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List of Publications by Year
in descending order

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85 papers	20,948 citations	23567 58 h-index	51608 86 g-index
87 all docs	87 docs citations	87 times ranked	20567 citing authors

#	Article	IF	Citations
1	Drug Delivery Systems: Entering the Mainstream. Science, 2004, 303, 1818-1822.	12.6	4,028
2	Liposomal drug delivery systems: From concept to clinical applications. Advanced Drug Delivery Reviews, 2013, 65, 36-48.	13.7	3,565
3	Rational design of cationic lipids for siRNA delivery. Nature Biotechnology, 2010, 28, 172-176.	17.5	1,366
4	Maximizing the Potency of siRNA Lipid Nanoparticles for Hepatic Gene Silencing Inâ€…Vivo**. Angewandte Chemie - International Edition, 2012, 51, 8529-8533.	13.8	843
5	The Onpattro story and the clinical translation of nanomedicines containing nucleic acid-based drugs. Nature Nanotechnology, 2019, 14, 1084-1087.	31.5	814
6	Lipid Nanoparticle Systems for Enabling Gene Therapies. Molecular Therapy, 2017, 25, 1467-1475.	8.2	632
7	Microfluidic Synthesis of Highly Potent Limit-size Lipid Nanoparticles for In Vivo Delivery of siRNA. Molecular Therapy - Nucleic Acids, 2012, 1, e37.	5.1	445
8	Interactions of liposomes and lipid-based carrier systems with blood proteins: Relation to clearance behaviour in vivo. Advanced Drug Delivery Reviews, 1998, 32, 3-17.	13.7	344
9	Efficient encapsulation of antisense oligonucleotides in lipid vesicles using ionizable aminolipids: formation of novel small multilamellar vesicle structures. Biochimica Et Biophysica Acta - Biomembranes, 2001, 1510, 152-166.	2.6	344
10	Lipid Nanoparticles Enabling Gene Therapies: From Concepts to Clinical Utility. Nucleic Acid Therapeutics, 2018, 28, 146-157.	3.6	335
11	The Liposomal Formulation of Doxorubicin. Methods in Enzymology, 2005, 391, 71-97.	1.0	332
12	Lipid polymorphism and the roles of lipids in membranes. Chemistry and Physics of Lipids, 1986, 40, 127-144.	3.2	321
13	On the Formation and Morphology of Lipid Nanoparticles Containing Ionizable Cationic Lipids and siRNA. ACS Nano, 2018, 12, 4787-4795.	14.6	319
14	Lipid Nanoparticle Technology for Clinical Translation of siRNA Therapeutics. Accounts of Chemical Research, 2019, 52, 2435-2444.	15.6	270
15	Bottom-Up Design and Synthesis of Limit Size Lipid Nanoparticle Systems with Aqueous and Triglyceride Cores Using Millisecond Microfluidic Mixing. Langmuir, 2012, 28, 3633-3640.	3.5	250
16	Liposomal nanomedicines. Expert Opinion on Drug Delivery, 2008, 5, 25-44.	5.0	235
17	Lipid Nanoparticles Containing siRNA Synthesized by Microfluidic Mixing Exhibit an Electron-Dense Nanostructured Core. Journal of Physical Chemistry C, 2012, 116, 18440-18450.	3.1	232
18	The accumulation of drugs within large unilamellar vesicles exhibiting a proton gradient: a survey. Chemistry and Physics of Lipids, 1990, 53, 37-46.	3.2	231

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19	Influence of Cholesterol on the Association of Plasma Proteins with Liposomes. Biochemistry, 1996, 35, 2521-2525.	2.5	231
20	Lipid-Based DNA Therapeutics: Hallmarks of Non-Viral Gene Delivery. ACS Nano, 2019, 13, 3754-3782.	14.6	220
21	Characterization of liposomal systems containing doxorubicin entrapped in response to pH gradients. Biochimica Et Biophysica Acta - Biomembranes, 1990, 1025, 143-151.	2.6	216
22	Liposomeâ€"complement interactions in rat serum: implications for liposome survival studies. Biochimica Et Biophysica Acta - Biomembranes, 1994, 1191, 43-51.	2.6	215
23	Influence of particle size on the in vivo potency of lipid nanoparticle formulations of siRNA. Journal of Controlled Release, 2016, 235, 236-244.	9.9	204
24	Microfluidic Mixing: A General Method for Encapsulating Macromolecules in Lipid Nanoparticle Systems. Journal of Physical Chemistry B, 2015, 119, 8698-8706.	2.6	203
25	Spontaneous Entrapment of Polynucleotides upon Electrostatic Interaction with Ethanol-Destabilized Cationic Liposomes. Biophysical Journal, 2001, 80, 2310-2326.	0.5	193
26	Lipid nanoparticle technology for therapeutic gene regulation in the liver. Advanced Drug Delivery Reviews, 2020, 159, 344-363.	13.7	187
27	Influence of pH gradients on the transbilayer transport of drugs, lipids, peptides and metal ions into large unilamellar vesicles. BBA - Biomembranes, 1997, 1331, 187-211.	8.0	185
28	On the role of helper lipids in lipid nanoparticle formulations of siRNA. Nanoscale, 2019, 11, 21733-21739.	5.6	176
29	Advances in Lipid Nanoparticles for siRNA Delivery. Pharmaceutics, 2013, 5, 498-507.	4.5	169
30	Stateâ€ofâ€theâ€Art Design and Rapidâ€Mixing Production Techniques of Lipid Nanoparticles for Nucleic Acid Delivery. Small Methods, 2018, 2, 1700375.	8.6	165
31	Î²2-Glycoprotein I Is a Major Protein Associated with Very Rapidly Cleared Liposomes in Vivo, Suggesting a Significant Role in the Immune Clearance of â€œNon-selfâ€•Particles. Journal of Biological Chemistry, 1995, 270, 25845-25849.	3.4	161
32	Techniques for encapsulating bioactive agents into liposomes. Chemistry and Physics of Lipids, 1986, 40, 333-345.	3.2	158
33	Influence of Cationic Lipid Composition on Gene Silencing Properties of Lipid Nanoparticle Formulations of siRNA in Antigen-Presenting Cells. Molecular Therapy, 2011, 19, 2186-2200.	8.2	153
34	Lipid Nanoparticle Delivery of siRNA to Silence Neuronal Gene Expression in the Brain. Molecular Therapy - Nucleic Acids, 2013, 2, e136.	5.1	127
35	Design of lipid nanoparticles for in vitro and in vivo delivery of plasmid DNA. Nanomedicine: Nanotechnology, Biology, and Medicine, 2017, 13, 1377-1387.	3.3	122
36	Separation of large unilamellar liposomes from blood components by a spin column procedure: towards identifying plasma proteins which mediate liposome clearance in vivo. Biochimica Et Biophysica Acta - Biomembranes, 1991, 1070, 215-222.	2.6	121

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37	The Biomolecular Corona of Lipid Nanoparticles for Gene Therapy. Bioconjugate Chemistry, 2020, 31, 2046-2059.	3.6	120
38	Therapeutically optimized rates of drug release can be achieved by varying the drug-to-lipid ratio in liposomal vincristine formulations. Biochimica Et Biophysica Acta - Biomembranes, 2006, 1758, 55-64.	2.6	118
39	Liposomal Nanomedicines: An Emerging Field. Toxicologic Pathology, 2008, 36, 21-29.	1.8	115
40	Modulation of Membrane Fusion by Asymmetric Transbilayer Distributions of Amino Lipids. Biochemistry, 1994, 33, 12573-12580.	2.5	110
41	Lipid Nanoparticles for Short Interfering RNA Delivery. Advances in Genetics, 2014, 88, 71-110.	1.8	109
42	Development of lipid nanoparticle formulations of siRNA for hepatocyte gene silencing following subcutaneous administration. Journal of Controlled Release, 2014, 196, 106-112.	9.9	108
43	Anomalous solubility behavior of the antibiotic ciprofloxacin encapsulated in liposomes: a 1H-NMR study. Biochimica Et Biophysica Acta - Biomembranes, 1998, 1374, 9-20.	2.6	106
44	Influence of dose on liposome clearance: critical role of blood proteins. Biochimica Et Biophysica Acta - Biomembranes, 1996, 1281, 31-37.	2.6	102
45	Liposomes with entrapped doxorubicin exhibit extended blood residence times. Biochimica Et Biophysica Acta - Biomembranes, 1990, 1023, 133-139.	2.6	95
46	Characterization of the drug retention and pharmacokinetic properties of liposomal nanoparticles containing dihydrosphingomyelin. Biochimica Et Biophysica Acta - Biomembranes, 2007, 1768, 1121-1127.	2.6	92
47	Fusion-dependent formation of lipid nanoparticles containing macromolecular payloads. Nanoscale, 2019, 11, 9023-9031.	5.6	85
48	Loading of doxorubicin into liposomes by forming Mn2+-drug complexes. Biochimica Et Biophysica Acta - Biomembranes, 1998, 1414, 205-216.	2.6	83
49	Lipid-based systems for the intracellular delivery of genetic drugs. Molecular Membrane Biology, 1999, 16, 129-140.	2.0	82
50	Development of a weak-base docetaxel derivative that can be loaded into lipid nanoparticles. Journal of Controlled Release, 2010, 144, 332-340.	9.9	78
51	Lipid nanoparticle siRNA systems for silencing the androgen receptor in human prostate cancer in vivo. International Journal of Cancer, 2012, 131, E781-90.	5.1	73
52	Influence of Drug-to-Lipid Ratio on Drug Release Properties and Liposome Integrity in Liposomal Doxorubicin Formulations. Journal of Liposome Research, 2008, 18, 145-157.	3.3	72
53	Ionophore-mediated uptake of ciprofloxacin and vincristine into large unilamellar vesicles exhibiting transmembrane ion gradients. Biochimica Et Biophysica Acta - Biomembranes, 1998, 1414, 188-204.	2.6	69
54	Optimization of the retention properties of vincristine in liposomal systems. Biochimica Et Biophysica Acta - Biomembranes, 1993, 1152, 253-258.	2.6	67

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55	Influence of cationic lipid composition on uptake and intracellular processing of lipid nanoparticle formulations of siRNA. Nanomedicine: Nanotechnology, Biology, and Medicine, 2013, 9, 233-246.	3.3	67
56	Effects of intravenous and subcutaneous administration on the pharmacokinetics, biodistribution, cellular uptake and immunostimulatory activity of CpG ODN encapsulated in liposomal nanoparticles. International Immunopharmacology, 2007, 7, 1064-1075.	3.8	65
57	[3] Stabilized plasmid-lipid particles: A systemic gene therapy vector. Methods in Enzymology, 2002, 346, 36-71.	1.0	63
58	siRNA Lipid Nanoparticle Potently Silences Clusterin and Delays Progression When Combined with Androgen Receptor Cotargeting in Enzalutamide-Resistant Prostate Cancer. Clinical Cancer Research, 2015, 21, 4845-4855.	7.0	60
59	Formation of drugâ€“arylsulfonate complexes inside liposomes: A novel approach to improve drug retention. Journal of Controlled Release, 2006, 110, 378-386.	9.9	58
60	Characterization of Lipid Nanoparticles Containing Ionizable Cationic Lipids Using Design-of-Experiments Approach. Langmuir, 2021, 37, 1120-1128.	3.5	50
61	Ganglioside GM1and Hydrophilic Polymers Increase Liposome Circulation Times by Inhibiting the Association of Blood Proteins. Journal of Liposome Research, 1992, 2, 397-410.	3.3	47
62	Intratumor distribution of doxorubicin following i.v. administration of drug encapsulated in egg phosphatidylcholine/cholesterol liposomes. Cancer Chemotherapy and Pharmacology, 1997, 40, 309-317.	2.3	47
63	Use of liposomes as injectable-drug delivery systems. American Journal of Health-System Pharmacy, 1989, 46, 1576-1588.	1.0	46
64	pH-Induced destabilization of lipid bilayers by a lipopeptide derived from influenza hemagglutinin. Biochimica Et Biophysica Acta - Biomembranes, 1997, 1324, 232-244.	2.6	46
65	Rapid synthesis of lipid nanoparticles containing hydrophobic inorganic nanoparticles. Nanoscale, 2017, 9, 13600-13609.	5.6	46
66	Dexamethasone prodrugs as potent suppressors of the immunostimulatory effects of lipid nanoparticle formulations of nucleic acids. Journal of Controlled Release, 2018, 286, 46-54.	9.9	42
67	Freeze-fracture of lipids and model membrane systems. Journal of Electron Microscopy Technique, 1989, 13, 277-287.	1.1	38
68	The Niemann-Pick C1 Inhibitor NP3.47 Enhances Gene Silencing Potency of Lipid Nanoparticles Containing siRNA. Molecular Therapy, 2016, 24, 2100-2108.	8.2	38
69	Optimized Photoactivatable Lipid Nanoparticles Enable Red Light Triggered Drug Release. Small, 2021, 17, e2008198.	10.0	36
70	The Use of Transmembrane pH Gradient-Driven Drug Encapsulation in the Pharmacodynamic Evaluation of Liposomal Doxorubicin. Journal of Liposome Research, 1994, 4, 529-553.	3.3	35
71	A Glu-urea-Lys Ligand-conjugated Lipid Nanoparticle/siRNA System Inhibits Androgen Receptor Expression In Vivo. Molecular Therapy - Nucleic Acids, 2016, 5, e348.	5.1	35
72	Small molecule ligands for enhanced intracellular delivery of lipid nanoparticle formulations of siRNA. Nanomedicine: Nanotechnology, Biology, and Medicine, 2013, 9, 665-674.	3.3	34

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73	Modular Lipid Nanoparticle Platform Technology for siRNA and Lipophilic Prodrug Delivery. Small, 2021, 17, e2103025.	10.0	29
74	Strategies for Optimizing Liposomal Doxorubicin. Journal of Liposome Research, 1990, 1, 463-480.	3.3	26
75	The presence of GM1 in liposomes with entrapped doxorubicin does not prevent RES blockade. Lipids and Lipid Metabolism, 1993, 1168, 249-252.	2.6	23
76	Simultaneous, Single-Particle Measurements of Size and Loading Give Insights into the Structure of Drug-Delivery Nanoparticles. ACS Nano, 2021, 15, 19244-19255.	14.6	23
77	IGFBP2 Is Neither Sufficient nor Necessary for the Physiological Actions of Leptin on Glucose Homeostasis in Male ob/ob Mice. Endocrinology, 2014, 155, 716-725.	2.8	21
78	Lipid nanoparticle delivery of glucagon receptor siRNA improves glucose homeostasis in mouse models of diabetes. Molecular Metabolism, 2017, 6, 1161-1172.	6.5	20
79	Role of drug delivery technologies in the success of COVID-19 vaccines: a perspective. Drug Delivery and Translational Research, 2022, 12, 2581-2588.	5.8	17
80	Platelet Distribution in Rabbits Following Infusion of Liposomes. Thrombosis and Haemostasis, 1989, 61, 392-396.	3.4	11
81	Exciting Times for Lipid Nanoparticles: How Canadian Discoveries Are Enabling Gene Therapies. Molecular Pharmaceutics, 2022, 19, 1663-1668.	4.6	11
82	Lipid nanoparticle-mediated silencing of osteogenic suppressor GNAS leads to osteogenic differentiation of mesenchymal stem cells inÂvivo. Molecular Therapy, 2022, 30, 3034-3051.	8.2	10
83	Lipid nanoparticles to silence androgen receptor variants for prostate cancer therapy. Journal of Controlled Release, 2022, 349, 174-183.	9.9	10
84	Magnetic Filtration of Vesicles Containing Iron-Dextran Particles. Journal of Liposome Research, 1988, 1, 137-150.	3.3	6
85	The effect of circulation lifetime and drug-to-lipid ratio of intravenously administered lipid nanoparticles on the biodistribution and immunostimulatory activity of encapsulated CpG-ODN. Journal of Drug Targeting, 2008, 16, 564-577.	4.4	6