

Guido Gerig

List of Publications by Citations

Source: <https://exaly.com/author-pdf/6963720/guido-gerig-publications-by-citations.pdf>

Version: 2024-04-26

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

233
papers

18,143
citations

61
h-index

133
g-index

244
ext. papers

21,314
ext. citations

4.4
avg, IF

6.26
L-index

#	Paper	IF	Citations
233	User-guided 3D active contour segmentation of anatomical structures: significantly improved efficiency and reliability. <i>NeuroImage</i> , 2006 , 31, 1116-28	7.9	4561
232	Three-dimensional multi-scale line filter for segmentation and visualization of curvilinear structures in medical images. <i>Medical Image Analysis</i> , 1998 , 2, 143-68	15.4	821
231	A structural MRI study of human brain development from birth to 2 years. <i>Journal of Neuroscience</i> , 2008 , 28, 12176-82	6.6	725
230	Unbiased diffeomorphic atlas construction for computational anatomy. <i>NeuroImage</i> , 2004 , 23 Suppl 1, S151-60	7.9	638
229	Early brain development in infants at high risk for autism spectrum disorder. <i>Nature</i> , 2017 , 542, 348-351	50.4	552
228	Magnetic resonance imaging and head circumference study of brain size in autism: birth through age 2 years. <i>Archives of General Psychiatry</i> , 2005 , 62, 1366-76		481
227	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	11.9	466
226	Parametrization of Closed Surfaces for 3-D Shape Description. <i>Computer Vision and Image Understanding</i> , 1995 , 61, 154-170	4.3	439
225	A brain tumor segmentation framework based on outlier detection. <i>Medical Image Analysis</i> , 2004 , 8, 275-84	15.4	399
224	Regional gray matter growth, sexual dimorphism, and cerebral asymmetry in the neonatal brain. <i>Journal of Neuroscience</i> , 2007 , 27, 1255-60	6.6	326
223	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, 467-76		298
222	Measuring tortuosity of the intracerebral vasculature from MRA images. <i>IEEE Transactions on Medical Imaging</i> , 2003 , 22, 1163-71	11.7	262
221	Automatic segmentation of MR images of the developing newborn brain. <i>Medical Image Analysis</i> , 2005 , 9, 457-66	15.4	258
220	Routine quantitative analysis of brain and cerebrospinal fluid spaces with MR imaging. <i>Journal of Magnetic Resonance Imaging</i> , 1992 , 2, 619-29	5.6	198
219	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	11.9	196
218	Automatic brain tumor segmentation by subject specific modification of atlas priors. <i>Academic Radiology</i> , 2003 , 10, 1341-8	4.3	192
217	Boundary and medial shape analysis of the hippocampus in schizophrenia. <i>Medical Image Analysis</i> , 2004 , 8, 197-203	15.4	181

216	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,	17.5	175
215	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	15.4	174
214	Vessel tortuosity and brain tumor malignancy: a blinded study. <i>Academic Radiology</i> , 2005 , 12, 1232-40	4.3	173
213	DTIPrep: quality control of diffusion-weighted images. <i>Frontiers in Neuroinformatics</i> , 2014 , 8, 4	3.9	172
212	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, 509-16		165
211	Group analysis of DTI fiber tract statistics with application to neurodevelopment. <i>NeuroImage</i> , 2009 , 45, S133-42	7.9	154
210	Quantitative tract-based white matter development from birth to age 2years. <i>NeuroImage</i> , 2012 , 61, 542-57	7.9	149
209	Morphometry of anatomical shape complexes with dense deformations and sparse parameters. <i>NeuroImage</i> , 2014 , 101, 35-49	7.9	140
208	Framework for the Statistical Shape Analysis of Brain Structures using SPHARM-PDM. <i>The Insight Journal</i> , 2006 , 242-250		140
207	Cortical gray and white brain tissue volume in adolescents and adults with autism. <i>Biological Psychiatry</i> , 2006 , 59, 1-6	7.9	131
206	Diffusion tensor imaging: Application to the study of the developing brain. <i>Journal of the American Academy of Child and Adolescent Psychiatry</i> , 2007 , 46, 213-23	7.2	130
205	Fiber tract-oriented statistics for quantitative diffusion tensor MRI analysis. <i>Medical Image Analysis</i> , 2006 , 10, 786-98	15.4	130
204	Increased Extra-axial Cerebrospinal Fluid in High-Risk Infants Who Later Develop Autism. <i>Biological Psychiatry</i> , 2017 , 82, 186-193	7.9	127
203	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, 4872-7	11.5	127
202	ITK-SNAP: An interactive tool for semi-automatic segmentation of multi-modality biomedical images. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , 2016 , 2016, 3342-3345	0.9	121
201	Duration of illness and treatment effects on hippocampal volume in male patients with schizophrenia. <i>British Journal of Psychiatry</i> , 2005 , 186, 26-31	5.4	120
200	Valmet: A New Validation Tool for Assessing and Improving 3D Object Segmentation. <i>Lecture Notes in Computer Science</i> , 2001 , 516-523	0.9	120
199	Altered corpus callosum morphology associated with autism over the first 2 years of life. <i>Brain</i> , 2015 , 138, 2046-58	11.2	116

198	The DTI Challenge: Toward Standardized Evaluation of Diffusion Tensor Imaging Tractography for Neurosurgery. <i>Journal of Neuroimaging</i> , 2015 , 25, 875-82	2.8	113
197	Amygdala-hippocampal shape differences in schizophrenia: the application of 3D shape models to volumetric MR data. <i>Psychiatry Research - Neuroimaging</i> , 2002 , 115, 15-35	2.9	102
196	DTI registration in atlas based fiber analysis of infantile Krabbe disease. <i>NeuroImage</i> , 2011 , 55, 1577-86	7.9	97
195	Genetic and environmental contributions to neonatal brain structure: A twin study. <i>Human Brain Mapping</i> , 2010 , 31, 1174-82	5.9	97
194	Simulation of brain tumors in MR images for evaluation of segmentation efficacy. <i>Medical Image Analysis</i> , 2009 , 13, 297-311	15.4	94
193	Quality Control of Diffusion Weighted Images. <i>Proceedings of SPIE</i> , 2010 , 7628,	1.7	91
192	Toward a comprehensive framework for the spatiotemporal statistical analysis of longitudinal shape data. <i>International Journal of Computer Vision</i> , 2013 , 103, 22-59	10.6	85
191	Neuroimaging of structural pathology and connectomics in traumatic brain injury: Toward personalized outcome prediction. <i>NeuroImage: Clinical</i> , 2012 , 1, 1-17	5.3	85
190	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	4.6	84
189	Neural circuitry at age 6 months associated with later repetitive behavior and sensory responsiveness in autism. <i>Molecular Autism</i> , 2017 , 8, 8	6.5	82
188	Abnormal brain synchrony in Down Syndrome. <i>NeuroImage: Clinical</i> , 2013 , 2, 703-15	5.3	81
187	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	3.3	79
186	Associations between white matter microstructure and infants' working memory. <i>NeuroImage</i> , 2013 , 64, 156-66	7.9	76
185	Prenatal and neonatal brain structure and white matter maturation in children at high risk for schizophrenia. <i>American Journal of Psychiatry</i> , 2010 , 167, 1083-91	11.9	74
184	Multi-modal image set registration and atlas formation. <i>Medical Image Analysis</i> , 2006 , 10, 440-51	15.4	73
183	Multi-atlas segmentation of subcortical brain structures via the AutoSeg software pipeline. <i>Frontiers in Neuroinformatics</i> , 2014 , 8, 7	3.9	72
182	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, 673-81	20.5	70
181	Unsupervised tissue type segmentation of 3D dual-echo MR head data. <i>Image and Vision Computing</i> , 1992 , 10, 349-360	3.7	70

180	Regional characterization of longitudinal DT-MRI to study white matter maturation of the early developing brain. <i>NeuroImage</i> , 2013 , 68, 236-47	7.9	68
179	Brain volume findings in 6-month-old infants at high familial risk for autism. <i>American Journal of Psychiatry</i> , 2012 , 169, 601-8	11.9	68
178	Quantitative MRI measures of orbitofrontal cortex in patients with chronic schizophrenia or schizoaffective disorder. <i>Psychiatry Research - Neuroimaging</i> , 2005 , 140, 133-45	2.9	68
177	Structural integrity of the uncinate fasciculus in geriatric depression: Relationship with age of onset. <i>Neuropsychiatric Disease and Treatment</i> , 2007 , 3, 669-74	3.1	67
176	The Emergence of Network Inefficiencies in Infants With Autism Spectrum Disorder. <i>Biological Psychiatry</i> , 2017 , 82, 176-185	7.9	65
175	Joint Attention and Brain Functional Connectivity in Infants and Toddlers. <i>Cerebral Cortex</i> , 2017 , 27, 1709-1720	6.3	63
174	Framework for the Statistical Shape Analysis of Brain Structures using SPHARM-PDM. <i>The Insight Journal</i> , 2006 ,		62
173	Frontolimbic neural circuitry at 6 months predicts individual differences in joint attention at 9 months. <i>Developmental Science</i> , 2013 , 16, 186-197	4.5	61
172	Spatiotemporal atlas estimation for developmental delay detection in longitudinal datasets. <i>Lecture Notes in Computer Science</i> , 2009 , 12, 297-304	0.9	61
171	Analysis of brain white matter via fiber tract modeling. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society</i> , 2004 , 2004, 4421-4		61
170	FADTTS: functional analysis of diffusion tensor tract statistics. <i>NeuroImage</i> , 2011 , 56, 1412-25	7.9	59
169	Shape versus Size: Improved Understanding of the Morphology of Brain Structures. <i>Lecture Notes in Computer Science</i> , 2001 , 24-32	0.9	58
168	Prenatal mild ventriculomegaly predicts abnormal development of the neonatal brain. <i>Biological Psychiatry</i> , 2008 , 64, 1069-76	7.9	54
167	Prenatal drug exposure affects neonatal brain functional connectivity. <i>Journal of Neuroscience</i> , 2015 , 35, 5860-9	6.6	53
166	Patient-tailored connectomics visualization for the assessment of white matter atrophy in traumatic brain injury. <i>Frontiers in Neurology</i> , 2012 , 3, 10	4.1	49
165	3 Tesla magnetic resonance imaging of the brain in newborns. <i>Psychiatry Research - Neuroimaging</i> , 2004 , 132, 81-5	2.9	48
164	Infant cerebral ventricle volume: a comparison of 3-D ultrasound and magnetic resonance imaging. <i>Ultrasound in Medicine and Biology</i> , 2001 , 27, 1143-6	3.5	48
163	Walking, Gross Motor Development, and Brain Functional Connectivity in Infants and Toddlers. <i>Cerebral Cortex</i> , 2018 , 28, 750-763	5.1	47

162	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	15.4	47
161	User-Guided Segmentation of Multi-modality Medical Imaging Datasets with ITK-SNAP. <i>Neuroinformatics</i> , 2019 , 17, 83-102	3.2	46
160	Probabilistic white matter fiber tracking using particle filtering and von Mises-Fisher sampling. <i>Medical Image Analysis</i> , 2009 , 13, 5-18	15.4	46
159	Comparison of acute and chronic traumatic brain injury using semi-automatic multimodal segmentation of MR volumes. <i>Journal of Neurotrauma</i> , 2011 , 28, 2287-306	5.4	46
158	Automatic and Robust Computation of 3D Medial Models Incorporating Object Variability. <i>International Journal of Computer Vision</i> , 2003 , 55, 107-122	10.6	46
157	UNC-Utah NA-MIC framework for DTI fiber tract analysis. <i>Frontiers in Neuroinformatics</i> , 2014 , 7, 51	3.9	45
156	Prenatal cocaine effects on brain structure in early infancy. <i>NeuroImage</i> , 2014 , 101, 114-23	7.9	44
155	Multi-object analysis of volume, pose, and shape using statistical discrimination. <i>IEEE Transactions on Pattern Analysis and Machine Intelligence</i> , 2010 , 32, 652-61	13.3	43
154	Practical consideration for 3T imaging. <i>Magnetic Resonance Imaging Clinics of North America</i> , 2003 , 11, 615-39, vi	1.6	42
153	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	2.1	42
152	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, 123-33	5.5	40
151	CENTS: cortical enhanced neonatal tissue segmentation. <i>Human Brain Mapping</i> , 2011 , 32, 382-96	5.9	34
150	Automatic Brain and Tumor Segmentation. <i>Lecture Notes in Computer Science</i> , 2002 , 372-379	0.9	34
149	Abnormal vessel tortuosity as a marker of treatment response of malignant gliomas: preliminary report. <i>Technology in Cancer Research and Treatment</i> , 2004 , 3, 577-84	2.7	33
148	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	2.1	33
147	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	3.4	33
146	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, 509-15	2.7	32
145	Prenatal isolated mild ventriculomegaly is associated with persistent ventricle enlargement at ages 1 and 2. <i>Early Human Development</i> , 2012 , 88, 691-8	2.2	30

144	Structural and radiometric asymmetry in brain images. <i>Medical Image Analysis</i> , 2003 , 7, 155-70	15.4	29
143	Resting-state fMRI in sleeping infants more closely resembles adult sleep than adult wakefulness. <i>PLoS ONE</i> , 2017 , 12, e0188122	3.7	28
142	Splenium development and early spoken language in human infants. <i>Developmental Science</i> , 2017 , 20, e12360	4.5	27
141	Improved correspondence for DTI population studies via unbiased atlas building. <i>Lecture Notes in Computer Science</i> , 2006 , 9, 260-7	0.9	27
140	Development of White Matter Circuitry in Infants With Fragile X Syndrome. <i>JAMA Psychiatry</i> , 2018 , 75, 505-513	14.5	26
139	Offering to share: how to put heads together in autism neuroimaging. <i>Journal of Autism and Developmental Disorders</i> , 2008 , 38, 2-13	4.6	25
138	Computer-assisted visualization of arteriovenous malformations on the home personal computer. <i>Neurosurgery</i> , 2001 , 48, 576-82; discussion 582-3	3.2	25
137	Development of cortical shape in the human brain from 6 to 24months of age via a novel measure of shape complexity. <i>NeuroImage</i> , 2016 , 135, 163-76	7.9	25
136	3D Graph Description of the Intracerebral Vasculature from Segmented MRA and Tests of Accuracy by Comparison with X-ray Angiograms. <i>Lecture Notes in Computer Science</i> , 1999 , 308-321	0.9	24
135	Adaptive prior probability and spatial temporal intensity change estimation for segmentation of the one-year-old human brain. <i>Journal of Neuroscience Methods</i> , 2013 , 212, 43-55	3	23
134	Reduced relationship to cortical white matter volume revealed by tractography-based segmentation of the corpus callosum in young children with developmental delay. <i>American Journal of Psychiatry</i> , 2006 , 163, 2157-63	11.9	22
133	Semiautomated ROI analysis in dynamic MR studies. Part I: Image analysis tools for automatic correction of organ displacements. <i>Journal of Computer Assisted Tomography</i> , 1991 , 15, 725-32	2.2	21
132	Rapid Radial T and T Mapping of the Hip Articular Cartilage With Magnetic Resonance Fingerprinting. <i>Journal of Magnetic Resonance Imaging</i> , 2019 , 50, 810-815	5.6	21
131	Effects of healthy aging measured by intracranial compartment volumes using a designed MR brain database. <i>Lecture Notes in Computer Science</i> , 2005 , 8, 383-91	0.9	21
130	Localized differences in caudate and hippocampal shape are associated with schizophrenia but not antipsychotic type. <i>Psychiatry Research - Neuroimaging</i> , 2013 , 211, 1-10	2.9	20
129	Subcortical structure segmentation using probabilistic atlas priors 2007 ,		20
128	Image analysis and computer vision in medicine. <i>Computerized Medical Imaging and Graphics</i> , 1994 , 18, 85-96	7.6	20
127	Semiautomated ROI analysis in dynamic MR studies. Part II: Application to renal function examination. <i>Journal of Computer Assisted Tomography</i> , 1991 , 15, 733-41	2.2	20

126	Particle based shape regression of open surfaces with applications to developmental neuroimaging. <i>Lecture Notes in Computer Science</i> , 2009 , 12, 167-74	0.9	20
125	Brain volumes in psychotic youth with schizophrenia and mood disorders. <i>Journal of Psychiatry and Neuroscience</i> , 2010 , 35, 229-36	4.5	19
124	Twin-singleton differences in neonatal brain structure. <i>Twin Research and Human Genetics</i> , 2011 , 14, 268-76	2.2	19
123	Synthetic ground truth for validation of brain tumor MRI segmentation. <i>Lecture Notes in Computer Science</i> , 2005 , 8, 26-33	0.9	19
122	Assessment of reliability of multi-site neuroimaging via traveling phantom study. <i>Lecture Notes in Computer Science</i> , 2008 , 11, 263-70	0.9	19
121	Topology preserving atlas construction from shape data without correspondence using sparse parameters. <i>Lecture Notes in Computer Science</i> , 2012 , 15, 223-30	0.9	19
120	Robust Estimation for Brain Tumor Segmentation. <i>Lecture Notes in Computer Science</i> , 2003 , 530-537	0.9	18
119	Estimation of smooth growth trajectories with controlled acceleration from time series shape data. <i>Lecture Notes in Computer Science</i> , 2011 , 14, 401-8	0.9	18
118	Fully convolutional structured LSTM networks for joint 4D medical image segmentation 2018 ,		18
117	Optimal data-driven sparse parameterization of diffeomorphisms for population analysis. <i>Lecture Notes in Computer Science</i> , 2011 , 22, 123-34	0.9	17
116	Differences in subcortical structures in young adolescents at familial risk for schizophrenia: a preliminary study. <i>Psychiatry Research - Neuroimaging</i> , 2012 , 204, 68-74	2.9	16
115	Statistical Shape Analysis of Multi-Object Complexes 2007 ,		16
114	Analysis Tool for Diffusion Tensor MRI. <i>Lecture Notes in Computer Science</i> , 2003 , 967-968	0.9	16
113	Multisite validation of image analysis methods: assessing intra- and intersite variability 2002 , 4684, 278		16
112	Geodesic shape regression in the framework of currents. <i>Lecture Notes in Computer Science</i> , 2013 , 23, 718-29	0.9	16
111	Diffusion imaging quality control via entropy of principal direction distribution. <i>NeuroImage</i> , 2013 , 82, 1-12	7.9	15
110	4D ACTIVE CUT: AN INTERACTIVE TOOL FOR PATHOLOGICAL ANATOMY MODELING 2014 , 2014, 529-532		15
109	SEGMENTATION OF SERIAL MRI OF TBI PATIENTS USING PERSONALIZED ATLAS CONSTRUCTION AND TOPOLOGICAL CHANGE ESTIMATION 2012 , 1152-1155	1.5	15

108	A Statistical Shape Model of Individual Fiber Tracts Extracted from Diffusion Tensor MRI. <i>Lecture Notes in Computer Science</i> , 2004 , 671-679	0.9	15
107	Automatic corpus callosum segmentation using a deformable active Fourier contour model. <i>Proceedings of SPIE</i> , 2012 , 8317,	1.7	14
106	Automatic Segmentation of Neonatal Brain MRI. <i>Lecture Notes in Computer Science</i> , 2004 , 10-17	0.9	14
105	Twin-singleton developmental study of brain white matter anatomy. <i>Human Brain Mapping</i> , 2017 , 38, 1009-1024	5.9	13
104	Quantitative Analysis of White Matter Fiber Properties along Geodesic Paths. <i>Lecture Notes in Computer Science</i> , 2003 , 16-23	0.9	13
103	Hypothesis testing with nonlinear shape models. <i>Lecture Notes in Computer Science</i> , 2005 , 19, 15-26	0.9	13
102	Fiber tract-oriented statistics for quantitative diffusion tensor MRI analysis. <i>Lecture Notes in Computer Science</i> , 2005 , 8, 131-9	0.9	13
101	Geodesic shape regression with multiple geometries and sparse parameters. <i>Medical Image Analysis</i> , 2017 , 39, 1-17	15.4	12
100	Automatic Tissue Segmentation of Neonate Brain MR Images with Subject-specific Atlases. <i>Proceedings of SPIE</i> , 2015 , 9413,	1.7	12
99	Subject-Motion Correction in HARDI Acquisitions: Choices and Consequences. <i>Frontiers in Neurology</i> , 2014 , 5, 240	4.1	12
98	GEODESIC REGRESSION OF IMAGE AND SHAPE DATA FOR IMPROVED MODELING OF 4D TRAJECTORIES 2014 , 2014, 385-388	1.5	12
97	VOXEL-WISE GROUP ANALYSIS OF DTI 2009 , 807-810	1.5	12
96	Structural description and combined 3D display for superior analysis of cerebral vascularity from MRA 1994 ,		11
95	Analysis of longitudinal shape variability via subject specific growth modeling. <i>Lecture Notes in Computer Science</i> , 2012 , 15, 731-8	0.9	11
94	Mixed-Effects Shape Models for Estimating Longitudinal Changes in Anatomy. <i>Lecture Notes in Computer Science</i> , 2012 , 7570, 76-87	0.9	11
93	A NEW FRAMEWORK FOR ANALYZING WHITE MATTER MATURATION IN EARLY BRAIN DEVELOPMENT 2010 , 97-100	1.5	10
92	Group statistics of DTI fiber bundles using spatial functions of tensor measures. <i>Lecture Notes in Computer Science</i> , 2008 , 11, 1068-75	0.9	10
91	SlicerSALT: Shape AnaLysis Toolbox. <i>Lecture Notes in Computer Science</i> , 2018 , 11167, 65-72	0.9	10

90	A Patient-Specific Segmentation Framework for Longitudinal MR Images of Traumatic Brain Injury. <i>Proceedings of SPIE</i> , 2012 , 8314, 831402	1.7	9
89	Asymmetrical ventricular enlargement in Parkinson's disease. <i>Movement Disorders</i> , 2007 , 22, 1657-60	7	9
88	CORRESPONDENCE EVALUATION IN LOCAL SHAPE ANALYSIS AND STRUCTURAL SUBDIVISION 2007 ,		9
87	Boundary and Medial Shape Analysis of the Hippocampus in Schizophrenia. <i>Lecture Notes in Computer Science</i> , 2003 , 464-471	0.9	9
86	Diffeomorphic shape trajectories for improved longitudinal segmentation and statistics. <i>Lecture Notes in Computer Science</i> , 2014 , 17, 49-56	0.9	9
85	Modeling 4D Changes in Pathological Anatomy using Domain Adaptation: Analysis of TBI Imaging using a Tumor Database. <i>Lecture Notes in Computer Science</i> , 2013 , 8159, 31-39	0.9	8
84	ANALYZING IMAGING BIOMARKERS FOR TRAUMATIC BRAIN INJURY USING 4D MODELING OF LONGITUDINAL MRI 2013 , 2013, 1392-1395	1.5	8
83	Facial emotion perception and fusiform gyrus volume in first episode schizophrenia. <i>Schizophrenia Research</i> , 2005 , 79, 341-3	3.6	8
82	Vascular Attributes and Malignant Brain Tumors. <i>Lecture Notes in Computer Science</i> , 2003 , 671-679	0.9	8
81	Probabilistic fiber tracking using particle filtering 2007 , 10, 144-52		8
80	Segmentation-Renormalized Deep Feature Modulation for Unpaired Image Harmonization. <i>IEEE Transactions on Medical Imaging</i> , 2021 , 40, 1519-1530	11.7	8
79	Tensor decomposition of hyperspectral images to study autofluorescence in age-related macular degeneration. <i>Medical Image Analysis</i> , 2019 , 56, 96-109	15.4	7
78	3D of Brain Shape and Volume After Cranial Vault Remodeling Surgery for Craniosynostosis Correction in Infants. <i>Proceedings of SPIE</i> , 2013 , 8672, 86720V	1.7	7
77	MULTIVARIATE MODELING OF LONGITUDINAL MRI IN EARLY BRAIN DEVELOPMENT WITH CONFIDENCE MEASURES 2013 , 1400-1403	1.5	7
76	Assessing Early Brain Development in Neonates by Segmentation of High-Resolution 3T MRI. <i>Lecture Notes in Computer Science</i> , 2003 , 979-980	0.9	7
75	Discordance of prenatal and neonatal brain development in twins. <i>Early Human Development</i> , 2009 , 85, 171-5	2.2	6
74	Minimum description length with local geometry 2008 ,		6
73	Statistical group differences in anatomical shape analysis using Hotelling T2 metric 2007 ,		6

72	Object models in multiscale intrinsic coordinates via m-reps. <i>Image and Vision Computing</i> , 2003 , 21, 5-15	3.7	6
71	Determining Malignancy of Brain Tumors by Analysis of Vessel Shape. <i>Lecture Notes in Computer Science</i> , 2004 , 645-653	0.9	6
70	Quantification of measurement error in DTI: theoretical predictions and validation 2007 , 10, 10-7		6
69	Image registration driven by combined probabilistic and geometric descriptors. <i>Lecture Notes in Computer Science</i> , 2010 , 13, 602-9	0.9	6
68	Performance of an efficient image-registration algorithm in processing MR renography data. <i>Journal of Magnetic Resonance Imaging</i> , 2016 , 43, 391-7	5.6	6
67	Image registration and segmentation in longitudinal MRI using temporal appearance modeling 2016 ,		5
66	Synergy of image analysis for animal and human neuroimaging supports translational research on drug abuse. <i>Frontiers in Psychiatry</i> , 2011 , 2, 53	5	5
65	Efficient Probabilistic and Geometric Anatomical Mapping Using Particle Mesh Approximation on GPUs. <i>International Journal of Biomedical Imaging</i> , 2011 , 2011, 572187	5.2	5
64	Scale-Space on Image Profiles about an Object Boundary. <i>Lecture Notes in Computer Science</i> , 2003 , 564-575	3.5	5
63	Profile Scale-Spaces for Multiscale Image Match. <i>Lecture Notes in Computer Science</i> , 2004 , 176-183	0.9	5
62	Brain Lesion Segmentation through Physical Model Estimation. <i>Lecture Notes in Computer Science</i> , 2008 , 562-571	0.9	5
61	Sex differences associated with corpus callosum development in human infants: A longitudinal multimodal imaging study. <i>NeuroImage</i> , 2020 , 215, 116821	7.9	5
60	Facilitating Manual Segmentation of 3D Datasets Using Contour And Intensity Guided Interpolation 2019 ,		4
59	Compressive Sensing Based Q-Space Resampling for Handling Fast Bulk Motion in Hardi Acquisitions 2016 , 2016, 907-910	1.5	4
58	Violence: heightened brain attentional network response is selectively muted in Down syndrome. <i>Journal of Neurodevelopmental Disorders</i> , 2015 , 7, 15	4.6	4
57	Spatio-Temporal Analysis of Early Brain Development. <i>Conference Record of the Asilomar Conference on Signals, Systems and Computers</i> , 2010 , 2010, 777-781	0.3	4
56	STATISTICAL GROWTH MODELING OF LONGITUDINAL DT-MRI FOR REGIONAL CHARACTERIZATION OF EARLY BRAIN DEVELOPMENT 2012 , 1507-1510	1.5	4
55	Measures for Validation of DTI Tractography. <i>Proceedings of SPIE</i> , 2012 , 8314,	1.7	4

54	Multi-modal Image Fusion for Multispectral Super-resolution in Microscopy. <i>Proceedings of SPIE</i> , 2019 , 10949,	1.7	4
53	Constrained data decomposition and regression for analyzing healthy aging from fiber tract diffusion properties. <i>Lecture Notes in Computer Science</i> , 2009 , 12, 321-8	0.9	4
52	Characterizing growth patterns in longitudinal MRI using image contrast. <i>Proceedings of SPIE</i> , 2014 , 9034, 90340D	1.7	3
51	UNC-Utah NA-MIC DTI framework: Atlas Based Fiber Tract Analysis with Application to a Study of Nicotine Smoking Addiction. <i>Proceedings of SPIE</i> , 2013 , 8669,	1.7	3
50	DTI Quality Control Assessment via Error Estimation From Monte Carlo Simulations. <i>Proceedings of SPIE</i> , 2013 , 8669, 1667549	1.7	3
49	Towards Analysis of Growth Trajectory through Multi-modal Longitudinal MR Imaging. <i>Proceedings of SPIE</i> , 2010 , 7623,	1.7	3
48	Age and Treatment Related Local Hippocampal Changes in Schizophrenia Explained by a Novel Shape Analysis Method. <i>Lecture Notes in Computer Science</i> , 2003 , 653-660	0.9	3
47	A Hardware And Software Optimized Program System For Interactive Image Processing 1984 ,		3
46	Geodesic image regression with a sparse parameterization of diffeomorphisms. <i>Lecture Notes in Computer Science</i> , 2013 , 8085, 95-102	0.9	3
45	Subject-specific prediction using nonlinear population modeling: application to early brain maturation from DTI. <i>Lecture Notes in Computer Science</i> , 2014 , 17, 33-40	0.9	3
44	Generative Adversarial Registration for Improved Conditional Deformable Templates 2021 ,		3
43	SPATIOTEMPORAL MODELING OF DISCRETE-TIME DISTRIBUTION-VALUED DATA APPLIED TO DTI TRACT EVOLUTION IN INFANT NEURODEVELOPMENT 2013 , 2013, 684-687	1.5	2
42	Changes of MR and DTI appearance in early human brain development. <i>Proceedings of SPIE</i> , 2010 , 7623,	1.7	2
41	Evaluation of DTI Property Maps as Basis of DTI Atlas Building. <i>Proceedings of SPIE</i> , 2010 , 7623,	1.7	2
40	Cortical enhanced tissue segmentation of neonatal brain MR images acquired by a dedicated phased array coil 2009 ,		2
39	Correction scheme for multiple correlated statistical tests in local shape analysis 2004 ,		2
38	A framework to construct a longitudinal DW-MRI infant atlas based on mixed effects modeling of dODF coefficients. <i>Mathematics and Visualization</i> , 2020 , 2020, 149-159	0.6	2
37	Hierarchical Multi-geodesic Model for Longitudinal Analysis of Temporal Trajectories of Anatomical Shape and Covariates. <i>Lecture Notes in Computer Science</i> , 2019 , 57-65	0.9	2

36	Longitudinal Modeling of Multi-modal Image Contrast Reveals Patterns of Early Brain Growth. <i>Lecture Notes in Computer Science</i> , 2017 , 75-83	0.9	2
35	Modeling 4D Pathological Changes by Leveraging Normative Models. <i>Computer Vision and Image Understanding</i> , 2016 , 151, 3-13	4.3	2
34	Equivariant Spherical Deconvolution: Learning Sparse Orientation Distribution Functions from Spherical Data. <i>Lecture Notes in Computer Science</i> , 2021 , 267-278	0.9	2
33	4D CONTINUOUS MEDIAL REPRESENTATION BY GEODESIC SHAPE REGRESSION 2018 , 2018, 1014-1017	1.5	2
32	ACCELERATION CONTROLLED Diffeomorphisms for Nonparametric Image Regression 2019 , 2019, 1488-1491	1.5	1
31	Spatiotemporal Analysis of Structural Changes of the Lamina Cribrosa. <i>Lecture Notes in Computer Science</i> , 2017 , 185-193	0.9	1
30	Subject-Specific Longitudinal Shape Analysis by Coupling Spatiotemporal Shape Modeling with Medial Analysis. <i>Proceedings of SPIE</i> , 2017 , 10133,	1.7	1
29	Shape index distribution based local surface complexity applied to the human cortex. <i>Proceedings of SPIE</i> , 2015 , 9413,	1.7	1
28	A JOINT FRAMEWORK FOR 4D SEGMENTATION AND ESTIMATION OF SMOOTH TEMPORAL APPEARANCE CHANGES 2014 , 2014, 1291-1294	1.5	1
27	PARAMETRIC REGRESSION SCHEME FOR DISTRIBUTIONS: ANALYSIS OF DTI FIBER TRACT DIFFUSION CHANGES IN EARLY BRAIN DEVELOPMENT 2014 , 2014, 559-562	1.5	1
26	LONGITUDINAL GROWTH MODELING OF DISCRETE-TIME FUNCTIONS WITH APPLICATION TO DTI TRACT EVOLUTION IN EARLY NEURODEVELOPMENT 2013 , 2012, 1945-1400	1.5	1
25	Cortical Enhanced Tissue Segmentation of Neonatal Brain MR Images Acquired by a Dedicated Phased Array Coil. <i>Proceedings of the IEEE Computer Society Conference on Computer Vision and Pattern Recognition</i> , 2009 , 2009, 39-45	6	1
24	Multivariate longitudinal statistics for neonatal-pediatric brain tissue development 2008 ,		1
23	MICCAI: medical image computing and computer-assisted intervention1. <i>Academic Radiology</i> , 2003 , 10, 1339-1340	4.3	1
22	Self-supervised Denoising via Diffeomorphic Template Estimation: Application to Optical Coherence Tomography. <i>Lecture Notes in Computer Science</i> , 2020 , 72-82	0.9	1
21	KWMeshVisu: A Mesh Visualization Tool for Shape Analysis. <i>The Insight Journal</i> , 2006 ,		1
20	Analysis of Morphological Changes of Lamina Cribrosa Under Acute Intraocular Pressure Change. <i>Lecture Notes in Computer Science</i> , 2018 , 11071, 364-371	0.9	1
19	A Novel Framework for the Local Extraction of Extra-Axial Cerebrospinal Fluid from MR Brain Images. <i>Proceedings of SPIE</i> , 2018 , 10574,	1.7	1

18	Robust Non-negative Tensor Factorization, Diffeomorphic Motion Correction, and Functional Statistics to Understand Fixation in Fluorescence Microscopy. <i>Lecture Notes in Computer Science</i> , 2019 , 11764, 658-666	0.9	1
17	Spatiotemporal Modeling for Image Time Series with Appearance Change: Application to Early Brain Development. <i>Lecture Notes in Computer Science</i> , 2019 , 174-185	0.9	1
16	Model selection for spatiotemporal modeling of early childhood sub-cortical development. <i>Proceedings of SPIE</i> , 2019 , 10949,	1.7	1
15	Analysis of the kinematic motion of the wrist from 4D magnetic resonance imaging 2019 ,		1
14	Longitudinal structural connectivity in the developing brain with projective non-negative matrix factorization 2019 ,		1
13	Bayesian Covariate Selection in Mixed-Effects Models For Longitudinal Shape Analysis 2016 , 2016, 656-659		1
12	Data-Driven Rank Aggregation with Application to Grand Challenges. <i>Lecture Notes in Computer Science</i> , 2017 , 754-762	0.9	1
11	A Novel Method for High-Dimensional Anatomical Mapping of Extra-Axial Cerebrospinal Fluid: Application to the Infant Brain. <i>Frontiers in Neuroscience</i> , 2020 , 14, 561556	5.1	1
10	ESTIMATING SHAPE CORRESPONDENCE FOR POPULATIONS OF OBJECTS WITH COMPLEX TOPOLOGY 2018 , 2018, 1010-1013	1.5	1
9	Trajectories from Distribution-Valued Functional Curves: A Unified Wasserstein Framework. <i>Lecture Notes in Computer Science</i> , 2020 , 343-353	0.9	0
8	Q-space Conditioned Translation Networks for Directional Synthesis of Diffusion Weighted Images from Multi-modal Structural MRI. <i>Lecture Notes in Computer Science</i> , 2021 , 530-540	0.9	0
7	Longitudinal Prediction of Infant MR Images With Multi-Contrast Perceptual Adversarial Learning. <i>Frontiers in Neuroscience</i> , 2021 , 15, 653213	5.1	0
6	3D Tensor Normalization for Improved Accuracy in DTI Tensor Registration Methods. <i>Lecture Notes in Computer Science</i> , 2012 , 170-179	0.9	
5	Hierarchical geodesic modeling on the diffusion orientation distribution function for longitudinal DW-MRI analysis. <i>Lecture Notes in Computer Science</i> , 2020 , 12267, 311-321	0.9	
4	4D Continuous Medial Representation Trajectory Estimation for Longitudinal Shape Analysis. <i>Lecture Notes in Computer Science</i> , 2018 , 125-136	0.9	
3	Multi-modal Perceptual Adversarial Learning for Longitudinal Prediction of Infant MR Images. <i>Lecture Notes in Computer Science</i> , 2020 , 284-294	0.9	
2	Motion Is Inevitable: The Impact of Motion Correction Schemes on HARDI Reconstructions. <i>Mathematics and Visualization</i> , 2014 , 169-179	0.6	
1	2D/3D Quasi-Intramodal Registration of Quantitative Magnetic Resonance Images. <i>Lecture Notes in Computer Science</i> , 2022 , 198-205	0.9	

