

# Stefaan C De Smedt

## List of Publications by Citations

**Source:** <https://exaly.com/author-pdf/6536445/stefaan-c-de-smedt-publications-by-citations.pdf>

**Version:** 2024-04-23

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

192  
papers

11,105  
citations

56  
h-index

100  
g-index

199  
ext. papers

13,027  
ext. citations

12.3  
avg, IF

6.59  
L-index

#	Paper	IF	Citations
192	Cationic polymer based gene delivery systems. <i>Pharmaceutical Research</i> , <b>2000</b> , 17, 113-26	4.5	733
191	Cellular toxicity of inorganic nanoparticles: Common aspects and guidelines for improved nanotoxicity evaluation. <i>Nano Today</i> , <b>2011</b> , 6, 446-465	17.9	506
190	The use of inhibitors to study endocytic pathways of gene carriers: optimization and pitfalls. <i>Molecular Therapy</i> , <b>2010</b> , 18, 561-9	11.7	464
189	Biodegradable polymers as non-viral carriers for plasmid DNA delivery. <i>Journal of Controlled Release</i> , <b>2008</b> , 126, 97-110	11.7	419
188	Advanced nanogel engineering for drug delivery. <i>Soft Matter</i> , <b>2009</b> , 5, 707-715	3.6	404
187	Electroporation-induced siRNA precipitation obscures the efficiency of siRNA loading into extracellular vesicles. <i>Journal of Controlled Release</i> , <b>2013</b> , 172, 229-238	11.7	333
186	Polyelectrolyte microcapsules for biomedical applications. <i>Soft Matter</i> , <b>2009</b> , 5, 282-291	3.6	255
185	Ecofriendly Electrospun Membranes Loaded with Visible-Light-Responding Nanoparticles for Multifunctional Usages: Highly Efficient Air Filtration, Dye Scavenging, and Bactericidal Activity. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2019</b> , 11, 12880-12889	9.5	251
184	Encoding microcarriers: present and future technologies. <i>Nature Reviews Drug Discovery</i> , <b>2002</b> , 1, 447-566	4.1	249
183	Lipid and polymer nanoparticles for drug delivery to bacterial biofilms. <i>Journal of Controlled Release</i> , <b>2014</b> , 190, 607-23	11.7	244
182	Cytotoxic effects of gold nanoparticles: a multiparametric study. <i>ACS Nano</i> , <b>2012</b> , 6, 5767-83	16.7	200
181	Exploiting intrinsic nanoparticle toxicity: the pros and cons of nanoparticle-induced autophagy in biomedical research. <i>Chemical Reviews</i> , <b>2014</b> , 114, 7581-609	68.1	190
180	N(1)-methylpseudouridine-incorporated mRNA outperforms pseudouridine-incorporated mRNA by providing enhanced protein expression and reduced immunogenicity in mammalian cell lines and mice. <i>Journal of Controlled Release</i> , <b>2015</b> , 217, 337-44	11.7	190
179	Stimuli-responsive electrospun fibers and their applications. <i>Chemical Society Reviews</i> , <b>2011</b> , 40, 2417-34	58.5	164
178	Ultrasound and microbubble mediated drug delivery: acoustic pressure as determinant for uptake via membrane pores or endocytosis. <i>Journal of Controlled Release</i> , <b>2015</b> , 197, 20-8	11.7	157
177	Assessing nanoparticle toxicity in cell-based assays: influence of cell culture parameters and optimized models for bridging the in vitro-in vivo gap. <i>Chemical Society Reviews</i> , <b>2013</b> , 42, 8339-59	58.5	156
176	Fluorescence recovery after photobleaching: a versatile tool for mobility and interaction measurements in pharmaceutical research. <i>Pharmaceutical Research</i> , <b>1999</b> , 16, 1153-62	4.5	147

175	Vitreous: a barrier to nonviral ocular gene therapy. <i>Investigative Ophthalmology and Visual Science</i> , <b>2005</b> , 46, 3553-61		144
174	Encoding microcarriers by spatial selective photobleaching. <i>Nature Materials</i> , <b>2003</b> , 2, 169-73	27	138
173	Merging the best of both worlds: hybrid lipid-enveloped matrix nanocomposites in drug delivery. <i>Chemical Society Reviews</i> , <b>2014</b> , 43, 444-72	58.5	133
172	Sizing nanomatter in biological fluids by fluorescence single particle tracking. <i>Nano Letters</i> , <b>2010</b> , 10, 4435-42	11.5	128
171	On the cellular processing of non-viral nanomedicines for nucleic acid delivery: mechanisms and methods. <i>Journal of Controlled Release</i> , <b>2012</b> , 161, 566-81	11.7	118
170	Biodegradable Dextran Nanogels for RNA Interference: Focusing on Endosomal Escape and Intracellular siRNA Delivery. <i>Advanced Functional Materials</i> , <b>2009</b> , 19, 1406-1415	15.6	118
169	Identification of Individual Exosome-Like Vesicles by Surface Enhanced Raman Spectroscopy. <i>Small</i> , <b>2016</b> , 12, 3292-301	11	116
168	Comparison of gold nanoparticle mediated photoporation: vapor nanobubbles outperform direct heating for delivering macromolecules in live cells. <i>ACS Nano</i> , <b>2014</b> , 8, 6288-96	16.7	115
167	A fast and sensitive method for measuring the integrity of siRNA-carrier complexes in full human serum. <i>Journal of Controlled Release</i> , <b>2008</b> , 126, 67-76	11.7	112
166	The proton sponge hypothesis: Fable or fact?. <i>European Journal of Pharmaceutics and Biopharmaceutics</i> , <b>2018</b> , 129, 184-190	5.7	111
165	Endosomal Size and Membrane Leakiness Influence Proton Sponge-Based Rupture of Endosomal Vesicles. <i>ACS Nano</i> , <b>2018</b> , 12, 2332-2345	16.7	101
164	Coating nanocarriers with hyaluronic acid facilitates intravitreal drug delivery for retinal gene therapy. <i>Journal of Controlled Release</i> , <b>2015</b> , 202, 83-92	11.7	100
163	Three decades of messenger RNA vaccine development. <i>Nano Today</i> , <b>2019</b> , 28, 100766	17.9	98
162	Protein-Release Behavior of Self-Assembled PEG/Cyclodextrin/PEG/Cholesterol Hydrogels. <i>Advanced Functional Materials</i> , <b>2009</b> , 19, 2992-3001	15.6	97
161	The dawn of mRNA vaccines: The COVID-19 case. <i>Journal of Controlled Release</i> , <b>2021</b> , 333, 511-520	11.7	94
160	Therapeutic and diagnostic applications of extracellular vesicles. <i>Journal of Controlled Release</i> , <b>2016</b> , 244, 167-183	11.7	90
159	Comparing exosome-like vesicles with liposomes for the functional cellular delivery of small RNAs. <i>Journal of Controlled Release</i> , <b>2016</b> , 232, 51-61	11.7	85
158	pH responsive polyurethane (core) and cellulose acetate phthalate (shell) electrospun fibers for intravaginal drug delivery. <i>Carbohydrate Polymers</i> , <b>2016</b> , 151, 1240-1244	10.3	83

157	Prolonged gene silencing by combining siRNA nanogels and photochemical internalization. <i>Journal of Controlled Release</i> , <b>2010</b> , 145, 281-8	11.7	81
156	Laser-induced vapour nanobubbles improve drug diffusion and efficiency in bacterial biofilms. <i>Nature Communications</i> , <b>2018</b> , 9, 4518	17.4	81
155	Degradable Multilayer Films and Hollow Capsules via a Click Strategy. <i>Macromolecular Rapid Communications</i> , <b>2008</b> , 29, 1111-1118	4.8	80
154	Magnetic Electrospun Fibers for Cancer Therapy. <i>Advanced Functional Materials</i> , <b>2012</b> , 22, 2479-2486	15.6	79
153	Monitoring the disassembly of siRNA polyplexes in serum is crucial for predicting their biological efficacy. <i>Journal of Controlled Release</i> , <b>2010</b> , 141, 38-41	11.7	79
152	The Role of Ultrasound-Driven Microbubble Dynamics in Drug Delivery: From Microbubble Fundamentals to Clinical Translation. <i>Langmuir</i> , <b>2019</b> , 35, 10173-10191	4	79
151	The potential of antigen and TriMix sonoporation using mRNA-loaded microbubbles for ultrasound-triggered cancer immunotherapy. <i>Journal of Controlled Release</i> , <b>2014</b> , 194, 28-36	11.7	73
150	Co-delivery of nucleoside-modified mRNA and TLR agonists for cancer immunotherapy: Restoring the immunogenicity of immunosilent mRNA. <i>Journal of Controlled Release</i> , <b>2017</b> , 266, 287-300	11.7	70
149	Dynamic colocalization microscopy to characterize intracellular trafficking of nanomedicines. <i>ACS Nano</i> , <b>2011</b> , 5, 7874-84	16.7	70
148	Evading innate immunity in nonviral mRNA delivery: don't shoot the messenger. <i>Drug Discovery Today</i> , <b>2016</b> , 21, 11-25	8.8	67
147	In vivo disassembly of IV administered siRNA matrix nanoparticles at the renal filtration barrier. <i>Biomaterials</i> , <b>2013</b> , 34, 2350-8	15.6	67
146	Line FRAP with the confocal laser scanning microscope for diffusion measurements in small regions of 3-D samples. <i>Biophysical Journal</i> , <b>2007</b> , 92, 2172-83	2.9	67
145	Stimuli-Responsive Multilayered Hybrid Nanoparticle/Polyelectrolyte Capsules. <i>Macromolecular Rapid Communications</i> , <b>2007</b> , 28, 88-95	4.8	66
144	Bio-inspired pulmonary surfactant-modified nanogels: A promising siRNA delivery system. <i>Journal of Controlled Release</i> , <b>2015</b> , 206, 177-86	11.7	64
143	Sonoprinting and the importance of microbubble loading for the ultrasound mediated cellular delivery of nanoparticles. <i>Biomaterials</i> , <b>2016</b> , 83, 294-307	15.6	63
142	Gas-Shearing Fabrication of Multicompartmental Microspheres: A One-Step and Oil-Free Approach. <i>Advanced Science</i> , <b>2019</b> , 6, 1802342	13.6	63
141	Nanomaterials and molecular transporters to overcome the bacterial envelope barrier: Towards advanced delivery of antibiotics. <i>Advanced Drug Delivery Reviews</i> , <b>2018</b> , 136-137, 28-48	18.5	58
140	Probing the size limit for nanomedicine penetration into <i>Burkholderia multivorans</i> and <i>Pseudomonas aeruginosa</i> biofilms. <i>Journal of Controlled Release</i> , <b>2014</b> , 195, 21-8	11.7	58

139	Hemocompatibility of siRNA loaded dextran nanogels. <i>Biomaterials</i> , <b>2011</b> , 32, 9120-7	15.6	58
138	Nanomedicine-based intraperitoneal therapy for the treatment of peritoneal carcinomatosis - Mission possible?. <i>Advanced Drug Delivery Reviews</i> , <b>2017</b> , 108, 13-24	18.5	57
137	Measuring the intravitreal mobility of nanomedicines with single-particle tracking microscopy. <i>Nanomedicine</i> , <b>2013</b> , 8, 1955-68	5.6	57
136	Mechanistic profiling of the siRNA delivery dynamics of lipid-polymer hybrid nanoparticles. <i>Journal of Controlled Release</i> , <b>2015</b> , 201, 22-31	11.7	55
135	Hitchhiking nanoparticles: Reversible coupling of lipid-based nanoparticles to cytotoxic T lymphocytes. <i>Biomaterials</i> , <b>2016</b> , 77, 243-54	15.6	53
134	Core-shell structured electrospun nanofibrous membranes for oil/water separation. <i>RSC Advances</i> , <b>2016</b> , 6, 41861-41870	3.7	53
133	Pulmonary surfactant and drug delivery: Focusing on the role of surfactant proteins. <i>Journal of Controlled Release</i> , <b>2018</b> , 291, 116-126	11.7	53
132	Colloidal stability of nano-sized particles in the peritoneal fluid: towards optimizing drug delivery systems for intraperitoneal therapy. <i>Acta Biomaterialia</i> , <b>2014</b> , 10, 2965-75	10.8	52
131	Dextran Microgels for Time-Controlled Delivery of siRNA. <i>Advanced Functional Materials</i> , <b>2008</b> , 18, 993-1006	10.6	50
130	Nanoparticle design to induce tumor immunity and challenge the suppressive tumor microenvironment. <i>Nano Today</i> , <b>2014</b> , 9, 743-758	17.9	49
129	Unbreakable codes in electrospun fibers: digitally encoded polymers to stop medicine counterfeiting. <i>Advanced Materials</i> , <b>2010</b> , 22, 2657-62	24	49
128	Theranostic mRNA-loaded microbubbles in the lymphatics of dogs: implications for drug delivery. <i>Theranostics</i> , <b>2015</b> , 5, 97-109	12.1	47
127	Hybrid pulmonary surfactant-coated nanogels mediate efficient in vivo delivery of siRNA to murine alveolar macrophages. <i>Journal of Controlled Release</i> , <b>2015</b> , 217, 53-63	11.7	46
126	In vitro and ex vivo models to study drug delivery barriers in the posterior segment of the eye. <i>Advanced Drug Delivery Reviews</i> , <b>2018</b> , 126, 44-57	18.5	45
125	A personalized view on cancer immunotherapy. <i>Cancer Letters</i> , <b>2014</b> , 352, 113-25	9.9	45
124	Comparing photoporation and nucleofection for delivery of small interfering RNA to cytotoxic T cells. <i>Journal of Controlled Release</i> , <b>2017</b> , 267, 154-162	11.7	44
123	Intracellular partitioning of cell organelles and extraneous nanoparticles during mitosis. <i>Advanced Drug Delivery Reviews</i> , <b>2012</b> , 64, 78-94	18.5	44
122	Photothermal nanofibres enable safe engineering of therapeutic cells. <i>Nature Nanotechnology</i> , <b>2021</b> , 16, 1281-1291	28.7	43

121	Biomimetic magnetic silk scaffolds. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2015</b> , 7, 6282-92	9.5	42
120	The Cellular Interactions of PEGylated Gold Nanoparticles: Effect of PEGylation on Cellular Uptake and Cytotoxicity. <i>Particle and Particle Systems Characterization</i> , <b>2014</b> , 31, 794-800	3.1	42
119	Investigating the toxic effects of iron oxide nanoparticles. <i>Methods in Enzymology</i> , <b>2012</b> , 509, 195-224	1.7	42
118	Cytosolic Delivery of Nanolabels Prevents Their Asymmetric Inheritance and Enables Extended Quantitative in Vivo Cell Imaging. <i>Nano Letters</i> , <b>2016</b> , 16, 5975-5986	11.5	42
117	Stimuli-responsive nanobubbles for biomedical applications. <i>Chemical Society Reviews</i> , <b>2021</b> , 50, 5746-5785	5.85	40
116	Interactions between oligonucleotides and cationic polymers investigated by fluorescence correlation spectroscopy. <i>Pharmaceutical Research</i> , <b>2001</b> , 18, 928-36	4.5	39
115	Improved Label-Free Identification of Individual Exosome-like Vesicles with Au@Ag Nanoparticles as SERS Substrate. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2019</b> , 11, 39424-39435	9.5	36
114	Fabrication of Sustained-release CA-PU Coaxial Electrospun Fiber Membranes for Plant Grafting Application. <i>Carbohydrate Polymers</i> , <b>2017</b> , 169, 198-205	10.3	35
113	The impact of species and cell type on the nanosafety profile of iron oxide nanoparticles in neural cells. <i>Journal of Nanobiotechnology</i> , <b>2016</b> , 14, 69	9.4	35
112	Repeated photoporation with graphene quantum dots enables homogeneous labeling of live cells with extrinsic markers for fluorescence microscopy. <i>Light: Science and Applications</i> , <b>2018</b> , 7, 47	16.7	35
111	Lysosomal capturing of cytoplasmic injected nanoparticles by autophagy: an additional barrier to non viral gene delivery. <i>Journal of Controlled Release</i> , <b>2014</b> , 195, 29-36	11.7	35
110	Surfactant protein B (SP-B) enhances the cellular siRNA delivery of proteolipid coated nanogels for inhalation therapy. <i>Acta Biomaterialia</i> , <b>2018</b> , 78, 236-246	10.8	34
109	Laser-assisted photoporation: fundamentals, technological advances and applications. <i>Advances in Physics: X</i> , <b>2016</b> , 1, 596-620	5.1	34
108	Bio-inspired materials in drug delivery: Exploring the role of pulmonary surfactant in siRNA inhalation therapy. <i>Journal of Controlled Release</i> , <b>2015</b> , 220, 642-50	11.7	33
107	Materials and Technologies to Combat Counterfeiting of Pharmaceuticals: Current and Future Problem Tackling. <i>Advanced Materials</i> , <b>2020</b> , 32, e1905486	24	33
106	Coating of Quantum Dots strongly defines their effect on lysosomal health and autophagy. <i>Acta Biomaterialia</i> , <b>2017</b> , 48, 195-205	10.8	32
105	Fast spatial-selective delivery into live cells. <i>Journal of Controlled Release</i> , <b>2017</b> , 266, 198-204	11.7	31
104	The influence of natural pulmonary surfactant on the efficacy of siRNA-loaded dextran nanogels. <i>Nanomedicine</i> , <b>2013</b> , 8, 1625-38	5.6	31

103	Faithful Fabrication of Biocompatible Multicompartmental Memomicrospheres for Digitally Color-Tunable Barcoding. <i>Small</i> , <b>2020</b> , 16, e1907586	11	30
102	FRAP in pharmaceutical research: practical guidelines and applications in drug delivery. <i>Pharmaceutical Research</i> , <b>2014</b> , 31, 255-70	4.5	29
101	On the release of proteins from degrading dextran methacrylate hydrogels and the correlation with the rheologic properties of the hydrogels. <i>Pharmaceutical Research</i> , <b>2001</b> , 18, 1593-9	4.5	29
100	Vapor nanobubble is the more reliable photothermal mechanism for inducing endosomal escape of siRNA without disturbing cell homeostasis. <i>Journal of Controlled Release</i> , <b>2020</b> , 319, 262-275	11.7	29
99	Repurposing cationic amphiphilic drugs as adjuvants to induce lysosomal siRNA escape in nanogel transfected cells. <i>Journal of Controlled Release</i> , <b>2018</b> , 269, 266-276	11.7	28
98	Multilayered Magnetic Gelatin Membrane Scaffolds. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2015</b> , 7, 23098-109	9.5	27
97	Methodologies to investigate intracellular barriers for nucleic acid delivery in non-viral gene therapy. <i>Nano Today</i> , <b>2018</b> , 21, 74-90	17.9	27
96	Disregarded Effect of Biological Fluids in siRNA Delivery: Human Ascites Fluid Severely Restricts Cellular Uptake of Nanoparticles. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2015</b> , 7, 24322-9	9.5	26
95	Müller cells as a target for retinal therapy. <i>Drug Discovery Today</i> , <b>2019</b> , 24, 1483-1498	8.8	25
94	Lessons in simplicity that should shape the future of drug delivery. <i>Nature Biotechnology</i> , <b>2015</b> , 33, 1026-1031	14.5	25
93	Fluorescence Correlation Spectroscopy to find the critical balance between extracellular association and intracellular dissociation of mRNA complexes. <i>Acta Biomaterialia</i> , <b>2018</b> , 75, 358-370	10.8	24
92	Morphology and Composition of the Inner Limiting Membrane: Species-Specific Variations and Relevance toward Drug Delivery Research. <i>Current Eye Research</i> , <b>2019</b> , 44, 465-475	2.9	24
91	Effect of hyaluronic acid-binding to lipoplexes on intravitreal drug delivery for retinal gene therapy. <i>European Journal of Pharmaceutical Sciences</i> , <b>2017</b> , 103, 27-35	5.1	23
90	Toward smart design of retinal drug carriers: a novel bovine retinal explant model to study the barrier role of the vitreoretinal interface. <i>Drug Delivery</i> , <b>2017</b> , 24, 1384-1394	7	23
89	Characterization of the Mode of Incorporation of Lipophilic Compounds in Solid Dispersions at the Nanoscale Using Fluorescence Resonance Energy Transfer (FRET). <i>Macromolecular Rapid Communications</i> , <b>2006</b> , 27, 1149-1155	4.8	23
88	Cationic Amphiphilic Drugs Boost the Lysosomal Escape of Small Nucleic Acid Therapeutics in a Nanocarrier-Dependent Manner. <i>ACS Nano</i> , <b>2020</b> , 14, 4774-4791	16.7	22
87	Layer by Layer Assembled Chitosan-Coated Gold Nanoparticles for Enhanced siRNA Delivery and Silencing. <i>International Journal of Molecular Sciences</i> , <b>2021</b> , 22,	6.3	22
86	Broadening the Message: A Nanovaccine Co-loaded with Messenger RNA and $\beta$ GalCer Induces Antitumor Immunity through Conventional and Natural Killer T Cells. <i>ACS Nano</i> , <b>2019</b> , 13, 1655-1669	16.7	21



85	The performance of gradient alloy quantum dots in cell labeling. <i>Biomaterials</i> , <b>2014</b> , 35, 7249-58	15.6	21
84	Selective Labeling of Individual Neurons in Dense Cultured Networks With Nanoparticle-Enhanced Photoporation. <i>Frontiers in Cellular Neuroscience</i> , <b>2018</b> , 12, 80	6.1	20
83	Targeted Perturbation of Nuclear Envelope Integrity with Vapor Nanobubble-Mediated Photoporation. <i>ACS Nano</i> , <b>2018</b> , 12, 7791-7802	16.7	20
82	High-Pressure Nebulization as Application Route for the Peritoneal Administration of siRNA Complexes. <i>Macromolecular Bioscience</i> , <b>2017</b> , 17, 1700024	5.5	19
81	Intracellular delivery of oligonucleotides in <i>Helicobacter pylori</i> by fusogenic liposomes in the presence of gastric mucus. <i>Biomaterials</i> , <b>2017</b> , 138, 1-12	15.6	19
80	Gold Nanoparticle-Mediated Photoporation Enables Delivery of Macromolecules over a Wide Range of Molecular Weights in Human CD4+ T Cells. <i>Crystals</i> , <b>2019</b> , 9, 411	2.3	19
79	Technical implementations of light sheet microscopy. <i>Microscopy Research and Technique</i> , <b>2018</b> , 81, 941-958	2.58	19
78	Self-exploding capsules. <i>Polymer Chemistry</i> , <b>2010</b> , 1, 137-148	4.9	19
77	Intracellular Delivery of mRNA in Adherent and Suspension Cells by Vapor Nanobubble Photoporation. <i>Nano-Micro Letters</i> , <b>2020</b> , 12, 185	19.5	19
76	Electrospun polystyrene fibers for HIV entrapment. <i>Polymers for Advanced Technologies</i> , <b>2014</b> , 25, 827-834	3.4	18
75	Triggered Release from Cellulose Microparticles Inspired by Wood Degradation by Fungi. <i>ACS Sustainable Chemistry and Engineering</i> , <b>2021</b> , 9, 387-397	8.3	18
74	PEGylated and Functionalized Aliphatic Polycarbonate Polyplex Nanoparticles for Intravenous Administration of HDAC5 siRNA in Cancer Therapy. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2017</b> , 9, 21812-2195	2.5	17
73	Photoablation of Human Vitreous Opacities by Light-Induced Vapor Nanobubbles. <i>ACS Nano</i> , <b>2019</b> , 13, 8401-8416	16.7	17
72	Sonoprinting of nanoparticle-loaded microbubbles: Unraveling the multi-timescale mechanism. <i>Biomaterials</i> , <b>2019</b> , 217, 119250	15.6	16
71	Targeted nanoparticles towards increased L cell stimulation as a strategy to improve oral peptide delivery in incretin-based diabetes treatment. <i>Biomaterials</i> , <b>2020</b> , 255, 120209	15.6	16
70	Establishment of a rat ovarian peritoneal metastasis model to study pressurized intraperitoneal aerosol chemotherapy (PIPAC). <i>BMC Cancer</i> , <b>2019</b> , 19, 424	4.8	15
69	Nucleic acid loading and fluorescent labeling of isolated extracellular vesicles requires adequate purification. <i>International Journal of Pharmaceutics</i> , <b>2018</b> , 548, 783-792	6.5	15
68	Sizing nanomaterials in bio-fluids by cFRAP enables protein aggregation measurements and diagnosis of bio-barrier permeability. <i>Nature Communications</i> , <b>2016</b> , 7, 12982	17.4	15



67	Non-viral delivery of chemically modified mRNA to the retina: Subretinal versus intravitreal administration. <i>Journal of Controlled Release</i> , <b>2019</b> , 307, 315-330	11.7	15
66	Evaluation of Encoded Layer-By-Layer Coated Microparticles As Protease Sensors. <i>Advanced Functional Materials</i> , <b>2008</b> , 18, 1624-1631	15.6	15
65	Exploring Light-Sensitive Nanocarriers for Simultaneous Triggered Antibiotic Release and Disruption of Biofilms Upon Generation of Laser-Induced Vapor Nanobubbles. <i>Pharmaceutics</i> , <b>2019</b> , 11,	6.4	14
64	Aerosolization of Nanotherapeutics as a Newly Emerging Treatment Regimen for Peritoneal Carcinomatosis. <i>Cancers</i> , <b>2019</b> , 11,	6.6	14
63	Nanomaterials to avoid and destroy protein aggregates. <i>Nano Today</i> , <b>2020</b> , 31, 100837	17.9	14
62	Ocular barriers to retinal delivery of intravitreal liposomes: Impact of vitreoretinal interface. <i>Journal of Controlled Release</i> , <b>2020</b> , 328, 952-961	11.7	14
61	High Pressure Nebulization (PIPAC) Versus Injection for the Intraperitoneal Administration of mRNA Complexes. <i>Pharmaceutical Research</i> , <b>2019</b> , 36, 126	4.5	13
60	Effect of covalent fluorescence labeling of plasmid DNA on its intracellular processing and transfection with lipid-based carriers. <i>Molecular Pharmaceutics</i> , <b>2014</b> , 11, 1359-68	5.6	13
59	Photothermally Triggered Endosomal Escape and Its Influence on Transfection Efficiency of Gold-Functionalized JetPEI/pDNA Nanoparticles. <i>International Journal of Molecular Sciences</i> , <b>2018</b> , 19,	6.3	13
58	Choose your cell model wisely: The in vitro nanoneurotoxicity of differentially coated iron oxide nanoparticles for neural cell labeling. <i>Acta Biomaterialia</i> , <b>2017</b> , 55, 204-213	10.8	12
57	Biocompatible Lipid-Coated Persistent Luminescent Nanoparticles for In Vivo Imaging of Dendritic Cell Migration. <i>Particle and Particle Systems Characterization</i> , <b>2019</b> , 36, 1900371	3.1	12
56	Surfactant Protein B Promotes Cytosolic siRNA Delivery by Adopting a Virus-like Mechanism of Action. <i>ACS Nano</i> , <b>2021</b> , 15, 8095-8109	16.7	12
55	Non-viral transfection technologies for next-generation therapeutic T cell engineering. <i>Biotechnology Advances</i> , <b>2021</b> , 49, 107760	17.8	12
54	Strategies for controlling the innate immune activity of conventional and self-amplifying mRNA therapeutics: Getting the message across. <i>Advanced Drug Delivery Reviews</i> , <b>2021</b> , 176, 113900	18.5	12
53	Surface Functionalization with Polyethylene Glycol and Polyethyleneimine Improves the Performance of Graphene-Based Materials for Safe and Efficient Intracellular Delivery by Laser-Induced Photoporation. <i>International Journal of Molecular Sciences</i> , <b>2020</b> , 21,	6.3	11
52	Long-term live-cell microscopy with labeled nanobodies delivered by laser-induced photoporation. <i>Nano Research</i> , <b>2020</b> , 13, 485-495	10	11
51	Intracellular Labeling with Extrinsic Probes: Delivery Strategies and Applications. <i>Small</i> , <b>2020</b> , 16, e2000146	14.6	11
50	Fluorescence-Based Quantification of Messenger RNA and Plasmid DNA Decay Kinetics in Extracellular Biological Fluids and Cell Extracts. <i>Advanced Biology</i> , <b>2020</b> , 4, e2000057	3.5	11

49	Concentration Gradients in Material Sciences: Methods to Design and Biomedical Applications. <i>Advanced Functional Materials</i> , <b>2021</b> , 31, 2009005	15.6	11
48	Synergy between Intraperitoneal Aerosolization (PIPAC) and Cancer Nanomedicine: Cisplatin-Loaded Polyarginine-Hyaluronic Acid Nanocarriers Efficiently Eradicate Peritoneal Metastasis of Advanced Human Ovarian Cancer. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2020</b> , 12, 29024-29036	9.5	10
47	Choose your models wisely: how different murine bone marrow-derived dendritic cell protocols influence the success of nanoparticulate vaccines in vitro. <i>Journal of Controlled Release</i> , <b>2014</b> , 195, 138-46	11.7	10
46	Lyophilization and nebulization of pulmonary surfactant-coated nanogels for siRNA inhalation therapy. <i>European Journal of Pharmaceutics and Biopharmaceutics</i> , <b>2020</b> , 157, 191-199	5.7	10
45	Gas-shearing synthesis of core-shell multicompartamental microparticles as cell-like system for enzymatic cascade reaction. <i>Chemical Engineering Journal</i> , <b>2022</b> , 428, 132607	14.7	10
44	Modulation of Dendritic Cells by Lipid Grafted Polyelectrolyte Microcapsules. <i>Advanced Functional Materials</i> , <b>2012</b> , 22, 4236-4243	15.6	9
43	Nanoparticle-sensitized photoporation enables inflammasome activation studies in targeted single cells. <i>Nanoscale</i> , <b>2021</b> , 13, 6592-6604	7.7	9
42	Small molecules convey big messages: Boosting non-viral nucleic acid delivery with low molecular weight drugs. <i>Nano Today</i> , <b>2017</b> , 16, 14-29	17.9	8
41	Enhancing Nucleic Acid Delivery with Ultrasound and Microbubbles. <i>Methods in Molecular Biology</i> , <b>2019</b> , 1943, 241-251	1.4	8
40	Exploring the HYDRATION method for loading siRNA on liposomes: the interplay between stability and biological activity in human undiluted ascites fluid. <i>Drug Delivery and Translational Research</i> , <b>2017</b> , 7, 241-251	6.2	8
39	Effect of Native Gastric Mucus on in vivo Hybridization Therapies Directed at Helicobacter pylori. <i>Molecular Therapy - Nucleic Acids</i> , <b>2015</b> , 4, e269	10.7	8
38	Comparison of MRI Properties between Multimeric DOTAGA and DO3A Gadolinium-Dendron Conjugates. <i>Inorganic Chemistry</i> , <b>2019</b> , 58, 12798-12808	5.1	7
37	Nanocarrier Lipid Composition Modulates the Impact of Pulmonary Surfactant Protein B (SP-B) on Cellular Delivery of siRNA. <i>Pharmaceutics</i> , <b>2019</b> , 11,	6.4	6
36	Bioinspired hyaluronic acid and polyarginine nanoparticles for DACHPt delivery. <i>European Journal of Pharmaceutics and Biopharmaceutics</i> , <b>2020</b> , 150, 1-13	5.7	6
35	A new microphotolysis based approach for mapping the mobility of drugs in microscopic drug delivery devices. <i>Pharmaceutical Research</i> , <b>1999</b> , 16, 1639-42	4.5	6
34	Focal delivery of AAV2/1-transgenes into the rat brain by localized ultrasound-induced BBB Opening. <i>Annals of Neurosciences</i> , <b>2014</b> , 21, 22	1.1	6
33	Enhanced siRNA Delivery and Selective Apoptosis Induction in H1299 Cancer Cells by Layer-by-Layer-Assembled Se Nanocomplexes: Toward More Efficient Cancer Therapy. <i>Frontiers in Molecular Biosciences</i> , <b>2021</b> , 8, 639184	5.6	6
32	Physical transfection technologies for macrophages and dendritic cells in immunotherapy. <i>Expert Opinion on Drug Delivery</i> , <b>2021</b> , 18, 229-247	8	6

31	Vapor nanobubble-mediated photoporation constitutes a versatile intracellular delivery technology. <i>Current Opinion in Colloid and Interface Science</i> , <b>2021</b> , 54, 101453	7.6	6
30	The obstacle course to the inner retina: Hyaluronic acid-coated lipoplexes cross the vitreous but fail to overcome the inner limiting membrane. <i>European Journal of Pharmaceutics and Biopharmaceutics</i> , <b>2019</b> , 141, 161-171	5.7	5
29	Pulmonary surfactant as a versatile biomaterial to fight COVID-19. <i>Journal of Controlled Release</i> , <b>2021</b> , 342, 170-170	11.7	5
28	Exploring high pressure nebulization of Pluronic F127 hydrogels for intraperitoneal drug delivery. <i>European Journal of Pharmaceutics and Biopharmaceutics</i> , <b>2021</b> , 169, 134-143	5.7	5
27	Photoporation with Biodegradable Polydopamine Nanosensitizers Enables Safe and Efficient Delivery of mRNA in Human T Cells. <i>Advanced Functional Materials</i> , <b>2021</b> , 31, 2102472	15.6	5
26	Modulating intracellular pathways to improve non-viral delivery of RNA therapeutics. <i>Advanced Drug Delivery Reviews</i> , <b>2021</b> , 181, 114041	18.5	4
25	Bubble Forming Films for Spatial Selective Cell Killing. <i>Advanced Materials</i> , <b>2021</b> , 33, e2008379	24	4
24	Hydrogel-Induced Cell Membrane Disruptions Enable Direct Cytosolic Delivery of Membrane-Impermeable Cargo. <i>Advanced Materials</i> , <b>2021</b> , 33, e2008054	24	4
23	Quantifying the Average Number of Nucleic Acid Therapeutics per Nanocarrier by Single Particle Tracking Microscopy. <i>Molecular Pharmaceutics</i> , <b>2018</b> , 15, 1142-1149	5.6	3
22	PEGylation of recombinant human deoxyribonuclease I decreases its transport across lung epithelial cells and uptake by macrophages. <i>International Journal of Pharmaceutics</i> , <b>2021</b> , 593, 120107	6.5	3
21	Cytosolic delivery of gadolinium via photoporation enables improved in vivo magnetic resonance imaging of cancer cells. <i>Biomaterials Science</i> , <b>2021</b> , 9, 4005-4018	7.4	3
20	Increasing Angiogenesis Factors in Hypoxic Diabetic Wound Conditions by siRNA Delivery: Additive Effect of LbL-Gold Nanocarriers and Desloratadine-Induced Lysosomal Escape. <i>International Journal of Molecular Sciences</i> , <b>2021</b> , 22,	6.3	3
19	Cas9 RNP transfection by vapor nanobubble photoporation for cell engineering. <i>Molecular Therapy - Nucleic Acids</i> , <b>2021</b> , 25, 696-707	10.7	3
18	Together is Better: mRNA Co-Encapsulation in Lipoplexes is Required to Obtain Ratiometric Co-Delivery and Protein Expression on the Single Cell Level.. <i>Advanced Science</i> , <b>2021</b> , e2102072	13.6	3
17	Influence of pathogenic stimuli on M $\phi$ cell transfection by lipoplexes. <i>European Journal of Pharmaceutics and Biopharmaceutics</i> , <b>2020</b> , 150, 87-95	5.7	2
16	Transient nuclear lamin A/C accretion aids in recovery from vapor nanobubble-induced permeabilisation of the plasma membrane.. <i>Cellular and Molecular Life Sciences</i> , <b>2022</b> , 79, 23	10.3	2
15	Lipoplexes to Deliver Oligonucleotides in Gram-Positive and Gram-Negative Bacteria: Towards Treatment of Blood Infections. <i>Pharmaceutics</i> , <b>2021</b> , 13,	6.4	2
14	Bubble-Forming Films: Bubble Forming Films for Spatial Selective Cell Killing (Adv. Mater. 27/2021). <i>Advanced Materials</i> , <b>2021</b> , 33, 2170211	24	2

13	Carbon quantum dots as a dual platform for the inhibition and light-based destruction of collagen fibers: implications for the treatment of eye floaters. <i>Nanoscale Horizons</i> , <b>2021</b> , 6, 449-461	10.8	2
12	Delivery of Oligonucleotides into Bacteria by Fusogenic Liposomes. <i>Methods in Molecular Biology</i> , <b>2021</b> , 2246, 87-96	1.4	2
11	Vaccinia Virus Protein B18R: Influence on mRNA Immunogenicity and Translation upon Non-Viral Delivery in Different Ocular Cell Types. <i>Pharmaceutics</i> , <b>2021</b> , 13,	6.4	2
10	Macrophage reprogramming into a pro-healing phenotype by siRNA delivered with LBL assembled nanocomplexes for wound healing applications. <i>Nanoscale</i> , <b>2021</b> , 13, 15445-15463	7.7	2
9	Release on demand: Artificial insemination by ovulation-triggered release of implanted sperms. <i>Journal of Controlled Release</i> , <b>2011</b> , 150, 1	11.7	1
8	Fluorine MR Imaging Probes Dynamic Migratory Profiles of Perfluorocarbon-Loaded Dendritic Cells After Streptozotocin-Induced Inflammation.. <i>Molecular Imaging and Biology</i> , <b>2022</b> , 1	3.8	1
7	The cellular response to plasma membrane disruption for nanomaterial delivery.. <i>Nano Convergence</i> , <b>2022</b> , 9, 6	9.2	1
6	Non-invasive cell-tracking methods for adoptive T cell therapies. <i>Drug Discovery Today</i> , <b>2021</b> ,	8.8	1
5	Black phosphorus mediated photoporation: a broad absorption nanoplatform for intracellular delivery of macromolecules. <i>Nanoscale</i> , <b>2021</b> , 13, 17049-17056	7.7	1
4	Non-viral siRNA delivery to T cells: Challenges and opportunities in cancer immunotherapy. <i>Biomaterials</i> , <b>2022</b> , 121510	15.6	1
3	Light triggered nanoscale biolistics for efficient intracellular delivery of functional macromolecules in mammalian cells.. <i>Nature Communications</i> , <b>2022</b> , 13, 1996	17.4	1
2	Yeast-produced fructosamine-3-kinase retains mobility after ex vivo intravitreal injection in human and bovine eyes as determined by Fluorescence Correlation Spectroscopy.. <i>International Journal of Pharmaceutics</i> , <b>2022</b> , 121772	6.5	1
1	Evaluation of Liposome-Loaded Microbubbles as a Theranostic Tool in a Murine Collagen-Induced Arthritis Model. <i>Scientia Pharmaceutica</i> , <b>2022</b> , 90, 17	4.3	