

Kathryn A Whitehead

List of Publications by Year in descending order

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Version: 2024-02-01

60
papers

8,888
citations

136950

32
h-index

168389

53
g-index

65
all docs

65
docs citations

65
times ranked

10681
citing authors

#	ARTICLE	IF	CITATIONS
1	Knocking down barriers: advances in siRNA delivery. <i>Nature Reviews Drug Discovery</i> , 2009, 8, 129-138.	46.4	2,639
2	Lipid-like materials for low-dose, in vivo gene silencing. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2010, 107, 1864-1869.	7.1	776
3	mRNA vaccines for infectious diseases: principles, delivery and clinical translation. <i>Nature Reviews Drug Discovery</i> , 2021, 20, 817-838.	46.4	577
4	Tools for translation: non-viral materials for therapeutic mRNA delivery. <i>Nature Reviews Materials</i> , 2017, 2, .	48.7	504
5	Managing diabetes with nanomedicine: challenges and opportunities. <i>Nature Reviews Drug Discovery</i> , 2015, 14, 45-57.	46.4	459
6	Degradable lipid nanoparticles with predictable in vivo siRNA delivery activity. <i>Nature Communications</i> , 2014, 5, 4277.	12.8	431
7	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.	13.7	288
8	Materials for oral delivery of proteins and peptides. <i>Nature Reviews Materials</i> , 2020, 5, 127-148.	48.7	275
9	Action and Reaction: The Biological Response to siRNA and Its Delivery Vehicles. <i>Molecular Therapy</i> , 2012, 20, 513-524.	8.2	231
10	Anionic nanoparticles enable the oral delivery of proteins by enhancing intestinal permeability. <i>Nature Biomedical Engineering</i> , 2020, 4, 84-96.	22.5	186
11	Lipid Nanoparticle Formulations for Enhanced Co-delivery of siRNA and mRNA. <i>Nano Letters</i> , 2018, 18, 3814-3822.	9.1	184
12	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.	7.1	178
13	Silencing or Stimulation? siRNA Delivery and the Immune System. <i>Annual Review of Chemical and Biomolecular Engineering</i> , 2011, 2, 77-96.	6.8	161
14	Branchedâ€”Tail Lipid Nanoparticles Potently Deliver mRNA In Vivo due to Enhanced Ionization at Endosomal pH. <i>Small</i> , 2019, 15, e1805097.	10.0	159
15	Achieving long-term stability of lipid nanoparticles: examining the effect of pH, temperature, and lyophilization. <i>International Journal of Nanomedicine</i> , 2017, Volume 12, 305-315.	6.7	157
16	Nanoparticulate Cellular Patches for Cell-Mediated Tumor-tropic Delivery. <i>ACS Nano</i> , 2010, 4, 625-631.	14.6	133
17	Advances in Drug Delivery. <i>Annual Review of Materials Research</i> , 2011, 41, 1-20.	9.3	125
18	Safe and Effective Permeation Enhancers for Oral Drug Delivery. <i>Pharmaceutical Research</i> , 2008, 25, 1782-1788.	3.5	115

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19	Oral delivery of macromolecules using intestinal patches: applications for insulin delivery. <i>Journal of Controlled Release</i> , 2004, 98, 37-45.	9.9	109
20	<i>In Vitro</i> to <i>In Vivo</i> Translation of Lipid Nanoparticles for Hepatocellular siRNA Delivery. <i>ACS Nano</i> , 2012, 6, 6922-6929.	14.6	96
21	Oral delivery of siRNA lipid nanoparticles: Fate in the GI tract. <i>Scientific Reports</i> , 2018, 8, 2178.	3.3	91
22	The replacement of helper lipids with charged alternatives in lipid nanoparticles facilitates targeted mRNA delivery to the spleen and lungs. <i>Journal of Controlled Release</i> , 2022, 345, 819-831.	9.9	83
23	A Potent Branched-Tail Lipid Nanoparticle Enables Multiplexed mRNA Delivery and Gene Editing <i>In Vivo</i> . <i>Nano Letters</i> , 2020, 20, 5167-5175.	9.1	72
24	Recent advances in biomaterials for the treatment of diabetic foot ulcers. <i>Biomaterials Science</i> , 2017, 5, 1962-1975.	5.4	70
25	Combinatorial Approach to Determine Functional Group Effects on Lipidoid-Mediated siRNA Delivery. <i>Bioconjugate Chemistry</i> , 2010, 21, 1448-1454.	3.6	64
26	Synergistic Silencing: Combinations of Lipid-like Materials for Efficacious siRNA Delivery. <i>Molecular Therapy</i> , 2011, 19, 1688-1694.	8.2	62
27	Engineering Aligned Skeletal Muscle Tissue Using Decellularized Plant-Derived Scaffolds. <i>ACS Biomaterials Science and Engineering</i> , 2020, 6, 3046-3054.	5.2	58
28	Mechanistic Analysis of Chemical Permeation Enhancers for Oral Drug Delivery. <i>Pharmaceutical Research</i> , 2008, 25, 1412-1419.	3.5	57
29	A Stiff Injectable Biodegradable Elastomer. <i>Advanced Functional Materials</i> , 2013, 23, 1527-1533.	14.9	54
30	Silencing TNF α with lipidoid nanoparticles downregulates both TNF α and MCP-1 in an in vitro co-culture model of diabetic foot ulcers. <i>Acta Biomaterialia</i> , 2016, 32, 120-128.	8.3	51
31	Lipid nanoparticles silence tumor necrosis factor α to improve wound healing in diabetic mice. <i>Bioengineering and Translational Medicine</i> , 2019, 4, 75-82.	7.1	49
32	Lipidoid Nanoparticles for siRNA Delivery to the Intestinal Epithelium: In Vitro Investigations in a Caco-2 Model. <i>PLoS ONE</i> , 2015, 10, e0133154.	2.5	36
33	In pursuit of a moving target: nanotherapeutics for the treatment of non-Hodgkin B-cell lymphoma. <i>Expert Opinion on Drug Delivery</i> , 2014, 11, 1923-1937.	5.0	27
34	Lipid nanoparticle chemistry determines how nucleoside base modifications alter mRNA delivery. <i>Journal of Controlled Release</i> , 2022, 341, 206-214.	9.9	27
35	ATRP-grown protein-polymer conjugates containing phenylpiperazine selectively enhance transepithelial protein transport. <i>Journal of Controlled Release</i> , 2017, 255, 270-278.	9.9	26
36	Discovery of synergistic permeation enhancers for oral drug delivery. <i>Journal of Controlled Release</i> , 2008, 128, 128-133.	9.9	22

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37	Expanding the utility of the dextran sulfate sodium (DSS) mouse model to induce a clinically relevant loss of intestinal barrier function. <i>PeerJ</i> , 2020, 8, e8681.	2.0	22
38	Lipidoid nanoparticle mediated silencing of Mcl-1 induces apoptosis in mantle cell lymphoma. <i>Experimental Biology and Medicine</i> , 2016, 241, 1007-1013.	2.4	21
39	The pH of Piperazine Derivative Solutions Predicts Their Utility as Transepithelial Permeation Enhancers. <i>Molecular Pharmaceutics</i> , 2016, 13, 578-585.	4.6	20
40	Structure-Function Analysis of Phenylpiperazine Derivatives as Intestinal Permeation Enhancers. <i>Pharmaceutical Research</i> , 2017, 34, 1320-1329.	3.5	18
41	Oral delivery of peptide therapeutics in infants: Challenges and opportunities. <i>Advanced Drug Delivery Reviews</i> , 2021, 173, 112-124.	13.7	17
42	Profiling of mature-stage human breast milk cells identifies six unique lactocyte subpopulations. <i>Science Advances</i> , 2022, 8, .	10.3	15
43	Lipidoid Tail Structure Strongly Influences siRNA Delivery Activity. <i>Cellular and Molecular Bioengineering</i> , 2016, 9, 305-314.	2.1	14
44	The enhanced intestinal permeability of infant mice enables oral protein and macromolecular absorption without delivery technology. <i>International Journal of Pharmaceutics</i> , 2021, 593, 120120.	5.2	14
45	Intestinal permeation enhancers enable oral delivery of macromolecules up to 70 kDa in size. <i>European Journal of Pharmaceutics and Biopharmaceutics</i> , 2022, 170, 70-76.	4.3	14
46	Lipid nanoparticle siRNA cocktails for the treatment of mantle cell lymphoma. <i>Bioengineering and Translational Medicine</i> , 2018, 3, 138-147.	7.1	13
47	Reversible inhibition of efflux transporters by hydrogel microdevices. <i>European Journal of Pharmaceutics and Biopharmaceutics</i> , 2019, 145, 76-84.	4.3	12
48	Thrifty, Rapid Intestinal Monolayers (TRIM) Using Caco-2 Epithelial Cells for Oral Drug Delivery Experiments. <i>Pharmaceutical Research</i> , 2019, 36, 172.	3.5	9
49	Piperazine Derivatives Enhance Epithelial Cell Monolayer Permeability by Increased Cell Force Generation and Loss of Cadherin Structures. <i>ACS Biomaterials Science and Engineering</i> , 2020, 6, 367-374.	5.2	6
50	Long-term daily oral administration of intestinal permeation enhancers is safe and effective in mice. <i>Bioengineering and Translational Medicine</i> , 2023, 8, .	7.1	3
51	A cage for pathogens. <i>Science Translational Medicine</i> , 2016, 8, .	12.4	1
52	Introduction to the <i>BioTM</i> special issue "Nucleic Acid Delivery: Enabling the Drugs of Tomorrow". <i>Bioengineering and Translational Medicine</i> , 2016, 1, 119-120.	7.1	0
53	Development of a clinically relevant chemoresistant mantle cell lymphoma cell culture model. <i>Experimental Biology and Medicine</i> , 2019, 244, 865-872.	2.4	0
54	A one-two punch for pain control. <i>Science Translational Medicine</i> , 2016, 8, .	12.4	0

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55	Pancreatic cells play switcheroo. Science Translational Medicine, 2016, 8, .	12.4	0
56	A captive peptide for T cell activation. Science Translational Medicine, 2016, 8, .	12.4	0
57	Gobbling up inflammation to ameliorate autoimmunity. Science Translational Medicine, 2016, 8, .	12.4	0
58	Protecting kids with a patch. Science Translational Medicine, 2016, 8, .	12.4	0
59	Muscling out gene mutations. Science Translational Medicine, 2016, 8, 367ec193.	12.4	0
60	A new lease on half-life. Science Translational Medicine, 2016, 8, 369ec201.	12.4	0