

Graeme F Mason

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/5541401/publications.pdf>

Version: 2024-02-01

108
papers

9,091
citations

30070

54
h-index

40979

93
g-index

110
all docs

110
docs citations

110
times ranked

8113
citing authors

#	ARTICLE	IF	CITATIONS
1	Novel approaches to estimate prefrontal synaptic strength in vivo in humans: of relevance to depression, schizophrenia, and ketamine. <i>Neuropsychopharmacology</i> , 2022, 47, 399-400.	5.4	3
2	Rates of pyruvate carboxylase, glutamate and GABA neurotransmitter cycling, and glucose oxidation in multiple brain regions of the awake rat using a combination of [²⁻¹³ C]/[¹⁻¹³ C]glucose infusion and ¹ H-[¹³ C]NMR <i>ex vivo</i> . <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2022, 42, 1507-1523.	4.3	11
3	Reversibility of brain glucose kinetics in type 2 diabetes mellitus. <i>Diabetologia</i> , 2022, 65, 895-905.	6.3	3
4	Prefrontal Glutamate Neurotransmission in PTSD: A Novel Approach to Estimate Synaptic Strength in Vivo in Humans. <i>Chronic Stress</i> , 2022, 6, 247054702210927.	3.4	8
5	Effects of ketogenic diet and ketone monoester supplement on acute alcohol withdrawal symptoms in male mice. <i>Psychopharmacology</i> , 2021, 238, 833-844.	3.1	19
6	A sobering addition to the literature on COVID-19 and the brain. <i>Journal of Clinical Investigation</i> , 2021, 131, .	8.2	5
7	Dissociation of Muscle Insulin Resistance from Alterations in Mitochondrial Substrate Preference. <i>Cell Metabolism</i> , 2020, 32, 726-735.e5.	16.2	27
8	Mapping Lithium in the Brain: New 3-Dimensional Methodology Reveals Regional Distribution in Euthymic Patients With Bipolar Disorder. <i>Biological Psychiatry</i> , 2020, 88, 367-368.	1.3	1
9	Early life stress and glutamate neurotransmission in major depressive disorder. <i>European Neuropsychopharmacology</i> , 2020, 35, 71-80.	0.7	12
10	Impaired neuronal and astroglial metabolic activity in chronic unpredictable mild stress model of depression: Reversal of behavioral and metabolic deficit with lanicemine. <i>Neurochemistry International</i> , 2020, 137, 104750.	3.8	19
11	Metabolic control analysis of hepatic glycogen synthesis in vivo. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 8166-8176.	7.1	51
12	Multi-Tissue Acceleration of the Mitochondrial Phosphoenolpyruvate Cycle Improves Whole-Body Metabolic Health. <i>Cell Metabolism</i> , 2020, 32, 751-766.e11.	16.2	41
13	A Novel Biomarker of Neuronal Glutamate Metabolism in Nonhuman Primates Using Localized ¹ H-Magnetic Resonance Spectroscopy: Development and Effects of BNC375, an ± 7 Nicotinic Acetylcholine Receptor Positive Allosteric Modulator. <i>Biological Psychiatry: Cognitive Neuroscience and Neuroimaging</i> , 2020, .	1.5	0
14	Imaging Biomarkers of the Neuroimmune System among Substance Use Disorders: A Systematic Review. <i>Molecular Neuropsychiatry</i> , 2019, 5, 125-146.	2.9	15
15	In vivo ¹³ C and ¹ H- $\{$ ¹³ C $\}$ MRS studies of neuroenergetics and neurotransmitter cycling, applications to neurological and psychiatric disease and brain cancer. <i>NMR in Biomedicine</i> , 2019, 32, e4172.	2.8	34
16	Glycemic Variability and Brain Glucose Levels in Type 1 Diabetes. <i>Diabetes</i> , 2019, 68, 163-171.	0.6	27
17	Utility of Imaging-Based Biomarkers for Glutamate-Targeted Drug Development in Psychotic Disorders. <i>JAMA Psychiatry</i> , 2018, 75, 11.	11.0	88
18	Selective proton-observed, carbon-edited (selPOCE) MRS method for measurement of glutamate and glutamine ¹³ C-labeling in the human frontal cortex. <i>Magnetic Resonance in Medicine</i> , 2018, 80, 11-20.	3.0	19

#	ARTICLE	IF	CITATIONS
19	Neurochemistry Predicts Convergence of Written and Spoken Language: A Proton Magnetic Resonance Spectroscopy Study of Cross-Modal Language Integration. <i>Frontiers in Psychology</i> , 2018, 9, 1507.	2.1	16
20	The effects of ketamine on prefrontal glutamate neurotransmission in healthy and depressed subjects. <i>Neuropsychopharmacology</i> , 2018, 43, 2154-2160.	5.4	146
21	Metabotropic Glutamate Receptor 5 and Glutamate Involvement in Major Depressive Disorder: A Multimodal Imaging Study. <i>Biological Psychiatry: Cognitive Neuroscience and Neuroimaging</i> , 2017, 2, 449-456.	1.5	47
22	Reproducibility measurement of glutathione, GABA, and glutamate: Towards in vivo neurochemical profiling of multiple sclerosis with MR spectroscopy at 7T. <i>Journal of Magnetic Resonance Imaging</i> , 2017, 45, 187-198.	3.4	75
23	Blunted rise in brain glucose levels during hyperglycemia in adults with obesity and T2DM. <i>JCI Insight</i> , 2017, 2, .	5.0	65
24	The human brain produces fructose from glucose. <i>JCI Insight</i> , 2017, 2, e90508.	5.0	58
25	Constance E. Lieber, Theodore R. Stanley, and the Enduring Impact of Philanthropy on Psychiatry Research. <i>Biological Psychiatry</i> , 2016, 80, 84-86.	1.3	2
26	How Imaging Glutamate, ^{13}C -Aminobutyric Acid, and Dopamine Can Inform the Clinical Treatment of Alcohol Dependence and Withdrawal. <i>Alcoholism: Clinical and Experimental Research</i> , 2015, 39, 2268-2282.	2.4	21
27	Integrated, Step-Wise, Mass-Isotopomeric Flux Analysis of the TCA Cycle. <i>Cell Metabolism</i> , 2015, 22, 936-947.	16.2	106
28	Glutamate Metabolism in Major Depressive Disorder. <i>American Journal of Psychiatry</i> , 2014, 171, 1320-1327.	7.2	155
29	Characterization of Cerebral Glutamine Uptake from Blood in the Mouse Brain: Implications for Metabolic Modeling of ^{13}C NMR Data. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2014, 34, 1666-1672.	4.3	31
30	Glutamate and Choline Levels Predict Individual Differences in Reading Ability in Emergent Readers. <i>Journal of Neuroscience</i> , 2014, 34, 4082-4089.	3.6	73
31	Decreased Occipital Cortical Glutamate Levels in Response to Successful Cognitive-Behavioral Therapy and Pharmacotherapy for Major Depressive Disorder. <i>Psychotherapy and Psychosomatics</i> , 2014, 83, 298-307.	8.8	53
32	Neuroimaging in Alcohol and Drug Dependence. <i>Current Behavioral Neuroscience Reports</i> , 2014, 1, 45-54.	1.3	22
33	Increased Brain Lactate Concentrations Without Increased Lactate Oxidation During Hypoglycemia in Type 1 Diabetic Individuals. <i>Diabetes</i> , 2013, 62, 3075-3080.	0.6	40
34	Differential role of ventral tegmental area acetylcholine and N-methyl-d-aspartate receptors in cocaine-seeking. <i>Neuropharmacology</i> , 2013, 75, 9-18.	4.1	41
35	Increased Brain Transport and Metabolism of Acetate in Hypoglycemia Unawareness. <i>Journal of Clinical Endocrinology and Metabolism</i> , 2013, 98, 3811-3820.	3.6	24
36	Metabolic products of ^{13}C ethanol in the rat brain after chronic ethanol exposure. <i>Journal of Neurochemistry</i> , 2013, 127, 353-364.	3.9	14

#	ARTICLE	IF	CITATIONS
37	Oxidation of ethanol in the rat brain and effects associated with chronic ethanol exposure. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 14444-14449.	7.1	41
38	Lactate preserves neuronal metabolism and function following antecedent recurrent hypoglycemia. Journal of Clinical Investigation, 2013, 123, 1988-1998.	8.2	80
39	Increased brain uptake and oxidation of acetate in heavy drinkers. Journal of Clinical Investigation, 2013, 123, 1605-1614.	8.2	111
40	Cortical GABA Levels in Primary Insomnia. Sleep, 2012, 35, 807-814.	1.1	81
41	Intravenous Ethanol Infusion Decreases Human Cortical \hat{I}^3 -Aminobutyric Acid and N-Acetylaspartate as Measured with Proton Magnetic Resonance Spectroscopy at 4 Tesla. Biological Psychiatry, 2012, 71, 239-246.	1.3	74
42	An ethanol vapor chamber system for small animals. Journal of Neuroscience Methods, 2012, 208, 79-85.	2.5	10
43	Neuroimaging insights into the role of cortical GABA systems and the influence of nicotine on the recovery from alcohol dependence. Neuropharmacology, 2011, 60, 1318-1325.	4.1	24
44	The antidepressant effect of ketamine is not associated with changes in occipital amino acid neurotransmitter content as measured by $[1H]$ -MRS. Psychiatry Research - Neuroimaging, 2011, 191, 122-127.	1.8	170
45	An Application of the Elastic Net for an Endophenotype Analysis. Behavior Genetics, 2011, 41, 120-124.	2.1	2
46	^{13}C MRS studies of neuroenergetics and neurotransmitter cycling in humans. NMR in Biomedicine, 2011, 24, 943-957.	2.8	249
47	Cortical Substrate Oxidation during Hyperketonemia in the Fasted Anesthetized Rat <i>in Vivo</i> . Journal of Cerebral Blood Flow and Metabolism, 2011, 31, 2313-2323.	4.3	28
48	<i>In vivo</i> neurochemical profiling of rat brain by 1H - ^{13}C NMR spectroscopy: cerebral energetics and glutamatergic/GABAergic neurotransmission. Journal of Neurochemistry, 2010, 112, 24-33.	3.9	41
49	Regional metabolite levels and turnover in the awake rat brain under the influence of nicotine. Journal of Neurochemistry, 2010, 113, 1447-1458.	3.9	44
50	Altered Brain Mitochondrial Metabolism in Healthy Aging as Assessed by <i>in vivo</i> Magnetic Resonance Spectroscopy. Journal of Cerebral Blood Flow and Metabolism, 2010, 30, 211-221.	4.3	223
51	Evaluation of Cerebral Acetate Transport and Metabolic Rates in the Rat Brain <i>in vivo</i> Using 1H - ^{13}C -NMR. Journal of Cerebral Blood Flow and Metabolism, 2010, 30, 1200-1213.	4.3	78
52	The Contribution of Blood Lactate to Brain Energy Metabolism in Humans Measured by Dynamic ^{13}C Nuclear Magnetic Resonance Spectroscopy. Journal of Neuroscience, 2010, 30, 13983-13991.	3.6	279
53	Recurrent Antecedent Hypoglycemia Alters Neuronal Oxidative Metabolism <i>In Vivo</i> . Diabetes, 2009, 58, 1266-1274.	0.6	38
54	It Is Time to Take a Stand for Medical Research and Against Terrorism Targeting Medical Scientists. Biological Psychiatry, 2008, 63, 725-727.	1.3	65

#	ARTICLE	IF	CITATIONS
55	Increased substrate oxidation and mitochondrial uncoupling in skeletal muscle of endurance-trained individuals. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 16701-16706.	7.1	94
56	Impaired Mitochondrial Substrate Oxidation in Muscle of Insulin-Resistant Offspring of Type 2 Diabetic Patients. Diabetes, 2007, 56, 1376-1381.	0.6	391
57	Glutamatergic and GABAergic Neurotransmitter Cycling and Energy Metabolism in Rat Cerebral Cortex during Postnatal Development. Journal of Cerebral Blood Flow and Metabolism, 2007, 27, 1895-1907.	4.3	75
58	Measurements of the anaplerotic rate in the human cerebral cortex using ^{13}C magnetic resonance spectroscopy and $[1-^{13}\text{C}]$ and $[2-^{13}\text{C}]$ glucose. Journal of Neurochemistry, 2007, 100, 73-86.	3.9	82
59	Cortical Gamma-Aminobutyric Acid Levels and the Recovery from Ethanol Dependence: Preliminary Evidence of Modification by Cigarette Smoking. Biological Psychiatry, 2006, 59, 85-93.	1.3	71
60	Cortical ^3H -Aminobutyric Acid Concentrations in Depressed Patients Receiving Cognitive Behavioral Therapy. Biological Psychiatry, 2006, 59, 284-286.	1.3	102
61	Preliminary evidence of reduced occipital GABA concentrations in puerperal women: a ^1H -MRS study. Psychopharmacology, 2006, 186, 425-433.	3.1	111
62	The interaction of neuroactive steroids and GABA in the development of neuropsychiatric disorders in women. Pharmacology Biochemistry and Behavior, 2006, 84, 635-643.	2.9	62
63	MR spectroscopy: its potential role for drug development for the treatment of psychiatric diseases. NMR in Biomedicine, 2006, 19, 690-701.	2.8	53
64	Get sober; stay sober. Brain, 2006, 130, 8-9.	7.6	0
65	Increased Brain Monocarboxylic Acid Transport and Utilization in Type 1 Diabetes. Diabetes, 2006, 55, 929-934.	0.6	117
66	Metabolic Modeling Analysis of Brain Metabolism. , 2005, , 53-72.		1
67	The Role of Altered Energetics of Neurotransmitter Systems in Psychiatric Disease. , 2005, , 239-256.		0
68	The contribution of GABA to glutamate/glutamine cycling and energy metabolism in the rat cortex in vivo. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 5588-5593.	7.1	308
69	Sex, GABA, and nicotine: The impact of smoking on cortical GABA levels across the menstrual cycle as measured with proton magnetic resonance spectroscopy. Biological Psychiatry, 2005, 57, 44-48.	1.3	111
70	Impaired GABA Neuronal Response to Acute Benzodiazepine Administration in Panic Disorder. American Journal of Psychiatry, 2004, 161, 2186-2193.	7.2	105
71	Regional glucose metabolism and glutamatergic neurotransmission in rat brain in vivo. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 12700-12705.	7.1	88
72	Family Psychopathology and Magnitude of Reductions in Occipital Cortex GABA Levels in Panic Disorder. Neuropsychopharmacology, 2004, 29, 639-640.	5.4	14

#	ARTICLE	IF	CITATIONS
73	Glutamatergic Neurotransmission and Neuronal Glucose Oxidation are Coupled during Intense Neuronal Activation. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2004, 24, 972-985.	4.3	141
74	Basic principles of metabolic modeling of NMR ¹³ C isotopic turnover to determine rates of brain metabolism in vivo. <i>Metabolic Engineering</i> , 2004, 6, 75-84.	7.0	47
75	Clinical Studies Implementing Glutamate Neurotransmission in Mood Disorders. <i>Annals of the New York Academy of Sciences</i> , 2003, 1003, 292-308.	3.8	145
76	Coupling of Glutamatergic Neurotransmission and Neuronal Glucose Oxidation over the Entire Range of Cerebral Cortex Activity. <i>Annals of the New York Academy of Sciences</i> , 2003, 1003, 452-453.	3.8	10
77	In vivo ¹³ C NMR measurement of neurotransmitter glutamate cycling, anaplerosis and TCA cycle flux in rat brain during [2- ¹³ C]glucose infusion. <i>Journal of Neurochemistry</i> , 2003, 76, 975-989.	3.9	229
78	Cerebral benzodiazepine receptors in depressed patients measured with [¹²³ I]iomazenil SPECT. <i>Biological Psychiatry</i> , 2003, 54, 792-799.	1.3	57
79	A comparison of ¹³ C NMR measurements of the rates of glutamine synthesis and the tricarboxylic acid cycle during oral and intravenous administration of [1- ¹³ C]glucose. <i>Brain Research Protocols</i> , 2003, 10, 181-190.	1.6	70
80	Increased Cortical GABA Concentrations in Depressed Patients Receiving ECT. <i>American Journal of Psychiatry</i> , 2003, 160, 577-579.	7.2	414
81	Magnetic resonance spectroscopy for studies of neurotransmission in vivo. <i>Psychopharmacology Bulletin</i> , 2003, 37, 26-40.	0.0	4
82	Increased Occipital Cortex GABA Concentrations in Depressed Patients After Therapy With Selective Serotonin Reuptake Inhibitors. <i>American Journal of Psychiatry</i> , 2002, 159, 663-665.	7.2	426
83	Regional Cerebral Blood Flow and Magnetic Resonance Spectroscopic Imaging Findings in Diaschisis From Stroke. <i>Stroke</i> , 2002, 33, 1243-1248.	2.0	42
84	Graded image segmentation of brain tissue in the presence of inhomogeneous radio frequency fields. <i>Magnetic Resonance Imaging</i> , 2002, 20, 431-436.	1.8	17
85	Astroglial Contribution to Brain Energy Metabolism in Humans Revealed by ¹³ C Nuclear Magnetic Resonance Spectroscopy: Elucidation of the Dominant Pathway for Neurotransmitter Glutamate Repletion and Measurement of Astrocytic Oxidative Metabolism. <i>Journal of Neuroscience</i> , 2002, 22, 1523-1531.	3.6	351
86	Differential increase in cerebral cortical glucose oxidative metabolism during rat postnatal development is greater in vivo than in vitro. <i>Brain Research</i> , 2001, 888, 193-202.	2.2	16
87	Decrease in GABA synthesis rate in rat cortex following GABA-transaminase inhibition correlates with the decrease in GAD67 protein. <i>Brain Research</i> , 2001, 914, 81-91.	2.2	81
88	Aplicações da ressonância magnética para medidas espectroscópicas da neurotransmissão. <i>Revista Brasileira De Psiquiatria</i> , 2001, 23, 6-10.	1.7	1
89	Dependence of Oxygen Delivery on Blood Flow in Rat Brain: A 7 Tesla Nuclear Magnetic Resonance Study. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2000, 20, 485-498.	4.3	92
90	Nonlinear determination of Michaelis-Menten kinetics with model evaluation through estimation of uncertainties. <i>Metabolic Brain Disease</i> , 2000, 15, 133-149.	2.9	3

#	ARTICLE	IF	CITATIONS
91	Measurement of the Tricarboxylic Acid Cycle Rate in Human Grey and White Matter in Vivo by ^1H - ^{13}C Magnetic Resonance Spectroscopy at 4.1T. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 1999, 19, 1179-1188.	4.3	76
92	Evaluation of ^31P metabolite differences in human cerebral gray and white matter. <i>Magnetic Resonance in Medicine</i> , 1998, 39, 346-353.	3.0	48
93	A novel k -space trajectory measurement technique. <i>Magnetic Resonance in Medicine</i> , 1998, 39, 999-1004.	3.0	65
94	Functional Energy Metabolism: In vivo ^{13}C -NMR Spectroscopy Evidence for Coupling of Cerebral Glucose Consumption and Glutamatergic Neuronal Activity. <i>Developmental Neuroscience</i> , 1998, 20, 321-330.	2.0	86
95	Oxidative Glucose Metabolism in Rat Brain during Single Forepaw Stimulation: A Spatially Localized ^1H - ^{13}C Nuclear Magnetic Resonance Study. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 1997, 17, 1040-1047.	4.3	122
96	^{13}C editing of glutamate in human brain using J -refocused coherence transfer spectroscopy at 4.1 T. <i>Magnetic Resonance in Medicine</i> , 1997, 37, 355-358.	3.0	28
97	A Method to measure arbitrary k -space trajectories for rapid MR imaging. <i>Magnetic Resonance in Medicine</i> , 1997, 38, 492-496.	3.0	82
98	The ^{13}C isotope and nuclear magnetic resonance: unique tools for the study of brain metabolism. <i>Metabolic Brain Disease</i> , 1996, 11, 283-313.	2.9	11
99	Spectroscopic imaging of human brain glutamate by water-suppressed J -refocused coherence transfer at 4.1 T. <i>Magnetic Resonance in Medicine</i> , 1996, 36, 7-12.	3.0	76
100	Quantitative ^1H spectroscopic imaging of human brain at 4.1 T using image segmentation. <i>Magnetic Resonance in Medicine</i> , 1996, 36, 21-29.	3.0	202
101	Proton nuclear magnetic resonance spectroscopic imaging of human temporal lobe epilepsy at 4.1 T. <i>Annals of Neurology</i> , 1995, 38, 396-404.	5.3	138
102	Simultaneous Determination of the Rates of the TCA Cycle, Glucose Utilization, $\hat{\pm}$ -Ketoglutarate/Glutamate Exchange, and Glutamine Synthesis in Human Brain by NMR. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 1995, 15, 12-25.	4.3	307
103	Detection of brain glutamate and glutamine in spectroscopic images at 4.1 T. <i>Magnetic Resonance in Medicine</i> , 1994, 32, 142-145.	3.0	53
104	^2D ^1H spectroscopic imaging of the human brain at 4.1 T. <i>Magnetic Resonance in Medicine</i> , 1994, 32, 530-534.	3.0	59
105	Evaluation of cerebral gray and white matter metabolite differences by spectroscopic imaging at 4.1T. <i>Magnetic Resonance in Medicine</i> , 1994, 32, 565-571.	3.0	190
106	Localized ^{13}C NMR Spectroscopy in the Human Brain of Amino Acid Labeling from ^{13}C Glucose. <i>Journal of Neurochemistry</i> , 1994, 63, 1377-1385.	3.9	229
107	NMR Determination of the TCA Cycle Rate and $\hat{\pm}$ -Ketoglutarate/Glutamate Exchange Rate in Rat Brain. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 1992, 12, 434-447.	4.3	249
108	NMR Determination of Intracerebral Glucose Concentration and Transport Kinetics in Rat Brain. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 1992, 12, 448-455.	4.3	106