Hugh D C Smyth

List of Publications by Year
in descending order

108 papers	3,768 citations	134610 34 h-index	156644 58 g-index
113 all docs	113 docs citations	113 times ranked	5206 citing authors

#	Article	IF	Citations
1	Identification of Stability Constraints in the Particle Engineering of an Inhaled Monoclonal Antibody Dried Powder. Journal of Pharmaceutical Sciences, 2022, 111, 403-416.	1.6	9
2	Comparison of HPMC Inhalation-Grade Capsules and Their Effect on Aerosol Performance Using Budesonide and Rifampicin DPI Formulations. AAPS PharmSciTech, 2022, 23, 52.	1.5	2
3	Nebulization of a polyelectrolyte-drug system for systemic hypertension treatment. European Journal of Pharmaceutical Sciences, 2022, 170, 106108.	1.9	3
4	Gap Junction-Mediated Delivery of Polymeric Macromolecules. ACS Biomaterials Science and Engineering, 2022, 8, 1566-1572.	2.6	6
5	Mixing of dry powders for inhalation: A review. International Journal of Pharmaceutics, 2022, 619, 121736.	2.6	10
6	Development and evaluation of inhalable composite niclosamide-lysozyme particles: A broad-spectrum, patient-adaptable treatment for coronavirus infections and sequalae. PLoS ONE, 2021, 16, e0246803.	1.1	43
7	Inhaled fixed-dose combination powders for the treatment of respiratory infections. Expert Opinion on Drug Delivery, 2021, 18, 1101-1115.	2.4	12
8	Aerosolizable siRNA-encapsulated solid lipid nanoparticles prepared by thin-film freeze-drying for potential pulmonary delivery. International Journal of Pharmaceutics, 2021, 596, 120215.	2.6	65
9	Pulmonary biofilm-based chronic infections and inhaled treatment strategies. International Journal of Pharmaceutics, 2021, 604, 120768.	2.6	10
10	Development of PEGylated chitosan/CRISPR-Cas9 dry powders for pulmonary delivery via thin-film freeze-drying. International Journal of Pharmaceutics, 2021, 605, 120831.	2.6	7
11	A Quality by Design Framework for Capsule-Based Dry Powder Inhalers. Pharmaceutics, 2021, 13, 1213.	2.0	16
12	Mitotropic triphenylphosphonium doxorubicin-loaded core-shell nanoparticles for cellular and mitochondrial sequential targeting of breast cancer. International Journal of Pharmaceutics, 2021, 606, 120936.	2.6	7
13	Gap Junction Liposomes for Efficient Delivery of Chemotherapeutics to Solid Tumors. ACS Biomaterials Science and Engineering, 2020, 6, 4851-4857.	2.6	8
14	Post-inhalation cough with therapeutic aerosols: Formulation considerations. Advanced Drug Delivery Reviews, 2020, 165-166, 127-141.	6.6	29
15	Peptides as surface coatings of nanoparticles that penetrate human cystic fibrosis sputum and uniformly distribute in vivo following pulmonary delivery. Journal of Controlled Release, 2020, 322, 457-469.	4.8	37
16	In vivo efficacy of a dry powder formulation of ciprofloxacin-copper complex in a chronic lung infection model of bioluminescent Pseudomonas aeruginosa. European Journal of Pharmaceutics and Biopharmaceutics, 2020, 152, 210-217.	2.0	7
17	Phenomena in Physical and Surface Chemistry. AAPS Introductions in the Pharmaceutical Sciences, 2020, , 5-16.	0.1	1
18	Essential Pharmaceutics. AAPS Introductions in the Pharmaceutical Sciences, 2019, , .	0.1	3

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19	Effect of Particle Formation Process on Characteristics and Aerosol Performance of Respirable Protein Powders. Molecular Pharmaceutics, 2019, 16, 4165-4180.	2.3	33
20	Strategies to facilitate or block nose-to-brain drug delivery. International Journal of Pharmaceutics, 2019, 570, 118635.	2.6	55
21	Efficacy of Ciprofloxacin and Its Copper Complex against Pseudomonas aeruginosa Biofilms. AAPS PharmSciTech, 2019, 20, 205.	1.5	7
22	Self-assembling of graphene oxide on carbon quantum dot loaded liposomes. Materials Science and Engineering C, 2019, 103, 109860.	3.8	9
23	A human skin high-throughput formulation screening method using a model hydrophilic drug. International Journal of Pharmaceutics, 2019, 565, 557-568.	2.6	8
24	Current Status of In Vitro Models and Assays for Susceptibility Testing for Wound Biofilm Infections. Biomedicines, 2019, 7, 34.	1.4	42
25	Delivery Technologies for Orally Inhaled Products: an Update. AAPS PharmSciTech, 2019, 20, 117.	1.5	36
26	Ophthalmic and Otic Drug Delivery. AAPS Introductions in the Pharmaceutical Sciences, 2019, , 123-130.	0.1	2
27	Pulmonary Drug Delivery. AAPS Introductions in the Pharmaceutical Sciences, 2019, , 163-181.	0.1	2
28	Personalized Medicine in Nasal Delivery: The Use of Patient-Specific Administration Parameters To Improve Nasal Drug Targeting Using 3D-Printed Nasal Replica Casts. Molecular Pharmaceutics, 2018, 15, 1392-1402.	2.3	57
29	Otic drug delivery systems: formulation principles and recent developments. Drug Development and Industrial Pharmacy, 2018, 44, 1395-1408.	0.9	19
30	Influence of Formulation Factors on the Aerosol Performance and Stability of Lysozyme Powders: a Systematic Approach. AAPS PharmSciTech, 2018, 19, 2755-2766.	1.5	21
31	Mass Median Plume Angle: A novel approach to characterize plume geometry in solution based pMDIs. International Journal of Pharmaceutics, 2018, 543, 376-385.	2.6	8
32	Influence of Excipients on the Antimicrobial Activity of Tobramycin Against Pseudomonas aeruginosa Biofilms. Pharmaceutical Research, 2018, 35, 10.	1.7	11
33	Layer-by-layer assembly of graphene oxide on thermosensitive liposomes for photo-chemotherapy. Acta Biomaterialia, 2018, 65, 376-392.	4.1	63
34	Mucus-penetrating phage-displayed peptides for improved transport across a mucus-like model. International Journal of Pharmaceutics, 2018, 553, 57-64.	2.6	29
35	PEGylated Chitosan for Nonviral Aerosol and Mucosal Delivery of the CRISPR/Cas9 System in Vitro. Molecular Pharmaceutics, 2018, 15, 4814-4826.	2.3	60
36	Formulation techniques for high dose dry powders. International Journal of Pharmaceutics, 2018, 547, 489-498.	2.6	46

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37	A modified USP induction port to characterize nasal spray plume geometry and predict turbinate deposition under flow. International Journal of Pharmaceutics, 2018, 548, 305-313.	2.6	18
38	Dosing considerations for inhaled biologics. International Journal of Pharmaceutics, 2018, 549, 58-66.	2.6	19
39	Development, Characterization, and InÂVitro Testing of Co-Delivered Antimicrobial Dry Powder Formulation for the Treatment of Pseudomonas aeruginosa Biofilms. Journal of Pharmaceutical Sciences, 2018, 107, 2172-2178.	1.6	3
40	Effect of size and chemical composition of graphene oxide nanoparticles on optical absorption cross-section. Journal of Biomedical Optics, 2018, 23, 1.	1.4	9
41	Magnetically triggered drug release from nanoparticles and its applications in anti-tumor treatment. Drug Delivery, 2017, 24, 511-518.	2.5	33
42	Evaluation of Granulated Lactose as a Carrier for Dry Powder Inhaler Formulations 2: Effect of Drugs and Drug Loading. Journal of Pharmaceutical Sciences, 2017, 106, 366-376.	1.6	20
43	Physicochemical properties of mucus and their impact on transmucosal drug delivery. International Journal of Pharmaceutics, 2017, 532, 555-572.	2.6	308
44	Excipient-Free Pulmonary Delivery and Macrophage Targeting of Clofazimine via Air Jet Micronization. Molecular Pharmaceutics, 2017, 14, 4019-4031.	2.3	33
45	Evaluation of the Photothermal Properties of a Reduced Graphene Oxide/Arginine Nanostructure for Near-Infrared Absorption. ACS Applied Materials & Interfaces, 2017, 9, 32607-32620.	4.0	73
46	Correction to â€œEvaluation of the Photothermal Properties of a Reduced Graphene Oxide/Arginine Nanostructure for Near-Infrared Absorptionâ€• ACS Applied Materials & Interfaces, 2017, 9, 39872-39872.	4.0	5
47	Implementation of design of experiments approach for the micronization of a drug with a high brittleâ€“ductile transition particle diameter. Drug Development and Industrial Pharmacy, 2017, 43, 364-371.	0.9	10
48	Editorial (Thematic Issue: Pulmonary Delivery of Systemic Drugs- from Aerosol Generation to) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 302	0.9	0
49	Route-Specific Challenges in the Delivery of Poorly Water-Soluble Drugs. AAPS Advances in the Pharmaceutical Sciences Series, 2016, , 1-39.	0.2	4
50	Hollow crystalline straws of diclofenac for high-dose and carrier-free dry powder inhaler formulations. International Journal of Pharmaceutics, 2016, 502, 170-180.	2.6	24
51	Carrier-free high-dose dry powder inhaler formulation of ibuprofen: Physicochemical characterization and in vitro aerodynamic performance. International Journal of Pharmaceutics, 2016, 511, 403-414.	2.6	31
52	3D Printing technologies for drug delivery: a review. Drug Development and Industrial Pharmacy, 2016, 42, 1019-1031.	0.9	322
53	Inhibition of bacterial growth by iron oxide nanoparticles with and without attached drug: Have we conquered the antibiotic resistance problem?. , 2015, , .		2
54	Sound Waves Effectively Assist Tobramycin in Elimination of Pseudomonas aeruginosa Biofilms In vitro. AAPS PharmSciTech, 2014, 15, 1644-1654.	1.5	10

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55	Swellable Ciprofloxacin-Loaded Nano-in-Micro Hydrogel Particles for Local Lung Drug Delivery. AAPS PharmSciTech, 2014, 15, 1535-1544.	1.5	41
56	Delivery of tobramycin coupled to iron oxide nanoparticles across the biofilm of mucoidal Pseudonomas aeruginosa and investigation of its efficacy. , 2014, , .		0
57	Evaluation of Granulated Lactose as a Carrier for DPI Formulations 1: Effect of Granule Size. AAPS PharmSciTech, 2014, 15, 1417-1428.	1.5	26
58	In Vitro Oxidative Metabolism of Cajaninstilbene Acid by Human Liver Microsomes and Hepatocytes: Involvement of Cytochrome P450 Reaction Phenotyping, Inhibition, and Induction Studies. Journal of Agricultural and Food Chemistry, 2014, 62, 10604-10614.	2.4	7
59	Enhanced cellular uptake and gene silencing activity of siRNA molecules mediated by chitosan-derivative nanocomplexes. International Journal of Pharmaceutics, 2014, 473, 579-590.	2.6	18
60	Externally Controlled Triggered-Release of Drug from PLGA Micro and Nanoparticles. PLoS ONE, 2014, 9, e114271.	1.1	47
61	Highly efficient multifunctional MnSe/ZnSeS quantum dots for biomedical applications. Proceedings of SPIE, 2013, , .	0.8	1
62	Effectiveness of tobramycin conjugated to iron oxide nanoparticles in treating infection in cystic fibrosis. Proceedings of SPIE, 2013, , .	0.8	4
63	Shock-Driven Particle Transport Off Smooth and Rough Surfaces. Journal of Fluids Engineering, Transactions of the ASME, 2013, 135, .	0.8	4
64	Tuning Aerosol Particle Size Distribution of Metered Dose Inhalers Using Cosolvents and Surfactants. BioMed Research International, 2013, 2013, 1-7.	0.9	17
65	Design andIn VitroEvaluation of a New Nano-Microparticulate System for Enhanced Aqueous-Phase Solubility of Curcumin. BioMed Research International, 2013, 2013, 1-9.	0.9	43
66	Efficacy of Tobramycin Conjugated to Superparamagnetic Iron Oxide Nanoparticles in Treating Cystic Fibrosis Infections. Materials Research Society Symposia Proceedings, 2013, 1617, 127-137.	0.1	0
67	Hydrogels for controlled pulmonary delivery. Therapeutic Delivery, 2013, 4, 1293-1305.	1.2	18
68	Multifunctional superparamagnetic nanocrystals for imaging and targeted drug delivery to the lung. , 2012, , .		0
69	Dry powder insufflation of crystalline and amorphous voriconazole formulations produced by thin film freezing to mice. European Journal of Pharmaceutics and Biopharmaceutics, 2012, 81, 600-608.	2.0	58
70	Formulation Approaches to Short Interfering RNA and MicroRNA: Challenges and Implications. Journal of Pharmaceutical Sciences, 2012, 101, 4046-4066.	1.6	70
71	Controlled Release Pulmonary Administration of Curcumin Using Swellable Biocompatible Microparticles. Molecular Pharmaceutics, 2012, 9, 269-280.	2.3	112
72	Dry Powder Inhaler Device Influence on Carrier Particle Performance. Journal of Pharmaceutical Sciences, 2012, 101, 1097-1107.	1.6	98

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73	Swellable Hydrogel Particles for Controlled Release Pulmonary Administration Using Propellant-Driven Metered Dose Inhalers. Journal of Aerosol Medicine and Pulmonary Drug Delivery, 2011, 24, 25-34.	0.7	29
74	Smart Magnetically Responsive Hydrogel Nanoparticles Prepared by a Novel Aerosol-Assisted Method for Biomedical and Drug Delivery Applications. Journal of Nanomaterials, 2011, 2011, 1-13.	1.5	69
75	Novel dry powder inhaler particle-dispersion systems. Therapeutic Delivery, 2011, 2, 1295-1311.	1.2	20
76	Synthesis and characterization of core/shell Fe3O4/ZnSe fluorescent magnetic nanoparticles. Journal of Applied Physics, 2011, 109, 07B536.	1.1	13
77	Effects of mild processing pressures on the performance of dry powder inhaler formulations for inhalation therapy (1): Budesonide and lactose. European Journal of Pharmaceutics and Biopharmaceutics, 2011, 78, 97-106.	2.0	9
78	Overcoming Lung Clearance Mechanisms for Controlled Release Drug Delivery. , 2011, , 101-126.		14
79	Micronized Drug Adhesion and Detachment from Surfaces: Effect of Loading Conditions. Aerosol Science and Technology, 2011, 45, 81-87.	1.5	21
80	Biodegradable pH-responsive alginate-poly (lactic-co-glycolic acid) nano/micro hydrogel matrices for oral delivery of silymarin. Carbohydrate Polymers, 2011, 83, 1345-1354.	5.1	74
81	Effect of Press-on Forces on Drug Adhesion in Dry Powder Inhaler Formulations. Journal of Adhesion Science and Technology, 2011, 25, 1659-1670.	1.4	13
82	Nanostructured Aerosol Particles: Fabrication, Pulmonary Drug Delivery, and Controlled Release. Journal of Nanomaterials, 2011, 2011, 1-2.	1.5	3
83	A Novel Aerosol Method for the Production of Hydrogel Particles. Journal of Nanomaterials, 2011, 2011, 1-10.	1.5	9
84	Phenomena in Physical and Surface Chemistry. Outlines in Pharmaceutical Sciences, 2011, , 5-18.	0.0	2
85	Micronization of a Soft Material: Air-Jet and Micro-Ball Milling. AAPS PharmSciTech, 2010, 11, 1642-1649.	1.5	43
86	Biodegradable nano-micro carrier systems for sustained pulmonary drug delivery: (I) Self-assembled nanoparticles encapsulated in respirable/swellable semi-IPN microspheres. International Journal of Pharmaceutics, 2010, 395, 132-141.	2.6	88
87	A novel dry powder inhaler: Effect of device design on dispersion performance. International Journal of Pharmaceutics, 2010, 401, 1-6.	2.6	23
88	Swellable microparticles as carriers for sustained pulmonary drug delivery. Journal of Pharmaceutical Sciences, 2010, 99, 2343-2356.	1.6	76
89	Influence of size and surface roughness of large lactose carrier particles in dry powder inhaler formulations. International Journal of Pharmaceutics, 2010, 402, 1-9.	2.6	98
90	Photo-induced synthesis, characterization and swelling behavior of poly(2-hydroxyethyl) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 62 Td (me	5.1	22

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91	Poly(ethylene glycol)â€“carboxymethyl chitosan-based pH-responsive hydrogels: photo-induced synthesis, characterization, swelling, and in vitro evaluation as potential drug carriers. Carbohydrate Research, 2010, 345, 2004-2012.	1.1	59
92	Novel cryomilled physically cross-linked biodegradable hydrogel microparticles as carriers for inhalation therapy. Journal of Microencapsulation, 2010, 27, 657-668.	1.2	22
93	Disruption of the Mucus Barrier by Topically Applied Exogenous Particles. Molecular Pharmaceutics, 2010, 7, 2280-2288.	2.3	71
94	Magnetically Responsive Nanoparticles for Drug Delivery Applications Using Low Magnetic Field Strengths. IEEE Transactions on Nanobioscience, 2009, 8, 33-42.	2.2	54
95	Enhanced drug transport through alginate biofilms using magnetic nanoparticles. , 2009, , .		3
96	The influence of porosity changes in human epidermal membrane during iontophoresis on the permeability enhancement of a model peptide. Drug Development and Industrial Pharmacy, 2009, 35, 1201-1209.	0.9	4
97	Prediction of Dry Powder Inhaler Formulation Performance From Surface Energetics and Blending Dynamics. Drug Development and Industrial Pharmacy, 2008, 34, 1002-1010.	0.9	54
98	Physical Characterization of Component Particles Included in Dry Powder Inhalers. I. Strategy Review and Static Characteristics. Journal of Pharmaceutical Sciences, 2007, 96, 1282-1301.	1.6	127
99	Physical Characterization of Component Particles Included in Dry Powder Inhalers. II. Dynamic Characteristics. Journal of Pharmaceutical Sciences, 2007, 96, 1302-1319.	1.6	81
100	Spray Pattern Analysis for Metered Dose Inhalers: Effect of Actuator Design. Pharmaceutical Research, 2006, 23, 1591-1596.	1.7	26
101	Excipients for Pulmonary Formulations. , 2006, , 225-249.		6
102	Propellant-driven metered-dose inhalers for pulmonary drug delivery. Expert Opinion on Drug Delivery, 2005, 2, 53-74.	2.4	36
103	Carriers in Drug Powder Delivery. American Journal of Drug Delivery, 2005, 3, 117-132.	0.6	83
104	Liquid-Spray or Dry-Powder Systems for Inhaled Delivery of Peptide and Proteins?. American Journal of Drug Delivery, 2005, 3, 29-45.	0.6	22
105	Alternative Propellant Aerosol Delivery Systems. Critical Reviews in Therapeutic Drug Carrier Systems, 2005, 22, 493-534.	1.2	7
106	Multimodal particle size distributions emitted from HFA-134a solution pressurized metered-dose inhalers. AAPS PharmSciTech, 2003, 4, 76-86.	1.5	35
107	The influence of formulation variables on the performance of alternative propellant-driven metered dose inhalers. Advanced Drug Delivery Reviews, 2003, 55, 807-828.	6.6	139
108	Effect of Permeation Enhancer Pretreatment on the Iontophoresis of Luteinizing Hormone Releasing Hormone (LHRH) Through Human Epidermal Membrane (HEM). Journal of Pharmaceutical Sciences, 2002, 91, 1296-1307.	1.6	34