Richard Jay Smeyne

List of Publications by Year
in descending order

#	Article	IF	Citations
1	Severe sensory and sympathetic neuropathies in mice carrying a disrupted Trk/NGF receptor gene. Nature, 1994, 368, 246-249.	27.8	932
2	Continuous c-fos expression precedes programmed cell death in vivo. Nature, 1993, 363, 166-169.	27.8	795
3	Targeted disruption of the trkB neurotrophin receptor gene results in nervous system lesions and neonatal death. Cell, 1993, 75, 113-122.	28.9	610
4	Disruption of the neurotrophin-3 receptor gene trkC eliminates la muscle afferents and results in abnormal movements. Nature, 1994, 368, 249-251.	27.8	607
5	Nrf2-mediated neuroprotection in the MPTP mouse model of Parkinson's disease: Critical role for the astrocyte. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 2933-2938.	7.1	520
6	The redox/DNA repair protein, Ref-1, is essential for early embryonic development in mice.. Proceedings of the National Academy of Sciences of the United States of America, 1996, 93, 8919-8923.	7.1	477
7	Pten regulates neuronal soma size: a mouse model of Lhermitte-Duclos disease. Nature Genetics, 2001, 29, 404-411.	21.4	422
8	Highly pathogenic H5N1 influenza virus can enter the central nervous system and induce neuroinflammation and neurodegeneration. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 14063-14068.	7.1	373
9	Glutathione metabolism and Parkinson's disease. Free Radical Biology and Medicine, 2013, 62, 13-25.	2.9	336
10	Sonic hedgehog signaling is required for expansion of granule neuron precursors and patterning of the mouse cerebellum. Developmental Biology, 2004, 270, 393-410.	2.0	313
11	Regulation of c-fos expression in transgenic mice requires multiple interdependent transcription control elements. Neuron, 1995, 14, 241-252.	8.1	301
12	The MPTP model of Parkinson's disease. Molecular Brain Research, 2005, 134, 57-66.	2.3	295
13	A promoter that drives transgene expression in cerebellar Purkinje and retinal bipolar neurons. Science, 1990, 248, 223-226.	12.6	287
14	Viral parkinsonism. Biochimica Et Biophysica Acta - Molecular Basis of Disease, 2009, 1792, 714-721.	3.8	241
15	Fos-lacZ transgenic mice: Mapping sites of gene induction in the central nervous system. Neuron, 1992, 8, 13-23.	8.1	239
16	Immunologic Privilege in the Central Nervous System and the Bloodâ€“Brain Barrier. Journal of Cerebral Blood Flow and Metabolism, 2013, 33, 13-21.	4.3	239
17	Extensive enteric nervous system abnormalities in mice transgenic for artificial chromosomes containing Parkinson disease-associated Î±-synuclein gene mutations precede central nervous system changes. Human Molecular Genetics, 2010, 19, 1633-1650.	2.9	237
18	Environmental enrichment in adulthood eliminates neuronal death in experimental Parkinsonism. Molecular Brain Research, 2005, 134, 170-179.	2.3	224

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19	Retroviral-Mediated Transfer of the Green Fluorescent Protein Gene Into Murine Hematopoietic Cells Facilitates Scoring and Selection of Transduced Progenitors In Vitro and Identification of Genetically Modified Cells In Vivo. Blood, 1997, 90, 1777-1786.	1.4	209
20	Local Control of Granule Cell Generation by Cerebellar Purkinje Cells. Molecular and Cellular Neurosciences, 1995, 6, 230-251.	2.2	195
21	A Golgi-Cox morphological analysis of neuronal changes induced by environmental enrichment. Developmental Brain Research, 2003, 141, 55-61.	1.7	184
22	TrkA, But Not TrkC, Receptors Are Essential for Survival of Sympathetic Neurons<i>In Vivo</i>. Journal of Neuroscience, 1996, 16, 6208-6218.	3.6	180
23	Control of segment-like patterns of gene expression in the mouse cerebellum. Neuron, 1993, 10, 1007-1018.	8.1	179
24	Scalable signaling mediated by T cell antigen receptorâ€“CD3 ITAMs ensures effective negative selection and prevents autoimmunity. Nature Immunology, 2008, 9, 658-666.	14.5	147
25	Differential strain susceptibility following 1-methyl-4-phenyl-1,2,3,6-tetrahydropyridine (MPTP) administration acts in an autosomal dominant fashion: quantitative analysis in seven strains of Mus musculus. Brain Research, 1999, 828, 91-103.	2.2	131
26	COVID-19 and possible links with Parkinsonâ€™s disease and parkinsonism: from bench to bedside. Npj Parkinson's Disease, 2020, 6, 18.	5.3	120
27	TheArftumor suppressor gene promotes hyaloid vascular regression during mouse eye development. Proceedings of the National Academy of Sciences of the United States of America, 2002, 99, 3848-3853.	7.1	111
28	Specific disruption of thalamic inputs to the auditory cortex in schizophrenia models. Science, 2014, 344, 1178-1182.	12.6	107
29	Mutant LRRK2 mediates peripheral and central immune responses leading to neurodegeneration in vivo. Brain, 2018, 141, 1753-1769.	7.6	106
30	Triggering endogenous neuroprotective processes through exercise in models of dopamine deficiency. Parkinsonism and Related Disorders, 2009, 15, S42-S45.	2.2	94
31	Exercise protects against MPTP-induced neurotoxicity in mice. Brain Research, 2010, 1341, 72-83.	2.2	92
32	Inflammatory Effects of Highly Pathogenic H5N1 Influenza Virus Infection in the CNS of Mice. Journal of Neuroscience, 2012, 32, 1545-1559.	3.6	92
33	Caspase-3-dependent neuronal death in the hippocampus following kainic acid treatment. Molecular Brain Research, 1999, 70, 159-163.	2.3	91
34	Parkinsonism and neurological manifestations of influenza throughout the 20th and 21st centuries. Parkinsonism and Related Disorders, 2010, 16, 566-571.	2.2	89
35	Exercise: Is it a neuroprotective and if so, how does it work?. Parkinsonism and Related Disorders, 2014, 20, S123-S127.	2.2	89
36	Methylphenidate Exposure Induces Dopamine Neuron Loss and Activation of Microglia in the Basal Ganglia of Mice. PLoS ONE, 2012, 7, e33693.	2.5	84

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37	Induction of Microglia Activation after Infection with the Non-Neurotropic A/CA/04/2009 H1N1 Influenza Virus. PLoS ONE, 2015, 10, e0124047.	2.5	77
38	GSTÂ expression mediates dopaminergic neuron sensitivity in experimental parkinsonism. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 1977-1982.	7.1	73
39	Functional amelioration of murine galactosialidosis by genetically modified bone marrow hematopoietic progenitor cells. Blood, 2002, 99, 3169-3178.	1.4	72
40	Analysis of Cerebellar Development in math1 Null Embryos and Chimeras. Journal of Neuroscience, 2004, 24, 2202-2211.	3.6	72
41	MPTP and SNpc DA neuronal vulnerability: Role of dopamine, superoxide and nitric oxide in neurotoxicity. Minireview.. Neurotoxicity Research, 2005, 7, 193-201.	2.7	71
42	The Cyclin-Dependent Kinase Inhibitors p19Ink4d and p27Kip1 Are Coexpressed in Select Retinal Cells and Act Cooperatively to Control Cell Cycle Exit. Molecular and Cellular Neurosciences, 2002, 19, 359-374.	2.2	69
43	Bacterial Peptidoglycan Traverses the Placenta to Induce Fetal Neuroproliferation and Aberrant Postnatal Behavior. Cell Host and Microbe, 2016, 19, 388-399.	11.0	69
44	Assessment of the Effects of MPTP and Paraquat on Dopaminergic Neurons and Microglia in the Substantia Nigra Pars Compacta of C57BL/6 Mice. PLoS ONE, 2016, 11, e0164094.	2.5	68
45	The mouse neurological mutant weaver maps within the region of chromosome 16 that is homologous to human chromosome 21. Genomics, 1989, 5, 522-526.	2.9	66
46	Developmental expression of the GIRK family of inward rectifying potassium channels: implications for abnormalities in the weaver mutant mouse. Brain Research, 1997, 778, 251-264.	2.2	66
47	Purkinje cell loss is due to a direct action of the weaver gene in Purkinje cells: evidence from chimeric mice. Developmental Brain Research, 1990, 52, 211-218.	1.7	65
48	Central Nervous System Destruction Mediated by Glutamic Acid Decarboxylase-Specific CD4+ T Cells. Journal of Immunology, 2010, 184, 4863-4870.	0.8	61
49	Normal Midbrain Dopaminergic Neuron Development and Function in miR-133b Mutant Mice. Journal of Neuroscience, 2012, 32, 10887-10894.	3.6	59
50	Infection with mosquito-borne alphavirus induces selective loss of dopaminergic neurons, neuroinflammation and widespread protein aggregation. Npj Parkinson's Disease, 2019, 5, 20.	5.3	58
51	Infection and Risk of Parkinsonâ€™s Disease. Journal of Parkinson's Disease, 2021, 11, 31-43.	2.8	54
52	Glia cell number modulates sensitivity to MPTP in mice. Glia, 2005, 52, 144-152.	4.9	53
53	Synergistic effects of influenza and 1-methyl-4-phenyl-1,2,3,6-tetrahydropyridine (MPTP) can be eliminated by the use of influenza therapeutics: experimental evidence for the multi-hit hypothesis. Npj Parkinson's Disease, 2017, 3, 18.	5.3	50
54	Strain-dependent susceptibility to MPTP and MPP+-induced Parkinsonism is determined by glia. Glia, 2001, 34, 73-80.	4.9	48

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55	Neurorestoration by physical exercise: Moving forward. Parkinsonism and Related Disorders, 2012, 18, S147-S150.	2.2	45
56	Allopregnanolone Reinstates Tyrosine Hydroxylase Immunoreactive Neurons and Motor Performance in an MPTP-Lesioned Mouse Model of Parkinson's Disease. PLoS ONE, 2012, 7, e50040.	2.5	44
57	Exercise Does Not Protect against MPTP-Induced Neurotoxicity in BDNF Happloinsufficent Mice. PLoS ONE, 2012, 7, e43250.	2.5	43
58	Restoring auditory cortex plasticity in adult mice by restricting thalamic adenosine signaling. Science, 2017, 356, 1352-1356.	12.6	40
59	Temporal and spatial expression of a fos-lacZ transgene in the developing nervous system. Molecular Brain Research, 1992, 16, 158-162.	2.3	39
60	Splice Variants of the OB Receptor Gene are Differentially Expressed in Brain and Peripheral Tissues of Mice. Journal of Receptor and Signal Transduction Research, 1999, 19, 245-266.	2.5	39
61	Correspondence between L7-lacZ-expressing purkinje cells and labeled olivocerebellar fibers during late embryogenesis in the mouse. , 1996, 374, 451-466.		37
62	Response to 1-methyl-4-phenyl-1,2,3,6-tetrahydropyridine (MPTP) differs in mouse strains and reveals a divergence in JNK signaling and COX-2 induction prior to loss of neurons in the substantia nigra pars compacta. Brain Research, 2007, 1175, 107-116.	2.2	37
63	Genetic Dissection of Strain Dependent Paraquat-induced Neurodegeneration in the Substantia Nigra Pars Compacta. PLoS ONE, 2012, 7, e29447.	2.5	32
64	Mapping of Cbln1â€like immunoreactivity in adult and developing mouse brain and its localization to the endolysosomal compartment of neurons. European Journal of Neuroscience, 2007, 26, 2962-2978.	2.6	31
65	Identification of a single QTL, Mptp1, for susceptibility to MPTP-induced substantia nigra pars compacta neuron loss in mice. Molecular Brain Research, 2003, 110, 279-288.	2.3	26
66	Exogenous activation of tumor necrosis factor receptor 2 promotes recovery from sensory and motor disease in a model of multiple sclerosis. Brain, Behavior, and Immunity, 2019, 81, 247-259.	4.1	26
67	Tune into the weaver channel. Nature Genetics, 1995, 11, 107-109.	21.4	25
68	Cocaine selectively increases proliferation in the adult murine hippocampus. Neuroscience Letters, 2010, 485, 112-116.	2.1	25
69	Method for culturing postnatal substantia nigra as an in vitro model of experimental Parkinsonâ€™s disease. Brain Research Protocols, 2002, 9, 105-111.	1.6	24
70	Murine <i> <scp>MPDZ</scp> </i> â€linked hydrocephalus is caused by hyperpermeability of the choroid plexus. EMBO Molecular Medicine, 2019, 11, .	6.9	24
71	Absence of neuroanatomical and behavioral deficits in L7/pcp-2-null mice. Molecular Brain Research, 1997, 46, 333-337.	2.3	23
72	Lack of PPCA Expression only Partially Coincides with Lysosomal Storage in Galactosialidosis Mice: Indirect Evidence for Spatial Requirement of the Catalytic Rather than the Protective Function of PPCA. Human Molecular Genetics, 1998, 7, 1787-1794.	2.9	23

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73	Regional differences in cortical dendrite morphology following in utero exposure to cocaine. Developmental Brain Research, 2003, 147, 59-66.	1.7	20
74	Rotenone induces regionally distinct Î±-synuclein protein aggregation and activation of glia prior to loss of dopaminergic neurons in C57Bl/6 mice. Neurobiology of Disease, 2022, 167, 105685.	4.4	17
75	p75 Regulates Purkinje Cell Firing by Modulating SK Channel Activity through Rac1. Journal of Biological Chemistry, 2014, 289, 31458-31472.	3.4	16
76	Expression of<i>Ob</i>Receptor Splice Variants During Prenatal Development of the Mouse. Journal of Receptor and Signal Transduction Research, 2000, 20, 87-103.	2.5	15
77	Neurochemical Measurement of Adenosine in Discrete Brain Regions of Five Strains of Inbred Mice. PLoS ONE, 2014, 9, e92422.	2.5	15
78	Acute Effects of 1-methyl-4-phenyl-1,2,3,6-tetrahydropyridine (MPTP) or Paraquat on Core Temperature in C57BL/6J Mice. Journal of Parkinson's Disease, 2015, 5, 389-401.	2.8	15
79	SCYL2 Protects CA3 Pyramidal Neurons from Excitotoxicity during Functional Maturation of the Mouse Hippocampus. Journal of Neuroscience, 2015, 35, 10510-10522.	3.6	15
80	<scp>COVID</scp>â€•19 Infection Enhances Susceptibility to Oxidative Stressâ€“Induced Parkinsonism. Movement Disorders, 2022, 37, 1394-1404.	3.9	15
81	Developmental expression of Fos-lacZ in the brains of postnatal transgenic rats. Developmental Brain Research, 1996, 93, 191-197.	1.7	14
82	Synaptic alterations and immune response are sexually dimorphic in a non-pertussis toxin model of experimental autoimmune encephalomyelitis. Experimental Neurology, 2020, 323, 113061.	4.1	14
83	Mutant LRRK2 in lymphocytes regulates neurodegeneration via IL-6 in an inflammatory model of Parkinsonâ€™s disease. Npj Parkinson's Disease, 2022, 8, 24.	5.3	14
84	Alterations in glutathione S-transferase pi expression following exposure to MPP+-induced oxidative stress in the blood of Parkinsonâ€™s disease patients. Parkinsonism and Related Disorders, 2011, 17, 765-768.	2.2	13
85	Postnatal development of the wild-type and weaver cerebellum after embryonic administration of propylthiouracil (PTU). Developmental Brain Research, 1990, 54, 282-286.	1.7	12
86	Astrocyte inflammatory signaling mediates Î±-synuclein aggregation and dopaminergic neuronal loss following viral encephalitis. Experimental Neurology, 2021, 346, 113845.	4.1	12
87	Foreword: Exercise and the Brain. Brain Research, 2010, 1341, 1-2.	2.2	6
88	Manganese exposure in juvenile C57BL/6 mice increases glial inflammatory responses in the substantia nigra following infection with H1N1 influenza virus. PLoS ONE, 2021, 16, e0245171.	2.5	6
89	Phenotype screening for genetically determined age-onset disorders and increased longevity in ENU-mutagenized mice. Age, 2005, 27, 75-90.	3.0	5
90	From Man to Mouse: The MPTP Model of Parkinson Disease. , 2005, , 149-160.		5

#	Article	IF	Citations
91	From Man to Mouse. , 2015, , 287-306.		4
92	Catalog of the Neurological Mutants of Mouse revisited: Honoring the 40th anniversary of its initial publication. Brain Research, 2007, 1140, 1.	2.2	1
93	Effect of Chronic Methylphenidate Treatment in a Female Experimental Model of Parkinsonism. Neurotoxicity Research, 2021, 39, 667-676.	2.7	1
94	Cell Death in Parkinsonâ€™s Disease. , 2004, , .		1
95	Effect of Longâ€term Methylphenidate Treatment in a Female Experimental Model of Parkinsonism. FASEB Journal, 2019, 33, 501.8.	0.5	0