# Cenk Ayata

## List of Publications by Citations



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|---|---|---|---|
| 158 papers | 9,076 citations | 52 h-index | 91 g-index |
| 169 ext. papers | 10,471 ext. citations | 7.7 avg, IF | 6.24 L-index |

| # | Paper | IF | Citations |
|---|---|---|---|
| 158 | Enlarged infarcts in endothelial nitric oxide synthase knockout mice are attenuated by nitro-L-arginine. *Journal of Cerebral Blood Flow and Metabolism*, **1996**, 16, 981-7 | 7.3 | 628 |
| 157 | Suppression of cortical spreading depression in migraine prophylaxis. *Annals of Neurology*, **2006**, 59, 652-61 | 9.4 | 440 |
| 156 | A computerized algorithm for etiologic classification of ischemic stroke: the Causative Classification of Stroke System. *Stroke*, **2007**, 38, 2979-84 | 6.7 | 328 |
| 155 | Spreading Depression, Spreading Depolarizations, and the Cerebral Vasculature. *Physiological Reviews*, **2015**, 95, 953-93 | 47.9 | 291 |
| 154 | Vasoconstrictive neurovascular coupling during focal ischemic depolarizations. *Journal of Cerebral Blood Flow and Metabolism*, **2006**, 26, 1018-30 | 7.3 | 251 |
| 153 | Migraine pathophysiology: lessons from mouse models and human genetics. *Lancet Neurology, The*, **2015**, 14, 65-80 | 24.1 | 243 |
| 152 | Nutrient-sensitized screening for drugs that shift energy metabolism from mitochondrial respiration to glycolysis. *Nature Biotechnology*, **2010**, 28, 249-55 | 44.5 | 234 |
| 151 | Laser speckle flowmetry for the study of cerebrovascular physiology in normal and ischemic mouse cortex. *Journal of Cerebral Blood Flow and Metabolism*, **2004**, 24, 744-55 | 7.3 | 225 |
| 150 | Ischaemic brain oedema. *Journal of Clinical Neuroscience*, **2002**, 9, 113-24 | 2.2 | 221 |
| 149 | Emerging concepts in sporadic cerebral amyloid angiopathy. *Brain*, **2017**, 140, 1829-1850 | 11.2 | 213 |
| 148 | The continuum of spreading depolarizations in acute cortical lesion development: Examining Leão's legacy. *Journal of Cerebral Blood Flow and Metabolism*, **2017**, 37, 1571-1594 | 7.3 | 205 |
| 147 | Genetic and hormonal factors modulate spreading depression and transient hemiparesis in mouse models of familial hemiplegic migraine type 1. *Journal of Clinical Investigation*, **2009**, 119, 99-109 | 15.9 | 187 |
| 146 | Mechanisms of reduced striatal NMDA excitotoxicity in type I nitric oxide synthase knock-out mice. *Journal of Neuroscience*, **1997**, 17, 6908-17 | 6.6 | 175 |
| 145 | Recording, analysis, and interpretation of spreading depolarizations in neurointensive care: Review and recommendations of the COSBID research group. *Journal of Cerebral Blood Flow and Metabolism*, **2017**, 37, 1595-1625 | 7.3 | 173 |
| 144 | Cortical spreading depression triggers migraine attack: pro. *Headache*, **2010**, 50, 725-30 | 4.2 | 153 |
| 143 | Timing of neurologic deterioration in massive middle cerebral artery infarction: a multicenter review. *Critical Care Medicine*, **2003**, 31, 272-7 | 1.4 | 149 |
| 142 | Age-dependent cerebrovascular dysfunction in a transgenic mouse model of cerebral amyloid angiopathy. *Brain*, **2007**, 130, 2310-9 | 11.2 | 146 |

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| 141 | Pronounced hypoperfusion during spreading depression in mouse cortex. *Journal of Cerebral Blood Flow and Metabolism*, **2004**, 24, 1172-82 | 7.3 | 144 |
| 140 | Normobaric hyperoxia improves cerebral blood flow and oxygenation, and inhibits peri-infarct depolarizations in experimental focal ischaemia. *Brain*, **2007**, 130, 1631-42 | 11.2 | 137 |
| 139 | Spreading depression and neurovascular coupling. *Stroke*, **2013**, 44, S87-9 | 6.7 | 135 |
| 138 | Cerebrovascular lesions induce transient β-amyloid deposition. *Brain*, **2011**, 134, 3697-707 | 11.2 | 134 |
| 137 | The phosphorylation state of eNOS modulates vascular reactivity and outcome of cerebral ischemia in vivo. *Journal of Clinical Investigation*, **2007**, 117, 1961-7 | 15.9 | 125 |
| 136 | Migraine mutations increase stroke vulnerability by facilitating ischemic depolarizations. *Circulation* , **2012**, 125, 335-45 | 16.7 | 123 |
| 135 | Supply-demand mismatch transients in susceptible peri-infarct hot zones explain the origins of spreading injury depolarizations. *Neuron*, **2015**, 85, 1117-31 | 13.9 | 120 |
| 134 | Mild induced hypertension improves blood flow and oxygen metabolism in transient focal cerebral ischemia. *Stroke*, **2008**, 39, 1548-55 | 6.7 | 114 |
| 133 | A randomized, double-blind, placebo-controlled pilot study of simvastatin in aneurysmal subarachnoid hemorrhage. *Stroke*, **2008**, 39, 2891-3 | 6.7 | 106 |
| 132 | Enhanced subcortical spreading depression in familial hemiplegic migraine type 1 mutant mice. *Journal of Neuroscience*, **2011**, 31, 5755-63 | 6.6 | 96 |
| 131 | Rho-kinase inhibition acutely augments blood flow in focal cerebral ischemia via endothelial mechanisms. *Journal of Cerebral Blood Flow and Metabolism*, **2007**, 27, 998-1009 | 7.3 | 94 |
| 130 | Hypomorphic Notch 3 alleles link Notch signaling to ischemic cerebral small-vessel disease. *Proceedings of the National Academy of Sciences of the United States of America*, **2011**, 108, E128-35 | 11.5 | 93 |
| 129 | Vagus nerve stimulation inhibits cortical spreading depression. *Pain*, **2016**, 157, 797-805 | 8 | 92 |
| 128 | L-NA-sensitive rCBF augmentation during vibrissal stimulation in type III nitric oxide synthase mutant mice. *Journal of Cerebral Blood Flow and Metabolism*, **1996**, 16, 539-41 | 7.3 | 89 |
| 127 | The sirtuin-2 inhibitor AK7 is neuroprotective in models of Parkinson's disease but not amyotrophic lateral sclerosis and cerebral ischemia. *PLoS ONE*, **2015**, 10, e0116919 | 3.7 | 82 |
| 126 | Androgenic suppression of spreading depression in familial hemiplegic migraine type 1 mutant mice. *Annals of Neurology*, **2009**, 66, 564-8 | 9.4 | 79 |
| 125 | Age-related decline in oligodendrogenesis retards white matter repair in mice. *Stroke*, **2013**, 44, 2573-8 | 6.7 | 78 |
| 124 | Cerebral autosomal dominant arteriopathy with subcortical infarcts and leukoencephalopathy syndrome mutations increase susceptibility to spreading depression. *Annals of Neurology*, **2011**, 69, 413-8 | 9.4 | 78 |

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| 123 | Selective ROCK2 Inhibition In Focal Cerebral Ischemia. *Annals of Clinical and Translational Neurology* , **2014**, 1, 2-14 | 5.3 | 76 |
| 122 | Linking Notch signaling to ischemic stroke. *Proceedings of the National Academy of Sciences of the United States of America*, **2008**, 105, 4856-61 | 11.5 | 76 |
| 121 | Cortical spreading depression and migraine. *Current Neurology and Neuroscience Reports*, **2010**, 10, 167-73 | 6.6 | 75 |
| 120 | Hypoxia and hypotension transform the blood flow response to cortical spreading depression from hyperemia into hypoperfusion in the rat. *Journal of Cerebral Blood Flow and Metabolism*, **2008**, 28, 1369-76 | 7.3 | 75 |
| 119 | The impact of anesthetics and hyperoxia on cortical spreading depression. *Experimental Neurology*, **2008**, 212, 201-6 | 5.7 | 72 |
| 118 | Peripheral GABAA receptor-mediated effects of sodium valproate on dural plasma protein extravasation to substance P and trigeminal stimulation. *British Journal of Pharmacology*, **1995**, 116, 1661-7 | 8.6 | 66 |
| 117 | Cognitive dysfunction and migraine. *Journal of Headache and Pain*, **2018**, 19, 109 | 8.8 | 65 |
| 116 | Translational Stroke Research: Vision and Opportunities. *Stroke*, **2017**, 48, 2632-2637 | 6.7 | 62 |
| 115 | Calabadion: A new agent to reverse the effects of benzylisoquinoline and steroidal neuromuscular-blocking agents. *Anesthesiology*, **2013**, 119, 317-25 | 4.3 | 62 |
| 114 | Inhibition of the P2X7-PANX1 complex suppresses spreading depolarization and neuroinflammation. *Brain*, **2017**, 140, 1643-1656 | 11.2 | 60 |
| 113 | Multiparametric, longitudinal optical coherence tomography imaging reveals acute injury and chronic recovery in experimental ischemic stroke. *PLoS ONE*, **2013**, 8, e71478 | 3.7 | 59 |
| 112 | Comparative Effectiveness of Calabadion and Sugammadex to Reverse Non-depolarizing Neuromuscular-blocking Agents. *Anesthesiology*, **2015**, 123, 1337-49 | 4.3 | 58 |
| 111 | Optical coherence tomography for the quantitative study of cerebrovascular physiology. *Journal of Cerebral Blood Flow and Metabolism*, **2011**, 31, 1339-45 | 7.3 | 57 |
| 110 | Continuous electroencephalography predicts delayed cerebral ischemia after subarachnoid hemorrhage: A prospective study of diagnostic accuracy. *Annals of Neurology*, **2018**, 83, 958-969 | 9.4 | 55 |
| 109 | Migraine and stroke: in search of shared mechanisms. *Cephalalgia*, **2015**, 35, 165-81 | 6.1 | 54 |
| 108 | CADASIL: experimental insights from animal models. *Stroke*, **2010**, 41, S129-34 | 6.7 | 53 |
| 107 | Cortical spreading depression impairs oxygen delivery and metabolism in mice. *Journal of Cerebral Blood Flow and Metabolism*, **2012**, 32, 376-86 | 7.3 | 53 |
| 106 | Fingolimod exerts neuroprotective effects in a mouse model of intracerebral hemorrhage. *Brain Research*, **2014**, 1555, 89-96 | 3.7 | 51 |

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| 105 | Perfusion pressure-dependent recovery of cortical spreading depression is independent of tissue oxygenation over a wide physiologic range. *Journal of Cerebral Blood Flow and Metabolism*, **2010**, 30, 1168-77 | 7.3 | 49 |
| 104 | Pearls and pitfalls in experimental models of spreading depression. *Cephalalgia*, **2013**, 33, 604-13 | 6.1 | 48 |
| 103 | Spreading depolarizations trigger caveolin-1-dependent endothelial transcytosis. *Annals of Neurology*, **2018**, 84, 409-423 | 9.4 | 44 |
| 102 | Multifaceted roles for astrocytes in spreading depolarization: A target for limiting spreading depolarization in acute brain injury?. *Glia*, **2016**, 64, 5-20 | 9 | 41 |
| 101 | Glucose modulation of spreading depression susceptibility. *Journal of Cerebral Blood Flow and Metabolism*, **2013**, 33, 191-5 | 7.3 | 40 |
| 100 | Quantitative imaging of cerebral blood flow velocity and intracellular motility using dynamic light scattering-optical coherence tomography. *Journal of Cerebral Blood Flow and Metabolism*, **2013**, 33, 819-25 | 7.3 | 39 |
| 99 | Achieving normothermia in patients with febrile subarachnoid hemorrhage: feasibility and safety of a novel intravascular cooling catheter. *Neurocritical Care*, **2004**, 1, 145-56 | 3.3 | 37 |
| 98 | Anti-migraine Calcitonin Gene-Related Peptide Receptor Antagonists Worsen Cerebral Ischemic Outcome in Mice. *Annals of Neurology*, **2020**, 88, 771-784 | 9.4 | 34 |
| 97 | Hyperlipidemia disrupts cerebrovascular reflexes and worsens ischemic perfusion defect. *Journal of Cerebral Blood Flow and Metabolism*, **2013**, 33, 954-62 | 7.3 | 34 |
| 96 | Aag-initiated base excision repair promotes ischemia reperfusion injury in liver, brain, and kidney. *Proceedings of the National Academy of Sciences of the United States of America*, **2014**, 111, E4878-86 | 11.5 | 33 |
| 95 | Vasculitis of the spinal cord. *Archives of Neurology*, **2003**, 60, 1791-4 | | 33 |
| 94 | Spreading depression and the clinical correlates of migraine. *Reviews in the Neurosciences*, **2013**, 24, 353-63 | 4.7 | 32 |
| 93 | Anesthesia in Experimental Stroke Research. *Translational Stroke Research*, **2016**, 7, 358-67 | 7.8 | 31 |
| 92 | Abnormal synaptic Ca(2+) homeostasis and morphology in cortical neurons of familial hemiplegic migraine type 1 mutant mice. *Annals of Neurology*, **2015**, 78, 193-210 | 9.4 | 31 |
| 91 | Recognition memory impairments after subcortical white matter stroke in mice. *Stroke*, **2014**, 45, 1468-73 | 6.7 | 31 |
| 90 | Non-invasively triggered spreading depolarizations induce a rapid pro-inflammatory response in cerebral cortex. *Journal of Cerebral Blood Flow and Metabolism*, **2020**, 40, 1117-1131 | 7.3 | 30 |
| 89 | Migraine prophylaxis, ischemic depolarizations, and stroke outcomes in mice. *Stroke*, **2015**, 46, 229-36 | 6.7 | 29 |
| 88 | Gabapentin suppresses cortical spreading depression susceptibility. *Journal of Cerebral Blood Flow and Metabolism*, **2010**, 30, 1588-92 | 7.3 | 29 |

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| 87 | Migraine mutations impair hippocampal learning despite enhanced long-term potentiation. *Journal of Neuroscience*, **2015**, 35, 3397-402 | 6.6 | 27 |
| 86 | Decreased microvascular cerebral blood flow assessed by diffuse correlation spectroscopy after repetitive concussions in mice. *Journal of Cerebral Blood Flow and Metabolism*, **2015**, 35, 1995-2000 | 7.3 | 27 |
| 85 | Sensitivity to acute cerebral ischemic injury in migraineurs: A retrospective case-control study. *Neurology*, **2015**, 85, 1945-9 | 6.5 | 27 |
| 84 | Cortical spreading depression confounds concentration-dependent pial arteriolar dilation during N-methyl-D-aspartate superfusion. *American Journal of Physiology - Heart and Circulatory Physiology* , **2006**, 290, H1837-41 | 5.2 | 27 |
| 83 | High-resolution in vivo optical imaging of stroke injury and repair. *Brain Research*, **2015**, 1623, 174-92 | 3.7 | 26 |
| 82 | Translational MR Neuroimaging of Stroke and Recovery. *Translational Stroke Research*, **2017**, 8, 22-32 | 7.8 | 26 |
| 81 | Pathophysiology of Lacunar Stroke: History's Mysteries and Modern Interpretations. *Journal of Stroke and Cerebrovascular Diseases*, **2019**, 28, 2079-2097 | 2.8 | 25 |
| 80 | The Role of Endothelin in the Pathophysiology of Migraine-a Systematic Review. *Current Pain and Headache Reports*, **2018**, 22, 27 | 4.2 | 25 |
| 79 | Chronic daily cortical spreading depressions suppress spreading depression susceptibility. *Cephalalgia*, **2011**, 31, 1601-8 | 6.1 | 25 |
| 78 | Pharmacological targeting of spreading depression in migraine. *Expert Review of Neurotherapeutics*, **2012**, 12, 297-306 | 4.3 | 25 |
| 77 | Which Spreading Depolarizations Are Deleterious To Brain Tissue?. *Neurocritical Care*, **2020**, 32, 317-322 | 3.3 | 25 |
| 76 | Determinants of Optogenetic Cortical Spreading Depolarizations. *Cerebral Cortex*, **2019**, 29, 1150-1161 | 5.1 | 24 |
| 75 | Real-time non-invasive in vivo visible light detection of cortical spreading depolarizations in mice. *Journal of Neuroscience Methods*, **2018**, 309, 143-146 | 3 | 24 |
| 74 | Mapping optogenetically-driven single-vessel fMRI with concurrent neuronal calcium recordings in the rat hippocampus. *Nature Communications*, **2019**, 10, 5239 | 17.4 | 23 |
| 73 | Micro-heterogeneity of flow in a mouse model of chronic cerebral hypoperfusion revealed by longitudinal Doppler optical coherence tomography and angiography. *Journal of Cerebral Blood Flow and Metabolism*, **2015**, 35, 1552-60 | 7.3 | 22 |
| 72 | Stress hormone corticosterone enhances susceptibility to cortical spreading depression in familial hemiplegic migraine type 1 mutant mice. *Experimental Neurology*, **2015**, 263, 214-20 | 5.7 | 22 |
| 71 | Cortical Spreading Depression: A Model for Understanding Migraine Biology and Future Drug Targets. *Headache Currents: A Journal for Recent Advances in Headache and Facial Pain*, **2005**, 2, 97-103 | | 22 |
| 70 | Effects of cerebral ischemia on N-methyl-D-aspartate and dihydropyridine-sensitive calcium currents. An electrophysiological study in the rat hippocampus in situ. *Stroke*, **1996**, 27, 127-33 | 6.7 | 22 |

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| 69 | Headache after ischemic stroke: A systematic review and meta-analysis. *Neurology*, **2020**, 94, e75-e86 | 6.5 | 22 |
| 68 | Requisite ischemia for spreading depolarization occurrence after subarachnoid hemorrhage in rodents. *Journal of Cerebral Blood Flow and Metabolism*, **2017**, 37, 1829-1840 | 7.3 | 21 |
| 67 | Spreading Depression in Primary and Secondary Headache Disorders. *Current Pain and Headache Reports*, **2016**, 20, 44 | 4.2 | 21 |
| 66 | Cortical Spreading Depression Denotes Concussion Injury. *Journal of Neurotrauma*, **2019**, 36, 1008-1017 | 5.4 | 20 |
| 65 | Soluble guanylate cyclase alpha1beta1 limits stroke size and attenuates neurological injury. *Stroke*, **2010**, 41, 1815-9 | 6.7 | 20 |
| 64 | Delayed Cerebral Ischemia After Subarachnoid Hemorrhage: Experimental-Clinical Disconnect and the Unmet Need. *Neurocritical Care*, **2020**, 32, 238-251 | 3.3 | 20 |
| 63 | Vagus nerve stimulation inhibits cortical spreading depression exclusively through central mechanisms. *Pain*, **2020**, 161, 1661-1669 | 8 | 19 |
| 62 | Phase III Preclinical Trials in Translational Stroke Research: Community Response on Framework and Guidelines. *Translational Stroke Research*, **2016**, 7, 241-7 | 7.8 | 19 |
| 61 | Rho-kinase inhibition improves ischemic perfusion deficit in hyperlipidemic mice. *Journal of Cerebral Blood Flow and Metabolism*, **2014**, 34, 284-7 | 7.3 | 19 |
| 60 | Two-photon microscopy of cortical NADH fluorescence intensity changes: correcting contamination from the hemodynamic response. *Journal of Biomedical Optics*, **2011**, 16, 106003 | 3.5 | 19 |
| 59 | Optogenetic Spreading Depression Elicits Trigeminal Pain and Anxiety Behavior. *Annals of Neurology*, **2021**, 89, 99-110 | 9.4 | 19 |
| 58 | Endothelial dysfunction abrogates the efficacy of normobaric hyperoxia in stroke. *Journal of Neuroscience*, **2014**, 34, 15200-7 | 6.6 | 17 |
| 57 | Differential effects of anesthetics on resting state functional connectivity in the mouse. *Journal of Cerebral Blood Flow and Metabolism*, **2020**, 40, 875-884 | 7.3 | 17 |
| 56 | Concussive injury before or after controlled cortical impact exacerbates histopathology and functional outcome in a mixed traumatic brain injury model in mice. *Journal of Neurotrauma*, **2013**, 30, 382-91 | 5.4 | 16 |
| 55 | Migraine.. *Nature Reviews Disease Primers*, **2022**, 8, 2 | 51.1 | 16 |
| 54 | What Should a Clinician Do When Spreading Depolarizations are Observed in a Patient?. *Neurocritical Care*, **2020**, 32, 306-310 | 3.3 | 16 |
| 53 | High-flow oxygen therapy for treatment of acute migraine: A randomized crossover trial. *Cephalalgia*, **2017**, 37, 730-736 | 6.1 | 15 |
| 52 | Oxcarbazepine does not suppress cortical spreading depression. *Cephalalgia*, **2011**, 31, 537-42 | 6.1 | 15 |

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| 51 | Early Activation of Phosphatidylinositol 3-Kinase after Ischemic Stroke Reduces Infarct Volume and Improves Long-Term Behavior. *Molecular Neurobiology*, **2017**, 54, 5375-5384 | 6.2 | 14 |
| 50 | Lasting pure-motor deficits after focal posterior internal capsule white-matter infarcts in rats. *Journal of Cerebral Blood Flow and Metabolism*, **2015**, 35, 977-84 | 7.3 | 14 |
| 49 | Genetic animal models of cerebral vasculopathies. *Progress in Molecular Biology and Translational Science*, **2012**, 105, 25-55 | 4 | 13 |
| 48 | Spreading depression as an innate antiseizure mechanism. *Nature Communications*, **2021**, 12, 2206 | 17.4 | 13 |
| 47 | Sustained functional improvement by hepatocyte growth factor-like small molecule BB3 after focal cerebral ischemia in rats and mice. *Journal of Cerebral Blood Flow and Metabolism*, **2015**, 35, 1044-53 | 7.3 | 12 |
| 46 | Late-onset thermal hypersensitivity after focal ischemic thalamic infarcts as a model for central post-stroke pain in rats. *Journal of Cerebral Blood Flow and Metabolism*, **2015**, 35, 1100-3 | 7.3 | 12 |
| 45 | Acute sleep deprivation enhances susceptibility to the migraine substrate cortical spreading depolarization. *Journal of Headache and Pain*, **2020**, 21, 86 | 8.8 | 12 |
| 44 | Novel Therapeutic Targets Against Spreading Depression. *Headache*, **2017**, 57, 1340-1358 | 4.2 | 12 |
| 43 | Monitoring cellular edema at single-neuron level by electrical resistance measurements. *Journal of Neuroscience Methods*, **1997**, 72, 175-81 | 3 | 12 |
| 42 | The cerebral metabolic consequences of nitric oxide synthase deficiency: glucose utilization in endothelial and neuronal nitric oxide synthase null mice. *Journal of Cerebral Blood Flow and Metabolism*, **1999**, 19, 144-8 | 7.3 | 12 |
| 41 | Aspirin Prophylaxis for Migraine with Aura: An Observational Case Series. *European Neurology*, **2017** , 78, 287-289 | 2.1 | 11 |
| 40 | An Overhauser-enhanced-MRI platform for dynamic free radical imaging in vivo. *NMR in Biomedicine* , **2018**, 31, e3896 | 4.4 | 10 |
| 39 | Gabapentin reduces infarct volume but does not suppress peri-infarct depolarizations. *Journal of Cerebral Blood Flow and Metabolism*, **2011**, 31, 1578-82 | 7.3 | 10 |
| 38 | Intravenous Endothelin-1 Infusion Does Not Induce Aura or Headache in Migraine Patients With Aura. *Headache*, **2020**, 60, 724-734 | 4.2 | 10 |
| 37 | Preclinical phase III trials in translational stroke research: call for collective design of framework and guidelines. *Stroke*, **2014**, 45, 357 | 6.7 | 9 |
| 36 | Enriched Environment Elicits Proangiogenic Mechanisms After Focal Cerebral Ischemia. *Translational Stroke Research*, **2019**, 10, 150-159 | 7.8 | 9 |
| 35 | Cerebrovascular effects of endothelin-1 investigated using high-resolution magnetic resonance imaging in healthy volunteers. *Journal of Cerebral Blood Flow and Metabolism*, **2020**, 40, 1685-1694 | 7.3 | 9 |
| 34 | Secondary Bleeding During Acute Experimental Intracerebral Hemorrhage. *Stroke*, **2019**, 50, 1210-1215 | 6.7 | 8 |

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| 33 | Uncovering the Rosetta Stone: Report from the First Annual Conference on Key Elements in Translating Stroke Therapeutics from Pre-Clinical to Clinical. *Translational Stroke Research*, **2018**, 9, 258-266 | 7.8 | 8 |
| 32 | Different Effects of Normobaric Oxygen in Normotensive Versus Hypertensive Rats After Focal Cerebral Ischemia. *Stroke*, **2018**, 49, 1534-1537 | 6.7 | 8 |
| 31 | Caffeine does not affect susceptibility to cortical spreading depolarization in mice. *Journal of Cerebral Blood Flow and Metabolism*, **2019**, 39, 740-750 | 7.3 | 8 |
| 30 | Noninvasive Vagus Nerve Stimulation Prevents Ruptures and Improves Outcomes in a Model of Intracranial Aneurysm in Mice. *Stroke*, **2019**, 50, 1216-1223 | 6.7 | 7 |
| 29 | Relief Following Chronic Stress Augments Spreading Depolarization Susceptibility in Familial Hemiplegic Migraine Mice. *Neuroscience*, **2019**, 415, 1-9 | 3.9 | 7 |
| 28 | First-order mathematical modeling of brain swelling in focal cerebral ischemia. *Translational Stroke Research*, **2010**, 1, 65-70 | 7.8 | 7 |
| 27 | Peri-Infarct Hot-Zones Have Higher Susceptibility to Optogenetic Functional Activation-Induced Spreading Depolarizations. *Stroke*, **2020**, 51, 2526-2535 | 6.7 | 7 |
| 26 | Neurovascular coupling during optogenetic functional activation: Local and remote stimulus-response characteristics, and uncoupling by spreading depression. *Journal of Cerebral Blood Flow and Metabolism*, **2020**, 40, 808-822 | 7.3 | 7 |
| 25 | Etomidate and Ketamine: Residual Motor and Adrenal Dysfunction that Persist beyond Recovery from Loss of Righting Reflex in Rats. *Pharmaceuticals*, **2014**, 8, 21-37 | 5.2 | 6 |
| 24 | Cerebral Amyloid Angiopathy-Related Transient Focal Neurologic Episodes. *Neurology*, **2021**, 97, 231-238 | 8.5 | 6 |
| 23 | Posterior reversible encephalopathy syndrome in stroke-prone spontaneously hypertensive rats on high-salt diet. *Journal of Cerebral Blood Flow and Metabolism*, **2019**, 39, 1232-1246 | 7.3 | 6 |
| 22 | Subarachnoid hemorrhage leads to early and persistent functional connectivity and behavioral changes in mice. *Journal of Cerebral Blood Flow and Metabolism*, **2021**, 41, 975-985 | 7.3 | 6 |
| 21 | Imaging PEG-like nanoprobes in tumor, transient ischemia, and inflammatory disease models. *Bioconjugate Chemistry*, **2015**, 26, 1061-9 | 6.3 | 5 |
| 20 | Rho-kinase inhibitors do not expand hematoma volume in acute experimental intracerebral hemorrhage. *Annals of Clinical and Translational Neurology*, **2018**, 5, 769-776 | 5.3 | 5 |
| 19 | cGMP-dependent protein kinase I in vascular smooth muscle cells improves ischemic stroke outcome in mice. *Journal of Cerebral Blood Flow and Metabolism*, **2019**, 39, 2379-2391 | 7.3 | 4 |
| 18 | Therapeutic implications of cortical spreading depression models in migraine. *Progress in Brain Research*, **2020**, 255, 29-67 | 2.9 | 4 |
| 17 | Sex and Genetic Background Effects on the Outcome of Experimental Intracranial Aneurysms. *Stroke*, **2020**, 51, 3083-3094 | 6.7 | 4 |
| 16 | Monitoring anoxic depolarization at the bedside: A step closer to the 24th century. *Journal of Cerebral Blood Flow and Metabolism*, **2018**, 38, 1123-1124 | 7.3 | 4 |

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| 15 | Intracranial pressure spikes trigger spreading depolarizations. *Brain*, **2021**, | 11.2 | 3 |
| 14 | Rapid hematoma growth triggers spreading depolarizations in experimental intracortical hemorrhage. *Journal of Cerebral Blood Flow and Metabolism*, **2021**, 41, 1264-1276 | 7.3 | 3 |
| 13 | Endovascular thrombectomy and post-procedural headache. *Journal of Headache and Pain*, **2017**, 18, 10 | 8.8 | 2 |
| 12 | The Critical Role of Spreading Depolarizations in Early Brain Injury: Consensus and Contention.. *Neurocritical Care*, **2022**, 1 | 3.3 | 2 |
| 11 | Questioning Glutamate Excitotoxicity in Acute Brain Damage: The Importance of Spreading Depolarization.. *Neurocritical Care*, **2022**, 1 | 3.3 | 2 |
| 10 | Animal Models of Migraine Aura **2017**, 321-345 | | 1 |
| 9 | Fleeting footprints: finding MRI biomarkers of transient ischaemic attack. *Brain*, **2017**, 140, 8-10 | 11.2 | 1 |
| 8 | Intravascular Endothelin-1 does not trigger or increase susceptibility to Spreading Depolarizations. *Journal of Headache and Pain*, **2020**, 21, 127 | 8.8 | 1 |
| 7 | Optical coherence tomography of arteriolar diameter and capillary perfusion during spreading depolarizations. *Journal of Cerebral Blood Flow and Metabolism*, **2021**, 41, 2256-2263 | 7.3 | 1 |
| 6 | Migraine susceptibility is modulated by food triggers and analgesic overuse via sulfotransferase inhibition.. *Journal of Headache and Pain*, **2022**, 23, 36 | 8.8 | 1 |
| 5 | Efficacy profile of noninvasive vagus nerve stimulation on cortical spreading depression susceptibility and the tissue response in a rat model.. *Journal of Headache and Pain*, **2022**, 23, 12 | 8.8 | 0 |
| 4 | Cortical Spreading Depolarizations in a Mouse Model of Subarachnoid Hemorrhage.. *Neurocritical Care*, **2022**, 1 | 3.3 | 0 |
| 3 | Focal Subcortical White Matter Lesions Disrupt Resting State Cortical Interhemispheric Functional Connectivity in Mice. *Cerebral Cortex*, **2021**, 31, 4958-4969 | 5.1 | 0 |
| 2 | Large Arteriolar Component of Oxygen Delivery Implies Safe Margin of Oxygen Supply to Cerebral Tissue. *FASEB Journal*, **2015**, 29, 794.1 | 0.9 | |
| 1 | Intensive care management of specific stroke treatment. *Advances in Neurology*, **2003**, 92, 361-77 | | |