Patrick Garidel

List of Publications by Year
in descending order

64 papers	2,862 citations	172207 29 h-index	174990 52 g-index
70 all docs	70 docs citations	70 times ranked	2950 citing authors

#	Article	IF	Citations
1	An Interlaboratory Comparison on the Characterization of a Sub-micrometer Polydisperse Particle Dispersion. Journal of Pharmaceutical Sciences, 2022, 111, 699-709.	1.6	6
2	Dipolar Interactions and Protein Hydration in Highly Concentrated Antibody Formulations. Molecular Pharmaceutics, 2022, 19, 494-507.	2.3	6
3	Photo-Oxidation of Therapeutic Protein Formulations: From Radical Formation to Analytical Techniques. Pharmaceutics, 2022, 14, 72.	2.0	11
4	Industry Perspective on the use and Characterization of Polysorbates for Biopharmaceutical Products Part 1: Survey Report on Current State and Common Practices for Handling and Control of Polysorbates. Journal of Pharmaceutical Sciences, 2022, 111, 1280-1291.	1.6	27
5	Poloxamer 188 as surfactant in biological formulations â€“ An alternative for polysorbate 20/80?. International Journal of Pharmaceutics, 2022, 620, 121706.	2.6	34
6	Characterization of radicals in polysorbate 80 using electron paramagnetic resonance (EPR) spectroscopy and spin trapping. International Journal of Pharmaceutics: X, 2022, , 100123.	1.2	2
7	Surface Tension and Self-association Properties of Aqueous Polysorbate 20 HP and 80 HP Solutions: Insights into Protein Stabilisation Mechanisms. Journal of Pharmaceutical Innovation, 2021, 16, 726-734.	1.1	28
8	HP-Î²-CD for the formulation of IgG and Ig-based biotherapeutics. International Journal of Pharmaceutics, 2021, 601, 120531.	2.6	17
9	Hydrolytic polysorbate 20 degradation â€“ Sensitive detection of free fatty acids in biopharmaceuticals via UPLC-QDa analytics with isolator column. Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences, 2021, 1174, 122717.	1.2	8
10	Cathelicidin and PMB neutralize endotoxins by multifactorial mechanisms including LPS interaction and targeting of host cell membranes. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	25
11	Complex Micellization Behavior of the Polysorbates Tween 20 and Tween 80. Molecular Pharmaceutics, 2021, 18, 3147-3157.	2.3	31
12	Investigating photodegradation of antibodies governed by the light dosage. International Journal of Pharmaceutics, 2021, 604, 120723.	2.6	7
13	Assessing the polysorbate degradation fingerprints and kinetics of lipases â€“ how the activity of polysorbate degrading hydrolases is influenced by the assay and assay conditions. European Journal of Pharmaceutical Sciences, 2021, 166, 105980.	1.9	21
14	Expanding the toolbox for predictive parameters describing antibody stability considering thermodynamic and kinetic determinants. Pharmaceutical Research, 2021, 38, 2065-2089.	1.7	1
15	Acidic and alkaline hydrolysis of polysorbates under aqueous conditions: Towards understanding polysorbate degradation in biopharmaceutical formulations. European Journal of Pharmaceutical Sciences, 2020, 144, 105211.	1.9	29
16	An in-depth examination of fatty acid solubility limits in biotherapeutic protein formulations containing polysorbate 20 and polysorbate 80. International Journal of Pharmaceutics, 2020, 591, 119934.	2.6	25
17	Rational optimization of a monoclonal antibody improves the aggregation propensity and enhances the CMC properties along the entire pharmaceutical process chain. MAbs, 2020, 12, 1787121.	2.6	15
18	Particle Detection and Characterization for Biopharmaceutical Applications: Current Principles of Established and Alternative Techniques. Pharmaceutics, 2020, 12, 1112.	2.0	33

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19	Development and validation of a selective marker-based quantification of polysorbate 20 in biopharmaceutical formulations using UPLC QDa detection. Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences, 2020, 1157, 122287.	1.2	21
20	Albumin displacement at the airâ€“water interface by Tween (Polysorbate) surfactants. European Biophysics Journal, 2020, 49, 533-547.	1.2	18
21	Fast pH-mediated changes of the viscosity of protein solutions studied with a voltage-modulated quartz crystal microbalance. Biointerphases, 2020, 15, 021004.	0.6	4
22	Thermal and Chemical Unfolding of a Monoclonal IgG1 Antibody: Application of the Multistate Zimm-Bragg Theory. Biophysical Journal, 2020, 118, 1067-1075.	0.2	19
23	Thermodynamic Unfolding and Aggregation Fingerprints of Monoclonal Antibodies Using Thermal Profiling. Pharmaceutical Research, 2020, 37, 78.	1.7	6
24	Physico-chemistry of Lipopolysaccharides. , 2020, , 1-18.		0
25	Concentration Effects in the Interaction of Monoclonal Antibodies (mAbs) with their Immediate Environment Characterized by EPR Spectroscopy. Molecules, 2019, 24, 2528.	1.7	10
26	Structure of a Therapeutic Full-Length Anti-NPRA IgG4 Antibody: Dissecting Conformational Diversity. Biophysical Journal, 2019, 116, 1637-1649.	0.2	17
27	Lyophilization of High-Concentration Protein Formulations. Methods in Pharmacology and Toxicology, 2019, , 291-325.	0.1	7
28	Hydrogel formulations for biologicals: current spotlight from a commercial perspective. Therapeutic Delivery, 2018, 9, 221-230.	1.2	13
29	Polysorbate degradation in biotherapeutic formulations: Identification and discussion of current root causes. International Journal of Pharmaceutics, 2018, 552, 422-436.	2.6	120
30	Spectroscopic methods for assessing the molecular origins of macroscopic solution properties of highly concentrated liquid protein solutions. Analytical Biochemistry, 2018, 561-562, 70-88.	1.1	19
31	Prediction and Reduction of the Aggregation of Monoclonal Antibodies. Journal of Molecular Biology, 2017, 429, 1244-1261.	2.0	112
32	Characterizing proteinâ€“protein-interaction in high-concentration monoclonal antibody systems with the quartz crystal microbalance. Physical Chemistry Chemical Physics, 2017, 19, 32698-32707.	1.3	13
33	Improved Solution-State Properties of Monoclonal Antibodies by Targeted Mutations. Journal of Physical Chemistry B, 2017, 121, 10818-10827.	1.2	25
34	High-concentration protein formulations: How high is high?. European Journal of Pharmaceutics and Biopharmaceutics, 2017, 119, 353-360.	2.0	126
35	Liquid-liquid phase separation of a monoclonal antibody at low ionic strength: Influence of anion charge and concentration. Biophysical Chemistry, 2017, 220, 7-19.	1.5	45
36	Nanoparticle tracking analysis of particle size and concentration detection in suspensions of polymer and protein samples: Influence of experimental and data evaluation parameters. European Journal of Pharmaceutics and Biopharmaceutics, 2016, 104, 30-41.	2.0	109

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37	Prediction of colloidal stability of high concentration protein formulations. Pharmaceutical Development and Technology, 2015, 20, 367-374.	1.1	46
38	Bufferâ€free therapeutic antibody preparations provide a viable alternative to conventionally buffered solutions: From protein buffer capacity prediction to bioprocess applications. Biotechnology Journal, 2015, 10, 610-622.	1.8	23
39	Boosting antibody developability through rational sequence optimization. MAbs, 2015, 7, 505-515.	2.6	60
40	Subvisible (2-100 Î¼m) Particle Analysis During Biotherapeutic Drug Product Development: Part 1, Considerations and Strategy. Journal of Pharmaceutical Sciences, 2015, 104, 1899-1908.	1.6	64
41	Stability of buffer-free freeze-dried formulations: A feasibility study of a monoclonal antibody at high protein concentrations. European Journal of Pharmaceutics and Biopharmaceutics, 2015, 97, 125-139.	2.0	32
42	Resolving power of dynamic light scattering for protein and polystyrene nanoparticles. Pharmaceutical Development and Technology, 2015, 20, 84-89.	1.1	37
43	Buffer capacity of biologicsâ€"from buffer salts to buffering by antibodies. Biotechnology Progress, 2013, 29, 480-492.	1.3	53
44	Viscosity measurements of antibody solutions by photon correlation spectroscopy: an indirect approach â€" limitations and applicability for high-concentration liquid protein solutions. Pharmaceutical Development and Technology, 2013, 18, 963-970.	1.1	16
45	Biophysical Mechanisms of the Neutralization of Endotoxins by Lipopolyamines. The Open Biochemistry Journal, 2013, 7, 82-93.	0.3	8
46	The electrokinetic potential of therapeutic proteins and its modulation: Impact on protein stability. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2012, 415, 421-430.	2.3	16
47	Systematic Investigation of the Effect of Lyophilizate Collapse on Pharmaceutically Relevant Proteins, Part 2: Stability During Storage at Elevated Temperatures. Journal of Pharmaceutical Sciences, 2012, 101, 2288-2306.	1.6	63
48	Strategies for the Assessment of Protein Aggregates in Pharmaceutical Biotech Product Development. Pharmaceutical Research, 2011, 28, 920-933.	1.7	312
49	A critical evaluation of self-interaction chromatography as a predictive tool for the assessment of proteinâ€"protein interactions in protein formulation development: A case study of a therapeutic monoclonal antibody. European Journal of Pharmaceutics and Biopharmaceutics, 2010, 75, 16-25.	2.0	100
50	Correlation of protein-protein interactions as assessed by affinity chromatography with colloidal protein stability: A case study with lysozyme. Pharmaceutical Development and Technology, 2010, 15, 421-430.	1.1	30
51	Insights into proteinâ€"polysorbate interactions analysed by means of isothermal titration and differential scanning calorimetry. European Biophysics Journal, 2009, 38, 557-568.	1.2	66
52	A thermodynamic analysis of the binding interaction between polysorbate 20 and 80 with human serum albumins and immunoglobulins: A contribution to understand colloidal protein stabilisation. Biophysical Chemistry, 2009, 143, 70-78.	1.5	99
53	Lysozymeâ€lysozyme selfâ€interactions as assessed by the osmotic second virial coefficient: Impact for physical protein stabilization. Biotechnology Journal, 2009, 4, 1305-1319.	1.8	37
54	An Infrared Reflection-Absorption Spectroscopic (IRRAS) Study of the Interaction of Lipid A and Lipopolysaccharide Re with Endotoxin-Binding Proteins. Medicinal Chemistry, 2009, 5, 535-542.	0.7	13

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55	A rapid, sensitive and economical assessment of monoclonal antibody conformational stability by intrinsic tryptophan fluorescence spectroscopy. Biotechnology Journal, 2008, 3, 1201-1211.	1.8	98
56	Conformational analysis of protein secondary structure during spray-drying of antibody/mannitol formulations. European Journal of Pharmaceutics and Biopharmaceutics, 2007, 65, 1-9.	2.0	92
57	Membranolytic Activity of Bile Salts: Influence of Biological Membrane Properties and Composition. Molecules, 2007, 12, 2292-2326.	1.7	104
58	Hydrophobic interactions are the driving force for the binding of peptide mimotopes and Staphylococcal protein A to recombinant human IgG1. European Biophysics Journal, 2007, 36, 647-660.	1.2	21
59	Structural organisation and phase behaviour of a stratum corneum lipid analogue: ceramide 3A. Physical Chemistry Chemical Physics, 2006, 8, 2265.	1.3	24
60	Mechanisms of endotoxin neutralization by synthetic cationic compounds. Journal of Endotoxin Research, 2006, 12, 261-277.	2.5	48
61	1,2-Dimyristoyl-sn-glycero-3-phosphoglycerol (DMPG) monolayers: influence of temperature, pH, ionic strength and binding of alkaline earth cations. Chemistry and Physics of Lipids, 2005, 138, 50-59.	1.5	70
62	Divalent cations affect chain mobility and aggregate structure of lipopolysaccharide from Salmonella minnesota reflected in a decrease of its biological activity. Biochimica Et Biophysica Acta - Biomembranes, 2005, 1715, 122-131.	1.4	81
63	Thermodynamics of Demicellization of Mixed Micelles Composed of Sodium Oleate and Bile Salts. Langmuir, 2004, 20, 320-328.	1.6	90
64	Thermodynamics of Lipid Organization and Domain Formation in Phospholipid Bilayers. Journal of Liposome Research, 2000, 10, 131-158.	1.5	38