

Publication List
Johannes M. Zanker

Journal Articles

- 65 Hermens, F., R. Walker and, J.M. Zanker: Microsaccades and preparatory set: a comparison between delayed and immediate, exogenous and endogenous pro- and anti-saccades.
Experimental Brain Research **201 (3)**, 489-498 (2010)
- 64 Zanker, J.M., F. Hermens and R. Walker: Quantifying and modeling the strength of motion illusions perceived in static patterns.
Journal of Vision **10 (2): 13**, 1-14 (2010)
- 63 Meso, A.I. and J.M. Zanker: Perceiving motion transparency in the absence of component direction differences.
Vision Research **49 (17)**, 2187-2200 (2009)
- 62 Meso, A.I. and J.M. Zanker: Speed encoding in correlation motion detectors as a consequence of spatial structure.
Biological Cybernetics **100**, 361-370 (2009)
- 60 Durant, S. and J.M Zanker: The movement of motion-defined contours can bias perceived position.
Biology Letters **5**, 270–273 (2009)
- 59 Durant, S. and J.M. Zanker: Characterizing motion contour detection mechanisms and equivalent mechanisms in the luminance domain.
Journal of Vision **9 (1): 36**, 1-16 (2009)
- 58 Durant, S. and J.M. Zanker: Combining direction and speed for the localisation of visual motion defined contours.
Vision Research **48 (8)**, 1053-1600 (2008)
- 57 Zanker, J.M.: Animal Communication: Reading Lizard's Body Language in Context.
Current Biology **17 (18)**, R806-R808 (2007)
- 56 Zanker, J.M. and J. Zeil: Movement-induced motion signal distributions in outdoor scenes.
Network: Computation in Neural Systems **16 (4)**, 357-376 (2005)
- 55 Felisberti, F. and J.M Zanker: Attention modulates perception of transparent motion.
Vision Research **45 (19)**, 2587-2599 (2005)
- 54 Zanker, J.M.: A computational analysis of separating motion signals in transparent random dot kinematograms.
Spatial Vision **18 (4)**, 431-445 (2005)
- 53 Zanker, J.M. and A.-al-J. Kane Abdullah: Are size illusions in simple line drawings affected by shading ?
Perception **33**, 1475 - 1482 (2004)

-
- 52 Zanker, J.M. and R. Walker: A new look at Op art : towards a simple explanation of illusory motion
Naturwissenschaften **91**, 149 - 156 (2004)
- 51 Zanker, J.M.: Looking at Op Art from a Computational Viewpoint
Spatial Vision **17**, 75-94 (2004)
- 50 Zanker, J.M., M. Doyle and R. Walker: Gaze stability of observers watching Op Art pictures
Perception **32**, 1037-1049 (2003)
- 49 Zanker, J.M. and J.P. Harris: On temporal hyperacuity in the human visual system
Vision Research **42**, 2499-2508 (2002)
- 48 Fisher, N. and J.M. Zanker: The Directional Tuning of the Barber Pole Illusion
Perception **30**, 1321-1336 (2001)
- 47 Ryan, J. and J.M. Zanker: What determines the perceived speed of dots moving within apertures ?
Exp. Brain Res. **141**, 79-87 (2001)
- 46 Zanker, J.M. and N.R. Burns: Interaction of first- and second-order direction in motion-defined motion
J. Opt. Soc. Am. A **18**, 2321-2330 (2001)
- 45 Zanker, J.M., T. Quenzer and M. Fahle: Perceptual deformation induced by visual motion
Naturwiss. **88**, 129-132 (2001)
- 44 Pix, W., J. M. Zanker and J. Zeil: The optomotor response and spatial resolution in the visual system of male *Xenos vesparum* (Strepsitera)
J. Exp. Biol. **203**, 3397-3409 (2000)
- 43 Burns, N.R. and J. M. Zanker: Bouncing and streaming: Observations on motion defined objects.
Clin. & Exp. Ophthalmol. **28**, 220-222 (2000)
- 42 Patzwahl, D. R. and J. M. Zanker: Mechanisms of human motion perception: combining evidence from evoked potentials, behavioural performance, and computational modelling.
European Journal of Neuroscience **12**, 273-282 (2000)
- 41 Zanker, J.M.: Playing with words, working with concepts, testing ideas.
Behavioral and Brain Sciences **22**, 855 (1999)
- 40 Zanker, J. M. and T. Quenzer: How to Tell Circles from Ellipses: Perceiving the Regularity of Simple Shapes.
Naturwiss. **86**, 492-495 (1999)
- 39 Burns, N.R. and J. M. Zanker: Determining the visibility of noise in motion signals.
Aust. NZ J. Ophthalmol. **27**, 254-257 (1999)
- 38 Castet, E. and J.M. Zanker: Long-range interactions in the spatial integration of motion signals.
Spatial Vision **12**, 287-308 (1999)

- 37 Zanker, J.M. and O. Braddick: How does noise influence the estimation of speed ?
Vision Research **39**, 2411-2420 (1999)
- 36 Zanker, J.M.: Perceptual Learning in Primary and Secondary Motion Vision.
Vision Research **39**, 1293-1304 (1999)
- 35 Zanker, J.M., M. Srinivasan and M. Egelhaaf: Speed Tuning in Elementary Motion
Detectors of the Correlation Type.
Biol. Cybern. **80**, 109-116 (1999)
- 34 Zanker, J. M., D. R. Patzwahl, D. Braun and M. Fahle: Von der Theorie visueller
Informationsverarbeitung zur klinischen Praxis.
NeuroForum **4/98**, 266-274 (1998)
- 33 Hine, T. J., M. Cook. and J. M. Zanker: Motion Capture and the 'Ouchi' Effect.
Aust. NZ J. Ophthalmol. **26** (Suppl.), S108-S110 (1998)
- 32 Davey, M. and J. M. Zanker: Detecting the Orientation of Short Lines in the
Periphery.
Aust. NZ J. Ophthalmol. **26** (Suppl.), S104-S107 (1998)
- 31 Zanker, J.M.: Limiting factors for the detection of orientation.
Perception **27**, 167-181 (1998)
- 30 Zanker, J. M., D. R. Patzwahl, D. Braun and M. Fahle: Complex motion stimuli
localize higher-order visual processing in normal observers and in patients with
parietal lesions.
Aust. NZ J. Ophthalmol. **26**, 149-155 (1998)
- 29 Zeil, J. and J. M. Zanker: A glimpse into crabworld.
Vision Research **37**, 3417-3426 (1997)
- 28 Butzer, F., U. J. Ilg and J. M. Zanker: Smooth pursuit eye movements elicited by first-
and second-order motion.
Exp. Brain Res. **115**, 61-70 (1997)
- 27 Zanker, J. M.: Is Facilitation Responsible for the 'Motion Induction' Effect ?
Vision Res. **37**, 1953-1959 (1997)
- 26 Zanker, J. M.: On second-order motion perception in the peripheral visual field.
J. Opt. Soc. Am. A **14**, 1385-1392 (1997)
- 25 Zanker, J. M.: On the elementary mechanism underlying secondary motion
processing.
Phil. Trans. R. Soc. **B 351**, 1725-1736 (1996)
- 24 Volz, H. and J. M. Zanker: Hyperacuity for spatial localisation of contrast-modulated
patterns.
Vision Research **36**, 1329-1339 (1996)
- 23 Patzwahl, D. R., T. Elbert, J. M. Zanker and E. O. Altenmüller: The cortical
representation of object motion in man is interindividually variable.
Neuroreport **7**, 469-472 (1996)
- 22 Zanker, J. M.: Does Motion Perception Follow Weber's Law ?
Perception **24**, 363-372, (1995)

-
- 21 Patzwahl, D. R., J. M. Zanker and E. O. Altenmüller: Cortical potentials reflecting motion processing in humans.
Visual Neuroscience **11**, 1135-1147 (1994)
 - 20 Zanker, J. M.: Illusionen als Schlüssel zur Wirklichkeit. Optische Täuschungen und die Arbeitsweise des Gehirns
Naturwiss. Rundschau **47**, 295-304 (1994)
 - 19 Zanker, J. M.: Modelling Human Motion Perception II. Beyond Fourier Motion Stimuli.
Naturwiss. **81**, 200-209 (1994)
 - 18 Zanker, J. M.: Modelling Human Motion Perception I. Classical Stimuli.
Naturwiss. **81**, 156-163 (1994)
 - 17 Zanker, J.M. and I.S.Hüppgens: Interaction Between Primary and Secondary Mechanisms in Human Motion Perception.
Vision Res. **34**, 1255-1266 (1994)
 - 16 Zanker, J. M. and T. Quenzer: Long-lasting oscillations in motion-sensitive neurons driven by the movement of high-contrast gratings.
Naturwiss. **80**, 134-137 (1993)
 - 15 Patzwahl, D. R., J. M. Zanker and E. O. Altenmüller: Cortical potentials in humans reflecting the direction of object motion.
Neuroreport **4**, 379-382 (1993)
 - 14 Zanker, J. M. and G. Mohn: On the development of motion perception in human infants.
Clin. Vis. Sci. **8**, 63-71 (1993)
 - 13 Zanker, J.M.: Theta motion: A paradoxical stimulus to explore higher order motion extraction.
Vision Res. **33**, 553-569 (1993).
 - 12 Zanker, J., G. Mohn, U. Weber, K. Zeitler-Driess and M. Fahle: The development of Vernier acuity in human infants.
Vision Res. **32**, 1557-1564 (1992).
 - 11 Quenzer, T. and J.M. Zanker: Visual detection of paradoxical motion in flies.
J. Comp. Physiol. A **169**, 331-340 (1991).
 - 10 Zanker, J.M., M. Egelhaaf, and A.-K. Warzecha: On the coordination of motor output during visual flight control of flies.
J. Comp. Physiol. A **169**, 127-134 (1991).
 - 9 Zanker, J.M.: Theta motion: A new psychophysical paradigm indicating two levels of visual motion perception.
Naturwiss. **77**, 243-246 (1990).
 - 8 Zanker, J.M.: The wing beat of *Drosophila melanogaster*. III. Control.
Phil. Trans. R. Soc. B **327**, 45-64 (1990).
 - 7 Zanker, J.M. and K.G. Götz: The wing beat of *Drosophila melanogaster*. II. Dynamics.
Phil. Trans. R. Soc. B **327**, 19-44 (1990).

- 6 Zanker, J.M.: The wing beat of *Drosophila melanogaster*. I. Kinematics. Phil. Trans. R. Soc. B **327**, 1-18 (1990).
- 5 Zanker, J.M.: On the directional sensitivity of motion detectors. Biol. Cybern. **62**, 177-183 (1990).
Erratum Biol. Cybern. **62**, 556 (1990).
- 4 Zanker, J.M.: On the mechanism of speed and altitude control in *Drosophila melanogaster*. Physiol. Entomol. **13**, 351-361 (1988).
- 3 Zanker, J.M.: How does lateral abdomen deflection contribute to flight control of *Drosophila melanogaster*? J. Comp. Physiol. A **162**, 581-588 (1988).
- 2 Zanker, J.M. and T.S. Collett: The optomotor system on the ground: on the absence of visual control of speed in walking ladybirds. J. Comp. Physiol. **156**, 395-402 (1985).
- 1 Wehrhahn, C., K. Hausen and J. Zanker: Is the landing response of the housefly (*Musca*) driven by motion of a flow field? Biol. Cybern. **41**, 91-99 (1981).

Book Chapters / Conference Proceedings

- B11 Holmes, T and JM Zanker: Eye on the prize: Using Overt Visual Attention to Drive Fitness for Interactive Evolutionary Computation. In: Proceedings of GECCO'08, Atlanta, Georgia, USA, ACM, 2008, pp. 1531-1538
- B10 Meso, AI and JM Zanker: Separating global motion components in transparent visual stimuli – a phenomenological analysis. In: LNCS Proceedings of ICANN, Springer Verlag Berlin Heidelberg, 2008, pp. 308-317
- B9 Zanker, J.M.: Psychophysics and Computational Modeling of Motion Detection. In: The Concise Corsini Encyclopedia of Psychology and Behavioral Science, 3rd ed., Eds. W.E. Craighead and C.B. Nemeroff, Wiley & Sons, New York, 2004, pp. 766-768
- B8 Zanker, J.M. and J. Zeil: An analysis of the motion signal distributions emerging from locomotion through a natural environment. In: Biologically Motivated Computer Vision 2002, Lecture Notes in Computer Science 2525, Eds. H.H. Bülthoff, S-W. Lee, T.A. Poggio and C.Wallraven, Springer-Verlag Berlin Heidelberg, 2002, pp. 146-156.
- B7 Zanker, J.M. and J. Zeil: An analysis of the motion signal distributions generated by locomotion in a natural environment. In: Dynamic Perception. Workshop of GI section 1.0.04 “Image Understanding” and the European Networks MUHCI and ECOVISION. Eds. R.P. Würtz and M. Lappe, Akademische Verlagsgesellschaft, Berlin, 2002, pp. 203-208.
- B6 Zanker, J.M.: Combining Local Motion Signals: A Computational Study of Segmentation and Transparency. In: Motion Vision: Computational, Neural and Ecological Constraints. Eds. J.M. Zanker and J. Zeil, Springer Verlag, Berlin Heidelberg New York, 2001, pp. 113-124.

- B5 Zanker, J.M. and J. Zeil: Processing Motion in the Real World.
In: Motion Vision: Computational, Neural and Ecological Constraints. Eds. J.M. Zanker and J. Zeil, Springer Verlag, Berlin Heidelberg New York, 2001, pp. 1-9.
- B4 Zanker, J.M.: Motion Detection.
In: The Corsini Encyclopedia of Psychology and Behavioral Science, Eds. W.E. Craighead and C.B. Nemeroff, Wiley & Sons, New York, 2000, pp. 976-977
- B3 Zanker, J. M. and V. Braitenberg: Psychophysical Mapping of Orientation Sensitivity in the Human Cortex.
In: Brain Theory: Biological Basis and Computational Principles. Ed. A. Aertsen and V. Braitenberg, Elsevier Pub., Amsterdam, 1996, pp. 19-36.
- B2 Zanker, J. M.: Of models and men: mechanisms of human motion perception.
In: Early Vision and Beyond. Ed. T. Papathomas et al. ed., MIT Press, Boston, 1995, pp. 156-165.
- B1 Zanker, J.M.: How motion detectors respond to some illusory contours.
In: Channels in the Visual Nervous System: Neurophysiology, Psychophysics and Models. Ed. B. Blum. Freund Publishing House Ltd., London, 1991, pp. 345-370.

Book Reviews

Zanker, J.M.: Putting Pictures into Perspective. Review of Hecht et al. *Looking into pictures: An interdisciplinary approach to pictorial space*
Perception **33**, 762-764 (2004)

Zanker, J.M.: Working with Flow. Review of Vaina et al. *Optic Flow and Beyond*
Trends in Cognitive Sciences 12 (8), 526-527 (2004)

Books

Zanker, J.M.: Sensation, Perception and Action - An Evolutionary Perspective.
Palgrave Macmillan, Basingstoke, 2010

Zanker, J.M. and J. Zeil (eds): Motion Vision: Computational, Neural and Ecological Constraints.
Springer Verlag, Berlin Heidelberg New York, 2001

Theses

Zanker, J.M.: Über die Flugkraftherzeugung und Flugkraftsteuerung der Fruchtfliege *Drosophila melanogaster*. Dissertation, Eberhard-Karls-Universität Tübingen 1987.

Zanker, J.M.: Zur Kontrolle der Laufgeschwindigkeit bei Insekten.
Diplomarbeit, Eberhard-Karls-Universität Tübingen 1983.

Refereed Abstracts

- A116 Zanker J. M.: Optic flow perceived from illusory disk motion.
Perception **38**, S 10 (2009)

- A115 Meso, A.I., Shaw, A., Durant, S. and J.M. Zanker: Extracting motion contours with simultaneous local and global processing mechanisms. *Journal of Vision* **9** (8), 652 (2009)
- A114 Durant, S. and J.M. Zanker: Comparing image structure with local motion structure in real life optic flow. *Journal of Vision* **9** (8), 1043 (2009)
- A113 Holmes, T. and J.M. Zanker: I like what I see: Using eye-movement statistics to detect image preference. *Journal of Vision* **9** (8), 385 (2009)
- A112 Zanker, J.M.: Generating optic flow from illusory disk motion. *Journal of Vision* **9** (9), 639 (2009)
- A111 Durant, S. and J.M. Zanker: Analysing the information about scene structure embedded in optic flow fields. *European Conference on Visual Perception. Perception* **37**, S 40 (2008)
- A110 Meso, A.I. and J.M. Zanker: The grouping of global motion components is influenced by both form and motion cues. *Perception* **37**, S 67 (2008)
- A109 Zanker, J.M., F. Hermens and R. Walker: What Determines the strength of Motion Illusions in Op Art paintings? *Perception* **37**, S 70 (2008)
- A108 Holmes, T. and J.M. Zanker: Bauhaus Revisited: Identifying form and colour preference using a gaze driven Evolutionary Algorithm *Perception* **37**, S 148 (2008)
- A107 Hermens, F., R. Walker and J.M. Zanker: What can we learn from micro-saccades? *Perception* **37**, S 150 (2008)
- A106 Meso, A. and J.M. Zanker: Exploring information combination across local motion detector channels to model the perception of motion transparency. *Computational and Systems Neuroscience 2008*, p235 (2008)
- A105 Zanker, J.M. and A.I. Meso: On the role of Fourier spectra in the separation of transparent motion components *Perception* **37**(6), 959 (2008)
- A104 Durant, S. and J.M. Zanker: The movement of motion-defined contours can bias perceived position *Perception* **37**(6), 964-965 (2008)
- A103 Hermens, F. and J.M. Zanker: On Motion Illusions in Static Op Art Patterns. 11th Winter Conference of the Dutch Psychonomic Society, P26 (2007).
- A102 Durant, S. and J.M. Zanker: Determining effective motion-defined contours for the human visual system *Perception* **36**, S 304 (2007).
- A101 Meso, A.I. and J.M. Zanker: Perceived motion transparency from integrating motion and non-motion transparency cues *Perception* **36**, S 309 (2007).

- A100 Zanker, J.M. and A.I. Meso: Assessing motion transparency in space time
Perception **36**, S 315-316 (2007).
- A99 Holmes, T.P. and J.M Zanker: Evolving the Golden Ratio: A new method for an old question of aesthetic perception
Perception **36**, S 107 (2007).
- A98 Meso, A. and J.M Zanker: Combining phase information across channels in perceived motion transparency: A computational approach.
Perception **36**, S94 (2007)
- A97 Durant, S. and J.M. Zanker: Within-modality cue combination: Localising contours defined by speed and direction
Perception **36**, S 88 (2007).
- A96 Zanker, J.M.: A simple motion-detector model explains the spinning-disks illusion
Perception **36**, S 64 (2007).
- A95 Zanker, J.M., S. Tharger and S. Durant: A new Barbers Pole configuration to study the integration of local motion information.
Journal of Vision **7 (9)**, 979a (2007)
- A94 Durant, S. and J.M Zanker: The spatial tuning of visual motion contour detection in humans.
Journal of Vision **7 (9)**, 404a (2007)
- A93 Meso, A. and J.M Zanker: On the contribution of form and motion cues in the perception of transparency.
Journal of Vision **7 (9)**, 403a (2007)
- A92 Zanker, J.M. and U. Leonards: Measuring motion illusion strength in op artpaintings
Perception **35**, S 237 (2006).
- A91 Durant, S. and J.M. Zanker: On the role of speed and direction in localising motion defined contours
Perception **35**, S 220 (2006).
- A90 Meso, A. and J.M. Zanker: Contrast and pattern cues in the perception of motion transparency
Perception **35**, S 218 (2006).
- A89 Meso, A. and J.M. Zanker: Computational modelling of global motion transparency
Perception **35**, 462 (2006).
- A88 Williams, A.L., J.M. Zanker and H. Ashida: Cortical activity during illusory motion sensations: The spinning disks illusion
Perception **34**, S 125 (2005).
- A87 Felisberti, F.M. and J.M. Zanker: Does attention affect the identification of multiple directions in transparent motion?
Perception **34**, S 94 (2005).
- A86 Zanker, J.M., E. Wicken and N.Fisher: A second-order barber pole illusion unrelated to veridical motion signal
Perception **34**, S 12 (2005).

- A85 Zanker, J.M. and J. Zeil: Optic flow in natural environments – a downunder perspective.
Perception **34**, 252 (2005).
- A84 Felisberti, F.M. and J.M. Zanker: Does attention affect transparent motion perception?
Perception **33**, S 124 (2004).
- A83 Zanker, J.M. and A.-al-J. Kane Abdullah: Does shading affect size illusions in simple line drawings?
Perception **33**, S 179 (2004).
- A82 Zanker, J.M. and J. Taylor: On the role of attention in the processing of transparent motion.
Perception **32**, S 43 (2003).
- A81 Zanker, J.M.: Adaptation and Contrast Enhancement as Universal Coding Strategies in the Human Visual System.
In: Proceedings of the 29th Göttingen Neurobiology Conference 2003. Eds. N. Elsner, H. Zimmermann, Thieme Stuttgart, 122 (2003)
- A80 Zanker, J.M. and J. Zeil: Analysing optic flow generated by locomotion through a natural environment.
Journal of Vision **3**, 99a (2003)
- A79 Zanker, J.M.: What can we learn from motion illusions seen in Op Art paintings?
Invest. Ophthalm. Vis. Sci. **44**, S #4320 (2003).
- A77 Zanker, J.M.: Perceiving a fragmented barber-pole illusion.
Perception **31**, S 84 (2002).
- A76 Zanker, J.M., M. Doyle and R. Walker: Looking at Op Art.
Perception **31**, S 14 (2002).
- A75 Zanker, J.M. and J.P. Harris: A psychophysical investigation of temporal hyperacuity in the human visual system.
FENS Abstracts **1**, A083.21 (2002).
- A74 Zanker, J.M.: Motion Segmentation and Transparency: A Computational Analysis and Some Observations.
Spatial Vision **15**, 246-247 (2002).
- A73 Zanker, J.M.: Fragmenting the barber-pole illusion.
Perception **31**, 384-385 (2002).
- A72 Zanker, J.M.: Motion Segmentation and Transparency: A computational analysis and some observations.
Australian Journal of Psychology **53**, S70 (2001).
- A71 Zanker, J.M.: Computational and Psychophysical Aspects of Motion Segmentation and Transparency.
Behavioural Pharmacology **12**, S112 (2001).
- A70 Zanker, J.M. and N.Fisher: On the Directional Tuning of the Barber Pole Illusion.
Invest. Ophthalm. Vis. Sci. **42**, S737 (2001).
- A69 Vladusich, T. Broerse, J. and J.M. Zanker: A unified neural model of color constancy and McCollough effects.

- Proceedings of the Fourth International Conference on Cognitive and Neural Systems, Boston University (2000).
- A68 Burns, N.R. and J.M. Zanker: Estimating internal noise for the human visual-motion-detection mechanisms.
Perception **29**, S 92 (2000).
- A67 Zanker, J.M and J. D. Ryan: Misjudging the speed of random dots moving in apertures.
Perception **29**, S 25 (2000).
- A66 Zanker, J.M.: Motion Transparency and Multiple Motion Directions.
Invest. Ophthal. Vis. Sci. **41**, S720 (2000).
- A65 Burns, N.R. and J.M. Zanker: Estimating internal noise of motion detection mechanisms.
Invest. Ophthal. Vis. Sci. **41**, S230 (2000).
- A64 Zanker, J.M. and J.D. Ryan: Misjudging the Speed of Moving Dots in Human Visual Perception.
Proc. Aust. Neuroscience Soc. **11**, 58 (2000).
- A63 Zeil, J., J. Chahl, M. Hofmann and J.M. Zanker: Learning flights and view-based homing.
Proc. Tenth International Conference on Perception and Action, p. 68 (1999)
- A62 Zanker, J.M., T. Quenzer and M. Fahle: Illusory deformation of moving contours.
Perception **28**, S 43 (1999).
- A61 Zanker, J.M.: Generating Motion-Defined Gratings from Spatially Filtered Random Dot Patterns.
Invest. Ophthal. Vis. Sci. **40**, S422 (1999).
- A60 Zanker, J.M.: On the Coding of Orientation in the Human Visual Cortex
Proc. Aust. Neuroscience Soc. **10**, 25 (1999).
- A59 Castet, E. and J.M. Zanker: Long-range interactions in the integration of 2-D and 1-D motion signals.
Perception **27**, S 186 (1998).
- A58 Zanker, J.M. and T. Worrall: On the combination of local motion signals in motion-defined gratings.
Perception **27**, S 4 (1998).
- A57 Zanker, J.M.: Visual Processing of Motion Gratings: From Perception to Computational Modelling.
Europ. J. Neurosci. **10**, S 239 (1998).
- A56 Zanker, J.M.: Modelling Motion Transparency and Segmentation.
Invest. Ophthal. Vis. Sci. **39**, S 462 (1998).
- A55 Zeil, J., R. Voss and J.M. Zanker: A View from the Cockpit of a Learning Wasp.
In: *Göttingen Neurobiology Report 1998*. Eds. N. Elsner, R. Wehner, Thieme, Stuttgart 1998, 140.
- A54 Zeil, J. and J.M. Zanker: An Attempt to Reconstruct the Visual World of Fiddler Crabs.

- In: Göttingen Neurobiology Report 1998. Eds. N. Elsner, R. Wehner, Thieme, Stuttgart 1998, 128.
- A53 Zanker, J.M.: Motion transparency: What can we learn from modelling? Proc. Aust. Neuroscience Soc. **9**, 71 (1998).
- A52 Zanker, J.M. and M.P. Davey: The detection of orientation of small objects. Perception **26**, S 120 (1997).
- A51 Hofmann, J.M. and J. M. Zanker: Detection of moving objects in optic flow fields. In: Göttingen Neurobiology Report 1997. Eds. N. Elsner, H. Wässle, Thieme, Stuttgart 1997, 1002.
- A50 Zanker, J.M. and J. Zeil: Motion in the Visual World of Fiddler Crabs. In: Göttingen Neurobiology Report 1997. Eds. N. Elsner, H. Wässle, Thieme, Stuttgart 1997, 466.
- A49 Quenzer, T. and J.M. Zanker: On perceiving the regularity of shapes Invest. Ophthal. Vis. Sci. **38**, S 999 (1997).
- A48 Zanker, J.M., M. Hofmann and J. Zeil: A two-dimensional motion detector model (2DMD) responding to artificial and natural image sequences. Invest. Ophthal. Vis. Sci. **38**, S 936 (1997).
- A47 Zanker, J.M. and O. J. Braddick: How does noise influence the estimation of speed ? Perception **25**, S 121 (1996).
- A46 Braun, D., M. Fahle, P. Schönle and J. M. Zanker: Deficits and recovery of first-order and second-order motion perception in patients with unilateral posterior parietal lesions Perception **25**, S 7 (1996).
- A45 Patzwahl, D. R., T. Elbert, J. M. Zanker and E. O. Altenmüller: The spatial location of moving objects is reflected by the spatiotemporal variation of the cortical magnetic field. NeuroImage **3**, S 293 (1996).
- A44 Patzwahl, D. R., T. Elbert, J. M. Zanker and E. O. Altenmüller: Spatiotemporal characteristics of the cortical magnetic field evoked by object motion. In: Göttingen Neurobiology Report 1996. Eds. N. Elsner, H.-U. Schnitzler, Thieme, Stuttgart 1996, 424.
- A43 Braun, D., M. Fahle, P. Schönle and J. Zanker: Deficits and recovery of first- and second-order motion perception in patients with unilateral posterior-parietal lesions Invest. Ophthal. Vis. Sci. **37**, S 1082 (1996).
- A42 Zanker, J.M.: Looking at the output of two-dimensional motion detector arrays Invest. Ophthal. Vis. Sci. **37**, S 743 (1996).
- A41 Zanker, J.M., H. Volz: Spatial localisation of contrast-modulated patterns. Perception **24**, S 41 (1995).
- A40 Zanker, J.M.: Is \square -motion detected in the peripheral visual field ? Invest. Ophthal. Vis. Sci. **36**, S 52 (1995).
- A39 Patzwahl, D. R., J. M. Zanker and E. O. Altenmüller: Human cortical potentials related to visual stimulation and to saccadic eye movements.

- In: Göttingen Neurobiology Report 1995. Eds. N. Elsner, R. Menzel, Thieme, Stuttgart 1995, 467.
- A38 Butzer, F., U. Ilg and J. M. Zanker: Peripheral and Central Vision in Psychophysics and Oculomotor Responses.
In: Göttingen Neurobiology Report 1995. Eds. N. Elsner, R. Menzel, Thieme, Stuttgart 1995, 480.
- A37 Zanker, J. M.: On Perceptual learning in Human Motion Processing.
In: Göttingen Neurobiology Report 1995. Eds. N. Elsner, R. Menzel, Thieme, Stuttgart 1995, 473.
- A36 Patzwahl, D. R., J. M. Zanker and E. O. Altenmüller: Localizing visual subfunctions with DC-potentials.
J. Neurol. **241**, 260 (1994).
- A35 Volz, H. and J. M. Zanker: Spatial localization of contrast-modulated pattern - a novel case of hyperacuity.
In: Sensory Transduction. Eds. N. Elsner, H. Breer, Thieme, Stuttgart 1994, 811.
- A34 Butzer, F., U. Ilg and J. M. Zanker: Human Eye Movements without Retinal Image Slip: Three Classes of Random Dot Motion Stimuli Evoke Smooth Pursuit.
In: Sensory Transduction. Eds. N. Elsner, H. Breer, Thieme, Stuttgart 1994, 517.
- A33 Patzwahl, D. R., J. M. Zanker and E. O. Altenmüller: Slow Cortical Potentials During Motion Stimulation: Speed Correlates.
In: Sensory Transduction. Eds. N. Elsner, H. Breer, Thieme, Stuttgart 1994, 494.
- A32 Patzwahl, D.R., J. M. Zanker and E.O. Altenmüller: Slow cortical potentials related to human motion processing.
Invest. Ophthal. Vis. Sci. **35**, 1438 (1994).
- A31 Zanker, J.M.: What is the elementary mechanism underlying secondary motion processing?
Invest. Ophthal. Vis. Sci. **35**, 1405 (1994).
- A30 Patzwahl, D. R., J. M. Zanker and E. O. Altenmüller: Human motion perception: DC-potentials are related to signal-to-noise ratio.
Perception **22**, S 95 (1993).
- A29 Zanker, J.M.: Perceived speed for stimulation with Fourier and theta motion.
Perception **22**, S 87 (1993).
- A28 Patzwahl, D. R., J. M. Zanker, E. O. Altenmüller and W. Kriechbaum: Cortical DC potentials during simple and paradoxical visual motion stimuli.
Electroenceph. clin. Neurophysiol. **87**, 13P (1993)
- A27 Patzwahl, D., J. M. Zanker and E. Altenmüller: Electrophysiological correlates of noise thresholds in human motion perception.
In: Gene - Brain -Behaviour. Eds. N. Elsner, M. Heisenberg, Thieme, Stuttgart 1993, 35.
- A26 Zanker, J.M.: Primary and secondary motion perception.
In: Gene - Brain -Behaviour. Eds. N. Elsner, M. Heisenberg, Thieme, Stuttgart 1993, 22.

- A25 Zanker, J.M.: Do signal-to-noise measurements of motion perception follow the Weber-Fechner law?
Invest. Ophthal. Vis. Sci. **34**, 1035 (1993).
- A24 Patzwahl, D., J. M. Zanker, E. Altenmüller and W. Kriechbaum: Corticale DC-Potentiale bei einfachen und paradoxen visuellen Bewegungsreizen.
Z. EEG-EMG **24**, 120 (1993)
- A23 Zanker, J.M. and I.S. Hüppgens: Visual perception of conventional and paradoxical motion stimuli (theta-motion).
Europ. J. Neurosci. Suppl. **5**, 264 (1992).
- A22 Fahle, M., W. Heide and J. Zanker: Störungen der Bewegungswahrnehmung bei corticalen Läsionen.
Beitrag zur 75. Tagung der Württ. Augenärztl. Vereinigung 1991, Nr. 48.
Klin. Mbl. Augenheilk. **200**, 316 (1992).
- A21 Zanker, J.M.: Paradoxical motion stimuli (theta-motion) realized as periodic gratings.
Perception **21**, Suppl. 2, 45 (1992).
- A20 Patzwahl, D., J.M. Zanker, E. Altenmüller and W. Kriechbaum: Parietal DC-shifts as correlates of motion perception.
In: *Rhythmogenesis in Neurons and Networks*. Eds. N. Elsner, D.W. Richter, Thieme, Stuttgart 1992, 361.
- A19 Hüppgens, I.S. and J.M. Zanker: Human sensitivity to paradox motion stimuli (theta-motion).
In: *Rhythmogenesis in Neurons and Networks*. Eds. N. Elsner, D.W. Richter, Thieme, Stuttgart 1992, 341.
- A18 Quenzer, T. and J.M. Zanker: The barber pole illusion in flies.
In: *Rhythmogenesis in Neurons and Networks*. Eds. N. Elsner, D.W. Richter, Thieme, Stuttgart 1992, 296.
- A17 Zanker, J.M.: Noise thresholds of Fourier, drift-balanced and paradox theta motion.
Invest. Ophthal. Vis. Sci. **33**, 974 (1992).
- A16 Zanker, J.M.: Effects of nonlinear preprocessing on the spatial limits of motion detection.
Perception **20**, S 78 (1991).
- A15 Weber, U., J. Zanker and M. Fahle: On the development of Vernier acuity in children.
In: *Synapse - Transmission - Modulation*. Eds. N. Elsner, H. Penzlin, Thieme, Stuttgart, 1991, 564.
- A14 Zanker, J.M., I.S. Hüppgens and T. Quenzer: Behavioural response of the fly to Fourier-, drift-balanced and paradox motion stimuli (Theta-motion).
In: *Synapse - Transmission - Modulation*. Eds. N. Elsner, H. Penzlin, Thieme, Stuttgart, 1991, 280.
- A13 Zanker, J., G. Mohn, U. Weber, K. Zeitler-Driess, V. Barth, O. Nieuwenhuizen and M. Fahle: On the development of Vernier acuity in human infants.
Invest. Ophthal. Vis. Sci. **32**, 965 (1991).
- A12 Zanker, J.M. and T. Quenzer: Visuelle Wahrnehmung paradoxer Bewegungsreize (θ -Bewegung) durch Menschen, Modelle und Fliegen.
Verh. Dtsch. Zool. Ges. **83**, 439 (1990).

- A11 Zanker, J.M.: Perception of drift-balanced and paradoxical motion stimuli (θ -motion). *Perception* **19**, S 330 (1990).
- A10 Quenzer, T. and J.M. Zanker: Response of a fly visual interneuron to a paradox motion stimuli (theta- and mu-motion).
In: *Brain - Perception - Cognition*. Eds. N. Elsner, G. Roth, Thieme, Stuttgart, 1990, 211.
- A9 Zanker, J.M.: On the detectability of phi- and theta-motion.
Invest. Ophthalmol. Vis. Sci. **31**, 519 (1990).
- A8 Zanker, J.M.: How illusory contours may stimulate motion detectors.
Perception **18**, S 503 (1989).
- A7 Zanker, J.M. and T. Quenzer: On the directional sensitivity of motion detectors.
In: *Neural Mechanisms of Behavior*. Eds. J. Erber, R. Menzel, H.-J. Pflüger, D. Todt, Thieme, Stuttgart, 1989, 181.
- A6 Zanker J.M., T. Quenzer and B. Bochenek: Directional sensitivity of motion detection in models and flies.
In: *Dynamics and Plasticity in Neuronal Systems*. Eds. N. Elsner, W. Singer, Thieme, Stuttgart, 1989, 107.
- A5 Zanker, J.M.: On the directional selectivity of motion detectors.
Perception **17**, S 404 (1988).
- A4 Zanker, J.M. and T. Quenzer: Abdominal deflections elicited by stripe movement.
In: *Sense Organs. Interfaces between Environment and Behavior*. Eds. N. Elsner, F.G. Barth, Thieme, Stuttgart, 1988, 132.
- A3 Zanker, J.M.: Kinematik and aerodynamic aspects of *Drosophila* wing beat cycle.
In: *New Frontiers in Brain Research*. Eds. N. Elsner, O. Creutzfeldt, Thieme, Stuttgart, 1987, 48.
- A2 Zanker, J.M.: Zur abdominalen Flugsteuerung bei *Drosophila*.
Verh. Dtsch. Zool. Ges. **79**, 252-253 (1986).
- A1 Zanker, J.M.: Zur Hub- und Schub-Kontrolle fixiert fliegender *Drosophilae*.
Verh. Dtsch. Zool. Ges. **78**, 245 (1985).