

# Darrell J Irvine

## List of Publications by Citations

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207  
papers

19,544  
citations

79  
h-index

137  
g-index

229  
ext. papers

23,142  
ext. citations

15.6  
avg, IF

7.14  
L-index

#	Paper	IF	Citations
207	Surface-structure-regulated cell-membrane penetration by monolayer-protected nanoparticles. <i>Nature Materials</i> , <b>2008</b> , 7, 588-95	27	1058
206	Bio-inspired, bioengineered and biomimetic drug delivery carriers. <i>Nature Reviews Drug Discovery</i> , <b>2011</b> , 10, 521-35	64.1	866
205	Direct observation of ligand recognition by T cells. <i>Nature</i> , <b>2002</b> , 419, 845-9	50.4	617
204	Structure-based programming of lymph-node targeting in molecular vaccines. <i>Nature</i> , <b>2014</b> , 507, 519-22	50.4	582
203	Synthetic Nanoparticles for Vaccines and Immunotherapy. <i>Chemical Reviews</i> , <b>2015</b> , 115, 11109-46	68.1	502
202	Therapeutic cell engineering with surface-conjugated synthetic nanoparticles. <i>Nature Medicine</i> , <b>2010</b> , 16, 1035-41	50.5	489
201	T cell killing does not require the formation of a stable mature immunological synapse. <i>Nature Immunology</i> , <b>2004</b> , 5, 524-30	19.1	427
200	Interbilayer-crosslinked multilamellar vesicles as synthetic vaccines for potent humoral and cellular immune responses. <i>Nature Materials</i> , <b>2011</b> , 10, 243-51	27	426
199	Engineering synthetic vaccines using cues from natural immunity. <i>Nature Materials</i> , <b>2013</b> , 12, 978-90	27	403
198	Eradication of large established tumors in mice by combination immunotherapy that engages innate and adaptive immune responses. <i>Nature Medicine</i> , <b>2016</b> , 22, 1402-1410	50.5	302
197	Engineering nano- and microparticles to tune immunity. <i>Advanced Materials</i> , <b>2012</b> , 24, 3724-46	24	298
196	Enhancing T cell therapy through TCR-signaling-responsive nanoparticle drug delivery. <i>Nature Biotechnology</i> , <b>2018</b> , 36, 707-716	44.5	283
195	Co-regulation of cell adhesion by nanoscale RGD organization and mechanical stimulus. <i>Journal of Cell Science</i> , <b>2002</b> , 115, 1423-33	5.3	273
194	A robust, high-throughput assay to determine the phagocytic activity of clinical antibody samples. <i>Journal of Immunological Methods</i> , <b>2011</b> , 366, 8-19	2.5	266
193	Enhancing humoral responses to a malaria antigen with nanoparticle vaccines that expand Tfh cells and promote germinal center induction. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2012</b> , 109, 1080-5	11.5	250
192	Enhancing cancer immunotherapy with nanomedicine. <i>Nature Reviews Immunology</i> , <b>2020</b> , 20, 321-334	36.5	245
191	Cytosolic delivery of membrane-impermeable molecules in dendritic cells using pH-responsive core-shell nanoparticles. <i>Nano Letters</i> , <b>2007</b> , 7, 3056-64	11.5	243

190	T cell-targeting nanoparticles focus delivery of immunotherapy to improve antitumor immunity. <i>Nature Communications</i> , <b>2017</b> , 8, 1747	17.4	240
189	Nanoparticulate STING agonists are potent lymph node-targeted vaccine adjuvants. <i>Journal of Clinical Investigation</i> , <b>2015</b> , 125, 2532-46	15.9	235
188	HIV Vaccine Design to Target Germline Precursors of Glycan-Dependent Broadly Neutralizing Antibodies. <i>Immunity</i> , <b>2016</b> , 45, 483-496	32.3	232
187	Particulate vaccines: on the quest for optimal delivery and immune response. <i>Drug Discovery Today</i> , <b>2011</b> , 16, 569-82	8.8	227
186	Beyond antigens and adjuvants: formulating future vaccines. <i>Journal of Clinical Investigation</i> , <b>2016</b> , 126, 799-808	15.9	216
185	Polymer multilayer tattooing for enhanced DNA vaccination. <i>Nature Materials</i> , <b>2013</b> , 12, 367-76	27	206
184	Elicitation of Robust Tier 2 Neutralizing Antibody Responses in Nonhuman Primates by HIV Envelope Trimer Immunization Using Optimized Approaches. <i>Immunity</i> , <b>2017</b> , 46, 1073-1088.e6	32.3	204
183	CD4 enhances T cell sensitivity to antigen by coordinating Lck accumulation at the immunological synapse. <i>Nature Immunology</i> , <b>2004</b> , 5, 791-9	19.1	201
182	Effect of particle diameter and surface composition on the spontaneous fusion of monolayer-protected gold nanoparticles with lipid bilayers. <i>Nano Letters</i> , <b>2013</b> , 13, 4060-7	11.5	192
181	Active targeting of chemotherapy to disseminated tumors using nanoparticle-carrying T cells. <i>Science Translational Medicine</i> , <b>2015</b> , 7, 291ra94	17.5	186
180	In vitro and in vivo mRNA delivery using lipid-enveloped pH-responsive polymer nanoparticles. <i>Molecular Pharmaceutics</i> , <b>2011</b> , 8, 774-87	5.6	184
179	Enhancing Cell therapies from the Outside In: Cell Surface Engineering Using Synthetic Nanomaterials. <i>Nano Today</i> , <b>2011</b> , 6, 309-325	17.9	181
178	In situ engineering of the lymph node microenvironment via intranodal injection of adjuvant-releasing polymer particles. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2011</b> , 108, 15745-50	11.5	177
177	Nanoscale clustering of RGD peptides at surfaces using Comb polymers. 1. Synthesis and characterization of Comb thin films. <i>Biomacromolecules</i> , <b>2001</b> , 2, 85-94	6.9	168
176	Sustained antigen availability during germinal center initiation enhances antibody responses to vaccination. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2016</b> , 113, E6639-E6648	11.5	164
175	Surface functionalization of living cells with multilayer patches. <i>Nano Letters</i> , <b>2008</b> , 8, 4446-53	11.5	158
174	A role for the immunological synapse in lineage commitment of CD4 lymphocytes. <i>Nature</i> , <b>2004</b> , 431, 527-32	50.4	157
173	Delivering safer immunotherapies for cancer. <i>Advanced Drug Delivery Reviews</i> , <b>2017</b> , 114, 79-101	18.5	154

172	Coordinate linkage of HIV evolution reveals regions of immunological vulnerability. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2011</b> , 108, 11530-5	11.5	153
171	Histone deacetylase inhibitors impair the elimination of HIV-infected cells by cytotoxic T-lymphocytes. <i>PLoS Pathogens</i> , <b>2014</b> , 10, e1004287	7.6	151
170	Enhanced CAR-T cell activity against solid tumors by vaccine boosting through the chimeric receptor. <i>Science</i> , <b>2019</b> , 365, 162-168	33.3	148
169	Localized immunotherapy via liposome-anchored Anti-CD137 + IL-2 prevents lethal toxicity and elicits local and systemic antitumor immunity. <i>Cancer Research</i> , <b>2013</b> , 73, 1547-58	10.1	146
168	Releasable layer-by-layer assembly of stabilized lipid nanocapsules on microneedles for enhanced transcutaneous vaccine delivery. <i>ACS Nano</i> , <b>2012</b> , 6, 8041-51	16.7	145
167	Actin foci facilitate activation of the phospholipase C- $\beta$ in primary T lymphocytes via the WASP pathway. <i>ELife</i> , <b>2015</b> , 4,	8.9	145
166	Immunological synapse arrays: patterned protein surfaces that modulate immunological synapse structure formation in T cells. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2006</b> , 103, 5700-5	11.5	144
165	Slow Delivery Immunization Enhances HIV Neutralizing Antibody and Germinal Center Responses via Modulation of Immunodominance. <i>Cell</i> , <b>2019</b> , 177, 1153-1171.e28	56.2	143
164	Synapse-directed delivery of immunomodulators using T-cell-conjugated nanoparticles. <i>Biomaterials</i> , <b>2012</b> , 33, 5776-87	15.6	141
163	Layer-by-layer-assembled multilayer films for transcutaneous drug and vaccine delivery. <i>ACS Nano</i> , <b>2009</b> , 3, 3719-29	16.7	140
162	Immunogenic Cell Death Amplified by Co-localized Adjuvant Delivery for Cancer Immunotherapy. <i>Nano Letters</i> , <b>2017</b> , 17, 7387-7393	11.5	139
161	Innate immune recognition of glycans targets HIV nanoparticle immunogens to germinal centers. <i>Science</i> , <b>2019</b> , 363, 649-654	33.3	138
160	Injectable dendritic cell-carrying alginate gels for immunization and immunotherapy. <i>Biomaterials</i> , <b>2008</b> , 29, 3671-3682	15.6	137
159	Induction of potent anti-tumor responses while eliminating systemic side effects via liposome-anchored combinatorial immunotherapy. <i>Biomaterials</i> , <b>2011</b> , 32, 5134-47	15.6	133
158	Nano-layered microneedles for transcutaneous delivery of polymer nanoparticles and plasmid DNA. <i>Advanced Materials</i> , <b>2010</b> , 22, 4851-6	24	129
157	Simulations of cell-surface integrin binding to nanoscale-clustered adhesion ligands. <i>Biophysical Journal</i> , <b>2002</b> , 82, 120-32	2.9	128
156	Nanoscale clustering of RGD peptides at surfaces using comb polymers. 2. Surface segregation of comb polymers in polylactide. <i>Biomacromolecules</i> , <b>2001</b> , 2, 545-56	6.9	127
155	Manipulating the selection forces during affinity maturation to generate cross-reactive HIV antibodies. <i>Cell</i> , <b>2015</b> , 160, 785-797	56.2	125

154	Generation of effector memory T cell-based mucosal and systemic immunity with pulmonary nanoparticle vaccination. <i>Science Translational Medicine</i> , <b>2013</b> , 5, 204ra130	17.5	125
153	Nanoparticle anchoring targets immune agonists to tumors enabling anti-cancer immunity without systemic toxicity. <i>Nature Communications</i> , <b>2018</b> , 9, 6	17.4	124
152	T cell receptor internalization from the immunological synapse is mediated by TC21 and RhoG GTPase-dependent phagocytosis. <i>Immunity</i> , <b>2011</b> , 35, 208-22	32.3	122
151	Synergistic innate and adaptive immune response to combination immunotherapy with anti-tumor antigen antibodies and extended serum half-life IL-2. <i>Cancer Cell</i> , <b>2015</b> , 27, 489-501	24.3	114
150	Composite dissolving microneedles for coordinated control of antigen and adjuvant delivery kinetics in transcutaneous vaccination. <i>Advanced Functional Materials</i> , <b>2013</b> , 23, 161-172	15.6	114
149	Photogenerated polyelectrolyte bilayers from an aqueous-processible photoresist for multicomponent protein patterning. <i>Journal of the American Chemical Society</i> , <b>2004</b> , 126, 9170-1	16.4	113
148	Antigen-displaying lipid-enveloped PLGA nanoparticles as delivery agents for a Plasmodium vivax malaria vaccine. <i>PLoS ONE</i> , <b>2012</b> , 7, e31472	3.7	112
147	Biomaterial Strategies for Immunomodulation. <i>Annual Review of Biomedical Engineering</i> , <b>2015</b> , 17, 317-492	11.0	110
146	Implantable silk composite microneedles for programmable vaccine release kinetics and enhanced immunogenicity in transcutaneous immunization. <i>Advanced Healthcare Materials</i> , <b>2014</b> , 3, 47-58	10.1	110
145	Modular injectable matrices based on alginate solution/microsphere mixtures that gel in situ and co-deliver immunomodulatory factors. <i>Acta Biomaterialia</i> , <b>2009</b> , 5, 969-82	10.8	104
144	Role of nanoscale antigen organization on B-cell activation probed using DNA origami. <i>Nature Nanotechnology</i> , <b>2020</b> , 15, 716-723	28.7	101
143	A Subset of Latency-Reversing Agents Expose HIV-Infected Resting CD4+ T-Cells to Recognition by Cytotoxic T-Lymphocytes. <i>PLoS Pathogens</i> , <b>2016</b> , 12, e1005545	7.6	99
142	Dynamics of cell surface molecules during T cell recognition. <i>Annual Review of Biochemistry</i> , <b>2003</b> , 72, 717-42	29.1	98
141	Membrane anchored immunostimulatory oligonucleotides for in vivo cell modification and localized immunotherapy. <i>Angewandte Chemie - International Edition</i> , <b>2011</b> , 50, 7052-5	16.4	96
140	Vaccine-Induced Protection from Homologous Tier 2 SHIV Challenge in Nonhuman Primates Depends on Serum-Neutralizing Antibody Titers. <i>Immunity</i> , <b>2019</b> , 50, 241-252.e6	32.3	96
139	Immunization expands B cells specific to HIV-1 V3 glycan in mice and macaques. <i>Nature</i> , <b>2019</b> , 570, 468-474	50.4	95
138	In vivo targeting of adoptively transferred T-cells with antibody- and cytokine-conjugated liposomes. <i>Journal of Controlled Release</i> , <b>2013</b> , 172, 426-35	11.7	94
137	Enhancing humoral immunity via sustained-release implantable microneedle patch vaccination. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2019</b> , 116, 16473-16478	11.5	86

136	Interleukin-7 receptor signaling network: an integrated systems perspective. <i>Cellular and Molecular Immunology</i> , <b>2008</b> , 5, 79-89	15.4	85
135	Enhancing Adoptive Cell Therapy of Cancer through Targeted Delivery of Small-Molecule Immunomodulators to Internalizing or Noninternalizing Receptors. <i>ACS Nano</i> , <b>2017</b> , 11, 3089-3100	16.7	84
134	Enhancing radiotherapy by lipid nanocapsule-mediated delivery of amphiphilic gold nanoparticles to intracellular membranes. <i>ACS Nano</i> , <b>2014</b> , 8, 8992-9002	16.7	82
133	Cell and fluid sampling microneedle patches for monitoring skin-resident immunity. <i>Science Translational Medicine</i> , <b>2018</b> , 10,	17.5	81
132	Engineered immunogen binding to alum adjuvant enhances humoral immunity. <i>Nature Medicine</i> , <b>2020</b> , 26, 430-440	50.5	80
131	Anchoring of intratumorally administered cytokines to collagen safely potentiates systemic cancer immunotherapy. <i>Science Translational Medicine</i> , <b>2019</b> , 11,	17.5	79
130	Robust IgG responses to nanograms of antigen using a biomimetic lipid-coated particle vaccine. <i>Journal of Controlled Release</i> , <b>2012</b> , 157, 354-65	11.7	79
129	Hydrogel-Coated Microneedle Arrays for Minimally Invasive Sampling and Sensing of Specific Circulating Nucleic Acids from Skin Interstitial Fluid. <i>ACS Nano</i> , <b>2019</b> , 13, 9620-9628	16.7	77
128	High-throughput quantitation of inorganic nanoparticle biodistribution at the single-cell level using mass cytometry. <i>Nature Communications</i> , <b>2017</b> , 8, 14069	17.4	74
127	Vaccine delivery with microneedle skin patches in nonhuman primates. <i>Nature Biotechnology</i> , <b>2013</b> , 31, 1082-5	44.5	72
126	Enhanced phagocytic activity of HIV-specific antibodies correlates with natural production of immunoglobulins with skewed affinity for Fc $\gamma$ 2a and Fc $\gamma$ 2b. <i>Journal of Virology</i> , <b>2013</b> , 87, 5468-76	6.6	72
125	Polymer-supported lipid shells, onions, and flowers. <i>Soft Matter</i> , <b>2008</b> , 4, 1787-1791	3.6	71
124	Homeostatic lymphoid chemokines synergize with adhesion ligands to trigger T and B lymphocyte chemokinesis. <i>Journal of Immunology</i> , <b>2006</b> , 177, 2340-8	5.3	70
123	A DOCK8-WIP-WASp complex links T cell receptors to the actin cytoskeleton. <i>Journal of Clinical Investigation</i> , <b>2016</b> , 126, 3837-3851	15.9	70
122	Cytosolic delivery mediated via electrostatic surface binding of protein, virus, or siRNA cargos to pH-responsive core-shell gel particles. <i>Biomacromolecules</i> , <b>2009</b> , 10, 756-65	6.9	68
121	Oligonucleotide delivery by cell-penetrating "striped" nanoparticles. <i>Angewandte Chemie - International Edition</i> , <b>2011</b> , 50, 12312-12315	16.4	66
120	Targeting dendritic cells to accelerate T-cell activation overcomes a bottleneck in tuberculosis vaccine efficacy. <i>Nature Communications</i> , <b>2016</b> , 7, 13894	17.4	66
119	Synthesis of protein-loaded hydrogel particles in an aqueous two-phase system for coincident antigen and CpG oligonucleotide delivery to antigen-presenting cells. <i>Biomacromolecules</i> , <b>2005</b> , 6, 2590-600	6.0	63

118	Guiding principles in the design of molecular bioconjugates for vaccine applications. <i>Bioconjugate Chemistry</i> , <b>2015</b> , 26, 791-801	6.3	62
117	Microfluidic squeezing for intracellular antigen loading in polyclonal B-cells as cellular vaccines. <i>Scientific Reports</i> , <b>2015</b> , 5, 10276	4.9	61
116	Liposomal vaccines incorporating molecular adjuvants and intrastructural T-cell help promote the immunogenicity of HIV membrane-proximal external region peptides. <i>Vaccine</i> , <b>2015</b> , 33, 861-8	4.1	61
115	Wound Healing Versus Regeneration: Role of the Tissue Environment in Regenerative Medicine. <i>MRS Bulletin</i> , <b>2010</b> , 35, 597	3.2	60
114	Structurally Programmed Assembly of Translation Initiation Nanoplex for Superior mRNA Delivery. <i>ACS Nano</i> , <b>2017</b> , 11, 2531-2544	16.7	59
113	Multifaceted Effects of Antigen Valency on B Cell Response Composition and Differentiation In Vivo. <i>Immunity</i> , <b>2020</b> , 53, 548-563.e8	32.3	59
112	Synthetic Charge-Invertible Polymer for Rapid and Complete Implantation of Layer-by-Layer Microneedle Drug Films for Enhanced Transdermal Vaccination. <i>ACS Nano</i> , <b>2018</b> , 12, 10272-10280	16.7	56
111	Controlling timing and location in vaccines. <i>Advanced Drug Delivery Reviews</i> , <b>2020</b> , 158, 91-115	18.5	55
110	Freely suspended cellular "backpacks" lead to cell aggregate self-assembly. <i>Biomacromolecules</i> , <b>2010</b> , 11, 1826-32	6.9	55
109	Roles for Innate Immunity in Combination Immunotherapies. <i>Cancer Research</i> , <b>2017</b> , 77, 5215-5221	10.1	54
108	Engulfing tumors with synthetic extracellular matrices for cancer immunotherapy. <i>Biomaterials</i> , <b>2009</b> , 30, 6757-67	15.6	54
107	Engineering chemoattractant gradients using chemokine-releasing polysaccharide microspheres. <i>Biomaterials</i> , <b>2011</b> , 32, 4903-13	15.6	53
106	Rapid conformational epitope mapping of anti-gp120 antibodies with a designed mutant panel displayed on yeast. <i>Journal of Molecular Biology</i> , <b>2013</b> , 425, 444-56	6.5	52
105	Large area two-dimensional B cell arrays for sensing and cell-sorting applications. <i>Biomacromolecules</i> , <b>2004</b> , 5, 822-7	6.9	52
104	Enhancing Humoral Responses Against HIV Envelope Trimers via Nanoparticle Delivery with Stabilized Synthetic Liposomes. <i>Scientific Reports</i> , <b>2018</b> , 8, 16527	4.9	52
103	Signaling thresholds govern heterogeneity in IL-7-receptor-mediated responses of naive CD8(+) T cells. <i>Immunology and Cell Biology</i> , <b>2011</b> , 89, 581-94	5	51
102	Composition-tunable properties of amphiphilic comb copolymers containing protected methacrylic acid groups for multicomponent protein patterning. <i>Langmuir</i> , <b>2006</b> , 22, 353-9	4	49
101	Antigen recognition-triggered drug delivery mediated by nanocapsule-functionalized cytotoxic T-cells. <i>Biomaterials</i> , <b>2017</b> , 117, 44-53	15.6	48

100	Beta-amino ester polymers facilitate in vivo DNA transfection and adjuvant plasmid DNA immunization. <i>Molecular Therapy</i> , <b>2005</b> , 12, 164-70	11.7	48
99	Strategies for Controlling the Planar Arrangement of Block Copolymer Micelles and Inorganic Nanoclusters. <i>Macromolecules</i> , <b>2005</b> , 38, 10728-10735	5.5	47
98	Quantifying signaling-induced reorientation of T cell receptors during immunological synapse formation. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2002</b> , 99, 15024-9	11.5	47
97	Targeting small molecule drugs to T cells with antibody-directed cell-penetrating gold nanoparticles. <i>Biomaterials Science</i> , <b>2018</b> , 7, 113-124	7.4	45
96	Control of T helper cell differentiation through cytokine receptor inclusion in the immunological synapse. <i>Journal of Experimental Medicine</i> , <b>2009</b> , 206, 877-92	16.6	44
95	Cellular barcodes for efficiently profiling single-cell secretory responses by microengraving. <i>Analytical Chemistry</i> , <b>2012</b> , 84, 10531-6	7.8	43
94	Influence of the glycocalyx and plasma membrane composition on amphiphilic gold nanoparticle association with erythrocytes. <i>Nanoscale</i> , <b>2015</b> , 7, 11420-32	7.7	42
93	Engineering New Approaches to Cancer Vaccines. <i>Cancer Immunology Research</i> , <b>2015</b> , 3, 836-43	12.5	42
92	Creating patterned carbon nanotube catalysts through the microcontact printing of block copolymer micellar thin films. <i>Langmuir</i> , <b>2006</b> , 22, 8273-6	4	42
91	Contrasting the compatibilizing activity of comb and linear copolymers. <i>Macromolecules</i> , <b>1994</b> , 27, 720-724	3.4	42
90	Redox-responsive interleukin-2 nanogel specifically and safely promotes the proliferation and memory precursor differentiation of tumor-reactive T-cells. <i>Biomaterials Science</i> , <b>2019</b> , 7, 1345-1357	7.4	39
89	Regulation of thymocyte positive selection and motility by GIT2. <i>Nature Immunology</i> , <b>2010</b> , 11, 503-11	19.1	39
88	Multifunctional oncolytic nanoparticles deliver self-replicating IL-12 RNA to eliminate established tumors and prime systemic immunity. <i>Nature Cancer</i> , <b>2020</b> , 1, 882-893	15.4	38
87	Design of lipid nanocapsule delivery vehicles for multivalent display of recombinant Env trimers in HIV vaccination. <i>Bioconjugate Chemistry</i> , <b>2014</b> , 25, 1470-8	6.3	36
86	Lymphoid tissue engineering: invoking lymphoid tissue neogenesis in immunotherapy and models of immunity. <i>Seminars in Immunology</i> , <b>2008</b> , 20, 137-46	10.7	35
85	Shaping humoral immunity to vaccines through antigen-displaying nanoparticles. <i>Current Opinion in Immunology</i> , <b>2020</b> , 65, 1-6	7.8	33
84	Immunogenicity of membrane-bound HIV-1 gp41 membrane-proximal external region (MPER) segments is dominated by residue accessibility and modulated by stereochemistry. <i>Journal of Biological Chemistry</i> , <b>2013</b> , 288, 31888-901	5.4	33
83	Cytoskeletal tension actively sustains the migratory T-cell synaptic contact. <i>EMBO Journal</i> , <b>2020</b> , 39, e102783	13	33



82	Temporally Programmed CD8 <sup>+</sup> DC Activation Enhances Combination Cancer Immunotherapy. <i>Cell Reports</i> , <b>2016</b> , 17, 2503-2511	10.6	32
81	Block copolymer micelles as nanocontainers for controlled release of proteins from biocompatible oil phases. <i>Biomacromolecules</i> , <b>2009</b> , 10, 732-41	6.9	31
80	Amphiphilic nanoparticle delivery enhances the anticancer efficacy of a TLR7 ligand via local immune activation. <i>Biomaterials</i> , <b>2019</b> , 190-191, 111-120	15.6	31
79	Enhancement of Peptide Vaccine Immunogenicity by Increasing Lymphatic Drainage and Boosting Serum Stability. <i>Cancer Immunology Research</i> , <b>2018</b> , 6, 1025-1038	12.5	30
78	Smart Radiation Therapy Biomaterials. <i>International Journal of Radiation Oncology Biology Physics</i> , <b>2017</b> , 97, 624-637	4	30
77	Antigen delivery by lipid-enveloped PLGA microparticle vaccines mediated by in situ vesicle shedding. <i>Biomacromolecules</i> , <b>2014</b> , 15, 2475-81	6.9	29
76	Immunogenicity of RNA Replicons Encoding HIV Env Immunogens Designed for Self-Assembly into Nanoparticles. <i>Molecular Therapy</i> , <b>2019</b> , 27, 2080-2090	11.7	27
75	Rapid Germinal Center and Antibody Responses in Non-human Primates after a Single Nanoparticle Vaccine Immunization. <i>Cell Reports</i> , <b>2019</b> , 29, 1756-1766.e8	10.6	27
74	High avidity CD8 <sup>+</sup> T cells efficiently eliminate motile HIV-infected targets and execute a locally focused program of anti-viral function. <i>PLoS ONE</i> , <b>2014</b> , 9, e87873	3.7	25
73	Functional Nanocavity Arrays via Amphiphilic Block Copolymer Thin Films. <i>Macromolecules</i> , <b>2008</b> , 41, 1739-1744	5.5	25
72	ABC triblock bottlebrush copolymer-based injectable hydrogels: design, synthesis, and application to expanding the therapeutic index of cancer immunochemotherapy. <i>Chemical Science</i> , <b>2020</b> , 11, 5974-5986	8.4	24
71	In chemotaxing fibroblasts, both high-fidelity and weakly biased cell movements track the localization of PI3K signaling. <i>Biophysical Journal</i> , <b>2011</b> , 100, 1893-901	2.9	24
70	Pharmacokinetic tuning of protein-antigen fusions enhances the immunogenicity of T-cell vaccines. <i>Nature Biomedical Engineering</i> , <b>2020</b> , 4, 636-648	19	23
69	Structure-Property Relationships of Amphiphilic Nanoparticles That Penetrate or Fuse Lipid Membranes. <i>Bioconjugate Chemistry</i> , <b>2018</b> , 29, 1131-1140	6.3	23
68	Synthetic surfaces as artificial antigen presenting cells in the study of T cell receptor triggering and immunological synapse formation. <i>Seminars in Immunology</i> , <b>2007</b> , 19, 245-54	10.7	21
67	Targeting HIV Env immunogens to B cell follicles in nonhuman primates through immune complex or protein nanoparticle formulations. <i>Npj Vaccines</i> , <b>2020</b> , 5, 72	9.5	20
66	Radiation-enhanced delivery of systemically administered amphiphilic-CpG oligodeoxynucleotide. <i>Journal of Controlled Release</i> , <b>2017</b> , 266, 248-255	11.7	18
65	Regulatory T cells engineered with TCR signaling-responsive IL-2 nanogels suppress alloimmunity in sites of antigen encounter. <i>Science Translational Medicine</i> , <b>2020</b> , 12,	17.5	18

64	Self-assembled cGAMP-STING $\beta$ M signaling complex as a bioinspired platform for cGAMP delivery. <i>Science Advances</i> , <b>2020</b> , 6, eaba7589	14.3	17
63	Membrane Anchored Immunostimulatory Oligonucleotides for In Vivo Cell Modification and Localized Immunotherapy. <i>Angewandte Chemie</i> , <b>2011</b> , 123, 7190-7193	3.6	17
62	In vitro evolution of enhanced RNA replicons for immunotherapy. <i>Scientific Reports</i> , <b>2019</b> , 9, 6932	4.9	15
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