JoaquÃn Castilla

List of Publications by Year in descending order

118 papers	7,194 citations	71102 41 h-index	58581 82 g-index
125 all docs	125 docs citations	125 times ranked	4795 citing authors

#	Article	IF	Citations
1	Network structure and transcriptomic vulnerability shape atrophy in frontotemporal dementia. Brain, 2023, 146, 321-336.	7.6	30
2	Blood Î²-Synuclein and Neurofilament Light Chain During the Course of Prion Disease. Neurology, 2022, , 10.1212/WNL.0000000000200002.	1.1	11
3	Description of the first Spanish case of Gerstmannâ€“StrÃ¤usslerâ€“Scheinker disease with A117V variant: clinical, histopathological and biochemical characterization. Journal of Neurology, 2022, , .	3.6	3
4	Detection of chronic wasting disease in mule and white-tailed deer by RT-QuIC analysis of outer ear. Scientific Reports, 2021, 11, 7702.	3.3	24
5	Improving the Pharmacological Properties of Ciclopirox for Its Use in Congenital Erythropoietic Porphyria. Journal of Personalized Medicine, 2021, 11, 485.	2.5	2
6	Sporadic Creutzfeldtâ€“Jakob disease with extremely long 14â€year survival period. European Journal of Neurology, 2021, 28, 2901-2906.	3.3	3
7	Cerebrospinal Fluid and Plasma Small Extracellular Vesicles and miRNAs as Biomarkers for Prion Diseases. International Journal of Molecular Sciences, 2021, 22, 6822.	4.1	10
8	Biosemiotics comprehension of PrP code and prion disease. BioSystems, 2021, 210, 104542.	2.0	6
9	Prion-Associated Neurodegeneration Causes Both Endoplasmic Reticulum Stress and Proteasome Impairment in a Murine Model of Spontaneous Disease. International Journal of Molecular Sciences, 2021, 22, 465.	4.1	11
10	Laboratory Identification of Prion Infections. , 2021, , .		0
11	SLITRK2, an X-linked modifier of the age at onset in C9orf72 frontotemporal lobar degeneration. Brain, 2021, 144, 2798-2811.	7.6	7
12	Homozygous R136S mutation in PRNP gene causes inherited early onset prion disease. Alzheimer's Research and Therapy, 2021, 13, 176.	6.2	1
13	Homozygous R136S mutation in PRNP gene causes inherited early onset prion disease. Alzheimer's Research and Therapy, 2021, 13, 176.	6.2	8
14	A Novel, Reliable and Highly Versatile Method to Evaluate Different Prion Decontamination Procedures. Frontiers in Bioengineering and Biotechnology, 2020, 8, 589182.	4.1	7
15	Evaluation of the Influence of Astrocytes on In Vitro Bloodâ€“Brain Barrier Models. ATLA Alternatives To Laboratory Animals, 2020, 48, 184-200.	1.0	14
16	Detection of Pathognomonic Biomarker PrPSc and the Contribution of Cell Free-Amplification Techniques to the Diagnosis of Prion Diseases. Biomolecules, 2020, 10, 469.	4.0	10
17	Autoantibodies against the prion protein in individuals with PRNP mutations. Neurology, 2020, 95, e2028-e2037.	1.1	7
18	Dogs are resistant to prion infection, due to the presence of aspartic or glutamic acid at position 163 of their prion protein. FASEB Journal, 2020, 34, 3969-3982.	0.5	27

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19	Development of a new largely scalable in vitro prion propagation method for the production of infectious recombinant prions for high resolution structural studies. PLoS Pathogens, 2019, 15, e1008117.	4.7	28
20	A Single Amino Acid Substitution, Found in Mammals with Low Susceptibility to Prion Diseases, Delays Propagation of Two Prion Strains in Highly Susceptible Transgenic Mouse Models. Molecular Neurobiology, 2019, 56, 6501-6511.	4.0	13
21	Insights into the Bidirectional Properties of the Sheepâ€“Deer Prion Transmission Barrier. Molecular Neurobiology, 2019, 56, 5287-5303.	4.0	23
22	Title is missing!. , 2019, 15, e1008117.		0
23	Title is missing!. , 2019, 15, e1008117.		0
24	Title is missing!. , 2019, 15, e1008117.		0
25	Behind the potential evolution towards prion resistant species. Prion, 2018, 12, 83-87.	1.8	6
26	An Amino Acid Substitution Found in Animals with Low Susceptibility to Prion Diseases Confers a Protective Dominant-Negative Effect in Prion-Infected Transgenic Mice. Molecular Neurobiology, 2018, 55, 6182-6192.	4.0	15
27	Detection of amyloid fibrils in Parkinsonâ€™s disease using plasmonic chirality. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 3225-3230.	7.1	209
28	iPS Cell Cultures from a Gerstmann-StrÃussler-Scheinker Patient with the Y218N PRNP Mutation Recapitulate tau Pathology. Molecular Neurobiology, 2018, 55, 3033-3048.	4.0	27
29	Cofactors influence the biological properties of infectious recombinant prions. Acta Neuropathologica, 2018, 135, 179-199.	7.7	56
30	Repurposing ciclopirox as a pharmacological chaperone in a model of congenital erythropoietic porphyria. Science Translational Medicine, 2018, 10, .	12.4	38
31	Recombinant PrPSc shares structural features with brain-derived PrPSc: Insights from limited proteolysis. PLoS Pathogens, 2018, 14, e1006797.	4.7	24
32	Prion replication without host adaptation during interspecies transmissions. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 1141-1146.	7.1	45
33	Post-translational modifications in PrP expand the conformational diversity of prions in vivo. Scientific Reports, 2017, 7, 43295.	3.3	30
34	Protein misfolding cyclic amplification corroborates the absence of PrP Sc accumulation in placenta from foetuses with the ARR/ARQ genotype in natural scrapie. Veterinary Microbiology, 2017, 203, 294-300.	1.9	5
35	In Vitro Approach To Identify Key Amino Acids in Low Susceptibility of Rabbit Prion Protein to Misfolding. Journal of Virology, 2017, 91, .	3.4	19
36	A Quick Method to Evaluate the Effect of the Amino Acid Sequence in the Misfolding Proneness of the Prion Protein. Methods in Molecular Biology, 2017, 1658, 205-216.	0.9	7

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37	Generation of a new infectious recombinant prion: a model to understand Gerstmannâ€“StrÃusslerâ€“Scheinker syndrome. Scientific Reports, 2017, 7, 9584.	3.3	14
38	Prion-like disorders and Transmissible Spongiform Encephalopathies: An overview of the mechanistic features that are shared by the various disease-related misfolded proteins. Biochemical and Biophysical Research Communications, 2017, 483, 1125-1136.	2.1	24
39	Soluble polymorphic bank vole prion proteins induced by co-expression of quiescin sulfhydryl oxidase in E. coli and their aggregation behaviors. Microbial Cell Factories, 2017, 16, 170.	4.0	4
40	Recombinant PrP and Its Contribution to Research on Transmissible Spongiform Encephalopathies. Pathogens, 2017, 6, 67.	2.8	6
41	Unraveling the key to the resistance of canids to prion diseases. PLoS Pathogens, 2017, 13, e1006716.	4.7	30
42	An antipsychotic drug exerts anti-prion effects by altering the localization of the cellular prion protein. PLoS ONE, 2017, 12, e0182589.	2.5	19
43	A cationic tetrapyrrole inhibits toxic activities of the cellular prion protein. Scientific Reports, 2016, 6, 23180.	3.3	34
44	The architecture of prions: how understanding would provide new therapeutic insights. Swiss Medical Weekly, 2016, 146, w14354.	1.6	4
45	Susceptibility of European Red Deer (Cervus elaphus elaphus) to Alimentary Challenge with Bovine Spongiform Encephalopathy. PLoS ONE, 2015, 10, e0116094.	2.5	9
46	Transgenic Mouse Bioassay: Evidence That Rabbits Are Susceptible to a Variety of Prion Isolates. PLoS Pathogens, 2015, 11, e1004977.	4.7	24
47	Transgenic Fatal Familial Insomnia Mice Indicate Prion Infectivity-Independent Mechanisms of Pathogenesis and Phenotypic Expression of Disease. PLoS Pathogens, 2015, 11, e1004796.	4.7	61
48	Prion-like diseases: Looking for their niche in the realm of infectious diseases. Virus Research, 2015, 207, 1-4.	2.2	6
49	Animal models for prion-like diseases. Virus Research, 2015, 207, 5-24.	2.2	10
50	Characterization of mesenchymal stem cells in sheep naturally infected with scrapie. Journal of General Virology, 2015, 96, 3715-3726.	2.9	11
51	Human prion protein sequence elements impede cross-species chronic wasting disease transmission. Journal of Clinical Investigation, 2015, 125, 1485-1496.	8.2	68
52	Elements Modulating the Prion Species Barrier and Its Passage Consequences. PLoS ONE, 2014, 9, e89722.	2.5	46
53	Prion Transmission Prevented by Modifying the Î²2-Î±2 Loop Structure of Host PrP^C. Journal of Neuroscience, 2014, 34, 1022-1027.	3.6	67
54	Exploring the risks of a putative transmission of BSE to new species. Prion, 2013, 7, 443-446.	1.8	8

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55	Prion-resistant or prion-susceptible species, this is the question. Virulence, 2013, 4, 333-334.	4.4	3
56	Bovine Spongiform Encephalopathy Induces Misfolding of Alleged Prion-Resistant Species Cellular Prion Protein without Altering Its Pathobiological Features. Journal of Neuroscience, 2013, 33, 7778-7786.	3.6	39
57	Infectivity versus Seeding in Neurodegenerative Diseases Sharing a Prion-Like Mechanism. International Journal of Cell Biology, 2013, 2013, 1-9.	2.5	20
58	Chronic Wasting Disease in Bank Voles: Characterisation of the Shortest Incubation Time Model for Prion Diseases. PLoS Pathogens, 2013, 9, e1003219.	4.7	88
59	Spontaneous Generation of Infectious Prion Disease in Transgenic Mice. Emerging Infectious Diseases, 2013, 19, 1938-1947.	4.3	18
60	Recombinant Human Prion Protein Inhibits Prion Propagation in vitro. Scientific Reports, 2013, 3, 2911.	3.3	27
61	Animal Models for Testing Anti-Prion Drugs. Current Topics in Medicinal Chemistry, 2013, 13, 2504-2521.	2.1	4
62	Structure of the Î²2â€Î±2 loop and interspecies prion transmission. FASEB Journal, 2012, 26, 2868-2876.	0.5	41
63	Naturally prion resistant mammals. Prion, 2012, 6, 425-429.	1.8	29
64	Rabbits are not resistant to prion infection. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 5080-5085.	7.1	72
65	Prionemia and Leukocyte-Platelet-Associated Infectivity in Sheep Transmissible Spongiform Encephalopathy Models. Journal of Virology, 2012, 86, 2056-2066.	3.4	60
66	De novo induction of amyloid-Î² deposition in vivo. Molecular Psychiatry, 2012, 17, 1347-1353.	7.9	163
67	Detection of PrPres in Genetically Susceptible Fetuses from Sheep with Natural Scrapie. PLoS ONE, 2011, 6, e27525.	2.5	24
68	Lipids, a Missing Link in Prion Propagation. Chemistry and Biology, 2011, 18, 1345-1346.	6.0	3
69	Ultra-Efficient PrPSc Amplification Highlights Potentialities and Pitfalls of PMCA Technology. PLoS Pathogens, 2011, 7, e1002370.	4.7	63
70	PMCA. A Decade of In Vitro Prion Replication. Current Chemical Biology, 2010, 4, 200-207.	0.5	3
71	Molecular Cross Talk between Misfolded Proteins in Animal Models of Alzheimer's and Prion Diseases. Journal of Neuroscience, 2010, 30, 4528-4535.	3.6	178
72	Prion Strain Mutation Determined by Prion Protein Conformational Compatibility and Primary Structure. Science, 2010, 328, 1154-1158.	12.6	201

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73	A molecular switch controls interspecies prion disease transmission in mice. Journal of Clinical Investigation, 2010, 120, 2590-2599.	8.2	124
74	PMCA. A Decade of In Vitro Prion Replication. Current Chemical Biology, 2010, 4, 200-207.	0.5	7
75	In vitro studies of the transmission barrier. Prion, 2009, 3, 220-223.	1.8	35
76	Transgenic Mice Expressing Porcine Prion Protein Resistant to Classical Scrapie but Susceptible to Sheep Bovine Spongiform Encephalopathy and Atypical Scrapie. Emerging Infectious Diseases, 2009, 15, 1214-1221.	4.3	61
77	In Vivo Generation of Neurotoxic Prion Protein: Role for Hsp70 in Accumulation of Misfolded Isoforms. PLoS Genetics, 2009, 5, e1000507.	3.5	76
78	Genome Comparison of a Nonpathogenic Myxoma Virus Field Strain with Its Ancestor, the Virulent Lausanne Strain. Journal of Virology, 2009, 83, 2397-2403.	3.4	27
79	Cell-free propagation of prion strains. EMBO Journal, 2008, 27, 2557-2566.	7.8	164
80	Reduction of prion infectivity in packed red blood cells. Biochemical and Biophysical Research Communications, 2008, 377, 373-378.	2.1	21
81	Crossing the Species Barrier by PrPSc Replication In Vitro Generates Unique Infectious Prions. Cell, 2008, 134, 757-768.	28.9	179
82	Accelerated High Fidelity Prion Amplification Within and Across Prion Species Barriers. PLoS Pathogens, 2008, 4, e1000139.	4.7	118
83	Unfolded protein response transcription factor XBP-1 does not influence prion replication or pathogenesis. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 757-762.	7.1	141
84	Perturbation of Endoplasmic Reticulum Homeostasis Facilitates Prion Replication. Journal of Biological Chemistry, 2007, 282, 12725-12733.	3.4	57
85	Sheep-Passaged Bovine Spongiform Encephalopathy Agent Exhibits Altered Pathobiological Properties in Bovine-PrP Transgenic Mice. Journal of Virology, 2007, 81, 835-843.	3.4	62
86	Progression of prion infectivity in asymptomatic cattle after oral bovine spongiform encephalopathy challenge. Journal of General Virology, 2007, 88, 1379-1383.	2.9	74
87	Reduced susceptibility to bovine spongiform encephalopathy prions in transgenic mice expressing a bovine PrP with five octapeptide repeats. Journal of General Virology, 2007, 88, 1842-1849.	2.9	18
88	Production of cattle lacking prion protein. Nature Biotechnology, 2007, 25, 132-138.	17.5	282
89	Coenzyme Q and protein/lipid oxidation in a BSE-infected transgenic mouse model. Free Radical Biology and Medicine, 2007, 42, 1723-1729.	2.9	33
90	Protein Misfolding Cyclic Amplification for Diagnosis and Prion Propagation Studies. Methods in Enzymology, 2006, 412, 3-21.	1.0	117

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91	Isolation and Characterization of a Proteinase K-Sensitive PrPScFractionâ€. Biochemistry, 2006, 45, 15710-15717.	2.5	134
92	Cell expression of a four extra octarepeat mutated PrPCmodifies cell structure and cell cycle regulation. FEBS Letters, 2006, 580, 4097-4104.	2.8	5
93	Amyloids, prions and the inherent infectious nature of misfolded protein aggregates. Trends in Biochemical Sciences, 2006, 31, 150-155.	7.5	241
94	Presymptomatic Detection of Prions in Blood. Science, 2006, 313, 92-94.	12.6	219
95	Ultra-efficient Replication of Infectious Prions by Automated Protein Misfolding Cyclic Amplification. Journal of Biological Chemistry, 2006, 281, 35245-35252.	3.4	282
96	Cyclic Amplification of Protein Misfolding and Aggregation. , 2005, 299, 053-066.		55
97	Detection of prions in blood. Nature Medicine, 2005, 11, 982-985.	30.7	290
98	Protein Misfolding. , 2005, , 213-227.		0
99	Vertical Transmission of Bovine Spongiform Encephalopathy Prions Evaluated in a Transgenic Mouse Model. Journal of Virology, 2005, 79, 8665-8668.	3.4	34
100	Amyloid Formation Modulates the Biological Activity of a Bacterial Protein. Journal of Biological Chemistry, 2005, 280, 26880-26885.	3.4	119
101	In Vitro Generation of Infectious Scrapie Prions. Cell, 2005, 121, 195-206.	28.9	724
102	Pre-symptomatic detection of prions by cyclic amplification of protein misfolding. FEBS Letters, 2005, 579, 638-642.	2.8	127
103	Transgenic mice expressing bovine PrP with a four extra repeat octapeptide insert mutation show a spontaneous, non-transmissible, neurodegenerative disease and an expedited course of BSE infection. FEBS Letters, 2005, 579, 6237-6246.	2.8	36
104	The Disulfide Isomerase Grp58 Is a Protective Factor against Prion Neurotoxicity. Journal of Neuroscience, 2005, 25, 2793-2802.	3.6	190
105	Different Behavior toward Bovine Spongiform Encephalopathy Infection of Bovine Prion Protein Transgenic Mice with One Extra Repeat Octapeptide Insert Mutation. Journal of Neuroscience, 2004, 24, 2156-2164.	3.6	44
106	Subclinical Bovine Spongiform Encephalopathy Infection in Transgenic Mice Expressing Porcine Prion Protein. Journal of Neuroscience, 2004, 24, 5063-5069.	3.6	56
107	The controversial protein-only hypothesis of prion propagation. Nature Medicine, 2004, 10, S63-S67.	30.7	91
108	Cyclic Amplification of Prion Protein Misfolding. , 2004, , 198-213.		7

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109	Proteinase K enhanced immunoreactivity of the prion protein-specific monoclonal antibody 2A11. Neuroscience Research, 2004, 48, 75-83.	1.9	33
110	Molecular Mechanisms of Neurotoxicity of Pathological Prion Protein. Current Molecular Medicine, 2004, 4, 397-403.	1.3	42
111	Caspase-12 and endoplasmic reticulum stress mediate neurotoxicity of pathological prion protein. EMBO Journal, 2003, 22, 5435-5445.	7.8	355
112	Early detection of PrP res in BSE-infected bovine PrP transgenic mice. Archives of Virology, 2003, 148, 677-691.	2.1	119
113	Engineering passive immunity in transgenic mice secreting virus-neutralizing antibodies in milk. Nature Biotechnology, 1998, 16, 349-354.	17.5	74
114	Lactogenic Immunity in Transgenic Mice Producing Recombinant Antibodies Neutralizing Coronavirus. Advances in Experimental Medicine and Biology, 1998, 440, 675-686.	1.6	7
115	Transgenic Mice Secreting Coronavirus Neutralizing Antibodies into the Milk. Journal of Virology, 1998, 72, 3762-3772.	3.4	47
116	Interference of Coronavirus Infection by Expression of IgG or IgA Virus Neutralizing Antibodies. Advances in Experimental Medicine and Biology, 1998, 440, 665-674.	1.6	1
117	Interference of coronavirus infection by expression of immunoglobulin G (IgG) or IgA virus-neutralizing antibodies. Journal of Virology, 1997, 71, 5251-5258.	3.4	26
118	Induction of an Immune Response to Transmissible Gastroenteritis Coronavirus Using Vectors with Enteric Tropism. Advances in Experimental Medicine and Biology, 1994, 342, 455-462.	1.6	0