Christopher M Jewell

List of Publications by Year
in descending order

96 papers	4,107 citations	101384 36 h-index	118652 62 g-index
98 all docs	98 docs citations	98 times ranked	4760 citing authors

#	Article	IF	Citations
1	Multilayered polyelectrolyte assemblies as platforms for the delivery of DNA and other nucleic acid-based therapeuticsâ˜†. Advanced Drug Delivery Reviews, 2008, 60, 979-999.	6.6	286
2	Peptideâ€“TLR-7/8a conjugate vaccines chemically programmed for nanoparticle self-assembly enhance CD8 T-cell immunity to tumor antigens. Nature Biotechnology, 2020, 38, 320-332.	9.4	210
3	In situ engineering of the lymph node microenvironment via intranodal injection of adjuvant-releasing polymer particles. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 15745-15750.	3.3	206
4	Multilayered polyelectrolyte films promote the direct and localized delivery of DNA to cells. Journal of Controlled Release, 2005, 106, 214-223.	4.8	172
5	Designing biomaterials with immunomodulatory properties for tissue engineering and regenerative medicine. Bioengineering and Translational Medicine, 2017, 2, 139-155.	3.9	154
6	Release of Plasmid DNA from Intravascular Stents Coated with Ultrathin Multilayered Polyelectrolyte Films. Biomacromolecules, 2006, 7, 2483-2491.	2.6	153
7	Improving Vaccine and Immunotherapy Design Using Biomaterials. Trends in Immunology, 2018, 39, 135-150.	2.9	152
8	Polyelectrolyte Multilayers Assembled Entirely from Immune Signals on Gold Nanoparticle Templates Promote Antigen-Specific T Cell Response. ACS Nano, 2015, 9, 6465-6477.	7.3	134
9	Reprogramming the Local Lymph Node Microenvironment Promotes Tolerance that Is Systemic and Antigen Specific. Cell Reports, 2016, 16, 2940-2952.	2.9	127
10	Designing inorganic nanomaterials for vaccines and immunotherapies. Nano Today, 2019, 27, 73-98.	6.2	102
11	Surface-mediated delivery of DNA: Cationic polymers take charge. Current Opinion in Colloid and Interface Science, 2008, 13, 395-402.	3.4	82
12	Intrinsic immunogenicity of rapidly-degradable polymers evolves during degradation. Acta Biomaterialia, 2016, 32, 24-34.	4.1	81
13	Assembly of Multilayered Films Using Well-Defined, End-Labeled Poly(acrylic acid):â€‰ Influence of Molecular Weight on Exponential Growth in a Synthetic Weak Polyelectrolyte System. Langmuir, 2007, 23, 8452-8459.	1.6	79
14	Designing natural and synthetic immune tissues. Nature Materials, 2018, 17, 484-498.	13.3	78
15	<i>In Vivo</i> Expansion of Melanoma-Specific T Cells Using Microneedle Arrays Coated with Immune-Polyelectrolyte Multilayers. ACS Biomaterials Science and Engineering, 2017, 3, 195-205.	2.6	77
16	Harnessing Biomaterials to Engineer the Lymph Node Microenvironment for Immunity or Tolerance. AAPS Journal, 2015, 17, 323-338.	2.2	74
17	Phage display as a tool for vaccine and immunotherapy development. Bioengineering and Translational Medicine, 2020, 5, e10142.	3.9	72
18	Oligonucleotide Delivery by Cellâ€Penetrating â€œStripedâ€•Nanoparticles. Angewandte Chemie - International Edition, 2011, 50, 12312-12315.	7.2	71

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19	Design of Polyelectrolyte Multilayers to Promote Immunological Tolerance. ACS Nano, 2016, 10, 9334-9345.	7.3	68
20	Engineering Immunological Tolerance Using Quantum Dots to Tune the Density of Selfâ€Antigen Display. Advanced Functional Materials, 2017, 27, 1700290.	7.8	67
21	Ferrocene-Containing Cationic Lipids: Influence of Redox State on Cell Transfection. Journal of the American Chemical Society, 2005, 127, 11576-11577.	6.6	65
22	Multilayered Films Fabricated from Plasmid DNA and a Side-Chain Functionalized Poly(Î²-amino Ester):â€‰ Surface-Type Erosion and Sequential Release of Multiple Plasmid Constructs from Surfaces. Langmuir, 2007, 23, 11139-11146.	1.6	62
23	Modular Vaccine Design Using Carrier-Free Capsules Assembled from Polyionic Immune Signals. ACS Biomaterials Science and Engineering, 2015, 1, 1200-1205.	2.6	57
24	Improving the clinical impact of biomaterials in cancer immunotherapy. Oncotarget, 2016, 7, 15421-15443.	0.8	56
25	Engineering self-assembled materials to study and direct immune function. Advanced Drug Delivery Reviews, 2017, 114, 60-78.	6.6	52
26	Polyplexes assembled from self-peptides and regulatory nucleic acids blunt toll-like receptor signaling to combat autoimmunity. Biomaterials, 2017, 118, 51-62.	5.7	52
27	Overcoming Ovarian Cancer Drug Resistance with a Cold Responsive Nanomaterial. ACS Central Science, 2018, 4, 567-581.	5.3	49
28	Engineering Immune Tolerance with Biomaterials. Advanced Healthcare Materials, 2019, 8, e1801419.	3.9	49
29	Polyelectrolyte Multilayers Promote Stent-Mediated Delivery of DNA to Vascular Tissue. Biomacromolecules, 2013, 14, 1696-1704.	2.6	48
30	Assembly of erodible, DNA-containing thin films on the surfaces of polymer microparticles: Toward a layer-by-layer approach to the delivery of DNA to antigen-presenting cells. Acta Biomaterialia, 2009, 5, 913-924.	4.1	47
31	Directing toll-like receptor signaling in macrophages to enhance tumor immunotherapy. Current Opinion in Biotechnology, 2019, 60, 138-145.	3.3	44
32	Controlled delivery of a metabolic modulator promotes regulatory T cells and restrains autoimmunity. Journal of Controlled Release, 2015, 210, 169-178.	4.8	42
33	Ferrocene-containing cationic lipids for the delivery of DNA: Oxidation state determines transfection activity. Journal of Controlled Release, 2006, 112, 129-138.	4.8	40
34	Prussian blue nanoparticle-based antigenicity and adjuvanticity trigger robust antitumor immune responses against neuroblastoma. Biomaterials Science, 2019, 7, 1875-1887.	2.6	40
35	Reversible Condensation of DNA Using a Redox-Active Surfactant. Langmuir, 2007, 23, 5609-5614.	1.6	38
36	Assembly and Immunological Processing of Polyelectrolyte Multilayers Composed of Antigens and Adjuvants. ACS Applied Materials & Interfaces, 2016, 8, 18722-18731.	4.0	38

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37	Lymph node fibroblastic reticular cells steer immune responses. Trends in Immunology, 2021, 42, 723-734.	2.9	37
38	Role of lymph node stroma and microenvironment in T cell tolerance. Immunological Reviews, 2019, 292, 9-23.	2.8	36
39	Biomaterials as Tools to Decode Immunity. Advanced Materials, 2020, 32, e1903367.	11.1	36
40	Characterization of the Nanostructure of Complexes Formed by a Redox-Active Cationic Lipid and DNA. Journal of Physical Chemistry B, 2008, 112, 5849-5857.	1.2	35
41	Intra-lymph Node Injection of Biodegradable Polymer Particles. Journal of Visualized Experiments, 2014, , e50984.	0.2	33
42	Impact of molecular weight on the intrinsic immunogenic activity of poly(beta amino esters). Journal of Biomedical Materials Research - Part A, 2017, 105, 1219-1229.	2.1	33
43	Integrating Biomaterials and Immunology to Improve Vaccines Against Infectious Diseases. ACS Biomaterials Science and Engineering, 2020, 6, 759-778.	2.6	32
44	Engineering Biomaterials to Direct Innate Immunity. Advanced Therapeutics, 2019, 2, 1800157.	1.6	31
45	Self-Assembly as a Molecular Strategy to Improve Immunotherapy. Accounts of Chemical Research, 2020, 53, 2534-2545.	7.6	31
46	Multilayered Films Fabricated from an Oligoarginine-Conjugated ProteinÂPromoteÂEfficientÂSurface-MediatedÂProteinÂTransduction. Biomacromolecules, 2007, 8, 857-863.	2.6	30
47	Degradable Polyelectrolyte Multilayers that Promote the Release of siRNA. Langmuir, 2011, 27, 7868-7876.	1.6	30
48	Low-dose controlled release of mTOR inhibitors maintains T cell plasticity and promotes central memory T cells. Journal of Controlled Release, 2017, 263, 151-161.	4.8	28
49	A poly(beta-amino ester) activates macrophages independent of NF-Î°B signaling. Acta Biomaterialia, 2018, 68, 168-177.	4.1	28
50	Selfâ€Assembly of Immune Signals Improves Codelivery to Antigen Presenting Cells and Accelerates Signal Internalization, Processing Kinetics, and Immune Activation. Small, 2018, 14, e1802202.	5.2	25
51	Engineering tolerance using biomaterials to target and control antigen presenting cells. Discovery Medicine, 2016, 21, 403-10.	0.5	25
52	Chemical Activation of Lipoplexes Formed from DNA and a Redox-Active, Ferrocene-Containing Cationic Lipid. Bioconjugate Chemistry, 2008, 19, 2120-2128.	1.8	24
53	Polyplex interaction strength as a driver of potency during cancer immunotherapy. Nano Research, 2018, 11, 5642-5656.	5.8	24
54	Lipoplexes Formed by DNA and Ferrocenyl Lipids: Effect of Lipid Oxidation State on Size, Internal Dynamics, and Î¶-Potential. Biophysical Journal, 2007, 93, 4414-4424.	0.2	23

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55	Induction of anti-cancer T cell immunity by in situ vaccination using systemically administered nanomedicines. Cancer Letters, 2019, 459, 192-203.	3.2	23
56	Design of Dissolvable Microneedles for Delivery of a Pfs47-Based Malaria Transmission-Blocking Vaccine. ACS Biomaterials Science and Engineering, 2021, 7, 1854-1862.	2.6	23
57	Impact of dose, route, and composition on the immunogenicity of immune polyelectrolyte multilayers delivered on gold templates. Biotechnology and Bioengineering, 2017, 114, 423-431.	1.7	21
58	Engineering release kinetics with polyelectrolyte multilayers to modulate TLR signaling and promote immune tolerance. Biomaterials Science, 2019, 7, 798-808.	2.6	16
59	Mapping the Mechanical and Immunological Profiles of Polymeric Microneedles to Enable Vaccine and Immunotherapy Applications. Frontiers in Immunology, 2022, 13, 843355.	2.2	15
60	Controlled Release of Second Generation mTOR Inhibitors to Restrain Inflammation in Primary Immune Cells. AAPS Journal, 2017, 19, 1175-1185.	2.2	14
61	Harnessing the lymph node microenvironment. Current Opinion in Organ Transplantation, 2018, 23, 73-82.	0.8	14
62	Microtubule disruption reduces metastasis more effectively than primary tumor growth. Breast Cancer Research, 2022, 24, 13.	2.2	14
63	Characterization of pH-induced changes in the morphology of polyelectrolyte multilayers assembled from poly(allylamine) and low molecular weight poly(acrylic acid). Journal of Colloid and Interface Science, 2011, 355, 431-441.	5.0	13
64	Targeted Programming of the Lymph Node Environment Causes Evolution of Local and Systemic Immunity. Cellular and Molecular Bioengineering, 2016, 9, 418-432.	1.0	13
65	Engineering Cell Surfaces with Polyelectrolyte Materials for Translational Applications. Polymers, 2017, 9, 40.	2.0	13
66	Leveraging the Modularity of Biomaterial Carriers to Tune Immune Responses. Advanced Functional Materials, 2020, 30, 2004119.	7.8	13
67	Exploiting Rational Assembly to Map Distinct Roles of Regulatory Cues during Autoimmune Therapy. ACS Nano, 2021, 15, 4305-4320.	7.3	13
68	Altering Antigen Charge to Control Self-Assembly and Processing of Immune Signals During Cancer Vaccination. Frontiers in Immunology, 2020, 11, 613830.	2.2	13
69	<i>In Vivo</i> Intradermal Delivery of Bacteria by Using Microneedle Arrays. Infection and Immunity, 2018, 86, .	1.0	12
70	Partial thermal imidization of polyelectrolyte multilayer cell tethering surfaces (TetherChip) enables efficient cell capture and microtentacle fixation for circulating tumor cell analysis. Lab on A Chip, 2020, 20, 2872-2888.	3.1	12
71	Biophysical Properties of Self-Assembled Immune Signals Impact Signal Processing and the Nature of Regulatory Immune Function. Nano Letters, 2021, 21, 3762-3771.	4.5	11
72	Control of autoimmune inflammation using liposomes to deliver positive allosteric modulators of metabotropic glutamate receptors. Journal of Biomedical Materials Research - Part A, 2017, 105, 2977-2985.	2.1	10

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73	Advanced manufacturing of microdisk vaccines for uniform control of material properties and immune cell function. Biomaterials Science, 2018, 6, 115-124.	2.6	10
74	Biomaterial interactions with the immune system. Biomaterials Science, 2019, 7, 713-714.	2.6	10
75	Lipid tethering of breast tumor cells enables real-time imaging of free-floating cell dynamics and drug response. Oncotarget, 2016, 7, 10486-10497.	0.8	10
76	Characterization of nanoscale transformations in polyelectrolyte multilayers fabricated from plasmid DNA using laser scanning confocal microscopy in combination with atomic force microscopy. Microscopy Research and Technique, 2010, 73, 834-844.	1.2	9
77	Extracting microtentacle dynamics of tumor cells in a non-adherent environment. Oncotarget, 2017, 8, 111567-111580.	0.8	9
78	Biomaterial-enabled induction of pancreatic-specific regulatory T cells through distinct signal transduction pathways. Drug Delivery and Translational Research, 2021, 11, 2468-2481.	3.0	6
79	Histatin 5 variant reduces Candida albicans biofilm viability and inhibits biofilm formation. Fungal Genetics and Biology, 2021, 149, 103529.	0.9	5
80	A plug-and-play approach for malaria vaccination. Nature Nanotechnology, 2018, 13, 1096-1097.	15.6	3
81	Impact of Excipients on Stability of Polymer Microparticles for Autoimmune Therapy. Frontiers in Bioengineering and Biotechnology, 2020, 8, 609577.	2.0	3
82	Microtentacle Formation in Ovarian Carcinoma. Cancers, 2022, 14, 800.	1.7	3
83	Bioconjugate Materials in Vaccines and Immunotherapies. Bioconjugate Chemistry, 2018, 29, 571-571.	1.8	2
84	Dendritic cell tracking and modulation. Nature Materials, 2020, 19, 1134-1135.	13.3	2
85	Spatial delivery of immune cues to lymph nodes to define therapeutic outcomes in cancer vaccination. Biomaterials Science, 2022, 10, 4612-4626.	2.6	2
86	Strategic Directions in Immunoresponsive Biomaterials in Tissue Engineering<sup />. Tissue Engineering - Part A, 2017, 23, 1042-1043.	1.6	1
87	Opening borders for foreign bodies. Science Translational Medicine, 2017, 9, .	5.8	1
88	Engineering immunity with quantitative tools. Molecular Systems Design and Engineering, 2019, 4, 677-678.	1.7	0
89	Biomaterial strategies to treat autoimmunity and unwanted immune responses to drugs and transplanted tissues. , 2021, , 139-173.		0
90	50 shades of red. Science Translational Medicine, 2017, 9, .	5.8	0

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91	Nanomedicine goes to school. Science Translational Medicine, 2017, 9, .	5.8	0
92	Eccentric implants stand alone. Science Translational Medicine, 2017, 9, .	5.8	0
93	Resistance is futile. Science Translational Medicine, 2017, 9, .	5.8	0
94	A game of thrones and broken bones. Science Translational Medicine, 2017, 9, .	5.8	0
95	Getting in touch with your inner stomach. Science Translational Medicine, 2017, 9, .	5.8	0
96	A homestay for your heart. Science Translational Medicine, 2017, 9, .	5.8	0