

Tsutomu Arakawa

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

188
papers

12,337
citations

53
h-index

109
g-index

194
ext. papers

13,115
ext. citations

4.3
avg, IF

6.29
L-index

#	Paper	IF	Citations
188	Stabilization of protein structure by sugars. <i>Biochemistry</i> , 1982 , 21, 6536-44	3.2	960
187	Preferential interactions of proteins with salts in concentrated solutions. <i>Biochemistry</i> , 1982 , 21, 6545-53	3.2	611
186	Mechanism of protein salting in and salting out by divalent cation salts: balance between hydration and salt binding. <i>Biochemistry</i> , 1984 , 23, 5912-23	3.2	536
185	Size-exclusion chromatography with on-line light-scattering, absorbance, and refractive index detectors for studying proteins and their interactions. <i>Analytical Biochemistry</i> , 1996 , 240, 155-66	3.1	443
184	Mechanism of poly(ethylene glycol) interaction with proteins. <i>Biochemistry</i> , 1985 , 24, 6756-62	3.2	407
183	Suppression of protein interactions by arginine: a proposed mechanism of the arginine effects. <i>Biophysical Chemistry</i> , 2007 , 127, 1-8	3.5	368
182	Factors affecting short-term and long-term stabilities of proteins. <i>Advanced Drug Delivery Reviews</i> , 2001 , 46, 307-26	18.5	357
181	Role of arginine in protein refolding, solubilization, and purification. <i>Biotechnology Progress</i> , 2004 , 20, 1301-8	2.8	327
180	Practical considerations in refolding proteins from inclusion bodies. <i>Protein Expression and Purification</i> , 2003 , 28, 1-8	2	324
179	The effects of arginine on refolding of aggregated proteins: not facilitate refolding, but suppress aggregation. <i>Biochemical and Biophysical Research Communications</i> , 2003 , 304, 148-52	3.4	298
178	Preferential interactions of proteins with solvent components in aqueous amino acid solutions. <i>Archives of Biochemistry and Biophysics</i> , 1983 , 224, 169-77	4.1	288
177	Theory of protein solubility. <i>Methods in Enzymology</i> , 1985 , 114, 49-77	1.7	267
176	Contribution of the surface free energy perturbation to protein-solvent interactions. <i>Biochemistry</i> , 1994 , 33, 15178-89	3.2	256
175	Interactions of formulation excipients with proteins in solution and in the dried state. <i>Advanced Drug Delivery Reviews</i> , 2011 , 63, 1053-73	18.5	248
174	Why preferential hydration does not always stabilize the native structure of globular proteins. <i>Biochemistry</i> , 1990 , 29, 1924-31	3.2	225
173	The basis for toxicity of certain cryoprotectants: A hypothesis. <i>Cryobiology</i> , 1990 , 27, 401-415	2.7	220
172	Mechanisms of protein aggregation. <i>Current Pharmaceutical Biotechnology</i> , 2009 , 10, 348-51	2.6	217

171	Protein precipitation and denaturation by dimethyl sulfoxide. <i>Biophysical Chemistry</i> , 2007 , 131, 62-70	3.5	217
170	Preferential interactions determine protein solubility in three-component solutions: the MgCl ₂ system. <i>Biochemistry</i> , 1990 , 29, 1914-23	3.2	208
169	Protein stabilization and destabilization by guanidinium salts. <i>Biochemistry</i> , 1984 , 23, 5924-9	3.2	198
168	Dimerization of the extracellular domain of the erythropoietin (EPO) receptor by EPO: one high-affinity and one low-affinity interaction. <i>Biochemistry</i> , 1996 , 35, 1681-91	3.2	186
167	Effect of additives on protein aggregation. <i>Current Pharmaceutical Biotechnology</i> , 2009 , 10, 400-7	2.6	174
166	Factors affecting short-term and long-term stabilities of proteins. <i>Advanced Drug Delivery Reviews</i> , 1993 , 10, 1-28	18.5	169
165	Protein-solvent interactions in pharmaceutical formulations. <i>Pharmaceutical Research</i> , 1991 , 8, 285-91	4.5	164
164	The critical role of mobile phase composition in size exclusion chromatography of protein pharmaceuticals. <i>Journal of Pharmaceutical Sciences</i> , 2010 , 99, 1674-92	3.9	158
163	Elution of antibodies from a Protein-A column by aqueous arginine solutions. <i>Protein Expression and Purification</i> , 2004 , 36, 244-8	2	157
162	Effects of acid exposure on the conformation, stability, and aggregation of monoclonal antibodies. <i>Proteins: Structure, Function and Bioinformatics</i> , 2007 , 66, 954-62	4.2	149
161	Mechanism of protein precipitation and stabilization by co-solvents. <i>Journal of Crystal Growth</i> , 1988 , 90, 39-46	1.6	128
160	Optimization of lyophilization conditions for recombinant human interleukin-2 by dried-state conformational analysis using Fourier-transform infrared spectroscopy. <i>Pharmaceutical Research</i> , 1995 , 12, 1250-9	4.5	126
159	Arginine as an effective additive in gel permeation chromatography. <i>Journal of Chromatography A</i> , 2005 , 1094, 49-55	4.5	123
158	Solubilization of active green fluorescent protein from insoluble particles by guanidine and arginine. <i>Biochemical and Biophysical Research Communications</i> , 2003 , 312, 1383-6	3.4	121
157	Small molecule pharmacological chaperones: From thermodynamic stabilization to pharmaceutical drugs. <i>Biochimica Et Biophysica Acta - Proteins and Proteomics</i> , 2006 , 1764, 1677-87	4	110
156	Effective elution of antibodies by arginine and arginine derivatives in affinity column chromatography. <i>Analytical Biochemistry</i> , 2005 , 345, 250-7	3.1	109
155	FGF-18, a novel member of the fibroblast growth factor family, stimulates hepatic and intestinal proliferation. <i>Molecular and Cellular Biology</i> , 1998 , 18, 6063-74	4.8	107
154	Comparison of Solute-Induced Protein Stabilization in Aqueous Solution and in the Frozen and Dried States. <i>Journal of Dairy Science</i> , 1990 , 73, 3627-3636	4	93

153	Is arginine a protein-denaturant?. <i>Protein Expression and Purification</i> , 2005 , 42, 1-6	2	92
152	The effects of arginine on protein binding and elution in hydrophobic interaction and ion-exchange chromatography. <i>Protein Expression and Purification</i> , 2007 , 54, 110-6	2	89
151	Abnormal solubility behavior of beta-lactoglobulin: salting-in by glycine and NaCl. <i>Biochemistry</i> , 1987 , 26, 5147-53	3.2	84
150	Review: Why is arginine effective in suppressing aggregation?. <i>Protein and Peptide Letters</i> , 2005 , 12, 613-9	1.9	83
149	Specific decrease in solution viscosity of antibodies by arginine for therapeutic formulations. <i>Molecular Pharmaceutics</i> , 2014 , 11, 1889-96	5.6	78
148	Protection of bovine serum albumin from aggregation by Tween 80. <i>Journal of Pharmaceutical Sciences</i> , 2000 , 89, 646-51	3.9	72
147	Effects of salts on protein-surface interactions: applications for column chromatography. <i>Journal of Pharmaceutical Sciences</i> , 2007 , 96, 1677-90	3.9	71
146	Arginine-assisted solubilization system for drug substances: solubility experiment and simulation. <i>Journal of Physical Chemistry B</i> , 2010 , 114, 13455-62	3.4	69
145	Strategies to suppress aggregation of recombinant keratinocyte growth factor during liquid formulation development. <i>Journal of Pharmaceutical Sciences</i> , 1994 , 83, 1657-61	3.9	66
144	Dimerization of the extracellular domain of granulocyte-colony stimulating factor receptor by ligand binding: a monovalent ligand induces 2:2 complexes. <i>Biochemistry</i> , 1996 , 35, 4886-96	3.2	65
143	Chemical and pharmacological chaperones: application for recombinant protein production and protein folding diseases. <i>Current Medicinal Chemistry</i> , 2011 , 18, 1-15	4.3	63
142	Mechanistic insights into protein precipitation by alcohol. <i>International Journal of Biological Macromolecules</i> , 2012 , 50, 865-71	7.9	62
141	Thermodynamic analysis of the effect of concentrated salts on protein interaction with hydrophobic and polysaccharide columns. <i>Archives of Biochemistry and Biophysics</i> , 1986 , 248, 101-5	4.1	60
140	Arginine increases the solubility of coumarin: comparison with salting-in and salting-out additives. <i>Journal of Biochemistry</i> , 2008 , 144, 363-9	3.1	59
139	Aggregation pathway of recombinant human keratinocyte growth factor and its stabilization. <i>Pharmaceutical Research</i> , 1994 , 11, 1581-7	4.5	57
138	MEP chromatography of antibody and Fc-fusion protein using aqueous arginine solution. <i>Protein Expression and Purification</i> , 2009 , 63, 158-63	2	54
137	Nondenaturing solubilization of beta2 microglobulin from inclusion bodies by L-arginine. <i>Biochemical and Biophysical Research Communications</i> , 2005 , 328, 189-97	3.4	54
136	Protection of bovine serum albumin from aggregation by Tween 80. <i>Journal of Pharmaceutical Sciences</i> , 2000 , 89, 646	3.9	54

135	Synergistic solubilization of porcine myosin in physiological salt solution by arginine. <i>International Journal of Biological Macromolecules</i> , 2013 , 62, 647-51	7.9	53
134	Aggregation suppression of proteins by arginine during thermal unfolding. <i>Protein and Peptide Letters</i> , 2006 , 13, 921-7	1.9	53
133	A new strategy for enhancing the stability of lyophilized protein: the effect of the reconstitution medium on keratinocyte growth factor. <i>Pharmaceutical Research</i> , 1995 , 12, 1447-52	4.5	53
132	Stabilization of recombinant human keratinocyte growth factor by osmolytes and salts. <i>Journal of Pharmaceutical Sciences</i> , 1996 , 85, 419-26	3.9	52
131	Arginine improves protein elution in hydrophobic interaction chromatography. The cases of human interleukin-6 and activin-A. <i>Journal of Chromatography A</i> , 2007 , 1154, 81-6	4.5	47
130	Solubility enhancement of gluten and organic compounds by arginine. <i>International Journal of Pharmaceutics</i> , 2008 , 355, 220-3	6.5	47
129	Arginine and lysine reduce the high viscosity of serum albumin solutions for pharmaceutical injection. <i>Journal of Bioscience and Bioengineering</i> , 2014 , 117, 539-43	3.3	46
128	MEP HyperCel chromatography II: binding, washing and elution. <i>Protein Expression and Purification</i> , 2010 , 71, 168-73	2	44
127	The effect of the reconstitution medium on aggregation of lyophilized recombinant interleukin-2 and ribonuclease A. <i>Pharmaceutical Research</i> , 1996 , 13, 643-6	4.5	43
126	Improved performance of column chromatography by arginine: dye-affinity chromatography. <i>Protein Expression and Purification</i> , 2007 , 52, 410-4	2	40
125	Highly efficient renaturation of beta-lactamase isolated from moderately halophilic bacteria. <i>FEBS Letters</i> , 2004 , 558, 7-12	3.8	39
124	Stabilizing effects of caprylate and acetyltryptophanate on heat-induced aggregation of bovine serum albumin. <i>BBA - Proteins and Proteomics</i> , 2000 , 1479, 32-6		38
123	Stability of recombinant consensus interferon to air-jet and ultrasonic nebulization. <i>Journal of Pharmaceutical Sciences</i> , 1995 , 84, 1210-4	3.9	38
122	Refractive index of proteins in aqueous sodium chloride. <i>Analytical Biochemistry</i> , 2000 , 280, 327-9	3.1	36
121	Effect of three elution buffers on the recovery and structure of monoclonal antibodies. <i>Analytical Biochemistry</i> , 1997 , 253, 236-45	3.1	35
120	Refolding single-chain antibody (scFv) using lauroyl-L-glutamate as a solubilization detergent and arginine as a refolding additive. <i>Protein Expression and Purification</i> , 2011 , 77, 68-74	2	34
119	Antiviral and virucidal activities of natural products. <i>Current Medicinal Chemistry</i> , 2009 , 16, 2485-97	4.3	34
118	Arginine increases the solubility of alkyl gallates through interaction with the aromatic ring. <i>Journal of Biochemistry</i> , 2011 , 149, 389-94	3.1	33

117	Reversibility of heat-induced denaturation of the recombinant human megakaryocyte growth and development factor. <i>Pharmaceutical Research</i> , 1999 , 16, 799-807	4.5	33
116	Molecular weights of glycosylated and nonglycosylated forms of recombinant human stem cell factor determined by low-angle laser light scattering. <i>Analytical Biochemistry</i> , 1992 , 203, 53-7	3.1	33
115	Arginine facilitates inactivation of enveloped viruses. <i>Journal of Pharmaceutical Sciences</i> , 2008 , 97, 3067-3073		32
114	Interaction of arginine with Capto MMC in multimodal chromatography. <i>Journal of Chromatography A</i> , 2014 , 1338, 58-66	4.5	31
113	Molecular dynamics simulation of the arginine-assisted solubilization of caffeic acid: intervention in the interaction. <i>Journal of Physical Chemistry B</i> , 2013 , 117, 7518-27	3.4	31
112	Solvent modulation of column chromatography. <i>Protein and Peptide Letters</i> , 2008 , 15, 544-55	1.9	31
111	Kinetic and thermodynamic analysis of thermal unfolding of recombinant erythropoietin. <i>Bioscience, Biotechnology and Biochemistry</i> , 2001 , 65, 1321-7	2.1	29
110	A novel protein refolding system using lauroyl-l-glutamate as a solubilizing detergent and arginine as a folding assisting agent. <i>Protein Expression and Purification</i> , 2011 , 75, 46-54	2	26
109	Activation of halophilic nucleoside diphosphate kinase by a non-ionic osmolyte, trimethylamine N-oxide. <i>The Protein Journal</i> , 2003 , 22, 345-51		25
108	Fractionation and characterization of polyclonal antibodies using three progressively more chaotropic solvents. <i>Analytical Biochemistry</i> , 1997 , 253, 246-52	3.1	24
107	The secondary structure analysis of a potent Ser14Gly analog of antiAlzheimer peptide, Humanin, by circular dichroism. <i>Journal of Peptide Science</i> , 2006 , 12, 639-42	2.1	24
106	Arginine inhibits adsorption of proteins on polystyrene surface. <i>PLoS ONE</i> , 2013 , 8, e70762	3.7	23
105	Non-denaturing solubilization of inclusion bodies. <i>Current Pharmaceutical Biotechnology</i> , 2010 , 11, 309-126		23
104	The mechanism of increased elution volume of proteins by polyethylene glycol. <i>Analytical Biochemistry</i> , 1985 , 144, 267-8	3.1	23
103	Multi-faceted arginine: mechanism of the effects of arginine on protein. <i>Current Protein and Peptide Science</i> , 2014 , 15, 608-20	2.8	23
102	Charge state of arginine as an additive on heat-induced protein aggregation. <i>International Journal of Biological Macromolecules</i> , 2016 , 87, 563-9	7.9	22
101	The solubility of nucleobases in aqueous arginine solutions. <i>Archives of Biochemistry and Biophysics</i> , 2010 , 497, 90-6	4.1	22
100	Determination of carbohydrate contents from excess light scattering. <i>Analytical Biochemistry</i> , 2001 , 299, 158-61	3.1	22

99	Co-operative thermal inactivation of herpes simplex virus and influenza virus by arginine and NaCl. <i>International Journal of Pharmaceutics</i> , 2009 , 366, 99-102	6.5	21
98	Mechanism of protein desorption from 4-mercaptoethylpyridine resins by arginine solutions. <i>Journal of Chromatography A</i> , 2014 , 1373, 141-8	4.5	20
97	Antiviral effect of arginine against herpes simplex virus type 1. <i>International Journal of Molecular Medicine</i> , 2009 , 23, 495-9	4.4	20
96	Halophilic beta-lactamase as a new solubility- and folding-enhancing tag protein: production of native human interleukin 1alpha and human neutrophil alpha-defensin. <i>Applied Microbiology and Biotechnology</i> , 2010 , 86, 649-58	5.7	20
95	Butyroyl-arginine as a potent virus inactivation agent. <i>International Journal of Pharmaceutics</i> , 2008 , 361, 92-8	6.5	20
94	Disulfide structure and N-glycosylation sites of an extracellular domain of granulocyte-colony stimulating factor receptor. <i>Biochemistry</i> , 1996 , 35, 13040-6	3.2	20
93	Hydrophobic interaction chromatography in alkaline pH. <i>Analytical Biochemistry</i> , 1989 , 182, 266-70	3.1	20
92	Polyethylene glycol behaves like weak organic solvent. <i>Biopolymers</i> , 2012 , 97, 117-22	2.2	18
91	Secretory production of single-chain antibody (scFv) in <i>Brevibacillus choshinensis</i> using novel fusion partner. <i>Applied Microbiology and Biotechnology</i> , 2013 , 97, 8569-80	5.7	17
90	Characterization of arginine as a solvent additive: a halophilic enzyme as a model protein. <i>Protein and Peptide Letters</i> , 2005 , 12, 649-53	1.9	17
89	Immobilized metal affinity chromatography in the presence of arginine. <i>Biochemical and Biophysical Research Communications</i> , 2009 , 381, 306-10	3.4	16
88	A novel "reverse screening" to identify refolding additives for activin-A. <i>Protein Expression and Purification</i> , 2006 , 47, 45-51	2	16
87	Refractive index of proteins in organic solvents. <i>Analytical Biochemistry</i> , 1999 , 271, 119-20	3.1	16
86	Thermal aggregation of human immunoglobulin G in arginine solutions: Contrasting effects of stabilizers and destabilizers. <i>International Journal of Biological Macromolecules</i> , 2017 , 104, 650-655	7.9	15
85	Protein aggregation under high concentration/density state during chromatographic and ultrafiltration processes. <i>International Journal of Biological Macromolecules</i> , 2017 , 95, 1153-1158	7.9	15
84	Induced binding of proteins by ammonium sulfate in affinity and ion-exchange column chromatography. <i>Journal of Proteomics</i> , 2007 , 70, 493-8		15
83	Opposing effects of NaCl on reversibility and thermal stability of halophilic beta-lactamase from a moderate halophile, <i>Chromohalobacter</i> sp. 560. <i>Biophysical Chemistry</i> , 2006 , 119, 316-20	3.5	15
82	Alternative downstream processes for production of antibodies and antibody fragments. <i>Biochimica Et Biophysica Acta - Proteins and Proteomics</i> , 2014 , 1844, 2032-2040	4	14

81	Dependence of ethanol effects on protein charges. <i>International Journal of Biological Macromolecules</i> , 2014 , 68, 169-72	7.9	14
80	The structure analysis of Humanin analog, AGA-(C8R)HNG17, by circular dichroism and sedimentation equilibrium: comparison with the parent molecule. <i>International Journal of Biological Macromolecules</i> , 2008 , 43, 88-93	7.9	14
79	Structure-based analysis reveals hydration changes induced by arginine hydrochloride. <i>Biophysical Chemistry</i> , 2008 , 137, 105-9	3.5	14
78	Characterization of keratinocyte growth factor binding to heparin and dextran sulfate. <i>Archives of Biochemistry and Biophysics</i> , 1996 , 332, 41-6	4.1	14
77	Antiviral effect of octyl gallate against influenza and other RNA viruses. <i>International Journal of Molecular Medicine</i> , 2007 , 19, 685-8	4.4	14
76	Effects of arginine on multimodal anion exchange chromatography. <i>Protein Expression and Purification</i> , 2015 , 116, 105-12	2	13
75	Utilization of Arg-elution method for FLAG-tag based chromatography. <i>Protein Expression and Purification</i> , 2009 , 67, 148-55	2	13
74	Interactions between NFkappaB and its inhibitor ikappaB: biophysical characterization of a NFkappaB/ikappaB-alpha complex. <i>The Protein Journal</i> , 1998 , 17, 757-63		13
73	Allantoin and hydantoin as new protein aggregation suppressors. <i>International Journal of Biological Macromolecules</i> , 2018 , 114, 497-503	7.9	12
72	The stabilization of beta-lactoglobulin by glycine and NaCl. <i>Biopolymers</i> , 1989 , 28, 1397-401	2.2	12
71	The effects of allantoin, arginine and NaCl on thermal melting and aggregation of ribonuclease, bovine serum albumin and lysozyme. <i>International Journal of Biological Macromolecules</i> , 2018 , 107, 1692-1696	7.9	11
70	Stabilizing and destabilizing effects of arginine on deoxyribonucleic acid. <i>International Journal of Biological Macromolecules</i> , 2010 , 46, 217-22	7.9	11
69	Screening of effective column rinse solvent for Protein-A chromatography. <i>Protein Expression and Purification</i> , 2010 , 70, 218-23	2	11
68	Synergistic virus inactivation effects of arginine. <i>Biotechnology Journal</i> , 2009 , 4, 174-8	5.6	11
67	Solvent-induced virus inactivation by acidic arginine solution. <i>International Journal of Molecular Medicine</i> , 2010 , 25, 433-7	4.4	11
66	Novel strategy with acidic arginine solution for the treatment of influenza A virus infection. <i>Experimental and Therapeutic Medicine</i> , 2010 , 1, 251-256	2.1	11
65	Recombinant therapeutic protein vaccines. <i>Protein and Peptide Letters</i> , 2013 , 20, 1324-44	1.9	11
64	Agarose native gel electrophoresis of proteins. <i>International Journal of Biological Macromolecules</i> , 2019 , 140, 668-671	7.9	10

63	Halophilic characterization of starch-binding domain from <i>Kocuria varians</i> α -amylase. <i>International Journal of Biological Macromolecules</i> , 2012 , 50, 95-102	7.9	10
62	Arginine inactivates human herpesvirus 2 and inhibits genital herpesvirus infection. <i>International Journal of Molecular Medicine</i> , 2012 , 30, 1307-12	4.4	10
61	Structure and solubility of interleukin-2 in sodium dodecyl sulfate. <i>International Journal of Peptide and Protein Research</i> , 1994 , 43, 583-7		10
60	Fractionation of polyclonal antibodies to fragments of a neuroreceptor using three increasingly chaotropic solvents. <i>Biomedical Applications</i> , 1999 , 728, 49-57		10
59	Structural insights into assembly and function of the RSC chromatin remodeling complex. <i>Nature Structural and Molecular Biology</i> , 2021 , 28, 71-80	17.6	10
58	Isoform separation of proteins by mixed-mode chromatography. <i>Protein Expression and Purification</i> , 2015 , 116, 144-51	2	9
57	Agarose native gel electrophoresis for characterization of antibodies. <i>International Journal of Biological Macromolecules</i> , 2020 , 151, 885-890	7.9	9
56	Analysis of protein denaturation, aggregation and post-translational modification by agarose native gel electrophoresis. <i>International Journal of Biological Macromolecules</i> , 2021 , 172, 589-596	7.9	9
55	Application of native polyacrylamide gel electrophoresis for protein analysis: Bovine serum albumin as a model protein. <i>International Journal of Biological Macromolecules</i> , 2019 , 125, 566-571	7.9	9
54	Feasibility of circular dichroism to study protein structure at extreme concentrations. <i>International Journal of Biological Macromolecules</i> , 2019 , 132, 1290-1295	7.9	8
53	A study of the small-molecule system used to investigate the effect of arginine on antibody elution in hydrophobic charge-induction chromatography. <i>Protein Expression and Purification</i> , 2017 , 129, 44-52	2	8
52	Arginine as a synergistic virucidal agent. <i>Molecules</i> , 2010 , 15, 1408-24	4.8	8
51	Effect of counter ions of arginine as an additive for the solubilization of protein and aromatic compounds. <i>International Journal of Biological Macromolecules</i> , 2016 , 91, 471-6	7.9	8
50	Salt-dependent elution of uncharged aromatic solutes in ion-exchange chromatography. <i>Journal of Chromatography A</i> , 2018 , 1546, 46-55	4.5	7
49	Halophilic properties of metal binding protein characterized by high histidine content from <i>Chromohalobacter salexigens</i> DSM3043. <i>Protein Journal</i> , 2012 , 31, 175-83	3.9	7
48	The biological activity of Humanin analogs correlates with structure stabilities in solution. <i>International Journal of Biological Macromolecules</i> , 2011 , 49, 93-7	7.9	7
47	Salting-in effects offset MgCL(2)-induced refolding of nucleoside diphosphate kinase. <i>Protein and Peptide Letters</i> , 2003 , 10, 575-80	1.9	7
46	Excluded Cosolvent in Chromatography. <i>Journal of Pharmaceutical Sciences</i> , 2018 , 107, 2297-2305	3.9	6

45	Structure of three Humanin peptides with different activities upon interaction with liposome. <i>International Journal of Biological Macromolecules</i> , 2011 , 48, 360-3	7.9	6
44	Capto MMC mixed-mode chromatography of murine and rabbit antibodies. <i>Protein Expression and Purification</i> , 2016 , 127, 105-110	2	6
43	Acetonitrile as solvent for protein interaction analysis. <i>International Journal of Biological Macromolecules</i> , 2018 , 114, 728-732	7.9	5
42	Modulation of small molecule solubility and protein binding by arginine. <i>Molecular Medicine Reports</i> , 2010 , 3, 833-6	2.9	5
41	Structure changes of natively disordered Humanin in the presence of lipid. <i>International Journal of Biological Macromolecules</i> , 2010 , 46, 375-9	7.9	5
40	High solubility supports efficient refolding of thermally unfolded β -lactamase. <i>International Journal of Biological Macromolecules</i> , 2010 , 47, 706-9	7.9	5
39	Active form of neuroprotective Humanin, HN, and inactive analog, S7A-HN, are monomeric and disordered in aqueous phosphate solution at pH 6.0; No correlation of solution structure with activity. <i>Protein and Peptide Letters</i> , 2009 , 16, 132-7	1.9	5
38	The complex structure transition of Humanin peptides by sodium dodecylsulfate and trifluoroethanol. <i>Protein and Peptide Letters</i> , 2008 , 15, 510-5	1.9	5
37	Structure analysis of activity-dependent neurotrophic factor 9 by circular dichroism and sedimentation equilibrium. <i>Journal of Molecular Neuroscience</i> , 2007 , 33, 262-7	3.3	5
36	Western blotting analysis of proteins separated by agarose native gel electrophoresis. <i>International Journal of Biological Macromolecules</i> , 2021 , 166, 1106-1110	7.9	5
35	Nucleoside Diphosphate Kinase from Psychrophilic Pseudoalteromonas sp. AS-131 Isolated from Antarctic Ocean. <i>Protein Journal</i> , 2015 , 34, 275-83	3.9	4
34	Hydantoin and Its Derivatives Reduce the Viscosity of Concentrated Antibody Formulations by Inhibiting Associations via Hydrophobic Amino Acid Residues. <i>Industrial & Engineering Chemistry Research</i> , 2019 , 58, 16296-16306	3.9	4
33	Activity-dependent neurotrophic factor, ADNF, determines the structure characteristics of Colivelin, a fusion protein of ADNF9 and Humanin analog. <i>Journal of Peptide Science</i> , 2008 , 14, 631-6	2.1	4
32	Effects of allantoin and dimethyl sulfoxide on the thermal aggregation of lysozyme. <i>International Journal of Biological Macromolecules</i> , 2018 , 119, 180-185	7.9	3
31	Amyloid fibril formation in vitro from halophilic metal binding protein: its high solubility and reversibility minimized formation of amorphous protein aggregations. <i>Protein Science</i> , 2013 , 22, 1582-91	6.3	3
30	Antiviral and virucidal activities of n-tocoyl-L-arginine ethyl ester. <i>Advances in Virology</i> , 2011 , 2011, 572868	1.9	3
29	Analysis of proteins by agarose native gel electrophoresis in the presence of solvent additives. <i>International Journal of Biological Macromolecules</i> , 2021 , 198, 26-26	7.9	3
28	Stress-free chromatography: affinity chromatography. <i>Current Pharmaceutical Biotechnology</i> , 2009 , 10, 456-60	2.6	3

27	Review on the Application of Mixed-mode Chromatography for Separation of Structure Isoforms. <i>Current Protein and Peptide Science</i> , 2019 , 20, 56-60	2.8	3
26	Structure Analysis of Proteins and Peptides by Difference Circular Dichroism Spectroscopy. <i>Protein Journal</i> , 2021 , 40, 867-875	3.9	3
25	Insoluble expression of highly soluble halophilic metal binding protein for metal ion biosorption: Application of aggregation-prone peptide from hen egg white lysozyme. <i>Protein Expression and Purification</i> , 2019 , 156, 50-57	2	3
24	Optimization and application of silver staining of non-glycosylated and glycosylated proteins and nucleic acids for agarose native gel electrophoresis. <i>International Journal of Biological Macromolecules</i> , 2021 , 189, 869-878	7.9	3
23	Inactive C8A-humanin analog is as stable as a potent S14G-humanin analog. <i>Molecular Medicine Reports</i> , 2014 , 9, 375-9	2.9	2
22	Refolding Technology for scFv Using a New Detergent, N-Lauroyl-L-glutamate and Arginine. <i>Antibodies</i> , 2012 , 1, 215-238	7	2
21	Stress-free chromatography: IEC and HIC. <i>Current Pharmaceutical Biotechnology</i> , 2009 , 10, 461-3	2.6	2
20	Gel-electrophoresis based method for biomolecular interaction. <i>Methods in Cell Biology</i> , 2022 ,	1.8	2
19	The effects of N-acetyltryptophan and caprylic acid on protein aggregation. <i>Journal of Biological Macromolecules</i> , 2016 , 16, 3-7	0.4	2
18	Technical Capabilities and Limitations of Optical Spectroscopy and Calorimetry Using Water-Miscible Solvents: The Case of Dimethyl Sulfoxide, Acetonitrile, and 1,4-Dioxane. <i>Journal of Pharmaceutical Sciences</i> , 2020 , 109, 524-531	3.9	2
17	The Glucagon-Like Peptide 2 Analog Teduglutide Reversibly Associates to Form Pentamers. <i>Journal of Pharmaceutical Sciences</i> , 2020 , 109, 775-784	3.9	2
16	Recombinant production of native proteins from Escherichia coli. <i>Pharmaceutical Biotechnology</i> , 2002 , 13, 27-60		2
15	Western blotting of native proteins from agarose gels.. <i>BioTechniques</i> , 2022 ,	2.5	2
14	Solvent Interactions with Proteins and Other Macromolecules 2011 , 277-360		1
13	Short neuroprotective peptides, ADFN9 and NAP, are structurally disordered and monomeric in PBS. <i>International Journal of Biological Macromolecules</i> , 2009 , 45, 8-11	7.9	1
12	Isoform Separation by a Mixed-mode Resin, TOYOPEARL MX-Trp-650M. <i>Current Protein and Peptide Science</i> , 2019 , 20, 61-64	2.8	1
11	Case Studies Involving Protein Aggregation		1
10	Classification of protein solubilizing additives by fluorescence assay.. <i>International Journal of Biological Macromolecules</i> , 2022 , 203, 695-695	7.9	0

- 9 Protein Solvent Interaction: Transition of Protein-solvent Interaction Concept from Basic Research into Solvent Manipulation of Chromatography. *Current Protein and Peptide Science*, **2019**, 20, 34-39 2.8 ○
- 8 Two Elution Mechanisms of MEP Chromatography. *Current Protein and Peptide Science*, **2019**, 20, 28-33 2.8 ○
- 7 A tribute to Dr. Serge N. Timasheff, our mentor. *Biophysical Reviews*, **2021**, 13, 459-484 3.7 ○
- 6 Protein aggregation suppressor arginine as an effective mouth cleaning agent. *International Journal of Biological Macromolecules*, **2019**, 122, 224-227 7.9 ○
- 5 Aromatic interaction of hydantoin compounds leads to virucidal activities. *Biophysical Chemistry*, **2021**, 275, 106621 3.5 ○
- 4 Insight into the protein salting-in mechanism of arginine, magnesium chloride and ethylene glycol: Solvent interaction with aromatic solutes. *International Journal of Biological Macromolecules*, **2021**, 188, 670-677 7.9 ○
- 3 A New Method to Characterize Conformation-Specific Antibody by a Combination of Agarose Native Gel Electrophoresis and Contact Blotting. *Antibodies*, **2022**, 11, 36 7 ○
- 2 VIRUCIDAL ABILITY OF ARGININE AND ITS POSSIBLE APPLICATION AS AN ANTIHERPETIC AGENT **2012**, 435-449
- 1 Elution of antibodies from a Protein-A column by aqueous arginine solutions. *Protein Expression and Purification*, **2004**, 36, 244-244 2