Matthan W A Caan

List of Publications by Year
in descending order

110 papers	4,549 citations	101384 36 h-index	118652 62 g-index
114 all docs	114 docs citations	114 times ranked	8350 citing authors

#	Article	IF	Citations
1	Predicting brain age with deep learning from raw imaging data results in a reliable and heritable biomarker. NeuroImage, 2017, 163, 115-124.	2.1	629
2	Late effects of high€dose adjuvant chemotherapy on white and gray matter in breast cancer survivors: Converging results from multimodal magnetic resonance imaging. Human Brain Mapping, 2012, 33, 2971-2983.	1.9	218
3	Increased brain-predicted aging in treated HIV disease. Neurology, 2017, 88, 1349-1357.	1.5	200
4	Relation Between Structural and Functional Connectivity in Major Depressive Disorder. Biological Psychiatry, 2013, 74, 40-47.	0.7	185
5	Accurate white matter lesion segmentation by k nearest neighbor classification with tissue type priors (kNN-TTPs). NeuroImage: Clinical, 2013, 3, 462-469.	1.4	177
6	White Matter Fractional Anisotropy Correlates With Speed of Processing and Motor Speed in Young Childhood Cancer Survivors. International Journal of Radiation Oncology Biology Physics, 2009, 74, 837-843.	0.4	146
7	Upper and extra-motoneuron involvement in early motoneuron disease: a diffusion tensor imaging study. Brain, 2011, 134, 1211-1228.	3.7	135
8	Hypercaloric diets with increased meal frequency, but not meal size, increase intrahepatic triglycerides: A randomized controlled trial. Hepatology, 2014, 60, 545-553.	3.6	110
9	Pontine tegmental cap dysplasia: a novel brain malformation with a defect in axonal guidance. Brain, 2007, 130, 2258-2266.	3.7	104
10	No Evidence for Accelerated Aging-Related Brain Pathology in Treated Human Immunodeficiency Virus: Longitudinal Neuroimaging Results From the Comorbidity in Relation to AIDS (COBRA) Project. Clinical Infectious Diseases, 2018, 66, 1899-1909.	2.9	86
11	Individual white matter bundle trajectories are associated with deep brain stimulation response in obsessive-compulsive disorder. Brain Stimulation, 2019, 12, 353-360.	0.7	82
12	ExploreASL: An image processing pipeline for multi-center ASL perfusion MRI studies. NeuroImage, 2020, 219, 117031.	2.1	80
13	The spatial coefficient of variation in arterial spin labeling cerebral blood flow images. Journal of Cerebral Blood Flow and Metabolism, 2017, 37, 3184-3192.	2.4	76
14	Multivariate normative comparison, a novel method for more reliably detecting cognitive impairment in HIV infection. Aids, 2015, 29, 547-557.	1.0	70
15	Study protocol of a phase IB/II clinical trial of metformin and chloroquine in patients with<i>IDH1</i>-mutated or<i>IDH2</i>-mutated solid tumours. BMJ Open, 2017, 7, e014961.	0.8	69
16	Cerebral injury in perinatally HIV-infected children compared to matched healthy controls. Neurology, 2016, 86, 19-27.	1.5	68
17	White matter hyperintensities in relation to cognition in HIV-infected men with sustained suppressed viral load on combination antiretroviral therapy. Aids, 2016, 30, 2329-2339.	1.0	67
18	Gray and White Matter Abnormalities in Treated Human Immunodeficiency Virus Disease and Their Relationship to Cognitive Function. Clinical Infectious Diseases, 2017, 65, 422-432.	2.9	65

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19	Persistent and reversible consequences of combat stress on the mesofrontal circuit and cognition. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 15508-15513.	3.3	64
20	Polyunsaturated Fatty Acid Concentration Predicts Myelin Integrity in Early-Phase Psychosis. Schizophrenia Bulletin, 2013, 39, 830-838.	2.3	62
21	Cortical Microinfarcts Detected In Vivo on 3 Tesla MRI. Stroke, 2015, 46, 255-257.	1.0	62
22	MP2RAGEME: T_1, T_2^*, and QSM mapping in one sequence at 7 tesla. Human Brain Mapping, 2019, 40, 1786-1798.	1.9	61
23	Determinants of reduced cognitive performance in HIV-1-infected middle-aged men on combination antiretroviral therapy. Aids, 2016, 30, 1027-1038.	1.0	58
24	Shaving diffusion tensor images in discriminant analysis: A study into schizophrenia. Medical Image Analysis, 2006, 10, 841-849.	7.0	55
25	Prenatal famine exposure has sex-specific effects on brain size. Brain, 2016, 139, 2136-2142.	3.7	54
26	Lower cognitive performance and white matter changes in testicular cancer survivors 10 years after chemotherapy. Human Brain Mapping, 2015, 36, 4638-4647.	1.9	53
27	White matter structure alterations in HIV-1-infected men with sustained suppression of viraemia on treatment. Aids, 2016, 30, 311-322.	1.0	52
28	Recurrent inference machines for reconstructing heterogeneous MRI data. Medical Image Analysis, 2019, 53, 64-78.	7.0	51
29	Diagnostic accuracy of MRI and ultrasound in chronic immune-mediated neuropathies. Neurology, 2020, 94, e62-e74.	1.5	51
30	No association between striatal dopamine transporter binding and body mass index: A multi-center European study in healthy volunteers. NeuroImage, 2013, 64, 61-67.	2.1	47
31	Cognitive Changes in Chronic Kidney Disease and After Transplantation. Transplantation, 2016, 100, 734-742.	0.5	46
32	Dynamic contrast-enhanced MRI in patients with luminal Crohn's disease. European Journal of Radiology, 2012, 81, 3019-3027.	1.2	45
33	White Matter Hyperintensity Volume and Cerebral Perfusion in Older Individuals with Hypertension Using Arterial Spin-Labeling. American Journal of Neuroradiology, 2016, 37, 1824-1830.	1.2	45
34	Decreased Cerebellar Fiber Density in Cortical Myoclonic Tremor but Not in Essential Tremor. Cerebellum, 2013, 12, 199-204.	1.4	44
35	White Matter by Diffusion MRI Following Methylphenidate Treatment: A Randomized Control Trial in Males with Attention-Deficit/Hyperactivity Disorder. Radiology, 2019, 293, 186-192.	3.6	44
36	Estimation of Diffusion Properties in Crossing Fiber Bundles. IEEE Transactions on Medical Imaging, 2010, 29, 1504-1515.	5.4	43

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37	Structural Brain Abnormalities in Successfully Treated HIV Infection: Associations With Disease and Cerebrospinal Fluid Biomarkers. Journal of Infectious Diseases, 2018, 217, 69-81.	1.9	40
38	ADHD and maturation of brain white matter: A DTI study in medication naive children and adults. NeuroImage: Clinical, 2018, 17, 53-59.	1.4	40
39	White matter alterations in cocaine users are negatively related to the number of additionally (ab)used substances. Addiction Biology, 2017, 22, 1048-1056.	1.4	35
40	Age–related differences in autism: The case of white matter microstructure. Human Brain Mapping, 2017, 38, 82-96.	1.9	35
41	White matter abnormalities in gene–positive myoclonus–dystonia. Movement Disorders, 2012, 27, 1666-1672.	2.2	34
42	Accuracy of abdominal ultrasound and MRI for detection of Crohn disease and ulcerative colitis in children. Pediatric Radiology, 2014, 44, 1370-1378.	1.1	33
43	Psychopathic traits in adolescents are associated with higher structural connectivity. Psychiatry Research - Neuroimaging, 2015, 233, 474-480.	0.9	33
44	Effect of Long-Term Vascular Care on Progression of Cerebrovascular Lesions. Stroke, 2017, 48, 1842-1848.	1.0	32
45	Brain function during cognitive flexibility and white matter integrity in alcohol–dependent patients, problematic drinkers and healthy controls. Addiction Biology, 2015, 20, 979-989.	1.4	31
46	Expiration-Phase Template-Based Motion Correction of Free-Breathing Abdominal Dynamic Contrast Enhanced MRI. IEEE Transactions on Biomedical Engineering, 2015, 62, 1215-1225.	2.5	28
47	Higher subcortical and white matter cerebral blood flow in perinatally HIV-infected children. Medicine (United States), 2017, 96, e5891.	0.4	26
48	Relationship between muscarinic M1 receptor binding and cognition in medication-free subjects with psychosis. NeuroImage: Clinical, 2018, 18, 713-719.	1.4	26
49	Dopaminergic System Dysfunction in Recreational Dexamphetamine Users. Neuropsychopharmacology, 2015, 40, 1172-1180.	2.8	25
50	A data–centric neuroscience gateway: design, implementation, and experiences. Concurrency Computation Practice and Experience, 2015, 27, 489-506.	1.4	24
51	Cerebral blood flow and cognitive function in HIV-infected men with sustained suppressed viremia on combination antiretroviral therapy. Aids, 2017, 31, 847-856.	1.0	24
52	Use of continuously MR tagged imaging for automated motion assessment in the abdomen: A feasibility study. Journal of Magnetic Resonance Imaging, 2012, 36, 492-497.	1.9	23
53	Cortical Morphology Differences in Subjects at Increased Vulnerability for Developing a Psychotic Disorder: A Comparison between Subjects with Ultra-High Risk and 22q11.2 Deletion Syndrome. PLoS ONE, 2016, 11, e0159928.	1.1	23
54	Ectopic peripontine arcuate fibres, a novel finding in pontine tegmental cap dysplasia. European Journal of Paediatric Neurology, 2014, 18, 434-438.	0.7	22

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55	The Eye as a Window to the Brain: Neuroretinal Thickness Is Associated With Microstructural White Matter Injury in HIV-Infected Children. , 2016, 57, 3864.		22
56	Neurometabolite Alterations Associated With Cognitive Performance in Perinatally HIV-Infected Children. Medicine (United States), 2016, 95, e3093.	0.4	22
57	Does higher sampling rate (multiband + SENSE) improve group statistics - An example from social neuroscience block design at 3T. NeuroImage, 2020, 213, 116731.	2.1	22
58	Brain volume in male patients with recent onset schizophrenia with and without cannabis use disorders. Journal of Psychiatry and Neuroscience, 2015, 40, 197-206.	1.4	21
59	Distinct white-matter aberrations in 22q11.2 deletion syndrome and patients at ultra-high risk for psychosis. Psychological Medicine, 2016, 46, 2299-2311.	2.7	20
60	Feasibility of ASL-based phMRI with a single dose of oral citalopram for repeated assessment of serotonin function. NeuroImage, 2012, 63, 1695-1700.	2.1	18
61	Mapping the hemodynamic response in human subjects to a dopaminergic challenge with dextroamphetamine using ASL-based pharmacological MRI. NeuroImage, 2013, 72, 1-9.	2.1	18
62	Testâ€"retest reliability of task-related pharmacological MRI with a single-dose oral citalopram challenge. NeuroImage, 2013, 75, 108-116.	2.1	18
63	Defining the Dorsal STN Border Using 7.0-T MRI: A Comparison to Microelectrode Recordings and Lower Field Strength MRI. Stereotactic and Functional Neurosurgery, 2019, 97, 153-159.	0.8	17
64	Monoaminergic dysfunction in recreational users of dexamphetamine. European Neuropsychopharmacology, 2013, 23, 1491-1502.	0.3	16
65	Responsiveness of Magnetic Resonance Imaging and Neuropsychological Assessment in Memory Clinic Patients. Journal of Alzheimer's Disease, 2014, 40, 409-418.	1.2	16
66	Brain structure of perinatally HIV-infected patients on long-term treatment. Neurology: Clinical Practice, 2019, 9, 433-442.	0.8	16
67	Longitudinal relation between blood pressure, antihypertensive use and cerebral blood flow, using arterial spin labelling MRI. Journal of Cerebral Blood Flow and Metabolism, 2021, 41, 1756-1766.	2.4	16
68	Adaptive Noise Filtering for Accurate and Precise Diffusion Estimation in Fiber Crossings. Lecture Notes in Computer Science, 2010, 13, 167-174.	1.0	15
69	Mapping serotonergic dysfunction in MDMA (ecstasy) users using pharmacological MRI. European Neuropsychopharmacology, 2012, 22, 537-545.	0.3	14
70	Longitudinal diffusion MRI as surrogate outcome measure for myelopathy in adrenoleukodystrophy. Neurology, 2019, 93, e2133-e2143.	1.5	14
71	Distance to white matter tracts is associated with deep brain stimulation motor outcome in Parkinsonâ€™s disease. Journal of Neurosurgery, 2020, 133, 433-442.	0.9	14
72	Sharpness in motion corrected quantitative imaging at 7T. NeuroImage, 2020, 222, 117227.	2.1	13

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73	The 'COmorBidity in Relation to AIDS' (COBRA) cohort: Design, methods and participant characteristics. PLoS ONE, 2018, 13, e0191791.	1.1	12
74	Neuropsychiatric symptoms of cholinergic deficiency occur with degradation of the projections from the nucleus basalis of Meynert. Brain Imaging and Behavior, 2017, 11, 1707-1719.	1.1	11
75	Cognitive Improvement After Kidney Transplantation Is Associated With Structural and Functional Changes on MRI. Transplantation Direct, 2020, 6, e531.	0.8	11
76	Nonrigid Point Set Matching of White Matter Tracts for Diffusion Tensor Image Analysis. IEEE Transactions on Biomedical Engineering, 2011, 58, 2431-2440.	2.5	10
77	Overview + Detail Visualization for Ensembles of Diffusion Tensors. Computer Graphics Forum, 2017, 36, 121-132.	1.8	10
78	Late-life brain perfusion after prenatal famine exposure. Neurobiology of Aging, 2019, 82, 1-9.	1.5	10
79	Validation of a Novel Multivariate Method of Defining HIV-Associated Cognitive Impairment. Open Forum Infectious Diseases, 2019, 6, ofz198.	0.4	10
80	Structural changes in cerebellar outflow tracts after thalamotomy in essential tremor. Parkinsonism and Related Disorders, 2014, 20, 554-557.	1.1	9
81	Dynamic contrast-enhanced magnetic resonance imaging of the wrist in children with juvenile idiopathic arthritis. Pediatric Radiology, 2017, 47, 205-213.	1.1	9
82	White matter integrity between left basal ganglia and left prefrontal cortex is compromised in gambling disorder. Addiction Biology, 2017, 22, 1590-1600.	1.4	8
83	Normal structural brain development in adolescents treated for perinatally acquired HIV: a longitudinal imaging study. Aids, 2021, 35, 1221-1228.	1.0	8
84	Exploring Workflow Interoperability for Neuroimage Analysis on the SHIWA Platform. Journal of Grid Computing, 2013, 11, 505-522.	2.5	7
85	Influence of muscarinic M1 receptor antagonism on brain choline levels and functional connectivity in medication-free subjects with psychosis: A placebo controlled, cross-over study. Psychiatry Research - Neuroimaging, 2019, 290, 5-13.	0.9	7
86	Spatial versus angular resolution for tractography-assisted planning of deep brain stimulation. NeuroImage: Clinical, 2020, 25, 102116.	1.4	7
87	Gray and white matter are both affected in classical galactosemia: An explorative study on the association between neuroimaging and clinical outcome. Molecular Genetics and Metabolism, 2020, 131, 370-379.	0.5	7
88	The muscarinic M1 receptor modulates associative learning and memory in psychotic disorders. NeuroImage: Clinical, 2020, 27, 102278.	1.4	7
89	Impact of Structural Cerebral Damage in Adults With Tetralogy of Fallot. Circulation, 2017, 135, 1873-1875.	1.6	6
90	Reliable Dual Tensor Model Estimation in Single and Crossing Fibers Based on Jeffreys Prior. PLoS ONE, 2016, 11, e0164336.	1.1	5

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91	3D scattering transforms for disease classification in neuroimaging. NeuroImage: Clinical, 2017, 14, 506-517.	1.4	5
92	Influence of Onset to Imaging Time on Radiological Thrombus Characteristics in Acute Ischemic Stroke. Frontiers in Neurology, 2021, 12, 693427.	1.1	5
93	Evolution of grid-based services for Diffusion Tensor Image analysis. Future Generation Computer Systems, 2012, 28, 1194-1204.	4.9	4
94	Clinical research cerebral MRI findings in HIV-positive subjects and appropriate controls. Aids, 2018, 32, 2077-2081.	1.0	4
95	Assessment of data consistency through cascades of independently recurrent inference machines for fast and robust accelerated MRI reconstruction. Physics in Medicine and Biology, 2022, 67, 124001.	1.6	4
96	A scale space based algorithm for automated segmentation of single shot tagged MRI of shearing deformation. Magnetic Resonance Materials in Physics, Biology, and Medicine, 2013, 26, 229-238.	1.1	3
97	DTI Analysis Methods: Fibre Tracking and Connectivity. , 2016, , 205-228.		3
98	Spatial Consistency in 3D Tract-Based Clustering Statistics. Lecture Notes in Computer Science, 2008, 11, 535-542.	1.0	3
99	3D Non-rigid Motion Correction of Free-Breathing Abdominal DCE-MRI Data. Lecture Notes in Computer Science, 2012, , 44-50.	1.0	3
100	Gridifying a Diffusion Tensor Imaging Analysis Pipeline. , 2010, , .		2
101	Data Decomposition in Biomedical e-Science Applications. , 2011, , .		2
102	Integrated support for neuroscience research: from study design to publication. Studies in Health Technology and Informatics, 2012, 175, 195-204.	0.2	2
103	Rank-2 model-order selection in diffusion tensor MRI: Infromation complexity based on the total Kullback-Leibler divergence. , 2015, , .		1
104	Magnetic resonance spectroscopy as marker for neurodegeneration in X-linked adrenoleukodystrophy. NeuroImage: Clinical, 2021, 32, 102793.	1.4	1
105	Differences in location of cerebral white matter hyperintensities in children and adults living with a treated HIV infection: A retrospective cohort comparison. PLoS ONE, 2020, 15, e0241438.	1.1	1
106	Feasibility of arterial spin labeling on a 1T open MRI scanner. Journal of Magnetic Resonance Imaging, 2013, 37, 958-964.	1.9	0
107	Editorial for "Quantification of Regional Cerebral Blood Flow Using Diffusion Imaging With <scp>Phase‐Contrast</scp>". Journal of Magnetic Resonance Imaging, 2021, 54, 1687-1688.	1.9	0
108	Generating Fiber Crossing Phantoms Out of Experimental DWIs. Lecture Notes in Computer Science, 2007, 10, 169-176.	1.0	0

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109	Robust Automated White Matter Pathway Reconstruction for Large Studies. Lecture Notes in Computer Science, 2015, , 101-108.	1.0	0
110	A high-resolution multi-shell 3T diffusion magnetic resonance imaging dataset as part of the Amsterdam Ultra-high field adult lifespan database (AHEAD). Data in Brief, 2022, 42, 108086.	0.5	0