

Pieter R Cullis

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	Role of drug delivery technologies in the success of COVID-19 vaccines: a perspective. <i>Drug Delivery and Translational Research</i> , 2022, 12, 2581-2588.	5.8	17
2	Exciting Times for Lipid Nanoparticles: How Canadian Discoveries Are Enabling Gene Therapies. <i>Molecular Pharmaceutics</i> , 2022, 19, 1663-1668.	4.6	11
3	Lipid nanoparticle-mediated silencing of osteogenic suppressor GNAS leads to osteogenic differentiation of mesenchymal stem cells <i>in vivo</i> . <i>Molecular Therapy</i> , 2022, 30, 3034-3051.	8.2	10
4	Lipid nanoparticles to silence androgen receptor variants for prostate cancer therapy. <i>Journal of Controlled Release</i> , 2022, 349, 174-183.	9.9	10
5	Optimized Photoactivatable Lipid Nanoparticles Enable Red Light Triggered Drug Release. <i>Small</i> , 2021, 17, e2008198.	10.0	36
6	Modular Lipid Nanoparticle Platform Technology for siRNA and Lipophilic Prodrug Delivery. <i>Small</i> , 2021, 17, e2103025.	10.0	29
7	Characterization of Lipid Nanoparticles Containing Ionizable Cationic Lipids Using Design-of-Experiments Approach. <i>Langmuir</i> , 2021, 37, 1120-1128.	3.5	50
8	Simultaneous, Single-Particle Measurements of Size and Loading Give Insights into the Structure of Drug-Delivery Nanoparticles. <i>ACS Nano</i> , 2021, 15, 19244-19255.	14.6	23
9	The Biomolecular Corona of Lipid Nanoparticles for Gene Therapy. <i>Bioconjugate Chemistry</i> , 2020, 31, 2046-2059.	3.6	120
10	Lipid nanoparticle technology for therapeutic gene regulation in the liver. <i>Advanced Drug Delivery Reviews</i> , 2020, 159, 344-363.	13.7	187
11	Lipid Nanoparticle Technology for Clinical Translation of siRNA Therapeutics. <i>Accounts of Chemical Research</i> , 2019, 52, 2435-2444.	15.6	270
12	Fusion-dependent formation of lipid nanoparticles containing macromolecular payloads. <i>Nanoscale</i> , 2019, 11, 9023-9031.	5.6	85
13	Lipid-Based DNA Therapeutics: Hallmarks of Non-Viral Gene Delivery. <i>ACS Nano</i> , 2019, 13, 3754-3782.	14.6	220
14	The Onpattro story and the clinical translation of nanomedicines containing nucleic acid-based drugs. <i>Nature Nanotechnology</i> , 2019, 14, 1084-1087.	31.5	814
15	On the role of helper lipids in lipid nanoparticle formulations of siRNA. <i>Nanoscale</i> , 2019, 11, 21733-21739.	5.6	176
16	Lipid Nanoparticles Enabling Gene Therapies: From Concepts to Clinical Utility. <i>Nucleic Acid Therapeutics</i> , 2018, 28, 146-157.	3.6	335
17	On the Formation and Morphology of Lipid Nanoparticles Containing Ionizable Cationic Lipids and siRNA. <i>ACS Nano</i> , 2018, 12, 4787-4795.	14.6	319
18	State-of-the-Art Design and Rapid-Mixing Production Techniques of Lipid Nanoparticles for Nucleic Acid Delivery. <i>Small Methods</i> , 2018, 2, 1700375.	8.6	165

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19	Dexamethasone prodrugs as potent suppressors of the immunostimulatory effects of lipid nanoparticle formulations of nucleic acids. <i>Journal of Controlled Release</i> , 2018, 286, 46-54.	9.9	42
20	Lipid Nanoparticle Systems for Enabling Gene Therapies. <i>Molecular Therapy</i> , 2017, 25, 1467-1475.	8.2	632
21	Lipid nanoparticle delivery of glucagon receptor siRNA improves glucose homeostasis in mouse models of diabetes. <i>Molecular Metabolism</i> , 2017, 6, 1161-1172.	6.5	20
22	Design of lipid nanoparticles for in vitro and in vivo delivery of plasmid DNA. <i>Nanomedicine: Nanotechnology, Biology, and Medicine</i> , 2017, 13, 1377-1387.	3.3	122
23	Rapid synthesis of lipid nanoparticles containing hydrophobic inorganic nanoparticles. <i>Nanoscale</i> , 2017, 9, 13600-13609.	5.6	46
24	A Glu-urea-Lys Ligand-conjugated Lipid Nanoparticle/siRNA System Inhibits Androgen Receptor Expression In Vivo. <i>Molecular Therapy - Nucleic Acids</i> , 2016, 5, e348.	5.1	35
25	Influence of particle size on the in vivo potency of lipid nanoparticle formulations of siRNA. <i>Journal of Controlled Release</i> , 2016, 235, 236-244.	9.9	204
26	The Niemann-Pick C1 Inhibitor NP3.47 Enhances Gene Silencing Potency of Lipid Nanoparticles Containing siRNA. <i>Molecular Therapy</i> , 2016, 24, 2100-2108.	8.2	38
27	Microfluidic Mixing: A General Method for Encapsulating Macromolecules in Lipid Nanoparticle Systems. <i>Journal of Physical Chemistry B</i> , 2015, 119, 8698-8706.	2.6	203
28	siRNA Lipid Nanoparticle Potently Silences Clusterin and Delays Progression When Combined with Androgen Receptor Cotargeting in Enzalutamide-Resistant Prostate Cancer. <i>Clinical Cancer Research</i> , 2015, 21, 4845-4855.	7.0	60
29	IGFBP2 Is Neither Sufficient nor Necessary for the Physiological Actions of Leptin on Glucose Homeostasis in Male ob/ob Mice. <i>Endocrinology</i> , 2014, 155, 716-725.	2.8	21
30	Lipid Nanoparticles for Short Interfering RNA Delivery. <i>Advances in Genetics</i> , 2014, 88, 71-110.	1.8	109
31	Development of lipid nanoparticle formulations of siRNA for hepatocyte gene silencing following subcutaneous administration. <i>Journal of Controlled Release</i> , 2014, 196, 106-112.	9.9	108
32	Liposomal drug delivery systems: From concept to clinical applications. <i>Advanced Drug Delivery Reviews</i> , 2013, 65, 36-48.	13.7	3,565
33	Small molecule ligands for enhanced intracellular delivery of lipid nanoparticle formulations of siRNA. <i>Nanomedicine: Nanotechnology, Biology, and Medicine</i> , 2013, 9, 665-674.	3.3	34
34	Influence of cationic lipid composition on uptake and intracellular processing of lipid nanoparticle formulations of siRNA. <i>Nanomedicine: Nanotechnology, Biology, and Medicine</i> , 2013, 9, 233-246.	3.3	67
35	Lipid Nanoparticle Delivery of siRNA to Silence Neuronal Gene Expression in the Brain. <i>Molecular Therapy - Nucleic Acids</i> , 2013, 2, e136.	5.1	127
36	Advances in Lipid Nanoparticles for siRNA Delivery. <i>Pharmaceutics</i> , 2013, 5, 498-507.	4.5	169

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37	Microfluidic Synthesis of Highly Potent Limit-size Lipid Nanoparticles for In Vivo Delivery of siRNA. <i>Molecular Therapy - Nucleic Acids</i> , 2012, 1, e37.	5.1	445
38	Lipid Nanoparticles Containing siRNA Synthesized by Microfluidic Mixing Exhibit an Electron-Dense Nanostructured Core. <i>Journal of Physical Chemistry C</i> , 2012, 116, 18440-18450.	3.1	232
39	Bottom-Up Design and Synthesis of Limit Size Lipid Nanoparticle Systems with Aqueous and Triglyceride Cores Using Millisecond Microfluidic Mixing. <i>Langmuir</i> , 2012, 28, 3633-3640.	3.5	250
40	Lipid nanoparticle siRNA systems for silencing the androgen receptor in human prostate cancer <i>in vivo</i> . <i>International Journal of Cancer</i> , 2012, 131, E781-90.	5.1	73
41	Maximizing the Potency of siRNA Lipid Nanoparticles for Hepatic Gene Silencing <i>In Vivo</i> . <i>Angewandte Chemie - International Edition</i> , 2012, 51, 8529-8533.	13.8	843
42	Influence of Cationic Lipid Composition on Gene Silencing Properties of Lipid Nanoparticle Formulations of siRNA in Antigen-Presenting Cells. <i>Molecular Therapy</i> , 2011, 19, 2186-2200.	8.2	153
43	Development of a weak-base docetaxel derivative that can be loaded into lipid nanoparticles. <i>Journal of Controlled Release</i> , 2010, 144, 332-340.	9.9	78
44	Rational design of cationic lipids for siRNA delivery. <i>Nature Biotechnology</i> , 2010, 28, 172-176.	17.5	1,366
45	Liposomal nanomedicines. <i>Expert Opinion on Drug Delivery</i> , 2008, 5, 25-44.	5.0	235
46	Influence of Drug-to-Lipid Ratio on Drug Release Properties and Liposome Integrity in Liposomal Doxorubicin Formulations. <i>Journal of Liposome Research</i> , 2008, 18, 145-157.	3.3	72
47	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. <i>Journal of Drug Targeting</i> , 2008, 16, 564-577.	4.4	6
48	Liposomal Nanomedicines: An Emerging Field. <i>Toxicologic Pathology</i> , 2008, 36, 21-29.	1.8	115
49	Characterization of the drug retention and pharmacokinetic properties of liposomal nanoparticles containing dihydrosphingomyelin. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 2007, 1768, 1121-1127.	2.6	92
50	Effects of intravenous and subcutaneous administration on the pharmacokinetics, biodistribution, cellular uptake and immunostimulatory activity of CpG ODN encapsulated in liposomal nanoparticles. <i>International Immunopharmacology</i> , 2007, 7, 1064-1075.	3.8	65
51	Therapeutically optimized rates of drug release can be achieved by varying the drug-to-lipid ratio in liposomal vincristine formulations. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 2006, 1758, 55-64.	2.6	118
52	Formation of drug-arylsulfonate complexes inside liposomes: A novel approach to improve drug retention. <i>Journal of Controlled Release</i> , 2006, 110, 378-386.	9.9	58
53	The Liposomal Formulation of Doxorubicin. <i>Methods in Enzymology</i> , 2005, 391, 71-97.	1.0	332
54	Drug Delivery Systems: Entering the Mainstream. <i>Science</i> , 2004, 303, 1818-1822.	12.6	4,028

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55	[3] Stabilized plasmid-lipid particles: A systemic gene therapy vector. <i>Methods in Enzymology</i> , 2002, 346, 36-71.	1.0	63
56	Spontaneous Entrapment of Polynucleotides upon Electrostatic Interaction with Ethanol-Destabilized Cationic Liposomes. <i>Biophysical Journal</i> , 2001, 80, 2310-2326.	0.5	193
57	Efficient encapsulation of antisense oligonucleotides in lipid vesicles using ionizable aminolipids: formation of novel small multilamellar vesicle structures. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 2001, 1510, 152-166.	2.6	344
58	Lipid-based systems for the intracellular delivery of genetic drugs. <i>Molecular Membrane Biology</i> , 1999, 16, 129-140.	2.0	82
59	Interactions of liposomes and lipid-based carrier systems with blood proteins: Relation to clearance behaviour in vivo. <i>Advanced Drug Delivery Reviews</i> , 1998, 32, 3-17.	13.7	344
60	Anomalous solubility behavior of the antibiotic ciprofloxacin encapsulated in liposomes: a ¹ H-NMR study. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 1998, 1374, 9-20.	2.6	106
61	Ionophore-mediated uptake of ciprofloxacin and vincristine into large unilamellar vesicles exhibiting transmembrane ion gradients. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 1998, 1414, 188-204.	2.6	69
62	Loading of doxorubicin into liposomes by forming Mn ²⁺ -drug complexes. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 1998, 1414, 205-216.	2.6	83
63	pH-Induced destabilization of lipid bilayers by a lipopeptide derived from influenza hemagglutinin. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 1997, 1324, 232-244.	2.6	46
64	Influence of pH gradients on the transbilayer transport of drugs, lipids, peptides and metal ions into large unilamellar vesicles. <i>BBA - Biomembranes</i> , 1997, 1331, 187-211.	8.0	185
65	Intratumor distribution of doxorubicin following i.v. administration of drug encapsulated in egg phosphatidylcholine/cholesterol liposomes. <i>Cancer Chemotherapy and Pharmacology</i> , 1997, 40, 309-317.	2.3	47
66	Influence of Cholesterol on the Association of Plasma Proteins with Liposomes. <i>Biochemistry</i> , 1996, 35, 2521-2525.	2.5	231
67	Influence of dose on liposome clearance: critical role of blood proteins. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 1996, 1281, 31-37.	2.6	102
68	¹²⁵ I-Glycoprotein I Is a Major Protein Associated with Very Rapidly Cleared Liposomes in Vivo, Suggesting a Significant Role in the Immune Clearance of "Non-self" Particles. <i>Journal of Biological Chemistry</i> , 1995, 270, 25845-25849.	3.4	161
69	The Use of Transmembrane pH Gradient-Driven Drug Encapsulation in the Pharmacodynamic Evaluation of Liposomal Doxorubicin. <i>Journal of Liposome Research</i> , 1994, 4, 529-553.	3.3	35
70	Liposome "complement" interactions in rat serum: implications for liposome survival studies. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 1994, 1191, 43-51.	2.6	215
71	Modulation of Membrane Fusion by Asymmetric Transbilayer Distributions of Amino Lipids. <i>Biochemistry</i> , 1994, 33, 12573-12580.	2.5	110
72	Optimization of the retention properties of vincristine in liposomal systems. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 1993, 1152, 253-258.	2.6	67

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73	The presence of GM1 in liposomes with entrapped doxorubicin does not prevent RES blockade. <i>Lipids and Lipid Metabolism</i> , 1993, 1168, 249-252.	2.6	23
74	Ganglioside GM1 and Hydrophilic Polymers Increase Liposome Circulation Times by Inhibiting the Association of Blood Proteins. <i>Journal of Liposome Research</i> , 1992, 2, 397-410.	3.3	47
75	Separation of large unilamellar liposomes from blood components by a spin column procedure: towards identifying plasma proteins which mediate liposome clearance in vivo. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 1991, 1070, 215-222.	2.6	121
76	The accumulation of drugs within large unilamellar vesicles exhibiting a proton gradient: a survey. <i>Chemistry and Physics of Lipids</i> , 1990, 53, 37-46.	3.2	231
77	Strategies for Optimizing Liposomal Doxorubicin. <i>Journal of Liposome Research</i> , 1990, 1, 463-480.	3.3	26
78	Liposomes with entrapped doxorubicin exhibit extended blood residence times. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 1990, 1023, 133-139.	2.6	95
79	Characterization of liposomal systems containing doxorubicin entrapped in response to pH gradients. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 1990, 1025, 143-151.	2.6	216
80	Use of liposomes as injectable-drug delivery systems. <i>American Journal of Health-System Pharmacy</i> , 1989, 46, 1576-1588.	1.0	46
81	Freeze-fracture of lipids and model membrane systems. <i>Journal of Electron Microscopy Technique</i> , 1989, 13, 277-287.	1.1	38
82	Platelet Distribution in Rabbits Following Infusion of Liposomes. <i>Thrombosis and Haemostasis</i> , 1989, 61, 392-396.	3.4	11
83	Magnetic Filtration of Vesicles Containing Iron-Dextran Particles. <i>Journal of Liposome Research</i> , 1988, 1, 137-150.	3.3	6
84	Techniques for encapsulating bioactive agents into liposomes. <i>Chemistry and Physics of Lipids</i> , 1986, 40, 333-345.	3.2	158
85	Lipid polymorphism and the roles of lipids in membranes. <i>Chemistry and Physics of Lipids</i> , 1986, 40, 127-144.	3.2	321