

Helene Benveniste

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/3778224/publications.pdf>

Version: 2024-02-01

71
papers

9,498
citations

172207

29
h-index

102304

66
g-index

77
all docs

77
docs citations

77
times ranked

10014
citing authors

#	ARTICLE	IF	CITATIONS
1	A Paravascular Pathway Facilitates CSF Flow Through the Brain Parenchyma and the Clearance of Interstitial Solutes, Including Amyloid β . <i>Science Translational Medicine</i> , 2012, 4, 147ra111.	5.8	3,514
2	Brain-wide pathway for waste clearance captured by contrast-enhanced MRI. <i>Journal of Clinical Investigation</i> , 2013, 123, 1299-1309.	3.9	801
3	β -Amyloid accumulation in the human brain after one night of sleep deprivation. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, 4483-4488.	3.3	571
4	Vascular dysfunction – The disregarded partner of Alzheimer's disease. <i>Alzheimer's and Dementia</i> , 2019, 15, 158-167.	0.4	454
5	Perivascular spaces in the brain: anatomy, physiology and pathology. <i>Nature Reviews Neurology</i> , 2020, 16, 137-153.	4.9	405
6	Suppression of glymphatic fluid transport in a mouse model of Alzheimer's disease. <i>Neurobiology of Disease</i> , 2016, 93, 215-225.	2.1	377
7	The Glymphatic System and Waste Clearance with Brain Aging: A Review. <i>Gerontology</i> , 2019, 65, 106-119.	1.4	291
8	The Effect of Body Posture on Brain Glymphatic Transport. <i>Journal of Neuroscience</i> , 2015, 35, 11034-11044.	1.7	283
9	Evaluating glymphatic pathway function utilizing clinically relevant intrathecal infusion of CSF tracer. <i>Journal of Translational Medicine</i> , 2013, 11, 107.	1.8	262
10	Understanding the role of the perivascular space in cerebral small vessel disease. <i>Cardiovascular Research</i> , 2018, 114, 1462-1473.	1.8	211
11	Use and Misuse of Opioids in Chronic Pain. <i>Annual Review of Medicine</i> , 2018, 69, 451-465.	5.0	190
12	In vivo 3D digital atlas database of the adult C57BL/6J mouse brain by magnetic resonance microscopy. <i>Frontiers in Neuroanatomy</i> , 2008, 2, 1.	0.9	169
13	Cerebrospinal Fluid Clearance in Alzheimer Disease Measured with Dynamic PET. <i>Journal of Nuclear Medicine</i> , 2017, 58, 1471-1476.	2.8	161
14	Anesthesia with Dexmedetomidine and Low-dose Isoflurane Increases Solute Transport <i>via</i> the Glymphatic Pathway in Rat Brain When Compared with High-dose Isoflurane. <i>Anesthesiology</i> , 2017, 127, 976-988.	1.3	144
15	Impaired Glymphatic Transport in Spontaneously Hypertensive Rats. <i>Journal of Neuroscience</i> , 2019, 39, 6365-6377.	1.7	131
16	The Glymphatic Pathway: Waste Removal from the CNS via Cerebrospinal Fluid Transport. <i>Neuroscientist</i> , 2017, 23, 454-465.	2.6	124
17	Glymphatic System Function in Relation to Anesthesia and Sleep States. <i>Anesthesia and Analgesia</i> , 2019, 128, 747-758.	1.1	95
18	Acute alcohol intoxication decreases glucose metabolism but increases acetate uptake in the human brain. <i>NeuroImage</i> , 2013, 64, 277-283.	2.1	88

#	ARTICLE	IF	CITATIONS
19	Quantitative Gd ³⁺ DOTA uptake from cerebrospinal fluid into rat brain using 3D VFA ⁺ SPGR at 9.4T. <i>Magnetic Resonance in Medicine</i> , 2018, 79, 1568-1578.	1.9	83
20	Optimal Mass Transport with Lagrangian Workflow Reveals Advective and Diffusion Driven Solute Transport in the Glymphatic System. <i>Scientific Reports</i> , 2020, 10, 1990.	1.6	75
21	Metabolomic Profiling of Children's Brains Undergoing General Anesthesia with Sevoflurane and Propofol. <i>Anesthesiology</i> , 2012, 117, 1062-1071.	1.3	68
22	Apparent diffusion coefficient changes in human brain during sleep – Does it inform on the existence of a glymphatic system?. <i>NeuroImage</i> , 2019, 185, 263-273.	2.1	62
23	Cerebrospinal and interstitial fluid transport via the glymphatic pathway modeled by optimal mass transport. <i>NeuroImage</i> , 2017, 152, 530-537.	2.1	57
24	Glymphatic Cerebrospinal Fluid and Solute Transport Quantified by MRI and PET Imaging. <i>Neuroscience</i> , 2021, 474, 63-79.	1.1	51
25	Mapping of CSF transport using high spatiotemporal resolution dynamic contrast-enhanced MRI in mice: Effect of anesthesia. <i>Magnetic Resonance in Medicine</i> , 2021, 85, 3326-3342.	1.9	47
26	Impaired neurogenesis alters brain biomechanics in a neuroprogenitor-based genetic subtype of congenital hydrocephalus. <i>Nature Neuroscience</i> , 2022, 25, 458-473.	7.1	46
27	Alcohol Decreases Baseline Brain Glucose Metabolism More in Heavy Drinkers Than Controls But Has No Effect on Stimulation-Induced Metabolic Increases. <i>Journal of Neuroscience</i> , 2015, 35, 3248-3255.	1.7	43
28	Ketogenic diet reduces alcohol withdrawal symptoms in humans and alcohol intake in rodents. <i>Science Advances</i> , 2021, 7, .	4.7	41
29	Cerebral small vessel disease: A glymphopathy?. <i>Current Opinion in Neurobiology</i> , 2022, 72, 15-21.	2.0	41
30	Cerebral amyloid angiopathy is associated with glymphatic transport reduction and time-delayed solute drainage along the neck arteries. <i>Nature Aging</i> , 2022, 2, 214-223.	5.3	41
31	PTEN action in leukaemia dictated by the tissue microenvironment. <i>Nature</i> , 2014, 510, 402-406.	13.7	40
32	Disparate volumetric fluid shifts across cerebral tissue compartments with two different anesthetics. <i>Fluids and Barriers of the CNS</i> , 2021, 18, 1.	2.4	34
33	In vivo T1 mapping for quantifying glymphatic system transport and cervical lymph node drainage. <i>Scientific Reports</i> , 2020, 10, 14592.	1.6	30
34	Endocannabinoids and acute pain after total knee arthroplasty. <i>Pain</i> , 2015, 156, 341-347.	2.0	29
35	Ketogenic Diet Suppresses Alcohol Withdrawal Syndrome in Rats. <i>Alcoholism: Clinical and Experimental Research</i> , 2018, 42, 270-277.	1.4	29
36	Interleukin-6 and leptin levels are associated with preoperative pain severity in patients with osteoarthritis but not with acute pain after total knee arthroplasty. <i>Knee</i> , 2018, 25, 25-33.	0.8	24

#	ARTICLE	IF	CITATIONS
37	A Novel Transgenic Rat Model of Robust Cerebral Microvascular Amyloid with Prominent Vasculopathy. <i>American Journal of Pathology</i> , 2018, 188, 2877-2889.	1.9	23
38	Brain Morphometry and Longitudinal Relaxation Time of Spontaneously Hypertensive Rats (SHRs) in Early and Intermediate Stages of Hypertension Investigated by 3D VFA-SPGR MRI. <i>Neuroscience</i> , 2019, 404, 14-26.	1.1	23
39	Cerebral Vascular Dysfunctions Detected in Human Small Vessel Disease and Implications for Preclinical Studies. <i>Annual Review of Physiology</i> , 2022, 84, 409-434.	5.6	23
40	Does glucagon-like peptide-1 (GLP-1) receptor agonist stimulation reduce alcohol intake in patients with alcohol dependence: study protocol of a randomised, double-blinded, placebo-controlled clinical trial. <i>BMJ Open</i> , 2018, 8, e019562.	0.8	22
41	The glymphatic system and its role in cerebral homeostasis. <i>Journal of Applied Physiology</i> , 2020, 129, 1330-1340.	1.2	22
42	Cocaine is pharmacologically active in the nonhuman primate fetal brain. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2010, 107, 1582-1587.	3.3	19
43	Glutamate, Microdialysis, and Cerebral Ischemia. <i>Anesthesiology</i> , 2009, 110, 422-425.	1.3	19
44	Metabolic Profiling of Dividing Cells in Live Rodent Brain by Proton Magnetic Resonance Spectroscopy (1HMRS) and LCModel Analysis. <i>PLoS ONE</i> , 2014, 9, e94755.	1.1	18
45	A Review of Translational Magnetic Resonance Imaging in Human and Rodent Experimental Models of Small Vessel Disease. <i>Translational Stroke Research</i> , 2021, 12, 15-30.	2.3	18
46	Optimal-mass-transfer-based estimation of glymphatic transport in living brain. , 2015, 9413, .		17
47	GlymphVIS: Visualizing Glymphatic Transport Pathways Using Regularized Optimal Transport. <i>Lecture Notes in Computer Science</i> , 2018, 11070, 844-852.	1.0	17
48	Intrathecal morphine administration reduces postoperative pain and peripheral endocannabinoid levels in total knee arthroplasty patients: a randomized clinical trial. <i>BMC Anesthesiology</i> , 2018, 18, 27.	0.7	16
49	Leptin Levels Are Negatively Correlated with 2-Arachidonoylglycerol in the Cerebrospinal Fluid of Patients with Osteoarthritis. <i>PLoS ONE</i> , 2015, 10, e0123132.	1.1	13
50	Modern cerebrospinal fluid flow research and Heinrich Quincke's seminal 1872 article on the distribution of cinnabar in freely moving animals. <i>Journal of Comparative Neurology</i> , 2015, 523, 1748-1755.	0.9	13
51	Simultaneous Preclinical Positron Emission Tomography-Magnetic Resonance Imaging Study of Lymphatic Drainage of Chelator-Free ⁶⁴ Cu-Labeled Nanoparticles. <i>Cancer Biotherapy and Radiopharmaceuticals</i> , 2018, 33, 213-220.	0.7	13
52	MIF inhibition enhances pulmonary angiogenesis and lung development in congenital diaphragmatic hernia. <i>Pediatric Research</i> , 2019, 85, 711-718.	1.1	13
53	Trajectories of Brain Lactate and Re-visited Oxygen-Glucose Index Calculations Do Not Support Elevated Non-oxidative Metabolism of Glucose Across Childhood. <i>Frontiers in Neuroscience</i> , 2018, 12, 631.	1.4	12
54	Diffuse white matter loss in a transgenic rat model of cerebral amyloid angiopathy. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2021, 41, 1103-1118.	2.4	12

#	ARTICLE	IF	CITATIONS
55	Reduced Levels of Cerebrospinal Fluid/Plasma A β 240 as an Early Biomarker for Cerebral Amyloid Angiopathy in RTg-DI Rats. <i>International Journal of Molecular Sciences</i> , 2020, 21, 303.	1.8	10
56	Sustained glymphatic transport and impaired drainage to the nasal cavity observed in multiciliated cell ciliopathies with hydrocephalus. <i>Fluids and Barriers of the CNS</i> , 2022, 19, 20.	2.4	9
57	The Brain's Waste-Removal System. <i>Cerebrum: the Dana Forum on Brain Science</i> , 2018, 2018, .	0.1	8
58	Characterization of perivascular space pathology in a rat model of cerebral small vessel disease by <i>in vivo</i> magnetic resonance imaging. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2022, 42, 1813-1826.	2.4	8
59	Quinckesâ€™ pioneering 19th centuries CSF studies may inform 21th centuries research. <i>Neurology Psychiatry and Brain Research</i> , 2015, 21, 79-81.	2.0	7
60	Characterization of Patients with Difficult-to-Treat Acute Pain Following Total Knee Arthroplasty Using Multi-Modal Analgesia. <i>Open Pain Journal</i> , 2013, 6, 1-6.	0.4	6
61	Maximization of contrast-to-noise ratio to distinguish diffusion and microcirculatory flow. <i>Journal of Magnetic Resonance Imaging</i> , 1991, 1, 39-46.	1.9	5
62	Imaging the fetal nonhuman primate brain with SV2A positron emission tomography (PET). <i>European Journal of Nuclear Medicine and Molecular Imaging</i> , 2022, 49, 3679-3691.	3.3	4
63	Emergent White Matter Degeneration in the rTg-DI Rat Model of Cerebral Amyloid Angiopathy Exhibits Unique Proteomic Changes. <i>American Journal of Pathology</i> , 2022, 192, 426-440.	1.9	3
64	DETECTION OF Ca^{2+} -DEPENDENT NEURONAL ACTIVITY SIMULTANEOUSLY WITH DYNAMIC CHANGES IN CEREBRAL BLOOD VOLUME AND TISSUE OXYGENATION FROM THE LIVE RAT BRAIN. <i>Journal of Innovative Optical Health Sciences</i> , 2009, 02, 189-200.	0.5	2
65	Glymphatic System. , 2015, , 1-18.		2
66	Fisher-Rao Regularized Transport Analysis of the Glymphatic System and Waste Drainage. <i>Lecture Notes in Computer Science</i> , 2020, 12267, 573-582.	1.0	2
67	Reply to: Rethink the classical view of cerebrospinal fluid production. <i>Nature Reviews Neurology</i> , 2021, 17, 590-591.	4.9	1
68	MR imaging of microcirculation in rat brain: Correlation with carbon dioxide-induced changes in blood flow. <i>Journal of Magnetic Resonance Imaging</i> , 1991, 1, 673-681.	1.9	0
69	F2-02-01: Influence of body posture on brain waste removal by the glymphatic pathway. , 2015, 11, P165-P165.		0
70	Glymphatic System. , 2016, , 1945-1962.		0
71	Development of an MRI-Compatible Nasal Drug Delivery Method for Probing Nicotine Addiction Dynamics. <i>Pharmaceutics</i> , 2021, 13, 2069.	2.0	0