Charles Rg Guttmann

List of Publications by Year
in descending order

48 papers	3,438 citations	218677 26 h-index	214800 47 g-index
48 all docs	48 docs citations	48 times ranked	4697 citing authors

#	Article	IF	Citations
1	Predictive value of gadolinium-enhanced magnetic resonance imaging for relapse rate and changes in disability or impairment in multiple sclerosis: a meta-analysis. Lancet, The, 1999, 353, 964-969.	13.7	476
2	MRI in multiple sclerosis: current status and future prospects. Lancet Neurology, The, 2008, 7, 615-625.	10.2	295
3	Cognitive profile and brain morphological changes in obstructive sleep apnea. NeuroImage, 2011, 54, 787-793.	4.2	241
4	MRI contrast uptake in new lesions in relapsing-remitting MS followed at weekly intervals. Neurology, 2003, 60, 640-646.	1.1	222
5	Spatial Distribution of White-Matter Hyperintensities in Alzheimer Disease, Cerebral Amyloid Angiopathy, and Healthy Aging. Stroke, 2008, 39, 1127-1133.	2.0	181
6	Automatic identification of gray matter structures from MRI to improve the segmentation of white matter lesions. Journal of Image Guided Surgery, 1995, 1, 326-338.	0.3	146
7	Quantitative analysis of MRI signal abnormalities of brain white matter with high reproducibility and accuracy. Journal of Magnetic Resonance Imaging, 2002, 15, 203-209.	3.4	118
8	Automated segmentation of multiple sclerosis lesion subtypes with multichannel MRI. NeuroImage, 2006, 32, 1205-1215.	4.2	115
9	Deep Gray Matter Involvement on Brain MRI Scans Is Associated with Clinical Progression in Multiple Sclerosis. Journal of Neuroimaging, 2009, 19, 3-8.	2.0	114
10	Impaired Cerebrovascular Hemodynamics are Associated with Cerebral White Matter Damage. Journal of Cerebral Blood Flow and Metabolism, 2014, 34, 228-234.	4.3	109
11	Quantitative follow-up of patients with multiple sclerosis using MRI: Technical aspects. Journal of Magnetic Resonance Imaging, 1999, 9, 519-530.	3.4	98
12	Brain MRI Lesion Load at 1.5T and 3T versus Clinical Status in Multiple Sclerosis. , 2011, 21, e50-e56.		98
13	Multi-component apparent diffusion coefficients in human brain: Relationship to spin-lattice relaxation. Magnetic Resonance in Medicine, 2000, 44, 292-300.	3.0	96
14	Time-series analysis of MRI intensity patterns in multiple sclerosis. NeuroImage, 2003, 20, 1193-1209.	4.2	86
15	Effects of Intensive Versus Standard Ambulatory Blood Pressure Control on Cerebrovascular Outcomes in Older People (INFINITY). Circulation, 2019, 140, 1626-1635.	1.6	84
16	Quantitative follow-up of patients with multiple sclerosis using MRI: Reproducibility. Journal of Magnetic Resonance Imaging, 1999, 9, 509-518.	3.4	83
17	Serial magnetic resonance imaging in multiple sclerosis: correlation with attacks, disability, and disease stage. Journal of Neuroimmunology, 2000, 104, 164-173.	2.3	74
18	3ÂT MRI relaxometry detects T2 prolongation in the cerebral normal-appearing white matter in multiple sclerosis. NeuroImage, 2009, 46, 633-641.	4.2	72

#	Article	IF	Citations
19	The Relationship between Normal Cerebral Perfusion Patterns and White Matter Lesion Distribution in 1,249 Patients with Multiple Sclerosis. Journal of Neuroimaging, 2012, 22, 129-136.	2.0	68
20	An MRI study of age-related white and gray matter volume changes in the rhesus monkey. Neurobiology of Aging, 2008, 29, 1563-1575.	3.1	65
21	Exploring the discrimination power of the time domain for segmentation and characterization of active lesions in serial MR data. Medical Image Analysis, 2000, 4, 31-42.	11.6	55
22	Hippocampal microstructural damage correlates with memory impairment in clinically isolated syndrome suggestive of multiple sclerosis. Multiple Sclerosis Journal, 2017, 23, 1214-1224.	3.0	52
23	Brain regional lesion burden and impaired mobility in the elderly. Neurobiology of Aging, 2011, 32, 646-654.	3.1	51
24	Fatigue predicts disease worsening in relapsing-remitting multiple sclerosis patients. Multiple Sclerosis Journal, 2016, 22, 1841-1849.	3.0	41
25	Brain anatomical correlates of fatigue in multiple sclerosis. Multiple Sclerosis Journal, 2020, 26, 751-764.	3.0	38
26	Dualâ€Sensitivity Multiple Sclerosis Lesion and CSF Segmentation for Multichannel 3T Brain MRI. Journal of Neuroimaging, 2018, 28, 36-47.	2.0	35
27	Characterizing Clinical and MRI Dissociation in Patients with Multiple Sclerosis. Journal of Neuroimaging, 2017, 27, 481-485.	2.0	34
28	Multiple sclerosis lesion formation and early evolution revisited: A weekly high-resolution magnetic resonance imaging study. Multiple Sclerosis Journal, 2016, 22, 761-769.	3.0	28
29	Disease modeling in multiple sclerosis: Assessment and quantification of sources of variability in brain parenchymal fraction measurements. NeuroImage, 2010, 52, 1367-1373.	4.2	25
30	Cerebral blood flow MRI in the nondemented elderly is not predictive of post-operative delirium but is correlated with cognitive performance. Journal of Cerebral Blood Flow and Metabolism, 2017, 37, 1386-1397.	4.3	25
31	Microstructural fronto-striatal and temporo-insular alterations are associated with fatigue in patients with multiple sclerosis independent of white matter lesion load and depression. Multiple Sclerosis Journal, 2020, 26, 1708-1718.	3.0	25
32	Has your patient's multiple sclerosis lesion burden or brain atrophy actually changed?. Multiple Sclerosis Journal, 2004, 10, 402-406.	3.0	24
33	Evaluating the Association between Enlarged Perivascular Spaces and Disease Worsening in Multiple Sclerosis. Journal of Neuroimaging, 2018, 28, 273-277.	2.0	24
34	Changes to the septo-fornical area might play a role in the pathogenesis of anxiety in multiple sclerosis. Multiple Sclerosis Journal, 2018, 24, 1105-1114.	3.0	23
35	Three-dimensional analysis of the geometry of individual multiple sclerosis lesions: Detection of shape changes over time using spherical harmonics. Journal of Magnetic Resonance Imaging, 2003, 18, 291-301.	3.4	22
36	Atlas-derived perfusion correlates of white matter hyperintensities in patients with reduced cardiac output. Neurobiology of Aging, 2011, 32, 133-139.	3.1	17

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37	Magnetic resonance disease severity scale (MRDSS) for patients with multiple sclerosis: A longitudinal study. Journal of the Neurological Sciences, 2012, 315, 49-54.	0.6	16
38	A novel classification of fatigue in multiple sclerosis based on longitudinal assessments. Multiple Sclerosis Journal, 2020, 26, 725-734.	3.0	13
39	Unsupervised spatio-temporal filtering of image sequences. A mean-shift specification. Pattern Recognition Letters, 2015, 68, 48-55.	4.2	10
40	Weekly multimodal MRI followâ€up of two multiple sclerosis active lesions presenting a transient decrease in ADC. Brain and Behavior, 2015, 5, e00307.	2.2	9
41	Functional magnetic resonance imaging using non-Fourier, spatially selective radiofrequency encoding. Magnetic Resonance in Medicine, 1999, 41, 759-766.	3.0	7
42	A method for the analysis of the geometrical relationship between white matter pathology and the vascular architecture of the brain. NeuroImage, 2004, 22, 1671-1678.	4.2	7
43	A rhesus monkey reference label atlas for template driven segmentation. Journal of Medical Primatology, 2008, 37, 250-260.	0.6	6
44	Application of spherical harmonics derived space rotation invariant indices to the analysis of multiple sclerosis lesions' geometry by MRI. Magnetic Resonance Imaging, 2004, 22, 815-825.	1.8	3
45	Identification and Characterization of Leptomeningeal Metastases Using SPINE, A Webâ€Based Collaborative Platform. Journal of Neuroimaging, 2021, 31, 324-333.	2.0	3
46	Unbiased treatment effect estimates by modeling the disease process of multiple sclerosis. Journal of the Neurological Sciences, 2009, 278, 54-59.	0.6	2
47	Simplified MRI prediction of clinically definite multiple sclerosis: a stepping stone towards treatment criteria?. Nature Clinical Practice Neurology, 2008, 4, 136-137.	2.5	1
48	Brain areas with normatively greater cerebral perfusion in early life may be more susceptible to beta amyloid deposition in late life. Cerebral Circulation - Cognition and Behavior, 2020, 1, 100001.	0.9	1