Christopher F Van Der Walle

List of Publications by Year
in descending order

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93 papers	2,948 citations	172457 29 h-index	182427 51 g-index
94 all docs	94 docs citations	94 times ranked	4104 citing authors

#	Article	IF	Citations
1	Cluster Percolation Causes Shear Thinning Behavior in Concentrated Solutions of Monoclonal Antibodies. Molecular Pharmaceutics, 2021, 18, 2669-2682.	4.6	9
2	Formulation Considerations for Autologous T Cell Drug Products. Pharmaceutics, 2021, 13, 1317.	4.5	4
3	Inhibiting the fibrillation of a GLP-1-like peptide. International Journal of Pharmaceutics, 2020, 574, 118923.	5.2	6
4	Advancing Therapeutic Protein Discovery and Development through Comprehensive Computational and Biophysical Characterization. Molecular Pharmaceutics, 2020, 17, 426-440.	4.6	25
5	Improved Physical Stability of an Antibodyâ€“Drug Conjugate Using Hostâ€“Guest Chemistry. Bioconjugate Chemistry, 2020, 31, 123-129.	3.6	6
6	Recent Advances in Studying Interfacial Adsorption of Bioengineered Monoclonal Antibodies. Molecules, 2020, 25, 2047.	3.8	20
7	Micro- and macro-viscosity relations in high concentration antibody solutions. European Journal of Pharmaceutics and Biopharmaceutics, 2020, 153, 211-221.	4.3	8
8	Arginine to Lysine Mutations Increase the Aggregation Stability of a Single-Chain Variable Fragment through Unfolded-State Interactions. Biochemistry, 2019, 58, 3413-3421.	2.5	24
9	Determination of Proteinâ€“Protein Interactions in a Mixture of Two Monoclonal Antibodies. Molecular Pharmaceutics, 2019, 16, 4775-4786.	4.6	17
10	Interfacial Adsorption of a Monoclonal Antibody and Its Fab and Fc Fragments at the Oil/Water Interface. Langmuir, 2019, 35, 13543-13552.	3.5	12
11	Observation of high-temperature macromolecular confinement in lyophilised protein formulations using terahertz spectroscopy. International Journal of Pharmaceutics: X, 2019, 1, 100022.	1.6	11
12	Terahertz Spectroscopy: An Investigation of the Structural Dynamics of Freeze-Dried Poly Lactic-co-glycolic Acid Microspheres. Pharmaceutics, 2019, 11, 291.	4.5	8
13	Interaction of a Macrocycle with an Aggregation-Prone Region of a Monoclonal Antibody. Molecular Pharmaceutics, 2019, 16, 3100-3108.	4.6	7
14	Application of Magnetic Resonance to Assess Lyophilized Drug Product Reconstitution. Pharmaceutical Research, 2019, 36, 71.	3.5	2
15	¹⁹F Dark-State Exchange Saturation Transfer NMR Reveals Reversible Formation of Protein-Specific Large Clusters in High-Concentration Protein Mixtures. Analytical Chemistry, 2019, 91, 4702-4708.	6.5	11
16	Poly(triazolyl methacrylate) glycopolymers as potential targeted unimolecular nanocarriers. Nanoscale, 2019, 11, 21155-21166.	5.6	11
17	Synthetic glycopolymers as modulators of protein aggregation: influences of chemical composition, topology and concentration. Journal of Materials Chemistry B, 2018, 6, 1044-1054.	5.8	13
18	Interfacial Adsorption of Monoclonal Antibody COE-3 at the Solid/Water Interface. ACS Applied Materials & Interfaces, 2018, 10, 1306-1316.	8.0	16

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19	Coadsorption of a Monoclonal Antibody and Nonionic Surfactant at the SiO2/Water Interface. ACS Applied Materials & Interfaces, 2018, 10, 44257-44266.	8.0	7
20	Novel salts of dipicolinic acid as viscosity modifiers for high concentration antibody solutions. International Journal of Pharmaceutics, 2018, 548, 682-688.	5.2	10
21	Control of Peptide Aggregation and Fibrillation by Physical PEGylation. Biomacromolecules, 2018, 19, 3958-3969.	5.4	9
22	¹⁹F NMR as a Tool for Monitoring Individual Differentially Labeled Proteins in Complex Mixtures. Molecular Pharmaceutics, 2018, 15, 2785-2796.	4.6	10
23	Evaluation of aggregate and silicone-oil counts in pre-filled siliconized syringes: An orthogonal study characterising the entire subvisible size range. International Journal of Pharmaceutics, 2017, 519, 58-66.	5.2	16
24	Antibody adsorption on the surface of water studied by neutron reflection. MAbs, 2017, 9, 466-475.	5.2	21
25	The effect of charge mutations on the stability and aggregation of a human single chain Fv fragment. European Journal of Pharmaceutics and Biopharmaceutics, 2017, 115, 18-30.	4.3	43
26	Dipicolinic acid as a novel spore-inspired excipient for antibody formulation. International Journal of Pharmaceutics, 2017, 526, 332-338.	5.2	4
27	Investigating Liquidâ€“Liquid Phase Separation of a Monoclonal Antibody Using Solution-State NMR Spectroscopy: Effect of ArgÂ·Glu and ArgÂ·HCl. Molecular Pharmaceutics, 2017, 14, 2852-2860.	4.6	25
28	Neutron Reflection Study of Surface Adsorption of Fc, Fab, and the Whole mAb. ACS Applied Materials & Interfaces, 2017, 9, 23202-23211.	8.0	19
29	A simple supramolecular assay for drug detection in urine. Chemical Communications, 2017, 53, 8842-8845.	4.1	17
30	Coarse-Grained Modeling of Antibodies from Small-Angle Scattering Profiles. Journal of Physical Chemistry B, 2017, 121, 8276-8290.	2.6	30
31	Engineering the surface properties of a human monoclonal antibody prevents self-association and rapid clearance in vivo. Scientific Reports, 2016, 6, 38644.	3.3	89
32	High Affinity Recognition of a Selected Amino Acid Epitope within a Protein by Cucurbit[8]uril Complexation. Angewandte Chemie - International Edition, 2016, 55, 14000-14004.	13.8	52
33	Characterizing monoclonal antibody formulations in arginine glutamate solutions using ¹H NMR spectroscopy. MAbs, 2016, 8, 1245-1258.	5.2	31
34	A novel combined strategy for the physical PEGylation of polypeptides. Journal of Controlled Release, 2016, 226, 35-46.	9.9	17
35	The effects of arginine glutamate, a promising excipient for protein formulation, on cell viability: Comparisons with NaCl. Toxicology in Vitro, 2016, 33, 88-98.	2.4	14
36	Selective, non-covalent conjugation of synthetic peptides with recombinant proteins mediated by hostâ€“guest chemistry. Chemical Communications, 2016, 52, 4235-4238.	4.1	16

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37	Modulation of the Hydration Water Around Monoclonal Antibodies on Addition of Excipients Detected by Terahertz Time-Domain Spectroscopy. Journal of Pharmaceutical Sciences, 2015, 104, 4025-4033.	3.3	13
38	Characterisation of Stress-Induced Aggregate Size Distributions and Morphological Changes of a Bi-Specific Antibody Using Orthogonal Techniques. Journal of Pharmaceutical Sciences, 2015, 104, 2473-2481.	3.3	13
39	Interrogating protonated/deuterated fibronectin fragment layers adsorbed to titania by neutron reflectivity and their concomitant control over cell adhesion. Journal of the Royal Society Interface, 2015, 12, 20150164.	3.4	2
40	Insights into the influence of the cooling profile on the reconstitution times of amorphous lyophilized protein formulations. European Journal of Pharmaceutics and Biopharmaceutics, 2015, 96, 247-254.	4.3	46
41	Specific Ion and Buffer Effects on Proteinâ€“Protein Interactions of a Monoclonal Antibody. Molecular Pharmaceutics, 2015, 12, 179-193.	4.6	124
42	The effect of arginine glutamate on the stability of monoclonal antibodies in solution. International Journal of Pharmaceutics, 2014, 473, 126-133.	5.2	64
43	The Role of Electrostatics in Proteinâ€“Protein Interactions of a Monoclonal Antibody. Molecular Pharmaceutics, 2014, 11, 2475-2489.	4.6	137
44	The effect of palmitoylation on the conformation and physical stability of a model peptide hormone. International Journal of Pharmaceutics, 2014, 472, 156-164.	5.2	13
45	Therapeutic antibodies: Market considerations, disease targets and bioprocessing. International Journal of Pharmaceutics, 2013, 440, 83-98.	5.2	208
46	Antacid co-encapsulated polyester nanoparticles for peroral delivery of insulin: Development, pharmacokinetics, biodistribution and pharmacodynamics. International Journal of Pharmaceutics, 2013, 440, 99-110.	5.2	32
47	Adsorption behavior of a human monoclonal antibody at hydrophilic and hydrophobic surfaces. MAbs, 2013, 5, 126-139.	5.2	50
48	Interaction and destabilization of a monoclonal antibody and albumin to surfaces of varying functionality and hydrophobicity. International Journal of Pharmaceutics, 2012, 438, 71-80.	5.2	9
49	Bioprocessing of bacteriophages via rapid drying onto microcrystals. Biotechnology Progress, 2012, 28, 540-548.	2.6	4
50	Towards a Bottom-up Approach for Mimicking Marine Sponge Spicules. Silicon, 2012, 4, 23-31.	3.3	2
51	Clustered integrin Î±5Î²1 ligand displays model fibronectin-mediated adhesion of human endometrial stromal cells. Biochemical and Biophysical Research Communications, 2011, 407, 777-782.	2.1	7
52	Cloning, expression and structure determination of the major extracellular domain of the PepT***1 oligopeptide transporter. Journal of Pharmacy and Pharmacology, 2011, 50, 234-234.	2.4	0
53	Solution-structure of a Peptide Designed to Mimic the C-terminal Hexapeptide of Endothelin. Journal of Pharmacy and Pharmacology, 2011, 50, 837-844.	2.4	1
54	Control of Mammalian Cell Behaviour Through Mimicry of the Extracellular Matrix Environment. , 2011, , .		1

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55	Lyophilized inserts for nasal administration harboring bacteriophage selective for Staphylococcus aureus: In vitro evaluation. International Journal of Pharmaceutics, 2011, 416, 280-287.	5.2	37
56	Perfusion culture enhanced human endometrial stromal cell growth in alginateâ€multivalent integrin Î±5Î²1 ligand scaffolds. Journal of Biomedical Materials Research - Part A, 2011, 99A, 211-220.	4.0	11
57	An Overview of the Field of Peptide and Protein Delivery. , 2011, , 1-22.		3
58	Modulation of the Intestinal Tight Junctions Using Bacterial Enterotoxins. , 2011, , 195-219.		3
59	A tetravalent RGD ligand for integrin-mediated cell adhesion. Journal of Pharmacy and Pharmacology, 2010, 58, 959-966.	2.4	14
60	Isolation of recombinant proteins from culture broth by coâ€precipitation with an amino acid carrier to form stable dry powders. Biotechnology and Bioengineering, 2010, 106, 764-773.	3.3	8
61	Crossâ€talk between the insulinâ€like growth factor (IGF) axis and membrane integrins to regulate cell physiology. Journal of Cellular Physiology, 2010, 224, 605-611.	4.1	32
62	Stabilization of bacteriophage during freeze drying. International Journal of Pharmaceutics, 2010, 389, 168-175.	5.2	69
63	Microemulsions for oral delivery of insulin: Design, development and evaluation in streptozotocin induced diabetic rats. European Journal of Pharmaceutics and Biopharmaceutics, 2010, 76, 159-169.	4.3	118
64	Silica Condensation by a Silicatein Î± Homologue Involves Surface-Induced Transition to a Stable Structural Intermediate Forming a Saturated Monolayer. Biomacromolecules, 2010, 11, 3126-3135.	5.4	12
65	Current approaches to stabilising and analysing proteins during microencapsulation in PLGA. Expert Opinion on Drug Delivery, 2009, 6, 177-186.	5.0	56
66	Oligomerisation and thermal stability of polyvalent integrin Î±5Î²1 ligands. Biophysical Chemistry, 2009, 142, 34-39.	2.8	5
67	A freeze-dried formulation of bacteriophage encapsulated in biodegradable microspheres. European Journal of Pharmaceutics and Biopharmaceutics, 2009, 72, 26-33.	4.3	91
68	IGFBP-3 and IGFBP-5 associate with the cell binding domain (CBD) of fibronectin. Biochemical and Biophysical Research Communications, 2009, 381, 572-576.	2.1	14
69	Dimeric integrin Î±5Î²1 ligands confer morphological and differentiation responses to murine embryonic stem cells. Biochemical and Biophysical Research Communications, 2009, 390, 716-721.	2.1	10
70	Orientation and surface coverage of adsorbed fibronectin cell binding domains and bound integrin Î±5Î²1 receptors. Soft Matter, 2009, 5, 3954.	2.7	14
71	Engineering Biodegradable Polyester Particles With Specific Drug Targeting and Drug Release Properties. Journal of Pharmaceutical Sciences, 2008, 97, 71-87.	3.3	248
72	Interdomain mobility and conformational stability of type III fibronectin domain pairs control surface adsorption, desorption and unfolding. Colloids and Surfaces B: Biointerfaces, 2008, 64, 1-9.	5.0	11

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73	Crystal structure and silica condensing activities of silicatein Î±â€“cathepsin L chimeras. Chemical Communications, 2008, , 1765.	4.1	51
74	A heparin binding motif on the pro-domain of human procathepsin L mediates zymogen destabilization and activation. Biochemical and Biophysical Research Communications, 2008, 366, 862-867.	2.1	20
75	Microrheology of Bacterial Biofilms In Vitro: Staphylococcus aureus and Pseudomonas aeruginosa. Langmuir, 2008, 24, 13549-13555.	3.5	96
76	Self-assembling multimeric integrin Â5Â1 ligands for cell attachment and spreading. Protein Engineering, Design and Selection, 2008, 21, 553-560.	2.1	17
77	The Heavy-Light Chain Loop of Human Cathepsin-L Modulates Its Activity and Stability. Protein and Peptide Letters, 2008, 15, 47-53.	0.9	7
78	Engineering Silica Particles as Oral Drug Delivery Vehicles. Current Pharmaceutical Design, 2008, 14, 1821-1831.	1.9	57
79	Solution formulation and lyophilisation of a recombinant fibronectin fragment. European Journal of Pharmaceutics and Biopharmaceutics, 2007, 67, 309-319.	4.3	11
80	Tight junction modulation and biochemical characterisation of the zonula occludens toxin C-and N-termini. FEBS Letters, 2007, 581, 2974-2980.	2.8	40
81	Physical ageing and thermal analysis of PLGA microspheres encapsulating protein or DNA. International Journal of Pharmaceutics, 2007, 339, 112-120.	5.2	42
82	PLGA microcapsules with novel dimpled surfaces for pulmonary delivery of DNA. International Journal of Pharmaceutics, 2006, 311, 97-107.	5.2	65
83	The Influence of Surfactant on PLGA Microsphere Glass Transition and Water Sorption: Remodeling the Surface Morphology to Attenuate the Burst Release. Pharmaceutical Research, 2006, 23, 1295-1305.	3.5	102
84	Emulsifying performance of modular Â-sandwich proteins: the hydrophobic moment and conformational stability. Protein Engineering, Design and Selection, 2006, 19, 537-545.	2.1	23
85	NMR and confocal microscopy studies of the mechanisms of burst drug release from PLGA microspheres. Journal of Controlled Release, 2005, 108, 271-281.	9.9	50
86	The influence of protein solubilisation, conformation and size on the burst release from poly(lactide-co-glycolide) microspheres. Journal of Controlled Release, 2005, 110, 34-48.	9.9	42
87	Interdomain Tilt Angle Determines Integrin-dependent Function of the Ninth and Tenth FIII Domains of Human Fibronectin. Journal of Biological Chemistry, 2004, 279, 55995-56003.	3.4	50
88	Controlled release of the fibronectin central cell binding domain from polymeric microspheres. Journal of Controlled Release, 2004, 95, 557-566.	9.9	27
89	Determining drug spatial distribution within controlled delivery tablets using MFX imaging. Journal of Controlled Release, 2004, 96, 97-100.	9.9	19
90	The intestinal zonula occludens toxin (ZOT) receptor recognises non-native ZOT conformers and localises to the intercellular contacts. FEBS Letters, 2003, 555, 638-642.	2.8	12

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91	Novel mutant human fibronectin FIII9â€“10 domain pair with increased conformational stability and biological activity. Protein Engineering, Design and Selection, 2002, 15, 1021-1024.	2.1	28
92	The Eighth FIII Domain of Human Fibronectin Promotes Integrin Î±5Î²1 Binding via Stabilization of the Ninth FIII Domain. Journal of Biological Chemistry, 2001, 276, 38885-38892.	3.4	66
93	Peptide substrates for AMP-activated protein kinase. Biochemical Society Transactions, 1995, 23, 141S-141S.	3.4	0