# Oleg Butovsky

List of Publications by Year
in descending order



| | | | |
|---|---|---|---|
| 83 papers | 18,984 citations | 38720<br>50 h-index | 64755<br>79 g-index |
| 91 all docs | 91 docs citations | 91 times ranked | 20395 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Sexâ€specific transcriptome of spinal microglia in neuropathic pain due to peripheral nerve injury. Glia, 2022, 70, 675-696. | 2.5 | 25 |
| 2 | TDP-43 loss and ALS-risk SNPs drive mis-splicing and depletion of UNC13A. Nature, 2022, 603, 131-137. | 13.7 | 188 |
| 3 | The microbiota restrains neurodegenerative microglia in a model of amyotrophic lateral sclerosis. Microbiome, 2022, 10, 47. | 4.9 | 17 |
| 4 | The cytokines interleukin-6 and interferon-Î± induce distinct microglia phenotypes. Journal of Neuroinflammation, 2022, 19, 96. | 3.1 | 23 |
| 5 | Retromer dysfunction in amyotrophic lateral sclerosis. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, . | 3.3 | 5 |
| 6 | Inhibition of colony stimulating factor 1 receptor corrects maternal inflammation-induced microglial and synaptic dysfunction and behavioral abnormalities. Molecular Psychiatry, 2021, 26, 1808-1831. | 4.1 | 44 |
| 7 | Acute and non-resolving inflammation associate with oxidative injury after human spinal cord injury. Brain, 2021, 144, 144-161. | 3.7 | 95 |
| 8 | Selective removal of astrocytic APOE4 strongly protects against tau-mediated neurodegeneration and decreases synaptic phagocytosis by microglia. Neuron, 2021, 109, 1657-1674.e7. | 3.8 | 151 |
| 9 | PD-L1+ and XCR1+ dendritic cells are region-specific regulators of gut homeostasis. Nature Communications, 2021, 12, 4907. | 5.8 | 18 |
| 10 | An integrated multi-omic analysis of iPSC-derived motor neurons from C9ORF72 ALS patients. IScience, 2021, 24, 103221. | 1.9 | 27 |
| 11 | Microglia, Lifestyle Stress, and Neurodegeneration. Immunity, 2020, 52, 222-240. | 6.6 | 174 |
| 12 | Essential omega-3 fatty acids tune microglial phagocytosis of synaptic elements in the mouse developing brain. Nature Communications, 2020, 11, 6133. | 5.8 | 88 |
| 13 | CSF1R signaling is a regulator of pathogenesis in progressive MS. Cell Death and Disease, 2020, 11, 904. | 2.7 | 74 |
| 14 | Loss of homeostatic microglial phenotype in CSF1R-related Leukoencephalopathy. Acta Neuropathologica Communications, 2020, 8, 72. | 2.4 | 42 |
| 15 | Vitamin D Regulates MerTK-Dependent Phagocytosis in Human Myeloid Cells. Journal of Immunology, 2020, 205, 398-406. | 0.4 | 10 |
| 16 | Association of <i>APOE</i> With Primary Open-Angle Glaucoma Suggests a Protective Effect for <i>APOE Îµ4</i>. , 2020, 61, 3. | | 23 |
| 17 | Type I interferon response drives neuroinflammation and synapse loss in Alzheimer disease. Journal of Clinical Investigation, 2020, 130, 1912-1930. | 3.9 | 268 |
| 18 | Proâ€inflammatory activation of microglia in the brain of patients with sepsis. Neuropathology and Applied Neurobiology, 2019, 45, 278-290. | 1.8 | 76 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | Postmortem Cortex Samples Identify Distinct Molecular Subtypes of ALS: Retrotransposon Activation, Oxidative Stress, and Activated Glia. Cell Reports, 2019, 29, 1164-1177.e5. | 2.9 | 184 |
| 20 | CX3CR1-CCR2-dependent monocyte-microglial signaling modulates neurovascular leakage and acute injury in a mouse model of childhood stroke. Journal of Cerebral Blood Flow and Metabolism, 2019, 39, 1919-1935. | 2.4 | 37 |
| 21 | Complement 3+-astrocytes are highly abundant in prion diseases, but their abolishment led to an accelerated disease course and early dysregulation of microglia. Acta Neuropathologica Communications, 2019, 7, 83. | 2.4 | 84 |
| 22 | Opposite microglial activation stages upon loss of <scp>PGRN</scp> or <scp>TREM</scp> 2 result in reduced cerebral glucose metabolism. EMBO Molecular Medicine, 2019, 11, . | 3.3 | 87 |
| 23 | Sex-specific effects of microbiome perturbations on cerebral AÎ² amyloidosis and microglia phenotypes. Journal of Experimental Medicine, 2019, 216, 1542-1560. | 4.2 | 165 |
| 24 | Retinal microglia initiate neuroinflammation in ocular autoimmunity. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 9989-9998. | 3.3 | 104 |
| 25 | Loss of TREM2 function increases amyloid seeding but reduces plaque-associated ApoE. Nature Neuroscience, 2019, 22, 191-204. | 7.1 | 358 |
| 26 | Regulatory T Cells and Their Derived Cytokine, Interleukin-35, Reduce Pain in Experimental Autoimmune Encephalomyelitis. Journal of Neuroscience, 2019, 39, 2326-2346. | 1.7 | 44 |
| 27 | Opposite microglial phenotypes upon loss of PGRN or TREM2 result in reduced cerebral glucose metabolism. , 2019, 58, . | | 0 |
| 28 | Fatal demyelinating disease is induced by monocyte-derived macrophages in the absence of TGF-Î² signaling. Nature Immunology, 2018, 19, 1-7. | 7.0 | 62 |
| 29 | Microglial Phenotypes and Functions in Multiple Sclerosis. Cold Spring Harbor Perspectives in Medicine, 2018, 8, a028993. | 2.9 | 73 |
| 30 | Differential contribution of microglia and monocytes in neurodegenerative diseases. Journal of Neural Transmission, 2018, 125, 809-826. | 1.4 | 84 |
| 31 | Dominant role of microglial and macrophage innate immune responses in human ischemic infarcts. Brain Pathology, 2018, 28, 791-805. | 2.1 | 85 |
| 32 | Competitive repopulation of an empty microglial niche yields functionally distinct subsets of microglia-like cells. Nature Communications, 2018, 9, 4845. | 5.8 | 148 |
| 33 | Acute microglia ablation induces neurodegeneration in the somatosensory system. Nature Communications, 2018, 9, 4578. | 5.8 | 55 |
| 34 | Microglial signatures and their role in health and disease. Nature Reviews Neuroscience, 2018, 19, 622-635. | 4.9 | 599 |
| 35 | TREMendous 2 Be Social. Immunity, 2018, 48, 842-843. | 6.6 | 3 |
| 36 | Laquinimod attenuates inflammation by modulating macrophage functions in traumatic brain injury mouse model. Journal of Neuroinflammation, 2018, 15, 26. | 3.1 | 27 |

| # | Article | IF | Citations |
|---|---|---|---|
| 37 | Microglia inhibit photoreceptor cell death and regulate immune cell infiltration in response to retinal detachment. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, E6264-E6273. | 3.3 | 104 |
| 38 | Microglial Biology and Physiology. , 2017, , 167-199. | | 0 |
| 39 | Microglia Function in the Central Nervous System During Health and Neurodegeneration. Annual Review of Immunology, 2017, 35, 441-468. | 9.5 | 1,450 |
| 40 | <scp>TREM</scp>2 deficiency impairs chemotaxis and microglial responses to neuronal injury. EMBO Reports, 2017, 18, 1186-1198. | 2.0 | 240 |
| 41 | Microglial confetti party. Nature Neuroscience, 2017, 20, 762-763. | 7.1 | 4 |
| 42 | Loss of â€˜homeostaticâ€™ microglia and patterns of their activation in active multiple sclerosis. Brain, 2017, 140, 1900-1913. | 3.7 | 475 |
| 43 | The brain parenchyma has a type I interferon response that can limit virus spread. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, E95-E104. | 3.3 | 49 |
| 44 | The TREM2-APOE Pathway Drives the Transcriptional Phenotype of Dysfunctional Microglia in Neurodegenerative Diseases. Immunity, 2017, 47, 566-581.e9. | 6.6 | 1,741 |
| 45 | ApoE4 markedly exacerbates tau-mediated neurodegeneration in a mouse model of tauopathy. Nature, 2017, 549, 523-527. | 13.7 | 852 |
| 46 | Activation of microglia by retroviral infection correlates with transient clearance of prions from the brain but does not change incubation time. Brain Pathology, 2017, 27, 590-602. | 2.1 | 19 |
| 47 | Characterisation of Immune and Neuroinflammatory Changes Associated with Chemotherapy-Induced Peripheral Neuropathy. PLoS ONE, 2017, 12, e0170814. | 1.1 | 177 |
| 48 | O4-04-01: Microglial Exosomes Propagate Tau Protein from the Entorhinal Cortex to the Hippocampus: An Early Pathophysiology of Alzheimer's Disease. , 2016, 12, P339-P340. | | 1 |
| 49 | Dark microglia: A new phenotype predominantly associated with pathological states. Glia, 2016, 64, 826-839. | 2.5 | 325 |
| 50 | Early life stress perturbs the maturation of microglia in the developing hippocampus. Brain, Behavior, and Immunity, 2016, 57, 79-93. | 2.0 | 139 |
| 51 | P2Y12 expression and function in alternatively activated human microglia. Neurology: Neuroimmunology and NeuroInflammation, 2015, 2, e80. | 3.1 | 139 |
| 52 | TREM2 deficiency eliminates TREM2+ inflammatory macrophages and ameliorates pathology in Alzheimerâ€™s disease mouse models. Journal of Experimental Medicine, 2015, 212, 287-295. | 4.2 | 538 |
| 53 | Identification of a chronic nonâ€neurodegenerative microglia activation state in a mouse model of peroxisomal Î²â€oxidation deficiency. Glia, 2015, 63, 1606-1620. | 2.5 | 45 |
| 54 | Depletion of microglia and inhibition of exosome synthesis halt tau propagation. Nature Neuroscience, 2015, 18, 1584-1593. | 7.1 | 1,142 |

| # | Article | IF | Citations |
|---|---|---|---|
| 55 | ISDN2014_0027: REMOVED: Identification of a unique molecular and functional microglia signature in health and disease. International Journal of Developmental Neuroscience, 2015, 47, 5-5. | 0.7 | 1 |
| 56 | ISDN2014_0028: REMOVED: Targeting miRâ€155 restores dysfunctional microglia and ameliorates disease in the SOD1 model of ALS. International Journal of Developmental Neuroscience, 2015, 47, 5-5. | 0.7 | 1 |
| 57 | Targeting mi<scp>R</scp>â€155 restores abnormal microglia and attenuates disease in <scp>SOD</scp>1 mice. Annals of Neurology, 2015, 77, 75-99. | 2.8 | 295 |
| 58 | Identification of a unique TGF-Î²â€“dependent molecular and functional signature in microglia. Nature Neuroscience, 2014, 17, 131-143. | 7.1 | 2,056 |
| 59 | Dysregulation of the homeostatic microglia signature in germ-free mice. Journal of Neuroimmunology, 2014, 275, 161. | 1.1 | 3 |
| 60 | Dysregulation of the APOE-TGFb pathway leads to loss of the microglial homeostatic signature in neurologic diseases including MS, ALS and AD. Journal of Neuroimmunology, 2014, 275, 141. | 1.1 | 0 |
| 61 | Identification of P2Y12 as a mediator of migration and inflammation in human microglia. Journal of Neuroimmunology, 2014, 275, 90. | 1.1 | 3 |
| 62 | Differential roles of microglia and monocytes in the inflamed central nervous system. Journal of Experimental Medicine, 2014, 211, 1533-1549. | 4.2 | 711 |
| 63 | Modulating inflammatory monocytes with a unique microRNA gene signature ameliorates murine ALS. Journal of Clinical Investigation, 2012, 122, 3063-3087. | 3.9 | 403 |
| 64 | Excess Circulating Alternatively Activated Myeloid (M2) Cells Accelerate ALS Progression While Inhibiting Experimental Autoimmune Encephalomyelitis. PLoS ONE, 2011, 6, e26921. | 1.1 | 54 |
| 65 | The Role of Ly6C+ Inflammatory Spleen-derived Monocytes in an Animal Model of Brain Ischemia. Clinical Immunology, 2010, 135, S97. | 1.4 | 0 |
| 66 | Weekly Vaccination with Copaxone (Glatiramer Acetate) as a Potential Therapy for Dry Age-Related Macular Degeneration. Current Eye Research, 2008, 33, 1011-1013. | 0.7 | 49 |
| 67 | Microglia can be induced by IFN-Î³ or IL-4 to express neural or dendritic-like markers. Molecular and Cellular Neurosciences, 2007, 35, 490-500. | 1.0 | 78 |
| 68 | Selective ablation of bone marrowâ€derived dendritic cells increases amyloid plaques in a mouse Alzheimer's disease model. European Journal of Neuroscience, 2007, 26, 413-416. | 1.2 | 150 |
| 69 | Immune cells contribute to the maintenance of neurogenesis and spatial learning abilities in adulthood. Nature Neuroscience, 2006, 9, 268-275. | 7.1 | 1,072 |
| 70 | Microglia activated by IL-4 or IFN-Î³ differentially induce neurogenesis and oligodendrogenesis from adult stem/progenitor cells. Molecular and Cellular Neurosciences, 2006, 31, 149-160. | 1.0 | 810 |
| 71 | Microglial phenotype: is the commitment reversible?. Trends in Neurosciences, 2006, 29, 68-74. | 4.2 | 394 |
| 72 | Does Inflammation in an Autoimmune Disease Differ from Inflammation in Neurodegenerative Diseases? Possible Implications for Therapy. Journal of NeuroImmune Pharmacology, 2006, 1, 4-10. | 2.1 | 16 |

| # | Article | IF | Citations |
|---|---|---|---|
| 73 | Induction and blockage of oligodendrogenesis by differently activated microglia in an animal model of multiple sclerosis. Journal of Clinical Investigation, 2006, 116, 905-915. | 3.9 | 231 |
| 74 | Glatiramer acetate fights against Alzheimer's disease by inducing dendritic-like microglia expressing insulin-like growth factor 1. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 11784-11789. | 3.3 | 362 |
| 75 | Activation of microglia by aggregated Î²-amyloid or lipopolysaccharide impairs MHC-II expression and renders them cytotoxic whereas IFN-Î³ and IL-4 render them protective. Molecular and Cellular Neurosciences, 2005, 29, 381-393. | 1.0 | 320 |
| 76 | The therapeutic window after spinal cord injury can accommodate T cell-based vaccination and methylprednisolone in rats. European Journal of Neuroscience, 2004, 19, 2984-2990. | 1.2 | 44 |
| 77 | Vaccination with autoantigen protects against aggregated ?-amyloid and glutamate toxicity by controlling microglia: effect of CD4+CD25+ T?cells. European Journal of Immunology, 2004, 34, 3434-3445. | 1.6 | 68 |
| 78 | Features of skin-coincubated macrophages that promote recovery from spinal cord injury. Journal of Neuroimmunology, 2003, 142, 10-16. | 1.1 | 140 |
| 79 | Vaccination with Dendritic Cells Pulsed with Peptides of Myelin Basic Protein Promotes Functional Recovery from Spinal Cord Injury. Journal of Neuroscience, 2003, 23, 8808-8819. | 1.7 | 96 |
| 80 | Morphological aspects of spinal cord autoimmune neuroprotection: colocalization of T cells with B7â€2 ( CD86 ) and prevention of cyst formation. FASEB Journal, 2001, 15, 1065-1067. | 0.2 | 11 |
| 81 | Vaccination for Neuroprotection in the Mouse Optic Nerve: Implications for Optic Neuropathies. Journal of Neuroscience, 2001, 21, 136-142. | 1.7 | 163 |
| 82 | Morphological aspects of spinal cord autoimmune neuroprotection: colocalization of T cells with B7â€“2 (CD86) and prevention of cyst formation. FASEB Journal, 2001, 15, 1065-1067. | 0.2 | 103 |
| 83 | Passive or Active Immunization with Myelin Basic Protein Promotes Recovery from Spinal Cord Contusion. Journal of Neuroscience, 2000, 20, 6421-6430. | 1.7 | 348 |