# Jack P Antel

## List of Publications by Citations



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|---|---|---|---|
| 223 papers | 20,896 citations | 75 h-index | 141 g-index |
| 242 ext. papers | 24,510 ext. citations | 10 avg, IF | 6.47 L-index |

| # | Paper | IF | Citations |
|---|---|---|---|
| 223 | Identification of a unique TGF-β-dependent molecular and functional signature in microglia. *Nature Neuroscience*, **2014**, 17, 131-43 | 25.5 | 1532 |
| 222 | Oral fingolimod (FTY720) for relapsing multiple sclerosis. *New England Journal of Medicine*, **2006**, 355, 1124-40 | 59.2 | 877 |
| 221 | Encephalitogenic potential of the myelin basic protein peptide (amino acids 83-99) in multiple sclerosis: results of a phase II clinical trial with an altered peptide ligand. *Nature Medicine*, **2000**, 6, 1167-75 | 50.5 | 706 |
| 220 | Rituximab in patients with primary progressive multiple sclerosis: results of a randomized double-blind placebo-controlled multicenter trial. *Annals of Neurology*, **2009**, 66, 460-71 | 9.4 | 629 |
| 219 | Type I interferons and microbial metabolites of tryptophan modulate astrocyte activity and central nervous system inflammation via the aryl hydrocarbon receptor. *Nature Medicine*, **2016**, 22, 586-97 | 50.5 | 629 |
| 218 | TLR signaling tailors innate immune responses in human microglia and astrocytes. *Journal of Immunology*, **2005**, 175, 4320-30 | 5.3 | 543 |
| 217 | Neuroblastoma x spinal cord (NSC) hybrid cell lines resemble developing motor neurons. *Developmental Dynamics*, **1992**, 194, 209-21 | 2.9 | 533 |
| 216 | Induction of a non-encephalitogenic type 2 T helper-cell autoimmune response in multiple sclerosis after administration of an altered peptide ligand in a placebo-controlled, randomized phase II trial. The Altered Peptide Ligand in Relapsing MS Study Group. *Nature Medicine*, **2000**, 6, 1176-82 | 50.5 | 446 |
| 215 | iPSC-Derived Human Microglia-like Cells to Study Neurological Diseases. *Neuron*, **2017**, 94, 278-293.e9 | 13.9 | 445 |
| 214 | Microglial control of astrocytes in response to microbial metabolites. *Nature*, **2018**, 557, 724-728 | 50.4 | 415 |
| 213 | Multiple sclerosis: Fas signaling in oligodendrocyte cell death. *Journal of Experimental Medicine*, **1996**, 184, 2361-70 | 16.6 | 331 |
| 212 | Comparison of polarization properties of human adult microglia and blood-derived macrophages. *Glia*, **2012**, 60, 717-27 | 9 | 320 |
| 211 | Brain-immune connection: Immuno-regulatory properties of CNS-resident cells. *Glia*, **2000**, 29, 293-304 | 9 | 289 |
| 210 | Proton magnetic resonance spectroscopic imaging for metabolic characterization of demyelinating plaques. *Annals of Neurology*, **1992**, 31, 235-41 | 9.4 | 275 |
| 209 | Regulation of astrocyte activation by glycolipids drives chronic CNS inflammation. *Nature Medicine*, **2014**, 20, 1147-56 | 50.5 | 267 |
| 208 | Chemical pathology of acute demyelinating lesions and its correlation with disability. *Annals of Neurology*, **1995**, 38, 901-9 | 9.4 | 267 |
| 207 | Interferon beta-1b decreases the migration of T lymphocytes in vitro: effects on matrix metalloproteinase-9. *Annals of Neurology*, **1996**, 40, 853-63 | 9.4 | 266 |

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| 206 | Glial cell influence on the human blood-brain barrier. *Glia*, **2001**, 36, 145-55 | 9 | 254 |
| 205 | An updated histological classification system for multiple sclerosis lesions. *Acta Neuropathologica*, **2017**, 133, 13-24 | 14.3 | 253 |
| 204 | PK11195 binding to the peripheral benzodiazepine receptor as a marker of microglia activation in multiple sclerosis and experimental autoimmune encephalomyelitis. *Journal of Neuroscience Research*, **1997**, 50, 345-53 | 4.4 | 251 |
| 203 | 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 |
| 202 | Glioblastoma-infiltrated innate immune cells resemble M0 macrophage phenotype. *JCI Insight*, **2016**, 1, | 9.9 | 226 |
| 201 | Roles of microglia in brain development, tissue maintenance and repair. *Brain*, **2015**, 138, 1138-59 | 11.2 | 225 |
| 200 | Extensive cortical remyelination in patients with chronic multiple sclerosis. *Brain Pathology*, **2007**, 17, 129-38 | 6 | 218 |
| 199 | Fingolimod (FTY720) enhances remyelination following demyelination of organotypic cerebellar slices. *American Journal of Pathology*, **2010**, 176, 2682-94 | 5.8 | 216 |
| 198 | FTY720 modulates human oligodendrocyte progenitor process extension and survival. *Annals of Neurology*, **2008**, 63, 61-71 | 9.4 | 213 |
| 197 | Vulnerability of human neurons to T cell-mediated cytotoxicity. *Journal of Immunology*, **2003**, 171, 368-79 | 5.3 | 182 |
| 196 | Use of proton magnetic resonance spectroscopy for monitoring disease progression in multiple sclerosis. *Annals of Neurology*, **1994**, 36, 76-82 | 9.4 | 173 |
| 195 | Type 2 monocyte and microglia differentiation mediated by glatiramer acetate therapy in patients with multiple sclerosis. *Journal of Immunology*, **2004**, 172, 7144-53 | 5.3 | 172 |
| 194 | Natalizumab effects on immune cell responses in multiple sclerosis. *Annals of Neurology*, **2006**, 59, 748-54 | 9.4 | 168 |
| 193 | Control of tumor-associated macrophages and T cells in glioblastoma via AHR and CD39. *Nature Neuroscience*, **2019**, 22, 729-740 | 25.5 | 166 |
| 192 | Cells of the oligodendroglial lineage, myelination, and remyelination. *Biochimica Et Biophysica Acta - Molecular Basis of Disease*, **2011**, 1812, 184-93 | 6.9 | 163 |
| 191 | miR-155 as a multiple sclerosis-relevant regulator of myeloid cell polarization. *Annals of Neurology*, **2013**, 74, 709-20 | 9.4 | 162 |
| 190 | Microglia and multiple sclerosis. *Journal of Neuroscience Research*, **2005**, 81, 363-73 | 4.4 | 160 |
| 189 | Human microglial cells have phenotypic and functional characteristics in common with both macrophages and dendritic antigen-presenting cells. *Journal of Leukocyte Biology*, **1994**, 56, 732-40 | 6.5 | 157 |

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| 188 | Determinants of human B cell migration across brain endothelial cells. *Journal of Immunology*, **2003**, 170, 4497-505 | 5.3 | 155 |
| 187 | B7/BB-1 antigen expression on adult human microglia studied in vitro and in situ. *European Journal of Immunology*, **1994**, 24, 3031-7 | 6.1 | 154 |
| 186 | Multiple sclerosis: magnetization transfer MR imaging of white matter before lesion appearance on T2-weighted images. *Radiology*, **2000**, 215, 824-30 | 20.5 | 153 |
| 185 | Genetic models for CNS inflammation. *Nature Medicine*, **2001**, 7, 161-6 | 50.5 | 151 |
| 184 | Glioblastoma stem cell-derived exosomes induce M2 macrophages and PD-L1 expression on human monocytes. *OncoImmunology*, **2018**, 7, e1412909 | 7.2 | 151 |
| 183 | ADP and AMP induce interleukin-1beta release from microglial cells through activation of ATP-primed P2X7 receptor channels. *Journal of Neuroscience*, **2002**, 22, 3061-9 | 6.6 | 140 |
| 182 | Central nervous system-directed effects of FTY720 (fingolimod). *Journal of the Neurological Sciences*, **2008**, 274, 13-7 | 3.2 | 136 |
| 181 | Biology of adult human microglia in culture: comparisons with peripheral blood monocytes and astrocytes. *Journal of Neuropathology and Experimental Neurology*, **1992**, 51, 538-49 | 3.1 | 135 |
| 180 | Microglial expression of the B7 family member B7 homolog 1 confers strong immune inhibition: implications for immune responses and autoimmunity in the CNS. *Journal of Neuroscience*, **2005**, 25, 2537-46 | 6.6 | 134 |
| 179 | Primary progressive multiple sclerosis: part of the MS disease spectrum or separate disease entity?. *Acta Neuropathologica*, **2012**, 123, 627-38 | 14.3 | 133 |
| 178 | Rapid and efficient generation of oligodendrocytes from human induced pluripotent stem cells using transcription factors. *Proceedings of the National Academy of Sciences of the United States of America*, **2017**, 114, E2243-E2252 | 11.5 | 128 |
| 177 | MAFG-driven astrocytes promote CNS inflammation. *Nature*, **2020**, 578, 593-599 | 50.4 | 125 |
| 176 | p75 neurotrophin receptor expression on adult human oligodendrocytes: signaling without cell death in response to NGF. *Journal of Neuroscience*, **1998**, 18, 1297-304 | 6.6 | 116 |
| 175 | Pathogenesis of multiple sclerosis. *Current Opinion in Neurology*, **2005**, 18, 225-30 | 7.1 | 115 |
| 174 | Peripheral blood gamma-delta T cells lyse fresh human brain-derived oligodendrocytes. *Annals of Neurology*, **1991**, 30, 794-800 | 9.4 | 112 |
| 173 | Pro-inflammatory activation of primary microglia and macrophages increases 18 kDa translocator protein expression in rodents but not humans. *Journal of Cerebral Blood Flow and Metabolism*, **2017**, 37, 2679-2690 | 7.3 | 110 |
| 172 | Sphingosine 1-phosphate receptor modulation suppresses pathogenic astrocyte activation and chronic progressive CNS inflammation. *Proceedings of the National Academy of Sciences of the United States of America*, **2017**, 114, 2012-2017 | 11.5 | 108 |
| 171 | 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 |

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| 170 | P2Y12 expression and function in alternatively activated human microglia. *Neurology: Neuroimmunology and NeuroInflammation*, **2015**, 2, e80 | 9.1 | 105 |
| 169 | Netrin 1 regulates blood-brain barrier function and neuroinflammation. *Brain*, **2015**, 138, 1598-612 | 11.2 | 103 |
| 168 | Enhanced Protein Kinase C Activity Correlates with the Growth Rate of Malignant Gliomas in Vitro. *Neurosurgery*, **1991**, 29, 880-887 | 3.2 | 100 |
| 167 | Statin therapy inhibits remyelination in the central nervous system. *American Journal of Pathology*, **2009**, 174, 1880-90 | 5.8 | 99 |
| 166 | Migration of multiple sclerosis lymphocytes through brain endothelium. *Archives of Neurology*, **2002**, 59, 391-7 | | 99 |
| 165 | Netrin 1 and Dcc regulate oligodendrocyte process branching and membrane extension via Fyn and RhoA. *Development (Cambridge)*, **2009**, 136, 415-26 | 6.6 | 98 |
| 164 | The tryptophan metabolite 3-hydroxyanthranilic acid plays anti-inflammatory and neuroprotective roles during inflammation: role of hemeoxygenase-1. *American Journal of Pathology*, **2011**, 179, 1360-72 | 5.8 | 97 |
| 163 | Myelin basic protein and human coronavirus 229E cross-reactive T cells in multiple sclerosis. *Annals of Neurology*, **1996**, 39, 233-40 | 9.4 | 97 |
| 162 | Peripherally derived macrophages modulate microglial function to reduce inflammation after CNS injury. *PLoS Biology*, **2018**, 16, e2005264 | 9.7 | 93 |
| 161 | Neurological complications of coronavirus infection; a comparative review and lessons learned during the COVID-19 pandemic. *Journal of the Neurological Sciences*, **2020**, 417, 117085 | 3.2 | 91 |
| 160 | Interferon-gamma modulates human oligodendrocyte susceptibility to Fas-mediated apoptosis. *Journal of Neuropathology and Experimental Neurology*, **2000**, 59, 280-6 | 3.1 | 90 |
| 159 | A human glial hybrid cell line differentially expressing genes subserving oligodendrocyte and astrocyte phenotype. *Journal of Neurobiology*, **1995**, 26, 283-93 | | 89 |
| 158 | Single-cell RNA-seq reveals that glioblastoma recapitulates a normal neurodevelopmental hierarchy. *Nature Communications*, **2020**, 11, 3406 | 17.4 | 88 |
| 157 | Fc receptors for IgG on cultured human microglia mediate cytotoxicity and phagocytosis of antibody-coated targets. *Journal of Neuropathology and Experimental Neurology*, **1994**, 53, 27-36 | 3.1 | 87 |
| 156 | Cyclical and dose-dependent responses of adult human mature oligodendrocytes to fingolimod. *American Journal of Pathology*, **2008**, 173, 1143-52 | 5.8 | 86 |
| 155 | Dimethyl Fumarate Treatment Mediates an Anti-Inflammatory Shift in B Cell Subsets of Patients with Multiple Sclerosis. *Journal of Immunology*, **2017**, 198, 691-698 | 5.3 | 83 |
| 154 | Neurobiological effects of sphingosine 1-phosphate receptor modulation in the cuprizone model. *FASEB Journal*, **2011**, 25, 1509-18 | 0.9 | 83 |
| 153 | Interferon-β secretion by peripheral blood T-cell subsets in multiple sclerosis: Correlation with disease phase and interferon-β therapy. *Annals of Neurology*, **1999**, 45, 247-250 | 9.4 | 78 |

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| 152 | Differential proliferative response of human and mouse astrocytes to gamma-interferon. *Glia*, **1992**, 6, 269-80 | 9 | 78 |
| 151 | T follicular helper cells in human efferent lymph retain lymphoid characteristics. *Journal of Clinical Investigation*, **2019**, 129, 3185-3200 | 15.9 | 78 |
| 150 | NKG2D-mediated cytotoxicity toward oligodendrocytes suggests a mechanism for tissue injury in multiple sclerosis. *Journal of Neuroscience*, **2007**, 27, 1220-8 | 6.6 | 77 |
| 149 | Interferon beta promotes nerve growth factor secretion early in the course of multiple sclerosis. *Archives of Neurology*, **2005**, 62, 563-8 | | 76 |
| 148 | Astrocytes in multiple sclerosis. *Multiple Sclerosis Journal*, **2016**, 22, 1114-24 | 5 | 75 |
| 147 | Simvastatin regulates oligodendroglial process dynamics and survival. *Glia*, **2007**, 55, 130-43 | 9 | 74 |
| 146 | Roles of immunoglobulins and B cells in multiple sclerosis: from pathogenesis to treatment. *Journal of Neuroimmunology*, **2006**, 180, 3-8 | 3.5 | 74 |
| 145 | Environmental Control of Astrocyte Pathogenic Activities in CNS Inflammation. *Cell*, **2019**, 176, 581-596.e18 | 36.2 | 74 |
| 144 | Oligodendrocyte injury in multiple sclerosis: a role for p53. *Journal of Neurochemistry*, **2003**, 85, 635-44 | 6 | 73 |
| 143 | MerTK Is a Functional Regulator of Myelin Phagocytosis by Human Myeloid Cells. *Journal of Immunology*, **2016**, 196, 3375-84 | 5.3 | 71 |
| 142 | Contribution of astrocyte-derived IL-15 to CD8 T cell effector functions in multiple sclerosis. *Journal of Immunology*, **2010**, 185, 5693-703 | 5.3 | 71 |
| 141 | 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 |
| 140 | Regulation and functional effects of monocyte migration across human brain-derived endothelial cells. *Journal of Neuropathology and Experimental Neurology*, **2003**, 62, 412-9 | 3.1 | 69 |
| 139 | Regulation of Th1 and Th2 lymphocyte migration by human adult brain endothelial cells. *Journal of Neuropathology and Experimental Neurology*, **2001**, 60, 1127-36 | 3.1 | 68 |
| 138 | Peripheral nerve injury induces persistent vascular dysfunction and endoneurial hypoxia, contributing to the genesis of neuropathic pain. *Journal of Neuroscience*, **2015**, 35, 3346-59 | 6.6 | 65 |
| 137 | A novel microRNA-132-sirtuin-1 axis underlies aberrant B-cell cytokine regulation in patients with relapsing-remitting multiple sclerosis [corrected]. *PLoS ONE*, **2014**, 9, e105421 | 3.7 | 65 |
| 136 | Characterization of T cell lines derived from glatiramer-acetate-treated multiple sclerosis patients. *Journal of Neuroimmunology*, **2000**, 108, 201-6 | 3.5 | 63 |
| 135 | CD40 engagement stimulates IL-12 p70 production by human microglial cells: basis for Th1 polarization in the CNS. *Journal of Neuroimmunology*, **2000**, 102, 44-50 | 3.5 | 63 |

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| 134 | Migratory behavior of lymphocytes isolated from multiple sclerosis patients: effects of interferon beta-1b therapy. *Annals of Neurology*, **1999**, 46, 319-24 | 9.4 | 63 |
| 133 | Kinin B1 receptor expression and function on human brain endothelial cells. *Journal of Neuropathology and Experimental Neurology*, **2000**, 59, 896-906 | 3.1 | 61 |
| 132 | Cytotoxic NKG2C+ CD4 T cells target oligodendrocytes in multiple sclerosis. *Journal of Immunology*, **2013**, 190, 2510-8 | 5.3 | 60 |
| 131 | Differential responses of human microglia and blood-derived myeloid cells to FTY720. *Journal of Neuroimmunology*, **2011**, 230, 10-6 | 3.5 | 60 |
| 130 | Dimethyl fumarate-induced lymphopenia in MS due to differential T-cell subset apoptosis. *Neurology: Neuroimmunology and NeuroInflammation*, **2017**, 4, e340 | 9.1 | 59 |
| 129 | Metabolic Control of Astrocyte Pathogenic Activity via cPLA2-MAVS. *Cell*, **2019**, 179, 1483-1498.e22 | 56.2 | 59 |
| 128 | Direct and indirect effects of immune and central nervous system-resident cells on human oligodendrocyte progenitor cell differentiation. *Journal of Immunology*, **2015**, 194, 761-72 | 5.3 | 58 |
| 127 | Contrasting potential of nitric oxide and peroxynitrite to mediate oligodendrocyte injury in multiple sclerosis. *Glia*, **2007**, 55, 926-34 | 9 | 58 |
| 126 | Phagocytosis of apoptotic inflammatory cells by microglia and its therapeutic implications: termination of CNS autoimmune inflammation and modulation by interferon-beta. *Glia*, **2003**, 43, 231-42 | 9 | 58 |
| 125 | Distinctive properties of human adult brain-derived myelin progenitor cells. *American Journal of Pathology*, **2004**, 165, 2167-75 | 5.8 | 55 |
| 124 | Continued administration of ciliary neurotrophic factor protects mice from inflammatory pathology in experimental autoimmune encephalomyelitis. *American Journal of Pathology*, **2006**, 169, 584-98 | 5.8 | 54 |
| 123 | NBI-5788, an altered MBP83-99 peptide, induces a T-helper 2-like immune response in multiple sclerosis patients. *Annals of Neurology*, **2000**, 48, 758-765 | 9.4 | 54 |
| 122 | Oligodendrocyte progenitor cell susceptibility to injury in multiple sclerosis. *American Journal of Pathology*, **2013**, 183, 516-25 | 5.8 | 53 |
| 121 | Effects of fumarates on circulating and CNS myeloid cells in multiple sclerosis. *Annals of Clinical and Translational Neurology*, **2016**, 3, 27-41 | 5.3 | 53 |
| 120 | USP15 regulates type I interferon response and is required for pathogenesis of neuroinflammation. *Nature Immunology*, **2017**, 18, 54-63 | 19.1 | 51 |
| 119 | Oligodendrocyte lysis by CD4+ T cells independent of tumor necrosis factor. *Annals of Neurology*, **1994**, 35, 341-8 | 9.4 | 50 |
| 118 | Mechanism of gammadelta T cell-induced human oligodendrocyte cytotoxicity: relevance to multiple sclerosis. *Journal of Neuroimmunology*, **1998**, 87, 49-61 | 3.5 | 48 |
| 117 | Lymphocyte migration and multiple sclerosis: relation with disease course and therapy. *Annals of Neurology*, **1999**, 46, 253-6 | 9.4 | 48 |

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|---|---|---|---|
| 116 | Oligodendrogliopathy in Multiple Sclerosis: Low Glycolytic Metabolic Rate Promotes Oligodendrocyte Survival. *Journal of Neuroscience*, **2016**, 36, 4698-707 | 6.6 | 48 |
| 115 | B7 expression and antigen presentation by human brain endothelial cells: requirement for proinflammatory cytokines. *Journal of Neuropathology and Experimental Neurology*, **2000**, 59, 129-36 | 3.1 | 47 |
| 114 | p53 induction by tumor necrosis factor-alpha and involvement of p53 in cell death of human oligodendrocytes. *Journal of Neurochemistry*, **1999**, 73, 605-11 | 6 | 46 |
| 113 | Small-Molecule Stabilization of 14-3-3 Protein-Protein Interactions Stimulates Axon Regeneration. *Neuron*, **2017**, 93, 1082-1093.e5 | 13.9 | 45 |
| 112 | Resistance of human adult oligodendrocytes to AMPA/kainate receptor-mediated glutamate injury. *Brain*, **2004**, 127, 2636-48 | 11.2 | 45 |
| 111 | Expression of a homologue of rat NG2 on human microglia. *Glia*, **1999**, 27, 259-68 | 9 | 45 |
| 110 | Dual effects of daily FTY720 on human astrocytes in vitro: relevance for neuroinflammation. *Journal of Neuroinflammation*, **2013**, 10, 41 | 10.1 | 43 |
| 109 | Reconstitution of circulating lymphocyte counts in FTY720-treated MS patients. *Clinical Immunology*, **2010**, 137, 15-20 | 9 | 43 |
| 108 | Role of p38MAPK in S1P receptor-mediated differentiation of human oligodendrocyte progenitors. *Glia*, **2014**, 62, 1361-75 | 9 | 42 |
| 107 | NK cell-mediated lysis of autologous human oligodendrocytes. *Journal of Neuroimmunology*, **2001**, 116, 107-15 | 3.5 | 42 |
| 106 | Isolating, culturing, and polarizing primary human adult and fetal microglia. *Methods in Molecular Biology*, **2013**, 1041, 199-211 | 1.4 | 40 |
| 105 | Dendritic cell differentiation signals induce anti-inflammatory properties in human adult microglia. *Journal of Immunology*, **2008**, 181, 8288-97 | 5.3 | 39 |
| 104 | Sphingosine-1-Phosphate Receptors in the Central Nervous and Immune Systems. *Current Drug Targets*, **2016**, 17, 1841-1850 | 3 | 39 |
| 103 | Regulation of miRNA 219 and miRNA Clusters 338 and 17-92 in Oligodendrocytes. *Frontiers in Genetics*, **2012**, 3, 46 | 4.5 | 38 |
| 102 | Response of human oligodendrocyte progenitors to growth factors and axon signals. *Journal of Neuropathology and Experimental Neurology*, **2010**, 69, 930-44 | 3.1 | 38 |
| 101 | Multiple sclerosis and central nervous system demyelination. *Journal of Autoimmunity*, **1999**, 13, 297-306 | 15.5 | 38 |
| 100 | COVID-19 and disease-modifying therapies in patients with demyelinating diseases of the central nervous system: A systematic review. *Multiple Sclerosis and Related Disorders*, **2021**, 50, 102800 | 4 | 38 |
| 99 | Production of IL-27 in multiple sclerosis lesions by astrocytes and myeloid cells: Modulation of local immune responses. *Glia*, **2016**, 64, 553-69 | 9 | 38 |

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| 98 | A central role for RhoA during oligodendroglial maturation in the switch from netrin-1-mediated chemorepulsion to process elaboration. *Journal of Neurochemistry*, **2010**, 113, 1589-97 | 6 | 37 |
| 97 | Th1 and Th2 lymphocyte migration across the human BBB is specifically regulated by interferon beta and copolymer-1. *Journal of Autoimmunity*, **2005**, 24, 119-24 | 15.5 | 37 |
| 96 | Fetal microglial phenotype in vitro carries memory of prior in vivo exposure to inflammation. *Frontiers in Cellular Neuroscience*, **2015**, 9, 294 | 6.1 | 35 |
| 95 | Distinct migratory and cytokine responses of human microglia and macrophages to ATP. *Brain, Behavior, and Immunity*, **2010**, 24, 1241-8 | 16.6 | 35 |
| 94 | Immune regulation and CNS autoimmune disease. *Journal of Neuroimmunology*, **1999**, 100, 181-9 | 3.5 | 35 |
| 93 | Do myelin-directed antibodies predict multiple sclerosis?. *New England Journal of Medicine*, **2003**, 349, 107-9 | 59.2 | 34 |
| 92 | Caspase 8 expression and signaling in Fas injury-resistant human fetal astrocytes. *Glia*, **2001**, 33, 217-24 | 9 | 34 |
| 91 | Mitochondrial and bioenergetic dysfunction in trauma-induced painful peripheral neuropathy. *Molecular Pain*, **2015**, 11, 58 | 3.4 | 33 |
| 90 | The majority of infiltrating CD8 T lymphocytes in multiple sclerosis lesions is insensitive to enhanced PD-L1 levels on CNS cells. *Glia*, **2011**, 59, 841-56 | 9 | 33 |
| 89 | Immune regulatory and effector properties of human adult microglia studies in vitro and in situ. *Advances in Neuroimmunology*, **1994**, 4, 273-81 | | 33 |
| 88 | The PTEN inhibitor bisperoxovanadium enhances myelination by amplifying IGF-1 signaling in rat and human oligodendrocyte progenitors. *Glia*, **2014**, 62, 64-77 | 9 | 32 |
| 87 | T lymphocytes conditioned with Interferon beta induce membrane and soluble VCAM on human brain endothelial cells. *Journal of Neuroimmunology*, **2001**, 115, 161-7 | 3.5 | 32 |
| 86 | MicroRNA Expression Patterns in Human Astrocytes in Relation to Anatomical Location and Age. *Journal of Neuropathology and Experimental Neurology*, **2016**, 75, 156-66 | 3.1 | 31 |
| 85 | Full-length and fragmented netrin-1 in multiple sclerosis plaques are inhibitors of oligodendrocyte precursor cell migration. *American Journal of Pathology*, **2013**, 183, 673-80 | 5.8 | 31 |
| 84 | Divergent Neuroinflammatory Regulation of Microglial TREM Expression and Involvement of NF-Β. *Frontiers in Cellular Neuroscience*, **2017**, 11, 56 | 6.1 | 31 |
| 83 | Differential effects of Th1 and Th2 lymphocyte supernatants on human microglia. *Glia*, **2003**, 42, 36-45 | 9 | 31 |
| 82 | Regulation of cellular and molecular trafficking across human brain endothelial cells by Th1- and Th2-polarized lymphocytes. *Journal of Neuropathology and Experimental Neurology*, **2004**, 63, 223-32 | 3.1 | 31 |
| 81 | MerTK-mediated regulation of myelin phagocytosis by macrophages generated from patients with MS. *Neurology: Neuroimmunology and NeuroInflammation*, **2017**, 4, e402 | 9.1 | 30 |

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| 80 | Barcoded viral tracing of single-cell interactions in central nervous system inflammation. *Science*, **2021**, 372, | 33.3 | 29 |
| 79 | Heterogeneity of oligodendrocyte progenitor cells in adult human brain. *Annals of Clinical and Translational Neurology*, **2014**, 1, 272-83 | 5.3 | 28 |
| 78 | Human central nervous system astrocytes support survival and activation of B cells: implications for MS pathogenesis. *Journal of Neuroinflammation*, **2018**, 15, 114 | 10.1 | 27 |
| 77 | Th1 polarization of CD4+ T cells by Toll-like receptor 3-activated human microglia. *Journal of Neuropathology and Experimental Neurology*, **2007**, 66, 848-59 | 3.1 | 27 |
| 76 | Human fetal oligodendrocyte progenitor cells from different gestational stages exhibit substantially different potential to myelinate. *Stem Cells and Development*, **2012**, 21, 1831-7 | 4.4 | 26 |
| 75 | The Identity of Human Tissue-Emigrant CD8 T Cells. *Cell*, **2020**, 183, 1946-1961.e15 | 56.2 | 25 |
| 74 | Distinct properties of circulating CD8+ T cells in FTY720-treated patients with multiple sclerosis. *Archives of Neurology*, **2010**, 67, 1449-55 | | 25 |
| 73 | Basis for fluctuations in lymphocyte counts in fingolimod-treated patients with multiple sclerosis. *Neurology*, **2013**, 81, 1768-72 | 6.5 | 24 |
| 72 | Developmental trajectory of oligodendrocyte progenitor cells in the human brain revealed by single cell RNA sequencing. *Glia*, **2020**, 68, 1291-1303 | 9 | 22 |
| 71 | Reconstitution of the peripheral immune repertoire following withdrawal of fingolimod. *Multiple Sclerosis Journal*, **2017**, 23, 1225-1232 | 5 | 22 |
| 70 | Heterogeneity of T-lymphocyte function in primary progressive multiple sclerosis: Relation to magnetic resonance imaging lesion volume. *Annals of Neurology*, **2000**, 47, 234-237 | 9.4 | 21 |
| 69 | HTLV type 1 Tax transduction in microglial cells and astrocytes by lentiviral vectors. *AIDS Research and Human Retroviruses*, **2000**, 16, 1771-6 | 1.6 | 21 |
| 68 | Distinct age and differentiation-state dependent metabolic profiles of oligodendrocytes under optimal and stress conditions. *PLoS ONE*, **2017**, 12, e0182372 | 3.7 | 21 |
| 67 | Transcriptomic and clonal characterization of T cells in the human central nervous system. *Science Immunology*, **2020**, 5, | 28 | 21 |
| 66 | Widespread immunoreactivity for neuronal nuclei in cultured human and rodent astrocytes. *Journal of Neurochemistry*, **2008**, 104, 1201-9 | 6 | 20 |
| 65 | Innate immune-mediated neuronal injury consequent to loss of astrocytes. *Journal of Neuropathology and Experimental Neurology*, **2008**, 67, 590-9 | 3.1 | 20 |
| 64 | Lesion stage-dependent causes for impaired remyelination in MS. *Acta Neuropathologica*, **2020**, 140, 359-375 | 14.3 | 20 |
| 63 | Sublethal oligodendrocyte injury: A reversible condition in multiple sclerosis?. *Annals of Neurology*, **2017**, 81, 811-824 | 9.4 | 19 |

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| 62 | Limited TCF7L2 expression in MS lesions. *PLoS ONE*, **2013**, 8, e72822 | 3.7 | 19 |
| 61 | Inflammatory potential and migratory capacities across human brain endothelial cells of distinct glatiramer acetate-reactive T cells generated in treated multiple sclerosis patients. *Clinical Immunology*, **2004**, 111, 38-46 | 9 | 18 |
| 60 | NG2 immunoreactivity on human brain endothelial cells. *Acta Neuropathologica*, **2001**, 102, 313-20 | 14.3 | 18 |
| 59 | Deep learning for high-throughput quantification of oligodendrocyte ensheathment at single-cell resolution. *Communications Biology*, **2019**, 2, 116 | 6.7 | 17 |
| 58 | Central nervous system effects of current and emerging multiple sclerosis-directed immuno-therapies. *Clinical Neurology and Neurosurgery*, **2008**, 110, 951-7 | 2 | 16 |
| 57 | Potential for interferon beta-induced serum antibodies in multiple sclerosis to inhibit endogenous interferon-regulated chemokine/cytokine responses within the central nervous system. *Archives of Neurology*, **2006**, 63, 1296-9 | | 16 |
| 56 | Immunotherapy for multiple sclerosis: from theory to practice. *Nature Medicine*, **1996**, 2, 1074-5 | 50.5 | 16 |
| 55 | Inflammation and remyelination in the central nervous system: a tale of two systems. *American Journal of Pathology*, **2004**, 164, 1519-22 | 5.8 | 15 |
| 54 | CXCR7 Is Involved in Human Oligodendroglial Precursor Cell Maturation. *PLoS ONE*, **2016**, 11, e0146503 | 3.7 | 15 |
| 53 | Potential Benefit of the Charge-Stabilized Nanostructure Saline RNS60 for Myelin Maintenance and Repair. *Scientific Reports*, **2016**, 6, 30020 | 4.9 | 14 |
| 52 | Oligodendrocyte precursor cell transplantation into organotypic cerebellar shiverer slices: a model to study myelination and myelin maintenance. *PLoS ONE*, **2012**, 7, e41237 | 3.7 | 14 |
| 51 | Glial Cells as Regulators of Neuroimmune Interactions in the Central Nervous System. *Journal of Immunology*, **2020**, 204, 251-255 | 5.3 | 14 |
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