

Guido Gerig

List of Publications by Year in Descending Order

Source: <https://exaly.com/author-pdf/6963720/guido-gerig-publications-by-year.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	2D/3D Quasi-Intramodal Registration of Quantitative Magnetic Resonance Images. <i>Lecture Notes in Computer Science</i> , 2022 , 198-205	0.9	
232	Segmentation-Renormalized Deep Feature Modulation for Unpaired Image Harmonization. <i>IEEE Transactions on Medical Imaging</i> , 2021 , 40, 1519-1530	11.7	8
231	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
230	Equivariant Spherical Deconvolution: Learning Sparse Orientation Distribution Functions from Spherical Data. <i>Lecture Notes in Computer Science</i> , 2021 , 267-278	0.9	2
229	Longitudinal Prediction of Infant MR Images With Multi-Contrast Perceptual Adversarial Learning. <i>Frontiers in Neuroscience</i> , 2021 , 15, 653213	5.1	0
228	Generative Adversarial Registration for Improved Conditional Deformable Templates 2021 ,		3
227	Trajectories from Distribution-Valued Functional Curves: A Unified Wasserstein Framework. <i>Lecture Notes in Computer Science</i> , 2020 , 343-353	0.9	0
226	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
225	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	
224	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
223	Multi-modal Perceptual Adversarial Learning for Longitudinal Prediction of Infant MR Images. <i>Lecture Notes in Computer Science</i> , 2020 , 284-294	0.9	
222	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
221	Sex differences associated with corpus callosum development in human infants: A longitudinal multimodal imaging study. <i>NeuroImage</i> , 2020 , 215, 116821	7.9	5
220	Facilitating Manual Segmentation of 3D Datasets Using Contour And Intensity Guided Interpolation 2019 ,		4
219	ACCELERATION CONTROLLED DFFEOMORPHISMS FOR NONPARAMETRIC IMAGE REGRESSION 2019 , 2019, 1488-1491	1.5	1
218	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
217	User-Guided Segmentation of Multi-modality Medical Imaging Datasets with ITK-SNAP. <i>Neuroinformatics</i> , 2019 , 17, 83-102	3.2	46

216	Multi-modal Image Fusion for Multispectral Super-resolution in Microscopy. <i>Proceedings of SPIE</i> , 2019 , 10949,	1.7	4
215	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
214	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
213	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
212	Model selection for spatiotemporal modeling of early childhood sub-cortical development. <i>Proceedings of SPIE</i> , 2019 , 10949,	1.7	1
211	Analysis of the kinematic motion of the wrist from 4D magnetic resonance imaging 2019 ,		1
210	Longitudinal structural connectivity in the developing brain with projective non-negative matrix factorization 2019 ,		1
209	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
208	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
207	Development of White Matter Circuitry in Infants With Fragile X Syndrome. <i>JAMA Psychiatry</i> , 2018 , 75, 505-513	14.5	26
206	Walking, Gross Motor Development, and Brain Functional Connectivity in Infants and Toddlers. <i>Cerebral Cortex</i> , 2018 , 28, 750-763	5.1	47
205	4D Continuous Medial Representation Trajectory Estimation for Longitudinal Shape Analysis. <i>Lecture Notes in Computer Science</i> , 2018 , 125-136	0.9	
204	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
203	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
202	SlicerSALT: Shape AnaLysis Toolbox. <i>Lecture Notes in Computer Science</i> , 2018 , 11167, 65-72	0.9	10
201	Fully convolutional structured LSTM networks for joint 4D medical image segmentation 2018 ,		18
200	ESTIMATING SHAPE CORRESPONDENCE FOR POPULATIONS OF OBJECTS WITH COMPLEX TOPOLOGY 2018 , 2018, 1010-1013	1.5	1
199	4D CONTINUOUS MEDIAL REPRESENTATION BY GEODESIC SHAPE REGRESSION 2018 , 2018, 1014-1017	1.5	2

198	Splenium development and early spoken language in human infants. <i>Developmental Science</i> , 2017 , 20, e12360	4.5	27
197	Joint Attention and Brain Functional Connectivity in Infants and Toddlers. <i>Cerebral Cortex</i> , 2017 , 27, 1709-1720	5.1	63
196	Increased Extra-axial Cerebrospinal Fluid in High-Risk Infants Who Later Develop Autism. <i>Biological Psychiatry</i> , 2017 , 82, 186-193	7.9	127
195	Early brain development in infants at high risk for autism spectrum disorder. <i>Nature</i> , 2017 , 542, 348-351	50.4	552
194	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
193	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
192	Geodesic shape regression with multiple geometries and sparse parameters. <i>Medical Image Analysis</i> , 2017 , 39, 1-17	15.4	12
191	The Emergence of Network Inefficiencies in Infants With Autism Spectrum Disorder. <i>Biological Psychiatry</i> , 2017 , 82, 176-185	7.9	65
190	Resting-state fMRI in sleeping infants more closely resembles adult sleep than adult wakefulness. <i>PLoS ONE</i> , 2017 , 12, e0188122	3.7	28
189	Spatiotemporal Analysis of Structural Changes of the Lamina Cribrosa. <i>Lecture Notes in Computer Science</i> , 2017 , 185-193	0.9	1
188	Subject-Specific Longitudinal Shape Analysis by Coupling Spatiotemporal Shape Modeling with Medial Analysis. <i>Proceedings of SPIE</i> , 2017 , 10133,	1.7	1
187	Twin-singleton developmental study of brain white matter anatomy. <i>Human Brain Mapping</i> , 2017 , 38, 1009-1024	5.9	13
186	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
185	Data-Driven Rank Aggregation with Application to Grand Challenges. <i>Lecture Notes in Computer Science</i> , 2017 , 754-762	0.9	1
184	Compressive Sensing Based Q-Space Resampling for Handling Fast Bulk Motion in Hardi Acquisitions 2016 , 2016, 907-910	1.5	4
183	Image registration and segmentation in longitudinal MRI using temporal appearance modeling 2016 ,		5
182	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
181	Bayesian Covariate Selection in Mixed-Effects Models For Longitudinal Shape Analysis 2016 , 2016, 656-659		1

180	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
179	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
178	Modeling 4D Pathological Changes by Leveraging Normative Models. <i>Computer Vision and Image Understanding</i> , 2016 , 151, 3-13	4.3	2
177	Altered corpus callosum morphology associated with autism over the first 2 years of life. <i>Brain</i> , 2015 , 138, 2046-58	11.2	116
176	Automatic Tissue Segmentation of Neonate Brain MR Images with Subject-specific Atlases. <i>Proceedings of SPIE</i> , 2015 , 9413,	1.7	12
175	Prenatal drug exposure affects neonatal brain functional connectivity. <i>Journal of Neuroscience</i> , 2015 , 35, 5860-9	6.6	53
174	Violence: heightened brain attentional network response is selectively muted in Down syndrome. <i>Journal of Neurodevelopmental Disorders</i> , 2015 , 7, 15	4.6	4
173	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
172	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
171	Shape index distribution based local surface complexity applied to the human cortex. <i>Proceedings of SPIE</i> , 2015 , 9413,	1.7	1
170	Morphometry of anatomical shape complexes with dense deformations and sparse parameters. <i>NeuroImage</i> , 2014 , 101, 35-49	7.9	140
169	Prenatal cocaine effects on brain structure in early infancy. <i>NeuroImage</i> , 2014 , 101, 114-23	7.9	44
168	UNC-Utah NA-MIC framework for DTI fiber tract analysis. <i>Frontiers in Neuroinformatics</i> , 2014 , 7, 51	3.9	45
167	DTIPrep: quality control of diffusion-weighted images. <i>Frontiers in Neuroinformatics</i> , 2014 , 8, 4	3.9	172
166	Multi-atlas segmentation of subcortical brain structures via the AutoSeg software pipeline. <i>Frontiers in Neuroinformatics</i> , 2014 , 8, 7	3.9	72
165	A JOINT FRAMEWORK FOR 4D SEGMENTATION AND ESTIMATION OF SMOOTH TEMPORAL APPEARANCE CHANGES 2014 , 2014, 1291-1294	1.5	1
164	4D ACTIVE CUT: AN INTERACTIVE TOOL FOR PATHOLOGICAL ANATOMY MODELING 2014 , 2014, 529-532	5	15
163	Characterizing growth patterns in longitudinal MRI using image contrast. <i>Proceedings of SPIE</i> , 2014 , 9034, 90340D	1.7	3

162	PARAMETRIC REGRESSION SCHEME FOR DISTRIBUTIONS: ANALYSIS OF DTI FIBER TRACT DIFFUSION CHANGES IN EARLY BRAIN DEVELOPMENT 2014 , 2014, 559-562	1.5	1
161	Subject-Motion Correction in HARDI Acquisitions: Choices and Consequences. <i>Frontiers in Neurology</i> , 2014 , 5, 240	4.1	12
160	GEODESIC REGRESSION OF IMAGE AND SHAPE DATA FOR IMPROVED MODELING OF 4D TRAJECTORIES 2014 , 2014, 385-388	1.5	12
159	Diffeomorphic shape trajectories for improved longitudinal segmentation and statistics. <i>Lecture Notes in Computer Science</i> , 2014 , 17, 49-56	0.9	9
158	Motion Is Inevitable: The Impact of Motion Correction Schemes on HARDI Reconstructions. <i>Mathematics and Visualization</i> , 2014 , 169-179	0.6	
157	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
156	Diffusion imaging quality control via entropy of principal direction distribution. <i>NeuroImage</i> , 2013 , 82, 1-12	7.9	15
155	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
154	Abnormal brain synchrony in Down Syndrome. <i>NeuroImage: Clinical</i> , 2013 , 2, 703-15	5.3	81
153	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
152	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
151	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
150	Associations between white matter microstructure and infants' working memory. <i>NeuroImage</i> , 2013 , 64, 156-66	7.9	76
149	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
148	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
147	DTI Quality Control Assessment via Error Estimation From Monte Carlo Simulations. <i>Proceedings of SPIE</i> , 2013 , 8669, 1667549	1.7	3
146	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
145	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

144	ANALYZING IMAGING BIOMARKERS FOR TRAUMATIC BRAIN INJURY USING 4D MODELING OF LONGITUDINAL MRI 2013 , 2013, 1392-1395	1.5	8
143	SPATIOTEMPORAL MODELING OF DISCRETE-TIME DISTRIBUTION-VALUED DATA APPLIED TO DTI TRACT EVOLUTION IN INFANT NEURODEVELOPMENT 2013 , 2013, 684-687	1.5	2
142	MULTIVARIATE MODELING OF LONGITUDINAL MRI IN EARLY BRAIN DEVELOPMENT WITH CONFIDENCE MEASURES 2013 , 1400-1403	1.5	7
141	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
140	LONGITUDINAL GROWTH MODELING OF DISCRETE-TIME FUNCTIONS WITH APPLICATION TO DTI TRACT EVOLUTION IN EARLY NEURODEVELOPMENT 2013 , 2012, 1945-1400	1.5	1
139	Geodesic shape regression in the framework of currents. <i>Lecture Notes in Computer Science</i> , 2013 , 23, 718-29	0.9	16
138	Geodesic image regression with a sparse parameterization of diffeomorphisms. <i>Lecture Notes in Computer Science</i> , 2013 , 8085, 95-102	0.9	3
137	3D Tensor Normalization for Improved Accuracy in DTI Tensor Registration Methods. <i>Lecture Notes in Computer Science</i> , 2012 , 170-179	0.9	
136	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
135	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
134	Quantitative tract-based white matter development from birth to age 2years. <i>NeuroImage</i> , 2012 , 61, 542-57	7.9	149
133	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
132	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
131	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
130	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
129	STATISTICAL GROWTH MODELING OF LONGITUDINAL DT-MRI FOR REGIONAL CHARACTERIZATION OF EARLY BRAIN DEVELOPMENT 2012 , 1507-1510	1.5	4
128	SEGMENTATION OF SERIAL MRI OF TBI PATIENTS USING PERSONALIZED ATLAS CONSTRUCTION AND TOPOLOGICAL CHANGE ESTIMATION 2012 , 1152-1155	1.5	15
127	Automatic corpus callosum segmentation using a deformable active Fourier contour model. <i>Proceedings of SPIE</i> , 2012 , 8317,	1.7	14

126	A Patient-Specific Segmentation Framework for Longitudinal MR Images of Traumatic Brain Injury. <i>Proceedings of SPIE</i> , 2012 , 8314, 831402	1.7	9
125	Measures for Validation of DTI Tractography. <i>Proceedings of SPIE</i> , 2012 , 8314,	1.7	4
124	Analysis of longitudinal shape variability via subject specific growth modeling. <i>Lecture Notes in Computer Science</i> , 2012 , 15, 731-8	0.9	11
123	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
122	Mixed-Effects Shape Models for Estimating Longitudinal Changes in Anatomy. <i>Lecture Notes in Computer Science</i> , 2012 , 7570, 76-87	0.9	11
121	DTI registration in atlas based fiber analysis of infantile Krabbe disease. <i>NeuroImage</i> , 2011 , 55, 1577-86	7.9	97
120	FADTTS: functional analysis of diffusion tensor tract statistics. <i>NeuroImage</i> , 2011 , 56, 1412-25	7.9	59
119	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
118	CENTS: cortical enhanced neonatal tissue segmentation. <i>Human Brain Mapping</i> , 2011 , 32, 382-96	5.9	34
117	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
116	Twin-singleton differences in neonatal brain structure. <i>Twin Research and Human Genetics</i> , 2011 , 14, 268-76	2.2	19
115	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
114	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
113	Optimal data-driven sparse parameterization of diffeomorphisms for population analysis. <i>Lecture Notes in Computer Science</i> , 2011 , 22, 123-34	0.9	17
112	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
111	Quality Control of Diffusion Weighted Images. <i>Proceedings of SPIE</i> , 2010 , 7628,	1.7	91
110	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
109	Brain volumes in psychotic youth with schizophrenia and mood disorders. <i>Journal of Psychiatry and Neuroscience</i> , 2010 , 35, 229-36	4.5	19

108	Towards Analysis of Growth Trajectory through Multi-modal Longitudinal MR Imaging. <i>Proceedings of SPIE</i> , 2010 , 7623,	1.7	3
107	Changes of MR and DTI appearance in early human brain development. <i>Proceedings of SPIE</i> , 2010 , 7623,	1.7	2
106	Evaluation of DTI Property Maps as Basis of DTI Atlas Building. <i>Proceedings of SPIE</i> , 2010 , 7623,	1.7	2
105	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
104	A NEW FRAMEWORK FOR ANALYZING WHITE MATTER MATURATION IN EARLY BRAIN DEVELOPMENT 2010 , 97-100	1.5	10
103	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
102	Genetic and environmental contributions to neonatal brain structure: A twin study. <i>Human Brain Mapping</i> , 2010 , 31, 1174-82	5.9	97
101	Image registration driven by combined probabilistic and geometric descriptors. <i>Lecture Notes in Computer Science</i> , 2010 , 13, 602-9	0.9	6
100	VOXEL-WISE GROUP ANALYSIS OF DTI 2009 , 807-810	1.5	12
99	Cortical enhanced tissue segmentation of neonatal brain MR images acquired by a dedicated phased array coil 2009 ,		2
98	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
97	Discordance of prenatal and neonatal brain development in twins. <i>Early Human Development</i> , 2009 , 85, 171-5	2.2	6
96	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
95	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
94	Simulation of brain tumors in MR images for evaluation of segmentation efficacy. <i>Medical Image Analysis</i> , 2009 , 13, 297-311	15.4	94
93	Spatiotemporal atlas estimation for developmental delay detection in longitudinal datasets. <i>Lecture Notes in Computer Science</i> , 2009 , 12, 297-304	0.9	61
92	Group analysis of DTI fiber tract statistics with application to neurodevelopment. <i>NeuroImage</i> , 2009 , 45, S133-42	7.9	154
91	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

90	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
89	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
88	Prenatal mild ventriculomegaly predicts abnormal development of the neonatal brain. <i>Biological Psychiatry</i> , 2008 , 64, 1069-76	7.9	54
87	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
86	Minimum description length with local geometry 2008 ,		6
85	Multivariate longitudinal statistics for neonatal-pediatric brain tissue development 2008 ,		1
84	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
83	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
82	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
81	Brain Lesion Segmentation through Physical Model Estimation. <i>Lecture Notes in Computer Science</i> , 2008 , 562-571	0.9	5
80	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
79	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
78	Asymmetrical ventricular enlargement in Parkinson's disease. <i>Movement Disorders</i> , 2007 , 22, 1657-60	7	9
77	CORRESPONDENCE EVALUATION IN LOCAL SHAPE ANALYSIS AND STRUCTURAL SUBDIVISION 2007 ,		9
76	Statistical Shape Analysis of Multi-Object Complexes 2007 ,		16
75	Statistical group differences in anatomical shape analysis using Hotelling T2 metric 2007 ,		6
74	Subcortical structure segmentation using probabilistic atlas priors 2007 ,		20
73	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

72	Quantification of measurement error in DTI: theoretical predictions and validation 2007 , 10, 10-7		6
71	Probabilistic fiber tracking using particle filtering 2007 , 10, 144-52		8
70	User-guided 3D active contour segmentation of anatomical structures: significantly improved efficiency and reliability. <i>NeuroImage</i> , 2006 , 31, 1116-28	7.9	4561
69	Cortical gray and white brain tissue volume in adolescents and adults with autism. <i>Biological Psychiatry</i> , 2006 , 59, 1-6	7.9	131
68	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
67	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
66	Multi-modal image set registration and atlas formation. <i>Medical Image Analysis</i> , 2006 , 10, 440-51	15.4	73
65	Fiber tract-oriented statistics for quantitative diffusion tensor MRI analysis. <i>Medical Image Analysis</i> , 2006 , 10, 786-98	15.4	130
64	Framework for the Statistical Shape Analysis of Brain Structures using SPHARM-PDM. <i>The Insight Journal</i> , 2006 , 242-250		140
63	KWMeshVisu: A Mesh Visualization Tool for Shape Analysis. <i>The Insight Journal</i> , 2006 ,		1
62	Framework for the Statistical Shape Analysis of Brain Structures using SPHARM-PDM. <i>The Insight Journal</i> , 2006 ,		62
61	Improved correspondence for DTI population studies via unbiased atlas building. <i>Lecture Notes in Computer Science</i> , 2006 , 9, 260-7	0.9	27
60	Synthetic ground truth for validation of brain tumor MRI segmentation. <i>Lecture Notes in Computer Science</i> , 2005 , 8, 26-33	0.9	19
59	Vessel tortuosity and brain tumor malignancy: a blinded study. <i>Academic Radiology</i> , 2005 , 12, 1232-40	4.3	173
58	Facial emotion perception and fusiform gyrus volume in first episode schizophrenia. <i>Schizophrenia Research</i> , 2005 , 79, 341-3	3.6	8
57	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
56	Automatic segmentation of MR images of the developing newborn brain. <i>Medical Image Analysis</i> , 2005 , 9, 457-66	15.4	258
55	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

54	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
53	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
52	Hypothesis testing with nonlinear shape models. <i>Lecture Notes in Computer Science</i> , 2005 , 19, 15-26	0.9	13
51	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
50	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
49	Fiber tract-oriented statistics for quantitative diffusion tensor MRI analysis. <i>Lecture Notes in Computer Science</i> , 2005 , 8, 131-9	0.9	13
48	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
47	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
46	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
45	3 Tesla magnetic resonance imaging of the brain in newborns. <i>Psychiatry Research - Neuroimaging</i> , 2004 , 132, 81-5	2.9	48
44	A brain tumor segmentation framework based on outlier detection. <i>Medical Image Analysis</i> , 2004 , 8, 275-84	15.4	399
43	Boundary and medial shape analysis of the hippocampus in schizophrenia. <i>Medical Image Analysis</i> , 2004 , 8, 197-203	15.4	181
42	Unbiased diffeomorphic atlas construction for computational anatomy. <i>NeuroImage</i> , 2004 , 23 Suppl 1, S151-60	7.9	638
41	Correction scheme for multiple correlated statistical tests in local shape analysis 2004 ,		2
40	Automatic Segmentation of Neonatal Brain MRI. <i>Lecture Notes in Computer Science</i> , 2004 , 10-17	0.9	14
39	Profile Scale-Spaces for Multiscale Image Match. <i>Lecture Notes in Computer Science</i> , 2004 , 176-183	0.9	5
38	Determining Malignancy of Brain Tumors by Analysis of Vessel Shape. <i>Lecture Notes in Computer Science</i> , 2004 , 645-653	0.9	6
37	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

36	Robust Estimation for Brain Tumor Segmentation. <i>Lecture Notes in Computer Science</i> , 2003 , 530-537	0.9	18
35	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
34	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
33	Boundary and Medial Shape Analysis of the Hippocampus in Schizophrenia. <i>Lecture Notes in Computer Science</i> , 2003 , 464-471	0.9	9
32	Quantitative Analysis of White Matter Fiber Properties along Geodesic Paths. <i>Lecture Notes in Computer Science</i> , 2003 , 16-23	0.9	13
31	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
30	Vascular Attributes and Malignant Brain Tumors. <i>Lecture Notes in Computer Science</i> , 2003 , 671-679	0.9	8
29	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
28	Object models in multiscale intrinsic coordinates via m-reps. <i>Image and Vision Computing</i> , 2003 , 21, 5-15	3.7	6
27	Structural and radiometric asymmetry in brain images. <i>Medical Image Analysis</i> , 2003 , 7, 155-70	15.4	29
26	Automatic brain tumor segmentation by subject specific modification of atlas priors. <i>Academic Radiology</i> , 2003 , 10, 1341-8	4.3	192
25	Practical consideration for 3T imaging. <i>Magnetic Resonance Imaging Clinics of North America</i> , 2003 , 11, 615-39, vi	1.6	42
24	MICCAI: medical image computing and computer-assisted intervention1. <i>Academic Radiology</i> , 2003 , 10, 1339-1340	4.3	1
23	Analysis Tool for Diffusion Tensor MRI. <i>Lecture Notes in Computer Science</i> , 2003 , 967-968	0.9	16
22	Measuring tortuosity of the intracerebral vasculature from MRA images. <i>IEEE Transactions on Medical Imaging</i> , 2003 , 22, 1163-71	11.7	262
21	Scale-Space on Image Profiles about an Object Boundary. <i>Lecture Notes in Computer Science</i> , 2003 , 564-575	0.9	5
20	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
19	Multisite validation of image analysis methods: assessing intra- and intersite variability 2002 , 4684, 278		16

18	Automatic Brain and Tumor Segmentation. <i>Lecture Notes in Computer Science</i> , 2002 , 372-379	0.9	34
17	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
16	Shape versus Size: Improved Understanding of the Morphology of Brain Structures. <i>Lecture Notes in Computer Science</i> , 2001 , 24-32	0.9	58
15	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
14	Computer-assisted visualization of arteriovenous malformations on the home personal computer. <i>Neurosurgery</i> , 2001 , 48, 576-82; discussion 582-3	3.2	25
13	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
12	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
11	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
10	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
9	Parametrization of Closed Surfaces for 3-D Shape Description. <i>Computer Vision and Image Understanding</i> , 1995 , 61, 154-170	4.3	439
8	Image analysis and computer vision in medicine. <i>Computerized Medical Imaging and Graphics</i> , 1994 , 18, 85-96	7.6	20
7	Structural description and combined 3D display for superior analysis of cerebral vascularity from MRA 1994 ,		11
6	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
5	Unsupervised tissue type segmentation of 3D dual-echo MR head data. <i>Image and Vision Computing</i> , 1992 , 10, 349-360	3.7	70
4	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
3	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
2	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
1	A Hardware And Software Optimized Program System For Interactive Image Processing 1984 ,		3

