# 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 | 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 |
| 2 | Synaptic vesicle binding of Î±-synuclein is modulated by Î²- and Î³-synucleins. Cell Reports, 2022, 39, 110675. | 2.9 | 25 |
| 3 | 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 |
| 4 | 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 |
| 5 | Triple-Knockout, Synuclein-Free Mice Display Compromised Lipid Pattern. Molecules, 2021, 26, 3078. | 1.7 | 2 |
| 6 | 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 |
| 7 | 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 |
| 8 | Toward a Disease-Modifying Therapy of Alpha-Synucleinopathies: New Molecules and New Approaches Came into the Limelight. Molecules, 2021, 26, 7351. | 1.7 | 6 |
| 9 | Synuclein Deficiency Results in Age-Related Respiratory and Cardiovascular Dysfunctions in Mice. Brain Sciences, 2020, 10, 583. | 1.1 | 4 |
| 10 | 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 |
| 11 | Frameshift peptides alter the properties of truncated FUS proteins in ALS-FUS. Molecular Brain, 2020, 13, 77. | 1.3 | 8 |
| 12 | 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 |
| 13 | Long non-coding RNA Neat1 regulates adaptive behavioural response to stress in mice. Translational Psychiatry, 2020, 10, 171. | 2.4 | 38 |
| 14 | 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 |
| 15 | 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 |
| 16 | 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 |
| 17 | Stem cells in human breast milk. Human Cell, 2019, 32, 223-230. | 1.2 | 53 |
| 18 | Antiviral Immune Response as a Trigger of FUS Proteinopathy in Amyotrophic Lateral Sclerosis. Cell Reports, 2019, 29, 4496-4508.e4. | 2.9 | 30 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | 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 |
| 20 | Protective paraspeckle hyper-assembly downstream of TDP-43 loss of function in amyotrophic lateral sclerosis. Molecular Neurodegeneration, 2018, 13, 30. | 4.4 | 70 |
| 21 | Modulation of p-eIF2Î± cellular levels and stress granule assembly/disassembly by trehalose. Scientific Reports, 2017, 7, 44088. | 1.6 | 22 |
| 22 | Chronically stressed or stress-preconditioned neurons fail to maintain stress granule assembly. Cell Death and Disease, 2017, 8, e2788-e2788. | 2.7 | 38 |
| 23 | 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 |
| 24 | Monomeric Alpha-Synuclein Exerts a Physiological Role on Brain ATP Synthase. Journal of Neuroscience, 2016, 36, 10510-10521. | 1.7 | 142 |
| 25 | 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 |
| 26 | 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 |
| 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 | 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 |
| 29 | 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 |
| 30 | Gammaâ€synuclein pathology in amyotrophic lateral sclerosis. Annals of Clinical and Translational Neurology, 2015, 2, 29-37. | 1.7 | 21 |
| 31 | Control of ventricular excitability by neurons of the dorsal motor nucleus of the vagus nerve. Heart Rhythm, 2015, 12, 2285-2293. | 0.3 | 82 |
| 32 | 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 |
| 33 | Hunk/Mak-v is a negative regulator of intestinal cell proliferation. BMC Cancer, 2015, 15, 110. | 1.1 | 15 |
| 34 | 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 |
| 35 | 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 |
| 36 | Compromised paraspeckle formation as a pathogenic factor in FUSopathies. Human Molecular Genetics, 2014, 23, 2298-2312. | 1.4 | 112 |

| # | Article | IF | Citations |
|---|---|---|---|
| 37 | 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 |
| 38 | Endogenous alpha-synuclein influences the number of dopaminergic neurons in mouse substantia nigra. Experimental Neurology, 2013, 248, 541-545. | 2.0 | 60 |
| 39 | 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 |
| 40 | 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 |
| 41 | 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 |
| 42 | Recruitment into stress granules prevents irreversible aggregation of FUS protein mislocalized to the cytoplasm. Cell Cycle, 2013, 12, 3383-3391. | 1.3 | 55 |
| 43 | Chronic Administration of Dimebon Ameliorates Pathology in TauP301S Transgenic Mice. Journal of Alzheimer's Disease, 2013, 33, 1041-1049. | 1.2 | 48 |
| 44 | C9ORF72 transcription in a frontotemporal dementia case with two expanded alleles. Neurology, 2013, 81, 1719-1721. | 1.5 | 25 |
| 45 | Î³-synuclein is a novel player in the control of body lipid metabolism. Adipocyte, 2013, 2, 276-280. | 1.3 | 9 |
| 46 | 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 |
| 47 | 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 |
| 48 | Increased levels of the HER1 adaptor protein Ruk l /CIN85 contribute to breast cancer malignancy. Carcinogenesis, 2012, 33, 1976-1984. | 1.3 | 31 |
| 49 | Dimebon Slows Progression of Proteinopathy in Î³-Synuclein Transgenic Mice. Neurotoxicity Research, 2012, 22, 33-42. | 1.3 | 43 |
| 50 | Deletion of alphaâ€synuclein decreases impulsivity in mice. Genes, Brain and Behavior, 2012, 11, 137-146. | 1.1 | 31 |
| 51 | 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 |
| 52 | 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 |
| 53 | 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 |
| 54 | 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 |

| # | Article | IF | Citations |
|---|---|---|---|
| 55 | 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 |
| 56 | 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 |
| 57 | Emerging Roles of Ruk/CIN85 in Vesicle-Mediated Transport, Adhesion, Migration and Malignancy. Traffic, 2010, 11, 721-731. | 1.3 | 50 |
| 58 | Pro-survival activity of the MAK-V protein kinase in PC12 cells. Cell Cycle, 2010, 9, 4248-4249. | 1.3 | 6 |
| 59 | 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 |
| 60 | Î±-Synuclein Promotes SNARE-Complex Assembly in Vivo and in Vitro. Science, 2010, 329, 1663-1667. | 6.0 | 1,476 |
| 61 | Lack of involvement of alpha-synuclein in unconditioned anxiety in mice. Behavioural Brain Research, 2010, 209, 234-240. | 1.2 | 30 |
| 62 | 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 |
| 63 | Î±-Synuclein and dopamine at the crossroads of Parkinson's disease. Trends in Neurosciences, 2010, 33, 559-568. | 4.2 | 233 |
| 64 | 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 |
| 65 | Methylene blue and dimebon inhibit aggregation of TDPâ€43 in cellular models. FEBS Letters, 2009, 583, 2419-2424. | 1.3 | 102 |
| 66 | 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 |
| 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 | Î³-Synucleinopathy: neurodegeneration associated with overexpression of the mouse protein. Human Molecular Genetics, 2009, 18, 1779-1794. | 1.4 | 101 |
| 69 | 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 |
| 70 | Localization of Synucleins in the Mammalian Cochlea. JARO - Journal of the Association for Research in Otolaryngology, 2008, 9, 452-463. | 0.9 | 19 |
| 71 | 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 |
| 72 | 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 |

| # | Article | IF | Citations |
|---|---|---|---|
| 73 | 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 |
| 74 | 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 |
| 75 | 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 |
| 76 | Autoantibodies to alpha-synuclein in inherited Parkinsonâ€™s disease. Journal of Neurochemistry, 2006, 101, 749-756. | 2.1 | 161 |
| 77 | Peripheral Sensory Neurons Survive in the Absence of Î±- and Î³-Synucleins. Journal of Molecular Neuroscience, 2005, 25, 157-164. | 1.1 | 17 |
| 78 | Protein Aggregation in Retinal Cells and Approaches to Cell Protection. Cellular and Molecular Neurobiology, 2005, 25, 1051-1066. | 1.7 | 61 |
| 79 | 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 |
| 80 | 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 |
| 81 | 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 |
| 82 | Parkinson's disease Î±-synuclein mutations exhibit defective axonal transport in cultured neurons. Journal of Cell Science, 2004, 117, 1017-1024. | 1.2 | 163 |
| 83 | Part II: Î±-synuclein and its molecular pathophysiological role in neurodegenerative disease. Neuropharmacology, 2003, 45, 14-44. | 2.0 | 254 |
| 84 | 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 |
| 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 | Organization of the mouse Ruk locus and expression of isoforms in mouse tissues. Gene, 2002, 295, 13-17. | 1.0 | 38 |
| 87 | Ruk is ubiquitinated but not degraded by the proteasome. FEBS Journal, 2002, 269, 3402-3408. | 0.2 | 26 |
| 88 | 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 |
| 89 | Cerd4, third member of the d4 gene family: expression and organization of genomic locus. Mammalian Genome, 2001, 12, 862-866. | 1.0 | 17 |
| 90 | 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 |

| # | Article | IF | Citations |
|---|---|---|---|
| 91 | Induction of neuronal death by Î±-synuclein. European Journal of Neuroscience, 2000, 12, 3073-3077. | 1.2 | 151 |
| 92 | Negative regulation of PI 3-kinase by Ruk, a novel adaptor protein. EMBO Journal, 2000, 19, 4015-4025. | 3.5 | 123 |
| 93 | Structure and expression of two members of the d4 gene family in mouse. Mammalian Genome, 2000, 11, 72-74. | 1.0 | 11 |
| 94 | Chicken synucleins: cloning and expression in the developing embryo. Mechanisms of Development, 2000, 99, 195-198. | 1.7 | 19 |
| 95 | 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 |
| 96 | Developmentally Regulated Expression of Persyn, a Member of the Synuclein Family, in Skin. Experimental Cell Research, 1999, 246, 308-311. | 1.2 | 28 |
| 97 | Genomic Structure and Chromosomal Localization of the Mouse Persyn Gene. Genomics, 1999, 56, 224-227. | 1.3 | 4 |
| 98 | Persyn, a member of the synuclein family, influences neurofilament network integrity. Nature Neuroscience, 1998, 1, 101-103. | 7.1 | 107 |
| 99 | GFRÎ±-4 and the tyrosine kinase Ret form a functional receptor complex for persephin. Current Biology, 1998, 8, 1019-1022. | 1.8 | 143 |
| 100 | GFRÎ±-4, a New GDNF Family Receptor. Molecular and Cellular Neurosciences, 1998, 11, 117-126. | 1.0 | 89 |
| 101 | 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 |
| 102 | TrkB Variants with Deletions in the Leucine-rich Motifs of the Extracellular Domain. Journal of Biological Chemistry, 1997, 272, 13019-13025. | 1.6 | 55 |
| 103 | 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 |
| 104 | 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 |
| 105 | Neurturin responsiveness requires a GPI-linked receptor and the Ret receptor tyrosine kinase. Nature, 1997, 387, 721-724. | 13.7 | 281 |
| 106 | Intracellular Compartmentalization of Two Differentially Spliceds-rex/NSPmRNAs in Neurons. Molecular and Cellular Neurosciences, 1996, 7, 289-303. | 1.0 | 27 |
| 107 | The d4 Gene Family in the Human Genome. Genomics, 1996, 36, 174-177. | 1.3 | 25 |
| 108 | Subtractive cDNA Cloning from Limited Amounts of Biological Material. Analytical Biochemistry, 1996, 237, 155-157. | 1.1 | 2 |

| # | Article | IF | Citations |
|---|---|---|---|
| 109 | GDNF is an age-specific survival factor for sensory and autonomic neurons. Neuron, 1995, 15, 821-828. | 3.8 | 385 |
| 110 | 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 |
| 111 | Antiviral Immune Response as a Trigger of FUS Proteinopathy in Amyotrophic Lateral Sclerosis. SSRN Electronic Journal, 0, , . | 0.4 | 0 |