Gaurav Sahay

List of Publications by Year
in descending order

46 papers	8,119 citations	117453 34 h-index	233125 45 g-index
49 all docs	49 docs citations	49 times ranked	11314 citing authors

#	Article	IF	Citations
1	Nanomedicine hitchhikes on neutrophils to the inflamed lung. Nature Nanotechnology, 2022, 17, 1-2.	15.6	19
2	Chemistry of Lipid Nanoparticles for RNA Delivery. Accounts of Chemical Research, 2022, 55, 2-12.	7.6	230
3	Mining LTR-retrotransposon genes for mRNA delivery. Trends in Pharmacological Sciences, 2022, , .	4.0	0
4	Matrix stiffness regulates lipid nanoparticle-mRNA delivery in cell-laden hydrogels. Nanomedicine: Nanotechnology, Biology, and Medicine, 2022, 42, 102550.	1.7	5
5	Illuminating endosomal escape of polymorphic lipid nanoparticles that boost mRNA delivery. Biomaterials Science, 2021, 9, 4289-4300.	2.6	52
6	Self-assembled mRNA vaccines. Advanced Drug Delivery Reviews, 2021, 170, 83-112.	6.6	248
7	RNA-Based Therapeutics: Current Developments in Targeted Molecular Therapy of Triple-Negative Breast Cancer. Pharmaceutics, 2021, 13, 1694.	2.0	17
8	Engineered mutant Î±-ENaC subunit mRNA delivered by lipid nanoparticles reduces amiloride currents in cystic fibrosisâ€"based cell and mice models. Science Advances, 2020, 6, .	4.7	13
9	Deconvoluting Lipid Nanoparticle Structure for Messenger RNA Delivery. Nano Letters, 2020, 20, 4543-4549.	4.5	193
10	Naturally Derived Membrane Lipids Impact Nanoparticle-Based Messenger RNA Delivery. Cellular and Molecular Bioengineering, 2020, 13, 463-474.	1.0	34
11	Naturally-occurring cholesterol analogues in lipid nanoparticles induce polymorphic shape and enhance intracellular delivery of mRNA. Nature Communications, 2020, 11, 983.	5.8	221
12	The effects of PEGylation on LNP based mRNA delivery to the eye. PLoS ONE, 2020, 15, e0241006.	1.1	91
13	Brief update on endocytosis of nanomedicines. Advanced Drug Delivery Reviews, 2019, 144, 90-111.	6.6	251
14	Advances in intracellular delivery through supramolecular self-assembly of oligonucleotides and peptides. Theranostics, 2019, 9, 3191-3212.	4.6	50
15	Micellar Formulation of Talazoparib and Buparlisib for Enhanced DNA Damage in Breast Cancer Chemoradiotherapy. ACS Applied Materials & Interfaces, 2019, 11, 12342-12356.	4.0	17
16	Drug induced micellization into ultra-high capacity and stable curcumin nanoformulations: Physico-chemical characterization and evaluation in 2D and 3D in vitro models. Journal of Controlled Release, 2019, 303, 162-180.	4.8	59
17	Lipid nanoparticles for delivery of messenger RNA to the back of the eye. Journal of Controlled Release, 2019, 303, 91-100.	4.8	134
18	Messenger RNA Delivery for Tissue Engineering and Regenerative Medicine Applications. Tissue Engineering - Part A, 2019, 25, 91-112.	1.6	68

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19	Supramolecular self assembly of nanodrill-like structures for intracellular delivery. Journal of Controlled Release, 2018, 282, 76-89.	4.8	21
20	Biodistribution and Toxicity of Micellar Platinum Nanoparticles in Mice via Intravenous Administration. Nanomaterials, 2018, 8, 410.	1.9	30
21	Lipid Nanoparticle-Delivered Chemically Modified mRNA Restores Chloride Secretion in Cystic Fibrosis. Molecular Therapy, 2018, 26, 2034-2046.	3.7	184
22	Boosting Intracellular Delivery of Lipid Nanoparticle-Encapsulated mRNA. Nano Letters, 2017, 17, 5711-5718.	4.5	167
23	Challenges in carrierâ€mediated intracellular delivery: moving beyond endosomal barriers. Wiley Interdisciplinary Reviews: Nanomedicine and Nanobiotechnology, 2016, 8, 465-478.	3.3	105
24	In vitro and ex vivo strategies for intracellular delivery. Nature, 2016, 538, 183-192.	13.7	662
25	PEG-lipid micelles enable cholesterol efflux in Niemann-Pick Type C1 disease-based lysosomal storage disorder. Scientific Reports, 2016, 6, 31750.	1.6	33
26	Lipopeptide nanoparticles for potent and selective siRNA delivery in rodents and nonhuman primates. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 3955-3960.	3.3	366
27	In vivo endothelial siRNA delivery using polymeric nanoparticles with low molecular weight. Nature Nanotechnology, 2014, 9, 648-655.	15.6	466
28	Small RNA combination therapy for lung cancer. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, E3553-61.	3.3	210
29	Niemann-Pick C1 Affects the Gene Delivery Efficacy of Degradable Polymeric Nanoparticles. ACS Nano, 2014, 8, 7905-7913.	7.3	26
30	Efficiency of siRNA delivery by lipid nanoparticles is limited by endocytic recycling. Nature Biotechnology, 2013, 31, 653-658.	9.4	660
31	Coreâ€"Shell Hydrogel Microcapsules for Improved Islets Encapsulation. Advanced Healthcare Materials, 2013, 2, 667-672.	3.9	141
32	Rational Design of a Biomimetic Cell Penetrating Peptide Library. ACS Nano, 2013, 7, 8616-8626.	7.3	43
33	Multiparametric approach for the evaluation of lipid nanoparticles for siRNA delivery. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 12881-12886.	3.3	131
34	Development of siRNA-probes for studying intracellular trafficking of siRNA nanoparticles. Integrative Biology (United Kingdom), 2013, 5, 224-230.	0.6	21
35	Rapid Discovery of Potent siRNA-Containing Lipid Nanoparticles Enabled by Controlled Microfluidic Formulation. Journal of the American Chemical Society, 2012, 134, 6948-6951.	6.6	288
36	FRET-Labeled siRNA Probes for Tracking Assembly and Disassembly of siRNA Nanocomplexes. ACS Nano, 2012, 6, 6133-6141.	7.3	59

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37	Alkane-modified short polyethyleneimine for siRNA delivery. Journal of Controlled Release, 2012, 160, 172-176.	4.8	43
38	Synergistic Silencing: Combinations of Lipid-like Materials for Efficacious siRNA Delivery. Molecular Therapy, 2011, 19, 1688-1694.	3.7	62
39	Combinatorial synthesis of chemically diverse core-shell nanoparticles for intracellular delivery. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 12996-13001.	3.3	178
40	Structure-property relationship in cytotoxicity and cell uptake of poly(2-oxazoline) amphiphiles. Journal of Controlled Release, 2011, 153, 73-82.	4.8	183
41	Endocytosis of nanomedicines. Journal of Controlled Release, 2010, 145, 182-195.	4.8	1,755
42	The exploitation of differential endocytic pathways in normal and tumor cells in the selective targeting of nanoparticulate chemotherapeutic agents. Biomaterials, 2010, 31, 923-933.	5.7	145
43	The utilization of pathogen-like cellular trafficking by single chain block copolymer. Biomaterials, 2010, 31, 1757-1764.	5.7	47
44	Polymeric Micelles with Ionic Cores Containing Biodegradable Cross-Links for Delivery of Chemotherapeutic Agents. Biomacromolecules, 2010, 11, 919-926.	2.6	119
45	Amphiphilic Block Copolymers Enhance Cellular Uptake and Nuclear Entry of Polyplex-Delivered DNA. Bioconjugate Chemistry, 2008, 19, 1987-1994.	1.8	87
46	Different Internalization Pathways of Polymeric Micelles and Unimers and Their Effects on Vesicular Transport. Bioconjugate Chemistry, 2008, 19, 2023-2029.	1.8	163