Gaurav Sahay

List of Publications by Year
in descending order

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46	8,119	117625	233421
papers	citations	34 h-index	45 g-index

49	49	49	11314
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Endocytosis of nanomedicines. Journal of Controlled Release, 2010, 145, 182-195.	9.9	1,755
2	In vitro and ex vivo strategies for intracellular delivery. Nature, 2016, 538, 183-192.	27.8	662
3	Efficiency of siRNA delivery by lipid nanoparticles is limited by endocytic recycling. Nature Biotechnology, 2013, 31, 653-658.	17.5	660
4	In vivo endothelial siRNA delivery using polymeric nanoparticles with low molecular weight. Nature Nanotechnology, 2014, 9, 648-655.	31.5	466
5	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.	7.1	366
6	Rapid Discovery of Potent siRNA-Containing Lipid Nanoparticles Enabled by Controlled Microfluidic Formulation. Journal of the American Chemical Society, 2012, 134, 6948-6951.	13.7	288
7	Brief update on endocytosis of nanomedicines. Advanced Drug Delivery Reviews, 2019, 144, 90-111.	13.7	251
8	Self-assembled mRNA vaccines. Advanced Drug Delivery Reviews, 2021, 170, 83-112.	13.7	248
9	Chemistry of Lipid Nanoparticles for RNA Delivery. Accounts of Chemical Research, 2022, 55, 2-12.	15.6	230
10	Naturally-occurring cholesterol analogues in lipid nanoparticles induce polymorphic shape and enhance intracellular delivery of mRNA. Nature Communications, 2020, 11, 983.	12.8	221
11	Small RNA combination therapy for lung cancer. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, E3553-61.	7.1	210
12	Deconvoluting Lipid Nanoparticle Structure for Messenger RNA Delivery. Nano Letters, 2020, 20, 4543-4549.	9.1	193
13	Lipid Nanoparticle-Delivered Chemically Modified mRNA Restores Chloride Secretion in Cystic Fibrosis. Molecular Therapy, 2018, 26, 2034-2046.	8.2	184
14	Structure-property relationship in cytotoxicity and cell uptake of poly(2-oxazoline) amphiphiles. Journal of Controlled Release, 2011, 153, 73-82.	9.9	183
15	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.	7.1	178
16	Boosting Intracellular Delivery of Lipid Nanoparticle-Encapsulated mRNA. Nano Letters, 2017, 17, 5711-5718.	9.1	167
17	Different Internalization Pathways of Polymeric Micelles and Unimers and Their Effects on Vesicular Transport. Bioconjugate Chemistry, 2008, 19, 2023-2029.	3.6	163
18	The exploitation of differential endocytic pathways in normal and tumor cells in the selective targeting of nanoparticulate chemotherapeutic agents. Biomaterials, 2010, 31, 923-933.	11.4	145

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19	Coreâ€“Shell Hydrogel Microcapsules for Improved Islets Encapsulation. Advanced Healthcare Materials, 2013, 2, 667-672.	7.6	141
20	Lipid nanoparticles for delivery of messenger RNA to the back of the eye. Journal of Controlled Release, 2019, 303, 91-100.	9.9	134
21	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.	7.1	131
22	Polymeric Micelles with Ionic Cores Containing Biodegradable Cross-Links for Delivery of Chemotherapeutic Agents. Biomacromolecules, 2010, 11, 919-926.	5.4	119
23	Challenges in carrierâ€mediated intracellular delivery: moving beyond endosomal barriers. Wiley Interdisciplinary Reviews: Nanomedicine and Nanobiotechnology, 2016, 8, 465-478.	6.1	105
24	The effects of PEGylation on LNP based mRNA delivery to the eye. PLoS ONE, 2020, 15, e0241006.	2.5	91
25	Amphiphilic Block Copolymers Enhance Cellular Uptake and Nuclear Entry of Polyplex-Delivered DNA. Bioconjugate Chemistry, 2008, 19, 1987-1994.	3.6	87
26	Messenger RNA Delivery for Tissue Engineering and Regenerative Medicine Applications. Tissue Engineering - Part A, 2019, 25, 91-112.	3.1	68
27	Synergistic Silencing: Combinations of Lipid-like Materials for Efficacious siRNA Delivery. Molecular Therapy, 2011, 19, 1688-1694.	8.2	62
28	FRET-Labeled siRNA Probes for Tracking Assembly and Disassembly of siRNA Nanocomplexes. ACS Nano, 2012, 6, 6133-6141.	14.6	59
29	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.	9.9	59
30	Illuminating endosomal escape of polymorphic lipid nanoparticles that boost mRNA delivery. Biomaterials Science, 2021, 9, 4289-4300.	5.4	52
31	Advances in intracellular delivery through supramolecular self-assembly of oligonucleotides and peptides. Theranostics, 2019, 9, 3191-3212.	10.0	50
32	The utilization of pathogen-like cellular trafficking by single chain block copolymer. Biomaterials, 2010, 31, 1757-1764.	11.4	47
33	Alkane-modified short polyethyleneimine for siRNA delivery. Journal of Controlled Release, 2012, 160, 172-176.	9.9	43
34	Rational Design of a Biomimetic Cell Penetrating Peptide Library. ACS Nano, 2013, 7, 8616-8626.	14.6	43
35	Naturally Derived Membrane Lipids Impact Nanoparticle-Based Messenger RNA Delivery. Cellular and Molecular Bioengineering, 2020, 13, 463-474.	2.1	34
36	PEG-lipid micelles enable cholesterol efflux in Niemann-Pick Type C1 disease-based lysosomal storage disorder. Scientific Reports, 2016, 6, 31750.	3.3	33

#	Article	IF	Citations
37	Biodistribution and Toxicity of Micellar Platinum Nanoparticles in Mice via Intravenous Administration. Nanomaterials, 2018, 8, 410.	4.1	30
38	Niemann-Pick C1 Affects the Gene Delivery Efficacy of Degradable Polymeric Nanoparticles. ACS Nano, 2014, 8, 7905-7913.	14.6	26
39	Development of siRNA-probes for studying intracellular trafficking of siRNA nanoparticles. Integrative Biology (United Kingdom), 2013, 5, 224-230.	1.3	21
40	Supramolecular self assembly of nanodrill-like structures for intracellular delivery. Journal of Controlled Release, 2018, 282, 76-89.	9.9	21
41	Nanomedicine hitchhikes on neutrophils to the inflamed lung. Nature Nanotechnology, 2022, 17, 1-2.	31.5	19
42	Micellar Formulation of Talazoparib and Buparlisib for Enhanced DNA Damage in Breast Cancer Chemoradiotherapy. ACS Applied Materials & Interfaces, 2019, 11, 12342-12356.	8.0	17
43	RNA-Based Therapeutics: Current Developments in Targeted Molecular Therapy of Triple-Negative Breast Cancer. Pharmaceutics, 2021, 13, 1694.	4.5	17
44	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, .	10.3	13
45	Matrix stiffness regulates lipid nanoparticle-mRNA delivery in cell-laden hydrogels. Nanomedicine: Nanotechnology, Biology, and Medicine, 2022, 42, 102550.	3.3	5
46	Mining LTR-retrotransposon genes for mRNA delivery. Trends in Pharmacological Sciences, 2022, , .	8.7	0