Pierre Julius Magistretti

List of Publications by Year
in descending order

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372 papers	39,610 citations	89 h-index	186 g-index
		3731	3182
399 all docs	399 docs citations	399 times ranked	32012 citing authors

#	Article	IF	Citations
1	Glutamate uptake into astrocytes stimulates aerobic glycolysis: a mechanism coupling neuronal activity to glucose utilization.. Proceedings of the National Academy of Sciences of the United States of America, 1994, 91, 10625-10629.	7.1	2,402
2	Brain Energy Metabolism: Focus on Astrocyte-Neuron Metabolic Cooperation. Cell Metabolism, 2011, 14, 724-738.	16.2	1,727
3	Oligodendroglia metabolically support axons and contribute to neurodegeneration. Nature, 2012, 487, 443-448.	27.8	1,287
4	Astrocyte-Neuron Lactate Transport Is Required for Long-Term Memory Formation. Cell, 2011, 144, 810-823.	28.9	1,285
5	Digital holographic microscopy: a noninvasive contrast imaging technique allowing quantitative visualization of living cells with subwavelength axial accuracy. Optics Letters, 2005, 30, 468.	3.3	1,209
6	Reactive astrocyte nomenclature, definitions, and future directions. Nature Neuroscience, 2021, 24, 312-325.	14.8	1,098
7	Energy on Demand. Science, 1999, 283, 496-497.	12.6	1,090
8	In vivo genome editing via CRISPR/Cas9 mediated homology-independent targeted integration. Nature, 2016, 540, 144-149.	27.8	906
9	A Cellular Perspective on Brain Energy Metabolism and Functional Imaging. Neuron, 2015, 86, 883-901.	8.1	871
10	Lactate in the brain: from metabolic end-product to signalling molecule. Nature Reviews Neuroscience, 2018, 19, 235-249.	10.2	724
11	Activityâ€dependent regulation of energy metabolism by astrocytes: An update. Glia, 2007, 55, 1251-1262.	4.9	696
12	Cellular mechanisms of brain energy metabolism and their relevance to functional brain imaging. Philosophical Transactions of the Royal Society B: Biological Sciences, 1999, 354, 1155-1163.	4.0	644
13	Measurement of the integral refractive index and dynamic cell morphometry of living cells with digital holographic microscopy. Optics Express, 2005, 13, 9361.	3.4	641
14	Genome-wide association study identifies eight risk loci and implicates metabo-psychiatric origins for anorexia nervosa. Nature Genetics, 2019, 51, 1207-1214.	21.4	641
15	Evidence Supporting the Existence of an Activity-Dependent Astrocyte-Neuron Lactate Shuttle. Developmental Neuroscience, 1998, 20, 291-299.	2.0	610
16	Neuronâ€“glia metabolic coupling and plasticity. Journal of Experimental Biology, 2006, 209, 2304-2311.	1.7	589
17	Sweet Sixteen for ANLS. Journal of Cerebral Blood Flow and Metabolism, 2012, 32, 1152-1166.	4.3	580
18	Astrocyteâ€“neuron metabolic relationships: for better and for worse. Trends in Neurosciences, 2011, 34, 76-87.	8.6	542

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19	Marker-free phase nanoscopy. Nature Photonics, 2013, 7, 113-117.	31.4	527
20	Aquaporins in Brain: Distribution, Physiology, and Pathophysiology. Journal of Cerebral Blood Flow and Metabolism, 2002, 22, 367-378.	4.3	512
21	InÂVivo Evidence for a Lactate Gradient from Astrocytes to Neurons. Cell Metabolism, 2016, 23, 94-102.	16.2	437
22	Significant Locus and Metabolic Genetic Correlations Revealed in Genome-Wide Association Study of Anorexia Nervosa. American Journal of Psychiatry, 2017, 174, 850-858.	7.2	410
23	Methylglyoxal, the dark side of glycolysis. Frontiers in Neuroscience, 2015, 9, 23.	2.8	381
24	Lactate promotes plasticity gene expression by potentiating NMDA signaling in neurons. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 12228-12233.	7.1	364
25	In VivoEvidence for Lactate as a Neuronal Energy Source. Journal of Neuroscience, 2011, 31, 7477-7485.	3.6	353
26	Selective Distribution of Lactate Dehydrogenase Isoenzymes in Neurons and Astrocytes of Human Brain. Journal of Cerebral Blood Flow and Metabolism, 1996, 16, 1079-1089.	4.3	351
27	Comparison of Lactate Transport in Astroglial Cells and Monocarboxylate Transporter 1 (MCT 1) Expressing Xenopus laevis Oocytes. Journal of Biological Chemistry, 1997, 272, 30096-30102.	3.4	320
28	The role of astroglia in neuroprotection. Dialogues in Clinical Neuroscience, 2009, 11, 281-295.	3.7	311
29	Lactate is a Preferential Oxidative Energy Substrate over Glucose for Neurons in Culture. Journal of Cerebral Blood Flow and Metabolism, 2003, 23, 1298-1306.	4.3	274
30	Expression of monocarboxylate transporter mRNAs in mouse brain: Support for a distinct role of lactate as an energy substrate for the neonatal vs. adult brain. Proceedings of the National Academy of Sciences of the United States of America, 1998, 95, 3990-3995.	7.1	264
31	Glial Glutamate Transporters Mediate a Functional Metabolic Crosstalk between Neurons and Astrocytes in the Mouse Developing Cortex. Neuron, 2003, 37, 275-286.	8.1	259
32	Characterization of the glycogenolysis elicited by vasoactive intestinal peptide, noradrenaline and adenosine in primary cultures of mouse cerebral cortical astrocytes. Brain Research, 1991, 563, 227-233.	2.2	252
33	Amyloid-Î² Aggregates Cause Alterations of Astrocytic Metabolic Phenotype: Impact on Neuronal Viability. Journal of Neuroscience, 2010, 30, 3326-3338.	3.6	252
34	Neuroenergetics: Calling Upon Astrocytes to Satisfy Hungry Neurons. Neuroscientist, 2004, 10, 53-62.	3.5	230
35	Immunohistochemical distribution of pro-somatostatin-related peptides in cerebral cortex. Brain Research, 1983, 262, 344-351.	2.2	216
36	Cell-specific localization of monocarboxylate transporters, MCT1 and MCT2, in the adult mouse brain revealed by double immunohistochemical labeling and confocal microscopy. Neuroscience, 2000, 100, 617-627.	2.3	207

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37	Evidence for a Susceptibility Gene for Anorexia Nervosa on Chromosome 1. American Journal of Human Genetics, 2002, 70, 787-792.	6.2	199
38	Neuroprotective Role of Lactate after Cerebral Ischemia. Journal of Cerebral Blood Flow and Metabolism, 2009, 29, 1780-1789.	4.3	197
39	Peripuberty stress leads to abnormal aggression, altered amygdala and orbitofrontal reactivity and increased prefrontal MAOA gene expression. Translational Psychiatry, 2013, 3, e216-e216.	4.8	196
40	Glutamate Uptake Stimulates Na⁺,K⁺â€ATPase Activity in Astrocytes via Activation of a Distinct Subunit Highly Sensitive to Ouabain. Journal of Neurochemistry, 1997, 69, 2132-2137.	3.9	190
41	Neurotransmitters Regulate Energy Metabolism in Astrocytes: Implications for the Metabolic Trafficking between Neural Cells. Developmental Neuroscience, 1993, 15, 306-312.	2.0	185
42	Noninvasive characterization of the fission yeast cell cycle by monitoring dry mass with digital holographic microscopy. Journal of Biomedical Optics, 2009, 14, 034049.	2.6	181
43	The distribution and morphological characteristics of the intracortical VIP-positive cell: An immunohistochemical analysis. Brain Research, 1984, 292, 269-282.	2.2	179
44	Simultaneous cell morphometry and refractive index measurement with dual-wavelength digital holographic microscopy and dye-enhanced dispersion of perfusion medium. Optics Letters, 2008, 33, 744.	3.3	179
45	VIP and noradrenaline act synergistically to increase cyclic AMP in cerebral cortex. Nature, 1984, 308, 280-282.	27.8	178
46	Lactate and pyruvate promote oxidative stress resistance through hormetic ROS signaling. Cell Death and Disease, 2019, 10, 653.	6.3	177
47	Fluoxetine regulates the expression of neurotrophic/growth factors and glucose metabolism in astrocytes. Psychopharmacology, 2011, 216, 75-84.	3.1	176
48	Astrocyte-Specific Expression of Aquaporin-9 in Mouse Brain is Increased after Transient Focal Cerebral Ischemia. Journal of Cerebral Blood Flow and Metabolism, 2001, 21, 477-482.	4.3	174
49	Early Cell Death Detection with Digital Holographic Microscopy. PLoS ONE, 2012, 7, e30912.	2.5	174
50	MCT2 is a Major Neuronal Monocarboxylate Transporter in the Adult Mouse Brain. Journal of Cerebral Blood Flow and Metabolism, 2002, 22, 586-595.	4.3	171
51	Comparative study of human erythrocytes by digital holographic microscopy, confocal microscopy, and impedance volume analyzer. Cytometry Part A: the Journal of the International Society for Analytical Cytology, 2008, 73A, 895-903.	1.5	171
52	Food for Thought: Challenging the Dogmas. Journal of Cerebral Blood Flow and Metabolism, 2003, 23, 1282-1286.	4.3	169
53	Brain lactate kinetics: Modeling evidence for neuronal lactate uptake upon activation. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 16448-16453.	7.1	169
54	TORC1 is a calcium- and cAMP-sensitive coincidence detector involved in hippocampal long-term synaptic plasticity. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 4700-4705.	7.1	168

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55	AÎ²42 Neurotoxicity Is Mediated by Ongoing Nucleated Polymerization Process Rather than by Discrete AÎ²42 Species. Journal of Biological Chemistry, 2011, 286, 8585-8596.	3.4	168
56	GABA uptake into astrocytes is not associated with significant metabolic cost: Implications for brain imaging of inhibitory transmission. Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 12456-12461.	7.1	165
57	Immunohistochemical distribution of pro-somatostatin-related peptides in hippocampus. Neuroscience Letters, 1982, 34, 137-142.	2.1	164
58	Pro-inflammatory cytokines induce the transcription factors C/EBP? and C/EBP? in astrocytes. Glia, 2000, 29, 91-97.	4.9	164
59	Astrocytes generate Na+-mediated metabolic waves. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 14937-14942.	7.1	164
60	Role of glutamate in neuron-glia metabolic coupling. American Journal of Clinical Nutrition, 2009, 90, 875S-880S.	4.7	164
61	Channel-Mediated Lactate Release by K⁺-Stimulated Astrocytes. Journal of Neuroscience, 2015, 35, 4168-4178.	3.6	163
62	Cerebral metabolic effects of exogenous lactate supplementation on the injured human brain. Intensive Care Medicine, 2014, 40, 412-421.	8.2	151
63	Astrocytic Î² ₂ -adrenergic receptors mediate hippocampal long-term memory consolidation. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 8526-8531.	7.1	151
64	Cellular bases of functional brain imaging: insights from neuron-glia metabolic coupling11Published on the World Wide Web on 12 October 2000.. Brain Research, 2000, 886, 108-112.	2.2	146
65	Distribution of Aquaporin 9 in the adult rat brain: Preferential expression in catecholaminergic neurons and in glial cells. Neuroscience, 2004, 128, 27-38.	2.3	140
66	Review of quantitative phase-digital holographic microscopy: promising novel imaging technique to resolve neuronal network activity and identify cellular biomarkers of psychiatric disorders. Neurophotonics, 2014, 1, 020901.	3.3	139
67	Functional receptors for vasoactive intestinal polypeptide in cultured astroglia from neonatal rat brain. Regulatory Peptides, 1983, 6, 71-80.	1.9	138
68	Brain Lactate Metabolism in Humans With Subarachnoid Hemorrhage. Stroke, 2012, 43, 1418-1421.	2.0	130
69	A quantitative analysis ofl-glutamate-regulated Na+dynamics in mouse cortical astrocytes: implications for cellular bioenergetics. European Journal of Neuroscience, 2000, 12, 3843-3853.	2.6	129
70	Cellâ€specific expression pattern of monocarboxylate transporters in astrocytes and neurons observed in different mouse brain cortical cell cultures. Journal of Neuroscience Research, 2003, 73, 141-155.	2.9	124
71	CCAAT/Enhancer-binding Protein Family Members Recruit the Coactivator CREB-binding Protein and Trigger Its Phosphorylation. Journal of Biological Chemistry, 2003, 278, 36959-36965.	3.4	122
72	Modulation of astrocytic metabolic phenotype by proinflammatory cytokines. Glia, 2008, 56, 975-989.	4.9	116

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73	Astrocytes Couple Synaptic Activity to Glucose Utilization in the Brain. Physiology, 1999, 14, 177-182.	3.1	114
74	Dissecting the Shared Genetic Architecture of Suicide Attempt, Psychiatric Disorders, and Known Risk Factors. Biological Psychiatry, 2022, 91, 313-327.	1.3	114
75	Determination of Transmembrane Water Fluxes in Neurons Elicited by Glutamate Ionotropic Receptors and by the Cotransporters KCC2 and NKCC1: A Digital Holographic Microscopy Study. Journal of Neuroscience, 2011, 31, 11846-11854.	3.6	113
76	Monoamines and peptides in cerebral cortex â€" contrasting principles of cortical organization. Trends in Neurosciences, 1983, 6, 146-151.	8.6	111
77	Peripheral administration of lactate produces antidepressant-like effects. Molecular Psychiatry, 2018, 23, 392-399.	7.9	111
78	Excitatory Amino Acids Stimulate Aerobic Glycolysis in Astrocytes via an Activation of the Na⁺/K⁺ ATPase. Developmental Neuroscience, 1996, 18, 336-342.	2.0	110
79	Role of the Glyoxalase System in Astrocyte-Mediated Neuroprotection. Journal of Neuroscience, 2011, 31, 18338-18352.	3.6	106
80	New Evidence of Neuroprotection by Lactate after Transient Focal Cerebral Ischaemia: Extended Benefit after Intracerebroventricular Injection and Efficacy of Intravenous Administration. Cerebrovascular Diseases, 2012, 34, 329-335.	1.7	106
81	Label-Free Cytotoxicity Screening Assay by Digital Holographic Microscopy. Assay and Drug Development Technologies, 2013, 11, 101-107.	1.2	105
82	In vivo reprogramming of wound-resident cells generates skin epithelial tissue. Nature, 2018, 561, 243-247.	27.8	104
83	Selective Postsynaptic Co-localization of MCT2 with AMPA Receptor GluR2/3 Subunits at Excitatory Synapses Exhibiting AMPA Receptor Trafficking. Cerebral Cortex, 2005, 15, 361-370.	2.9	103
84	Alzheimer's disease: the amyloid hypothesis and the Inverse Warburg effect. Frontiers in Physiology, 2014, 5, 522.	2.8	103
85	Cellular perspectives on the glutamateâ€"monoamine interactions in limbic lobe structures and their relevance for some psychiatric disorders. Progress in Neurobiology, 2002, 67, 173-202.	5.7	102
86	NEUROSCIENCE: Let There Be (NADH) Light. Science, 2004, 305, 50-52.	12.6	97
87	Learning-Induced Gene Expression in the Hippocampus Reveals a Role of Neuron -Astrocyte Metabolic Coupling in Long Term Memory. PLoS ONE, 2015, 10, e0141568.	2.5	95
88	VIP and PACAP potentiate the action of glutamate on BDNF expression in mouse cortical neurones. European Journal of Neuroscience, 1998, 10, 272-280.	2.6	94
89	An immunohistochemical study of pro-somatostatin-derived peptides in the human brain. Neuroscience, 1987, 22, 781-800.	2.3	93
90	Glutamate Transport Decreases Mitochondrial pH and Modulates Oxidative Metabolism in Astrocytes. Journal of Neuroscience, 2011, 31, 3550-3559.	3.6	93

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91	Noradrenaline- and vasoactive intestinal peptide-containing neuronal systems in neocortex: Functional convergence with contrasting morphology. Neuroscience, 1988, 24, 367-378.	2.3	92
92	Spatial analysis of erythrocyte membrane fluctuations by digital holographic microscopy. Blood Cells, Molecules, and Diseases, 2009, 42, 228-232.	1.4	92
93	Disrupting astrocyteâ€“neuron lactate transfer persistently reduces conditioned responses to cocaine. Molecular Psychiatry, 2016, 21, 1070-1076.	7.9	89
94	Neuron-glia metabolic coupling and plasticity. Experimental Physiology, 2011, 96, 407-410.	2.0	88
95	Cell morphology and intracellular ionic homeostasis explored with a multimodal approach combining epifluorescence and digital holographic microscopy. Journal of Biophotonics, 2010, 3, 432-436.	2.3	87
96	Noradrenaline Modulates Glutamate-mediated Neurotransmission in the Rat Basolateral AmygdalaIn Vitro. European Journal of Neuroscience, 1997, 9, 1356-1364.	2.6	86
97	Multi-timescale Modeling of Activity-Dependent Metabolic Coupling in the Neuron-Glia-Vasculature Ensemble. PLoS Computational Biology, 2015, 11, e1004036.	3.2	86
98	Purification and Cytochemical Identification of Neuronal and Non-Neuronal Cells in Chick Embryo Retina Cultures. Developmental Neuroscience, 1982, 5, 27-39.	2.0	85
99	Deletion of CREB-Regulated Transcription Coactivator 1 Induces Pathological Aggression, Depression-Related Behaviors, and Neuroplasticity Genes Dysregulation in Mice. Biological Psychiatry, 2012, 72, 528-536.	1.3	85
100	Threeâ€dimensional immersive virtual reality for studying cellular compartments in 3D models from EM preparations of neural tissues. Journal of Comparative Neurology, 2016, 524, 23-38.	1.6	85
101	Effects of chronic lithium treatment on dopamine receptors in the rat corpus striatum. II. No effect on denervation or neuroleptic-induced supersensitivity. Brain Research, 1982, 232, 401-412.	2.2	81
102	Autoradiographic mapping of [mono[125I]iodo-Tyr10, MetO17]vasoactive intestinal peptide binding sites in the rat brain. Neuroscience, 1987, 23, 539-565.	2.3	81
103	Local Injection of Antisense Oligonucleotides Targeted to the Glial Glutamate Transporter GLAST Decreases the Metabolic Response to Somatosensory Activation. Journal of Cerebral Blood Flow and Metabolism, 2001, 21, 404-412.	4.3	80
104	Feeding active neurons: (re)emergence of a nursing role for astrocytes. Journal of Physiology (Paris), 2002, 96, 273-282.	2.1	80
105	A coherent neurobiological framework for functional neuroimaging provided by a model integrating compartmentalized energy metabolism. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 4188-4193.	7.1	80
106	Protein targeting to glycogen mRNA expression is stimulated by noradrenaline in mouse cortical astrocytes. , 2000, 30, 382-391.		79
107	Gangliosides: Treatment Avenues in Neurodegenerative Disease. Frontiers in Neurology, 2019, 10, 859.	2.4	79
108	Astrocytes: New Targets for the Treatment of Neurodegenerative Diseases. Current Pharmaceutical Design, 2015, 21, 3570-3581.	1.9	79

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109	Dopaminergic supersensitivity induced by denervation and chronic receptor blockade is additive. Nature, 1982, 299, 72-74.	27.8	78
110	Sleep deprivation modulates brain mRNAs encoding genes of glycogen metabolism. European Journal of Neuroscience, 2002, 16, 1163-1167.	2.6	76
111	Astrocytes as Key Regulators of Brain Energy Metabolism: New Therapeutic Perspectives. Frontiers in Physiology, 2021, 12, 825816.	2.8	76
112	Cerebral Extracellular Lactate Increase is Predominantly Nonischemic in Patients with Severe Traumatic Brain Injury. Journal of Cerebral Blood Flow and Metabolism, 2013, 33, 1815-1822.	4.3	75
113	L-Lactate Regulates the Expression of Synaptic Plasticity and Neuroprotection Genes in Cortical Neurons: A Transcriptome Analysis. Frontiers in Molecular Neuroscience, 2018, 11, 375.	2.9	74
114	Deciphering neuron-glia compartmentalization in cortical energy metabolism. Frontiers in Neuroenergetics, 2009, 1, 4.	5.3	73
115	The Challenge of Connecting the Dots in the B.R.A.I.N.. Neuron, 2013, 80, 270-274.	8.1	73
116	Relationship between L-glutamate-regulated intracellular Na+ dynamics and ATP hydrolysis in astrocytes. Journal of Neural Transmission, 2005, 112, 77-85.	2.8	72
117	Measurement of absolute cell volume, osmotic membrane water permeability, and refractive index of transmembrane water and solute flux by digital holographic microscopy. Journal of Biomedical Optics, 2013, 18, 036007.	2.6	72
118	Deficiency in monocarboxylate transporter 1 (MCT1) in mice delays regeneration of peripheral nerves following sciatic nerve crush. Experimental Neurology, 2015, 263, 325-338.	4.1	71
119	Comment on Recent Modeling Studies of Astrocyteâ€“Neuron Metabolic Interactions. Journal of Cerebral Blood Flow and Metabolism, 2010, 30, 1982-1986.	4.3	70
120	Regulation of energy metabolism by neurotransmitters in astrocytes in primary culture and in an immortalized cell line. , 1997, 21, 74-83.		69
121	Glucocorticoids modulate neurotransmitterâ€induced glycogen metabolism in cultured cortical astrocytes. Journal of Neurochemistry, 2004, 88, 900-908.	3.9	69
122	How to balance the brain energy budget while spending glucose differently. Journal of Physiology, 2003, 546, 325-325.	2.9	69
123	Labeled Acetate as a Marker of Astrocytic Metabolism. Journal of Cerebral Blood Flow and Metabolism, 2011, 31, 1668-1674.	4.3	69
124	Effects of chronic lithium treatment on dopamine receptors in the rat corpus striatum. I. Locomotor activity and behavioral supersensitivity. Brain Research, 1982, 232, 391-400.	2.2	67
125	Differential messenger RNA distribution of lactate dehydrogenase LDH-1 and LDH-5 isoforms in the rat brain. Neuroscience, 2000, 96, 619-625.	2.3	67
126	Regulation of neuronâ€“astrocyte metabolic coupling across the sleepâ€“wake cycle. Neuroscience, 2016, 323, 135-156.	2.3	67

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127	Cloning, localization and induction of mouse brain glycogen synthase. Molecular Brain Research, 1996, 38, 191-199.	2.3	66
128	The HDAC inhibitor SAHA improves depressive-like behavior of CRTC1-deficient mice: Possible relevance for treatment-resistant depression. Neuropharmacology, 2016, 107, 111-121.	4.1	66
129	Improvement of Neuroenergetics by Hypertonic Lactate Therapy in Patients with Traumatic Brain Injury Is Dependent on Baseline Cerebral Lactate/Pyruvate Ratio. Journal of Neurotrauma, 2016, 33, 681-687.	3.4	66
130	Resistance to Diet-Induced Obesity and Associated Metabolic Perturbations in Haploinsufficient Monocarboxylate Transporter 1 Mice. PLoS ONE, 2013, 8, e82505.	2.5	66
131	Evidence for the role of EP HX2 gene variants in anorexia nervosa. Molecular Psychiatry, 2014, 19, 724-732.	7.9	65
132	Sustained sleep fragmentation affects brain temperature, food intake and glucose tolerance in mice. Journal of Sleep Research, 2013, 22, 3-12.	3.2	64
133	3D cellular reconstruction of cortical glia and parenchymal morphometric analysis from Serial Block-Face Electron Microscopy of juvenile rat. Progress in Neurobiology, 2019, 183, 101696.	5.7	64
134	The Strategic Location of Glycogen and Lactate: From Body Energy Reserve to Brain Plasticity. Frontiers in Cellular Neuroscience, 2019, 13, 82.	3.7	64
135	Sodium signaling and astrocyte energy metabolism. Glia, 2016, 64, 1667-1676.	4.9	61
136	VIP neurons in the cerebral cortex. Trends in Pharmacological Sciences, 1990, 11, 250-254.	8.7	60
137	Metabolic compartmentalization in the human cortex and hippocampus: evidence for a cell- and region-specific localization of lactate dehydrogenase 5 and pyruvate dehydrogenase. BMC Neuroscience, 2007, 8, 35.	1.9	60
138	Reactive Oxygen Species: Beyond Their Reactive Behavior. Neurochemical Research, 2021, 46, 77-87.	3.3	60
139	Dual-Gene, Dual-Cell Type Therapy against an Excitotoxic Insult by Bolstering Neuroenergetics. Journal of Neuroscience, 2004, 24, 6202-6208.	3.6	58
140	Quantitative RT-PCR Analysis of Uncoupling Protein Isoforms in Mouse Brain Cortex: Methodological Optimization and Comparison of Expression with Brown Adipose Tissue and Skeletal Muscle. Journal of Cerebral Blood Flow and Metabolism, 2004, 24, 780-788.	4.3	58
141	Inadequate brain glycogen or sleep increases spreading depression susceptibility. Annals of Neurology, 2018, 83, 61-73.	5.3	58
142	A_{2B} receptor activation promotes glycogen synthesis in astrocytes through modulation of gene expression. American Journal of Physiology - Cell Physiology, 2003, 284, C696-C704.	4.6	57
143	Expression of the monocarboxylate transporter MCT1 in the adult human brain cortex. Brain Research, 2006, 1070, 65-70.	2.2	57
144	Association study of 182 candidate genes in anorexia nervosa. American Journal of Medical Genetics Part B: Neuropsychiatric Genetics, 2010, 153B, 1070-1080.	1.7	57

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145	Patterns of calciumâ€binding proteins support parallel and hierarchical organization of human auditory areas. European Journal of Neuroscience, 2003, 17, 397-410.	2.6	56
146	Differential effects of pro- and anti-inflammatory cytokines alone or in combinations on the metabolic profile of astrocytes. Journal of Neurochemistry, 2011, 116, 564-576.	3.9	55
147	Astrocyteâ€“neuron co-culture on microchips based on the model of SOD mutation to mimic ALS. Integrative Biology (United Kingdom), 2013, 5, 964-975.	1.3	54
148	Regulation of Glycogen Metabolism in Astrocytes: Physiological, Pharmacological, and Pathological Aspects. , 1993, , 243-265.		54
149	Noradrenaline enhances monocarboxylate transporter 2 expression in cultured mouse cortical neurons via a translational regulation. Journal of Neurochemistry, 2003, 86, 1468-1476.	3.9	52
150	Prostaglandins and the synergism between VIP and noradrenaline in the cerebral cortex. Nature, 1987, 328, 637-640.	27.8	51
151	Precise in vivo genome editing via single homology arm donor mediated intron-targeting gene integration for genetic disease correction. Cell Research, 2019, 29, 804-819.	12.0	51
152	VIP and PACAP in the CNS: Regulators of Glial Energy Metabolism and Modulators of Glutamatergic Signalinga. Annals of the New York Academy of Sciences, 1998, 865, 213-225.	3.8	50
153	Vasoactive Intestinal Peptide and Pituitary Adenylate Cyclaseâ€Activating Polypeptide Potentiate câ€‹fos Expression Induced by Glutamate in Cultured Cortical Neurons. Journal of Neurochemistry, 1995, 65, 1-9.	3.9	50
154	International Brain Initiative: An Innovative Framework for Coordinated Global Brain Research Efforts. Neuron, 2020, 105, 212-216.	8.1	50
155	Transmitter mediated regulation of energy metabolism in nervous tissue at the cellular level. Neurochemistry International, 1986, 9, 1-10.	3.8	49
156	Î²â€Adrenergic Stimulation Promotes Homocysteic Acid Release from Astrocyte Cultures: Evidence for a Role of Astrocytes in the Modulation of Synaptic Transmission. Journal of Neurochemistry, 1997, 68, 2386-2394.	3.9	49
157	Early acquisition of typical metabolic features upon differentiation of mouse neural stem cells into astrocytes. Glia, 2004, 46, 8-17.	4.9	49
158	A New Outlook on Mental Illnesses: Glial Involvement Beyond the Glue. Frontiers in Cellular Neuroscience, 2015, 9, 468.	3.7	49
159	Glycogen metabolism and the homeostatic regulation of sleep. Metabolic Brain Disease, 2015, 30, 263-279.	2.9	49
160	Dysregulation of soluble epoxide hydrolase and lipidomic profiles in anorexia nervosa. Molecular Psychiatry, 2016, 21, 537-546.	7.9	49
161	Hypertonic Lactate to Improve Cerebral Perfusion and Glucose Availability After Acute Brain Injury*. Critical Care Medicine, 2018, 46, 1649-1655.	0.9	49
162	VIP neurons in the neocortex. Trends in Neurosciences, 1985, 8, 7-8.	8.6	48

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163	VIP receptor subtypes in mouse cerebral cortex: evidence for a differnntial localization in astrocytes, microvessels and synaptosomal membranes. Brain Research, 1992, 587, 1-12.	2.2	48
164	Noradrenaline Increases Kâ€conductance and Reduces Glutamatergic Transmission in the Mouse Entorhinal Cortex by Activation of Î±₂â€Adrenoreceptors. European Journal of Neuroscience, 1995, 7, 2370-2378.	2.6	48
165	Label-free second-harmonic phase imaging of biological specimen by digital holographic microscopy. Optics Letters, 2010, 35, 4102.	3.3	48
166	Involvement of the agmatinergic system in the depressive-like phenotype of the Crtc1 knockout mouse model of depression. Translational Psychiatry, 2016, 6, e852-e852.	4.8	48
167	Spatially-Resolved Eigenmode Decomposition of Red Blood Cells Membrane Fluctuations Questions the Role of ATP in Flickering. PLoS ONE, 2012, 7, e40667.	2.5	48
168	Genes Involved in the Astrocyte-Neuron Lactate Shuttle (ANLS) Are Specifically Regulated in Cortical Astrocytes Following Sleep Deprivation in Mice. Sleep, 2013, 36, 1445-1458.	1.1	47
169	Norepinephrine stimulates glycogenolysis in astrocytes to fuel neurons with lactate. PLoS Computational Biology, 2018, 14, e1006392.	3.2	47
170	BDNF stimulates expression, activity and release of tissue-type plasminogen activator in mouse cortical neurons. European Journal of Neuroscience, 1999, 11, 1639-1646.	2.6	46
171	Developmental and Hormonal Regulation of the Monocarboxylate Transporter 2 (MCT2) Expression in the Mouse Germ Cells1. Biology of Reproduction, 2003, 69, 1069-1078.	2.7	46
172	Opposite Regulation of Calbindin and Calretinin Expression by Brain-Derived Neurotrophic Factor in Cortical Neurons. Journal of Neurochemistry, 2008, 74, 1870-1877.	3.9	45
173	Dopamine receptors in bovine retina: Characterization of the 3H-spiroperidol binding and its use for screening dopamine receptor affinity of drugs. Life Sciences, 1979, 25, 1675-1685.	4.3	44
174	Brain Energy Metabolism. , 2013, , 1591-1620.		44
175	Vasoactive intestinal peptide binding sites and fibers in the brain of the pigeonColumba livia: An autoradiographic and immunohistochemical study. Journal of Comparative Neurology, 1991, 305, 393-411.	1.6	43
176	Stimulation-Induced Increases of Astrocytic Oxidative Metabolism in Rats and Humans Investigated with 1-¹¹C-Acetate. Journal of Cerebral Blood Flow and Metabolism, 2009, 29, 44-56.	4.3	43
177	High throughput second harmonic imaging for label-free biological applications. Optics Express, 2014, 22, 31102.	3.4	43
178	Associations Between Attention-Deficit/Hyperactivity Disorder and Various Eating Disorders: A Swedish Nationwide Population Study Using Multiple Genetically Informative Approaches. Biological Psychiatry, 2019, 86, 577-586.	1.3	43
179	Adenosine triphosphate and arachidonic acid stimulate glycogenolysis in primary cultures of mouse cerebral cortical astrocytes. Neuroscience Letters, 1995, 188, 109-112.	2.1	42
180	Low-Cost Travel in Neurons. Science, 2009, 325, 1349-1351.	12.6	42

#	Article	IF	Citations
181	Influence ofCRTC1Polymorphisms on Body Mass Index and Fat Mass in Psychiatric Patients and the General Adult Population. JAMA Psychiatry, 2013, 70, 1011.	11.0	42
182	Metabolic Response of the Cerebral Cortex Following Gentle Sleep Deprivation and Modafinil Administration. Sleep, 2010, 33, 901-908.	1.1	40
183	Perinatal and early postnatal changes in the expression of monocarboxylate transporters MCT1 and MCT2 in the rat forebrain. Journal of Comparative Neurology, 2003, 465, 445-454.	1.6	39
184	Increased activation in Broca's area after cognitive remediation in schizophrenia. Psychiatry Research - Neuroimaging, 2014, 221, 204-209.	1.8	39
185	Metabolic gene expression changes in astrocytes in Multiple Sclerosis cerebral cortex are indicative of immune-mediated signaling. Brain, Behavior, and Immunity, 2015, 48, 313-325.	4.1	39
186	International perspectives on engaging the public in neuroethics. Nature Reviews Neuroscience, 2005, 6, 977-982.	10.2	38
187	Mouse fertility is not dependent on the CREB coactivator Crtc1. Nature Medicine, 2009, 15, 989-990.	30.7	38
188	Simultaneous Optical Recording in Multiple Cells by Digital Holographic Microscopy of Chloride Current Associated to Activation of the Ligand-Gated Chloride Channel GABAA Receptor. PLoS ONE, 2012, 7, e51041.	2.5	38
189	Trans-inhibition of glutamate transport prevents excitatory amino acid-induced glycolysis in astrocytes. Brain Research, 1999, 850, 39-46.	2.2	37
190	Roadmap on Digital Holography-Based Quantitative Phase Imaging. Journal of Imaging, 2021, 7, 252.	3.0	37
191	Autoradiographic analysis of the distribution of vasoactive intestinal peptide binding sites in the vertebrate central nervous system: a phylogenetic study. Brain Research, 1990, 520, 14-26.	2.2	36
192	Genetic Association of Recovery from Eating Disorders: The Role of GABA Receptor SNPs. Neuropsychopharmacology, 2011, 36, 2222-2232.	5.4	36
193	The psychostimulant modafinil enhances gap junctional communication in cortical astrocytes. Neuropharmacology, 2013, 75, 533-538.	4.1	36
194	Abstractocyte: A Visual Tool for Exploring Nanoscale Astroglial Cells. IEEE Transactions on Visualization and Computer Graphics, 2018, 24, 853-861.	4.4	36
195	Prostanoids and their role in cell-cell interactions in the central nervous system. Neurochemistry International, 1991, 18, 303-322.	3.8	35
196	Expression of brain-derived neurotrophic factor is not modulated by chronic mild stress in the rat hippocampus and amygdala. Pharmacological Reports, 2008, 60, 1001-7.	3.3	34
197	Hypocretin/orexin deficiency decreases cocaine abuse liability. Neuropharmacology, 2018, 133, 395-403.	4.1	33
198	VIP- and glucagon-induced formation of cyclic AMP in intact retinae in vitro. European Journal of Pharmacology, 1981, 71, 131-133.	3.5	32

#	Article	IF	Citations
199	Patterns of calcium-binding proteins in human inferior colliculus: identification of subdivisions and evidence for putative parallel systems. Neuroscience, 2003, 116, 1111-1121.	2.3	32
200	Comparison of the effects of modafinil and sleep deprivation on sleep and cortical EEG spectra in mice. Neuropharmacology, 2002, 43, 110-118.	4.1	31
201	Long-term modulation of glucose utilization by IL-1Î± and TNF-Î± in astrocytes: Na+pump activity as a potential target via distinct signaling mechanisms. Glia, 2002, 39, 10-18.	4.9	31
202	Glycogen: a Trojan horse for neurons. Nature Neuroscience, 2007, 10, 1341-1342.	14.8	31
203	Absence of association between specific common variants of the obesityâ€related FTO gene and psychological and behavioral eating disorder phenotypes. American Journal of Medical Genetics Part B: Neuropsychiatric Genetics, 2011, 156, 454-461.	1.7	31
204	Goals in Nutrition Science 2015â€“2020. Frontiers in Nutrition, 2015, 2, 26.	3.7	31
205	Regulation of Neurotrophic Factors and Energy Metabolism by Antidepressants in Astrocytes. Current Drug Targets, 2013, 14, 1308-1321.	2.1	31
206	Morphological and functional correlates of VIP neurons in cerebral cortex. Peptides, 1984, 5, 213-218.	2.4	30
207	Association of Candidate Genes with Phenotypic Traits Relevant to Anorexia Nervosa. European Eating Disorders Review, 2011, 19, 487-493.	4.1	30
208	Digital Reconstruction of the Neuro-Glia-Vascular Architecture. Cerebral Cortex, 2021, 31, 5686-5703.	2.9	30
209	The effects of VIP on cyclic AMP and glycogen levels in vertebrate retina. Peptides, 1984, 5, 295-298.	2.4	29
210	A preclinical model for identifying rats at risk of alcohol use disorder. Scientific Reports, 2017, 7, 9454.	3.3	29
211	Accumulation of Cyclic AMP Elicited by Vasoactive Intestinal Peptide Is Potentiated by Noradrenaline, Histamine, Adenosine, Baclofen, Phorbol Esters, and Ouabain in Mouse Cerebral Cortical Slices: Studies on the Role of Arachidonic Acid Metabolites and Protein Kinase C. Journal of Neurochemistry, 1989, 53, 1941-1951.	3.9	28
212	Vasoactive Intestinal Peptide (VIP) and Pituitary Adenylate Cyclase-activating Polypeptide (PACAP) Potentiate the Glutamate-evoked Release of Arachidonic Acid from Mouse Cortical Neurons. Journal of Biological Chemistry, 1996, 271, 23705-23710.	3.4	28
213	Effects of glial glutamate transporter inhibitors on intracellular Na+ in mouse astrocytes. Brain Research, 2001, 893, 46-52.	2.2	28
214	Hypoxia/hypoglycemia preconditioning prevents the loss of functional electrical activity in organotypic slice cultures. Brain Research, 2005, 1051, 117-122.	2.2	28
215	Shared genetic risk between eating disorderâ€and substanceâ€useâ€related phenotypes: Evidence from genomeâ€wide association studies. Addiction Biology, 2021, 26, e12880.	2.6	28
216	Brain-derived neurotrophic factor stimulates phosphorylation of stathmin in cortical neurons. Molecular Brain Research, 1997, 51, 220-228.	2.3	27

#	Article	IF	Citations
217	AMPA/kainate receptor activation blocks K+ currents via internal Na+ increase in mouse cultured stellate astrocytes. , 1997, 20, 38-50.		27
218	Induction of brain aquaporin 9 (AQP9) in catecholaminergic neurons in diabetic rats. Brain Research, 2008, 1188, 17-24.	2.2	27
219	Alteration of brain glycogen turnover in the conscious rat after 5h of prolonged wakefulness. Neurochemistry International, 2009, 55, 45-51.	3.8	27
220	Role of adult hippocampal neurogenesis in the antidepressant actions of lactate. Molecular Psychiatry, 2021, 26, 6723-6735.	7.9	27
221	Brain energy metabolism in Alzheimerâ€™s disease: 99mTc-HMPAO SPECT imaging during verbal fluency and role of astrocytes in the cellular mechanism of 99mTc-HMPAO retention. Brain Research Reviews, 2001, 36, 230-240.	9.0	26
222	Glycogen Metabolism as a Marker of Astrocyte Differentiation. Journal of Cerebral Blood Flow and Metabolism, 2010, 30, 51-55.	4.3	26
223	Control of Mitochondrial pH by Uncoupling Protein 4 in Astrocytes Promotes Neuronal Survival. Journal of Biological Chemistry, 2014, 289, 31014-31028.	3.4	26
224	Neuroenergetic Response to Prolonged Cerebral Glucose Depletion after Severe Brain Injury and the Role of Lactate. Journal of Neurotrauma, 2015, 32, 1560-1566.	3.4	26
225	The role of leptin, melanocortin, and neurotrophin system genes on body weight in anorexia nervosa and bulimia nervosa. Journal of Psychiatric Research, 2014, 55, 77-86.	3.1	25
226	A Process for Digitizing and Simulating Biologically Realistic Oligocellular Networks Demonstrated for the Neuro-Glio-Vascular Ensemble. Frontiers in Neuroscience, 2018, 12, 664.	2.8	25
227	Pharmacological studies of voltage-sensitive Ca2+-channels involved in the release of vasoactive intestinal peptide evoked by K+ in mouse cerebral cortical slices. Neuroscience, 1989, 30, 423-431.	2.3	24
228	The astrocyte-mediated coupling between synaptic activity and energy metabolism operates through volume transmission. Progress in Brain Research, 2000, 125, 229-240.	1.4	24
229	Astrocytes as a Predominant Cellular Site of ^{99m}Tc-HMPAO Retention. Journal of Cerebral Blood Flow and Metabolism, 2001, 21, 456-468.	4.3	24
230	Distribution of the monocarboxylate transporter MCT2 in human cerebral cortex: An immunohistochemical study. Brain Research, 2008, 1226, 61-69.	2.2	24
231	Brain Energy Metabolism. , 2013, , 261-284.		24
232	Sustained Sleep Fragmentation Induces Sleep Homeostasis in Mice. Sleep, 2015, 38, 567-579.	1.1	24
233	A Novel Method for In Vitro Production of Human Glial-Like Cells from Neurosurgical Resection Tissue. Laboratory Investigation, 2002, 82, 809-812.	3.7	23
234	Glucose and lactate are equally effective in energizing activity-dependent synaptic vesicle turnover in purified cortical neurons. Neuroscience, 2006, 141, 157-165.	2.3	23

#	Article	IF	Citations
235	C/EBPÎ² couples dopamine signalling to substance P precursor gene expression in striatal neurones. Journal of Neurochemistry, 2006, 98, 1390-1399.	3.9	23
236	Noradrenaline reduces synaptic responses in normal and tottering mouse entorhinal cortex via Î±2 receptors. Neuroscience Letters, 1994, 179, 145-148.	2.1	22
237	Altered Glycogen Metabolism in Cultured Astrocytes from Mice with Chronic Glutathione Deficit; Relevance for Neuroenergetics in Schizophrenia. PLoS ONE, 2011, 6, e22875.	2.5	22
238	Vasoactive Intestinal Peptide as a Mediator of Intercellular Communication in the Cerebral Cortex. Release, Receptors, Actions, and Interactions with Norepinephrine. Annals of the New York Academy of Sciences, 1988, 527, 110-129.	3.8	21
239	Metabolic Activation Pattern of Distinct Hippocampal Subregions during Spatial Learning and Memory Retrieval. Journal of Cerebral Blood Flow and Metabolism, 2006, 26, 468-477.	4.3	21
240	Role of MCT1 and CAII in skeletal muscle pH homeostasis, energetics, and function:in vivoinsights from MCT1 haploinsufficient mice. FASEB Journal, 2017, 31, 2562-2575.	0.5	21
241	Ampakinetm CX546 bolsters energetic response of astrocytes: a novel target for cognitive-enhancing drugs acting as alpha-amino-3-hydroxy-5-methyl-4-isoxazolepropionic acid (AMPA) receptor modulators. Journal of Neurochemistry, 2005, 92, 668-677.	3.9	20
242	The human CFTR protein expressed in CHO cells activates an aquaporin 3 in a cAMP dependent pathway: study by Digital Holographic Microscopy. Journal of Cell Science, 2014, 127, 546-56.	2.0	20
243	Imaging brain aerobic glycolysis as a marker of synaptic plasticity. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 7015-7016.	7.1	20
244	Brain glycogen metabolism: A possible link between sleep disturbances, headache and depression. Sleep Medicine Reviews, 2021, 59, 101449.	8.5	20
245	Intercellular communication mediated by VIP in the cerebral cortex. Peptides, 1986, 7, 169-173.	2.4	19
246	Regulation of Astrocyte Energy Metabolism by Neurotransmitters. Kidney and Blood Pressure Research, 1994, 17, 168-171.	2.0	19
247	Thrombin-induced ischemic tolerance is prevented by inhibiting c-jun N-terminal kinase. Brain Research, 2007, 1148, 217-225.	2.2	19
248	The homeostatic psyche: Freudian theory and somatic markers. Journal of Physiology (Paris), 2010, 104, 272-278.	2.1	19
249	Effect of 6-hydroxydopamine lesions on norepinephrine-induced [3H]glycogen hydrolysis in mouse cortical slices. Brain Research, 1983, 261, 159-162.	2.2	18
250	IL-1-Alpha and TNF-Alpha Differentially Regulate CD4 and Mac-1 Expression in Mouse Microglia. NeuroImmunoModulation, 1998, 5, 42-52.	1.8	18
251	Cryopreservation of human brain tissue allowing timely production of viable adult human brain cells for autologous transplantation. Cryobiology, 2003, 47, 179-183.	0.7	18
252	Protein targeting to glycogen is a master regulator of glycogen synthesis in astrocytes. IBRO Reports, 2016, 1, 46-53.	0.3	18

#	Article	IF	Citations
253	l-Lactate: Food for Thoughts, Memory and Behavior. Metabolites, 2021, 11, 548.	2.9	18
254	Synaptic Plasticity and the Warburg Effect. Cell Metabolism, 2014, 19, 4-5.	16.2	17
255	GLAM: Glycogen-derived Lactate Absorption Map for visual analysis of dense and sparse surface reconstructions of rodent brain structures on desktop systems and virtual environments. Computers and Graphics, 2018, 74, 85-98.	2.5	17
256	Gut microbiota modulates expression of genes involved in the astrocyte-neuron lactate shuttle in the hippocampus. European Neuropsychopharmacology, 2020, 41, 152-159.	0.7	17
257	The Subjective Sensation of Synchrony: An Experimental Study. PLoS ONE, 2016, 11, e0147008.	2.5	17
258	Ganglioside GM1 Targets Astrocytes to Stimulate Cerebral Energy Metabolism. Frontiers in Pharmacology, 2021, 12, 653842.	3.5	16
259	Influence of MCHR2 and MCHR2-AS1 Genetic Polymorphisms on Body Mass Index in Psychiatric Patients and In Population-Based Subjects with Present or Past Atypical Depression. PLoS ONE, 2015, 10, e0139155.	2.5	16
260	Noradrenergic sub-sensitivity in the cerebral cortex of the tottering mouse, a spontaneously epileptic mutant. Brain Research, 1987, 403, 181-185.	2.2	15
261	Stimulation by nicotine of enteric inhibitory nerves and release of vasoactive intestinal peptide in the taenia of the guinea-pig caecum. European Journal of Pharmacology, 1988, 148, 179-186.	3.5	15
262	Stable transfection of cDNAs targeting specific steps of glycogen metabolism supports the existence of active gluconeogenesis in mouse cultured astrocytes. Glia, 2002, 37, 379-382.	4.9	15
263	Embodied memory: unconscious smiling modulates emotional evaluation of episodic memories. Frontiers in Psychology, 2015, 6, 650.	2.1	15
264	Lactate release from astrocytes to neurons contributes to cocaine memory formation. BioEssays, 2016, 38, 1266-1273.	2.5	15
265	Extended preclinical investigation of lactate for neuroprotection after ischemic stroke. Clinical and Translational Neuroscience, 2020, 4, 2514183X2090457.	0.9	15
266	High- and low-affinity binding sites for vasoactive intestinal peptide (VIP) in the rat kidney revealed by light microscopic autoradiography. Regulatory Peptides, 1988, 23, 145-152.	1.9	14
267	Immunocytochemical expression of monocarboxylate transporters in the human visual cortex at midgestation. Developmental Brain Research, 2004, 148, 69-76.	1.7	14
268	Regulation by Neurotransmitters of Glial Energy Metabolism. Advances in Experimental Medicine and Biology, 1997, 429, 137-143.	1.6	14
269	Differential effect of thyroid hormone deficiency on the growth of calretinin-expressing neurons in rat spinal cord and dorsal root ganglia. Journal of Comparative Neurology, 2000, 426, 519-533.	1.6	13
270	Sleep fragmentation alters brain energy metabolism without modifying hippocampal electrophysiological response to novelty exposure. Journal of Sleep Research, 2016, 25, 583-590.	3.2	13

#	Article	IF	Citations
271	Differential effects of benzamides and thioxanthenes on dopamine-elicited accumulation of cyclic AMP in isolated rabbit retina. Naunyn-Schmiedeberg's Archives of Pharmacology, 1978, 303, 189-191.	3.0	12
272	Impact of HSD11B1 polymorphisms on BMI and components of the metabolic syndrome in patients receiving psychotropic treatments. Pharmacogenetics and Genomics, 2015, 25, 246-258.	1.5	12
273	Gender-specific alteration of energy balance and circadian locomotor activity in the Crtc1 knockout mouse model of depression. Translational Psychiatry, 2017, 7, 1269.	4.8	12
274	An investigation of indirect effects of personality features on anorexia nervosa severity through interoceptive dysfunction in individuals with lifetime anorexia nervosa diagnoses. International Journal of Eating Disorders, 2019, 52, 200-205.	4.0	12
275	Regulation of Gene Expression by Neurotransmitters in the Central Nervous System. European Neurology, 1998, 39, 129-134.	1.4	11
276	DHM (Digital Holography Microscope) for imaging cells. Journal of Physics: Conference Series, 2007, 61, 1317-1321.	0.4	11
277	Hypertonic lactate and the injured brain: facts and the potential for positive clinical implications. Intensive Care Medicine, 2014, 40, 920-921.	8.2	11
278	Chapter 12 Vasoactive intestinal peptide and noradrenaline regulate energy metabolism in astrocytes: a physiological function in the control of local homeostasis within the CNS. Progress in Brain Research, 1994, 100, 87-93.	1.4	10
279	Assessing multiple sclerosis activity: is the in vitro production of tumor necrosis factor-Î±, interleukins 2, 6, 4, and 10, and immunoglobulin G of value?. Journal of Neurology, 1999, 246, 1041-1050.	3.6	10
280	In Vivo Measurement of Glucose Utilization in Rats using a Î²-Microprobe: Direct Comparison with Autoradiography. Journal of Cerebral Blood Flow and Metabolism, 2004, 24, 1015-1024.	4.3	10
281	Memory Reconsolidation, Trace Reassociation and the Freudian Unconscious. , 2013, , 293-312.		10
282	A Motion Capture Study to Measure the Feeling of Synchrony in Romantic Couples and in Professional Musicians. Frontiers in Psychology, 2016, 7, 1673.	2.1	10
283	Interactive Volumetric Visual Analysis of Glycogenâ€derived Energy Absorption in Nanometric Brain Structures. Computer Graphics Forum, 2019, 38, 427-439.	3.0	10
284	Lactate measurement by neurochemical profiling in the dorsolateral prefrontal cortex at 7T: accuracy, precision, and relaxation times. Magnetic Resonance in Medicine, 2020, 83, 1895-1908.	3.0	10
285	From the Principle of Inertia to the Death Drive: The Influence of the Second Law of Thermodynamics on the Freudian Theory of the Psychical Apparatus. Frontiers in Psychology, 2020, 11, 325.	2.1	10
286	InShaDe: Invariant Shape Descriptors for visual 2D and 3D cellular and nuclear shape analysis and classification. Computers and Graphics, 2021, 98, 105-125.	2.5	10
287	Common Genetic Variation and Age of Onset of Anorexia Nervosa. Biological Psychiatry Global Open Science, 2022, 2, 368-378.	2.2	10
288	Modulation of VIP-Stimulated cAMP Formation by Excitatory Amino Acids in Mouse Cerebral Cortex. European Journal of Neuroscience, 1990, 2, 525-533.	2.6	9

#	Article	IF	Citations
289	‹title›Digital holography applied to microscopy‹/title›. , 2002, , .		9
290	Chloramphenicol decreases brain glucose utilization and modifies the sleep-wake cycle architecture in rats. Journal of Neurochemistry, 2005, 93, 1623-1632.	3.9	9
291	Functional imaging studies of cognition using 99mTc-HMPAO SPECT: empirical validation using the n-back working memory paradigm. European Journal of Nuclear Medicine and Molecular Imaging, 2008, 35, 695-703.	6.4	9
292	Complex regulation of CREB-binding protein by homeodomain-interacting protein kinase 2. Cellular Signalling, 2015, 27, 2252-2260.	3.6	9
293	Virtual reality framework for editing and exploring medial axis representations of nanometric scale neural structures. Computers and Graphics, 2020, 91, 12-24.	2.5	9
294	High potency of the orally-active NMDA-receptor antagonist CGP 40 116 in inhibiting excitatory postsynaptic potentials of rat basolateral amygdala neurones in vitro. Neuropharmacology, 1997, 36, 1555-1559.	4.1	8
295	Empiricism and Rationalism: Two Paths toward the Same Goal. Journal of Cerebral Blood Flow and Metabolism, 2004, 24, 1240-1241.	4.3	8
296	Investigation of Dopamine Content, Synthesis, and Release in the Rabbit Retina In Vitro: II. Effects of High Potassium, Adenylate Cyclase Activators, and ‹i›Nâ€n‹/i›â€Propylâ€3â€(3â€Hydroxyphenyl) Piperidine. Journal of Neurochemistry, 1986, 47, 1207-1213.	3.9	8
297	Characterization of genetic variation in the VGLL4 gene in anorexia nervosa. Psychiatric Genetics, 2014, 24, 183-184.	1.1	8
298	The Epistemological Foundations of Freudâ€™s Energetics Model. Frontiers in Psychology, 2018, 9, 1861.	2.1	8
299	Brain Energy Metabolism. , 2004, , 67-89.		7
300	Hydroxycarboxylic Acid Receptor 1 and Neuroprotection in a Mouse Model of Cerebral Ischemia-Reperfusion. Frontiers in Physiology, 2021, 12, 689239.	2.8	7
301	Actions of VIP, hGRF, PHI and secretin: Comparative studies in cerebral cortex and adenohypophysis. Peptides, 1986, 7, 175-180.	2.4	6
302	A Role for Lactate in the Consolidation of Drug-Related Associative Memories. Biological Psychiatry, 2016, 79, 875-877.	1.3	6
303	At the Heart of Genome Editing and Cardiovascular Diseases. Circulation Research, 2018, 123, 221-223.	4.5	6
304	Coupling of Cerebral Blood Flow and Metabolism. , 1997, , 70-75.		6
305	Cellular Mechanisms of Brain Energy Metabolism. , 2011, , 123-146.		6
306	Stable transfection of cDNAs targeting specific steps of glycogen metabolism supports the existence of active gluconeogenesis in mouse cultured astrocytes. Glia, 2002, 37, 379-82.	4.9	6

#	Article	IF	Citations
307	JULIDE: A Software Tool for 3D Reconstruction and Statistical Analysis of Autoradiographic Mouse Brain Sections. PLoS ONE, 2010, 5, e14094.	2.5	5
308	Association of PCK1 with Body Mass Index and Other Metabolic Features in Patients With Psychotropic Treatments. Journal of Clinical Psychopharmacology, 2015, 35, 544-552.	1.4	5
309	Glutamate Cysteine Ligaseâ€"Modulatory Subunit Knockout Mouse Shows Normal Insulin Sensitivity but Reduced Liver Glycogen Storage. Frontiers in Physiology, 2016, 7, 142.	2.8	5
310	Impact of MCT1 Haploinsufficiency on the Mouse Retina. Advances in Experimental Medicine and Biology, 2018, 1074, 375-380.	1.6	5
311	Neuroscience without borders: Preserving the history of neuroscience. European Journal of Neuroscience, 2018, 48, 2099-2109.	2.6	5
312	The increase in cyclic-AMP levels elicited by vasoactive intestinal peptide (VIP) in mouse cerebral cortical slices is potentiated by ergot alkaloids. Neurochemistry International, 1984, 6, 751-753.	3.8	4
313	Shape analysis of 3D nanoscale reconstructions of brain cell nuclear envelopes by implicit and explicit parametric representations. Computers and Graphics: X, 2019, 1, 100004.	0.6	4
314	A Method for 3D Reconstruction and Virtual Reality Analysis of Glial and Neuronal Cells. Journal of Visualized Experiments, 2019, , .	0.3	4
315	Interoception Disorder and Insular Cortex Abnormalities in Schizophrenia: A New Perspective Between Psychoanalysis and Neuroscience. Frontiers in Psychology, 2021, 12, 628355.	2.1	4
316	PlasticitÃ© neuronaleÂ: les traces et leurs destins. , 2017, , 19-46.		4
317	Effects of dobutamine on cyclic AMP accumulation induced by the stimulation of dopamine receptors in rabbit retina in vitro. Experientia, 1980, 36, 1108-1110.	1.2	3
318	Effects of ethanol on VIP- and/or noradrenaline-stimulated cAMP formation in mouse brain. Alcohol, 1988, 5, 445-449.	1.7	3
319	Regional Distribution of Vasoactive Intestinal Peptide Immunoreactivity in the Brain of Salmon, Trout and Carp. NeuroSignals, 1995, 4, 86-93.	0.9	3
320	Ocular mitochondrial myopathy evolving late in life into a disabling proximal myopathy associated with the mitochondrial DNA 3243 A to G mutation. Journal of Neurology, 2001, 248, 332-333.	3.6	3
321	Digital holographic microscopy: a new optical imaging technique to investigate cellular dynamics. , 2006, , .		3
322	Dual-wavelength Digital Holography for quantification of cell volume and integral refractive index (RI). , 2011, , .		3
323	Exploring Neural Cell Dynamics with Digital Holographic Microscopy. , 2013, , .		3
324	Adding large EM stack support. , 2016, , .		3

#	Article	IF	Citations
325	Three-dimensional immersive virtual reality for studying cellular compartments in 3D models from EM preparations of neural tissues. Journal of Comparative Neurology, 2016, 524, Spc1-Spc1.	1.6	3
326	WHOLE GENOME SEQUENCE ANALYSIS OF A COUSIN PAIR WITH RESTRICTING ANOREXIA NERVOSA. European Neuropsychopharmacology, 2019, 29, S977-S978.	0.7	3
327	Excitation states of metabolic networks predict dose-response fingerprinting and ligand pulse phase signalling. Journal of Theoretical Biology, 2020, 487, 110123.	1.7	3
328	Proâ€inflammatory cytokines induce the transcription factors C/EBPÎ² and C/EBPÎ´ in astrocytes. Glia, 2000, 29, 91-97.	4.9	3
329	1. Preface. Epilepsy Research, 1991, 10, 1-2.	1.6	2
330	Exploring red blood cell membrane dynamics with digital holographic microscopy. , 2010, , .		2
331	Cell death detection and ionic homeostasis monitoring with digital holographic microscopy. , 2011, , .		2
332	Quantitative measurement of absolute cell volume and intracellular integral refractive index (RI) with dual-wavelength digital holographic microscopy (DHM). Proceedings of SPIE, 2012, , .	0.8	2
333	A Historical Review of Diachrony and Semantic Dimensions of Trace in Neurosciences and Lacanian Psychoanalysis. Frontiers in Psychology, 2017, 8, 734.	2.1	2
334	Noradrenergic System and Memory. , 2017, , 183-200.		2
335	Forget About Electron Micrographs: A Novel Guide for Using for Quantitative Analysis of Dense Reconstructions. Neuromethods, 2020, , 263-304.	0.3	2
336	The Central Role of Astrocytes in Neuroenergetics. , 2004, , 367-376.		2
337	Cell biology explored with Digital Holographic Microscopy. , 2008, , .		2
338	Virtual environment for processing medial axis representations of 3D nanoscale reconstructions of brain cellular structures. , 2019, , .		2
339	How lactate links cannabis to social behaviour. Nature, 2020, 583, 526-527.	27.8	2
340	Representing stimulus information in an energy metabolism pathway. Journal of Theoretical Biology, 2022, 540, 111090.	1.7	2
341	Potentiation of apomorphine-induced climbing behaviour in mice by d-LSD. Progress in Neuro-Psychopharmacology & Biological Psychiatry, 1979, 3, 503-511.	0.6	1
342	Age-dependent supersensitivity to the glycogenolytic effect of K+ in the cerebral cortex of the spontaneously epileptic quaking mouse mutant. Developmental Brain Research, 1989, 46, 107-113.	1.7	1

#	Article	IF	Citations
343	Prostaglandins and the ?1-Adrenergic Potentiation of Neurotransmitter-Stimulated Cyclic AMP Formation in Mouse Cerebral Cortex. Journal of Neurochemistry, 1990, 54, 1082-1083.	3.9	1
344	Role of astrocytes in coupling synaptic activity to glucose utilization. International Congress Series, 2002, 1235, 189-196.	0.2	1
345	Progress and perspectives in digital holographic microscopy applied to life sciences. , 2010, , .		1
346	An introduction to the International Brain Research Organization: IBRO's beginnings. Neurology, 2012, 79, 1496-1498.	1.1	1
347	Study of Intracellular Ion Dynamics with a Multimodality Approach Combining Epifluorescence and Digital Holographic Microscopy. , 2010, , .		1
348	Cell Death and Ionic Regulation Detection with Digital Holographic Microscopy. , 2011, , .		1
349	Brain Energy and Metabolism. , 2016, , 1879-1909.		1
350	Biochemical Approaches to the Study of Peptide Actions. , 1987, , 245-298.		0
351	Introduction. Developmental Neuroscience, 1998, 20, 289-290.	2.0	0
352	Chapter II Brain PACAP/VIP receptors: regional distribution, functional properties and physiological relevance. Handbook of Chemical Neuroanatomy, 2000, 16, 45-77.	0.3	0
353	Digital holographic microscopy applied to metrology. , 2004, , .		0
354	Digital Holographic Microscopy (DHM). Imaging & Microscopy, 2006, 8, 46-48.	0.1	0
355	Non-invasive dry mass determination and monitoring at the single cell level with digital holographic microscopy. Proceedings of SPIE, 2008, , .	0.8	0
356	Measuring biophysical properties of living cells with digital holographic microscopy. , 2011, , .		0
357	Digital holographic microscopy applied to neurociences. , 2012, , .		0
358	Super-resolution Phase Tomography. , 2013, , .		0
359	Exploring cell structure, dynamics and homeostasis with a multimodal microscopy approach based on digital holographic microscopy: towards identifying early biomarkers of cell viability and cytotoxicity. , 2018, , .		0
360	Lactate enhances NMDA receptor responses via two distinct mechanisms. IBRO Reports, 2019, 6, S397-S398.	0.3	0

#	Article	IF	Citations
361	Brain Energy Metabolism: Cellular Aspects and Relevance to Functional Brain Imaging. , 2001, , 203-209.		0
362	Effects of pro-inflammatory cytokines and beta-amyloid peptide on glucose metabolism in primary cultures of astrocytes. Journal of Cerebral Blood Flow and Metabolism, 2005, 25, S74-S74.	4.3	0
363	The central role of astrocytes in neurometabolic coupling: A decade's perspective. Journal of Cerebral Blood Flow and Metabolism, 2005, 25, S71-S71.	4.3	0
364	Quantitative measurements of dynamic cell morphometry and intracellular integral refractive index with Digital holographic microscopy. , 2006, , .		0
365	Simultaneous cell morphometry and refractive index measurement with dual-wavelength Digital Holographic Microscopy. , 2008, , .		0
366	Exploring cell dynamics with Digital Holographic Microscopy. , 2009, , .		0
367	Early Glutamate-mediated Cell Death Detection with Digital Holographic Microscopy. , 2011, , .		0
368	Interactions between Vasoactive Intestinal Peptide and Norepinephrine, Ergot Alkaloids and Prostanoids in Mouse Cerebral Cortex. , 1987, , 272-283.		0
369	Interactions between Vasoactive Intestinal Peptide and Norepinephrine, Ergot Alkaloids and Prostanoids in Mouse Cerebral Cortex. , 1987, , 272-283.		0
370	Release of vasoactive intestinal peptide (VIP) in mouse neocortex: Ca2+-channels subtypes and involvement of arachidonic acid metabolites. Progress in Cell Research, 1990, 1, 49-60.	0.3	0
371	Exploring living neuronal network dynamics and homeostasis with multimodal digital holographic microscopy: towards identifying early biomarkers for neurodevelopmental disorders. , 2019, , .		0
372	Le symptÃ´me entre neurosciences et psychanalyse. ActualitÃ© de lâ€™au-delÃ du principe de plaisir. Figures De La Psychanalyse, 2020, nÂ° 40, 101-110.	0.0	0