Arturo Alvarez-Buylla

List of Publications by Year
in descending order

88 papers	28,970 citations	20797 60 h-index	45285 90 g-index
94 all docs	94 docs citations	94 times ranked	20958 citing authors

#	Article	IF	Citations
1	Subventricular Zone Astrocytes Are Neural Stem Cells in the Adult Mammalian Brain. Cell, 1999, 97, 703-716.	13.5	3,557
2	The Glial Nature of Embryonic and Adult Neural Stem Cells. Annual Review of Neuroscience, 2009, 32, 149-184.	5.0	2,067
3	Cellular Composition and Three-Dimensional Organization of the Subventricular Germinal Zone in the Adult Mammalian Brain. Journal of Neuroscience, 1997, 17, 5046-5061.	1.7	1,670
4	Astrocytes Give Rise to New Neurons in the Adult Mammalian Hippocampus. Journal of Neuroscience, 2001, 21, 7153-7160.	1.7	1,366
5	For the Long Run. Neuron, 2004, 41, 683-686.	3.8	1,241
6	Human hippocampal neurogenesis drops sharply in children to undetectable levels in adults. Nature, 2018, 555, 377-381.	13.7	1,074
7	Noggin Antagonizes BMP Signaling to Create a Niche for Adult Neurogenesis. Neuron, 2000, 28, 713-726.	3.8	999
8	Neural Stem Cells Confer Unique Pinwheel Architecture to the Ventricular Surface in Neurogenic Regions of the Adult Brain. Cell Stem Cell, 2008, 3, 265-278.	5.2	885
9	Origin of Oligodendrocytes in the Subventricular Zone of the Adult Brain. Journal of Neuroscience, 2006, 26, 7907-7918.	1.7	872
10	Corridors of migrating neurons in the human brain and their decline during infancy. Nature, 2011, 478, 382-386.	13.7	741
11	Mosaic Organization of Neural Stem Cells in the Adult Brain. Science, 2007, 317, 381-384.	6.0	730
12	Radial glia give rise to adult neural stem cells in the subventricular zone. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 17528-17532.	3.3	727
13	New Neurons Follow the Flow of Cerebrospinal Fluid in the Adult Brain. Science, 2006, 311, 629-632.	6.0	708
14	Maturation and Death of Adult-Born Olfactory Bulb Granule Neurons: Role of Olfaction. Journal of Neuroscience, 2002, 22, 6106-6113.	1.7	622
15	Adult Ependymal Cells Are Postmitotic and Are Derived from Radial Glial Cells during Embryogenesis. Journal of Neuroscience, 2005, 25, 10-18.	1.7	621
16	Cell types, lineage, and architecture of the germinal zone in the adult dentate gyrus. Journal of Comparative Neurology, 2004, 478, 359-378.	0.9	552
17	Regional Astrocyte Allocation Regulates CNS Synaptogenesis and Repair. Science, 2012, 337, 358-362.	6.0	448
18	Young neurons from medial ganglionic eminence disperse in adult and embryonic brain. Nature Neuroscience, 1999, 2, 461-466.	7.1	445

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19	Zika virus cell tropism in the developing human brain and inhibition by azithromycin. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 14408-14413.	3.3	432
20	The Adult Ventricularâ€“Subventricular Zone (V-SVZ) and Olfactory Bulb (OB) Neurogenesis. Cold Spring Harbor Perspectives in Biology, 2016, 8, a018820.	2.3	431
21	Embryonic Origin of Postnatal Neural Stem Cells. Cell, 2015, 161, 1644-1655.	13.5	403
22	Neural stem cells: origin, heterogeneity and regulation in the adult mammalian brain. Development (Cambridge), 2019, 146, .	1.2	377
23	Chromatin remodelling factor Mll1 is essential for neurogenesis from postnatal neural stem cells. Nature, 2009, 458, 529-533.	13.7	356
24	Postnatal Development of Radial Glia and the Ventricular Zone (VZ): a Continuum of the Neural Stem Cell Compartment. Cerebral Cortex, 2003, 13, 580-587.	1.6	327
25	Adult Neural Stem Cells Bridge Their Niche. Cell Stem Cell, 2012, 10, 698-708.	5.2	314
26	Lake-Front Property: A Unique Germinal Niche by the Lateral Ventricles of the Adult Brain. Neuron, 2011, 70, 674-686.	3.8	312
27	Pax6 Is Required for Making Specific Subpopulations of Granule and Periglomerular Neurons in the Olfactory Bulb. Journal of Neuroscience, 2005, 25, 6997-7003.	1.7	306
28	Proliferation â€œhot spotsâ€•in adult avian ventricular zone reveal radial cell division. Neuron, 1990, 5, 101-109.	3.8	304
29	Intrinsically determined cell death of developing cortical interneurons. Nature, 2012, 491, 109-113.	13.7	293
30	Extensive migration of young neurons into the infant human frontal lobe. Science, 2016, 354, .	6.0	293
31	Astrocyte Development and Heterogeneity. Cold Spring Harbor Perspectives in Biology, 2015, 7, a020362.	2.3	275
32	Cortical Plasticity Induced by Inhibitory Neuron Transplantation. Science, 2010, 327, 1145-1148.	6.0	256
33	Non-epithelial stem cells and cortical interneuron production in the human ganglionic eminences. Nature Neuroscience, 2013, 16, 1576-1587.	7.1	253
34	A Subpopulation of Olfactory Bulb GABAergic Interneurons Is Derived from Emx1- and Dlx5/6-Expressing Progenitors. Journal of Neuroscience, 2007, 27, 6878-6891.	1.7	229
35	Persistent Sonic Hedgehog Signaling in Adult Brain Determines Neural Stem Cell Positional Identity. Neuron, 2011, 71, 250-262.	3.8	226
36	Adult neural stem cells in distinct microdomains generate previously unknown interneuron types. Nature Neuroscience, 2014, 17, 207-214.	7.1	222

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37	Cell cycle and lineage progression of neural progenitors in the ventricular-subventricular zones of adult mice. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, E1045-54.	3.3	212
38	Adult Neurogenesis Is Sustained by Symmetric Self-Renewal and Differentiation. Cell Stem Cell, 2018, 22, 221-234.e8.	5.2	184
39	A Glial Signature and Wnt7 Signaling Regulate Glioma-Vascular Interactions and Tumor Microenvironment. Cancer Cell, 2018, 33, 874-889.e7.	7.7	180
40	Cortical Inhibition Modified by Embryonic Neural Precursors Grafted into the Postnatal Brain. Journal of Neuroscience, 2006, 26, 7380-7389.	1.7	170
41	A cortical disinhibitory circuit for enhancing adult plasticity. ELife, 2015, 4, e05558.	2.8	165
42	Interneurons from Embryonic Development to Cell-Based Therapy. Science, 2014, 344, 1240622.	6.0	162
43	Adult neural stem cells stake their ground. Trends in Neurosciences, 2014, 37, 563-571.	4.2	145
44	A protein assembly mediates Xist localization and gene silencing. Nature, 2020, 587, 145-151.	13.7	123
45	Loss of Dishevelleds Disrupts Planar Polarity in Ependymal Motile Cilia and Results in Hydrocephalus. Neuron, 2014, 83, 558-571.	3.8	121
46	Primary cilia are required in a unique subpopulation of neural progenitors. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 12438-12443.	3.3	118
47	Axonal Control of the Adult Neural Stem Cell Niche. Cell Stem Cell, 2014, 14, 500-511.	5.2	117
48	Origins and Proliferative States of Human Oligodendrocyte Precursor Cells. Cell, 2020, 182, 594-608.e11.	13.5	110
49	Sonic hedgehog signaling in the postnatal brain. Seminars in Cell and Developmental Biology, 2014, 33, 105-111.	2.3	109
50	Inhibitory Interneuron Progenitor Transplantation Restores Normal Learning and Memory in ApoE4 Knock-In Mice without or with Aî² Accumulation. Journal of Neuroscience, 2014, 34, 9506-9515.	1.7	107
51	Brain size and limits to adult neurogenesis. Journal of Comparative Neurology, 2016, 524, 646-664.	0.9	107
52	A tension-mediated glycocalyxâ€“integrin feedback loop promotes mesenchymal-like glioblastoma. Nature Cell Biology, 2018, 20, 1203-1214.	4.6	103
53	Unsupervised learning and adaptation in a model of adult neurogenesis. Journal of Computational Neuroscience, 2001, 11, 175-182.	0.6	98
54	Does Adult Neurogenesis Persist in the Human Hippocampus?. Cell Stem Cell, 2018, 23, 780-781.	5.2	95

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55	Immature excitatory neurons develop during adolescence in the human amygdala. Nature Communications, 2019, 10, 2748.	5.8	95
56	Positive Controls in Adults and Children Support That Very Few, If Any, New Neurons Are Born in the Adult Human Hippocampus. Journal of Neuroscience, 2021, 41, 2554-2565.	1.7	90
57	Development of Ependymal and Postnatal Neural Stem Cells and Their Origin from a Common Embryonic Progenitor. Cell Reports, 2019, 27, 429-441.e3.	2.9	86
58	Wide Dispersion and Diversity of Clonally Related Inhibitory Interneurons. Neuron, 2015, 87, 999-1007.	3.8	84
59	Bi- and uniciliated ependymal cells define continuous floor-plate-derived tanycytic territories. Nature Communications, 2017, 8, 13759.	5.8	80
60	Activity Regulates Cell Death within Cortical Interneurons through a Calcineurin-Dependent Mechanism. Cell Reports, 2018, 22, 1695-1709.	2.9	80
61	Cortical plasticity induced by transplantation of embryonic somatostatin or parvalbumin interneurons. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 18339-18344.	3.3	76
62	Individual human cortical progenitors can produce excitatory and inhibitory neurons. Nature, 2022, 601, 397-403.	13.7	73
63	A Dorsal SHH-Dependent Domain in the V-SVZ Produces Large Numbers of Oligodendroglial Lineage Cells in the Postnatal Brain. Stem Cell Reports, 2015, 5, 461-470.	2.3	70
64	Planar Organization of Multiciliated Ependymal (E1) Cells in the Brain Ventricular Epithelium. Trends in Neurosciences, 2016, 39, 543-551.	4.2	65
65	Single-cell analysis of the ventricular-subventricular zone reveals signatures of dorsal and ventral adult neurogenesis. ELife, 2021, 10, .	2.8	62
66	Multimodal Single-Cell Analysis Reveals Physiological Maturation in the Developing Human Neocortex. Neuron, 2019, 102, 143-158.e7.	3.8	61
67	Distinct and separable roles for EZH2 in neurogenic astroglia. ELife, 2014, 3, e02439.	2.8	60
68	Transcription Factors Sp8 and Sp9 Coordinately Regulate Olfactory Bulb Interneuron Development. Cerebral Cortex, 2018, 28, 3278-3294.	1.6	50
69	Mechanosensory Genes Pkd1 and Pkd2 Contribute to the Planar Polarization of Brain Ventricular Epithelium. Journal of Neuroscience, 2015, 35, 11153-11168.	1.7	47
70	Restricted nature of adult neural stem cells: re-evaluation of their potential for brain repair. Frontiers in Neuroscience, 2014, 8, 162.	1.4	46
71	Acute Lesioning and Rapid Repair of Hypothalamic Neurons outside the Blood-Brain Barrier. Cell Reports, 2017, 19, 2257-2271.	2.9	42
72	Secretagogin is Expressed by Developing Neocortical GABAergic Neurons in Humans but not Mice and Increases Neurite Arbor Size and Complexity. Cerebral Cortex, 2018, 28, 1946-1958.	1.6	34

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73	Clustered gamma-protocadherins regulate cortical interneuron programmed cell death. ELife, 2020, 9, .	2.8	33
74	Unique Organization of the Nuclear Envelope in the Post-natal Quiescent Neural Stem Cells. Stem Cell Reports, 2017, 9, 203-216.	2.3	32
75	Caudal Ganglionic Eminence Precursor Transplants Disperse and Integrate as Lineage-Specific Interneurons but Do Not Induce Cortical Plasticity. Cell Reports, 2016, 16, 1391-1404.	2.9	31
76	Identification of proliferative progenitors associated with prominent postnatal growth of the pons. Nature Communications, 2016, 7, 11628.	5.8	29
77	Viral-mediated Labeling and Transplantation of Medial Ganglionic Eminence (MGE) Cells for In Vivo Studies. Journal of Visualized Experiments, 2015, , .	0.2	27
78	SnapShot: Adult Neurogenesis in the V-SVZ. Neuron, 2014, 81, 220-220.e1.	3.8	26
79	Maintenance of neural stem cell positional identity by mixed-lineage leukemia 1. Science, 2020, 368, 48-53.	6.0	24
80	Transplantation of GABAergic interneurons for cell-based therapy. Progress in Brain Research, 2017, 231, 57-85.	0.9	17
81	Vesicular GABA Transporter Is Necessary for Transplant-Induced Critical Period Plasticity in Mouse Visual Cortex. Journal of Neuroscience, 2019, 39, 2635-2648.	1.7	14
82	Nests of dividing neuroblasts sustain interneuron production for the developing human brain. Science, 2022, 375, eabk2346.	6.0	13
83	Comment on â€œImpact of neurodegenerative diseases on human adult hippocampal neurogenesisâ€. Science, 2022, 376, eabn8861.	6.0	13
84	Neocortical integration of transplanted GABA progenitor cells from wild type and GABAB receptor knockout mouse donors. Neuroscience Letters, 2014, 561, 52-57.	1.0	11
85	Development and long-term integration of MGE-lineage cortical interneurons in the heterochronic environment. Journal of Neurophysiology, 2017, 118, 131-139.	0.9	11
86	Transplanted Cells Are Essential for the Induction But Not the Expression of Cortical Plasticity. Journal of Neuroscience, 2019, 39, 7529-7538.	1.7	11
87	GLI3 Is Required for OLIG2+ Progeny Production in Adult Dorsal Neural Stem Cells. Cells, 2022, 11, 218.	1.8	4
88	Axons take a dive. Neurogenesis (Austin, Tex), 2014, 1, e29341.	1.5	3