

Selected Publications Using RWD Laser Speckle

Latest update time: July 31st, 2023

We select a serious of high reputed papers using RWD laser speckle imaging system. We categorize them into different research topics for you to better check.

Research topics:

[Cerebral ischemia](#)

[& Ischemic stroke](#)

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[Angiogenesis](#)

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[Thrombosis](#)

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[Vasospasm](#)

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[Tumor](#)

[Intestinal ischemia reperfusion &](#)

[Intestinal inflammation](#)

Cerebral ischemia & Ischemic stroke

- Tedeschi A, Larson M J E, Zouridakis A, et al. Harnessing cortical plasticity via gabapentinoid administration promotes recovery after stroke[J]. *Brain*, 2022, 145(7): 2378-2393.
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- Wan T, Zhu W, Zhao Y, et al. Astrocytic phagocytosis contributes to demyelination after focal cortical ischemia in mice[J]. *Nature Communications*, 2022, 13(1): 1134.
- Xu K, Gao X, Xia G, et al. Rapid gut dysbiosis induced by stroke exacerbates brain infarction in turn[J]. *Gut*, 2021, 70(8): gutjnl-2020-323263. DOI:10.1136/gutjnl-2020-323263.
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- Zaidi S K, Hoda M N, Tabrez S, et al. Pharmacological Inhibition of Class III Alcohol Dehydrogenase 5: Turning Remote Ischemic Conditioning Effective in a Diabetic Stroke Model[J]. *Antioxidants*, 2022, 11(10): 2051.
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- Li X, Li H, Xu Z, et al. Ischemia-induced cleavage of OPA1 at S1 site aggravates mitochondrial fragmentation and reperfusion injury in neurons[J]. *Cell Death & Disease*, 2022, 13(4): 321.
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- Wang X S, Yue J, Hu L N, et al. Activation of G protein-coupled receptor 30 protects neurons by regulating autophagy in astrocytes[J]. *Glia*, 2020, 68(1): 27-43.
- Guo X, Tian Y, Yang Y, et al. Pituitary adenylate cyclase-activating polypeptide protects against cognitive impairment caused by chronic cerebral hypoperfusion[J]. *Molecular Neurobiology*, 2021, 58(9): 4309-4322.
- Wu Y, Zeng J, Pluimer B, et al. Microvascular Injury in Mild Traumatic Brain Injury Accelerates Alzheimer-like Pathogenesis in Mice[J]. *bioRxiv*, 2020: 2020.04. 12.036392.
- Wang S, Lv W, Zhang H, et al. Aging exacerbates impairments of cerebral blood flow autoregulation and cognition in diabetic rats[J]. *Geroscience*, 2020, 42: 1387-1410.
- Jiang W, Zhang P, Yang P, et al. Phosphoproteome Analysis Identifies a Synaptotagmin-1-Associated Complex Involved in Ischemic Neuron Injury[J]. *Molecular & Cellular Proteomics*, 2022, 21(5).
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Traumatic Brain Injury (TBI)

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Angiogenesis

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Wound healing

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Flap survival

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Thrombosis

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- Wei X, Zhang B, Wei F, et al. Gegen Qinlian pills alleviate carrageenan-induced thrombosis in mice model by regulating the HMGB1/NF- κ B/NLRP3 signaling[J]. *Phytomedicine*, 2022, 100: 154083.

Limb ischemia

- Wong C W T, Sawhney A, Wu Y, et al. Sourcing of human peripheral blood-derived myeloid angiogenic cells under xeno-free conditions for the treatment of critical limb ischemia[J]. *Stem Cell Research & Therapy*, 2022, 13(1): 1-19.
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Diabetes

- Martín-Aragón Baudel M, Flores-Tamez V A, Hong J, et al. Spatiotemporal control of vascular Cav1. 2 by $\alpha 1c$ S1928 phosphorylation[J]. *Circulation Research*, 2022, 131(12): 1018-1033.
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- Zhu X, Chen Y, Xu X, et al. SP6616 as a Kv2. 1 inhibitor efficiently ameliorates peripheral neuropathy in diabetic mice[J]. *EBioMedicine*, 2020, 61: 103061.
- Yang J, Wei Y, Zhao T, et al. Magnolol effectively ameliorates diabetic peripheral neuropathy in mice[J]. *Phytomedicine*, 2022, 107: 154434.
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- Tian Y Q, Li J H, Li Y C, et al. Overexpression of GRK6 alleviates chronic visceral hypersensitivity through downregulation of P2Y6 receptors in anterior cingulate cortex of rats with prenatal maternal stress[J]. *CNS Neuroscience & Therapeutics*, 2022, 28(6): 851-861.
- Wang S, Lv W, Zhang H, et al. Aging exacerbates impairments of cerebral blood flow autoregulation and cognition in diabetic rats[J]. *Geroscience*, 2020, 42: 1387-1410.

Alzheimer's disease

- Wang N Y, Li J N, Liu W L, et al. Ferulic acid ameliorates Alzheimer's disease-like pathology and repairs cognitive decline by preventing capillary hypofunction in APP/PS1 mice[J]. *Neurotherapeutics*, 2021, 18: 1064-1080.
- Fang X, Tang C, Zhang H, et al. Longitudinal characterization of cerebral hemodynamics in the TgF344-AD rat model of Alzheimer's disease[J]. *GeroScience*, 2023: 1-20.
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- Wu Y, Wu H, Zeng J, et al. Mild traumatic brain injury induces microvascular injury and accelerates Alzheimer-like pathogenesis in mice[J]. *Acta neuropathologica communications*, 2021, 9(1): 1-14.
- Clemons G A, Silva A C, Acosta C H, et al. Protein arginine methyltransferase 4 modulates nitric oxide synthase uncoupling and cerebral blood flow in Alzheimer's disease[J]. *Journal of Cellular Physiology*, 2022.

Arterial sympathectomy

- Xie Y, Fang F, Lin P, et al. Segmental branches emanating from saphenous nerve morphing into sympathetic trunks for innervation of saphenous artery and its clinical implication for arterial sympathectomy[J]. *International Wound Journal*, 2022, 19(2): 294-304.
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Atherosclerosis

- Chu Y, Wang M, Wang X, et al. Identifying quality markers of Mailuoshutong pill against thromboangiitis obliterans based on chinmedomics strategy[J]. *Phytomedicine*, 2022, 104: 154313.
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Endothelial function

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Irritable bowel syndrome (IBS)

- Hu C, Yan C, Wu Y, et al. Low FODMAP Diet Relieves Visceral Hypersensitivity and Is Associated with Changes in Colonic Microcirculation in Water Avoidance Mice Model[J]. *Nutrients*, 2023, 15(5): 1155.
- Tian Y Q, Li J H, Li Y C, et al. Overexpression of GRK6 alleviates chronic visceral hypersensitivity through downregulation of P2Y6 receptors in anterior cingulate cortex of rats with prenatal maternal stress[J]. *CNS Neuroscience & Therapeutics*, 2022, 28(6): 851-861.

Sepsis

- Sun Y, Ye F, Li D, et al. Fibroblast growth factor 2 (FGF2) ameliorates the coagulation abnormalities in sepsis[J]. *Toxicology and Applied Pharmacology*, 2023: 116364.

Vasospasm

- Ma Q, Liu D, Gong R, et al. Mechanically induced vasospasm-evaluation of spasmolytic efficacy of 10 pharmaceutical agents using laser speckle contrast imaging[J]. *Lasers in Surgery and Medicine*, 2021, 53(5): 684-694.

Hernia surgery

- Fehér D. Szövetpótlásra alkalmas poli (vinil alkohol) sérvháló in vitro és in vivo biokompatibilitási vizsgálatai[D]. , 2021.

Intestinal ischemia reperfusion & Intestinal inflammation

- Cong R, Sun L, Yang J, et al. Protein O-GlcNAcylation alleviates small intestinal injury induced by ischemia-reperfusion and oxygen-glucose deprivation[J]. *Biomedicine & Pharmacotherapy*, 2021, 138: 111477.
- Zhang J, Yang M, Tang X, et al. Intestinal delivery of ROS-scavenging carbonized polymer dots for full-course treatment of acute and chronic radiation enteritis[J]. *Applied Materials Today*, 2022, 28: 101544.

Tumor

- Wang S, Zhang J, Liu H, et al. The effect of blood velocity in solid tumor on intratumorally accumulation and penetration of nanocarriers and drugs[J]. *Nano Today*, 2023, 50: 101870.