Catherine A Fromen

List of Publications by Year
in descending order

37	1,097	516215 16	433756 31
papers	citations	h-index	g-index

39	39	39	1742
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Inhalable mRNA vaccines for respiratory diseases: a roadmap. Current Opinion in Biotechnology, 2022, 74, 104-109.	3.3	10
2	Nanoparticle Internalization Promotes the Survival of Primary Macrophages. Advanced NanoBiomed Research, 2022, 2, .	1.7	5
3	Realizing Lobe-Specific Aerosol Targeting in a 3D-Printed In Vitro Lung Model. Journal of Aerosol Medicine and Pulmonary Drug Delivery, 2021, 34, 42-56.	0.7	14
4	Hydrogel nanoparticle degradation influences the activation and survival of primary macrophages. Journal of Materials Chemistry B, 2021, 9, 7246-7257.	2.9	6
5	Deformable microparticles for shuttling nanoparticles to the vascular wall. Science Advances, 2021, 7, .	4.7	28
6	Scalable<scp>3D</scp>â€printed lattices for pressure control in fluid applications. AICHE Journal, 2021, 67, e17452.	1.8	12
7	Biomaterials-Based Opportunities to Engineer the Pulmonary Host Immune Response in COVID-19. ACS Biomaterials Science and Engineering, 2021, 7, 1742-1764.	2.6	16
8	Scalable, process-oriented beam lattices: Generation, characterization, and compensation for open cellular structures. Additive Manufacturing, 2021, 48, 102386.	1.7	7
9	Degradation profiles of poly(ethylene glycol)diacrylate (PEGDA)-based hydrogel nanoparticles. Polymer Chemistry, 2020, 11, 568-580.	1.9	46
10	Glottis motion effects on the particle transport and deposition in a subject-specific mouth-to-trachea model: A CFPD study. Computers in Biology and Medicine, 2020, 116, 103532.	3.9	31
11	Polymeric Nanoparticles. , 2020, , 303-324.		23
12	Evaluating UiO-66 Metalâ€“Organic Framework Nanoparticles as Acid-Sensitive Carriers for Pulmonary Drug Delivery Applications. ACS Applied Materials & Interfaces, 2020, 12, 38989-39004.	4.0	102
13	Significant Unresolved Questions and Opportunities for Bioengineering in Understanding and Treating COVID-19 Disease Progression. Cellular and Molecular Bioengineering, 2020, 13, 259-284.	1.0	5
14	Geometric model to predict improvement after lingual frenulectomy for ankyloglossia. International Journal of Pediatric Otorhinolaryngology, 2020, 134, 110063.	0.4	0
15	Check the gap: Facemask performance and exhaled aerosol distributions around the wearer. PLoS ONE, 2020, 15, e0243885.	1.1	15
16	The HensNest: Mass Manufacturing a General Use Face Mask Here in Delaware. Delaware Journal of Public Health, 2020, 6, 36-38.	0.2	0
17	Engineering Preclinical Tools and Therapeutics to Understand and Treat COVID-19. Delaware Journal of Public Health, 2020, 6, 32-35.	0.2	0
18	Evaluating Regional Pulmonary Deposition using Patient-Specific 3D Printed Lung Models. Journal of Visualized Experiments, 2020, , .	0.2	1

#	Article	IF	Citations
19	Controlling Size, Defectiveness, and Fluorescence in Nanoparticle UiO-66 through Water and Ligand Modulation. Chemistry of Materials, 2019, 31, 4831-4839.	3.2	41
20	Model Particulate Drug Carriers Modulate Leukocyte Adhesion in Human Blood Flows. ACS Biomaterials Science and Engineering, 2019, 5, 6530-6540.	2.6	9
21	PEGylation of model drug carriers enhances phagocytosis by primary human neutrophils. Acta Biomaterialia, 2018, 79, 283-293.	4.1	65
22	Potent Immune Stimulation from Nanoparticle Carriers Relies on the Interplay of Adjuvant Surface Density and Adjuvant Mass Distribution. ACS Biomaterials Science and Engineering, 2017, 3, 560-571.	2.6	8
23	Exploring deformable particles in vascular-targeted drug delivery: Softer is only sometimes better. Biomaterials, 2017, 124, 169-179.	5.7	45
24	Neutrophilâ€“Particle Interactions in Blood Circulation Drive Particle Clearance and Alter Neutrophil Responses in Acute Inflammation. ACS Nano, 2017, 11, 10797-10807.	7.3	71
25	Pulmonary Delivery of Butyrylcholinesterase as a Model Protein to the Lung. Molecular Pharmaceutics, 2016, 13, 1626-1635.	2.3	15
26	Evaluation of receptorâ€ligand mechanisms of dualâ€targeted particles to an inflamed endothelium. Bioengineering and Translational Medicine, 2016, 1, 103-115.	3.9	23
27	Nanoparticle surface charge impacts distribution, uptake and lymph node trafficking by pulmonary antigen-presenting cells. Nanomedicine: Nanotechnology, Biology, and Medicine, 2016, 12, 677-687.	1.7	119
28	Tumor Presence Induces Global Immune Changes and Enhances Nanoparticle Clearance. ACS Nano, 2016, 10, 861-870.	7.3	51
29	Distribution and Cellular Uptake of PEGylated Polymeric Particles in the Lung Towards Cell-Specific Targeted Delivery. Pharmaceutical Research, 2015, 32, 3248-3260.	1.7	36
30	Controlled analysis of nanoparticle charge on mucosal and systemic antibody responses following pulmonary immunization. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 488-493.	3.3	124
31	Emergence and Utility of Nonspherical Particles in Biomedicine. Industrial & Engineering Chemistry Research, 2015, 54, 4043-4059.	1.8	52
32	Drug carrier interaction with blood: a critical aspect for high-efficient vascular-targeted drug delivery systems. Therapeutic Delivery, 2015, 6, 915-934.	1.2	13
33	Biomedical Nanopreparations with Controlled Geometry. Frontiers in Nanobiomedical Research, 2014, , 349-400.	0.1	0
34	Synthesis and characterization of monodisperse uniformly shaped respirable aerosols. AIChE Journal, 2013, 59, 3184-3194.	1.8	11
35	Microfabricated Engineered Particle Systems for Respiratory Drug Delivery and Other Pharmaceutical Applications. Journal of Drug Delivery, 2012, 2012, 1-10.	2.5	52
36	Generation of a Library of Particles Having Controlled Sizes and Shapes via the Mechanical Elongation of Master Templates. Langmuir, 2011, 27, 524-528.	1.6	36

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37	Modeling the effects of microencapsulation on the electro-optic behavior of polymer cholesteric liquid crystal flakes. Journal of Applied Physics, 2009, 106, 124911.	1.1	3