

J Tilak Ratnanather

List of Publications by Year in descending order

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Version: 2024-02-01

98
papers

2,629
citations

147566

31
h-index

214527

47
g-index

104
all docs

104
docs citations

104
times ranked

3730
citing authors

#	ARTICLE	IF	CITATIONS
1	A comparative neuroimaging perspective of olfaction and higher-order olfactory processing: on health and disease. <i>Seminars in Cell and Developmental Biology</i> , 2022, 129, 22-30.	2.3	4
2	Volume Reduction of the Dorsal Lateral Prefrontal Cortex Prior to the Onset of Frank Psychosis in Individuals with an At-Risk Mental State. <i>Cerebral Cortex</i> , 2022, 32, 2245-2253.	1.6	1
3	Linking Vestibular Function and Subcortical Gray Matter Volume Changes in a Longitudinal Study of Aging Adults. , 2022, 2021, .		0
4	A 7 Tesla Amygdalar-Hippocampal Shape Analysis of Lithium Response in Bipolar Disorder. <i>Frontiers in Psychiatry</i> , 2021, 12, 614010.	1.3	7
5	An mHealth App (Speech Banana) for Auditory Training: App Design and Development Study. <i>JMIR MHealth and UHealth</i> , 2021, 9, e20890.	1.8	5
6	Embracing diversity and inclusivity in an academic setting: Insights from the Organization for Human Brain Mapping. <i>NeuroImage</i> , 2021, 229, 117742.	2.1	25
7	Hearing loss impacts gray and white matter across the lifespan: Systematic review, meta-analysis and meta-regression. <i>NeuroImage</i> , 2021, 231, 117826.	2.1	22
8	Supporting Equity and Inclusion of Deaf and Hard-of-Hearing Individuals in Professional Organizations. <i>Frontiers in Education</i> , 2021, 6, .	1.2	7
9	Visualization of Speech Perception Analysis via Phoneme Alignment: A Pilot Study. <i>Frontiers in Neurology</i> , 2021, 12, 724800.	1.1	2
10	Structural neuroimaging of the altered brain stemming from pediatric and adolescent hearing loss—Scientific and clinical challenges. <i>Wiley Interdisciplinary Reviews: Systems Biology and Medicine</i> , 2020, 12, e1469.	6.6	8
11	Structural MRI Study of the Planum Temporale in Individuals With an At-Risk Mental State Using Labeled Cortical Distance Mapping. <i>Frontiers in Psychiatry</i> , 2020, 11, 593952.	1.3	3
12	Vestibular function and cortical and sub-cortical alterations in an aging population. <i>Heliyon</i> , 2020, 6, e04728.	1.4	20
13	Motor cortical thickness is related to effort-based decision-making in humans. <i>Journal of Neurophysiology</i> , 2020, 123, 2373-2381.	0.9	5
14	Visualising the topography of the acoustic radiation in clinical diffusion tensor imaging scans. <i>Neuroradiology</i> , 2020, 62, 1157-1167.	1.1	1
15	Using deep Siamese neural networks for detection of brain asymmetries associated with Alzheimer's Disease and Mild Cognitive Impairment. <i>Magnetic Resonance Imaging</i> , 2019, 64, 190-199.	1.0	56
16	Cortical thickness atrophy in the transentorhinal cortex in mild cognitive impairment. <i>NeuroImage: Clinical</i> , 2019, 21, 101617.	1.4	46
17	Regional subcortical shape analysis in premanifest Huntington's disease. <i>Human Brain Mapping</i> , 2019, 40, 1419-1433.	1.9	20
18	3D Normal Coordinate Systems for Cortical Areas. <i>Lecture Notes Series, Institute for Mathematical Sciences</i> , 2019, , 167-179.	0.2	8

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19	Scientists with Hearing Loss Changing Perspectives in STEMM. <i>Acoustics Today</i> , 2019, 15, 66-70.	1.0	0
20	Community network for deaf scientists. <i>Science</i> , 2017, 356, 386-387.	6.0	4
21	A Large Deformation Diffeomorphic Approach to Registration of CLARITY Images via Mutual Information. <i>Lecture Notes in Computer Science</i> , 2017, , 275-282.	1.0	8
22	Reduced Thickness of the Anterior Cingulate Cortex in Individuals With an At-Risk Mental State Who Later Develop Psychosis. <i>Schizophrenia Bulletin</i> , 2017, 43, 907-913.	2.3	31
23	Analysis of cortical morphometric variability using labeled cortical distance maps. <i>Statistics and Its Interface</i> , 2017, 10, 313-341.	0.2	0
24	Opinion: Accessible Mathematics for People with Hearing Loss at Colleges and Universities. <i>Notices of the American Mathematical Society</i> , 2017, 64, 1180-1183.	0.1	0
25	Eigenbreasts for statistical breast phantoms. <i>Proceedings of SPIE</i> , 2016, , .	0.8	1
26	Linking white matter and deep gray matter alterations in premanifest Huntington disease. <i>NeuroImage: Clinical</i> , 2016, 11, 450-460.	1.4	58
27	The development of a population of 4D pediatric XCAT phantoms for imaging research and optimization. <i>Medical Physics</i> , 2015, 42, 4719-4726.	1.6	46
28	Relationship of medial temporal lobe atrophy, $APOE$ genotype, and cognitive reserve in preclinical Alzheimer's disease. <i>Human Brain Mapping</i> , 2015, 36, 2826-2841.	1.9	84
29	Network Neurodegeneration in Alzheimer's Disease via MRI Based Shape Diffeomorphometry and High-Field Atlas. <i>Frontiers in Bioengineering and Biotechnology</i> , 2015, 3, 54.	2.0	43
30	Morphometry of the amygdala in schizophrenia and psychotic bipolar disorder. <i>Schizophrenia Research</i> , 2015, 164, 199-202.	1.1	28
31	Ventromedial prefrontal cortex thinning in preschool-onset depression. <i>Journal of Affective Disorders</i> , 2015, 180, 79-86.	2.0	31
32	Amygdalar atrophy in symptomatic Alzheimer's disease based on diffeomorphometry: the BIOCARD cohort. <i>Neurobiology of Aging</i> , 2015, 36, S3-S10.	1.5	53
33	Regionally selective atrophy of subcortical structures in prodromal HD as revealed by statistical shape analysis. <i>Human Brain Mapping</i> , 2014, 35, 792-809.	1.9	58
34	Morphometric Differences in Planum Temporale in Schizophrenia and Bipolar Disorder Revealed by Statistical Analysis of Labeled Cortical Depth Maps. <i>Frontiers in Psychiatry</i> , 2014, 5, 94.	1.3	12
35	Algorithm 935. <i>ACM Transactions on Mathematical Software</i> , 2014, 40, 1-12.	1.6	30
36	A set of 4D pediatric XCAT reference phantoms for multimodality research. <i>Medical Physics</i> , 2014, 41, 033701.	1.6	32

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37	Knowledge-based automated reconstruction of human brain white matter tracts using a path-finding approach with dynamic programming. <i>NeuroImage</i> , 2014, 88, 271-281.	2.1	11
38	Computational Anatomy Gateway. , 2014, , .		6
39	The development of a population of 4D pediatric XCAT phantoms for CT imaging research and optimization. , 2014, , .		1
40	Population of anatomically variable 4D XCAT adult phantoms for imaging research and optimization. <i>Medical Physics</i> , 2013, 40, 043701.	1.6	154
41	The diffeomorphometry of temporal lobe structures in preclinical Alzheimer's disease. <i>NeuroImage: Clinical</i> , 2013, 3, 352-360.	1.4	80
42	Morphometry of superior temporal gyrus and planum temporale in schizophrenia and psychotic bipolar disorder. <i>Schizophrenia Research</i> , 2013, 150, 476-483.	1.1	52
43	Reduced anterior cingulate gray matter volume and thickness in subjects with deficit schizophrenia. <i>Schizophrenia Research</i> , 2013, 150, 484-490.	1.1	44
44	Structural-functional correlations between hippocampal volume and cortico-limbic emotional responses in depressed children. <i>Cognitive, Affective and Behavioral Neuroscience</i> , 2013, 13, 135-151.	1.0	31
45	The Stokesian flow field of an oscillatory submerged viscous jet impinging on a planar wall. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , 2013, 469, 20130282.	1.0	1
46	Cortico-Cortical, Cortico-Striatal, and Cortico-Thalamic White Matter Fiber Tracts Generated in the Macaque Brain via Dynamic Programming. <i>Brain Connectivity</i> , 2013, 3, 475-490.	0.8	10
47	Distinct abnormalities of the primate prefrontal cortex caused by ionizing radiation in early or midgestation. <i>Journal of Comparative Neurology</i> , 2013, 521, 1040-1053.	0.9	32
48	Censoring Distances Based on Labeled Cortical Distance Maps in Cortical Morphometry. <i>Frontiers in Neurology</i> , 2013, 4, 155.	1.1	2
49	Computational analysis of LDDMM for brain mapping. <i>Frontiers in Neuroscience</i> , 2013, 7, 151.	1.4	36
50	Effects of protocol and obesity on dose conversion factors in adult body CT. <i>Medical Physics</i> , 2012, 39, 6550-6571.	1.6	46
51	Metric Distances between Hippocampal Shapes Indicate Different Rates of Change over Time in Nondemented and Demented Subjects. <i>Current Alzheimer Research</i> , 2012, 9, 972-981.	0.7	3
52	Ontological labels for automated location of anatomical shape differences. <i>Journal of Biomedical Informatics</i> , 2012, 45, 522-527.	2.5	8
53	A Stokesian analysis of a submerged viscous jet impinging on a planar wall. <i>Journal of Fluid Mechanics</i> , 2012, 712, 531-551.	1.4	6
54	An MRI study of amygdala in schizophrenia and psychotic bipolar disorder. <i>Schizophrenia Research</i> , 2012, 138, 188-191.	1.1	26

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55	Amygdala Atrophy in MCI/Alzheimer's Disease in the BIOCARD cohort based on Diffeomorphic Morphometry. , 2012, 2012, 155-166.		8
56	Ontological Labels for Automated Location of Left Ventricular Remodeling. , 2011, , .		0
57	Feasibility of Geometric-Intensity-Based Semi-Automated Delineation of the Tentorium Cerebelli from MRI Scans. , 2011, 21, e148-e155.		3
58	Statistical Analysis of Cortical Morphometrics Using Pooled Distances Based on Labeled Cortical Distance Maps. Journal of Mathematical Imaging and Vision, 2011, 40, 20-35.	0.8	11
59	Quantization and analysis of hippocampal morphometric changes due to dementia of Alzheimer type using metric distances based on large deformation diffeomorphic metric mapping. Computerized Medical Imaging and Graphics, 2011, 35, 275-293.	3.5	10
60	Generating patient-specific dosimetry phantoms with whole-body diffeomorphic image registration. , 2011, , .		7
61	Patient Specific Dosimetry Phantoms Using Multichannel LDDMM of the Whole Body. International Journal of Biomedical Imaging, 2011, 2011, 1-9.	3.0	15
62	Structural abnormalities in gyri of the prefrontal cortex in individuals with schizophrenia and their unaffected siblings. British Journal of Psychiatry, 2010, 196, 150-157.	1.7	72
63	Large deformation diffeomorphic metric mapping registration of reconstructed 3D histological section images and in vivo MR images. Frontiers in Human Neuroscience, 2010, 4, 43.	1.0	44
64	The new XCAT series of digital phantoms for multi-modality imaging. , 2010, , .		3
65	Diffeomorphic Active Contours. SIAM Journal on Imaging Sciences, 2010, 3, 176-198.	1.3	17
66	Collaborative computational anatomy: An MRI morphometry study of the human brain via diffeomorphic metric mapping. Human Brain Mapping, 2009, 30, 2132-2141.	1.9	48
67	Special Issue on Mathematics in Brain Imaging. NeuroImage, 2009, 45, S1-S2.	2.1	6
68	Neuroanatomical asymmetry patterns in individuals with schizophrenia and their non-psychotic siblings. NeuroImage, 2009, 47, 1221-1229.	2.1	50
69	Patient specific computerized phantoms to estimate dose in pediatric CT. , 2009, , .		14
70	Segmentation of arteries in MPRAGE images of the ventral medial prefrontal cortex. Computerized Medical Imaging and Graphics, 2008, 32, 36-43.	3.5	6
71	Region-based analysis with application of cortical thickness variation of left planum temporale in schizophrenia and psychotic bipolar disorder. Human Brain Mapping, 2008, 29, 973-985.	1.9	41
72	Cingulate gyrus neuroanatomy in schizophrenia subjects and their non-psychotic siblings. Schizophrenia Research, 2008, 104, 61-70.	1.1	54

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73	Diffeomorphic Surface Flows: A Novel Method of Surface Evolution. SIAM Journal on Applied Mathematics, 2008, 68, 806-824.	0.8	10
74	Validation of Alternating Kernel Mixture Method: Application to Tissue Segmentation of Cortical and Subcortical Structures. Journal of Biomedicine and Biotechnology, 2008, 2008, 1-8.	3.0	12
75	Validation of Alternating Kernel Mixture Method Based Segmentation of the Human Brain. , 2007, , .		0
76	Hypotonic swelling of salicylate-treated cochlear outer hair cells. Hearing Research, 2007, 228, 95-104.	0.9	17
77	Combining anatomical manifold information via diffeomorphic metric mappings for studying cortical thinning of the cingulate gyrus in schizophrenia. NeuroImage, 2007, 37, 821-833.	2.1	45
78	Large Deformation Diffeomorphism and Momentum Based Hippocampal Shape Discrimination in Dementia of the Alzheimer type. IEEE Transactions on Medical Imaging, 2007, 26, 462-470.	5.4	136
79	Statistical Analysis of Morphometric Measures Based on Labeled Cortical Distance Maps. , 2007, , .		1
80	Abnormalities of cingulate gyrus neuroanatomy in schizophrenia. Schizophrenia Research, 2007, 93, 66-78.	1.1	66
81	Amygdala Volume Analysis in Female Twins with Major Depression. Biological Psychiatry, 2007, 62, 415-422.	0.7	61
82	Segmenting magnetic resonance images via hierarchical mixture modelling. Computational Statistics and Data Analysis, 2006, 50, 551-567.	0.7	14
83	Electromechanical Models of the Outer Hair Cell Composite Membrane. Journal of Membrane Biology, 2006, 209, 135-152.	1.0	43
84	Validation of semiautomated methods for quantifying cingulate cortical metrics in schizophrenia. Psychiatry Research - Neuroimaging, 2004, 132, 53-68.	0.9	33
85	Soliton dynamics in computational anatomy. NeuroImage, 2004, 23, S170-S178.	2.1	61
86	Computational anatomy and neuropsychiatric disease: probabilistic assessment of variation and statistical inference of group difference, hemispheric asymmetry, and time-dependent change. NeuroImage, 2004, 23, S56-S68.	2.1	90
87	Dynamic programming generation of boundaries of local coordinatized submanifolds in the neocortex: application to the planum temporale. NeuroImage, 2003, 20, 359-377.	2.1	55
88	Labeled cortical mantle distance maps of the cingulate quantify differences between dementia of the Alzheimer type and healthy aging. Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 15172-15177.	3.3	56
89	Semi-automated segmentation of cortical subvolumes via hierarchical mixture modeling. , 2003, 5032, 1602.		1
90	Validating Cortical Surface Analysis of Medial Prefrontal Cortex. NeuroImage, 2001, 14, 1058-1069.	2.1	30

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91	On the thermal field of a separating wall jet. Journal of Engineering Mathematics, 2001, 41, 329-344.	0.6	3
92	An analysis of the hydraulic conductivity of the extracisternal space of the cochlear outer hair cell. Journal of Mathematical Biology, 2000, 40, 372-382.	0.8	7
93	Bayesian Construction of Geometrically Based Cortical Thickness Metrics. NeuroImage, 2000, 12, 676-687.	2.1	100
94	Early Education of the Deaf. Science, 1998, 279, 1611-1611.	6.0	0
95	Measurements and a model of the outer hair cell hydraulic conductivity. Hearing Research, 1996, 96, 33-40.	0.9	15
96	The ratio of elastic moduli of cochlear outer hair cells derived from osmotic experiments. Journal of the Acoustical Society of America, 1996, 99, 1025-1028.	0.5	27
97	Solution of the Thermal Boundary Layer Equations in Regions of Flow Reversal. SIAM Journal on Applied Mathematics, 1995, 55, 192-204.	0.8	5
98	The outer region of a turbulent boundary layer. Physics of Fluids A, Fluid Dynamics, 1990, 2, 427-434.	1.6	11