Vania Broccoli

List of Publications by Year
in descending order

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121 papers	12,569 citations	28274 55 h-index	24982 109 g-index
129 all docs	129 docs citations	129 times ranked	17267 citing authors

#	Article	IF	Citations
1	Scn1a gene reactivation after symptom onset rescues pathological phenotypes in a mouse model of Dravet syndrome. Nature Communications, 2022, 13, 161.	12.8	29
2	Administration of aerosolized SARS-CoV-2 to K18-hACE2 mice uncouples respiratory infection from fatal neuroinvasion. Science Immunology, 2022, 7, .	11.9	61
3	SOX9-induced Generation of Functional Astrocytes Supporting Neuronal Maturation in an All-human System. Stem Cell Reviews and Reports, 2021, 17, 1855-1873.	3.8	19
4	Glucocerebrosidase Gene Therapy Induces Alpha-Synuclein Clearance and Neuroprotection of Midbrain Dopaminergic Neurons in Mice and Macaques. International Journal of Molecular Sciences, 2021, 22, 4825.	4.1	18
5	Genetics and gene therapy in Dravet syndrome. Epilepsy and Behavior, 2021, , 108043.	1.7	9
6	Exploiting hiPSCs in Leber's Hereditary Optic Neuropathy (LHON): Present Achievements and Future Perspectives. Frontiers in Neurology, 2021, 12, 648916.	2.4	7
7	SETBP1 accumulation induces P53 inhibition and genotoxic stress in neural progenitors underlying neurodegeneration in Schinzel-Giedion syndrome. Nature Communications, 2021, 12, 4050.	12.8	24
8	The relevance of mitochondrial DNA variants fluctuation during reprogramming and neuronal differentiation of human iPSCs. Stem Cell Reports, 2021, 16, 1953-1967.	4.8	8
9	Microglia-specific overexpression of Î±-synuclein leads to severe dopaminergic neurodegeneration by phagocytic exhaustion and oxidative toxicity. Nature Communications, 2021, 12, 6237.	12.8	74
10	Case Report: Off-Label Liraglutide Use in Children With Wolfram Syndrome Type 1: Extensive Characterization of Four Patients. Frontiers in Pediatrics, 2021, 9, 755365.	1.9	12
11	Administration of aerosolized SARS-CoV-2 to K18-hACE2 mice uncouples respiratory infection from fatal neuroinvasion. Science Immunology, 2021, , eabl9929.	11.9	3
12	dCas9-Based Scn1a Gene Activation Restores Inhibitory Interneuron Excitability and Attenuates Seizures in Dravet Syndrome Mice. Molecular Therapy, 2020, 28, 235-253.	8.2	135
13	Transdifferentiation of Mouse Embryonic Fibroblasts into Dopaminergic Neurons Reactivates LINE-1 Repetitive Elements. Stem Cell Reports, 2020, 14, 60-74.	4.8	16
14	SULT4A1 Modulates Synaptic Development and Function by Promoting the Formation of PSD-95/NMDAR Complex. Journal of Neuroscience, 2020, 40, 7013-7026.	3.6	11
15	Frataxin gene editing rescues Friedreichâ€™s ataxia pathology in dorsal root ganglia organoid-derived sensory neurons. Nature Communications, 2020, 11, 4178.	12.8	42
16	In vivo CRISPRa decreases seizures and rescues cognitive deficits in a rodent model of epilepsy. Brain, 2020, 143, 891-905.	7.6	79
17	Whole brain delivery of an instability-prone Mecp2 transgene improves behavioral and molecular pathological defects in mouse models of Rett syndrome. ELife, 2020, 9, .	6.0	42
18	Stem Cell Modeling of Neuroferritinopathy Reveals Iron as a Determinant of Senescence and Ferroptosis during Neuronal Aging. Stem Cell Reports, 2019, 13, 832-846.	4.8	46

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19	SETD5 Regulates Chromatin Methylation State and Preserves Global Transcriptional Fidelity during Brain Development and Neuronal Wiring. Neuron, 2019, 104, 271-289.e13.	8.1	75
20	Direct Neuronal Reprogramming Reveals Unknown Functions for Known Transcription Factors. Frontiers in Neuroscience, 2019, 13, 283.	2.8	20
21	Reconstitution of the Human Nigro-striatal Pathway on-a-Chip Reveals OPA1-Dependent Mitochondrial Defects and Loss of Dopaminergic Synapses. Cell Reports, 2019, 29, 4646-4656.e4.	6.4	42
22	<scp>SCN</scp>1A/Na_V1.1 channelopathies: Mechanisms in expression systems, animal models, and human <scp>iPSC</scp> models. Epilepsia, 2019, 60, S25-S38.	5.1	35
23	H3K36 Methylation in Neural Development and Associated Diseases. Frontiers in Genetics, 2019, 10, 1291.	2.3	32
24	Pharmacological Inhibition of Necroptosis Protects from Dopaminergic Neuronal Cell Death in Parkinsonâ€™s Disease Models. Cell Reports, 2018, 22, 2066-2079.	6.4	167
25	Folic Acid Exposure Rescues Spina Bifida Aperta Phenotypes in Human Induced Pluripotent Stem Cell Model. Scientific Reports, 2018, 8, 2942.	3.3	18
26	Cas9/sgRNA selective targeting of the P23H Rhodopsin mutant allele for treating retinitis pigmentosa by intravitreal AAV9.PHP.B-based delivery. Human Molecular Genetics, 2018, 27, 761-779.	2.9	107
27	PRRT2 controls neuronal excitability by negatively modulating Na+ channel 1.2/1.6 activity. Brain, 2018, 141, 1000-1016.	7.6	99
28	Gene therapy approaches in the non-human primate model of Parkinsonâ€™s disease. Journal of Neural Transmission, 2018, 125, 575-589.	2.8	20
29	mSELâ€1L deficiency affects vasculogenesis and neural stem cell lineage commitment. Journal of Cellular Physiology, 2018, 233, 3152-3163.	4.1	2
30	Recipes for Making Neurons using Combinatorial Forward Genetics. Cell Stem Cell, 2018, 23, 13-14.	11.1	0
31	SETBP1 induces transcription of a network of development genes by acting as an epigenetic hub. Nature Communications, 2018, 9, 2192.	12.8	66
32	The Tbr2 Molecular Network Controls Cortical Neuronal Differentiation Through Complementary Genetic and Epigenetic Pathways. Cerebral Cortex, 2017, 27, 3378-3396.	2.9	31
33	Human Endometrial Stromal Cells Are Highly Permissive To Productive Infection by Zika Virus. Scientific Reports, 2017, 7, 44286.	3.3	50
34	Two factor-based reprogramming of rodent and human fibroblasts into Schwann cells. Nature Communications, 2017, 8, 14088.	12.8	28
35	Heparin prevents Zika virus induced-cytopathic effects in human neural progenitor cells. Antiviral Research, 2017, 140, 13-17.	4.1	88
36	A Human Bi-specific Antibody against Zika Virus with High Therapeutic Potential. Cell, 2017, 171, 229-241.e15.	28.9	118

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37	AAV-PHP.B-Mediated Global-Scale Expression in the Mouse Nervous System Enables GBA1 Gene Therapy for Wide Protection from Synucleinopathy. Molecular Therapy, 2017, 25, 2727-2742.	8.2	98
38	Reprogramming of somatic cells. Progress in Brain Research, 2017, 230, 53-68.	1.4	7
39	Neuroprotection of Brain Cells by Lipoic Acid Treatment after Cellular Stress. ACS Chemical Neuroscience, 2017, 8, 569-577.	3.5	11
40	Generation of Human Induced Pluripotent Stem Cell-Derived Bona Fide Neural Stem Cells for Ex Vivo Gene Therapy of Metachromatic Leukodystrophy. Stem Cells Translational Medicine, 2017, 6, 352-368.	3.3	63
41	The endoplasmic reticulum-mitochondria interface is perturbed in PARK2 knockout mice and patients with PARK2 mutations. Human Molecular Genetics, 2016, 25, ddw148.	2.9	105
42	MyT1 Counteracts the Neural Progenitor Program to Promote Vertebrate Neurogenesis. Cell Reports, 2016, 17, 469-483.	6.4	56
43	Coenzyme A corrects pathological defects in human neurons of <scp>PANK</scp> 2â€associated neurodegeneration. EMBO Molecular Medicine, 2016, 8, 1197-1211.	6.9	74
44	Rapid and efficient CRISPR/Cas9 gene inactivation in human neurons during human pluripotent stem cell differentiation and direct reprogramming. Scientific Reports, 2016, 6, 37540.	3.3	38
45	MICAL2is a novel human cancer gene controlling mesenchymal to epithelial transition involved in cancer growth and invasion. Oncotarget, 2016, 7, 1808-1825.	1.8	55
46	Direct Conversion of Fibroblasts into Functional Astrocytes by Defined Transcription Factors. Stem Cell Reports, 2015, 4, 25-36.	4.8	194
47	Human induced pluripotent stem cells differentiate into insulin-producing cells able to engraft in vivo. Acta Diabetologica, 2015, 52, 1025-1035.	2.5	33
48	ARX Regulates Cortical Intermediate Progenitor Cell Expansion and Upper Layer Neuron Formation Through Repression of Cdkn1c. Cerebral Cortex, 2015, 25, 322-335.	2.9	56
49	Overcoming the hurdles for a reproducible generation of human functionally mature reprogrammed neurons. Experimental Biology and Medicine, 2015, 240, 787-794.	2.4	10
50	Histone modifications controlling native and induced neural stem cell identity. Current Opinion in Genetics and Development, 2015, 34, 95-101.	3.3	9
51	Rapid Conversion of Fibroblasts into Functional Forebrain GABAergic Interneurons by Direct Genetic Reprogramming. Cell Stem Cell, 2015, 17, 719-734.	11.1	152
52	Mitochondrial iron and energetic dysfunction distinguish fibroblasts and induced neurons from pantothenate kinase-associated neurodegeneration patients. Neurobiology of Disease, 2015, 81, 144-153.	4.4	61
53	Modeling physiological and pathological human neurogenesis in the dish. Frontiers in Neuroscience, 2014, 8, 183.	2.8	31
54	Zrf1 is required to establish and maintain neural progenitor identity. Genes and Development, 2014, 28, 182-197.	5.9	29

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55	Remote control of induced dopaminergic neurons in parkinsonian rats. Journal of Clinical Investigation, 2014, 124, 3215-3229.	8.2	104
56	Oxysterols detour to neurodevelopment. Nature Chemical Biology, 2013, 9, 70-71.	8.0	2
57	Rapid Generation of Functional Dopaminergic Neurons From Human Induced Pluripotent Stem Cells Through a Single-Step Procedure Using Cell Lineage Transcription Factors. Stem Cells Translational Medicine, 2013, 2, 473-479.	3.3	81
58	Human L-ferritin deficiency is characterized by idiopathic generalized seizures and atypical restless leg syndrome. Journal of Experimental Medicine, 2013, 210, 1779-1791.	8.5	39
59	Wnt Signaling Has Opposing Roles in the Developing and the Adult Brain That Are Modulated by Hipk1. Cerebral Cortex, 2012, 22, 2415-2427.	2.9	35
60	Primary Skin Fibroblasts as a Model of Parkinson's Disease. Molecular Neurobiology, 2012, 46, 20-27.	4.0	121
61	CDKL5 ensures excitatory synapse stability by reinforcing NGL-1â€“PSD95 interaction in the postsynaptic compartment and is impaired in patient iPSC-derived neurons. Nature Cell Biology, 2012, 14, 911-923.	10.3	231
62	Transplantation of Genetically Corrected Human iPSC-Derived Progenitors in Mice with Limb-Girdle Muscular Dystrophy. Science Translational Medicine, 2012, 4, 140ra89.	12.4	269
63	Importance of Shank3 Protein in Regulating Metabotropic Glutamate Receptor 5 (mGluR5) Expression and Signaling at Synapses. Journal of Biological Chemistry, 2011, 286, 34839-34850.	3.4	180
64	Site-specific integration and tailoring of cassette design for sustainable gene transfer. Nature Methods, 2011, 8, 861-869.	19.0	300
65	Direct generation of functional dopaminergic neurons from mouse and human fibroblasts. Nature, 2011, 476, 224-227.	27.8	941
66	Adult Human MÃ¼ller Glia Cells Are a Highly Efficient Source of Rod Photoreceptors. Stem Cells, 2011, 29, 344-356.	3.2	122
67	A microRNA-Based System for Selecting and Maintaining the Pluripotent State in Human Induced Pluripotent Stem Cells. Stem Cells, 2011, 29, 1684-1695.	3.2	29
68	Reduced AKT/mTOR signaling and protein synthesis dysregulation in a Rett syndrome animal model. Human Molecular Genetics, 2011, 20, 1182-1196.	2.9	202
69	Setting a highway for converting skin into neurons. Journal of Molecular Cell Biology, 2011, 3, 322-323.	3.3	8
70	GABAergic Neuronal Precursor Grafting: Implications in Brain Regeneration and Plasticity. Neural Plasticity, 2011, 2011, 1-11.	2.2	19
71	Long-term culture and differentiation of CNS precursors derived from anterior human neural rosettes following exposure to ventralizing factors. Experimental Cell Research, 2010, 316, 1148-1158.	2.6	34
72	An ES-Like Pluripotent State in FGF-Dependent Murine iPS cells. PLoS ONE, 2010, 5, e16092.	2.5	17

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73	Tbr2-positive intermediate (basal) neuronal progenitors safeguard cerebral cortex expansion by controlling amplification of pallial glutamatergic neurons and attraction of subpallial GABAergic interneurons. Genes and Development, 2010, 24, 1816-1826.	5.9	94
74	Xenopus Bsxlinks daily cell cycle rhythms and pineal photoreceptor fate. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 6352-6357.	7.1	22
75	The Apical Complex Couples Cell Fate and Cell Survival to Cerebral Cortical Development. Neuron, 2010, 66, 69-84.	8.1	97
76	CDKL5 influences RNA splicing activity by its association to the nuclear speckle molecular machinery. Human Molecular Genetics, 2009, 18, 4590-4602.	2.9	53
77	Arx acts as a regional key selector gene in the ventral telencephalon mainly through its transcriptional repression activity. Developmental Biology, 2009, 334, 59-71.	2.0	48
78	Efficient Genetic Reprogramming of Unmodified Somatic Neural Progenitors Uncovers the Essential Requirement of Oct4 and Klf4. Stem Cells and Development, 2009, 18, 707-716.	2.1	26
79	FOXG1 Is Responsible for the Congenital Variant of Rett Syndrome. American Journal of Human Genetics, 2008, 83, 89-93.	6.2	366
80	The homeobox gene Arx is a novel positive regulator of embryonic myogenesis. Cell Death and Differentiation, 2008, 15, 94-104.	11.2	28
81	Tbr2 Directs Conversion of Radial Glia into Basal Precursors and Guides Neuronal Amplification by Indirect Neurogenesis in the Developing Neocortex. Neuron, 2008, 60, 56-69.	8.1	344
82	CDKL5 Expression Is Modulated during Neuronal Development and Its Subcellular Distribution Is Tightly Regulated by the C-terminal Tail. Journal of Biological Chemistry, 2008, 283, 30101-30111.	3.4	155
83	Neurons derived from reprogrammed fibroblasts functionally integrate into the fetal brain and improve symptoms of rats with Parkinson's disease. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 5856-5861.	7.1	1,129
84	Arx Is a Direct Target of Dlx2 and Thereby Contributes to the Tangential Migration of GABAergic Interneurons. Journal of Neuroscience, 2008, 28, 10674-10686.	3.6	140
85	Magic-Factor 1, a Partial Agonist of Met, Induces Muscle Hypertrophy by Protecting Myogenic Progenitors from Apoptosis. PLoS ONE, 2008, 3, e3223.	2.5	36
86	Necdin mediates skeletal muscle regeneration by promoting myoblast survival and differentiation. Journal of Cell Biology, 2007, 179, 305-319.	5.2	46
87	Inactivation of Arx, the Murine Ortholog of the X-Linked Lissencephaly with Ambiguous Genitalia Gene, Leads to Severe Disorganization of the Ventral Telencephalon with Impaired Neuronal Migration and Differentiation. Journal of Neuroscience, 2007, 27, 4786-4798.	3.6	124
88	Aristaless-related homeobox gene, the gene responsible for West syndrome and related disorders, is a Groucho/transducin-like enhancer of split dependent transcriptional repressor. Neuroscience, 2007, 146, 236-247.	2.3	62
89	FERM protein EPB41L5 is a novel member of the mammalian CRBâ€“MPP5 polarity complex. Experimental Cell Research, 2007, 313, 3959-3970.	2.6	55
90	Embryonic Stemâ€“Derived Versus Somatic Neural Stem Cells: A Comparative Analysis of Their Developmental Potential and Molecular Phenotype. Stem Cells, 2006, 24, 825-834.	3.2	38

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91	Direct Derivation of Neural Rosettes from Cloned Bovine Blastocysts: A Model of Early Neurulation Events and Neural Crest Specification In Vitro. Stem Cells, 2006, 24, 2514-2521.	3.2	46
92	The vertebrate ortholog of Aristaless is regulated by Dlx genes in the developing forebrain. Journal of Comparative Neurology, 2005, 483, 292-303.	1.6	91
93	The simultaneous loss of Arx and Pax4 genes promotes a somatostatin-producing cell fate specification at the expense of the Î±-and Î²-cell lineages in the mouse endocrine pancreas. Development (Cambridge), 2005, 132, 2969-2980.	2.5	203
94	Inactivation of the peroxisomal ABCD2 transporter in the mouse leads to late-onset ataxia involving mitochondria, Golgi and endoplasmic reticulum damage. Human Molecular Genetics, 2005, 14, 3565-3577.	2.9	90
95	CDKL5 belongs to the same molecular pathway of MeCP2 and it is responsible for the early-onset seizure variant of Rett syndrome. Human Molecular Genetics, 2005, 14, 1935-1946.	2.9	279
96	Neuroacanthocytosis: new developments in a neglected group of dementing disorders. Journal of the Neurological Sciences, 2005, 229-230, 171-186.	0.6	77
97	Bsx, an evolutionary conserved Brain Specific homeoboX gene expressed in the septum, epiphysis, mammillary bodies and arcuate nucleus. Gene Expression Patterns, 2004, 4, 47-51.	0.8	32
98	Mouse orthologue of ARX, a gene mutated in several X-linked forms of mental retardation and epilepsy, is a marker of adult neural stem cells and forebrain GABAergic neurons. Developmental Dynamics, 2004, 231, 631-639.	1.8	76
99	Axonal degeneration in paraplegin-deficient mice is associated with abnormal mitochondria and impairment of axonal transport. Journal of Clinical Investigation, 2004, 113, 231-242.	8.2	241
100	Axonal degeneration in paraplegin-deficient mice is associated with abnormal mitochondria and impairment of axonal transport. Journal of Clinical Investigation, 2004, 113, 231-242.	8.2	144
101	Role of citron kinase in dendritic morphogenesis of cortical neurons. Brain Research Bulletin, 2003, 60, 319-327.	3.0	18
102	Hypogonadotropic hypogonadism and peripheral neuropathy inEbf2-null mice. Development (Cambridge), 2003, 130, 401-410.	2.5	89
103	Mapping Wnt/Î²-catenin signaling during mouse development and in colorectal tumors. Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 3299-3304.	7.1	730
104	Location and Size of Dopaminergic and Serotonergic Cell Populations Are Controlled by the Position of the Midbrainâ€“Hindbrain Organizer. Journal of Neuroscience, 2003, 23, 4199-4207.	3.6	133
105	Isolation of Crb1, a mouse homologue of Drosophila crumbs, and analysis of its expression pattern in eye and brain. Mechanisms of Development, 2002, 110, 203-207.	1.7	98
106	Dmbx1 is a paired-box containing gene specifically expressed in the caudal most brain structures. Mechanisms of Development, 2002, 114, 219-223.	1.7	18
107	The meso-angioblast: a multipotent, self-renewing cell that originates from the dorsal aorta and differentiates into most mesodermal tissues. Development (Cambridge), 2002, 129, 2773-2783.	2.5	429
108	Emx2regulates the proliferation of stem cells of the adult mammalian central nervous system. Development (Cambridge), 2002, 129, 1633-1644.	2.5	115

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109	Cloning and expression of noz1, a zebrafish zinc finger gene related to Drosophila nocA. Mechanisms of Development, 2001, 104, 117-120.	1.7	22
110	Otx genes in brain morphogenesis. Progress in Neurobiology, 2001, 64, 69-95.	5.7	97
111	Defective Neurogenesis in Citron Kinase Knockout Mice by Altered Cytokinesis and Massive Apoptosis. Neuron, 2000, 28, 115-127.	8.1	232
112	MAEG, an EGF-repeat containing gene, is a new marker associated with dermatome specification and morphogenesis of its derivatives. Mechanisms of Development, 2000, 98, 179-182.	1.7	19
113	The caudal limit of Otx2 expression positions the isthmic organizer. Nature, 1999, 401, 164-168.	27.8	305
114	1 Body Plan Genes and Human Malformation. Advances in Genetics, 1998, 38, 1-29.	1.8	5
115	Evolution of Emx genes and brain development in vertebrates. Proceedings of the Royal Society B: Biological Sciences, 1997, 264, 1763-1766.	2.6	21
116	Emx1andEmx2Show Different Patterns of Expression During Proliferation and Differentiation of the Developing Cerebral Cortex in the Mouse. European Journal of Neuroscience, 1996, 8, 1037-1050.	2.6	213
117	Vascular endothelial growth factor messenger ribonucleic acid expression in human ovarian and endometrial cancer. Gynecological Endocrinology, 1996, 10, 375-382.	1.7	35
118	c-otx2 is expressed in two different phases of gastrulation and is sensitive to retinoic acid treatment in chick embryo. Mechanisms of Development, 1995, 49, 49-63.	1.7	183
119	Emx and Otx Gene Expression in the Developing Mouse Brain. Novartis Foundation Symposium, 1995, 193, 100-126.	1.1	13
120	Cloning and characterization of a new human Xq13 gene, encoding a putative helicase. Human Molecular Genetics, 1994, 3, 1957-1964.	2.9	58
121	Emx and Otx homeobox genes in the developing mouse brain. Journal of Neurobiology, 1993, 24, 1356-1366.	3.6	129