JoÃ£o M N Duarte

List of Publications by Year
in descending order

65 papers	2,449 citations	201674 27 h-index	233421 45 g-index
71 all docs	71 docs citations	71 times ranked	3266 citing authors

#	Article	IF	Citations
1	The neurochemical profile quantified by in vivo 1H NMR spectroscopy. NeuroImage, 2012, 61, 342-362.	4.2	199
2	Caffeine consumption attenuates neurochemical modifications in the hippocampus of streptozotocinâ€induced diabetic rats. Journal of Neurochemistry, 2009, 111, 368-379.	3.9	133
3	Caffeine Consumption Prevents Diabetes-Induced Memory Impairment and Synaptotoxicity in the Hippocampus of NONcZNO10/LTJ Mice. PLoS ONE, 2012, 7, e21899.	2.5	119
4	Modification upon aging of the density of presynaptic modulation systems in the hippocampus. Neurobiology of Aging, 2009, 30, 1877-1884.	3.1	117
5	N-Acetylcysteine Normalizes Neurochemical Changes in the Glutathione-Deficient Schizophrenia Mouse Model During Development. Biological Psychiatry, 2012, 71, 1006-1014.	1.3	100
6	Longitudinal neurochemical modifications in the aging mouse brain measured inÂvivo by 1H magnetic resonance spectroscopy. Neurobiology of Aging, 2014, 35, 1660-1668.	3.1	90
7	Neurochemical Modifications in the Hippocampus, Cortex and Hypothalamus of Mice Exposed to Long-Term High-Fat Diet. Frontiers in Neuroscience, 2018, 12, 985.	2.8	88
8	Glutamatergic and <scp>GABA</scp>ergic energy metabolism measured in the rat brain by ¹³C <scp>NMR</scp> spectroscopy at 14.1 T. Journal of Neurochemistry, 2013, 126, 579-590.	3.9	71
9	Compartmentalized Cerebral Metabolism of [1,6-13C]Glucose Determined by in vivo13C NMR Spectroscopy at 14.1 T. Frontiers in Neuroenergetics, 2011, 3, 3.	5.3	70
10	Metabolic Alterations Associated to Brain Dysfunction in Diabetes. , 2015, 6, 304-21.		70
11	How Energy Metabolism Supports Cerebral Function: Insights from 13C Magnetic Resonance Studies In vivo. Frontiers in Neuroscience, 2017, 11, 288.	2.8	64
12	In vivo enzymatic activity of acetylCoA synthetase in skeletal muscle revealed by 13C turnover from hyperpolarized [1-13C]acetate to [1-13C]acetylcarnitine. Biochimica Et Biophysica Acta - General Subjects, 2013, 1830, 4171-4178.	2.4	61
13	Modification of adenosine A1 and A2A receptor density in the hippocampus of streptozotocin-induced diabetic rats. Neurochemistry International, 2006, 48, 144-150.	3.8	60
14	Brain Metabolism Alterations in Type 2 Diabetes: What Did We Learn From Diet-Induced Diabetes Models?. Frontiers in Neuroscience, 2020, 14, 229.	2.8	54
15	Neurochemical profile of the developing mouse cortex determined by <i>in vivo</i>¹H NMR spectroscopy at 14.1â€ƒT and the effect of recurrent anaesthesia. Journal of Neurochemistry, 2010, 115, 1466-1477.	3.9	51
16	The C57BL/6J Mouse Exhibits Sporadic Congenital Portosystemic Shunts. PLoS ONE, 2013, 8, e69782.	2.5	51
17	Metabolic Flux and Compartmentation Analysis in the Brain In vivo. Frontiers in Endocrinology, 2013, 4, 156.	3.5	47
18	Modification of purinergic signaling in the hippocampus of streptozotocin-induced diabetic rats. Neuroscience, 2007, 149, 382-391.	2.3	46

#	Article	IF	Citations
19	Compartmentalised energy metabolism supporting glutamatergic neurotransmission in response to increased activity in the rat cerebral cortex: A ¹³C MRS study <i>inÂvivo</i> at 14.1 T. Journal of Cerebral Blood Flow and Metabolism, 2016, 36, 928-940.	4.3	46
20	Astrocytic and neuronal oxidative metabolism are coupled to the rate of glutamateâ€“glutamine cycle in the tree shrew visual cortex. Glia, 2018, 66, 477-491.	4.9	45
21	Magnetic Resonance Spectroscopy in Schizophrenia: Evidence for Glutamatergic Dysfunction and Impaired Energy Metabolism. Neurochemical Research, 2019, 44, 102-116.	3.3	44
22	Mitochondria and the Brain: Bioenergetics and Beyond. Neurotoxicity Research, 2019, 36, 219-238.	2.7	41
23	Cerebral Glutamine Metabolism under Hyperammonemia Determined <i>in vivo</i> by Localized ¹H and ¹⁵N NMR Spectroscopy. Journal of Cerebral Blood Flow and Metabolism, 2012, 32, 696-708.	4.3	40
24	Glutathione Deficit Affects the Integrity and Function of the Fimbria/Fornix and Anterior Commissure in Mice: Relevance for Schizophrenia. International Journal of Neuropsychopharmacology, 2016, 19, pyv110.	2.1	40
25	Impact of Caffeine Consumption on Type 2 Diabetes-Induced Spatial Memory Impairment and Neurochemical Alterations in the Hippocampus. Frontiers in Neuroscience, 2018, 12, 1015.	2.8	40
26	High-fat diet consumption alters energy metabolism in the mouse hypothalamus. International Journal of Obesity, 2019, 43, 1295-1304.	3.4	37
27	Metabolic Disturbances in Diseases with Neurological Involvement. , 2014, 5, 238-55.		36
28	Characterization of cerebral glucose dynamics <i>inÂvivo</i> with a fourâ€state conformational model of transport at the bloodâ€“brain barrier. Journal of Neurochemistry, 2012, 121, 396-406.	3.9	35
29	Brain metabolic alterations in mice subjected to postnatal traumatic stress and in their offspring. Journal of Cerebral Blood Flow and Metabolism, 2017, 37, 2423-2432.	4.3	35
30	Increase of cannabinoid CB1 receptor density in the hippocampus of streptozotocin-induced diabetic rats. Experimental Neurology, 2007, 204, 479-484.	4.1	34
31	Taurine Supplementation as a Neuroprotective Strategy upon Brain Dysfunction in Metabolic Syndrome and Diabetes. Nutrients, 2022, 14, 1292.	4.1	33
32	Alterations of Brain Energy Metabolism in Type 2 Diabetic Goto-Kakizaki Rats Measured In Vivo by 13C Magnetic Resonance Spectroscopy. Neurotoxicity Research, 2019, 36, 268-278.	2.7	29
33	Different metabolism of glutamatergic and GABAergic compartments in superfused hippocampal slices characterized by nuclear magnetic resonance spectroscopy. Neuroscience, 2007, 144, 1305-1313.	2.3	28
34	CB1 receptor activation inhibits neuronal and astrocytic intermediary metabolism in the rat hippocampus. Neurochemistry International, 2012, 60, 1-8.	3.8	27
35	Cognitive Impairment and Metabolite Profile Alterations in the Hippocampus and Cortex of Male and Female Mice Exposed to a Fat and Sugar-Rich Diet are Normalized by Diet Reversal. , 2022, 13, 267.		27
36	Steady-state brain glucose transport kinetics re-evaluated with a four-state conformational model. Frontiers in Neuroenergetics, 2009, 1, 6.	5.3	26

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37	Deep thiopental anesthesia alters steadyâ€state glucose homeostasis but not the neurochemical profile of rat cortex. Journal of Neuroscience Research, 2010, 88, 413-419.	2.9	24
38	Adenosine A₁ receptors control the metabolic recovery after hypoxia in rat hippocampal slices. Journal of Neurochemistry, 2016, 136, 947-957.	3.9	23
39	Brain energy metabolism measured by ¹³<scp>C</scp> magnetic resonance spectroscopy in vivo upon infusion of [3â€¹³<scp>C</scp>]lactate. Journal of Neuroscience Research, 2015, 93, 1009-1018.	2.9	21
40	Glycogen Supercompensation in the Rat Brain After Acute Hypoglycemia is Independent of Glucose Levels During Recovery. Neurochemical Research, 2017, 42, 1629-1635.	3.3	19
41	Direct <i>in vivo</i> measurement of glycine and the neurochemical profile in the rat medulla oblongata. NMR in Biomedicine, 2010, 23, 1097-1102.	2.8	18
42	Lactate and glutamate dynamics during prolonged stimulation of the rat barrel cortex suggest adaptation of cerebral glucose and oxygen metabolism. Neuroscience, 2017, 346, 337-348.	2.3	16
43	Glycogen metabolism is impaired in the brain of male type 2 diabetic Gotoâ€Kakizaki rats. Journal of Neuroscience Research, 2019, 97, 1004-1017.	2.9	16
44	Imaging of prolonged BOLD response in the somatosensory cortex of the rat. NMR in Biomedicine, 2015, 28, 414-421.	2.8	15
45	Social isolation stress and chronic glutathione deficiency have a common effect on the glutamineâ€toâ€glutamate ratio and <i>myo</i>â€inositol concentration in the mouse frontal cortex. Journal of Neurochemistry, 2017, 142, 767-775.	3.9	15
46	Increased hepatic fatty acid polyunsaturation precedes ectopic lipid deposition in the liver in adaptation to high-fat diets in mice. Magnetic Resonance Materials in Physics, Biology, and Medicine, 2018, 31, 341-354.	2.0	15
47	Energy metabolism in the rat cortex under thiopental anaesthesia measured <i>In Vivo</i> by ¹³C MRS. Journal of Neuroscience Research, 2017, 95, 2297-2306.	2.9	14
48	Refined Analysis of Brain Energy Metabolism Using In Vivo Dynamic Enrichment of 13C Multiplets. ASN Neuro, 2016, 8, 175909141663234.	2.7	13
49	Evaluation of the Impact of Diabetes on Retinal Metabolites by NMR Spectroscopy. Current Eye Research, 2010, 35, 992-1001.	1.5	12
50	Which prior knowledge? Quantification of in vivo brain ¹³C MR spectra following ¹³C glucose infusion using AMARES. Magnetic Resonance in Medicine, 2013, 69, 1512-1522.	3.0	12
51	Brain Glucose Transport and Phosphorylation Under Acute Insulin-Induced Hypoglycemia in Mice: An ¹⁸F-FDG PET Study. Journal of Nuclear Medicine, 2013, 54, 2153-2160.	5.0	11
52	Feasibility of in vivo measurement of glucose metabolism in the mouse hypothalamus by ¹Hâ€[¹³C] MRS at 14.1T. Magnetic Resonance in Medicine, 2018, 80, 874-884.	3.0	11
53	Metabolism in the Diabetic Brain: Neurochemical Profiling by 1H Magnetic Resonance Spectroscopy. Diabetes & Metabolic Disorders, 2016, 3, 1-6.	0.1	10
54	<scp>MRS</scp> glucose mapping and <scp>PET</scp> joining forces: reâ€evaluation of the lumped constant in the rat brain under isoflurane anaesthesia. Journal of Neurochemistry, 2014, 129, 672-682.	3.9	9

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55	A glucose-stimulated BOLD fMRI study of hypothalamic dysfunction in mice fed a high-fat and high-sucrose diet. Journal of Cerebral Blood Flow and Metabolism, 2021, 41, 1734-1743.	4.3	9
56	Activatable MRI probes for the specific detection of bacteria. Analytical and Bioanalytical Chemistry, 2021, 413, 7353-7362.	3.7	7
57	Hormone-sensitive lipase is localized at synapses and is necessary for normal memory functioning in mice. Journal of Lipid Research, 2022, 63, 100195.	4.2	7
58	Sphingosine 1-Phoshpate Receptors are Located in Synapses and Control Spontaneous Activity of Mouse Neurons in Culture. Neurochemical Research, 2022, 47, 3114-3125.	3.3	5
59	Dynamic alterations in the central glutamatergic status following food and glucose intake: <i>in vivo</i> multimodal assessments in humans and animal models. Journal of Cerebral Blood Flow and Metabolism, 2021, 41, 2928-2943.	4.3	4
60	Cerebral Glucose Transport and Homeostasis. Advances in Neurobiology, 2012, , 655-673.	1.8	4
61	Transient gain of function of cannabinoid CB1 receptors in the control of frontocortical glucose consumption in a rat model of Type-1 diabetes. Brain Research Bulletin, 2020, 161, 106-115.	3.0	3
62	Loss of biliverdin reductaseâ€a (BVRâ€A) impairs beneficial effects of CNS insulin on brain energy metabolism favoring the development of Alzheimer's disease (AD) neuropathology. Alzheimer's and Dementia, 2020, 16, e039511.	0.8	0
63	Hippocampal metabolism and memory impairment in dietâ€induced insulinâ€resistant mice are reversed by diet normalization. Alzheimer's and Dementia, 2020, 16, e041031.	0.8	0
64	Editorial: Mechanisms of Neuronal Recovery in the Central Nervous System. Frontiers in Cell and Developmental Biology, 2021, 9, 733066.	3.7	0
65	Taurine and <i>N</i> â€acetylcysteine supplementation prevents memory impairment in highâ€fat dietâ€fed female mice. Alzheimer's and Dementia, 2021, 17, .	0.8	0