Fernando Gomez-Pinilla

List of Publications by Year
in descending order

103 papers	13,913 citations	28242 55 h-index	34964 98 g-index
109 all docs	109 docs citations	109 times ranked	14052 citing authors

#	Article	IF	Citations
1	Editorial to special issue of BBADIS: Brain-gut interaction and cognitive control. Biochimica Et Biophysica Acta - Molecular Basis of Disease, 2022, 1868, 166396.	1.8	0
2	How to boost the effects of exercise to favor traumatic brain injury outcome. Sports Medicine and Health Science, 2022, 4, 147-151.	0.7	2
3	Diet and depression: exploring the biological mechanisms of action. Molecular Psychiatry, 2021, 26, 134-150.	4.1	265
4	Mild traumatic brain injury induces microvascular injury and accelerates Alzheimer-like pathogenesis in mice. Acta Neuropathologica Communications, 2021, 9, 74.	2.4	31
5	The interaction between brain and liver regulates lipid metabolism in the TBI pathology. Biochimica Et Biophysica Acta - Molecular Basis of Disease, 2021, 1867, 166078.	1.8	10
6	Dietary fructose as a model to explore the influence of peripheral metabolism on brain function and plasticity. Biochimica Et Biophysica Acta - Molecular Basis of Disease, 2021, 1867, 166036.	1.8	8
7	Differential metabolic and multi-tissue transcriptomic responses to fructose consumption among genetically diverse mice. Biochimica Et Biophysica Acta - Molecular Basis of Disease, 2020, 1866, 165569.	1.8	21
8	Multiâ€Tissue Multiâ€Omics Nutrigenomics Indicates Contextâ€Specific Effects of Docosahexaenoic Acid on Rat Brain. Molecular Nutrition and Food Research, 2020, 64, e2000788.	1.5	2
9	Host Genetic Background and Gut Microbiota Contribute to Differential Metabolic Responses to Fructose Consumption in Mice. Journal of Nutrition, 2020, 150, 2716-2728.	1.3	15
10	Cerebral Fructose Metabolism as a Potential Mechanism Driving Alzheimerâ€™s Disease. Frontiers in Aging Neuroscience, 2020, 12, 560865.	1.7	38
11	Early exercise induces long-lasting morphological changes in cortical and hippocampal neurons throughout of a sedentary period of rats. Scientific Reports, 2019, 9, 13684.	1.6	18
12	Blueberry Supplementation Mitigates Altered Brain Plasticity and Behavior after Traumatic Brain Injury in Rats. Molecular Nutrition and Food Research, 2019, 63, e1801055.	1.5	29
13	Making sense of gut feelings in the traumatic brain injury pathogenesis. Neuroscience and Biobehavioral Reviews, 2019, 102, 345-361.	2.9	28
14	Brain Trauma Disrupts Hepatic Lipid Metabolism: Blame It on Fructose?. Molecular Nutrition and Food Research, 2019, 63, e1801054.	1.5	12
15	Short-term fructose ingestion affects the brain independently from establishment of metabolic syndrome. Biochimica Et Biophysica Acta - Molecular Basis of Disease, 2018, 1864, 24-33.	1.8	25
16	Biglycan gene connects metabolic dysfunction with brain disorder. Biochimica Et Biophysica Acta - Molecular Basis of Disease, 2018, 1864, 3679-3687.	1.8	18
17	Single cell molecular alterations reveal target cells and pathways of concussive brain injury. Nature Communications, 2018, 9, 3894.	5.8	113
18	Nerve Growth Factor Is Responsible for Exercise-Induced Recovery of Septohippocampal Cholinergic Structure and Function. Frontiers in Neuroscience, 2018, 12, 773.	1.4	24

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19	System biology approach intersecting diet and cell metabolism with pathogenesis of brain disorders. Progress in Neurobiology, 2018, 169, 76-90.	2.8	11
20	Traumatic Brain Injury Induces Genome-Wide Transcriptomic, Methylomic, and Network Perturbations in Brain and Blood Predicting Neurological Disorders. EBioMedicine, 2017, 16, 184-194.	2.7	88
21	7,8-Dihydroxyflavone facilitates the action exercise to restore plasticity and functionality: Implications for early brain trauma recovery. Biochimica Et Biophysica Acta - Molecular Basis of Disease, 2017, 1863, 1204-1213.	1.8	38
22	Aerobic exercise in adolescence results in an increase of neuronal and non-neuronal cells and in mTOR overexpression in the cerebral cortex of rats. Neuroscience, 2017, 361, 108-115.	1.1	13
23	Physical exercise as an epigenetic modulator of brain plasticity and cognition. Neuroscience and Biobehavioral Reviews, 2017, 80, 443-456.	2.9	197
24	Systems Nutrigenomics Reveals Brain Gene Networks Linking Metabolic and Brain Disorders. EBioMedicine, 2016, 7, 157-166.	2.7	59
25	Interplay between exercise and dietary fat modulates myelinogenesis in the central nervous system. Biochimica Et Biophysica Acta - Molecular Basis of Disease, 2016, 1862, 545-555.	1.8	46
26	Dietary fructose aggravates the pathobiology of traumatic brain injury by influencing energy homeostasis and plasticity. Journal of Cerebral Blood Flow and Metabolism, 2016, 36, 941-953.	2.4	49
27	Methamphetamine blocks exercise effects on Bdnf and Drd2 gene expression in frontal cortex and striatum. Neuropharmacology, 2015, 99, 658-664.	2.0	17
28	Curcumin boosts DHA in the brain: Implications for the prevention of anxiety disorders. Biochimica Et Biophysica Acta - Molecular Basis of Disease, 2015, 1852, 951-961.	1.8	57
29	Fructose consumption reduces hippocampal synaptic plasticity underlying cognitive performance. Biochimica Et Biophysica Acta - Molecular Basis of Disease, 2015, 1852, 2379-2390.	1.8	55
30	Interactive actions of Bdnf methylation and cell metabolism for building neural resilience under the influence of diet. Neurobiology of Disease, 2015, 73, 307-318.	2.1	55
31	Dietary Strategy to Repair Plasma Membrane After Brain Trauma. Neurorehabilitation and Neural Repair, 2014, 28, 75-84.	1.4	40
32	Coupling energy homeostasis with a mechanism to support plasticity in brain trauma. Biochimica Et Biophysica Acta - Molecular Basis of Disease, 2014, 1842, 535-546.	1.8	35
33	TBI and sex: Crucial role of progesterone protecting the brain in an omegaâˆ'3 deficient condition. Experimental Neurology, 2014, 253, 41-51.	2.0	7
34	Deterioration of plasticity and metabolic homeostasis in the brain of the UCD-T2DM rat model of naturally occurring type-2 diabetes. Biochimica Et Biophysica Acta - Molecular Basis of Disease, 2014, 1842, 1313-1323.	1.8	39
35	CNS-specific immunity at the choroid plexus shifts toward destructive Th2 inflammation in brain aging. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 2264-2269.	3.3	234
36	The Influence of Exercise on Cognitive Abilities. , 2013, 3, 403-428.		402

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37	Diet and cognition. Current Opinion in Clinical Nutrition and Metabolic Care, 2013, 16, 726-733.	1.3	84
38	Vulnerability Imposed by Diet and Brain Trauma for Anxiety-Like Phenotype: Implications for Post-Traumatic Stress Disorders. PLoS ONE, 2013, 8, e57945.	1.1	23
39	Natural mood foods: The actions of polyphenols against psychiatric and cognitive disorders. Nutritional Neuroscience, 2012, 15, 127-133.	1.5	156
40	High-fat diet transition reduces brain DHA levels associated with altered brain plasticity and behaviour. Scientific Reports, 2012, 2, 431.	1.6	63
41	Dietary therapy to promote neuroprotection in chronic spinal cord injury. Journal of Neurosurgery: Spine, 2012, 17, 134-140.	0.9	17
42	â€˜Metabolic syndromeâ€™ in the brain: deficiency in omegaâ€3 fatty acid exacerbates dysfunctions in insulin receptor signalling and cognition. Journal of Physiology, 2012, 590, 2485-2499.	1.3	180
43	Hypothalamic stimulation enhances hippocampal BDNF plasticity in proportion toÂmetabolic rate. Brain Stimulation, 2012, 5, 642-646.	0.7	6
44	Effects of Diet and/or Exercise in Enhancing Spinal Cord Sensorimotor Learning. PLoS ONE, 2012, 7, e41288.	1.1	19
45	Dietary Omega-3 Deficiency from Gestation Increases Spinal Cord Vulnerability to Traumatic Brain Injury-Induced Damage. PLoS ONE, 2012, 7, e52998.	1.1	17
46	Diet transition to a high-fat diet for 3 weeks reduces brain omega-3-fatty acid levels, alters BDNF signaling and induces anxiety & depression-like behavior in adult rats. Nature Precedings, 2012, , .	0.1	2
47	Molecular Mechanisms for the Ability of Exercise Supporting Cognitive Abilities and Counteracting Neurological Disorders. , 2012, , 25-43.		6
48	Brain and Spinal Cord Interaction: Protective Effects of Exercise Prior to Spinal Cord Injury. PLoS ONE, 2012, 7, e32298.	1.1	30
49	The Influence of Dietary Factors in Central Nervous System Plasticity and Injury Recovery. PM and R, 2011, 3, S111-6.	0.9	35
50	The combined effects of exercise and foods in preventing neurological and cognitive disorders. Preventive Medicine, 2011, 52, S75-S80.	1.6	76
51	The Salutary Effects of DHA Dietary Supplementation on Cognition, Neuroplasticity, and Membrane Homeostasis after Brain Trauma. Journal of Neurotrauma, 2011, 28, 2113-2122.	1.7	142
52	Collaborative Effects of Diet and Exercise on Cognitive Enhancement. Nutrition and Health, 2011, 20, 165-169.	0.6	37
53	Brain and Spinal Cord Interaction. Neurorehabilitation and Neural Repair, 2011, 25, 332-342.	1.4	73
54	Omega-3 Fatty Acid Deficiency during Brain Maturation Reduces Neuronal and Behavioral Plasticity in Adulthood. PLoS ONE, 2011, 6, e28451.	1.1	148

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55	Voluntary exercise may engage proteasome function to benefit the brain after trauma. Brain Research, 2010, 1341, 25-31.	1.1	21
56	Exercise contributes to the effects of DHA dietary supplementation by acting on membrane-related synaptic systems. Brain Research, 2010, 1341, 32-40.	1.1	71
57	Vitamin E Protects Against Oxidative Damage and Learning Disability After Mild Traumatic Brain Injury in Rats. Neurorehabilitation and Neural Repair, 2010, 24, 290-298.	1.4	125
58	A pyrazole curcumin derivative restores membrane homeostasis disrupted after brain trauma. Experimental Neurology, 2010, 226, 191-199.	2.0	67
59	The Therapeutical Potential of Diet and Exercise on Brain Repair. , 2010, , 485-498.		1
60	Exercise can increase small heat shock proteins (sHSP) and pre- and post-synaptic proteins in the hippocampus. Brain Research, 2009, 1249, 191-201.	1.1	76
61	Exercise-induced improvement in cognitive performance after traumatic brain injury in rats is dependent on BDNF activation. Brain Research, 2009, 1288, 105-115.	1.1	233
62	Controlled contusion injury alters molecular systems associated with cognitive performance. Journal of Neuroscience Research, 2009, 87, 795-805.	1.3	61
63	Exercise normalizes levels of MAG and Nogoâ€A growth inhibitors after brain trauma. European Journal of Neuroscience, 2008, 27, 1-11.	1.2	59
64	Brain foods: the effects of nutrients on brain function. Nature Reviews Neuroscience, 2008, 9, 568-578.	4.9	931
65	Brainâ€derived neurotrophic factor functions as a metabotrophin to mediate the effects of exercise on cognition. European Journal of Neuroscience, 2008, 28, 2278-2287.	1.2	297
66	The effects of FGF-2 gene therapy combined with voluntary exercise on axonal regeneration across peripheral nerve gaps. Neuroscience Letters, 2008, 443, 179-183.	1.0	26
67	The influences of diet and exercise on mental health through hormesis. Ageing Research Reviews, 2008, 7, 49-62.	5.0	125
68	The influence of diet and physical activity on brain repair and neurosurgical outcome. World Neurosurgery, 2008, 70, 333-335.	1.3	13
69	Time Window for Voluntary Exerciseâ€“Induced Increases in Hippocampal Neuroplasticity Molecules after Traumatic Brain Injury Is Severity Dependent. Journal of Neurotrauma, 2007, 24, 1161-1171.	1.7	156
70	Omega-3 Fatty Acids Supplementation Restores Mechanisms that Maintain Brain Homeostasis in Traumatic Brain Injury. Journal of Neurotrauma, 2007, 24, 1587-1595.	1.7	153
71	Exercise decreases myelin-associated glycoprotein expression in the spinal cord and positively modulates neuronal growth. Glia, 2007, 55, 966-975.	2.5	55
72	Dietary curcumin counteracts the outcome of traumatic brain injury on oxidative stress, synaptic plasticity, and cognition. Experimental Neurology, 2006, 197, 309-317.	2.0	241

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73	Circulating insulin-like growth factor I and functional recovery from spinal cord injury under enriched housing conditions. European Journal of Neuroscience, 2006, 23, 1035-1046.	1.2	74
74	Oxidative stress modulates Sir2Î± in rat hippocampus and cerebral cortex. European Journal of Neuroscience, 2006, 23, 2573-2580.	1.2	85
75	Exercise affects energy metabolism and neural plasticity-related proteins in the hippocampus as revealed by proteomic analysis. European Journal of Neuroscience, 2006, 24, 1265-1276.	1.2	152
76	Neurobiology of Exercise. Obesity, 2006, 14, 345-356.	1.5	704
77	Suppression of hippocampal plasticity-related gene expression by sleep deprivation in rats. Journal of Physiology, 2006, 575, 807-819.	1.3	156
78	Exercise differentially regulates synaptic proteins associated to the function of BDNF. Brain Research, 2006, 1070, 124-130.	1.1	215
79	Revenge of the â€œSitâ€ How lifestyle impacts neuronal and cognitive health through molecular systems that interface energy metabolism with neuronal plasticity. Journal of Neuroscience Research, 2006, 84, 699-715.	1.3	258
80	Exercise restores levels of neurotrophins and synaptic plasticity following spinal cord injury. Experimental Neurology, 2005, 193, 411-419.	2.0	235
81	License to Run: Exercise Impacts Functional Plasticity in the Intact and Injured Central Nervous System by Using Neurotrophins. Neurorehabilitation and Neural Repair, 2005, 19, 283-295.	1.4	354
82	Three exercise paradigms differentially improve sensory recovery after spinal cord contusion in rats. Brain, 2004, 127, 1403-1414.	3.7	280
83	Voluntary exercise increases axonal regeneration from sensory neurons. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 8473-8478.	3.3	151
84	The interplay between oxidative stress and brain-derived neurotrophic factor modulates the outcome of a saturated fat diet on synaptic plasticity and cognition. European Journal of Neuroscience, 2004, 19, 1699-1707.	1.2	354
85	Hippocampal BDNF mediates the efficacy of exercise on synaptic plasticity and cognition. European Journal of Neuroscience, 2004, 20, 2580-2590.	1.2	1,193
86	The upregulation of plasticity-related proteins following TBI is disrupted with acute voluntary exercise. Brain Research, 2004, 1016, 154-162.	1.1	154
87	Exercise induces BDNF and synapsin I to specific hippocampal subfields. Journal of Neuroscience Research, 2004, 76, 356-362.	1.3	168
88	Dietary Omega-3 Fatty Acids Normalize BDNF Levels, Reduce Oxidative Damage, and Counteract Learning Disability after Traumatic Brain Injury in Rats. Journal of Neurotrauma, 2004, 21, 1457-1467.	1.7	468
89	Afferent Input Modulates Neurotrophins and Synaptic Plasticity in the Spinal Cord. Journal of Neurophysiology, 2004, 92, 3423-3432.	0.9	71
90	Voluntary exercise increases neurotrophin-3 and its receptor TrkC in the spinal cord. Brain Research, 2003, 987, 93-99.	1.1	85

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91	Alterations in BDNF and Synapsin I within the Occipital Cortex and Hippocampus after Mild Traumatic Brain Injury in the Developing Rat: Reflections of Injury-Induced Neuroplasticity. Journal of Neurotrauma, 2002, 19, 803-814.	1.7	83
92	Voluntary Exercise Induces a BDNF-Mediated Mechanism That Promotes Neuroplasticity. Journal of Neurophysiology, 2002, 88, 2187-2195.	0.9	578
93	Differential effects of acute and chronic exercise on plasticity-related genes in the rat hippocampus revealed by microarray. European Journal of Neuroscience, 2002, 16, 1107-1116.	1.2	371
94	Learning upregulates brain-derived neurotrophic factor messenger ribonucleic acid: A mechanism to facilitate encoding and circuit maintenance?. Behavioral Neuroscience, 1998, 112, 1012-1019.	0.6	219
95	Physical exercise induces FGF-2 and its mRNA in the hippocampus. Brain Research, 1997, 764, 1-8.	1.1	236
96	Physical activity increases mRNA for brain-derived neurotrophic factor and nerve growth factor in rat brain. Brain Research, 1996, 726, 49-56.	1.1	834
97	Possible Coordinated Gene Expressions for FGF Receptor, FGF-5, and FGF-2 Following Seizures. Experimental Neurology, 1995, 133, 164-174.	2.0	41
98	NGF receptor immunoreactivity in aged rat brain. Brain Research, 1989, 479, 255-262.	1.1	65
99	Bilateral pericruciate cortical innervation of the red nucleus in cats with adult or neonatal cerebral hemispherectomy. Brain Research, 1988, 453, 17-31.	1.1	44
100	Epidermal growth factor receptor immunoreactivity in rat brain. Development and cellular localization. Brain Research, 1988, 438, 385-390.	1.1	172
101	Epidermal growth factor receptor immunoreactivity in rat brain astrocytes. Response to injury. Neuroscience Letters, 1988, 91, 276-282.	1.0	111
102	Reorganization of Pericruciate cortical projections to the spinal cord and dorsal column nuclei after neonatal or adult cerebral hemispherectomy in cats. Brain Research, 1986, 385, 343-355.	1.1	72
103	Intersecting Genetics with Lifestyle: the Role of Exercise and Diet in Synaptic Plasticity and Cognitive Enhancement. , 0, , 337-375.		1