Stefaan C De Smedt

List of Publications by Year in Descending Order

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

| 192 | 11,105 | 56 | 100 |
|--------------------|-----------------------|---------------------|-----------------|
| papers | citations | h-index | g-index |
| 199 ext. papers | 13,027 ext. citations | 12.3 avg, IF | 6.59 L-index |

| # | Paper | IF | Citations |
|-----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-----------|
| 192 | Fluorine MR Imaging Probes Dynamic Migratory Profiles of Perfluorocarbon-Loaded Dendritic Cells After Streptozotocin-Induced Inflammation <i>Molecular Imaging and Biology</i> , 2022 , 1 | 3.8 | 1 |
| 191 | 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> , 2022 , 79, 23 | 10.3 | 2 |
| 190 | The cellular response to plasma membrane disruption for nanomaterial delivery <i>Nano Convergence</i> , 2022 , 9, 6 | 9.2 | 1 |
| 189 | Gas-shearing synthesis of corelinell multicompartmental microparticles as cell-like system for enzymatic cascade reaction. <i>Chemical Engineering Journal</i> , 2022 , 428, 132607 | 14.7 | 10 |
| 188 | Evaluation of Liposome-Loaded Microbubbles as a Theranostic Tool in a Murine Collagen-Induced Arthritis Model. <i>Scientia Pharmaceutica</i> , 2022 , 90, 17 | 4.3 | |
| 187 | Non-viral siRNA delivery to T cells: Challenges and opportunities in cancer immunotherapy. <i>Biomaterials</i> , 2022 , 121510 | 15.6 | 1 |
| 186 | Light triggered nanoscale biolistics for efficient intracellular delivery of functional macromolecules in mammalian cells <i>Nature Communications</i> , 2022 , 13, 1996 | 17.4 | 1 |
| 185 | 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> , 2022 , 121772 | 6.5 | 1 |
| 184 | Pulmonary surfactant as a versatile biomaterial to fight COVID-19. <i>Journal of Controlled Release</i> , 2021 , 342, 170-170 | 11.7 | 5 |
| 183 | Modulating intracellular pathways to improve non-viral delivery of RNA therapeutics. <i>Advanced Drug Delivery Reviews</i> , 2021 , 181, 114041 | 18.5 | 4 |
| 182 | Photothermal nanofibres enable safe engineering of therapeutic cells. <i>Nature Nanotechnology</i> , 2021 , 16, 1281-1291 | 28.7 | 43 |
| 181 | Exploring high pressure nebulization of Pluronic F127 hydrogels for intraperitoneal drug delivery. <i>European Journal of Pharmaceutics and Biopharmaceutics</i> , 2021 , 169, 134-143 | 5.7 | 5 |
| 180 | Non-invasive cell-tracking methods for adoptive T cell therapies. <i>Drug Discovery Today</i> , 2021 , | 8.8 | 1 |
| 179 | Triggered Release from Cellulose Microparticles Inspired by Wood Degradation by Fungi. <i>ACS Sustainable Chemistry and Engineering</i> , 2021 , 9, 387-397 | 8.3 | 18 |
| 178 | Surfactant Protein B Promotes Cytosolic SiRNA Delivery by Adopting a Virus-like Mechanism of Action. <i>ACS Nano</i> , 2021 , 15, 8095-8109 | 16.7 | 12 |
| 177 | Photoporation with Biodegradable Polydopamine Nanosensitizers Enables Safe and Efficient Delivery of mRNA in Human T Cells. <i>Advanced Functional Materials</i> , 2021 , 31, 2102472 | 15.6 | 5 |
| 176 | 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> , 2021 , 8, 639184 | 5.6 | 6 |

| 175 | The dawn of mRNA vaccines: The COVID-19 case. Journal of Controlled Release, 2021, 333, 511-520 | 11.7 | 94 |
|-----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|----|
| 174 | Bubble Forming Films for Spatial Selective Cell Killing. <i>Advanced Materials</i> , 2021 , 33, e2008379 | 24 | 4 |
| 173 | Hydrogel-Induced Cell Membrane Disruptions Enable Direct Cytosolic Delivery of Membrane-Impermeable Cargo. <i>Advanced Materials</i> , 2021 , 33, e2008054 | 24 | 4 |
| 172 | Lipoplexes to Deliver Oligonucleotides in Gram-Positive and Gram-Negative Bacteria: Towards Treatment of Blood Infections. <i>Pharmaceutics</i> , 2021 , 13, | 6.4 | 2 |
| 171 | Bubble-Forming Films: Bubble Forming Films for Spatial Selective Cell Killing (Adv. Mater. 27/2021). <i>Advanced Materials</i> , 2021 , 33, 2170211 | 24 | 2 |
| 170 | Non-viral transfection technologies for next-generation therapeutic T cell engineering. <i>Biotechnology Advances</i> , 2021 , 49, 107760 | 17.8 | 12 |
| 169 | Physical transfection technologies for macrophages and dendritic cells in immunotherapy. <i>Expert Opinion on Drug Delivery</i> , 2021 , 18, 229-247 | 8 | 6 |
| 168 | PEGylation of recombinant human deoxyribonuclease I decreases its transport across lung epithelial cells and uptake by macrophages. <i>International Journal of Pharmaceutics</i> , 2021 , 593, 120107 | 6.5 | 3 |
| 167 | Cytosolic delivery of gadolinium via photoporation enables improved in vivo magnetic resonance imaging of cancer cells. <i>Biomaterials Science</i> , 2021 , 9, 4005-4018 | 7.4 | 3 |
| 166 | Layer by Layer Assembled Chitosan-Coated Gold Nanoparticles for Enhanced siRNA Delivery and Silencing. <i>International Journal of Molecular Sciences</i> , 2021 , 22, | 6.3 | 22 |
| 165 | Nanoparticle-sensitized photoporation enables inflammasome activation studies in targeted single cells. <i>Nanoscale</i> , 2021 , 13, 6592-6604 | 7.7 | 9 |
| 164 | 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> , 2021 , 6, 449-461 | 10.8 | 2 |
| 163 | Stimuli-responsive nanobubbles for biomedical applications. <i>Chemical Society Reviews</i> , 2021 , 50, 5746-5 | 5 75/86 5 | 40 |
| 162 | Delivery of Oligonucleotides into Bacteria by Fusogenic Liposomes. <i>Methods in Molecular Biology</i> , 2021 , 2246, 87-96 | 1.4 | 2 |
| 161 | Black phosphorus mediated photoporation: a broad absorption nanoplatform for intracellular delivery of macromolecules. <i>Nanoscale</i> , 2021 , 13, 17049-17056 | 7.7 | 1 |
| 160 | Concentration Gradients in Material Sciences: Methods to Design and Biomedical Applications. <i>Advanced Functional Materials</i> , 2021 , 31, 2009005 | 15.6 | 11 |
| 159 | Vapor nanobubble-mediated photoporation constitutes a versatile intracellular delivery technology. <i>Current Opinion in Colloid and Interface Science</i> , 2021 , 54, 101453 | 7.6 | 6 |
| 158 | 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> , 2021 , 22, | 6.3 | 3 |

| 157 | Cas9 RNP transfection by vapor nanobubble photoporation for cell engineering. <i>Molecular Therapy - Nucleic Acids</i> , 2021 , 25, 696-707 | 10.7 | 3 |
|-----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|----------------|
| 156 | Strategies for controlling the innate immune activity of conventional and self-amplifying mRNA therapeutics: Getting the message across. <i>Advanced Drug Delivery Reviews</i> , 2021 , 176, 113900 | 18.5 | 12 |
| 155 | Vaccinia Virus Protein B18R: Influence on mRNA Immunogenicity and Translation upon Non-Viral Delivery in Different Ocular Cell Types. <i>Pharmaceutics</i> , 2021 , 13, | 6.4 | 2 |
| 154 | Macrophage reprogramming into a pro-healing phenotype by siRNA delivered with LBL assembled nanocomplexes for wound healing applications. <i>Nanoscale</i> , 2021 , 13, 15445-15463 | 7:7 | 2 |
| 153 | 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> , 2021 , e2102072 | 13.6 | 3 |
| 152 | Faithful Fabrication of Biocompatible Multicompartmental Memomicrospheres for Digitally Color-Tunable Barcoding. <i>Small</i> , 2020 , 16, e1907586 | 11 | 30 |
| 151 | Influence of pathogenic stimuli on Mller cell transfection by lipoplexes. <i>European Journal of Pharmaceutics and Biopharmaceutics</i> , 2020 , 150, 87-95 | 5.7 | 2 |
| 150 | Targeted nanoparticles towards increased L cell stimulation as a strategy to improve oral peptide delivery in incretin-based diabetes treatment. <i>Biomaterials</i> , 2020 , 255, 120209 | 15.6 | 16 |
| 149 | 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 & amp; Interfaces, 2020, 12, 29024 | 9.5 1-2903 | 10 6 |
| 148 | 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> , 2020 , 21, | 6.3 | 11 |
| 147 | Bioinspired hyaluronic acid and polyarginine nanoparticles for DACHPt delivery. <i>European Journal of Pharmaceutics and Biopharmaceutics</i> , 2020 , 150, 1-13 | 5.7 | 6 |
| 146 | Long-term live-cell microscopy with labeled nanobodies delivered by laser-induced photoporation. <i>Nano Research</i> , 2020 , 13, 485-495 | 10 | 11 |
| 145 | Intracellular Labeling with Extrinsic Probes: Delivery Strategies and Applications. <i>Small</i> , 2020 , 16, e2000 | 146 | 11 |
| 144 | Fluorescence-Based Quantification of Messenger RNA and Plasmid DNA Decay Kinetics in Extracellular Biological Fluids and Cell Extracts. <i>Advanced Biology</i> , 2020 , 4, e2000057 | 3.5 | 11 |
| 143 | Cationic Amphiphilic Drugs Boost the Lysosomal Escape of Small Nucleic Acid Therapeutics in a Nanocarrier-Dependent Manner. <i>ACS Nano</i> , 2020 , 14, 4774-4791 | 16.7 | 22 |
| 142 | Nanomaterials to avoid and destroy protein aggregates. <i>Nano Today</i> , 2020 , 31, 100837 | 17.9 | 14 |
| 141 | Vapor nanobubble is the more reliable photothermal mechanism for inducing endosomal escape of siRNA without disturbing cell homeostasis. <i>Journal of Controlled Release</i> , 2020 , 319, 262-275 | 11.7 | 29 |
| 140 | Lyophilization and nebulization of pulmonary surfactant-coated nanogels for siRNA inhalation therapy. <i>European Journal of Pharmaceutics and Biopharmaceutics</i> , 2020 , 157, 191-199 | 5.7 | 10 |

(2019-2020)

| 139 | Intracellular Delivery of mRNA in Adherent and Suspension Cells by Vapor Nanobubble Photoporation. <i>Nano-Micro Letters</i> , 2020 , 12, 185 | 19.5 | 19 |
|-----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-----|
| 138 | Ocular barriers to retinal delivery of intravitreal liposomes: Impact of vitreoretinal interface. Journal of Controlled Release, 2020 , 328, 952-961 | 11.7 | 14 |
| 137 | Materials and Technologies to Combat Counterfeiting of Pharmaceuticals: Current and Future Problem Tackling. <i>Advanced Materials</i> , 2020 , 32, e1905486 | 24 | 33 |
| 136 | Nanocarrier Lipid Composition Modulates the Impact of Pulmonary Surfactant Protein B (SP-B) on Cellular Delivery of siRNA. <i>Pharmaceutics</i> , 2019 , 11, | 6.4 | 6 |
| 135 | Comparison of MRI Properties between Multimeric DOTAGA and DO3A Gadolinium-Dendron Conjugates. <i>Inorganic Chemistry</i> , 2019 , 58, 12798-12808 | 5.1 | 7 |
| 134 | Gold Nanoparticle-Mediated Photoporation Enables Delivery of Macromolecules over a Wide Range of Molecular Weights in Human CD4+ T Cells. <i>Crystals</i> , 2019 , 9, 411 | 2.3 | 19 |
| 133 | Improved Label-Free Identification of Individual Exosome-like Vesicles with Au@Ag Nanoparticles as SERS Substrate. <i>ACS Applied Materials & Interfaces</i> , 2019 , 11, 39424-39435 | 9.5 | 36 |
| 132 | High Pressure Nebulization (PIPAC) Versus Injection for the Intraperitoneal Administration of mRNA Complexes. <i>Pharmaceutical Research</i> , 2019 , 36, 126 | 4.5 | 13 |
| 131 | Sonoprinting of nanoparticle-loaded microbubbles: Unraveling the multi-timescale mechanism. <i>Biomaterials</i> , 2019 , 217, 119250 | 15.6 | 16 |
| 130 | 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> , 2019 , 141, 161-171 | 5.7 | 5 |
| 129 | Establishment of a rat ovarian peritoneal metastasis model to study pressurized intraperitoneal aerosol chemotherapy (PIPAC). <i>BMC Cancer</i> , 2019 , 19, 424 | 4.8 | 15 |
| 128 | Exploring Light-Sensitive Nanocarriers for Simultaneous Triggered Antibiotic Release and Disruption of Biofilms Upon Generation of Laser-Induced Vapor Nanobubbles. <i>Pharmaceutics</i> , 2019 , 11, | 6.4 | 14 |
| 127 | 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 & Distriction</i> , 11, 12880-12889 | 9.5 | 251 |
| 126 | Enhancing Nucleic Acid Delivery with Ultrasound and Microbubbles. <i>Methods in Molecular Biology</i> , 2019 , 1943, 241-251 | 1.4 | 8 |
| 125 | Mller cells as a target for retinal therapy. <i>Drug Discovery Today</i> , 2019 , 24, 1483-1498 | 8.8 | 25 |
| 124 | Broadening the Message: A Nanovaccine Co-loaded with Messenger RNA and EGalCer Induces Antitumor Immunity through Conventional and Natural Killer T Cells. <i>ACS Nano</i> , 2019 , 13, 1655-1669 | 16.7 | 21 |
| 123 | Aerosolization of Nanotherapeutics as a Newly Emerging Treatment Regimen for Peritoneal Carcinomatosis. <i>Cancers</i> , 2019 , 11, | 6.6 | 14 |
| 122 | Photoablation of Human Vitreous Opacities by Light-Induced Vapor Nanobubbles. <i>ACS Nano</i> , 2019 , 13, 8401-8416 | 16.7 | 17 |

| 121 | Non-viral delivery of chemically modified mRNA to the retina: Subretinal versus intravitreal administration. <i>Journal of Controlled Release</i> , 2019 , 307, 315-330 | 11.7 | 15 |
|-----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|-----|
| 120 | Three decades of messenger RNA vaccine development. <i>Nano Today</i> , 2019 , 28, 100766 | 17.9 | 98 |
| 119 | Biocompatible Lipid-Coated Persistent Luminescent Nanoparticles for In Vivo Imaging of Dendritic Cell Migration. <i>Particle and Particle Systems Characterization</i> , 2019 , 36, 1900371 | 3.1 | 12 |
| 118 | Gas-Shearing Fabrication of Multicompartmental Microspheres: A One-Step and Oil-Free Approach. <i>Advanced Science</i> , 2019 , 6, 1802342 | 13.6 | 63 |
| 117 | The Role of Ultrasound-Driven Microbubble Dynamics in Drug Delivery: From Microbubble Fundamentals to Clinical Translation. <i>Langmuir</i> , 2019 , 35, 10173-10191 | 4 | 79 |
| 116 | Morphology and Composition of the Inner Limiting Membrane: Species-Specific Variations and Relevance toward Drug Delivery Research. <i>Current Eye Research</i> , 2019 , 44, 465-475 | 2.9 | 24 |
| 115 | Endosomal Size and Membrane Leakiness Influence Proton Sponge-Based Rupture of Endosomal Vesicles. <i>ACS Nano</i> , 2018 , 12, 2332-2345 | 16.7 | 101 |
| 114 | Quantifying the Average Number of Nucleic Acid Therapeutics per Nanocarrier by Single Particle Tracking Microscopy. <i>Molecular Pharmaceutics</i> , 2018 , 15, 1142-1149 | 5.6 | 3 |
| 113 | Technical implementations of light sheet microscopy. <i>Microscopy Research and Technique</i> , 2018 , 81, 941 | -9.58 | 19 |
| 112 | Nanomaterials and molecular transporters to overcome the bacterial envelope barrier: Towards advanced delivery of antibiotics. <i>Advanced Drug Delivery Reviews</i> , 2018 , 136-137, 28-48 | 18.5 | 58 |
| 111 | Nucleic acid loading and fluorescent labeling of isolated extracellular vesicles requires adequate purification. <i>International Journal of Pharmaceutics</i> , 2018 , 548, 783-792 | 6.5 | 15 |
| 110 | In vitro and ex vivo models to study drug delivery barriers in the posterior segment of the eye. <i>Advanced Drug Delivery Reviews</i> , 2018 , 126, 44-57 | 18.5 | 45 |
| 109 | Selective Labeling of Individual Neurons in Dense Cultured Networks With Nanoparticle-Enhanced Photoporation. <i>Frontiers in Cellular Neuroscience</i> , 2018 , 12, 80 | 6.1 | 20 |
| 108 | Targeted Perturbation of Nuclear Envelope Integrity with Vapor Nanobubble-Mediated Photoporation. <i>ACS Nano</i> , 2018 , 12, 7791-7802 | 16.7 | 20 |
| 107 | Methodologies to investigate intracellular barriers for nucleic acid delivery in non-viral gene therapy. <i>Nano Today</i> , 2018 , 21, 74-90 | 17.9 | 27 |
| 106 | Repeated photoporation with graphene quantum dots enables homogeneous labeling of live cells with extrinsic markers for fluorescence microscopy. <i>Light: Science and Applications</i> , 2018 , 7, 47 | 16.7 | 35 |
| 105 | Surfactant protein B (SP-B) enhances the cellular siRNA delivery of proteolipid coated nanogels for inhalation therapy. <i>Acta Biomaterialia</i> , 2018 , 78, 236-246 | 10.8 | 34 |
| 104 | Fluorescence Correlation Spectroscopy to find the critical balance between extracellular association and intracellular dissociation of mRNA complexes. <i>Acta Biomaterialia</i> , 2018 , 75, 358-370 | 10.8 | 24 |

(2017-2018)

| 103 | Repurposing cationic amphiphilic drugs as adjuvants to induce lysosomal siRNA escape in nanogel transfected cells. <i>Journal of Controlled Release</i> , 2018 , 269, 266-276 | 11.7 | 28 |
|-----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------|-----------------|
| 102 | Photothermally Triggered Endosomal Escape and Its Influence on Transfection Efficiency of Gold-Functionalized JetPEI/pDNA Nanoparticles. <i>International Journal of Molecular Sciences</i> , 2018 , 19, | 6.3 | 13 |
| 101 | Pulmonary surfactant and drug delivery: Focusing on the role of surfactant proteins. <i>Journal of Controlled Release</i> , 2018 , 291, 116-126 | 11.7 | 53 |
| 100 | Laser-induced vapour nanobubbles improve drug diffusion and efficiency in bacterial biofilms. <i>Nature Communications</i> , 2018 , 9, 4518 | 17.4 | 81 |
| 99 | The proton sponge hypothesis: Fable or fact?. European Journal of Pharmaceutics and Biopharmaceutics, 2018 , 129, 184-190 | 5.7 | 111 |
| 98 | Effect of hyaluronic acid-binding to lipoplexes on intravitreal drug delivery for retinal gene therapy. <i>European Journal of Pharmaceutical Sciences</i> , 2017 , 103, 27-35 | 5.1 | 23 |
| 97 | Fabrication of Sustained-release CA-PU Coaxial Electrospun Fiber Membranes for Plant Grafting Application. <i>Carbohydrate Polymers</i> , 2017 , 169, 198-205 | 10.3 | 35 |
| 96 | High-Pressure Nebulization as Application Route for the Peritoneal Administration of siRNA Complexes. <i>Macromolecular Bioscience</i> , 2017 , 17, 1700024 | 5.5 | 19 |
| 95 | Intracellular delivery of oligonucleotides in Helicobacter pylori by fusogenic liposomes in the presence of gastric mucus. <i>Biomaterials</i> , 2017 , 138, 1-12 | 15.6 | 19 |
| 94 | Choose your cell model wisely: The in vitro nanoneurotoxicity of differentially coated iron oxide nanoparticles for neural cell labeling. <i>Acta Biomaterialia</i> , 2017 , 55, 204-213 | 10.8 | 12 |
| 93 | PEGylated and Functionalized Aliphatic Polycarbonate Polyplex Nanoparticles for Intravenous Administration of HDAC5 siRNA in Cancer Therapy. <i>ACS Applied Materials & Damp; Interfaces</i> , 2017 , 9, 218 | 81 ⁹ 2 ⁵ 19. | 5 ¹⁷ |
| 92 | Fast spatial-selective delivery into live cells. <i>Journal of Controlled Release</i> , 2017 , 266, 198-204 | 11.7 | 31 |
| 91 | Co-delivery of nucleoside-modified mRNA and TLR agonists for cancer immunotherapy: Restoring the immunogenicity of immunosilent mRNA. <i>Journal of Controlled Release</i> , 2017 , 266, 287-300 | 11.7 | 70 |
| 90 | Small molecules convey big messages: Boosting non-viral nucleic acid delivery with low molecular weight drugs. <i>Nano Today</i> , 2017 , 16, 14-29 | 17.9 | 8 |
| 89 | 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> , 2017 , 24, 1384-1394 | 7 | 23 |
| 88 | Comparing photoporation and nucleofection for delivery of small interfering RNA to cytotoxic T cells. <i>Journal of Controlled Release</i> , 2017 , 267, 154-162 | 11.7 | 44 |
| 87 | Coating of Quantum Dots strongly defines their effect on lysosomal health and autophagy. <i>Acta Biomaterialia</i> , 2017 , 48, 195-205 | 10.8 | 32 |
| 86 | Nanomedicine-based intraperitoneal therapy for the treatment of peritoneal carcinomatosis - Mission possible?. <i>Advanced Drug Delivery Reviews</i> , 2017 , 108, 13-24 | 18.5 | 57 |

| 85 | 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> , 2017 , 7, 241-251 | 6.2 | 8 |
|----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|-----|
| 84 | Evading innate immunity in nonviral mRNA delivery: don't shoot the messenger. <i>Drug Discovery Today</i> , 2016 , 21, 11-25 | 8.8 | 67 |
| 83 | Sizing nanomaterials in bio-fluids by cFRAP enables protein aggregation measurements and diagnosis of bio-barrier permeability. <i>Nature Communications</i> , 2016 , 7, 12982 | 17.4 | 15 |
| 82 | The impact of species and cell type on the nanosafety profile of iron oxide nanoparticles in neural cells. <i>Journal of Nanobiotechnology</i> , 2016 , 14, 69 | 9.4 | 35 |
| 81 | pH responsive polyurethane (core) and cellulose acetate phthalate (shell) electrospun fibers for intravaginal drug delivery. <i>Carbohydrate Polymers</i> , 2016 , 151, 1240-1244 | 10.3 | 83 |
| 80 | Sonoprinting and the importance of microbubble loading for the ultrasound mediated cellular delivery of nanoparticles. <i>Biomaterials</i> , 2016 , 83, 294-307 | 15.6 | 63 |
| 79 | Hitchhiking nanoparticles: Reversible coupling of lipid-based nanoparticles to cytotoxic T lymphocytes. <i>Biomaterials</i> , 2016 , 77, 243-54 | 15.6 | 53 |
| 78 | Identification of Individual Exosome-Like Vesicles by Surface Enhanced Raman Spectroscopy. <i>Small</i> , 2016 , 12, 3292-301 | 11 | 116 |
| 77 | Laser-assisted photoporation: fundamentals, technological advances and applications. <i>Advances in Physics: X</i> , 2016 , 1, 596-620 | 5.1 | 34 |
| 76 | Corelineath structured electrospun nanofibrous membranes for oil water separation. <i>RSC Advances</i> , 2016 , 6, 41861-41870 | 3.7 | 53 |
| 75 | Comparing exosome-like vesicles with liposomes for the functional cellular delivery of small RNAs. Journal of Controlled Release, 2016 , 232, 51-61 | 11.7 | 85 |
| 74 | Cytosolic Delivery of Nanolabels Prevents Their Asymmetric Inheritance and Enables Extended Quantitative in Vivo Cell Imaging. <i>Nano Letters</i> , 2016 , 16, 5975-5986 | 11.5 | 42 |
| 73 | Therapeutic and diagnostic applications of extracellular vesicles. <i>Journal of Controlled Release</i> , 2016 , 244, 167-183 | 11.7 | 90 |
| 72 | Biomimetic magnetic silk scaffolds. ACS Applied Materials & amp; Interfaces, 2015, 7, 6282-92 | 9.5 | 42 |
| 71 | Bio-inspired pulmonary surfactant-modified nanogels: A promising siRNA delivery system. <i>Journal of Controlled Release</i> , 2015 , 206, 177-86 | 11.7 | 64 |
| 70 | Disregarded Effect of Biological Fluids in siRNA Delivery: Human Ascites Fluid Severely Restricts Cellular Uptake of Nanoparticles. <i>ACS Applied Materials & Delivery: Interfaces</i> , 2015 , 7, 24322-9 | 9.5 | 26 |
| 69 | Multilayered Magnetic Gelatin Membrane Scaffolds. <i>ACS Applied Materials & Description</i> (2005), 7, 23098-109 | 9.5 | 27 |
| 68 | Lessons in simplicity that should shape the future of drug delivery. <i>Nature Biotechnology</i> , 2015 , 33, 102 | 26474.5 | 25 |

(2014-2015)

| 67 | Hybrid pulmonary surfactant-coated nanogels mediate efficient in vivo delivery of siRNA to murine alveolar macrophages. <i>Journal of Controlled Release</i> , 2015 , 217, 53-63 | 11.7 | 46 |
|----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-----|
| 66 | Bio-inspired materials in drug delivery: Exploring the role of pulmonary surfactant in siRNA inhalation therapy. <i>Journal of Controlled Release</i> , 2015 , 220, 642-50 | 11.7 | 33 |
| 65 | Ultrasound and microbubble mediated drug delivery: acoustic pressure as determinant for uptake via membrane pores or endocytosis. <i>Journal of Controlled Release</i> , 2015 , 197, 20-8 | 11.7 | 157 |
| 64 | 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> , 2015 , 217, 337-44 | 11.7 | 190 |
| 63 | Theranostic mRNA-loaded microbubbles in the lymphatics of dogs: implications for drug delivery. <i>Theranostics</i> , 2015 , 5, 97-109 | 12.1 | 47 |
| 62 | Effect of Native Gastric Mucus on in vivo Hybridization Therapies Directed at Helicobacter pylori. <i>Molecular Therapy - Nucleic Acids</i> , 2015 , 4, e269 | 10.7 | 8 |
| 61 | Mechanistic profiling of the siRNA delivery dynamics of lipid-polymer hybrid nanoparticles. <i>Journal of Controlled Release</i> , 2015 , 201, 22-31 | 11.7 | 55 |
| 60 | Coating nanocarriers with hyaluronic acid facilitates intravitreal drug delivery for retinal gene therapy. <i>Journal of Controlled Release</i> , 2015 , 202, 83-92 | 11.7 | 100 |
| 59 | Merging the best of both worlds: hybrid lipid-enveloped matrix nanocomposites in drug delivery. <i>Chemical Society Reviews</i> , 2014 , 43, 444-72 | 58.5 | 133 |
| 58 | The potential of antigen and TriMix sonoporation using mRNA-loaded microbubbles for ultrasound-triggered cancer immunotherapy. <i>Journal of Controlled Release</i> , 2014 , 194, 28-36 | 11.7 | 73 |
| 57 | Lysosomal capturing of cytoplasmic injected nanoparticles by autophagy: an additional barrier to non viral gene delivery. <i>Journal of Controlled Release</i> , 2014 , 195, 29-36 | 11.7 | 35 |
| 56 | Probing the size limit for nanomedicine penetration into Burkholderia multivorans and Pseudomonas aeruginosa biofilms. <i>Journal of Controlled Release</i> , 2014 , 195, 21-8 | 11.7 | 58 |
| 55 | The Cellular Interactions of PEGylated Gold Nanoparticles: Effect of PEGylation on Cellular Uptake and Cytotoxicity. <i>Particle and Particle Systems Characterization</i> , 2014 , 31, 794-800 | 3.1 | 42 |
| 54 | 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> , 2014 , 195, 138- | 46 ^{1.7} | 10 |
| 53 | FRAP in pharmaceutical research: practical guidelines and applications in drug delivery. <i>Pharmaceutical Research</i> , 2014 , 31, 255-70 | 4.5 | 29 |
| 52 | Lipid and polymer nanoparticles for drug delivery to bacterial biofilms. <i>Journal of Controlled Release</i> , 2014 , 190, 607-23 | 11.7 | 244 |
| 51 | Colloidal stability of nano-sized particles in the peritoneal fluid: towards optimizing drug delivery systems for intraperitoneal therapy. <i>Acta Biomaterialia</i> , 2014 , 10, 2965-75 | 10.8 | 52 |
| 50 | Effect of covalent fluorescence labeling of plasmid DNA on its intracellular processing and transfection with lipid-based carriers. <i>Molecular Pharmaceutics</i> , 2014 , 11, 1359-68 | 5.6 | 13 |

| 49 | Electrospun polystyrene fibers for HIV entrapment. <i>Polymers for Advanced Technologies</i> , 2014 , 25, 827- | 8 3.4 | 18 |
|----|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|-----|
| 48 | Exploiting intrinsic nanoparticle toxicity: the pros and cons of nanoparticle-induced autophagy in biomedical research. <i>Chemical Reviews</i> , 2014 , 114, 7581-609 | 68.1 | 190 |
| 47 | Comparison of gold nanoparticle mediated photoporation: vapor nanobubbles outperform direct heating for delivering macromolecules in live cells. <i>ACS Nano</i> , 2014 , 8, 6288-96 | 16.7 | 115 |
| 46 | The performance of gradient alloy quantum dots in cell labeling. <i>Biomaterials</i> , 2014 , 35, 7249-58 | 15.6 | 21 |
| 45 | Nanoparticle design to induce tumor immunity and challenge the suppressive tumor microenvironment. <i>Nano Today</i> , 2014 , 9, 743-758 | 17.9 | 49 |
| 44 | A personalized view on cancer immunotherapy. <i>Cancer Letters</i> , 2014 , 352, 113-25 | 9.9 | 45 |
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