H. & Legein, C. P. (1976). Foveal and parafoveal recognition in adult readers. *Ophthalmology*, 173, 432.
- Bourdon, B. (1902). *La perception visuelle de l'espace*. Paris: Bibl. de Péd. et de Psy.
- Bouwhuis, D. & Bouma, H. (1979). Visual word recognition of three-letter words as derived from the recognition of the constituent letters. *Perception & Psychophysics*, 25, 12-22.
- Boyland, P. (1991). *Guide to Standard Mathematica Packages. Technical Report*. Champaign, Illinois: Wolfram Research, Inc.
- Braddick, O. (1981). Is spatial phase degraded in peripheral vision and visual pathology? *Documenta Ophthalmologica, Proceedings Series*, 30, 225-262.

- Braddick, O., Campbell, F. W. & Atkinson, J. (1978). Channels in vision: Basic aspects. In R. Held, H. W. Leibowitz & H. L. Teuber (Eds.), *Handbook of sensory physiology. Vol. VIII: Perception* (pp. 3-38). Berlin: Springer.
- Breitmeyer, B. G. (1984). *Visual masking: An integrative approach*. New York: Oxford University Press.
- Breitmeyer, B. G. & Ganz, L. (1976). Implications of sustained and transient channels for theories of visual pattern masking, saccadic suppression, and information processing. *Psychological Review*, 83, 1-36.
- Brettel, H., Caelli, T., Hilz, R. & Rentschler, I. (1982). Modelling perceptual distortion: Amplitude and phase transmission in the human visual system. *Human Neurobiology*, 1, 61-67.
- Brindley, G. S. & Lewin, W. S. (1968). The sensations produced by electrical stimulation of the visual cortex. *Journal of Physiology (London)*, 196, 479-493.
- Broadbent, D. E. (1958). *Perception and communication*. London: Pergamon.
- Bronstein, I. N. & Semendjajew, K. A. (1989). *Taschenbuch der Mathematik*. Frankfurt/Main: Verlag Harri Deutsch.
- Brown, J. L. & Mueller, C. G. (1965). Brightness discrimination and brightness contrast. In C. H. Graham (Ed.), *Vision and visual perception* (pp. 208-250). New York: John Wiley.
- Brown, V. A., Doran, R. M. L. & Woodhouse, J. M. (1987). The use of computerized contrast sensitivity, Arden gratings and low contrast letter charts in the assessment of amblyopia. *Ophthalmology and Physiological Optics*, 7, 43-51.
- Burbeck, C. A. & Yap, Y. L. (1990). Two mechanisms for localization? Evidence for separation-dependent and separation-independent processing of position information. *Vision Research*, 30, 739-750.
- Butzmann, K. (1940). Aktualgenese im indirekten Sehen. *Archiv für die gesamte Psychologie*, 106, 137-193.
- Caelli, T. (1981). *Visual perception; theory and practice*. Oxford: Pergamon Press.
- Caelli, T. (1985). Three processing characteristics of visual texture segmentation. *Spatial Vision*, 1, 19-30.
- Caelli, T. (1986). Digital image-processing techniques for the display of images and modeling of visual perception. *Behavior Research Methods, Instruments & Computers*, 18, 493-506.
- Caelli, T., Brettel, H., Rentschler, I. & Hilz, R. (1983). Discrimination thresholds in the two-dimensional spatial frequency domain. *Vision Research*, 23, 129-133.
- Caelli, T., Ferraro, M. & Barth, E. (1992). Aspects of invariant pattern and object recognition. In H. Wechsler (Ed.), *Neural Networks for Perception. Vol. 1: Human and Machine Perception* (pp. 520). San Diego: Academic Press.
- Caelli, T., Julesz, B. & Gilbert, E. (1978). On perceptual analyzers underlying visual texture discrimination: Part 2. *Biological Cybernetics*, 29, 201-214.

- Caelli, T. & Rentschler, I. (1986). Cross-correlation model for pattern acuity. *Journal of the Optical Society of America A*, 3, 1948-1956.
- Caelli, T., Rentschler, I. & Scheidler, W. (1987). Visual pattern recognition in humans, I. Evidence for adaptive filtering. *Biological Cybernetics*, 57, 233-240.
- Campbell, F. W. & Green, D. M. (1965). Optical and retinal factors affecting visual resolution. *Journal of Physiology (London)*, 181, 576-593.
- Campbell, R. A. (1963). Detection of a noise signal of varying duration. *Journal of the Acoustical Society of America*, 35, 1732-1737.
- Cavanagh, P. (1982). Functional size invariance is not provided by the cortical magnification factor. *Vision Research*, 22, 1409-1412.
- Cavonius, C. R. & Hilz, R. (1973). Invariance of visual receptive field size and visual acuity with viewing distance. *Journal of the Optical Society of America*, 63, 929-933.
- Chauhan, B. C. & House, P. H. (1991). Intratest variability in conventional and high-pass resolution perimetry. *Ophthalmology*, 98, 79-83.
- Chauhan, B. C., Tompkins, J. D., LeBlanc, R. P. & McCormick, T. A. (1993). Characteristics of frequency-of-seeing curves in normal subjects, patients with suspected glaucoma, and patients with glaucoma. *Investigative Ophthalmology and Visual Science*, 34, 3534-3540.
- Chung S.T., Levi D.M. & Legge G.E. (2001). Spatial-frequency and contrast properties of crowding. *Vision Research*, 41, 1833-1850.
- Cleland, B. G., Levick, W. R. & Wässle, H. (1975). Physiological identification of a morphological class of cat retinal ganglion cells. *Journal of Physiology*, 248, 151-171.
- Cohn, T. E. (1990). Spatial and temporal summation in human vision. In C. Blakemore (Ed.), *Vision: Coding and efficiency* (pp. 376-385). Cambridge: Cambridge University Press.
- Collett, D. (1991). *Modelling binary data*. London: Chapman and Hall.
- Cowey, A. & Rolls, E. T. (1974). Human cortical magnification factor and its relation to visual acuity. *Experimental Brain Research*, 21, 447-454.
- Cowey, A., Stoerig, P. & Perry, V. H. (1989). Transneuronal retrograde degeneration of retinal ganglion cells after damage to striate cortex in macaque monkeys: Selective loss of p beta cells. *Neuroscience*, 29, 65-80.
- Crandall, R. E. (1991). *Mathematica for the sciences*. Addison-Wesley, Redwood City, California. Redwood City, California: Addison-Wesley.
- Crawford, B. H. (1940). The effect of field size and pattern on the change of visual sensitivity with time. *Proceedings of the Royal Society (London) B*, 129, 94-106.
- Creutzfeldt, O. D., Sakmann, B., Scheich, H. & Korn, A. (1970). Sensitivity distribution and spatial summation within receptive-field center of retinal on-center ganglion cells and transfer function of the retina. *Journal of Neurophysiology*, 33, 654-671.
- Crick, F. (1984). Function of the thalamic reticular complex: the searchlight hypothesis. *Proceedings of the National Academy of Sciences USA*, 81, 4586-4590.
- Curcio, C. A. & Allen, K. A. (1990). Topography of ganglion cells in human retina. *Journal of Comparative Neurology*, 300, 5-25.

- Curcio, C. A., Sloan, K. R. J., Packer, O., Hendrickson, A. E. & Kalina, R. E. (1987). Distribution of cones in human and monkey retina: Individual variability and radial asymmetry. *Science*, 236, 579-582.
- Daitch, J. M. & Green, D. G. (1969). Contrast sensitivity of the human peripheral retina. *Vision Research*, 9, 947-951.
- Daniel, P. M. & Whitteridge, D. (1961). The representation of the visual field on the cerebral cortex in monkeys. *Journal of Physiology*, 159, 203-221.
- Daugman, J. (1985). Uncertainty relation for resolution in space, spatial frequency, and orientation optimized by 2D visual cortical filters. *Journal of the Optical Society of America A*, 2, 1160-1169.
- Davage, R. H. & Sumner, F. C. (1950). Isolation as a factor in lowering the threshold of visual perception. *Journal of Psychology*, 30, 191-194.
- De Monasterio, F. M. & Gouras, P. (1975). Functional properties of ganglion cells of the rhesus monkey retina. *Journal of Physiology*, 251, 167-195.
- De Valois, R. L. & De Valois, K. K. (1980). Spatial vision. *Annual Review of Psychology*, 31, 309-341.
- Deeley, R. J. & Drasdo, N. (1987). The effect of optical degradation on the contrast sensitivity function measured at the fovea and in the periphery. *Vision Research*, 27, 1179-1186.
- Demp, J. B., Boynton, G. M. & Heeger, D. J. (1998). Psychophysical evidence for a magnocellular pathway deficit in dyslexia. *Vision Research*, 38, 1555-1559.
- Department of the Army (1948). *Studies in visual acuity. PRS report no.742. Prepared by the staff, Personnel Research Section; the Adjutant General's Office.* Washington, D.C.: United States Government Printing Office.
- Derrington, A. M. & Lennie, P. (1984). Spatial and temporal contrast sensitivities of neurones in lateral geniculate nucleus of macaque. *Journal of Physiology*, 357, 219-240.
- Desimone, R., Albright, T. D., Gross, C. G. & Bruce, C. (1984). Stimulus-selective properties of inferior temporal neurons in the macaque. *Journal of Neuroscience*, 4, 2051-2062.
- Desimone, R. & Duncan, J. (1995). Neural mechanisms of visual attention. *Annual Reviews of Neuroscience*, 18, 193-222.
- DeYoe, E. A. & Van Essen, D. C. (1988). Concurrent processing streams in monkey visual cortex. *Trends in Neuroscience*, 11, 219-226.
- Di Lollo, V., Hanson, D. & McIntyre, J. S. (1983). Initial stages of visual information processing in dyslexia. *Journal of Experimental Psychology: Human Perception and Performance*, 9, 923-935.
- Dow, B. M., Snyder, R. G., Vautin, R. G. & Bauer, R. (1981). Magnification factor and receptive field size in foveal striate cortex of the monkey. *Experimental Brain Research*, 44, 213-228.
- Drasdo, N. (1977). The neural representation of visual space. *Nature*, 266, 554-556.

- Drasdo, N. (1989). Receptive field densities of the ganglion cells of the human retina. *Vision Research*, 29, 985-988.
- Drasdo, N. (1991). Neural substrates and threshold gradients of peripheral vision. In J. J. Kulikowski, V. Walsh & I. J. Murray (Eds.), *Limits of Vision* (pp. 250-264). London: Macmillan Press.
- Duda, R. O. & Hart, P. E. (1973). *Pattern classification and scene analysis*. New York: John Wiley.
- Duncan, J. (1985). Visual search and visual attention. In M. I. Posner & O. S. M. Marin (Eds.), *Attention & Performance* (pp. 85-106). Hillsdale, N. J.: Erlbaum.
- Ehlers, H. (1936). The movements of the eyes during reading. *Acta Ophthalmologica*, 14, 56-63.
- Ehlers, H. (1953). Clinical testing of visual acuity. *A.M.A. Archives of Ophthalmology*, 49, 431-434.
- Elbel, G.-K. (1999). Psychometrische Funktionen in der klinischen Lichtsinn-Perimetrie. Dissertation, Universität München.
- Enroth-Cugell, C. & Robson, J. G. (1966). The contrast sensitivity of retinal ganglion cells of the cat. *Journal of Physiology (London)*, 187, 517-552.
- Eriksen, B. A. & Eriksen, C. W. (1974). Effects of noise letters upon the identification of a target letter in a nonsearch task. *Perception & Psychophysics*, 16, 143-149.
- Eriksen, C. W. & Collins, J. F. (1969). Temporal course of selective attention. *Journal of Experimental Psychology*, 80, 254-261.
- Eriksen, C. W. & Hoffman, J. E. (1974). Selective attention: noise suppression or signal enhancement? *Bulletin of the Psychonomic Society*, 4, 587-589.
- Eriksen, C. W. & Rohrbaugh, J. W. (1970). Some factors determining efficiency of selective attention. *American Journal of Psychology*, 83, 330-343.
- Eriksen, C. W. & Yeh, Y.-Y. (1985). Allocation of attention in the visual field. *Journal of Experimental Psychology: Human Perception and Performance*, 5, 583-597.
- Exner, S. (1875). Über das Sehen von Bewegungen und die Theorie des zusammengesetzten Auges. *Sitzungsberichte der Kaiserlichen Akademie der Wissenschaften, Wien*, 72, 156-190.
- Fahle, M. & Schmidt, M. (1988). Naso-temporal asymmetry of visual perception and of the visual cortex. *Vision Research*, 28, 293-300.
- Falmagne, J.-C. (1986). Chapter 1. Psychophysical measurement and theory. In K. R. Boff, L. Kaufman & J. P. Thomas (Eds.), *Handbook of perception and human performance* (pp. 1-1 - 1-66). New York: John Wiley.
- Farah, M. J. (2000). *The cognitive neuroscience of vision*. Malden, Oxford: Blackwell.
- Fechner, G. T. (1860). *Elemente der Psychophysik*. Leipzig: Breitkopf und Härtel.
- Fendick, M. & Westheimer, G. (1983). Effects of practice and the separation of test targets on foveal and peripheral stereoacuity. *Vision Research*, 23, 145-150.



- Fendrich, R., Wessinger, C. M. & Gazzaniga, M. S. (1992). Residual vision in a scotoma: Implications for blindsight. *Science*, 258, 1489-1491.
- Fendrich, R., Wessinger, C. M. & Gazzaniga, M. S. (1993). Sources of blindsight – reply to Stoerig and Weiskrantz. *Science*, 261, 493-495.
- Ferec, C. E., Rand, G. & Hardy, C. (1933). An important factor in space perception in the peripheral field of vision. *American Journal of Psychology*, 45, 228-247.
- Ferrera, V. P., Nealey, T. A. & Maunsell, J. H. R. (1992). Mixed parvocellular and magnocellular geniculate signals in visual area V4. *Nature*, 358, 756-758.
- Finlay (1982). Motion perception in the peripheral visual field. *Perception*, 11, 457-462.
- Fischer, B. (1999). *Blick-Punkte. Neurobiologische Prinzipien des Sehens und der Blicksteuerung*. Bern: Huber.
- Fischer, B. & Freund, H.-J. (1970). Eine mathematische Formulierung für Reiz-Reaktionsbeziehungen retinaler Ganglienzellen. *Kybernetik*, 7, 160-166.
- Fischer, B. & May, H. U. (1970). Invarianzen in der Katzenretina: Gesetzmäßige Beziehungen zwischen Empfindlichkeit, Größe und Lage receptiver Felder von Ganglienzellen. *Experimental Brain Research*, 11, 448-464.
- Fitts, P. M. (1951). Engineering in psychology and equipment design. In S. S. Stevens (Ed.), *Handbook of experimental psychology* (pp. 1287-1340). New York: John Wiley & Sons.
- Fleck, H.-J. (1987). *Zur peripheren Wahrnehmung von Sehzeichen*. Düsseldorf: VDI-Verlag.
- Flom, M. C., Heath, G. G. & Takahashi, E. (1963). Contour interaction and visual resolution: Contralateral effects. *Science*, 142, 979-980.
- Flom, M. C., Weymouth, F. W. & Kahnemann, D. (1963). Visual resolution and contour interaction. *Journal of the Optical Society of America*, 53, 1026-1032.
- Foster, D. H., Gravano, S. & Tomoszek, A. (1989). Acuity for fine-grain motion and for two-dot spacing as a function of retinal eccentricity: Differences in specialization of the central and peripheral retina. *Vision Research*, 29, 1017-1031.
- France, T. D. & France, L. W. (1988). Low contrast visual acuity cards in pediatric ophthalmology. *Albrecht von Graefes Archiv für klinische und experimentelle Ophthalmologie*, 226, 158-160.
- Frisén, L. (1993). Ringperimetrie. In B. Gloor (Ed.), *Perimetrie, mit besonderer Berücksichtigung der automatischen Perimetrie* (pp. 138-149). Stuttgart: Ferdinand Enke Verlag.
- Fujita, I., Tanaka, K., Ito, M. & Cheng, K. (1992). Columns for visual features of objects in monkey inferotemporal cortex. *Nature*, 360, 343-346.
- García-Pérez, M. A. & Sierra-Vásquez, V. (1996). Do channels shift their tuning towards lower spatial frequencies in the periphery? *Vision Research*, 36, 3339-3372.
- Gazzaniga, M. S. (1995). *The Cognitive Neurosciences*. Cambridge, MA: MIT Press (Bradford Book).
- Gazzaniga, M. S. (1999). *The New Cognitive Neurosciences*. Cambridge, MA: MIT Press (Bradford Book).

- Geiger, G. & Lettvin, J. Y. (1986). Enhancing the perception of form in peripheral vision. *Perception, 15*, 119-130.
- Geiger, G. & Lettvin, J. Y. (1989). Dyslexia and reading as examples of alternative visual strategies. In C. von Euler (Ed.), *Brain and Reading* (pp. 331-343). London: Macmillan.
- Geiger, G., Lettvin, J. Y. & Zegarra-Moran, O. (1992). Task-determined strategies of visual process. *Cognitive Brain Research, 1*, 39-52.
- Geisler, W. S. (1979). Evidence for the equivalent-background hypothesis in cones. *Vision Research, 19*, 799-805.
- Genter II, C. R., Kandel, G., L. & Bedell, H. E. (1981). The minimum angle of resolution vs. angle of regard function as measured with different targets. *Ophthalmic and Physiological Optics, 1*, 3-13.
- Gervais, M. J., Harvey, L. O., Jr. & Roberts, J. O. (1984). Identification confusions among letters of the alphabet. *Journal of Experimental Psychology: Human Perception and Performance, 10*, 655-666.
- Gescheider, G. A. (1997). *Psychophysics: the fundamentals*. Mahwah, New Jersey: Lawrence Erlbaum Ass.
- Geyer, L. H. (1977). Recognition and confusion of the lowercase alphabet. *Perception & Psychophysics, 22*, 487-490.
- Gilmore, G. C., Hersh, H., Caramazza, A. & Griffin, J. (1979). Multidimensional letter similarity derived from recognition errors. *Perception & Psychophysics, 25*, 425-431.
- Ginsburg, A. P., Cannon, M. W. & Nelson, M. (1980). Suprathreshold processing of complex visual stimuli: Evidence for linearity in contrast perception. *Science, 208*, 619-621.
- Ginsburg, A. P., Evans, D., Sekuler, R. & Harp, S. (1982). Contrast sensitivity predicts pilots' performance in aircraft simulators. *American Journal of Optometry and Physiological Optics, 59*, 105-108.
- Goodale, M. A. & Milner, A. D. (1992). Separate visual pathways for perception and action. *Trends in Neuroscience, 15*, 20-25.
- Gothe, J., Strasburger, H., Lutz, K., Kasten, E. & Sabel, B. A. (2000). Recognition of low-contrast characters by subjects with cerebral visual-field defects. *Perception, 29 Suppl.*, p. 45.
- Graham, C. H. (1965). *Vision and visual perception*. New York: John Wiley.
- Graham, C. H. & Bartlett, N. R. (1939). The relation of size of stimulus and intensity in the human eye. Intensity thresholds for red and violet light. *Journal of Experimental Psychology, 24*, 574-587.
- Graham, C. H. & Bartlett, N. R. (1940). The relation of size of stimulus and intensity in the human eye: III. *Journal of Experimental Psychology, 27*, 149-159.
- Green, D. M. & Swets, J. A. (1966/1988). *Signal detection theory and psychophysics*. Los Altos, California: Peninsula Publishing.
- Greenlee, M. W. (1992). Spatial frequency discrimination of band-limited periodic targets: Effects of stimulus contrast, bandwidth and retinal eccentricity. *Vision Research, 32*, 275-283.

- Grindley, G. C. & Townsend, V. (1968). Voluntary attention in peripheral vision and its effect on acuity and differential thresholds. *Quarterly Journal of Experimental Psychology*, 20, 11-19.
- Grossberg, S. & Todorovic, D. (1988). Neural dynamics of 1-D and 2-D brightness perception: A unified model of classical and recent phenomena. *Perception & Psychophysics*, 43, 241-277.
- Gstalder, R. J. & Green, D. G. (1971). Laser interferometric acuity in amblyopia. *Journal of Pediatric Ophthalmology*, 8, 251-256.
- Haber, R. N. & Standing, L. (1968). Clarity and recognition of masked and degraded stimuli. *Psychonomic Science*, 13, 83-84.
- Haberlandt, K. (1997). *Cognitive Psychology*. Boston: Allyn and Bacon.
- Hall, J. L. (1968). Maximum-likelihood sequential procedure for estimation of psychometric functions. *Journal of the Acoustical Society of America*, 370, A-N9.
- Hallett, P. E. (1962). Spatial summation. *Vision Research*, 3, 9-24.
- Hartmann, E. (1987). Sehschärfebestimmung. *Klinische Monatsblätter für Augenheilkunde*, 191, 62-68.
- Hartmann, E., Lachenmayr, B. J. & Brettel, H. (1979). The peripheral critical flicker frequency. *Vision Research*, 19, 1019-1023.
- Harvey, L. O., Jr. (1986). Efficient estimation of sensory thresholds. *Behavior Research Methods, Instruments & Computers*, 18, 623-632.
- Harvey, L. O., Jr. (1997). Efficient estimation of sensory thresholds with ML-PEST. *Spatial Vision*, 11, 121-128.
- Harvey, L. O., Jr. & Gervais, M. J. (1978). Visual texture perception and Fourier analysis. *Perception & Psychophysics*, 24, 534-542.
- Harvey, L. O., Jr. & Pöppel, E. (1972). Contrast sensitivity of the human retina. *American Journal of Optometry and Archives of the American Academy of Optometry*, 49, 748-753.
- Harvey, L. O., Jr., Rentschler, I. & Weiss, C. (1985). Sensitivity to phase distortion in central and peripheral vision. *Perception & Psychophysics*, 38, 392-396.
- Hauske, G., Wolf, W. & Lupp, U. (1976). Matched filters in human vision. *Biological Cybernetics*, 22, 181-188.
- He, S., Cavanagh, P. & Intriligator, J. (1996). Attentional resolution and the locus of visual awareness. *Nature*, 383, 334-337.
- Hecht, S. (1935). A theory of visual intensity discrimination. *Journal of General Physiology*, 18, 767-789.
- Hecht, S., Schlaer, S. & Pirenne, M. H. (1942). Energy, quanta, and vision. *Journal of General Physiology*, 25, 819-840.
- Hedin, A., Nyman, K. G. & Derouet, B. (1980). A modified letter matching chart for testing young children's visual acuity. *Journal of Pediatric Ophthalmology and Strabismus*, 17, 114-118.

- Heller, D., Huckauf, A. & Nazir, T. A. (1995). Interaction effects in the lateral visual field: an extension of Bouma's (1970) approach. *Zeitschrift für Experimentelle Psychologie*, *42*, 386-418.
- Helstrom, C. W. (1966). *IEEE Transactions on Information Theory*, *IT-13*, 81-82.
- Henderson, J. M., Pollatsek, A. & Rayner, K. (1989). Covert visual attention and extrafoveal information use during object identification. *Perception & Psychophysics*, *45*, 196-208.
- Hennessy, R. T. & Richards, W. (1975). Contrast sensitivity and viewing distance. *Journal of the Optical Society of America*, *65*, 97-98.
- Hering, E. (1899). Über die Grenzen der Sehschärfe. *Berichte über die Verhandlungen der Königlich-Sächsischen Gesellschaft der Wissenschaften zu Leipzig/Mathematisch-Physische Classe; Naturwissenschaftlicher Teil*, 16-24.
- Herse, P. R. & Bedell, H. E. (1989). Contrast sensitivity for letter and grating targets under various stimulus conditions. *Optometry and Vision Science*, *66*, 774-781.
- Hess, R. F., Dakin, S. C., Kapoor, N. & Tewfik, M. (2000). Contour interaction in fovea and periphery. *Journal of the Optical Society of America A*, *17*, 1516-1524.
- Hess, R. F. & Holliday, I. E. (1992). The spatial localization deficit in amblyopia. *Vision Research*, *32*, 1319-1340.
- Hess, R. F. & Jacobs, R. J. (1979). A preliminary report of acuity and contour interactions across the amblyope's visual field. *Vision Research*, *19*, 1403-1408.
- Hicks, T. P., Lee, B. B. & Vidyasagar, T. R. (1983). The responses of cells in macaque lateral geniculate nucleus to sinusoidal gratings. *Journal of Physiology*, *337*, 183-200.
- Higgins, K. E., Arditi, A. & Knoblauch, K. (1996). Detection and identification of mirror-image letter pairs in central and peripheral vision. *Vision Research*, *36*, 331-337. Also in: Tyler, Christopher W. (Ed): *Human symmetry perception*. AH Zeist, VSP, 71-83.
- Hilton, A. F. & Stanley, J. C. (1972). Pitfalls in testing children's vision by the Sheridan Gardiner single optotype method. *British Journal of Ophthalmology*, *56*, 135-139.
- Hilz, R. & Cavonius, C. R. (1974). Functional organisation of the peripheral retina: Sensitivity to periodic stimuli. *Vision Research*, *14*, 1333-1337.
- Hilz, R., Rentschler, I. & Brettel, H. (1981). Insensitivity of peripheral vision to spatial phase. *Experimental Brain Research*, *43*, 111-114.
- Holmes, G. (1945). The organization of the visual cortex in man. *Proceedings of the Royal Society London, Series B (Biology)*, *132*, 348-361.
- Holmes, G. & Lister, W. T. (1916). Disturbances of vision from cerebral lesions with special reference to the cortical representation of the macula. *Brain*, *39*, 34-73.
- Hood, D. C. & Finkelstein, M. A. (1986). Sensitivity to light. In K. R. Boff, L. Kaufman & J. P. Thomas (Eds.), *Handbook of perception and human performance* (pp. 5-1 - 5-66). New York: John Wiley.
- Horton, J. C. & Hoyt, W. F. (1991). The representation of the visual field in human striate cortex. A revision of the classic Holmes map. *Archives of Ophthalmology*, *109*, 816-824.

- Hübner, M., Rentschler, I. & Encke, W. (1985). Hidden-face recognition: Comparing foveal and extrafoveal performance. *Human Neurobiology*, 4, 1-7.
- Hück, A. (1840). Von den Gränzen des Sehvermögens. *Archiv für Anatomie, Physiologie und wissenschaftliche Medizin*, 82 ff.
- Huckauf, A., Heller, D. & Nazir, T. A. (1999). Lateral masking: limitations of the feature interaction account. *Perception & Psychophysics*, 61, 177-189.
- Humphreys, G. W. & Quinlan, P. T. (1988). Priming effects between two-dimensional shapes. *Journal of Experimental Psychology: Human Perception and Performance*, 14, 203-220.
- Inouye, T. (1909). *Die Sehstörungen bei Schussverletzungen der kortikalen Sehphäre*. Leipzig: W. Engelmann.
- Irtel, H. (1997). PXL: A library for psychological experiments on IBM PC type computers. *Spatial Vision*, 10, 467-469.
- Ito, M., Tamura, H., Fujita, I. & Tanaka, K. (1995). Size and position invariance of neuronal responses in monkey inferotemporal cortex. *Journal of Neurophysiology*, 73, 218-226.
- Jacobs, A., Nazir, T. A. & Heller, O. (1989). Perception of lowercase letters in peripheral vision: A discrimination matrix based on saccade latencies. *Perception & Psychophysics*, 46, 95-102.
- James, W. (1890). *Principles of psychology*. New York: Holt.
- Jameson, D. & Hurvich, L. M. (1972). *Handbook of sensory physiology, Vol. VII/4: Visual psychophysics*. Berlin: Springer.
- Jänich, K. (1980). *Einführung in die Funktionentheorie*. Berlin, Heidelberg, New York: Springer.
- Johnson, C. A. (1976). Effects of luminance and stimulus distance on accommodation and visual resolution. *Journal of the Optical Society of America*, 66, 138-142.
- Johnson, C. A., Keltner, J. L. & Balestrery, F. (1978). Effects of target size and eccentricity on visual detection and resolution. *Vision Research*, 18, 1217-1222.
- Johnston, A. (1986). A spatial property of the retino-cortical mapping. *Spatial Vision*, 1, 319-331.
- Johnston, A. (1987). Spatial scaling of central and peripheral contrast-sensitivity functions. *Journal of the Optical Society of America A*, 4, 1583-1593.
- Jonides, J. (1981). Voluntary versus automatic control of over the mind's eye's movement. In J. B. Long & A. D. Baddeley (Eds.), *Attention and Performance IX* (pp. 187-204). Hillsdale, NJ: Erlbaum.
- Julesz, B. (1981). Textons, the elements of texture perception, and their interactions. *Nature*, 290, 91-97.
- Julesz, B. & Caelli, T. (1979). On the limits of Fourier decompositions in visual texture perception. *Perception*, 8, 69-73.
- Jung, R. & Spillmann, L. (1970). Receptive-field estimation and perceptual integration in human vision. In F. A. Young & D. B. Lindsley (Eds.), *Early experience and visual in-*

- formation processing in perceptual and reading disorders (pp. 181-197). Washington: National Academy of Sciences.
- Jüttner, M. & Rentschler, I. (1996). Reduced perceptual dimensionality in extrafoveal vision. *Vision Research*, 36, 1007-1022.
- Jüttner, M. & Strasburger, H. (1997). FORPXL – A Fortran interface to PXL, the psychological experiments library. *Spatial Vision*, 10, 491-493.
- Kaplan, E., Lee, B. B. & Shapley, R. M. (1990). New views of primate retinal function. In N. Osborne & J. Chader (Eds.), *Progress in Retinal Research* (pp. 273-336). Oxford: Pergamon Press.
- Kaplan, E. & Shapley, R. M. (1982). X and Y cells in the lateral geniculate nucleus of macaque monkeys. *Journal of Physiology (London)*, 330, 125-143.
- Kasten, E., Strasburger, H. & Sabel, B. A. (1997). Programs for diagnosis and therapy of visual field deficits in vision rehabilitation. *Spatial Vision*, 10, 499-503.
- Kasten, E., Wiegmann, U. & Sabel, B. A. (1994). Rehabilitation zerebraler bedingter Gesichtsfeldeinschränkungen – Überblick. *Zeitschrift für Neuropsychologie*, 5, 127-150.
- Kasten, E., Wüst, S., Behrens-Baumann, W. & Sabel, B. A. (1998). Computer-based training for the treatment of partial blindness. *Nature Medicine*, 4, 1083-1087.
- Kasten, E., Wüst, S. & Sabel, B. A. (1998). Residual vision in transition zones in patients with cerebral blindness. *Journal of Clinical and Experimental Neuropsychology*, 20, 581-598.
- Kasten, E., Wüst, S. & Sabel, B. A. (1998). Variability of stimulus detection, pattern discrimination and color recognition with suprathreshold campimetry in brain damaged patients. *Neuro-Ophthalmology*, 20, 161-176.
- Keele, S. W. (1986). Motor control. In K. R. Boff, L. Kaufman & J. P. Thomas (Eds.), *Handbook of perception and human performance. Vol. II: Cognitive processes and performance. Chapter 30*. New York: John Wiley.
- Kelly, D. H. (1984). Retinal inhomogeneity: I. Spatiotemporal contrast sensitivity. *Journal of the Optical Society of America A*, 1, 107-113.
- Kelly, D. H. (1984). Retinal inhomogeneity: II. Spatial summation. *Journal of the Optical Society of America A*, 1, 114-119.
- Kerkhoff, G., Münßinger, U., Haaf, E., Eberle-Strauß, G. & Stögerer, E. (1992). Rehabilitation of homonymous scotoma in patients with postgeniculate damage of the visual system: saccadic compensation training. *Restorative Neurology and Neuroscience*, 4, 245-254.
- King-Smith, P. E. (1978). Analysis of the detection of a moving line. *Perception*, 7, 449-458.
- Kirschmann, A. (1908). Über die Erkennbarkeit geometrischer Figuren und Schriftzeichen im indirekten Sehen. *Archiv für die gesamte Psychologie*, 13, 352-388.
- Kishto, B. N. & Saunders, R. (1970). Variation of the visual threshold with retinal location. *Vision Research*, 10, 745-767.
- Kitterle, F. L. (1986). Psychophysics of lateral tachistoscopic presentation. *Brain & Cognition*, 5, 200-222.

- Klein, R., Berry, G., Briand, K., D'Entremont, B. & Farmer, M. (1990). Letter identification declines with increasing retinal eccentricity at the same rate for normal and dyslexic readers. *Perception & Psychophysics*, 47, 601-606.
- Klein, S. A. & Levi, D. M. (1987). Position sense of the peripheral retina. *Journal of the Optical Society of America A*, 4, 1543-1553.
- Kobatake, E. & Tanaka, K. (1994). Neuronal selectivities to complex object features in the ventral visual pathway of the macaque cerebral cortex. *Journal of Neurophysiology*, 71, 856-867.
- Koenderink, J. J., Bouman, M. A., Bueno de Mesquita, A. E. & Slappendel, S. (1978). Perimetry of contrast detection thresholds of moving spatial sine wave patterns. I. The near peripheral visual field (eccentricity  $0^{\circ}$ - $8^{\circ}$ ). *Journal of the Optical Society of America*, 68, 845-849.
- Koenderink, J. J., Bouman, M. A., Bueno de Mesquita, A. E. & Slappendel, S. (1978). Perimetry of contrast detection thresholds of moving spatial sine wave patterns. II. The far peripheral visual field (eccentricity  $0^{\circ}$  -  $50^{\circ}$ ). *Journal of the Optical Society of America*, 68, 850-854.
- Koenderink, J. J., Bouman, M. A., Bueno de Mesquita, A. E. & Slappendel, S. (1978). Perimetry of contrast detection thresholds of moving spatial sine wave patterns. III. The target extent as a sensitivity controlling parameter. *Journal of the Optical Society of America*, 68, 854-860.
- Koenderink, J. J., Bouman, M. A., Bueno de Mesquita, A. E. & Slappendel, S. (1978). Perimetry of contrast detection thresholds of moving spatial sine wave patterns. IV. The influence of the mean retinal illuminance. *Journal of the Optical Society of America*, 68, 860-865.
- Koenderink, J. J. & Doorn, A. J. (1978). Visual detection of spatial contrast; influence of location in the visual field, target extent and illuminance level. *Biological Cybernetics*, 30, 157-167.
- Kolb, M., Petersen, D., Schiefer, U., Kolb, R. & Skalej, M. (1995). Scotoma perception in white-noise-field campimetry and postchiasmal visual pathway lesions. *German Journal of Ophthalmology*, 4, 228-233.
- Köllner, H. (1925). Die Untersuchung der Sehschärfe im indirekten Sehen. In A. von Gräfe & E. T. Sämisch (Hrsg.), *Handbuch der gesamten Augenheilkunde* (pp. 524-552). Leipzig: W. Engelmann.
- Kölmel, H. W. (1988). *Die homonymen Hemianopsien. Klinik u. Pathophysiologie zentraler Sehstörungen*. Berlin: Springer.
- Kommerell, G., Lieb, B. & Münßinger, U. (1999). Rehabilitation bei homonymer Hemianopie. *Zeitschrift für praktische Augenheilkunde*, 20, 334-342.
- Kornhuber, H. H. & Spillmann, L. (1964). Zur visuellen Feldorganisation beim Menschen: Die receptiven Felder im peripheren und zentralen Gesichtsfeld bei Simultankontrast, Flimmerfusion, Scheinbewegung und Blickfolgebewegung. *Pflügers Archiv für die gesamte Physiologie des Menschen und der Tiere*, 279, R 5-6.
- Kothe, A. C., Regan, D. (1990). Crowding depends on contrast. *Optometry and Visual Sciences*, 67, 283-286.

- Korte, W. (1923). Über die Gestaltauffassung im indirekten Sehen. *Zeitschrift für Psychologie*, 93, 17-82.
- Krüger, K., Donicht, M., Müller-Kusdian, G., Kiefer, W. & Berlucchi, G. (1988). Lesion of areas 17/18/19: effects on the cat's performance in a binary detection task. *Experimental Brain Research*, 72, 510-516.
- Krüger, K., Heitländer-Fansa, H., Dinse, H. R. O. & Berlucchi, G. (1986). Detection performance of normal cats and those lacking areas 17 and 18: a behavioral approach to analyze pattern recognition deficits. *Experimental Brain Research*, 63, 233-247.
- Kukkonen, H., Rovamo, J., Tiippana, K. & Näsänen, R. (1993). Michelson contrast, RMS contrast and energy of various spatial stimuli at threshold. *Vision Research*, 33, 1431-1436.
- Kulikowski, J. J. (1991). What really limits vision? Conceptual limitations to the assessment of visual function and the role of interacting channels. In J. J. Kulikowski, V. Walsh & I. J. Murray (Eds.), *Limits of vision* (pp. 286-329). London: Macmillan Press.
- Kulikowski, J. J., Dickinson, C. M. & Murray, I. J. (1989). Seeing contour and colour. In *Vision and Visual Health Care*, J. Cronly-Dillon (Ed.), Oxford: Pergamon.
- Kulikowski, J. J., Marcelja, S. & Bishop, P. O. (1982). Theory of spatial position and spatial frequency relations in the receptive field of simple cells in the visual cortex. *Biological Cybernetics*, 43, 187-198.
- Kulikowski, J. J., Walsh, V. & Murray, I. J. (1991). Limits of vision. In *Vision and visual dysfunction*, J. R. Cronly-Dillon (Ed.), London: Macmillan Press.
- LaBerge, D. (1983). Spatial extent of attention to letters in words. *Journal of Experimental Psychology: Human Perception and Performance*, 9, 371-379.
- LaBerge, D. (1995). Computational and anatomical models of selective attention in object identification. In M. S. Gazzaniga (Ed.), *The Cognitive Neurosciences* Cambridge, MA: MIT Press.
- LaBerge, D. & Brown, V. (1989). Theory of attentional operations in shape identification. *Psychological Review*, 96, 101-124.
- Lachenmayr, B. J. (1988). Perimetrie gestern und heute. *Klinische Monatsblätter für Augenheilkunde*, 193, 80-92.
- Lachenmayr, B. J. (1988). *Analyse der zeitlich-räumlichen Übertragungseigenschaften des visuellen Systems – ein neuer Weg zur Frühdiagnose von Netzhaut- und Sehnervenkrankungen?* Habilitationsschrift, Medizinische Fakultät München.
- Lachenmayr, B. J. (1989). Das periphere Sehen – Funktion und Bedeutung. *Naturwissenschaften*, 76, 447-452.
- Lachenmayr, B. J. & Vivell, P. M. O. (1992). *Perimetrie*. Stuttgart: Georg Thieme.
- Lamar, E. S., Hecht, S., Hendley, C. D. & Schlaer, S. (1948). Size, shape, and contrast in detection of targets by daylight vision. II. Frequency of seeing and the quantum theory of cone vision. *Journal of the Optical Society of America*, 38, 741-755.
- Lawden, M. C., Hess, R. F. & Campbell, F. W. (1982). The discriminability of spatial phase relationships in amblyopia. *Vision Research*, 22, 1005-1016.



- Lee, B. B., Wehrhahn, C., Westheimer, G. & Kremers, J. (1993). Macaque ganglion cell responses to stimuli that elicit hyperacuity in man: detection of small displacements. *Journal of Neuroscience*, *13*, 1001-1009.
- Leek, M. R., Hanna, T. E. & Marshall, L. (1992). Estimation of psychometric functions from adaptive tracking procedures. *Perception & Psychophysics*, *51*, 247-256.
- Leggin, C. P. & Bouma, H. (1976). Foveal and parafoveal recognition in dyslectic children. *Ophthalmology*, *173*, 432-433.
- Legge, G. E. & Foley, J. M. (1980). Contrast masking in human vision. *Journal of the Optical Society of America*, *70*, 1458-1471.
- Legge, G. E. & Kersten, D. (1983). Light and dark bars; contrast discrimination. *Vision Research*, *23*, 473-483.
- Legge, G. E., Rubin, G. S. & Luebker, A. (1987). Psychophysics of reading -- V. The role of contrast in normal vision. *Vision Research*, *27*, 1165-1177.
- Lettvin, J. Y. (1976). On seeing sidelong. *The Sciences*, *16*, 10-20.
- Levi, D. M. (1999). Progress and paradigm shifts in spatial vision over the 20 years of ECVF. *Perception*, *28*, 1443-1459.
- Levi, D. M. & Klein, S. A. (1982). Differences in vernier discrimination for gratings between strabismic and anisometropic amblyopes. *Investigative Ophthalmology and Visual Science*, *23*, 398-407.
- Levi, D. M. & Klein, S. A. (1983). Spatial localization in normal and amblyopic vision. *Vision Research*, *23*, 1005-1017.
- Levi, D. M. & Klein, S. A. (1985). Vernier acuity, crowding and amblyopia. *Vision Research*, *25*, 979-991.
- Levi, D. M. & Klein, S. A. (1986). Sampling in spatial vision. *Nature*, *320*, 360-362.
- Levi, D. M., Klein, S. A. & Aitsebaomo, A. P. (1984). Detection and discrimination of the direction of motion in central and peripheral vision of normal and amblyopic observers. *Vision Research*, *24*, 789-800.
- Levi, D. M., Klein, S. A. & Aitsebaomo, A. P. (1985). Vernier acuity, crowding and cortical magnification. *Vision Research*, *25*, 963-977.
- Levi, D. M., Klein, S. A. & Sharma, V. (1999). Position jitter and undersampling in pattern perception. *Vision Research*, *39*, 445-465.
- Levi, D. M., Klein, S. A. & Yap, Y. L. (1987). Positional uncertainty in peripheral and amblyopic vision. *Vision Research*, *27*, 581-597.
- Levine, M. D. (1985). *Vision in man and machine*. New York: McGraw-Hill.
- Lie, I. (1980). Visual detection and resolution as a function of retinal locus. *Vision Research*, *20*, 967-974.
- Lillesaeter, O. (1993). Complex contrast, a definition for structured targets and backgrounds. *Journal of the Optical Society of America A*, *10*, 2453-2457.
- Livingstone, M. S. & Hubel, D. H. (1985). Spatial relationship and extrafoveal vision. *Nature*, *315*, 285.

- Livingstone, M. S. & Hubel, D. H. (1988). Do the relative mapping densities of the magno- and parvocellular systems vary with eccentricity? *Journal of Neuroscience*, 8, 4334-4339.
- Livingstone, M. S. & Hubel, D. H. (1988). Segregation of form, color, movement, and depth: Anatomy, physiology, and perception. *Science*, 240, 740-749.
- Lovegrove, W. J., Bowling, C., Badcock, D. & Blackwood, M. (1980). Specific reading disability: differences in contrast sensitivity as a function of spatial frequency. *Science*, 210, 439-440.
- Low, F. N. (1951). Peripheral visual acuity. *Archives of Ophthalmology*, 45, 80-99.
- Luce, R. D. (1986). *Response times*. New York: Oxford University Press.
- Ludvigh, E. (1941). Extrafoveal visual acuity as measured with Snellen test-letters. *American Journal of Ophthalmology*, 24, 303-310.
- Mackeben, M. (1999). Sustained focal attention and peripheral letter recognition. *Spatial Vision*, 12, 51-72.
- Mackeben, M. & Nakayama, K. (1993). Express attentional shifts. *Vision Research*, 33, 85-90.
- Mackworth, N. H. (1965). Visual noise causes tunnel vision. *Psychonomic Science*, 3, 67-68.
- Macmillan, N. A. & Creelman, C. D. (1991). *Detection theory: A user's guide*. Cambridge: Cambridge University Press.
- Mäkelä, P., Whitaker, D. & Rovamo, J. (1992). An example of the enormous task-dependent variations in peripheral visual performance (ARVO abstract). *Investigative Ophthalmology and Visual Science*, 33, 825.
- Malik, J. & Perona, P. (1990). Preattentive texture discrimination with early vision mechanisms. *Journal of the Optical Society of America A*, 7, 923-932.
- Mallot, H. A. (1985). An overall description of retinotopic mapping in the cat's visual cortex areas 17, 18, and 19. *Biological Cybernetics*, 52, 45-51.
- Mallot, H. A. (1987). Point images, receptive fields, and retinotopic mapping. *Trends in Neuroscience*, 10, 310-311.
- Mallot, H. A., von Seelen, W. & Giannakopoulos, F. (1990). Neural mapping and space-variant image processing. *Neural Networks*, 3, 245-263.
- Malpeli, J. G., Lee, D. & Baker, F. H. (1996). Laminar and retinotopic organization of the macaque lateral geniculate nucleus: magnocellular and parvocellular magnification functions. *Journal of Comparative Neurology*, 375, 363-377.
- Marcelja, S. J. (1980). Mathematical description of the responses of simple cortical cells. *Journal of the Optical Society of America*, 70, 1297-1300.
- Marko, H. (1986). *Methoden der Systemtheorie*. Berlin: Springer.
- Marr, D. (1982). *Vision*. San Francisco: W. H. Freeman.
- Marr, D. & Hildreth, E. (1980). A theory of edge detection. *Proceedings of the Royal Society of London, Series B: Biological Sciences*, 207, 187-217.

- McClelland, J. L. & Rumelhart, D. E. (1981). An interactive activation model of context effects in letter perception: Part 1. An account of basic findings. *Psychological Review*, 88, 375-407.
- McClelland, J. L. & Rumelhart, D. E. (1988). *Explorations in parallel distributed processing*. Cambridge, MA: MIT Press.
- McClelland, J. L., Rumelhart, D. E. & the PDP research group (1986). *Parallel distributed processing. Vol 2: Psychological and biological models*. Cambridge, MA: MIT Press.
- Mewhort, D. J. K. & Campbell, A. J. (1978). Processing spatial information and the selective-masking effect. *Perception & Psychophysics*, 24, 93-101.
- Mewhort, D. J. K., Campbell, A. J., Marchetti, F. M. & Campbell, J. I. D. (1981). Identification, localisation, and "iconic memory": an evaluation of the bar-probe task. *Memory & Cognition*, 9, 50-67.
- Milodot, M., Johnson, C. A., Lamont, A. & Leibowitz, H. W. (1975). Effect of dioptics on peripheral visual acuity. *Vision Research*, 15, 1357-1362.
- Milner, A. D. & Goodale, M. A. (1996). *The Visual Brain in Action (Oxford Psychology Series, No 27)*. Oxford: Oxford University Press.
- Minsky, M. (1985). *The Society of Mind*. New York: Simon & Schuster.
- Mishkin, M., Ungerleider, L. G. & Macko, K. A. (1983). Object vision and spatial vision: two cortical pathways. *Trends in Neurosciences*, 6, 414-417.
- Monti, P. M. (1973). Lateral masking of end elements by inner elements in tachistoscopic pattern perception. *Perceptual and Motor Skills*, 36, 777-778.
- Morgan, B. J. T. (1992). *Analysis of quantal response data*. London: Chapman & Hall.
- Morgan, M. J. & Watt, R. J. (1982). The modulation transfer function of a display oscilloscope: measurements and comments. *Vision Research*, 22, 1083-1085.
- Morrone, M. C., Burr, D. C. & Spinelli, D. (1989). Discrimination of spatial phase in central and peripheral vision. *Vision Research*, 29, 433-445.
- Müller, P. (1951). Über das Sehen der Amblyopen. *Ophthalmologica*, 121, 143-149.
- Mumford, D. (1991). Mathematical theories of shape: Do they model perception? In B. Vemuri (Ed.), *Geometric Methods in Computer Vision. SPIE Proc. Vol. 1570* (pp. 2-10). Bellingham, WA: SPIE.
- Nachmias, J. (1981). On the psychometric function for contrast detection. *Vision Research*, 21, 215-223.
- Nakayama, K. & Mackeben, M. (1989). Sustained and transient components of focal visual attention. *Vision Research*, 29, 1631-1647.
- Nakayama, K. & Silverman, G. H. (1986). Serial and parallel processing of visual feature conjunctions. *Nature*, 320, 264-265.
- Näsänen, R. & O'Leary, C. (1998). Recognition of band-pass filtered hand-written numerals in foveal and peripheral vision. *Vision Research*, 38, 3691-3701.
- Neumann, O. (1992). Theorien der Aufmerksamkeit: von Metaphern zu Mechanismen. *Psychologische Rundschau*, 43, 83-101.

- Nieuwenhuis, R. & van Huijzen, C. (1988). *The human central nervous system*. Berlin: Springer.
- Normenausschuß Feinmechanik und Optik (Na FuO) im DIN Deutsches Institut für Normung e.V. (1988). *DIN 58 220. Sehschärfebestimmung, Normsehzeichen*. Berlin: Beuth Verlag.
- Oehler, R. (1985). Spatial interactions in the rhesus monkey retina: a behavioural study using the Westheimer paradigm. *Experimental Brain Research*, 59, 217-225.
- Ogle, K. N. (1950). *Binocular Vision*. Philadelphia: Saunders.
- Ohlshausen, B. A., Anderson, C. & Van Essen, D. (1992). A neural model of visual attention and invariant pattern recognition. *California Institute of Technology Computation and Neural Systems Program Memos*, 1-40.
- Ohlshausen, B. A. & Koch, C. (1995). Selective visual attention. In M. A. Arbib (Ed.), *The handbook of brain theory and neural networks* (pp. 837-840). Cambridge, MA: MIT Press (A Bradford Book).
- Oliver, M. & Nawratzki, I. (1971). Screening of pre-school children for ocular anomalies. *British Journal of Ophthalmology*, 55, 462-466.
- Olzak, L. A. & Thomas, J. P. (1986). Chapter 7. Seeing spatial patterns. In K. R. Boff, L. Kaufman & J. P. Thomas (Eds.), *Handbook of perception and human performance* (pp. 7-1 - 7-56). New York: John Wiley.
- Oppenheim, A. V. & Lim, J. S. (1981). The importance of phase in signals. *Proceedings of the IEEE*, 69, 529-541.
- Osterberg, G. (1935). Topography of the layer of rods and cones in the human retina. *Acta Ophthalmologica. Supplement*, 6-10, 11-96.
- Pantle, A. (1992). Immobility of some second-order stimuli in human peripheral vision. *Journal of the Optical Society of America A*, 9, 863-867.
- Parth, P. & Rentschler, I. (1984). Numerosity judgements in peripheral vision: Limitations of the cortical magnification hypothesis. *Behavioural Brain Research*, 11, 241-248.
- Peichl, L. & Wässle, H. (1979). Size, scatter and coverage of ganglion cell receptive field centres in the cat retina. *Journal of Physiology*, 291, 117-141.
- Pelli, D. G., Robson, J. G. & Wilkins, A. J. (1988). The design of a new letter chart for measuring contrast sensitivity. *Clinical Vision Sciences*, 2, 187-199.
- Pelli, D. G. & Zhang, L. (1991). Accurate control of contrast on microcomputer displays. *Vision Research*, 31, 1337-1350.
- Pentland, A. (1980). Maximum likelihood estimation: The best PEST. *Perception & Psychophysics*, 28, 377-379.
- Perenin, M. T. & Jeannerod, M. (1978). Visual function within the hemianopic field following early cerebral hemidecortication in man. I. Spatial localization. *Neuropsychologia*, 16, 1-13.
- Perry, V. H. & Cowey, A. (1985). The ganglion cell and cone distributions in the monkey's retina: Implications for central magnification factors. *Vision Research*, 25, 1795-1810.

- Perry, V. H. & Cowey, A. (1988). The lengths of the fibres of Henle in the retina of macaque monkeys: implications for vision. *Neuroscience*, 25, 225-236.
- Perry, V. H., Oehler, R. & Cowey, A. (1984). Retinal ganglion cells that project to the dorsal lateral geniculate nucleus in the macaque monkey. *Neuroscience*, 12, 1101-1123.
- Perry, V. H. & Silveira, L. C. L. (1988). Functional lamination in the ganglion cell layer of the macaque's retina. *Neuroscience*, 25, 217-223.
- Peterzell, D. H., Harvey, L. O., Jr. & Hardyck, C. D. (1989). Spatial frequencies and the cerebral hemispheres: Contrast sensitivity, visible persistence, and letter classification. *Perception & Psychophysics*, 46, 443-455.
- Piper, H. (1903). Über die Abhängigkeit des Reizwertes leuchtender Objekte von ihrer Flächen- bzw. Winkelgröße. *Zeitschrift für Psychologie und Physiologie der Sinnesorgane*, 32, 98-112.
- Pirenne, M. H. (1962). Visual acuity. In H. Davson (Ed.), *The eye*, Chapter 9 (pp. 175-195). New York: Academic Press.
- Poffenberger, A. T. (1912). Reaction time to retinal stimulation, with special reference to the time lost in conduction through nerve centers. *Archives of Psychology*, 23, 1-73.
- Pointer, J. S. (1986). The cortical magnification factor and photopic vision. *Biological Reviews of the Cambridge Philosophical Society*, 61, 97-119.
- Polyak, S. (1932). *The main afferent fibre systems of the cerebral cortex in primates*. Berkeley, California: University of California Press.
- Pommerenke, K. & Markowitsch, H. J. (1989). Rehabilitation training of homonymous visual field defects in patients with postgeniculate damage of the visual system. *Restorative Neurology and Neuroscience*, 1, 47-63.
- Pöppel, E. (1988). Size constancy and oculomotor modulation of perifoveal light-difference threshold. *Naturwissenschaften*, 75, 463-465.
- Pöppel, E., Brinkmann, R., von Cramon, D. & Singer, W. (1978). Association and dissociation of visual functions in a case of bilateral occipital lobe infarction. *Archiv für Psychiatrie und Nervenkrankheiten*, 225, 1-21.
- Pöppel, E. & Harvey, L. O., Jr. (1973). Light-difference threshold and subjective brightness in the periphery of the visual field. *Psychologische Forschung*, 36, 145-161.
- Pöppel, E., Held, R. & Frost, D. (1973). Residual visual function after brain wounds involving the central visual pathways in man. *Nature*, 243, 295-296.
- Pöppel, E., Stoerig, P., Logothetis, N., Fries, W., Boergen, K.-P., Oertel, W. & Zihl, J. (1987). Plasticity and rigidity in the representation of the human visual field. *Experimental Brain Research*, 68, 445-448.
- Pöppel, E., von Cramon, D. & Backmund, H. (1975). Eccentricity-specific dissociation of visual functions in patients with lesions of the central visual pathway. *Nature*, 256, 489-490.
- Porat, M. & Zeevi, Y. Y. (1988). The generalized Gabor scheme of image representation in biological and machine vision. *IEEE Transactions on Pattern Analysis and Machine Intelligence*, 10, 452-468.

- Porat, M. & Zeevi, Y. Y. (1989). Localized texture processing in vision: Analysis and synthesis in the Gaborian space. *IEEE Transactions on Biomedical Engineering*, 36, 115-129.
- Posner, M. I. & Cohen, Y. (1982). Components of visual orienting. In M. Bouma (Ed.), *Attention and Performance X*. Hillsdale, N. J.: Erlbaum.
- Posner, M. I. & Marin, O. S. M. (1985). *Attention and Performance XI*. Hillsdale, N.J.: Erlbaum.
- Posner, M. I. & Snyder, C. R. R. (1975). Facilitation and inhibition in the processing of signals. In P. M. A. Rabbitt & S. Dornic (Eds.), *Attention and Performance* (pp. 669-682). New York: Academic Press.
- Posner, M. I., Walker, J. A., Friedrich, F. A. & Rafal, R. D. (1987). How do the parietal lobes direct covert attention? *Neuropsychologia*, 25, 135-145.
- Posner, M. I., Walker, J. A., Friedrich, F. J. & Rafal, R. D. (1984). Effects of parietal injury on covert orienting of attention. *The Journal of Neuroscience*, 4, 1863-1874.
- Press, W. H., Flannery, B. P., Teukolsky, S. A. & Vetterling, W. T. (1986). *Numerical Recipes: The Art of Scientific Computing*. Cambridge: Cambridge University Press.
- Prince, J. H. (1957). Relationship of reading types to uncorrectable lowered visual acuity. *American Journal of Optometry & Archives of the American Academy of Optometry*, 34, 581-595.
- Quick, R. F. A. (1974). A vector-magnitude model of contrast detection. *Kybernetik*, 16, 65-67.
- Rabin, J. (1995). Small letter contrast sensitivity: an alternative measure of visual resolution for aviation candidates. *Aviation Space and Environmental Medicine*, 66, 56-58.
- Rabin, J. & Wicks, J. (1996). Measuring resolution in the contrast domain: the small letter contrast test. *Optometry and Visual Science*, 76, 398-403.
- Rains, J. D. (1963). Signal luminance and position effects in human reaction time. *Vision Research*, 3, 239-251.
- Randall, H. G., Brown, D. J. & Sloan, L. L. (1966). Peripheral visual acuity. *Archives of Ophthalmology*, 75, 500-504.
- Reeves, P. (1920). The response of the average pupil to various intensities of light. *Journal of the Optical Society of America A*, 4, 35-43.
- Regan, D. (1988). Low-contrast visual acuity test for pediatric use. *Canadian Journal of Ophthalmology*, 23, 224-227.
- Regan, D. (1988). Low-contrast letter charts and sinewave grating tests in ophthalmological and neurological disorders. *Clinical Vision Sciences*, 2, 235-250.
- Regan, D. & Neima, D. (1983). Low-contrast letter charts as a test of visual function. *Ophthalmology*, 90, 1192-1200.
- Regan, D. & Neima, D. (1983). Low-contrast letter charts in early diabetic retinopathy, ocular hypertension, glaucoma and Parkinson's disease. *British Journal of Ophthalmology*, 68, 885-889.

- Rentschler, I. (1988). Pattern discrimination in normal and abnormal vision. In H. Marko, G. Hauske & A. Struppler (Eds.), *Processing structures for perception and action* (pp. 163-183). Weinheim: VCH Verlagsgesellschaft.
- Rentschler, I., Baumgartner, G., Campbell, F. W. & Lehmann, D. (1982). Analysis and restitution of visual function in a case of cerebral amblyopia. *Human Neurobiology*, 1, 9-16.
- Rentschler, I. & Caelli, T. (1990). Visual representations in the brain: Inferences from psychophysical research. In H. Haken & K. Stadler (Eds.), *Synergetics of cognition* (pp. 233-248). Berlin: Springer.
- Rentschler, I., Caelli, T. & Scheidler, W. (1990). Adaptive filters in spatial vision. *Investigative Ophthalmology and Visual Science*, 31, 2115.
- Rentschler, I. & Hilz, R. (1985). Amblyopic processing of positional information. Part I: Vernier acuity. *Experimental Brain Research*, 60, 270-278.
- Rentschler, I., Hübner, M. & Caelli, T. (1988). On the discrimination of compound Gabor signals and textures. *Vision Research*, 28, 279-291.
- Rentschler, I. & Schober, H. (1978). Die Entstehung des Netzhautbildes. *Sehen; Sinnesphysiologie III*, 141-203. München: Urban & Schwarzenberg.
- Rentschler, I., Strasburger, H., Treutwein, B. & Encke, W. (1989). *Untersuchungen zur flugmedizinischen Sehfunktionsprüfung. Forschungsbericht aus der Wehrmedizin*. Bonn: Dokumentations- und Fachinformationszentrum der Bundeswehr.
- Rentschler, I. & Treutwein, B. (1985). Loss of spatial phase relationships in extrafoveal vision. *Nature*, 313, 308-310.
- Rentschler, I., Treutwein, B. & Landis, T. (1994). Dissociation of local and global processing in visual agnosia. *Vision Research*, 34, 963-971.
- Riccò, A. (1877). Relazione fra il minimo angolo visuale e l'intensità luminosa. *Annali di Ottalmologia*, 6, 373-479.
- Richards, W. (1967). Apparent modifiability of receptive fields during accommodation and convergence and a model for size constancy. *Neuropsychologia*, 5, 63-72.
- Riddoch, G. (1917). Dissociations of visual perceptions due to occipital injuries, with especial reference to appreciation of movement. *Brain*, 40, 15-57.
- Röhler, R. (1967). *Informationstheorie in der Optik*. Stuttgart: Wissenschaftliche Verlagsgesellschaft.
- Rosenfeld, A. & Kak, A. C. (1982). *Digital picture processing*. New York: Academic Press.
- Rovamo, J. & Raninen, A. (1984). Critical flicker frequency and *M*-scaling of stimulus size and retinal illuminance. *Vision Research*, 24, 1127-1131.
- Rovamo, J. & Virsu, V. (1979). An estimation and application of the human cortical magnification factor. *Experimental Brain Research*, 37, 495-510.
- Rovamo, J., Virsu, V. & Näsänen, R. (1978). Cortical magnification factor predicts the photopic contrast sensitivity of peripheral vision. *Nature*, 271, 54-56.
- Rumelhart, D. E., McClelland, J. L. & the PDP research group (1986). *Parallel distributed processing. Vol 1: Foundations*. Cambridge, MA: MIT Press.

- Saarinen, J. (1987). Perception of positional relationships between line segments in eccentric vision. *Perception*, 16, 583–591.
- Safran, A. B., Duret, F., Issenhot, M. & Landis, T. (1997). Dissociation between actual and perceived defects in the visual field, demonstrated by a double Amsler grid test. The "filling-in" phenomenon revisited. In A. Heijl (Ed.), *Perimetry update 1996/1997*. Amsterdam: Kugler & Ghedini.
- Safran, A. B. & Landis, T. (1996). Plasticity in the adult visual cortex: implications for the diagnosis of visual field defects and visual rehabilitation. *Current Opinion in Ophthalmology*, 7, 53-64.
- Sakitt, B. (1971). Configuration dependence of scotopic spatial summation. *Journal of Physiology (London)*, 216, 513-529.
- Sakitt, B. & Barlow, H. B. (1982). A model for the economical encoding of the visual image in cerebral cortex. *Biological Cybernetics*, 43, 97-108.
- Schein, S. & de Monasterio, F. M. (1987). Mapping of retinal and geniculate neurons onto striate cortex of macaque. *Journal of Neuroscience*, 7, 996-1009.
- Schiefer, U., Köst, G. & Aulhorn, E. (1990). Rauschfeld-Untersuchungsergebnisse mit dem Tübinger ElektronikKampimeter (TEC): Ein Vergleich mit herkömmlichen perimetrischen Verfahren. *Fortschritte der Ophthalmologie*, 87, 508-515.
- Schiefer, U., Pfau, U., Selbmann, H. K., Wilhelm, H. & Zrenner, E. (1995). Sensitivität und Spezifität der Rauschfeldkampimetrie. *Der Ophthalmologe*, 92, 156-167.
- Schiefer, U., Strasburger, H., Becker, S. T., R., V., Jan, S., Dietrich, T. J. & Hart, W. (2001). Reaction time in automated kinetic perimetry. Effects of stimulus luminance, eccentricity and movement direction. *Vision Research*, 41, 2157-2164.
- Schiller, P. H. & Colby, C. L. (1983). The response of single cells in the lateral geniculate nucleus of the rhesus monkey to color and luminance contrast. *Vision Research*, 23, 1631-1641.
- Schiller, P. H., Logothetis, N. K. & Charles, E. R. (1990). Role of the color-opponent and broad-band channels in vision. *Visual Neuroscience*, 5, 321-346.
- Schmielau, F. (1989). Restitution visueller Funktionen bei hirnerkrankten Patienten: Effizienz lokalisationspezifischer sensorischer und sensomotorischer Rehabilitationsmaßnahmen. In P. Jacobi (Hrsg.), *Jahrbuch der Medizinischen Psychologie 2, Psychologie in der Neurologie* (pp. 115-126). Berlin: Springer Verlag.
- Schneider, W. X. (1993). Space-based visual attention models and object selection: Constraints, problems, and possible solutions. *Psychological Research*, 56, 35-43.
- Schwartz, E. L. (1980). Computational anatomy and functional architecture of striate cortex: A spatial mapping approach to perceptual coding. *Vision Research*, 20, 645-669.
- Sergent, J. (1982). The cerebral balance of power: Confrontation of cooperation? *Journal of Experimental Psychology: Human Perception & Performance*, 8, 253-272.
- Sergent, J. & Hellige, J. B. (1986). Role of input factors in visual-field asymmetries. *Brain & Cognition*, 5, 174-199.



- Shapley, R. & Perry, V. H. (1986). Cat and monkey retinal ganglion cells and their visual functional roles. *Trends in Neuroscience*, 229-235.
- Shapley, R. M., Caelli, T., Grossberg, S., Morgan, M. & Rentschler, I. (1990). Computational theories of visual perception. In L. Spillmann & J. S. Werner (Eds.), *Visual perception: The neurophysiological foundations*, Chap. 15 (pp. 417-448). San Diego: Academic Press.
- Shapley, R. M., Kaplan, E. & Soodak, R. M. (1981). Spatial summation and contrast sensitivity of X and Y cells in the LGN of the macaque. *Nature*, 292, 543-545.
- Shaw, P. (1969). Processing of tachistoscopic displays with controlled order of characters and spaces. *Perception & Psychophysics*, 6, 257-266.
- Sherman, S. M. (1985). Functional organization of the W-, X-, and Y-cell pathways in the cat: a review and hypothesis. *Progress in Psychobiology and Physiological Psychology*, 11, 233-314.
- Simmers, A. J., Gray, L. S., McGraw, P. V. & Winn, B. (1999): Contour interaction for high and low contrast optotypes in normal and amblyopic observers. *Ophthalmic and Physiologic Optics*, 19, 253-260.
- Sireteanu, R., Lagrèze, W.-D. & Constantinescu, D. H. (1993). Distortions in two-dimensional visual space perception in strabismic observers. *Vision Research*, 33, 677-690.
- Skinner, J. E. & Yingling, C. D. (1977). Central gating mechanisms that regulate potentials and behavior. In J. E. Desmedt (Ed.), *Progress in clinical neurophysiology: attention, voluntary contraction and event-related cerebral potentials*, Vol. 1, 4586-4590.
- Slaghuis, W. L., Lovegrove, W. J. & Freestun, J. (1992). Letter recognition in peripheral vision and metacontrast masking in dyslexic and normal readers. *Clinical Vision Sciences*, 7, 53-65.
- Sloan, L. L. (1947). Rate of dark adaptation and regional threshold gradient of the dark-adapted eye: Physiologic and clinical studies. *American Journal of Ophthalmology*, 30, 705-720.
- Sloan, L. L. (1968). The photopic acuity-luminance function with special reference to parafoveal vision. *Vision Research*, 8, 901-911.
- Snellen, H. (1862). *Optotypi ad visum determinandum (Probebuchstaben zur Bestimmung der Sehschärfe)*. Utrecht: van de Weijer.
- Snellen, H. & Landolt, E. (1874). Perioptometrie. In A. von Gräfe & E. T. Sämisch (Hrsg.), *Handbuch der gesamten Augenheilkunde*. Leipzig: W. Engelmann.
- Snyder, A. W. (1982). Hyperacuity and interpolation by the visual pathways. *Vision Research*, 22, 1219-1220.
- Solomon, J. A. & Pelli, D. G. (1994). The visual filter mediating letter identification. *Nature*, 369, 395-397.
- Solomon, J. A. & Sperling, G. (1995). 1<sup>st</sup>- and 2<sup>nd</sup>-order motion and texture resolution in central and peripheral vision. *Vision Research*, 35, 59-64.
- Spang, K., Brunner-Beek, F., Schwendemann, G. & Fahle, M. (2001). Subjektive Wahrnehmung von infarkt-bedingten Gesichtsfeldausfällen. In H. H. Bülhoff, H. A. Mallot,

- K. Gegenfurtner & R. Ulrich (Hrsg.), 4. *Tübinger Wahrnehmungskonferenz* (pp. 183). Kirchentellinsfurt: Knirsch Verlag.
- Sperling, G. (1960). The information available in brief visual presentations. *Psychological Monographs*, 74.
- Spillmann, L. (1964). *Zur Feldorganisation der visuellen Wahrnehmung beim Menschen*. Dissertation, Universität Münster.
- Spillmann, L. (1999). Brain and Gestalt. I. Metzger's laws of vision. *Psychologische Beiträge*, 41.
- Spillmann, L. (1999). From elements to perception: Local and global processing in visual neurons. *Perception*, 28, 1461 - 1492.
- Spillmann, L. (2001). *Gehirn und Gestalt. II. Neuronale Mechanismen*. *Kognitionswissenschaften* 9, 122-123.
- Spillmann, L. (2002). *Brain and Gestalt. II. Neuronal mechanisms*. In preparation.
- Spillmann, L. & Ehrenstein, W. (1996). From neuron to Gestalt. Mechanisms of visual perception. In R. Greger & U. Windhorst (Eds.), *Comprehensive human physiology. Mechanisms of visual perception, Vol. 1* (pp. 861-893). Heidelberg, Berlin, New York: Springer.
- Spinelli, D., Bazzo, A. & Vicario, G. B. (1984). Orientation sensitivity in the peripheral visual field. *Perception*, 13, 41-47.
- Stein, J. & Talcott, J. (1999). Impaired neuronal timing in developmental dyslexia -- The magnocellular hypothesis. *Dyslexia*, 5, 59-77.
- Stein, J. & Walsh, V. (1997). To see but not to read; the magnocellular theory of dyslexia. *Trends in Neuroscience*, 20, 147-151.
- Stephenson, C. M. E., Knapp, A. J. & Braddick, O. J. (1991). Discrimination of spatial phase shows a qualitative difference between foveal and peripheral processing. *Vision Research*, 31, 1315-1326.
- Stoerig, P. & Cowey, A. (1989). Spectral sensitivity in blindsight. *Nature*, 342, 916-918.
- Stoerig, P. & Cowey, A. (1992). Wavelength discrimination in blindsight. *Brain*, 115, 425-444.
- Stoerig, P. & Pöppel, E. (1986). Eccentricity-dependent residual target detection in visual field defects. *Experimental Brain Research*, 64, 469-475.
- Stoffer, T. H. (1988). *Dynamische Aspekte der visuellen Aufmerksamkeit. Funktionelle Charakteristika der Fokussieränderung vom Typ "Gummilinse" und ihre Beteiligung an der Entstehung der Dominanz globaler über lokale Merkmale*. Habilitationsschrift, Universität Bielefeld.
- Strasburger, H. (1997). Use of computers and cathode-ray-tube displays in visual psychophysics. Part I. In *Special Issue of Spatial Vision*, 10(4) D. H. Foster & A. Reeves (Eds.), AH Zeist, The Netherlands: VSP.
- Strasburger, H. (1997). *R\_Contrast*: Rapid measurement of recognition contrast thresholds. *Spatial Vision*, 10, 495-498.

- Strasburger, H. (1997). Use of computers and cathode-ray-tube displays in visual psychophysics. Part II. In *Special Issue of Spatial Vision, 11(1)* D. H. Foster & A. Reeves (Eds.), AH Zeist, The Netherlands: VSP.
- Strasburger, H. (2001). Invariance of the psychometric function for letter recognition across the visual field. *Perception & Psychophysics, 63*, 1356-1376.
- Strasburger, H. (2001). Converting between measures of slope of the psychometric function. *Perception & Psychophysics, 63*, 1348-1355.
- Strasburger, H., Gothe, J. & Lutz, K. (2000). The healthy visual field of recognition. *Perception, 29 Suppl.*, 84-85.
- Strasburger, H., Harvey, L. O., Jr. & Rentschler, I. (1991). Contrast thresholds for identification of numeric characters in direct and eccentric view. *Perception & Psychophysics, 49*, 495-508.
- Strasburger, H., Murray, I. J. & Remky, A. (1993). Sustained and transient mechanisms in the steady-state visual evoked potential: Onset presentation compared to pattern reversal. *Clinical Vision Sciences, 8*, 211-234.
- Strasburger, H. & Pöppel, E. (1997). Visual field. In G. Adelman & B.H. Smith (Ed.), *Encyclopedia of Neuroscience*. Amsterdam, New York: Elsevier Science B.V.
- Strasburger, H. & Rentschler, I. (1995). Is the crowding effect of purely attentional origin? *Perception, 24, Suppl.*, 77.
- Strasburger, H. & Rentschler, I. (1996). Contrast-dependent dissociation of visual recognition and detection fields. *European Journal of Neuroscience, 8*, 1787-1791.
- Strasburger, H., Rentschler, I. & Harvey, L. O., Jr. (1994). Cortical magnification theory fails to predict visual recognition. *European Journal of Neuroscience, 6*, 1583-1588.
- Strasburger, H., Rentschler, I. & Harvey, L. O. J. (1993). Visual acuity, contrast sensitivity, and recognition of optotypes. In R. Steyer, K. F. Wender & K. F. Widaman (Eds.), *Psychometric methodology. Proceedings of the Psychometric Society* (pp. 493-498). Stuttgart: Gustav Fischer Verlag.
- Strasburger, H., Wüstenberg, T. & Jäncke, L. (2002). Calibrated LCD/TFT stimulus presentation for visual psychophysics. *Journal of Neuroscience Methods*, in print.
- Stuart, J. A. & Burian, H. M. (1962). A study of separation difficulty: its relationship to visual acuity in normal and amblyopic eyes. *American Journal of Ophthalmology, 53*, 471-477.
- Talbot, S. A. & Marshall, W. H. (1941). Physiological studies on neural mechanisms of visual localization and discrimination. *American Journal of Ophthalmology, 46*, 102-113.
- Tanaka, K. (1996). Inferotemporal cortex and object vision. *Annual Review of Neuroscience, 19*, 109-139.
- Tanaka, K., Saito, H.-A., Fukuda, Y. & Moriya, M. (1991). Coding visual images of objects in the inferotemporal cortex of the macaque monkey. *Journal of Neurophysiology, 66*, 170-189.
- Taylor, M. M. & Creelman, C. D. (1967). PEST: Efficient estimates on probability functions. *Journal of the Acoustical Society of America, 41*, 782-787.

- Taylor, S. G. & Brown, D. R. (1972). Lateral visual masking: Supraretinal effects when viewing linear arrays with unlimited viewing time. *Perception & Psychophysics*, 12, 97-99.
- Teichner, W. H. (1954). Recent studies on simple reaction time. *Psychological Bulletin*, 51, 128-149.
- Teichner, W. H. & Krebs, M. (1972). Laws of the simple visual reaction time. *Psychological Review*, 79, 344-358.
- Thibos, L. N., Still, D. L. & Bradley, A. (1996). Characterization of spatial aliasing and contrast sensitivity in peripheral vision. *Vision Research*, 36, 249-258.
- Thomas, J. P. (1987). Effect of eccentricity on the relationship between detection and identification. *Journal of the Optical Society of America A*, 4, 1599-1605.
- Thomas, J. P., Gille, J. & Barker, R. A. (1982). Simultaneous visual detection and identification: theory and data. *Journal of the Optical Society of America*, 72, 1642-1651.
- Thomas-Decortis, G. (1959). Acuité visuelle angulaire et acuité visuelle morphoscopique dans l'amblyopie ex anopsia. *Bulle de la Société Belge d'Ophtalmologie*, 123, 488-499.
- Toet, A. & Levi, D. M. (1992). The two-dimensional shape of spatial interaction zones in the parafovea. *Vision Research*, 32, 1349-1357.
- Tolhurst, D. J. & Dealy, R. S. (1975). The detection and identification of lines and edges. *Vision Research*, 15, 1367-1372.
- Tolhurst, D. J. & Ling, L. (1988). Magnification factors and the organization of the human striate cortex. *Human Neurobiology*, 6, 247-254.
- Tommilla, V. (1972). A new chart for testing line acuity in amblyopia. *Acta Ophthalmologica*, 50, 565-569.
- Topolski, R. & Inhoff, A. W. (1995). Loss of vision during the retinal stabilization of letters. *Psychological Research*, 58, 155-162.
- Townsend, J. T. (1971). Theoretical analysis of an alphabetic confusion matrix. *Perception & Psychophysics*, 9, 40-50.
- Townsend, J. T., Taylor, S. G. & Brown, D. R. (1971). Lateral masking for letters with unlimited viewing time. *Perception & Psychophysics*, 10, 375-378.
- Townsend, V. M. (1973). Loss of spatial and identity information following a tachistoscopic exposure. *Journal of Experimental Psychology*, 98, 113-118.
- Trauzettel-Klosinski, S. (1997). Eccentric fixation with hemianopic field defects. *Neuro-ophthalmology*, 18, 117-131.
- Treisman, A. M. (1986). Features and objects in visual processing. *Scientific American*, 255 (Nov), 106-115 (wird von Treisman selbst falsch als "244, 114-124" zitiert!).
- Treisman, A. M. (1988). Features and objects: The fourteenth Bartlett memorial lecture. *Quarterly Journal of Experimental Psychology*, 40A, 201-237.
- Treisman, A. M. & Gelade, G. (1980). A feature-integration theory of attention. *Cognitive Psychology*, 12, 97-136.

- Treutwein, B. (1991). Adaptive psychophysical methods. In V. P. Bhatkar & K. M. Rege (Eds.), *Frontiers in knowledge based computing* (pp. 101-111). Narosa, New Delhi.
- Treutwein, B. (1995). Adaptive psychophysical procedures: Minireview. *Vision Research*, *35*, 2503-2522.
- Treutwein, B. & Rentschler, I. (1992). Double pulse resolution in the visual field: The influence of temporal stimulus characteristics. *Clinical Vision Sciences*, *7*, 421-434.
- Treutwein, B., Rentschler, I., Scheidler, M., Zetzsche, C. & Boergen, K.-P. (1996). Amblyopic quasi-blindness for image structure. *Vision Research*, *36*, 2211-2228.
- Treutwein, B. & Strasburger, H. (1999). Fitting the psychometric function. *Perception & Psychophysics*, *61*, 87-106.
- Tsal, Y. (1983). On interpreting the effects of location preknowledge: A critique of Duncan. *Perception & Psychophysics*, *34*, 297-298.
- Tsal, Y. & Lavie, N. (1988). Attending to color and shape: the special role of location in selective visual processing. *Perception & Psychophysics*, *44*, 15-21.
- Tyler, C. W. (1999). Human symmetry detection exhibits reverse eccentricity scaling. *Visual Neuroscience*, *16*, 919-922.
- Tynan, P. D. & Sekuler, R. (1982). Motion processing in peripheral vision: reaction time and perceived velocity. *Vision Research*, *22*, 61-68.
- Ungerleider, L. G. & Haxby, J. V. (1994). 'What' and 'where' in the human brain. *Current opinion in neurobiology*, *4*, 157-165.
- Ungerleider, L. G. & Mishkin, M. (1982). Two cortical visual systems. In D. J. Ingle, M. A. Goodale & R. J. Mansfield (Eds.), *Analysis of visual behavior*. Cambridge, MA: MIT Press.
- Valeton, J. M. & Watson, A. B. (1990). Contrast detection does not have a local spatial scale (ARVO abstract). *Investigative Ophthalmology and Visual Science*, *31*, 428.
- van Buren, J. M. (1963). *The retinal ganglion cell layer*. Springfield: Thomas.
- van der Heijden, A. H. C. (1987). Central selection in vision. In H. Heuer & A. F. Sanders (Eds.), *Perspectives on perception and action* (pp. 421-446). Hillsdale, N. J.: Erlbaum.
- van der Heijden, A. H. C. (1992). *Selective attention in vision*. London, New York: Routledge.
- Van Essen, D. C., Newsome, W. T. & Maunsell, J. H. R. (1984). The visual field representation in striate cortex of the macaque monkey: Asymmetries, anisotropies, and individual variability. *Vision Research*, *24*, 429-448.
- Vetterling, W. T., Teukolsky, S. A., Press, W. H. & Flannery, B. P. (1986). *Numerical Recipes Example Book (Fortran)*. Cambridge: Cambridge University Press.
- Virsu, V. & Hari, R. (1996). Cortical magnification, scale invariance and visual ecology. *Vision Research*, *36*, 2971-2977.
- Virsu, V., Näsänen, R. & Osmoviita, K. (1987). Cortical magnification and peripheral vision. *Journal of the Optical Society of America A*, *4*, 1568-1578.

- Virsu, V. & Rovamo, J. (1979). Visual resolution, contrast sensitivity and the cortical magnification factor. *Experimental Brain Research*, 37, 475-494.
- Virsu, V., Rovamo, J., Laurinen, P. & Näsänen, R. (1982). Temporal contrast sensitivity and cortical magnification. *Vision Research*, 22, 1211-1217.
- von Foerster, H. (1981). *Observing systems*. Seaside, California: Intersystems Publications.
- von Helmholtz, H. (1871). Über die Zeit, welche nötig ist, damit ein Gesichtseindruck zum Bewusstsein kommt. *Berliner Monatsberichte, Juni*, 333-337.
- von Noorden, G. K. (1985). Amblyopia: A multidisciplinary approach. Proctor lecture. *Investigative Ophthalmology and Visual Science*, 26, 1704-1716.
- Wagner, J. (1918). Experimentelle Beiträge zur Psychologie des Lesens. *Zeitschrift für Psychologie*, 80, 1-75.
- Wahl, F. M. (1989). *Digitale Bildsignalverarbeitung*. Berlin: Springer.
- Wässle, H., Grünert, U., Röhrenbeck, J. & Boycott, B. B. (1989). Cortical magnification factor and the ganglion cell density of the primate retina. *Nature*, 341, 643-646.
- Wässle, H., Grünert, U., Röhrenbeck, J. & Boycott, B. B. (1990). Retinal ganglion cell density and cortical magnification factor in the primate. *Vision Research*, 30, 1897-1911.
- Watanabe, S. (1985). *Pattern recognition: Human and mechanical*. New York: John Wiley.
- Watson, A. B. (1983). What does the eye see best? *Nature*, 302, 419-422.
- Watson, A. B. (1983). Detection and recognition of simple spatial forms. In O. J. Braddick & A. C. Sleight (Eds.), *Physical and Biological Processing of Images* (pp. 100-114). New York: Springer-Verlag.
- Watson, A. B. & Pelli, D. G. (1983). QUEST: A Bayesian adaptive psychometric method. *Perception & Psychophysics*, 33, 113-120.
- Watson, A. B. & Robson, J. G. (1981). Discrimination at threshold: labelled detectors in human vision. *Vision Research*, 21, 1115-1122.
- Watt, R. J. (1985). Structured representation in low-level vision. *Nature*, 313, 266-267.
- Watt, R. J. & Morgan, M. J. (1985). A theory of the primitive spatial code in human vision. *Vision Research*, 11, 1661-1674.
- Wechsler, H. (1990). *Computational vision*. Boston: Academic Press.
- Weibull, W. (1951). A statistical distribution function of wide applicability. *Journal of Applied Mechanics*, 18, 293-297.
- Weinstein, C. & Arnulf, A. (1946). Contribution à l'étude des seuils de perception de l'œil. *Communications des Laboratoires de l'Institut d'Optique (Paris)*, 19, 1-43.
- Weiskrantz, L., Warrington, E. K., Sanders, M. D. & Marshall, J. (1974). Visual capacity in the hemianopic field following a restricted occipital ablation. *Brain*, 97, 709-728.
- Weiss, C., Rentschler, I. & Caelli, T. (1985). Amblyopic processing of positional information. Part II: Sensitivity to phase distortion. *Experimental Brain Research*, 60, 279-288.
- Weiss, C., Rentschler, I. & Strasburger, H. (1983). Amblyopic sensitivity to 1-D and 2-D spatial phase. *Perception*, 12, A21.

- Weiss, J. B. (1973). Mésure de l'acuité visuelle du jeune enfant. *Vision Research*, 13, 1139-1149.
- Wertheim, T. (1887). Ueber die Zahl der Seheinheiten im mittleren Theile der Netzhaut. *Albrecht von Graefes Archiv für Ophthalmologie*, 33
- Wertheim, T. (1894). Über die indirekte Sehschärfe. *Zeitschrift für Psychologie & Physiologie der Sinnesorgane*, 7, 172-187.
- Wessinger, C. M., Fendrich, R. & Gazzaniga, M. S. (1997). Islands of residual vision in hemianopic patients. *Journal of Cognitive Neuroscience*, 9, 203-221.
- Westheimer, G. (1965). Spatial interaction in the human retina during scotopic vision. *Journal of Physiology (London)*, 181, 881-894.
- Westheimer, G. (1967). Spatial interaction in human cone vision. *Journal of Physiology (London)*, 190, 139-154.
- Westheimer, G. (1979). Publications of Gerald Westheimer. *Investigative Ophthalmology and Visual Science*, 18, 890-892.
- Westheimer, G. (1979). The spatial sense of the eye. *Investigative Ophthalmology and Visual Science*, 18, 893-912.
- Westheimer, G. (1982). The spatial grain of the perifoveal visual field. *Vision Research*, 22, 157-162.
- Weymouth, F. W. (1958). Visual sensory units and the minimal angle of resolution. *American Journal of Ophthalmology*, 46, 102-113.
- White, M. J. (1969). Identification and localization within digit and letter spans. *Psychonomic Science*, 14, 279-280.
- Wilkins, A. J. & Nimmo-Smith, M. I. (1987). The clarity and comfort of printed text. *Ergonomics*, 30, 1705-1720.
- Wilson, H. R. (1980). A transducer function for threshold and suprathreshold human vision. *Biological Cybernetics*, 38, 171-178.
- Wilson, H. R. (1991). Model of peripheral and amblyopic hyperacuity. *Vision Research*, 31, 967-982.
- Wilson, H. R. & Bergen, J. R. (1979). A four mechanism model for threshold spatial vision. *Vision Research*, 19, 19-32.
- Wilson, H. R. & Gelb, D. J. (1984). Modified line element theory for spatial- frequency and width discrimination. *Journal of the Optical Society of America A*, 1, 124-131.
- Wolford, G. & Chambers, L. (1983). Lateral masking as a function of spacing. *Perception & Psychophysics*, 33, 129-138.
- Wolfram, S. (1991). *Mathematica. A system for doing mathematics by computer*. Redwood City, California: Addison-Wesley.
- Woodrow, H. (1936). The measurement of difficulty. *Psychological Review*, 43, 341-365.
- Woodrow, H. (1937). The interrelation of conditions of difficulty: I. The effect of changes in number at various spatial separations on simultaneous letter span. *Journal of General Psychology*, 16, 83-102.

- Woodrow, H. (1937). The interrelation of conditions of difficulty: II. Number, spatial separation and illumination as conditions of simultaneous letter span. *Journal of General Psychology*, 16, 103-170.
- Woodrow, H. (1938). The effect of pattern upon simultaneous letter-span. *American Journal of Psychology*, 51, 83-96.
- Woodworth, R. S. & Schlosberg, H. (1979). *Experimental Psychology*. New York: Holt.
- Youngson, R. M. (1979). Anomaly in visual acuity testing in children. *British Journal of Ophthalmology*, 59, 168-170.
- Zeevi, Y. Y. & Porat, M. (1989). Image representation by localized phase. *Visual Communications and Image processing IV. SPIE Proc. Vol. 1199* (pp. 1512-1517). Bellingham, WA: SPIE.
- Zeki, S. & Shipp, S. (1988). The functional logic of cortical connections. *Nature*, 335, 311-317.
- Zetzsche, C. & Barth, E. (1990). Image surface predicates and the neural encoding of two-dimensional signal variations. In B. E. Rogowitz & J. P. Allebach (Eds.), *Human vision and electronic imaging: Models, methods, and applications. SPIE Proc. Vol. 1249* (pp. 209-216). Bellingham, WA: SPIE.
- Zetzsche, C. & Barth, E. (1990). Fundamental limits of linear filters in the visual processing of two-dimensional signals. *Vision Research*, 30, 1111-1117.
- Zetzsche, C., Barth, E. & Wegmann, B. (1993). The importance of intrinsically two-dimensional image features in biological vision and picture coding. In A. B. Watson (Ed.), *Digital images and human vision* (pp. 109-138). Cambridge, MA: MIT Press.
- Zigler, M. J., Cook, B., Miller, D. & Wemple, L. (1930). The perception of form in peripheral vision. *American Journal of Psychology*, 42, 246-259.
- Zihl, J. (1980). *Untersuchung von Sehfunktionen bei Patienten mit einer Schädigung des zentralen visuellen Systems unter besonderer Berücksichtigung der Restitution dieser Funktionen*, Habilitationsschrift, Universität München.
- Zihl, J. (1981). Recovery of visual functions in patients with cerebral blindness: Effects of specific practice with saccadic localization. *Experimental Brain Research*, 44, 159-169.
- Zihl, J., Lissy, P. & Pöppel, E. (1980). Brightness perception in the visual field. *Psychological Research*, 41, 297-304.
- Zihl, J. & von Cramon, D. (1985). Visual field recovery from scotoma in patients with post-geniculate damage. A review of 55 cases. *Brain*, 108, 335-365.
- Zihl, J., von Cramon, D. & Pöppel, E. (1978). Sensorische Rehabilitation bei Patienten mit postchiasmatischen Sehstörungen. *Der Nervenarzt*, 49, 101-111.