Vladimir L Buchman

List of Publications by Year
in descending order

111	7,803	66234	53109
papers	citations	42 h-index	85 g-index

118	118	118	8710
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Î±-Synuclein Promotes SNARE-Complex Assembly in Vivo and in Vitro. Science, 2010, 329, 1663-1667.	6.0	1,476
2	GDNF is an age-specific survival factor for sensory and autonomic neurons. Neuron, 1995, 15, 821-828.	3.8	385
3	Neurturin responsiveness requires a GPI-linked receptor and the Ret receptor tyrosine kinase. Nature, 1997, 387, 721-724.	13.7	281
4	Î±Î²Î³-Synuclein triple knockout mice reveal age-dependent neuronal dysfunction. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 19573-19578.	3.3	261
5	Part II: Î±-synuclein and its molecular pathophysiological role in neurodegenerative disease. Neuropharmacology, 2003, 45, 14-44.	2.0	254
6	Î±-Synuclein and dopamine at the crossroads of Parkinson's disease. Trends in Neurosciences, 2010, 33, 559-568.	4.2	233
7	Myelination transition zone astrocytes are constitutively phagocytic and have synuclein dependent reactivity in glaucoma. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 1176-1181.	3.3	189
8	Parkinson's disease Î±-synuclein mutations exhibit defective axonal transport in cultured neurons. Journal of Cell Science, 2004, 117, 1017-1024.	1.2	163
9	Autoantibodies to alpha-synuclein in inherited Parkinsonâ€™s disease. Journal of Neurochemistry, 2006, 101, 749-756.	2.1	161
10	Functional Alterations to the Nigrostriatal System in Mice Lacking All Three Members of the Synuclein Family. Journal of Neuroscience, 2011, 31, 7264-7274.	1.7	158
11	Induction of neuronal death by Î±-synuclein. European Journal of Neuroscience, 2000, 12, 3073-3077.	1.2	151
12	Persyn, a Member of the Synuclein Family, Has a Distinct Pattern of Expression in the Developing Nervous System. Journal of Neuroscience, 1998, 18, 9335-9341.	1.7	148
13	GFRÎ±-4 and the tyrosine kinase Ret form a functional receptor complex for persephin. Current Biology, 1998, 8, 1019-1022.	1.8	143
14	Monomeric Alpha-Synuclein Exerts a Physiological Role on Brain ATP Synthase. Journal of Neuroscience, 2016, 36, 10510-10521.	1.7	142
15	Increased striatal dopamine release and hyperdopaminergicâ€like behaviour in mice lacking both alphaâ€synuclein and gammaâ€synuclein. European Journal of Neuroscience, 2008, 27, 947-957.	1.2	138
16	Role of STAT3 and PI 3-Kinase/Akt in Mediating the Survival Actions of Cytokines on Sensory Neurons. Molecular and Cellular Neurosciences, 2001, 18, 270-282.	1.0	135
17	Developmental loss and resistance to MPTP toxicity of dopaminergic neurones in substantia nigra pars compacta of gamma-synuclein, alpha-synuclein and double alpha/gamma-synuclein null mutant mice. Journal of Neurochemistry, 2004, 89, 1126-1136.	2.1	135
18	Negative regulation of PI 3-kinase by Ruk, a novel adaptor protein. EMBO Journal, 2000, 19, 4015-4025.	3.5	123

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19	Compromised paraspeckle formation as a pathogenic factor in FUSopathies. Human Molecular Genetics, 2014, 23, 2298-2312.	1.4	112
20	Role of PI 3-kinase, Akt and Bcl-2â€“related proteins in sustaining the survival of neurotrophic factorâ€“independent adult sympathetic neurons. Journal of Cell Biology, 2001, 154, 995-1006.	2.3	109
21	Persyn, a member of the synuclein family, influences neurofilament network integrity. Nature Neuroscience, 1998, 1, 101-103.	7.1	107
22	Absence of Î±-synuclein affects dopamine metabolism and synaptic markers in the striatum of aging mice. Neurobiology of Aging, 2010, 31, 796-804.	1.5	106
23	ALS-linked FUS mutations confer loss and gain of function in the nucleus by promoting excessive formation of dysfunctional paraspeckles. Acta Neuropathologica Communications, 2019, 7, 7.	2.4	103
24	Methylene blue and dimebon inhibit aggregation of TDPâ€43 in cellular models. FEBS Letters, 2009, 583, 2419-2424.	1.3	102
25	Î³-Synucleinopathy: neurodegeneration associated with overexpression of the mouse protein. Human Molecular Genetics, 2009, 18, 1779-1794.	1.4	101
26	Fused in Sarcoma (FUS) Protein Lacking Nuclear Localization Signal (NLS) and Major RNA Binding Motifs Triggers Proteinopathy and Severe Motor Phenotype in Transgenic Mice. Journal of Biological Chemistry, 2013, 288, 25266-25274.	1.6	95
27	Induction of de novo Î±-synuclein fibrillization in a neuronal model for Parkinsonâ€™s disease. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, E912-21.	3.3	95
28	GFRÎ±-4, a New GDNF Family Receptor. Molecular and Cellular Neurosciences, 1998, 11, 117-126.	1.0	89
29	Control of ventricular excitability by neurons of the dorsal motor nucleus of the vagus nerve. Heart Rhythm, 2015, 12, 2285-2293.	0.3	82
30	Multistep process of FUS aggregation in the cell cytoplasm involves RNA-dependent and RNA-independent mechanisms. Human Molecular Genetics, 2014, 23, 5211-5226.	1.4	80
31	Protective paraspeckle hyper-assembly downstream of TDP-43 loss of function in amyotrophic lateral sclerosis. Molecular Neurodegeneration, 2018, 13, 30.	4.4	70
32	Neurons Expressing the Highest Levels of Î³-Synuclein Are Unaffected by Targeted Inactivation of the Gene. Molecular and Cellular Biology, 2003, 23, 8233-8245.	1.1	65
33	Protein Aggregation in Retinal Cells and Approaches to Cell Protection. Cellular and Molecular Neurobiology, 2005, 25, 1051-1066.	1.7	61
34	Endogenous alpha-synuclein influences the number of dopaminergic neurons in mouse substantia nigra. Experimental Neurology, 2013, 248, 541-545.	2.0	60
35	HD-PTP and Alix share some membrane-traffic related proteins that interact with their Bro1 domains or proline-rich regions. Archives of Biochemistry and Biophysics, 2007, 457, 142-149.	1.4	58
36	TrkB Variants with Deletions in the Leucine-rich Motifs of the Extracellular Domain. Journal of Biological Chemistry, 1997, 272, 13019-13025.	1.6	55

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37	Recruitment into stress granules prevents irreversible aggregation of FUS protein mislocalized to the cytoplasm. Cell Cycle, 2013, 12, 3383-3391.	1.3	55
38	Stem cells in human breast milk. Human Cell, 2019, 32, 223-230.	1.2	53
39	Simultaneous and independent detection of C9ORF72 alleles with low and high number of GGGGCC repeats using an optimised protocol of Southern blot hybridisation. Molecular Neurodegeneration, 2013, 8, 12.	4.4	52
40	Emerging Roles of Ruk/CIN85 in Vesicle-Mediated Transport, Adhesion, Migration and Malignancy. Traffic, 2010, 11, 721-731.	1.3	50
41	Chronic Administration of Dimebon Ameliorates Pathology in TauP301S Transgenic Mice. Journal of Alzheimer's Disease, 2013, 33, 1041-1049.	1.2	48
42	Combinational losses of synucleins reveal their differential requirements for compensating age-dependent alterations in motor behavior and dopamine metabolism. Neurobiology of Aging, 2016, 46, 107-112.	1.5	44
43	Dimebon Slows Progression of Proteinopathy in Î³-Synuclein Transgenic Mice. Neurotoxicity Research, 2012, 22, 33-42.	1.3	43
44	Organization of the mouse Ruk locus and expression of isoforms in mouse tissues. Gene, 2002, 295, 13-17.	1.0	38
45	Chronically stressed or stress-preconditioned neurons fail to maintain stress granule assembly. Cell Death and Disease, 2017, 8, e2788-e2788.	2.7	38
46	Long non-coding RNA Neat1 regulates adaptive behavioural response to stress in mice. Translational Psychiatry, 2020, 10, 171.	2.4	38
47	Differential Expression of Sarcoplasmic and Myofibrillar Proteins of Rat Soleus Muscle during Denervation Atrophy. Bioscience, Biotechnology and Biochemistry, 2009, 73, 1748-1756.	0.6	32
48	Selective pattern of motor system damage in gamma-synuclein transgenic mice mirrors the respective pathology in amyotrophic lateral sclerosis. Neurobiology of Disease, 2012, 48, 124-131.	2.1	32
49	Increased levels of the HER1 adaptor protein Ruk l /CIN85 contribute to breast cancer malignancy. Carcinogenesis, 2012, 33, 1976-1984.	1.3	31
50	Deletion of alphaâ€synuclein decreases impulsivity in mice. Genes, Brain and Behavior, 2012, 11, 137-146.	1.1	31
51	Whole genome expression analyses of single- and double-knock-out mice implicate partially overlapping functions of alpha- and gamma-synuclein. Neurogenetics, 2007, 8, 71-81.	0.7	30
52	Lack of involvement of alpha-synuclein in unconditioned anxiety in mice. Behavioural Brain Research, 2010, 209, 234-240.	1.2	30
53	Antiviral Immune Response as a Trigger of FUS Proteinopathy in Amyotrophic Lateral Sclerosis. Cell Reports, 2019, 29, 4496-4508.e4.	2.9	30
54	Developmentally Regulated Expression of Persyn, a Member of the Synuclein Family, in Skin. Experimental Cell Research, 1999, 246, 308-311.	1.2	28

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55	CRISPR/Cas9-generated mouse model of Duchenne muscular dystrophy recapitulating a newly identified large 430 kb deletion in the humanDMDgene. DMM Disease Models and Mechanisms, 2019, 12, .	1.2	28
56	Intracellular Compartmentalization of Two Differentially Spliceds-rex/NSPmRNAs in Neurons. Molecular and Cellular Neurosciences, 1996, 7, 289-303.	1.0	27
57	Intersectin 1 forms a complex with adaptor protein Ruk/CIN85 in vivo independently of epidermal growth factor stimulation. Cellular Signalling, 2009, 21, 753-759.	1.7	27
58	Ruk is ubiquitinated but not degraded by the proteasome. FEBS Journal, 2002, 269, 3402-3408.	0.2	26
59	Increased lipolysis and altered lipid homeostasis protect Â-synuclein-null mutant mice from diet-induced obesity. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 20943-20948.	3.3	26
60	Chronic Administration of Dimebon does not Ameliorate Amyloid-Î² Pathology in 5xFAD Transgenic Mice. Journal of Alzheimer's Disease, 2013, 36, 589-596.	1.2	26
61	Differential splicing creates a diversity of transcripts from a neurospecific developmentally regulated gene encoding a protein with new zinc-finger motifs. Nucleic Acids Research, 1992, 20, 5579-5585.	6.5	25
62	The d4 Gene Family in the Human Genome. Genomics, 1996, 36, 174-177.	1.3	25
63	Modulation of Î±-synuclein expression in transgenic animals for modelling synucleinopathies â€" is the juice worth the squeeze?. Neurotoxicity Research, 2008, 14, 329-341.	1.3	25
64	C9ORF72 transcription in a frontotemporal dementia case with two expanded alleles. Neurology, 2013, 81, 1719-1721.	1.5	25
65	Calcium-responsive transactivator (CREST) protein shares a set of structural and functional traits with other proteins associated with amyotrophic lateral sclerosis. Molecular Neurodegeneration, 2015, 10, 20.	4.4	25
66	Synaptic vesicle binding of Î±-synuclein is modulated by Î²- and Î³-synucleins. Cell Reports, 2022, 39, 110675.	2.9	25
67	Hindering of proteinopathy-induced neurodegeneration as a new mechanism of action for neuroprotectors and cognition enhancing compounds. Doklady Biochemistry and Biophysics, 2009, 428, 235-238.	0.3	24
68	Contrasting Effects of Î±-Synuclein and Î³-Synuclein on the Phenotype of Cysteine String Protein Î± (CSPÎ±) Null Mutant Mice Suggest Distinct Function of these Proteins in Neuronal Synapses. Journal of Biological Chemistry, 2012, 287, 44471-44477.	1.6	24
69	Alterations in the nigrostriatal system following conditional inactivation of Î±-synuclein in neurons of adult and aging mice. Neurobiology of Aging, 2020, 91, 76-87.	1.5	24
70	Î³-Synuclein Is an Adipocyte-Neuron Gene Coordinately Expressed with Leptin and Increased in Human Obesity. Journal of Nutrition, 2008, 138, 841-848.	1.3	23
71	Multiple Domains of Ruk/CIN85/SETA/CD2BP3 are Involved in Interaction with p85Î± Regulatory Subunit of PI 3-kinase. Journal of Molecular Biology, 2004, 343, 1135-1146.	2.0	22
72	Residual association at C9orf72 suggests an alternative amyotrophic lateral sclerosis-causing hexanucleotide repeat. Neurobiology of Aging, 2013, 34, 2234.e1-2234.e7.	1.5	22

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73	Modulation of p-eIF2Î± cellular levels and stress granule assembly/disassembly by trehalose. Scientific Reports, 2017, 7, 44088.	1.6	22
74	Gammaâ€synuclein pathology in amyotrophic lateral sclerosis. Annals of Clinical and Translational Neurology, 2015, 2, 29-37.	1.7	21
75	Rat and chicken s-rex/NSP mRNA: nucleotide sequence of main transcripts and expression of splice variants in rat tissues. Gene, 1997, 184, 205-210.	1.0	20
76	Adaptor Protein Ruk/CIN85 is Associated with a Subset of COPI-Coated Membranes of the Golgi Complex. Traffic, 2008, 9, 798-812.	1.3	20
77	Chicken synucleins: cloning and expression in the developing embryo. Mechanisms of Development, 2000, 99, 195-198.	1.7	19
78	Localization of Synucleins in the Mammalian Cochlea. JARO - Journal of the Association for Research in Otolaryngology, 2008, 9, 452-463.	0.9	19
79	ALS-linked cytoplasmic FUS assemblies are compositionally different from physiological stress granules and sequester hnRNPA3, a novel modifier of FUS toxicity. Neurobiology of Disease, 2022, 162, 105585.	2.1	19
80	Cerd4, third member of the d4 gene family: expression and organization of genomic locus. Mammalian Genome, 2001, 12, 862-866.	1.0	17
81	Peripheral Sensory Neurons Survive in the Absence of Î±- and Î³-Synucleins. Journal of Molecular Neuroscience, 2005, 25, 157-164.	1.1	17
82	Early lethality and neuronal proteinopathy in mice expressing cytoplasm-targeted FUS that lacks the RNA recognition motif. Amyotrophic Lateral Sclerosis and Frontotemporal Degeneration, 2015, 16, 402-409.	1.1	17
83	A novel resource for studying function and dysfunction of Î±-synuclein: mouse lines for modulation of endogenous Snca gene expression. Scientific Reports, 2015, 5, 16615.	1.6	17
84	Mutations in the gene encoding human persyn are not associated with amyotrophic lateral sclerosis or familial Parkinson's disease. Neuroscience Letters, 1999, 274, 21-24.	1.0	16
85	Expression pattern of dd4, a sole member of the d4 family of transcription factors in Drosophila melanogaster. Mechanisms of Development, 2002, 114, 119-123.	1.7	15
86	Hunk/Mak-v is a negative regulator of intestinal cell proliferation. BMC Cancer, 2015, 15, 110.	1.1	15
87	Lipid Classes and Fatty Acid Patterns are Altered in the Brain of Î³â€Synuclein Null Mutant Mice. Lipids, 2011, 46, 121-130.	0.7	14
88	In a search for efficient treatment for amyotrophic lateral sclerosis: Old drugs for new approaches. Medicinal Research Reviews, 2021, 41, 2804-2822.	5.0	13
89	Dimebon Does Not Ameliorate Pathological Changes Caused by Expression of Truncated (1â€“120) Human Alpha-Synuclein in Dopaminergic Neurons of Transgenic Mice. Neurodegenerative Diseases, 2011, 8, 430-437.	0.8	12
90	C9ORF72 hexanucleotide repeat expansion in ALS patients from the Central European Russia population. Neurobiology of Aging, 2015, 36, 2908.e5-2908.e9.	1.5	12

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91	Structure and expression of two members of the d4 gene family in mouse. Mammalian Genome, 2000, 11, 72-74.	1.0	11
92	Behavioural impairments in mice of a novel FUS transgenic line recapitulate features of frontotemporal lobar degeneration. Genes, Brain and Behavior, 2019, 18, e12607.	1.1	10
93	Î²-synuclein potentiates synaptic vesicle dopamine uptake and rescues dopaminergic neurons from MPTP-induced death in the absence of other synucleins. Journal of Biological Chemistry, 2021, 297, 101375.	1.6	10
94	Molecular cloning and expression pattern of rpr-1 , a resiniferatoxin-binding, phosphotriesterase-related protein, expressed in rat kidney tubules 1. FEBS Letters, 1997, 410, 378-382.	1.3	9
95	Î³-synuclein is a novel player in the control of body lipid metabolism. Adipocyte, 2013, 2, 276-280.	1.3	9
96	Frameshift peptides alter the properties of truncated FUS proteins in ALS-FUS. Molecular Brain, 2020, 13, 77.	1.3	8
97	Cloning and developmental expression of MARK/Par-1/MELK-related protein kinase xMAK-V in Xenopus laevis. Development Genes and Evolution, 2004, 214, 139-143.	0.4	7
98	Pro-survival activity of the MAK-V protein kinase in PC12 cells. Cell Cycle, 2010, 9, 4248-4249.	1.3	6
99	Generation of mouse lines with conditionally or constitutively inactivated Snca gene and Rosa26-stop-lacZ reporter located in cis on the mouse chromosome 6. Transgenic Research, 2017, 26, 301-307.	1.3	6
100	Reduced complement of dopaminergic neurons in the substantia nigra pars compacta of mice with a constitutive â€œlow footprintâ€•genetic knockout of alpha-synuclein. Molecular Brain, 2020, 13, 75.	1.3	6
101	Toward a Disease-Modifying Therapy of Alpha-Synucleinopathies: New Molecules and New Approaches Came into the Limelight. Molecules, 2021, 26, 7351.	1.7	6
102	Identification of Nedd4 E3 Ubiquitin Ligase as a Binding Partner and Regulator of MAK-V Protein Kinase. PLoS ONE, 2012, 7, e39505.	1.1	5
103	Genomic Structure and Chromosomal Localization of the Mouse Persyn Gene. Genomics, 1999, 56, 224-227.	1.3	4
104	Synuclein Deficiency Results in Age-Related Respiratory and Cardiovascular Dysfunctions in Mice. Brain Sciences, 2020, 10, 583.	1.1	4
105	A bioisostere of Dimebon/Latrepirdine delays the onset and slows the progression of pathology in FUS transgenic mice. CNS Neuroscience and Therapeutics, 2021, 27, 765-775.	1.9	4
106	A Novel Interaction of the Catalytic Subunit of Protein Phosphatase 2A with the Adaptor Protein CIN85 Suppresses Phosphatase Activity and Facilitates Platelet Outside-in Î±IIbÎ²3 Integrin Signaling. Journal of Biological Chemistry, 2016, 291, 17360-17368.	1.6	3
107	Low Level of Expression of C-Terminally Truncated Human FUS Causes Extensive Changes in the Spinal Cord Transcriptome of Asymptomatic Transgenic Mice. Neurochemical Research, 2020, 45, 1168-1179.	1.6	3
108	Subtractive cDNA Cloning from Limited Amounts of Biological Material. Analytical Biochemistry, 1996, 237, 155-157.	1.1	2

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109	Triple-Knockout, Synuclein-Free Mice Display Compromised Lipid Pattern. Molecules, 2021, 26, 3078.	1.7	2
110	Kinetics of alpha-synuclein depletion in three brain regions following conditional pan-neuronal inactivation of the encoding gene (Snca) by tamoxifen-induced Cre-recombination in adult mice. Transgenic Research, 2021, 30, 867-873.	1.3	2
111	Antiviral Immune Response as a Trigger of FUS Proteinopathy in Amyotrophic Lateral Sclerosis. SSRN Electronic Journal, 0, , .	0.4	0