Thomas Wittenberg

List of Publications by Year in Descending Order

121 papers	1,356 citations	20 h-index	34 g-index
138 ext. papers	1,591 ext. citations	1.9 avg, IF	4.31 L-index

#	Paper	IF	Citations
121	3D Reconstruction of the Colon from Monocular Sequences Evaluation by 3D-printed Phantom Data. *Informatik Aktuell*, **2022**, 141-146	0.3	
120	MitoDet: Simple and Robust Mitosis Detection. *Lecture Notes in Computer Science*, **2022**, 53-57	0.9	
119	Fast whole-slide cartography in colon cancer histology using superpixels and CNN classification.. *Journal of Medical Imaging*, **2022**, 9, 027501	2.6	1
118	Towards computer aided diagnosis of infective endocarditis in whole-slide images of heart valve tissue using FISH. *Current Directions in Biomedical Engineering*, **2021**, 7, 468-471	0.5	0
117	Acquisition of Semantics for AI-based Applications in Medical Technologies. *Current Directions in Biomedical Engineering*, **2021**, 7, 515-518	0.5	
116	Multispectral single chip reconstruction using DNNs with application to open neurosurgery. *Current Directions in Biomedical Engineering*, **2021**, 7, 37-40	0.5	
115	Pandemic Robot. *Current Directions in Biomedical Engineering*, **2021**, 7, 601-604	0.5	
114	Partial 3D-reconstruction of the colon from monoscopic colonoscopy videos using shape-from-motion and deep learning. *Current Directions in Biomedical Engineering*, **2021**, 7, 335-338	0.5	1
113	The Online Expert-Panel Review of a Novel Web-seminar Format. *Current Directions in Biomedical Engineering*, **2021**, 7, 453-455	0.5	
112	Panoramic Imaging Assessment of Different Bladder Phantoms - An Evaluation Study. *Urology*, **2021**, 156, e103-e110	1.6	0
111	Exploring Flood Filling Networks for Instance Segmentation of XXL-Volumetric and Bulk Material CT Data. *Journal of Nondestructive Evaluation*, **2021**, 40, 1	2.1	0
110	A Geometric and Textural Model of the Colon as Ground Truth for Deep Learning-based 3D-reconstruction. *Informatik Aktuell*, **2021**, 298-303	0.3	2
109	Semiautomated 3D Root Segmentation and Evaluation Based on X-Ray CT Imagery. *Plant Phenomics*, **2021**, 2021, 8747930	7	8
108	Initial experiments of eye-tracking during AIassisted polyp-detection in colonoscopy. *Current Directions in Biomedical Engineering*, **2021**, 7, 145-149	0.5	
107	Electromagnets for an endoscopic anastomosis tool in the colon. *Current Directions in Biomedical Engineering*, **2021**, 7, 39-42	0.5	
106	Robust Slide Cartography in Colon Cancer Histology. *Informatik Aktuell*, **2021**, 229-234	0.3	0
105	A Concept for Context Awareness in Smart Environments. *Current Directions in Biomedical Engineering*, **2020**, 6, 380-383	0.5	

104	Deep-learning based reconstruction of the stomach from monoscopic video data. *Current Directions in Biomedical Engineering*, **2020**, 6, 44-47	0.5	
103	Evaluation of HRV estimation algorithms from PPG data using neural networks. *Current Directions in Biomedical Engineering*, **2020**, 6, 505-509	0.5	3
102	Haptic Rendering of Soft-Tissue for Training Surgical Procedures at the Larynx. *Informatik Aktuell*, **2020**, 342-347	0.3	
101	First results of computer-enhanced optical diagnosis of bladder cancer. *Current Directions in Biomedical Engineering*, **2020**, 6, 246-249	0.5	0
100	CT-Based Non-Destructive Quantification of 3D-Printed Hydrogel Implants. *Informatik Aktuell*, **2020**, 119-124	0.3	
99	Retrospective Color Shading Correction for Endoscopic Images. *Informatik Aktuell*, **2020**, 14-19	0.3	
98	Artificial Intelligence-Based Polyp Detection in Colonoscopy: Where Have We Been, Where Do We Stand, and Where Are We Headed?. *Visceral Medicine*, **2020**, 36, 428-438	2.4	5
97	Force-feedback assisted and virtual fixtures based K-wire drilling simulation. *Computers in Biology and Medicine*, **2019**, 114, 103473	7	5
96	Automated polyp detection in the colorectum: a prospective study (with videos). *Gastrointestinal Endoscopy*, **2019**, 89, 576-582.e1	5.2	64
95	Co-staining of microRNAs and their target proteins by miRNA in situ hybridization and immunohistofluorescence on prostate cancer tissue microarrays. *Laboratory Investigation*, **2019**, 99, 1527-1534	5.9	9
94	Automatic Detection of Tumor Buds in Pan-Cytokeratin Stained Colorectal Cancer Sections by a Hybrid Image Analysis Approach. *Lecture Notes in Computer Science*, **2019**, 83-90	0.9	6
93	Automated detection of bone splinters in DEXA phantoms using deep neural networks. *Current Directions in Biomedical Engineering*, **2019**, 5, 281-283	0.5	1
92	Computer Aided Detection of Polyps in Whitelight- Colonoscopy Images using Deep Neural Networks. *Current Directions in Biomedical Engineering*, **2019**, 5, 231-234	0.5	15
91	Interactive Image Segmentation for Cochlea Implant Planning based on DVT Data. *Current Directions in Biomedical Engineering*, **2019**, 5, 413-415	0.5	0
90	Force-feedback-assisted Bone Drilling Simulation Based on CT Data. *Informatik Aktuell*, **2018**, 291-296	0.3	
89	Stitching Pathological Tissue Images using DOP Feature Tracking. *Informatik Aktuell*, **2018**, 322-327	0.3	1
88	IFN-□esponse mediator GBP-1 represses human cell proliferation by inhibiting the Hippo signaling transcription factor TEAD. *Biochemical Journal*, **2018**, 475, 2955-2967	3.8	9
87	CT-basiertes virtuelles Fr□en am Felsenbein. *Informatik Aktuell*, **2018**, 176-181	0.3	

86	Digital Mapping of the Urinary Bladder: Potential for Standardized Cystoscopy Reports. *Urology*, **2017**, 104, 235-241	1.6	11
85	Automated plasmodia recognition in microscopic images for diagnosis of malaria using convolutional neural networks **2017**,		1
84	Semi-automated delineation of breast cancer tumors and subsequent materialization using three-dimensional printing (rapid prototyping). *Journal of Surgical Oncology*, **2017**, 115, 238-242	2.8	8
83	Using simulated fluorescence cell micrographs for the evaluation of cell image segmentation algorithms. *BMC Bioinformatics*, **2017**, 18, 176	3.6	8
82	Using automated texture features to determine the probability for masking of a tumor on mammography, but not ultrasound. *European Journal of Medical Research*, **2017**, 22, 30	4.8	4
81	Analysis of Corynebacterium diphtheriae macrophage interaction: Dispensability of corynomycolic acids for inhibition of phagolysosome maturation and identification of a new gene involved in synthesis of the corynomycolic acid layer. *PLoS ONE*, **2017**, 12, e0180105	3.7	12
80	Automated morphological analysis of bone marrow cells in microscopic images for diagnosis of leukemia: nucleus-plasma separation and cell classification using a hierarchical tree model of hematopoesis **2016**,		3
79	Stitching and Surface Reconstruction From Endoscopic Image Sequences: A Review of Applications and Methods. *IEEE Journal of Biomedical and Health Informatics*, **2016**, 20, 304-21	7.2	50
78	The killing of macrophages by Corynebacterium ulcerans. *Virulence*, **2016**, 7, 45-55	4.7	12
77	Shading correction for endoscopic images using principal color components. *International Journal of Computer Assisted Radiology and Surgery*, **2016**, 11, 397-405	3.9	6
76	The Tax-Inducible Actin-Bundling Protein Fascin Is Crucial for Release and Cell-to-Cell Transmission of Human T-Cell Leukemia Virus Type 1 (HTLV-1). *PLoS Pathogens*, **2016**, 12, e1005916	7.6	20
75	Automatic Detection of Relevant Regions for the Morphological Analysis of Bone Marrow Slides. *Informatik Aktuell*, **2016**, 272-276	0.3	
74	Combining Active Contours and Active Shapes for Segmentation of Fluorescently Stained Cells. *Informatik Aktuell*, **2016**, 122-127	0.3	
73	Basic Statistics of SIFT Features for Texture Analysis. *Informatik Aktuell*, **2016**, 98-103	0.3	3
72	The Clinical Data Intelligence Project. *Informatik-Spektrum*, **2016**, 39, 290-300	0.3	5
71	Dynamic Programming for the Segmentation of Bone Marrow Cells. *Informatik Aktuell*, **2015**, 359-364	0.3	1
70	Review of free software tools for image analysis of fluorescence cell micrographs. *Journal of Microscopy*, **2015**, 257, 39-53	1.9	69
69	Image based reconstruction for cystoscopy. *Current Directions in Biomedical Engineering*, **2015**, 1, 470-474	0.5	2

68	Automated high-throughput analysis of B cell spreading on immobilized antibodies with whole slide imaging. *Current Directions in Biomedical Engineering*, **2015**, 1, 224-227	0.5	3
67	The Cell-Shape-Wizard. *Informatik Aktuell*, **2015**, 341-346	0.3	
66	Automated classification of bone marrow cells in microscopic images for diagnosis of leukemia: a comparison of two classification schemes with respect to the segmentation quality **2015**,		1
65	3D Shape Reconstruction of the Esophagus from Gastroscopic Video. *Informatik Aktuell*, **2015**, 173-178	0.3	
64	Panorama Mapping of the Esophagus from Gastroscopic Video. *Informatik Aktuell*, **2015**, 455-460	0.3	1
63	Using multi-channel level sets to measure the cytoplasmic localization of HCMV pUL97 in GFP-B-gal fusion constructs. *Journal of Virological Methods*, **2014**, 199, 61-7	2.6	2
62	13. Endoskopie **2014**, 455-470		
61	Panoramabildgebung der Blase: Vom Phantom zu präklinischen Experimenten. *Endoskopie Heute*, **2014**, 27, 146-150		2
60	A new ex vivo beating heart model to investigate the application of heart valve performance tools with a high-speed camera. *ASAIO Journal*, **2014**, 60, 38-43	3.6	5
59	Lokalisierung von Knochenmarkzellen für die automatisierte morphologische Analyse von Knochenmarkpräparaten. *Informatik Aktuell*, **2014**, 403-408	0.3	3
58	Enhancing automated micrograph-based evaluation of LPS-stimulated macrophage spreading. *Cytometry Part A: the Journal of the International Society for Analytical Cytology*, **2013**, 83, 409-18	4.6	2
57	A graph-based approach for local and global panorama imaging in cystoscopy **2013**,		8
56	Cell Simulation for Validation of Cell Micrograph Evaluation Algorithms. *Biomedizinische Technik*, **2013**, 58 Suppl 1,	1.3	3
55	Approaches to automatic parameter fitting in a microscopy image segmentation pipeline: An exploratory parameter space analysis. *Journal of Pathology Informatics*, **2013**, 4, S5	4.4	5
54	Viewpoints on Medical Image Processing: From Science to Application. *Current Medical Imaging*, **2013**, 9, 79-88	1.2	13
53	Characterizing mammographic images by using generic texture features. *Breast Cancer Research*, **2012**, 14, R59	8.3	51
52	Association of mammographic density with the proliferation marker Ki-67 in a cohort of patients with invasive breast cancer. *Breast Cancer Research and Treatment*, **2012**, 135, 885-92	4.4	30
51	Laryngoscopic Image Stitching for View Enhancement and Documentation First Experiences. *Biomedizinische Technik*, **2012**, 57,	1.3	5

50	Association of mammographic density with hormone receptors in invasive breast cancers: results from a case-only study. *International Journal of Cancer*, **2012**, 131, 2643-9	7.5	39
49	Subjective assessment of ovarian masses using pattern recognition: the impact of experience on diagnostic performance and interobserver variability. *Archives of Gynecology and Obstetrics*, **2012**, 285, 1663-9	2.5	12
48	Correlates of mammographic density in B-mode ultrasound and real time elastography. *European Journal of Cancer Prevention*, **2012**, 21, 343-9	2	6
47	Nuclear import of isoforms of the cytomegalovirus kinase pUL97 is mediated by differential activity of NLS1 and NLS2 both acting through classical importin-□binding. *Journal of General Virology*, **2012**, 93, 1756-1768	4.9	18
46	Computer-assisted diagnosis in colposcopy: results of a preliminary experiment?. *Acta Cytologica*, **2012**, 56, 554-9	3	6
45	Comparison of Methods for Splitting of Touching and Overlapping Macrophages in Fluorescent Micrographs. *Lecture Notes in Computer Science*, **2012**, 456-464	0.9	
44	Measurement of TLR-Induced Macrophage Spreading by Automated Image Analysis: Differential Role of Myd88 and MAPK in Early and Late Responses. *Frontiers in Physiology*, **2011**, 2, 71	4.6	21
43	Mammographic density as a risk factor for breast cancer in a German case-control study. *European Journal of Cancer Prevention*, **2011**, 20, 1-8	2	47
42	Comparison of parameter-adapted segmentation methods for fluorescence micrographs. *Cytometry Part A: the Journal of the International Society for Analytical Cytology*, **2011**, 79, 933-45	4.6	12
41	Two isoforms of the protein kinase pUL97 of human cytomegalovirus are differentially regulated in their nuclear translocation. *Journal of General Virology*, **2011**, 92, 638-49	4.9	30
40	Using multimodal information for the segmentation of fluorescent micrographs with application to virology and microbiology. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2011**, 2011, 6487-90	0.9	5
39	Digital Kymography for the Analysis of the Opening and Closure Intervals of Heart Valves. *Informatik Aktuell*, **2011**, 144-148	0.3	2
38	HemaCAM □A Computer Assisted Microscopy System for Hematology **2011**, 233-242		4
37	Visual Computing at the IIS: From Life Sciences to Industrial Applications **2011**, 227-232		
36	Spatial orientation in translumenal surgery. *Minimally Invasive Therapy and Allied Technologies*, **2010** , 19, 262-73	2.1	5
35	Contour tracing for segmentation of mammographic masses. *Physics in Medicine and Biology*, **2010**, 55, 5299-315	3.8	13
34	Computer-assisted diagnosis for precancerous lesions in the esophagus. *Methods of Information in Medicine*, **2009**, 48, 324-30	1.5	12
33	Texture-based computer-assisted diagnosis for fiberscopic images. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2009**, 2009, 3735-8	0.9	1

32	Clinical evaluation of Endorientation: Gravity related rectification for endoscopic images **2009**,		3
31	Endoscopic orientation correction. *Lecture Notes in Computer Science*, **2009**, 12, 459-66	0.9	13
30	Image Segmentation of Cell Nuclei based on Classification in the Color Space. *IFMBE Proceedings*, **2009**, 613-616	0.2	2
29	Segmentation of leukocytes and erythrocytes in blood smear images. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2008**, 2008, 3075-8	0.9	27
28	New Structured Illumination Technique for the Inspection of High-Reflective Surfaces: Application for the Detection of Structural Defects without any Calibration Procedures. *Eurasip Journal on Image and Video Processing*, **2008**, 2008, 1-14	2.5	8
27	Boundary-precise segmentation of nucleus and plasma of leukocytes **2008**,		2
26	Efficient large scale image stitching for virtual microscopy. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2008**, 2008, 4019-23	0.9	6
25	A Knowledge-Based System for the Computer Assisted Diagnosis of Endoscopic Images. *Informatik Aktuell*, **2008**, 272-276	0.3	1
24	Aufnahme, Analyse und Visualisierung von Bewegungen nativer Herzklappen in-vitro. *Informatik Aktuell*, **2008**, 328-332	0.3	1
23	The prediction of breast cancer biopsy outcomes using two CAD approaches that both emphasize an intelligible decision process. *Medical Physics*, **2007**, 34, 4164-72	4.4	126
22	An evaluation and comparison of the performance of state of the art approaches for the detection of spiculated masses in mammograms. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2007**, 2007, 3773-6	0.9	1
21	High-Speed-Camera Recordings and Image Sequence Analysis of Moving Heart-Valves: Experiments and First Results **2007**, 169-174		3
20	Complete Digital Iconic and Textual Annotation for Mammography **2007**, 91-95		0
19	Cognition Network Technology for Automated Holistic Analysis in Mammography **2007**, 282-287		
18	Physically motivated enhancement of color images for fiber endoscopy **2007**, 10, 360-7		4
17	A spectral color correction framework for medical applications. *IEEE Transactions on Biomedical Engineering*, **2006**, 53, 254-65	5	5
16	Automatic adaptive enhancement for images obtained with fiberscopic endoscopes. *IEEE Transactions on Biomedical Engineering*, **2006**, 53, 2035-46	5	38
15	Camera Calibration from Fiberscopic Views with Accuracy Evaluation **2006**, 424-428		5

14	The need of annotation for reference image data sets. *International Congress Series*, **2005**, 1281, 453-458		2
13	Illumination Invariant Color Texture Analysis Based on Sum- and Difference-Histograms. *Lecture Notes in Computer Science*, **2005**, 17-24	0.9	6
12	High-speed imaging: applications and development. *Logopedics Phoniatrics Vocology*, **2003**, 28, 133-9	1.3	37
11	Establishing an International Reference Image Database for Research and Development in Medical Image Processing. *Informatik Aktuell*, **2003**, 363-367	0.3	1
10	Automatic Ischemic Stroke Segmentation Using Various Techniques **2003**, 498-503		1
9	Computerbasierte Bewegungsanalyse von Stimmlippenschwingungen. *Informatik Aktuell*, **2002**, 271-274	0.3	
8	Functional imaging of vocal fold vibration: digital multislice high-speed kymography. *Journal of Voice*, **2000**, 14, 422-42	1.9	100
7	Imaging of vocal fold vibration by digital multi-plane kymography. *Computerized Medical Imaging and Graphics*, **1999**, 23, 323-30	7.6	40
6	High-speed digital imaging of neoglottic vibration after total laryngectomy. *JAMA Otolaryngology*, **1999**, 125, 891-7		26
5	Phonation onset: vocal fold modeling and high-speed glottography. *Journal of the Acoustical Society of America*, **1998**, 104, 464-70	2.2	33
4	High-speed imaging and image processing in voice disorders **1996**,		3
3	Direct evaluation of high-speed recordings of vocal fold vibrations. *Folia Phoniatrica Et Logopaedica* , **1996**, 48, 163-70	1.5	65
2	Recording, processing, and analysis of digital high-speed sequences in glottography. *Machine Vision and Applications*, **1995**, 8, 399-404	2.8	63
1	Recording, processing, and analysis of digital high-speed sequences in glottography **1995**, 8, 399		8