Schriftenverzeichnis von Uwe Sörgel

Kapitel in Fachbüchern

1. Soergel U (2010), "Review of Radar Remote Sensing of Urban Areas." In: Soergel U (ed.): Radar Remote Sensing of Urban Areas, Series *Remote Sensing and Digital Image Processing*, Springer Netherlands, pp. 1-47.

2. Thiele A, Wegner J D, Soergel U (2010), "Building Reconstruction from Multi-Aspect InSAR Data." In: Soergel U (ed.): Radar Remote Sensing of Urban Areas, Series *Remote Sensing and Digital Image Processing*, Springer Netherlands, pp. 187-214.

3. Stilla U, Soergel U (2006), "Reconstruction of Buildings in SAR Imagery of Urban Areas." In: Weng Q, Quattrochi D (eds.): Urban Remote Sensing, Taylor & Francis, CRC Press Inc., pp. 47-68.

Herausgaben

1. Soergel U, Schack L (eds.), Tagungsband Geomonitoring 2013, 205 p.

2. Heipke C, Jacobsen K, Rottensteiner F, Soergel U (eds.): ISPRS Hannover Workshop 2011: High Resolution Earth Imaging for Geospatial Information, IntArchPhRS 40-1/W1, CD.

3. Soergel U, Gens R, Crosetto M (eds.): "Special Issue: Innovative Applications of SAR Interferometry from modern Satellite Sensors." In: ISPRS Journal of Photogrammetry and Remote Sensing, Vol. 73, 2012, Editorial, pp. 1-2.

4. Heipke C., Jacobsen K., Rottensteiner F., Müller S., Soergel U (eds.): "Special Issue: High Resolution Earth Imaging for Geospatial Information." In: Photogrammetrie, Fernerkundung, Geoinformation (PFG), Vol. 2012, No. 4, Editorial, pp. 315-316.

5. Heipke C., Jacobsen K., Rottensteiner F., Müller S., Soergel U (eds.): "ISPRS Hannover Workshop 2011: High Resolution Earth Imaging for Geospatial Information." IntArchPhRS 38-4/W19/WS, CD.

6. Busch W, Niemeier W, Soergel U (eds.), Tagungsband Geomonitoring 2011, 248 p.

7. Heipke C, Jacobsen K, Müller S, Soergel U (eds.): "Special Issue: High Resolution Earth Imaging for Geospatial Information." In: Photogrammetric Engineering & Remote Sensing, Vol. 76, No. 9, 2010, Editorial, p. 1005-1006.

8. Soergel U (2010), "Radar Remote Sensing of Urban Areas." Series *Remote Sensing and Digital Image Processing*, Springer Netherlands, 277 p.

9. Heipke C, Jacobsen K, Müller S, Soergel U (eds.): "ISPRS Hannover Workshop 2009: High-Resolution Earth Imaging for Geospatial Information." IntArchPhRS Vol. 38, Part 1-4-7/WS, CD.

Referierte Zeitschriftenartikel

1. Schmidt A, Rottensteiner F, Soergel U (2013), "Water-Land-Classification in Coastal Areas with Full Waveform Lidar Data." In: Photogrammetrie, Fernerkundung, Geoinformation (PFG), Vol. 2013, No. 2, pp. 71-81.

2. Ok A O, Wegner J D, Heipke C, Rottensteiner F, Soergel U, Toprak V (2012), "Matching of Straight Line Segments from Aerial Stereo Images of Urban Areas." In: ISPRS Journal of Photogrammetry and Remote Sensing, Elsevier B.V., Vol. 74, pp. 133-151, http://dx.doi.org/10.1016/j.isprsjprs.2012.09.003

3. Ok A O, Wegner J D, Heipke C, Rottensteiner F, Soergel U, Toprak V (2012), "Accurate Reconstruction of Near-Epipolar Line Segments from Stereo Aerial Images." Photogrammetrie, Fernerkundung, Geoinformation (PFG), Vol. 2012, No. 4, pp. 341–354.

4. Schunert A, Soergel U (2012), "Grouping of Persistent Scatterers in high-resolution SAR data of urban scenes." In: ISPRS Journal of Photogrammetry and Remote Sensing, Elsevier B.V., Vol. 73, pp. 80-88, http://dx.doi.org/10.1016/j.isprsjprs.2012.04.002

5. Mallet C, Bretar F, Roux M, Soergel U, Heipke, C (2011), "Relevance assessment of full-waveform Lidar data for urban area classification." In: ISPRS Journal of Photogrammetry and Remote Sensing, Elsevier B.V., Vol. 66, No. 6, pp. 71-84.

6. Wegner J D, Hänsch R, Thiele A, Soergel U (2011), "Building Detection From One Orthophoto and High-Resolution InSAR Data Using Conditional Random Fields." IEEE Journal of selected topics in applied Earth Observations and Remote Sensing, Vol. 4, No.1, pp. 83-91.

7. Xie H, Heipke C, Lohmann P, Soergel U, Tong X, Shi W (2011), "A New Binary Encoding Algorithm for the Simultaneous region-based Classification of Hyperspectral Data and Digital Surface Models." Photogrammetrie - Fernerkundung - Geoinformation (PFG), pp. 17-33.

8. Mallet C, Lafarge F, Roux M, Soergel U, Bretar F, Heipke C (2010), "A Marked Point Process for Modeling Lidar Waveforms." IEEE Transactions on Image Processing, Vol.19, No.12, pp. 3204-3221, doi: 10.1109/TIP.2010.2052825.

9. Wegner J D, Auer S, Soergel U (2010), "Extraction and Geometrical Accuracy of Double-Bounce Lines in High-Resolution SAR Images." Photogrammetric Engineering & Remote Sensing, Vol. 76, No. 9, pp. 1071-1080.

10. Wegner J D, Hänsch R, Thiele A, Soergel U (2010), "Building Detection From One Orthophoto and High-Resolution InSAR Data Using Conditional Random Fields." IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, Vol. 99, pp. 1 - 9.

11. Michaelsen E, Stilla U, Soergel U, Doktorski L (2010), "Extraction of building polygons from SAR images: Grouping and decision-level in the GESTALT system." Pattern Recognition Letters, Vol. 31, No. 10, pp. 1071-1076, DOI: 10.1016/j.patrec.2009.10.004.

12. Thiele A, Cadario E, Schulz K, Soergel U (2010), "Analysis of Gable-Roofed Building Signature in Multiaspect InSAR Data." IEEE Geoscience and Remote Sensing Letters, Vol. 7, No. 1, pp. 83-87.

13. Soergel U, Michaelsen E, Thiele A, Cadario E, Thoennessen U (2009), "Stereo Analysis of High-Resolution SAR Images for Building Height Estimation in case of Orthogonal Aspect Directions." ISPRS Journal of Photogrammetry and Remote Sensing, Elsevier B.V., Vol. 64, No. 5, pp. 490-500.

14. Brzank A, Heipke C, Goepfert J, Soergel U (2008), "Aspects of Generating Precise Digital Terrain Models in the Wadden Sea from LIDAR – Water Classification and Structure Line Extraction." ISPRS Journal of Photogrammetry and Remote Sensing, Elsevier B.V., Vol. 63, No. 5, pp. 510-528.

15. Mallet C, Bretar F, Soergel U (2008), "Analysis of Full-Waveform Lidar Data for Classification of Urban Areas." Photogrammetrie - Fernerkundung - Geoinformation (PFG), Vol. 5, pp. 337-349.

16. Soergel U, Cadario E, Thiele A, Thoennessen U (2008), "Feature Extraction and Visualization of Bridges over Water from high-resolution InSAR Data and one Orthophoto." IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, Vol. 1, No. 2, pp. 147-153.

17. Thiele A, Thoennessen U, Cadario E, Schulz K, Soergel U (2007), "Building Recognition from Multi-Aspect High Resolution InSAR Data in Urban Areas." IEEE Transactions of Geoscience and Remote Sensing, Vol. 45, No. 11, pp. 3583-3593.

18. Soergel U, Thoennessen U, Brenner A, Stilla U (2006), "High resolution SAR data: new opportunities and challenges for the analysis of urban areas." IEE Proceedings on Radar, Sonar & Navigation, Vol. 153, No. 3, pp. 294-300.

19. Michaelsen E, Soergel U, Thoennessen U (2006), "Perceptual Grouping for Automatic Detection of Man-Made Structures in high-resolution SAR Data." Pattern Recognition Letters, Elsevier B.V., Special Issue Pattern Recognition in Remote Sensing, Vol. 27, No. 4, pp. 218-225.

20. Soergel U, Schulz K, Thoennessen U, Stilla U (2005), "Integration of 3D Data in SAR Mission Planning and Image Interpretation in Urban Areas." Information Fusion, Elsevier B.V., Vol. 6, No. 4, pp. 301-310.

21. Michaelsen E, Middelmann W, Soergel U, Thoennessen U (2005), "On the improvement of structural detection of building features in high-resolution SAR data by edge preserving image enhancement." Pattern Recognition and Image Analysis, MAIK "Nauka/Interperiodica" Publishing, Moscow, Vol. 15, No. 4, pp. 686-689.

22. Stilla U, Soergel U, Thoennessen U (2003), "Potential and Limits of InSAR Data for Building Reconstruction in Built-up Areas." ISPRS Journal of Photogrammetry and Remote Sensing, Elsevier B.V., Vol. 58, No. 1-2, pp. 113-123.

Weitere Zeitschriftenartikel

1. Michaelsen E, Thiele A, Cadario E, Soergel U (2008), "Building Extraction Based on Stereo Analysis of High-Resolution SAR Images Taken from Orthogonal Aspect Directions." Pattern Recognition and Image Analysis, Pleiades Publishing, Ltd., ISSN 1054-6618, Vol. 18, No. 2, pp. 231–235.

2. Cong X, Schlittenhardt J, Gutjahr K, Soergel U (2008), "Monitoring unterirdischer Kernwaffentests mit differentieller SAR-Interferometrie." AVN Allgemeine Vermessungs-Nachrichten Heft 7, pp. 262 - 268.

3. Soergel U, Schulz K, Thoennessen U, Stilla U (2003) "Event-driven SAR Data Acquisition in Urban Areas Using GIS." GeoBIT/GIS Journal for Spatial Information and Decision Making - GeoBIT/GIS Zeitschrift für raumbezogene Informationen und Entscheidungen, Hüthig Verlag, Heidelberg, Vol. 12, pp. 32-37.

4. Schulz K, Soergel U, Thoennessen U (2003), "Perspektiven der automatischen Bildanalyse für die raumgestützte Aufklärung." Raumfahrt Concret, Vol. 29, 30 or 4/5-2003, pp. 12-15.

Begutachtete Tagungsartikel ("peer-review" des gesamten Aufsatzes)

1. Niemeyer J, Rottensteiner F, Soergel U (2012), "Conditional random fields for lidar point cloud classification in complex urban areas." In: ISPRS Annals of the Photogrammetry, Remote Sensing and Spatial Information Sciences I-3, S. 263-268.

2. Schack L, Schunert A, Soergel U (2012), "A Two-dimensional Production System for Grouping Persistent Scatterers in Urban High-resolution SAR Scenes." 7th IAPR Workshop on Pattern Recognition in Remote Sensing (PRRS 2012), pp. 1-4.

3. Wegner JD, Rosenhahn B, Soergel U (2012), "Segmentation and classification of objects with implicit scene context." In: Dellaert, F., Frahm, J.-M., Pollefeys, M., Rosenhahn, B. (eds.), Outdoor and Large-Scale Real-World Scene Analysis, Dagstuhl Seminar 11261, LNCS 7474, Berlin: Springer, pp. 264-284.

4. Niemeyer J, Wegner J D, Mallet C, Rottensteiner F, Soergel, U (2011), "Conditional Random Fields for Urban Scene Classification with Full Waveform LiDAR Data." In: Stilla, Rottensteiner, Mayer, Jutzi, Butenuth (eds.), Photogrammetric Image Analysis (PIA), LNCS 6952, Springer, Heidelberg, pp. 233-244.

5. Ok A O, Wegner J D, Heipke C, Rottensteiner F, Soergel U, Toprak V (2011), "In-Strip Matching and Reconstruction of Line Segments from UHR Aerial Image Triplets." In: Stilla, Rottensteiner, Mayer, Jutzi, Butenuth (eds.), Photogrammetric Image Analysis (PIA), LNCS 6952, Springer, Heidelberg, pp. 61-72.

6. Wegner J D, Rosenhahn B, Soergel, U (2011), "Segment-based Building Detection with Conditional Random Fields." In: U. Stilla, P. Gamba, C. Juergens, D. Maktav (Eds), Proceedings of 6th IEEE/GRSS/ISPRS Joint Urban Remote Sensing Event, Munich, 2011, pp. 205-208.

7. Wegner J D, Rosenhahn B, Soergel, U (2011), "Implicit scene context for object segmentation and classification." 33rd DAGM Symposium, LNCS 6835, Springer, Berlin, pp. 31-40.

8. Michaelsen E, Soergel U, Schunert A, Doktorski L, Jaeger K (2010), "Perceptual grouping for building recognition from satellite SAR image stacks." 6th IAPR TC 7 Workshop on Pattern Recognition in Remote Sensing, CD, 4 p.

9. Ok A O, Wegner J D, Heipke C, Rottensteiner F, Soergel U, Toprak V (2010), "A new straight line reconstruction methodology from multi-spectral stereo aerial images." In: Proceedings of Photogrammetric Computer Vision and Image Analysis Conference, IntArchPhRS Vol. 38(3A), pp. 25-30.

10. Wegner J D, Ok A O, Thiele A, Rottensteiner F, Soergel U (2010), "Urban Building Detection from optical and InSAR Features exploiting Context." Photogrammetric Computer Vision and Image Analysis Conference, IntArchPhRS, Vol. 38(3A), 6p.

11. Mallet C, Lafarge F, Bretar F, Soergel U, Heipke H (2009), "Lidar Waveform Modeling using a Marked Point Process." IEEE International Conference on Image Processing (ICIP), CD, 4 p.

12. Mallet C, Lafarge F, Bretar F, Roux M, Soergel U, Heipke H (2009), "A stochastic approach for modelling airborne lidar waveforms." IntArchPhRS, Vol. 38, Part 3/W8, pp.201-206.

13. Wegner J D, Thiele A, Soergel U (2009), "Fusion of optical and InSAR features for building recognition in urban areas." IntArchPhRS, Vol. 38, Part 3/W4, pp. 169-174.

14. Mallet C, Bretar F, Soergel U (2008) "Analysis of Full-Waveform Lidar Data for an Accurate Classification of Urban Areas." IntArchPhRS, Vol. 37, Part 3/A, pp. 85-92.

15. Goepfert J, Soergel U, Brzank A (2008), "Integration of intensity information and echo distribution in the filtering process of LIDAR data in vegetated areas." 8th International Conference on LiDAR Applications in Forest Assessment and Inventory, Silvilaser 2008, CD, 6 p.

16. Michaelsen E, Soergel U, Stilla U, Doktorski L (2008), "Extraction of Building Polygons from SAR Images: Grouping and Decision-Level in the GESTALT System." 5th IAPR TC 7 Workshop on Pattern Recognition in Remote Sensing 2008, CD, 4 p.

17. Thiele A, Thoennessen U, Soergel U, Schulz K (2008), "Building Reconstruction from InSAR Data by Detail Analysis of Phase Profiles." IntArchPhRS, Vol. 37, Part 3/A, pp. 191-196.

18. Goepfert J, Soergel U (2007), "Estimation of the LIDAR Height Offset in Coastal Vegetated Areas." ISPRS Workshop Laserscanning, Espoo, IntArchPhRS, Vol. 36, Part 3/ W52, pp. 156-161.

19. Michaelsen E, Middelmann W, Soergel U (2007), "Cognitive Vision and Perceptual Grouping by Production Systems with Blackboard Control – An Example for High-Resolution SAR-Images." J. Braz et al. (eds.): VISAPP and GRAPP 2006, CCIS 4,

Advances in Computer Graphics and Computer Vision, Springer-Verlag, Berlin, Heidelberg; pp. 293–304.

20. Michaelsen E, Thiele A, Cadario E, Soergel U (2007), "Building Extraction Based on Stereo Analysis of High-Resolution SAR Images taken from Orthogonal Aspect Directions." 7th Open German/Russian Workshop on Pattern Recognition and Image Understanding, OGRS, CD, 5 p.

21. Thiele A, Cadario E, Schulz K, Thoennessen U, Soergel U (2007), "InSAR Phase Profiles at Building Locations." Photogrammetric Image Analysis, IntArchPhRS, Vol. 36, Part 3/ W49A, pp. 203-208.

22. Michaelsen E, Middelmann W, Soergel U (2006), "Cognitive Vision and Perceptual Grouping by Production Systems with Blackboard Control: An Example for High-resolution SAR- images." International Conference on Computer Vision Theory and Applications VISAPP 2006, Vol. 2, pp. 109-115.

23. Soergel U, Gross H, Michaelsen E, Thoennessen U (2006), "Reflection Phenomena of Bridges over Water in Multi-aspect InSAR Images as Potential Features for Automatic Recognition." 4th IAPR TC 7 Workshop on Pattern Recognition in Remote Sensing 2006, CD, 4 p, *best poster award.*

24. Soergel U, Gross H, Thiele A, Thoennessen U (2006), "Extraction of bridges over water in high-resolution InSAR data." Photogrammetric Computer Vision, IntArchPhRS, Vol. 37, 6p.

25. Michaelsen E, Soergel U, Thoennessen U (2005), "Potential of Building Extraction from multi-aspect high-resolution Amplitude SAR-Data." Joint workshop of ISPRS/DAGM Object Extraction for 3D City Models, Road Databases, and Traffic Monitoring CMRT, IntArchPhRS, Vol. 36, Part 3/W24, pp. 149-154.

26. Michaelsen E, Soergel U, Thoennessen U (2004) "Perceptual Grouping in Automatic Detection of Man-Made Structure in high-resolution SAR-Data." 3rd IAPR TC 7 Workshop on Pattern Recognition in Remote Sensing 2004, CD, 5 p.

27. Soergel U, Thoennessen U, Stilla U (2003), "Reconstruction of Buildings from Interferometric SAR Data of built-up Areas." In: Ebner H, Heipke C, Mayer H, Pakzad K (eds) Photogrammetric Image Analysis PIA'03, IntArchPhRS, Vol. 34, Part 3/W8, pp. 59-64.

28. Soergel U, Thoennessen U, Stilla U (2003), "Iterative Building Reconstruction in Multi-Aspect InSAR Data." In: Maas HG, Vosselman G, Streilein A (eds) 3-D Reconstruction from Airborne Laserscanner and InSAR Data, IntArchPhRS, Vol. 34, Part 3/W13, pp. 186-192.

29. Michaelsen E, Soergel U, Stilla U (2002), "Grouping Salient Scatterers in InSAR Data for Recognition of Industrial Buildings." In: Kasturi R, Laurendeau D, Sun C (eds) 16th Int. Conf. on Pattern Recognition, ICPR 2002, Vol. II, pp. 613-616.

30. Soergel U, Schulz K, Thoennessen U (2001), "Phenomenology-based Segmentation of InSAR Data for Building Detection." In: Radig B, Florczyk S (eds.) Pattern Recognition, 23rd DAGM Symposium, Berlin: Springer, pp. 345-352.

Weitere Tagungsartikel (akzeptiert aufgrund Kurzfassung)

1. Baltsavias M, Cho K, Remondino F, Wakabayashi H, Soergel U (2013), "Rapidmap – rapid mapping and information dissemination for disasters using remote sensing and geoinformation." In: IntArchPhRS, Vol. 40-7/W2, pp. 31-35.

2. Niemeyer J, Soergel U (2013), "Opportunities of Airborne Laser Bathymetry for the Monitoring of the Sea Bed on the Baltic Sea Coast" In: IntArchPhRS, Vol. 40-7/W2, pp. 179-184.

3. Schmidt A, Soergel U (2013), "Monitoring and change detection of Wadden Sea areas using Lidar data." In: IntArchPhRS, Vol. 40-7/W2, pp. 219-224.

4. Soergel U, Jacobsen K, Schack L (2013), "TanDEM-X Mission: Overview and Evaluation of intermediate Results." In: IntArchPhRS, Vol. 40-7/W2, pp. 255-230.

5. Niemeyer J, Rottensteiner F, Soergel U (2013), "Classification of Urban LiDAR data using Conditional Random Field and Random Forests." In: IEEE Proceedings of the Joint Urban Remote Sensing Event (JURSE), pp. 139-142.

6. Schack, L.; Schunert, A.; Soergel, U. (2013), "Improving the geocoding of persistent scatterers at façades using lattice topology information." In: IEEE Proceedings of the Joint Urban Remote Sensing Event (JURSE), pp. 74-77.

7. Schack L, Soergel U (2013), "Using lattice topology information to investigate persistent scatterers at facades in urban areas." In: IntArchPhRS, Vol. 40-1/W1, Hannover, 2013, 5 p.

8. Schmidt A, Rottensteiner F, Soergel U (2013), "Monitoring concepts for coastal areas using lidar data." In: IntArchPhRS, Vol. 40-1/W1, Hannover, 2013, 6 p.

9. Schmidt A, Soergel U (2013), "Lidar data for classification and scientific monitoring in coastal areas." In: Proceedings of Coastal Dynamics 2013, June 25-28, Arcachon, France, pp. 1473-1482.

10. Michaelsen E, Schunert A, Soergel U (2011), "Utilizing Phase for the Grouping of PS in Urban High-Resolution InSAR-Images." In: Stilla U., Gamba P., Juergens C., Maktav D. (eds.), Proceedings of 6th IEEE/GRSS/ISPRS Joint Urban Remote Sensing Event, Urban 2013, 4 p., CD.

11. Schack L, Schunert A, Soergel U (2012), "Lattice Detection in Persistent Scatterer Point Clouds and Oblique Aerial Imagery." IEEE Geoscience and Remote Sensing Symposium, IGARSS, pp. 451 – 454.

12. Schack L, Soergel U (2012), "Nutzung von Nachbarschaftsinformationen zur Validierung der SAR-Tomographie." In: Tagungsband der 32. Wissenschaftlich-Technischen Jahrestagung der DGPF, ISSN 0942-2870, Band 21, pp. 410-417

13. Schmidt A, Adolph W, Klonus S, Ehlers M, Farke H, Soergel U (2012), "Potential of Airborne Laserscanning Data for Classification of Wadden Sea Areas." 32th EARSeL Symposium, pp. 495-502

14. Schmidt A, Rottensteiner F, Soergel U (2012), "Classification of airborne laser scanning data in wadden sea areas using conditional random fields." IntArchPhRS, Vol. 39-B3, pp. 161-166, 2012.

15. Schunert A, Schack L, Soergel U (2012), "Matching of Persistent Scatterers to Buildings." IEEE Geoscience and Remote Sensing Symposium, IGARSS, pp. 5733 - 5736.

16. Schunert A, Schack L, Soergel U (2012), "Matching Persistent Scatterers to Buildings." In: IntArchPhRS, Vol. 39-B7, S. 79-84.

17. Niemeyer J, Mallet C, Rottensteiner F, Soergel U (2011), "Conditional Random Fields for the Classification of LiDAR Point Clouds." In: IntArchPhRS, Vol. 38-4/W19, Hannover, 2011, 6 p., CD.

18. Ok A O, Wegner J D, Heipke C, Rottensteiner F, Soergel U, Toprak V(2011), "Accurate Matching and Reconstruction Of Line Features From Ultra High Resolution Stereo Aerial Images." In: IntArchPhRS, Vol. 38-4/W19, Hannover, 6 p., CD.

19. Schmidt A, Rottensteiner F, Soergel U (2011), "Untersuchung zur Erkennung von Wasserflächen in Full-Waveform-Laserscanner-Daten." In: DGPF Tagungsband 20/2011, pp. 391-398.

20. Schmidt, A.; Rottensteiner, F.; Soergel, U (2011), "Detection of Water Surfaces in Full-Waveform Laser Scanning Data. In: IntArchPhRS, Vol. 38-4/W19, Hannover, 2011, 6 p., CD.

21. Schunert A, Michaelsen E, Wegner, J D, Soergel U (2011), "Erkennung von Gebäudestrukturen anhand von Mustern punktförmiger Reflektoren in SAR-Bildern." In: Busch, W.; Niemeier, W.; Soergel, U. (eds.), Tagungsband Geomonitoring, pp 91-100.

22. Watanabe K, Sefercik U, Schunert A, Soergel U (2011), "Evaluation of InSAR DEM from High-Resolution Spaceborne SAR Data." In: IntArchPhRS, Vol. 38-4/W19, Hannover, 2011, 6 p., CD.

23. Wegner, J D, Soergel U (2011), "A contextual approach to building extraction combining high-resolution InSAR and optical data." IEEE International Geoscience and Remote Sensing Symposium, IGARSS, 4 p., CD. .

24. Balz T, Wegner J D, Schunert A, Liu K, Soergel U, Liao M (2010), "Persistent Scatterer localization and prediction technique." International Workshop Spatial Information Technologies for Monitoring the Deformation of Large-Scale Man-made Linear Features, Hongkong, 7 p., CD.

25. Niemeyer J, Rottensteiner F, Kühn F, Soergel, U (2010), "Extraktion geologisch relevanter Strukturen auf Rügen in Laserscanner-Daten." In: Konferenzband der Dreiländertagung von DGPF, OVG und SGPBF in Wien, pp. 298-307.

26. Ok A O, Wegner J D, Heipke C, Rottensteiner F, Soergel U, Toprak V (2010), "A Stereo Line Matching Technique For Aerial Images Based On A Pair-Wise Relation Approach." In: Proceedings of ISPRS Istanbul Workshop, Modelling Of Optical Airborne and Spaceborne Sensors, Istanbul, Turkey, CD.

27. Sefercik U, Soergel U (2010), "Comparison of High Resolution InSAR and Optical DEMs." EARSeL Joint SIG Workshop: Urban - 3D - Radar - Thermal Remote Sensing and Developing Countries, Ghent, CD, 13 p.

28. Sefercik U, Soergel U (2010), "Topographic estimation by TERRASAR-X." In: Wagner W., Székely, B. (eds.): ISPRS TC VII Symposium – 100 Years ISPRS, IntArchPhRS, Vol. 38, Part 7B, pp. 504-510.

29. Sefercik U, Alobeid A, Soergel U, Jacobsen K (2010), "Generation and Analysis of DEMs Based on Space-Borne Remote Sensing." 17th International Symposium. Damascus, 2010, CD, 6 S.

30. Wegner J D, Haensch R, Thiele A, Soergel U (2010), "Fusion of high-resolution InSAR data and optical imagery for building detection using Conditional Random Fields." Proc. 8th European Conference on Synthetic Aperture Radar, EUSAR 2010, 4 p., CD.

31. Wegner J D, Nezam S, Müller S, Soergel U (2010), "Comparison of land cover classification using high-resolution TerraSAR-X and optical imagery." 8th European Conference on Synthetic Aperture Radar, EUSAR 2010, pp. 238 - 241.

32. Wegner J D, Schunert A, Soergel U (2010), "Recognition of building features in high-resolution SAR and optical imagery." Second International Workshop on Application of Artificial Intelligence and Innovations in Engineering Geodesy, Braunschweig, pp. 42-46.

33. Wegner J D, Ziehn J R, Soergel U (2010), "Building detection and height estimation from high-resolution InSAR and optical data." IEEE International Geoscience and Remote Sensing Symposium, IGARSS, 4 p., CD.

34. Wegner J D, Ziehn J R, Soergel U (2010), "Building detection in urban areas from combined optical and InSAR data exploiting context." EARSeL Workshop, 2010, 8 p., CD.

35. Even M, Schunert A, Schulz K, Soergel, U (2009), "PSInSAR: detection of localized surface deformations with a modified StaMPS-algorithm." Proc. SPIE, Vol. 7477.

36. Lohmann P, Soergel U, Farghaly D (2009), "Classification of Agricultural Sites using Time-series of High-resolution dual-polarisation TerraSAR – X Spotlight images." 29th EARSeL Symposium - Imaging Europe, CD, 11 p.

37. Lohmann P, Soergel U, Tavakkoli M, Farghaly D (2009), "Multi-temporal Classification for Crop Discrimination using TerraSAR – X Spotlight images." IntArchPhRS, Vol. 38, Part 1-4-7/WS, CD, 6 p.

38. Wegner J D, Thiele A, Soergel U (2009), "Building extraction in urban scenes from high-resolution InSAR data and optical imagery." 5th IEEE/GRSS/ISPRS Joint Urban Remote Sensing Event, Urban 2009, CD, 6 p.

39. Wegner J D, Auer S, Soergel U (2009), "Analyse urbaner Gebiete mit optischen Bildern und SAR-Bildern sehr hoher Auflösung." DGPF Jahrestagung, Band 18, pp. 387-398.

40. Wegner J D, Auer S, Soergel U (2009), "Accuracy assessment of building height estimation from a high resolution optical image combined with a simulated SAR image." IntArchPhRS Vol. 38, Part 1-4-7/WS, CD, 6 p.

41. Wegner J D, Auer S, Thiele A, Soergel U (2009), "Analysis of urban areas combining high-resolution optical and SAR imagery." 29th EARSeL Symposium - Imaging Europe, CD, 8p.

42. Xie H, Tong X, Heipke C, Lohmann P, Soergel U (2009), "Object-based binary encoding algorithm - an integration of hyperspectral data and DSM." 5th IEEE/GRSS/ISPRS Joint Urban Remote Sensing Event, Urban 2009, CD, 6 p.

43. Cadario E, Schulz K, Gross H, Hammer H, Thiele A, Thoennessen U, Weydahl D J, Soergel U (2008), "Feature Extraction and Change Detection for Bridges over Water in Airborne and Spaceborne SAR Image Data." EARSeL Workshop, pp. 177-185.

44. Cadario E, Gross H, Hammer H, Schulz K, Thiele A, Thoennessen U, Soergel U, Weydahl D.J. (2008), "Feature Extraction of Bridges for Change Detection in High Resolution SAR Data." Proceedings of SPIE Remote Sensing 2008, Cardiff, Wales, Vol., Part, CD.

45. Goepfert J, Soergel U, Heipke C, Brzank A (2008), "An approach for filtering Lidar data in coastal vegetated areas using intensity information and multiple echoes." IntArchPhRS, Vol. 37, Part B3b-1, pp. 219-225.

46. Hammer H, Balz T, Thoennessen U, Soergel U, Stilla U (2008), "Comparison of SAR simulation concepts for the analysis of high-resolution SAR data." Proc. 7th European Conference on Synthetic Aperture Radar, EUSAR 2008, pp 213-216.

47. Hoedl T, Brandt D, Soergel U, Wiggenhagen M (2008), "Real-time orientation of a PTZ-camera based on pedestrian detection in video data of wide and complex scenes." IntArchPhRS, Vol. 37, Part B 3b. Peking, pp. 663-668. |

48. Tavakkoli S M, Lohmann P, Soergel U (2008), "Monitoring agricultural activities using multi-temporal ASAR ENVISAT Data." IntArchPhRS, Vol. 37, Part B7-2, 2008, pp. 735-742.

49. Thiele A, Cadario E, Schulz K, Thoennessen U, Soergel U (2008) "Reconstruction of residential buildings by detail analysis of multi-aspect InSAR data." Proceedings of SPIE Remote Sensing 2008, Cardiff, Wales, Vol., Part, CD.

50. Thiele A, Thoennessen U, Soergel U, Schulz K (2008), "Modelling and Analysing InSAR Phase Profiles at Building Locations in Multi-Aspect and Multi-Resolution Data." Proc. 7th European Conference on Synthetic Aperture Radar, EUSAR 2008, pp. 209-212.

51. Thiele A, Cadario E, Schulz K, Thoennessen U, Soergel U (2008), "Reconstruction of residential buildings from multi-aspect InSAR data." Proceedings of ESA-EUSC Workshop, March 2008, Frascati, 6p.

52. Wegner J D, Soergel U (2008), "Bridge height estimation from combined high-resolution optical and SAR imagery." IntArchPhRS, Vol. 37, Part B7-3, pp. 1071-1076.

53. Wegner J D, Soergel U (2008), "Registration of SAR Optical Images Containing Bridges over Land." EARSeL Workshop Remote Sensing - New Challenges of High Resolution, pp. 194-201.

54. Cong X, Gutjahr K, Schlittenhardt J, Soergel U (2007), "The Application of Differential SAR interferometry to the Measurement of Surface Displacement caused by Underground Nuclear Explosions." ISPRS Hannover Workshop, IntArchPhRS, Vol. 36, Part 1/W51, CD, 5p.

55. Michaelsen E, Doktorski L, Soergel U, Stilla U (2007), "Perceptual Grouping for Building Recognition in High-resolution SAR Images using the GESTALT-System." IEEE/ISPRS Joint workshop on remote sensing and data fusion over urban areas, Urban 2007, IntArchPhRS, Vol. 36, CD, 6p.

56. Schmitz M, Lohmann P, Kuehn F, Soergel U (2007), "Landcover Mapping of Banda Aceh, Indonesia, using Optical and SAR Satellite Imagery." IntArchPhRS, Vol. 36, Part 1/W51, CD, 7p.

57. Schlittenhardt J, Cong X, Gutjahr K, Canty M J, Soergel U (2007), "The potential of combined seismological and differential InSAR processing in a CTBT verification scenario." 67. Jahrestagung der Deutschen Geophysikalischen Gesellschaft, in Druck.

58. Soergel U, Thiele A, Gross H, Thoennessen U (2007), "Extraction of Bridge Features from high-resolution InSAR Data and optical Images." IEEE/ISPRS Joint workshop on remote sensing and data fusion over urban areas, Urban 2007, IntArchPhRS, Vol. 36, CD, 6p.

59. Tavakkoli S M, Lohmann P, Soergel U (2007), "Mapping of Agricultural Activities Using Multi Temporal ASAR ENVISAT data." IntArchPhRS 36, Vol. 1/W51, CD, 6p.

60. Thiele A, Cadario E, Schulz K, Thoennessen U, Soergel U (2007), "Model Based Building Recognition from Multi-Aspect InSAR Data in Urban Areas." IEEE/ISPRS Joint workshop on remote sensing and data fusion over urban areas, Urban 2007, IntArchPhRS, Vol. 36, CD, 6p.

61. Thiele A, Cadario E, Schulz K, Thoennessen U, Soergel U (2007), "Feature Extraction of Gable-Roofed Buildings from Multi-Aspect High-Resolution InSAR Data." Proc. IGARSS, CD, 4 p.

62. Thiele A, Cadario E, Schulz K, Thoennessen U, Soergel U (2007), "Modeling and Analyzing InSAR Phase Profiles at Building Locations ." Proc. IGARSS, CD, 4 p.

63. Soergel U, Thiele A, Michaelsen E, Thoennessen U (2007), "Fusion of High-resolution InSAR Data and Optical Imagery in Scenes with Bridges over Water for 3D Visualisation and Interpretation." IntArchPhRS, Vol. 36, CD, 6 p.

64. Soergel U, Cadario E, Gross H, Thiele A, Thoennessen U (2006), "Bridge Detection in multi-aspect high-resolution Interferometric SAR Data." Proc. 6th European Conference on Synthetic Aperture Radar, EUSAR 2006, CD, 4p, invited paper.

65. Soergel U, Michaelsen E, Thiele A, Thoennessen U (2006), "Radargrammetric Extraction of Building Features from high resolution multi-aspect SAR Data." Proc. IGARSS, CD, 4 p.

66. Tavakkoli S M, Lohmann P, Soergel U (2006), "Environmental Monitoring using ENVISAT ASAR Data in Agricultural areas." Proc. EARSeL Symposium, CD, 8 p.

67. Tavakkoli S M, Lohmann P, Soergel U (2006), "Multi-tempotal Segment-based Classification of ASAR Images of an Agricultural Area." Proc. GRRS, CDROM, 6p.

68. Thiele A, Thoennessen U, Cadario E, Schulz K, Soergel U (2006), "Building Recognition in Urban Areas from Multi-Aspect High-Resolution Interferometric SAR Data." Proc. 6th European Conference on Synthetic Aperture Radar, EUSAR 2006, CD, 4p.

69. Thiele A, Thoennessen U, Cadario E, Schulz K, Soergel U (2006), "Building Recognition Fusing Multi-Aspect High-Resolution Interferometric SAR Data." Proc. IGARSS, CD, 4 p.

70. Thiele A, Thoennessen U, Cadario E, Schulz K, Soergel U (2006), "Building recognition from multi-aspect high-resolution interferometric SAR data in urban areas." Proceedings of SPIE - Algorithms for Synthetic Aperture Radar Imagery XIII, E. G. Zelnio, F. D. Garber (eds.), Vol. 6237, pp. 13-20.

71. Balz T, Haala N, Soergel U (2005), "Combining LIDAR, InSAR, SAR and SAR-Simulation for Change Detection Applications in Cloud-prone Areas." 1st Intern. Symposium on Cloude-Prone and Rainy Areas Remote Sensing (CARRS), CD, 11p.

72. Hedman, K, Wessel B, Soergel U, Stilla U (2005), "Automatic Road Extraction by Fusion of Multiple SAR Views." IEEE/ISPRS Joint workshop on remote sensing and data fusion over urban areas, Urban 2005, IntArchPhRS, Vol. 36, Part 8 W27, CD, 5 p.

73. Soergel U, Michaelsen E, Thoennessen U, Stilla U (2005), "Opportunities of Urban Analysis from high-resolution SAR Data." ISPRS Hannover Workshop: WG I/1, WG I/3, WG I/5, WG IV/2, WG IV/3, IntArchPhRS, Vol. 36, Part 1/W3, CD, 6 p.

74. Soergel U, Schulz K, Thoennessen U (2005), "Building reconstruction from interferometric SAR data: potential and limits." EARSeL 3D-Remote Sensing Workshop, CD, 8 p.

75. Stilla U, Soergel U, Thoennessen U, Brenner A (2005), "Potential and limits for reconstruction of buildings from high resolution SAR data of urban areas." URSI GA 2005, New Delhi, India, 23-29 October 2005, CD, 4 p. – invited paper.

76. Soergel U, Michaelsen E, Thoennessen U, Stilla U (2005), "Potential of high-resolution SAR Images for Urban Analysis." IEEE/ISPRS Joint workshop on remote sensing and data fusion over urban areas Urban 2005, CD, 7 p.

77. Michaelsen E, Middelmann W, Soergel U, Thoennessen U (2004), "On the Improvement of Structural Detection of Building Features in High-Resolution SAR Data by Edge Preserving Image Enhancement." 7th Int. Conf. on Pattern Recognition and Image Analysis: New Information Technologies, pp. 795-798.

78. Schulz K, Soergel U, Cadario E, Thoennessen U (2004), "Comparison of Digital Height Models with Different Quality Concerning the Usage in SAR Image Analysis." Proc. 5th European Conference on Synthetic Aperture Radar, EUSAR 2004, pp. 455-458.

79. Soergel U, Cadario E, Thoennessen U (2004), "Geocoding and Fusion of Airborne High-resolution Multi-aspect SAR Data." Proc. 5th European Conference on Synthetic Aperture Radar, EUSAR 2004, pp. 945-948.

80. Soergel U, Thoennessen U, Stilla U, Brenner A (2004), "New Opportunities and Challenges for Analysis of Urban Areas in High-resolution SAR Data." Proc. 5th European Conference on Synthetic Aperture Radar, EUSAR 2004, pp. 416-418.

81. Soergel U, Thoennessen U, Stilla U (2004), "SAR Data Acquisition for Event-driven Mapping of Urban Areas Using GIS." In: IntArchPhRS, Vol. 35, pp. 500-505.

82. Stilla U, Michaelsen E, Soergel U, Hinz S, Ender H J G (2004), "Airborne Monitoring of Vehicle Activity in Urban Areas." In: IntArchPhRS. Vol. 35, Part B3, pp. 973-979.

83. Schulz K, Soergel U, Thoennessen U (2003), "Elimination of Across-Track Phase Components in Airborne Along-Track Interferometry Data to Improve Object Velocity Measurements". Proc. IGARSS, CD, 3 p.

84. Soergel U, Thoennessen U, Stilla U (2003), "Visibility Analysis of man-made Objects in SAR Image." IEEE/ISPRS Joint workshop on remote sensing and data fusion over urban areas, Urban 2003, pp. 120-124.

85. Soergel U, Schulz K, Thoennessen U, Stilla U (2003), "Determination of optimal SAR Illumination Aspects in Built-up Area." Proc. IGARSS, CD, 3 p.

86. Stilla U, Michaelsen E, Soergel U (2003), "Perceptual Grouping of Regular Structures for Automatic Detection of man-made Objects - Examples from IR and SAR." Proc. IGARSS, CD, 3 p.

87. Stilla U, Soergel U, Thoennessen U (2003), "Building Reconstruction from high-resolution InSAR Data of Urban Areas." In: Mese ED (ed) Tyrrhenian international workshop on remote sensing, TIWRS 2003. Pisa: Plus-Universita di Pisa, pp. 165-178.

88. Schulz K, Soergel U, Thoennessen U (2002), "Multi-Channel Segmentation of Moving Objects in Along-Track Interferometry Data." Proc. 4th European Conference on Synthetic Aperture Radar, EUSAR 2002, pp. 233-236.

89. Soergel U, Schulz K, Thoennessen U, Stilla U (2002), "Utilization of 2D and 3D Information for SAR Image Analysis in Dense Urban Areas." Proc. 4th European Conference on Synthetic Aperture Radar, EUSAR 2002, pp. 429-434.

90. Soergel U, Thoennessen U, Stilla U (2002), "Utilization of LIDAR DEM for SAR Image Analysis in Dense Urban Areas." Photogrammetric Computer Vision, IntArchPhRS, Vol. 34, Part 3B, pp. 255-258.

91. Soergel U, Thoennessen U, Ender J H G (2002). "Modelling of SAR-Effects by Using LADAR." RTO Symposium on Complementary of Ladar and Radar, CD, 9 p.

92. Stilla U, Soergel U, Thoennessen U (2002), "Geometric Constraints for Building Reconstruction from InSAR Data of Urban Areas." Symposium on geospatial theory, processing and applications. IntArchPhRS, Vol. 34, Part 4, CD, 8 p.

93. Thoennessen U, Soergel U, Gross H, Stilla U (2002), "Rapid Terrain Visualization." 5th International Military Sensing Symposium (MSS), CD, 5 p.

94. Dell'Acqua F, Gamba P, Soergel U, Thoennessen U (2001), "Fully 3D and Joint 2D/3D Segmentation of InSAR Data over Urban Environments." IEEE/ISPRS Joint workshop on remote sensing and data fusion over urban areas, Urban 2001, IEEE, ISBN 0-7803-7059-7, pp. 328-331.

95. Schulz K, Soergel U, Thoennessen U (2001), "Segmentation of Moving Objects in SAR-MTI Data." In: Zelnio E, (ed.), Algorithms for Synthetic Aperture Radar Imagery VIII, SPIE Proc., Vol. 4382, pp. 174-181.

96. Soergel U, Schulz K, Thoennessen U (2001), "Segmentation of Interferometric SAR Data in Urban Areas." In: Zelnio E, (ed.), Algorithms for Synthetic Aperture Radar Imagery VIII, SPIE Proc., Vol. 4382, pp. 84-91.

97. Stilla U, Soergel U, Thoennessen U, Michaelsen E (2001), "Segmentation of LIDAR and InSAR Elevation Data for Building Reconstruction." In: Baltsavias E P, Gruen A, Van Gol L, Automatic Extraction of Man-Made Objects from Aerial and Space Images (III), invited paper, pp. 297-307.

98. Stilla U, Soergel U, Thoennessen U (2001), "Potential and Limits of InSAR Data for the Reconstruction of Buildings." IEEE/ISPRS Joint workshop on remote sensing and data fusion over urban areas, Urban 2001, IEEE, ISBN 0-7803-7059-7, pp. 64-68.

99. Soergel U, Schulz K, Thoennessen U, Stilla U (2000), "3D Visualization of Interferometric SAR Data." Proc. 3rd European Conference on Synthetic Aperture Radar, EUSAR 2000, pp. 305-308.

100. Soergel U, Gross H, Thoennessen U, Stilla U (2000), "Segmentation of Interferometric SAR Data For Building Detection." IntArchPhRS, Vol. 33, B1, pp. 328-335.

101. Soergel U, Schulz K, Thoennessen U (2000), "Enhancement of Interferometric SAR Data Using Segmented Intensity Information in Urban Areas." Proc. IGARSS, CD, 3 p.

102. Stilla U, Soergel U, Jaeger K (2000), "Utilization of 3D-City Models in Aerial Image Sequences." Proceedings of UM3 2000: International Workshop on Urban 3D/Multi-Media Mapping. Tokyo: University, IIS, pp. 1-7.

103. Stilla U, Soergel U, Jaeger K (2000), "Generation of 3D-City Models and their Utilisation in Image Sequences." IntArchPhRS, Vol. 33, Part B2, pp. 518-524.

104. Soergel U, Thoennessen U (1999), "Automatic geocoding of high value targets using structural image analysis and GIS data." In: Serpico SB (ed) Image and signal processing for remote sensing V, Europto, Proc. SPIE, Vol. 3871, pp. 315-324.

105. Weiss S, Soergel U, Steward R W (1996), "Computationally Efficient Adaptive System Identification in Subbands with Intersubband Tap Assignment for Undermodelled Problems." Proc. 30th Asilomar Conference on Systems, Signals, and Computers, Vol. 2, pp. 818-822.

Dissertation

Soergel U (2003), "Iterative Verfahren zur Detektion und Rekonstruktion von Gebäuden in SAR- und InSAR-Daten." Dissertation, Fakultät für Elektrotechnik und Informationstechnik, Universität Hannover.

Forschungsberichte

Thoennessen U, Ebert A, Middelmann W, Schulz K, Soergel U (2004), "Automatische Auswertung von SAR-Bilddaten." 122 Seiten, Abschlussbericht FOM 2004/37, FGAN-FOM Forschungsinstitut für Optronik und Mustererkennung, Ettlingen.

Thoennessen U, Ebert A, Schulz K, Soergel U (2001), "Automatische Verfahren zur Zielerkennung für Symbolische SAR-Aufklärungsbilddaten." 115 Seiten, Abschlussbericht FOM 2002/11, FGAN-FOM Forschungsinstitut für Optronik und Mustererkennung, Ettlingen.

Thoennessen U, Bernstein E, Gross H, Schulz K, Soergel U (2001), "Automatische Verfahren zur Zielerkennung (AVZ) - Teil 1." 128 Seiten, Abschlussbericht FOM 2001/44, FGAN-FOM Forschungsinstitut für Optronik und Mustererkennung, Ettlingen.

Schaerf R, Ebert A, Gross H, Hofele G, Mauer E, Schwan H, Soergel U, Thoennessen U (1998), "Bildauswertung für SAR-Bilddaten." 100 Seiten, Abschlussbericht FIM 274, FGAN-FIM Forschungsinstitut für Informationsverarbeitung und Mustererkennung, Ettlingen.

Studium

Soergel U (1996), "Adaptive Filtering in Subbands Using Critical Sampling and Tap Assignment." Studienarbeit, Lehrstuhl für Nachrichtentechnik, Universität Erlangen-Nürnberg & University of Strathclyde, Glasgow.

Soergel U (1997), "Rekonstruktion einer dreidimensionalen Szene aus Videosequenzen." Diplomarbeit, Lehrstuhl für Nachrichtentechnik, Universität Erlangen-Nürnberg.

Sonstige Schriften
Soergel U (2006), Festschrift "125 Jahre Geodäsie und Geoinformatik": Stand der Technik und Trends der Radarfernerkundung. Band 263, 2006, pp. 295-302.