Alberto MartÃ-nez-Serrano

List of Publications by Year
in descending order

90	5,235	101496 36	85498 71
papers	citations	h-index	g-index

92	92	92	5288
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Brain organoid formation on decellularized porcine brain ECM hydrogels. PLoS ONE, 2021, 16, e0245685.	1.1	55
2	Microglia-Secreted Factors Enhance Dopaminergic Differentiation of Tissue- and iPSC-Derived Human Neural Stem Cells. Stem Cell Reports, 2021, 16, 281-294.	2.3	23
3	Next generation human brain models: engineered flat brain organoids featuring gyrification. Biofabrication, 2021, 13, 011001.	3.7	26
4	Multifactoriality of Parkinsonâ€™s Disease as Explored Through Human Neural Stem Cells and Their Transplantation in Middle-Aged Parkinsonian Mice. Frontiers in Pharmacology, 2021, 12, 773925.	1.6	3
5	Microfluidic Neural Devices: 3Dâ€Printed Soft Lithography for Complex Compartmentalized Microfluidic Neural Devices (Adv. Sci. 16/2020). Advanced Science, 2020, 7, 2070088.	5.6	0
6	Pyrolytic Carbon Nanograss Enhances Neurogenesis and Dopaminergic Differentiation of Human Midbrain Neural Stem Cells. Advanced Healthcare Materials, 2020, 9, e2001108.	3.9	7
7	3Dâ€Printed Soft Lithography for Complex Compartmentalized Microfluidic Neural Devices. Advanced Science, 2020, 7, 2001150.	5.6	36
8	Lysosomal perturbations in human dopaminergic neurons derived from induced pluripotent stem cells with PARK2 mutation. Scientific Reports, 2020, 10, 10278.	1.6	31
9	Bioimpedance Measurements on Human Neural Stem Cells as a Benchmark for the Development of Smart Mobile Biomedical Applications. IFMBE Proceedings, 2020, , 38-47.	0.2	0
10	Neuronal and Glial Differentiation of Human Neural Stem Cells Is Regulated by Amyloid Precursor Protein (APP) Levels. Molecular Neurobiology, 2019, 56, 1248-1261.	1.9	34
11	Human cerebral organoids and neural 3D tissues in basic research, and their application to study neurological diseases. Future Neurology, 2019, 14, FNL3.	0.9	6
12	Leaky Optoelectrical Fiber for Optogenetic Stimulation and Electrochemical Detection of Dopamine Exocytosis from Human Dopaminergic Neurons. Advanced Science, 2019, 6, 1902011.	5.6	23
13	Nonhypoxic pharmacological stabilization of Hypoxia Inducible Factor 1Î±: Effects on dopaminergic differentiation of human neural stem cells. European Journal of Neuroscience, 2019, 49, 497-509.	1.2	2
14	AÎ²42 Peptide Promotes Proliferation and Gliogenesis in Human Neural Stem Cells. Molecular Neurobiology, 2019, 56, 4023-4036.	1.9	15
15	Functionalization and Characterization of Magnetic Nanoparticles for the Detection of Ferritin Accumulation in Alzheimerâ€™s Disease. ACS Chemical Neuroscience, 2018, 9, 912-924.	1.7	49
16	Deregulation of the imprinted DLK1-DIO3 locus ncRNAs is associated with replicative senescence of human adipose-derived stem cells. PLoS ONE, 2018, 13, e0206534.	1.1	9
17	Intermittent, low dose carbon monoxide exposure enhances survival and dopaminergic differentiation of human neural stem cells. PLoS ONE, 2018, 13, e0191207.	1.1	20
18	Comparative Analysis of Spontaneous and Stimulus-Evoked Calcium Transients in Proliferating and Differentiating Human Midbrain-Derived Stem Cells. Stem Cells International, 2017, 2017, 1-14.	1.2	2

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19	Short-Term Grafting of Human Neural Stem Cells: Electrophysiological Properties and Motor Behavioral Amelioration in Experimental Parkinson's Disease. Cell Transplantation, 2016, 25, 2083-2097.	1.2	2
20	Tracking of iron-labeled human neural stem cells by magnetic resonance imaging in cell replacement therapy for Parkinsonâ€²s disease. Neural Regeneration Research, 2016, 11, 49.	1.6	24
21	Optimization of the magnetic labeling of human neural stem cells and MRI visualization in the hemiparkinsonian rat brain. Journal of Nanobiotechnology, 2015, 13, 20.	4.2	27
22	Survival, Differentiation, and Neuroprotective Mechanisms of Human Stem Cells Complexed With Neurotrophin-3-Releasing Pharmacologically Active Microcarriers in an Ex Vivo Model of Parkinson's Disease. Stem Cells Translational Medicine, 2015, 4, 670-684.	1.6	23
23	Group I Metabotropic Glutamate Receptors: A Potential Target for Regulation of Proliferation and Differentiation of an Immortalized Human Neural Stem Cell Line. Basic and Clinical Pharmacology and Toxicology, 2015, 116, 329-336.	1.2	14
24	Effects of cytomegalovirus infection in human neural precursor cells depend on their differentiation state. Journal of NeuroVirology, 2015, 21, 346-357.	1.0	14
25	V-Myc Immortalizes Human Neural Stem Cells in the Absence of Pluripotency-Associated Traits. PLoS ONE, 2015, 10, e0118499.	1.1	6
26	Pyrolysed 3Dâ€Carbon Scaffolds Induce Spontaneous Differentiation of Human Neural Stem Cells and Facilitate Realâ€Time Dopamine Detection. Advanced Functional Materials, 2014, 24, 7042-7052.	7.8	62
27	A compact multifunctional microfluidic platform for exploring cellular dynamics in real-time using electrochemical detection. RSC Advances, 2014, 4, 63761-63771.	1.7	19
28	In vivo inhibition of the mitochondrial H+-ATP synthase in neurons promotes metabolic preconditioning. EMBO Journal, 2014, 33, 762-778.	3.5	93
29	Influence of Oxygen Tension on Dopaminergic Differentiation of Human Fetal Stem Cells of Midbrain and Forebrain Origin. PLoS ONE, 2014, 9, e96465.	1.1	17
30	Intermediate progenitors are increased by lengthening of the cell cycle through calcium signaling and p53 expression in human neural progenitors. Molecular Biology of the Cell, 2012, 23, 1167-1180.	0.9	20
31	Human midbrain precursors activate the expected developmental genetic program and differentiate long-term to functional A9 dopamine neurons in vitro. Enhancement by Bcl-XL. Experimental Cell Research, 2012, 318, 2446-2459.	1.2	13
32	Long term behavioral effects of functional dopaminergic neurons generated from human neural stem cells in the rat 6-OH-DA Parkinson's disease model. Effects of the forced expression of BCL-XL. Behavioural Brain Research, 2012, 232, 225-232.	1.2	31
33	Clonal Human Fetal Ventral Mesencephalic Dopaminergic Neuron Precursors for Cell Therapy Research. PLoS ONE, 2012, 7, e52714.	1.1	12
34	Induction of cell death in a glioblastoma line by hyperthermic therapy based on gold nanorods. International Journal of Nanomedicine, 2012, 7, 1511.	3.3	59
35	Modulation of the Generation of Dopaminergic Neurons from Human Neural Stem Cells by Bcl-XL. Vitamins and Hormones, 2011, 87, 175-205.	0.7	5
36	Recent progress and challenges for the use of stem cell derivatives in neuron replacement therapy for Parkinsonâ€™s disease. Future Neurology, 2010, 5, 161-165.	0.9	8

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37	In Vitro and in Vivo Enhanced Generation of Human A9 Dopamine Neurons from Neural Stem Cells by Bcl-XL. Journal of Biological Chemistry, 2010, 285, 9881-9897.	1.6	54
38	Functional properties of the human ventral mesencephalic neural stem cell line hVM1. Experimental Neurology, 2010, 223, 653-656.	2.0	15
39	Generation and properties of a new human ventral mesencephalic neural stem cell line. Experimental Cell Research, 2009, 315, 1860-1874.	1.2	45
40	A brain slice culture model for studies of endogenous and exogenous precursor cell migration in the rostral migratory stream. Brain Research, 2009, 1295, 1-12.	1.1	12
41	Enhanced dopaminergic differentiation of human neural stem cells by synergistic effect of Bclâ€•x_L and reduced oxygen tension. Journal of Neurochemistry, 2009, 110, 1908-1920.	2.1	33
42	Dopaminergic differentiation of human neural stem cells mediated by coâ€•cultured rat striatal brain slices. Journal of Neurochemistry, 2008, 105, 460-470.	2.1	13
43	Bimodal Viral Vectors and<i>In Vivo</i>Imaging Reveal the Fate of Human Neural Stem Cells in Experimental Glioma Model. Journal of Neuroscience, 2008, 28, 4406-4413.	1.7	98
44	Transcription of Genes Encoding Synaptic Vesicle Proteins in Human Neural Stem Cells. Journal of Biological Chemistry, 2008, 283, 9257-9268.	1.6	30
45	Bcl-XL modulates the differentiation of immortalized human neural stem cells. Cell Death and Differentiation, 2007, 14, 1880-1892.	5.0	47
46	Generation of human cortical neurons from a new immortal fetal neural stem cell line. Experimental Cell Research, 2007, 313, 588-601.	1.2	45
47	â€œIs there any need to argueâ€¦â€•about the nature and genetic signature of in vitro neural stem cells?. Experimental Neurology, 2006, 199, 20-25.	2.0	11
48	Gene marking of human neural stem/precursor cells using green fluorescent proteins. Journal of Gene Medicine, 2005, 7, 18-29.	1.4	14
49	The Generation of Dopaminergic Neurons by Human Neural Stem Cells Is Enhanced by Bcl-XL, Both In Vitro and In Vivo. Journal of Neuroscience, 2004, 24, 10786-10795.	1.7	92
50	Low-Level Tyrosine Hydroxylase (TH) Expression Allows for the Generation of Stable TH+ Cell Lines of Human Neural Stem Cells. Human Gene Therapy, 2004, 15, 13-20.	1.4	14
51	Stem cell therapy for human neurodegenerative disordersâ€"how to make it work. Nature Medicine, 2004, 10, S42-S50.	15.2	824
52	Long-term molecular and cellular stability of human neural stem cell lines. Experimental Cell Research, 2004, 294, 559-570.	1.2	88
53	Developmental changes in the Ca2+-regulated mitochondrial aspartateâ€"glutamate carrier aralar1 in brain and prominent expression in the spinal cord. Developmental Brain Research, 2003, 143, 33-46.	2.1	137
54	Isolation, Survival, Proliferation, and Differentiation of Human Neural Stem Cells. , 2003, , 271-298.		0

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55	The Endocannabinoid Anandamide Inhibits Neuronal Progenitor Cell Differentiation through Attenuation of the Rap1/B-Raf/ERK Pathway. Journal of Biological Chemistry, 2002, 277, 46645-46650.	1.6	212
56	Genetic perpetuation of in vitro expanded human neural stem cells: cellular properties and therapeutic potential. Brain Research Bulletin, 2002, 57, 789-794.	1.4	17
57	Human neural stem cells in vitro. A focus on their isolation and perpetuation. Biomedicine and Pharmacotherapy, 2001, 55, 91-95.	2.5	26
58	Neuroprotective and behavioral efficacy of nerve growth factorâ€"transfected hippocampal progenitor cell transplants after experimental traumatic brain injury. Journal of Neurosurgery, 2001, 94, 765-774.	0.9	112
59	Human Neural Stem and Progenitor Cells: In Vitro and In Vivo Properties, and Potential for Gene Therapy and Cell Replacement in the CNS. Current Gene Therapy, 2001, 1, 279-299.	0.9	81
60	Human neural progenitor cells: better blue than green?. Nature Medicine, 2000, 6, 483-483.	15.2	28
61	Establishment and Properties of a Growth Factor-Dependent, Perpetual Neural Stem Cell Line from the Human CNS. Experimental Neurology, 2000, 161, 67-84.	2.0	213
62	Genetically Perpetuated Human Neural Stem Cells Engraft and Differentiate into the Adult Mammalian Brain. Molecular and Cellular Neurosciences, 2000, 16, 1-13.	1.0	104
63	BDNF gene transfer to the mammalian brain using CNS-derived neural precursors. Gene Therapy, 1999, 6, 1851-1866.	2.3	38
64	Neural Stem Cell Lines for CNS Repair. , 1999, , 203-IX.		6
65	In uterogene transfer reveals survival effects of nerve growth factor on rat brain cholinergic neurones during development. European Journal of Neuroscience, 1998, 10, 263-271.	1.2	8
66	Amelioration of ischaemia-induced neuronal death in the rat striatum by NGF-secreting neural stem cells. European Journal of Neuroscience, 1998, 10, 2026-2036.	1.2	96
67	Amelioration of spatial navigation and short-term memory deficits by grafts of foetal basal forebrain tissue placed into the hippocampus and cortex of rats with selective cholinergic lesions. European Journal of Neuroscience, 1998, 10, 2353-2370.	1.2	30
68	Focal cerebral ischemia in rats induces expression of p75 neurotrophin receptor in resistant striatal cholinergic neurons. Neuroscience, 1998, 84, 1113-1125.	1.1	108
69	Ex vivo nerve growth factor gene transfer to the basal forebrain in presymptomatic middle-aged rats prevents the development of cholinergic neuron atrophy and cognitive impairment during aging. Proceedings of the National Academy of Sciences of the United States of America, 1998, 95, 1858-1863.	3.3	86
70	Survival, Integration, and Differentiation of Neural Stem Cell Lines after Transplantation to the Adult Rat Striatum. Experimental Neurology, 1997, 145, 342-360.	2.0	178
71	Immortalized neural progenitor cells for CNS gene transfer and repair. Trends in Neurosciences, 1997, 20, 530-538.	4.2	206
72	Intrastriatal glial cell line-derived neurotrophic factor promotes sprouting of spared nigrostriatal dopaminergic afferents and induces recovery of function in a rat model of Parkinson's disease. Neuroscience, 1997, 82, 129-137.	1.1	141

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73	Correspondence. Neuroscience, 1996, 75, 979-985.	1.1	207
74	Cytosolic and mitochondrial calcium in synaptosomes during aging. Life Sciences, 1996, 59, 429-434.	2.0	47
75	Protection of the Neostriatum against Excitotoxic Damage by Neurotrophin-Producing, Genetically Modified Neural Stem Cells. Journal of Neuroscience, 1996, 16, 4604-4616.	1.7	208
76	Modulation of presynaptic calcium homeostasis by nitric oxide. Cell Calcium, 1996, 20, 293-302.	1.1	8
77	Ex VivoGene Transfer of Brain-derived Neurotrophic Factor to the Intact Rat Forebrain: Neurotrophic Effects on Cholinergic Neurons. European Journal of Neuroscience, 1996, 8, 727-735.	1.2	50
78	Long-term functional recovery from age-induced spatial memory impairments by nerve growth factor gene transfer to the rat basal forebrain.. Proceedings of the National Academy of Sciences of the United States of America, 1996, 93, 6355-6360.	3.3	109
79	CNS-derived neural progenitor cells for gene transfer of nerve growth factor to the adult rat brain: complete rescue of axotomized cholinergic neurons after transplantation into the septum. Journal of Neuroscience, 1995, 15, 5668-5680.	1.7	146
80	Reversal of age-dependent cognitive impairments and cholinergic neuron atrophy by NGF-secreting neural progenitors grafted to the basal forebrain. Neuron, 1995, 15, 473-484.	3.8	162
81	Altered cell calcium regulation in synaptosomes and brain cells of the 30-month-old rat: Prominent effects in hippocampus. Neurobiology of Aging, 1995, 16, 809-816.	1.5	38
82	The activity of synaptosomal calcium channels is inversely correlated with working memory performance in memory impaired, aged rats. Neuroscience Letters, 1994, 165, 5-8.	1.0	12
83	Age-related changes in calcium homeostatic mechanisms in synaptosomes in relation with working memory deficiency. Neurobiology of Aging, 1993, 14, 479-486.	1.5	32
84	Altered Calcium Homeostasis During Aging of the Brain: Cellular Mechanisms Involved and Possible Consequences. , 1993, , 79-88.		2
85	NMDA-induced increase in [Ca2+]i and45Ca2+ uptake in acutely dissociated brain cells derived from adult rats. Brain Research, 1992, 570, 347-353.	1.1	31
86	Conditions Restricting Depolarization-Dependent Calcium Influx in Synaptosomes Reveal a Graded Response of P96 Dephosphorylation and a Transient Dephosphorylation of P65. Journal of Neurochemistry, 1991, 56, 2039-2047.	2.1	11
87	Prolactin Increases Cytosolic Free Calcium Concentration in Hepatocytes of Lactating Rats*. Endocrinology, 1991, 129, 2857-2861.	1.4	26
88	Effect of Quin-2 on 45Ca2+ uptake mediated by Na+iCa2+o exchange and 45Ca2+ efflux in rat brain synaptosomes: a requirement for [Ca2+]i. Cell Calcium, 1990, 11, 25-33.	1.1	6
89	Reduction of K+-Stimulated45Ca2+Influx in Synaptosomes with Age Involves Inactivating and Noninactivating Calcium Channels and Is Correlated with Temporal Modifications in Protein Dephosphorylation. Journal of Neurochemistry, 1989, 52, 576-584.	2.1	40
90	Caffeine-sensitive calcium stores in presynaptic nerve endings: A physiological role?. Biochemical and Biophysical Research Communications, 1989, 161, 965-971.	1.0	45