Jan Modersitzki

List of Publications by Year
in descending order

60 papers	2,453 citations	361045 20 h-index	264894 42 g-index
64 all docs	64 docs citations	64 times ranked	1626 citing authors

#	Article	IF	Citations
1	A discretize–optimize approach for LDDMM registration. , 2020, , 479-532.		3
2	An Image Registration Framework for Discontinuous Mappings Along Cracks. Lecture Notes in Computer Science, 2020, , 163-173.	1.0	1
3	Variational Registration of Multiple Images with the SVD Based $$\mathrm{S}q\mathrm{N}$$ Distance Measure. Lecture Notes in Computer Science, 2019, , 251-262.	1.0	3
4	Image and surface registration. Handbook of Numerical Analysis, 2019, 20, 579-611.	0.9	6
5	Simultaneous Registration of Image Sequences – a novel singular value based images similarity measure. Proceedings in Applied Mathematics and Mechanics, 2018, 18, e201800370.	0.2	4
6	Detection and localization of spatially correlated point landmarks in medical images using an automatically learned conditional random field. Computer Vision and Image Understanding, 2018, 176-177, 45-53.	3.0	7
7	Estimating the discretization dependent accuracy of perfusion in coupled capillary flow measurements. PLoS ONE, 2018, 13, e0200521.	1.1	9
8	A Novel Similarity Measure for Image Sequences. Lecture Notes in Computer Science, 2018, , 47-56.	1.0	6
9	A matrix-free approach to efficient affine-linear image registration on CPU and GPU. Journal of Real-Time Image Processing, 2017, 13, 205-225.	2.2	5
10	Estimation of Large Motion in Lung CT by Integrating Regularized Keypoint Correspondences into Dense Deformable Registration. IEEE Transactions on Medical Imaging, 2017, 36, 1746-1757.	5.4	79
11	A stabilized multigrid solver for hyperelastic image registration. Numerical Linear Algebra With Applications, 2017, 24, e2095.	0.9	2
12	A robust algorithm for optic disc segmentation and fovea detection in retinal fundus images. Current Directions in Biomedical Engineering, 2017, 3, 533-537.	0.2	6
13	Dimensionality reduction of medical image descriptors for multimodal image registration. Current Directions in Biomedical Engineering, 2015, 1, 201-205.	0.2	1
14	Non-linear Image Registration. , 2015, , 2005-2051.		6
15	Nonlinear Image Registration. , 2014, , 1-42.		0
16	Mathematical methods in biomedical imaging. GAMM Mitteilungen, 2014, 37, 154-183.	2.7	1
17	Segmentation-Driven Image Registration-Application to 4D DCE-MRI Recordings of the Moving Kidneys. IEEE Transactions on Image Processing, 2014, 23, 2392-2404.	6.0	27
18	Registration of Noisy Images via Maximum A-Posteriori Estimation. Lecture Notes in Computer Science, 2014, , 231-240.	1.0	2

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19	A variational model for SPECT reconstruction with a nonlinearly transformed attenuation prototype. International Journal of Computer Mathematics, 2013, 90, 82-91.	1.0	2
20	A Hyperelastic Regularization Energy for Image Registration. SIAM Journal of Scientific Computing, 2013, 35, B132-B148.	1.3	103
21	Atlas-based segmentation using passive contours. , 2012, , .		0
22	Pipeline for motion correction in dual gated PET. , 2012, , .		2
23	Registration of Dynamic Contrast Enhanced MRI with Local Rigidity Constraint. Lecture Notes in Computer Science, 2012, , 190-198.	1.0	5
24	Numerical optimization for constrained image registration. Numerical Linear Algebra With Applications, 2010, 17, 343-359.	0.9	26
25	A variational setting for volume constrained image registration. Inverse Problems and Imaging, 2010, 4, 505-522.	0.6	10
26	3D ultrasound-CT registration of the liver using combined landmark-intensity information. International Journal of Computer Assisted Radiology and Surgery, 2009, 4, 79-88.	1.7	107
27	A computational framework for image-based constrained registration. Linear Algebra and Its Applications, 2009, 431, 459-470.	0.4	20
28	Combined Reconstruction and Motion Correction in SPECT Imaging. IEEE Transactions on Nuclear Science, 2009, 56, 73-80.	1.2	28
29	A Scale-Space Approach to Landmark Constrained Image Registration. Lecture Notes in Computer Science, 2009, , 612-623.	1.0	9
30	FLIRT with Rigidityâ€"Image Registration with a Local Non-rigidity Penalty. International Journal of Computer Vision, 2008, 76, 153-163.	10.9	41
31	Image registration for CT and intra-operative ultrasound data of the liver. , 2008, , .		11
32	Adaptive Mesh Refinement for Nonparametric Image Registration. SIAM Journal of Scientific Computing, 2008, 30, 3012-3027.	1.3	22
33	Ill-posed medicineâ€"an introduction to image registration. Inverse Problems, 2008, 24, 034008.	1.0	141
34	Registrierung im Fokus. Informatik Aktuell, 2008, , 138-142.	0.4	3
35	An Octree Method for Parametric Image Registration. SIAM Journal of Scientific Computing, 2007, 29, 2008-2023.	1.3	11
36	Intensity Gradient Based Registration and Fusion of Multi-modal Images. Methods of Information in Medicine, 2007, 46, 292-299.	0.7	105

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37	Image Registration with Guaranteed Displacement Regularity. International Journal of Computer Vision, 2007, 71, 361-372.	10.9	67
38	Image Registration of Sectioned Brains. International Journal of Computer Vision, 2007, 73, 5-39.	10.9	64
39	A Fast and Flexible Image Registration Toolbox. , 2007, , 106-110.		6
40	Image Registration with Local Rigidity Constraints. , 2007, , 444-448.		3
41	A Multilevel Method for Image Registration. SIAM Journal of Scientific Computing, 2006, 27, 1594-1607.	1.3	96
42	Combining Homogenization and Registration. Lecture Notes in Computer Science, 2006, , 257-263.	1.0	17
43	Registration of Histological Serial Sectionings. Mathematics in Industry, 2006, , 63-80.	0.1	2
44	Beyond Mutual Information: A Simple and Robust Alternative. , 2005, , 350-354.		29
45	Videomicroscopy, image processing, and analysis of whole histologic sections of the human brain. Microscopy Research and Technique, 2005, 66, 203-218.	1.2	5
46	A unified approach to fast image registration and a new curvature based registration technique. Linear Algebra and Its Applications, 2004, 380, 107-124.	0.4	126
47	Large scale problems arising from image registration. GAMM Mitteilungen, 2004, 27, 104-120.	2.7	4
48	Numerical methods for volume preserving image registration. Inverse Problems, 2004, 20, 1621-1638.	1.0	132
49	Volume Preserving Image Registration. Lecture Notes in Computer Science, 2004, , 591-598.	1.0	4
50	Vollständige Rekonstruktion eines Rattenhirns aus hochaufgelösten Bildern von histologischen Serienschnitten. Informatik Aktuell, 2004, , 204-208.	0.4	3
51	Curvature Based Image Registration. Journal of Mathematical Imaging and Vision, 2003, 18, 81-85.	0.8	226
52	Combining landmark and intensity driven registrations. Proceedings in Applied Mathematics and Mechanics, 2003, 3, 32-35.	0.2	26
53	Combination of automatic non-rigid and landmark based registration: the best of both worlds. , 2003, 5032, 1037.		16
54	FLIRT: A Flexible Image Registration Toolbox. Lecture Notes in Computer Science, 2003, , 261-270.	1.0	32

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55	Curvature Based Registration with Applications to MR-Mammography. Lecture Notes in Computer Science, 2002, , 202-206.	1.0	9
56	Fast Curvature Based Registration of MR-mammography Images. Informatik Aktuell, 2002, , 139-142.	0.4	4
57	A Super Fast Registration Algorithm. Informatik Aktuell, 2001, , 169-173.	0.4	5
58	Effiziente, nicht-lineare Registrierung eines histologischen Serienschnittes durch das menschliche Gehirn. Informatik Aktuell, 2001, , 179-183.	0.4	3
59	Fast inversion of matrices arising in image processing. Numerical Algorithms, 1999, 22, 1-11.	1.1	87
60	An algorithm for complex linear approximation based on semi-infinite programming. Numerical Algorithms, 1993, 5, 287-297.	1.1	11