Kathryn A Whitehead

List of Publications by Year
in descending order

60	8,888	136950	168389
papers	citations	32 h-index	53 g-index

65	65	65	10681
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Longâ€term daily oral administration of intestinal permeation enhancers is safe and effective in mice. Bioengineering and Translational Medicine, 2023, 8, .	7.1	3
2	Lipid nanoparticle chemistry determines how nucleoside base modifications alter mRNA delivery. Journal of Controlled Release, 2022, 341, 206-214.	9.9	27
3	Intestinal permeation enhancers enable oral delivery of macromolecules up to 70ÂkDa in size. European Journal of Pharmaceutics and Biopharmaceutics, 2022, 170, 70-76.	4.3	14
4	The replacement of helper lipids with charged alternatives in lipid nanoparticles facilitates targeted mRNA delivery to the spleen and lungs. Journal of Controlled Release, 2022, 345, 819-831.	9.9	83
5	Profiling of mature-stage human breast milk cells identifies six unique lactocyte subpopulations. Science Advances, 2022, 8, .	10.3	15
6	The enhanced intestinal permeability of infant mice enables oral protein and macromolecular absorption without delivery technology. International Journal of Pharmaceutics, 2021, 593, 120120.	5.2	14
7	Oral delivery of peptide therapeutics in infants: Challenges and opportunities. Advanced Drug Delivery Reviews, 2021, 173, 112-124.	13.7	17
8	mRNA vaccines for infectious diseases: principles, delivery and clinical translation. Nature Reviews Drug Discovery, 2021, 20, 817-838.	46.4	577
9	Anionic nanoparticles enable the oral delivery of proteins by enhancing intestinal permeability. Nature Biomedical Engineering, 2020, 4, 84-96.	22.5	186
10	Materials for oral delivery of proteins and peptides. Nature Reviews Materials, 2020, 5, 127-148.	48.7	275
11	A Potent Branched-Tail Lipid Nanoparticle Enables Multiplexed mRNA Delivery and Gene Editing In Vivo. Nano Letters, 2020, 20, 5167-5175.	9.1	72
12	Engineering Aligned Skeletal Muscle Tissue Using Decellularized Plant-Derived Scaffolds. ACS Biomaterials Science and Engineering, 2020, 6, 3046-3054.	5.2	58
13	Piperazine Derivatives Enhance Epithelial Cell Monolayer Permeability by Increased Cell Force Generation and Loss of Cadherin Structures. ACS Biomaterials Science and Engineering, 2020, 6, 367-374.	5.2	6
14	Expanding the utility of the dextran sulfate sodium (DSS) mouse model to induce a clinically relevant loss of intestinal barrier function. PeerJ, 2020, 8, e8681.	2.0	22
15	Development of a clinically relevant chemoresistant mantle cell lymphoma cell culture model. Experimental Biology and Medicine, 2019, 244, 865-872.	2.4	0
16	Reversible inhibition of efflux transporters by hydrogel microdevices. European Journal of Pharmaceutics and Biopharmaceutics, 2019, 145, 76-84.	4.3	12
17	Thrifty, Rapid Intestinal Monolayers (TRIM) Using Caco-2 Epithelial Cells for Oral Drug Delivery Experiments. Pharmaceutical Research, 2019, 36, 172.	3.5	9
18	Lipid nanoparticles silence tumor necrosis factor Î± to improve wound healing in diabetic mice. Bioengineering and Translational Medicine, 2019, 4, 75-82.	7.1	49

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19	Branchedâ€Tail Lipid Nanoparticles Potently Deliver mRNA In Vivo due to Enhanced Ionization at Endosomal pH. Small, 2019, 15, e1805097.	10.0	159
20	Lipid Nanoparticle Formulations for Enhanced Co-delivery of siRNA and mRNA. Nano Letters, 2018, 18, 3814-3822.	9.1	184
21	Oral delivery of siRNA lipid nanoparticles: Fate in the GI tract. Scientific Reports, 2018, 8, 2178.	3.3	91
22	Lipid nanoparticle siRNA cocktails for the treatment of mantle cell lymphoma. Bioengineering and Translational Medicine, 2018, 3, 138-147.	7.1	13
23	Achieving long-term stability of lipid nanoparticles: examining the effect of pH, temperature, and lyophilization. International Journal of Nanomedicine, 2017, Volume 12, 305-315.	6.7	157
24	ATRP-grown protein-polymer conjugates containing phenylpiperazine selectively enhance transepithelial protein transport. Journal of Controlled Release, 2017, 255, 270-278.	9.9	26
25	Structure-Function Analysis of Phenylpiperazine Derivatives as Intestinal Permeation Enhancers. Pharmaceutical Research, 2017, 34, 1320-1329.	3.5	18
26	Tools for translation: non-viral materials for therapeutic mRNA delivery. Nature Reviews Materials, 2017, 2, .	48.7	504
27	Recent advances in biomaterials for the treatment of diabetic foot ulcers. Biomaterials Science, 2017, 5, 1962-1975.	5.4	70
28	Lipidoid nanoparticle mediated silencing of Mcl-1 induces apoptosis in mantle cell lymphoma. Experimental Biology and Medicine, 2016, 241, 1007-1013.	2.4	21
29	Introduction to the BioTM special issue â€œNucleic Acid Delivery: Enabling the Drugs of Tomorrowâ€• Bioengineering and Translational Medicine, 2016, 1, 119-120.	7.1	0
30	Lipidoid Tail Structure Strongly Influences siRNA Delivery Activity. Cellular and Molecular Bioengineering, 2016, 9, 305-314.	2.1	14
31	The pH of Piperazine Derivative Solutions Predicts Their Utility as Transepithelial Permeation Enhancers. Molecular Pharmaceutics, 2016, 13, 578-585.	4.6	20
32	Silencing TNFÎ± with lipidoid nanoparticles downregulates both TNFÎ± and MCP-1 in an in vitro co-culture model of diabetic foot ulcers. Acta Biomaterialia, 2016, 32, 120-128.	8.3	51
33	A cage for pathogens. Science Translational Medicine, 2016, 8, .	12.4	1
34	A one-two punch for pain control. Science Translational Medicine, 2016, 8, .	12.4	0
35	Pancreatic cells play switcheroo. Science Translational Medicine, 2016, 8, .	12.4	0
36	A captive peptide for T cell activation. Science Translational Medicine, 2016, 8, .	12.4	0

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37	Gobbling up inflammation to ameliorate autoimmunity. Science Translational Medicine, 2016, 8, .	12.4	0
38	Protecting kids with a patch. Science Translational Medicine, 2016, 8, .	12.4	0
39	Muscling out gene mutations. Science Translational Medicine, 2016, 8, 367ec193.	12.4	0
40	A new lease on half-life. Science Translational Medicine, 2016, 8, 369ec201.	12.4	0
41	Managing diabetes with nanomedicine: challenges and opportunities. Nature Reviews Drug Discovery, 2015, 14, 45-57.	46.4	459
42	Lipidoid Nanoparticles for siRNA Delivery to the Intestinal Epithelium: In Vitro Investigations in a Caco-2 Model. PLoS ONE, 2015, 10, e0133154.	2.5	36
43	In pursuit of a moving target: nanotherapeutics for the treatment of non-Hodgkin B-cell lymphoma. Expert Opinion on Drug Delivery, 2014, 11, 1923-1937.	5.0	27
44	Degradable lipid nanoparticles with predictable in vivo siRNA delivery activity. Nature Communications, 2014, 5, 4277.	12.8	431
45	A Stiff Injectable Biodegradable Elastomer. Advanced Functional Materials, 2013, 23, 1527-1533.	14.9	54
46	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
47	In Vitroâ€“In Vivo Translation of Lipid Nanoparticles for Hepatocellular siRNA Delivery. ACS Nano, 2012, 6, 6922-6929.	14.6	96
48	Action and Reaction: The Biological Response to siRNA and Its Delivery Vehicles. Molecular Therapy, 2012, 20, 513-524.	8.2	231
49	Synergistic Silencing: Combinations of Lipid-like Materials for Efficacious siRNA Delivery. Molecular Therapy, 2011, 19, 1688-1694.	8.2	62
50	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
51	Silencing or Stimulation? siRNA Delivery and the Immune System. Annual Review of Chemical and Biomolecular Engineering, 2011, 2, 77-96.	6.8	161
52	Advances in Drug Delivery. Annual Review of Materials Research, 2011, 41, 1-20.	9.3	125
53	Lipid-like materials for low-dose, in vivo gene silencing. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 1864-1869.	7.1	776
54	Combinatorial Approach to Determine Functional Group Effects on Lipidoid-Mediated siRNA Delivery. Bioconjugate Chemistry, 2010, 21, 1448-1454.	3.6	64

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55	Nanoparticulate Cellular Patches for Cell-Mediated Tumoritropic Delivery. ACS Nano, 2010, 4, 625-631.	14.6	133
56	Knocking down barriers: advances in siRNA delivery. Nature Reviews Drug Discovery, 2009, 8, 129-138.	46.4	2,639
57	Safe and Effective Permeation Enhancers for Oral Drug Delivery. Pharmaceutical Research, 2008, 25, 1782-1788.	3.5	115
58	Mechanistic Analysis of Chemical Permeation Enhancers for Oral Drug Delivery. Pharmaceutical Research, 2008, 25, 1412-1419.	3.5	57
59	Discovery of synergistic permeation enhancers for oral drug delivery. Journal of Controlled Release, 2008, 128, 128-133.	9.9	22
60	Oral delivery of macromolecules using intestinal patches: applications for insulin delivery. Journal of Controlled Release, 2004, 98, 37-45.	9.9	109