

Guido Gerig

List of Publications by Year in descending order

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237
papers

24,052
citations

16437

64
h-index

8618

146
g-index

244
all docs

244
docs citations

244
times ranked

25815
citing authors

#	ARTICLE	IF	CITATIONS
1	User-guided 3D active contour segmentation of anatomical structures: Significantly improved efficiency and reliability. <i>NeuroImage</i> , 2006, 31, 1116-1128.	2.1	6,669
2	Three-dimensional multi-scale line filter for segmentation and visualization of curvilinear structures in medical images. <i>Medical Image Analysis</i> , 1998, 2, 143-168.	7.0	999
3	A Structural MRI Study of Human Brain Development from Birth to 2 Years. <i>Journal of Neuroscience</i> , 2008, 28, 12176-12182.	1.7	926
4	Early brain development in infants at high risk for autism spectrum disorder. <i>Nature</i> , 2017, 542, 348-351.	13.7	808
5	Unbiased diffeomorphic atlas construction for computational anatomy. <i>NeuroImage</i> , 2004, 23, S151-S160.	2.1	766
6	Magnetic Resonance Imaging and Head Circumference Study of Brain Size in Autism. <i>Archives of General Psychiatry</i> , 2005, 62, 1366.	13.8	577
7	Differences in White Matter Fiber Tract Development Present From 6 to 24 Months in Infants With Autism. <i>American Journal of Psychiatry</i> , 2012, 169, 589-600.	4.0	555
8	Parametrization of Closed Surfaces for 3-D Shape Description. <i>Computer Vision and Image Understanding</i> , 1995, 61, 154-170.	3.0	545
9	A brain tumor segmentation framework based on outlier detection*1. <i>Medical Image Analysis</i> , 2004, 8, 275-283.	7.0	498
10	Regional Gray Matter Growth, Sexual Dimorphism, and Cerebral Asymmetry in the Neonatal Brain. <i>Journal of Neuroscience</i> , 2007, 27, 1255-1260.	1.7	389
11	Early Brain Overgrowth in Autism Associated With an Increase in Cortical Surface Area Before Age 2 Years. <i>Archives of General Psychiatry</i> , 2011, 68, 467.	13.8	384
12	Measuring tortuosity of the intracerebral vasculature from MRA images. <i>IEEE Transactions on Medical Imaging</i> , 2003, 22, 1163-1171.	5.4	339
13	Automatic segmentation of MR images of the developing newborn brain. <i>Medical Image Analysis</i> , 2005, 9, 457-466.	7.0	306
14	Functional neuroimaging of high-risk 6-month-old infants predicts a diagnosis of autism at 24 months of age. <i>Science Translational Medicine</i> , 2017, 9, .	5.8	264
15	ITK-SNAP: An interactive tool for semi-automatic segmentation of multi-modality biomedical images. , 2016, 2016, 3342-3345.		250
16	Automatic brain tumor segmentation by subject specific modification of atlas priors1. <i>Academic Radiology</i> , 2003, 10, 1341-1348.	1.3	246
17	Vessel Tortuosity and Brain Tumor Malignancy. <i>Academic Radiology</i> , 2005, 12, 1232-1240.	1.3	239
18	White Matter Microstructure and Atypical Visual Orienting in 7-Month-Olds at Risk for Autism. <i>American Journal of Psychiatry</i> , 2013, 170, 899-908.	4.0	228

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19	Routine quantitative analysis of brain and cerebrospinal fluid spaces with MR imaging. <i>Journal of Magnetic Resonance Imaging</i> , 1992, 2, 619-629.	1.9	224
20	Boundary and medial shape analysis of the hippocampus in schizophrenia. <i>Medical Image Analysis</i> , 2004, 8, 197-203.	7.0	224
21	DTIPrep: quality control of diffusion-weighted images. <i>Frontiers in Neuroinformatics</i> , 2014, 8, 4.	1.3	221
22	Segmentation of 2-D and 3-D objects from MRI volume data using constrained elastic deformations of flexible Fourier contour and surface models. <i>Medical Image Analysis</i> , 1996, 1, 19-34.	7.0	212
23	Longitudinal Study of Amygdala Volume and Joint Attention in 2- to 4-Year-Old Children With Autism. <i>Archives of General Psychiatry</i> , 2009, 66, 509.	13.8	199
24	Morphometry of anatomical shape complexes with dense deformations and sparse parameters. <i>NeuroImage</i> , 2014, 101, 35-49.	2.1	195
25	Valmet: A New Validation Tool for Assessing and Improving 3D Object Segmentation. <i>Lecture Notes in Computer Science</i> , 2001, , 516-523.	1.0	180
26	Group analysis of DTI fiber tract statistics with application to neurodevelopment. <i>NeuroImage</i> , 2009, 45, S133-S142.	2.1	180
27	Quantitative tract-based white matter development from birth to age 2 years. <i>NeuroImage</i> , 2012, 61, 542-557.	2.1	179
28	Increased Extra-axial Cerebrospinal Fluid in High-Risk Infants Who Later Develop Autism. <i>Biological Psychiatry</i> , 2017, 82, 186-193.	0.7	173
29	Altered corpus callosum morphology associated with autism over the first 2 years of life. <i>Brain</i> , 2015, 138, 2046-2058.	3.7	169
30	Cortical Gray and White Brain Tissue Volume in Adolescents and Adults with Autism. <i>Biological Psychiatry</i> , 2006, 59, 1-6.	0.7	155
31	Framework for the Statistical Shape Analysis of Brain Structures using SPHARM-PDM. <i>The Insight Journal</i> , 2006, , 242-250.	0.2	154
32	Diffusion Tensor Imaging. <i>Journal of the American Academy of Child and Adolescent Psychiatry</i> , 2007, 46, 213-223.	0.3	150
33	Fiber tract-oriented statistics for quantitative diffusion tensor MRI analysis. <i>Medical Image Analysis</i> , 2006, 10, 786-798.	7.0	149
34	The DTI Challenge: Toward Standardized Evaluation of Diffusion Tensor Imaging Tractography for Neurosurgery. <i>Journal of Neuroimaging</i> , 2015, 25, 875-882.	1.0	147
35	Morphometric analysis of lateral ventricles in schizophrenia and healthy controls regarding genetic and disease-specific factors. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2005, 102, 4872-4877.	3.3	146
36	Duration of illness and treatment effects on hippocampal volume in male patients with schizophrenia. <i>British Journal of Psychiatry</i> , 2005, 186, 26-31.	1.7	127

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37	Simulation of brain tumors in MR images for evaluation of segmentation efficacy. <i>Medical Image Analysis</i> , 2009, 13, 297-311.	7.0	123
38	Quality control of diffusion weighted images. <i>Proceedings of SPIE</i> , 2010, 7628, .	0.8	123
39	Amygdalaâ€™s hippocampal shape differences in schizophrenia: the application of 3D shape models to volumetric MR data. <i>Psychiatry Research - Neuroimaging</i> , 2002, 115, 15-35.	0.9	121
40	Genetic and environmental contributions to neonatal brain structure: A twin study. <i>Human Brain Mapping</i> , 2010, 31, 1174-1182.	1.9	115
41	Neuroimaging of structural pathology and connectomics in traumatic brain injury: Toward personalized outcome prediction. <i>NeuroImage: Clinical</i> , 2012, 1, 1-17.	1.4	111
42	Abnormal brain synchrony in Down Syndrome. <i>NeuroImage: Clinical</i> , 2013, 2, 703-715.	1.4	111
43	Neural circuitry at age 6 months associated with later repetitive behavior and sensory responsiveness in autism. <i>Molecular Autism</i> , 2017, 8, 8.	2.6	111
44	DTI registration in atlas based fiber analysis of infantile Krabbe disease. <i>NeuroImage</i> , 2011, 55, 1577-1586.	2.1	110
45	Framework for the Statistical Shape Analysis of Brain Structures using SPHARM-PDM. <i>The Insight Journal</i> , 2006, , .	0.2	107
46	Toward a Comprehensive Framework for the Spatiotemporal Statistical Analysis of Longitudinal Shape Data. <i>International Journal of Computer Vision</i> , 2013, 103, 22-59.	10.9	106
47	Joint Attention and Brain Functional Connectivity in Infants and Toddlers. <i>Cerebral Cortex</i> , 2017, 27, 1709-1720.	1.6	103
48	Multi-atlas segmentation of subcortical brain structures via the AutoSeg software pipeline. <i>Frontiers in Neuroinformatics</i> , 2014, 8, 7.	1.3	98
49	User-Guided Segmentation of Multi-modality Medical Imaging Datasets with ITK-SNAP. <i>Neuroinformatics</i> , 2019, 17, 83-102.	1.5	97
50	Temporal lobe sulco-gyral pattern anomalies in schizophrenia: an in vivo MR three-dimensional surface rendering study. <i>Neuroscience Letters</i> , 1994, 182, 7-12.	1.0	93
51	Teasing apart the heterogeneity of autism: Same behavior, different brains in toddlers with fragile X syndrome and autism. <i>Journal of Neurodevelopmental Disorders</i> , 2009, 1, 81-90.	1.5	93
52	The Emergence of Network Inefficiencies in Infants With Autism Spectrum Disorder. <i>Biological Psychiatry</i> , 2017, 82, 176-185.	0.7	93
53	Multi-modal image set registration and atlas formation. <i>Medical Image Analysis</i> , 2006, 10, 440-451.	7.0	91
54	Shape versus Size: Improved Understanding of the Morphology of Brain Structures. <i>Lecture Notes in Computer Science</i> , 2001, , 24-32.	1.0	90

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55	Associations between white matter microstructure and infants' working memory. <i>NeuroImage</i> , 2013, 64, 156-166.	2.1	90
56	Prenatal and Neonatal Brain Structure and White Matter Maturation in Children at High Risk for Schizophrenia. <i>American Journal of Psychiatry</i> , 2010, 167, 1083-1091.	4.0	88
57	Unsupervised tissue type segmentation of 3D dual-echo MR head data. <i>Image and Vision Computing</i> , 1992, 10, 349-360.	2.7	83
58	Brain Volume Findings in 6-Month-Old Infants at High Familial Risk for Autism. <i>American Journal of Psychiatry</i> , 2012, 169, 601-608.	4.0	83
59	Regional characterization of longitudinal DT-MRI to study white matter maturation of the early developing brain. <i>NeuroImage</i> , 2013, 68, 236-247.	2.1	82
60	Spatiotemporal Atlas Estimation for Developmental Delay Detection in Longitudinal Datasets. <i>Lecture Notes in Computer Science</i> , 2009, 12, 297-304.	1.0	81
61	Analysis of brain white matter via fiber tract modeling. , 2004, 2004, 4421-4.		80
62	Comparisons of Regional White Matter Diffusion in Healthy Neonates and Adults Performed with a 3.0-T Head-only MR Imaging Unit. <i>Radiology</i> , 2003, 229, 673-681.	3.6	79
63	Quantitative MRI measures of orbitofrontal cortex in patients with chronic schizophrenia or schizoaffective disorder. <i>Psychiatry Research - Neuroimaging</i> , 2005, 140, 133-145.	0.9	79
64	Frontolimbic neural circuitry at 6Âmonths predicts individual differences in joint attention at 9Âmonths. <i>Developmental Science</i> , 2013, 16, 186-197.	1.3	77
65	Prenatal Drug Exposure Affects Neonatal Brain Functional Connectivity. <i>Journal of Neuroscience</i> , 2015, 35, 5860-5869.	1.7	72
66	Structural integrity of the uncinate fasciculus in geriatric depression: Relationship with age of onset. <i>Neuropsychiatric Disease and Treatment</i> , 2007, 3, 669-74.	1.0	71
67	Prenatal Mild Ventriculomegaly Predicts Abnormal Development of the Neonatal Brain. <i>Biological Psychiatry</i> , 2008, 64, 1069-1076.	0.7	69
68	FADTTS: Functional analysis of diffusion tensor tract statistics. <i>NeuroImage</i> , 2011, 56, 1412-1425.	2.1	66
69	Walking, Gross Motor Development, and Brain Functional Connectivity in Infants and Toddlers. <i>Cerebral Cortex</i> , 2018, 28, 750-763.	1.6	65
70	Automatic and Robust Computation of 3D Medial Models Incorporating Object Variability. <i>International Journal of Computer Vision</i> , 2003, 55, 107-122.	10.9	63
71	Probabilistic white matter fiber tracking using particle filtering and von Misesâ€Fisher sampling. <i>Medical Image Analysis</i> , 2009, 13, 5-18.	7.0	60
72	Automatic Brain and Tumor Segmentation. <i>Lecture Notes in Computer Science</i> , 2002, , 372-379.	1.0	59

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73	Infant cerebral ventricle volume: a comparison of 3-D ultrasound and magnetic resonance imaging. <i>Ultrasound in Medicine and Biology</i> , 2001, 27, 1143-1146.	0.7	58
74	Exploring the discrimination power of the time domain for segmentation and characterization of active lesions in serial MR data. <i>Medical Image Analysis</i> , 2000, 4, 31-42.	7.0	55
75	Comparison of Acute and Chronic Traumatic Brain Injury Using Semi-Automatic Multimodal Segmentation of MR Volumes. <i>Journal of Neurotrauma</i> , 2011, 28, 2287-2306.	1.7	55
76	UNC-Utah NA-MIC framework for DTI fiber tract analysis. <i>Frontiers in Neuroinformatics</i> , 2014, 7, 51.	1.3	54
77	3 Tesla magnetic resonance imaging of the brain in newborns. <i>Psychiatry Research - Neuroimaging</i> , 2004, 132, 81-85.	0.9	53
78	Patient-Tailored Connectomics Visualization for the Assessment of White Matter Atrophy in Traumatic Brain Injury. <i>Frontiers in Neurology</i> , 2012, 3, 10.	1.1	53
79	Restricted and Repetitive Behavior and Brain Functional Connectivity in Infants at Risk for Developing Autism Spectrum Disorder. <i>Biological Psychiatry: Cognitive Neuroscience and Neuroimaging</i> , 2019, 4, 50-61.	1.1	53
80	Assessment of mandibular growth and response to orthopedic treatment with 3-dimensional magnetic resonance images. <i>American Journal of Orthodontics and Dentofacial Orthopedics</i> , 2005, 128, 16-26.	0.8	51
81	Accurate age classification of 6 and 12 month-old infants based on resting-state functional connectivity magnetic resonance imaging data. <i>Developmental Cognitive Neuroscience</i> , 2015, 12, 123-133.	1.9	51
82	Resting-state fMRI in sleeping infants more closely resembles adult sleep than adult wakefulness. <i>PLoS ONE</i> , 2017, 12, e0188122.	1.1	51
83	Multi-Object Analysis of Volume, Pose, and Shape Using Statistical Discrimination. <i>IEEE Transactions on Pattern Analysis and Machine Intelligence</i> , 2010, 32, 652-661.	9.7	49
84	Prenatal cocaine effects on brain structure in early infancy. <i>NeuroImage</i> , 2014, 101, 114-123.	2.1	49
85	Rapid Radial T ₁ and T ₂ Mapping of the Hip Articular Cartilage With Magnetic Resonance Fingerprinting. <i>Journal of Magnetic Resonance Imaging</i> , 2019, 50, 810-815.	1.9	46
86	Practical consideration for 3T imaging. <i>Magnetic Resonance Imaging Clinics of North America</i> , 2003, 11, 615-639.	0.6	44
87	CENTS: Cortical enhanced neonatal tissue segmentation. <i>Human Brain Mapping</i> , 2011, 32, 382-396.	1.9	40
88	Abnormal Vessel Tortuosity as a Marker of Treatment Response of Malignant Gliomas: Preliminary Report. <i>Technology in Cancer Research and Treatment</i> , 2004, 3, 577-584.	0.8	39
89	Comparison of relative mandibular growth vectors with high-resolution 3-dimensional imaging. <i>American Journal of Orthodontics and Dentofacial Orthopedics</i> , 2005, 128, 27-34.	0.8	39
90	Aggression and Quantitative MRI Measures of Caudate in Patients With Chronic Schizophrenia or Schizoaffective Disorder. <i>Journal of Neuropsychiatry and Clinical Neurosciences</i> , 2006, 18, 509-515.	0.9	38

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91	Prenatal isolated mild ventriculomegaly is associated with persistent ventricle enlargement at ages 1 and 2. Early Human Development, 2012, 88, 691-698.	0.8	38
92	Structural and radiometric asymmetry in brain images. Medical Image Analysis, 2003, 7, 155-170.	7.0	37
93	3D Graph Description of the Intracerebral Vasculature from Segmented MRA and Tests of Accuracy by Comparison with X-ray Angiograms. Lecture Notes in Computer Science, 1999, , 308-321.	1.0	36
94	Synthetic Ground Truth for Validation of Brain Tumor MRI Segmentation. Lecture Notes in Computer Science, 2005, 8, 26-33.	1.0	36
95	Subcortical structure segmentation using probabilistic atlas priors. , 2007, , .		36
96	Selenium development and early spoken language in human infants. Developmental Science, 2017, 20, e12360.	1.3	36
97	Improved Correspondence for DTI Population Studies Via Unbiased Atlas Building. Lecture Notes in Computer Science, 2006, 9, 260-267.	1.0	36
98	Development of White Matter Circuitry in Infants With Fragile X Syndrome. JAMA Psychiatry, 2018, 75, 505.	6.0	35
99	Fully convolutional structured LSTM networks for joint 4D medical image segmentation. , 2018, , .		34
100	Multisite validation of image analysis methods: assessing intra- and intersite variability. , 2002, 4684, 278.		33
101	Development of cortical shape in the human brain from 6 to 24months of age via a novel measure of shape complexity. NeuroImage, 2016, 135, 163-176.	2.1	33
102	Computer-assisted Visualization of Arteriovenous Malformations on the Home Personal Computer. Neurosurgery, 2001, 48, 576-583.	0.6	32
103	Semiautomated ROI Analysis in Dynamic MR Studies. Part I. Journal of Computer Assisted Tomography, 1991, 15, 725-732.	0.5	30
104	Estimation of Smooth Growth Trajectories with Controlled Acceleration from Time Series Shape Data. Lecture Notes in Computer Science, 2011, 14, 401-408.	1.0	30
105	Image analysis and computer vision in medicine. Computerized Medical Imaging and Graphics, 1994, 18, 85-96.	3.5	29
106	Robust Estimation for Brain Tumor Segmentation. Lecture Notes in Computer Science, 2003, , 530-537.	1.0	29
107	Adaptive prior probability and spatial temporal intensity change estimation for segmentation of the one-year-old human brain. Journal of Neuroscience Methods, 2013, 212, 43-55.	1.3	29
108	Effects of Healthy Aging Measured By Intracranial Compartment Volumes Using a Designed MR Brain Database. Lecture Notes in Computer Science, 2005, 8, 383-391.	1.0	29

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109	Semiautomated ROI Analysis in Dynamic MR Studies. Part II. Journal of Computer Assisted Tomography, 1991, 15, 733-741.	0.5	28
110	Assessment of Reliability of Multi-site Neuroimaging Via Traveling Phantom Study. Lecture Notes in Computer Science, 2008, 11, 263-270.	1.0	28
111	Particle Based Shape Regression of Open Surfaces with Applications to Developmental Neuroimaging. Lecture Notes in Computer Science, 2009, 12, 167-174.	1.0	28
112	Offering to Share: How to Put Heads Together in Autism Neuroimaging. Journal of Autism and Developmental Disorders, 2008, 38, 2-13.	1.7	27
113	Quantitative Analysis of White Matter Fiber Properties along Geodesic Paths. Lecture Notes in Computer Science, 2003, , 16-23.	1.0	24
114	Topology Preserving Atlas Construction from Shape Data without Correspondence Using Sparse Parameters. Lecture Notes in Computer Science, 2012, 15, 223-230.	1.0	24
115	Analysis Tool for Diffusion Tensor MRI. Lecture Notes in Computer Science, 2003, , 967-968.	1.0	23
116	Localized differences in caudate and hippocampal shape are associated with schizophrenia but not antipsychotic type. Psychiatry Research - Neuroimaging, 2013, 211, 1-10.	0.9	23
117	Reduced Relationship to Cortical White Matter Volume Revealed by Tractography-Based Segmentation of the Corpus Callosum in Young Children With Developmental Delay. American Journal of Psychiatry, 2006, 163, 2157-2163.	4.0	22
118	Brain volumes in psychotic youth with schizophrenia and mood disorders. Journal of Psychiatry and Neuroscience, 2010, 35, 229-236.	1.4	22
119	Automatic Segmentation of Neonatal Brain MRI. Lecture Notes in Computer Science, 2004, , 10-17.	1.0	22
120	Geodesic shape regression with multiple geometries and sparse parameters. Medical Image Analysis, 2017, 39, 1-17.	7.0	21
121	Segmentation-Renormalized Deep Feature Modulation for Unpaired Image Harmonization. IEEE Transactions on Medical Imaging, 2021, 40, 1519-1530.	5.4	21
122	Optimal Data-Driven Sparse Parameterization of Diffeomorphisms for Population Analysis. Lecture Notes in Computer Science, 2011, 22, 123-134.	1.0	21
123	Twin-Singleton Differences in Neonatal Brain Structure. Twin Research and Human Genetics, 2011, 14, 268-276.	0.3	20
124	Longitudinal modeling of appearance and shape and its potential for clinical use. Medical Image Analysis, 2016, 33, 114-121.	7.0	20
125	SlicerSALT: Shape AnaLysis Toolbox. Lecture Notes in Computer Science, 2018, 11167, 65-72.	1.0	20
126	Statistical Shape Analysis of Multi-Object Complexes. , 2007, , .		19

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127	Differences in subcortical structures in young adolescents at familial risk for schizophrenia: A preliminary study. <i>Psychiatry Research - Neuroimaging</i> , 2012, 204, 68-74.	0.9	19
128	Geodesic Shape Regression in the Framework of Currents. <i>Lecture Notes in Computer Science</i> , 2013, 23, 718-729.	1.0	19
129	Diffusion imaging quality control via entropy of principal direction distribution. <i>NeuroImage</i> , 2013, 82, 1-12.	2.1	18
130	4D active cut: An interactive tool for pathological anatomy modeling. , 2014, 2014, 529-532.		18
131	Automatic tissue segmentation of neonate brain MR Images with subject-specific atlases. <i>Proceedings of SPIE</i> , 2015, 9413, .	0.8	18
132	Voxel-wise group analysis of DTI. , 2009, , 807-810.		17
133	Hypothesis Testing with Nonlinear Shape Models. <i>Lecture Notes in Computer Science</i> , 2005, 19, 15-26.	1.0	16
134	Segmentation of serial MRI of TBI patients using personalized atlas construction and topological change estimation. , 2012, , 1152-1155.		16
135	Automatic corpus callosum segmentation using a deformable active Fourier contour model. , 2012, 8317, .		16
136	Geodesic regression of image and shape data for improved modeling of 4D trajectories. , 2014, 2014, 385-388.		16
137	Fiber Tract-Oriented Statistics for Quantitative Diffusion Tensor MRI Analysis. <i>Lecture Notes in Computer Science</i> , 2005, 8, 131-139.	1.0	16
138	Analysis of Longitudinal Shape Variability via Subject Specific Growth Modeling. <i>Lecture Notes in Computer Science</i> , 2012, 15, 731-738.	1.0	15
139	Mixed-Effects Shape Models for Estimating Longitudinal Changes in Anatomy. <i>Lecture Notes in Computer Science</i> , 2012, 7570, 76-87.	1.0	15
140	<title>Structural description and combined 3D display for superior analysis of cerebral vascularity from MRA</title>. , 1994, , .		14
141	Twin-singleton developmental study of brain white matter anatomy. <i>Human Brain Mapping</i> , 2017, 38, 1009-1024.	1.9	14
142	Sex differences associated with corpus callosum development in human infants: A longitudinal multimodal imaging study. <i>NeuroImage</i> , 2020, 215, 116821.	2.1	14
143	Infant Visual Brain Development and Inherited Genetic Liability in Autism. <i>American Journal of Psychiatry</i> , 2022, 179, 573-585.	4.0	14
144	Boundary and Medial Shape Analysis of the Hippocampus in Schizophrenia. <i>Lecture Notes in Computer Science</i> , 2003, , 464-471.	1.0	12

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145	Vascular Attributes and Malignant Brain Tumors. Lecture Notes in Computer Science, 2003, , 671-679.	1.0	12
146	CORRESPONDENCE EVALUATION IN LOCAL SHAPE ANALYSIS AND STRUCTURAL SUBDIVISION. , 2007, , .		12
147	A new framework for analyzing white matter maturation in early brain development. , 2010, , 97-100.		12
148	Subject- and Motion Correction in HARDI Acquisitions: Choices and Consequences. Frontiers in Neurology, 2014, 5, 240.	1.1	12
149	Generative Adversarial Registration for Improved Conditional Deformable Templates. , 2021, , .		12
150	Asymmetrical ventricular enlargement in Parkinson's disease. Movement Disorders, 2007, 22, 1657-1660.	2.2	11
151	A patient-specific segmentation framework for longitudinal MR images of traumatic brain injury. , 2012, 8314, 831402.		11
152	ND morphological contour interpolation. The Insight Journal, 2016, , .	0.2	11
153	Multivariate modeling of longitudinal MRI in early brain development with confidence measures. , 2013, , 1400-1403.		10
154	Diffeomorphic Shape Trajectories for Improved Longitudinal Segmentation and Statistics. Lecture Notes in Computer Science, 2014, 17, 49-56.	1.0	10
155	Probabilistic Fiber Tracking Using Particle Filtering. , 2007, 10, 144-152.		10
156	Group Statistics of DTI Fiber Bundles Using Spatial Functions of Tensor Measures. Lecture Notes in Computer Science, 2008, 11, 1068-1075.	1.0	10
157	Object models in multiscale intrinsic coordinates via m-reps. Image and Vision Computing, 2003, 21, 5-15.	2.7	9
158	Facial emotion perception and fusiform gyrus volume in first episode schizophrenia. Schizophrenia Research, 2005, 79, 341-343.	1.1	9
159	Tensor decomposition of hyperspectral images to study autofluorescence in age-related macular degeneration. Medical Image Analysis, 2019, 56, 96-109.	7.0	9
160	3D of brain shape and volume after cranial vault remodeling surgery for craniosynostosis correction in infants. , 2013, 8672, 86720V.		8
161	Modeling 4D Changes in Pathological Anatomy Using Domain Adaptation: Analysis of TBI Imaging Using a Tumor Database. Lecture Notes in Computer Science, 2013, 8159, 31-39.	1.0	8
162	Analyzing imaging biomarkers for traumatic brain injury using 4d modeling of longitudinal MRI. , 2013, 2013, 1392-1395.		8

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163	Quantification of Measurement Error in DTI: Theoretical Predictions and Validation. , 2007, 10, 10-17.		8
164	Minimum description length with local geometry. , 2008, , .		7
165	Discordance of prenatal and neonatal brain development in twins. Early Human Development, 2009, 85, 171-175.	0.8	7
166	Image registration and segmentation in longitudinal MRI using temporal appearance modeling. , 2016, , .		7
167	Determining Malignancy of Brain Tumors by Analysis of Vessel Shape. Lecture Notes in Computer Science, 2004, , 645-653.	1.0	7
168	Multi-modal image fusion for multispectral super-resolution in microscopy. , 2019, 10949, .		7
169	Statistical group differences in anatomical shape analysis using Hotelling T2 metric. , 2007, , .		6
170	Spatio-temporal analysis of early brain development. , 2010, 2010, 777-781.		6
171	Performance of an efficient imageâ€registration algorithm in processing MR renography data. Journal of Magnetic Resonance Imaging, 2016, 43, 391-397.	1.9	6
172	Facilitating Manual Segmentation of 3D Datasets Using Contour And Intensity Guided Interpolation. , 2019, , .		6
173	Profile Scale-Spaces for Multiscale Image Match. Lecture Notes in Computer Science, 2004, , 176-183.	1.0	6
174	Brain Lesion Segmentation through Physical Model Estimation. Lecture Notes in Computer Science, 2008, , 562-571.	1.0	6
175	Image Registration Driven by Combined Probabilistic and Geometric Descriptors. Lecture Notes in Computer Science, 2010, 13, 602-609.	1.0	6
176	Subject-Specific Prediction Using Nonlinear Population Modeling: Application to Early Brain Maturation from DTI. Lecture Notes in Computer Science, 2014, 17, 33-40.	1.0	6
177	Synergy of Image Analysis for Animal and Human Neuroimaging Supports Translational Research on Drug Abuse. Frontiers in Psychiatry, 2011, 2, 53.	1.3	5
178	Efficient Probabilistic and Geometric Anatomical Mapping Using Particle Mesh Approximation on GPUs. International Journal of Biomedical Imaging, 2011, 2011, 1-16.	3.0	5
179	Statistical growth modeling of longitudinal DT-MRI for regional characterization of early brain development. , 2012, , 1507-1510.		5
180	DTI quality control assessment via error estimation from Monte Carlo simulations. Proceedings of SPIE, 2013, 8669, 1667549.	0.8	5

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181	Violence: heightened brain attentional network response is selectively muted in Down syndrome. Journal of Neurodevelopmental Disorders, 2015, 7, 15.	1.5	5
182	Equivariant Spherical Deconvolution: Learning Sparse Orientation Distribution Functions from Spherical Data. Lecture Notes in Computer Science, 2021, , 267-278.	1.0	5
183	Scale-Space on Image Profiles about an Object Boundary. Lecture Notes in Computer Science, 2003, , 564-575.	1.0	5
184	Constrained Data Decomposition and Regression for Analyzing Healthy Aging from Fiber Tract Diffusion Properties. Lecture Notes in Computer Science, 2009, 12, 321-328.	1.0	5
185	Hierarchical Multi-geodesic Model for Longitudinal Analysis of Temporal Trajectories of Anatomical Shape and Covariates. Lecture Notes in Computer Science, 2019, , 57-65.	1.0	5
186	Age and Treatment Related Local Hippocampal Changes in Schizophrenia Explained by a Novel Shape Analysis Method. Lecture Notes in Computer Science, 2003, , 653-660.	1.0	4
187	Measures for validation of DTI tractography. , 2012, 8314, .		4
188	Characterizing growth patterns in longitudinal MRI using image contrast. , 2014, 9034, 90340D.		4
189	Compressive sensing based Q-space resampling for handling fast bulk motion in hardi acquisitions. , 2016, 2016, 907-910.		4
190	Acceleration Controlled Diffeomorphisms For Nonparametric Image Regression. , 2019, 2019, 1488-1491.		4
191	Point-Supervised Segmentation Of Microscopy Images And Volumes Via Objectness Regularization. , 2021, , .		4
192	Longitudinal Prediction of Infant MR Images With Multi-Contrast Perceptual Adversarial Learning. Frontiers in Neuroscience, 2021, 15, 653213.	1.4	4
193	Geodesic Image Regression with a Sparse Parameterization of Diffeomorphisms. Lecture Notes in Computer Science, 2013, 8085, 95-102.	1.0	4
194	<title>>A Hardware And Software Optimized Program System For Interactive Image Processing</title>. Proceedings of SPIE, 1984, , .	0.8	3
195	Correction scheme for multiple correlated statistical tests in local shape analysis. , 2004, , .		3
196	Discrimination analysis using multi-object statistics of shape and pose. , 2007, , .		3
197	Multivariate nonlinear mixed model to analyze longitudinal image data: MRI study of early brain development. , 2008, , .		3
198	Towards analysis of growth trajectory through multimodal longitudinal MR imaging. , 2010, 7623, .		3

#	ARTICLE	IF	CITATIONS
199	Evaluation of DTI property maps as basis of DTI atlas building. , 2010, 7623, .		3
200	UNC-Utah NA-MIC DTI framework: atlas based fiber tract analysis with application to a study of nicotine smoking addiction. Proceedings of SPIE, 2013, 8669, .	0.8	3
201	Estimating shape correspondence for populations of objects with complex topology. , 2018, 2018, 1010-1013.		3
202	4D continuous medial representation by geodesic shape regression. , 2018, 2018, 1014-1017.		3
203	KWMeshVisu: A Mesh Visualization Tool for Shape Analysis. The Insight Journal, 2006, , .	0.2	3
204	A Prospective Evaluation of Infant Cerebellar-Cerebral Functional Connectivity in Relation to Behavioral Development in Autism Spectrum Disorder. Biological Psychiatry Global Open Science, 2023, 3, 149-161.	1.0	3
205	MICCAI: medical image computing and computer-assisted intervention1. Academic Radiology, 2003, 10, 1339-1340.	1.3	2
206	Multivariate longitudinal statistics for neonatal-pediatric brain tissue development. Proceedings of SPIE, 2008, , .	0.8	2
207	Cortical enhanced tissue segmentation of neonatal brain MR images acquired by a dedicated phased array coil. , 2009, , .		2
208	Changes of MR and DTI appearance in early human brain development. Proceedings of SPIE, 2010, 7623, .	0.8	2
209	Spatiotemporal modeling of distribution-valued data applied to DTI tract evolution in infant neurodevelopment. , 2013, 2013, 684-687.		2
210	A joint framework for 4D segmentation and estimation of smooth temporal appearance changes. , 2014, 2014, 1291-1294.		2
211	Shape index distribution based local surface complexity applied to the human cortex. Proceedings of SPIE, 2015, 9413, .	0.8	2
212	Modeling 4D pathological changes by leveraging normative models. Computer Vision and Image Understanding, 2016, 151, 3-13.	3.0	2
213	A Novel Method for High-Dimensional Anatomical Mapping of Extra-Axial Cerebrospinal Fluid: Application to the Infant Brain. Frontiers in Neuroscience, 2020, 14, 561556.	1.4	2
214	Q-space Conditioned Translation Networks for Directional Synthesis of Diffusion Weighted Images from Multi-modal Structural MRI. Lecture Notes in Computer Science, 2021, , 530-540.	1.0	2
215	Longitudinal Modeling of Multi-modal Image Contrast Reveals Patterns of Early Brain Growth. Lecture Notes in Computer Science, 2017, , 75-83.	1.0	2
216	Bayesian covariate selection in mixed-effects models for longitudinal shape analysis. , 2016, 2016, 656-659.		2

#	ARTICLE	IF	CITATIONS
217	A novel framework for the local extraction of extra-axial cerebrospinal fluid from MR brain images. , 2018, 10574, .		2
218	Robust Non-negative Tensor Factorization, Diffeomorphic Motion Correction, and Functional Statistics to Understand Fixation in Fluorescence Microscopy. Lecture Notes in Computer Science, 2019, 11764, 658-666.	1.0	2
219	Spatiotemporal Modeling for Image Time Series with Appearance Change: Application to Early Brain Development. Lecture Notes in Computer Science, 2019, , 174-185.	1.0	2
220	Analysis of the kinematic motion of the wrist from 4D magnetic resonance imaging. , 2019, , .		2
221	A Framework to Construct a Longitudinal DW-MRI Infant Atlas Based on Mixed Effects Modeling of dODF Coefficients. Mathematics and Visualization, 2020, 2020, 149-159.	0.4	2
222	Cortical enhanced tissue segmentation of neonatal brain MR images acquired by a dedicated phased array coil. , 2009, 2009, 39-45.		1
223	Longitudinal growth modeling of discrete-time functions with application to DTI tract evolution in early neurodevelopment. , 2012, 2012, 1945-1400.		1
224	Parametric regression scheme for distributions: Analysis of DTI fiber tract diffusion changes in early brain development. , 2014, 2014, 559-562.		1
225	Spatiotemporal Analysis of Structural Changes of the Lamina Cribrosa. Lecture Notes in Computer Science, 2017, , 185-193.	1.0	1
226	Subject-specific longitudinal shape analysis by coupling spatiotemporal shape modeling with medial analysis. Proceedings of SPIE, 2017, 10133, .	0.8	1
227	Analysis of Morphological Changes of Lamina Cribrosa Under Acute Intraocular Pressure Change. Lecture Notes in Computer Science, 2018, 11071, 364-371.	1.0	1
228	Model selection for spatiotemporal modeling of early childhood sub-cortical development. , 2019, 10949, .		1
229	Longitudinal structural connectivity in the developing brain with projective non-negative matrix factorization. , 2019, , .		1
230	Multi-modal Perceptual Adversarial Learning for Longitudinal Prediction of Infant MR Images. Lecture Notes in Computer Science, 2020, , 284-294.	1.0	1
231	Trajectories from Distribution-Valued Functional Curves: A Unified Wasserstein Framework. Lecture Notes in Computer Science, 2020, , 343-353.	1.0	1
232	Self-supervised Denoising via Diffeomorphic Template Estimation: Application to Optical Coherence Tomography. Lecture Notes in Computer Science, 2020, , 72-82.	1.0	1
233	A Quantitative DTI Fiber Tract Analysis Suite. The Insight Journal, 2005, , .	0.2	1
234	RLEImage: run-length encoded memory compression scheme for an itk::Image. The Insight Journal, 2016, , .	0.2	1

#	ARTICLE	IF	CITATIONS
235	3D Tensor Normalization for Improved Accuracy in DTI Tensor Registration Methods. Lecture Notes in Computer Science, 2012, , 170-179.	1.0	0
236	4D Continuous Medial Representation Trajectory Estimation for Longitudinal Shape Analysis. Lecture Notes in Computer Science, 2018, , 125-136.	1.0	0
237	Hierarchical Geodesic Modeling on the Diffusion Orientation Distribution Function for Longitudinal DW-MRI Analysis. Lecture Notes in Computer Science, 2020, 12267, 311-321.	1.0	0