Konstantin K Turoverov

List of Publications by Year in Descending Order

144 papers	4,647 citations	37 h-index	65 g-index
172 ext. papers	5,238 ext. citations	3.9 avg, IF	5.62 L-index

#	Paper	IF	Citations
144	New Evidence of the Importance of Weak Interactions in the Formation of PML-Bodies.. *International Journal of Molecular Sciences*, **2022**, 23,	6.3	2
143	Liquid-liquid phase separation as an organizing principle of intracellular space: overview of the evolution of the cell compartmentalization concept.. *Cellular and Molecular Life Sciences*, **2022**, 79, 251	10.3	9
142	New Evidence on a Distinction between A40 and A42 Amyloids: Thioflavin T Binding Modes, Clustering Tendency, Degradation Resistance, and Cross-Seeding. *International Journal of Molecular Sciences*, **2022**, 23, 5513	6.3	0
141	Structural Polymorphism of Lysozyme Amyloid Fibrils. *Cell and Tissue Biology*, **2022**, 16, 259-267	0.4	0
140	New findings on GFP-like protein application as fluorescent tags: Fibrillogenesis, oligomerization, and amorphous aggregation. *International Journal of Biological Macromolecules*, **2021**, 192, 1304-1310	7.9	2
139	Photo-dependent membrane-less organelles formed from plant phyB and PIF6 proteins in mammalian cells. *International Journal of Biological Macromolecules*, **2021**, 176, 325-331	7.9	5
138	Trypsin Induced Degradation of Amyloid Fibrils. *International Journal of Molecular Sciences*, **2021**, 22,	6.3	4
137	The Role of Non-Specific Interactions in Canonical and ALT-Associated PML-Bodies Formation and Dynamics. *International Journal of Molecular Sciences*, **2021**, 22,	6.3	4
136	Alpha-B-Crystallin Effect on Mature Amyloid Fibrils: Different Degradation Mechanisms and Changes in Cytotoxicity. *International Journal of Molecular Sciences*, **2020**, 21,	6.3	1
135	Point mutations affecting yeast prion propagation change the structure of its amyloid fibrils. *Journal of Molecular Liquids*, **2020**, 314, 113618	6	1
134	Probing the allostery in dimeric near-infrared biomarkers derived from the bacterial phytochromes: The impact of the T204A substitution on the inter-monomer interaction. *International Journal of Biological Macromolecules*, **2020**, 162, 894-902	7.9	1
133	Denaturant effect on amyloid fibrils: Declasterization, depolymerization, denaturation and reassembly. *International Journal of Biological Macromolecules*, **2020**, 150, 681-694	7.9	7
132	Effect of the fluorescent probes ThT and ANS on the mature amyloid fibrils. *Prion*, **2020**, 14, 67-75	2.3	14
131	Folding perspectives of an intrinsically disordered transactivation domain and its single mutation breaking the folding propensity. *International Journal of Biological Macromolecules*, **2020**, 155, 1359-1372	7.9	6
130	Accumulation of storage proteins in plant seeds is mediated by amyloid formation. *PLoS Biology*, **2020**, 18, e3000564	9.7	16
129	Accumulation of storage proteins in plant seeds is mediated by amyloid formation **2020**, 18, e3000564		
128	Accumulation of storage proteins in plant seeds is mediated by amyloid formation **2020**, 18, e3000564		

127	Accumulation of storage proteins in plant seeds is mediated by amyloid formation **2020**, 18, e3000564		
126	Accumulation of storage proteins in plant seeds is mediated by amyloid formation **2020**, 18, e3000564		
125	Accumulation of storage proteins in plant seeds is mediated by amyloid formation **2020**, 18, e3000564		
124	Accumulation of storage proteins in plant seeds is mediated by amyloid formation **2020**, 18, e3000564		
123	Structural Analogue of Thioflavin T, DMASEBT, as a Tool for Amyloid Fibrils Study. *Analytical Chemistry*, **2019**, 91, 3131-3140	7.8	13
122	Stochasticity of Biological Soft Matter: Emerging Concepts in Intrinsically Disordered Proteins and Biological Phase Separation. *Trends in Biochemical Sciences*, **2019**, 44, 716-728	10.3	53
121	Near-Infrared Fluorescent Proteins and Their Applications. *Biochemistry (Moscow)*, **2019**, 84, S32-S50	2.9	15
120	Multi-functionality of proteins involved in GPCR and G protein signaling: making sense of structure-function continuum with intrinsic disorder-based proteoforms. *Cellular and Molecular Life Sciences*, **2019**, 76, 4461-4492	10.3	28
119	Two Novel Amyloid Proteins, RopA and RopB, from the Root Nodule Bacterium. *Biomolecules*, **2019**, 9,	5.9	13
118	Near-Infrared Markers based on Bacterial Phytochromes with Phycocyanobilin as a Chromophore. *International Journal of Molecular Sciences*, **2019**, 20,	6.3	4
117	Folding of poly-amino acids and intrinsically disordered proteins in overcrowded milieu induced by pH change. *International Journal of Biological Macromolecules*, **2019**, 125, 244-255	7.9	7
116	Thioflavin T Interaction with Acetylcholinesterase: New Evidence of 1:1 Binding Stoichiometry Obtained with Samples Prepared by Equilibrium Microdialysis. *ACS Chemical Neuroscience*, **2018**, 9, 1793-1801	5.7	6
115	Intrinsically disordered proteins in crowded milieu: when chaos prevails within the cellular gumbo. *Cellular and Molecular Life Sciences*, **2018**, 75, 3907-3929	10.3	48
114	Near-Infrared Fluorescent Proteins: Multiplexing and Optogenetics across Scales. *Trends in Biotechnology*, **2018**, 36, 1230-1243	15.1	42
113	Investigation of Synuclein Amyloid Fibrils Using the Fluorescent Probe Thioflavin T. *International Journal of Molecular Sciences*, **2018**, 19,	6.3	23
112	M60-like metalloprotease domain of the Escherichia coli YghJ protein forms amyloid fibrils. *PLoS ONE*, **2018**, 13, e0191317	3.7	10
111	Structural Features of Amyloid Fibrils Formed from the Full-Length and Truncated Forms of Beta-2-Microglobulin Probed by Fluorescent Dye Thioflavin T. *International Journal of Molecular Sciences*, **2018**, 19,	6.3	11
110	The Pathways of the iRFP713 Unfolding Induced by Different Denaturants. *International Journal of Molecular Sciences*, **2018**, 19,	6.3	1

109	Trans-2-[4-(dimethylamino)styryl]-3-ethyl-1,3-benzothiazolium perchlorate - New fluorescent dye for testing of amyloid fibrils and study of their structure. *Dyes and Pigments*, **2018**, 157, 385-395	4.6	11
108	Effects of low urea concentrations on protein-water interactions. *Journal of Biomolecular Structure and Dynamics*, **2017**, 35, 207-218	3.6	5
107	Design of near-infrared single-domain fluorescent protein GAF-FP based on bacterial phytochrome. *Cell and Tissue Biology*, **2017**, 11, 16-26	0.4	3
106	Formation of trans-2-[4-(Dimethylamino)Styryl]-3-Ethyl-1,3-Benzothiazolium Perchlorate Dimers in the Presence of Sodium Polystyrene Sulfonate. *Journal of Applied Spectroscopy*, **2017**, 83, 917-923	0.7	3
105	The effects of crowding agents Dextran-70k and PEG-8k on actin structure and unfolding reaction. *Journal of Molecular Structure*, **2017**, 1140, 46-51	3.4	7
104	Photophysical Properties of Fluorescent Probe Thioflavin T in Crowded Milieu. *Journal of Spectroscopy*, **2017**, 2017, 1-10	1.5	8
103	Structure and Conformational Properties of d-Glucose/d-Galactose-Binding Protein in Crowded Milieu. *Molecules*, **2017**, 22,	4.8	7
102	Thioflavin T fluoresces as excimer in highly concentrated aqueous solutions and as monomer being incorporated in amyloid fibrils. *Scientific Reports*, **2017**, 7, 2146	4.9	39
101	Stabilization of structure in near-infrared fluorescent proteins by binding of biliverdin chromophore. *Journal of Molecular Structure*, **2017**, 1140, 22-31	3.4	11
100	Different conditions of fibrillogenesis cause polymorphism of lysozyme amyloid fibrils. *Journal of Molecular Structure*, **2017**, 1140, 52-58	3.4	20
99	Osmolyte-Like Stabilizing Effects of Low GdnHCl Concentrations on d-Glucose/d-Galactose-Binding Protein. *International Journal of Molecular Sciences*, **2017**, 18,	6.3	1
98	Interaction of Biliverdin Chromophore with Near-Infrared Fluorescent Protein BphP1-FP Engineered from Bacterial Phytochrome. *International Journal of Molecular Sciences*, **2017**, 18,	6.3	8
97	Protein unfolding in crowded milieu: what crowding can do to a protein undergoing unfolding?. *Journal of Biomolecular Structure and Dynamics*, **2016**, 34, 2155-70	3.6	23
96	Near-infrared bioluminescent proteins for two-color multimodal imaging. *Scientific Reports*, **2016**, 6, 36588	4.9	53
95	Protein folding and stability in the presence of osmolytes. *Biophysics (Russian Federation)*, **2016**, 61, 185-192	0.7	5
94	High Fluorescence Anisotropy of Thioflavin T in Aqueous Solution Resulting from Its Molecular Rotor Nature. *Analytical Chemistry*, **2016**, 88, 718-24	7.8	28
93	Structure and stability of recombinant bovine odorant-binding protein: II. Unfolding of the monomeric forms. *PeerJ*, **2016**, 4, e1574	3.1	2
92	Structure and stability of recombinant bovine odorant-binding protein: III. Peculiarities of the wild type bOBP unfolding in crowded milieu. *PeerJ*, **2016**, 4, e1642	3.1	3

91	Structure and stability of recombinant bovine odorant-binding protein: I. Design and analysis of monomeric mutants. *PeerJ*, **2016**, 4, e1933	3.1	4
90	Peculiarities of the Super-Folder GFP Folding in a Crowded Milieu. *International Journal of Molecular Sciences*, **2016**, 17,	6.3	8
89	Stoichiometry and Affinity of Thioflavin T Binding to Sup35p Amyloid Fibrils. *PLoS ONE*, **2016**, 11, e0156314	3.7	22
88	Native globular actin has a thermodynamically unstable quasi-stationary structure with elements of intrinsic disorder. *FEBS Journal*, **2016**, 283, 438-45	5.7	6
87	Allosteric effects of chromophore interaction with dimeric near-infrared fluorescent proteins engineered from bacterial phytochromes. *Scientific Reports*, **2016**, 6, 18750	4.9	28
86	Tryptophan residue of the D-galactose/D-glucose-binding protein from E. Coli localized in its active center does not contribute to the change in intrinsic fluorescence upon glucose binding. *Journal of Fluorescence*, **2015**, 25, 87-94	2.4	5
85	Spectral Manifestations of Thioflavin T Aggregation. *Journal of Applied Spectroscopy*, **2015**, 82, 33-39	0.7	12
84	Intrinsically disordered proteins as crucial constituents of cellular aqueous two phase systems and coacervates. *FEBS Letters*, **2015**, 589, 15-22	3.8	153
83	Beyond the excluded volume effects: mechanistic complexity of the crowded milieu. *Molecules*, **2015**, 20, 1377-409	4.8	118
82	Spectral properties of BADAN in solutions with different polarities. *Journal of Molecular Structure*, **2015**, 1090, 107-111	3.4	3
81	Minimal domain of bacterial phytochrome required for chromophore binding and fluorescence. *Scientific Reports*, **2015**, 5, 18348	4.9	34
80	A knot in the protein structure - probing the near-infrared fluorescent protein iRFP designed from a bacterial phytochrome. *FEBS Journal*, **2014**, 281, 2284-98	5.7	17
79	Investigation of the kinetics of insulin amyloid fibrils formation. *Cell and Tissue Biology*, **2014**, 8, 186-191	0.4	8
78	The trehalose/maltose-binding protein as the sensitive element of a glucose biosensor. *Optical Materials*, **2014**, 36, 1676-1679	3.3	7
77	Photophysical Properties of Trans-2-[4-(dimethylamino)styryl]-3-ethyl-1,3-benzothiazolium Perchlorate, a New Structural Analog of Thioflavin T. *Journal of Applied Spectroscopy*, **2014**, 81, 205-213	0.7	3
76	What macromolecular crowding can do to a protein. *International Journal of Molecular Sciences*, **2014**, 15, 23090-140	6.3	318
75	Actinous enigma or enigmatic actin: Folding, structure, and functions of the most abundant eukaryotic protein. *Intrinsically Disordered Proteins*, **2014**, 2, e34500		10
74	Fluorescence of dyes in solutions with high absorbance. Inner filter effect correction. *PLoS ONE*, **2014**, 9, e103878	3.7	146

73	The quaternary structure of the recombinant bovine odorant-binding protein is modulated by chemical denaturants. *PLoS ONE*, **2014**, 9, e85169	3.7	7
72	Sensitivity of superfolder GFP to ionic agents. *PLoS ONE*, **2014**, 9, e110750	3.7	13
71	Spectral characteristics of the mutant form GGBP/H152C of D-glucose/D-galactose-binding protein labeled with fluorescent dye BADAN: influence of external factors. *PeerJ*, **2014**, 2, e275	3.1	12
70	Beta-barrel scaffold of fluorescent proteins: folding, stability and role in chromophore formation. *International Review of Cell and Molecular Biology*, **2013**, 302, 221-78	6	57
69	Binding stoichiometry and affinity of fluorescent dyes to proteins in different structural states. *Methods in Molecular Biology*, **2012**, 895, 441-60	1.4	14
68	Interaction of thioflavin T with amyloid fibrils: fluorescence quantum yield of bound dye. *Journal of Physical Chemistry B*, **2012**, 116, 2538-44	3.4	76
67	Reevaluation of ANS binding to human and bovine serum albumins: key role of equilibrium microdialysis in ligand - receptor binding characterization. *PLoS ONE*, **2012**, 7, e40845	3.7	64
66	Analyzing thioflavin T binding to amyloid fibrils by an equilibrium microdialysis-based technique. *PLoS ONE*, **2012**, 7, e30724	3.7	54
65	Distinct effects of guanidine thiocyanate on the structure of superfolder GFP. *PLoS ONE*, **2012**, 7, e48809	3.7	14
64	Protein-Ligand Interactions of the D-Galactose/D-Glucose-Binding Protein as a Potential Sensing Probe of Glucose Biosensors. *Spectroscopy*, **2012**, 27, 373-379		2
63	Structural Perturbation of Superfolder GFP in the Presence of Guanidine Thiocyanate. *Spectroscopy*, **2012**, 27, 381-386		0
62	Ligand-Binding Proteins: Structure, Stability and Practical Application **2012**,		2
61	A new trend in the experimental methodology for the analysis of the thioflavin T binding to amyloid fibrils. *Molecular Neurobiology*, **2012**, 45, 488-98	6.2	46
60	Waveguide-type localized plasmon resonance biosensor for noninvasive glucose concentration detection **2012**,		6
59	Proteomic analysis of the 20S proteasome (PSMA3)-interacting proteins reveals a functional link between the proteasome and mRNA metabolism. *Biochemical and Biophysical Research Communications*, **2011**, 416, 258-65	3.4	39
58	Modern fluorescent proteins: from chromophore formation to novel intracellular applications. *BioTechniques*, **2011**, 51, 313-4, 316, 318 passim	2.5	105
57	Interaction of thioflavin T with amyloid fibrils: stoichiometry and affinity of dye binding, absorption spectra of bound dye. *Journal of Physical Chemistry B*, **2011**, 115, 11519-24	3.4	81
56	Interaction between non-histone chromatin protein HMGB1 and linker histone H1. *Cell and Tissue Biology*, **2011**, 5, 120-122	0.4	

55	The effect of red pigment on the amyloidization of yeast proteins. *Yeast*, **2011**, 28, 505-26	3.4	10
54	New insight in protein-ligand interactions. 2. Stability and properties of two mutant forms of the D-galactose/D-glucose-binding protein from E. coli. *Journal of Physical Chemistry B*, **2011**, 115, 9022-32	3.4	12
53	New insight into protein-ligand interactions. The case of the D-galactose/D-glucose-binding protein from Escherichia coli. *Journal of Physical Chemistry B*, **2011**, 115, 2765-73	3.4	11
52	Structure and stability of D-galactose/D-glucose-binding protein. The role of D-glucose binding and Ca ion depletion. *Spectroscopy*, **2010**, 24, 355-359		4
51	High stability of trehalose/maltose binding protein fromThermococcus litoralismakes it a good candidate as a sensitive element in biosensor systems for sugar control. *Spectroscopy*, **2010**, 24, 349-353		1
50	Denaturation of proteins with beta-barrel topology induced by guanidine hydrochloride. *Spectroscopy*, **2010**, 24, 367-373		4
49	Spectral properties and factors determining high quantum yield of thioflavin T incorporated in amyloid fibrils. *Spectroscopy*, **2010**, 24, 169-172		9
48	Fluorescence quantum yield of thioflavin T in rigid isotropic solution and incorporated into the amyloid fibrils. *PLoS ONE*, **2010**, 5, e15385	3.7	131
47	Differences in the pathways of proteins unfolding induced by urea and guanidine hydrochloride: molten globule state and aggregates. *PLoS ONE*, **2010**, 5, e15035	3.7	67
46	Comparison of crude lysate pellets from isogenic strains of yeast with different prion composition: Identification of prion-associated proteins. *Cell and Tissue Biology*, **2010**, 4, 36-53	0.4	2
45	Effect of red pigment on amyloidization of yeast. *Cell and Tissue Biology*, **2010**, 4, 152-166	0.4	7
44	The protein kingdom extended: ordered and intrinsically disordered proteins, their folding, supramolecular complex formation, and aggregation. *Progress in Biophysics and Molecular Biology*, **2010**, 102, 73-84	4.7	157
43	Prion-associated proteins in yeast: comparative analysis of isogenic [PSI(+)] and [psi(-)] strains. *Yeast*, **2009**, 26, 611-31	3.4	17
42	Thioflavin T as a molecular rotor: fluorescent properties of thioflavin T in solvents with different viscosity. *Journal of Physical Chemistry B*, **2008**, 112, 15893-902	3.4	256
41	Fluorescent proteins as biomarkers and biosensors: throwing color lights on molecular and cellular processes. *Current Protein and Peptide Science*, **2008**, 9, 338-69	2.8	117
40	Hydrophobic interactions and ionic networks play an important role in thermal stability and denaturation mechanism of the porcine odorant-binding protein. *Proteins: Structure, Function and Bioinformatics*, **2008**, 71, 35-44	4.2	28
39	Understanding the role of Arg96 in structure and stability of green fluorescent protein. *Proteins: Structure, Function and Bioinformatics*, **2008**, 73, 539-51	4.2	13
38	Comparative assay of amyloid and prion contents in yeast cells. *Cell and Tissue Biology*, **2008**, 2, 71-80	0.4	4

37	Stability and dynamics of the porcine odorant-binding protein. *Biochemistry*, **2007**, 46, 11120-7	3.2	25
36	Computational study of thioflavin T torsional relaxation in the excited state. *Journal of Physical Chemistry A*, **2007**, 111, 4829-35	2.8	173
35	Different disturbances--one pathway of protein unfolding. Actin folding-unfolding and misfolding. *Cell Biology International*, **2007**, 31, 405-12	4.5	11
34	Expression of recombinant actin 5C from Drosophila in the methylotrophyc yeast Pichia pastoris. *Cell and Tissue Biology*, **2007**, 1, 248-258	0.4	
33	ThT as an instrument for testing and investigation of amyloid and amyloid-like fibrils **2007**,		5
32	Spectral properties of thioflavin T in solvents with different dielectric properties and in a fibril-incorporated form. *Journal of Proteome Research*, **2007**, 6, 1392-401	5.6	166
31	Inelastic Incoherent Neutron Scattering in Some Proteins. *Ferroelectrics*, **2007**, 348, 154-160	0.6	5
30	Actin and amphiphilic polymers influence on channel formation by Syringomycin E in lipid bilayers. *European Biophysics Journal*, **2006**, 35, 382-92	1.9	3
29	Unfolding and refolding of the glutamine-binding protein from Escherichia coli and its complex with glutamine induced by guanidine hydrochloride. *Biochemistry*, **2005**, 44, 5625-33	3.2	24
28	Fluorescence properties of glutamine-binding protein from Escherichia coli and its complex with glutamine. *Journal of Proteome Research*, **2005**, 4, 417-23	5.6	13
27	The Combined Use of Fluorescence Spectroscopy and X-Ray Crystallography Greatly Contributes to Elucidating Structure and Dynamics of Proteins **2005**, 25-61		2
26	Conformational change of the dimeric DsbC molecule induced by GdnHCl. A study by intrinsic fluorescence. *Biochemistry*, **2004**, 43, 5296-303	3.2	17
25	Comparative studies on the structure and stability of fluorescent proteins EGFP, zFP506, mRFP1, "dimer2", and DsRed1. *Biochemistry*, **2004**, 43, 14913-23	3.2	73
24	Use of the phase diagram method to analyze the protein unfolding-refolding reactions: fishing out the "invisible" intermediates. *Journal of Proteome Research*, **2004**, 3, 485-94	5.6	120
23	Spectral Properties of Thioflavin T and Its Complexes with Amyloid Fibrils. *Journal of Applied Spectroscopy*, **2003**, 70, 868-874	0.7	177
22	Intrinsic Fluorescence of Actin. *Journal of Fluorescence*, **2003**, 13, 41-57	2.4	48
21	Expression of recombinant GFP-actin fusion protein in the methylotrophic yeast Pichia pastoris. *FEMS Yeast Research*, **2003**, 3, 105-111	3.1	
20	High stability of Discosoma DsRed as compared to Aequorea EGFP. *Biochemistry*, **2003**, 42, 7879-84	3.2	89

19	Monitoring of actin unfolding by room temperature tryptophan phosphorescence. *Biochemistry*, **2003**, 42, 13551-7	3.2	11
18	Expression of recombinant GFP-actin fusion protein in the methylotrophic yeast Pichia pastoris. *FEMS Yeast Research*, **2003**, 3, 105-11	3.1	9
17	Unraveling multistate unfolding of rabbit muscle creatine kinase. *BBA - Proteins and Proteomics*, **2002**, 1596, 138-55		88
16	The place of inactivated actin and its kinetic predecessor in actin folding-unfolding. *Biochemistry*, **2002**, 41, 13127-32	3.2	39
15	Kinetics of actin unfolding induced by guanidine hydrochloride. *Biochemistry*, **2002**, 41, 1014-9	3.2	33
14	Partially folded conformations in the folding pathway of bovine carbonic anhydrase II: a fluorescence spectroscopic analysis. *ChemBioChem*, **2001**, 2, 813-21	3.8	115
13	Contribution of separate tryptophan residues to intrinsic fluorescence of actin. Analysis of 3D structure. *FEBS Letters*, **1999**, 452, 205-10	3.8	33
12	Effect of self-association on the structural organization of partially folded proteins: inactivated actin. *Biophysical Journal*, **1999**, 77, 2788-800	2.9	41
11	The structure and dynamics of partially folded actin. *Biochemistry*, **1999**, 38, 6261-9	3.2	31
10	Correlation between polymerizability and conformation in scallop beta-like actin and rabbit skeletal muscle alpha-actin. *Archives of Biochemistry and Biophysics*, **1999**, 368, 105-11	4.1	11
9	Conformational changes in subdomain I of actin induced by proteolytic cleavage within the DNase I-binding loop: energy transfer from tryptophan to AEDANS. *FEBS Letters*, **1996**, 383, 105-8	3.8	32
8	Physico-chemical properties of actin cleaved with bacterial protease from E. coli A2 strain. *FEBS Letters*, **1991**, 279, 49-51	3.8	44
7	Changes of structure and intramolecular mobility in the course of actin denaturation. *Biophysical Chemistry*, **1988**, 32, 73-8	3.5	32
6	What causes the depolarization of trypsin and trypsinogen fluorescence. Intramolecular mobility or non-radiative energy transfer?. *Biophysical Chemistry*, **1986**, 25, 315-23	3.5	5
5	What causes the variation of polarization degree across the emission spectrum of proteins?. *Biophysical Chemistry*, **1986**, 24, 327-35	3.5	1
4	The environment of the tryptophan residue in Pseudomonas aeruginosa azurin and its fluorescence properties. *Biophysical Chemistry*, **1985**, 23, 79-89	3.5	36
3	Alentsev-Fok method of resolving complex spectra. *Journal of Applied Spectroscopy*, **1978**, 29, 844-849	0.7	2
2	Ultra-violet fluorescence of actin. Determination of native actin content in actin preparations. *FEBS Letters*, **1976**, 62, 4-6	3.8	80

1 Luminescence of Biopolymers and Cells **1969**, 65