

Jan Modersitzki

List of Publications by Year in descending order

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Version: 2024-02-01

60
papers

2,453
citations

361296

20
h-index

265120

42
g-index

64
all docs

64
docs citations

64
times ranked

1626
citing authors

#	ARTICLE	IF	CITATIONS
1	Curvature Based Image Registration. Journal of Mathematical Imaging and Vision, 2003, 18, 81-85.	0.8	226
2	Ill-posed medicine – an introduction to image registration. Inverse Problems, 2008, 24, 034008.	1.0	141
3	Numerical methods for volume preserving image registration. Inverse Problems, 2004, 20, 1621-1638.	1.0	132
4	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
5	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
6	Intensity Gradient Based Registration and Fusion of Multi-modal Images. Methods of Information in Medicine, 2007, 46, 292-299.	0.7	105
7	A Hyperelastic Regularization Energy for Image Registration. SIAM Journal of Scientific Computing, 2013, 35, B132-B148.	1.3	103
8	A Multilevel Method for Image Registration. SIAM Journal of Scientific Computing, 2006, 27, 1594-1607.	1.3	96
9	Fast inversion of matrices arising in image processing. Numerical Algorithms, 1999, 22, 1-11.	1.1	87
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	Image Registration with Guaranteed Displacement Regularity. International Journal of Computer Vision, 2007, 71, 361-372.	10.9	67
12	Image Registration of Sectioned Brains. International Journal of Computer Vision, 2007, 73, 5-39.	10.9	64
13	FLIRT with Rigidity – Image Registration with a Local Non-rigidity Penalty. International Journal of Computer Vision, 2008, 76, 153-163.	10.9	41
14	FLIRT: A Flexible Image Registration Toolbox. Lecture Notes in Computer Science, 2003, , 261-270.	1.0	32
15	Beyond Mutual Information: A Simple and Robust Alternative. , 2005, , 350-354.		29
16	Combined Reconstruction and Motion Correction in SPECT Imaging. IEEE Transactions on Nuclear Science, 2009, 56, 73-80.	1.2	28
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	Combining landmark and intensity driven registrations. Proceedings in Applied Mathematics and Mechanics, 2003, 3, 32-35.	0.2	26

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19	Numerical optimization for constrained image registration. Numerical Linear Algebra With Applications, 2010, 17, 343-359.	0.9	26
20	Adaptive Mesh Refinement for Nonparametric Image Registration. SIAM Journal of Scientific Computing, 2008, 30, 3012-3027.	1.3	22
21	A computational framework for image-based constrained registration. Linear Algebra and Its Applications, 2009, 431, 459-470.	0.4	20
22	Combining Homogenization and Registration. Lecture Notes in Computer Science, 2006, , 257-263.	1.0	17
23	Combination of automatic non-rigid and landmark based registration: the best of both worlds. , 2003, 5032, 1037.		16
24	An algorithm for complex linear approximation based on semi-infinite programming. Numerical Algorithms, 1993, 5, 287-297.	1.1	11
25	An Octree Method for Parametric Image Registration. SIAM Journal of Scientific Computing, 2007, 29, 2008-2023.	1.3	11
26	Image registration for CT and intra-operative ultrasound data of the liver. , 2008, , .		11
27	A variational setting for volume constrained image registration. Inverse Problems and Imaging, 2010, 4, 505-522.	0.6	10
28	Estimating the discretization dependent accuracy of perfusion in coupled capillary flow measurements. PLoS ONE, 2018, 13, e0200521.	1.1	9
29	Curvature Based Registration with Applications to MR-Mammography. Lecture Notes in Computer Science, 2002, , 202-206.	1.0	9
30	A Scale-Space Approach to Landmark Constrained Image Registration. Lecture Notes in Computer Science, 2009, , 612-623.	1.0	9
31	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
32	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
33	A Novel Similarity Measure for Image Sequences. Lecture Notes in Computer Science, 2018, , 47-56.	1.0	6
34	Non-linear Image Registration. , 2015, , 2005-2051.		6
35	A Fast and Flexible Image Registration Toolbox. , 2007, , 106-110.		6
36	Image and surface registration. Handbook of Numerical Analysis, 2019, 20, 579-611.	0.9	6

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37	Videomicroscopy, image processing, and analysis of whole histologic sections of the human brain. <i>Microscopy Research and Technique</i> , 2005, 66, 203-218.	1.2	5
38	A matrix-free approach to efficient affine-linear image registration on CPU and GPU. <i>Journal of Real-Time Image Processing</i> , 2017, 13, 205-225.	2.2	5
39	Registration of Dynamic Contrast Enhanced MRI with Local Rigidity Constraint. <i>Lecture Notes in Computer Science</i> , 2012, , 190-198.	1.0	5
40	A Super Fast Registration Algorithm. <i>Informatik Aktuell</i> , 2001, , 169-173.	0.4	5
41	Large scale problems arising from image registration. <i>GAMM Mitteilungen</i> , 2004, 27, 104-120.	2.7	4
42	Simultaneous Registration of Image Sequences – a novel singular value based images similarity measure. <i>Proceedings in Applied Mathematics and Mechanics</i> , 2018, 18, e201800370.	0.2	4
43	Fast Curvature Based Registration of MR-mammography Images. <i>Informatik Aktuell</i> , 2002, , 139-142.	0.4	4
44	Volume Preserving Image Registration. <i>Lecture Notes in Computer Science</i> , 2004, , 591-598.	1.0	4
45	Variational Registration of Multiple Images with the SVD Based \mathcal{S} - \mathcal{N} Distance Measure. <i>Lecture Notes in Computer Science</i> , 2019, , 251-262.	1.0	3
46	A discretize–optimize approach for LDDMM registration. , 2020, , 479-532.		3
47	Image Registration with Local Rigidity Constraints. , 2007, , 444-448.		3
48	Registrierung im Fokus. <i>Informatik Aktuell</i> , 2008, , 138-142.	0.4	3
49	Effiziente, nicht-lineare Registrierung eines histologischen Serienschnittes durch das menschliche Gehirn. <i>Informatik Aktuell</i> , 2001, , 179-183.	0.4	3
50	Vollständige Rekonstruktion eines Rattenhirns aus hochauflösenden Bildern von histologischen Serienschnitten. <i>Informatik Aktuell</i> , 2004, , 204-208.	0.4	3
51	Pipeline for motion correction in dual gated PET. , 2012, , .		2
52	A variational model for SPECT reconstruction with a nonlinearly transformed attenuation prototype. <i>International Journal of Computer Mathematics</i> , 2013, 90, 82-91.	1.0	2
53	A stabilized multigrid solver for hyperelastic image registration. <i>Numerical Linear Algebra With Applications</i> , 2017, 24, e2095.	0.9	2
54	Registration of Noisy Images via Maximum A-Posteriori Estimation. <i>Lecture Notes in Computer Science</i> , 2014, , 231-240.	1.0	2

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55	Registration of Histological Serial Sectionings. Mathematics in Industry, 2006, , 63-80.	0.1	2
56	Mathematical methods in biomedical imaging. GAMM Mitteilungen, 2014, 37, 154-183.	2.7	1
57	Dimensionality reduction of medical image descriptors for multimodal image registration. Current Directions in Biomedical Engineering, 2015, 1, 201-205.	0.2	1
58	An Image Registration Framework for Discontinuous Mappings Along Cracks. Lecture Notes in Computer Science, 2020, , 163-173.	1.0	1
59	Atlas-based segmentation using passive contours. , 2012, , .		0
60	Nonlinear Image Registration. , 2014, , 1-42.		0