Nicole F Steinmetz

List of Publications by Year
in descending order

225 papers	12,375 citations	22548 61 h-index	40945 97 g-index
232 all docs	232 docs citations	232 times ranked	12680 citing authors

#	Article	IF	Citations
1	COVID-19 vaccine development and a potential nanomaterial path forward. Nature Nanotechnology, 2020, 15, 646-655.	15.6	501
2	In situ vaccination with cowpea mosaic virus nanoparticles suppresses metastatic cancer. Nature Nanotechnology, 2016, 11, 295-303.	15.6	392
3	Labeling Live Cells by Copper-Catalyzed Alkyneâˆ’Azide Click Chemistry. Bioconjugate Chemistry, 2010, 21, 1912-1916.	1.8	347
4	Design of virus-based nanomaterials for medicine, biotechnology, and energy. Chemical Society Reviews, 2016, 45, 4074-4126.	18.7	313
5	Applications of viral nanoparticles in medicine. Current Opinion in Biotechnology, 2011, 22, 901-908.	3.3	260
6	COVID-19 Vaccine Frontrunners and Their Nanotechnology Design. ACS Nano, 2020, 14, 12522-12537.	7.3	259
7	The Art of Engineering Viral Nanoparticles. Molecular Pharmaceutics, 2011, 8, 29-43.	2.3	233
8	Viral nanoparticles for drug delivery, imaging, immunotherapy, and theranostic applications. Advanced Drug Delivery Reviews, 2020, 156, 214-235.	6.6	231
9	Viral nanoparticles as platforms for next-generation therapeutics and imaging devices. Nanomedicine: Nanotechnology, Biology, and Medicine, 2010, 6, 634-641.	1.7	229
10	Biodistribution, pharmacokinetics, and blood compatibility of native and PEGylated tobacco mosaic virus nano-rods and -spheres in mice. Virology, 2014, 449, 163-173.	1.1	165
11	Builtâ€In Active Microneedle Patch with Enhanced Autonomous Drug Delivery. Advanced Materials, 2020, 32, e1905740.	11.1	160
12	The Impact of Aspect Ratio on the Biodistribution and Tumor Homing of Rigid Softâ€Matter Nanorods. Advanced Healthcare Materials, 2015, 4, 874-882.	3.9	148
13	Dual-Modal Magnetic Resonance and Fluorescence Imaging of Atherosclerotic Plaques in Vivo Using VCAM-1 Targeted Tobacco Mosaic Virus. Nano Letters, 2014, 14, 1551-1558.	4.5	145
14	Tobacco Mosaic Virus Delivery of Phenanthriplatin for Cancer therapy. ACS Nano, 2016, 10, 4119-4126.	7.3	145
15	Hydrazone Ligation Strategy to Assemble Multifunctional Viral Nanoparticles for Cell Imaging and Tumor Targeting. Nano Letters, 2010, 10, 1093-1097.	4.5	144
16	Increased Tumor Homing and Tissue Penetration of the Filamentous Plant Viral Nanoparticle <i>Potato virus X</i>. Molecular Pharmaceutics, 2013, 10, 33-42.	2.3	139
17	CPMV-DOX Delivers. Molecular Pharmaceutics, 2013, 10, 3-10.	2.3	139
18	Utilisation of plant viruses in bionanotechnology. Organic and Biomolecular Chemistry, 2007, 5, 2891.	1.5	138

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19	Virus-Based Nanoparticles as Versatile Nanomachines. Annual Review of Virology, 2015, 2, 379-401.	3.0	136
20	Model-Independent Analysis of QCM Data on Colloidal Particle Adsorption. Langmuir, 2009, 25, 5177-5184.	1.6	133
21	Solvation Effects in the Quartz Crystal Microbalance with Dissipation Monitoring Response to Biomolecular Adsorption. A Phenomenological Approach. Analytical Chemistry, 2008, 80, 8880-8890.	3.2	132
22	Titanium dioxide nanoparticle-induced oxidative stress triggers DNA damage and hepatic injury in mice. Nanomedicine, 2014, 9, 1423-1434.	1.7	132
23	Intravital imaging of embryonic and tumor neovasculature using viral nanoparticles. Nature Protocols, 2010, 5, 1406-1417.	5.5	129
24	PEGylated Viral Nanoparticles for Biomedicine: The Impact of PEG Chain Length on VNP Cell Interactions In Vitro and Ex Vivo. Biomacromolecules, 2009, 10, 784-792.	2.6	128
25	Buckyballs Meet Viral Nanoparticles: Candidates for Biomedicine. Journal of the American Chemical Society, 2009, 131, 17093-17095.	6.6	119
26	Nanocarriers for the Delivery of Medical, Veterinary, and Agricultural Active Ingredients. ACS Nano, 2020, 14, 2678-2701.	7.3	113
27	Potato virus X, a filamentous plant viral nanoparticle for doxorubicin delivery in cancer therapy. Nanoscale, 2017, 9, 2348-2357.	2.8	108
28	Cowpea mosaic virus nanoparticles target surface vimentin on cancer cells. Nanomedicine, 2011, 6, 351-364.	1.7	107
29	Intravital Imaging of Human Prostate Cancer Using Viral Nanoparticles Targeted to Gastrinâ€Releasing Peptide Receptors. Small, 2011, 7, 1664-1672.	5.2	100
30	Potato Virus X as a Novel Platform for Potential Biomedical Applications. Nano Letters, 2010, 10, 305-312.	4.5	99
31	Tobacco mosaic virus rods and spheres as supramolecular high-relaxivity MRI contrast agents. Journal of Materials Chemistry B, 2013, 1, 1482.	2.9	95
32	Interior Engineering of a Viral Nanoparticle and Its Tumor Homing Properties. Biomacromolecules, 2012, 13, 3990-4001.	2.6	94
33	Treatment of Canine Oral Melanoma with Nanotechnology-Based Immunotherapy and Radiation. Molecular Pharmaceutics, 2018, 15, 3717-3722.	2.3	92
34	Infusion of imaging and therapeutic molecules into the plant virus-based carrier cowpea mosaic virus: Cargo-loading and delivery. Journal of Controlled Release, 2013, 172, 568-578.	4.8	90
35	Plant viruses and bacteriophages for drug delivery in medicine and biotechnology. Current Opinion in Chemical Biology, 2017, 38, 108-116.	2.8	90
36	Dysprosium-Modified Tobacco Mosaic Virus Nanoparticles for Ultra-High-Field Magnetic Resonance and Near-Infrared Fluorescence Imaging of Prostate Cancer. ACS Nano, 2017, 11, 9249-9258.	7.3	90

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37	Fluorescent Nanodiamonds Embedded in Biocompatible Translucent Shells. Small, 2014, 10, 1106-1115.	5.2	88
38	Plant viral nanoparticles-based HER2 vaccine: Immune response influenced by differential transport, localization and cellular interactions of particulate carriers. Biomaterials, 2017, 121, 15-27.	5.7	88
39	Cowpea Mosaic Virus for Material Fabrication:â€‰ Addressable Carboxylate Groups on a Programmable Nanoscaffold. Langmuir, 2006, 22, 3488-3490.	1.6	86
40	POxylation as an alternative stealth coating for biomedical applications. European Polymer Journal, 2017, 88, 679-688.	2.6	81
41	Bioinspired Shielding Strategies for Nanoparticle Drug Delivery Applications. Molecular Pharmaceutics, 2018, 15, 2900-2909.	2.3	81
42	Stealth filaments: Polymer chain length and conformation affect the in vivo fate of PEGylated potato virus X. Acta Biomaterialia, 2015, 19, 166-179.	4.1	79
43	In Situ Vaccination with Cowpea vs Tobacco Mosaic Virus against Melanoma. Molecular Pharmaceutics, 2018, 15, 3700-3716.	2.3	79
44	Decoration of Cowpea Mosaic Virus with Multiple, Redox-Active, Organometallic Complexes. Small, 2006, 2, 530-533.	5.2	78
45	Serum albumin â€˜camouflageâ€™ of plant virus based nanoparticles prevents their antibody recognition and enhances pharmacokinetics. Biomaterials, 2016, 89, 89-97.	5.7	78
46	Delivery of Pesticides to Plant Parasitic Nematodes Using Tobacco Mild Green Mosaic Virus as a Nanocarrier. ACS Nano, 2017, 11, 4719-4730.	7.3	77
47	Combination of Plant Virus Nanoparticle-Based in Situ Vaccination with Chemotherapy Potentiates Antitumor Response. Nano Letters, 2017, 17, 4019-4028.	4.5	77
48	Virusâ€Templated Silica Nanoparticles. Small, 2009, 5, 813-816.	5.2	76
49	Chemical Modification of the Inner and Outer Surfaces of Tobacco Mosaic Virus (TMV). Methods in Molecular Biology, 2014, 1108, 173-185.	0.4	74
50	Plant Viral Capsids as Nanobuilding Blocks:Â Construction of Arrays on Solid Supports. Langmuir, 2006, 22, 10032-10037.	1.6	73
51	The Protein Corona of Plant Virus Nanoparticles Influences their Dispersion Properties, Cellular Interactions, and In Vivo Fates. Small, 2016, 12, 1758-1769.	5.2	72
52	Structure-Based Engineering of an Icosahedral Virus for Nanomedicine and Nanotechnology. Current Topics in Microbiology and Immunology, 2009, 327, 23-58.	0.7	71
53	Membrane-Grafted Hyaluronan Films:Â A Well-Defined Model System of Glycoconjugate Cell Coats. Journal of the American Chemical Society, 2007, 129, 5306-5307.	6.6	70
54	Polymer Structure and Conformation Alter the Antigenicity of Virus-like Particleâ€"Polymer Conjugates. Journal of the American Chemical Society, 2017, 139, 3312-3315.	6.6	70

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55	Molecular mechanism and binding free energy of doxorubicin intercalation in DNA. Physical Chemistry Chemical Physics, 2019, 21, 3877-3893.	1.3	70
56	Engineering Gd-loaded nanoparticles to enhance MRI sensitivity via<i>T</i>₁shortening. Nanotechnology, 2013, 24, 462001.	1.3	69
57	Enhancing the Angular Sensitivity of Plasmonic Sensors Using Hyperbolic Metamaterials. Advanced Optical Materials, 2016, 4, 1767-1772.	3.6	69
58	Shaping bio-inspired nanotechnologies to target thrombosis for dual optical-magnetic resonance imaging. Journal of Materials Chemistry B, 2015, 3, 6037-6045.	2.9	68
59	Radiation Therapy Combined with Cowpea Mosaic Virus Nanoparticle in Situ Vaccination Initiates Immune-Mediated Tumor Regression. ACS Omega, 2018, 3, 3702-3707.	1.6	68
60	Tobacco mosaic virus-based protein nanoparticles and nanorods for chemotherapy delivery targeting breast cancer. Journal of Controlled Release, 2016, 231, 103-113.	4.8	67
61	Integrating plant molecular farming and materials research for next-generation vaccines. Nature Reviews Materials, 2022, 7, 372-388.	23.3	65
62	Shape matters: the diffusion rates of TMV rods and CPMV icosahedrons in a spheroid model of extracellular matrix are distinct. Biomaterials Science, 2013, 1, 581.	2.6	64
63	Physalis Mottle Virus-Like Particles as Nanocarriers for Imaging Reagents and Drugs. Biomacromolecules, 2017, 18, 4141-4153.	2.6	63
64	Soil mobility of synthetic and virus-based model nanopesticides. Nature Nanotechnology, 2019, 14, 712-718.	15.6	59
65	Cowpea Mosaic Virus Nanoparticles and Empty Virus-Like Particles Show Distinct but Overlapping Immunostimulatory Properties. Journal of Virology, 2019, 93, .	1.5	58
66	The Antitumor Efficacy of CpG Oligonucleotides is Improved by Encapsulation in Plant Virusâ€Like Particles. Advanced Functional Materials, 2020, 30, 1908743.	7.8	58
67	Development of viral nanoparticles for efficient intracellular delivery. Nanoscale, 2012, 4, 3567.	2.8	57
68	Tobacco Mosaic Virus-Delivered Cisplatin Restores Efficacy in Platinum-Resistant Ovarian Cancer Cells. Molecular Pharmaceutics, 2018, 15, 2922-2931.	2.3	57
69	Layerâ€Byâ€Layer Assembly of Viral Nanoparticles and Polyelectrolytes: The Film Architecture is Different for Spheres Versus Rods. ChemBioChem, 2008, 9, 1662-1670.	1.3	56
70	Assembly of Multilayer Arrays of Viral Nanoparticles via Biospecific Recognition: A Quartz Crystal Microbalance with Dissipation Monitoring Study. Biomacromolecules, 2008, 9, 456-462.	2.6	56
71	Biodistribution and clearance of a filamentous plant virus in healthy and tumor-bearing mice. Nanomedicine, 2014, 9, 221-235.	1.7	56
72	Delivery of siRNA therapeutics using cowpea chlorotic mottle virus-like particles. Biomaterials Science, 2019, 7, 3138-3142.	2.6	56

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73	Virusâ€based nanoparticles as platform technologies for modern vaccines. Wiley Interdisciplinary Reviews: Nanomedicine and Nanobiotechnology, 2016, 8, 554-578.	3.3	55
74	Heterologous Prime-Boost Enhances the Antitumor Immune Response Elicited by Plant-Virus-Based Cancer Vaccine. Journal of the American Chemical Society, 2019, 141, 6509-6518.	6.6	55
75	Plant Virus-Like Particle In Situ Vaccine for Intracranial Glioma Immunotherapy. Cancers, 2019, 11, 515.	1.7	55
76	Siteâ€specific and Spatially Controlled Addressability of a New Viral Nanobuilding Block: <i>Sulfolobus islandicus</i> Rodâ€shaped Virus 2. Advanced Functional Materials, 2008, 18, 3478-3486.	7.8	54
77	Slowâ€Release Formulation of Cowpea Mosaic Virus for In Situ Vaccine Delivery to Treat Ovarian Cancer. Advanced Science, 2018, 5, 1700991.	5.6	54
78	Design rules for nanomedical engineering: from physical virology to the applications of virus-based materials in medicine. Journal of Biological Physics, 2013, 39, 301-325.	0.7	53
79	Interface of Physics and Biology: Engineering Virus-Based Nanoparticles for Biophotonics. Bioconjugate Chemistry, 2015, 26, 51-62.	1.8	53
80	Utilizing Viral Nanoparticle/Dendron Hybrid Conjugates in Photodynamic Therapy for Dual Delivery to Macrophages and Cancer Cells. Bioconjugate Chemistry, 2016, 27, 1227-1235.	1.8	53
81	Intra- and intermolecular atomic-scale interactions in the receptor binding domain of SARS-CoV-2 spike protein: implication for ACE2 receptor binding. Physical Chemistry Chemical Physics, 2020, 22, 18272-18283.	1.3	53
82	Transferrin-mediated targeting of bacteriophage HK97 nanoparticles into tumor cells. Nanomedicine, 2011, 6, 55-68.	1.7	52
83	Guiding plant virus particles to integrin-displaying cells. Nanoscale, 2012, 4, 3698.	2.8	50
84	Detection and Imaging of Aggressive Cancer Cells Using an Epidermal Growth Factor Receptor (EGFR)-Targeted Filamentous Plant Virus-Based Nanoparticle. Bioconjugate Chemistry, 2015, 26, 262-269.	1.8	50
85	Cowpea Mosaic Virus Immunotherapy Combined with Cyclophosphamide Reduces Breast Cancer Tumor Burden and Inhibits Lung Metastasis. Advanced Science, 2019, 6, 1802281.	5.6	50
86	Chemical Introduction of Reactive Thiols Into a Viral Nanoscaffold: A Method that Avoids Virus Aggregation. ChemBioChem, 2007, 8, 1131-1136.	1.3	49
87	Engineering of Brome mosaic virus for biomedical applications. RSC Advances, 2012, 2, 3670.	1.7	49
88	Controlled immobilisation of active enzymes on the cowpea mosaic virus capsid. Nanoscale, 2012, 4, 5640.	2.8	49
89	Trivalent Subunit Vaccine Candidates for COVID-19 and Their Delivery Devices. Journal of the American Chemical Society, 2021, 143, 14748-14765.	6.6	48
90	Molecular farming of fluorescent virus-based nanoparticles for optical imaging in plants, human cells and mouse models. Biomaterials Science, 2014, 2, 784.	2.6	47

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91	High Aspect Ratio Nanotubes Formed by Tobacco Mosaic Virus for Delivery of Photodynamic Agents Targeting Melanoma. ACS Biomaterials Science and Engineering, 2016, 2, 838-844.	2.6	47
92	Biodegradable Viral Nanoparticle/Polymer Implants Prepared <i>via</i> Melt-Processing. ACS Nano, 2017, 11, 8777-8789.	7.3	47
93	Tobacco mosaic virus delivery of mitoxantrone for cancer therapy. Nanoscale, 2018, 10, 16307-16313.	2.8	47
94	CD47 Blockade and Cowpea Mosaic Virus Nanoparticle In Situ Vaccination Triggers Phagocytosis and Tumor Killing. Advanced Healthcare Materials, 2019, 8, e1801288.	3.9	47
95	Cowpea Mosaic Virus Promotes Antiâ€Tumor Activity and Immune Memory in a Mouse Ovarian Tumor Model. Advanced Therapeutics, 2019, 2, 1900003.	1.6	47
96	Cancer Theranostic Applications of Albumin-Coated Tobacco Mosaic Virus Nanoparticles. ACS Applied Materials & Interfaces, 2018, 10, 39468-39477.	4.0	45
97	Antibody Response against Cowpea Mosaic Viral Nanoparticles Improves <i>In Situ</i> Vaccine Efficacy in Ovarian Cancer. ACS Nano, 2020, 14, 2994-3003.	7.3	44
98	Protein cages and virus-like particles: from fundamental insight to biomimetic therapeutics. Biomaterials Science, 2020, 8, 2771-2777.	2.6	44
99	Physalis Mottle Virus-like Nanoparticles for Targeted Cancer Imaging. ACS Applied Materials & Interfaces, 2019, 11, 18213-18223.	4.0	42
100	The unique potency of Cowpea mosaic virus (CPMV) <i>in situ</i> cancer vaccine. Biomaterials Science, 2020, 8, 5489-5503.	2.6	42
101	Virusâ€based nanomaterials as positron emission tomography and magnetic resonance contrast agents: from technology development to translational medicine. Wiley Interdisciplinary Reviews: Nanomedicine and Nanobiotechnology, 2015, 7, 708-721.	3.3	41
102	Implication of the solvent effect, metal ions and topology in the electronic structure and hydrogen bonding of human telomeric G-quadruplex DNA. Physical Chemistry Chemical Physics, 2016, 18, 21573-21585.	1.3	41
103	Elongated Plant Virus-Based Nanoparticles for Enhanced Delivery of Thrombolytic Therapies. Molecular Pharmaceutics, 2017, 14, 3815-3823.	2.3	41
104	Active Delivery of VLPs Promotes Antiâ€Tumor Activity in a Mouse Ovarian Tumor Model. Small, 2020, 16, e1907150.	5.2	40
105	Cowpea mosaic virus stimulates antitumor immunity through recognition by multiple MYD88-dependent toll-like receptors. Biomaterials, 2021, 275, 120914.	5.7	40
106	Plasmonic Nanodiamonds: Targeted Coreâ€"Shell Type Nanoparticles for Cancer Cell Thermoablation. Advanced Healthcare Materials, 2015, 4, 460-468.	3.9	39
107	Biomimetic Virus-Like Particles as Severe Acute Respiratory Syndrome Coronavirus 2 Diagnostic Tools. ACS Nano, 2021, 15, 1259-1272.	7.3	39
108	Genetic Engineering and Chemical Conjugation of Potato Virus X. Methods in Molecular Biology, 2014, 1108, 3-21.	0.4	38

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109	Viral Nanoparticles in Drug Delivery and Imaging. Molecular Pharmaceutics, 2013, 10, 1-2.	2.3	37
110	The<i>in vivo</i>fates of plant viral nanoparticles camouflaged using self-proteins: overcoming immune recognition. Journal of Materials Chemistry B, 2018, 6, 2204-2216.	2.9	37
111	Polydopamine-decorated tobacco mosaic virus for photoacoustic/magnetic resonance bimodal imaging and photothermal cancer therapy. Nanoscale, 2019, 11, 9760-9768.	2.8	37
112	A Combination of Cowpea Mosaic Virus and Immune Checkpoint Therapy Synergistically Improves Therapeutic Efficacy in Three Tumor Models. Advanced Functional Materials, 2020, 30, 2002299.	7.8	37
113	Two Domains of Vimentin Are Expressed on the Surface of Lymph Node, Bone and Brain Metastatic Prostate Cancer Lines along with the Putative Stem Cell Marker Proteins CD44 and CD133. Cancers, 2011, 3, 2870-2885.	1.7	36
114	Delivery of mitoxantrone using a plant virus-based nanoparticle for the treatment of glioblastomas. Journal of Materials Chemistry B, 2018, 6, 5888-5895.	2.9	36
115	Silica-coated Gd(DOTA)-loaded protein nanoparticles enable magnetic resonance imaging of macrophages. Journal of Materials Chemistry B, 2015, 3, 7503-7510.	2.9	35
116	Nanomanufacturing of Tobacco Mosaic Virus-Based Spherical Biomaterials Using a Continuous Flow Method. ACS Biomaterials Science and Engineering, 2015, 1, 13-18.	2.6	35
117	Photodynamic activity of viral nanoparticles conjugated with C60. Chemical Communications, 2012, 48, 9044.	2.2	34
118	To Target or Not to Target: Active vs. Passive Tumor Homing of Filamentous Nanoparticles Based on Potato virus X. Cellular and Molecular Bioengineering, 2015, 8, 433-444.	1.0	34
119	Active Microneedle Administration of Plant Virus Nanoparticles for Cancer In Situ Vaccination Improves Immunotherapeutic Efficacy. ACS Applied Nano Materials, 2020, 3, 8037-8051.	2.4	34
120	Electronic Structure, Dielectric Response and Surface Charge Distribution of RGD (1FUV) Peptide. Scientific Reports, 2014, 4, 5605.	1.6	33
121	Determination of the second virial coefficient of bovine serum albumin under varying pH and ionic strength by composition-gradient multi-angle static light scattering. Journal of Biological Physics, 2015, 41, 85-97.	0.7	32
122	Production of Immunoabsorbent Nanoparticles by Displaying Singleâ€Domain Protein A on Potato Virus X. Macromolecular Bioscience, 2016, 16, 231-241.	2.1	32
123	Diffusion and Uptake of Tobacco Mosaic Virus as Therapeutic Carrier in Tumor Tissue: Effect of Nanoparticle Aspect Ratio. Journal of Physical Chemistry B, 2016, 120, 6120-6129.	1.2	31
124	Viral Nanoparticles for In vivo Tumor Imaging. Journal of Visualized Experiments, 2012, , e4352.	0.2	30
125	Impact of Hydrogen Bonding in the Binding Site between Capsid Protein and MS2 Bacteriophage ssRNA. Journal of Physical Chemistry B, 2017, 121, 6321-6330.	1.2	30
126	Delivery of thrombolytic therapy using rod-shaped plant viral nanoparticles decreases the risk of hemorrhage. Nanoscale, 2018, 10, 16547-16555.	2.8	30

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127	Optical and Magnetic Resonance Imaging Using Fluorous Colloidal Nanoparticles. Biomacromolecules, 2017, 18, 103-112.	2.6	29
128	Presentation and Delivery of Tumor Necrosis Factor-Related Apoptosis-Inducing Ligand <i>via</i> Elongated Plant Viral Nanoparticle Enhances Antitumor Efficacy. ACS Nano, 2019, 13, 2501-2510.	7.3	29
129	The pharmacology of plant virus nanoparticles. Virology, 2021, 556, 39-61.	1.1	29
130	Chemical addressability of potato virus X for its applications in bio/nanotechnology. Journal of Structural Biology, 2017, 200, 360-368.	1.3	28
131	Speciation of Phenanthriplatin and Its Analogs in the Core of Tobacco Mosaic Virus. Journal of the American Chemical Society, 2018, 140, 4279-4287.	6.6	28
132	Fluorinated polymerâ€“photosensitizer conjugates enable improved generation of ROS for anticancer photodynamic therapy. Polymer Chemistry, 2017, 8, 3195-3202.	1.9	27
133	Electrostatic layer-by-layer construction of fibrous TMV biofilms. Nanoscale, 2017, 9, 1580-1590.	2.8	27
134	Dual Contrast - Magnetic Resonance Fingerprinting (DC-MRF): A Platform for Simultaneous Quantification of Multiple MRI Contrast Agents. Scientific Reports, 2017, 7, 8431.	1.6	27
135	Site-Specific Antibody Conjugation Strategy to Functionalize Virus-Based Nanoparticles. Bioconjugate Chemistry, 2020, 31, 1408-1416.	1.8	27
136	Electronic Structure and Partial Charge Distribution of Doxorubicin in Different Molecular Environments. ChemPhysChem, 2015, 16, 1451-1460.	1.0	26
137	Emerging nanotechnologies for cancer immunotherapy. Experimental Biology and Medicine, 2016, 241, 1116-1126.	1.1	26
138	Endosomal tollâ€like receptors play a key role in activation of primary human monocytes by cowpea mosaic virus. Immunology, 2020, 159, 183-192.	2.0	26
139	Doxorubicinâ€Loaded Physalis Mottle Virus Particles Function as a pHâ€Responsive Prodrug Enabling Cancer Therapy. Biotechnology Journal, 2020, 15, e2000077.	1.8	26
140	Plant Viral Nanoparticle Conjugated with Anti-PD-1 Peptide for Ovarian Cancer Immunotherapy. International Journal of Molecular Sciences, 2021, 22, 9733.	1.8	26
141	Featured Article: Delivery of chemotherapeutic vcMMAE using tobacco mosaic virus nanoparticles. Experimental Biology and Medicine, 2017, 242, 1405-1411.	1.1	25
142	Plant viral and bacteriophage delivery of nucleic acid therapeutics. Wiley Interdisciplinary Reviews: Nanomedicine and Nanobiotechnology, 2018, 10, e1487.	3.3	25
143	A Viral Nanoparticle Cancer Vaccine Delays Tumor Progression and Prolongs Survival in a HER2⁺ Tumor Mouse Model. Advanced Therapeutics, 2019, 2, 1800139.	1.6	25
144	Plant Viruses and Bacteriophage-Based Reagents for Diagnosis and Therapy. Annual Review of Virology, 2020, 7, 559-587.	3.0	25

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145	Development of a Virus-Like Particle-Based Anti-HER2 Breast Cancer Vaccine. Cancers, 2021, 13, 2909.	1.7	25
146	Presentation of HER2 epitopes using a filamentous plant virus-based vaccination platform. Journal of Materials Chemistry B, 2014, 2, 6249.	2.9	24
147	Suppression of Hyperactive Immune Responses Protects against Nitrogen Mustard Injury. Journal of Investigative Dermatology, 2015, 135, 2971-2981.	0.3	23
148	Viral nanoparticles decorated with novel EGFL7 ligands enable intravital imaging of tumor neovasculature. Nanoscale, 2017, 9, 12096-12109.	2.8	23
149	A Singleâ€Dose, Implantâ€Based, Trivalent Virusâ€like Particle Vaccine against â€œCholesterol Checkpointâ€ Proteins. Advanced Therapeutics, 2021, 4, 2100014.	1.6	23
150	Dissolving Microneedle Delivery of a Prophylactic HPV Vaccine. Biomacromolecules, 2022, 23, 903-912.	2.6	23
151	Cisplatin Prodrug-Loaded Nanoparticles Based on Physalis Mottle Virus for Cancer Therapy. Molecular Pharmaceutics, 2020, 17, 4629-4636.	2.3	22
152	Hypo-fractionated radiation, magnetic nanoparticle hyperthermia and a viral immunotherapy treatment of spontaneous canine cancer. , 2017, 10066, .		21
153	Affinity of plant viral nanoparticle potato virus X (PVX) towards malignant B cells enables cancer drug delivery. Biomaterials Science, 2020, 8, 3935-3943.	2.6	21
154	One-Step Supramolecular Multifunctional Coating on Plant Virus Nanoparticles for Bioimaging and Therapeutic Applications. ACS Applied Materials & Interfaces, 2022, 14, 13692-13702.	4.0	21
155	Tropism of CPMV to Professional Antigen Presenting Cells Enables a Platform to Eliminate Chronic Infections. ACS Biomaterials Science and Engineering, 2015, 1, 1050-1054.	2.6	20
156	Bioengineering of Tobacco Mosaic Virus to Create a Non-Infectious Positive Control for Ebola Diagnostic Assays. Scientific Reports, 2016, 6, 23803.	1.6	20
157	A Scalable Manufacturing Approach to Single Dose Vaccination against HPV. Vaccines, 2021, 9, 66.	2.1	20
158	Injectable Slow-Release Hydrogel Formulation of a Plant Virus-Based COVID-19 Vaccine Candidate. Biomacromolecules, 2022, 23, 1812-1825.	2.6	20
159	Cryo-electron tomography investigation of serum albumin-camouflaged tobacco mosaic virus nanoparticles. Nanoscale, 2017, 9, 3408-3415.	2.8	19
160	S100A9-targeted tobacco mosaic virus nanoparticles exhibit high specificity toward atherosclerotic lesions in ApoE^{â^'/â^'} mice. Journal of Materials Chemistry B, 2019, 7, 1842-1846.	2.9	19
161	Tobacco Mosaic Virus-Functionalized Mesoporous Silica Nanoparticles, a Wool-Ball-like Nanostructure for Drug Delivery. Langmuir, 2019, 35, 203-211.	1.6	19
162	<i>In situ</i>vaccine application of inactivated CPMV nanoparticles for cancer immunotherapy. Materials Advances, 2021, 2, 1644-1656.	2.6	19

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163	Combining nanomedicine and immune checkpoint therapy for cancer immunotherapy. Wiley Interdisciplinary Reviews: Nanomedicine and Nanobiotechnology, 2022, 14, e1739.	3.3	19
164	Neoadjuvant in situ vaccination with cowpea mosaic virus as a novel therapy against canine inflammatory mammary cancer. , 2022, 10, e004044.		19
165	Charge distribution and hydrogen bonding of a collagen Î±₂â€chain in vacuum, hydrated, neutral, and charged structural models. International Journal of Quantum Chemistry, 2016, 116, 681-691.	1.0	18
166	Anti-atherogenic effect of trivalent chromium-loaded CPMV nanoparticles in human aortic smooth muscle cells under hyperglycemic conditions in vitro. Nanoscale, 2016, 8, 6542-6554.	2.8	18
167	Let There Be Light: Targeted Photodynamic Therapy Using High Aspect Ratio Plant Viral Nanoparticles. Macromolecular Bioscience, 2019, 19, e1800407.	2.1	18
168	Biodistribution of Filamentous Plant Virus Nanoparticles: Pepino Mosaic Virus versus Potato Virus X. Biomacromolecules, 2019, 20, 469-477.	2.6	18
169	Optical properties and electronic transitions of DNA oligonucleotides as a function of composition and stacking sequence. Physical Chemistry Chemical Physics, 2015, 17, 4589-4599.	1.3	17
170	van der Waals Interactions on the Mesoscale: Open-Science Implementation, Anisotropy, Retardation, and Solvent Effects. Langmuir, 2015, 31, 10145-10153.	1.6	17
171	Multiple Administrations of Viral Nanoparticles Alter <i>in Vivo</i> Behaviorâ€"Insights from Intravital Microscopy. ACS Biomaterials Science and Engineering, 2016, 2, 829-837.	2.6	17
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