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Selected Publications Using RWD Laser Speckle

Latest update time: October 30th, 2024

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

Research topics:

Neurovascular coupling	Limb ischemia
Cerebral ischemia	<u>Diabetes</u>
& Ischemic stroke	Alzheimer's disease &
Traumatic Brain Injury	Vascular Dementia
Spinal cord injury	Arterial sympathectomy
Angiogenesis	<u>Atherosclerosis</u>
Wound healing	Endothelial function
Flap survival	Irritable bowel syndrome
Thrombosis	Neuroinflammation
Acute pancreatitis	Pulmonary Fibrosis
Myocardial Infarction	<u>Gut-lung</u>
Hypertension	Liver
Neonatal hypoxic-ischemic encephalopathy	
Bone restoration	<u>Skin</u>
Blood-glucose	COVID-19
Traditional Chinese Medical Science	

Peripheral nerve injuries Excitotoxicity Subarachnoid hemorrhage Sepsis Vasospasm Hernia surgery Tumor Intestinal ischemia reperfusion & Intestinal inflammation Obesity Drug discovery Micro and nanorobots Glymphatic-lymphatic system **Optical transparency DNA** methylation

DNA methylation

Kremer LPM, Cerrizuela S, El-Sammak H, Al Shukairi ME, Ellinger T, Straub J, Korkmaz A, Volk K, Brunken J, Kleber S, Anders S, Martin-Villalba A. DNA methylation controls stemness of astrocytes in health and ischaemia. Nature. 2024 Oct;634(8033):415-423.

Optical transparency

Ou Z, Duh YS, Rommelfanger NJ, , et al. Achieving optical transparency in live animals with absorbing molecules. Science. 2024 Sep 6;385(6713):eadm6869.

Neurovascular coupling

Zhang D, Ruan J, Peng S, et al. Synaptic-like transmission between neural axons and



arteriolar smooth muscle cells drives cerebral neurovascular coupling[J]. *Nature Neuroscience*, 2024: 1-17.

Cerebral ischemia & Ischemic stroke

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- Kewei Liu, Yuqin Peng, Mingheng Xu, et al. Brain-Targeted 9-Phenanthrol-Loaded Lipid Nanoparticle Prevents Brain Edema after Cerebral Ischemia-Reperfusion Injury by Inhibiting the Trpm4 Channel in Mice. *Adv. Funct. Mater*. 2024, 2401173.
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respiratory dysfunction caused by GCI/R injury. Biomed Pharmacother. 2024 Jun;175:116664.

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