Wouter L J Hinrichs

List of Publications by Year
in descending order

104 papers	4,137 citations	101543 36 h-index	133252 59 g-index
105 all docs	105 docs citations	105 times ranked	4837 citing authors

#	Article	IF	Citations
1	Inulin, a flexible oligosaccharide I: Review of its physicochemical characteristics. Carbohydrate Polymers, 2015, 130, 405-419.	10.2	331
2	How sugars protect proteins in the solid state and during drying (review): Mechanisms of stabilization in relation to stress conditions. European Journal of Pharmaceutics and Biopharmaceutics, 2017, 114, 288-295.	4.3	325
3	Development of Stable Influenza Vaccine Powder Formulations: Challenges and Possibilities. Pharmaceutical Research, 2008, 25, 1256-1273.	3.5	171
4	Inulin, a flexible oligosaccharide. II: Review of its pharmaceutical applications. Carbohydrate Polymers, 2015, 134, 418-428.	10.2	123
5	Needle-free influenza vaccination. Lancet Infectious Diseases, The, 2010, 10, 699-711.	9.1	105
6	Polymeric formulations for drug release prepared by hot melt extrusion: application and characterization. Drug Discovery Today, 2015, 20, 812-823.	6.4	102
7	The choice of a suitable oligosaccharide to prevent aggregation of PEGylated nanoparticles during freeze thawing and freeze drying. International Journal of Pharmaceutics, 2006, 311, 237-244.	5.2	98
8	Poly(N-isopropylacrylamide) with hydrolyzable lactic acid ester side groups: a new type of thermosensitive polymer. Macromolecular Rapid Communications, 1999, 20, 577-581.	3.9	94
9	Towards tailored vaccine delivery: Needs, challenges and perspectives. Journal of Controlled Release, 2012, 161, 363-376.	9.9	93
10	Quality by design approach for optimizing the formulation and physical properties of extemporaneously prepared orodispersible films. International Journal of Pharmaceutics, 2015, 485, 70-76.	5.2	87
11	Bottom-Up Preparation Techniques for Nanocrystals of Lipophilic Drugs. Pharmaceutical Research, 2011, 28, 1220-1223.	3.5	83
12	Orodispersible films in individualized pharmacotherapy: The development of a formulation for pharmacy preparations. International Journal of Pharmaceutics, 2015, 478, 155-163.	5.2	78
13	Improved dissolution behavior of lipophilic drugs by solid dispersions: the production process as starting point for formulation considerations. Expert Opinion on Drug Delivery, 2011, 8, 1121-1140.	5.0	77
14	Development of a dried influenza whole inactivated virus vaccine for pulmonary immunization. Vaccine, 2011, 29, 4345-4352.	3.8	75
15	The role of particle engineering in relation to formulation and de-agglomeration principle in the development of a dry powder formulation for inhalation of cetrorelix. European Journal of Pharmaceutical Sciences, 2004, 23, 139-149.	4.0	58
16	Intranasal Delivery of Influenza Subunit Vaccine Formulated with GEM Particles as an Adjuvant. AAPS Journal, 2010, 12, 109-116.	4.4	58
17	Dermal substitutes for full-thickness wounds in a one-stage grafting model. Wound Repair and Regeneration, 1993, 1, 244-252.	3.0	57
18	Spray freeze drying to produce a stable Î”9-tetrahydrocannabinol containing inulin-based solid dispersion powder suitable for inhalation. European Journal of Pharmaceutical Sciences, 2005, 26, 231-240.	4.0	55

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19	Devices and formulations for pulmonary vaccination. Expert Opinion on Drug Delivery, 2013, 10, 1383-1397.	5.0	54
20	Inulin sugar glasses preserve the structural integrity and biological activity of influenza virosomes during freeze-drying and storage. European Journal of Pharmaceutical Sciences, 2007, 32, 33-44.	4.0	53
21	Preservation of the Immunogenicity of Dry-powder Influenza H5N1 Whole Inactivated Virus Vaccine at Elevated Storage Temperatures. AAPS Journal, 2010, 12, 215-222.	4.4	53
22	Inhaled vaccine delivery in the combat against respiratory viruses: a 2021 overview of recent developments and implications for COVID-19. Expert Review of Vaccines, 2022, 21, 957-974.	4.4	51
23	Improved storage stability and immunogenicity of hepatitis B vaccine after spray-freeze drying in presence of sugars. European Journal of Pharmaceutical Sciences, 2014, 55, 36-45.	4.0	50
24	Characterization of a cyclosporine solid dispersion for inhalation. AAPS Journal, 2007, 9, E190-E199.	4.4	48
25	Pulmonary Vaccine Delivery: A Realistic Approach?. Journal of Aerosol Medicine and Pulmonary Drug Delivery, 2012, 25, 249-260.	1.4	47
26	Self-Exploding Lipid-Coated Microgels. Biomacromolecules, 2006, 7, 373-379.	5.4	46
27	Antifungal and biofilm inhibitory effect of Cymbopogon citratus (lemongrass) essential oil on biofilm forming by Candida tropicalis isolates; an in vitro study. Journal of Ethnopharmacology, 2020, 246, 112188.	4.1	46
28	Evaluation of monophosphoryl lipid A as adjuvant for pulmonary delivered influenza vaccine. Journal of Controlled Release, 2014, 174, 51-62.	9.9	44
29	Oromucosal films: from patient centricity to production by printing techniques. Expert Opinion on Drug Delivery, 2019, 16, 981-993.	5.0	44
30	Advax augments B and T cell responses upon influenza vaccination via the respiratory tract and enables complete protection of mice against lethal influenza virus challenge. Journal of Controlled Release, 2018, 288, 199-211.	9.9	43
31	Preparation of drug nanocrystals by controlled crystallization: Application of a 3-way nozzle to prevent premature crystallization for large scale production. European Journal of Pharmaceutical Sciences, 2009, 38, 224-229.	4.0	41
32	Development of a dry, stable and inhalable acylâ€“homoserineâ€“lactoneâ€“acylase powder formulation for the treatment of pulmonary Pseudomonas aeruginosa infections. European Journal of Pharmaceutical Sciences, 2013, 48, 637-643.	4.0	41
33	Low temperature extruded implants based on novel hydrophilic multiblock copolymer for long-term protein delivery. European Journal of Pharmaceutical Sciences, 2013, 49, 578-587.	4.0	40
34	Production methods and stabilization strategies for polymer-based nanoparticles and microparticles for parenteral delivery of peptides and proteins. Expert Opinion on Drug Delivery, 2015, 12, 1311-1331.	5.0	39
35	Orodispersible films based on blends of trehalose and pullulan for protein delivery. European Journal of Pharmaceutics and Biopharmaceutics, 2018, 133, 104-111.	4.3	39
36	Inulin solid dispersion technology to improve the absorption of the BCS Class IV drug TMC240. European Journal of Pharmaceutics and Biopharmaceutics, 2010, 74, 233-238.	4.3	38

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37	Designing CAF-adjuvanted dry powder vaccines: Spray drying preserves the adjuvant activity of CAF01. Journal of Controlled Release, 2013, 167, 256-264.	9.9	38
38	Influence of Miscibility of Protein-Sugar Lyophilizates on Their Storage Stability. AAPS Journal, 2016, 18, 1225-1232.	4.4	37
39	Pulmonary administration of small interfering RNA: The route to go?. Journal of Controlled Release, 2016, 235, 14-23.	9.9	36
40	Feasibility of nonvolatile buffers in capillary electrophoresis-electrospray ionization-mass spectrometry of proteins. Electrophoresis, 2004, 25, 43-49.	2.4	35
41	Controlled Crystallization of the Lipophilic Drug Fenofibrate During Freeze-Drying: Elucidation of the Mechanism by In-Line Raman Spectroscopy. AAPS Journal, 2010, 12, 569-575.	4.4	34
42	Tailored protein release from biodegradable poly(Îµ-caprolactone-PEG)-b-poly(Îµ-caprolactone) multiblock-copolymer implants. European Journal of Pharmaceutics and Biopharmaceutics, 2014, 87, 329-337.	4.3	34
43	Physical and immunogenic stability of spray freeze-dried influenza vaccine powder for pulmonary delivery: Comparison of inulin, dextran, or a mixture of dextran and trehalose as protectants. European Journal of Pharmaceutics and Biopharmaceutics, 2013, 85, 716-725.	4.3	33
44	In-line near infrared spectroscopy during freeze-drying as a tool to measure efficiency of hydrogen bond formation between protein and sugar, predictive of protein storage stability. International Journal of Pharmaceutics, 2015, 496, 792-800.	5.2	33
45	A novel aerosol generator for homogenous distribution of powder over the lungs after pulmonary administration to small laboratory animals. European Journal of Pharmaceutics and Biopharmaceutics, 2014, 88, 1056-1063.	4.3	32
46	Stability of Lysozyme in Aqueous Extremolyte Solutions during Heat Shock and Accelerated Thermal Conditions. PLoS ONE, 2014, 9, e86244.	2.5	30
47	Investigations into the stabilization of drugs by sugar glasses: III. The influence of various high-pH buffers. Pharmaceutical Research, 2003, 20, 1437-1443.	3.5	29
48	Formulation and process development of (recombinant human) deoxyribonuclease I as a powder for inhalation. Pharmaceutical Development and Technology, 2009, 14, 358-368.	2.4	27
49	A New Strategy to Stabilize Oxytocin in Aqueous Solutions: I. The Effects of Divalent Metal Ions and Citrate Buffer. AAPS Journal, 2011, 13, 284-290.	4.4	27
50	Surface-Active Derivative of Inulin (InutecÂ® SP1) Is a Superior Carrier for Solid Dispersions with a High Drug Load. Journal of Pharmaceutical Sciences, 2011, 100, 2333-2342.	3.3	27
51	NIR spectroscopy for the in-line monitoring of a multicomponent formulation during the entire freeze-drying process. Journal of Pharmaceutical and Biomedical Analysis, 2014, 97, 39-46.	2.8	27
52	Addition of Pullulan to Trehalose Glasses Improves the Stability of Î²-Galactosidase at High Moisture Conditions. Carbohydrate Polymers, 2017, 176, 374-380.	10.2	27
53	Advances in the development of entry inhibitors for sialic-acid-targeting viruses. Drug Discovery Today, 2021, 26, 122-137.	6.4	27
54	A New Strategy To Stabilize Oxytocin in Aqueous Solutions: II. Suppression of Cysteine-Mediated Intermolecular Reactions by a Combination of Divalent Metal Ions and Citrate. Molecular Pharmaceutics, 2012, 9, 554-562.	4.6	26

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55	Development and potential application of an oral ColoPulse infliximab tablet with colon specific release: A feasibility study. International Journal of Pharmaceutics, 2016, 505, 175-186.	5.2	26
56	Characterization of the Mode of Incorporation of Lipophilic Compounds in Solid Dispersions at the Nanoscale Using Fluorescence Resonance Energy Transfer (FRET). Macromolecular Rapid Communications, 2006, 27, 1149-1155.	3.9	25
57	Pulmonary delivery of influenza vaccine formulations in cotton rats: site of deposition plays a minor role in the protective efficacy against clinical isolate of H1N1pdm virus. Drug Delivery, 2018, 25, 533-545.	5.7	25
58	Inulin as filler-binder for tablets prepared by direct compaction. European Journal of Pharmaceutical Sciences, 2002, 15, 31-38.	4.0	23
59	Pharmacokinetics of a sustained release formulation of PDGFÎ²-receptor directed carrier proteins to target the fibrotic liver. Journal of Controlled Release, 2018, 269, 258-265.	9.9	23
60	An overview of the production methods for coreâ€“shell microspheres for parenteral controlled drug delivery. European Journal of Pharmaceutics and Biopharmaceutics, 2022, 170, 24-42.	4.3	22
61	Effect of drug-carrier interaction on the dissolution behavior of solid dispersion tablets. Pharmaceutical Development and Technology, 2010, 15, 460-468.	2.4	21
62	Inclusion of the Helper Lipid Dioleoyl-Phosphatidylethanolamine in Solid Lipid Nanoparticles Inhibits Their Transfection Efficiency. Journal of Biomedical Nanotechnology, 2014, 10, 355-365.	1.1	21
63	Identifying critical process steps to protein stability during spray drying using a vibrating mesh or a two-fluid nozzle. European Journal of Pharmaceutical Sciences, 2019, 128, 152-157.	4.0	21
64	Natural and bioinspired excipients for dry powder inhalation formulations. Current Opinion in Colloid and Interface Science, 2021, 56, 101497.	7.4	21
65	A User-Friendly Model for Spray Drying to Aid Pharmaceutical Product Development. PLoS ONE, 2013, 8, e74403.	2.5	20
66	Model to predict inhomogeneous proteinâ€“sugar distribution in powders prepared by spray drying. Journal of Aerosol Science, 2016, 101, 22-33.	3.8	20
67	siRNA-mediated protein knockdown in precision-cut lung slices. European Journal of Pharmaceutics and Biopharmaceutics, 2018, 133, 339-348.	4.3	20
68	Development of an Orodispersible Film Containing Stabilized Influenza Vaccine. Pharmaceutics, 2020, 12, 245.	4.5	20
69	Dry influenza vaccines: towards a stable, effective and convenient alternative to conventional parenteral influenza vaccination. Expert Review of Vaccines, 2016, 15, 1431-1447.	4.4	19
70	Pulmonary immunization: deposition site is of minor relevance for influenza vaccination but deep lung deposition is crucial for hepatitis B vaccination. Acta Pharmaceutica Sinica B, 2019, 9, 1231-1240.	12.0	19
71	Simplifying Influenza Vaccination During Pandemics: Sublingual Priming and Intramuscular Boosting of Immune Responses with Heterologous Whole Inactivated Influenza Vaccine. AAPS Journal, 2014, 16, 342-349.	4.4	18
72	Enhanced pulmonary immunization with aerosolized inactivated influenza vaccine containing delta inulin adjuvant. European Journal of Pharmaceutical Sciences, 2015, 66, 118-122.	4.0	18

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73	Passive inhalation of dry powder influenza vaccine formulations completely protects chickens against H5N1 lethal viral challenge. European Journal of Pharmaceutics and Biopharmaceutics, 2018, 133, 85-95.	4.3	18
74	siRNA-Mediated RNA Interference in Precision-Cut Tissue Slices Prepared from Mouse Lung and Kidney. AAPS Journal, 2017, 19, 1855-1863.	4.4	17
75	Efficient production of solid dispersions by spray drying solutions of high solid content using a 3-fluid nozzle. European Journal of Pharmaceutics and Biopharmaceutics, 2018, 123, 50-58.	4.3	17
76	Isocratic high-performance liquid chromatography (HPLC) for simultaneous quantification of curcumin and piperine in a microparticle formulation containing Curcuma longa and Piper nigrum. Heliyon, 2021, 7, e06541.	3.2	17
77	The Formation of Oxytocin Dimers is Suppressed by the Zinc-Aspartate-Oxytocin Complex. Journal of Pharmaceutical Sciences, 2013, 102, 1734-1741.	3.3	16
78	Comparison of adjuvants for a spray freeze-dried whole inactivated virus influenza vaccine for pulmonary administration. European Journal of Pharmaceutics and Biopharmaceutics, 2015, 93, 231-241.	4.3	16
79	Development of orodispersible films with selected Indonesian medicinal plant extracts. Journal of Herbal Medicine, 2017, 7, 37-46.	2.0	16
80	Respiratory syncytial virus subunit vaccines based on the viral envelope glycoproteins intended for pregnant women and the elderly. Expert Review of Vaccines, 2019, 18, 935-950.	4.4	16
81	An adaptable model for growth and/or shrinkage of droplets in the respiratory tract during inhalation of aqueous particles. Journal of Aerosol Science, 2016, 93, 21-34.	3.8	15
82	Preservation of Influenza Virosome Structure and Function During Freeze-Drying and Storage. Journal of Liposome Research, 2007, 17, 173-182.	3.3	14
83	The mechanism behind the biphasic pulsatile drug release from physically mixed poly(dl-lactic(-co-glycolic) acid)-based compacts. International Journal of Pharmaceutics, 2018, 551, 195-202.	5.2	13
84	The effects of oxygen concentration on cell death, anti-oxidant transcription, acute inflammation, and cell proliferation in precision-cut lung slices. Scientific Reports, 2019, 9, 16239.	3.3	13
85	Preparation and physicochemical evaluation of a new tacrolimus tablet formulation for sublingual administration. Drug Development and Industrial Pharmacy, 2012, 38, 490-500.	2.0	12
86	Pulmonary immunization of chickens using non-adjuvanted spray-freeze dried whole inactivated virus vaccine completely protects against highly pathogenic H5N1 avian influenza virus. Vaccine, 2014, 32, 6445-6450.	3.8	12
87	Nanoparticle Formulation of a Poorly Soluble Cannabinoid Receptor 1 Antagonist Improves Absorption by Rat and Human Intestine. Drug Metabolism and Disposition, 2013, 41, 1557-1565.	3.3	10
88	pH-dependent ileocolonic drug delivery, part I: in vitro and clinical evaluation of novel systems. Drug Discovery Today, 2020, 25, 1362-1373.	6.4	9
89	Protein release from water-swellable poly(d,l-lactide-PEG)-b-poly(Ïµ-caprolactone) implants. International Journal of Pharmaceutics, 2015, 480, 73-83.	5.2	8
90	Silencing Heat Shock Protein 47 (HSP47) in Fibrogenic Precision-Cut Lung Slices: A Surprising Lack of Effects on Fibrogenesis?. Frontiers in Medicine, 2021, 8, 607962.	2.6	8

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91	Efficacy of a New Pulmonary Cyclosporine A Powder Formulation for Prevention of Transplant Rejection in Rats. Journal of Heart and Lung Transplantation, 2009, 28, 486-492.	0.6	7
92	Aspartate buffer and divalent metal ions affect oxytocin in aqueous solution and protect it from degradation. International Journal of Pharmaceutics, 2013, 444, 139-145.	5.2	7
93	Ileo-Colon Targeting of the Poorly Water-Soluble Drug Celecoxib Using a pH-Dependent Coating in Combination with Self-Emulsifying Drug Delivery or Solid Dispersion Systems. Pharmaceutics, 2021, 13, 731.	4.5	7
94	Formulation and In Vitro Evaluation of Pellets Containing Sulfasalazine and Caffeine to Verify Ileo-Colonic Drug Delivery. Pharmaceutics, 2021, 13, 1985.	4.5	7
95	Ovalbumin-containing core-shell implants suitable to obtain a delayed IgG1 antibody response in support of a biphasic pulsatile release profile in mice. PLoS ONE, 2018, 13, e0202961.	2.5	6
96	CLSM as Quantitative Method to Determine the Size of Drug Crystals in a Solid Dispersion. Pharmaceutical Research, 2011, 28, 2567-2574.	3.5	5
97	pH-dependent ileocolonic drug delivery, part II: preclinical evaluation of novel drugs and novel excipients. Drug Discovery Today, 2020, 25, 1374-1388.	6.4	5
98	Microfluidic Production of Polymeric Core-Shell Microspheres for the Delayed Pulsatile Release of Bovine Serum Albumin as a Model Antigen. Pharmaceutics, 2021, 13, 1854.	4.5	5
99	Dried influenza vaccines: Over the counter vaccines. Hum Vaccin, 2010, 6, 854-856.	2.4	4
100	Adjuvantation of Pulmonary-Administered Influenza Vaccine with GPI-0100 Primarily Stimulates Antibody Production and Memory B Cell Proliferation. Vaccines, 2017, 5, 19.	4.4	4
101	Inhomogeneous Distribution of Components in Solid Protein Pharmaceuticals: Origins, Consequences, Analysis, and Resolutions. Journal of Pharmaceutical Sciences, 2020, 109, 134-153.	3.3	3
102	Development of a Stable Respiratory Syncytial Virus Pre-Fusion Protein Powder Suitable for a Core-Shell Implant with a Delayed Release in Mice: A Proof of Concept Study. Pharmaceutics, 2019, 11, 510.	4.5	1
103	Candida Biofilm Formation Assay on Essential Oil Coated Silicone Rubber. Bio-protocol, 2021, 11, e3941.	0.4	1
104	Assessing the Immunomodulatory Effect of Size on the Uptake and Immunogenicity of Influenza- and Hepatitis B Subunit Vaccines In Vitro. Pharmaceuticals, 2022, 15, 887.	3.8	0