Douglas L Arnold

List of Publications by Year in Descending Order

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	How patients with multiple sclerosis acquire disability.. *Brain*, **2022**,	11.2	10
308	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	
307	Patterns of white and gray structural abnormality associated with paediatric demyelinating disorders.. *NeuroImage: Clinical*, **2022**, 34, 103001	5.3	
306	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
305	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
304	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	
303	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
302	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
301	Progressive retinal changes in pediatric multiple sclerosis.. *Multiple Sclerosis and Related Disorders*, **2022**, 61, 103761	4	
300	Serum MOG-IgG in children meeting multiple sclerosis diagnostic criteria.. *Multiple Sclerosis Journal*, **2022**, 13524585221093789	5	0
299	Metagenomic Analysis of the Pediatric-Onset Multiple Sclerosis Gut Microbiome.. *Neurology*, **2021**,	6.5	3
298	Disrupted cognitive development following pediatric acquired demyelinating syndromes: a longitudinal study. *Child Neuropsychology*, **2021**, 1-22	2.7	
297	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
296	Comparison of Spinal Cord Magnetic Resonance Imaging Features Among Children With Acquired Demyelinating Syndromes. *JAMA Network Open*, **2021**, 4, e2128871	10.4	0
295	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
294	Temporal profile of serum neurofilament light in multiple sclerosis: Implications for patient monitoring. *Multiple Sclerosis Journal*, **2021**, 27, 1497-1505	5	9
293	Identifying multiple sclerosis subtypes using unsupervised machine learning and MRI data. *Nature Communications*, **2021**, 12, 2078	17.4	32

292	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
291	Ozanimod in relapsing multiple sclerosis: Pooled safety results from the clinical development program. *Multiple Sclerosis and Related Disorders*, **2021**, 51, 102844	4	3
290	Secondary Progressive Multiple Sclerosis: New Insights. *Neurology*, **2021**, 97, 378-388	6.5	14
289	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
288	Silent New Brain MRI Lesions in Children with MOG-Antibody Associated Disease. *Annals of Neurology*, **2021**, 89, 408-413	9.4	7
287	Effect of Ozanimod on Symbol Digit Modalities Test Performance in Relapsing MS. *Multiple Sclerosis and Related Disorders*, **2021**, 48, 102673	4	3
286	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
285	Cohort Bias Adaptation in Aggregated Datasets for Lesion Segmentation. *Lecture Notes in Computer Science*, **2021**, 101-111	0.9	
284	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
283	Abnormalities in normal-appearing white matter from which multiple sclerosis lesions arise. *Brain Communications*, **2021**, 3, fcab176	4.5	1
282	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
281	Pro-inflammatory adiponectin in pediatric-onset multiple sclerosis. *Multiple Sclerosis Journal*, **2021**, 27, 1948-1959	5	2
280	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**, 1352458521103790	5	7
279	Slowly expanding lesions are a marker of progressive MS - No. *Multiple Sclerosis Journal*, **2021**, 27, 1681-1683	5	2
278	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
277	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
276	Propagating Uncertainty Across Cascaded Medical Imaging Tasks For Improved Deep Learning Inference. *IEEE Transactions on Medical Imaging*, **2021**, PP,	11.7	1
275	The gut microbiota in pediatric multiple sclerosis and demyelinating syndromes. *Annals of Clinical and Translational Neurology*, **2021**,	5.3	3

274	Diffusely abnormal white matter converts to T2 lesion volume in the absence of MRI-detectable acute inflammation.. *Brain*, **2021**,	11.2	2
273	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
272	CNN Detection of New and Enlarging Multiple Sclerosis Lesions from Longitudinal Mri Using Subtraction Images **2020**,		6
271	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
270	Brain volume loss in individuals over time: Source of variance and limits of detectability. *NeuroImage*, **2020**, 214, 116737	7.9	5
269	Increased mental health care use by mothers of children with multiple sclerosis. *Neurology*, **2020**, 94, e1040-e1050	6.5	3
268	Automated separation of diffusely abnormal white matter from focal white matter lesions on MRI in multiple sclerosis. *NeuroImage*, **2020**, 213, 116690	7.9	6
267	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
266	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
265	Factors associated with health care utilization in pediatric multiple sclerosis. *Multiple Sclerosis and Related Disorders*, **2020**, 38, 101511	4	3
264	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
263	Deep learning segmentation of orbital fat to calibrate conventional MRI for longitudinal studies. *NeuroImage*, **2020**, 208, 116442	7.9	6
262	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
261	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
260	Five years of ocrelizumab in relapsing multiple sclerosis: OPERA studies open-label extension. *Neurology*, **2020**, 95, e1854-e1867	6.5	34
259	Serum neurofilament light as a biomarker in progressive multiple sclerosis. *Neurology*, **2020**, 95, 436-444	6.5	44
258	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
257	Patterning Chronic Active Demyelination in Slowly Expanding/Evolving White Matter MS Lesions. *American Journal of Neuroradiology*, **2020**, 41, 1584-1591	4.4	9

256	Serial Anti-Myelin Oligodendrocyte Glycoprotein Antibody Analyses and Outcomes in Children With Demyelinating Syndromes. *JAMA Neurology*, **2020**, 77, 82-93	17.2	84
255	Exploring uncertainty measures in deep networks for Multiple sclerosis lesion detection and segmentation. *Medical Image Analysis*, **2020**, 59, 101557	15.4	111
254	Neurotoxicity after hematopoietic stem cell transplant in multiple sclerosis. *Annals of Clinical and Translational Neurology*, **2020**, 7, 767-775	5.3	10
253	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
252	Chronic white matter lesion activity predicts clinical progression in primary progressive multiple sclerosis. *Brain*, **2019**, 142, 2787-2799	11.2	64
251	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
250	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, 1021-1033	24.1	98
249	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
248	White matter plasticity and maturation in human cognition. *Glia*, **2019**, 67, 2020-2037	9	16
247	High rates of health care utilization in pediatric multiple sclerosis: A Canadian population-based study. *PLoS ONE*, **2019**, 14, e0218215	3.7	9
246	Placebo-Controlled Trial of an Oral BTK Inhibitor in Multiple Sclerosis. *New England Journal of Medicine*, **2019**, 380, 2406-2417	59.2	111
245	Effect of dimethyl fumarate on lymphocytes in RRMS: Implications for clinical practice. *Neurology*, **2019**, 92, e1724-e1738	6.5	48
244	A surface-in gradient of thalamic damage evolves in pediatric multiple sclerosis. *Annals of Neurology*, **2019**, 85, 340-351	9.4	24
243	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
242	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
241	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
240	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
239	Propagating Uncertainty Across Cascaded Medical Imaging Tasks for Improved Deep Learning Inference. *Lecture Notes in Computer Science*, **2019**, 23-32	0.9	5

238	Imaging outcome measures of neuroprotection and repair in MS: A consensus statement from NAIMS. *Neurology*, **2019**, 92, 519-533	6.5	25
237	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	
236	Abnormal effector and regulatory T cell subsets in paediatric-onset multiple sclerosis. *Brain*, **2019**, 142, 617-632	11.2	34
235	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	
234	High serum neurofilament light chain normalizes after hematopoietic stem cell transplantation for MS. *Neurology: Neuroimmunology and NeuroInflammation*, **2019**, 6, e598	9.1	26
233	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
232	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
231	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
230	The contribution of secondhand tobacco smoke exposure to pediatric multiple sclerosis risk. *Multiple Sclerosis Journal*, **2019**, 25, 515-522	5	24
229	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
228	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
227	Siponimod versus placebo in secondary progressive multiple sclerosis (EXPAND): a double-blind, randomised, phase 3 study. *Lancet, The*, **2018**, 391, 1263-1273	40	422
226	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
225	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
224	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
223	Blind blur assessment of MRI images using parallel multiscale difference of Gaussian filters. *BioMedical Engineering OnLine*, **2018**, 17, 76	4.1	8
222	Lesion Detection, Segmentation and Prediction in Multiple Sclerosis Clinical Trials. *Lecture Notes in Computer Science*, **2018**, 15-28	0.9	5
221	Standardized quality metric system for structural brain magnetic resonance images in multi-center neuroimaging study. *BMC Medical Imaging*, **2018**, 18, 31	2.9	1

220	Incidence and prevalence of MS in children: A population-based study in Ontario, Canada. *Neurology* , **2018**, 91, e1579-e1590	6.5	18
219	Improving the SIENA performance using BEaST brain extraction. *PLoS ONE*, **2018**, 13, e0196945	3.7	6
218	Physical activity and dentate gyrus volume in pediatric acquired demyelinating syndromes. *Neurology: Neuroimmunology and NeuroInflammation*, **2018**, 5, e499	9.1	3
217	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
216	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
215	Trial of Fingolimod versus Interferon Beta-1a in Pediatric Multiple Sclerosis. *New England Journal of Medicine*, **2018**, 379, 1017-1027	59.2	144
214	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
213	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
212	Brain atrophy after bone marrow transplantation for treatment of multiple sclerosis. *Multiple Sclerosis Journal*, **2017**, 23, 420-431	5	22
211	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
210	High-dose immunosuppressive therapy and autologous HCT for relapsing-remitting MS. *Neurology*, **2017**, 88, 842-852	6.5	99
209	Statistical power and prediction accuracy in multisite resting-state fMRI connectivity. *NeuroImage*, **2017**, 149, 220-232	7.9	43
208	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
207	Bayesian framework inspired no-reference region-of-interest quality measure for brain MRI images. *Journal of Medical Imaging*, **2017**, 4, 025504	2.6	6
206	White matter changes in paediatric multiple sclerosis and monophasic demyelinating disorders. *Brain*, **2017**, 140, 1300-1315	11.2	37
205	Monophasic demyelination reduces brain growth in children. *Neurology*, **2017**, 88, 1744-1750	6.5	34
204	Ocrelizumab versus Interferon Beta-1a in Relapsing Multiple Sclerosis. *New England Journal of Medicine*, **2017**, 376, 221-234	59.2	858
203	Ocrelizumab versus Placebo in Primary Progressive Multiple Sclerosis. *New England Journal of Medicine*, **2017**, 376, 209-220	59.2	880

202	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
201	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
200	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
199	Alemtuzumab CARE-MS II 5-year follow-up: Efficacy and safety findings. *Neurology*, **2017**, 89, 1117-1126	6.5	175
198	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
197	MRI evidence of acute inflammation in leukocortical lesions of patients with early multiple sclerosis. *Neurology*, **2017**, 89, 714-721	6.5	10
196	Application of calibrated fMRI in Alzheimer's disease. *NeuroImage: Clinical*, **2017**, 15, 348-358	5.3	29
195	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
194	ACCLAIM: A randomized trial of abatacept (CTLA4-Ig) for relapsing-remitting multiple sclerosis. *Multiple Sclerosis Journal*, **2017**, 23, 686-695	5	29
193	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
192	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
191	Contribution of the cerebellum to cognitive performance in children and adolescents with multiple sclerosis. *Multiple Sclerosis Journal*, **2016**, 22, 599-607	5	32
190	Viral exposures and MS outcome in a prospective cohort of children with acquired demyelination. *Multiple Sclerosis Journal*, **2016**, 22, 385-8	5	33
189	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
188	MTR recovery in brain lesions in the BECOME study of glatiramer acetate vs interferon β1b. *Neurology*, **2016**, 87, 905-11	6.5	11
187	MRI in the evaluation of pediatric multiple sclerosis. *Neurology*, **2016**, 87, S88-96	6.5	33
186	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
185	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

184	Delineation of cortical pathology in multiple sclerosis using multi-surface magnetization transfer ratio imaging. *NeuroImage: Clinical*, **2016**, 12, 858-868	5.3	3
183	Superior MRI outcomes with alemtuzumab compared with subcutaneous interferon β-1a in MS. *Neurology*, **2016**, 87, 1464-1472	6.5	21
182	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
181	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
180	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
179	Impaired growth of the cerebellum in pediatric-onset acquired CNS demyelinating disease. *Multiple Sclerosis Journal*, **2016**, 22, 1266-78	5	14
178	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
177	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
176	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
175	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
174	Cognitive and Behavioral Functioning in Childhood Acquired Demyelinating Syndromes. *Journal of the International Neuropsychological Society*, **2016**, 22, 1050-1060	3.1	7
173	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
172	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
171	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
170	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
169	Daclizumab HYP versus Interferon Beta-1a in Relapsing Multiple Sclerosis. *New England Journal of Medicine*, **2015**, 373, 1418-28	59.2	203
168	Lower physical activity is associated with higher disease burden in pediatric multiple sclerosis. *Neurology*, **2015**, 85, 1663-9	6.5	45
167	Peginterferon beta-1a in multiple sclerosis: 2-year results from ADVANCE. *Multiple Sclerosis Journal* , **2015**, 21, 1025-35	5	72

166	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
165	Tolerability and Safety of Combined Glatiramer Acetate and N-Acetylcysteine in Relapsing-Remitting Multiple Sclerosis. *Clinical Neuropharmacology*, **2015**, 38, 127-31	1.4	7
164	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
163	Non-Local Means Inpainting of MS Lesions in Longitudinal Image Processing. *Frontiers in Neuroscience*, **2015**, 9, 456	5.1	14
162	Rotation-invariant multi-contrast non-local means for MS lesion segmentation. *NeuroImage: Clinical* , **2015**, 8, 376-89	5.3	48
161	Diurnal fluctuations in brain volume: Statistical analyses of MRI from large populations. *NeuroImage* , **2015**, 118, 126-32	7.9	69
160	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
159	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
158	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
157	Pegylated interferon β-1a for relapsing-remitting multiple sclerosis (ADVANCE): a randomised, phase 3, double-blind study. *Lancet Neurology, The*, **2014**, 13, 657-65	24.1	263
156	Magnetization transfer ratio in the delayed-release dimethyl fumarate DEFINE study. *Journal of Neurology*, **2014**, 261, 2429-37	5.5	31
155	Imaging of repeated episodes of demyelination and remyelination in multiple sclerosis. *NeuroImage: Clinical*, **2014**, 6, 20-5	5.3	24
154	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	
153	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
152	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
151	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
150	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
149	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

148	Onset of multiple sclerosis before adulthood leads to failure of age-expected brain growth. *Neurology*, **2014**, 83, 2140-6	6.5	80
147	Epitope spreading as an early pathogenic event in pediatric multiple sclerosis. *Neurology*, **2014**, 83, 2219-26	6.5	46
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