Claudio Soto

List of Publications by Year
in descending order

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Version: 2024-02-01

145	15,193	18482	18647
papers	citations	62 h-index	119 g-index

153	153	153	12304
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Unfolding the role of protein misfolding in neurodegenerative diseases. Nature Reviews Neuroscience, 2003, 4, 49-60.	10.2	1,271
2	Sensitive detection of pathological prion protein by cyclic amplification of protein misfolding. Nature, 2001, 411, 810-813.	27.8	1,131
3	Protein misfolding, aggregation, and conformational strains in neurodegenerative diseases. Nature Neuroscience, 2018, 21, 1332-1340.	14.8	728
4	In Vitro Generation of Infectious Scrapie Prions. Cell, 2005, 121, 195-206.	28.9	724
5	Discriminating Î±-synuclein strains in Parkinsonâ€™s disease and multiple system atrophy. Nature, 2020, 578, 273-277.	27.8	479
6	Caspase-12 and endoplasmic reticulum stress mediate neurotoxicity of pathological prion protein. EMBO Journal, 2003, 22, 5435-5445.	7.8	355
7	Development of a Biochemical Diagnosis of Parkinson Disease by Detection of Î±-Synuclein Misfolded Aggregates in Cerebrospinal Fluid. JAMA Neurology, 2017, 74, 163.	9.0	312
8	The Î±-Helical to Î²-Strand Transition in the Amino-terminal Fragment of the Amyloid Î²-Peptide Modulates Amyloid Formation. Journal of Biological Chemistry, 1995, 270, 3063-3067.	3.4	298
9	Protein misfolding and disease; protein refolding and therapy. FEBS Letters, 2001, 498, 204-207.	2.8	292
10	Detection of prions in blood. Nature Medicine, 2005, 11, 982-985.	30.7	290
11	Protein Misfolding and Neurodegeneration. Archives of Neurology, 2008, 65, 184-9.	4.5	286
12	Ultra-efficient Replication of Infectious Prions by Automated Protein Misfolding Cyclic Amplification. Journal of Biological Chemistry, 2006, 281, 35245-35252.	3.4	282
13	Type 2 diabetes as a protein misfolding disease. Trends in Molecular Medicine, 2015, 21, 439-449.	6.7	255
14	Modeling amyloid beta and tau pathology in human cerebral organoids. Molecular Psychiatry, 2018, 23, 2363-2374.	7.9	249
15	Amyloids, prions and the inherent infectious nature of misfolded protein aggregates. Trends in Biochemical Sciences, 2006, 31, 150-155.	7.5	241
16	Presymptomatic Detection of Prions in Blood. Science, 2006, 313, 92-94.	12.6	219
17	Prion Strain Mutation Determined by Prion Protein Conformational Compatibility and Primary Structure. Science, 2010, 328, 1154-1158.	12.6	201
18	Transmissible Proteins: Expanding the Prion Heresy. Cell, 2012, 149, 968-977.	28.9	196

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19	The Disulfide Isomerase Grp58 Is a Protective Factor against Prion Neurotoxicity. Journal of Neuroscience, 2005, 25, 2793-2802.	3.6	190
20	Misfolded protein aggregates: Mechanisms, structures and potential for disease transmission. Seminars in Cell and Developmental Biology, 2011, 22, 482-487.	5.0	180
21	Crossing the Species Barrier by PrPSc Replication In Vitro Generates Unique Infectious Prions. Cell, 2008, 134, 757-768.	28.9	179
22	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
23	Prions in the Urine of Patients with Variant Creutzfeldtâ€“Jakob Disease. New England Journal of Medicine, 2014, 371, 530-539.	27.0	171
24	Cell-free propagation of prion strains. EMBO Journal, 2008, 27, 2557-2566.	7.8	164
25	Cross-Seeding of Misfolded Proteins: Implications for Etiology and Pathogenesis of Protein Misfolding Diseases. PLoS Pathogens, 2013, 9, e1003537.	4.7	164
26	BDNF/NF-Î²B Signaling in the Neurobiology of Depression. Current Pharmaceutical Design, 2017, 23, 3154-3163.	1.9	162
27	Detection of Misfolded AÎ² Oligomers for Sensitive Biochemical Diagnosis of Alzheimerâ€™s Disease. Cell Reports, 2014, 7, 261-268.	6.4	154
28	Prion hypothesis: the end of the controversy?. Trends in Biochemical Sciences, 2011, 36, 151-158.	7.5	152
29	IRE1 signaling exacerbates Alzheimerâ€™s disease pathogenesis. Acta Neuropathologica, 2017, 134, 489-506.	7.7	147
30	Comparative study of cerebrospinal fluid Î±â€synuclein seeding aggregation assays for diagnosis of Parkinson's disease. Movement Disorders, 2019, 34, 536-544.	3.9	146
31	Cyclic amplification of protein misfolding: application to prion-related disorders and beyond. Trends in Neurosciences, 2002, 25, 390-394.	8.6	144
32	The prion strain phenomenon: Molecular basis and unprecedented features. Biochimica Et Biophysica Acta - Molecular Basis of Disease, 2007, 1772, 681-691.	3.8	141
33	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
34	Pre-symptomatic detection of prions by cyclic amplification of protein misfolding. FEBS Letters, 2005, 579, 638-642.	2.8	127
35	Detection of prions in blood from patients with variant Creutzfeldt-Jakob disease. Science Translational Medicine, 2016, 8, 370ra183.	12.4	120
36	Amyloid Formation Modulates the Biological Activity of a Bacterial Protein. Journal of Biological Chemistry, 2005, 280, 26880-26885.	3.4	119

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37	The intricate mechanisms of neurodegeneration in prion diseases. Trends in Molecular Medicine, 2011, 17, 14-24.	6.7	119
38	Accelerated High Fidelity Prion Amplification Within and Across Prion Species Barriers. PLoS Pathogens, 2008, 4, e1000139.	4.7	118
39	Protein Misfolding Cyclic Amplification for Diagnosis and Prion Propagation Studies. Methods in Enzymology, 2006, 412, 3-21.	1.0	117
40	Protein misfolding cyclic amplification of infectious prions. Nature Protocols, 2012, 7, 1397-1409.	12.0	115
41	High-resolution structure of infectious prion protein: the final frontier. Nature Structural and Molecular Biology, 2012, 19, 370-377.	8.2	113
42	Traumatic Brain Injury Induces Tau Aggregation and Spreading. Journal of Neurotrauma, 2020, 37, 80-92.	3.4	113
43	Inhibition of protein misfolding and aggregation by natural phenolic compounds. Cellular and Molecular Life Sciences, 2018, 75, 3521-3538.	5.4	112
44	Generation of a New Form of Human PrPSc in Vitro by Interspecies Transmission from Cervid Prions. Journal of Biological Chemistry, 2011, 286, 7490-7495.	3.4	110
45	Role of Protein Misfolding and Proteostasis Deficiency in Protein Misfolding Diseases and Aging. International Journal of Cell Biology, 2013, 2013, 1-10.	2.5	108
46	De Novo Generation of Infectious Prions In Vitro Produces a New Disease Phenotype. PLoS Pathogens, 2009, 5, e1000421.	4.7	107
47	Estimating prion concentration in fluids and tissues by quantitative PMCA. Nature Methods, 2010, 7, 519-520.	19.0	106
48	Detection of infectious prions in urine. FEBS Letters, 2008, 582, 3161-3166.	2.8	103
49	Grass Plants Bind, Retain, Uptake, and Transport Infectious Prions. Cell Reports, 2015, 11, 1168-1175.	6.4	103
50	Stressing Out the ER: A Role of the Unfolded Protein Response in Prion-Related Disorders. Current Molecular Medicine, 2006, 6, 37-43.	1.3	96
51	Smoking exacerbates amyloid pathology in a mouse model of Alzheimerâ€™s disease. Nature Communications, 2013, 4, 1495.	12.8	95
52	The controversial protein-only hypothesis of prion propagation. Nature Medicine, 2004, 10, S63-S67.	30.7	91
53	High diagnostic performance of independent alpha-synuclein seed amplification assays for detection of early Parkinsonâ€™s disease. Acta Neuropathologica Communications, 2021, 9, 179.	5.2	86
54	Diagnosing prion diseases: needs, challenges and hopes. Nature Reviews Microbiology, 2004, 2, 809-819.	28.6	84

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55	Constraining the loop, releasing prion infectivity. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 10-11.	7.1	81
56	Amyloid-beta and tau pathology following repetitive mild traumatic brain injury. Biochemical and Biophysical Research Communications, 2017, 483, 1137-1142.	2.1	78
57	<scp>Alphaâ€Synuclein</scp> Oligomers and Neurofilament Light Chain in Spinal Fluid Differentiate Multiple System Atrophy from Lewy Body Synucleinopathies. Annals of Neurology, 2020, 88, 503-512.	5.3	78
58	In Vivo Generation of Neurotoxic Prion Protein: Role for Hsp70 in Accumulation of Misfolded Isoforms. PLoS Genetics, 2009, 5, e1000507.	3.5	76
59	The Endoplasmic Reticulum Chaperone GRP78/BiP Modulates Prion Propagation in vitro and in vivo. Scientific Reports, 2017, 7, 44723.	3.3	73
60	Induction of IAPP amyloid deposition and associated diabetic abnormalities by a prion-like mechanism. Journal of Experimental Medicine, 2017, 214, 2591-2610.	8.5	72
61	Prion Protein Misfolding Affects Calcium Homeostasis and Sensitizes Cells to Endoplasmic Reticulum Stress. PLoS ONE, 2010, 5, e15658.	2.5	71
62	The necroptosis machinery mediates axonal degeneration in a model of Parkinson disease. Cell Death and Differentiation, 2020, 27, 1169-1185.	11.2	71
63	Is loss of function of the prion protein the cause of prion disorders?. Trends in Molecular Medicine, 2003, 9, 237-243.	6.7	66
64	Cell-Lysate Conversion of Prion Protein into Its Protease-Resistant Isoform Suggests the Participation of a Cellular Chaperone. Biochemical and Biophysical Research Communications, 1999, 258, 470-475.	2.1	63
65	Prion-like features of misfolded AÎ² and tau aggregates. Virus Research, 2015, 207, 106-112.	2.2	63
66	Microcin Amyloid Fibrils A Are Reservoir of Toxic Oligomeric Species. Journal of Biological Chemistry, 2012, 287, 11665-11676.	3.4	62
67	Cross Currents in Protein Misfolding Disorders: Interactions and Therapy. CNS and Neurological Disorders - Drug Targets, 2009, 8, 363-371.	1.4	61
68	Prion Protein Glycosylation Is Not Required for Strain-Specific Neurotropism. Journal of Virology, 2009, 83, 5321-5328.	3.4	59
69	Perturbation of Endoplasmic Reticulum Homeostasis Facilitates Prion Replication. Journal of Biological Chemistry, 2007, 282, 12725-12733.	3.4	57
70	Cyclic Amplification of Protein Misfolding and Aggregation. , 2005, 299, 053-066.		55
71	Pathways of Prion Spread during Early Chronic Wasting Disease in Deer. Journal of Virology, 2017, 91, .	3.4	55
72	Multiple system atrophy-associated oligodendroglial protein p25Î± stimulates formation of novel Î±-synuclein strain with enhanced neurodegenerative potential. Acta Neuropathologica, 2021, 142, 87-115.	7.7	55

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73	Generation of a humanized AÎ² expressing mouse demonstrating aspects of Alzheimerâ€™s disease-like pathology. Nature Communications, 2021, 12, 2421.	12.8	53
74	Alphaâ€Synuclein Oligomers and Neurofilament Light Chain Predict Phenoconversion of Pure Autonomic Failure. Annals of Neurology, 2021, 89, 1212-1220.	5.3	51
75	Genome-Wide Association and Mechanistic Studies Indicate That Immune Response Contributes to Alzheimerâ€™s Disease Development. Frontiers in Genetics, 2018, 9, 410.	2.3	50
76	Cellular factors implicated in prion replication. FEBS Letters, 2010, 584, 2409-2414.	2.8	49
77	The Protein-disulfide Isomerase ERp57 Regulates the Steady-state Levels of the Prion Protein. Journal of Biological Chemistry, 2015, 290, 23631-23645.	3.4	48
78	Calcineurin Inhibition at the Clinical Phase of Prion Disease Reduces Neurodegeneration, Improves Behavioral Alterations and Increases Animal Survival. PLoS Pathogens, 2010, 6, e1001138.	4.7	47
79	Increased susceptibility to AÎ² toxicity in neuronal cultures derived from familial Alzheimerâ€™s disease (PSEN1-A246E) induced pluripotent stem cells. Neuroscience Letters, 2017, 639, 74-81.	2.1	44
80	Cyclic Amplification of Prion Protein Misfolding. Methods in Molecular Biology, 2012, 849, 199-212.	0.9	44
81	Amyloid Inhibitors and Î²-Sheet Breakers. , 2005, 38, 351-364.		43
82	Bacterial DNA promotes Tau aggregation. Scientific Reports, 2020, 10, 2369.	3.3	43
83	Efficient prion disease transmission through common environmental materials. Journal of Biological Chemistry, 2018, 293, 3363-3373.	3.4	41
84	Detection of Prions in Blood of Cervids at the Asymptomatic Stage of Chronic Wasting Disease. Scientific Reports, 2017, 7, 17241.	3.3	40
85	The ecology of chronic wasting disease in wildlife. Biological Reviews, 2020, 95, 393-408.	10.4	38
86	Aggregate-Depleted Brain Fails to Induce AÎ² Deposition in a Mouse Model of Alzheimer's Disease. PLoS ONE, 2014, 9, e89014.	2.5	36
87	Titration of biologically active amyloidâ€“Î² seeds in a transgenic mouse model of Alzheimer's disease. Scientific Reports, 2015, 5, 9349.	3.3	36
88	Strain-dependent profile of misfolded prion protein aggregates. Scientific Reports, 2016, 6, 20526.	3.3	35
89	Prion-Like Protein Aggregates and Type 2 Diabetes. Cold Spring Harbor Perspectives in Medicine, 2017, 7, a024315.	6.2	35
90	Recent US Case of Variant Creutzfeldt-Jakob Diseaseâ€”Global Implications. Emerging Infectious Diseases, 2015, 21, 750-759.	4.3	32

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91	Brains from non-Alzheimerâ€™s individuals containing amyloid deposits accelerate AÎ² deposition in vivo. Acta Neuropathologica Communications, 2013, 1, 76.	5.2	30
92	Passage of murine scrapie prion protein across the mouse vascular bloodâ€“brain barrier. Biochemical and Biophysical Research Communications, 2004, 318, 125-130.	2.1	29
93	In Vitro detection of Chronic Wasting Disease (CWD) prions in semen and reproductive tissues of white tailed deer bucks (Odocoileus virginianus). PLoS ONE, 2019, 14, e0226560.	2.5	29
94	Prion-like characteristics of the bacterial protein Microcin E492. Scientific Reports, 2017, 7, 45720.	3.3	28
95	AÎ² oligomers trigger necroptosis-mediated neurodegeneration via microglia activation in Alzheimerâ€™s disease. Acta Neuropathologica Communications, 2022, 10, 31.	5.2	28
96	InÂVivo Spreading of Tau Pathology. Neuron, 2012, 73, 621-623.	8.1	26
97	Seed Amplification Assay to Diagnose Early Parkinson's and Predict Dopaminergic Deficit Progression. Movement Disorders, 2021, 36, 2444-2446.	3.9	24
98	Modeling Traumatic Brain Injury in Human Cerebral Organoids. Cells, 2021, 10, 2683.	4.1	24
99	Generation of prions in vitro and the protein-only hypothesis. Prion, 2010, 4, 53-59.	1.8	23
100	Reduction of Blood Amyloid-Î² Oligomers in Alzheimerâ€™s Disease Transgenic Mice by c-Abl Kinase Inhibition. Journal of Alzheimer's Disease, 2016, 54, 1193-1205.	2.6	23
101	The stress of prion disease. Brain Research, 2016, 1648, 553-560.	2.2	23
102	Prion disease is accelerated in mice lacking stress-induced heat shock protein 70 (HSP70). Journal of Biological Chemistry, 2019, 294, 13619-13628.	3.4	23
103	The clock modulator Nobiletin mitigates astrogliosisâ€associated neuroinflammation and disease hallmarks in an Alzheimerâ€™s disease model. FASEB Journal, 2022, 36, e22186.	0.5	23
104	Reduction of prion infectivity in packed red blood cells. Biochemical and Biophysical Research Communications, 2008, 377, 373-378.	2.1	21
105	Preclinical Detection of Prions in Blood of Nonhuman Primates Infected with Variant Creutzfeldt-Jakob Disease. Emerging Infectious Diseases, 2020, 26, 34-43.	4.3	21
106	PMCA-replicated PrPD in urine of vCJD patients maintains infectivity and strain characteristics of brain PrPD: Transmission study. Scientific Reports, 2019, 9, 5191.	3.3	20
107	North American and Norwegian Chronic Wasting Disease Prions Exhibit Different Potential for Interspecies Transmission and Zoonotic Risk. Journal of Infectious Diseases, 2022, 225, 542-551.	4.0	20
108	Transmission of cerebral amyloid pathology by peripheral administration of misfolded AÎ² aggregates. Molecular Psychiatry, 2021, 26, 5690-5701.	7.9	18

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109	Initial fate of prions upon peripheral infection: halfâ€life, distribution, clearance, and tissue uptake. FASEB Journal, 2011, 25, 2792-2803.	0.5	17
110	Natural Animal Models of Neurodegenerative Protein Misfolding Diseases. Current Pharmaceutical Design, 2012, 18, 1148-1158.	1.9	17
111	Peripherally administrated prions reach the brain at subâ€infectious quantities in experimental hamsters. FEBS Letters, 2014, 588, 795-800.	2.8	17
112	Induced Pluripotent Stem Cell-Derived Neural Precursors Improve Memory, Synaptic and Pathological Abnormalities in a Mouse Model of Alzheimerâ€™s Disease. Cells, 2021, 10, 1802.	4.1	17
113	Detection of Misfolded Î±-Synuclein Aggregates in Cerebrospinal Fluid by the Protein Misfolding Cyclic Amplification Platform. Methods in Molecular Biology, 2019, 1948, 35-44.	0.9	16
114	Infusion of blood from mice displaying cerebral amyloidosis accelerates amyloid pathology in animal models of Alzheimerâ€™s disease. Acta Neuropathologica Communications, 2020, 8, 213.	5.2	16
115	Amyloid pathology arrangements in Alzheimerâ€™s disease brains modulate in vivo seeding capability. Acta Neuropathologica Communications, 2021, 9, 56.	5.2	15
116	Detection of CWD prions in naturally infected white-tailed deer fetuses and gestational tissues by PMCA. Scientific Reports, 2021, 11, 18385.	3.3	15
117	Kosmotropic Anions Promote Conversion of Recombinant Prion Protein into a PrPSc-Like Misfolded Form. PLoS ONE, 2012, 7, e31678.	2.5	14
118	Delaying aging in Caenorhabditis elegans with protein aggregation inhibitors. Biochemical and Biophysical Research Communications, 2017, 482, 62-67.	2.1	13
119	Application of PMCA to screen for prion infection in a human cell line used to produce biological therapeutics. Scientific Reports, 2019, 9, 4847.	3.3	13
120	Prions efficiently cross the intestinal barrier after oral administration: Study of the bioavailability, and cellular and tissue distribution in vivo. Scientific Reports, 2016, 6, 32338.	3.3	12
121	Identification of circulating microRNA signatures as potential biomarkers in the serum of elk infected with chronic wasting disease. Scientific Reports, 2019, 9, 19705.	3.3	11
122	Human Endogenous Retroviruses in Glioblastoma Multiforme. Microorganisms, 2021, 9, 764.	3.6	11
123	Preventive and therapeutic reduction of amyloid deposition and behavioral impairments in a model of Alzheimerâ€™s disease by whole blood exchange. Molecular Psychiatry, 2022, 27, 4285-4296.	7.9	11
124	Endoplasmic Reticulum Stress, PrP Trafficking, and Neurodegeneration. Developmental Cell, 2008, 15, 339-341.	7.0	10
125	Role of Prion Replication in the Strain-dependent Brain Regional Distribution of Prions. Journal of Biological Chemistry, 2016, 291, 12880-12887.	3.4	9
126	The Extent of Protease Resistance of Misfolded Prion Protein Is Highly Dependent on the Salt Concentration. Journal of Biological Chemistry, 2014, 289, 3073-3079.	3.4	8

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127	Prion Dissemination through the Environment and Medical Practices: Facts and Risks for Human Health. Clinical Microbiology Reviews, 2021, 34, e0005919.	13.6	8
128	Lack of prion transmission by sexual or parental routes in experimentally infected hamsters. Prion, 2013, 7, 412-419.	1.8	7
129	Therapeutic strategies against protein misfolding in neurodegenerative diseases. Expert Opinion on Drug Discovery, 2009, 4, 71-84.	5.0	6
130	Role of Prion Protein Oligomers in the Pathogenesis of Transmissible Spongiform Encephalopathies. , 2012, , 319-335.		6
131	Peripheral Delivery of Neural Precursor Cells Ameliorates Parkinsonâ€™s Disease-Associated Pathology. Cells, 2019, 8, 1359.	4.1	5
132	Mitochondrial transplant to replenish damaged mitochondria: A novel therapeutic strategy for neurodegenerative diseases?. Progress in Molecular Biology and Translational Science, 2021, 177, 49-63.	1.7	5
133	Protocol for controlled cortical impact in human cerebral organoids to model traumatic brain injury. STAR Protocols, 2021, 2, 100987.	1.2	5
134	Uptake, Retention, and Excretion of Infectious Prions by Experimentally Exposed Earthworms. Emerging Infectious Diseases, 2021, 27, 3151-3154.	4.3	4
135	Development of a Fluorescent Quenching Based High Throughput Assay to Screen for Calcineurin Inhibitors. PLoS ONE, 2015, 10, e0131297.	2.5	3
136	(De)stabilization of Alpha-Synuclein Fibrillary Aggregation by Charged and Uncharged Surfactants. International Journal of Molecular Sciences, 2021, 22, 12509.	4.1	3
137	Aged Cattle Brain Displays Alzheimer's Disease-Like Pathology and Promotes Brain Amyloidosis in a Transgenic Animal Model. Frontiers in Aging Neuroscience, 2021, 13, 815361.	3.4	3
138	Identification of Multicolor Fluorescent Probes for Heterogeneous AÎ² Deposits in Alzheimerâ€™s Disease. Frontiers in Aging Neuroscience, 2021, 13, 802614.	3.4	3
139	1,2,4â€trihydroxynaphthaleneâ€2â€Oâ€Îˆâ€Dâ€glucopyranoside delays amyloidâ€Îˆ₄₂ aggregation and reduces amyloid cytotoxicity. BioFactors, 2018, 44, 272-280.	5.4	2
140	Longitudinal Assessment of Tau-Associated Pathology by 18F-THK5351 PET Imaging: A Histological, Biochemical, and Behavioral Study. Diagnostics, 2021, 11, 1874.	2.6	2
141	Protein Misfolding Cyclic Amplification. , 2013, , 83-92.		1
142	Protein Misfolding. , 2005, , 213-227.		0
143	Identification of biomarkers for diagnosing and monitoring therapy in the treatment of neurologic disorders. , 2021, , 291-310.		0
144	Reduction of Prion Infectivity in Packed Red Cells by Separation of Whole Blood and Washing of the Red Cell Fraction.. Blood, 2007, 110, 2890-2890.	1.4	0

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145	The infectious nature of protein misfolding disorders. FASEB Journal, 2009, 23, 91.2.	0.5	0