Stefaan C De Smedt

List of Publications by Year in descending order

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#	Article	IF	CITATIONS
1	Cationic polymer based gene delivery systems. Pharmaceutical Research, 2000, 17, 113-126.	1.7	816
2	Cellular toxicity of inorganic nanoparticles: Common aspects and guidelines for improved nanotoxicity evaluation. Nano Today, 2011, 6, 446-465.	6.2	581
3	The Use of Inhibitors to Study Endocytic Pathways of Gene Carriers: Optimization and Pitfalls. Molecular Therapy, 2010, 18, 561-569.	3.7	578
4	Electroporation-induced siRNA precipitation obscures the efficiency of siRNA loading into extracellular vesicles. Journal of Controlled Release, 2013, 172, 229-238.	4.8	457
5	Biodegradable polymers as non-viral carriers for plasmid DNA delivery. Journal of Controlled Release, 2008, 126, 97-110.	4.8	451
6	Advanced nanogel engineering for drug delivery. Soft Matter, 2009, 5, 707-715.	1.2	443
7	N1-methylpseudouridine-incorporated mRNA outperforms pseudouridine-incorporated mRNA by providing enhanced protein expression and reduced immunogenicity in mammalian cell lines and mice. Journal of Controlled Release, 2015, 217, 337-344.	4.8	365
8	Lipid and polymer nanoparticles for drug delivery to bacterial biofilms. Journal of Controlled Release, 2014, 190, 607-623.	4.8	325
9	Ecofriendly Electrospun Membranes Loaded with Visible-Light-Responding Nanoparticles for Multifunctional Usages: Highly Efficient Air Filtration, Dye Scavenging, and Bactericidal Activity. ACS Applied Materials & Interfaces, 2019, 11, 12880-12889.	4.0	323
10	Polyelectrolyte microcapsules for biomedical applications. Soft Matter, 2009, 5, 282-291.	1.2	276
11	The dawn of mRNA vaccines: The COVID-19 case. Journal of Controlled Release, 2021, 333, 511-520.	4.8	276
12	Encoding microcarriers: present and future technologies. Nature Reviews Drug Discovery, 2002, 1, 447-456.	21.5	270
13	Cytotoxic Effects of Gold Nanoparticles: A Multiparametric Study. ACS Nano, 2012, 6, 5767-5783.	7.3	239
14	Exploiting Intrinsic Nanoparticle Toxicity: The Pros and Cons of Nanoparticle-Induced Autophagy in Biomedical Research. Chemical Reviews, 2014, 114, 7581-7609.	23.0	222
15	Ultrasound and microbubble mediated drug delivery: Acoustic pressure as determinant for uptake via membrane pores or endocytosis. Journal of Controlled Release, 2015, 197, 20-28.	4.8	220
16	The proton sponge hypothesis: Fable or fact?. European Journal of Pharmaceutics and Biopharmaceutics, 2018, 129, 184-190.	2.0	199
17	Photothermal nanofibres enable safe engineering of therapeutic cells. Nature Nanotechnology, 2021, 16, 1281-1291.	15.6	192
18	Assessing nanoparticle toxicity in cell-based assays: influence of cell culture parameters and optimized models for bridging the in vitro–in vivo gap. Chemical Society Reviews, 2013, 42, 8339.	18.7	190

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19	Stimuli-responsive electrospun fibers and their applications. Chemical Society Reviews, 2011, 40, 2417.	18.7	184
20	Three decades of messenger RNA vaccine development. Nano Today, 2019, 28, 100766.	6.2	177
21	Fluorescence recovery after photobleaching: a versatile tool for mobility and interaction measurements in pharmaceutical research. Pharmaceutical Research, 1999, 16, 1153-1162.	1.7	169
22	Vitreous: A Barrier to Nonviral Ocular Gene Therapy. , 2005, 46, 3553.		169
23	Merging the best of both worlds: hybrid lipid-enveloped matrix nanocomposites in drug delivery. Chemical Society Reviews, 2014, 43, 444-472.	18.7	157
24	Comparison of Gold Nanoparticle Mediated Photoporation: Vapor Nanobubbles Outperform Direct Heating for Delivering Macromolecules in Live Cells. ACS Nano, 2014, 8, 6288-6296.	7.3	157
25	Endosomal Size and Membrane Leakiness Influence Proton Sponge-Based Rupture of Endosomal Vesicles. ACS Nano, 2018, 12, 2332-2345.	7.3	154
26	Encoding microcarriers by spatial selective photobleaching. Nature Materials, 2003, 2, 169-173.	13.3	152
27	Identification of Individual Exosome-Like Vesicles by Surface Enhanced Raman Spectroscopy. Small, 2016, 12, 3292-3301.	5.2	145
28	Therapeutic and diagnostic applications of extracellular vesicles. Journal of Controlled Release, 2016, 244, 167-183.	4.8	145
29	Sizing Nanomatter in Biological Fluids by Fluorescence Single Particle Tracking. Nano Letters, 2010, 10, 4435-4442.	4.5	144
30	Stimuli-responsive nanobubbles for biomedical applications. Chemical Society Reviews, 2021, 50, 5746-5776.	18.7	141
31	The Role of Ultrasound-Driven Microbubble Dynamics in Drug Delivery: From Microbubble Fundamentals to Clinical Translation. Langmuir, 2019, 35, 10173-10191.	1.6	140
32	Biodegradable Dextran Nanogels for RNA Interference: Focusing on Endosomal Escape and Intracellular siRNA Delivery. Advanced Functional Materials, 2009, 19, 1406-1415.	7.8	134
33	On the cellular processing of non-viral nanomedicines for nucleic acid delivery: Mechanisms and methods. Journal of Controlled Release, 2012, 161, 566-581.	4.8	125
34	Coating nanocarriers with hyaluronic acid facilitates intravitreal drug delivery for retinal gene therapy. Journal of Controlled Release, 2015, 202, 83-92.	4.8	125
35	A fast and sensitive method for measuring the integrity of siRNA-carrier complexes in full human serum. Journal of Controlled Release, 2008, 126, 67-76.	4.8	119
36	Laser-induced vapour nanobubbles improve drug diffusion and efficiency in bacterial biofilms. Nature Communications, 2018, 9, 4518.	5.8	113

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37	Comparing exosome-like vesicles with liposomes for the functional cellular delivery of small RNAs. Journal of Controlled Release, 2016, 232, 51-61.	4.8	112
38	Proteinâ€Release Behavior of Selfâ€Assembled PEG– <i>β</i> â€Cyclodextrin/PEG–Cholesterol Hydrogels. Advanced Functional Materials, 2009, 19, 2992-3001.	7.8	101
39	pH responsive polyurethane (core) and cellulose acetate phthalate (shell) electrospun fibers for intravaginal drug delivery. Carbohydrate Polymers, 2016, 151, 1240-1244.	5.1	99
40	Co-delivery of nucleoside-modified mRNA and TLR agonists for cancer immunotherapy: Restoring the immunogenicity of immunosilent mRNA. Journal of Controlled Release, 2017, 266, 287-300.	4.8	98
41	Pulmonary surfactant and drug delivery: Focusing on the role of surfactant proteins. Journal of Controlled Release, 2018, 291, 116-126.	4.8	97
42	The potential of antigen and TriMix sonoporation using mRNA-loaded microbubbles for ultrasound-triggered cancer immunotherapy. Journal of Controlled Release, 2014, 194, 28-36.	4.8	95
43	Prolonged gene silencing by combining siRNA nanogels and photochemical internalization. Journal of Controlled Release, 2010, 145, 281-288.	4.8	92
44	Monitoring the disassembly of siRNA polyplexes in serum is crucial for predicting their biological efficacy. Journal of Controlled Release, 2010, 141, 38-41.	4.8	91
45	Nanomaterials and molecular transporters to overcome the bacterial envelope barrier: Towards advanced delivery of antibiotics. Advanced Drug Delivery Reviews, 2018, 136-137, 28-48.	6.6	91
46	Sonoprinting and the importance of microbubble loading for the ultrasound mediated cellular delivery of nanoparticles. Biomaterials, 2016, 83, 294-307.	5.7	89
47	Evading innate immunity in nonviral mRNA delivery: don't shoot the messenger. Drug Discovery Today, 2016, 21, 11-25.	3.2	89
48	Magnetic Electrospun Fibers for Cancer Therapy. Advanced Functional Materials, 2012, 22, 2479-2486.	7.8	88
49	Gasâ€Shearing Fabrication of Multicompartmental Microspheres: A Oneâ€Step and Oilâ€Free Approach. Advanced Science, 2019, 6, 1802342.	5.6	87
50	Materials and Technologies to Combat Counterfeiting of Pharmaceuticals: Current and Future Problem Tackling. Advanced Materials, 2020, 32, e1905486.	11.1	84
51	Probing the size limit for nanomedicine penetration into Burkholderia multivorans and Pseudomonas aeruginosa biofilms. Journal of Controlled Release, 2014, 195, 21-28.	4.8	83
52	Degradable Multilayer Films and Hollow Capsules via a â€~Click' Strategy. Macromolecular Rapid Communications, 2008, 29, 1111-1118.	2.0	82
53	Dynamic Colocalization Microscopy To Characterize Intracellular Trafficking of Nanomedicines. ACS Nano, 2011, 5, 7874-7884.	7.3	82
54	Bio-inspired pulmonary surfactant-modified nanogels: A promising siRNA delivery system. Journal of Controlled Release, 2015, 206, 177-186.	4.8	78

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55	Line FRAP with the Confocal Laser Scanning Microscope for Diffusion Measurements in Small Regions of 3-D Samples. Biophysical Journal, 2007, 92, 2172-2183.	0.2	77
56	Nanomedicine-based intraperitoneal therapy for the treatment of peritoneal carcinomatosis — Mission possible?. Advanced Drug Delivery Reviews, 2017, 108, 13-24.	6.6	76
57	In vitro and ex vivo models to study drug delivery barriers in the posterior segment of the eye. Advanced Drug Delivery Reviews, 2018, 126, 44-57.	6.6	76
58	InÂvivo disassembly of IV administered siRNA matrix nanoparticles at the renal filtration barrier. Biomaterials, 2013, 34, 2350-2358.	5.7	72
59	Stimuli-Responsive Multilayered Hybrid Nanoparticle/Polyelectrolyte Capsules. Macromolecular Rapid Communications, 2007, 28, 88-95.	2.0	71
60	Measuring the intravitreal mobility of nanomedicines with single-particle tracking microscopy. Nanomedicine, 2013, 8, 1955-1968.	1.7	69
61	Hitchhiking nanoparticles: Reversible coupling of lipid-based nanoparticles to cytotoxic T lymphocytes. Biomaterials, 2016, 77, 243-254.	5.7	68
62	Mechanistic profiling of the siRNA delivery dynamics of lipid–polymer hybrid nanoparticles. Journal of Controlled Release, 2015, 201, 22-31.	4.8	66
63	A personalized view on cancer immunotherapy. Cancer Letters, 2014, 352, 113-125.	3.2	63
64	Hemocompatibility of siRNA loaded dextran nanogels. Biomaterials, 2011, 32, 9120-9127.	5.7	62
65	The Cellular Interactions of PEGylated Gold Nanoparticles: Effect of PEGylation on Cellular Uptake and Cytotoxicity. Particle and Particle Systems Characterization, 2014, 31, 794-800.	1.2	62
66	Core–sheath structured electrospun nanofibrous membranes for oil–water separation. RSC Advances, 2016, 6, 41861-41870.	1.7	62
67	Improved Label-Free Identification of Individual Exosome-like Vesicles with Au@Ag Nanoparticles as SERS Substrate. ACS Applied Materials & amp; Interfaces, 2019, 11, 39424-39435.	4.0	62
68	Nanoparticle design to induce tumor immunity and challenge the suppressive tumor microenvironment. Nano Today, 2014, 9, 743-758.	6.2	60
69	Hybrid pulmonary surfactant-coated nanogels mediate efficient in vivo delivery of siRNA to murine alveolar macrophages. Journal of Controlled Release, 2015, 217, 53-63.	4.8	60
70	Surfactant protein B (SP-B) enhances the cellular siRNA delivery of proteolipid coated nanogels for inhalation therapy. Acta Biomaterialia, 2018, 78, 236-246.	4.1	60
71	Strategies for controlling the innate immune activity of conventional and self-amplifying mRNA therapeutics: Getting the message across. Advanced Drug Delivery Reviews, 2021, 176, 113900.	6.6	59
72	Unbreakable Codes in Electrospun Fibers: Digitally Encoded Polymers to Stop Medicine Counterfeiting. Advanced Materials, 2010, 22, 2657-2662.	11.1	58

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73	Colloidal stability of nano-sized particles in the peritoneal fluid: Towards optimizing drug delivery systems for intraperitoneal therapy. Acta Biomaterialia, 2014, 10, 2965-2975.	4.1	58
74	Morphology and Composition of the Inner Limiting Membrane: Species-Specific Variations and Relevance toward Drug Delivery Research. Current Eye Research, 2019, 44, 465-475.	0.7	58
75	Comparing photoporation and nucleofection for delivery of small interfering RNA to cytotoxic T cells. Journal of Controlled Release, 2017, 267, 154-162.	4.8	57
76	Theranostic mRNA-loaded Microbubbles in the Lymphatics of Dogs: Implications for Drug Delivery. Theranostics, 2015, 5, 97-109.	4.6	55
77	Triggered Release from Cellulose Microparticles Inspired by Wood Degradation by Fungi. ACS Sustainable Chemistry and Engineering, 2021, 9, 387-397.	3.2	53
78	Biomimetic Magnetic Silk Scaffolds. ACS Applied Materials & amp; Interfaces, 2015, 7, 6282-6292.	4.0	52
79	Dextran Microgels for Time ontrolled Delivery of siRNA. Advanced Functional Materials, 2008, 18, 993-1001.	7.8	50
80	Repeated photoporation with graphene quantum dots enables homogeneous labeling of live cells with extrinsic markers for fluorescence microscopy. Light: Science and Applications, 2018, 7, 47.	7.7	50
81	Cytosolic Delivery of Nanolabels Prevents Their Asymmetric Inheritance and Enables Extended Quantitative in Vivo Cell Imaging. Nano Letters, 2016, 16, 5975-5986.	4.5	49
82	Ocular barriers to retinal delivery of intravitreal liposomes: Impact of vitreoretinal interface. Journal of Controlled Release, 2020, 328, 952-961.	4.8	49
83	Intracellular partitioning of cell organelles and extraneous nanoparticles during mitosis. Advanced Drug Delivery Reviews, 2012, 64, 78-94.	6.6	48
84	Müller cells as a target for retinal therapy. Drug Discovery Today, 2019, 24, 1483-1498.	3.2	48
85	Laser-assisted photoporation: fundamentals, technological advances and applications. Advances in Physics: X, 2016, 1, 596-620.	1.5	47
86	Investigating the Toxic Effects of Iron Oxide Nanoparticles. Methods in Enzymology, 2012, 509, 195-224.	0.4	46
87	Repurposing cationic amphiphilic drugs as adjuvants to induce lysosomal siRNA escape in nanogel transfected cells. Journal of Controlled Release, 2018, 269, 266-276.	4.8	45
88	Vapor nanobubble is the more reliable photothermal mechanism for inducing endosomal escape of siRNA without disturbing cell homeostasis. Journal of Controlled Release, 2020, 319, 262-275.	4.8	45
89	Interactions between oligonucleotides and cationic polymers investigated by fluorescence correlation spectroscopy. Pharmaceutical Research, 2001, 18, 928-936.	1.7	44
90	Bio-inspired materials in drug delivery: Exploring the role of pulmonary surfactant in siRNA inhalation therapy. Journal of Controlled Release, 2015, 220, 642-650.	4.8	44

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91	Broadening the Message: A Nanovaccine Co-loaded with Messenger RNA and α-GalCer Induces Antitumor Immunity through Conventional and Natural Killer T Cells. ACS Nano, 2019, 13, 1655-1669.	7.3	44
92	Technical implementations of light sheet microscopy. Microscopy Research and Technique, 2018, 81, 941-958.	1.2	43
93	Coating of Quantum Dots strongly defines their effect on lysosomal health and autophagy. Acta Biomaterialia, 2017, 48, 195-205.	4.1	42
94	Intracellular Delivery of mRNA in Adherent and Suspension Cells by Vapor Nanobubble Photoporation. Nano-Micro Letters, 2020, 12, 185.	14.4	42
95	The impact of species and cell type on the nanosafety profile of iron oxide nanoparticles in neural cells. Journal of Nanobiotechnology, 2016, 14, 69.	4.2	41
96	Fabrication of Sustained-release CA-PU Coaxial Electrospun Fiber Membranes for Plant Grafting Application. Carbohydrate Polymers, 2017, 169, 198-205.	5.1	41
97	Faithful Fabrication of Biocompatible Multicompartmental Memomicrospheres for Digitally Colorâ€īunable Barcoding. Small, 2020, 16, e1907586.	5.2	41
98	Lysosomal capturing of cytoplasmic injected nanoparticles by autophagy: An additional barrier to non viral gene delivery. Journal of Controlled Release, 2014, 195, 29-36.	4.8	40
99	Fast spatial-selective delivery into live cells. Journal of Controlled Release, 2017, 266, 198-204.	4.8	40
100	Cationic Amphiphilic Drugs Boost the Lysosomal Escape of Small Nucleic Acid Therapeutics in a Nanocarrier-Dependent Manner. ACS Nano, 2020, 14, 4774-4791.	7.3	40
101	FRAP in Pharmaceutical Research: Practical Guidelines and Applications in Drug Delivery. Pharmaceutical Research, 2014, 31, 255-270.	1.7	39
102	Toward smart design of retinal drug carriers: a novel bovine retinal explant model to study the barrier role of the vitreoretinal interface. Drug Delivery, 2017, 24, 1384-1394.	2.5	39
103	Concentration Gradients in Material Sciences: Methods to Design and Biomedical Applications. Advanced Functional Materials, 2021, 31, 2009005.	7.8	38
104	Methodologies to investigate intracellular barriers for nucleic acid delivery in non-viral gene therapy. Nano Today, 2018, 21, 74-90.	6.2	37
105	Laser-induced nanobubbles safely ablate vitreous opacities in vivo. Nature Nanotechnology, 2022, 17, 552-559.	15.6	37
106	The influence of natural pulmonary surfactant on the efficacy of siRNA-loaded dextran nanogels. Nanomedicine, 2013, 8, 1625-1638.	1.7	36
107	Photoablation of Human Vitreous Opacities by Light-Induced Vapor Nanobubbles. ACS Nano, 2019, 13, 8401-8416.	7.3	36
108	Layer by Layer Assembled Chitosan-Coated Gold Nanoparticles for Enhanced siRNA Delivery and Silencing. International Journal of Molecular Sciences, 2021, 22, 831.	1.8	35

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109	Multilayered Magnetic Gelatin Membrane Scaffolds. ACS Applied Materials & Interfaces, 2015, 7, 23098-23109.	4.0	34
110	Non-viral transfection technologies for next-generation therapeutic T cell engineering. Biotechnology Advances, 2021, 49, 107760.	6.0	33
111	On the release of proteins from degrading dextran methacrylate hydrogels and the correlation with the rheologic properties of the hydrogels. Pharmaceutical Research, 2001, 18, 1593-1599.	1.7	32
112	Non-viral delivery of chemically modified mRNA to the retina: Subretinal versus intravitreal administration. Journal of Controlled Release, 2019, 307, 315-330.	4.8	32
113	Effect of hyaluronic acid-binding to lipoplexes on intravitreal drug delivery for retinal gene therapy. European Journal of Pharmaceutical Sciences, 2017, 103, 27-35.	1.9	31
114	Photoporation with Biodegradable Polydopamine Nanosensitizers Enables Safe and Efficient Delivery of mRNA in Human T Cells. Advanced Functional Materials, 2021, 31, 2102472.	7.8	31
115	Gas-shearing synthesis of core–shell multicompartmental microparticles as cell-like system for enzymatic cascade reaction. Chemical Engineering Journal, 2022, 428, 132607.	6.6	31
116	Lessons in simplicity that should shape the future of drug delivery. Nature Biotechnology, 2015, 33, 1026-1027.	9.4	30
117	Fluorescence Correlation Spectroscopy to find the critical balance between extracellular association and intracellular dissociation of mRNA complexes. Acta Biomaterialia, 2018, 75, 358-370.	4.1	30
118	Targeted nanoparticles towards increased L cell stimulation as a strategy to improve oral peptide delivery in incretin-based diabetes treatment. Biomaterials, 2020, 255, 120209.	5.7	30
119	Disregarded Effect of Biological Fluids in siRNA Delivery: Human Ascites Fluid Severely Restricts Cellular Uptake of Nanoparticles. ACS Applied Materials & Interfaces, 2015, 7, 24322-24329.	4.0	29
120	Targeted Perturbation of Nuclear Envelope Integrity with Vapor Nanobubble-Mediated Photoporation. ACS Nano, 2018, 12, 7791-7802.	7.3	29
121	Gold Nanoparticle-Mediated Photoporation Enables Delivery of Macromolecules over a Wide Range of Molecular Weights in Human CD4+ T Cells. Crystals, 2019, 9, 411.	1.0	28
122	Intracellular delivery of oligonucleotides in Helicobacter pylori by fusogenic liposomes in the presence of gastric mucus. Biomaterials, 2017, 138, 1-12.	5.7	27
123	Sonoprinting of nanoparticle-loaded microbubbles: Unraveling the multi-timescale mechanism. Biomaterials, 2019, 217, 119250.	5.7	27
124	Nanomaterials to avoid and destroy protein aggregates. Nano Today, 2020, 31, 100837.	6.2	27
125	Highâ€Pressure Nebulization as Application Route for the Peritoneal Administration of siRNA Complexes. Macromolecular Bioscience, 2017, 17, 1700024.	2.1	26
126	Exploring Light-Sensitive Nanocarriers for Simultaneous Triggered Antibiotic Release and Disruption of Biofilms Upon Generation of Laser-Induced Vapor Nanobubbles. Pharmaceutics, 2019, 11, 201.	2.0	26

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127	Fluorescenceâ€Based Quantification of Messenger RNA and Plasmid DNA Decay Kinetics in Extracellular Biological Fluids and Cell Extracts. Advanced Biology, 2020, 4, e2000057.	3.0	26
128	Modulating intracellular pathways to improve non-viral delivery of RNA therapeutics. Advanced Drug Delivery Reviews, 2022, 181, 114041.	6.6	26
129	Characterization of the Mode of Incorporation of Lipophilic Compounds in Solid Dispersions at the Nanoscale Using Fluorescence Resonance Energy Transfer (FRET). Macromolecular Rapid Communications, 2006, 27, 1149-1155.	2.0	25
130	Lyophilization and nebulization of pulmonary surfactant-coated nanogels for siRNA inhalation therapy. European Journal of Pharmaceutics and Biopharmaceutics, 2020, 157, 191-199.	2.0	25
131	Surfactant Protein B Promotes Cytosolic SiRNA Delivery by Adopting a Virus-like Mechanism of Action. ACS Nano, 2021, 15, 8095-8109.	7.3	24
132	Sizing nanomaterials in bio-fluids by cFRAP enables protein aggregation measurements and diagnosis of bio-barrier permeability. Nature Communications, 2016, 7, 12982.	5.8	23
133	Selective Labeling of Individual Neurons in Dense Cultured Networks With Nanoparticle-Enhanced Photoporation. Frontiers in Cellular Neuroscience, 2018, 12, 80.	1.8	23
134	Establishment of a rat ovarian peritoneal metastasis model to study pressurized intraperitoneal aerosol chemotherapy (PIPAC). BMC Cancer, 2019, 19, 424.	1.1	23
135	Vapor nanobubble-mediated photoporation constitutes a versatile intracellular delivery technology. Current Opinion in Colloid and Interface Science, 2021, 54, 101453.	3.4	23
136	The performance of gradient alloy quantum dots in cell labeling. Biomaterials, 2014, 35, 7249-7258.	5.7	22
137	Self-exploding capsules. Polymer Chemistry, 2010, 1, 137-148.	1.9	21
138	PEGylated and Functionalized Aliphatic Polycarbonate Polyplex Nanoparticles for Intravenous Administration of HDAC5 siRNA in Cancer Therapy. ACS Applied Materials & Interfaces, 2017, 9, 2181-2195.	4.0	21
139	Bioinspired hyaluronic acid and polyarginine nanoparticles for DACHPt delivery. European Journal of Pharmaceutics and Biopharmaceutics, 2020, 150, 1-13.	2.0	21
140	Intracellular Labeling with Extrinsic Probes: Delivery Strategies and Applications. Small, 2020, 16, e2000146.	5.2	21
141	Bubble Forming Films for Spatial Selective Cell Killing. Advanced Materials, 2021, 33, e2008379.	11.1	20
142	Pulmonary surfactant as a versatile biomaterial to fight COVID-19. Journal of Controlled Release, 2022, 342, 170-188.	4.8	20
143	Electrospun polystyrene fibers for HIV entrapment. Polymers for Advanced Technologies, 2014, 25, 827-834.	1.6	19
144	Synergy between Intraperitoneal Aerosolization (PIPAC) and Cancer Nanomedicine: Cisplatin-Loaded Polyarginine-Hyaluronic Acid Nanocarriers Efficiently Eradicate Peritoneal Metastasis of Advanced Human Ovarian Cancer. ACS Applied Materials & Interfaces, 2020, 12, 29024-29036.	4.0	19

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145	Increasing Angiogenesis Factors in Hypoxic Diabetic Wound Conditions by siRNA Delivery: Additive Effect of LbL-Gold Nanocarriers and Desloratadine-Induced Lysosomal Escape. International Journal of Molecular Sciences, 2021, 22, 9216.	1.8	19
146	Photothermally Triggered Endosomal Escape and Its Influence on Transfection Efficiency of Gold-Functionalized JetPEI/pDNA Nanoparticles. International Journal of Molecular Sciences, 2018, 19, 2400.	1.8	18
147	Aerosolization of Nanotherapeutics as a Newly Emerging Treatment Regimen for Peritoneal Carcinomatosis. Cancers, 2019, 11, 906.	1.7	18
148	High Pressure Nebulization (PIPAC) Versus Injection for the Intraperitoneal Administration of mRNA Complexes. Pharmaceutical Research, 2019, 36, 126.	1.7	18
149	Effect of Covalent Fluorescence Labeling of Plasmid DNA on Its Intracellular Processing and Transfection with Lipid-Based Carriers. Molecular Pharmaceutics, 2014, 11, 1359-1368.	2.3	17
150	Surface Functionalization with Polyethylene Glycol and Polyethyleneimine Improves the Performance of Graphene-Based Materials for Safe and Efficient Intracellular Delivery by Laser-Induced Photoporation. International Journal of Molecular Sciences, 2020, 21, 1540.	1.8	17
151	Cas9 RNP transfection by vapor nanobubble photoporation for exÂvivo cell engineering. Molecular Therapy - Nucleic Acids, 2021, 25, 696-707.	2.3	17
152	Biocompatible Lipidâ€Coated Persistent Luminescent Nanoparticles for In Vivo Imaging of Dendritic Cell Migration. Particle and Particle Systems Characterization, 2019, 36, 1900371.	1.2	16
153	Nanoparticle-sensitized photoporation enables inflammasome activation studies in targeted single cells. Nanoscale, 2021, 13, 6592-6604.	2.8	16
154	Exploring high pressure nebulization of Pluronic F127 hydrogels for intraperitoneal drug delivery. European Journal of Pharmaceutics and Biopharmaceutics, 2021, 169, 134-143.	2.0	16
155	Evaluation of Encoded Layerâ€By‣ayer Coated Microparticles As Protease Sensors. Advanced Functional Materials, 2008, 18, 1624-1631.	7.8	15
156	Small molecules convey big messages: Boosting non-viral nucleic acid delivery with low molecular weight drugs. Nano Today, 2017, 16, 14-29.	6.2	15
157	Nucleic acid loading and fluorescent labeling of isolated extracellular vesicles requires adequate purification. International Journal of Pharmaceutics, 2018, 548, 783-792.	2.6	15
158	The obstacle course to the inner retina: Hyaluronic acid-coated lipoplexes cross the vitreous but fail to overcome the inner limiting membrane. European Journal of Pharmaceutics and Biopharmaceutics, 2019, 141, 161-171.	2.0	15
159	Macrophage reprogramming into a pro-healing phenotype by siRNA delivered with LBL assembled nanocomplexes for wound healing applications. Nanoscale, 2021, 13, 15445-15463.	2.8	15
160	Long-term live-cell microscopy with labeled nanobodies delivered by laser-induced photoporation. Nano Research, 2020, 13, 485-495.	5.8	14
161	Carbon quantum dots as a dual platform for the inhibition and light-based destruction of collagen fibers: implications for the treatment of eye floaters. Nanoscale Horizons, 2021, 6, 449-461.	4.1	14
162	Choose your cell model wisely: The in vitro nanoneurotoxicity of differentially coated iron oxide nanoparticles for neural cell labeling. Acta Biomaterialia, 2017, 55, 204-213.	4.1	13

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163	Enhanced siRNA Delivery and Selective Apoptosis Induction in H1299 Cancer Cells by Layer-by-Layer-Assembled Se Nanocomplexes: Toward More Efficient Cancer Therapy. Frontiers in Molecular Biosciences, 2021, 8, 639184.	1.6	13
164	Hydrogelâ€Induced Cell Membrane Disruptions Enable Direct Cytosolic Delivery of Membraneâ€Impermeable Cargo. Advanced Materials, 2021, 33, e2008054.	11.1	13
165	Together is Better: mRNA Coâ€Encapsulation in Lipoplexes is Required to Obtain Ratiometric Coâ€Delivery and Protein Expression on the Single Cell Level. Advanced Science, 2022, 9, e2102072.	5.6	13
166	Choose your models wisely: How different murine bone marrow-derived dendritic cell protocols influence the success of nanoparticulate vaccines in vitro. Journal of Controlled Release, 2014, 195, 138-146.	4.8	12
167	Nanocarrier Lipid Composition Modulates the Impact of Pulmonary Surfactant Protein B (SP-B) on Cellular Delivery of siRNA. Pharmaceutics, 2019, 11, 431.	2.0	12
168	Effect of Native Gastric Mucus on in vivo Hybridization Therapies Directed at Helicobacter pylori. Molecular Therapy - Nucleic Acids, 2015, 4, e269.	2.3	11
169	Non-viral siRNA delivery to T cells: Challenges and opportunities in cancer immunotherapy. Biomaterials, 2022, 286, 121510.	5.7	11
170	Exploring the HYDRAtion method for loading siRNA on liposomes: the interplay between stability and biological activity in human undiluted ascites fluid. Drug Delivery and Translational Research, 2017, 7, 241-251.	3.0	10
171	Enhancing Nucleic Acid Delivery with Ultrasound and Microbubbles. Methods in Molecular Biology, 2019, 1943, 241-251.	0.4	10
172	The cellular response to plasma membrane disruption for nanomaterial delivery. Nano Convergence, 2022, 9, 6.	6.3	10
173	Light triggered nanoscale biolistics for efficient intracellular delivery of functional macromolecules in mammalian cells. Nature Communications, 2022, 13, 1996.	5.8	10
174	Modulation of Dendritic Cells by Lipid Grafted Polyelectrolyte Microcapsules. Advanced Functional Materials, 2012, 22, 4236-4243.	7.8	9
175	Comparison of MRI Properties between Multimeric DOTAGA and DO3A Gadolinium-Dendron Conjugates. Inorganic Chemistry, 2019, 58, 12798-12808.	1.9	9
176	Lipoplexes to Deliver Oligonucleotides in Gram-Positive and Gram-Negative Bacteria: Towards Treatment of Blood Infections. Pharmaceutics, 2021, 13, 989.	2.0	9
177	Physical transfection technologies for macrophages and dendritic cells in immunotherapy. Expert Opinion on Drug Delivery, 2021, 18, 229-247.	2.4	8
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