

Gaurav Sahay

List of Publications by Year in descending order

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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	Endocytosis of nanomedicines. <i>Journal of Controlled Release</i> , 2010, 145, 182-195.	4.8	1,755
2	In vitro and ex vivo strategies for intracellular delivery. <i>Nature</i> , 2016, 538, 183-192.	13.7	662
3	Efficiency of siRNA delivery by lipid nanoparticles is limited by endocytic recycling. <i>Nature Biotechnology</i> , 2013, 31, 653-658.	9.4	660
4	In vivo endothelial siRNA delivery using polymeric nanoparticles with low molecular weight. <i>Nature Nanotechnology</i> , 2014, 9, 648-655.	15.6	466
5	Lipopeptide nanoparticles for potent and selective siRNA delivery in rodents and nonhuman primates. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014, 111, 3955-3960.	3.3	366
6	Rapid Discovery of Potent siRNA-Containing Lipid Nanoparticles Enabled by Controlled Microfluidic Formulation. <i>Journal of the American Chemical Society</i> , 2012, 134, 6948-6951.	6.6	288
7	Brief update on endocytosis of nanomedicines. <i>Advanced Drug Delivery Reviews</i> , 2019, 144, 90-111.	6.6	251
8	Self-assembled mRNA vaccines. <i>Advanced Drug Delivery Reviews</i> , 2021, 170, 83-112.	6.6	248
9	Chemistry of Lipid Nanoparticles for RNA Delivery. <i>Accounts of Chemical Research</i> , 2022, 55, 2-12.	7.6	230
10	Naturally-occurring cholesterol analogues in lipid nanoparticles induce polymorphic shape and enhance intracellular delivery of mRNA. <i>Nature Communications</i> , 2020, 11, 983.	5.8	221
11	Small RNA combination therapy for lung cancer. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014, 111, E3553-61.	3.3	210
12	Deconvoluting Lipid Nanoparticle Structure for Messenger RNA Delivery. <i>Nano Letters</i> , 2020, 20, 4543-4549.	4.5	193
13	Lipid Nanoparticle-Delivered Chemically Modified mRNA Restores Chloride Secretion in Cystic Fibrosis. <i>Molecular Therapy</i> , 2018, 26, 2034-2046.	3.7	184
14	Structure-property relationship in cytotoxicity and cell uptake of poly(2-oxazoline) amphiphiles. <i>Journal of Controlled Release</i> , 2011, 153, 73-82.	4.8	183
15	Combinatorial synthesis of chemically diverse core-shell nanoparticles for intracellular delivery. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2011, 108, 12996-13001.	3.3	178
16	Boosting Intracellular Delivery of Lipid Nanoparticle-Encapsulated mRNA. <i>Nano Letters</i> , 2017, 17, 5711-5718.	4.5	167
17	Different Internalization Pathways of Polymeric Micelles and Unimers and Their Effects on Vesicular Transport. <i>Bioconjugate Chemistry</i> , 2008, 19, 2023-2029.	1.8	163
18	The exploitation of differential endocytic pathways in normal and tumor cells in the selective targeting of nanoparticulate chemotherapeutic agents. <i>Biomaterials</i> , 2010, 31, 923-933.	5.7	145

#	ARTICLE	IF	CITATIONS
19	Core-Shell Hydrogel Microcapsules for Improved Islets Encapsulation. <i>Advanced Healthcare Materials</i> , 2013, 2, 667-672.	3.9	141
20	Lipid nanoparticles for delivery of messenger RNA to the back of the eye. <i>Journal of Controlled Release</i> , 2019, 303, 91-100.	4.8	134
21	Multiparametric approach for the evaluation of lipid nanoparticles for siRNA delivery. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013, 110, 12881-12886.	3.3	131
22	Polymeric Micelles with Ionic Cores Containing Biodegradable Cross-Links for Delivery of Chemotherapeutic Agents. <i>Biomacromolecules</i> , 2010, 11, 919-926.	2.6	119
23	Challenges in carrier-mediated intracellular delivery: moving beyond endosomal barriers. <i>Wiley Interdisciplinary Reviews: Nanomedicine and Nanobiotechnology</i> , 2016, 8, 465-478.	3.3	105
24	The effects of PEGylation on LNP based mRNA delivery to the eye. <i>PLoS ONE</i> , 2020, 15, e0241006.	1.1	91
25	Amphiphilic Block Copolymers Enhance Cellular Uptake and Nuclear Entry of Polyplex-Delivered DNA. <i>Bioconjugate Chemistry</i> , 2008, 19, 1987-1994.	1.8	87
26	Messenger RNA Delivery for Tissue Engineering and Regenerative Medicine Applications. <i>Tissue Engineering - Part A</i> , 2019, 25, 91-112.	1.6	68
27	Synergistic Silencing: Combinations of Lipid-like Materials for Efficacious siRNA Delivery. <i>Molecular Therapy</i> , 2011, 19, 1688-1694.	3.7	62
28	FRET-Labeled siRNA Probes for Tracking Assembly and Disassembly of siRNA Nanocomplexes. <i>ACS Nano</i> , 2012, 6, 6133-6141.	7.3	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. <i>Journal of Controlled Release</i> , 2019, 303, 162-180.	4.8	59
30	Illuminating endosomal escape of polymorphic lipid nanoparticles that boost mRNA delivery. <i>Biomaterials Science</i> , 2021, 9, 4289-4300.	2.6	52
31	Advances in intracellular delivery through supramolecular self-assembly of oligonucleotides and peptides. <i>Theranostics</i> , 2019, 9, 3191-3212.	4.6	50
32	The utilization of pathogen-like cellular trafficking by single chain block copolymer. <i>Biomaterials</i> , 2010, 31, 1757-1764.	5.7	47
33	Alkane-modified short polyethyleneimine for siRNA delivery. <i>Journal of Controlled Release</i> , 2012, 160, 172-176.	4.8	43
34	Rational Design of a Biomimetic Cell Penetrating Peptide Library. <i>ACS Nano</i> , 2013, 7, 8616-8626.	7.3	43
35	Naturally Derived Membrane Lipids Impact Nanoparticle-Based Messenger RNA Delivery. <i>Cellular and Molecular Bioengineering</i> , 2020, 13, 463-474.	1.0	34
36	PEG-lipid micelles enable cholesterol efflux in Niemann-Pick Type C1 disease-based lysosomal storage disorder. <i>Scientific Reports</i> , 2016, 6, 31750.	1.6	33

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37	Biodistribution and Toxicity of Micellar Platinum Nanoparticles in Mice via Intravenous Administration. <i>Nanomaterials</i> , 2018, 8, 410.	1.9	30
38	Niemann-Pick C1 Affects the Gene Delivery Efficacy of Degradable Polymeric Nanoparticles. <i>ACS Nano</i> , 2014, 8, 7905-7913.	7.3	26
39	Development of siRNA-probes for studying intracellular trafficking of siRNA nanoparticles. <i>Integrative Biology (United Kingdom)</i> , 2013, 5, 224-230.	0.6	21
40	Supramolecular self assembly of nanodrill-like structures for intracellular delivery. <i>Journal of Controlled Release</i> , 2018, 282, 76-89.	4.8	21
41	Nanomedicine hitchhikes on neutrophils to the inflamed lung. <i>Nature Nanotechnology</i> , 2022, 17, 1-2.	15.6	19
42	Micellar Formulation of Talazoparib and Buparlisib for Enhanced DNA Damage in Breast Cancer Chemoradiotherapy. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 12342-12356.	4.0	17
43	RNA-Based Therapeutics: Current Developments in Targeted Molecular Therapy of Triple-Negative Breast Cancer. <i>Pharmaceutics</i> , 2021, 13, 1694.	2.0	17
44	Engineered mutant $\text{I}\pm\text{-ENaC}$ subunit mRNA delivered by lipid nanoparticles reduces amiloride currents in cystic fibrosis-based cell and mice models. <i>Science Advances</i> , 2020, 6, .	4.7	13
45	Matrix stiffness regulates lipid nanoparticle-mRNA delivery in cell-laden hydrogels. <i>Nanomedicine: Nanotechnology, Biology, and Medicine</i> , 2022, 42, 102550.	1.7	5
46	Mining LTR-retrotransposon genes for mRNA delivery. <i>Trends in Pharmacological Sciences</i> , 2022, , .	4.0	0