

# Todd M Przybycien

## List of Publications by Year in descending order

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68  
papers

2,605  
citations

186209

28  
h-index

197736

49  
g-index

70  
all docs

70  
docs citations

70  
times ranked

2557  
citing authors

#	ARTICLE	IF	CITATIONS
1	Alternative bioseparation operations: life beyond packed-bed chromatography. <i>Current Opinion in Biotechnology</i> , 2004, 15, 469-478.	3.3	290
2	Precipitation of Proteins in Supercritical Carbon Dioxide. <i>Journal of Pharmaceutical Sciences</i> , 1996, 85, 586-594.	1.6	185
3	Protein unfolding at interfaces: Slow dynamics of $\alpha$ -helix to $\beta$ -sheet transition. <i>Proteins: Structure, Function and Bioinformatics</i> , 2004, 56, 669-678.	1.5	144
4	Secondary structure characterization of $\alpha$ -lactamase inclusion bodies. <i>Protein Engineering, Design and Selection</i> , 1994, 7, 131-136.	1.0	117
5	Coverage-Dependent Orientation of Lysozyme Adsorbed on Silica. <i>Langmuir</i> , 2003, 19, 3848-3857.	1.6	115
6	A Holistic Approach to Protein Secondary Structure Characterization Using Amide I Band Raman Spectroscopy. <i>Analytical Biochemistry</i> , 1999, 269, 255-272.	1.1	112
7	A Holistic Approach for Protein Secondary Structure Estimation from Infrared Spectra in H <sub>2</sub> O Solutions. <i>Analytical Biochemistry</i> , 2000, 285, 33-49.	1.1	109
8	Critical factors for high-performance physically adsorbed (dynamic) polymeric wall coatings for capillary electrophoresis of DNA. <i>Electrophoresis</i> , 2002, 23, 2766-2776.	1.3	85
9	The Conformation of the Poly(ethylene glycol) Chain in Mono-PEGylated Lysozyme and Mono-PEGylated Human Growth Hormone. <i>Bioconjugate Chemistry</i> , 2011, 22, 2317-2323.	1.8	80
10	Coadsorption of Sodium Dodecyl Sulfate with Hydrophobically Modified Nonionic Cellulose Polymers. 1. Role of Polymer Hydrophobic Modification. <i>Langmuir</i> , 2003, 19, 2705-2713.	1.6	69
11	Secondary Structure Characterization of Microparticulate Insulin Powders. <i>Journal of Pharmaceutical Sciences</i> , 1994, 83, 1651-1656.	1.6	67
12	Self-interaction chromatography: A tool for the study of protein-protein interactions in bioprocessing environments. , 2000, 52, 193-203.		61
13	Adsorption of a Formulated Protein on a Drug Delivery Device Surface. <i>Journal of Colloid and Interface Science</i> , 1997, 189, 216-228.	5.0	60
14	Adsorption of Poly(ethylene glycol)-Modified Lysozyme to Silica. <i>Langmuir</i> , 2005, 21, 1328-1337.	1.6	54
15	Poly(ethylene glycol)-Modified Proteins: Implications for Poly(lactide-co-glycolide)-Based Microsphere Delivery. <i>AAPS Journal</i> , 2009, 11, 88-98.	2.2	45
16	Protein purification with vapor-phase carbon dioxide. , 1999, 62, 247-258.		44
17	Surface Tension Gradient Driven Spreading on Aqueous Mucin Solutions: A Possible Route to Enhanced Pulmonary Drug Delivery. <i>Molecular Pharmaceutics</i> , 2011, 8, 387-394.	2.3	44
18	Protein structure perturbations on chromatographic surfaces. <i>Journal of Chromatography A</i> , 1999, 849, 149-159.	1.8	43

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19	Aggregation of lysozyme and of poly(ethylene glycol)-modified lysozyme after adsorption to silica. <i>Colloids and Surfaces B: Biointerfaces</i> , 2007, 57, 81-88.	2.5	40
20	Continuous precipitation for monoclonal antibody capture using countercurrent washing by microfiltration. <i>Biotechnology Progress</i> , 2019, 35, e2886.	1.3	39
21	Comparative coagulation performance study of <i>Moringa oleifera</i> cationic protein fractions with varying water hardness. <i>Journal of Environmental Chemical Engineering</i> , 2016, 4, 4690-4698.	3.3	35
22	Solubility-activity relationships in the inorganic salt-induced precipitation of $\hat{\pm}$ -chymotrypsin. <i>Enzyme and Microbial Technology</i> , 1989, 11, 264-276.	1.6	34
23	Adsorption of poly(ethylene glycol)-modified ribonuclease A to a poly(lactide-co-glycolide) surface. <i>Biotechnology and Bioengineering</i> , 2005, 90, 856-868.	1.7	34
24	Protein instability during HIC: Hydrogen exchange labeling analysis and a framework for describing mobile and stationary phase effects. <i>Biotechnology and Bioengineering</i> , 2007, 96, 80-93.	1.7	34
25	Metal affinity protein precipitation: Effects of mixing, protein concentration, and modifiers on protein fractionation. <i>Biotechnology and Bioengineering</i> , 1995, 48, 324-332.	1.7	33
26	Long-term and high-temperature storage of supercritically-processed microparticulate protein powders. <i>Pharmaceutical Research</i> , 1997, 14, 1370-1378.	1.7	33
27	Surfactant-induced Marangoni transport of lipids and therapeutics within the lung. <i>Current Opinion in Colloid and Interface Science</i> , 2018, 36, 58-69.	3.4	33
28	Coadsorption of Sodium Dodecyl Sulfate with Hydrophobically Modified Nonionic Cellulose Polymers. 2. Role of Surface Selectivity in Adsorption Hysteresis. <i>Langmuir</i> , 2003, 19, 2714-2721.	1.6	32
29	Protein PEGylation Attenuates Adsorption and Aggregation on a Negatively Charged and Moderately Hydrophobic Polymer Surface. <i>Langmuir</i> , 2010, 26, 18231-18238.	1.6	30
30	Aggregation kinetics in salt-induced protein precipitation. <i>AIChE Journal</i> , 1989, 35, 1779-1790.	1.8	28
31	Protein-protein interactions as a means of purification. <i>Current Opinion in Biotechnology</i> , 1998, 9, 164-170.	3.3	25
32	Effect of Flow on Human Serum Albumin Adsorption to Self-Assembled Monolayers of Varying Packing Density. <i>Langmuir</i> , 2003, 19, 5464-5474.	1.6	24
33	Self-Assembled Monolayers on Polymer Surfaces: Kinetics, Functionalization, and Photopatterning. <i>Langmuir</i> , 1999, 15, 5323-5328.	1.6	23
34	Quasi-Immiscible Spreading of Aqueous Surfactant Solutions on Entangled Aqueous Polymer Solution Subphases. <i>ACS Applied Materials &amp; Interfaces</i> , 2013, 5, 5542-5549.	4.0	23
35	Dispersion in steady and time-oscillatory two-dimensional flows through a parallel-plate channel. <i>Physics of Fluids</i> , 2019, 31, 022007.	1.6	23
36	Enabling Marangoni flow at air-liquid interfaces through deposition of aerosolized lipid dispersions. <i>Journal of Colloid and Interface Science</i> , 2016, 484, 270-278.	5.0	19

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37	Autophobic on Liquid Subphases Driven by the Interfacial Transport of Amphiphilic Molecules. <i>Langmuir</i> , 2012, 28, 15212-15221.	1.6	18
38	A Model for Metal Affinity Protein Precipitation. <i>Journal of Colloid and Interface Science</i> , 1996, 177, 391-400.	5.0	17
39	Polyclonal and monoclonal IgG binding on protein A resins—Evidence of competitive binding effects. <i>Biotechnology and Bioengineering</i> , 2017, 114, 1803-1812.	1.7	17
40	Surfactant Driven Post-Deposition Spreading of Aerosols on Complex Aqueous Subphases. 1: High Deposition Flux Representative of Aerosol Delivery to Large Airways. <i>Journal of Aerosol Medicine and Pulmonary Drug Delivery</i> , 2015, 28, 382-393.	0.7	16
41	High throughput solubility and redissolution screening for antibody purification via combined PEG and zinc chloride precipitation. <i>Biotechnology Progress</i> , 2020, 36, e3041.	1.3	16
42	Electroless Gold Plating of 316 L Stainless Steel Beads. <i>Journal of the Electrochemical Society</i> , 1999, 146, 2517-2521.	1.3	15
43	Effect of polyelectrolyte—surfactant complexation on Marangoni transport at a liquid—liquid interface. <i>Journal of Colloid and Interface Science</i> , 2016, 467, 105-114.	5.0	15
44	Imaging the Postdeposition Dispersion of an Inhaled Surfactant Aerosol. <i>Journal of Aerosol Medicine and Pulmonary Drug Delivery</i> , 2012, 25, 290-296.	0.7	14
45	Transport of a partially wetted particle at the liquid/vapor interface under the influence of an externally imposed surfactant generated Marangoni stress. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2017, 521, 49-60.	2.3	14
46	Flow regime transitions and effects on solute transport in surfactant-driven Marangoni flows. <i>Journal of Colloid and Interface Science</i> , 2019, 553, 136-147.	5.0	14
47	Separation of PEGylated variants of ribonuclease A and apo- $\beta$ -lactalbumin via reversed phase chromatography. <i>Journal of Chromatography A</i> , 2014, 1360, 209-216.	1.8	12
48	<i>Moringa oleifera</i> Seed Protein Adsorption to Silica: Effects of Water Hardness, Fractionation, and Fatty Acid Extraction. <i>Langmuir</i> , 2018, 34, 4852-4860.	1.6	12
49	Flowsheet simulation of aqueous two-phase extraction systems for protein purification. <i>Journal of Chemical Technology and Biotechnology</i> , 2010, 85, 1575-1587.	1.6	11
50	Toward improving selectivity in affinity chromatography with PEGylated affinity ligands: The performance of PEGylated protein A. <i>Biotechnology Progress</i> , 2014, 30, 1364-1379.	1.3	11
51	Aerosolizing Lipid Dispersions Enables Antibiotic Transport Across Mimics of the Lung Airway Surface Even in the Presence of Pre-existing Lipid Monolayers. <i>Journal of Aerosol Medicine and Pulmonary Drug Delivery</i> , 2018, 31, 212-220.	0.7	11
52	Surfactant Driven Post-Deposition Spreading of Aerosols on Complex Aqueous Subphases. 2: Low Deposition Flux Representative of Aerosol Delivery to Small Airways. <i>Journal of Aerosol Medicine and Pulmonary Drug Delivery</i> , 2015, 28, 394-405.	0.7	10
53	Transient Marangoni transport of colloidal particles at the liquid/liquid interface caused by surfactant convective-diffusion under radial flow. <i>Journal of Colloid and Interface Science</i> , 2016, 462, 75-87.	5.0	10
54	Towards an electrochemically modulated chromatographic stationary phase. <i>Journal of Chromatography A</i> , 1995, 707, 29-33.	1.8	9

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55	Rheology of transient networks containing hydrophobically modified cellulose, anionic surfactant and colloidal silica: role of selective adsorption. <i>Rheologica Acta</i> , 2004, 43, 50-61.	1.1	9
56	Effect of humic acids on the kaolin coagulation performance of <i>Moringa oleifera</i> proteins. <i>Journal of Environmental Chemical Engineering</i> , 2018, 6, 4564-4572.	3.3	8
57	Enhanced filtration performance using feed-and-bleed configuration for purification of antibody precipitates. <i>Biotechnology Progress</i> , 2021, 37, e3082.	1.3	8
58	Towards optimal aqueous two-phase extraction system flowsheets for protein purification. <i>Journal of Chemical Technology and Biotechnology</i> , 2013, 88, 62-71.	1.6	7
59	Coverage-dependent morphology of PEGylated lysozyme layers adsorbed on silica. <i>Journal of Colloid and Interface Science</i> , 2012, 370, 170-175.	5.0	5
60	Chemical modification of protein A chromatography ligands with polyethylene glycol. I: Effects on IgG adsorption equilibrium, kinetics, and transport. <i>Journal of Chromatography A</i> , 2018, 1546, 77-88.	1.8	5
61	A Prototype Electrochemical Chromatographic Column for Use with Proteins. <i>Analytical Chemistry</i> , 1999, 71, 4272-4277.	3.2	4
62	Evolution and disappearance of solvent drops on miscible polymer subphases. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2018, 546, 266-275.	2.3	4
63	Viral adventitious agent detection using laser force cytology: Intrinsic cell property changes with infection and comparison to in vitro testing. <i>Biotechnology and Bioengineering</i> , 2022, 119, 134-144.	1.7	4
64	Skin-Color-Compensated Colorimeter for Detection and Classification of Pressure Ulcers. , 2008, , .		3
65	Chemical modification of protein a chromatography ligands with polyethylene glycol. II: Effects on resin robustness and process selectivity. <i>Journal of Chromatography A</i> , 2018, 1546, 89-96.	1.8	3
66	Structural Response of Bovine Growth Hormone to Dead-Ended Ultrafiltration. <i>Separation Science and Technology</i> , 2003, 38, 251-270.	1.3	2
67	Design of acoustic wave biochemical sensors using micro-electro-mechanical systems. <i>Journal of Applied Physics</i> , 2007, 101, 064508.	1.1	2
68	The Impact of Formulated Interleukin-2 / Delivery Device Surface Interactions on Bioefficacy. <i>Materials Research Society Symposia Proceedings</i> , 1993, 331, 227.	0.1	0