

Christopher F Van Der Walle

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/3142868/publications.pdf>

Version: 2024-02-01

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	Engineering Biodegradable Polyester Particles With Specific Drug Targeting and Drug Release Properties. <i>Journal of Pharmaceutical Sciences</i> , 2008, 97, 71-87.	3.3	248
2	Therapeutic antibodies: Market considerations, disease targets and bioprocessing. <i>International Journal of Pharmaceutics</i> , 2013, 440, 83-98.	5.2	208
3	The Role of Electrostatics in Protein-Protein Interactions of a Monoclonal Antibody. <i>Molecular Pharmaceutics</i> , 2014, 11, 2475-2489.	4.6	137
4	Specific Ion and Buffer Effects on Protein-Protein Interactions of a Monoclonal Antibody. <i>Molecular Pharmaceutics</i> , 2015, 12, 179-193.	4.6	124
5	Microemulsions for oral delivery of insulin: Design, development and evaluation in streptozotocin induced diabetic rats. <i>European Journal of Pharmaceutics and Biopharmaceutics</i> , 2010, 76, 159-169.	4.3	118
6	The Influence of Surfactant on PLGA Microsphere Glass Transition and Water Sorption: Remodeling the Surface Morphology to Attenuate the Burst Release. <i>Pharmaceutical Research</i> , 2006, 23, 1295-1305.	3.5	102
7	Microrheology of Bacterial Biofilms In Vitro: <i>Staphylococcus aureus</i> and <i>Pseudomonas aeruginosa</i> . <i>Langmuir</i> , 2008, 24, 13549-13555.	3.5	96
8	A freeze-dried formulation of bacteriophage encapsulated in biodegradable microspheres. <i>European Journal of Pharmaceutics and Biopharmaceutics</i> , 2009, 72, 26-33.	4.3	91
9	Engineering the surface properties of a human monoclonal antibody prevents self-association and rapid clearance in vivo. <i>Scientific Reports</i> , 2016, 6, 38644.	3.3	89
10	Stabilization of bacteriophage during freeze drying. <i>International Journal of Pharmaceutics</i> , 2010, 389, 168-175.	5.2	69
11	The Eighth FIII Domain of Human Fibronectin Promotes Integrin $\alpha 5 \beta 1$ Binding via Stabilization of the Ninth FIII Domain. <i>Journal of Biological Chemistry</i> , 2001, 276, 38885-38892.	3.4	66
12	PLGA microcapsules with novel dimpled surfaces for pulmonary delivery of DNA. <i>International Journal of Pharmaceutics</i> , 2006, 311, 97-107.	5.2	65
13	The effect of arginine glutamate on the stability of monoclonal antibodies in solution. <i>International Journal of Pharmaceutics</i> , 2014, 473, 126-133.	5.2	64
14	Engineering Silica Particles as Oral Drug Delivery Vehicles. <i>Current Pharmaceutical Design</i> , 2008, 14, 1821-1831.	1.9	57
15	Current approaches to stabilising and analysing proteins during microencapsulation in PLGA. <i>Expert Opinion on Drug Delivery</i> , 2009, 6, 177-186.	5.0	56
16	High Affinity Recognition of a Selected Amino Acid Epitope within a Protein by Cucurbit[8]uril Complexation. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 14000-14004.	13.8	52
17	Crystal structure and silica condensing activities of silicatein α -cathepsin L chimeras. <i>Chemical Communications</i> , 2008, , 1765.	4.1	51
18	Interdomain Tilt Angle Determines Integrin-dependent Function of the Ninth and Tenth FIII Domains of Human Fibronectin. <i>Journal of Biological Chemistry</i> , 2004, 279, 55995-56003.	3.4	50

#	ARTICLE	IF	CITATIONS
19	NMR and confocal microscopy studies of the mechanisms of burst drug release from PLGA microspheres. <i>Journal of Controlled Release</i> , 2005, 108, 271-281.	9.9	50
20	Adsorption behavior of a human monoclonal antibody at hydrophilic and hydrophobic surfaces. <i>MAbs</i> , 2013, 5, 126-139.	5.2	50
21	Insights into the influence of the cooling profile on the reconstitution times of amorphous lyophilized protein formulations. <i>European Journal of Pharmaceutics and Biopharmaceutics</i> , 2015, 96, 247-254.	4.3	46
22	The effect of charge mutations on the stability and aggregation of a human single chain Fv fragment. <i>European Journal of Pharmaceutics and Biopharmaceutics</i> , 2017, 115, 18-30.	4.3	43
23	The influence of protein solubilisation, conformation and size on the burst release from poly(lactide-co-glycolide) microspheres. <i>Journal of Controlled Release</i> , 2005, 110, 34-48.	9.9	42
24	Physical ageing and thermal analysis of PLGA microspheres encapsulating protein or DNA. <i>International Journal of Pharmaceutics</i> , 2007, 339, 112-120.	5.2	42
25	Tight junction modulation and biochemical characterisation of the zonula occludens toxin C-and N-termini. <i>FEBS Letters</i> , 2007, 581, 2974-2980.	2.8	40
26	Lyophilized inserts for nasal administration harboring bacteriophage selective for <i>Staphylococcus aureus</i> : In vitro evaluation. <i>International Journal of Pharmaceutics</i> , 2011, 416, 280-287.	5.2	37
27	Crosstalk between the insulin-like growth factor (IGF) axis and membrane integrins to regulate cell physiology. <i>Journal of Cellular Physiology</i> , 2010, 224, 605-611.	4.1	32
28	Antacid co-encapsulated polyester nanoparticles for peroral delivery of insulin: Development, pharmacokinetics, biodistribution and pharmacodynamics. <i>International Journal of Pharmaceutics</i> , 2013, 440, 99-110.	5.2	32
29	Characterizing monoclonal antibody formulations in arginine glutamate solutions using ¹ H NMR spectroscopy. <i>MAbs</i> , 2016, 8, 1245-1258.	5.2	31
30	Coarse-Grained Modeling of Antibodies from Small-Angle Scattering Profiles. <i>Journal of Physical Chemistry B</i> , 2017, 121, 8276-8290.	2.6	30
31	Novel mutant human fibronectin FIII9 ¹⁰ domain pair with increased conformational stability and biological activity. <i>Protein Engineering, Design and Selection</i> , 2002, 15, 1021-1024.	2.1	28
32	Controlled release of the fibronectin central cell binding domain from polymeric microspheres. <i>Journal of Controlled Release</i> , 2004, 95, 557-566.	9.9	27
33	Investigating Liquid-Liquid Phase Separation of a Monoclonal Antibody Using Solution-State NMR Spectroscopy: Effect of Arg-Glu and Arg-HCl. <i>Molecular Pharmaceutics</i> , 2017, 14, 2852-2860.	4.6	25
34	Advancing Therapeutic Protein Discovery and Development through Comprehensive Computational and Biophysical Characterization. <i>Molecular Pharmaceutics</i> , 2020, 17, 426-440.	4.6	25
35	Arginine to Lysine Mutations Increase the Aggregation Stability of a Single-Chain Variable Fragment through Unfolded-State Interactions. <i>Biochemistry</i> , 2019, 58, 3413-3421.	2.5	24
36	Emulsifying performance of modular $\hat{\Lambda}$ -sandwich proteins: the hydrophobic moment and conformational stability. <i>Protein Engineering, Design and Selection</i> , 2006, 19, 537-545.	2.1	23

#	ARTICLE	IF	CITATIONS
37	Antibody adsorption on the surface of water studied by neutron reflection. <i>MAbs</i> , 2017, 9, 466-475.	5.2	21
38	A heparin binding motif on the pro-domain of human procathepsin L mediates zymogen destabilization and activation. <i>Biochemical and Biophysical Research Communications</i> , 2008, 366, 862-867.	2.1	20
39	Recent Advances in Studying Interfacial Adsorption of Bioengineered Monoclonal Antibodies. <i>Molecules</i> , 2020, 25, 2047.	3.8	20
40	Determining drug spatial distribution within controlled delivery tablets using MFX imaging. <i>Journal of Controlled Release</i> , 2004, 96, 97-100.	9.9	19
41	Neutron Reflection Study of Surface Adsorption of Fc, Fab, and the Whole mAb. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 23202-23211.	8.0	19
42	Self-assembling multimeric integrin $\alpha 5 \beta 1$ ligands for cell attachment and spreading. <i>Protein Engineering, Design and Selection</i> , 2008, 21, 553-560.	2.1	17
43	A novel combined strategy for the physical PEGylation of polypeptides. <i>Journal of Controlled Release</i> , 2016, 226, 35-46.	9.9	17
44	A simple supramolecular assay for drug detection in urine. <i>Chemical Communications</i> , 2017, 53, 8842-8845.	4.1	17
45	Determination of Protein-Protein Interactions in a Mixture of Two Monoclonal Antibodies. <i>Molecular Pharmaceutics</i> , 2019, 16, 4775-4786.	4.6	17
46	Selective, non-covalent conjugation of synthetic peptides with recombinant proteins mediated by host-guest chemistry. <i>Chemical Communications</i> , 2016, 52, 4235-4238.	4.1	16
47	Evaluation of aggregate and silicone-oil counts in pre-filled siliconized syringes: An orthogonal study characterising the entire subvisible size range. <i>International Journal of Pharmaceutics</i> , 2017, 519, 58-66.	5.2	16
48	Interfacial Adsorption of Monoclonal Antibody COE-3 at the Solid/Water Interface. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 1306-1316.	8.0	16
49	IGFBP-3 and IGFBP-5 associate with the cell binding domain (CBD) of fibronectin. <i>Biochemical and Biophysical Research Communications</i> , 2009, 381, 572-576.	2.1	14
50	Orientation and surface coverage of adsorbed fibronectin cell binding domains and bound integrin $\alpha 5 \beta 1$ receptors. <i>Soft Matter</i> , 2009, 5, 3954.	2.7	14
51	A tetravalent RGD ligand for integrin-mediated cell adhesion. <i>Journal of Pharmacy and Pharmacology</i> , 2010, 58, 959-966.	2.4	14
52	The effects of arginine glutamate, a promising excipient for protein formulation, on cell viability: Comparisons with NaCl. <i>Toxicology in Vitro</i> , 2016, 33, 88-98.	2.4	14
53	The effect of palmitoylation on the conformation and physical stability of a model peptide hormone. <i>International Journal of Pharmaceutics</i> , 2014, 472, 156-164.	5.2	13
54	Modulation of the Hydration Water Around Monoclonal Antibodies on Addition of Excipients Detected by Terahertz Time-Domain Spectroscopy. <i>Journal of Pharmaceutical Sciences</i> , 2015, 104, 4025-4033.	3.3	13

#	ARTICLE	IF	CITATIONS
55	Characterisation of Stress-Induced Aggregate Size Distributions and Morphological Changes of a Bi-Specific Antibody Using Orthogonal Techniques. <i>Journal of Pharmaceutical Sciences</i> , 2015, 104, 2473-2481.	3.3	13
56	Synthetic glycopolymers as modulators of protein aggregation: influences of chemical composition, topology and concentration. <i>Journal of Materials Chemistry B</i> , 2018, 6, 1044-1054.	5.8	13
57	The intestinal zonula occludens toxin (ZOT) receptor recognises non-native ZOT conformers and localises to the intercellular contacts. <i>FEBS Letters</i> , 2003, 555, 638-642.	2.8	12
58	Silica Condensation by a Silicatein $\hat{\pm}$ Homologue Involves Surface-Induced Transition to a Stable Structural Intermediate Forming a Saturated Monolayer. <i>Biomacromolecules</i> , 2010, 11, 3126-3135.	5.4	12
59	Interfacial Adsorption of a Monoclonal Antibody and Its Fab and Fc Fragments at the Oil/Water Interface. <i>Langmuir</i> , 2019, 35, 13543-13552.	3.5	12
60	Solution formulation and lyophilisation of a recombinant fibronectin fragment. <i>European Journal of Pharmaceutics and Biopharmaceutics</i> , 2007, 67, 309-319.	4.3	11
61	Interdomain mobility and conformational stability of type III fibronectin domain pairs control surface adsorption, desorption and unfolding. <i>Colloids and Surfaces B: Biointerfaces</i> , 2008, 64, 1-9.	5.0	11
62	Perfusion culture enhanced human endometrial stromal cell growth in alginate- ϵ -multivalent integrin $\hat{\pm}$ 5 $\hat{\pm}$ 1 ligand scaffolds. <i>Journal of Biomedical Materials Research - Part A</i> , 2011, 99A, 211-220.	4.0	11
63	Observation of high-temperature macromolecular confinement in lyophilised protein formulations using terahertz spectroscopy. <i>International Journal of Pharmaceutics: X</i> , 2019, 1, 100022.	1.6	11
64	¹⁹ F Dark-State Exchange Saturation Transfer NMR Reveals Reversible Formation of Protein-Specific Large Clusters in High-Concentration Protein Mixtures. <i>Analytical Chemistry</i> , 2019, 91, 4702-4708.	6.5	11
65	Poly(triazolyl methacrylate) glycopolymers as potential targeted unimolecular nanocarriers. <i>Nanoscale</i> , 2019, 11, 21155-21166.	5.6	11
66	Dimeric integrin $\hat{\pm}$ 5 $\hat{\pm}$ 1 ligands confer morphological and differentiation responses to murine embryonic stem cells. <i>Biochemical and Biophysical Research Communications</i> , 2009, 390, 716-721.	2.1	10
67	Novel salts of dipicolinic acid as viscosity modifiers for high concentration antibody solutions. <i>International Journal of Pharmaceutics</i> , 2018, 548, 682-688.	5.2	10
68	¹⁹ F NMR as a Tool for Monitoring Individual Differentially Labeled Proteins in Complex Mixtures. <i>Molecular Pharmaceutics</i> , 2018, 15, 2785-2796.	4.6	10
69	Interaction and destabilization of a monoclonal antibody and albumin to surfaces of varying functionality and hydrophobicity. <i>International Journal of Pharmaceutics</i> , 2012, 438, 71-80.	5.2	9
70	Control of Peptide Aggregation and Fibrillation by Physical PEGylation. <i>Biomacromolecules</i> , 2018, 19, 3958-3969.	5.4	9
71	Cluster Percolation Causes Shear Thinning Behavior in Concentrated Solutions of Monoclonal Antibodies. <i>Molecular Pharmaceutics</i> , 2021, 18, 2669-2682.	4.6	9
72	Isolation of recombinant proteins from culture broth by co-precipitation with an amino acid carrier to form stable dry powders. <i>Biotechnology and Bioengineering</i> , 2010, 106, 764-773.	3.3	8

#	ARTICLE	IF	CITATIONS
73	Terahertz Spectroscopy: An Investigation of the Structural Dynamics of Freeze-Dried Poly Lactic-co-glycolic Acid Microspheres. <i>Pharmaceutics</i> , 2019, 11, 291.	4.5	8
74	Micro- and macro-viscosity relations in high concentration antibody solutions. <i>European Journal of Pharmaceutics and Biopharmaceutics</i> , 2020, 153, 211-221.	4.3	8
75	The Heavy-Light Chain Loop of Human Cathepsin-L Modulates Its Activity and Stability. <i>Protein and Peptide Letters</i> , 2008, 15, 47-53.	0.9	7
76	Clustered integrin $\alpha 5 \beta 1$ ligand displays model fibronectin-mediated adhesion of human endometrial stromal cells. <i>Biochemical and Biophysical Research Communications</i> , 2011, 407, 777-782.	2.1	7
77	Coadsorption of a Monoclonal Antibody and Nonionic Surfactant at the SiO ₂ /Water Interface. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 44257-44266.	8.0	7
78	Interaction of a Macrocyclic with an Aggregation-Prone Region of a Monoclonal Antibody. <i>Molecular Pharmaceutics</i> , 2019, 16, 3100-3108.	4.6	7
79	Inhibiting the fibrillation of a GLP-1-like peptide. <i>International Journal of Pharmaceutics</i> , 2020, 574, 118923.	5.2	6
80	Improved Physical Stability of an Antibody-Drug Conjugate Using Host-Guest Chemistry. <i>Bioconjugate Chemistry</i> , 2020, 31, 123-129.	3.6	6
81	Oligomerisation and thermal stability of polyvalent integrin $\alpha 5 \beta 1$ ligands. <i>Biophysical Chemistry</i> , 2009, 142, 34-39.	2.8	5
82	Bioprocessing of bacteriophages via rapid drying onto microcrystals. <i>Biotechnology Progress</i> , 2012, 28, 540-548.	2.6	4
83	Dipicolinic acid as a novel spore-inspired excipient for antibody formulation. <i>International Journal of Pharmaceutics</i> , 2017, 526, 332-338.	5.2	4
84	Formulation Considerations for Autologous T Cell Drug Products. <i>Pharmaceutics</i> , 2021, 13, 1317.	4.5	4
85	An Overview of the Field of Peptide and Protein Delivery. , 2011, , 1-22.		3
86	Modulation of the Intestinal Tight Junctions Using Bacterial Enterotoxins. , 2011, , 195-219.		3
87	Towards a Bottom-up Approach for Mimicking Marine Sponge Spicules. <i>Silicon</i> , 2012, 4, 23-31.	3.3	2
88	Interrogating protonated/deuterated fibronectin fragment layers adsorbed to titania by neutron reflectivity and their concomitant control over cell adhesion. <i>Journal of the Royal Society Interface</i> , 2015, 12, 20150164.	3.4	2
89	Application of Magnetic Resonance to Assess Lyophilized Drug Product Reconstitution. <i>Pharmaceutical Research</i> , 2019, 36, 71.	3.5	2
90	Solution-structure of a Peptide Designed to Mimic the C-terminal Hexapeptide of Endothelin. <i>Journal of Pharmacy and Pharmacology</i> , 2011, 50, 837-844.	2.4	1

#	ARTICLE	IF	CITATIONS
91	Control of Mammalian Cell Behaviour Through Mimicry of the Extracellular Matrix Environment. , 2011, , .		1
92	Peptide substrates for AMP-activated protein kinase. Biochemical Society Transactions, 1995, 23, 141S-141S.	3.4	0
93	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