Kevin Braekmans

List of Publications by Citations

200 papers	10,583 citations	55 h-index	96 g-index
209 ext. papers	12,294 ext. citations	11.5 avg, IF	6.28 L-index

#	Paper	IF	Citations
200	Cellular toxicity of inorganic nanoparticles: Common aspects and guidelines for improved nanotoxicity evaluation. *Nano Today*, **2011**, 6, 446-465	17.9	506
199	The use of inhibitors to study endocytic pathways of gene carriers: optimization and pitfalls. *Molecular Therapy*, **2010**, 18, 561-9	11.7	464
198	Polymer-coated nanoparticles interacting with proteins and cells: focusing on the sign of the net charge. *ACS Nano*, **2013**, 7, 3253-63	16.7	390
197	Precisely and accurately localizing single emitters in fluorescence microscopy. *Nature Methods*, **2014**, 11, 253-66	21.6	341
196	Electroporation-induced siRNA precipitation obscures the efficiency of siRNA loading into extracellular vesicles. *Journal of Controlled Release*, **2013**, 172, 229-238	11.7	333
195	Encoding microcarriers: present and future technologies. *Nature Reviews Drug Discovery*, **2002**, 1, 447-56	64.1	249
194	Lipid and polymer nanoparticles for drug delivery to bacterial biofilms. *Journal of Controlled Release*, **2014**, 190, 607-23	11.7	244
193	Three-dimensional fluorescence recovery after photobleaching with the confocal scanning laser microscope. *Biophysical Journal*, **2003**, 85, 2240-52	2.9	227
192	Intracellular delivery of nanomaterials: How to catch endosomal escape in the act. *Nano Today*, **2014**, 9, 344-364	17.9	205
191	Cytotoxic effects of gold nanoparticles: a multiparametric study. *ACS Nano*, **2012**, 6, 5767-83	16.7	200
190	Exploiting intrinsic nanoparticle toxicity: the pros and cons of nanoparticle-induced autophagy in biomedical research. *Chemical Reviews*, **2014**, 114, 7581-609	68.1	190
189	Extracellular barriers in respiratory gene therapy. *Advanced Drug Delivery Reviews*, **2009**, 61, 115-27	18.5	165
188	Stimuli-responsive electrospun fibers and their applications. *Chemical Society Reviews*, **2011**, 40, 2417-34	58.5	164
187	Ultrasound and microbubble mediated drug delivery: acoustic pressure as determinant for uptake via membrane pores or endocytosis. *Journal of Controlled Release*, **2015**, 197, 20-8	11.7	157
186	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, 8339-59	58.5	156
185	Liposome based systems for systemic siRNA delivery: stability in blood sets the requirements for optimal carrier design. *Journal of Controlled Release*, **2012**, 158, 362-70	11.7	152
184	Vitreous: a barrier to nonviral ocular gene therapy. *Investigative Ophthalmology and Visual Science*, **2005**, 46, 3553-61		144

183	Polysaccharide-based nucleic acid nanoformulations. *Advanced Drug Delivery Reviews*, **2013**, 65, 1123-47	18.5	140
182	Encoding microcarriers by spatial selective photobleaching. *Nature Materials*, **2003**, 2, 169-73	27	138
181	Merging the best of both worlds: hybrid lipid-enveloped matrix nanocomposites in drug delivery. *Chemical Society Reviews*, **2014**, 43, 444-72	58.5	133
180	Sizing nanomatter in biological fluids by fluorescence single particle tracking. *Nano Letters*, **2010**, 10, 4435-42	11.5	128
179	On the cellular processing of non-viral nanomedicines for nucleic acid delivery: mechanisms and methods. *Journal of Controlled Release*, **2012**, 161, 566-81	11.7	118
178	The transport of nanosized gene carriers unraveled by live-cell imaging. *Angewandte Chemie - International Edition*, **2006**, 45, 1568-72	16.4	118
177	Identification of Individual Exosome-Like Vesicles by Surface Enhanced Raman Spectroscopy. *Small*, **2016**, 12, 3292-301	11	116
176	Comparison of gold nanoparticle mediated photoporation: vapor nanobubbles outperform direct heating for delivering macromolecules in live cells. *ACS Nano*, **2014**, 8, 6288-96	16.7	115
175	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	11.7	112
174	The proton sponge hypothesis: Fable or fact?. *European Journal of Pharmaceutics and Biopharmaceutics*, **2018**, 129, 184-190	5.7	111
173	Endosomal Size and Membrane Leakiness Influence Proton Sponge-Based Rupture of Endosomal Vesicles. *ACS Nano*, **2018**, 12, 2332-2345	16.7	101
172	The role of nanoparticle concentration-dependent induction of cellular stress in the internalization of non-toxic cationic magnetoliposomes. *Biomaterials*, **2009**, 30, 6803-13	15.6	101
171	Coating nanocarriers with hyaluronic acid facilitates intravitreal drug delivery for retinal gene therapy. *Journal of Controlled Release*, **2015**, 202, 83-92	11.7	100
170	Light-addressable capsules as caged compound matrix for controlled triggering of cytosolic reactions. *Angewandte Chemie - International Edition*, **2013**, 52, 695-9	16.4	98
169	Protein-Release Behavior of Self-Assembled PEG Cyclodextrin/PEG Cholesterol Hydrogels. *Advanced Functional Materials*, **2009**, 19, 2992-3001	15.6	97
168	Laser-induced vapour nanobubbles improve drug diffusion and efficiency in bacterial biofilms. *Nature Communications*, **2018**, 9, 4518	17.4	81
167	Nucleic acid delivery: Where material sciences and bio-sciences meet. *Materials Science and Engineering Reports*, **2007**, 58, 117-161	30.9	79
166	Fluorescence recovery after photobleaching in material and life sciences: putting theory into practice. *Quarterly Reviews of Biophysics*, **2015**, 48, 323-87	7	78

165	Fungicidal activity of miconazole against Candida spp. biofilms. *Journal of Antimicrobial Chemotherapy*, **2010**, 65, 694-700	5.1	78
164	Ovarian tissue cryopreservation in female-to-male transgender people: insights into ovarian histology and physiology after prolonged androgen treatment. *Reproductive BioMedicine Online*, **2017**, 34, 557-566	4	77
163	Transport of nanoparticles in cystic fibrosis sputum and bacterial biofilms by single-particle tracking microscopy. *Nanomedicine*, **2013**, 8, 935-49	5.6	76
162	In search for cross-reactivity to immunophenotype equine mesenchymal stromal cells by multicolor flow cytometry. *Cytometry Part A: the Journal of the International Society for Analytical Cytology*, **2012**, 81, 312-23	4.6	74
161	Cytotoxicity of cadmium-free quantum dots and their use in cell bioimaging. *Chemical Research in Toxicology*, **2014**, 27, 1050-9	4	70
160	Dynamic colocalization microscopy to characterize intracellular trafficking of nanomedicines. *ACS Nano*, **2011**, 5, 7874-84	16.7	70
159	Flotillin-dependent endocytosis and a phagocytosis-like mechanism for cellular internalization of disulfide-based poly(amido amine)/DNA polyplexes. *Biomaterials*, **2011**, 32, 3072-84	15.6	70
158	The cytotoxic effects of polymer-coated quantum dots and restrictions for live cell applications. *Biomaterials*, **2012**, 33, 4882-8	15.6	69
157	In vivo disassembly of IV administered siRNA matrix nanoparticles at the renal filtration barrier. *Biomaterials*, **2013**, 34, 2350-8	15.6	67
156	Line FRAP with the confocal laser scanning microscope for diffusion measurements in small regions of 3-D samples. *Biophysical Journal*, **2007**, 92, 2172-83	2.9	67
155	Bio-inspired pulmonary surfactant-modified nanogels: A promising siRNA delivery system. *Journal of Controlled Release*, **2015**, 206, 177-86	11.7	64
154	Mobility of model proteins in hydrogels composed of oppositely charged dextran microspheres studied by protein release and fluorescence recovery after photobleaching. *Journal of Controlled Release*, **2005**, 110, 67-78	11.7	64
153	A beneficiary role for neuraminidase in influenza virus penetration through the respiratory mucus. *PLoS ONE*, **2014**, 9, e110026	3.7	63
152	Gas-Shearing Fabrication of Multicompartmental Microspheres: A One-Step and Oil-Free Approach. *Advanced Science*, **2019**, 6, 1802342	13.6	63
151	Towards theranostic multicompartment microcapsules: in-situ diagnostics and laser-induced treatment. *Theranostics*, **2013**, 3, 141-51	12.1	62
150	Transport of nanoparticles and tobramycin-loaded liposomes in Burkholderia cepacia complex biofilms. *PLoS ONE*, **2013**, 8, e79220	3.7	62
149	Nanomaterials and molecular transporters to overcome the bacterial envelope barrier: Towards advanced delivery of antibiotics. *Advanced Drug Delivery Reviews*, **2018**, 136-137, 28-48	18.5	58
148	Probing the size limit for nanomedicine penetration into Burkholderia multivorans and Pseudomonas aeruginosa biofilms. *Journal of Controlled Release*, **2014**, 195, 21-8	11.7	58

147	Hemocompatibility of siRNA loaded dextran nanogels. *Biomaterials*, **2011**, 32, 9120-7	15.6	58
146	Functional platform for controlled subcellular distribution of carbon nanotubes. *ACS Nano*, **2011**, 5, 9264-70	13.7	56
145	Mechanistic profiling of the siRNA delivery dynamics of lipid-polymer hybrid nanoparticles. *Journal of Controlled Release*, **2015**, 201, 22-31	11.7	55
144	The influence of movement on the localization precision of sub-resolution particles in fluorescence microscopy. *Journal of Biophotonics*, **2012**, 5, 97-109	3.1	54
143	Straightforward FRAP for quantitative diffusion measurements with a laser scanning microscope. *Optics Express*, **2010**, 18, 22886-905	3.3	53
142	A new FRAP/FRAPa method for three-dimensional diffusion measurements based on multiphoton excitation microscopy. *Biophysical Journal*, **2008**, 95, 3457-69	2.9	53
141	The effect of nanoparticle degradation on amphiphilic polymer-coated quantum dot toxicity: the importance of particle functionality assessment in toxicology [corrected]. *Acta Biomaterialia*, **2014**, 10, 732-41	10.8	52
140	Colloidal stability of nano-sized particles in the peritoneal fluid: towards optimizing drug delivery systems for intraperitoneal therapy. *Acta Biomaterialia*, **2014**, 10, 2965-75	10.8	52
139	Detection and characterization of subvisible aggregates of monoclonal IgG in serum. *Pharmaceutical Research*, **2012**, 29, 2202-12	4.5	51
138	Bright and stable CdSe/CdS@SiO□nanoparticles suitable for long-term cell labeling. *ACS Applied Materials & Interfaces*, **2014**, 6, 11714-23	9.5	50
137	Photopolymerized thermosensitive poly(HPMAlactate)-PEG-based hydrogels: effect of network design on mechanical properties, degradation, and release behavior. *Biomacromolecules*, **2010**, 11, 2143-51	6.9	50
136	Unbreakable codes in electrospun fibers: digitally encoded polymers to stop medicine counterfeiting. *Advanced Materials*, **2010**, 22, 2657-62	24	49
135	Endocytosis and Endosomal Trafficking of DNA After Gene Electrotransfer In Vitro. *Molecular Therapy - Nucleic Acids*, **2016**, 5, e286	10.7	47
134	Comparing photoporation and nucleofection for delivery of small interfering RNA to cytotoxic T cells. *Journal of Controlled Release*, **2017**, 267, 154-162	11.7	44
133	Intracellular partitioning of cell organelles and extraneous nanoparticles during mitosis. *Advanced Drug Delivery Reviews*, **2012**, 64, 78-94	18.5	44
132	Fluorescence single particle tracking for the characterization of submicron protein aggregates in biological fluids and complex formulations. *Pharmaceutical Research*, **2011**, 28, 1112-20	4.5	44
131	Characterization of diffusion of macromolecules in konjac glucomannan solutions and gels by fluorescence recovery after photobleaching technique. *International Journal of Pharmaceutics*, **2006**, 316, 37-46	6.5	44
130	Stable long-term intracellular labelling with fluorescently tagged cationic magnetoliposomes. *ChemBioChem*, **2009**, 10, 257-67	3.8	43

129	Photothermal nanofibres enable safe engineering of therapeutic cells. *Nature Nanotechnology*, **2021**, 16, 1281-1291	28.7	43
128	Biomimetic magnetic silk scaffolds. *ACS Applied Materials & Interfaces*, **2015**, 7, 6282-92	9.5	42
127	The Cellular Interactions of PEGylated Gold Nanoparticles: Effect of PEGylation on Cellular Uptake and Cytotoxicity. *Particle and Particle Systems Characterization*, **2014**, 31, 794-800	3.1	42
126	Investigating the toxic effects of iron oxide nanoparticles. *Methods in Enzymology*, **2012**, 509, 195-224	1.7	42
125	Cytosolic Delivery of Nanolabels Prevents Their Asymmetric Inheritance and Enables Extended Quantitative in Vivo Cell Imaging. *Nano Letters*, **2016**, 16, 5975-5986	11.5	42
124	High oxygen tension increases global methylation in bovine 4-cell embryos and blastocysts but does not affect general retrotransposon expression. *Reproduction, Fertility and Development*, **2016**, 28, 948-959	1.8	40
123	Stimuli-responsive nanobubbles for biomedical applications. *Chemical Society Reviews*, **2021**, 50, 5746-5765	58.5	40
122	On-chip light sheet illumination enables diagnostic size and concentration measurements of membrane vesicles in biofluids. *Nanoscale*, **2014**, 6, 1741-7	7.7	39
121	Advanced fluorescence microscopy methods illuminate the transfection pathway of nucleic acid nanoparticles. *Journal of Controlled Release*, **2010**, 148, 69-74	11.7	39
120	Water-Soluble Monofunctional Perylene and Terrylene Dyes: Powerful Labels for Single-Enzyme Tracking. *Angewandte Chemie*, **2008**, 120, 3420-3423	3.6	39
119	Improved Label-Free Identification of Individual Exosome-like Vesicles with Au@Ag Nanoparticles as SERS Substrate. *ACS Applied Materials & Interfaces*, **2019**, 11, 39424-39435	9.5	36
118	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	16.7	35
117	Lysosomal capturing of cytoplasmic injected nanoparticles by autophagy: an additional barrier to non viral gene delivery. *Journal of Controlled Release*, **2014**, 195, 29-36	11.7	35
116	Laser-assisted photoporation: fundamentals, technological advances and applications. *Advances in Physics: X*, **2016**, 1, 596-620	5.1	34
115	Decationized polyplexes as stable and safe carrier systems for improved biodistribution in systemic gene therapy. *Journal of Controlled Release*, **2014**, 195, 162-175	11.7	33
114	Materials and Technologies to Combat Counterfeiting of Pharmaceuticals: Current and Future Problem Tackling. *Advanced Materials*, **2020**, 32, e1905486	24	33
113	Membrane vesicle secretion and prophage induction in multidrug-resistant Stenotrophomonas maltophilia in response to ciprofloxacin stress. *Environmental Microbiology*, **2017**, 19, 3930-3937	5.2	32
112	Coating of Quantum Dots strongly defines their effect on lysosomal health and autophagy. *Acta Biomaterialia*, **2017**, 48, 195-205	10.8	32

111	Turning a frown upside down: Exploiting nanoparticle toxicity for anticancer therapy. *Nano Today*, **2013**, 8, 121-125	17.9	32
110	Fast spatial-selective delivery into live cells. *Journal of Controlled Release*, **2017**, 266, 198-204	11.7	31
109	Single-particle tracking for studying nanomaterial dynamics: applications and fundamentals in drug delivery. *Nanomedicine*, **2014**, 9, 913-27	5.6	31
108	Fluorescent non-porous silica nanoparticles for long-term cell monitoring: cytotoxicity and particle functionality. *Acta Biomaterialia*, **2013**, 9, 9183-93	10.8	31
107	The influence of natural pulmonary surfactant on the efficacy of siRNA-loaded dextran nanogels. *Nanomedicine*, **2013**, 8, 1625-38	5.6	31
106	Immobilization of pseudorabies virus in porcine tracheal respiratory mucus revealed by single particle tracking. *PLoS ONE*, **2012**, 7, e51054	3.7	31
105	Faithful Fabrication of Biocompatible Multicompartmental Memomicrospheres for Digitally Color-Tunable Barcoding. *Small*, **2020**, 16, e1907586	11	30
104	FRAP in pharmaceutical research: practical guidelines and applications in drug delivery. *Pharmaceutical Research*, **2014**, 31, 255-70	4.5	29
103	Dioctadecyldimethylammonium:monoolein nanocarriers for efficient in vitro gene silencing. *ACS Applied Materials & Interfaces*, **2014**, 6, 6977-89	9.5	29
102	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	11.7	29
101	Transport Mechanisms of Squalenoyl-Adenosine Nanoparticles Across the Blood–Brain Barrier. *Chemistry of Materials*, **2015**, 27, 3636-3647	9.6	28
100	Multilayered Magnetic Gelatin Membrane Scaffolds. *ACS Applied Materials & Interfaces*, **2015**, 7, 23098-109	9.5	27
99	Methodologies to investigate intracellular barriers for nucleic acid delivery in non-viral gene therapy. *Nano Today*, **2018**, 21, 74-90	17.9	27
98	Protein macromonomers containing reduction-sensitive linkers for covalent immobilization and glutathione triggered release from dextran hydrogels. *Journal of Controlled Release*, **2011**, 156, 329-36	11.7	27
97	Disregarded Effect of Biological Fluids in siRNA Delivery: Human Ascites Fluid Severely Restricts Cellular Uptake of Nanoparticles. *ACS Applied Materials & Interfaces*, **2015**, 7, 24322-9	9.5	26
96	Spatiotemporal visualization of subcellular dynamics of carbon nanotubes. *Nano Letters*, **2012**, 12, 6145-51	11.5	26
95	Freeze-dried mucoadhesive polymeric system containing pegylated lipoplexes: Towards a vaginal sustained released system for siRNA. *Journal of Controlled Release*, **2016**, 236, 68-78	11.7	26
94	Design of smart GE11-PLGA/PEG-PLGA blend nanoparticulate platforms for parenteral administration of hydrophilic macromolecular drugs: synthesis, preparation and in vitro/ex vivo characterization. *International Journal of Pharmaceutics*, **2016**, 511, 1112-23	6.5	26

93	Intra- and Interspecies Effects of Outer Membrane Vesicles from Stenotrophomonas maltophilia on β-Lactam Resistance. *Antimicrobial Agents and Chemotherapy*, **2016**, 60, 2516-8	5.9	25
92	Influence of temperature, oxygen and bacterial strain identity on the association of Campylobacter jejuni with Acanthamoeba castellanii. *FEMS Microbiology Ecology*, **2010**, 74, 371-81	4.3	25
91	The Transport of Nanosized Gene Carriers Unraveled by Live-Cell Imaging. *Angewandte Chemie*, **2006**, 118, 1598-1602	3.6	24
90	Effect of hyaluronic acid-binding to lipoplexes on intravitreal drug delivery for retinal gene therapy. *European Journal of Pharmaceutical Sciences*, **2017**, 103, 27-35	5.1	23
89	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	4.8	23
88	Loss of Nuclear Envelope Integrity in Aging and Disease. *International Review of Cell and Molecular Biology*, **2018**, 336, 205-222	6	22
87	Layer by Layer Assembled Chitosan-Coated Gold Nanoparticles for Enhanced siRNA Delivery and Silencing. *International Journal of Molecular Sciences*, **2021**, 22,	6.3	22
86	The performance of gradient alloy quantum dots in cell labeling. *Biomaterials*, **2014**, 35, 7249-58	15.6	21
85	MRI assessment of blood outgrowth endothelial cell homing using cationic magnetoliposomes. *Biomaterials*, **2011**, 32, 4140-50	15.6	21
84	Stealth monoolein-based nanocarriers for delivery of siRNA to cancer cells. *Acta Biomaterialia*, **2015**, 25, 216-29	10.8	20
83	Targeted decationized polyplexes for siRNA delivery. *Molecular Pharmaceutics*, **2015**, 12, 150-61	5.6	20
82	Selective Labeling of Individual Neurons in Dense Cultured Networks With Nanoparticle-Enhanced Photoporation. *Frontiers in Cellular Neuroscience*, **2018**, 12, 80	6.1	20
81	Targeted Perturbation of Nuclear Envelope Integrity with Vapor Nanobubble-Mediated Photoporation. *ACS Nano*, **2018**, 12, 7791-7802	16.7	20
80	Mechanistic profiling of the release kinetics of siRNA from lipidoid-polymer hybrid nanoparticles in vitro and in vivo after pulmonary administration. *Journal of Controlled Release*, **2019**, 310, 82-93	11.7	20
79	Intracellular delivery of oligonucleotides in Helicobacter pylori by fusogenic liposomes in the presence of gastric mucus. *Biomaterials*, **2017**, 138, 1-12	15.6	19
78	Gold Nanoparticle-Mediated Photoporation Enables Delivery of Macromolecules over a Wide Range of Molecular Weights in Human CD4+ T Cells. *Crystals*, **2019**, 9, 411	2.3	19
77	Intracellular Delivery of mRNA in Adherent and Suspension Cells by Vapor Nanobubble Photoporation. *Nano-Micro Letters*, **2020**, 12, 185	19.5	19
76	Electrospun polystyrene fibers for HIV entrapment. *Polymers for Advanced Technologies*, **2014**, 25, 827-834	3.1	18

75	Anomalous photobleaching in fluorescence recovery after photobleaching measurements due to excitation saturation--a case study for fluorescein. *Journal of Biomedical Optics*, **2006**, 11, 044013	3.5	18
74	Triggered Release from Cellulose Microparticles Inspired by Wood Degradation by Fungi. *ACS Sustainable Chemistry and Engineering*, **2021**, 9, 387-397	8.3	18
73	PEGylated and Functionalized Aliphatic Polycarbonate Polyplex Nanoparticles for Intravenous Administration of HDAC5 siRNA in Cancer Therapy. *ACS Applied Materials & Interfaces*, **2017**, 9, 2181-2195	9.5	17
72	Photoablation of Human Vitreous Opacities by Light-Induced Vapor Nanobubbles. *ACS Nano*, **2019**, 13, 8401-8416	16.7	17
71	The Effect of Intracellular Degradation on Cytotoxicity and Cell Labeling Efficacy of Inorganic Ligand-Stabilized Colloidal CdSe/CdS Quantum Dots. *Journal of Biomedical Nanotechnology*, **2015**, 11, 631-43	4	17
70	Sonoprinting of nanoparticle-loaded microbubbles: Unraveling the multi-timescale mechanism. *Biomaterials*, **2019**, 217, 119250	15.6	16
69	Targeted nanoparticles towards increased L cell stimulation as a strategy to improve oral peptide delivery in incretin-based diabetes treatment. *Biomaterials*, **2020**, 255, 120209	15.6	16
68	Multifunctional layer-by-layer coating of digitally encoded microparticles. *Langmuir*, **2007**, 23, 10272-9	4	16
67	Delivery of Mixed-Lineage Kinase Domain-Like Protein by Vapor Nanobubble Photoporation Induces Necroptotic-Like Cell Death in Tumor Cells. *International Journal of Molecular Sciences*, **2019**, 20,	6.3	15
66	Nucleic acid loading and fluorescent labeling of isolated extracellular vesicles requires adequate purification. *International Journal of Pharmaceutics*, **2018**, 548, 783-792	6.5	15
65	Sizing nanomaterials in bio-fluids by cFRAP enables protein aggregation measurements and diagnosis of bio-barrier permeability. *Nature Communications*, **2016**, 7, 12982	17.4	15
64	Elucidating the pre- and post-nuclear intracellular processing of 1,4-dihydropyridine based gene delivery carriers. *Journal of Controlled Release*, **2012**, 162, 167-75	11.7	15
63	Light-Addressable Capsules as Caged Compound Matrix for Controlled Triggering of Cytosolic Reactions. *Angewandte Chemie*, **2013**, 125, 723-727	3.6	15
62	Microfabricated devices for single objective single plane illumination microscopy (SoSPIM). *Optics Express*, **2017**, 25, 1732-1745	3.3	15
61	Evaluation of Encoded Layer-By-Layer Coated Microparticles As Protease Sensors. *Advanced Functional Materials*, **2008**, 18, 1624-1631	15.6	15
60	Exploring Light-Sensitive Nanocarriers for Simultaneous Triggered Antibiotic Release and Disruption of Biofilms Upon Generation of Laser-Induced Vapor Nanobubbles. *Pharmaceutics*, **2019**, 11,	6.4	14
59	Nanomaterials to avoid and destroy protein aggregates. *Nano Today*, **2020**, 31, 100837	17.9	14
58	High-resolution synchrotron X-ray analysis of bioglass-enriched hydrogels. *Journal of Biomedical Materials Research - Part A*, **2016**, 104, 1194-201	5.4	14

57	Effect of covalent fluorescence labeling of plasmid DNA on its intracellular processing and transfection with lipid-based carriers. *Molecular Pharmaceutics*, **2014**, 11, 1359-68	5.6	13
56	Equine oviduct explant culture: a basic model to decipher embryo-maternal communication. *Reproduction, Fertility and Development*, **2014**, 26, 954-66	1.8	13
55	Cell uptake, cytoplasmic diffusion and nuclear access of a 6.5 nm diameter dendrimer. *International Journal of Pharmaceutics*, **2007**, 331, 215-9	6.5	13
54	Photothermally Triggered Endosomal Escape and Its Influence on Transfection Efficiency of Gold-Functionalized JetPEI/pDNA Nanoparticles. *International Journal of Molecular Sciences*, **2018**, 19,	6.3	13
53	Methods to follow intracellular trafficking of cell-penetrating peptides. *Journal of Drug Targeting*, **2016**, 24, 508-19	5.4	12
52	Biocompatible Lipid-Coated Persistent Luminescent Nanoparticles for In Vivo Imaging of Dendritic Cell Migration. *Particle and Particle Systems Characterization*, **2019**, 36, 1900371	3.1	12
51	Correlation of dual colour single particle trajectories for improved detection and analysis of interactions in living cells. *International Journal of Molecular Sciences*, **2013**, 14, 16485-514	6.3	12
50	Non-viral transfection technologies for next-generation therapeutic T cell engineering. *Biotechnology Advances*, **2021**, 49, 107760	17.8	12
49	Intra-Articular Formulation of GE11-PLGA Conjugate-Based NPs for Dexamethasone Selective Targeting-In Vitro Evaluation. *International Journal of Molecular Sciences*, **2018**, 19,	6.3	12
48	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,	6.3	11
47	Long-term live-cell microscopy with labeled nanobodies delivered by laser-induced photoporation. *Nano Research*, **2020**, 13, 485-495	10	11
46	Intracellular Labeling with Extrinsic Probes: Delivery Strategies and Applications. *Small*, **2020**, 16, e2000146	11	11
45	Fluorescence-Based Quantification of Messenger RNA and Plasmid DNA Decay Kinetics in Extracellular Biological Fluids and Cell Extracts. *Advanced Biology*, **2020**, 4, e2000057	3.5	11
44	Bypassing Border Control: Nuclear Envelope Rupture in Disease. *Physiology*, **2018**, 33, 39-49	9.8	11
43	Post-PEGylated and crosslinked polymeric ssRNA nanocomplexes as adjuvants targeting lymph nodes with increased cytolytic T cell inducing properties. *Journal of Controlled Release*, **2018**, 284, 73-83	11.7	11
42	Concentration Gradients in Material Sciences: Methods to Design and Biomedical Applications. *Advanced Functional Materials*, **2021**, 31, 2009005	15.6	11
41	Limitations and caveats of magnetic cell labeling using transfection agent complexed iron oxide nanoparticles. *Contrast Media and Molecular Imaging*, **2012**, 7, 140-52	3.2	10
40	Gas-shearing synthesis of core–shell multicompartmental microparticles as cell-like system for enzymatic cascade reaction. *Chemical Engineering Journal*, **2022**, 428, 132607	14.7	10

39	Efficient Endocytosis of Inorganic Nanoparticles with Zwitterionic Surface Functionalization. *ACS Applied Materials & Interfaces*, **2019**, 11, 38475-38482	9.5	9
38	Nanoparticle-sensitized photoporation enables inflammasome activation studies in targeted single cells. *Nanoscale*, **2021**, 13, 6592-6604	7.7	9
37	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	6.2	8
36	Effect of Native Gastric Mucus on in vivo Hybridization Therapies Directed at Helicobacter pylori. *Molecular Therapy - Nucleic Acids*, **2015**, 4, e269	10.7	8
35	Nanobody click chemistry for convenient site-specific fluorescent labelling, single step immunocytochemistry and delivery into living cells by photoporation and live cell imaging. *New Biotechnology*, **2020**, 59, 33-43	6.4	8
34	Approximate Bayesian computation for estimating number concentrations of monodisperse nanoparticles in suspension by optical microscopy. *Physical Review E*, **2016**, 93, 063311	2.4	6
33	Fluorescence Spectroscopy to Characterize Protein Aggregates and Particles **2012**, 201-226		6
32	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	5.6	6
31	Physical transfection technologies for macrophages and dendritic cells in immunotherapy. *Expert Opinion on Drug Delivery*, **2021**, 18, 229-247	8	6
30	Vapor nanobubble-mediated photoporation constitutes a versatile intracellular delivery technology. *Current Opinion in Colloid and Interface Science*, **2021**, 54, 101453	7.6	6
29	DNA counterstaining for methylation and hydroxymethylation immunostaining in bovine zygotes. *Analytical Biochemistry*, **2014**, 454, 14-6	3.1	5
28	Photoporation with Biodegradable Polydopamine Nanosensitizers Enables Safe and Efficient Delivery of mRNA in Human T Cells. *Advanced Functional Materials*, **2021**, 31, 2102472	15.6	5
27	The role of small proteins in J2315 biofilm formation, persistence and intracellular growth. *Biofilm*, **2019**, 1, 100001	5.9	4
26	Bubble Forming Films for Spatial Selective Cell Killing. *Advanced Materials*, **2021**, 33, e2008379	24	4
25	Hydrogel-Induced Cell Membrane Disruptions Enable Direct Cytosolic Delivery of Membrane-Impermeable Cargo. *Advanced Materials*, **2021**, 33, e2008054	24	4
24	Quantifying the Average Number of Nucleic Acid Therapeutics per Nanocarrier by Single Particle Tracking Microscopy. *Molecular Pharmaceutics*, **2018**, 15, 1142-1149	5.6	3
23	Brn-3a suppresses pseudorabies virus-induced cell death in sensory neurons. *Journal of General Virology*, **2007**, 88, 743-747	4.9	3
22	PEGylation of recombinant human deoxyribonuclease I decreases its transport across lung epithelial cells and uptake by macrophages. *International Journal of Pharmaceutics*, **2021**, 593, 120107	6.5	3

21	Cytosolic delivery of gadolinium via photoporation enables improved in vivo magnetic resonance imaging of cancer cells. *Biomaterials Science*, **2021**, 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. *International Journal of Molecular Sciences*, **2021**, 22,	6.3	3
19	Cas9 RNP transfection by vapor nanobubble photoporation for cell engineering. *Molecular Therapy - Nucleic Acids*, **2021**, 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.. *Advanced Science*, **2021**, e2102072	13.6	3
17	Transient nuclear lamin A/C accretion aids in recovery from vapor nanobubble-induced permeabilisation of the plasma membrane.. *Cellular and Molecular Life Sciences*, **2022**, 79, 23	10.3	2
16	Does the mode of dispersion determine the properties of dispersed Pseudomonas aeruginosa biofilm cells?. *International Journal of Antimicrobial Agents*, **2020**, 56, 106194	14.3	2
15	Lipoplexes to Deliver Oligonucleotides in Gram-Positive and Gram-Negative Bacteria: Towards Treatment of Blood Infections. *Pharmaceutics*, **2021**, 13,	6.4	2
14	Bubble-Forming Films: Bubble Forming Films for Spatial Selective Cell Killing (Adv. Mater. 27/2021). *Advanced Materials*, **2021**, 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. *Nanoscale Horizons*, **2021**, 6, 449-461	10.8	2
12	Delivery of Oligonucleotides into Bacteria by Fusogenic Liposomes. *Methods in Molecular Biology*, **2021**, 2246, 87-96	1.4	2
11	In Vitro Evaluation of Anti-Aggregation and Degradation Behavior of PEGylated Polymeric Nanogels under In Vivo Like Conditions. *Macromolecular Bioscience*, **2018**, 18, 1700127	5.5	2
10	Macrophage reprogramming into a pro-healing phenotype by siRNA delivered with LBL assembled nanocomplexes for wound healing applications. *Nanoscale*, **2021**, 13, 15445-15463	7.7	2
9	Plasma membrane perforation by GSDME during apoptosis-driven secondary necrosis.. *Cellular and Molecular Life Sciences*, **2021**, 79, 19	10.3	2
8	Unbreakable codes in electrospun fibers to stop medicine counterfeiting. *Journal of Controlled Release*, **2010**, 148, e13-5	11.7	1
7	The cellular response to plasma membrane disruption for nanomaterial delivery.. *Nano Convergence*, **2022**, 9, 6	9.2	1
6	Black phosphorus mediated photoporation: a broad absorption nanoplatform for intracellular delivery of macromolecules. *Nanoscale*, **2021**, 13, 17049-17056	7.7	1
5	Non-viral siRNA delivery to T cells: Challenges and opportunities in cancer immunotherapy. *Biomaterials*, **2022**, 121510	15.6	1
4	Light triggered nanoscale biolistics for efficient intracellular delivery of functional macromolecules in mammalian cells.. *Nature Communications*, **2022**, 13, 1996	17.4	1

3	Yeast-produced fructosamine-3-kinase retains mobility after ex vivo intravitreal injection in human and bovine eyes as determined by Fluorescence Correlation Spectroscopy.. *International Journal of Pharmaceutics*, **2022**, 121772	6.5	1
2	Automatic particle detection in microscopy using temporal correlations. *Microscopy Research and Technique*, **2013**, 76, 997-1006	2.8	
1	Detection of ovalbumin amyloid-like fibrils at the oil-water interface in oil-in-water emulsions by spinning disk confocal microscopy. *Food Structure*, **2021**, 29, 100207	4.3	