

# Nicholas J Tustison

## List of Publications by Year in Descending Order

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**Version:** 2024-04-28

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

84  
papers

9,745  
citations

26  
h-index

93  
g-index

93  
ext. papers

13,333  
ext. citations

4.7  
avg, IF

5.91  
L-index

#	Paper	IF	Citations
84	Deformation-based morphometry identifies deep brain structures protected by ocrelizumab.. <i>NeuroImage: Clinical</i> , <b>2022</b> , 34, 102959	5.3	
83	Mapping the Spatial Distribution of Lesions in Stroke: Effect of Diffeomorphic Registration Strategy in the ATLAS Dataset. <i>NeuroMethods</i> , <b>2022</b> , 79-94	0.4	
82	Computational Approach toward Pulmonary Functional Imaging. <i>Medical Radiology</i> , <b>2021</b> , 299-318	0.2	
81	Deep Learning-based Quantification of Abdominal Subcutaneous and Visceral Fat Volume on CT Images. <i>Academic Radiology</i> , <b>2021</b> , 28, 1481-1487	4.3	2
80	The ANTsX ecosystem for quantitative biological and medical imaging. <i>Scientific Reports</i> , <b>2021</b> , 11, 9068	4.9	9
79	Diminishing Efficacy of Prone Positioning With Late Application in Evolving Lung Injury. <i>Critical Care Medicine</i> , <b>2021</b> , 49, e1015-e1024	1.4	6
78	Image- versus histogram-based considerations in semantic segmentation of pulmonary hyperpolarized gas images. <i>Magnetic Resonance in Medicine</i> , <b>2021</b> , 86, 2822-2836	4.4	1
77	Negative Overgeneralization is Associated with Anxiety and Mechanisms of Pattern Completion in Peripubertal Youth. <i>Social Cognitive and Affective Neuroscience</i> , <b>2021</b> ,	4	1
76	Characterisation of gas exchange in COPD with dissolved-phase hyperpolarised xenon-129 MRI. <i>Thorax</i> , <b>2021</b> , 76, 178-181	7.3	3
75	Similarity-driven multi-view embeddings from high-dimensional biomedical data. <i>Nature Computational Science</i> , <b>2021</b> , 1, 143-152		2
74	Measures of ventilation heterogeneity mapped with hyperpolarized helium-3 MRI demonstrate a T2-high phenotype in asthma. <i>Pediatric Pulmonology</i> , <b>2021</b> , 56, 1440-1448	3.5	1
73	Evaluation of Regional Lung Function in Pulmonary Fibrosis with Xenon-129 MRI. <i>Tomography</i> , <b>2021</b> , 7, 452-465	3.1	1
72	Characterizing Gas Exchange Physiology in Healthy Young Electronic-Cigarette Users with Hyperpolarized Xe MRI: A Pilot Study. <i>International Journal of COPD</i> , <b>2021</b> , 16, 3183-3187	3	1
71	Mitigating site effects in covariance for machine learning in neuroimaging data.. <i>Human Brain Mapping</i> , <b>2021</b> ,	5.9	3
70	Single-Session Bronchial Thermoplasty Guided by Xe Magnetic Resonance Imaging. A Pilot Randomized Controlled Clinical Trial. <i>American Journal of Respiratory and Critical Care Medicine</i> , <b>2020</b> , 202, 524-534	10.2	25
69	Longitudinal ComBat: A method for harmonizing longitudinal multi-scanner imaging data. <i>NeuroImage</i> , <b>2020</b> , 220, 117129	7.9	32
68	Brain Tumor Segmentation Using an Ensemble of 3D U-Nets and Overall Survival Prediction Using Radiomic Features. <i>Frontiers in Computational Neuroscience</i> , <b>2020</b> , 14, 25	3.5	59

67	In vivo imaging of canine lung deformation: effects of posture, pneumonectomy, and inhaled erythropoietin. <i>Journal of Applied Physiology</i> , <b>2020</b> , 128, 1093-1105	3.7	1
66	An Image Registration-Based Morphing Technique for Generating Subject-Specific Brain Finite Element Models. <i>Annals of Biomedical Engineering</i> , <b>2020</b> , 48, 2412-2424	4.7	12
65	Anterolateral entorhinal cortex thickness as a new biomarker for early detection of Alzheimer's disease. <i>Alzheimer's and Dementia: Diagnosis, Assessment and Disease Monitoring</i> , <b>2020</b> , 12, e12068	5.2	6
64	Functional and Structural Neuroimaging Correlates of Repetitive Low-Level Blast Exposure in Career Breachers. <i>Journal of Neurotrauma</i> , <b>2020</b> , 37, 2468-2481	5.4	12
63	Automated apparent diffusion coefficient analysis for genotype prediction in lower grade glioma: association with the T2-FLAIR mismatch sign. <i>Journal of Neuro-Oncology</i> , <b>2020</b> , 149, 325-335	4.8	9
62	Multi-Site Meta-Analysis of Morphometry. <i>IEEE/ACM Transactions on Computational Biology and Bioinformatics</i> , <b>2019</b> , 16, 1508-1514	3	4
61	Structural neuroimaging in mild traumatic brain injury: A chronic effects of neurotrauma consortium study. <i>International Journal of Methods in Psychiatric Research</i> , <b>2019</b> , 28, e1781	4.3	7
60	A randomized trial of an NMDA receptor antagonist for reversing corticosteroid effects on the human hippocampus. <i>Neuropsychopharmacology</i> , <b>2019</b> , 44, 2263-2267	8.7	4
59	Learning image-based spatial transformations via convolutional neural networks: A review. <i>Magnetic Resonance Imaging</i> , <b>2019</b> , 64, 142-153	3.3	16
58	Deep convolutional neural network for segmentation of thoracic organs-at-risk using cropped 3D images. <i>Medical Physics</i> , <b>2019</b> , 46, 2169-2180	4.4	53
57	Probing Changes in Lung Physiology in COPD Using CT, Perfusion MRI, and Hyperpolarized Xenon-129 MRI. <i>Academic Radiology</i> , <b>2019</b> , 26, 326-334	4.3	16
56	Longitudinal Mapping of Cortical Thickness Measurements: An Alzheimer's Disease Neuroimaging Initiative-Based Evaluation Study. <i>Journal of Alzheimer's Disease</i> , <b>2019</b> , 71, 165-183	4.3	13
55	Convolutional Neural Networks with Template-Based Data Augmentation for Functional Lung Image Quantification. <i>Academic Radiology</i> , <b>2019</b> , 26, 412-423	4.3	18
54	A randomized, double-blind, placebo-controlled trial of lamotrigine for prescription corticosteroid effects on the human hippocampus. <i>European Neuropsychopharmacology</i> , <b>2019</b> , 29, 376-383	1.2	2
53	ABCA7 risk variant in healthy older African Americans is associated with a functionally isolated entorhinal cortex mediating deficient generalization of prior discrimination training. <i>Hippocampus</i> , <b>2019</b> , 29, 527-538	3.5	13
52	Whole mouse brain connectomics. <i>Journal of Comparative Neurology</i> , <b>2019</b> , 527, 2146-2157	3.4	10
51	Functional Imbalance of Anterolateral Entorhinal Cortex and Hippocampal Dentate/CA3 Underlies Age-Related Object Pattern Separation Deficits. <i>Neuron</i> , <b>2018</b> , 97, 1187-1198.e4	13.9	81
50	Longitudinal and cross-sectional structural magnetic resonance imaging correlates of AV-1451 uptake. <i>Neurobiology of Aging</i> , <b>2018</b> , 66, 49-58	5.6	44

49	Unstable Inflation Causing Injury. Insight from Prone Position and Paired Computed Tomography Scans. <i>American Journal of Respiratory and Critical Care Medicine</i> , <b>2018</b> , 198, 197-207	10.2	23
48	Quantitative Computed Tomography Metrics From the Transplanted Lung can Predict Forced Expiratory Volume in the First Second After Lung Transplantation. <i>Journal of Thoracic Imaging</i> , <b>2018</b> , 33, 112-123	5.6	9
47	Deep learning-based quantification of abdominal fat on magnetic resonance images. <i>PLoS ONE</i> , <b>2018</b> , 13, e0204071	3.7	7
46	APOE $\epsilon$ status in healthy older African Americans is associated with deficits in pattern separation and hippocampal hyperactivation. <i>Neurobiology of Aging</i> , <b>2018</b> , 69, 221-229	5.6	19
45	Use of hyperpolarized helium-3 MRI to assess response to ivacaftor treatment in patients with cystic fibrosis. <i>Journal of Cystic Fibrosis</i> , <b>2017</b> , 16, 267-274	4.1	53
44	RNA-seq analyses reveal that cervical spinal cords and anterior motor neurons from amyotrophic lateral sclerosis subjects show reduced expression of mitochondrial DNA-encoded respiratory genes, and rhTFAM may correct this respiratory deficiency. <i>Brain Research</i> , <b>2017</b> , 1667, 74-83	3.7	10
43	Tidal changes on CT and progression of ARDS. <i>Thorax</i> , <b>2017</b> , 72, 981-989	7.3	25
42	A population level atlas of Mus musculus craniofacial skeleton and automated image-based shape analysis. <i>Journal of Anatomy</i> , <b>2017</b> , 231, 433-443	2.9	10
41	Supervised learning technique for the automated identification of white matter hyperintensities in traumatic brain injury. <i>Brain Injury</i> , <b>2016</b> , 30, 1458-1468	2.1	16
40	Automated segmentation of chronic stroke lesions using LINDA: Lesion identification with neighborhood data analysis. <i>Human Brain Mapping</i> , <b>2016</b> , 37, 1405-21	5.9	87
39	Clinical correlates of lung ventilation defects in asthmatic children. <i>Journal of Allergy and Clinical Immunology</i> , <b>2016</b> , 137, 789-96.e7	11.5	32
38	Atlas-based estimation of lung and lobar anatomy in proton MRI. <i>Magnetic Resonance in Medicine</i> , <b>2016</b> , 76, 315-20	4.4	17
37	Entorhinal Cortex Thickness across the Human Lifespan. <i>Journal of Neuroimaging</i> , <b>2016</b> , 26, 278-82	2.8	22
36	Crowdsourced estimation of cognitive decline and resilience in Alzheimer's disease. <i>Alzheimer's and Dementia</i> , <b>2016</b> , 12, 645-53	1.2	58
35	Advanced Normalization Tools for Cardiac Motion Correction. <i>Lecture Notes in Computer Science</i> , <b>2015</b> , 3-12	0.9	7
34	Noninvasive evaluation of the regional variations of GABA using magnetic resonance spectroscopy at 3 Tesla. <i>Magnetic Resonance Imaging</i> , <b>2015</b> , 33, 611-7	3.3	11
33	Optimal Symmetric Multimodal Templates and Concatenated Random Forests for Supervised Brain Tumor Segmentation (Simplified) with ANTsR. <i>Neuroinformatics</i> , <b>2015</b> , 13, 209-25	3.2	163
32	Semiautomatic segmentation of longitudinal computed tomography images in a rat model of lung injury by surfactant depletion. <i>Journal of Applied Physiology</i> , <b>2015</b> , 118, 377-85	3.7	17

31	The pediatric template of brain perfusion. <i>Scientific Data</i> , <b>2015</b> , 2, 150003	8.2	40
30	Rapid acquisition of helium-3 and proton three-dimensional image sets of the human lung in a single breath-hold using compressed sensing. <i>Magnetic Resonance in Medicine</i> , <b>2015</b> , 74, 1110-5	4.4	13
29	Neuroinformatics and the The Insight ToolKit. <i>Frontiers in Neuroinformatics</i> , <b>2015</b> , 9, 5	3.9	4
28	The Multimodal Brain Tumor Image Segmentation Benchmark (BRATS). <i>IEEE Transactions on Medical Imaging</i> , <b>2015</b> , 34, 1993-2024	11.7	2132
27	Multimodal MR imaging model to predict tumor infiltration in patients with gliomas. <i>Neuroradiology</i> , <b>2014</b> , 56, 107-15	3.2	21
26	Logical circularity in voxel-based analysis: normalization strategy may induce statistical bias. <i>Human Brain Mapping</i> , <b>2014</b> , 35, 745-59	5.9	35
25	Large-scale evaluation of ANTs and FreeSurfer cortical thickness measurements. <i>NeuroImage</i> , <b>2014</b> , 99, 166-79	7.9	350
24	The Insight ToolKit image registration framework. <i>Frontiers in Neuroinformatics</i> , <b>2014</b> , 8, 44	3.9	272
23	The ANTs cortical thickness processing pipeline <b>2013</b> ,		12
22	Explicit B-spline regularization in diffeomorphic image registration. <i>Frontiers in Neuroinformatics</i> , <b>2013</b> , 7, 39	3.9	131
21	Instrumentation bias in the use and evaluation of scientific software: recommendations for reproducible practices in the computational sciences. <i>Frontiers in Neuroscience</i> , <b>2013</b> , 7, 162	5.1	19
20	A reproducible evaluation of ANTs similarity metric performance in brain image registration. <i>NeuroImage</i> , <b>2011</b> , 54, 2033-44	7.9	2213
19	Topological well-composedness and glamorous glue: a digital gluing algorithm for topologically constrained front propagation. <i>IEEE Transactions on Image Processing</i> , <b>2011</b> , 20, 1756-61	8.7	13
18	Point set registration using Havrda-Charvat-Tsallis entropy measures. <i>IEEE Transactions on Medical Imaging</i> , <b>2011</b> , 30, 451-60	11.7	20
17	Evaluation of registration methods on thoracic CT: the EMPIRE10 challenge. <i>IEEE Transactions on Medical Imaging</i> , <b>2011</b> , 30, 1901-20	11.7	311
16	An open source multivariate framework for n-tissue segmentation with evaluation on public data. <i>Neuroinformatics</i> , <b>2011</b> , 9, 381-400	3.2	340
15	Ventilation-based segmentation of the lungs using hyperpolarized (3)He MRI. <i>Journal of Magnetic Resonance Imaging</i> , <b>2011</b> , 34, 831-41	5.6	48
14	Pulmonary kinematics from image data: a review. <i>Academic Radiology</i> , <b>2011</b> , 18, 402-17	4.3	11

13	N4ITK: improved N3 bias correction. <i>IEEE Transactions on Medical Imaging</i> , <b>2010</b> , 29, 1310-20	11.7	2457
12	Pulmonary kinematics from tagged hyperpolarized helium-3 MRI. <i>Journal of Magnetic Resonance Imaging</i> , <b>2010</b> , 31, 1236-41	5.6	14
11	Feature analysis of hyperpolarized helium-3 pulmonary MRI: a study of asthmatics versus nonasthmatics. <i>Magnetic Resonance in Medicine</i> , <b>2010</b> , 63, 1448-55	4.4	42
10	Sparse unbiased analysis of anatomical variance in longitudinal imaging. <i>Lecture Notes in Computer Science</i> , <b>2010</b> , 13, 324-31	0.9	15
9	Directly manipulated free-form deformation image registration. <i>IEEE Transactions on Image Processing</i> , <b>2009</b> , 18, 624-35	8.7	50
8	A new information-theoretic measure to control the robustness-sensitivity trade-off for DMFFD point-set registration. <i>Lecture Notes in Computer Science</i> , <b>2009</b> , 21, 215-26	0.9	4
7	Topological Repairing of 3D Digital Images. <i>Journal of Mathematical Imaging and Vision</i> , <b>2008</b> , 30, 249-274	6	28
6	Biventricular myocardial strains via nonrigid registration of anatomical NURBS model [corrected]. <i>IEEE Transactions on Medical Imaging</i> , <b>2006</b> , 25, 94-112	11.7	34
5	Generalized n-D B-Spline Scattered Data Approximation with Confidence Values. <i>Lecture Notes in Computer Science</i> , <b>2006</b> , 76-83	0.9	13
4	Myocardial kinematics from tagged MRI based on a 4-D B-spline model. <i>IEEE Transactions on Biomedical Engineering</i> , <b>2003</b> , 50, 1038-40	5	34
3	The ANTs Longitudinal Cortical Thickness Pipeline		6
2	Removal of Scanner Effects in Covariance Improves Multivariate Pattern Analysis in Neuroimaging Data		7
1	Longitudinal ComBat: A Method for Harmonizing Longitudinal Multi-scanner Imaging Data		2