

CITATION REPORT

List of articles citing

ATP and brain function

DOI: 10.1038/jcbfm.1989.2

Journal of Cerebral Blood Flow and Metabolism, 1989,
9, 2-19.

Source: <https://exaly.com/paper-pdf/20713848/citation-report.pdf>

Version: 2024-04-28

This report has been generated based on the citations recorded by exaly.com for the above article. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

#	Paper	IF	Citations
709	Brain oxygenation: monitoring techniques and insights into brain function and survival. 1989 , 3, 647-674		1
708	Glycolysis-induced discordance between glucose metabolic rates measured with radiolabeled fluorodeoxyglucose and glucose. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 1989 , 9, 774-85	7.3	129
707	Venn diagrams and neuronal vulnerability. 1989 , 10, 613-4; discussion 618-20		1
706	Excitatory amino acids and Alzheimer's disease: idle thoughts on an exciting subject. 1989 , 10, 614-6; discussion 618-20		2
705	Elementary aspects of acid-base permeation and pH regulation. 1989 , 574, 333-53		8
704	Neuronal glutamine utilization: glutamine/glutamate homeostasis in synaptosomes. 1990 , 54, 2057-69		53
703	Phosphorylase alpha and labile metabolites during anoxia: correlation to membrane fluxes of K ⁺ and Ca ²⁺ . 1990 , 55, 1690-6		52
702	Application and validation of an ion-exchange high-performance liquid chromatographic method for measuring adenine nucleotides, creatine and creatine phosphate in mouse brain. 1990 , 527, 31-9		13
701	Cortical spreading depression is associated with arachidonic acid accumulation and preservation of energy charge. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 1990 , 10, 115-22	7.3	97
700	Mechanistic distinctions between excitotoxic and acidotic hippocampal damage in an in vitro model of ischemia. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 1990 , 10, 527-35	7.3	73
699	Nuclear magnetic resonance determination of flow, lactate, and phosphate metabolites during amphetamine stimulation of the rat brain. 1990 , 3, 272-8		24
698	Opiate antagonist nalmefene improves intracellular free Mg ²⁺ , bioenergetic state, and neurologic outcome following traumatic brain injury in rats. 1990 , 10, 3524-30		56
697	Relationships between the neuronal sodium/potassium pump and energy metabolism. Effects of K ⁺ , Na ⁺ , and adenosine triphosphate in isolated brain synaptosomes. 1990 , 95, 591-616		140
696	Brain glucose and energy metabolism during normal aging. 1990 , 2, 245-58		17
695	Metabolism and role of glutamate in mammalian brain. 1990 , 35, 245-96		589
694	Experimental biology of cerebral hypoxia-ischemia: relation to perinatal brain damage. 1990 , 27, 317-26		380
693	Effects of acrylamide and N,N'-methylene-bis-acrylamide on creatine kinase activity. 1990 , 507, 351-3		22

692	Level of ischemia and brain functions in the Mongolian gerbil in vivo. 1990 , 524, 1-9		37
691	Regulation of Ca ²⁺ transport in brain mitochondria. II. The mechanism of the adenine nucleotides enhancement of Ca ²⁺ uptake and retention. 1990 , 1016, 87-98		47
690	Significance of cation transport in control of energy metabolism and thermogenesis. 1991 , 71, 733-74		205
689	Synaptosomal respiration: a potent indicator of veratridine-induced Na influx. 1991 , 43, 26-35		16
688	Relations between intracellular ions and energy metabolism: a study with monensin in synaptosomes, neurons, and C6 glioma cells. 1991 , 11, 2410-21		67
687	Optical measurements of the dependence of chemoreception on oxygen pressure in the cat carotid body. 1991 , 261, C614-22		50
686	Neuronal expression of nuclear and mitochondrial genes for cytochrome oxidase (CO) subunits analyzed by in situ hybridization: comparison with CO activity and protein. 1991 , 11, 1942-58		101
685	Sodium, ATP, and intracellular pH transients during reversible complete ischemia of dog cerebrum. 1991 , 22, 233-41		63
684	Quicker metabolic recovery after forebrain ischemia in rats treated with the antioxidant U74006F. 1991 , 22, 1188-92		21
683	Abnormalities of glucose metabolism in Alzheimer's disease. 1991 , 640, 53-8		85
682	Transport of asparagine by rat brain synaptosomes: an approach to evaluate glutamine accumulation. 1991 , 57, 491-8		6
681	On-line monitoring of extracellular brain glucose using microdialysis and a NADPH-linked enzymatic assay. 1991 , 57, 648-54		39
680	Cerebral blood flow and oxygen consumption in cortical spreading depression. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 1991 , 11, 829-36	7:3	105
679	Basic fibroblast growth factor prevents thalamic degeneration after cortical infarction. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 1991 , 11, 472-8	7:3	166
678	Could Wallerian degeneration contribute to "leuko-araiosis" in subjects free of any vascular disorder?. 1991 , 54, 46-50		105
677	Extending neurotransmitter hypotheses of neuroleptic action and schizophrenia beyond cell-surface receptors. The phosphoinositide signalling system provides a link between receptors and intracellular calcium. 1992 , 6, 453-61		1
676	Energy requirements of CNS cells as related to their function and to their vulnerability to ischemia: a commentary based on studies on retina. 1992 , 70 Suppl, S158-64		114
675	Thiamin uptake by rat isolated enterocytes: relationship between transport and phosphorylation. 1992 , 100, 275-9		8

674	Mechanisms for anoxic survival in the vertebrate brain. 1992 , 54, 601-18		131
673	Nitrogen metabolism: neuronal-astroglial relationships. 1992 , 94, 213-24		15
672	Glucose-associated alterations in ischemic brain metabolism of neonatal piglets. 1992 , 23, 1504-11		32
671	Fructose-1,6-bisphosphate stabilizes brain intracellular calcium during hypoxia in rats. 1992 , 23, 1617-22		47
670	Coupling among changes in energy metabolism, acid-base homeostasis, and ion fluxes in ischemia. 1992 , 70 Suppl, S170-5		17
669	Brain energy metabolites in mice intoxicated with acrylamide: effects of ischemia. 1992 , 62, 39-43		1
668	Coordination of ATP production and consumption in brain: parallel regulation of cytochrome oxidase and Na ⁺ , K ⁽⁺⁾ -ATPase. 1992 , 138, 188-92		90
667	Ischemic injury to rat forebrain mitochondria and cellular calcium homeostasis. 1992 , 1134, 223-32		66
666	Energy metabolism in islets of Langerhans. 1992 , 1101, 273-95		87
665	Relationships between energy level and insulin secretion in isolated rat islets of Langerhans. Manipulation of [ATP]/[ADP][Pi] by 2-deoxy-D-glucose. 1992 , 43, 1859-64		12
664	Localization of cytochrome oxidase (COX) activity and COX mRNA in the hippocampus and entorhinal cortex of the monkey brain: correlation with specific neuronal pathways. 1992 , 579, 333-6		33
663	Corticosterone accelerates hypoxia- and cyanide-induced ATP loss in cultured hippocampal astrocytes. 1992 , 588, 154-8		69
662	Ionic mechanisms of anoxic injury in mammalian CNS white matter: role of Na ⁺ channels and Na ⁽⁺⁾ -Ca ²⁺ exchanger. 1992 , 12, 430-9		583
661	Perturbation of cellular energy state in complete ischemia: relationship to dissipative ion fluxes. 1992 , 90, 47-53		28
660	Glucocorticoids exacerbate hypoxic and hypoglycemic hippocampal injury in vitro: biochemical correlates and a role for astrocytes. 1992 , 59, 137-46		124
659	Ion homeostasis in rat brain in vivo: intra- and extracellular [Ca ²⁺] and [H ⁺] in the hippocampus during recovery from short-term, transient ischemia. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 1992 , 12, 759-72	7-3	218
658	Changes in brain monoaminergic neurotransmitter concentrations in rat after intracerebroventricular injection of streptozotocin. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 1992 , 12, 103-9	7-3	35
657	Focal and perifocal changes in tissue energy state during middle cerebral artery occlusion in normo- and hyperglycemic rats. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 1992 , 12, 25-33	7-3	147

656	An intracellular medium formulary. 1992 , 44, 91-100		42
655	Acrylamide disrupts elemental composition and water content of rat tibial nerve. I. Myelinated axons. 1992 , 115, 21-34		34
654	Age influences abnormalities in striatal dopamine metabolism during and after transient forebrain ischemia. 1992 , 4, 213-25		3
653	Oxidative energy metabolism in Alzheimer brain. Studies in early-onset and late-onset cases. 1992 , 16, 207-24		148
652	Entorhinal cortex of the human, monkey, and rat: metabolic map as revealed by cytochrome oxidase. 1992 , 326, 451-69		294
651	Metabolic changes in the rat brain after acute and chronic ethanol intoxication: a ³¹ P NMR spectroscopy study. 1993 , 29, 719-23		20
650	Shift reagent enhanced concurrent ²³ Na and ¹ H magnetic resonance spectroscopic studies of transcellular sodium distribution in the dog brain in vivo. 1993 , 30, 11-7		13
649	Regulation of brain 6-phosphofructo-1-kinase: effects of aging, fructose-2,6-bisphosphate, and regional subunit distribution. 1993 , 120, 61-8		9
648	Coupling of energy failure and dissipative K ⁺ flux during ischemia: role of preischemic plasma glucose concentration. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 1993 , 13, 193-200	7-3	30
647	Energy reserves and utilization rates in developing brain measured in vivo by ³¹ P and ¹ H nuclear magnetic resonance spectroscopy. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 1993 , 13, 235-46	7-3	21
646	Relations between intracellular ions and energy metabolism under acidotic conditions: a study with nigericin in synaptosomes, neurons, and C6 glioma cells. 1993 , 61, 1356-68		31
645	The high sensitivity to rotenone of striatal dopamine uptake suggests the existence of a constitutive metabolic deficiency in dopaminergic neurons from the substantia nigra. 1993 , 5, 1029-34		48
644	Role of GABA in hypoxia tolerance, metabolic depression and hibernation--possible links to neurotransmitter evolution. 1993 , 105, 329-36		29
643	Sporadic dementia of Alzheimer type: role of amyloid in etiology is challenged. 1993 , 6, 159-65		13
642	Anaerobic glycolysis and postanoxic recovery of respiration of rat cortical synaptosomes are reduced by synaptosomal sodium load. 1993 , 611, 286-94		19
641	Localization of cytochrome oxidase (COX) activity and COX mRNA in the perirhinal and superior temporal sulci of the monkey brain. 1993 , 606, 213-9		11
640	Relationship between extracellular neurotransmitter amino acids and energy metabolism during cerebral ischemia in rats monitored by microdialysis and in vivo magnetic resonance spectroscopy. 1993 , 605, 33-42		51
639	Contributory mechanisms in the causation of neurodegenerative disorders. 1993 , 54, 287-322		204

638	Intermediary metabolism disturbance in AD/SDAT and its relation to molecular events. 1993 , 17, 199-228	17
637	Correlation between somatosensory-evoked potentials and magnetic resonance imaging of focal cerebral ischemia in cats. 1993 , 40, 216-23	4
636	Abnormalities in brain glucose utilization and its impact on cellular and molecular mechanisms in sporadic dementia of Alzheimer type. 1993 , 695, 77-80	24
635	Cholinergic stimulation of the Na ⁺ /K ⁺ adenosine triphosphatase as revealed by microphysiometry. 1993 , 64, 813-23	33
634	Modification of hypoxia-induced injury in cultured rat astrocytes by high levels of glucose. 1993 , 24, 855-63	47
633	Altered brain energy metabolism in demented patients with multiple subcortical ischemic lesions. Working hypotheses. 1993 , 50, 384-8	19
632	Temporal analysis of events associated with programmed cell death (apoptosis) of sympathetic neurons deprived of nerve growth factor. 1993 , 123, 1207-22	514
631	Editorial Errors. 1993 , 50, 388-388	
630	Brain oxidative energy and related metabolism, neuronal stress, and Alzheimer's disease: a speculative synthesis. 1993 , 6, 3-13	39
629	Cytochrome oxidase in the human visual cortex: distribution in the developing and the adult brain. 1993 , 10, 41-58	76
628	An in vivo study of phosphorus and glucose metabolism in Alzheimer's disease using magnetic resonance spectroscopy and PET. 1993 , 50, 341-9	44
627	Noninactivating, tetrodotoxin-sensitive Na ⁺ conductance in rat optic nerve axons. 1993 , 90, 6976-80	190
626	Mitochondrial and nuclear gene expression for cytochrome oxidase subunits are disproportionately regulated by functional activity in neurons. 1993 , 13, 1805-19	108
625	Differential metabolic and electrical activity in the somatic sensory cortex of juvenile and adult rats. 1993 , 13, 4193-213	90
624	High-energy phosphate metabolism in a neonatal model of hydrocephalus before and after shunting. 1994 , 81, 544-53	34
623	Creatine kinase in non-muscle tissues and cells. 1994 , 133-134, 193-220	274
622	Effects of acrylamide and acrylic acid on creatine kinase activity in the rat brain. 1994 , 68, 67-70	11
621	Rapid monitoring of changes in water diffusion coefficients during reversible ischemia in cat and rat brain. 1994 , 31, 454-60	148

620	Impaired brain microcirculation may trigger Alzheimer's disease. 1994 , 18, 397-401		93
619	Age-related changes in swine brain creatine kinase-catalyzed 31P exchange measured in vivo using 31P NMR magnetization transfer. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 1994 , 14, 1070-7	7.3	22
618	Induction of ischemic tolerance following brief focal ischemia in rat brain. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 1994 , 14, 545-53	7.3	194
617	Reduction of brain phosphocreatine in bipolar II disorder detected by phosphorus-31 magnetic resonance spectroscopy. 1994 , 31, 125-33		195
616	Correlation between content of high-energy phosphates and hypoxic-ischemic damage in immature and mature astrocytes. 1994 , 82, 62-8		43
615	What is primary and what secondary for amyloid deposition in Alzheimer's disease. 1994 , 719, 230-7		26
614	Age as risk factor for sporadic dementia of the Alzheimer type?. 1994 , 719, 248-56		29
613	Effects of kainate-induced seizures on cerebral metabolism: a combined 1H and 31P NMR study in rat. 1994 , 638, 53-60		52
612	Changes in blood glucose concentration in the carotid body-sinus modify brain glucose retention. 1994 , 654, 167-70		30
611	Intracerebroventricular injection of streptozotocin induces discrete local changes in cerebral glucose utilization in rats. 1994 , 12, 737-43		127
610	Ions and energy in mammalian brain. 1994 , 43, 37-71		379
609	Impairment in mitochondrial cytochrome oxidase gene expression in Alzheimer disease. 1994 , 24, 336-40		175
608	Short-term or long-term intracerebroventricular (i.c.v.) infusion of insulin exhibits a discrete anabolic effect on cerebral energy metabolism in the rat. 1994 , 175, 153-6		55
607	Mineralocorticoid and glucocorticoid receptors in the brain. Implications for ion permeability and transmitter systems. 1994 , 43, 1-36		346
606	Effects of hypo- and hyperglycemia on brain energy metabolites in mice exposed to carbon monoxide. 1994 , 73, 135-43		5
605	Lateralized abnormality of high energy phosphate metabolism in the frontal lobes of patients with bipolar disorder detected by phase-encoded 31P-MRS. 1995 , 25, 557-66		103
604	Regional distributions of hippocampal Na ⁺ ,K ⁽⁺⁾ -ATPase, cytochrome oxidase, and total protein in temporal lobe epilepsy. 1995 , 36, 371-83		36
603	Neurobiological correlates of masculine sexual behavior. 1995 , 19, 261-77		39

602	Beneficial vascular and metabolic effects of cobalt-ATP in spontaneously hypertensive rabbits with diffuse chronic cerebral ischaemia. 1995 , 242, 243-8		
601	Rat brain glucose and energy metabolites: effect of +Gz (head-to-foot inertial load) exposure in a small animal centrifuge. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 1995 , 15, 1040-6	73	7
600	Reduced local cerebral blood flow in periventricular white matter in experimental neonatal hydrocephalus-restoration with CSF shunting. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 1995 , 15, 1057-65	73	73
599	Concomitant EEG, lactate, and phosphorus changes by ¹ H and ³¹ P NMR spectroscopy during repeated brief cerebral ischemia. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 1995 , 15, 26-32	73	16
598	Vulnerability of medium spiny striatal neurons to glutamate: role of Na ⁺ /K ⁺ ATPase. 1995 , 7, 1674-83		78
597	Creatine and nucleoside triphosphates in rat cerebral gray and white matter. 1995 , 10, 347-52		12
596	Major differences in response to graded hypoxia between hypoglossal and neocortical neurons. 1995 , 683, 179-86		41
595	An obligate role for oxygen in the early stages of glutamate-induced, delayed neuronal death. 1995 , 15, 7071-8		69
594	A model of spike initiation in neocortical pyramidal neurons. 1995 , 15, 1427-39		368
593	Lateralized abnormality of high-energy phosphate and bilateral reduction of phosphomonoester measured by phosphorus-31 magnetic resonance spectroscopy of the frontal lobes in schizophrenia. 1995 , 61, 151-60		54
592	Synthesis of (2-[¹¹ C]methoxy)rotenone, a marker of mitochondrial complex I activity. 1995 , 22, 65-9		8
591	Short-term effects of perinatal asphyxia studied with Fos-immunocytochemistry and in vivo microdialysis in the rat. 1995 , 131, 279-87		22
590	Functional alterations in neural circuits in Alzheimer's disease. 1995 , 16, 305-9		18
589	Enzyme Histochemical Methods and Techniques. 1995 , 67-79		2
588	Sleep function(s) and cerebral metabolism. 1995 , 69, 75-83		165
587	Chapter 2 Oxygen availability: Brain defence mechanisms. 1995 , 5, 19-44		4
586	Analysis of Ca ²⁺ homeostasis in neurons dissociated from rat nucleus basalis. 1995 , 22, 259-66		2
585	A metabolic map of cytochrome oxidase in the rat brain: histochemical, densitometric and biochemical studies. 1995 , 65, 313-42		135

584	Nimodipine improves brain energy metabolism and blood rheology during ischemia and reperfusion in the gerbil brain. 1996 , 144, 84-90	12
583	High-energy phosphate metabolism in the frontal lobes of patients with panic disorder detected by phase-encoded 31P-MRS. 1996 , 40, 785-93	28
582	Brain glucose metabolism is controlled by amplification and desensitization of the neuronal insulin receptor. 1996 , 777, 374-9	51
581	In vivo brain glucose measurements: differential normal pulse voltammetry with enzyme-modified carbon fiber microelectrodes. 1996 , 68, 4358-64	84
580	Creatine kinase-B mRNA levels in brain regions from male and female rats. 1996 , 41, 50-6	18
579	Evidence for physiological down-regulation of brain oxidative phosphorylation in Alzheimer's disease. 1996 , 142, 80-8	90
578	Mitochondrial oxidative phosphorylation changes in the life span. Molecular aspects and physiopathological implications. 1996 , 1276, 87-105	205
577	Metabolic and energetic properties of isolated nerve ending particles (synaptosomes). 1996 , 1277, 13-34	40
576	Oxidative metabolism deficiencies in brains of patients with Alzheimer's disease. 1996 , 165, 18-24	59
575	Brain creatine kinases and phosphocreatine: an update. 1996 , 18, 522-3	6
574	[3H]dihydrorotenone binding to NADH: ubiquinone reductase (complex I) of the electron transport chain: an autoradiographic study. 1996 , 16, 3807-16	84
573	Metabolic and genetic analyses of apoptosis in potassium/serum-deprived rat cerebellar granule cells. 1996 , 16, 7487-95	201
572	Sodium and potassium channel modulators: their role in neuroprotection. 1997 , 40, 109-35	20
571	Brain Hypoxia: Metabolic and Ventilatory Depression. 1996 , 1291-1306	
570	Relative phosphocreatine and nucleoside triphosphate concentrations in cerebral gray and white matter measured in vivo by 31P nuclear magnetic resonance. 1996 , 707, 146-54	32
569	Effect of cerebral hypoxia on NMDA receptor binding characteristics after treatment with 3-(2-carboxypiperazin-4-yl) propyl-1-phosphonic acid (CPP) in newborn piglets. 1996 , 729, 66-74	24
568	Changes in labile energy metabolites, redox state and intracellular pH in postischemic brain of normo- and hyperglycemic rats. 1996 , 726, 57-63	11
567	Limitation of glycolysis by hexokinase in rat brain synaptosomes during intense ion pumping. 1996 , 726, 153-9	29

566	Brain cell membrane Na ⁺ ,K ⁽⁺⁾ -ATPase activity following severe hypoxic injury in the newborn piglet. 1996 , 730, 52-7	19
565	Tissue swelling and intracellular pH in the CA1 region of anoxic rat hippocampus. 1996 , 65, 183-7	17
564	Effect of adrenalectomy and corticosterone substitution on glucose and glycogen metabolism in rat brain. 1996 , 103, 89-100	40
563	5 Selective modulation of voltage-gated sodium channels: a rational approach for neuroprotection. 1996 , 10, 461-480	1
562	Differential glutamatergic innervation in cytochrome oxidase-rich and -poor regions of the macaque striate cortex: quantitative EM analysis of neurons and neuropil. 1996 , 369, 571-90	33
561	Metabolic and neurochemical plasticity of gamma-aminobutyric acid-immunoreactive neurons in the adult macaque striate cortex following monocular impulse blockade: quantitative electron microscopic analysis. 1996 , 370, 350-66	23
560	Mitochondrial- and nuclear-encoded subunits of cytochrome oxidase in neurons: differences in compartmental distribution, correlation with enzyme activity, and regulation by neuronal activity. 1996 , 373, 139-55	24
559	Brain regional levels of adenosine and adenosine nucleotides in rats killed by high-energy focused microwave irradiation. 1996 , 64, 151-6	85
558	The significance of glucose turnover in the brain in the pathogenetic mechanisms of Alzheimer's disease. 1996 , 7, 1-19	44
557	Thyroid hormone-dependent gene expression program for <i>Xenopus</i> neural development. 1997 , 272, 8179-88	109
556	Brain glucose: voltammetric determination in normal and hyperglycaemic rats using a glucose microsensor. 1997 , 8, 1109-12	33
555	Is high extracellular glutamate the key to excitotoxicity in traumatic brain injury?. 1997 , 14, 677-98	167
554	Effect of perinatal asphyxia on systemic and intracerebral pH and glycolysis metabolism in the rat. 1997 , 145, 390-6	38
553	A diffusion model of cerebral microischemia. 1997 , 147, 142-50	9
552	Decreased energy demanding processes in the frontal lobes of schizophrenics due to neuroleptics? A ³¹ P-magneto-resonance spectroscopic study. 1997 , 76, 123-9	29
551	Multiple regression analysis of relationship between frontal lobe phosphorus metabolism and clinical symptoms in patients with schizophrenia. 1997 , 76, 113-22	25
550	Lactic acidosis and other mitochondrial disorders. 1997 , 46, 306-21	70
549	Altered glutamatergic transmission in neurological disorders: from high extracellular glutamate to excessive synaptic efficacy. 1997 , 51, 39-87	262

548	Anoxic depression of light-evoked potentials in retina and optic tectum of crucian carp. 1997 , 237, 73-6	37
547	Reduced cytochrome oxidase and memory dysfunction after chronic brain ischemia in aged rats. 1997 , 223, 165-8	74
546	Ion homeostasis in brain cells: differences in intracellular ion responses to energy limitation between cultured neurons and glial cells. 1997 , 78, 589-601	164
545	Determination of NADH in the rat brain during sleep-wake states with an optic fibre sensor and time-resolved fluorescence procedures. 1997 , 79, 683-93	21
544	Synaptic physiology and mitochondrial function in crayfish tonic and phasic motor neurons. 1997 , 78, 281-94	67
543	Ion transport and membrane potential in CNS myelinated axons. II. Effects of metabolic inhibition. 1997 , 78, 2095-107	45
542	Nutrient Consumption and Metabolic Perturbations. 1997 , 8, 145-164	9
541	Cerebromicrovascular pathology in Alzheimer's disease compared to normal aging. 1997 , 43, 26-43	69
540	The electrogenic effects of Na(+)-K(+)-ATPase in rat auditory thalamus. 1997 , 502 (Pt 2), 375-85	22
539	Oxygen deprivation inhibits Na ⁺ current in rat hippocampal neurones via protein kinase C. 1997 , 503 (Pt 3), 479-88	54
538	Pathogenesis of decreased glucose turnover and oxidative phosphorylation in ischemic and trauma-induced dementia of the Alzheimer type. 1997 , 826, 229-41	26
537	Causes and consequences of neuronal energy deficit in sporadic Alzheimer's disease. 1997 , 826, 379-81	7
536	Physiological effects and brain protection by hypothermia and cerebrolysin after moderate forebrain ischemia in rats. 1997 , 49, 105-16	20
535	Mitochondrial DNA mutations and pathogenesis. 1997 , 29, 131-49	328
534	Brain creatine kinase reaction rates and reactant concentrations during seizures in developing rats. 1997 , 27, 7-11	19
533	Astroglial acid-base dynamics in hyperglycemic and normoglycemic global ischemia. 1997 , 21, 143-50	32
532	Response of glial cells to ischemia: roles of reactive oxygen species and glutathione. 1997 , 21, 151-66	135
531	Energetic dysfunction in quinolinic acid-lesioned rat striatum. 1997 , 69, 1629-39	66

530	Effect of brain, body, and magnet bore temperatures on energy metabolism during global cerebral ischemia and reperfusion monitored by magnetic resonance spectroscopy in rats. 1997 , 37, 833-9		11
529	Energetics of 3.5 s neural activation in humans: a ³¹ P MR spectroscopy study. 1997 , 38, 878-83		48
528	Energetic demands of the Na ⁺ /K ⁺ ATPase in mammalian astrocytes. 1997 , 21, 35-45		93
527	On the inhibition of voltage activated calcium currents in rat cortical neurones by the neuroprotective agent 619C89. 1998 , 125, 1058-64		16
526	Early postischemic dantrolene-induced amelioration of poly(ADP-ribose) polymerase-related bioenergetic failure in neonatal rat brain slices. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 1998 , 18, 1346-56	7-3	30
525	Responses of rat brain to induced spreading depression following exposure to carbon monoxide. 1998 , 780, 323-8		11
524	Reversal of ischemic-induced chronic memory dysfunction in aging rats with a free radical scavenger-glycolytic intermediate combination. 1998 , 779, 285-8		13
523	In vivo phosphocreatine and ATP in piglet cerebral gray and white matter during seizures. 1998 , 783, 19-27		25
522	Cardiovascular function and brain metabolites in normal weight and intrauterine growth restricted newborn piglets--effect of mild hypoxia. 1998 , 50, 294-300		19
521	Neuroprotection--rationale for pharmacological modulation of Na ⁽⁺⁾ -channels. 1998 , 14, 151-8		16
520	³¹ P magnetic resonance spectroscopy in the frontal lobe of major depressed patients. 1998 , 248, 289-95		126
519	Differences in gene expression between sleep and waking as revealed by mRNA differential display. 1998 , 56, 293-305		77
518	Methylmalonate toxicity in primary neuronal cultures. 1998 , 86, 279-90		90
517	Autism: a mitochondrial disorder?. 1998 , 50, 497-500		102
516	GABAergic deafferentation hypothesis of brain aging and Alzheimer's disease revisited. 1998 , 45, 341-79		110
515	³¹ Phosphorus magnetic resonance spectroscopy of the dorsolateral prefrontal region in schizophrenics--a study including 50 patients and 36 controls. 1998 , 44, 399-404		49
514	Effects of intrastriatal injection of quinolinic acid on electrical activity and extracellular ion concentrations in rat striatum in vivo. 1998 , 83, 459-69		21
513	A histochemical demonstration of altered cytochrome oxidase activity in the rat brain by neuroleptics. 1998 , 8, 1-6		22

512	High-energy phosphates in the frontal lobe correlate with Wisconsin Card Sort Test performance in controls, not in schizophrenics: a ³¹ P magnetic resonance spectroscopic and neuropsychological investigation. 1998 , 31, 37-47	21
511	Neuroprotective strategies: voltage-gated Na ⁺ -channel down-modulation versus presynaptic glutamate release inhibition. 1998 , 9, 203-11	18
510	Risk factors for Alzheimer's disease during aging. Impacts of glucose/energy metabolism. 1998 , 54, 187-94	40
509	Magnetic resonance spectroscopy in affective disorders. 1998 , 10, 133-47	96
508	Metabolic control of kynurenic acid formation in the rat brain. 1998 , 20, 408-16	22
507	Acidosis reduces neuronal apoptosis. 1998 , 9, 875-9	46
506	Neuroprotective effects of creatine and cyclocreatine in animal models of Huntington's disease. 1998 , 18, 156-63	365
505	Glucose-induced intracellular ion changes in sugar-sensitive hypothalamic neurons. 1998 , 79, 1733-45	177
504	Central peptidergic neurons are hyperactive during collateral sprouting and inhibition of activity suppresses sprouting. 1999 , 19, 1586-98	14
503	Electrophysiological recordings and calcium measurements in striatal large aspiny interneurons in response to combined O ₂ /glucose deprivation. 1999 , 81, 2508-16	46
502	Neuroprotective effect of high glucose against NMDA, free radical, and oxygen-glucose deprivation through enhanced mitochondrial potentials. 1999 , 19, 8849-55	41
501	Mitochondrial genome lesions in the pathogenesis of sporadic Alzheimer's disease. 1999 , 45, 289-97	21
500	Histochemical localisation of mitochondrial enzyme activity in human optic nerve and retina. 1999 , 83, 231-5	102
499	Relationship of energy metabolism detected by ³¹ P-MRS in the human brain with mental fatigue. 1999 , 39, 214-8	16
498	Cerebral amino acids studied by nuclear magnetic resonance spectroscopy in vivo. 1999 , 34, 301-326	16
497	Attenuation of neuronal death by NMDA and oxygen-glucose deprivation in cortical neurons maintained in high glucose. 1999 , 893, 396-9	4
496	Expression and regulation of NMDA receptor subunit R1 and neuronal nitric oxide synthase in cortical neuronal cultures: correlation with cytochrome oxidase. 1999 , 28, 525-39	25
495	Effect of acrylamide on neurological recovery following spinal cord injury in rats. 1999 , 141, 989-98; discussion 998-9	6

494	Interrelation between cerebral energy metabolism and behaviour in a rat model of permanent brain vessel occlusion. 1999 , 830, 320-9	45
493	Frequency-dependent changes in cerebral blood flow and evoked potentials during somatosensory stimulation in the rat. 1999 , 837, 221-8	105
492	Role of sodium ion influx in depolarization-induced neuronal cell death by high KCl or veratridine. 1999 , 372, 297-304	36
491	Age-related alteration of intracellular ATP maintenance in the cell suspensions of mice cerebral cortex. 1999 , 110, 1-12	17
490	Distribution of glycogen phosphorylase and cytochrome oxidase in the central nervous system of the turtle <i>Trachemys dorbignii</i> . 1999 , 124, 113-22	13
489	Nuclear respiratory factor-2 subunit protein: correlation with cytochrome oxidase and regulation by functional activity in the monkey primary visual cortex. 1999 , 404, 310-20	23
488	Effect of prolonged O ₂ deprivation on Na ⁺ channels: differential regulation in adult versus fetal rat brain. 1999 , 94, 1231-43	33
487	Improvement of cerebral ATP and choline deficiencies by Shao-Yin-Ren Shi-Quang-Da-Bu-Tang in senescence-accelerated mouse prone 8. 1999 , 67, 297-305	3
486	Inter-relation between hemodynamic, metabolic, ionic and electrical activities during ischemia and reperfusion in the gerbil brain. 1999 , 21, 699-704	11
485	Brain metabolic and ionic responses to systemic hypoxia in the newborn dog in vivo. 1999 , 21, 765-70	4
484	Delayed treatment with AM-36, a novel neuroprotective agent, reduces neuronal damage after endothelin-1-induced middle cerebral artery occlusion in conscious rats. 1999 , 30, 2704-12; discussion 2712	59
483	Cerebral hypoperfusion, capillary degeneration, and development of Alzheimer disease. 2000 , 14 Suppl 1, S72-81	61
482	Human nuclear respiratory factor 2 alpha subunit cDNA: isolation, subcloning, sequencing, and in situ hybridization of transcripts in normal and monocularly deprived macaque visual system. 2000 , 417, 221-32	16
481	Dietary supplement creatine protects against traumatic brain injury. 2000 , 48, 723-729	223
480	New multiparametric monitoring approach for real-time evaluation of drug tissue interaction in vivo. 2000 , 50, 457-470	9
479	Proton NMR chemical shifts and coupling constants for brain metabolites. 2000 , 13, 129-53	1284
478	Evolution of changes in neuronal activity in the subthalamic nucleus of rats with unilateral lesion of the substantia nigra assessed by metabolic and electrophysiological measurements. 2000 , 12, 337-44	144
477	Depolarizing stimulation upregulates GA-binding protein in neurons: a transcription factor involved in the bigenomic expression of cytochrome oxidase subunits. 2000 , 12, 1013-23	43

476	Magnetic resonance spectroscopy in Alzheimer's disease: focus on N-acetylaspartate. 2000 , 176, 20-6	38
475	Critically attained threshold of cerebral hypoperfusion: can it cause Alzheimer's disease?. 2000 , 903, 424-36	73
474	Permanent cerebral hypoperfusion: 'preconditioning-like' effects on rat energy metabolism towards acute systemic hypotension. 2000 , 858, 363-70	16
473	Inhibition of Na(+)/H(+) exchange by 5-(N-ethyl-N-isopropyl)-amiloride reduces free fatty acid efflux from the ischemic reperfused rat cerebral cortex. 2000 , 884, 155-62	17
472	Rapid and transient inhibition of mitochondrial function following methamphetamine or 3,4-methylenedioxymethamphetamine administration. 2000 , 398, 11-8	110
471	Huperzine A improves cognitive deficits caused by chronic cerebral hypoperfusion in rats. 2000 , 398, 65-72	64
470	Astroglial cell death induced by excessive influx of sodium ions. 2000 , 408, 127-35	23
469	Effects of low-level lead on glycolytic enzymes and pyruvate dehydrogenase of rat brain in vitro: relevance to sporadic Alzheimer's disease?. 2000 , 107, 355-68	27
468	Selective depolarization of interneurons in the early posttraumatic dentate gyrus: involvement of the Na(+)/K(+)-ATPase. 2000 , 83, 2916-30	114
467	Brain creatine kinase and creatine transporter proteins in normal and creatine-treated rabbit pups. 2000 , 22, 437-43	13
466	Anoxic ATP depletion in neonatal mice brainstem is prevented by creatine supplementation. 2000 , 82, F224-7	41
465	Quantitative proton magnetic resonance spectroscopy of the subcortical white matter in motor neuron disease. 2000 , 1, 123-9	2
464	Low mass-specific brain Na ⁺ /K ⁺ -ATPase activity in elasmobranch compared to teleost fishes: implications for the large brain size of elasmobranchs. 2000 , 267, 1335-9	7
463	CNS energy metabolism as related to function. 2000 , 34, 42-68	507
462	Evidence that Alzheimer's disease is a microvascular disorder: the role of constitutive nitric oxide. 2000 , 34, 119-36	229
461	Critically attained threshold of cerebral hypoperfusion: the CATCH hypothesis of Alzheimer's pathogenesis. 2000 , 21, 331-42	217
460	Sustained depolarisation induces changes in the extracellular concentrations of purine and pyrimidine nucleosides in the rat thalamus. 2000 , 37, 71-9	42
459	G protein and cAMP-dependent protein kinase mediate amyloid beta-peptide inhibition of neuronal glucose uptake. 2001 , 167, 59-64	24

458	Dynamic changes in cytochrome oxidase activity in the amygdala following lesions of rewarding sites in the lateral hypothalamus. 2001 , 119, 103-10		7
457	Fas-induced apoptosis of glioma cells is associated with down-regulation of the hSCO1 protein, a subunit of complex IV. 2001 , 91, 131-6		9
456	Chronic exposure of neural cells to elevated intracellular sodium decreases mitochondrial mRNA expression. 2001 , 1, 141-50		2
455	Effects of acrylamide on creatine kinase from rabbit muscle. 2001 , 33, 1064-70		14
454	Slippage and uncoupling in P-type cation pumps; implications for energy transduction mechanisms and regulation of metabolism. 2001 , 1513, 95-121		34
453	Hypoglycemia enhances ionotropic but reduces metabotropic glutamate responses in substantia nigra dopaminergic neurons. 2001 , 85, 1159-66		19
452	Circadian clock regulation of pH in the rabbit retina. 2001 , 21, 2897-902		77
451	Altered brain phosphocreatine and ATP regulation when mitochondrial creatine kinase is absent. 2001 , 66, 866-72		34
450	Strategies for neuroprotection against L-trans-2,4-pyrrolidine dicarboxylate-induced neuronal damage during energy impairment in vitro. 2001 , 64, 418-28		31
449	Astrocytic clasmatodendrosis in hippocampal organ culture. 2001 , 33, 169-79		65
448	In vivo and in vitro proton NMR spectroscopic studies of thiamine-deficient rat brains. 2001 , 13, 163-6		16
447	Brain activation in normal subjects and in patients affected by mitochondrial disease without clinical central nervous system involvement: a phosphorus magnetic resonance spectroscopy study. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2001 , 21, 85-91	7-3	53
446	An energy budget for signaling in the grey matter of the brain. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2001 , 21, 1133-45	7-3	2138
445	Neuromodulatory effect of propentofylline on rat brain under acute and long-term hypoperfusion. 2001 , 133, 107-16		23
444	Non-linear changes of electrocortical activity after antenatal betamethasone treatment in fetal sheep. 2001 , 531, 535-43		25
443	Tissue oxygen tension and brain sensitivity to hypoxia. 2001 , 128, 263-76		443
442	Alterations in cerebral energy metabolism induced by traumatic brain injury. 2001 , 23, 129-38		17
441	Effect of moderate hypocapnic ventilation on nuclear DNA fragmentation and energy metabolism in the cerebral cortex of newborn piglets. 2001 , 50, 586-9		21

440	Multiparametric monitoring of brain under elevated intracranial pressure in a rat model. 2001 , 18, 711-25	13
439	NMDA receptor activation contributes to a portion of the decreased mitochondrial membrane potential and elevated intracellular free calcium in strain-injured neurons. 2002 , 19, 1619-29	46
438	Energy utilization in the ischemic/reperfused brain. 2002 , 51, 377-414	6
437	Adenosine and purine nucleosides protect rat primary astrocytes from peroxynitrite-potentiated, glucose deprivation-induced death: preservation of intracellular ATP level. 2002 , 176, 175-82	17
436	Food for thought: fluctuations in brain extracellular glucose provide insight into the mechanisms of memory modulation. 2002 , 1, 264-80	74
435	A model of the coupling between brain electrical activity, metabolism, and hemodynamics: application to the interpretation of functional neuroimaging. 2002 , 17, 1162-81	131
434	Spreading depression: a teleological means for self-protection from brain ischemia. 2002 , 142-158	7
433	Repeated interactions with females elevate metabolic capacity in the limbic system of male rats. 2002 , 936, 27-37	25
432	The aging brain. Changes in the neuronal insulin/insulin receptor signal transduction cascade trigger late-onset sporadic Alzheimer disease (SAD). A mini-review. 2002 , 109, 991-1002	125
431	Lactate in the brain of the freely moving rat: voltammetric monitoring of the changes related to the sleep-wake states. 2002 , 16, 461-6	38
430	Metabolic and energetic changes during apoptosis in neural cells. 1995 , 65, 1721-30	26
429	Dexamethasone prevents hypoxia/ischemia-induced reductions in cerebral glucose utilization and high-energy phosphate metabolites in immature brain. 1997 , 69, 1954-63	25
428	Adenosine, inosine, and guanosine protect glial cells during glucose deprivation and mitochondrial inhibition: correlation between protection and ATP preservation. 1998 , 71, 535-48	80
427	Oxidative and nonoxidative metabolism of excited neurons and astrocytes. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2002 , 22, 1-14	7-3 144
426	Vascular basis of Alzheimer's pathogenesis. 2002 , 977, 196-215	191
425	Norepinephrine-induced hyperglycemia does not increase cortical lactate in brain-injured rats. 2002 , 28, 1491-7	12
424	The sodium channel blocker RS100642 reverses down-regulation of the sodium channel alpha-subunit Na(v) 1.1 expression caused by transient ischemic brain injury in rats. 2003 , 5, 245-53	10
423	Imaging Alzheimer's disease. 2003 , 3, 385-92	7

422	Pyruvate ameliorates post ischemic injury of rat astrocytes and protects them against PARP mediated cell death. 2003 , 992, 104-13		26
421	Induction of brain glucose uptake by a factor secreted into cerebrospinal fluid. 2003 , 994, 124-33		7
420	Elevation of Na ⁺ -K ⁺ ATPase immunoreactivity in GABAergic neurons in gerbil CA1 region following transient forebrain ischemia. 2003 , 977, 284-9		11
419	Glucose uptake in PC12 cells: GLUT3 vesicle trafficking and fusion as revealed with a novel GLUT3-GFP fusion protein. 2003 , 73, 518-25		10
418	Kinetic differences between the isoforms of glutamate decarboxylase: implications for the regulation of GABA synthesis. 2003 , 86, 879-87		101
417	Primary cortical neuronal cultures reduce cellular energy utilization during anoxic energy deprivation. 2003 , 87, 764-72		16
416	Dual effects of intermittent or continuous L-DOPA administration on gene expression in the globus pallidus and subthalamic nucleus of adult rats with a unilateral 6-OHDA lesion. 2003 , 49, 246-60		21
415	Seungnoidan increases cerebrocortical ATP and acetylcholine contents in ovariectomized rats. 2003 , 17, 1025-31		1
414	Effects of hypothermia on energy metabolism in Mammalian central nervous system. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2003 , 23, 513-30	7-3	34 ⁰
413	N-acetylaspartate to total creatine ratio in the hippocampal CA1 sector after transient cerebral ischemia in gerbils: influence of neuronal elements, reactive gliosis, and tissue atrophy. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2003 , 23, 700-8	7-3	12
412	Axon function persists during anoxia in mammalian white matter. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2003 , 23, 1340-7	7-3	38
411	Basal levels of metabolic activity are elevated in Genetic Absence Epilepsy Rats from Strasbourg (GAERS): measurement of regional activity of cytochrome oxidase and lactate dehydrogenase by histochemistry. 2003 , 182, 346-52		16
410	Synaptic mitochondrial changes in the motor cortex following unilateral cortical lesions and motor skills training in adult male rats. 2003 , 337, 159-62		9
409	Radiotracers for positron emission tomography imaging. 2003 , 33, 14-27		36
408	Measurement of unidirectional Pi to ATP flux in human visual cortex at 7 T by using in vivo 31P magnetic resonance spectroscopy. 2003 , 100, 14409-14		90
407	Measuring correlates of brain metabolism with high-resolution MRI: a promising approach for diagnosing Alzheimer disease and mapping its course. 2003 , 17, 154-61		18
406	Adenosine receptors mediate glutamate-evoked arteriolar dilation in the rat cerebral cortex. 2003 , 284, H1631-7		35
405	Effects of hypoxia-reoxygenation on rat blood-brain barrier permeability and tight junctional protein expression. 2003 , 285, H2820-31		148

404	Molecular and functional imaging of cancer: advances in MRI and MRS. 2004 , 386, 3-60	53
403	White matter injury mechanisms. 2004 , 4, 113-30	212
402	Causes and consequences of disturbances of cerebral glucose metabolism in sporadic Alzheimer disease: therapeutic implications. 2004 , 541, 135-52	127
401	Tracing the neuroanatomical profiles of reward pathways with markers of neuronal activation. 2004 , 15, 383-414	24
400	Ultrastructural study of depolarization-induced translocation of NRF-2 transcription factor in cultured rat visual cortical neurons. 2004 , 19, 1153-62	33
399	Effects of L-glutamate/D-aspartate and monensin on lactic acid production in retina and cultured retinal Müller cells. 2004 , 89, 514-25	12
398	Glucose improvement of memory: a review. 2004 , 490, 33-57	250
397	Glucose metabolism and insulin receptor signal transduction in Alzheimer disease. 2004 , 490, 115-25	308
396	Glucose insufficiency alters neuronal viability and increases susceptibility to glutamate toxicity. 2004 , 1004, 188-92	22
395	Calcium signaling and neuronal vulnerability to ischemia in the striatum. 2004 , 36, 277-84	26
394	Metabolic stages, mitochondria and calcium in hypoxic/ischemic brain damage. 2004 , 36, 221-33	115
393	Relationship between cerebral energy metabolism in parietotemporal cortex and hippocampus and mental activity during aging in rats. 2004 , 111, 575-89	19
392	Impact of hypoglycemia and diabetes on CNS: correlation of mitochondrial oxidative stress with DNA damage. 2004 , 260, 153-9	109
391	Developmental sculpting of social phenotype and plasticity. 2004 , 28, 95-112	62
390	Magnetic resonance spectroscopy in cognitive research. 2004 , 44, 83-102	170
389	Energy metabolism in mammalian brain during development. 2004 , 73, 397-445	226
388	Tissue oxygenation and capacity to deliver O ₂ do the two go together?. 2004 , 31, 45-54	19
387	Altered Na ⁺ -K ⁺ ATPase immunoreactivity within GABAergic neurons in the gerbil hippocampal complex induced by spontaneous seizure and vigabatrin treatment. 2004 , 45, 179-87	18

386	Susceptibility of hippocampus and cerebral cortex to oxidative damage in streptozotocin treated mice: prevention by extracts of <i>Withania somnifera</i> and <i>Aloe vera</i> . 2004 , 11, 397-402	83
385	Extensive and divergent effects of sleep and wakefulness on brain gene expression. 2004 , 41, 35-43	511
384	Covariance PET patterns in early Alzheimer's disease and subjects with cognitive impairment but no dementia: utility in group discrimination and correlations with functional performance. 2004 , 23, 35-45	85
383	Poloxamer 188 volumetrically decreases neuronal loss in the rat in a time-dependent manner. 2004 , 55, 943-8; discussion 948-9	20
382	Individual value of brain tissue oxygen pressure, microvascular oxygen saturation, cytochrome redox level, and energy metabolites in detecting critically reduced cerebral energy state during acute changes in global cerebral perfusion. 2004 , 16, 210-9	33
381	Sleep deprivation induces the unfolded protein response in mouse cerebral cortex. 2005 , 92, 1150-7	148
380	Regulation of mitochondrial gene expression by energy demand in neural cells. 2005 , 93, 850-60	25
379	Oxygen consumption and mitochondrial membrane potential indicate developmental adaptation in energy metabolism of rat cortical neurons. 2005 , 21, 2721-32	16
378	Mitochondrial dysfunction in bipolar disorder: evidence from magnetic resonance spectroscopy research. 2005 , 10, 900-19	357
377	Changes in number of synapses and mitochondria in presynaptic terminals in the dentate gyrus following cerebral ischemia and rehabilitation training. 2005 , 1033, 51-7	30
376	Lithium-induced alterations in nucleoside triphosphate levels in human brain: a proton-decoupled ³¹ P magnetic resonance spectroscopy study. 2005 , 138, 51-9	8
375	Dynamic study of cerebral bioenergetics and brain function using in vivo multinuclear MRS approaches. 2005 , 27A, 84-121	11
374	A mouse model of cerebral oligemia: relation to brain histopathology, cerebral blood flow, and energy state. 2005 , 162, 324-31	7
373	Hemodilution with liposome-encapsulated low-oxygen-affinity hemoglobin does not attenuate hypothermic cerebral ischemia in rats. 2005 , 8, 263-9	8
372	Aspects of ageing in chronic cerebral oligoemia. Mechanisms of degeneration and compensation in rat models. 2005 , 112, 393-413	19
371	Mitogen-activated protein kinases (MAPKs) mediate SIN-1/ glucose deprivation-induced death in rat primary astrocytes. 2005 , 28, 942-7	12
370	Adenosine and purine nucleosides prevent the disruption of mitochondrial transmembrane potential by peroxynitrite in rat primary astrocytes. 2005 , 28, 810-5	8
369	Effects of erythropoietin on brain function. 2005 , 6, 65-79	68

368	Brain development and susceptibility to damage; ion levels and movements. 2005 , 69, 139-86	11
367	Quantitative immuno-electron microscopic analysis of nuclear respiratory factor 2 alpha and beta subunits: Normal distribution and activity-dependent regulation in mammalian visual cortex. 2005 , 22, 1-18	15
366	Study of the oxidative stress in a rat model of chronic brain hypoperfusion. 2005 , 46, 601-11	89
365	Dopamine-containing neurons are silenced by energy deprivation: a defensive response or beginning of cell death?. 2005 , 26, 857-68	12
364	The top 10 most abundant transcripts are sufficient to characterize the organs functional specificity: evidences from the cortex, hypothalamus and pituitary gland. 2005 , 344, 133-41	35
363	Molecular cloning and expression pattern of 14 kDa apolipoprotein in orange-spotted grouper, <i>Epinephelus coioides</i> . 2005 , 142, 432-7	33
362	Behavioral correlates of differences in neural metabolic capacity. 2005 , 48, 1-15	64
361	Protective effects of isoliquiritigenin in transient middle cerebral artery occlusion-induced focal cerebral ischemia in rats. 2006 , 53, 303-9	153
360	EST-based identification of genes expressed in the hypothalamus of male orange-spotted grouper (<i>Epinephelus coioides</i>). 2006 , 256, 129-139	18
359	Insulin regulates neuronal glucose uptake by promoting translocation of glucose transporter GLUT3. 2006 , 198, 48-53	70
358	Optical and pharmacological tools to investigate the role of mitochondria during oxidative stress and neurodegeneration. 2006 , 79, 136-71	149
357	Mitochondrial trafficking and morphology in healthy and injured neurons. 2006 , 80, 241-68	180
356	Hemodynamic consequences of deformed microvessels in the brain in Alzheimer's disease. 1997 , 826, 75-91	81
355	Impaired cerebrovascular perfusion. Summary of evidence in support of its causality in Alzheimer's disease. 2000 , 924, 136-52	61
354	Parkinson's disease and brain mitochondrial dysfunction: a functional phosphorus magnetic resonance spectroscopy study. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2006 , 26, 283-90	7-3 83
353	Alois Alzheimer revisited: differences in origin of the disease carrying his name. 2006 , 113, 1645-58	23
352	Identification of nitrated proteins in Alzheimer's disease brain using a redox proteomics approach. 2006 , 22, 76-87	303
351	Therapeutic hypothermia for brain injury after cardiac arrest. 2006 , 26, 387-95	36

350	Imaging the earliest stages of Alzheimer's disease. 2006 , 3, 529-39	19
349	Neuronal metabolism governs cortical network response state. 2006 , 103, 5597-601	123
348	Heterogeneous regional and temporal energetic impairment following controlled cortical impact injury in rats. 2007 , 29, 594-603	18
347	Inhibition and brain work. 2007 , 56, 771-83	306
346	Neural correlates of regional EEG power change. 2007 , 36, 1301-12	29
345	The Key Role of Oxidative Stress in Alzheimer's Disease. 2007 , 267-281	10
344	The Phosphocreatine Circuit: Molecular and Cellular Physiology of Creatine Kinases, Sensitivity to Free Radicals, and Enhancement by Creatine Supplementation. 195-264	40
343	A comparison of mitochondrial respiratory function of Tibet chicken and Silky chicken embryonic brain. 2007 , 86, 2210-5	18
342	4.5 Coupling of Brain Function to Metabolism: Evaluation of Energy Requirements. 2007 , 343-400	11
341	Brain mitochondrial dysfunction as a link between Alzheimer's disease and diabetes. 2007 , 257, 206-14	135
340	Gestational and lactational iron deficiency alters the developing striatal metabolome and associated behaviors in young rats. 2007 , 137, 1043-9	69
339	Energy Metabolism in Conformational Diseases. 233-257	3
338	. 2007 ,	14
337	Global brain ischemia and reperfusion. 236-281	2
336	. 2007 ,	1
335	Development of an ion-pair HPLC method for investigation of energy charge changes in cerebral ischemia of mice and hypoxia of Neuro-2a cell line. 2007 , 21, 628-34	25
334	In Vivo NMR Spectroscopy Static Aspects. 43-110	6
333	Efficient in vivo ³¹ P magnetization transfer approach for noninvasively determining multiple kinetic parameters and metabolic fluxes of ATP metabolism in the human brain. 2007 , 57, 103-14	94

332	Global and regional brain metabolic scaling and its functional consequences. 2007 , 5, 18	96
331	Protective effects of Nicotiflorin on reducing memory dysfunction, energy metabolism failure and oxidative stress in multi-infarct dementia model rats. 2007 , 86, 741-8	64
330	Dementia: The Significance of Cerebral Metabolic Disturbances in Alzheimer's Disease. Relation to Parkinson's Disease. 2007 , 189-232	
329	Cellular pathways of energy metabolism in the brain: is glucose used by neurons or astrocytes?. 2007 , 55, 1238-50	75
328	Alzheimer disease--no target for statin treatment. A mini review. 2007 , 32, 695-706	20
327	Probing the molecular mechanisms of neuronal degeneration: importance of mitochondrial dysfunction and calcineurin activation. 2008 , 22, 253-62	16
326	Protective effect of the energy precursor creatine against toxicity of glutamate and beta-amyloid in rat hippocampal neurons. 2000 , 74, 1968-78	168
325	Stretch-Induced Injury Alters Mitochondrial Membrane Potential and Cellular ATP in Cultured Astrocytes and Neurons. 2008 , 74, 1951-1960	5
324	Cerebral alanine transport and alanine aminotransferase reaction: alanine as a source of neuronal glutamate. 1994 , 62, 1953-64	42
323	Time course of changes in extracellular lactate evoked by transient K(+)-induced depolarisation in the rat striatum. 1994 , 62, 2368-74	19
322	Metabolic changes in the thalamus after spinal cord injury followed by proton MR spectroscopy. 2008 , 59, 499-506	15
321	Most expressed transcripts in sexual organs and other tissues. 2008 , 75, 230-42	2
320	Multinuclear magnetic resonance spectroscopy for in vivo assessment of mitochondrial dysfunction in Parkinson's disease. 2008 , 1147, 206-20	48
319	Gamma-aminobutyric acid modulates local brain oxygen consumption and blood flow in rat cerebellar cortex. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2008 , 28, 906-15	7.3 24
318	Effects of chloramphenicol on brain energy metabolism using ³¹ P spectroscopy: influences on sleep-wake states in rat. 2008 , 106, 1552-62	4
317	Neuroimaging of mitochondrial disease. 2008 , 8, 396-413	171
316	Branched-chain amino acids may improve recovery from a vegetative or minimally conscious state in patients with traumatic brain injury: a pilot study. 2008 , 89, 1642-7	44
315	Functions and effects of creatine in the central nervous system. 2008 , 76, 329-43	257

314	d-galactose administration induces memory loss and energy metabolism disturbance in mice: protective effects of catalpol. 2008 , 46, 2888-94	55
313	The ischemic cascade and mediators of ischemic injury. 2009 , 92, 31-41	15
312	Tightly coupled brain activity and cerebral ATP metabolic rate. 2008 , 105, 6409-14	141
311	SHEDDING LIGHT ON LIFE: OPTICAL ASSESSMENT OF MITOCHONDRIAL FUNCTION AND TISSUE VITALITY IN BIOLOGY AND MEDICINE. 2008 ,	
310	SHEDDING LIGHT ON LIFE: OPTICAL ASSESSMENT OF MITOCHONDRIAL FUNCTION AND TISSUE VITALITY IN BIOLOGY AND MEDICINE. 2008 , 01, 71-83	2
309	Biochemical evaluation of focal non-reperfusion cerebral ischemia by middle cerebral artery occlusion in rats. 2008 , 66, 725-30	7
308	Modeling sporadic Alzheimer's disease: the insulin resistant brain state generates multiple long-term morphobiological abnormalities including hyperphosphorylated tau protein and amyloid-beta. 2009 , 18, 729-50	80
307	Iron is essential for neuron development and memory function in mouse hippocampus. 2009 , 139, 672-9	129
306	Phosphorus and proton magnetic resonance spectroscopy demonstrates mitochondrial dysfunction in early and advanced Parkinson's disease. 2009 , 132, 3285-97	148
305	Principal cell spiking, postsynaptic excitation, and oxygen consumption in the rat cerebellar cortex. 2009 , 102, 1503-12	27
304	Erythropoietin improves brain mitochondrial function in rats after traumatic brain injury. 2009 , 31, 496-502	33
303	Magnetic resonance imaging studies of cigarette smoking. 2009 , 113-43	47
302	Thermodynamic constraints on neural dimensions, firing rates, brain temperature and size. 2009 , 27, 415-36	40
301	The relationship between pluripotency and mitochondrial DNA proliferation during early embryo development and embryonic stem cell differentiation. 2009 , 5, 140-58	183
300	The interplay between inorganic phosphate and amino acids determines zinc solubility in brain slices. 2009 , 108, 1300-8	16
299	Manganese exposure is cytotoxic and alters dopaminergic and GABAergic neurons within the basal ganglia. 2009 , 110, 378-89	93
298	Differential influence of arterial blood glucose on cerebral metabolism following severe traumatic brain injury. 2009 , 13, R13	33
297	Heterogeneity of nervous system mitochondria: location, location, location!. 2009 , 218, 293-307	49

296	Influences of nanoparticle zinc oxide on acutely isolated rat hippocampal CA3 pyramidal neurons. 2009 , 30, 220-30	129
295	Executive function deficits and neural discordance in children with Autism Spectrum Disorders. 2009 , 120, 1107-15	57
294	Oxidative Neural Injury. 2009 ,	
293	Pharmacology of dimethyl sulfoxide in cardiac and CNS damage. 2009 , 61, 225-35	77
292	Functional Imaging with Mitochondrial Flavoprotein Autofluorescence. 2009 , 221-253	
291	Functional Magnetic Resonance Imaging, Diffusion Tensor Imaging, and Magnetic Resonance Spectroscopy in Bipolar Disorder. 2010 , 133-199	2
290	In vivo and in vitro assessment of brain bioenergetics in aging rats. 2010 , 14, 2667-74	14
289	Oxidative stress and cognitive longevity. 2010 , 26, 595-603	37
288	High energy phosphate abnormalities normalize after antipsychotic treatment in schizophrenia: a longitudinal 31P MRS study of basal ganglia. 2010 , 181, 237-40	19
287	The use of proton magnetic resonance spectroscopy in PTSD research--meta-analyses of findings and methodological review. 2010 , 34, 7-22	44
286	Neurotoxicological effects and the impairment of spatial recognition memory in mice caused by exposure to TiO2 nanoparticles. 2010 , 31, 8043-50	183
285	Measurement of selected ions related to oxidative stress and energy metabolism in Saudi autistic children. 2010 , 43, 63-70	42
284	Changes in glucose uptake rather than lactate shuttle take center stage in subserving neuroenergetics: evidence from mathematical modeling. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2010 , 30, 586-602	7-3 72
283	Proton MRS in twin pairs discordant for schizophrenia. 2010 , 15, 308-18	100
282	Exercise as an intervention for the age-related decline in neural metabolic support. 2010 , 2,	15
281	Pathophysiology of perinatal hypoxia/chaemia. 2010 , 20, 351-355	
280	AMP-activated protein kinase mediates activity-dependent regulation of peroxisome proliferator-activated receptor gamma coactivator-1alpha and nuclear respiratory factor 1 expression in rat visual cortical neurons. 2010 , 169, 23-38	52
279	Animal Models of Dementia. 2011 ,	7

278	Discontinuous gas exchange in insects: is it all in their heads?. 2011 , 177, 130-4	46
277	Activity-dependent increases in local oxygen consumption correlate with postsynaptic currents in the mouse cerebellum in vivo. 2011 , 31, 18327-37	35
276	Neurokinetics. 2011 ,	9
275	Role of 5'-adenosine monophosphate-activated protein kinase in cell survival and death responses in neurons. 2011 , 14, 1863-76	64
274	REM sleep loss increases brain excitability: role of noradrenaline and its mechanism of action. 2011 , 15, 165-78	59
273	Delta oscillations induced by ketamine increase energy levels in sleep-wake related brain regions. 2011 , 197, 72-9	10
272	Molecular neurobiology of sleep. 2011 , 98, 191-203	15
271	Role of creatine kinase and its substrates in the central nervous system in norm and in various pathologies. 2011 , 47, 140-150	2
270	Protective effect of caffeine and a selective A2A receptor antagonist on impairment of memory and oxidative stress of aged rats. 2011 , 46, 309-15	46
269	Ovariectomy alters energy metabolism in rat striatum: effect of supplementation with soy diet rich in isoflavones. 2011 , 26, 97-105	8
268	The toxicological effects in brain of mice following exposure to cerium chloride. 2011 , 144, 872-84	20
267	Neurobiological correlates of imaging. 2011 , 22, 162-72	
266	Review: magnetic resonance spectroscopy studies of pediatric major depressive disorder. 2011 , 2011, 650450	34
265	Early gene expression changes in the retinal ganglion cell layer of a rat glaucoma model. 2011 , 52, 1460-73	53
264	Cardiovascular risk factors promote brain hypoperfusion leading to cognitive decline and dementia. 2012 , 2012, 367516	252
263	Glucose Metabolism During Neural Activation. 2012 , 675-697	
262	Regulation of Na(+)/K(+)-ATPase by nuclear respiratory factor 1: implication in the tight coupling of neuronal activity, energy generation, and energy consumption. 2012 , 287, 40381-90	18
261	Respiratory chain complex I, a main regulatory target of the cAMP/PKA pathway is defective in different human diseases. 2012 , 586, 568-77	59

260	Painted turtle cortex is resistant to an in vitro mimic of the ischemic mammalian penumbra. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2012 , 32, 2033-43	7-3	20
259	MRSI correlates of cognitive-behavioral therapy in pediatric obsessive-compulsive disorder. 2012 , 36, 161-8		29
258	A sensitive HPLC-based method to quantify adenine nucleotides in primary astrocyte cell cultures. 2012 , 889-890, 110-5		40
257	Intranasal insulin suppresses food intake via enhancement of brain energy levels in humans. 2012 , 61, 2261-8		109
256	Neuronal inhibition and excitation, and the dichotomic control of brain hemodynamic and oxygen responses. 2012 , 62, 1040-50		107
255	Quantitative imaging of energy expenditure in human brain. 2012 , 60, 2107-17		158
254	Dynamics of subcellular proteomes during brain development. 2012 , 11, 2467-79		35
253	Approximate invariance of metabolic energy per synapse during development in mammalian brains. 2012 , 7, e33425		12
252	BK channels reveal novel phosphate sensitivity in SNr neurons. 2012 , 7, e52148		1
251	Elevated glutamatergic compounds in pregenual anterior cingulate in pediatric autism spectrum disorder demonstrated by 1H MRS and 1H MRSI. 2012 , 7, e38786		69
250	Activation of AMP-activated protein kinase stimulates Na ⁺ ,K ⁺ -ATPase activity in skeletal muscle cells. 2012 , 287, 23451-63		49
249	The role of glutathione in brain tumor drug resistance. 2012 , 83, 1005-12		126
248	Mitochondrial detachment of hexokinase 1 in mood and psychotic disorders: implications for brain energy metabolism and neurotrophic signaling. 2012 , 46, 95-104		69
247	Creatine ethyl ester: A new substrate for creatine kinase. 2012 , 46, 149-152		5
246	Therapeutic use of creatine in brain or heart ischemia: available data and future perspectives. 2013 , 33, 336-63		32
245	Redox modification of proteins as essential mediators of CNS autophagy and mitophagy. 2013 , 587, 2291-8		28
244	1H NMR metabolomics investigation of an Alzheimer's disease (AD) mouse model pinpoints important biochemical disturbances in brain and plasma. 2013 , 9, 974-983		33
243	Tissue-type plasminogen activator mediates neuronal detection and adaptation to metabolic stress. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2013 , 33, 1761-9	7-3	20

242	Why does brain metabolism not favor burning of fatty acids to provide energy? Reflections on disadvantages of the use of free fatty acids as fuel for brain. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2013 , 33, 1493-9	7-3	216
241	Effect of body size on organ-specific mitochondrial respiration rate of the largemouth bronze gudgeon. 2013 , 39, 513-21		6
240	Acetate supplementation increases brain phosphocreatine and reduces AMP levels with no effect on mitochondrial biogenesis. 2013 , 62, 296-305		14
239	Application of Magnetic Resonance Spectroscopic Imaging to Addiction Research. 2013 , 707-750		2
238	Molecular chaperones, β -synuclein, and neurodegeneration. 2013 , 47, 552-60		39
237	Glucose and Lactate Monitoring Across the Rat Sleep/Wake Cycle. 2013 , 241-256		1
236	Application of 2D BN/SDS-PAGE coupled with mass spectrometry for identification of VDAC-associated protein complexes related to mitochondrial binding sites for type I brain hexokinase. 2013 , 13, 823-30		1
235	Exercise and DHA prevent the negative effects of hypoxia on EEG and nerve conduction velocity. 2013 , 14, 360-6		5
234	Mitochondrial modulators for bipolar disorder: a pathophysiologically informed paradigm for new drug development. 2013 , 47, 26-42		49
233	Energetic and cell membrane metabolic products in patients with primary insomnia: a 31-phosphorus magnetic resonance spectroscopy study at 4 tesla. 2013 , 36, 493-500		21
232	Comparative analysis of cytosolic and mitochondrial ATP synthesis in embryonic and postnatal hippocampal neuronal cultures. 2012 , 5, 102		23
231	Chronic cerebral hypoperfusion causes decrease of O-GlcNAcylation, hyperphosphorylation of tau and behavioral deficits in mice. 2014 , 6, 10		59
230	Constancy and trade-offs in the neuroanatomical and metabolic design of the cerebral cortex. 2014 , 8, 9		25
229	Energy demands of diverse spiking cells from the neocortex, hippocampus, and thalamus. 2014 , 8, 41		18
228	Translocation of mixed lineage kinase domain-like protein to plasma membrane leads to necrotic cell death. 2014 , 24, 105-21		500
227	Impaired cerebral mitochondrial oxidative phosphorylation function in a rat model of ventricular fibrillation and cardiopulmonary resuscitation. 2014 , 2014, 192769		13
226	Energy status and metabolism in intracranial space occupying lesions: a prospective 31p spectroscopic study. 2014 , 8, RC05-8		8
225	Effects of acute administration of mazindol on brain energy metabolism in adult mice. 2014 , 26, 146-54		3

224	Glucose and the injured brain-monitored in the neurointensive care unit. 2014 , 5, 91	23
223	Calcium dysregulation, and lithium treatment to forestall Alzheimer's disease - a merging of hypotheses. 2014 , 55, 175-81	16
222	Mitochondria: a multimodal hub of hypoxia tolerance. 2014 , 92, 569-589	36
221	The oxygen paradox of neurovascular coupling. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2014 , 34, 19-29	73 80
220	Tissue-specific differences in brain phosphodiesterases in late-life major depression. 2014 , 22, 499-509	14
219	A preliminary evaluation of the correlation between regional energy phosphates and resting state functional connectivity in depression. 2015 , 9, 348-54	4
218	Neuronal acid-induced $[Zn^{2+}]_i$ elevations calibrated using the low-affinity ratiometric probe FuraZin-1. 2015 , 135, 777-86	3
217	Paroxetine ameliorates changes in hippocampal energy metabolism in chronic mild stress-exposed rats. 2015 , 11, 2887-901	6
216	Cognitive-behavioral therapy for obsessive-compulsive disorder: access to treatment, prediction of long-term outcome with neuroimaging. 2015 , 8, 211-23	24
215	GABAA Receptor-Mediated Bidirectional Control of Synaptic Activity, Intracellular Ca^{2+} , Cerebral Blood Flow, and Oxygen Consumption in Mouse Somatosensory Cortex In Vivo. 2015 , 25, 2594-609	16
214	Parkinson's disease: in vivo brain metabolomics by MRS. 2015 , 122, 81-94	5
213	The role of mitochondrially derived ATP in synaptic vesicle recycling. 2015 , 290, 22325-36	131
212	Metabolic changes assessed by MRS accurately reflect brain function during drug-induced epilepsy in mice in contrast to fMRI-based hemodynamic readouts. 2015 , 120, 55-63	12
211	Spreading Depression, Spreading Depolarizations, and the Cerebral Vasculature. 2015 , 95, 953-93	291
210	Suppression of neurite outgrowth of primary cultured hippocampal neurons is involved in impairment of glutamate metabolism and NMDA receptor function caused by nanoparticulate TiO_2 . 2015 , 53, 76-85	43
209	Identifying the ischaemic penumbra using pH-weighted magnetic resonance imaging. 2015 , 138, 36-42	102
208	Brain high-energy phosphates and creatine kinase synthesis rate under graded isoflurane anesthesia: An in vivo (^{31}P) magnetization transfer study at 11.7 tesla. 2015 , 73, 726-30	7
207	Extratemporal abnormalities in phosphorus magnetic resonance spectroscopy of patients with mesial temporal sclerosis. 2016 , 74, 93-8	4

206	Killing Me Softly: Connotations to Unfolded Protein Response and Oxidative Stress in Alzheimer's Disease. 2016 , 2016, 1805304	20
205	Proton spectroscopy study of the dorsolateral prefrontal cortex in youth with familial depression. 2016 , 70, 269-77	16
204	Activity-dependent calcium, oxygen, and vascular responses in a mouse model of familial hemiplegic migraine type 1. 2016 , 80, 219-32	19
203	Phosphorus Spectroscopy (³¹ P MRS) of the Brain in Psychiatric Disorders. 2016 , 1257-1270	2
202	Mitochondrial dysfunction in bipolar disorder: Evidence, pathophysiology and translational implications. 2016 , 68, 694-713	91
201	Extrusion versus diffusion: mechanisms for recovery from sodium loads in mouse CA1 pyramidal neurons. 2016 , 594, 5507-27	18
200	Glutaminases. 2016 , 13, 133-171	12
199	Mitochondrial Oxidative Phosphorylation System (OXPHOS) Deficits in Schizophrenia: Possible Interactions with Cellular Processes. 2016 , 61, 457-69	78
198	Modulation of Acid-sensing Ion Channel 1a by Intracellular pH and Its Role in Ischemic Stroke. 2016 , 291, 18370-83	30
197	Sodium MRI of glioma in animal models at ultrahigh magnetic fields. 2016 , 29, 175-86	25
196	Support of Nerve Conduction by Respiring Myelin Sheath: Role of Connexons. 2016 , 53, 2468-79	14
195	Mitochondrial dysfunction induces dendritic loss via eIF2 β phosphorylation. 2017 , 216, 815-834	30
194	Treating cognitive impairment with transcranial low level laser therapy. 2017 , 168, 149-155	25
193	Retinal metabolism: A comparative look at energetics in the retina. 2017 , 1672, 50-57	100
192	Creatine in the central nervous system: From magnetic resonance spectroscopy to creatine deficiencies. 2017 , 529, 144-157	53
191	Tissue Type-Specific Bioenergetic Abnormalities in Adults with Major Depression. 2017 , 42, 876-885	45
190	Assessing Metabolism and Injury in Acute Human Traumatic Brain Injury with Magnetic Resonance Spectroscopy: Current and Future Applications. 2017 , 8, 426	30
189	Paralytic hypo-energetic state facilitates anoxia tolerance despite ionic imbalance in adult. 2018 , 221,	12

188	Effects of Aging on the Human Brain: A Proton and Phosphorus MR Spectroscopy Study at 3T. 2018 , 28, 416-421	25
187	Functional energetic responses and individual variance of the human brain revealed by quantitative imaging of adenosine triphosphate production rates. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2018 , 38, 959-972	73 14
186	Environmentally relevant concentrations of glibenclamide induce oxidative stress in common carp (<i>Cyprinus carpio</i>). 2018 , 197, 105-116	8
185	Signature of positive selection in mitochondrial DNA in <i>Cetartiodactyla</i> . 2018 , 93, 65-73	12
184	Mitochondrial Agents for Bipolar Disorder. 2018 , 21, 550-569	28
183	The Oxysterol-Binding Protein Cycle: Burning Off PI(4)P to Transport Cholesterol. 2018 , 87, 809-837	77
182	P magnetization transfer magnetic resonance spectroscopy: Assessing the activation induced change in cerebral ATP metabolic rates at 3 T. 2018 , 79, 22-30	13
181	Alterations in the E3 ligases Parkin and CHIP result in unique metabolic signaling defects and mitochondrial quality control issues. 2018 , 117, 139-155	4
180	Autophagy plays a protective role in Mn-induced toxicity in PC12 cells. 2018 , 394, 45-53	26
179	Mitochondrially produced ATP affects stem cell pluripotency via Actl6a-mediated histone acetylation. 2018 , 32, 1891-1902	14
178	Postnatal Subacute Benzo(a)Pyrene Exposure Caused Neurobehavioral Impairment and Metabolomic Changes of Cerebellum in the Early Adulthood Period of Sprague-Dawley Rats. 2018 , 33, 812-823	12
177	In Vivo NMR Spectroscopy Static Aspects. 2018 , 43-128	0
176	The Effects of Hypoxic Hypoxia on Olfactory Sensitivity in Humans. 2018 , 63, 463-468	1
175	X-Nuclear MRS Imaging Methods for Quantitative Assessment of Neuroenergetic Biomarkers in Studying Brain Function and Aging. 2018 , 10, 394	6
174	Assessment of the antidepressant effect of caffeine using rat model of depression induced by reserpine. 2018 , 42,	3
173	Semi-quantitative Assessment Using [18F]FDG Tracer in Patients with Severe Brain Injury. 2018 ,	4
172	VDAC electronics: 5. Mechanism and computational model of hexokinase-dependent generation of the outer membrane potential in brain mitochondria. 2018 , 1860, 2599-2607	5
171	Cerebrovascular Reactivity during Prolonged Breath-Hold in Experienced Freedivers. 2018 , 39, 1839-1847	5

170	Some Biological Consequences of the Inhibition of Na,K-ATPase by Translationally Controlled Tumor Protein (TCTP). 2018 , 19,	8
169	Cerebrospinal fluid and brain extracellular fluid in severe brain trauma. 2017 , 146, 237-258	8
168	The Evolution of Oxygen-Independent Energy Metabolism in Eukaryotes with Hydrogenosomes and Mitosomes. 2019 , 7-29	
167	Functional spectroscopic imaging reveals specificity of glutamate response in mouse brain to peripheral sensory stimulation. 2019 , 9, 10563	3
166	The effect of chronic cerebral hypoperfusion on the pathology of Alzheimer's disease: A positron emission tomography study in rats. 2019 , 9, 14102	30
165	History and progress of hypotheses and clinical trials for Alzheimer's disease. 2019 , 4, 29	182
164	Aptamer superstructure-based electrochemical biosensor for sensitive detection of ATP in rat brain with in vivo microdialysis. 2019 , 144, 1711-1717	16
163	Iron Metabolism and Brain Development in Premature Infants. 2019 , 10, 463	28
162	Norepinephrine-Fe(III)-ATP Ternary Complex and Its Relevance to Parkinson's Disease. 2019 , 10, 2777-2785	1
161	Brain metabolic alterations in patients with long-term calcineurin inhibitor therapy after liver transplantation. 2019 , 49, 1431-1441	2
160	Mitochondria-coupled glucose phosphorylation develops after birth to modulate H ₂ O release and calcium handling in rat brain. 2019 , 149, 624-640	7
159	The NaH-Exchanger NHE1 Regulates Extra- and Intracellular pH and Nimodipine-sensitive [Ca] in the Suprachiasmatic Nucleus. 2019 , 9, 6430	5
158	Cost of auditory sharpness: Model-Based estimate of energy use by auditory brainstem "octopus" neurons. 2019 , 469, 137-147	2
157	Iron Oxide Nanoparticles Affects Behaviour and Monoamine Levels in Mice. 2019 , 44, 1533-1548	12
156	Mitochondria and neuroprotection in stroke: Cationic arginine-rich peptides (CARPs) as a novel class of mitochondria-targeted neuroprotective therapeutics. 2019 , 121, 17-33	30
155	Spontaneous astrocytic Ca activity abounds in electrically suppressed ischemic penumbra of aged mice. 2019 , 67, 37-52	9
154	Coenzyme Q10 and neuropsychiatric and neurological disorders: relevance for schizophrenia. 2020 , 23, 756-769	8
153	Modification of oxygen consumption and blood flow in mouse somatosensory cortex by cell-type-specific neuronal activity. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2020 , 40, 2010-2025 ⁷³	10

152	Higher cardiovascular fitness level is associated with lower cerebrovascular reactivity and perfusion in healthy older adults. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2020 , 40, 1468-1481	7.3	12
151	Brain mitochondrial impairment in early-onset Parkinson's disease with or without PINK1 mutation. 2020 , 35, 504-507		9
150	Methylene Blue Preserves Cytochrome Oxidase Activity and Prevents Neurodegeneration and Memory Impairment in Rats With Chronic Cerebral Hypoperfusion. 2020 , 14, 130		5
149	Fluorescent Biosensors for Neuronal Metabolism and the Challenges of Quantitation. 2020 , 63, 111-121		5
148	Brain function and metabolism in patients with long-term tacrolimus therapy after kidney transplantation in comparison to patients after liver transplantation. 2020 , 15, e0229759		2
147	Brain metabolism and neurological symptoms in combined malonic and methylmalonic aciduria. 2020 , 15, 27		6
146	Hypoxic-Ischemic Encephalopathy and Mitochondrial Dysfunction: Facts, Unknowns, and Challenges. 2020 , 33, 247-262		12
145	Opposed hemodynamic responses following increased excitation and parvalbumin-based inhibition. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2021 , 41, 841-856	7.3	8
144	Transcranial magnetic stimulation and magnetic resonance spectroscopy: Opportunities for a bimodal approach in human neuroscience. 2021 , 224, 117394		12
143	Altered phospholipid and high-energy phosphate metabolism in the basal ganglia and thalamus of severe obsessive compulsive patients with treatment resistance: A phosphorus 31 nuclear magnetic resonance spectroscopy study. 2021 , 307, 111217		
142	Exploring the crosstalk of glycolysis and mitochondrial metabolism in psychiatric disorders and brain tumours. 2021 , 53, 3002-3018		2
141	Development and validation of LC-MS/MS method for quantification of ATP, ADP and AMP in dried blood spot, liver and brain of neonate mice pups. 2021 , 3, 100172		1
140	The distinct roles of calcium in rapid control of neuronal glycolysis and the tricarboxylic acid cycle. 2021 , 10,		12
139	Alterations of neurometabolism in the dorsolateral prefrontal cortex and thalamus in transition to psychosis patients change under treatment as usual - A two years follow-up H/P-MR-spectroscopy study. 2021 , 228, 7-18		1
138	Glycolytic metabolism and activation of Na pumping contribute to extracellular acidification in the central clock of the suprachiasmatic nucleus: Differential glucose sensitivity and utilization between oxidative and non-oxidative glycolytic pathways.. 2021 ,		0
137	Deciphering Alzheimer's Disease Pathogenic Pathway: Role of Chronic Brain Hypoperfusion on p-Tau and mTOR. 2021 , 79, 1381-1396		1
136	Interplay between bioenergetics and oxidative stress at normal brain aging. Aging as a result of increasing disbalance in the system oxidative stress-energy provision. 2021 , 473, 713-722		11
135	Quantitative Assessment of Occipital Metabolic and Energetic Changes in Parkinson's Patients, Using In Vivo P MRS-Based Metabolic Imaging at 7T. 2021 , 11,		3

134	Significant higher-level C-C motif chemokine ligand 2/3 and chemotactic power in cerebral white matter than grey matter in rat and human. 2021 , 54, 4088	2
133	An interictal measurement of cerebral oxygen extraction fraction in MRI-negative refractory epilepsy using quantitative susceptibility mapping. 2021 , 85, 87-97	0
132	Sulfide catabolism ameliorates hypoxic brain injury. 2021 , 12, 3108	14
131	Neuronal autophagy and mitophagy in Parkinson's disease. 2021 , 82, 100972	5
130	Oxygen Deficient (OD) Combustion and Metabolism: Allometric Laws of Organs and Kleiber's Law from OD Metabolism?. 2021 , 9, 54	3
129	Clinical translation of amide proton transfer (APT) MRI for ischemic stroke: a systematic review (2003-2020). 2021 , 11, 3797-3811	3
128	Comparing the effect of cognitive vs. exercise training on brain MRI outcomes in healthy older adults: A systematic review. 2021 , 128, 511-533	2
127	Brain neurochemical monitoring. 2021 , 189, 113351	5
126	A novel integrated approach to estimate the mitochondrial content of neuronal cells and brain tissues. 2021 , 363, 109351	
125	Na/K-ATPase activity is regionally regulated by acute hypoxia in naked mole-rat brain. 2021 , 764, 136244	4
124	Hyperbaric Oxygen Preconditioning Protects Against Cerebral Ischemia/Reperfusion Injury by Inhibiting Mitochondrial Apoptosis and Energy Metabolism Disturbance. 2021 , 46, 866-877	6
123	Increasing neuronal glucose uptake attenuates brain aging and promotes life span under dietary restriction in. 2021 , 24, 101979	6
122	Targeting Mitochondrial Dysfunction for Bipolar Disorder. 2021 , 48, 61-99	3
121	4.7 Ion Transport and Energy Metabolism. 2007 , 429-465	1
120	6.4 Mitochondrial Permeability Transition in the CNS: Composition, Regulation, and Pathophysiological Relevance. 2007 , 667-702	6
119	8.1 Mechanisms and Modeling of Energy Transfer Between Intracellular Compartments. 2007 , 815-860	6
118	1.5 Electron Transport. Structure, Redox-Coupled Protonmotive Activity, and Pathological Disorders of Respiratory Chain Complexes. 2007 , 93-118	8
117	Anoxia Resistance in Lower and Higher Vertebrates. 2013 , 19-35	1

116	Brain Metabolism in the Fetus and Neonate. 1998 , 537-550	2
115	Responses of electrical activity and redox state of cytochrome oxidase to oxygen insufficiency in perfused rat brain in situ. 1996 , 388, 319-26	2
114	Possible role of ammonia in the brain in dementia of Alzheimer type. 1994 , 368, 197-205	7
113	Creatine kinase in non-muscle tissues and cells. 1994 , 193-220	5
112	Metabolic Correlates of Focal Ischemia. 1992 , 9-39	1
111	Oxygen and ion concentrations in normoxic and hypoxic brain cells. 1998 , 454, 7-16	118
110	The Functioning Gerbil Brain In Vivo. 1997 , 41-53	3
109	Functional activation of cerebral glucose uptake after carotid body stimulation. 1996 , 410, 411-20	2
108	Gangliosides: New Generation of Neuroprotective Agents. 1992 , 187-223	5
107	Primate Visual Cortex. 1994 , 141-200	17
106	Brain Cytochrome Oxidase. 1998 , 1-53	12
105	Cytochrome Oxidase and Neuroanatomical Patterns. 1998 , 91-108	1
104	Molecular Mechanisms of Impaired Mitochondrial Gene Expression in Alzheimer's Disease. 1998 , 203-216	1
103	Cytochrome Oxidase. 1998 , 233-261	4
102	Nitrated Proteins in the Progression of Alzheimer's Disease: A Proteomics Comparison of Mild Cognitive Impairment and Alzheimer's Disease Brain. 2009 , 137-157	1
101	Pathobiochemische Störungen im oxydativen Hirnstoffwechsel und ihre therapeutische Beeinflussbarkeit. 1991 , 29-40	2
100	Molekulare Medizin der Alzheimer-Krankheit. 1999 , 195-236	3
99	Toxin Induced Mitochondrial Dysfunction and Neurodegeneration. 1998 , 297-317	4

98	Models of Alzheimer's disease: cellular and molecular aspects. 1997 , 49, 11-21	21
97	Desensitization of brain insulin receptor. Effect on glucose/energy and related metabolism. 1994 , 44, 259-68	57
96	Proton-motive ATP synthase and energy transfer in the cell. 1991 , 15-30	1
95	Cytochrome Oxidase Studies on the Human Visual Cortex. 1993 , 165-180	4
94	MR Studies of Tumors: Relationship between Blood Flow, Metabolism, and Physiology. 1994 , 311-328	4
93	Ischemic White Matter Damage. 2004 , 985-1007	2
92	Molecular Mechanisms of Calcium Influx in Axonal Degeneration. 2005 , 275-292	1
91	Cellular Mechanisms of Brain Energy Metabolism. 2011 , 123-146	3
90	Neurometabolic patterns of an "at risk for mental disorders" syndrome involve abnormalities in the thalamus and anterior midcingulate cortex. 2020 ,	1
89	Tricarboxylic acid cycle in rat brain synaptosomes. Fluxes and interactions with aspartate aminotransferase and malate/aspartate shuttle.. 1994 , 269, 27414-27420	121
88	Determination of creatine kinase kinetic parameters in rat brain by NMR magnetization transfer. Correlation with brain function. 1993 , 268, 13166-13171	83
87	Brain energy metabolism and the physiological basis of the haemodynamic response. 2001 , 38-67	4
86	Anoxic/ischemic injury in axons. 1995 , 462-479	6
85	Mechanisms of secondary brain injury. 1996 , 13, 247-268	195
84	The distinct roles of calcium in rapid control of neuronal glycolysis and the tricarboxylic acid cycle.	1
83	Effect of mild hypothermia on cerebral energy metabolism during the evolution of hypoxic-ischemic brain damage in the immature rat. 1996 , 27, 919-25; discussion 926	81
82	Creatine protects the central respiratory network of mammals under anoxic conditions. 1998 , 43, 8-14	61
81	Brain and body oxygen requirements of <i>Gnathonemus petersii</i> , a fish with an exceptionally large brain. 1996 , 199, 603-607	81

80	Survival of energy failure in the anoxic frog brain: delayed release of glutamate.. 1997 , 200, 2913-2917	20
79	Cortical Composition Hierarchy Driven by Spine Proportion Economical Maximization or Wire Volume Minimization. 2015 , 11, e1004532	9
78	Severe chronic cerebral hypoperfusion induces microglial dysfunction leading to memory loss in APP ^{swe} /PS1 mice. 2016 , 7, 11864-80	21
77	Saponins of <i>Panax japonicus</i> Confer Neuroprotection against Brain Aging through Mitochondrial Related Oxidative Stress and Autophagy in Rats. 2020 , 21, 667-680	6
76	Hypoxia-induced lipid peroxidation in the brain during postnatal ontogenesis. 2012 , 61, S89-101	24
75	Epilepsy Focus Localization in Patients Utilizing BOLD Differences Related to Regional Metabolic Dynamics. 2019 , 09, 163-175	1
74	Validation of a Fast and Simple HPLC-UV Method for the Quantification of Adenosine Phosphates in Human Bronchial Epithelial Cells. 2021 , 26,	0
73	Effect of extracellular volume on the energy stored in transmembrane concentration gradients. 2021 , 104, 044409	1
72	Profound alterations in brain tissue linked to hypoxic episode after device implantation. 2021 , 278, 121143	0
71	In vivo magnetic resonance spectrometry imaging demonstrates comparable adaptation of brain energy metabolism to metabolic stress induced by 72h of fasting in depressed patients and healthy volunteers. 2021 , 143, 422-428	3
70	Ischemia-Induced Ionic Mechanisms of Injury in the Developing Brain. 2001 , 231-248	
69	Slow ATP loss and the defense of ion homeostasis in the anoxic frog brain. 2001 , 204, 3547-3551	29
68	Magnetic Resonance Spectroscopy. 2002 , 257-290	
67	Triggering Events in Ischemic Brain Damage. 2003 , 45-59	
66	Strukturelle, zelluläre und subzelluläre Veränderungen des Gehirns bei physiologischem Altern und der senilen Demenz vom Alzheimer-Typ. 2004 , 127-147	
65	Effects of NG-monomethyl-L-arginine and L-arginine on cerebral hemodynamics and energy metabolism during reoxygenation-reperfusion after cerebral hypoxia-ischemia in newborn piglets. 2006 , 49, 317	
64	Anesthesia for Cardiovascular Surgery. 2006 , 571-650	
63	Functional Brain Imaging. 551-599	

- 62 Metabolic Abnormalities in Alzheimer Disease. **2009**, 483-530
- 61 Experimental Ischemia: Summary of Metabolic Encephalopathy. **2009**, 41-67
- 60 Leading Toward a Unified Cortico-basal Ganglia Functional Model. **2009**, 1-20
- 59 Neurobiology of Postischemic Recuperation in the Aged Mammalian Brain. **2009**, 403-451
- 58 Spontaneous Vertebrate Models of Alzheimer Dementia: Selectively Bred Strains (SAM Strains). **2011**, 271-293
- 57 Oxidative Stress and Alzheimer Disease: Mechanisms and Therapeutic Opportunities. **2011**, 607-631
- 56 Hypoxic-Ischemic Encephalopathy in Infants and Older Children. **2012**, 1149-1184
- 55 Double-Label Quantitative Autoradiographic Studies of Anaerobic Glucose Metabolism in Limbic Seizures. **1990**, 61-73
- 54 Neurotransmitter und Demenz. **1991**, 173-179
- 53 Energy Metabolism in Cortex and Hippocampus During Aging, Ischemia, and Dementia. **1991**, 132-148 2
- 52 Molecular and cellular mechanisms involved in the high resistance of neonatal brain to anoxia. **1991**, 289-295 1
- 51 Oxidative, Energy and Related Brain Metabolism During Normal Aging. **1992**, 53-59
- 50 Ischemic Neuronal Injury Modified by Basic Fibroblast Growth Factor. **1992**, 139-149
- 49 Energiestoffwechsel und Neurotransmittersynthese im Gehirn bei Demenz vom Alzheimer-Typ. **1992**, 87-95
- 48 ENERGETICS OF CEREBRAL METABOLISM AND ION TRANSPORT. **1992**, 10, 563-573
- 47 Oxydativer Energiestoffwechsel bei der Demenz vom Alzheimer-Typ. **1993**, 405-409
- 46 Effects of Neurotoxins on Brain Creatine Kinase Activity. **1994**, 943-948
- 45 Metabolic Disorders as Consequences of Drug-Induced Energy Deficits. **1994**, 111-139 1

44 Neuropathophysiology: The Basics. **1995**, 41-49

43 Pharmakologische Modelle. **1999**, 469-480

42 Salt Environment. **2016**, 55-68

41 Enhanced fitness relates to reduced cerebrovascular reactivity and perfusion in a sample of very healthy older adults.

40 Modification of oxygen consumption and blood flow in mouse somatosensory cortex by cell-type-specific neuronal activity.

39 Increasing glucose uptake into neurons antagonizes brain aging and promotes health and life span under dietary restriction in Drosophila. 1

38 NMR of P nuclear spin singlet states in organic diphosphates. **2021**, 333, 107101 2

37 In Vivo Measurement of Neurochemical Abnormalities in the Hippocampus in a Rat Model of Cuprizone-Induced Demyelination. **2020**, 11, 3

36 Normal Brain Function. **2003**, 3-42

35 The Brain in Crisis. **2003**, 60-103

34 Membrane Potential. 541-548

33 2-deoxy-d-glucose uptake in the inner retina: an in vivo study in the normal rat and following photoreceptor degeneration. **2002**, 100, 353-64 2

32 Spatiotemporal regulation of ATP and Ca²⁺ dynamics in vertebrate rod and cone ribbon synapses. **2007**, 13, 887-919 83

31 PINK1: Multiple mechanisms of neuroprotection. **2021**, 193-219

30 Can Erythropoietin Reduce Hypoxemic Neurological Damages in Neonates With Congenital Heart Defects?. **2021**, 12, 770590 1

29 Two Pools of ATP Detected in the Brains of Pediatric Patients with Myelin Oligodendrocyte Glycoprotein Antibody Disorders (MOGAD) by 3D 31P MR Spectroscopic Imaging (MRSI) at 7T.

28 Nanometer-Resolution Long-term Tracking of Single Cargos Reveals Dynein Motor Mechanisms. 0

27 Effects of 3-O-[6-deoxy-3-O-methyl-β-D-allopyranosyl-(1 4)-β-D-canaropyranosyl]-17β-marsdenin on selected indices of cardiovascular diseases in mouse. **2022**, 31, 155-168

- 26 How expensive is the astrocyte?. *Journal of Cerebral Blood Flow and Metabolism*, **2022**, 271678X221077343 3
- 25 Broken detailed balance and entropy production in the human brain. **2021**, 118, 10
- 24 Adaptations to a hypoxic lifestyle in naked mole-rats.. **2022**, 225, 2
- 23 Searching for the Mechanism of Action of Extremely Low Frequency Electromagnetic Field-The Pilot fNIRS Research.. **2022**, 19, 0
- 22 Review: A history and perspective of mitochondria in the context of anoxia tolerance.. **2022**, 110733 3
- 21 BAX regulates dendritic spine development via mitochondrial fusion. **2022**, 0
- 20 An Altered Sphingolipid Profile as a Risk Factor for Progressive Neurodegeneration in Long-Chain 3-Hydroxyacyl-CoA Deficiency (LCHADD). **2022**, 23, 7144 0
- 19 Salt Environment. **2022**, 55-68 0
- 18 Cerebral hemodynamic and metabolic dysregulation in the postradiation brain. 0
- 17 Cocaine addiction-like behaviors are associated with long-term changes in gene regulation, energy metabolism, and GABAergic inhibition within the amygdala. 0
- 16 ATP Line Splitting in Association with Reduced Intracellular Magnesium and pH: A Brain 31 P MR Spectroscopic Imaging (MRSI) Study of Pediatric Patients with Myelin Oligodendrocyte Glycoprotein Antibody-associated Disorders (MOGAD). 0
- 15 Sequence of Physiological Responses Recorded During Induced CSD Event. **2022**, 95-117 0
- 14 Effects of Pharmacological Agents on CSD. **2022**, 241-311 0
- 13 Epigenetics and island-mainland divergence in an insectivorous small mammal. 0
- 12 Nanomedicine in the Face of Parkinson's Disease: From Drug Delivery Systems to Nanozymes. **2022**, 11, 3445 0
- 11 Effects of Δ^9 -tetrahydrocannabinol on mitochondria. **2023**, 451-473 0
- 10 Alkaline pH in intracranial tuberculomas: A 31Phosphorus magnetic resonance spectroscopy study. **2023**, 13, 791-794 0
- 9 Iron and Neurodevelopmental Disorders. **2023**, 247-261 0

- 8 Commonly Overlooked Factors in Biocompatibility Studies of Neural Implants. 2205095
- 7 Downregulation of SF3B2 protects CNS neurons in models of multiple sclerosis.
- 6 p120-Catenin suppresses NLRP3 inflammasome activation in macrophages. **2023**, 324, L596-L608
- 5 An Isotonic Model of Neuron Swelling Based on Co-Transport of Salt and Water. **2023**, 13, 206
- 4 Analysis of mitochondrial respiration and ATP synthase in frozen brain tissues. **2023**, 9, e13888
- 3 Effects of cardiac glycoside digoxin on dendritic spines and motor learning performance in mice.
- 2 Erythrocytes Functionality in SARS-CoV-2 Infection: Potential Link with Alzheimer's Disease. **2023**, 24, 5739
- 1 Single-nucleus RNA sequencing unveils critical regulators in various hippocampal neurons for anti-N-methyl-D-aspartate receptor encephalitis.