

# Tsutomu Arakawa

## List of Publications by Year in descending order

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Version: 2024-02-01

188  
papers

14,174  
citations

26567

56  
h-index

20900

115  
g-index

194  
all docs

194  
docs citations

194  
times ranked

9308  
citing authors

| #  | ARTICLE  | IF  | CITATIONS |
|----|--|-----|-----------|
| 1  | Analysis of proteins by agarose native gel electrophoresis in the presence of solvent additives. <i>International Journal of Biological Macromolecules</i> , 2022, 198, 26-36.   | 3.6 | 16        |
| 2  | Gel-electrophoresis based method for biomolecular interaction. <i>Methods in Cell Biology</i> , 2022, , 67-95.   | 0.5 | 12        |
| 3  | Classification of protein solubilizing solutes by fluorescence assay. <i>International Journal of Biological Macromolecules</i> , 2022, 203, 695-702.  | 3.6 | 3         |
| 4  | Western blotting of native proteins from agarose gels. <i>BioTechniques</i> , 2022, 72, 207-218.   | 0.8 | 11        |
| 5  | A New Method to Characterize Conformation-Specific Antibody by a Combination of Agarose Native Gel Electrophoresis and Contact Blotting. <i>Antibodies</i> , 2022, 11, 36.   | 1.2 | 6         |
| 6  | Analysis of bovine serum albumin unfolding in the absence and presence of ATP by SYPRO Orange staining of agarose native gel electrophoresis. <i>Analytical Biochemistry</i> , 2022, 654, 114817.  | 1.1 | 6         |
| 7  | Western blotting analysis of proteins separated by agarose native gel electrophoresis. <i>International Journal of Biological Macromolecules</i> , 2021, 166, 1106-1110.   | 3.6 | 17        |
| 8  | Structural insights into assembly and function of the RSC chromatin remodeling complex. <i>Nature Structural and Molecular Biology</i> , 2021, 28, 71-80.  | 3.6 | 25        |
| 9  | 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.                                     | 3.6 | 25        |
| 10 | A tribute to Dr. Serge N. Timasheff, our mentor. <i>Biophysical Reviews</i> , 2021, 13, 459-484.   | 1.5 | 1         |
| 11 | Aromatic interaction of hydantoin compounds leads to virucidal activities. <i>Biophysical Chemistry</i> , 2021, 275, 106621.   | 1.5 | 3         |
| 12 | Insight into the protein salting-in mechanism of arginine, magnesium chloride and ethylene glycol: Solvent interaction with aromatic solutes. <i>International Journal of Biological Macromolecules</i> , 2021, 188, 670-677.                | 3.6 | 1         |
| 13 | 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.      | 3.6 | 12        |
| 14 | Structure Analysis of Proteins and Peptides by Difference Circular Dichroism Spectroscopy. <i>Protein Journal</i> , 2021, 40, 867-875.   | 0.7 | 4         |
| 15 | The Glucagon-Like Peptide 2 Analog Teduglutide Reversibly Associates to Form Pentamers. <i>Journal of Pharmaceutical Sciences</i> , 2020, 109, 775-784.  | 1.6 | 4         |
| 16 | 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. | 1.6 | 4         |
| 17 | Agarose native gel electrophoresis for characterization of antibodies. <i>International Journal of Biological Macromolecules</i> , 2020, 151, 885-890.   | 3.6 | 24        |
| 18 | Hydantoin and Its Derivatives Reduce the Viscosity of Concentrated Antibody Formulations by Inhibiting Associations via Hydrophobic Amino Acid Residues. <i>Industrial &amp; Engineering Chemistry Research</i> , 2019, 58, 16296-16306.     | 1.8 | 7         |

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|----|---|-----|-----------|
| 19 | Agarose native gel electrophoresis of proteins. International Journal of Biological Macromolecules, 2019, 140, 668-671.   | 3.6 | 26        |
| 20 | Feasibility of circular dichroism to study protein structure at extreme concentrations. International Journal of Biological Macromolecules, 2019, 132, 1290-1295.   | 3.6 | 14        |
| 21 | Application of native polyacrylamide gel electrophoresis for protein analysis: Bovine serum albumin as a model protein. International Journal of Biological Macromolecules, 2019, 125, 566-571.                                 | 3.6 | 12        |
| 22 | Insoluble expression of highly soluble halophilic metal binding protein for metal ion biosorption: Application of aggregation-prone peptide from hen egg white lysozyme. Protein Expression and Purification, 2019, 156, 50-57. | 0.6 | 4         |
| 23 | Protein aggregation suppressor arginine as an effective mouth cleaning agent. International Journal of Biological Macromolecules, 2019, 122, 224-227.   | 3.6 | 1         |
| 24 | Salt-dependent elution of uncharged aromatic solutes in ion-exchange chromatography. Journal of Chromatography A, 2018, 1546, 46-55.  | 1.8 | 12        |
| 25 | Allantoin and hydantoin as new protein aggregation suppressors. International Journal of Biological Macromolecules, 2018, 114, 497-503.   | 3.6 | 16        |
| 26 | Acetonitrile as solvent for protein interaction analysis. International Journal of Biological Macromolecules, 2018, 114, 728-732.   | 3.6 | 9         |
| 27 | The effects of allantoin, arginine and NaCl on thermal melting and aggregation of ribonuclease, bovine serum albumin and lysozyme. International Journal of Biological Macromolecules, 2018, 107, 1692-1696.                    | 3.6 | 15        |
| 28 | Effects of allantoin and dimethyl sulfoxide on the thermal aggregation of lysozyme. International Journal of Biological Macromolecules, 2018, 119, 180-185.   | 3.6 | 5         |
| 29 | Excluded Cosolvent in Chromatography. Journal of Pharmaceutical Sciences, 2018, 107, 2297-2305.   | 1.6 | 9         |
| 30 | Review on the Application of Mixed-mode Chromatography for Separation of Structure Isoforms. Current Protein and Peptide Science, 2018, 20, 56-60.  | 0.7 | 5         |
| 31 | Isoform Separation by a Mixed-mode Resin, TOYOPEARL MX-Trp-650M. Current Protein and Peptide Science, 2018, 20, 61-64.  | 0.7 | 2         |
| 32 | Protein Solvent Interaction: Transition of Protein-solvent Interaction Concept from Basic Research into Solvent Manipulation of Chromatography. Current Protein and Peptide Science, 2018, 20, 34-39.                           | 0.7 | 1         |
| 33 | Two Elution Mechanisms of MEP Chromatography. Current Protein and Peptide Science, 2018, 20, 28-33.   | 0.7 | 2         |
| 34 | Thermal aggregation of human immunoglobulin G in arginine solutions: Contrasting effects of stabilizers and destabilizers. International Journal of Biological Macromolecules, 2017, 104, 650-655.                              | 3.6 | 22        |
| 35 | Protein aggregation under high concentration/density state during chromatographic and ultrafiltration processes. International Journal of Biological Macromolecules, 2017, 95, 1153-1158.                                       | 3.6 | 25        |
| 36 | A study of the small-molecule system used to investigate the effect of arginine on antibody elution in hydrophobic charge-induction chromatography. Protein Expression and Purification, 2017, 129, 44-52.                      | 0.6 | 10        |

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|----|--|-----|-----------|
| 37 | 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, 471-476.                                 | 3.6 | 9         |
| 38 | Capto MMC mixed-mode chromatography of murine and rabbit antibodies. <i>Protein Expression and Purification</i> , 2016, 127, 105-110.  | 0.6 | 7         |
| 39 | Charge state of arginine as an additive on heat-induced protein aggregation.. <i>International Journal of Biological Macromolecules</i> , 2016, 87, 563-569.   | 3.6 | 31        |
| 40 | The effects of N-acetyltryptophan and caprylic acid on protein aggregation. <i>Journal of Biological Macromolecules</i> , 2016, 16, 3-7.   | 0.2 | 2         |
| 41 | Effects of arginine on multimodal anion exchange chromatography. <i>Protein Expression and Purification</i> , 2015, 116, 105-112.  | 0.6 | 16        |
| 42 | Nucleoside Diphosphate Kinase from Psychrophilic Pseudoalteromonas sp. AS-131 Isolated from Antarctic Ocean. <i>Protein Journal</i> , 2015, 34, 275-283.   | 0.7 | 4         |
| 43 | Isoform separation of proteins by mixed-mode chromatography. <i>Protein Expression and Purification</i> , 2015, 116, 144-151.  | 0.6 | 10        |
| 44 | Inactive C8A-humanin analog is as stable as a potent S14G-humanin analog. <i>Molecular Medicine Reports</i> , 2014, 9, 375-379.  | 1.1 | 2         |
| 45 | Mechanism of protein desorption from 4-mercaptoethylpyridine resins by arginine solutions. <i>Journal of Chromatography A</i> , 2014, 1373, 141-148.   | 1.8 | 23        |
| 46 | Arginine and lysine reduce the high viscosity of serum albumin solutions for pharmaceutical injection. <i>Journal of Bioscience and Bioengineering</i> , 2014, 117, 539-543.   | 1.1 | 61        |
| 47 | Specific Decrease in Solution Viscosity of Antibodies by Arginine for Therapeutic Formulations. <i>Molecular Pharmaceutics</i> , 2014, 11, 1889-1896.  | 2.3 | 95        |
| 48 | Interaction of arginine with Capto MMC in multimodal chromatography. <i>Journal of Chromatography A</i> , 2014, 1338, 58-66.   | 1.8 | 36        |
| 49 | Alternative downstream processes for production of antibodies and antibody fragments. <i>Biochimica Et Biophysica Acta - Proteins and Proteomics</i> , 2014, 1844, 2032-2040.  | 1.1 | 17        |
| 50 | Dependence of ethanol effects on protein charges. <i>International Journal of Biological Macromolecules</i> , 2014, 68, 169-172.   | 3.6 | 20        |
| 51 | Multi-Faceted Arginine: Mechanism of the Effects of Arginine on Protein. <i>Current Protein and Peptide Science</i> , 2014, 15, 608-620.   | 0.7 | 33        |
| 52 | Secretory production of single-chain antibody (scFv) in <i>Brevibacillus choshinensis</i> using novel fusion partner. <i>Applied Microbiology and Biotechnology</i> , 2013, 97, 8569-8580.                                 | 1.7 | 17        |
| 53 | Amyloid fibril formation <i>in vitro</i> from halophilic metal binding protein: Its high solubility and reversibility minimized formation of amorphous protein aggregations. <i>Protein Science</i> , 2013, 22, 1582-1591. | 3.1 | 3         |
| 54 | Synergistic solubilization of porcine myosin in physiological salt solution by arginine. <i>International Journal of Biological Macromolecules</i> , 2013, 62, 647-651.  | 3.6 | 78        |

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|----|--|-----|-----------|
| 55 | Molecular Dynamics Simulation of the Arginine-Assisted Solubilization of Caffeic Acid: Intervention in the Interaction. <i>Journal of Physical Chemistry B</i> , 2013, 117, 7518-7527.             | 1.2 | 35        |
| 56 | Arginine Inhibits Adsorption of Proteins on Polystyrene Surface. <i>PLoS ONE</i> , 2013, 8, e70762.  | 1.1 | 28        |
| 57 | Recombinant Therapeutic Protein Vaccines. <i>Protein and Peptide Letters</i> , 2013, 20, 1324-1344.  | 0.4 | 13        |
| 58 | VIRUCIDAL ABILITY OF ARGININE AND ITS POSSIBLE APPLICATION AS AN ANTIHERPETIC AGENT. , 2012, , 435-449.  |     | 0         |
| 59 | Halophilic characterization of starch-binding domain from <i>Kocuria varians</i> $\alpha$ -amylase. <i>International Journal of Biological Macromolecules</i> , 2012, 50, 95-102.                  | 3.6 | 12        |
| 60 | Mechanistic insights into protein precipitation by alcohol. <i>International Journal of Biological Macromolecules</i> , 2012, 50, 865-871.   | 3.6 | 84        |
| 61 | Refolding Technology for scFv Using a New Detergent, N-Lauroyl-L-glutamate and Arginine. <i>Antibodies</i> , 2012, 1, 215-238.   | 1.2 | 3         |
| 62 | Arginine inactivates human herpesvirus 2 and inhibits genital herpesvirus infection. <i>International Journal of Molecular Medicine</i> , 2012, 30, 1307-1312.                                     | 1.8 | 12        |
| 63 | Polyethylene glycol behaves like weak organic solvent. <i>Biopolymers</i> , 2012, 97, 117-122.   | 1.2 | 21        |
| 64 | Halophilic Properties of Metal Binding Protein Characterized by High Histidine Content from <i>Chromohalobacter salexigens</i> DSM3043. <i>Protein Journal</i> , 2012, 31, 175-183.                | 0.7 | 8         |
| 65 | Structure of three Humanin peptides with different activities upon interaction with liposome. <i>International Journal of Biological Macromolecules</i> , 2011, 48, 360-363.                       | 3.6 | 6         |
| 66 | The biological activity of Humanin analogs correlates with structure stabilities in solution. <i>International Journal of Biological Macromolecules</i> , 2011, 49, 93-97.                         | 3.6 | 8         |
| 67 | 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.    | 0.6 | 30        |
| 68 | 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. | 0.6 | 38        |
| 69 | Interactions of formulation excipients with proteins in solution and in the dried state. <i>Advanced Drug Delivery Reviews</i> , 2011, 63, 1053-1073.  | 6.6 | 307       |
| 70 | Arginine increases the solubility of alkyl gallates through interaction with the aromatic ring. <i>Journal of Biochemistry</i> , 2011, 149, 389-394.   | 0.9 | 36        |
| 71 | Antiviral and Virucidal Activities of N-Cocoyl-L-Arginine Ethyl Ester. <i>Advances in Virology</i> , 2011, 2011, 1-6.  | 0.5 | 3         |
| 72 | Chemical and Pharmacological Chaperones: Application for Recombinant Protein Production and Protein Folding Diseases. <i>Current Medicinal Chemistry</i> , 2011, 18, 1-15.                         | 1.2 | 70        |

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|----|--|-----|-----------|
| 73 | Solvent-induced virus inactivation by acidic arginine solution. <i>International Journal of Molecular Medicine</i> , 2010, 25, 433-7.  | 1.8 | 15        |
| 74 | Novel strategy with acidic arginine solution for the treatment of influenza A virus infection. <i>Experimental and Therapeutic Medicine</i> , 2010, 1, 251-256.  | 0.8 | 13        |
| 75 | Halophilic $\beta$ -lactamase as a new solubility- and folding-enhancing tag protein: production of native human interleukin 1 $\beta$ and human neutrophil $\alpha$ -defensin. <i>Applied Microbiology and Biotechnology</i> , 2010, 86, 649-658. | 1.7 | 21        |
| 76 | The critical role of mobile phase composition in size exclusion chromatography of protein pharmaceuticals. <i>Journal of Pharmaceutical Sciences</i> , 2010, 99, 1674-1692.  | 1.6 | 188       |
| 77 | Modulation of small molecule solubility and protein binding by arginine. <i>Molecular Medicine Reports</i> , 2010, 3, 833-6.   | 1.1 | 5         |
| 78 | Non-Denaturing Solubilization of Inclusion Bodies. <i>Current Pharmaceutical Biotechnology</i> , 2010, 11, 309-312.  | 0.9 | 27        |
| 79 | Arginine-Assisted Solubilization System for Drug Substances: Solubility Experiment and Simulation. <i>Journal of Physical Chemistry B</i> , 2010, 114, 13455-13462.  | 1.2 | 82        |
| 80 | Arginine as a Synergistic Virucidal Agent. <i>Molecules</i> , 2010, 15, 1408-1424.   | 1.7 | 8         |
| 81 | Stabilizing and destabilizing effects of arginine on deoxyribonucleic acid. <i>International Journal of Biological Macromolecules</i> , 2010, 46, 217-222.   | 3.6 | 14        |
| 82 | Structure changes of natively disordered Humanin in the presence of lipid. <i>International Journal of Biological Macromolecules</i> , 2010, 46, 375-379.  | 3.6 | 5         |
| 83 | High solubility supports efficient refolding of thermally unfolded $\beta$ -lactamase. <i>International Journal of Biological Macromolecules</i> , 2010, 47, 706-709.  | 3.6 | 6         |
| 84 | Screening of effective column rinse solvent for Protein-A chromatography. <i>Protein Expression and Purification</i> , 2010, 70, 218-223.  | 0.6 | 13        |
| 85 | MEP HyperCel chromatography II: Binding, washing and elution. <i>Protein Expression and Purification</i> , 2010, 71, 168-173.  | 0.6 | 46        |
| 86 | The solubility of nucleobases in aqueous arginine solutions. <i>Archives of Biochemistry and Biophysics</i> , 2010, 497, 90-96.  | 1.4 | 27        |
| 87 | Antiviral effect of arginine against herpes simplex virus type 1. <i>International Journal of Molecular Medicine</i> , 2009, 23, 495-9.  | 1.8 | 24        |
| 88 | Antiviral and Virucidal Activities of Natural Products. <i>Current Medicinal Chemistry</i> , 2009, 16, 2485-2497.  | 1.2 | 40        |
| 89 | 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.   | 2.6 | 21        |
| 90 | Synergistic virus inactivation effects of arginine. <i>Biotechnology Journal</i> , 2009, 4, 174-178.   | 1.8 | 12        |

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|-----|---|-----|-----------|
| 91  | Immobilized metal affinity chromatography in the presence of arginine. <i>Biochemical and Biophysical Research Communications</i> , 2009, 381, 306-310.   | 1.0 | 20        |
| 92  | MEP chromatography of antibody and Fc-fusion protein using aqueous arginine solution. <i>Protein Expression and Purification</i> , 2009, 63, 158-163.   | 0.6 | 63        |
| 93  | Utilization of Arg-elution method for FLAG-tag based chromatography. <i>Protein Expression and Purification</i> , 2009, 67, 148-155.  | 0.6 | 13        |
| 94  | Short neuroprotective peptides, ADFN9 and NAP, are structurally disordered and monomeric in PBS. <i>International Journal of Biological Macromolecules</i> , 2009, 45, 8-11.  | 3.6 | 2         |
| 95  | Active Form of Neuroprotective Humanin, HN, and Inactive Analog, S7AHN, 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, 132-137. | 0.4 | 6         |
| 96  | Stress-Free Chromatography: IEC and HIC. <i>Current Pharmaceutical Biotechnology</i> , 2009, 10, 461-463.   | 0.9 | 2         |
| 97  | Mechanisms of Protein Aggregation. <i>Current Pharmaceutical Biotechnology</i> , 2009, 10, 348-351.   | 0.9 | 246       |
| 98  | Effect of Additives on Protein Aggregation. <i>Current Pharmaceutical Biotechnology</i> , 2009, 10, 400-407.  | 0.9 | 211       |
| 99  | Stress-Free Chromatography: Affinity Chromatography. <i>Current Pharmaceutical Biotechnology</i> , 2009, 10, 456-460.   | 0.9 | 5         |
| 100 | Activity-dependent neurotrophic factor, ADFN, determines the structure characteristics of Colivelin, a fusion protein of ADFN9 and Humanin analog. <i>Journal of Peptide Science</i> , 2008, 14, 631-636.   | 0.8 | 6         |
| 101 | Arginine Facilitates Inactivation of Enveloped Viruses. <i>Journal of Pharmaceutical Sciences</i> , 2008, 97, 3067-3073.  | 1.6 | 36        |
| 102 | Structure-based analysis reveals hydration changes induced by arginine hydrochloride. <i>Biophysical Chemistry</i> , 2008, 137, 105-109.  | 1.5 | 15        |
| 103 | Solubility enhancement of gluten and organic compounds by arginine. <i>International Journal of Pharmaceutics</i> , 2008, 355, 220-223.   | 2.6 | 51        |
| 104 | Butyryl-arginine as a potent virus inactivation agent. <i>International Journal of Pharmaceutics</i> , 2008, 361, 92-98.  | 2.6 | 23        |
| 105 | Arginine Increases the Solubility of Coumarin: Comparison with Salting-in and Salting-out Additives. <i>Journal of Biochemistry</i> , 2008, 144, 363-369.   | 0.9 | 68        |
| 106 | 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.                          | 3.6 | 15        |
| 107 | The Complex Structure Transition of Humanin Peptides by Sodium Dodecylsulfate and Trifluoroethanol. <i>Protein and Peptide Letters</i> , 2008, 15, 510-515.   | 0.4 | 6         |
| 108 | Solvent Modulation of Column Chromatography. <i>Protein and Peptide Letters</i> , 2008, 15, 544-555.  | 0.4 | 34        |

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|-----|---|-----|-----------|
| 109 | Improved performance of column chromatography by arginine: Dye-affinity chromatography. <i>Protein Expression and Purification</i> , 2007, 52, 410-414.   | 0.6 | 43        |
| 110 | The effects of arginine on protein binding and elution in hydrophobic interaction and ion-exchange chromatography. <i>Protein Expression and Purification</i> , 2007, 54, 110-116.                        | 0.6 | 94        |
| 111 | Effects of salts on proteinâ€™surface interactions: applications for column chromatography. <i>Journal of Pharmaceutical Sciences</i> , 2007, 96, 1677-1690.  | 1.6 | 95        |
| 112 | Suppression of protein interactions by arginine: A proposed mechanism of the arginine effects. <i>Biophysical Chemistry</i> , 2007, 127, 1-8.   | 1.5 | 439       |
| 113 | Protein precipitation and denaturation by dimethyl sulfoxide. <i>Biophysical Chemistry</i> , 2007, 131, 62-70.  | 1.5 | 260       |
| 114 | Arginine improves protein elution in hydrophobic interaction chromatography. <i>Journal of Chromatography A</i> , 2007, 1154, 81-86.  | 1.8 | 49        |
| 115 | Induced binding of proteins by ammonium sulfate in affinity and ion-exchange column chromatography. <i>Journal of Proteomics</i> , 2007, 70, 493-498.   | 2.4 | 15        |
| 116 | Structure Analysis of Activity-dependent Neurotrophic Factor 9 by Circular Dichroism and Sedimentation Equilibrium. <i>Journal of Molecular Neuroscience</i> , 2007, 33, 262-267.                         | 1.1 | 6         |
| 117 | Antiviral effect of octyl gallate against influenza and other RNA viruses. <i>International Journal of Molecular Medicine</i> , 2007, 19, 685-8.  | 1.8 | 14        |
| 118 | A novel â€™reverse screeningâ€™ to identify refolding additives for activin-A. <i>Protein Expression and Purification</i> , 2006, 47, 45-51.  | 0.6 | 17        |
| 119 | Effects of acid exposure on the conformation, stability, and aggregation of monoclonal antibodies. <i>Proteins: Structure, Function and Bioinformatics</i> , 2006, 66, 954-962.                           | 1.5 | 176       |
| 120 | The secondary structure analysis of a potent Ser14Gly analog of antiAlzheimer peptide, Humanin, by circular dichroism. <i>Journal of Peptide Science</i> , 2006, 12, 639-642.                             | 0.8 | 24        |
| 121 | Opposing effects of NaCl on reversibility and thermal stability of halophilic Î²-lactamase from a moderate halophile, <i>Chromohalobacter</i> sp. 560. <i>Biophysical Chemistry</i> , 2006, 119, 316-320. | 1.5 | 15        |
| 122 | Small molecule pharmacological chaperones: From thermodynamic stabilization to pharmaceutical drugs. <i>Biochimica Et Biophysica Acta - Proteins and Proteomics</i> , 2006, 1764, 1677-1687.              | 1.1 | 129       |
| 123 | Aggregation Suppression of Proteins by Arginine During Thermal Unfolding. <i>Protein and Peptide Letters</i> , 2006, 13, 921-927.   | 0.4 | 58        |
| 124 | Effective elution of antibodies by arginine and arginine derivatives in affinity column chromatography. <i>Analytical Biochemistry</i> , 2005, 345, 250-257.  | 1.1 | 116       |
| 125 | Arginine as an effective additive in gel permeation chromatography. <i>Journal of Chromatography A</i> , 2005, 1094, 49-55.   | 1.8 | 138       |
| 126 | Review: Why is Arginine Effective in Suppressing Aggregation?. <i>Protein and Peptide Letters</i> , 2005, 12, 613-619.  | 0.4 | 95        |



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|-----|---|-----|-----------|
| 127 | Characterization of Arginine as a Solvent Additive: A Halophilic Enzyme Model Protein. <i>Protein and Peptide Letters</i> , 2005, 12, 649-653.  | 0.4 | 18        |
| 128 | Nondenaturing solubilization of $\beta$ 2 microglobulin from inclusion bodies by l-arginine. <i>Biochemical and Biophysical Research Communications</i> , 2005, 328, 189-197.                     | 1.0 | 60        |
| 129 | Is arginine a protein-denaturant?. <i>Protein Expression and Purification</i> , 2005, 42, 1-6.  | 0.6 | 103       |
| 130 | Role of Arginine in Protein Refolding, Solubilization, and Purification. <i>Biotechnology Progress</i> , 2004, 20, 1301-1308.   | 1.3 | 378       |
| 131 | The Effects of Protein Stabilizers on Aggregation Induced by Multiple-Stresses. <i>ChemInform</i> , 2004, 35, no.   | 0.1 | 0         |
| 132 | Elution of antibodies from a Protein-A column by aqueous arginine solutions. <i>Protein Expression and Purification</i> , 2004, 36, 244-244.  | 0.6 | 0         |
| 133 | Elution of antibodies from a Protein-A column by aqueous arginine solutions. <i>Protein Expression and Purification</i> , 2004, 36, 244-248.  | 0.6 | 181       |
| 134 | Highly efficient renaturation of $\beta$ -lactamase isolated from moderately halophilic bacteria. <i>FEBS Letters</i> , 2004, 558, 7-12.  | 1.3 | 45        |
| 135 | Activation of halophilic nucleoside diphosphate kinase by a non-ionic osmolyte, trimethylamine N-oxide. <i>The Protein Journal</i> , 2003, 22, 345-351.   | 1.1 | 25        |
| 136 | Solubilization of active green fluorescent protein from insoluble particles by guanidine and arginine. <i>Biochemical and Biophysical Research Communications</i> , 2003, 312, 1383-1386.         | 1.0 | 134       |
| 137 | The effects of arginine on refolding of aggregated proteins: not facilitate refolding, but suppress aggregation. <i>Biochemical and Biophysical Research Communications</i> , 2003, 304, 148-152. | 1.0 | 324       |
| 138 | Practical considerations in refolding proteins from inclusion bodies. <i>Protein Expression and Purification</i> , 2003, 28, 1-8.   | 0.6 | 366       |
| 139 | Salting-In Effects offset Mgcl2-Induced Refolding of Nucleoside Diphosphate Kinase. <i>Protein and Peptide Letters</i> , 2003, 10, 575-580.   | 0.4 | 8         |
| 140 | Recombinant Production of Native Proteins from <i>Escherichia coli</i> . <i>Pharmaceutical Biotechnology</i> , 2002, 13, 27-60.   | 0.3 | 2         |
| 141 | Kinetic and Thermodynamic Analysis of Thermal Unfolding of Recombinant Erythropoietin. <i>Bioscience, Biotechnology and Biochemistry</i> , 2001, 65, 1321-1327.                                   | 0.6 | 31        |
| 142 | Determination of Carbohydrate Contents from Excess Light Scattering. <i>Analytical Biochemistry</i> , 2001, 299, 158-161.   | 1.1 | 24        |
| 143 | Factors affecting short-term and long-term stabilities of proteins. <i>Advanced Drug Delivery Reviews</i> , 2001, 46, 307-326.  | 6.6 | 428       |
| 144 | Protection of Bovine Serum Albumin from Aggregation by Tween 80. <i>Journal of Pharmaceutical Sciences</i> , 2000, 89, 646-651.   | 1.6 | 83        |

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|-----|--|-----|-----------|
| 145 | Refractive Index of Proteins in Aqueous Sodium Chloride. <i>Analytical Biochemistry</i> , 2000, 280, 327-329.  | 1.1 | 38        |
| 146 | Stabilizing effects of caprylate and acetyltryptophanate on heat-induced aggregation of bovine serum albumin. <i>BBA - Proteins and Proteomics</i> , 2000, 1479, 32-36.                                    | 2.1 | 44        |
| 147 | Protection of bovine serum albumin from aggregation by Tween 80. <i>Journal of Pharmaceutical Sciences</i> , 2000, 89, 646.  | 1.6 | 58        |
| 148 | Fractionation of polyclonal antibodies to fragments of a neuroreceptor using three increasingly chaotropic solvents. <i>Biomedical Applications</i> , 1999, 728, 49-57.                                    | 1.7 | 10        |
| 149 | Reversibility of heat-induced denaturation of the recombinant human megakaryocyte growth and development factor. <i>Pharmaceutical Research</i> , 1999, 16, 799-807.                                       | 1.7 | 36        |
| 150 | Refractive Index of Proteins in Organic Solvents. <i>Analytical Biochemistry</i> , 1999, 271, 119-120.   | 1.1 | 16        |
| 151 | Interactions between NFkappaB and its inhibitor ikappaB: biophysical characterization of a NFkappaB/ikappaB-alpha complex. <i>The Protein Journal</i> , 1998, 17, 757-763.                                 | 1.1 | 13        |
| 152 | FGF-18, a Novel Member of the Fibroblast Growth Factor Family, Stimulates Hepatic and Intestinal Proliferation. <i>Molecular and Cellular Biology</i> , 1998, 18, 6063-6074.                               | 1.1 | 128       |
| 153 | Effect of Three Elution Buffers on the Recovery and Structure of Monoclonal Antibodies. <i>Analytical Biochemistry</i> , 1997, 253, 236-245.   | 1.1 | 40        |
| 154 | Fractionation and Characterization of Polyclonal Antibodies Using Three Progressively More Chaotropic Solvents. <i>Analytical Biochemistry</i> , 1997, 253, 246-252.                                       | 1.1 | 28        |
| 155 | Disulfide Structure and N-Glycosylation Sites of an Extracellular Domain of Granulocyte-Colony Stimulating Factor Receptor. <i>Biochemistry</i> , 1996, 35, 13040-13046.                                   | 1.2 | 26        |
| 156 | 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, 1681-1691.                       | 1.2 | 200       |
| 157 | Characterization of Keratinocyte Growth Factor Binding to Heparin and Dextran Sulfate. <i>Archives of Biochemistry and Biophysics</i> , 1996, 332, 41-46.  | 1.4 | 15        |
| 158 | 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, 4886-4896.        | 1.2 | 74        |
| 159 | The effect of the reconstitution medium on aggregation of lyophilized recombinant interleukin-2 and ribonuclease A. <i>Pharmaceutical Research</i> , 1996, 13, 643-646.                                    | 1.7 | 49        |
| 160 | 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, 155-166. | 1.1 | 487       |
| 161 | Stabilization of Recombinant Human Keratinocyte Growth Factor by Osmolytes and Salts. <i>Journal of Pharmaceutical Sciences</i> , 1996, 85, 419-422.   | 1.6 | 60        |
| 162 | Stability of Recombinant Consensus Interferon to AirJet and Ultrasonic Nebulization. <i>Journal of Pharmaceutical Sciences</i> , 1995, 84, 1210-1214.  | 1.6 | 43        |

| #   | ARTICLE   | IF  | CITATIONS |
|-----|---|-----|-----------|
| 163 | 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, 1447-1452.                           | 1.7 | 58        |
| 164 | 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, 1250-1259. | 1.7 | 138       |
| 165 | Strategies To Suppress Aggregation of Recombinant Keratinocyte Growth Factor during Liquid Formulation Development. <i>Journal of Pharmaceutical Sciences</i> , 1994, 83, 1657-1661.                                      | 1.6 | 76        |
| 166 | Aggregation pathway of recombinant human keratinocyte growth factor and its stabilization. <i>Pharmaceutical Research</i> , 1994, 11, 1581-1587.  | 1.7 | 64        |
| 167 | Contribution of the Surface Free Energy Perturbation to Protein-Solvent Interactions. <i>Biochemistry</i> , 1994, 33, 15178-15189.  | 1.2 | 280       |
| 168 | Structure and solubility of interleukin-2 in sodium dodecyl sulfate. <i>International Journal of Peptide and Protein Research</i> , 1994, 43, 583-587.  | 0.1 | 10        |
| 169 | Factors affecting short-term and long-term stabilities of proteins. <i>Advanced Drug Delivery Reviews</i> , 1993, 10, 1-28.   | 6.6 | 186       |
| 170 | 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, 53-57.                      | 1.1 | 37        |
| 171 | Protein-solvent interactions in pharmaceutical formulations. <i>Pharmaceutical Research</i> , 1991, 08, 285-291.  | 1.7 | 190       |
| 172 | Why preferential hydration does not always stabilize the native structure of globular proteins. <i>Biochemistry</i> , 1990, 29, 1924-1931.  | 1.2 | 238       |
| 173 | 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.   | 1.4 | 113       |
| 174 | Preferential interactions determine protein solubility in three-component solutions: the magnesium chloride system. <i>Biochemistry</i> , 1990, 29, 1914-1923.  | 1.2 | 231       |
| 175 | The basis for toxicity of certain cryoprotectants: A hypothesis. <i>Cryobiology</i> , 1990, 27, 401-415.  | 0.3 | 244       |
| 176 | Hydrophobic interaction chromatography in alkaline pH. <i>Analytical Biochemistry</i> , 1989, 182, 266-270.   | 1.1 | 24        |
| 177 | The stabilization of $\beta$ -lactoglobulin by glycine and NaCl. <i>Biopolymers</i> , 1989, 28, 1397-1401.  | 1.2 | 13        |
| 178 | Mechanism of protein precipitation and stabilization by co-solvents. <i>Journal of Crystal Growth</i> , 1988, 90, 39-46.  | 0.7 | 139       |
| 179 | Abnormal solubility behavior of $\beta$ -lactoglobulin: salting-in by glycine and sodium chloride. <i>Biochemistry</i> , 1987, 26, 5147-5153.   | 1.2 | 90        |
| 180 | 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, 101-105.                       | 1.4 | 67        |

| #   | ARTICLE   | IF  | CITATIONS |
|-----|---|-----|-----------|
| 181 | Mechanism of polyethylene glycol interaction with proteins. <i>Biochemistry</i> , 1985, 24, 6756-6762.  | 1.2 | 446       |
| 182 | The mechanism of increased elution volume of proteins by polyethylene glycol. <i>Analytical Biochemistry</i> , 1985, 144, 267-268.                                  | 1.1 | 25        |
| 183 | [3]Theory of protein solubility. <i>Methods in Enzymology</i> , 1985, 114, 49-77.   | 0.4 | 317       |
| 184 | Mechanism of protein salting in and salting out by divalent cation salts: balance between hydration and salt binding. <i>Biochemistry</i> , 1984, 23, 5912-5923.    | 1.2 | 609       |
| 185 | Protein stabilization and destabilization by guanidinium salts. <i>Biochemistry</i> , 1984, 23, 5924-5929.  | 1.2 | 218       |
| 186 | Preferential interactions of proteins with solvent components in aqueous amino acid solutions. <i>Archives of Biochemistry and Biophysics</i> , 1983, 224, 169-177. | 1.4 | 320       |
| 187 | Stabilization of protein structure by sugars. <i>Biochemistry</i> , 1982, 21, 6536-6544.  | 1.2 | 1,050     |
| 188 | Preferential interactions of proteins with salts in concentrated solutions. <i>Biochemistry</i> , 1982, 21, 6545-6552.  | 1.2 | 670       |