Vytautas Smirnovas

List of Publications by Year
in descending order

70 papers	2,153 citations	201385 27 h-index	243296 44 g-index
74 all docs	74 docs citations	74 times ranked	2502 citing authors

#	Article	IF	Citations
1	Superoxide dismutase-1 alters the rate of prion protein aggregation and resulting fibril conformation. Archives of Biochemistry and Biophysics, 2022, 715, 109096.	1.4	2
2	Chaperones mainly suppress primary nucleation during formation of functional amyloid required for bacterial biofilm formation. Chemical Science, 2022, 13, 536-553.	3.7	10
3	Lysozyme Amyloid Fibril Structural Variability Dependence on Initial Protein Folding State. International Journal of Molecular Sciences, 2022, 23, 5421.	1.8	10
4	Interactions between S100A9 and Alpha-Synuclein: Insight from NMR Spectroscopy. International Journal of Molecular Sciences, 2022, 23, 6781.	1.8	2
5	Exploring the occurrence of thioflavin-T-positive insulin amyloid aggregation intermediates. PeerJ, 2021, 9, e10918.	0.9	6
6	Lysozyme Fibrils Alter the Mechanism of Insulin Amyloid Aggregation. International Journal of Molecular Sciences, 2021, 22, 1775.	1.8	7
7	Effects of Pulsed Electric Fields on Yeast with Prions and the Structure of Amyloid Fibrils. Applied Sciences (Switzerland), 2021, 11, 2684.	1.3	2
8	Bioinformatics methods for identification of amyloidogenic peptides show robustness to misannotated training data. Scientific Reports, 2021, 11, 8934.	1.6	5
9	Human Polymerase Î´-Interacting Protein 2 (PolDIP2) Inhibits the Formation of Human Tau Oligomers and Fibrils. International Journal of Molecular Sciences, 2021, 22, 5768.	1.8	3
10	Natural Compound from Olive Oil Inhibits S100A9 Amyloid Formation and Cytotoxicity: Implications for Preventing Alzheimerâ€™s Disease. ACS Chemical Neuroscience, 2021, 12, 1905-1918.	1.7	18
11	Temperature-Dependent Structural Variability of Prion Protein Amyloid Fibrils. International Journal of Molecular Sciences, 2021, 22, 5075.	1.8	17
12	Using lysozyme amyloid fibrils as a means of scavenging aggregationâ€inhibiting compounds. Biotechnology Journal, 2021, 16, e2100138.	1.8	5
13	Polyoxometalates as Effective Nano-inhibitors of Amyloid Aggregation of Pro-inflammatory S100A9 Protein Involved in Neurodegenerative Diseases. ACS Applied Materials & Interfaces, 2021, 13, 26721-26734.	4.0	15
14	S100A9 Alters the Pathway of Alpha-Synuclein Amyloid Aggregation. International Journal of Molecular Sciences, 2021, 22, 7972.	1.8	13
15	Co-Aggregation of S100A9 with DOPA and Cyclen-Based Compounds Manifested in Amyloid Fibril Thickening without Altering Rates of Self-Assembly. International Journal of Molecular Sciences, 2021, 22, 8556.	1.8	1
16	Autoxidation Enhances Anti-Amyloid Potential of Flavone Derivatives. Antioxidants, 2021, 10, 1428.	2.2	5
17	Aggregation Conditionâ€“Structure Relationship of Mouse Prion Protein Fibrils. International Journal of Molecular Sciences, 2021, 22, 9635.	1.8	4
18	Mapping human calreticulin regions important for structural stability. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2021, 1869, 140710.	1.1	5

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19	Distinct Neurotoxic Effects of Extracellular Tau Species in Primary Neuronal-Glial Cultures. Molecular Neurobiology, 2021, 58, 658-667.	1.9	16
20	Interplay between epigallocatechin-3-gallate and ionic strength during amyloid aggregation. PeerJ, 2021, 9, e12381.	0.9	7
21	Polymorphism of Alpha-Synuclein Amyloid Fibrils Depends on Ionic Strength and Protein Concentration. International Journal of Molecular Sciences, 2021, 22, 12382.	1.8	17
22	Extracellular tau induces microglial phagocytosis of living neurons in cell cultures. Journal of Neurochemistry, 2020, 154, 316-329.	2.1	35
23	Self-Replication of Prion Protein Fragment 89-230 Amyloid Fibrils Accelerated by Prion Protein Fragment 107-143 Aggregates. International Journal of Molecular Sciences, 2020, 21, 7410.	1.8	3
24	Identifying Insulin Fibril Conformational Differences by Thioflavin-T Binding Characteristics. Biomacromolecules, 2020, 21, 4989-4997.	2.6	20
25	MIRRAGGE â€" Minimum Information Required for Reproducible AGGregation Experiments. Frontiers in Molecular Neuroscience, 2020, 13, 582488.	1.4	19
26	Effect of Ionic Strength on Thioflavin-T Affinity to Amyloid Fibrils and Its Fluorescence Intensity. International Journal of Molecular Sciences, 2020, 21, 8916.	1.8	26
27	Gallic acid oxidation products alter the formation pathway of insulin amyloid fibrils. Scientific Reports, 2020, 10, 14466.	1.6	18
28	Templating S100A9 amyloids on Aβ fibrillar surfaces revealed by charge detection mass spectrometry, microscopy, kinetic and microfluidic analyses. Chemical Science, 2020, 11, 7031-7039.	3.7	20
29	Formation of distinct prion protein amyloid fibrils under identical experimental conditions. Scientific Reports, 2020, 10, 4572.	1.6	23
30	Methylene blue inhibits nucleation and elongation of SOD1 amyloid fibrils. PeerJ, 2020, 8, e9719.	0.9	13
31	Additional Thioflavin-T Binding Mode in Insulin Fibril Inner Core Region. Journal of Physical Chemistry B, 2019, 123, 8727-8732.	1.2	17
32	Pro-Inflammatory S100A9 Protein Aggregation Promoted by NCAM1 Peptide Constructs. ACS Chemical Biology, 2019, 14, 1410-1417.	1.6	13
33	Amyloidophilic Molecule Interactions on the Surface of Insulin Fibrils: Cooperative Binding and Fluorescence Quenching. Scientific Reports, 2019, 9, 20303.	1.6	14
34	The Environment Is a Key Factor in Determining the Anti-Amyloid Efficacy of EGCG. Biomolecules, 2019, 9, 855.	1.8	32
35	Emergence of visible light optical properties of L-phenylalanine aggregates. PeerJ, 2019, 7, e6518.	0.9	9
36	Concentration-dependent polymorphism of insulin amyloid fibrils. PeerJ, 2019, 7, e8208.	0.9	20

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37	Exploring the potential of deep-blue autofluorescence for monitoring amyloid fibril formation and dissociation. PeerJ, 2019, 7, e7554.	0.9	9
38	Self-inhibition of insulin amyloid-like aggregation. Physical Chemistry Chemical Physics, 2018, 20, 27638-27645.	1.3	22
39	Polymorphism of Prion Protein Amyloid-Like Fibrils. Biophysical Journal, 2018, 114, 429a.	0.2	0
40	Artificial strain of human prions created in vitro. Nature Communications, 2018, 9, 2166.	5.8	33
41	Picomolar inhibitors of carbonic anhydrase: Importance of inhibition and binding assays. Analytical Biochemistry, 2017, 522, 61-72.	1.1	27
42	Finkeâ€"Watzky Two-Step Nucleationâ€"Autocatalysis Model of S100A9 Amyloid Formation: Protein Misfolding as â€œNucleationâ€•Event. ACS Chemical Neuroscience, 2017, 8, 2152-2158.	1.7	40
43	Flavone Derivatives as Inhibitors of Insulin Amyloid-Like Fibril Formation. PLoS ONE, 2015, 10, e0121231.	1.1	33
44	Polymorphism of amyloid-like fibrils can be defined by the concentration of seeds. PeerJ, 2015, 3, e1207.	0.9	17
45	pH-Driven Polymorphism of Insulin Amyloid-Like Fibrils. PLoS ONE, 2015, 10, e0136602.	1.1	53
46	Looking for a generic inhibitor of amyloid-like fibril formation among flavone derivatives. PeerJ, 2015, 3, e1271.	0.9	29
47	Elongation of Mouse Prion Protein Amyloid-Like Fibrils: Effect of Temperature and Denaturant Concentration. PLoS ONE, 2014, 9, e94469.	1.1	23
48	Conformational Stability of Mammalian Prion Protein Amyloid Fibrils Is Dictated by a Packing Polymorphism within the Core Region. Journal of Biological Chemistry, 2014, 289, 2643-2650.	1.6	46
49	Discovery and Characterization of Novel Selective Inhibitors of Carbonic Anhydrase IX. Journal of Medicinal Chemistry, 2014, 57, 9435-9446.	2.9	72
50	Amyloid-Like Fibril Elongation Follows Michaelis-Menten Kinetics. PLoS ONE, 2013, 8, e68684.	1.1	17
51	Structural organization of brain-derived mammalian prions examined by hydrogen-deuterium exchange. Nature Structural and Molecular Biology, 2011, 18, 504-506.	3.6	206
52	Distinct Structures of Scrapie Prion Protein (PrPSc)-seeded Versus Spontaneous Recombinant Prion Protein Fibrils Revealed by Hydrogen/Deuterium Exchange. Journal of Biological Chemistry, 2009, 284, 24233-24241.	1.6	78
53	Interplay between Hydrogen Bonding and Macromolecular Architecture Leading to Unusual Phase Behavior in Thermosensitive Microgels. Angewandte Chemie - International Edition, 2008, 47, 338-341.	7.2	90
54	Revealing Different Aggregation Pathways of Amyloidogenic Proteins by Ultrasound Velocimetry. Biophysical Journal, 2008, 94, 3241-3246.	0.2	34

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55	Copolymer Microgels from Mono- and Disubstituted Acrylamides: Phase Behavior and Hydrogen Bonds. Macromolecules, 2008, 41, 6830-6836.	2.2	63
56	Effect of Pressure on Islet Amyloid Polypeptide Aggregation: Revealing the Polymorphic Nature of the Fibrillation Process. Biochemistry, 2008, 47, 6352-6360.	1.2	53
57	Islet amyloid polypeptide and high hydrostatic pressure: towards an understanding of the fibrillization process. Journal of Physics: Conference Series, 2008, 121, 112002.	0.3	2
58	Cytotoxicity of Insulin within its Self-assembly and Amyloidogenic Pathways. Journal of Molecular Biology, 2007, 370, 372-384.	2.0	82
59	Effects of Lipid Confinement on Insulin Stability and Amyloid Formation. Langmuir, 2007, 23, 7118-7126.	1.6	34
60	The effects of various membrane physicalâ€"chemical properties on the aggregation kinetics of insulin. Chemistry and Physics of Lipids, 2007, 149, 28-39.	1.5	29
61	New Insights into the Self-Assembly of Insulin Amyloid Fibrils:Â An Hâ˘'D Exchange FT-IR Studyâ€. Biochemistry, 2006, 45, 8143-8151.	1.2	63
62	Solvation-assisted Pressure Tuning of Insulin Fibrillation: From Novel Aggregation Pathways to Biotechnological Applications. Journal of Molecular Biology, 2006, 356, 497-509.	2.0	106
63	Protein Amyloidogenesis in the Context of Volume Fluctuations: A Case Study on Insulin. ChemPhysChem, 2006, 7, 1046-1049.	1.0	36
64	A conformational Î±-helix to Î²-sheet transition accompanies racemic self-assembly of polylysine: an FT-IR spectroscopic study. Biophysical Chemistry, 2005, 115, 49-54.	1.5	44
65	Template-controlled conformational patterns of insulin fibrillar self-assembly reflect history of solvation of the amyloid nuclei. Physical Chemistry Chemical Physics, 2005, 7, 1349.	1.3	35
66	Thermodynamic Properties Underlying the Î±-Helix-to-Î²-Sheet Transition, Aggregation, and Amyloidogenesis of Polylysine as Probed by Calorimetry, Densimetry, and Ultrasound Velocimetry. Journal of Physical Chemistry B, 2005, 109, 19043-19045.	1.2	36
67	Ethanol-Perturbed Amyloidogenic Self-Assembly of Insulin:â€‰ Looking for Origins of Amyloid Strains. Biochemistry, 2005, 44, 8948-8958.	1.2	111
68	Insulin forms amyloid in a strain-dependent manner: An FT-IR spectroscopic study. Protein Science, 2004, 13, 1927-1932.	3.1	125
69	Title is missing!. Journal of Analytical Chemistry, 2003, 58, 1038-1042.	0.4	8
70	Synthesis of new SAM-forming ferrocene derivatives and their interfacial properties on gold. Tetrahedron Letters, 2001, 42, 7691-7694.	0.7	18