

# Darrell J Irvine

## List of Publications by Year in descending order

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Version: 2024-02-01

211  
papers

26,267  
citations

5126

86  
h-index

8034

154  
g-index

229  
all docs

229  
docs citations

229  
times ranked

32530  
citing authors

#	ARTICLE	IF	CITATIONS
1	Surface-structure-regulated cell-membrane penetration by monolayer-protected nanoparticles. <i>Nature Materials</i> , 2008, 7, 588-595.	13.3	1,179
2	Bio-inspired, bioengineered and biomimetic drug delivery carriers. <i>Nature Reviews Drug Discovery</i> , 2011, 10, 521-535.	21.5	1,038
3	Structure-based programming of lymph-node targeting in molecular vaccines. <i>Nature</i> , 2014, 507, 519-522.	13.7	760
4	Direct observation of ligand recognition by T cells. <i>Nature</i> , 2002, 419, 845-849.	13.7	725
5	Synthetic Nanoparticles for Vaccines and Immunotherapy. <i>Chemical Reviews</i> , 2015, 115, 11109-11146.	23.0	623
6	Therapeutic cell engineering with surface-conjugated synthetic nanoparticles. <i>Nature Medicine</i> , 2010, 16, 1035-1041.	15.2	599
7	Enhancing cancer immunotherapy with nanomedicine. <i>Nature Reviews Immunology</i> , 2020, 20, 321-334.	10.6	506
8	Engineering synthetic vaccines using cues from natural immunity. <i>Nature Materials</i> , 2013, 12, 978-990.	13.3	500
9	Interbilayer-crosslinked multilamellar vesicles as synthetic vaccines for potent humoral and cellular immune responses. <i>Nature Materials</i> , 2011, 10, 243-251.	13.3	498
10	T cell killing does not require the formation of a stable mature immunological synapse. <i>Nature Immunology</i> , 2004, 5, 524-530.	7.0	496
11	Enhancing T cell therapy through TCR-signaling-responsive nanoparticle drug delivery. <i>Nature Biotechnology</i> , 2018, 36, 707-716.	9.4	448
12	Eradication of large established tumors in mice by combination immunotherapy that engages innate and adaptive immune responses. <i>Nature Medicine</i> , 2016, 22, 1402-1410.	15.2	437
13	A robust, high-throughput assay to determine the phagocytic activity of clinical antibody samples. <i>Journal of Immunological Methods</i> , 2011, 366, 8-19.	0.6	393
14	T cell-targeting nanoparticles focus delivery of immunotherapy to improve antitumor immunity. <i>Nature Communications</i> , 2017, 8, 1747.	5.8	336
15	HIV Vaccine Design to Target Germline Precursors of Glycan-Dependent Broadly Neutralizing Antibodies. <i>Immunity</i> , 2016, 45, 483-496.	6.6	335
16	Engineering Nano- and Microparticles to Tune Immunity. <i>Advanced Materials</i> , 2012, 24, 3724-3746.	11.1	334
17	Beyond antigens and adjuvants: formulating future vaccines. <i>Journal of Clinical Investigation</i> , 2016, 126, 799-808.	3.9	309
18	Nanoparticulate STING agonists are potent lymph node-targeted vaccine adjuvants. <i>Journal of Clinical Investigation</i> , 2015, 125, 2532-2546.	3.9	306

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19	Slow Delivery Immunization Enhances HIV Neutralizing Antibody and Germinal Center Responses via Modulation of Immunodominance. <i>Cell</i> , 2019, 177, 1153-1171.e28.	13.5	293
20	Enhancing humoral responses to a malaria antigen with nanoparticle vaccines that expand T <sub>fh</sub> cells and promote germinal center induction. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012, 109, 1080-1085.	3.3	291
21	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> , 2016, 113, E6639-E6648.	3.3	286
22	Elicitation of Robust Tier 2 Neutralizing Antibody Responses in Nonhuman Primates by HIV Envelope Trimer Immunization Using Optimized Approaches. <i>Immunity</i> , 2017, 46, 1073-1088.e6.	6.6	286
23	Enhanced CAR <sup>+</sup> T cell activity against solid tumors by vaccine boosting through the chimeric receptor. <i>Science</i> , 2019, 365, 162-168.	6.0	282
24	Co-regulation of cell adhesion by nanoscale RGD organization and mechanical stimulus. <i>Journal of Cell Science</i> , 2002, 115, 1423-33.	1.2	282
25	Cytosolic Delivery of Membrane-Impermeable Molecules in Dendritic Cells Using pH-Responsive Core-Shell Nanoparticles. <i>Nano Letters</i> , 2007, 7, 3056-3064.	4.5	276
26	Particulate vaccines: on the quest for optimal delivery and immune response. <i>Drug Discovery Today</i> , 2011, 16, 569-582.	3.2	265
27	Role of nanoscale antigen organization on B-cell activation probed using DNA origami. <i>Nature Nanotechnology</i> , 2020, 15, 716-723.	15.6	263
28	Polymer multilayer tattooing for enhanced DNA <sup>+</sup> vaccination. <i>Nature Materials</i> , 2013, 12, 367-376.	13.3	242
29	Active targeting of chemotherapy to disseminated tumors using nanoparticle-carrying T cells. <i>Science Translational Medicine</i> , 2015, 7, 291ra94.	5.8	242
30	Effect of Particle Diameter and Surface Composition on the Spontaneous Fusion of Monolayer-Protected Gold Nanoparticles with Lipid Bilayers. <i>Nano Letters</i> , 2013, 13, 4060-4067.	4.5	236
31	Delivering safer immunotherapies for cancer. <i>Advanced Drug Delivery Reviews</i> , 2017, 114, 79-101.	6.6	233
32	CD4 enhances T cell sensitivity to antigen by coordinating Lck accumulation at the immunological synapse. <i>Nature Immunology</i> , 2004, 5, 791-799.	7.0	228
33	Innate immune recognition of glycans targets HIV nanoparticle immunogens to germinal centers. <i>Science</i> , 2019, 363, 649-654.	6.0	227
34	<i>In Vitro</i> and <i>In Vivo</i> mRNA Delivery Using Lipid-Enveloped pH-Responsive Polymer Nanoparticles. <i>Molecular Pharmaceutics</i> , 2011, 8, 774-787.	2.3	226
35	Enhancing cell therapies from the outside in: Cell surface engineering using synthetic nanomaterials. <i>Nano Today</i> , 2011, 6, 309-325.	6.2	215
36	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> , 2011, 108, 15745-15750.	3.3	206

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37	Actin foci facilitate activation of the phospholipase C- $\beta$ 3 in primary T lymphocytes via the WASP pathway. <i>ELife</i> , 2015, 4, .	2.8	200
38	Immunogenic Cell Death Amplified by Co-localized Adjuvant Delivery for Cancer Immunotherapy. <i>Nano Letters</i> , 2017, 17, 7387-7393.	4.5	184
39	Nanoparticle anchoring targets immune agonists to tumors enabling anti-cancer immunity without systemic toxicity. <i>Nature Communications</i> , 2018, 9, 6.	5.8	184
40	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> , 2011, 108, 11530-11535.	3.3	183
41	Nanoscale Clustering of RGD Peptides at Surfaces Using Comb Polymers. 1. Synthesis and Characterization of Comb Thin Films. <i>Biomacromolecules</i> , 2001, 2, 85-94.	2.6	182
42	Histone Deacetylase Inhibitors Impair the Elimination of HIV-Infected Cells by Cytotoxic T-Lymphocytes. <i>PLoS Pathogens</i> , 2014, 10, e1004287.	2.1	179
43	Localized Immunotherapy via Liposome-Anchored Anti-CD137 + IL-2 Prevents Lethal Toxicity and Elicits Local and Systemic Antitumor Immunity. <i>Cancer Research</i> , 2013, 73, 1547-1558.	0.4	176
44	Surface Functionalization of Living Cells with Multilayer Patches. <i>Nano Letters</i> , 2008, 8, 4446-4453.	4.5	174
45	Manipulating the Selection Forces during Affinity Maturation to Generate Cross-Reactive HIV Antibodies. <i>Cell</i> , 2015, 160, 785-797.	13.5	173
46	Engineered immunogen binding to alum adjuvant enhances humoral immunity. <i>Nature Medicine</i> , 2020, 26, 430-440.	15.2	172
47	Releasable Layer-by-Layer Assembly of Stabilized Lipid Nanocapsules on Microneedles for Enhanced Transcutaneous Vaccine Delivery. <i>ACS Nano</i> , 2012, 6, 8041-8051.	7.3	170
48	A role for the immunological synapse in lineage commitment of CD4 lymphocytes. <i>Nature</i> , 2004, 431, 527-532.	13.7	169
49	Synapse-directed delivery of immunomodulators using T-cell-conjugated nanoparticles. <i>Biomaterials</i> , 2012, 33, 5776-5787.	5.7	168
50	Induction of potent anti-tumor responses while eliminating systemic side effects via liposome-anchored combinatorial immunotherapy. <i>Biomaterials</i> , 2011, 32, 5134-5147.	5.7	164
51	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> , 2006, 103, 5700-5705.	3.3	159
52	Injectable dendritic cell-carrying alginate gels for immunization and immunotherapy. <i>Biomaterials</i> , 2008, 29, 3671-3682.	5.7	159
53	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> , 2015, 27, 489-501.	7.7	158
54	Generation of Effector Memory T Cell-Based Mucosal and Systemic Immunity with Pulmonary Nanoparticle Vaccination. <i>Science Translational Medicine</i> , 2013, 5, 204ra130.	5.8	157

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55	Layer-by-Layer-Assembled Multilayer Films for Transcutaneous Drug and Vaccine Delivery. <i>ACS Nano</i> , 2009, 3, 3719-3729.	7.3	154
56	Vaccine-Induced Protection from Homologous Tier 2 SHIV Challenge in Nonhuman Primates Depends on Serum-Neutralizing Antibody Titers. <i>Immunity</i> , 2019, 50, 241-252.e6.	6.6	153
57	T Cell Receptor Internalization from the Immunological Synapse Is Mediated by TC21 and RhoG GTPase-Dependent Phagocytosis. <i>Immunity</i> , 2011, 35, 208-222.	6.6	152
58	Multifaceted Effects of Antigen Valency on B Cell Response Composition and Differentiation In Vivo. <i>Immunity</i> , 2020, 53, 548-563.e8.	6.6	149
59	Composite Dissolving Microneedles for Coordinated Control of Antigen and Adjuvant Delivery Kinetics in Transcutaneous Vaccination. <i>Advanced Functional Materials</i> , 2013, 23, 161-172.	7.8	147
60	Nano-layered Microneedles for Transcutaneous Delivery of Polymer Nanoparticles and Plasmid DNA. <i>Advanced Materials</i> , 2010, 22, 4851-4856.	11.1	145
61	Immunization expands B cells specific to HIV-1 V3 glycan in mice and macaques. <i>Nature</i> , 2019, 570, 468-473.	13.7	145
62	A Subset of Latency-Reversing Agents Expose HIV-Infected Resting CD4+ T-Cells to Recognition by Cytotoxic T-Lymphocytes. <i>PLoS Pathogens</i> , 2016, 12, e1005545.	2.1	142
63	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> , 2019, 116, 16473-16478.	3.3	141
64	Anchoring of intratumorally administered cytokines to collagen safely potentiates systemic cancer immunotherapy. <i>Science Translational Medicine</i> , 2019, 11, .	5.8	141
65	Controlling timing and location in vaccines. <i>Advanced Drug Delivery Reviews</i> , 2020, 158, 91-115.	6.6	141
66	Hydrogel-Coated Microneedle Arrays for Minimally Invasive Sampling and Sensing of Specific Circulating Nucleic Acids from Skin Interstitial Fluid. <i>ACS Nano</i> , 2019, 13, 9620-9628.	7.3	140
67	Implantable Silk Composite Microneedles for Programmable Vaccine Release Kinetics and Enhanced Immunogenicity in Transcutaneous Immunization. <i>Advanced Healthcare Materials</i> , 2014, 3, 47-58.	3.9	139
68	Simulations of Cell-Surface Integrin Binding to Nanoscale-Clustered Adhesion Ligands. <i>Biophysical Journal</i> , 2002, 82, 120-132.	0.2	133
69	Antigen-Displaying Lipid-Enveloped PLGA Nanoparticles as Delivery Agents for a Plasmodium vivax Malaria Vaccine. <i>PLoS ONE</i> , 2012, 7, e31472.	1.1	133
70	Nanoscale Clustering of RGD Peptides at Surfaces Using Comb Polymers. 2. Surface Segregation of Comb Polymers in Poly(lactide). <i>Biomacromolecules</i> , 2001, 2, 545-556.	2.6	132
71	Biomaterial Strategies for Immunomodulation. <i>Annual Review of Biomedical Engineering</i> , 2015, 17, 317-349.	5.7	132
72	One nanoparticle, one kill. <i>Nature Materials</i> , 2011, 10, 342-343.	13.3	130

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73	Membrane Anchored Immunostimulatory Oligonucleotides for In Vivo Cell Modification and Localized Immunotherapy. <i>Angewandte Chemie - International Edition</i> , 2011, 50, 7052-7055.	7.2	122
74	In vivo targeting of adoptively transferred T-cells with antibody- and cytokine-conjugated liposomes. <i>Journal of Controlled Release</i> , 2013, 172, 426-435.	4.8	122
75	Photogenerated Polyelectrolyte Bilayers from an Aqueous-Processible Photoresist for Multicomponent Protein Patterning. <i>Journal of the American Chemical Society</i> , 2004, 126, 9170-9171.	6.6	119
76	Enhancing Adoptive Cell Therapy of Cancer through Targeted Delivery of Small-Molecule Immunomodulators to Internalizing or Noninternalizing Receptors. <i>ACS Nano</i> , 2017, 11, 3089-3100.	7.3	117
77	STING agonist delivery by tumour-penetrating PEG-lipid nanodiscs primes robust anticancer immunity. <i>Nature Materials</i> , 2022, 21, 710-720.	13.3	114
78	Multifunctional oncolytic nanoparticles deliver self-replicating IL-12 RNA to eliminate established tumors and prime systemic immunity. <i>Nature Cancer</i> , 2020, 1, 882-893.	5.7	113
79	Interleukin-7 Receptor Signaling Network: An Integrated Systems Perspective. <i>Cellular and Molecular Immunology</i> , 2008, 5, 79-89.	4.8	112
80	Modular injectable matrices based on alginate solution/microsphere mixtures that gel in situ and co-deliver immunomodulatory factors. <i>Acta Biomaterialia</i> , 2009, 5, 969-982.	4.1	111
81	Cell and fluid sampling microneedle patches for monitoring skin-resident immunity. <i>Science Translational Medicine</i> , 2018, 10, .	5.8	111
82	Dynamics of Cell Surface Molecules During T Cell Recognition. <i>Annual Review of Biochemistry</i> , 2003, 72, 717-742.	5.0	105
83	High-throughput quantitation of inorganic nanoparticle biodistribution at the single-cell level using mass cytometry. <i>Nature Communications</i> , 2017, 8, 14069.	5.8	102
84	Targeting dendritic cells to accelerate T-cell activation overcomes a bottleneck in tuberculosis vaccine efficacy. <i>Nature Communications</i> , 2016, 7, 13894.	5.8	100
85	Enhancing Radiotherapy by Lipid Nanocapsule-Mediated Delivery of Amphiphilic Gold Nanoparticles to Intracellular Membranes. <i>ACS Nano</i> , 2014, 8, 8992-9002.	7.3	97
86	Enhanced Phagocytic Activity of HIV-Specific Antibodies Correlates with Natural Production of Immunoglobulins with Skewed Affinity for Fc $\gamma$ 3R2a and Fc $\gamma$ 3R2b. <i>Journal of Virology</i> , 2013, 87, 5468-5476.	1.5	94
87	Robust IgG responses to nanograms of antigen using a biomimetic lipid-coated particle vaccine. <i>Journal of Controlled Release</i> , 2012, 157, 354-365.	4.8	93
88	A DOCK8-WIP-WASp complex links T cell receptors to the actin cytoskeleton. <i>Journal of Clinical Investigation</i> , 2016, 126, 3837-3851.	3.9	93
89	Microfluidic squeezing for intracellular antigen loading in polyclonal B-cells as cellular vaccines. <i>Scientific Reports</i> , 2015, 5, 10276.	1.6	88
90	Vaccine delivery with microneedle skin patches in nonhuman primates. <i>Nature Biotechnology</i> , 2013, 31, 1082-1085.	9.4	85

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91	Wound Healing Versus Regeneration: Role of the Tissue Environment in Regenerative Medicine. MRS Bulletin, 2010, 35, 597-606.	1.7	82
92	Roles for Innate Immunity in Combination Immunotherapies. Cancer Research, 2017, 77, 5215-5221.	0.4	81
93	Shaping humoral immunity to vaccines through antigen-displaying nanoparticles. Current Opinion in Immunology, 2020, 65, 1-6.	2.4	78
94	Polymer-supported lipid shells, onions, and flowers. Soft Matter, 2008, 4, 1787.	1.2	77
95	Liposomal vaccines incorporating molecular adjuvants and intrastructural T-cell help promote the immunogenicity of HIV membrane-proximal external region peptides. Vaccine, 2015, 33, 861-868.	1.7	76
96	Evolution of Toll-like receptor 7/8 agonist therapeutics and their delivery approaches: From antiviral formulations to vaccine adjuvants. Advanced Drug Delivery Reviews, 2021, 175, 113803.	6.6	76
97	Homeostatic Lymphoid Chemokines Synergize with Adhesion Ligands to Trigger T and B Lymphocyte Chemokinesis. Journal of Immunology, 2006, 177, 2340-2348.	0.4	74
98	Guiding Principles in the Design of Molecular Bioconjugates for Vaccine Applications. Bioconjugate Chemistry, 2015, 26, 791-801.	1.8	74
99	Structurally Programmed Assembly of Translation Initiation Nanoplex for Superior mRNA Delivery. ACS Nano, 2017, 11, 2531-2544.	7.3	74
100	Synthetic Charge-Invertible Polymer for Rapid and Complete Implantation of Layer-by-Layer Microneedle Drug Films for Enhanced Transdermal Vaccination. ACS Nano, 2018, 12, 10272-10280.	7.3	72
101	Cytosolic Delivery Mediated via Electrostatic Surface Binding of Protein, Virus, or siRNA Cargos to pH-Responsive Core-Shell Gel Particles. Biomacromolecules, 2009, 10, 756-765.	2.6	71
102	Oligonucleotide Delivery by Cell-Penetrating "Striped" Nanoparticles. Angewandte Chemie - International Edition, 2011, 50, 12312-12315.	7.2	71
103	Enhancing Humoral Responses Against HIV Envelope Trimers via Nanoparticle Delivery with Stabilized Synthetic Liposomes. Scientific Reports, 2018, 8, 16527.	1.6	69
104	Synthesis of Protein-Loaded Hydrogel Particles in an Aqueous Two-Phase System for Coincident Antigen and CpG Oligonucleotide Delivery to Antigen-Presenting Cells. Biomacromolecules, 2005, 6, 2590-2600.	2.6	68
105	Engineered SARS-CoV-2 receptor binding domain improves manufacturability in yeast and immunogenicity in mice. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	68
106	Targeting small molecule drugs to T cells with antibody-directed cell-penetrating gold nanoparticles. Biomaterials Science, 2019, 7, 113-124.	2.6	67
107	Engulfing tumors with synthetic extracellular matrices for cancer immunotherapy. Biomaterials, 2009, 30, 6757-6767.	5.7	63
108	Freely Suspended Cellular "Backpacks" Lead to Cell Aggregate Self-Assembly. Biomacromolecules, 2010, 11, 1826-1832.	2.6	63

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109	A particulate saponin/TLR agonist vaccine adjuvant alters lymph flow and modulates adaptive immunity. <i>Science Immunology</i> , 2021, 6, eabf1152.	5.6	63
110	Engineering chemoattractant gradients using chemokine-releasing polysaccharide microspheres. <i>Biomaterials</i> , 2011, 32, 4903-4913.	5.7	61
111	Antigen recognition-triggered drug delivery mediated by nanocapsule-functionalized cytotoxic T-cells. <i>Biomaterials</i> , 2017, 117, 44-53.	5.7	61
112	Signaling thresholds govern heterogeneity in IL-7 receptor-mediated responses of naïve CD8 <sup>+</sup> T cells. <i>Immunology and Cell Biology</i> , 2011, 89, 581-594.	1.0	60
113	Enhancement of Peptide Vaccine Immunogenicity by Increasing Lymphatic Drainage and Boosting Serum Stability. <i>Cancer Immunology Research</i> , 2018, 6, 1025-1038.	1.6	58
114	Immunogenicity of RNA Replicons Encoding HIV Env Immunogens Designed for Self-Assembly into Nanoparticles. <i>Molecular Therapy</i> , 2019, 27, 2080-2090.	3.7	58
115	Redox-responsive interleukin-2 nanogel specifically and safely promotes the proliferation and memory precursor differentiation of tumor-reactive T-cells. <i>Biomaterials Science</i> , 2019, 7, 1345-1357.	2.6	58
116	Low neoantigen expression and poor T-cell priming underlie early immune escape in colorectal cancer. <i>Nature Cancer</i> , 2021, 2, 1071-1085.	5.7	57
117	Large Area Two-Dimensional B Cell Arrays for Sensing and Cell-Sorting Applications. <i>Biomacromolecules</i> , 2004, 5, 822-827.	2.6	56
118	Rapid Conformational Epitope Mapping of Anti-gp120 Antibodies with a Designed Mutant Panel Displayed on Yeast. <i>Journal of Molecular Biology</i> , 2013, 425, 444-456.	2.0	56
119	Intratumorally injected alum-tethered cytokines elicit potent and safer local and systemic anticancer immunity. <i>Nature Biomedical Engineering</i> , 2022, 6, 129-143.	11.6	56
120	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> , 2002, 99, 15024-15029.	3.3	54
121	Cytoskeletal tension actively sustains the migratory T cell synaptic contact. <i>EMBO Journal</i> , 2020, 39, e102783.	3.5	53
122	β-Amino Ester Polymers Facilitate in Vivo DNA Transfection and Adjuvant Plasmid DNA Immunization. <i>Molecular Therapy</i> , 2005, 12, 164-170.	3.7	52
123	Influence of the glycocalyx and plasma membrane composition on amphiphilic gold nanoparticle association with erythrocytes. <i>Nanoscale</i> , 2015, 7, 11420-11432.	2.8	51
124	Composition-Tunable Properties of Amphiphilic Comb Copolymers Containing Protected Methacrylic Acid Groups for Multicomponent Protein Patterning. <i>Langmuir</i> , 2006, 22, 353-359.	1.6	50
125	Control of T helper cell differentiation through cytokine receptor inclusion in the immunological synapse. <i>Journal of Experimental Medicine</i> , 2009, 206, 877-892.	4.2	50
126	Engineering New Approaches to Cancer Vaccines. <i>Cancer Immunology Research</i> , 2015, 3, 836-843.	1.6	50



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127	Contrasting the compatibilizing activity of comb and linear copolymers. <i>Macromolecules</i> , 1994, 27, 720-724.	2.2	48
128	Strategies for Controlling the Planar Arrangement of Block Copolymer Micelles and Inorganic Nanoclusters. <i>Macromolecules</i> , 2005, 38, 10728-10735.	2.2	47
129	Rapid Germinal Center and Antibody Responses in Non-human Primates after a Single Nanoparticle Vaccine Immunization. <i>Cell Reports</i> , 2019, 29, 1756-1766.e8.	2.9	47
130	Creating Patterned Carbon Nanotube Catalysts through the Microcontact Printing of Block Copolymer Micellar Thin Films. <i>Langmuir</i> , 2006, 22, 8273-8276.	1.6	45
131	Lymphoid tissue engineering: Invoking lymphoid tissue neogenesis in immunotherapy and models of immunity. <i>Seminars in Immunology</i> , 2008, 20, 137-146.	2.7	45
132	Cancer Cell Coating Nanoparticles for Optimal Tumor-Specific Cytokine Delivery. <i>ACS Nano</i> , 2020, 14, 11238-11253.	7.3	45
133	Cellular Barcodes for Efficiently Profiling Single-Cell Secretory Responses by Microengraving. <i>Analytical Chemistry</i> , 2012, 84, 10531-10536.	3.2	44
134	Pharmacokinetic tuning of protein-antigen fusions enhances the immunogenicity of T-cell vaccines. <i>Nature Biomedical Engineering</i> , 2020, 4, 636-648.	11.6	44
135	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> , 2013, 288, 31888-31901.	1.6	43
136	Amphiphilic nanoparticle delivery enhances the anticancer efficacy of a TLR7 ligand via local immune activation. <i>Biomaterials</i> , 2019, 190-191, 111-120.	5.7	43
137	Exploiting albumin as a mucosal vaccine chaperone for robust generation of lung-resident memory T cells. <i>Science Immunology</i> , 2021, 6, .	5.6	43
138	Smart Radiation Therapy Biomaterials. <i>International Journal of Radiation Oncology Biology Physics</i> , 2017, 97, 624-637.	0.4	42
139	Engineering Strategies for Immunomodulatory Cytokine Therapies: Challenges and Clinical Progress. <i>Advanced Therapeutics</i> , 2021, 4, 2100035.	1.6	42
140	Self-assembled cGAMP-STING <sup>TM</sup> signaling complex as a bioinspired platform for cGAMP delivery. <i>Science Advances</i> , 2020, 6, eaba7589.	4.7	41
141	Regulation of thymocyte positive selection and motility by GIT2. <i>Nature Immunology</i> , 2010, 11, 503-511.	7.0	40
142	In vitro evolution of enhanced RNA replicons for immunotherapy. <i>Scientific Reports</i> , 2019, 9, 6932.	1.6	40
143	ABC triblock bottlebrush copolymer-based injectable hydrogels: design, synthesis, and application to expanding the therapeutic index of cancer immunochemotherapy. <i>Chemical Science</i> , 2020, 11, 5974-5986.	3.7	40
144	An adjuvant strategy enabled by modulation of the physical properties of microbial ligands expands antigen immunogenicity. <i>Cell</i> , 2022, 185, 614-629.e21.	13.5	40

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145	Regulatory T cells engineered with TCR signaling-responsive IL-2 nanogels suppress alloimmunity in sites of antigen encounter. <i>Science Translational Medicine</i> , 2020, 12, .	5.8	39
146	Targeting HIV Env immunogens to B cell follicles in nonhuman primates through immune complex or protein nanoparticle formulations. <i>Npj Vaccines</i> , 2020, 5, 72.	2.9	39
147	Design of Lipid Nanocapsule Delivery Vehicles for Multivalent Display of Recombinant Env Trimers in HIV Vaccination. <i>Bioconjugate Chemistry</i> , 2014, 25, 1470-1478.	1.8	38
148	Calcium-triggered fusion of lipid membranes is enabled by amphiphilic nanoparticles. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 18470-18476.	3.3	38
149	Temporally Programmed CD8 <sup>+</sup> + DC Activation Enhances Combination Cancer Immunotherapy. <i>Cell Reports</i> , 2016, 17, 2503-2511.	2.9	37
150	Disassembly of HIV envelope glycoprotein trimer immunogens is driven by antibodies elicited via immunization. <i>Science Advances</i> , 2021, 7, .	4.7	37
151	Block Copolymer Micelles as Nanocontainers for Controlled Release of Proteins from Biocompatible Oil Phases. <i>Biomacromolecules</i> , 2009, 10, 732-741.	2.6	36
152	Structure-Property Relationships of Amphiphilic Nanoparticles That Penetrate or Fuse Lipid Membranes. <i>Bioconjugate Chemistry</i> , 2018, 29, 1131-1140.	1.8	36
153	Resistance to PD1 blockade in the absence of metalloprotease-mediated LAG3 shedding. <i>Science Immunology</i> , 2020, 5, .	5.6	36
154	Antigen Delivery by Lipid-Enveloped PLGA Microparticle Vaccines Mediated by <i>In Situ</i> Vesicle Shedding. <i>Biomacromolecules</i> , 2014, 15, 2475-2481.	2.6	35
155	Materializing the future of vaccines and immunotherapy. <i>Nature Reviews Materials</i> , 2016, 1, .	23.3	32
156	The injury response to DNA damage in live tumor cells promotes antitumor immunity. <i>Science Signaling</i> , 2021, 14, eabc4764.	1.6	32
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