

List of publications

Arjan Kuijper

Publications sorted per year

Accepted

2012 [1–6]

2011 [7]

Published

2011 [8]

2011 [9–36]

2010 [37–61]

2009 [62–70]

2008 [71–85]

2007 [86–98]

2006 [99–111]

2005 [112–121]

2004 [122–132]

2003 [133–138]

2002 [139–144]

2001 [145–152]

2000 [153]

1999 [154, 155]

1998 [156–159]

1997 [160]

1995 [161]

References

1. K. Schwenk, A. Kuijper, J. Behr, and D. Fellner, “Practical noise reduction for progressive stochastic ray tracing with perceptual control,” *IEEE Computer Graphics and Applications*, vol. x, no. x, pp. xx–xx, 2012. available online.
2. X. Zhou, A. Kuijper, and C. Busch, “Retrieving secrets from iris fuzzy commitment,” in *Fifth IAPR/IEEE International Conference on Biometrics (March 30 - April 1, 2012, New Delhi, India)*, pp. 1–7, IEEE, 2012.
3. T. Schreck, M. Scherer, M. Walter, B. Bustos, S. M. Yoon, and A. Kuijper, “Graph-based combinations of fragment descriptors for improved 3d object retrieval,” in *ACM Multimedia Systems Conference - MMSYS 2012 (February 22-24, 2012, Chapel Hill, North Carolina, USA)*, pp. 1–6, ACM, 2012.
4. A. Kuijper, “The multi-scale hierarchy of shapes,” in *1st Workshop on Deep Hierarchies in Vision (Vienna, Austria, 21 February 2012)*, pp. 1–2, 2012.

5. A. Kuijper, "The gaussian scale space hierarchy of images," in *1st Workshop on Deep Hierarchies in Vision (Vienna, Austria, 21 February 2012)*, pp. 1–2, 2012.
6. A. Kuijper, B. Heise, Y. Zhou, L. He, and H. Wolinski, "Segmentation of clustered cells in microscopy images by geometric pdes and level sets," in *Handbook of Biomedical Imaging* (N. Paragios, J. Duncan, and N. Ayache, eds.), Springer, 2012. in press, scheduled for 2012.
7. M. Scherer, E. Rosert, and A. Kuijper, "Utilizing symmetry of convolution kernels for precomputation," in *2nd International conference on Pervasive Computing, Signal Processing and Applications (PCSPA 2011) (September 5-7 2011, Gjovik, Norway)*, pp. 1–4, IEEE, 2011. accepted.
8. T. Kalbe, A. Schwarzkopf, M. Goesele, A. Kuijper, and C. Bajaj, "Volumetric nonlinear anisotropic diffusion on GPUs," in *Third International Conference on Scale Space Methods and Variational Methods in Computer Vision (SSVM) (May 29th - June 2nd, 2011, Ein Gedi, Israel), LNCS 6667*, pp. 62–73, 2012.
9. X. Zhou, A. Kuijper, R. Veldhuis, and C. Busch, "Quantifying privacy and security of biometric fuzzy commitment," in *International Joint Conference on Biometrics - IJCB2011 (October 11-13, 2011, Washington DC, USA)*, pp. 1–8, IEEE, 2011.
10. S. Yoon and A. Kuijper, "Sketch-based 3d model retrieval using compressive sensing classification," *Electronics Letters*, vol. 47, no. 21, pp. 1181–1183, 2011.
11. S. Kahn, P. Hartmann, U. Bockholt, and A. Kuijper, "Towards symmetry axis based markerless motion capture," in *8th Workshop on Virtual Reality Interaction and Physical Simulation - VRIPHYS 2011 (Lyon, France, 5-6 December 2011)*, pp. 73–82, Eurographics Association, 2011.
12. T. von Landesberger, A. Kuijper, T. Schreck, J. Kohlhammer, J. J. van Wijk, J.-D. Fekete, and D. Fellner, "Visual analysis of large graphs: State-of-the-art and future research challenges," *Computer Graphics Forum*, vol. 30, no. 6, pp. 1719–1749, 2011.
13. F. Wientapper, H. Wuest, and A. Kuijper, "Composing the feature map retrieval process for robust and ready-to-use monocular tracking," *Computers & Graphics*, vol. 35, no. 4, pp. 778–788, 2011.
14. A. Binotto, C. E. Pereira, A. Kuijper, A. Stork, and D. Fellner, "An effective dynamic scheduling runtime and tuning system for heterogeneous multi and many-core desktop platforms," in *13th IEEE International Conference on High Performance Computing and Communications, IEEE HPC-11 (September 2-4, 2011, Banff, Alberta, Canada)*, pp. 78–85, IEEE, 2011.
15. S. M. Yoon and A. Kuijper, "View-based 3d model retrieval using compressive sensing based classification," in *7th International Symposium on Image and Signal Processing and Analysis, ISPA 2011 (September 4-6, 2011, Dubrovnik, Croatia)*, pp. 437–442, IEEE, 2011.
16. S. M. Yoon and A. Kuijper, "3d model retrieval using the histogram of orientation of suggestive contours," in *7th International Symposium on Visual Computing (September 26-28, 2011, Las Vegas, Nevada, USA), LNCS 6939*, pp. 367–376, 2011.
17. E. Gutzeit, S. Ohl, J. Voskamp, A. Kuijper, and B. Urban, "Automatic wood log segmentation using graph cuts," in *Computer Vision, Imaging and Computer Graphics. Theory and Applications, VISIGRAPP 2010. Revised Selected Papers* (P. Richard and J. Braz, eds.), vol. 229 of *Communications in Computer and Information Science*, pp. 96–109, Springer, 2011.

18. S. Reidt, P. Ebinger, S. D. Wolthusen, and A. Kuijper, "Resource-constrained signal propagation modeling for tactical mobile ad hoc networks," in *IEEE First International Workshop on Network Science (NSW)*, pp. 67–74, IEEE, 2011.
19. Y. Jung, A. Kuijper, D. Felner, M. Kipp, J. Gratch, and D. Thalmann, "Believable virtual characters in human-computer dialogs," in *Eurographics 2011 (April 11 - 11, 2011, Llandudno, Wales, UK). State-of-the-Art Reports*, pp. 75–100, Eurographics Association, 2011.
20. F. Wientapper, H. Wuest, and A. Kuijper, "Reconstruction and accurate alignment of feature maps for augmented reality," in *3DIMPVT 2011: The First Joint 3DIM/3DPVT Conference (Hangzhou, China, May 16-19, 2011)*, pp. 140–147, IEEE, 2011.
21. C. Stab, K. Nazemi, M. Breyer, D. Burkhardt, and A. Kuijper, "Interacting with semantics and time," in *HCI International 2011 (9-14 July 2011, Orlando, Florida, USA), LNCS 6764*, pp. 520–529, 2011.
22. D. Burkhardt, M. Breyer, K. Nazemi, and A. Kuijper, "Search intention analysis for user-centered adaptive visualizations," in *HCI International 2011 (9-14 July 2011, Orlando, Florida, USA), LNCS 6765*, pp. 317–326, 2011.
23. K. Nazemi, D. Burkhardt, M. Breyer, and A. Kuijper, "Modeling users for adaptive semantics visualizations," in *HCI International 2011 (9-14 July 2011, Orlando, Florida, USA), LNCS 6766*, pp. 88–97, 2011.
24. K. Nazemi, M. Breyer, J. Forster, D. Burkhardt, and A. Kuijper, "Interacting with semantics: A user-centered visualization adaptation based on semantics data," in *HCI International 2011 (9-14 July 2011, Orlando, Florida, USA), LNCS 6771*, pp. 239–248, 2011.
25. K. Nazemi, C. Stab, and A. Kuijper, "A reference model for adaptive visualization systems," in *HCI International 2011 (9-14 July 2011, Orlando, Florida, USA), LNCS 6761*, pp. 480–489, 2011.
26. Y. Jung, H. Graf, J. Behr, and A. Kuijper, "Mesh deformations in x3d via cuda with freeform deformation lattices," in *HCI International 2011 (9-14 July 2011, Orlando, Florida, USA), LNCS 6774*, pp. 343–351, 2011.
27. K. Nazemi, D. Burkhardt, A. Praetorius, M. Breyer, and A. Kuijper, "Adapting user interfaces by analyzing data characteristics for determining adequate visualizations," in *HCI International 2011 (9-14 July 2011, Orlando, Florida, USA), LNCS 6776*, pp. 566–575, 2011.
28. D. Burkhardt, M. Breyer, C. Glaser, K. Nazemi, and A. Kuijper, "Classifying interaction methods to support intuitive interaction devices for creating user-centered-systems," in *HCI International 2011 (9-14 July 2011, Orlando, Florida, USA), LNCS 6765*, pp. 20–29, 2011.
29. D. Burkhardt, M. Breyer, K. Nazemi, C. Stab, and A. Kuijper, "Semazoom: Semantics exploration by using a layer-based focus and context metaphor," in *HCI International 2011 (9-14 July 2011, Orlando, Florida, USA), LNCS 6776*, pp. 491–499, 2011.
30. K. Nazemi, M. Breyer, and A. Kuijper, "User-oriented graph visualization taxonomy: A data-oriented examination of visual features," in *HCI International 2011 (9-14 July 2011, Orlando, Florida, USA), LNCS 6776*, pp. 576–585, 2011.
31. M. Breyer, K. Nazemi, C. Stab, D. Burkhardt, and A. Kuijper, "A comprehensive reference model for personalized recommender systems," in *HCI International 2011 (9-14 July 2011, Orlando, Florida, USA), LNCS 6771*, pp. 528–537, 2011.
32. A. Marinc, C. Stockl ow, A. Braun, C. Limberger, C. Hofmann, and A. Kuijper, "Interactive personalization of ambient assisted living environments," in *HCI In-*

- ternational 2011 (9-14 July 2011, Orlando, Florida, USA), LNCS 6771*, pp. 567–576, 2011.
33. R. Huff, T. Gierlinger, A. Kuijper, A. Stork, and D. Fellner, “A comparison of xpu platforms exemplified with ray tracing algorithms,” in *13th Symposium on Virtual and Augmented Reality 2011 - SVR2011 (Brazil, May 23-26, 2011)*, pp. 1–8, IEEE, 2011.
 34. S. Klose, T. Engelke, and A. Kuijper, “Automatic projector calibration: A review of systems for non-experienced users,” in *6th International Conference on Computer Graphics Theory and Applications (GRAPP, Algarve, Portugal, 5 - 7 March 2011)*, pp. 286–295, 2011.
 35. A. Kuijper, “DAGM 2010: 32nd Annual Symposium of the German Association for Pattern Recognition.” IAPR newsletter, 33 (1), 22–25, January 2011.
 36. A. Kuijper, “Book review: Handbook of Pattern Recognition and Computer Vision, 4th Edition, by C.H. Chen.” IAPR newsletter, 33 (3), 16–17, July 2011.
 37. M. Goesele, S. Roth, A. Kuijper, B. Schiele, and K. Schindler, eds., *Pattern Recognition (Proceedings of the 32nd DAGM)*, vol. 6376 of *Lecture Notes in Computer Science*. Springer-Verlag, Berlin Heidelberg, 2010. ISBN 978-3-642-15985-5.
 38. I. Echizen, J.-S. Pan, D. Fellner, A. Nouak, A. Kuijper, and L. C. Jain, eds., *Intelligent Information Hiding and Multimedia Signal Processing (Proceedings of the 6th International Conference)*. IEEE, 2010. ISBN 978-0-7695-4222-5.
 39. B. Zagar, A. Kuijper, and H. Sahbi, eds., *Signal Processing, Pattern Recognition and Applications (Proceedings of the 7th International Conference)*. Acta Press, 2010. ISBN: 978-0-88986-822-9.
 40. A. Binotto, D. Weber, C. Daniel, A. Stork, C. E. Pereira, A. Kuijper, and D. Fellner, “Iterative sle solvers over a cpu-gpu platform,” in *12th IEEE International Conference on High Performance Computing and Communications, IEEE HPCC-10 (September 1-3, 2010, Melbourne, Australia)*, pp. 305–313, IEEE, 2010.
 41. S. M. Yoon, M. Scherer, T. Schreck, and A. Kuijper, “Sketch-based 3d model retrieval using diffusion tensor fields of suggestive contours,” in *ACM Multimedia 2010 - Multimedia Applications Track Full Paper (October 25-29, 2010, Firenze, Italy)*, pp. 193–200, 2010.
 42. M. Knuth, A. Kuijper, and J. Kohlhammer, “A geometry-shader-based adaptive mesh refinement scheme using semiuniform quad/triangle patches and warping,” in *7th Workshop on Virtual Reality Interaction and Physical Simulation - VRI-PHYS 10 (Copenhagen, Denmark, 11 - 12 November 2010)*, pp. 21–29, Eurographics Association, 2010.
 43. A. P. Binotto, B. M. Pedras, M. Goetz, A. Kuijper, C. E. Pereira, A. Stork, and D. W. Fellner, “Effective dynamic scheduling on heterogeneous multi/manycore desktop platforms,” in *1st Workshop on Applications for Multi and Many Core Architectures, Held in conjunction with the 22nd International Symposium on Computer Architecture and High Performance Computing (SBAC PAD 2010) (October 27-30, 2010, Petropolis, Rio de Janeiro, Brazil.)*, pp. 37–42, IEEE, 2010.
 44. S. M. Yoon and A. Kuijper, “Query-by-sketch based image retrieval using diffusion tensor fields,” in *2nd International Conference on Image Processing Theory, Tools and Applications - IPTA10 (Paris, France, July 7-10 2010)*, pp. 343–348, IEEE, 2010.
 45. S. M. Yoon and A. Kuijper, “Human action recognition using segmented skeletal features,” in *20th International Conference on Pattern Recognition - ICPR2010 (Istanbul, Turkey, August 23-26, 2010)*, pp. 3740–3743, IEEE, 2010.

46. S. M. Yoon and A. Kuijper, "3D human action recognition using model segmentation," in *International Conference on Image Analysis and Recognition - ICIAR 2010 (June 21-23, 2010, Povo de Varzim, Portugal)*. LNCS 6111, pp. 189–199, 2010.
47. X. Zhou, A. Kuijper, and C. Busch, "Template protection for 3D face recognition," in *Face Recognition* (M. Oravec, ed.), ch. 17, pp. 315–328, Sciyo, 2010. ISBN 978-953-307-060-5.
48. T. von Landesberger, A. Kuijper, T. Schreck, J. Kohlhammer, J. J. van Wijk, J.-D. Fekete, and D. Fellner, "Visual analysis of large graphs," in *Eurographics 2010 (May 2 - 7, 2010, Norrkoping, Sweden)*. *State-of-the-Art Reports*, pp. 113–136, Eurographics Association, 2010.
49. K. Schwenk, T. Franke, T. Drevensek, A. Kuijper, U. Bockholt, and D. Feller, "Adapting precomputed radiance transfer to real-time spectral rendering," in *Eurographics 2010 (May 2 - 7, 2010, Norrkoping, Sweden)*. *Short Papers proceedings*, pp. 49–52, Eurographics Association, 2010.
50. E. Gutzeit, B. Urban, S. Ohl, J. Voskamp, and A. Kuijper, "Setting graph cut weights for automatic foreground extraction in wood," in *5th International Conference on Computer Vision Theory and Applications (VISAPP, Angers, France, 17 - 21 May 2010)*, vol. 2, pp. 60–67, 2010.
51. S. M. Yoon and A. Kuijper, "Object retrieval based on user-drawn sketches," in *5th International Conference on Computer Vision Theory and Applications (VISAPP, Angers, France, 17 - 21 May 2010)*, vol. 2, pp. 292–299, 2010.
52. H. Seibert, D. Hildenbrand, M. Becker, and A. Kuijper, "Estimation of curvatures in point sets based on geometric algebra," in *5th International Conference on Computer Vision Theory and Applications (VISAPP, Angers, France, 17 - 21 May 2010)*, vol. 1, pp. 12–19, 2010.
53. M. Knuth, J. Kohlhammer, and A. Kuijper, "Embedding hierarchical deformation within a realtime scene graph," in *5th International Conference on Computer Graphics Theory and Applications (GRAPP, Angers, France, 17 - 21 May 2010)*, pp. 246–253, 2010.
54. K. Schwenk, U. Bockholt, and A. Kuijper, "Modeling wavelength-dependent brdfs as factored tensors for real-time spectral rendering," in *5th International Conference on Computer Graphics Theory and Applications (GRAPP, Angers, France, 17 - 21 May 2010)*, pp. 165–172, 2010.
55. S. M. Yoon and A. Kuijper, "3D volume data segmentation from superquadric tensor analysis," in *5th International Conference on Computer Graphics Theory and Applications (GRAPP, Angers, France, 17 - 21 May 2010)*, pp. 72–77, 2010.
56. L. H. Wendt, A. Stork, and A. Kuijper, "3D reconstruction from line drawings," in *5th International Conference on Computer Graphics Theory and Applications (GRAPP, Angers, France, 17 - 21 May 2010)*, pp. 65–71, 2010.
57. M. Burisch, D. Guerrero Ichaso, and A. Kuijper, "Stripe propagation for color encoded structured light," in *5th International Symposium on 3D Data Processing, Visualization and Transmission - 3DPVT (Paris, France, May 17-20 2010)*, pp. 1–8, IEEE, 2010.
58. X. Zhou, S. A. Sanchez, and A. Kuijper, "3D face recognition with local binary patterns," in *sixth International Conference on Intelligent Information Hiding and Multimedia Signal Processing - IHHMSP2010 (Darmstadt, October 15-17, 2010)*, pp. 329–332, IEEE, 2010.
59. R. Huff, T. Neves, T. Gierlinger, A. Stork, A. Kuijper, and D. Fellner, "A general two-level acceleration structure for interactive ray tracing on the gpu," in *Com-*

- puter Graphics International 2010 - CGI10 (Singapore, June 8-11, 2010)*, p. 4p, 2010.
60. R. Huff, T. Neves, T. Gierlinger, A. Stork, A. Kuijper, and D. Fellner, "Opencl vs. cuda for ray tracing," in *Symposium on Virtual and Augmented Reality 2010 - SVR2010 (Brazil, May 24-27, 2010)*, p. 4p, 2010.
 61. A. Kuijper, "ICPR 2010 Impressions: Amazing Istanbul." IAPR newsletter, 32 (4), 5-6, October 2010.
 62. A. Kuijper, "Geometrical PDEs based on second order derivatives of gauge coordinates in image processing," *Image and Vision Computing*, vol. 27, no. 8, pp. 1023-1034, 2009.
 63. A. Kuijper, "Deep structure, singularities, and computer vision," 2009. Habilitation Thesis, Technical University of Graz.
 64. A. Kuijper, "Transitions of a multi-scale image hierarchy tree," in *Scale Space and Variational Methods in Computer Vision, Second International Conference, SSVM 2009, Voss, Norway, June 1-5, 2009. Proceedings. Lecture Notes in Computer Science 5567*, pp. 844-855, 2009.
 65. T. Kalbe, S. Fuhrmann, S. Uhrig, F. Zeilfelder, and A. Kuijper, "A new projection method for point set surfaces," in *Eurographics 2009 (March 30 to April 3, 2009, Munich, Germany). Short Papers proceedings*, pp. 77-80, Eurographics Association, 2009.
 66. T. Reitz and A. Kuijper, "Applying instance visualisation and conceptual schema mapping for geodata harmonisation," in *Advances in GIScience, Proceedings of the 12th AGILE Conference, Hannover, Germany, 2-5 June 2009. Lecture Notes in Geoinformation and Cartography*, pp. 173-194, Springer, 2009.
 67. X. Zhou, C. Busch, S. Wolthusen, and A. Kuijper, "A security analysis of biometric template protection schemes," in *International Conference on Image Analysis and Recognition - ICIAR 2009 (July 6-8, 2009, Halifax, Canada). LNCS 5627*, pp. 429-438, 2009.
 68. X. Zhou, S. Wolthusen, C. Busch, and A. Kuijper, "Feature correlation attack on biometric privacy protection schemes," in *Fifth International Conference on Intelligent Information Hiding and Multimedia Signal Processing - IHHMSP2009 (September 12-14, 2009, Kyoto, Japan)*, pp. 1061-1065, IEEE, 2009.
 69. A. Kuijper, "Global Pattern Recognition Series: Visual Computing in Darmstadt, Germany." IAPR newsletter, 31 (4), 3-6, October 2009.
 70. A. Kuijper, "Inside the IAPR: Associate Editor for Book Reviews." IAPR newsletter, 31 (4), 11, October 2009.
 71. A. Kuijper, B. Heise, and L. Muresan, eds., *32nd annual workshop of the Austrian Association for Pattern Recognition (OAGM/AAPR), OEAGM07, (St. Magdalena, Linz, Austria, May 26-27, 2008)*, vol. books@ocg 232, OCG, 2008. ISBN 978-3-85403-232-8.
 72. A. Kuijper, Y. Zhou, and B. Heise, "Clustered cell segmentation based on iterative voting and the level set method," in *3rd International Conference on Computer Vision Theory and Applications (VISAPP, Funchal, Portugal, 22 - 25 January 2008)*, vol. I, pp. 307-314, 2008.
 73. A. Kuijper, "Singularities in gaussian scale space that are relevant for changes in its hierarchical structure," in *79th Annual Meeting of the International Association of Applied Mathematics and Mechanics, GAMM2008 (Bremen, Germany, 31 March - 4 April 2008)*, p. S20(7), 2008.
 74. Y. Zhou, A. Kuijper, and L. He, "Multiphase level set method and its application in cell segmentation," in *5th IASTED International Conference on Signal Pro-*

- cessing, *Pattern Recognition, and Applications (SPPRA 2008, Innsbruck, Austria, February 13–15, 2008)*, pp. 134–139, 2008. accepted.
75. F. Schubert, A. Kuijper, and M. Kostner, “Image stitching: From mathematics to arts,” in *Bridges*, pp. 401–404, 2008.
 76. M. Kostner, A. Kuijper, and F. Schubert, “Diffusion processes and light installations: Mathematics, visualisation, and perception,” in *Bridges*, pp. 265–272, 2008.
 77. A. Kuijper and W. Kuijper, “Imaging, mathematics, and art,” in *Bridges*, pp. 473–474, 2008.
 78. A. Kuijper, “Book review: The Dissimilarity Representation for Pattern Recognition: Foundations And Applications (Machine Perception and Artificial Intelligence) by E. Pekalska and R.P.W. Duin.” IAPR newsletter, 30 (2), 8–9, April 2008.
 79. A. Kuijper, “On the interactions of critical curves, catastrophe points, scale space saddles, and iso-intensity manifolds in gaussian scale space images under a one-parameter driven deformation,” Tech. Rep. 2008-12, RICAM, 2008.
 80. A. Kuijper, “Exploring and exploiting the structure of saddle points in Gaussian scale space,” *Computer Vision and Image Understanding*, vol. 112, no. 3, pp. 337–349, 2008.
 81. A. Kuijper and B. Heise, “Automatic cell segmentation method for differential interference contrast (dic) microscopy,” in *Proceedings ICPR08 - 19th International Conference on Pattern Recognition (ICPR 2008), December 8-11, 2008, Tampa, Florida, USA*, pp. 1–4, 2008.
 82. A. Kuijper, “2d shape matching using symmetry sets,” in *Workshop Geometry and Statistics of Shapes (Hausdorff Center for Mathematics, Bonn, Germany, June 9-14, 2008)*., 2008.
 83. A. Kuijper, “Relevant transitions of the gaussian scale space hierarchy,” in *SIAM Conference on Imaging Science, SIAM IS08 (San Diego, CA, USA, July 7-9, 2008)*., 2008.
 84. A. Kuijper, “Book review: Digital Image Processing: An Algorithmic Introduction using Java, by W. Burger and M.J. Burge.” IAPR newsletter, 30 (3), 14–16, July 2008.
 85. A. Kuijper, “Conference review: 32nd annual workshop of the Austrian Association for Pattern Recognition.” IAPR newsletter, 30 (3), 23–24, July 2008.
 86. F. Bauer, A. Kuijper, and L. Muresan, eds., *International Workshop on Image Analysis in the Life Sciences; Theory and Applications*, 2007.
 87. A. Kuijper, “Image processing with geometrical and variational pdes,” in *31st annual workshop of the Austrian Association for Pattern Recognition (OAGM/AAPR), OEAGM07, (Schloss Krumbach, Austria, May 3-4, 2007)*, pp. 89–96, 2007.
 88. A. Kuijper, “Image analysis using p-laplacian and geometrical pdes,” in *6th International Congress on Industrial and Applied Mathematics, ICIAM 2007 (Zurich, Switzerland, 16-20 July 2007)*, p. 157, 2007.
 89. A. Kuijper, “p-laplacian driven image processing,” in *14th International Conference on Image Processing, ICIP 2007 (San Antonio, Texas, USA, 16-19 September 2007)*, vol. V, pp. 257–260, 2007.
 90. A. Kuijper, “Image processing with geometrical and variational pdes,” Tech. Rep. 103, WITTGENSTEIN RESEARCH GROUP PREPRINTS, 2007.
 91. A. Kuijper, “p-laplacian driven image processing,” Tech. Rep. 104, WITTGENSTEIN RESEARCH GROUP PREPRINTS, 2007.

92. A. Kuijper and I. Havukkala, "Computationally efficient matching of microRNA shapes using mutual symmetry," in *9th IASTED International Conference on Signal and Image Processing, SIP 2007 (August 20-22, 2007 Honolulu, Hawaii, USA)*, pp. 477–482, 2007.
93. A. Kuijper, "Deriving the medial axis with geometrical arguments for planar shapes," *Pattern Recognition Letters*, vol. 28, no. 15, pp. 2011–2018, 2007.
94. A. Kuijper, "Qualitative and quantitative behaviour of geometrical pdes in image processing," in *8th Asian Conference on Computer Vision, ACCV 2007 (Tokyo, Japan, Nov. 18-22, 2007), LNCS 4843*, pp. 230–239, 2007.
95. A. Kuijper, "Book review: Geometric Tomography (J. Gardner)." IAPR newsletter, 29 (4), 5–6, October 2007.
96. A. Kuijper, P. Markowich, and O. Scherzer, eds., *International Workshop on PDE methods for Bio-imaging*, 2007.
97. A. Kuijper, "Image analysis using p -laplacian and geometrical pdes," in *PAMM*, vol. 7(1), pp. 1011201–1011202, 2007. Special Issue: Sixth International Congress on Industrial Applied Mathematics ICIAM07 and GAMM Annual Meeting, Zürich 2007.
98. Y. Zhou, A. Kuijper, B. Heise, and L. He, "Cell segmentation using the level set method," Tech. Rep. 2007-17, RICAM, 2007.
99. A. Kuijper, O. Olsen, P. Giblin, and M. Nielsen, "Alternative 2D shape representations using the symmetry set," *Journal of Mathematical Imaging and Vision*, vol. 26, pp. 127–147, November 2006.
100. A. Kuijper and O. Olsen, "Multi-scale shape analysis using symmetry sets," in *2nd SIAM Conference on Imaging Science (Minneapolis, USA, May 15-17, 2006.)*, 2006.
101. A. Kuijper and P. Markowich, " p -norm PDE's," in *2nd SIAM Conference on Imaging Science (Minneapolis, USA, May 15-17, 2006.)*, 2006.
102. A. Kuijper and O. Olsen, "Describing and matching 2D shapes by their points of mutual symmetry," in *9th European Conference on Computer Vision (Graz, Austria, May 7 - 13, 2006), Part III, LNCS 3953*, pp. 213–225, 2006.
103. A. Kuijper and O. Olsen, "Shapes, symmetry sets, and matching," in *30th annual workshop of the Austrian Association for Pattern Recognition (OAGM/AAPR), OEAGM06, (Oberurgl, Austria, March 2-3, 2006)*, pp. 65–74, 2006.
104. A. Kuijper, O. Olsen, P. Giblin, and P. Bille, "Matching shapes using the symmetry set," in *International Conference on Pattern Recognition 2006, 20 - 24 August 2006, Hong Kong.*, vol. II, pp. 179–182, 2006.
105. A. Kuijper, "Geometrical & p -laplacian pdes in image analysis," in *Variational and PDE Level Set Methods (September 1st - 3rd, 2006, Oberurgl, Austria)*, 2006.
106. A. Kuijper, "Book review: Handbook of mathematical models in computer vision (Paragios, Chen, and Faugeras (editors))." IAPR newsletter, 28 (4), 20–21, October 2006.
107. A. Kuijper, "Pde-based topological image segmentation," in *Image Analysis and Inverse Problems (December 11th - 13th, 2006, Eindhoven, the Netherlands)*, 2006.
108. A. Kuijper and O. Olsen, "Describing and matching 2d shapes by their points of mutual symmetry," Tech. Rep. 94, WITTGENSTEIN RESEARCH GROUP PREPRINTS, 2006.
109. A. Kuijper, O. Olsen, P. Bille, and P. Giblin, "Matching 2d shapes using their symmetry sets," Tech. Rep. 95, WITTGENSTEIN RESEARCH GROUP PREPRINTS, 2006.

110. A. Kuijper and L. Florack, "Using catastrophe theory to derive trees from images," Tech. Rep. 89, WITGENSTEIN RESEARCH GROUP PREPRINTS, 2006.
111. A. Kuijper, O. Olsen, P. Giblin, and M. Nielsen, "Alternative 2D shape representations using the symmetry set," Tech. Rep. 88, WITGENSTEIN RESEARCH GROUP PREPRINTS, 2006.
112. O. Olsen, L. Florack, and A. Kuijper, eds., *Deep Structure, Singularities, and Computer Vision*, vol. 3753 of *Lecture Notes in Computer Science*. Springer-Verlag, Berlin Heidelberg, 2005. ISBN 978-3-540-29836-6.
113. A. Kuijper and L. M. J. Florack, "Using catastrophe theory to derive trees from images," *Journal of Mathematical Imaging and Vision*, vol. 23, no. 3, pp. 219–238, 2005.
114. A. Kuijper and O. Olsen, "The structure of shapes: Scale space aspects of the (pre-) symmetry set," in *Kimmel et al. [162]*, pp. 291–302, 2005.
115. A. Kuijper and O. Olsen, "Geometrical skeletonization using the symmetry set," in *IEEE Proceedings of the International Conference on Image Processing - ICIP 2005, Genova, Italy, 11-13 September, 2005*, vol. I, pp. 497–500, 2005.
116. A. Kuijper, "Exploiting deep structure," in *Olsen et al. [112]*, pp. 169–180, 2005.
117. A. Kuijper and O. Olsen, "Computing 3D symmetry sets; a case study," in *Olsen et al. [112]*, pp. 193–204, 2005.
118. A. Kuijper and O. Olsen, "Essential loops and their relevance for skeletons and symmetry sets," in *Olsen et al. [112]*, pp. 24–35, 2005.
119. A. Kuijper and O. Olsen, "Matching 2D shapes using the symmetry set," Tech. Rep. TR-2005-65, IT University of Copenhagen, 2005. ISBN 87-7949-095-6.
120. A. Kuijper and O. Olsen, "A symmetry set based 2D shape descriptor," in *14th Danish conference on pattern recognition and image analysis (S.I. Olsen (Ed.), DSAGM05, Copenhagen, August 18-19, 2005)*, pp. 118–123, 2005.
121. A. Kuijper and O. Olsen, "Pre-symmetry set based shape matching," Tech. Rep. TR-2005-72, IT University of Copenhagen, 2005. ISBN 87-7949-106-5.
122. A. Kuijper, "Mutual information aspects of scale space images," *Pattern Recognition*, vol. 37, no. 12, pp. 2361–2373, 2004.
123. A. Kuijper and L. Florack, "The relevance of non-generic events in scale space models," *International Journal of Computer Vision*, vol. 1, no. 57, pp. 67–84, 2004.
124. A. Kuijper, "On detecting all saddle points in 2D images," *Pattern Recognition Letters*, vol. 25, no. 5, pp. 1665–1672, 2004.
125. A. Kuijper, O. Olsen, P. Giblin, P. Bille, and M. Nielsen, "From a 2D shape to a string structure using the symmetry set," in *Proceedings of the 8th European Conference on Computer Vision*, vol. II, pp. 313–326, 2004. LNCS 3022.
126. A. Kuijper and O. Olsen, "Transitions of the pre-symmetry set," in *Proceedings of the 17th International Conference on Pattern Recognition*, vol. III, pp. 190–193, 2004.
127. A. Kuijper and O. Olsen, "On extending symmetry sets for 2D shapes," in *Proceedings of the Joint IAPR International Workshops on Syntactical and Structural Pattern Recognition (SSPR 2004) and Statistical Pattern Recognition (SPR 2004) Lisbon, Portugal, August 18-20, 2004*, pp. 512–520, 2004. LNCS 3138.
128. A. Kuijper, P. Giblin, and O. F. Olsen, "Data structures from shapes using the symmetry set," 2004. SIAM Conference on Imaging Science, Salt Lake City, USA, May 3-5, 2004.
129. A. Kuijper, "On scale space saddles," 2004. SIAM Conference on Imaging Science, Salt Lake City, USA, May 3-5, 2004.

130. A. Kuijper, "On data structures from symmetry sets of 2D shapes," Tech. Rep. TR-2004-47, IT University of Copenhagen, 2004. ISBN 87-7949-069-7.
131. A. Kuijper, "Computing symmetry sets from 3D shapes," Tech. Rep. TR-2004-48, IT University of Copenhagen, 2004. ISBN 87-7949-070-0.
132. A. Kuijper, "Simplifying structures by selectively specifying suited scale space saddles," Tech. Rep. TR-2004-53, IT University of Copenhagen, 2004. ISBN 87-7949-075-1.
133. A. Kuijper, L. M. J. Florack, and M. A. Viergever, "Scale space hierarchy," *Journal of Mathematical Imaging and Vision*, vol. 18, pp. 169–189, April 2003.
134. A. Kuijper and L. Florack, "The hierarchical structure of images," *IEEE Transactions on Image Processing*, vol. 12, no. 9, pp. 1067–1079, 2003.
135. A. Kuijper, "Logical filtering in scale space," in *12th Danish conference on pattern recognition and image analysis (S.I. Olsen (Ed.), DSAGM03, Kopenhagen, August 21-22, 2003)*, pp. 4–11, 2003.
136. A. Kuijper, "Mutual information aspects of scale space images," in *3rd IASTED International Conference on Visualization, Imaging and Image Processing (VIIP 2003, Benalmadena, Spain, September 8-10, 2003)*, vol. 1, pp. 317–322, 2003.
137. A. Kuijper, "On manifolds in Gaussian scale space," in *Griffin and Lillholm [163]*, pp. 1–16, 2003.
138. A. Kuijper, "Computing symmetry sets from 2D shapes," Tech. Rep. TR-2003-36, IT University of Copenhagen, 2003. ISBN 87-7949-049-2.
139. A. Kuijper, *The Deep Structure of Gaussian Scale Space Images*. PhD thesis, Utrecht University, 2002. ISBN 9039330611.
140. A. Kuijper and L. M. J. Florack, "The relevance of non-generic events in scale space," in *Proceedings of the 7th European Conference on Computer Vision (Copenhagen, Denmark, May 28–31, 2002), LNCS 2350*, pp. 190–204, 2002.
141. A. Kuijper and L. M. J. Florack, "Understanding and modeling the evolution of critical points under Gaussian blurring," in *Proceedings of the 7th European Conference on Computer Vision (Copenhagen, Denmark, May 28–31, 2002), LNCS 2350*, pp. 143–157, 2002.
142. A. Kuijper, "The deep structure of gaussian scale space images," 2002. Spring meeting of the NVPBHV, Amsterdam, the Netherlands, 15 May 2002.
143. A. Kuijper and L. M. J. Florack, "Logical filtering in scale space," Tech. Rep. UU-CS-2002-018, Department of Computer Science, Utrecht University, 2002.
144. A. Kuijper, "Mutual information aspects of scale space images," Tech. Rep. UU-CS-2002-049, Department of Computer Science, Utrecht University, 2002.
145. A. Kuijper and L. M. J. Florack, "Hierarchical pre-segmentation without prior knowledge," in *Proceedings of the 8th International Conference on Computer Vision (Vancouver, Canada, July 9–12, 2001)*, pp. 487–493, 2001.
146. A. Kuijper, "Hierarchical pre-segmentation without prior knowledge," 2001. Spring meeting of the NVPBHV, Amsterdam, the Netherlands, 17 April 2001.
147. A. Kuijper and L. M. J. Florack, "Hierarchical pre-segmentation without prior knowledge," Tech. Rep. UU-CS-2001-17, Department of Computer Science, Utrecht University, 2001.
148. A. Kuijper, L. M. J. Florack, and M. A. Viergever, "Scale space hierarchy," Tech. Rep. UU-CS-2001-19, Department of Computer Science, Utrecht University, 2001.
149. A. Kuijper and L. M. J. Florack, "The application of catastrophe theory to image analysis," Tech. Rep. UU-CS-2001-23, Department of Computer Science, Utrecht University, 2001.

150. A. Kuijper and L. M. J. Florack, "The application of catastrophe theory to medical image analysis," Tech. Rep. UU-CS-2001-24, Department of Computer Science, Utrecht University, 2001.
151. A. Kuijper and L. M. J. Florack, "On the creation of critical points in scale space with application to medical image analysis," Tech. Rep. UU-CS-2001-25, Department of Computer Science, Utrecht University, 2001.
152. A. Kuijper and L. M. J. Florack, "The relevance of non-generic events in scale space models," Tech. Rep. UU-CS-2001-55, Department of Computer Science, Utrecht University, 2001.
153. L. M. J. Florack and A. Kuijper, "The topological structure of scale-space images," *Journal of Mathematical Imaging and Vision*, vol. 12, pp. 65–80, February 2000.
154. A. Kuijper and L. M. J. Florack, "Calculations on critical points under Gaussian blurring," in *Nielsen et al. [164]*, pp. 318–329, 1999.
155. A. Kuijper and L. M. J. Florack, "Calculations on critical points under Gaussian blurring," Tech. Rep. UU-CS-1999-12, Department of Computer Science, Utrecht University, 1999.
156. A. Kuijper, J. Bijhold, J.-H. Westhuis, and Z. Geradts, "Comparative study of image restoration techniques in forensic image processing," 1998. Fall meeting of the NVPBV, Best, the Netherlands, 20 November 1998.
157. A. Kuijper and L. M. J. Florack, "Calculations on critical points under Gaussian blurring," 1998. Danish-Dutch workshop, Utrecht, the Netherlands, October 1998.
158. L. M. J. Florack and A. Kuijper, "The topological structure of scale-space images," Tech. Rep. UU-CS-1998-31, Utrecht University, 1998.
159. L. M. J. Florack and A. Kuijper, "On the behaviour of critical points under Gaussian blurring," Tech. Rep. UU-CS-1998-34, Utrecht University, 1998.
160. J. Bijhold, A. Kuijper, and J.-H. Westhuis, "Comparative study of image restoration techniques in forensic image processing," in *SPIE Proceedings Vol. 2942, Leonid I. Rudin, Simon K. Bramble (Eds.): Investigative Image Processing, Boston, MA, USA, 1996*, pp. 10–21, 1997.
161. A. Kuijper, "Image restoration in forensic research using minimal total variation or maximum entropy," Master's thesis, University of Twente, the Netherlands, 1995.
162. R. Kimmel, N. Sochen, and J. Weickert, eds., *Scale Space and PDE Methods in Computer Vision*, vol. 3459 of *Lecture Notes in Computer Science*. Springer-Verlag, Berlin Heidelberg, 2005.
163. L. Griffin and M. Lillholm, eds., *Scale Space Methods in Computer Vision*, vol. 2695 of *Lecture Notes in Computer Science*. Springer-Verlag, Berlin Heidelberg, 2003.
164. M. Nielsen, P. Johansen, O. F. Olsen, and J. Weickert, eds., *Scale-Space Theories in Computer Vision*, vol. 1682 of *Lecture Notes in Computer Science*. Springer-Verlag, Berlin Heidelberg, 1999.