Douglas L Arnold

List of Publications by Citations

309 papers	22,435 citations	71 h-index	143 g-index
326 ext. papers	26,306 ext. citations	8.6 avg, IF	6.56 L-index

#	Paper	IF	Citations
309	B-cell depletion with rituximab in relapsing-remitting multiple sclerosis. *New England Journal of Medicine*, **2008**, 358, 676-88	59.2	1723
308	Placebo-controlled phase 3 study of oral BG-12 for relapsing multiple sclerosis. *New England Journal of Medicine*, **2012**, 367, 1098-107	59.2	1216
307	Ocrelizumab versus Placebo in Primary Progressive Multiple Sclerosis. *New England Journal of Medicine*, **2017**, 376, 209-220	59.2	880
306	Ocrelizumab versus Interferon Beta-1a in Relapsing Multiple Sclerosis. *New England Journal of Medicine*, **2017**, 376, 221-234	59.2	858
305	Alemtuzumab versus interferon beta 1a as first-line treatment for patients with relapsing-remitting multiple sclerosis: a randomised controlled phase 3 trial. *Lancet, The*, **2012**, 380, 1819-28	40	834
304	Alemtuzumab for patients with relapsing multiple sclerosis after disease-modifying therapy: a randomised controlled phase 3 trial. *Lancet, The*, **2012**, 380, 1829-39	40	827
303	Accurate, noninvasive diagnosis of human brain tumors by using proton magnetic resonance spectroscopy. *Nature Medicine*, **1996**, 2, 323-5	50.5	469
302	Siponimod versus placebo in secondary progressive multiple sclerosis (EXPAND): a double-blind, randomised, phase 3 study. *Lancet, The*, **2018**, 391, 1263-1273	40	422
301	Reversible decreases in N-acetylaspartate after acute brain injury. *Magnetic Resonance in Medicine*, **1995**, 34, 721-7	4.4	412
300	Rituximab in relapsing-remitting multiple sclerosis: a 72-week, open-label, phase I trial. *Annals of Neurology*, **2008**, 63, 395-400	9.4	386
299	Evidence of axonal damage in the early stages of multiple sclerosis and its relevance to disability. *Archives of Neurology*, **2001**, 58, 65-70		355
298	Proton magnetic resonance spectroscopic imaging for metabolic characterization of demyelinating plaques. *Annals of Neurology*, **1992**, 31, 235-41	9.4	275
297	Chemical pathology of acute demyelinating lesions and its correlation with disability. *Annals of Neurology*, **1995**, 38, 901-9	9.4	267
296	Pegylated interferon β1a for relapsing-remitting multiple sclerosis (ADVANCE): a randomised, phase 3, double-blind study. *Lancet Neurology, The*, **2014**, 13, 657-65	24.1	263
295	Myoblast transfer in Duchenne muscular dystrophy. *Annals of Neurology*, **1993**, 34, 8-17	9.4	263
294	Proton magnetic resonance spectroscopy of human brain in vivo in the evaluation of multiple sclerosis: assessment of the load of disease. *Magnetic Resonance in Medicine*, **1990**, 14, 154-9	4.4	243
293	Neuroimaging evidence of progressive neuronal loss and dysfunction in temporal lobe epilepsy. *Annals of Neurology*, **1999**, 45, 568-76	9.4	240

#	Reference		
292	Immunoablation and autologous haemopoietic stem-cell transplantation for aggressive multiple sclerosis: a multicentre single-group phase 2 trial. *Lancet, The*, **2016**, 388, 576-85	40	234
291	Clinical, environmental, and genetic determinants of multiple sclerosis in children with acute demyelination: a prospective national cohort study. *Lancet Neurology, The*, **2011**, 10, 436-45	24.1	234
290	Review of automatic segmentation methods of multiple sclerosis white matter lesions on conventional magnetic resonance imaging. *Medical Image Analysis*, **2013**, 17, 1-18	15.4	228
289	Proton magnetic resonance spectroscopic imaging and magnetic resonance imaging volumetry in the lateralization of temporal lobe epilepsy: a series of 100 patients. *Annals of Neurology*, **1997**, 42, 737-46	9.4	207
288	Daclizumab HYP versus Interferon Beta-1a in Relapsing Multiple Sclerosis. *New England Journal of Medicine*, **2015**, 373, 1418-28	59.2	203
287	Lateralization of temporal lobe epilepsy based on regional metabolic abnormalities in proton magnetic resonance spectroscopic images. *Annals of Neurology*, **1994**, 35, 211-6	9.4	203
286	Treatment effect on brain atrophy correlates with treatment effect on disability in multiple sclerosis. *Annals of Neurology*, **2014**, 75, 43-9	9.4	195
285	Alemtuzumab CARE-MS II 5-year follow-up: Efficacy and safety findings. *Neurology*, **2017**, 89, 1117-1126	6.5	175
284	Use of proton magnetic resonance spectroscopy for monitoring disease progression in multiple sclerosis. *Annals of Neurology*, **1994**, 36, 76-82	9.4	173
283	Aerobic conditioning in patients with mitochondrial myopathies: physiological, biochemical, and genetic effects. *Annals of Neurology*, **2001**, 50, 133-41	9.4	168
282	Recovery of N-acetylaspartate in corticomotor neurons of patients with ALS after riluzole therapy. *NeuroReport*, **1998**, 9, 1757-61	1.7	165
281	In vivo evidence for axonal dysfunction remote from focal cerebral demyelination of the type seen in multiple sclerosis. *Brain*, **1999**, 122 (Pt 10), 1933-9	11.2	161
280	Robust Rician noise estimation for MR images. *Medical Image Analysis*, **2010**, 14, 483-93	15.4	160
279	Treatment optimization in MS: Canadian MS Working Group updated recommendations. *Canadian Journal of Neurological Sciences*, **2013**, 40, 307-23	1	159
278	Axonal metabolic recovery in multiple sclerosis patients treated with interferon beta-1b. *Journal of Neurology*, **2001**, 248, 979-86	5.5	156
277	Multiple sclerosis: magnetization transfer MR imaging of white matter before lesion appearance on T2-weighted images. *Radiology*, **2000**, 215, 824-30	20.5	153
276	The relationship between diffuse axonal damage and fatigue in multiple sclerosis. *Archives of Neurology*, **2004**, 61, 201-7		152
275	Effect of natalizumab on disease progression in secondary progressive multiple sclerosis (ASCEND): a phase 3, randomised, double-blind, placebo-controlled trial with an open-label extension. *Lancet Neurology, The*, **2018**, 17, 405-415	24.1	150

274	Diffuse axonal and tissue injury in patients with multiple sclerosis with low cerebral lesion load and no disability. *Archives of Neurology*, **2002**, 59, 1565-71		150
273	Induction of antigen-specific tolerance in multiple sclerosis after immunization with DNA encoding myelin basic protein in a randomized, placebo-controlled phase 1/2 trial. *Archives of Neurology*, **2007**, 64, 1407-15		146
272	Trial of Fingolimod versus Interferon Beta-1a in Pediatric Multiple Sclerosis. *New England Journal of Medicine*, **2018**, 379, 1017-1027	59.2	144
271	Magnetization transfer ratio evolution with demyelination and remyelination in multiple sclerosis lesions. *Annals of Neurology*, **2008**, 63, 254-62	9.4	142
270	Alemtuzumab CARE-MS I 5-year follow-up: Durable efficacy in the absence of continuous MS therapy. *Neurology*, **2017**, 89, 1107-1116	6.5	139
269	Texture analysis and morphological processing of magnetic resonance imaging assist detection of focal cortical dysplasia in extra-temporal partial epilepsy. *Annals of Neurology*, **2001**, 49, 770-775	9.4	134
268	Proton magnetic resonance spectroscopy for the diagnosis and management of cerebral disorders. *Archives of Neurology*, **1999**, 56, 919-26		134
267	Primary progressive multiple sclerosis: part of the MS disease spectrum or separate disease entity?. *Acta Neuropathologica*, **2012**, 123, 627-38	14.3	133
266	High-dose immunosuppressive therapy and autologous hematopoietic cell transplantation for relapsing-remitting multiple sclerosis (HALT-MS): a 3-year interim report. *JAMA Neurology*, **2015**, 72, 159-69	17.2	132
265	MRI parameters for prediction of multiple sclerosis diagnosis in children with acute CNS demyelination: a prospective national cohort study. *Lancet Neurology, The*, **2011**, 10, 1065-73	24.1	132
264	Late-onset mitochondrial myopathy. *Annals of Neurology*, **1995**, 37, 16-23	9.4	126
263	Safety and efficacy of the selective sphingosine 1-phosphate receptor modulator ozanimod in relapsing multiple sclerosis (RADIANCE): a randomised, placebo-controlled, phase 2 trial. *Lancet Neurology, The*, **2016**, 15, 373-81	24.1	118
262	Oxidative phosphorylation defect in the brains of carriers of the tRNAleu(UUR) A3243G mutation in a MELAS pedigree. *Annals of Neurology*, **2000**, 47, 179-185	9.4	113
261	T2 relaxometry can lateralize mesial temporal lobe epilepsy in patients with normal MRI. *NeuroImage*, **2000**, 12, 739-46	7.9	112
260	Placebo-Controlled Trial of an Oral BTK Inhibitor in Multiple Sclerosis. *New England Journal of Medicine*, **2019**, 380, 2406-2417	59.2	111
259	Exploring uncertainty measures in deep networks for Multiple sclerosis lesion detection and segmentation. *Medical Image Analysis*, **2020**, 59, 101557	15.4	111
258	A proton magnetic resonance spectroscopy study of focal epilepsy in humans. *Neurology*, **1990**, 40, 985-9	6.5	110
257	Estriol combined with glatiramer acetate for women with relapsing-remitting multiple sclerosis: a randomised, placebo-controlled, phase 2 trial. *Lancet Neurology, The*, **2016**, 15, 35-46	24.1	109

256	Long-term effects of delayed-release dimethyl fumarate in multiple sclerosis: Interim analysis of ENDORSE, a randomized extension study. *Multiple Sclerosis Journal*, **2017**, 23, 253-265	5	105
255	Diminished Th17 (not Th1) responses underlie multiple sclerosis disease abrogation after hematopoietic stem cell transplantation. *Annals of Neurology*, **2013**, 73, 341-54	9.4	105
254	Automated detection of focal cortical dysplasia lesions using computational models of their MRI characteristics and texture analysis. *NeuroImage*, **2003**, 19, 1748-59	7.9	105
253	High-dose immunosuppressive therapy and autologous HCT for relapsing-remitting MS. *Neurology*, **2017**, 88, 842-852	6.5	99
252	Safety and efficacy of ozanimod versus interferon beta-1a in relapsing multiple sclerosis (RADIANCE): a multicentre, randomised, 24-month, phase 3 trial. *Lancet Neurology, The*, **2019**, 18, 1021-1053	24.1	98
251	Evaluating intensity normalization on MRIs of human brain with multiple sclerosis. *Medical Image Analysis*, **2011**, 15, 267-82	15.4	97
250	Magnetic resonance spectroscopy guided brain tumor resection: differentiation between recurrent glioma and radiation change in two diagnostically difficult cases. *Canadian Journal of Neurological Sciences*, **1998**, 25, 13-22	1	97
249	Safety and efficacy of ozanimod versus interferon beta-1a in relapsing multiple sclerosis (SUNBEAM): a multicentre, randomised, minimum 12-month, phase 3 trial. *Lancet Neurology, The*, **2019**, 18, 1009-1020	24.1	96
248	2010 McDonald criteria for diagnosing pediatric multiple sclerosis. *Annals of Neurology*, **2012**, 72, 211-23	9.4	94
247	Insights into muscle diseases gained by phosphorus magnetic resonance spectroscopy. *Muscle and Nerve*, **2000**, 23, 1316-34	3.4	89
246	1H-MRS quantification of tNA and tCr in patients with multiple sclerosis: a meta-analytic review. *Brain*, **2005**, 128, 2483-506	11.2	88
245	Magnetization transfer can predict clinical evolution in patients with multiple sclerosis. *Journal of Neurology*, **2002**, 249, 662-8	5.5	88
244	Serial Anti-Myelin Oligodendrocyte Glycoprotein Antibody Analyses and Outcomes in Children With Demyelinating Syndromes. *JAMA Neurology*, **2020**, 77, 82-93	17.2	84
243	Onset of multiple sclerosis before adulthood leads to failure of age-expected brain growth. *Neurology*, **2014**, 83, 2140-6	6.5	80
242	Interferon beta promotes nerve growth factor secretion early in the course of multiple sclerosis. *Archives of Neurology*, **2005**, 62, 563-8		76
241	Is ictal recording mandatory in temporal lobe epilepsy? Not when the interictal electroencephalogram and hippocampal atrophy coincide. *Archives of Neurology*, **2000**, 57, 497-500		74
240	Peginterferon beta-1a in multiple sclerosis: 2-year results from ADVANCE. *Multiple Sclerosis Journal*, **2015**, 21, 1025-35	5	72
239	Contribution of Relapse-Independent Progression vs Relapse-Associated Worsening to Overall Confirmed Disability Accumulation in Typical Relapsing Multiple Sclerosis in a Pooled Analysis of 2 Randomized Clinical Trials. *JAMA Neurology*, **2020**, 77, 1132-1140	17.2	72

238	Evaluation of automated techniques for the quantification of grey matter atrophy in patients with multiple sclerosis. *NeuroImage*, **2010**, 52, 1261-7	7.9	71
237	Neurodegeneration and neuroprotection in multiple sclerosis and other neurodegenerative diseases. *Journal of Neuroimmunology*, **2006**, 176, 198-215	3.5	71
236	In vivo differentiation of astrocytic brain tumors and isolated demyelinating lesions of the type seen in multiple sclerosis using 1H magnetic resonance spectroscopic imaging. *Annals of Neurology*, **1998**, 44, 273-8	9.4	70
235	Cerebral dysgenesis and lactic acidemia: an MRI/MRS phenotype associated with pyruvate dehydrogenase deficiency. *Pediatric Neurology*, **1994**, 11, 224-9	2.9	70
234	Diurnal fluctuations in brain volume: Statistical analyses of MRI from large populations. *NeuroImage*, **2015**, 118, 126-32	7.9	69
233	Clinically feasible MTR is sensitive to cortical demyelination in MS. *Neurology*, **2013**, 80, 246-52	6.5	69
232	Lesion distribution in children with clinically isolated syndromes. *Annals of Neurology*, **2008**, 63, 401-5	9.4	67
231	Chronic white matter lesion activity predicts clinical progression in primary progressive multiple sclerosis. *Brain*, **2019**, 142, 2787-2799	11.2	64
230	Proton magnetic resonance spectroscopic imaging for discrimination of absence and complex partial seizures. *Annals of Neurology*, **1997**, 41, 74-81	9.4	64
229	Using proton magnetic resonance spectroscopic imaging to predict in vivo the response of recurrent malignant gliomas to tamoxifen chemotherapy. *Neurosurgery*, **2000**, 46, 306-18	3.2	64
228	Gradient distortions in MRI: characterizing and correcting for their effects on SIENA-generated measures of brain volume change. *NeuroImage*, **2010**, 49, 1601-11	7.9	63
227	Lesion remyelinating activity of GSK239512 versus placebo in patients with relapsing-remitting multiple sclerosis: a randomised, single-blind, phase II study. *Journal of Neurology*, **2017**, 264, 304-315	5.5	60
226	Jacobian integration method increases the statistical power to measure gray matter atrophy in multiple sclerosis. *NeuroImage: Clinical*, **2014**, 4, 10-7	5.3	59
225	Proton magnetic resonance spectroscopic imaging in patients with extratemporal epilepsy. *Epilepsia*, **1998**, 39, 267-73	6.4	58
224	MRI and laboratory features and the performance of international criteria in the diagnosis of multiple sclerosis in children and adolescents: a prospective cohort study. *The Lancet Child and Adolescent Health*, **2018**, 2, 191-204	14.5	57
223	Function and organization in dysgenic cortex. Case report. *Journal of Neurosurgery*, **1997**, 87, 113-21	3.2	57
222	ADP recovery after a brief ischemic exercise in normal and diseased human muscle--a 31P MRS study. *NMR in Biomedicine*, **1996**, 9, 165-72	4.4	57
221	Slowly expanding/evolving lesions as a magnetic resonance imaging marker of chronic active multiple sclerosis lesions. *Multiple Sclerosis Journal*, **2019**, 25, 1915-1925	5	57

220	Safety and efficacy of opicinumab in patients with relapsing multiple sclerosis (SYNERGY): a randomised, placebo-controlled, phase 2 trial. *Lancet Neurology, The*, **2019**, 18, 845-856	24.1	56
219	Effects of delayed-release dimethyl fumarate on MRI measures in the Phase 3 DEFINE study. *Journal of Neurology*, **2014**, 261, 1794-802	5.5	56
218	Correlation between brain volume change and T2 relaxation time induced by dehydration and rehydration: implications for monitoring atrophy in clinical studies. *NeuroImage: Clinical*, **2014**, 6, 166-70	5.3	56
217	MRI in the diagnosis and management of multiple sclerosis. *Neurology*, **2002**, 58, S23-31	6.5	56
216	Clinical efficacy of BG-12 (dimethyl fumarate) in patients with relapsing-remitting multiple sclerosis: subgroup analyses of the DEFINE study. *Journal of Neurology*, **2013**, 260, 2297-305	5.5	55
215	Axonal injury in the cerebral normal-appearing white matter of patients with multiple sclerosis is related to concurrent demyelination in lesions but not to concurrent demyelination in normal-appearing white matter. *NeuroImage*, **2006**, 29, 637-42	7.9	55
214	Computational models of MRI characteristics of focal cortical dysplasia improve lesion detection. *NeuroImage*, **2002**, 17, 1755-60	7.9	55
213	Changes in cognitive performance over a 1-year period in children and adolescents with multiple sclerosis. *Neuropsychology*, **2013**, 27, 210-9	3.8	53
212	Phase III dose-comparison study of glatiramer acetate for multiple sclerosis. *Annals of Neurology*, **2011**, 69, 75-82	9.4	53
211	The role of edema and demyelination in chronic T1 black holes: a quantitative magnetization transfer study. *Journal of Magnetic Resonance Imaging*, **2005**, 21, 103-10	5.6	53
210	Trimmed-likelihood estimation for focal lesions and tissue segmentation in multisequence MRI for multiple sclerosis. *IEEE Transactions on Medical Imaging*, **2011**, 30, 1455-67	11.7	52
209	Morphometric MRI analysis of the parahippocampal region in temporal lobe epilepsy. *Annals of the New York Academy of Sciences*, **2000**, 911, 495-500	6.5	52
208	Proton magnetic resonance spectroscopic imaging can predict length of survival in patients with supratentorial gliomas. *Neurosurgery*, **2003**, 53, 565-74; discussion 574-6	3.2	52
207	Segmentation of magnetization transfer ratio lesions for longitudinal analysis of demyelination and remyelination in multiple sclerosis. *NeuroImage*, **2013**, 66, 103-9	7.9	51
206	Evolution of focal and diffuse magnetisation transfer abnormalities in multiple sclerosis. *Journal of Neurology*, **2003**, 250, 924-31	5.5	49
205	Imaging of axonal damage in vivo in Rasmussen's syndrome. *Brain*, **1995**, 118 (Pt 3), 753-8	11.2	49
204	Effect of dimethyl fumarate on lymphocytes in RRMS: Implications for clinical practice. *Neurology*, **2019**, 92, e1724-e1738	6.5	48
203	Rotation-invariant multi-contrast non-local means for MS lesion segmentation. *NeuroImage: Clinical* , **2015**, 8, 376-89	5.3	48

202	Quantitative determination of regional lesion volume and distribution in children and adults with relapsing-remitting multiple sclerosis. *PLoS ONE*, **2014**, 9, e85741	3.7	46
201	Epitope spreading as an early pathogenic event in pediatric multiple sclerosis. *Neurology*, **2014**, 83, 2219-26	6.5	46
200	Entorhinal cortex MRI assessment in temporal, extratemporal, and idiopathic generalized epilepsy. *Epilepsia*, **2003**, 44, 1070-4	6.4	46
199	Infection risk with alemtuzumab decreases over time: pooled analysis of 6-year data from the CAMMS223, CARE-MS I, and CARE-MS II studies and the CAMMS03409 extension study. *Multiple Sclerosis Journal*, **2019**, 25, 1605-1617	5	46
198	Lower physical activity is associated with higher disease burden in pediatric multiple sclerosis. *Neurology*, **2015**, 85, 1663-9	6.5	45
197	Quality of life outcomes with BG-12 (dimethyl fumarate) in patients with relapsing-remitting multiple sclerosis: the DEFINE study. *Multiple Sclerosis Journal*, **2014**, 20, 243-52	5	45
196	Mitochondrial disease. Pulmonary function, exercise performance, and blood lactate levels. *Chest*, **1995**, 108, 182-9	5.3	45
195	Safety and efficacy of amiselimod in relapsing multiple sclerosis (MOMENTUM): a randomised, double-blind, placebo-controlled phase 2 trial. *Lancet Neurology, The*, **2016**, 15, 1148-59	24.1	44
194	Automated quality control of brain MR images. *Journal of Magnetic Resonance Imaging*, **2008**, 28, 308-19	5.6	44
193	Rapid improvement in cortical neuronal integrity in amyotrophic lateral sclerosis detected by proton magnetic resonance spectroscopic imaging. *Journal of Neurology*, **2006**, 253, 1060-3	5.5	44
192	Serum neurofilament light as a biomarker in progressive multiple sclerosis. *Neurology*, **2020**, 95, 436-444	6.5	44
191	Statistical power and prediction accuracy in multisite resting-state fMRI connectivity. *NeuroImage*, **2017**, 149, 220-232	7.9	43
190	Temporally consistent probabilistic detection of new multiple sclerosis lesions in brain MRI. *IEEE Transactions on Medical Imaging*, **2013**, 32, 1490-503	11.7	43
189	Measuring demyelination and remyelination in acute multiple sclerosis lesion voxels. *Archives of Neurology*, **2009**, 66, 375-81		43
188	Magnetic resonance spectroscopy in Niemann-Pick disease type C: correlation with diagnosis and clinical response to cholestyramine and lovastatin. *Pediatric Neurology*, **1994**, 10, 228-32	2.9	43
187	Magnetic resonance imaging of multiple sclerosis: new insights linking pathology to clinical evolution. *Current Opinion in Neurology*, **2001**, 14, 279-87	7.1	40
186	Efficacy of delayed-release dimethyl fumarate in relapsing-remitting multiple sclerosis: integrated analysis of the phase 3 trials. *Annals of Clinical and Translational Neurology*, **2015**, 2, 103-18	5.3	38
185	Magnetic resonance techniques for the in vivo assessment of multiple sclerosis pathology: consensus report of the white matter study group. *Journal of Magnetic Resonance Imaging*, **2005**, 21, 669-75	5.6	38

184	Long-term follow-up from the ORATORIO trial of ocrelizumab for primary progressive multiple sclerosis: a post-hoc analysis from the ongoing open-label extension of the randomised, placebo-controlled, phase 3 trial. *Lancet Neurology, The*, **2020**, 19, 998-1009	24.1	38
183	White matter changes in paediatric multiple sclerosis and monophasic demyelinating disorders. *Brain*, **2017**, 140, 1300-1315	11.2	37
182	Impairment of muscle mitochondrial oxidative metabolism in McArdles's disease. *Muscle and Nerve*, **1996**, 19, 764-9	3.4	37
181	Characterization of astrocytomas, meningiomas, and pituitary adenomas by phosphorus magnetic resonance spectroscopy. *Journal of Neurosurgery*, **1991**, 74, 447-53	3.2	37
180	Gabapentin therapy for amyotrophic lateral sclerosis: lack of improvement in neuronal integrity shown by MR spectroscopy. *American Journal of Neuroradiology*, **2003**, 24, 476-80	4.4	37
179	Surface-based analysis reveals regions of reduced cortical magnetization transfer ratio in patients with multiple sclerosis: a proposed method for imaging subpial demyelination. *Human Brain Mapping*, **2014**, 35, 3402-13	5.9	36
178	Proton magnetic resonance spectroscopic images and MRI volumetric studies for lateralization of temporal lobe epilepsy. *Magnetic Resonance Imaging*, **1995**, 13, 1187-91	3.3	36
177	Monophasic demyelination reduces brain growth in children. *Neurology*, **2017**, 88, 1744-1750	6.5	34
176	Five years of ocrelizumab in relapsing multiple sclerosis: OPERA studies open-label extension. *Neurology*, **2020**, 95, e1854-e1867	6.5	34
175	Abnormal effector and regulatory T cell subsets in paediatric-onset multiple sclerosis. *Brain*, **2019**, 142, 617-632	11.2	34
174	Viral exposures and MS outcome in a prospective cohort of children with acquired demyelination. *Multiple Sclerosis Journal*, **2016**, 22, 385-8	5	33
173	MRI in the evaluation of pediatric multiple sclerosis. *Neurology*, **2016**, 87, S88-96	6.5	33
172	Contribution of the cerebellum to cognitive performance in children and adolescents with multiple sclerosis. *Multiple Sclerosis Journal*, **2016**, 22, 599-607	5	32
171	Hematopoietic stem cell transplantation for multiple sclerosis: collaboration of the CIBMTR and EBMT to facilitate international clinical studies. *Biology of Blood and Marrow Transplantation*, **2010**, 16, 1076-83	4.7	32
170	Elevated serum inflammatory markers in post-poliomyelitis syndrome. *Journal of the Neurological Sciences*, **2008**, 271, 80-6	3.2	32
169	N-acetylaspartate: usefulness as an indicator of viable neuronal tissue. *Annals of Neurology*, **2001**, 50, 823-5	9.4	32
168	1H NMR characterization of normal human cerebrospinal fluid and the detection of methylmalonic acid in a vitamin B12 deficient patient. *NMR in Biomedicine*, **1991**, 4, 192-200	4.4	32
167	Evidence for mitochondrial dysfunction in patients with alternating hemiplegia of childhood. *Annals of Neurology*, **1993**, 33, 604-7	9.4	32

166	Identifying multiple sclerosis subtypes using unsupervised machine learning and MRI data. *Nature Communications*, **2021**, 12, 2078	17.4	32
165	Magnetization transfer ratio in the delayed-release dimethyl fumarate DEFINE study. *Journal of Neurology*, **2014**, 261, 2429-37	5.5	31
164	Effect of peginterferon beta-1a on MRI measures and achieving no evidence of disease activity: results from a randomized controlled trial in relapsing-remitting multiple sclerosis. *BMC Neurology*, **2014**, 14, 240	3.1	31
163	Application of calibrated fMRI in Alzheimer's disease. *NeuroImage: Clinical*, **2017**, 15, 348-358	5.3	29
162	ACCLAIM: A randomized trial of abatacept (CTLA4-Ig) for relapsing-remitting multiple sclerosis. *Multiple Sclerosis Journal*, **2017**, 23, 686-695	5	29
161	MR spectroscopy and imaging in metabolic myopathies. *Neurologic Clinics*, **2000**, 18, 35-52	4.5	29
160	Safety and efficacy of MD1003 (high-dose biotin) in patients with progressive multiple sclerosis (SPI2): a randomised, double-blind, placebo-controlled, phase 3 trial. *Lancet Neurology, The*, **2020**, 19, 988-997	24.1	28
159	Neuroprotection with glatiramer acetate: evidence from the PreCISe trial. *Journal of Neurology*, **2013**, 260, 1901-6	5.5	27
158	Automatic detection of gadolinium-enhancing multiple sclerosis lesions in brain MRI using conditional random fields. *IEEE Transactions on Medical Imaging*, **2012**, 31, 1181-94	11.7	27
157	Estimating and accounting for the effect of MRI scanner changes on longitudinal whole-brain volume change measurements. *NeuroImage*, **2019**, 184, 555-565	7.9	27
156	Clinical and MRI activity as determinants of sample size for pediatric multiple sclerosis trials. *Neurology*, **2013**, 81, 1215-21	6.5	26
155	Reproducibility of quantitative magnetization-transfer imaging parameters from repeated measurements. *Magnetic Resonance in Medicine*, **2010**, 64, 391-400	4.4	26
154	High serum neurofilament light chain normalizes after hematopoietic stem cell transplantation for MS. *Neurology: Neuroimmunology and NeuroInflammation*, **2019**, 6, e598	9.1	26
153	Safety and efficacy of delayed-release dimethyl fumarate in patients with relapsing-remitting multiple sclerosis: 9 years' follow-up of DEFINE, CONFIRM, and ENDORSE. *Therapeutic Advances in Neurological Disorders*, **2020**, 13, 1756286420915005	6.6	25
152	Imaging outcome measures of neuroprotection and repair in MS: A consensus statement from NAIMS. *Neurology*, **2019**, 92, 519-533	6.5	25
151	A surface-in gradient of thalamic damage evolves in pediatric multiple sclerosis. *Annals of Neurology*, **2019**, 85, 340-351	9.4	24
150	Efficacy and safety of ozanimod in multiple sclerosis: Dose-blinded extension of a randomized phase II study. *Multiple Sclerosis Journal*, **2019**, 25, 1255-1262	5	24
149	Imaging of repeated episodes of demyelination and remyelination in multiple sclerosis. *NeuroImage: Clinical*, **2014**, 6, 20-5	5.3	24

148	A multicenter, open-label, phase II study of the immunogenicity and safety of a new prefilled syringe (liquid) formulation of Avonex in patients with multiple sclerosis. *Clinical Therapeutics*, **2004**, 26, 511-21	3.5	24
147	The contribution of secondhand tobacco smoke exposure to pediatric multiple sclerosis risk. *Multiple Sclerosis Journal*, **2019**, 25, 515-522	5	24
146	Probabilistic multiple sclerosis lesion classification based on modeling regional intensity variability and local neighborhood information. *IEEE Transactions on Biomedical Engineering*, **2015**, 62, 1281-92	5	23
145	Intracellular phosphates in inclusion body myositis--a 31P magnetic resonance spectroscopy study. *Muscle and Nerve*, **1998**, 21, 1523-5	3.4	23
144	Magnetic Resonance Spectroscopy in Epilepsy: Clinical Issues. *Epilepsia*, **2002**, 43, 32-39	6.4	23
143	Brain atrophy after bone marrow transplantation for treatment of multiple sclerosis. *Multiple Sclerosis Journal*, **2017**, 23, 420-431	5	22
142	Early metabolic changes following chemotherapy of human gliomas in vivo demonstrated by phosphorus magnetic resonance spectroscopy. *Investigative Radiology*, **1989**, 24, 958-61	10.1	22
141	Diroximel fumarate (DRF) in patients with relapsing-remitting multiple sclerosis: Interim safety and efficacy results from the phase 3 EVOLVE-MS-1 study. *Multiple Sclerosis Journal*, **2020**, 26, 1729-1739	5	22
140	Superior MRI outcomes with alemtuzumab compared with subcutaneous interferon β1a in MS. *Neurology*, **2016**, 87, 1464-1472	6.5	21
139	Magnetization transfer ratio recovery in new lesions decreases during adolescence in pediatric-onset multiple sclerosis patients. *NeuroImage: Clinical*, **2014**, 6, 237-42	5.3	21
138	Fatigue in post-poliomyelitis syndrome: association with disease-related, behavioral, and psychosocial factors. *PM and R*, **2009**, 1, 442-9	2.2	21
137	(1)H-MRSI evidence for cortical gray matter pathology that is independent of cerebral white matter lesion load in patients with secondary progressive multiple sclerosis. *Journal of the Neurological Sciences*, **2009**, 282, 72-9	3.2	21
136	Lateralization of temporal lobe epilepsy (TLE) and discrimination of TLE from extra-TLE using pattern analysis of magnetic resonance spectroscopic and volumetric data. *Epilepsia*, **2000**, 41, 832-42	6.4	21
135	Comparison of Multiple Sclerosis Cortical Lesion Types Detected by Multicontrast 3T and 7T MRI. *American Journal of Neuroradiology*, **2019**, 40, 1162-1169	4.4	20
134	Large, nonplateauing relationship between clinical disability and cerebral white matter lesion load in patients with multiple sclerosis. *Archives of Neurology*, **2012**, 69, 89-95		20
133	Axonal damage in multiple sclerosis patients with high versus low expanded disability status scale score. *Canadian Journal of Neurological Sciences*, **2004**, 31, 225-8	1	20
132	Relation of interictal spike frequency to 1H-MRSI-measured NAA/Cr. *Epilepsia*, **1999**, 40, 1821-7	6.4	20
131	No evidence of disease activity (NEDA) analysis by epochs in patients with relapsing multiple sclerosis treated with ocrelizumab vs interferon beta-1a. *Multiple Sclerosis Journal - Experimental, Translational and Clinical*, **2018**, 4, 2055217318760642	2	19

130	Two-year results from a phase 2 extension study of oral amiselimod in relapsing multiple sclerosis. *Multiple Sclerosis Journal*, **2018**, 24, 1605-1616	5	19
129	A double-blind, placebo-controlled, single ascending-dose study of remyelinating antibody rHIgM22 in people with multiple sclerosis. *Multiple Sclerosis Journal - Experimental, Translational and Clinical*, **2017**, 3, 2055217317743097	2	19
128	Non-conventional MRI techniques for measuring neuroprotection, repair and plasticity in multiple sclerosis. *Current Opinion in Neurology*, **2008**, 21, 272-7	7.1	19
127	Proton magnetic resonance spectroscopic imaging studies in patients with newly diagnosed partial epilepsy. *Epilepsia*, **2000**, 41, 825-31	6.4	19
126	Safety and efficacy of tolebrutinib, an oral brain-penetrant BTK inhibitor, in relapsing multiple sclerosis: a phase 2b, randomised, double-blind, placebo-controlled trial. *Lancet Neurology, The*, **2021**, 20, 729-738	24.1	19
125	Glutaric acidemia type II: neuroimaging and spectroscopy evidence for developmental encephalomyopathy. *Pediatric Neurology*, **1995**, 12, 350-3	2.9	18
124	Incidence and prevalence of MS in children: A population-based study in Ontario, Canada. *Neurology*, **2018**, 91, e1579-e1590	6.5	18
123	Peginterferon beta-1a improves MRI measures and increases the proportion of patients with no evidence of disease activity in relapsing-remitting multiple sclerosis: 2-year results from the ADVANCE randomized controlled trial. *BMC Neurology*, **2017**, 17, 29	3.1	17
122	Intracortical inhibition abnormality during the remission phase of multiple sclerosis is related to upper limb dexterity and lesions. *Clinical Neurophysiology*, **2016**, 127, 1503-1511	4.3	17
121	Prospective serial proton MR spectroscopic assessment of response to tamoxifen for recurrent malignant glioma. *Journal of Neuro-Oncology*, **2008**, 90, 63-76	4.8	17
120	Multiple sclerosis lesion segmentation using an automatic multimodal graph cuts. *Lecture Notes in Computer Science*, **2009**, 12, 584-91	0.9	17
119	White matter plasticity and maturation in human cognition. *Glia*, **2019**, 67, 2020-2037	9	16
118	The lesions of multiple sclerosis. *New England Journal of Medicine*, **2002**, 346, 199-200	59.2	16
117	Phase IV study of retention on fingolimod injectable multiple sclerosis therapies: a randomized clinical trial. *Therapeutic Advances in Neurological Disorders*, **2018**, 11, 1756286418774338	6.6	16
116	Temporal Hierarchical Adaptive Texture CRF for Automatic Detection of Gadolinium-Enhancing Multiple Sclerosis Lesions in Brain MRI. *IEEE Transactions on Medical Imaging*, **2015**, 34, 1227-41	11.7	15
115	Memory performance and normalized regional brain volumes in patients with pediatric-onset multiple sclerosis. *Journal of the International Neuropsychological Society*, **2012**, 18, 471-80	3.1	15
114	Impaired growth of the cerebellum in pediatric-onset acquired CNS demyelinating disease. *Multiple Sclerosis Journal*, **2016**, 22, 1266-78	5	14
113	Altered resting-state functional connectivity in cognitively preserved pediatric-onset MS patients and relationship to structural damage and cognitive performance. *Multiple Sclerosis Journal*, **2016**, 22, 792-800	5	14

112	Non-Local Means Inpainting of MS Lesions in Longitudinal Image Processing. *Frontiers in Neuroscience*, **2015**, 9, 456	5.1	14
111	Evidence for neuroprotection and remyelination using imaging techniques. *Neurology*, **2007**, 68, S83-90; discussion S91-6	6.5	14
110	Association of cerebral dysgenesis and lactic acidemia with X-linked PDH E1 alpha subunit mutations in females. *Pediatric Neurology*, **1995**, 13, 327-32	2.9	14
109	Secondary Progressive Multiple Sclerosis: New Insights. *Neurology*, **2021**, 97, 378-388	6.5	14
108	IMaGe: Iterative Multilevel Probabilistic Graphical Model for Detection and Segmentation of Multiple Sclerosis Lesions in Brain MRI. *Lecture Notes in Computer Science*, **2015**, 24, 514-26	0.9	13
107	Quantitative Measurement of tissue damage and recovery within new T2w lesions in pediatric- and adult-onset multiple sclerosis. *Multiple Sclerosis Journal*, **2015**, 21, 718-25	5	13
106	Masquerades of acquired demyelination in children: experiences of a national demyelinating disease program. *Journal of Child Neurology*, **2013**, 28, 184-97	2.5	13
105	Improved Precision in the Measurement of Longitudinal Global and Regional Volumetric Changes via a Novel MRI Gradient Distortion Characterization and Correction Technique. *Lecture Notes in Computer Science*, **2010**, 324-333	0.9	13
104	Changes observed in multiple sclerosis using magnetic resonance imaging reflect a focal pathology distributed along axonal pathways. *Journal of Neurology*, **2005**, 252 Suppl 5, v25-9	5.5	12
103	Adaptive multi-level conditional random fields for detection and segmentation of small enhanced pathology in medical images. *Medical Image Analysis*, **2016**, 27, 17-30	15.4	11
102	Normalization of white matter intensity on T1-weighted images of patients with acquired central nervous system demyelination. *Journal of Neuroimaging*, **2015**, 25, 184-190	2.8	11
101	MTR recovery in brain lesions in the BECOME study of glatiramer acetate vs interferon β1b. *Neurology*, **2016**, 87, 905-11	6.5	11
100	Neuronal dysfunction in children with newly diagnosed temporal lobe epilepsy. *Pediatric Neurology*, **2000**, 22, 281-6	2.9	11
99	Familial myopathy with conspicuous depletion of mitochondria in muscle fibers: a morphologically distinct disease. *Neuromuscular Disorders*, **1995**, 5, 139-44	2.9	11
98	Investigation of human mitochondrial myopathies by phosphorus magnetic resonance spectroscopy. *Biochemical Society Transactions*, **1985**, 13, 654	5.1	11
97	Efficacy and safety of alemtuzumab over 6 years: final results of the 4-year CARE-MS extension trial. *Therapeutic Advances in Neurological Disorders*, **2021**, 14, 1756286420982134	6.6	11
96	Effect of fingolimod on MRI outcomes in patients with paediatric-onset multiple sclerosis: results from the phase 3 PARADIG study. *Journal of Neurology, Neurosurgery and Psychiatry*, **2020**, 91, 483-492	5.5	10
95	No-reference quality measure in brain MRI images using binary operations, texture and set analysis. *IET Image Processing*, **2017**, 11, 672-684	1.7	10

94	MRI evidence of acute inflammation in leukocortical lesions of patients with early multiple sclerosis. *Neurology*, **2017**, 89, 714-721	6.5	10
93	How patients with multiple sclerosis acquire disability.. *Brain*, **2022**,	11.2	10
92	Neurotoxicity after hematopoietic stem cell transplant in multiple sclerosis. *Annals of Clinical and Translational Neurology*, **2020**, 7, 767-775	5.3	10
91	Characterisation of MS phenotypes across the age span using a novel data set integrating 34 clinical trials (NO.MS cohort): Age is a key contributor to presentation. *Multiple Sclerosis Journal*, **2021**, 27, 2062-2076	5	10
90	High rates of health care utilization in pediatric multiple sclerosis: A Canadian population-based study. *PLoS ONE*, **2019**, 14, e0218215	3.7	9
89	Delayed-release dimethyl fumarate and disability assessed by the Multiple Sclerosis Functional Composite: Integrated analysis of DEFINE and CONFIRM. *Multiple Sclerosis Journal - Experimental, Translational and Clinical*, **2016**, 2, 2055217316634111	2	9
88	Detection and clinical correlation of leukocortical lesions in pediatric-onset multiple sclerosis on multi-contrast MRI. *Multiple Sclerosis Journal*, **2019**, 25, 980-986	5	9
87	Patterning Chronic Active Demyelination in Slowly Expanding/Evolving White Matter MS Lesions. *American Journal of Neuroradiology*, **2020**, 41, 1584-1591	4.4	9
86	Temporal profile of serum neurofilament light in multiple sclerosis: Implications for patient monitoring. *Multiple Sclerosis Journal*, **2021**, 27, 1497-1505	5	9
85	Long-term outcomes of peginterferon beta-1a in multiple sclerosis: results from the ADVANCE extension study, ATTAIN. *Therapeutic Advances in Neurological Disorders*, **2018**, 11, 1756286418791143	6.6	9
84	Subgroup and sensitivity analyses of annualized relapse rate over 2 years in the ADVANCE trial of peginterferon beta-1a in patients with relapsing-remitting multiple sclerosis. *Journal of Neurology*, **2016**, 263, 1778-87	5.5	8
83	Blind blur assessment of MRI images using parallel multiscale difference of Gaussian filters. *BioMedical Engineering OnLine*, **2018**, 17, 76	4.1	8
82	Tolerability and Safety of Combined Glatiramer Acetate and N-Acetylcysteine in Relapsing-Remitting Multiple Sclerosis. *Clinical Neuropharmacology*, **2015**, 38, 127-31	1.4	7
81	Adaptive voxel, texture and temporal conditional random fields for detection of Gad-enhancing multiple sclerosis lesions in brain MRI. *Lecture Notes in Computer Science*, **2013**, 16, 543-50	0.9	7
80	Natalizumab versus fingolimod for patients with active relapsing-remitting multiple sclerosis: results from REVEAL, a prospective, randomised head-to-head study. *BMJ Open*, **2020**, 10, e038861	3	7
79	Cognitive and Behavioral Functioning in Childhood Acquired Demyelinating Syndromes. *Journal of the International Neuropsychological Society*, **2016**, 22, 1050-1060	3.1	7
78	Silent New Brain MRI Lesions in Children with MOG-Antibody Associated Disease. *Annals of Neurology*, **2021**, 89, 408-413	9.4	7
77	Efficacy and Safety of 2 Fingolimod Doses vs Glatiramer Acetate for the Treatment of Patients With Relapsing-Remitting Multiple Sclerosis: A Randomized Clinical Trial. *JAMA Neurology*, **2020**,	17.2	7

76	Long-term safety and efficacy of dimethyl fumarate for up to 13 years in patients with relapsing-remitting multiple sclerosis: Final ENDORSE study results. *Multiple Sclerosis Journal*, **2021**, 13524585211037909	5	7
75	Bayesian framework inspired no-reference region-of-interest quality measure for brain MRI images. *Journal of Medical Imaging*, **2017**, 4, 025504	2.6	6
74	CNN Detection of New and Enlarging Multiple Sclerosis Lesions from Longitudinal Mri Using Subtraction Images **2020**,		6
73	Automated separation of diffusely abnormal white matter from focal white matter lesions on MRI in multiple sclerosis. *NeuroImage*, **2020**, 213, 116690	7.9	6
72	Impact of immunoablation and autologous hematopoietic stem cell transplantation on gray and white matter atrophy in multiple sclerosis. *Multiple Sclerosis Journal*, **2018**, 24, 1055-1066	5	6
71	Detection of Gad-enhancing lesions in multiple sclerosis using conditional random fields. *Lecture Notes in Computer Science*, **2010**, 13, 41-8	0.9	6
70	Deep learning segmentation of orbital fat to calibrate conventional MRI for longitudinal studies. *NeuroImage*, **2020**, 208, 116442	7.9	6
69	Improving the SIENA performance using BEaST brain extraction. *PLoS ONE*, **2018**, 13, e0196945	3.7	6
68	Texture analysis and morphological processing of magnetic resonance imaging assist detection of focal cortical dysplasia in extra-temporal partial epilepsy **2001**, 49, 770		6
67	Predicting Future Disease Activity and Treatment Responders for Multiple Sclerosis Patients Using a Bag-of-Lesions Brain Representation. *Lecture Notes in Computer Science*, **2017**, 186-194	0.9	5
66	Brain volume loss in individuals over time: Source of variance and limits of detectability. *NeuroImage*, **2020**, 214, 116737	7.9	5
65	Brain volume and fatigue in patients with postpoliomyelitis syndrome. *PM and R*, **2014**, 6, 215-20	2.2	5
64	Evidence for use of glatiramer acetate in multiple sclerosis. *Lancet Neurology, The*, **2005**, 4, 74-5; discussion 76-7	24.1	5
63	Safety and efficacy of teriflunomide in paediatric multiple sclerosis (TERIKIDS): a multicentre, double-blind, phase 3, randomised, placebo-controlled trial. *Lancet Neurology, The*, **2021**, 20, 1001-1011	24.1	5
62	Propagating Uncertainty Across Cascaded Medical Imaging Tasks for Improved Deep Learning Inference. *Lecture Notes in Computer Science*, **2019**, 23-32	0.9	5
61	Lesion Detection, Segmentation and Prediction in Multiple Sclerosis Clinical Trials. *Lecture Notes in Computer Science*, **2018**, 15-28	0.9	5
60	Improvement in relapse recovery with peginterferon beta-1a in patients with multiple sclerosis. *Multiple Sclerosis Journal - Experimental, Translational and Clinical*, **2016**, 2, 2055217316676644	2	5
59	Temporal profile of lymphocyte counts and relationship with infections with fingolimod therapy in paediatric patients with multiple sclerosis: Results from the PARADIG study. *Multiple Sclerosis Journal*, **2021**, 27, 922-932	5	5

58   Image Quality Evaluation in Clinical Research: A Case Study on Brain and Cardiac MRI Images in Multi-Center Clinical Trials. *IEEE Journal of Translational Engineering in Health and Medicine*, **2018**, 6, 1800915   3   5

57   Optimal selection of regularization parameter in total variation method for reducing noise in magnetic resonance images of the brain. *Biomedical Engineering Letters*, **2014**, 4, 80-92   3.6   4

56   Evolving role of MRI in optimizing the treatment of multiple sclerosis: Canadian Consensus recommendations. *Multiple Sclerosis Journal - Experimental, Translational and Clinical*, **2015**, 1, 2055217315589775   2   4

55   Imaging of Demyelination and Remyelination in Multiple Sclerosis **2013**, 233-253   4

54   The clique potential of Markov random field in a random experiment for estimation of noise levels in 2D brain MRI. *International Journal of Imaging Systems and Technology*, **2013**, 23, 304-313   2.5   4

53   The metabolic epicenter of supratentorial gliomas: a 1H-MRSI study. *Canadian Journal of Neurological Sciences*, **2009**, 36, 696-706   1   4

52   A Generative Model for Automatic Detection of Resolving Multiple Sclerosis Lesions. *Lecture Notes in Computer Science*, **2014**, 118-129   0.9   4

51   Hierarchical conditional random fields for detection of gad-enhancing lesions in multiple sclerosis. *Lecture Notes in Computer Science*, **2012**, 15, 379-86   0.9   4

50   Peginterferon β1a every 2 weeks increased achievement of no evidence of disease activity over 4 years in the ADVANCE and ATTAIN studies in patients with relapsing-remitting multiple sclerosis. *Therapeutic Advances in Neurological Disorders*, **2018**, 11, 1756286418795085   6.6   4

49   Increased mental health care use by mothers of children with multiple sclerosis. *Neurology*, **2020**, 94, e1040-e1050   6.5   3

48   Delineation of cortical pathology in multiple sclerosis using multi-surface magnetization transfer ratio imaging. *NeuroImage: Clinical*, **2016**, 12, 858-868   5.3   3

47   The place of MRI in monitoring the individual MS patient. *Journal of the Neurological Sciences*, **2007**, 259, 123-7   3.2   3

46   Metagenomic Analysis of the Pediatric-Onset Multiple Sclerosis Gut Microbiome.. *Neurology*, **2021**,   6.5   3

45   Factors associated with health care utilization in pediatric multiple sclerosis. *Multiple Sclerosis and Related Disorders*, **2020**, 38, 101511   4   3

44   Ozanimod in relapsing multiple sclerosis: Pooled safety results from the clinical development program. *Multiple Sclerosis and Related Disorders*, **2021**, 51, 102844   4   3

43   Effect of Ozanimod on Symbol Digit Modalities Test Performance in Relapsing MS. *Multiple Sclerosis and Related Disorders*, **2021**, 48, 102673   4   3

42   Physical activity and dentate gyrus volume in pediatric acquired demyelinating syndromes. *Neurology: Neuroimmunology and NeuroInflammation*, **2018**, 5, e499   9.1   3

41   The gut microbiota in pediatric multiple sclerosis and demyelinating syndromes. *Annals of Clinical and Translational Neurology*, **2021**,   5.3   3

40	The spatial statistics of structural magnetic resonance images: application to post-acquisition quality assessment of brain MRI images. *Imaging Science Journal*, **2017**, 65, 468-483	0.9	2
39	Local Indicators of Spatial Autocorrelation (LISA): Application to Blind Noise-Based Perceptual Quality Metric Index for Magnetic Resonance Images. *Journal of Imaging*, **2019**, 5,	3.1	2
38	Peginterferon beta-1a reduces the evolution of MRI lesions to black holes in patients with RRMS: a post hoc analysis from the ADVANCE study. *Journal of Neurology*, **2017**, 264, 1728-1734	5.5	2
37	Path Sampling to Compute Integrated Likelihoods: An Adaptive Approach. *Journal of Computational and Graphical Statistics*, **2009**, 18, 415-437	1.4	2
36	Remarkable resistance of the nerve to ischemia: a reply. *Muscle and Nerve*, **1987**, 10, 183	3.4	2
35	Saliency Based Deep Neural Network for Automatic Detection of Gadolinium-Enhancing Multiple Sclerosis Lesions in Brain MRI. *Lecture Notes in Computer Science*, **2020**, 108-118	0.9	2
34	Pro-inflammatory adiponectin in pediatric-onset multiple sclerosis. *Multiple Sclerosis Journal*, **2021**, 27, 1948-1959	5	2
33	Slowly expanding lesions are a marker of progressive MS - No. *Multiple Sclerosis Journal*, **2021**, 27, 1681-1683	5	2
32	Effect of siponimod on magnetic resonance imaging measures of neurodegeneration and myelination in secondary progressive multiple sclerosis: Gray matter atrophy and magnetization transfer ratio analyses from the EXPAND phase 3 trial.. *Multiple Sclerosis Journal*, **2022**, 13524585221076717	5	2
31	Long-term efficacy and safety of siponimod in patients with secondary progressive multiple sclerosis: Analysis of EXPAND core and extension data up to >5 years.. *Multiple Sclerosis Journal*, **2022**, 13524585221083194	5	2
30	Diffusely abnormal white matter converts to T2 lesion volume in the absence of MRI-detectable acute inflammation.. *Brain*, **2021**,	11.2	2
29	Siponimod vs placebo in active secondary progressive multiple sclerosis: a post hoc analysis from the phase 3 EXPAND study. *Journal of Neurology*,	5.5	2
28	Axonal pathology in patients with multiple sclerosis150-164		1
27	The search for the missing links in multiple sclerosis. *Current Neurology and Neuroscience Reports*, **2007**, 7, 93-4	6.6	1
26	Chapter 10 Magnetic Resonance Imaging and Spectroscopy: Insights into the Pathology and Pathophysiology of Multiple Sclerosis. *Blue Books of Practical Neurology*, **2003**, 27, 139-167		1
25	Is It Possible to Differentiate the Impact of Pediatric Monophasic Demyelinating Disorders and Multiple Sclerosis After a First Episode of Demyelination?. *Lecture Notes in Computer Science*, **2015**, 38-48	0.9	1
24	Predicting disability progression and cognitive worsening in multiple sclerosis using patterns of grey matter volumes. *Journal of Neurology, Neurosurgery and Psychiatry*, **2021**, 92, 995-1006	5.5	1
23	Abnormalities in normal-appearing white matter from which multiple sclerosis lesions arise. *Brain Communications*, **2021**, 3, fcab176	4.5	1

22	Standardized quality metric system for structural brain magnetic resonance images in multi-center neuroimaging study. *BMC Medical Imaging*, **2018**, 18, 31	2.9	1
21	Propagating Uncertainty Across Cascaded Medical Imaging Tasks For Improved Deep Learning Inference. *IEEE Transactions on Medical Imaging*, **2021**, PP,	11.7	1
20	Differential Diagnosis of Human Intracranial Tumors in Vivo Using 1H Mr Spectroscopic Imaging and Feature Space for Spectral Pattern Recognition **1994**, 299-313		1
19	Prognostic Value of Serum Neurofilament Light Chain for Disease Activity and Worsening in Patients With Relapsing Multiple Sclerosis: Results From the Phase 3 ASCLEPIOS I and II Trials.. *Frontiers in Immunology*, **2022**, 13, 852563	8.4	1
18	Comparison of Spinal Cord Magnetic Resonance Imaging Features Among Children With Acquired Demyelinating Syndromes. *JAMA Network Open*, **2021**, 4, e2128871	10.4	0
17	Assessing the differential sensitivities of wave-CAIPI ViSTa myelin water fraction and magnetization transfer saturation for efficiently quantifying tissue damage in MS. *Multiple Sclerosis and Related Disorders*, **2021**, 56, 103309	4	0
16	Safety and efficacy of daclizumab beta in patients with relapsing multiple sclerosis in a 5-year open-label study (EXTEND): final results following early termination. *Therapeutic Advances in Neurological Disorders*, **2021**, 14, 1756286420987941	6.6	0
15	Brain volume change after high-dose immunosuppression and autologous hematopoietic cell transplantation for relapsing-remitting multiple sclerosis. *Multiple Sclerosis and Related Disorders*, **2021**, 54, 103149	4	0
14	Efficacy and Safety Outcomes with Diroximel Fumarate After Switching from Prior Therapies or Continuing on DRF: Results from the Phase 3 EVOLVE-MS-1 Study.. *Advances in Therapy*, **2022**, 39, 1810	4.1	0
13	Serum MOG-IgG in children meeting multiple sclerosis diagnostic criteria.. *Multiple Sclerosis Journal*, **2022**, 13524585221093789	5	0
12	Four-neighborhood clique kernel: A general framework for Bayesian and variational techniques of noise reduction in magnetic resonance images of the brain. *International Journal of Imaging Systems and Technology*, **2014**, 24, 224-238	2.5	
11	Reply: To PMID 24006277. *Annals of Neurology*, **2014**, 75, 463-4	9.4	
10	Windows on the working brain: magnetic resonance spectroscopy **2002**, 146-159		
9	Chapter 54 MRS for imaging neuronal dysfunction in epilepsy. *Supplements To Clinical Neurophysiology*, **2002**, 359-364		
8	Disrupted cognitive development following pediatric acquired demyelinating syndromes: a longitudinal study. *Child Neuropsychology*, **2021**, 1-22	2.7	
7	Early treatment responses to peginterferon beta-1a are associated with longer-term clinical outcomes in patients with relapsing-remitting multiple sclerosis: Subgroup analyses of ADVANCE and ATTAIN.. *Multiple Sclerosis and Related Disorders*, **2022**, 57, 103367	4	
6	CNN Prediction of Future Disease Activity for Multiple Sclerosis Patients from Baseline MRI and Lesion Labels. *Lecture Notes in Computer Science*, **2019**, 57-69	0.9	
5	056 Efficacy and safety of the Bruton tyrosine kinase inhibitor evobrutinib (M2951) in patients with relapsing multiple sclerosis over 48 weeks: a randomized, placebo-controlled, phase 2 study. *Journal of Neurology, Neurosurgery and Psychiatry*, **2019**, 90, A18.2-A19	5.5	

List of Publications

4	Cohort Bias Adaptation in Aggregated Datasets for Lesion Segmentation. *Lecture Notes in Computer Science*, **2021**, 101-111	0.9
3	Patterns of white and gray structural abnormality associated with paediatric demyelinating disorders.. *NeuroImage: Clinical*, **2022**, 34, 103001	5.3
2	Effects of Dimethyl Fumarate on Brain Atrophy in Relapsing-Remitting Multiple Sclerosis: Pooled Analysis Phase 3 DEFINE and CONFIRM Studies.. *Frontiers in Neurology*, **2022**, 13, 809273	4.1
1	Progressive retinal changes in pediatric multiple sclerosis.. *Multiple Sclerosis and Related Disorders*, **2022**, 61, 103761	4