# Joel C Watts

## List of Publications by Year in Descending Order



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| 61 papers | 3,408 citations | 29 h-index | 58 g-index |
| 65 ext. papers | 4,002 ext. citations | 8.1 avg, IF | 5.21 L-index |

| # | Paper | IF | Citations |
|---|---|---|---|
| 61 | Alpha-synuclein seeding shows a wide heterogeneity in multiple system atrophy.. *Translational Neurodegeneration*, **2022**, 11, 7 | 10.3 | 2 |
| 60 | The cellular prion protein interacts with and promotes the activity of Na,K-ATPases. *PLoS ONE*, **2021**, 16, e0258682 | 3.7 | 0 |
| 59 | Viral alpha-synuclein knockdown prevents spreading synucleinopathy. *Brain Communications*, **2021**, 3, fcab247 | 4.5 | 0 |
| 58 | The existence of A□strains and their potential for driving phenotypic heterogeneity in Alzheimer's disease. *Acta Neuropathologica*, **2021**, 142, 17-39 | 14.3 | 18 |
| 57 | A□3 aggregates exhibit enhanced prion-like seeding activity in mice. *Acta Neuropathologica Communications*, **2021**, 9, 83 | 7.3 | 3 |
| 56 | Sensitive protein misfolding cyclic amplification of sporadic Creutzfeldt-Jakob disease prions is strongly seed and substrate dependent. *Scientific Reports*, **2021**, 11, 4058 | 4.9 | 6 |
| 55 | The aminoglycoside G418 hinders de novo prion infection in cultured cells. *Journal of Biological Chemistry*, **2021**, 297, 101073 | 5.4 | 1 |
| 54 | Cellular models for discovering prion disease therapeutics: Progress and challenges. *Journal of Neurochemistry*, **2020**, 153, 150-172 | 6 | 9 |
| 53 | □Synuclein strains target distinct brain regions and cell types. *Nature Neuroscience*, **2020**, 23, 21-31 | 25.5 | 91 |
| 52 | The utility of bank voles for studying prion disease. *Progress in Molecular Biology and Translational Science*, **2020**, 175, 179-211 | 4 | 1 |
| 51 | Identification of a homology-independent linchpin domain controlling mouse and bank vole prion protein conversion. *PLoS Pathogens*, **2020**, 16, e1008875 | 7.6 | 3 |
| 50 | Identification of a homology-independent linchpin domain controlling mouse and bank vole prion protein conversion **2020**, 16, e1008875 | | |
| 49 | Identification of a homology-independent linchpin domain controlling mouse and bank vole prion protein conversion **2020**, 16, e1008875 | | |
| 48 | Identification of a homology-independent linchpin domain controlling mouse and bank vole prion protein conversion **2020**, 16, e1008875 | | |
| 47 | Identification of a homology-independent linchpin domain controlling mouse and bank vole prion protein conversion **2020**, 16, e1008875 | | |
| 46 | Identification of a homology-independent linchpin domain controlling mouse and bank vole prion protein conversion **2020**, 16, e1008875 | | |
| 45 | Identification of a homology-independent linchpin domain controlling mouse and bank vole prion protein conversion **2020**, 16, e1008875 | | |

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| 44 | Engineering a murine cell line for the stable propagation of hamster prions. *Journal of Biological Chemistry*, **2019**, 294, 4911-4923 | 5.4 | 9 |
| 43 | Full restoration of specific infectivity and strain properties from pure mammalian prion protein. *PLoS Pathogens*, **2019**, 15, e1007662 | 7.6 | 16 |
| 42 | Calling -synuclein a prion is scientifically justifiable. *Acta Neuropathologica*, **2019**, 138, 505-508 | 14.3 | 7 |
| 41 | Structural heterogeneity and intersubject variability of A- in familial and sporadic Alzheimer's disease. *Proceedings of the National Academy of Sciences of the United States of America*, **2018**, 115, E782-E791 | 11.5 | 69 |
| 40 | Prion-like propagation of -amyloid aggregates in the absence of APP overexpression. *Acta Neuropathologica Communications*, **2018**, 6, 26 | 7.3 | 32 |
| 39 | -Amyloid Prions and the Pathobiology of Alzheimer's Disease. *Cold Spring Harbor Perspectives in Medicine*, **2018**, 8, | 5.4 | 44 |
| 38 | -Synuclein: Multiple System Atrophy Prions. *Cold Spring Harbor Perspectives in Medicine*, **2018**, 8, | 5.4 | 40 |
| 37 | Discriminating Strains of Self-Propagating Protein Aggregates Using a Conformational Stability Assay. *Methods in Molecular Biology*, **2018**, 1777, 339-354 | 1.4 | 3 |
| 36 | The prion protein is embedded in a molecular environment that modulates transforming growth factor -and integrin signaling. *Scientific Reports*, **2018**, 8, 8654 | 4.9 | 11 |
| 35 | The function of the cellular prion protein in health and disease. *Acta Neuropathologica*, **2018**, 135, 159-178 | 14.3 | 43 |
| 34 | Experimental Models of Inherited PrP Prion Diseases. *Cold Spring Harbor Perspectives in Medicine*, **2017**, 7, | 5.4 | 19 |
| 33 | The Biology and Pathobiology of -Synuclein **2017**, 109-130 | | 1 |
| 32 | Strains of Pathological Protein Aggregates in Neurodegenerative Diseases. *Discoveries*, **2017**, 5, e78 | 3.7 | 6 |
| 31 | Somatostatin binds to the human amyloid -peptide and favors the formation of distinct oligomers. *ELife*, **2017**, 6, | 8.9 | 21 |
| 30 | Guinea Pig Prion Protein Supports Rapid Propagation of Bovine Spongiform Encephalopathy and Variant Creutzfeldt-Jakob Disease Prions. *Journal of Virology*, **2016**, 90, 9558-9569 | 6.6 | 2 |
| 29 | -Synuclein-Based Animal Models of Parkinson's Disease: Challenges and Opportunities in a New Era. *Trends in Neurosciences*, **2016**, 39, 750-762 | 13.3 | 92 |
| 28 | Towards authentic transgenic mouse models of heritable PrP prion diseases. *Acta Neuropathologica* , **2016**, 132, 593-610 | 14.3 | 28 |
| 27 | Structural studies of truncated forms of the prion protein PrP. *Biophysical Journal*, **2015**, 108, 1548-1554 | 2.9 | 23 |

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| 26 | Modulation of Creutzfeldt-Jakob disease prion propagation by the A224V mutation. *Annals of Neurology*, **2015**, 78, 540-53 | 9.4 | 16 |
| 25 | Evidence for synuclein prions causing multiple system atrophy in humans with parkinsonism. *Proceedings of the National Academy of Sciences of the United States of America*, **2015**, 112, E5308-17 | 11.5 | 450 |
| 24 | Propagation of prions causing synucleinopathies in cultured cells. *Proceedings of the National Academy of Sciences of the United States of America*, **2015**, 112, E4949-58 | 11.5 | 152 |
| 23 | Distinct synthetic A prion strains producing different amyloid deposits in bigenic mice. *Proceedings of the National Academy of Sciences of the United States of America*, **2014**, 111, 10329-34 | 11.5 | 124 |
| 22 | Mouse models for studying the formation and propagation of prions. *Journal of Biological Chemistry*, **2014**, 289, 19841-9 | 5.4 | 58 |
| 21 | Serial propagation of distinct strains of A prions from Alzheimer's disease patients. *Proceedings of the National Academy of Sciences of the United States of America*, **2014**, 111, 10323-8 | 11.5 | 214 |
| 20 | Evidence that bank vole PrP is a universal acceptor for prions. *PLoS Pathogens*, **2014**, 10, e1003990 | 7.6 | 71 |
| 19 | Endoproteolytic processing of the mammalian prion glycoprotein family. *FEBS Journal*, **2014**, 281, 862-76 | 5.7 | 21 |
| 18 | Drug resistance confounding prion therapeutics. *Proceedings of the National Academy of Sciences of the United States of America*, **2013**, 110, E4160-9 | 11.5 | 97 |
| 17 | Transmission of multiple system atrophy prions to transgenic mice. *Proceedings of the National Academy of Sciences of the United States of America*, **2013**, 110, 19555-60 | 11.5 | 303 |
| 16 | The prion protein modulates A-type K+ currents mediated by Kv4.2 complexes through dipeptidyl aminopeptidase-like protein 6. *Journal of Biological Chemistry*, **2013**, 288, 37241-55 | 5.4 | 17 |
| 15 | Spontaneous generation of rapidly transmissible prions in transgenic mice expressing wild-type bank vole prion protein. *Proceedings of the National Academy of Sciences of the United States of America*, **2012**, 109, 3498-503 | 11.5 | 49 |
| 14 | Purified and synthetic Alzheimer's amyloid beta (A) prions. *Proceedings of the National Academy of Sciences of the United States of America*, **2012**, 109, 11025-30 | 11.5 | 290 |
| 13 | Conformational transformation and selection of synthetic prion strains. *Journal of Molecular Biology*, **2011**, 413, 527-42 | 6.5 | 46 |
| 12 | Family reunion--the ZIP/prion gene family. *Progress in Neurobiology*, **2011**, 93, 405-20 | 10.9 | 31 |
| 11 | Spontaneous generation of anchorless prions in transgenic mice. *Proceedings of the National Academy of Sciences of the United States of America*, **2011**, 108, 21223-8 | 11.5 | 56 |
| 10 | Bioluminescence imaging of Abeta deposition in bigenic mouse models of Alzheimer's disease. *Proceedings of the National Academy of Sciences of the United States of America*, **2011**, 108, 2528-33 | 11.5 | 90 |
| 9 | Protease-resistant prions selectively decrease Shadoo protein. *PLoS Pathogens*, **2011**, 7, e1002382 | 7.6 | 37 |

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| 8 | Wild-type Shadoo proteins convert to amyloid-like forms under native conditions. *Journal of Neurochemistry*, **2010**, 113, 92-104 | 6 | 27 |
| 7 | Interactome analyses identify ties of PrP and its mammalian paralogs to oligomannosidic N-glycans and endoplasmic reticulum-derived chaperones. *PLoS Pathogens*, **2009**, 5, e1000608 | 7.6 | 98 |
| 6 | Evolutionary descent of prion genes from the ZIP family of metal ion transporters. *PLoS ONE*, **2009**, 4, e7208 | 3.7 | 94 |
| 5 | The in vivo brain interactome of the amyloid precursor protein. *Molecular and Cellular Proteomics*, **2008**, 7, 15-34 | 7.6 | 126 |
| 4 | The CNS glycoprotein Shadoo has PrP(C)-like protective properties and displays reduced levels in prion infections. *EMBO Journal*, **2007**, 26, 4038-50 | 13 | 104 |
| 3 | The prion protein family: diversity, rivalry, and dysfunction. *Biochimica Et Biophysica Acta - Molecular Basis of Disease*, **2007**, 1772, 654-72 | 6.9 | 86 |
| 2 | The expanding universe of prion diseases. *PLoS Pathogens*, **2006**, 2, e26 | 7.6 | 100 |
| 1 | Genetic mapping of activity determinants within cellular prion proteins: N-terminal modules in PrPC offset pro-apoptotic activity of the Doppel helix B/BVregion. *Journal of Biological Chemistry*, **2004**, 279, 55443-54 | 5.4 | 50 |