

# Axel Montagne

## List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

54  
papers

5,828  
citations

27  
h-index

69  
g-index

69  
ext. papers

7,901  
ext. citations

11.9  
avg, IF

6.17  
L-index

#	Paper	IF	Citations
54	Blood-brain barrier link to human cognitive impairment and Alzheimer's Disease. <b>2022</b> , 1, 108-115		3
53	Protection of ischemic white matter and oligodendrocytes in mice by 3K3A-activated protein C. <i>Journal of Experimental Medicine</i> , <b>2022</b> , 219,	16.6	2
52	Prenatal disruption of blood-brain barrier formation via cyclooxygenase activation leads to lifelong brain inflammation.. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2022</b> , 119, e2113310119	11.5	2
51	Imaging subtle leaks in the blood-brain barrier in the aging human brain: potential pitfalls, challenges, and possible solutions.. <i>GeroScience</i> , <b>2022</b> , 1	8.9	1
50	Air Pollution Particulate Matter Amplifies White Matter Vascular Pathology and Demyelination Caused by Hypoperfusion. <i>Frontiers in Immunology</i> , <b>2021</b> , 12, 785519	8.4	2
49	Evidence that blood-CSF barrier transport, but not inflammatory biomarkers, change in migraine, while CSF sVCAM1 associates with migraine frequency and CSF fibrinogen. <i>Headache</i> , <b>2021</b> , 61, 536-545	4.2	3
48	Alzheimer's pathogenic mechanisms and underlying sex difference. <i>Cellular and Molecular Life Sciences</i> , <b>2021</b> , 78, 4907-4920	10.3	19
47	accelerates advanced-stage vascular and neurodegenerative disorder in old Alzheimer's mice via cyclophilin A independently of amyloid- $\beta$ <i>Nature Aging</i> , <b>2021</b> , 1, 506-520		16
46	A Review of Translational Magnetic Resonance Imaging in Human and Rodent Experimental Models of Small Vessel Disease. <i>Translational Stroke Research</i> , <b>2021</b> , 12, 15-30	7.8	11
45	Cranial Suture Regeneration Mitigates Skull and Neurocognitive Defects in Craniosynostosis. <i>Cell</i> , <b>2021</b> , 184, 243-256.e18	56.2	22
44	Endothelial LRP1 protects against neurodegeneration by blocking cyclophilin A. <i>Journal of Experimental Medicine</i> , <b>2021</b> , 218,	16.6	17
43	Interplay between Brain Pericytes and Endothelial Cells in Dementia. <i>American Journal of Pathology</i> , <b>2021</b> , 191, 1917-1931	5.8	7
42	Air Pollution Particulate Matter Exposure and Chronic Cerebral Hypoperfusion and Measures of White Matter Injury in a Murine Model. <i>Environmental Health Perspectives</i> , <b>2021</b> , 129, 87006	8.4	3
41	Magnetic Resonance Imaging of Blood-Brain Barrier permeability in Dementia. <i>Neuroscience</i> , <b>2021</b> , 474, 14-29	3.9	5
40	New Mechanistic Insights, Novel Treatment Paradigms, and Clinical Progress in Cerebrovascular Diseases. <i>Frontiers in Aging Neuroscience</i> , <b>2021</b> , 13, 623751	5.3	9
39	Perivascular spaces in the brain: anatomy, physiology and pathology. <i>Nature Reviews Neurology</i> , <b>2020</b> , 16, 137-153	15	161
38	APOE4 leads to blood-brain barrier dysfunction predicting cognitive decline. <i>Nature</i> , <b>2020</b> , 581, 71-76	50.4	356

37	A novel sensitive assay for detection of a biomarker of pericyte injury in cerebrospinal fluid. <i>Alzheimers and Dementia</i> , <b>2020</b> , 16, 821-830	1.2	22
36	Comparison Between Blood-Brain Barrier Water Exchange Rate and Permeability to Gadolinium-Based Contrast Agent in an Elderly Cohort. <i>Frontiers in Neuroscience</i> , <b>2020</b> , 14, 571480	5.1	12
35	Pericyte loss leads to circulatory failure and pleiotrophin depletion causing neuron loss. <i>Nature Neuroscience</i> , <b>2019</b> , 22, 1089-1098	25.5	144
34	Undetectable gadolinium brain retention in individuals with an age-dependent blood-brain barrier breakdown in the hippocampus and mild cognitive impairment. <i>Alzheimers and Dementia</i> , <b>2019</b> , 15, 1568-1575 <sup>10</sup>	1.2	265
33	Vascular dysfunction-The disregarded partner of Alzheimer's disease. <i>Alzheimers and Dementia</i> , <b>2019</b> , 15, 158-167	1.2	265
32	Blood-brain barrier breakdown is an early biomarker of human cognitive dysfunction. <i>Nature Medicine</i> , <b>2019</b> , 25, 270-276	50.5	577
31	Blood-Brain Barrier: From Physiology to Disease and Back. <i>Physiological Reviews</i> , <b>2019</b> , 99, 21-78	47.9	647
30	Permeability imaging as a predictor of delayed cerebral ischemia after aneurysmal subarachnoid hemorrhage. <i>Journal of Cerebral Blood Flow and Metabolism</i> , <b>2018</b> , 38, 973-979	7.3	17
29	Pericyte degeneration causes white matter dysfunction in the mouse central nervous system. <i>Nature Medicine</i> , <b>2018</b> , 24, 326-337	50.5	211
28	The role of brain vasculature in neurodegenerative disorders. <i>Nature Neuroscience</i> , <b>2018</b> , 21, 1318-1331	25.5	338
27	Cerebral blood flow regulation and neurovascular dysfunction in Alzheimer disease. <i>Nature Reviews Neuroscience</i> , <b>2017</b> , 18, 419-434	13.5	538
26	Alzheimer's disease: A matter of blood-brain barrier dysfunction?. <i>Journal of Experimental Medicine</i> , <b>2017</b> , 214, 3151-3169	16.6	312
25	Regional early and progressive loss of brain pericytes but not vascular smooth muscle cells in adult mice with disrupted platelet-derived growth factor receptor- $\beta$ signaling. <i>PLoS ONE</i> , <b>2017</b> , 12, e0176225	3.7	60
24	Optimal acquisition and modeling parameters for accurate assessment of low K <sub>trans</sub> blood-brain barrier permeability using dynamic contrast-enhanced MRI. <i>Magnetic Resonance in Medicine</i> , <b>2016</b> , 75, 1967-77	4.4	70
23	Tissue Plasminogen Activator Expression Is Restricted to Subsets of Excitatory Pyramidal Glutamatergic Neurons. <i>Molecular Neurobiology</i> , <b>2016</b> , 53, 5000-12	6.2	21
22	Blood-Brain Barrier Permeability and Gadolinium: Benefits and Potential Pitfalls in Research. <i>JAMA Neurology</i> , <b>2016</b> , 73, 13-4	17.2	56
21	Brain imaging of neurovascular dysfunction in Alzheimer's disease. <i>Acta Neuropathologica</i> , <b>2016</b> , 131, 687-707	14.3	124
20	Impact of alcohol consumption on the outcome of ischemic stroke and thrombolysis: role of the hepatic clearance of tissue-type plasminogen activator. <i>Stroke</i> , <b>2015</b> , 46, 1641-50	6.7	8

19	Vascular plasticity and cognition during normal aging and dementia. <i>JAMA Neurology</i> , <b>2015</b> , 72, 495-6	17.2	27
18	ROCKETSHIP: a flexible and modular software tool for the planning, processing and analysis of dynamic MRI studies. <i>BMC Medical Imaging</i> , <b>2015</b> , 15, 19	2.9	44
17	7T Multi-shell Hybrid Diffusion Imaging (HYDI) for Mapping Brain Connectivity in Mice. <i>Proceedings of SPIE</i> , <b>2015</b> , 9413,	1.7	7
16	Blood-brain barrier breakdown in the aging human hippocampus. <i>Neuron</i> , <b>2015</b> , 85, 296-302	13.9	1023
15	Molecular magnetic resonance imaging of brain-immune interactions. <i>Frontiers in Cellular Neuroscience</i> , <b>2014</b> , 8, 389	6.1	55
14	GpIb/ADP blockade restores vessel patency by dissolving platelet aggregates formed under very high shear rate in mice. <i>Blood</i> , <b>2014</b> , 123, 3354-63	2.2	53
13	Urokinase versus Alteplase for intraventricular hemorrhage fibrinolysis. <i>Neuropharmacology</i> , <b>2014</b> , 85, 158-65	5.5	37
12	Immunotherapy blocking the tissue plasminogen activator-dependent activation of N-methyl-D-aspartate glutamate receptors improves hemorrhagic stroke outcome. <i>Neuropharmacology</i> , <b>2013</b> , 67, 267-71	5.5	14
11	Intracerebral hematomas disappear on T2*-weighted images during normobaric oxygen therapy. <i>Stroke</i> , <b>2013</b> , 44, 3482-9	6.7	13
10	Ultra-sensitive molecular MRI of vascular cell adhesion molecule-1 reveals a dynamic inflammatory penumbra after strokes. <i>Stroke</i> , <b>2013</b> , 44, 1988-96	6.7	76
9	Memantine improves safety of thrombolysis for stroke. <i>Stroke</i> , <b>2012</b> , 43, 2774-81	6.7	27
8	Glutamate controls tPA recycling by astrocytes, which in turn influences glutamatergic signals. <i>Journal of Neuroscience</i> , <b>2012</b> , 32, 5186-99	6.6	55
7	Ultra-sensitive molecular MRI of cerebrovascular cell activation enables early detection of chronic central nervous system disorders. <i>NeuroImage</i> , <b>2012</b> , 63, 760-70	7.9	54
6	Unveiling an exceptional zymogen: the single-chain form of tPA is a selective activator of NMDA receptor-dependent signaling and neurotoxicity. <i>Cell Death and Differentiation</i> , <b>2012</b> , 19, 1983-91	12.7	43
5	Selective inhibition of GluN2D-containing N-methyl-D-aspartate receptors prevents tissue plasminogen activator-promoted neurotoxicity both in vitro and in vivo. <i>Molecular Neurodegeneration</i> , <b>2011</b> , 6, 68	19	23
4	Tissue plasminogen activator prevents white matter damage following stroke. <i>Journal of Experimental Medicine</i> , <b>2011</b> , 208, 1229-42	16.6	60
3	Impact of tissue plasminogen activator on the neurovascular unit: from clinical data to experimental evidence. <i>Journal of Cerebral Blood Flow and Metabolism</i> , <b>2011</b> , 31, 2119-34	7.3	85
2	NR2D-containing NMDA receptors mediate tissue plasminogen activator-promoted neuronal excitotoxicity. <i>Cell Death and Differentiation</i> , <b>2010</b> , 17, 860-71	12.7	45

1 Atp13a5 Marker Reveals Pericytes of The Central Nervous System in Mice

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