

# Tom J Macgillivray

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/57400/publications.pdf>

Version: 2024-02-01

71  
papers

2,640  
citations

236925

25  
h-index

214800

47  
g-index

78  
all docs

78  
docs citations

78  
times ranked

4130  
citing authors

#	ARTICLE	IF	CITATIONS
1	Prediction of Major Adverse Cardiovascular Events From Retinal, Clinical, and Genomic Data in Individuals With Type 2 Diabetes: A Population Cohort Study. <i>Diabetes Care</i> , 2022, 45, 710-716.	8.6	11
2	Comparing Measurements of Vascular Diameter Using Adaptive Optics Imaging and Conventional Fundus Imaging. <i>Diagnostics</i> , 2022, 12, 705.	2.6	7
3	Rationale and design of a longitudinal study of cerebral small vessel diseases, clinical and imaging outcomes in patients presenting with mild ischaemic stroke: Mild Stroke Study 3. <i>European Stroke Journal</i> , 2021, 6, 81-88.	5.5	17
4	A review of machine learning methods for retinal blood vessel segmentation and artery/vein classification. <i>Medical Image Analysis</i> , 2021, 68, 101905.	11.6	86
5	DiCyc: GAN-based deformation invariant cross-domain information fusion for medical image synthesis. <i>Information Fusion</i> , 2021, 67, 147-160.	19.1	62
6	Retinal venular tortuosity and fractal dimension predict incident retinopathy in adults with type 2 diabetes: the Edinburgh Type 2 Diabetes Study. <i>Diabetologia</i> , 2021, 64, 1103-1112.	6.3	21
7	Sonographic bridging callus at six weeks following displaced midshaft clavicle fracture can accurately predict healing. <i>Bone and Joint Research</i> , 2021, 10, 113-121.	3.6	7
8	Changes in retinal vascular diameters in senior and geriatric cats in association with variation in systemic blood pressure. <i>Journal of Feline Medicine and Surgery</i> , 2021, 23, 1129-1139.	1.6	1
9	On the quantitative effects of compression of retinal fundus images on morphometric vascular measurements in VAMPIRE. <i>Computer Methods and Programs in Biomedicine</i> , 2021, 202, 105969.	4.7	7
10	Quantitative Parameters from OCT Angiography in Patients with Diabetic Retinopathy and in Those with Only Peripheral Retinopathy Compared with Control Participants. <i>Ophthalmology Science</i> , 2021, 1, 100030.	2.5	2
11	Retinal arteriolar tortuosity and fractal dimension are associated with long-term cardiovascular outcomes in people with type 2 diabetes. <i>Diabetologia</i> , 2021, 64, 2215-2227.	6.3	14
12	2D alpha-shapes to quantify retinal microvasculature morphology and their application to proliferative diabetic retinopathy characterisation in fundus photographs. <i>Scientific Reports</i> , 2021, 11, 22814.	3.3	2
13	3D ultrasound reconstruction of sonographic callus. <i>Bone and Joint Research</i> , 2021, 10, 759-766.	3.6	3
14	Retinal Vessel Analysis as a Novel Screening Tool to Identify Childhood Acute Lymphoblastic Leukemia Survivors at Risk of Cardiovascular Disease. <i>Journal of Pediatric Hematology/Oncology</i> , 2020, 42, e394-e400.	0.6	3
15	The Eye as a Non-Invasive Window to the Microcirculation in Liver Cirrhosis: A Prospective Pilot Study. <i>Journal of Clinical Medicine</i> , 2020, 9, 3332.	2.4	11
16	Quantitative measurements of enlarged perivascular spaces in the brain are associated with retinal microvascular parameters in older community-dwelling subjects. <i>Cerebral Circulation - Cognition and Behavior</i> , 2020, 1, 100002.	0.9	6
17	Relationship Between Venules and Perivascular Spaces in Sporadic Small Vessel Diseases. <i>Stroke</i> , 2020, 51, 1503-1506.	2.0	20
18	Automated Segmentation of Optical Coherence Tomography Angiography Images: Benchmark Data and Clinically Relevant Metrics. <i>Translational Vision Science and Technology</i> , 2020, 9, 5.	2.2	43

#	ARTICLE	IF	CITATIONS
19	Retinal Biomarkers Discovery for Cerebral Small Vessel Disease in an Older Population. Communications in Computer and Information Science, 2020, , 400-409.	0.5	2
20	Evaluation of algorithms for Multi-Modality Whole Heart Segmentation: An open-access grand challenge. Medical Image Analysis, 2019, 58, 101537.	11.6	180
21	Retinal microvasculature and cerebral small vessel disease in the Lothian Birth Cohort 1936 and Mild Stroke Study. Scientific Reports, 2019, 9, 6320.	3.3	49
22	Retinal Vessel Phenotype in Patients with Nonarteritic Anterior Ischemic Optic Neuropathy. American Journal of Ophthalmology, 2019, 208, 178-184.	3.3	10
23	A multimodal approach to cardiovascular risk stratification in patients with type 2 diabetes incorporating retinal, genomic and clinical features. Scientific Reports, 2019, 9, 3591.	3.3	21
24	Using orthogonal locality preserving projections to find dominant features for classifying retinal blood vessels. Multimedia Tools and Applications, 2019, 78, 12783-12803.	3.9	8
25	Retinal Imaging in Early Alzheimer's Disease. Neuromethods, 2018, , 199-212.	0.3	5
26	Robust Revascularization in Models of Limb Ischemia Using a Clinically Translatable Human Stem Cell-Derived Endothelial Cell Product. Molecular Therapy, 2018, 26, 1669-1684.	8.2	48
27	Peripheral Retinal Imaging Biomarkers for Alzheimer's Disease: A Pilot Study. Ophthalmic Research, 2018, 59, 182-192.	1.9	64
28	Dietary patterns and chronic kidney disease: a cross-sectional association in the Irish Nun Eye Study. Scientific Reports, 2018, 8, 6654.	3.3	17
29	A Graph Cut Approach to Artery/Vein Classification in Ultra-Widefield Scanning Laser Ophthalmoscopy. IEEE Transactions on Medical Imaging, 2018, 37, 516-526.	8.9	24
30	Evaluation of coronary artery disease as a risk factor for reticular pseudodrusen. British Journal of Ophthalmology, 2018, 102, 483-489.	3.9	13
31	Machine learning of neuroimaging for assisted diagnosis of cognitive impairment and dementia: A systematic review. Alzheimer's and Dementia: Diagnosis, Assessment and Disease Monitoring, 2018, 10, 519-535.	2.4	162
32	Retinal microvascular network geometry and cognitive abilities in community-dwelling older people: The Lothian Birth Cohort 1936 study. British Journal of Ophthalmology, 2017, 101, 993-998.	3.9	25
33	Dynamic Enhancement of B-Mode Cardiac Ultrasound Image Sequences. Ultrasound in Medicine and Biology, 2017, 43, 1533-1548.	1.5	5
34	Estimated Glomerular Filtration Rate is not Associated with Alzheimer's Disease in a Northern Ireland Cohort. Journal of Alzheimer's Disease, 2017, 60, 1379-1385.	2.6	6
35	Exploring the Biological and Mechanical Properties of Abdominal Aortic Aneurysms Using USPIO MRI and Peak Tissue Stress: A Combined Clinical and Finite Element Study. Journal of Cardiovascular Translational Research, 2017, 10, 489-498.	2.4	9
36	Aortic Wall Inflammation Predicts Abdominal Aortic Aneurysm Expansion, Rupture, and Need for Surgical Repair. Circulation, 2017, 136, 787-797.	1.6	122

#	ARTICLE	IF	CITATIONS
37	Computed tomography myocardial perfusion vs 15O-water positron emission tomography and fractional flow reserve. <i>European Radiology</i> , 2017, 27, 1114-1124.	4.5	25
38	MRI enhanced with ultrasmall superparamagnetic particles of iron oxide in the assessment of cellular inflammation after myocardial infarction. <i>Lancet, The</i> , 2016, 387, S94.	13.7	1
39	Elevational spatial compounding for enhancing image quality in echocardiography. <i>Ultrasound</i> , 2016, 24, 74-85.	0.7	4
40	Positron Emission Tomography and Magnetic Resonance Imaging of Cellular Inflammation in Patients with Abdominal Aortic Aneurysms. <i>European Journal of Vascular and Endovascular Surgery</i> , 2016, 51, 518-526.	1.5	43
41	Suitability of UK Biobank Retinal Images for Automatic Analysis of Morphometric Properties of the Vasculature. <i>PLoS ONE</i> , 2015, 10, e0127914.	2.5	56
42	Retinal Vascular Fractal Dimension, Childhood IQ, and Cognitive Ability in Old Age: The Lothian Birth Cohort Study 1936. <i>PLoS ONE</i> , 2015, 10, e0121119.	2.5	26
43	MRI using ultrasmall superparamagnetic particles of iron oxide in patients under surveillance for abdominal aortic aneurysms to predict rupture or surgical repair: MRI for abdominal aortic aneurysms to predict rupture or surgery—the MA <sup>3</sup> RS study. <i>Open Heart</i> , 2015, 2, e000190.	2.3	41
44	Measurement of myocardial blood flow by cardiovascular magnetic resonance perfusion: comparison of distributed parameter and Fermi models with single and dual bolus. <i>Journal of Cardiovascular Magnetic Resonance</i> , 2015, 17, 17.	3.3	22
45	Temporal Compounding: A Novel Implementation and Its Impact on Quality and Diagnostic Value in Echocardiography. <i>Ultrasound in Medicine and Biology</i> , 2015, 41, 1749-1765.	1.5	7
46	Blood vessel segmentation and width estimation in ultra-wide field scanning laser ophthalmoscopy. <i>Biomedical Optics Express</i> , 2014, 5, 4329.	2.9	43
47	Retinal imaging as a source of biomarkers for diagnosis, characterization and prognosis of chronic illness or long-term conditions. <i>British Journal of Radiology</i> , 2014, 87, 20130832.	2.2	98
48	Quantitative myocardial inflammation assessed using a novel USPIO-Magnetic Resonance Imaging acquisition and analysis protocol. <i>Journal of Cardiovascular Magnetic Resonance</i> , 2013, 15, O114.	3.3	2
49	Validating Retinal Fundus Image Analysis Algorithms: Issues and a Proposal. , 2013, 54, 3546.		142
50	Investigating post-processing of scanning laser ophthalmoscope images for unsupervised retinal blood vessel detection. , 2013, , .		1
51	Ultrasmall Superparamagnetic Particles of Iron Oxide in Patients With Acute Myocardial Infarction. <i>Circulation: Cardiovascular Imaging</i> , 2012, 5, 559-565.	2.6	148
52	Retinal Vessel Tortuosity in Response to Hypobaric Hypoxia. <i>High Altitude Medicine and Biology</i> , 2012, 13, 263-268.	0.9	12
53	In Vivo Mononuclear Cell Tracking Using Superparamagnetic Particles of Iron Oxide. <i>Circulation: Cardiovascular Imaging</i> , 2012, 5, 509-517.	2.6	100
54	Role of multidetector computed tomography in the diagnosis and management of patients attending the rapid access chest pain clinic, The Scottish computed tomography of the heart (SCOT-HEART) trial: study protocol for randomized controlled trial. <i>Trials</i> , 2012, 13, 184.	1.6	52

#	ARTICLE	IF	CITATIONS
55	Vasomotor and fibrinolytic responses to kinin receptor agonists in the atherosclerotic human lower limb. <i>Heart and Vessels</i> , 2012, 27, 179-185.	1.2	6
56	The Association Between Retinal Vessel Morphology and Retinal Nerve Fiber Layer Thickness in an Elderly Population. <i>Ophthalmic Surgery Lasers and Imaging Retina</i> , 2012, 43, S61-6.	0.7	4
57	Magnetic resonance imaging with k-means clustering objectively measures whole muscle volume compartments in sarcopenia/cancer cachexia. <i>Clinical Nutrition</i> , 2011, 30, 106-111.	5.0	42
58	Association of retinal arteriolar dilatation with lower verbal memory: the Edinburgh Type 2 Diabetes Study. <i>Diabetologia</i> , 2011, 54, 1653-1662.	6.3	20
59	Abdominal Aortic Aneurysm Growth Predicted by Uptake of Ultrasmall Superparamagnetic Particles of Iron Oxide. <i>Circulation: Cardiovascular Imaging</i> , 2011, 4, 274-281.	2.6	153
60	Retinal Arteriolar Geometry is Associated with Cerebral White Matter Hyperintensities on Magnetic Resonance Imaging. <i>International Journal of Stroke</i> , 2010, 5, 434-439.	5.9	33
61	Carotid Intima-Media Thickness and Cerebrovascular Disease in Community-Dwelling Older People Without Stroke. <i>Stroke</i> , 2010, 41, 2083-2086.	2.0	10
62	Temporal compounding of cardiac ultrasound data: Improving image quality and clinical measurement repeatability. , 2009, 2009, 3661-4.		3
63	Birth Parameters Are Associated With Late-Life White Matter Integrity in Community-Dwelling Older People. <i>Stroke</i> , 2009, 40, 1225-1228.	2.0	15
64	3D Freehand Ultrasound for in vivo Determination of Human Skeletal Muscle Volume. <i>Ultrasound in Medicine and Biology</i> , 2009, 35, 928-935.	1.5	54
65	The Association between Retinal Vascular Network Geometry and Cognitive Ability in an Elderly Population. , 2007, 48, 1995.		70
66	B-mode compound imaging in mice. <i>Ultrasound in Medicine and Biology</i> , 2006, 32, 29-32.	1.5	7
67	Dietary Electrolyte-Driven Responses in the Renal WNK Kinase Pathway In Vivo. <i>Journal of the American Society of Nephrology: JASN</i> , 2006, 17, 2402-2413.	6.1	113
68	Asymmetry of Retinal Arteriolar Branch Widths at Junctions Affects Ability of Formulae to Predict Trunk Arteriolar Widths. , 2006, 47, 1329.		38
69	Cognitive Correlates of Cerebral White Matter Lesions and Water Diffusion Tensor Parameters in Community-Dwelling Older People. <i>Cerebrovascular Diseases</i> , 2005, 20, 310-318.	1.7	89
70	Childhood and current cognitive function in healthy 80-year-olds: a DT-MRI study. <i>NeuroReport</i> , 2003, 14, 345-349.	1.2	44
71	3D ultrasound. , 0, , 171-180.		0