

# Rainer Schubert

## List of Publications by Year in descending order

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Version: 2024-02-01

55  
papers

1,106  
citations

623574

14  
h-index

434063

31  
g-index

56  
all docs

56  
docs citations

56  
times ranked

1070  
citing authors

| #  | ARTICLE   | IF  | CITATIONS |
|----|---|-----|-----------|
| 1  | Tackling the class imbalance problem of deep learning-based head and neck organ segmentation. International Journal of Computer Assisted Radiology and Surgery, 2022, 17, 2103-2111.                          | 1.7 | 6         |
| 2  | Training of head and neck segmentation networks with shape prior on small datasets. International Journal of Computer Assisted Radiology and Surgery, 2020, 15, 1417-1425.                                    | 1.7 | 5         |
| 3  | Multi-organ segmentation of the head and neck area: an efficient hierarchical neural networks approach. International Journal of Computer Assisted Radiology and Surgery, 2019, 14, 745-754.                  | 1.7 | 42        |
| 4  | Evaluation of segmentation methods on head and neck <scp>CT</scp>: Autoâ€segmentation challenge 2015. Medical Physics, 2017, 44, 2020-2036.   | 1.6 | 198       |
| 5  | Model-based Vestibular Afferent Stimulation: Modular Workflow for Analyzing Stimulation Scenarios in Patient Specific and Statistical Vestibular Anatomy. Frontiers in Neuroscience, 2017, 11, 713.           | 1.4 | 12        |
| 6  | Automatic segmentation of head and neck CT images for radiotherapy treatment planning using multiple atlases, statistical appearance models, and geodesic active contours. Medical Physics, 2014, 41, 051910. | 1.6 | 109       |
| 7  | Automated Quality Inspection of Microfluidic Chips Using Morphologic Techniques. Lecture Notes in Computer Science, 2013, , 508-519.  | 1.0 | 5         |
| 8  | Femoral strength prediction using a 3D reconstruction method from Dual-energy X-ray Absorptiometry. , 2012, , .   |     | 1         |
| 9  | Hip fracture discrimination from dual-energy X-ray absorptiometry by statistical model registration. Bone, 2012, 51, 896-901.   | 1.4 | 29        |
| 10 | Hip fracture discrimination using 3D reconstructions from Dual-energy X-ray Absorptiometry. , 2011, , .   |     | 2         |
| 11 | Whole vertebral bone segmentation method with a statistical intensity-shape model based approach. , 2011, , .   |     | 3         |
| 12 | 3-D Graph Cut Segmentation with Riemannian Metrics to Avoid the Shrinking Problem. Lecture Notes in Computer Science, 2011, 14, 554-561.  | 1.0 | 6         |
| 13 | A Statistical Model of Shape and Bone Mineral Density Distribution of the Proximal Femur for Fracture Risk Assessment. Lecture Notes in Computer Science, 2011, 14, 393-400.                                  | 1.0 | 14        |
| 14 | Texture Analysis, Bone Mineral Density, and Cortical Thickness of the Proximal Femur. Journal of Computer Assisted Tomography, 2010, 34, 949-957.   | 0.5 | 16        |
| 15 | Analysis of the micro-migration of sliding hip screws by using point-based registration. International Journal of Computer Assisted Radiology and Surgery, 2010, 5, 455-460.                                  | 1.7 | 2         |
| 16 | 3D bone mineral density distribution and shape reconstruction of the proximal femur from a single simulated DXA image: an in vitro study. Proceedings of SPIE, 2010, , .                                      | 0.8 | 7         |
| 17 | Assessment of the individual fracture risk of the proximal femur by using statistical appearance models. Medical Physics, 2010, 37, 2560-2571.  | 1.6 | 16        |
| 18 | 3D reconstruction of both shape and Bone Mineral Density distribution of the femur from DXA images. , 2010, , .   |     | 11        |

| #  | ARTICLE   | IF  | CITATIONS |
|----|---|-----|-----------|
| 19 | Using a statistical appearance model to predict the fracture load of the proximal femur. Proceedings of SPIE, 2009, , .   | 0.8 | 6         |
| 20 | Trabecular Bone Analysis in CT and X-Ray Images of the Proximal Femur for the Assessment of Local Bone Quality. IEEE Transactions on Medical Imaging, 2009, 28, 1560-1575.            | 5.4 | 20        |
| 21 | Statistical model based analysis of bone mineral density of lumbar spine. International Journal of Computer Assisted Radiology and Surgery, 2009, 4, 239-243.                         | 1.7 | 1         |
| 22 | Development and testing of texture discriminators for the analysis of trabecular bone in proximal femur radiographs. Medical Physics, 2009, 36, 5089-5098.                            | 1.6 | 31        |
| 23 | Knowledge-based femur detection in conventional radiographs of the pelvis. Computers in Biology and Medicine, 2008, 38, 535-544.  | 3.9 | 12        |
| 24 | Proximal femur segmentation in conventional pelvic x ray. Medical Physics, 2008, 35, 2463-2472.   | 1.6 | 9         |
| 25 | 3D inters-subject cardiac registration using 4D information. Proceedings of SPIE, 2008, , .   | 0.8 | 1         |
| 26 | Comparison of Different Metrics for Appearance-Model-Based 2D/3D-registration with X-ray Images. Informatik Aktuell, 2008, , 122-126.   | 0.4 | 5         |
| 27 | Prediction of Biomechanical Parameters of the Proximal Femur Using Statistical Appearance Models and Support Vector Regression. Lecture Notes in Computer Science, 2008, 11, 568-575. | 1.0 | 7         |
| 28 | 4D Endocardial Segmentation Using Spatio-temporal Appearance Models and Level Sets. Informatik Aktuell, 2008, , 1-5.  | 0.4 | 0         |
| 29 | Level Set Segmentation of Lumbar Vertebrae Using Appearance Models. Informatik Aktuell, 2008, , 46-50.  | 0.4 | 0         |
| 30 | Assessment of femoral bone quality using co-occurrence matrices and adaptive regions of interest. , 2007, , .   |     | 4         |
| 31 | A framework in prolog for computing structural relationships. Data and Knowledge Engineering, 2007, 62, 308-326.  | 2.1 | 0         |
| 32 | 3D image segmentation using combined shape-intensity prior models. International Journal of Computer Assisted Radiology and Surgery, 2007, 1, 341-350.                                | 1.7 | 32        |
| 33 | Quantification of the migration and deformation of abdominal aortic aneurysm stent grafts. , 2006, , .  |     | 5         |
| 34 | A mathematical analysis of theories of parthood. Data and Knowledge Engineering, 2006, 59, 107-138.   | 2.1 | 15        |
| 35 | Shape Discrimination of Healthy and Diseased Cardiac Ventricles using Medial Representation. International Journal of Computer Assisted Radiology and Surgery, 2006, 1, 33-38.        | 1.7 | 4         |
| 36 | 3D image segmentation by using statistical deformation models and level sets. International Journal of Computer Assisted Radiology and Surgery, 2006, 1, 123-135.                     | 1.7 | 10        |

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|----|---|------|-----------|
| 37 | Femur Detection in Radiographs Using Template-Based Registration. , 2006, , 111-115.  |      | 4         |
| 38 | A software framework for preprocessing and level set segmentation of medical image data. , 2005, , .  |      | 8         |
| 39 | Automatic 4D endocardium segmentation using hierarchical registration and model guided level set segmentation. International Congress Series, 2005, 1281, 212-217.                          | 0.2  | 1         |
| 40 | Spatio-temporal changes and migration of stent grafts after endovascular aortic aneurysm repair. International Congress Series, 2005, 1281, 393-397.  | 0.2  | 6         |
| 41 | Modeling of the geometric variation and analysis of the right atrium and right ventricle motion of the human heart using PCA. International Congress Series, 2004, 1268, 1108-1113.         | 0.2  | 4         |
| 42 | Analyzing inter-individual shape variations of the middle ear cavity by developing a common shape model based on medial representation. International Congress Series, 2004, 1268, 243-248. | 0.2  | 0         |
| 43 | A high-resolution model of the inner organs based on the visible human data set. Journal of Visualization, 2002, 5, 212-212.  | 1.1  | 1         |
| 44 | The Muscular Compliance of the Auditory Tube: A Model-Based Survey. Laryngoscope, 2002, 112, 1791-1795.   | 1.1  | 34        |
| 45 | A virtual reality training system for pediatric sonography. International Congress Series, 2001, 1230, 483-487.   | 0.2  | 8         |
| 46 | Creating a high-resolution spatial/symbolic model of the inner organs based on the Visible Human. Medical Image Analysis, 2001, 5, 221-228.   | 7.0  | 109       |
| 47 | Exploring the Visible Human using the VOXEL-MAN framework. Computerized Medical Imaging and Graphics, 2000, 24, 127-132.  | 3.5  | 51        |
| 48 | A Computerized Three-Dimensional Atlas of the Human Skull and Brain. , 1996, 14, 185-197.   |      | 48        |
| 49 | A new representation of knowledge concerning human anatomy and function. Nature Medicine, 1995, 1, 506-511.   | 15.2 | 115       |
| 50 | A New Method for Practicing Exploration, Dissection, and Simulation with a Complete Computerized Three-Dimensional Model of the Brain and Skull. Cells Tissues Organs, 1994, 150, 69-74.    | 1.3  | 14        |
| 51 | <title>Interpretation of tomographic images using automatic atlas lookup</title>. , 1994, , .   |      | 12        |
| 52 | â€œIntelligent volumesâ€: a new concept for representing spatial knowledge. Pattern Recognition Letters, 1994, 15, 519-526.  | 2.6  | 1         |
| 53 | <title>Symbolic modeling of human anatomy for visualization and simulation</title>. , 1994, 2359, 412.  |      | 29        |
| 54 | Shape-Based 3D Level Set Segmentation of the Proximal Femur in CT-Data. , 0, , 91-95.   |      | 0         |

| #  | ARTICLE   | IF | CITATIONS |
|----|---|----|-----------|
| 55 | A Robust Semi-automatic Procedure for Motion Quantification of Aortic Stent Grafts Using Point Set Registration. , 0 , 216-220. |    | 1         |