Darrell J Irvine

List of Publications by Year
in descending order

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211 papers	26,267 citations	4388 86 h-index	6996 154 g-index
229 all docs	229 docs citations	229 times ranked	29068 citing authors

#	Article	IF	Citations
1	Neoadjuvant STING Activation, Extended Half-life IL2, and Checkpoint Blockade Promote Metastasis Clearance via Sustained NK-cell Activation. Cancer Immunology Research, 2022, 10, 26-39.	3.4	10
2	Intratumourally injected alum-tethered cytokines elicit potent and safer local and systemic anticancer immunity. Nature Biomedical Engineering, 2022, 6, 129-143.	22.5	56
3	Mannose-binding lectin and complement mediate follicular localization and enhanced immunogenicity of diverse protein nanoparticle immunogens. Cell Reports, 2022, 38, 110217.	6.4	29
4	An adjuvant strategy enabled by modulation of the physical properties of microbial ligands expands antigen immunogenicity. Cell, 2022, 185, 614-629.e21.	28.9	40
5	Structure-guided changes at the V2 apex of HIV-1 clade C trimer enhance elicitation of autologous neutralizing and broad V1V2-scaffold antibodies. Cell Reports, 2022, 38, 110436.	6.4	6
6	Immunogenic cell stress and injury versus immunogenic cell death: implications for improving cancer treatment with immune checkpoint blockade. Molecular and Cellular Oncology, 2022, 9, 2039038.	0.7	0
7	Coâ€Anchoring of Engineered Immunogen and Immunostimulatory Cytokines to Alum Promotes Enhancedâ€Humoral Immunity. Advanced Therapeutics, 2022, 5, .	3.2	3
8	STING agonist delivery by tumour-penetrating PEG-lipid nanodiscs primes robust anticancer immunity. Nature Materials, 2022, 21, 710-720.	27.5	114
9	Controlling Nuclease Degradation of Wireframe DNA Origami with Minor Groove Binders. ACS Nano, 2022, 16, 8954-8966.	14.6	22
10	Intratumorally anchored cytokine therapy. Expert Opinion on Drug Delivery, 2022, 19, 725-732.	5.0	11
11	Peptideâ€Based Cancer Vaccine Delivery via the STINGÎ”TMâ€cGAMP Complex. Advanced Healthcare Materials, 2022, 11, .	7.6	12
12	Screening for CD19-specific chimaeric antigen receptors with enhanced signalling via a barcoded library of intracellular domains. Nature Biomedical Engineering, 2022, 6, 855-866.	22.5	23
13	InÂVivo Validation of a Reversible Small Molecule-Based Switch for Synthetic Self-Amplifying mRNA Regulation. Molecular Therapy, 2021, 29, 1164-1173.	8.2	13
14	Surface Plasmonâ€Enhanced Shortâ€Wave Infrared Fluorescence for Detecting Subâ€Millimeterâ€Sized Tumors. Advanced Materials, 2021, 33, e2006057.	21.0	23
15	Morphological Definition of Actin Architecture at the T Cell Immunological Synapse. Journal of the Indian Institute of Science, 2021, 101, 47-50.	1.9	0
16	IgG-Engineered Protective Antigen for Cytosolic Delivery of Proteins into Cancer Cells. ACS Central Science, 2021, 7, 365-378.	11.3	8
17	Temporal dynamics of intradermal cytokine response to tuberculin in Mycobacterium bovis BCG-vaccinated cattle using sampling microneedles. Scientific Reports, 2021, 11, 7074.	3.3	7
18	Ivermectin converts cold tumors hot and synergizes with immune checkpoint blockade for treatment of breast cancer. Npj Breast Cancer, 2021, 7, 22.	5.2	16

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19	Exploiting albumin as a mucosal vaccine chaperone for robust generation of lung-resident memory T cells. Science Immunology, 2021, 6, .	11.9	43
20	Immunotherapy-induced antibodies to endogenous retroviral envelope glycoprotein confer tumor protection in mice. PLoS ONE, 2021, 16, e0248903.	2.5	6
21	Engineering Strategies for Immunomodulatory Cytokine Therapies: Challenges and Clinical Progress. Advanced Therapeutics, 2021, 4, 2100035.	3.2	42
22	A participant-derived xenograft model of HIV enables long-term evaluation of autologous immunotherapies. Journal of Experimental Medicine, 2021, 218, .	8.5	9
23	Disassembly of HIV envelope glycoprotein trimer immunogens is driven by antibodies elicited via immunization. Science Advances, 2021, 7, .	10.3	37
24	An in vivo selection-derived <scp>d</scp> -peptide for engineering erythrocyte-binding antigens that promote immune tolerance. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	6
25	Combined PET and whole-tissue imaging of lymphatic-targeting vaccines in non-human primates. Biomaterials, 2021, 275, 120868.	11.4	16
26	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.	13.7	76
27	Low neoantigen expression and poor T-cell priming underlie early immune escape in colorectal cancer. Nature Cancer, 2021, 2, 1071-1085.	13.2	57
28	In Situ Covalent Functionalization of DNA Origami Virus-like Particles. ACS Nano, 2021, 15, 14316-14322.	14.6	29
29	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, .	7.1	68
30	In vitro STING Activation with the cGAMP-STINGÎ”TM Signaling Complex. Bio-protocol, 2021, 11, e3905.	0.4	0
31	The injury response to DNA damage in live tumor cells promotes antitumor immunity. Science Signaling, 2021, 14, eabc4764.	3.6	32
32	Sequential immunization of macaques elicits heterologous neutralizing antibodies targeting the V3-glycan patch of HIV-1 Env. Science Translational Medicine, 2021, 13, eabk1533.	12.4	27
33	Reprogramming NK cells and macrophages via combined antibody and cytokine therapy primes tumors for elimination by checkpoint blockade. Cell Reports, 2021, 37, 110021.	6.4	21
34	A particulate saponin/TLR agonist vaccine adjuvant alters lymph flow and modulates adaptive immunity. Science Immunology, 2021, 6, eabf1152.	11.9	63
35	Introduction to the Special Issue: Nanoparticles and immune responses. Seminars in Immunology, 2021, 56, 101548.	5.6	0
36	Phosphate-mediated coanchoring of RBD immunogens and molecular adjuvants to alum potentiates humoral immunity against SARS-CoV-2. Science Advances, 2021, 7, eabj6538.	10.3	19

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37	Cytoskeletal tension actively sustains the migratory Tâ€cell synaptic contact. EMBO Journal, 2020, 39, e102783.	7.8	53
38	DOCK2 Sets the Threshold for Entry into the Virtual Memory CD8+ T Cell Compartment by Negatively Regulating Tonic TCR Triggering. Journal of Immunology, 2020, 204, 49-57.	0.8	9
39	Murine CD8 Tâ€cell functional avidity is stable in vivo but not in vitro: Independence from homologous prime/boost time interval and antigen density. European Journal of Immunology, 2020, 50, 505-514.	2.9	6
40	Multifaceted Effects of Antigen Valency on B Cell Response Composition and Differentiation InÂVivo. Immunity, 2020, 53, 548-563.e8.	14.3	149
41	Calcium-triggered fusion of lipid membranes is enabled by amphiphilic nanoparticles. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 18470-18476.	7.1	38
42	Cancer Cell Coating Nanoparticles for Optimal Tumor-Specific Cytokine Delivery. ACS Nano, 2020, 14, 11238-11253.	14.6	45
43	Resistance to PD1 blockade in the absence of metalloprotease-mediated LAG3 shedding. Science Immunology, 2020, 5, .	11.9	36
44	Regulatory T cells engineered with TCR signalingâ€“responsive IL-2 nanogels suppress alloimmunity in sites of antigen encounter. Science Translational Medicine, 2020, 12, .	12.4	39
45	Multifunctional oncolytic nanoparticles deliver self-replicating IL-12 RNA to eliminate established tumors and prime systemic immunity. Nature Cancer, 2020, 1, 882-893.	13.2	113
46	Targeting HIV Env immunogens to B cell follicles in nonhuman primates through immune complex or protein nanoparticle formulations. Npj Vaccines, 2020, 5, 72.	6.0	39
47	Pharmacokinetic tuning of proteinâ€“antigen fusions enhances the immunogenicity of T-cell vaccines. Nature Biomedical Engineering, 2020, 4, 636-648.	22.5	44
48	ABC triblock bottlebrush copolymer-based injectable hydrogels: design, synthesis, and application to expanding the therapeutic index of cancer immunochemotherapy. Chemical Science, 2020, 11, 5974-5986.	7.4	40
49	Self-assembled cGAMP-STINGÎ”TM signaling complex as a bioinspired platform for cGAMP delivery. Science Advances, 2020, 6, eaba7589.	10.3	41
50	Shaping humoral immunity to vaccines through antigen-displaying nanoparticles. Current Opinion in Immunology, 2020, 65, 1-6.	5.5	78
51	Role of nanoscale antigen organization on B-cell activation probed using DNA origami. Nature Nanotechnology, 2020, 15, 716-723.	31.5	263
52	Controlling timing and location in vaccines. Advanced Drug Delivery Reviews, 2020, 158, 91-115.	13.7	141
53	Engineered immunogen binding to alum adjuvant enhances humoral immunity. Nature Medicine, 2020, 26, 430-440.	30.7	172
54	Enhancing cancer immunotherapy with nanomedicine. Nature Reviews Immunology, 2020, 20, 321-334.	22.7	506

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55	Hydrogel-Coated Microneedle Arrays for Minimally Invasive Sampling and Sensing of Specific Circulating Nucleic Acids from Skin Interstitial Fluid. ACS Nano, 2019, 13, 9620-9628.	14.6	140
56	Enhancing humoral immunity via sustained-release implantable microneedle patch vaccination. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 16473-16478.	7.1	141
57	Anchoring of intratumorally administered cytokines to collagen safely potentiates systemic cancer immunotherapy. Science Translational Medicine, 2019, 11, .	12.4	141
58	A multilamellar nanoliposome stabilized by interlayer hydrogen bonds increases antimalarial drug efficacy. Nanomedicine: Nanotechnology, Biology, and Medicine, 2019, 22, 102099.	3.3	18
59	Rapid Germinal Center and Antibody Responses in Non-human Primates after a Single Nanoparticle Vaccine Immunization. Cell Reports, 2019, 29, 1756-1766.e8.	6.4	47
60	Donor cell engineering with GSK3 inhibitorâ€“loaded nanoparticles enhances engraftment after in utero transplantation. Blood, 2019, 134, 1983-1995.	1.4	13
61	Immunogenicity of RNA Replicons Encoding HIV Env Immunogens Designed for Self-Assembly into Nanoparticles. Molecular Therapy, 2019, 27, 2080-2090.	8.2	58
62	Redox-responsive interleukin-2 nanogel specifically and safely promotes the proliferation and memory precursor differentiation of tumor-reactive T-cells. Biomaterials Science, 2019, 7, 1345-1357.	5.4	58
63	Immunization expands B cells specific to HIV-1 V3 glycan in mice and macaques. Nature, 2019, 570, 468-473.	27.8	145
64	Slow Delivery Immunization Enhances HIV Neutralizing Antibody and Germinal Center Responses via Modulation of Immunodominance. Cell, 2019, 177, 1153-1171.e28.	28.9	293
65	In vitro evolution of enhanced RNA replicons for immunotherapy. Scientific Reports, 2019, 9, 6932.	3.3	40
66	Order of administration of combination cytokine therapies can decouple toxicity from efficacy in syngeneic mouse tumor models. OncoImmunology, 2019, 8, e1558678.	4.6	10
67	Probing the Role of HIV Antigen Nanoscale Organization on B-Cell Activation with DNA Origami. Biophysical Journal, 2019, 116, 578a.	0.5	0
68	Vaccine-Induced Protection from Homologous Tier 2 SHIV Challenge in Nonhuman Primates Depends on Serum-Neutralizing Antibody Titers. Immunity, 2019, 50, 241-252.e6.	14.3	153
69	Innate immune recognition of glycans targets HIV nanoparticle immunogens to germinal centers. Science, 2019, 363, 649-654.	12.6	227
70	Amphiphilic nanoparticle delivery enhances the anticancer efficacy of a TLR7 ligand via local immune activation. Biomaterials, 2019, 190-191, 111-120.	11.4	43
71	Targeting small molecule drugs to T cells with antibody-directed cell-penetrating gold nanoparticles. Biomaterials Science, 2019, 7, 113-124.	5.4	67
72	Enhanced CARâ€“T cell activity against solid tumors by vaccine boosting through the chimeric receptor. Science, 2019, 365, 162-168.	12.6	282

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73	Structureâ€“Property Relationships of Amphiphilic Nanoparticles That Penetrate or Fuse Lipid Membranes. Bioconjugate Chemistry, 2018, 29, 1131-1140.	3.6	36
74	Nanoparticle anchoring targets immune agonists to tumors enabling anti-cancer immunity without systemic toxicity. Nature Communications, 2018, 9, 6.	12.8	184
75	Enhancing Humoral Responses Against HIV Envelope Trimers via Nanoparticle Delivery with Stabilized Synthetic Liposomes. Scientific Reports, 2018, 8, 16527.	3.3	69
76	Cell and fluid sampling microneedle patches for monitoring skin-resident immunity. Science Translational Medicine, 2018, 10, .	12.4	111
77	Combined HDAC and BET Inhibition Enhances Melanoma Vaccine Immunogenicity and Efficacy. Journal of Immunology, 2018, 201, 2744-2752.	0.8	11
78	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.	14.6	72
79	Material aid for vaccines. Nature Materials, 2018, 17, 472-473.	27.5	10
80	Enhancing T cell therapy through TCR-signaling-responsive nanoparticle drug delivery. Nature Biotechnology, 2018, 36, 707-716.	17.5	448
81	Polymers at the Interface with Biology. Biomacromolecules, 2018, 19, 3151-3162.	5.4	10
82	Enhancement of Peptide Vaccine Immunogenicity by Increasing Lymphatic Drainage and Boosting Serum Stability. Cancer Immunology Research, 2018, 6, 1025-1038.	3.4	58
83	Structurally Programmed Assembly of Translation Initiation Nanoplex for Superior mRNA Delivery. ACS Nano, 2017, 11, 2531-2544.	14.6	74
84	High-throughput quantitation of inorganic nanoparticle biodistribution at the single-cell level using mass cytometry. Nature Communications, 2017, 8, 14069.	12.8	102
85	Enhancing Adoptive Cell Therapy of Cancer through Targeted Delivery of Small-Molecule Immunomodulators to Internalizing or Noninternalizing Receptors. ACS Nano, 2017, 11, 3089-3100.	14.6	117
86	Nanoscience and Nanotechnology Cross Borders. ACS Nano, 2017, 11, 1123-1126.	14.6	4
87	Delivering safer immunotherapies for cancer. Advanced Drug Delivery Reviews, 2017, 114, 79-101.	13.7	233
88	Elicitation of Robust Tier 2 Neutralizing Antibody Responses in Nonhuman Primates by HIV Envelope Trimer Immunization Using Optimized Approaches. Immunity, 2017, 46, 1073-1088.e6.	14.3	286
89	Radiation-enhanced delivery of systemically administered amphiphilic-CpG oligodeoxynucleotide. Journal of Controlled Release, 2017, 266, 248-255.	9.9	21
90	Roles for Innate Immunity in Combination Immunotherapies. Cancer Research, 2017, 77, 5215-5221.	0.9	81

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91	T cell-targeting nanoparticles focus delivery of immunotherapy to improve antitumor immunity. Nature Communications, 2017, 8, 1747.	12.8	336
92	Immunogenic Cell Death Amplified by Co-localized Adjuvant Delivery for Cancer Immunotherapy. Nano Letters, 2017, 17, 7387-7393.	9.1	184
93	Synthetic Lift-off Polymer beneath Layer-by-Layer Films for Surface-Mediated Drug Delivery. ACS Macro Letters, 2017, 6, 1320-1324.	4.8	9
94	Smart Radiation Therapy Biomaterials. International Journal of Radiation Oncology Biology Physics, 2017, 97, 624-637.	0.8	42
95	Synthesis of Lymph Node-Targeting Adjuvants. Methods in Molecular Biology, 2017, 1494, 145-152.	0.9	5
96	Antigen recognition-triggered drug delivery mediated by nanocapsule-functionalized cytotoxic T-cells. Biomaterials, 2017, 117, 44-53.	11.4	61
97	Beyond antigens and adjuvants: formulating future vaccines. Journal of Clinical Investigation, 2016, 126, 799-808.	8.2	309
98	A Subset of Latency-Reversing Agents Expose HIV-Infected Resting CD4+ T-Cells to Recognition by Cytotoxic T-Lymphocytes. PLoS Pathogens, 2016, 12, e1005545.	4.7	142
99	Generation of Long-Lived Bone Marrow Plasma Cells Secreting Antibodies Specific for the HIV-1 gp41 Membrane-Proximal External Region in the Absence of Polyreactivity. Journal of Virology, 2016, 90, 8875-8890.	3.4	20
100	Targeting dendritic cells to accelerate T-cell activation overcomes a bottleneck in tuberculosis vaccine efficacy. Nature Communications, 2016, 7, 13894.	12.8	100
101	Temporally Programmed CD8Î± + DC Activation Enhances Combination Cancer Immunotherapy. Cell Reports, 2016, 17, 2503-2511.	6.4	37
102	Sustained antigen availability during germinal center initiation enhances antibody responses to vaccination. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, E6639-E6648.	7.1	286
103	HIV Vaccine Design to Target Germline Precursors of Glycan-Dependent Broadly Neutralizing Antibodies. Immunity, 2016, 45, 483-496.	14.3	335
104	Materializing the future of vaccines and immunotherapy. Nature Reviews Materials, 2016, 1, .	48.7	32
105	Eradication of large established tumors in mice by combination immunotherapy that engages innate and adaptive immune responses. Nature Medicine, 2016, 22, 1402-1410.	30.7	437
106	A Receptor for All Occasions. Cell, 2016, 164, 599-600.	28.9	4
107	A DOCK8-WIP-WASp complex links T cell receptors to the actin cytoskeleton. Journal of Clinical Investigation, 2016, 126, 3837-3851.	8.2	93
108	Active targeting of chemotherapy to disseminated tumors using nanoparticle-carrying T cells. Science Translational Medicine, 2015, 7, 291ra94.	12.4	242

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109	Microfluidic squeezing for intracellular antigen loading in polyclonal B-cells as cellular vaccines. Scientific Reports, 2015, 5, 10276.	3.3	88
110	Manipulating the Selection Forces during Affinity Maturation to Generate Cross-Reactive HIV Antibodies. Cell, 2015, 160, 785-797.	28.9	173
111	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.	3.8	76
112	Influence of the glycocalyx and plasma membrane composition on amphiphilic gold nanoparticle association with erythrocytes. Nanoscale, 2015, 7, 11420-11432.	5.6	51
113	Synthetic Nanoparticles for Vaccines and Immunotherapy. Chemical Reviews, 2015, 115, 11109-11146.	47.7	623
114	Engineering New Approaches to Cancer Vaccines. Cancer Immunology Research, 2015, 3, 836-843.	3.4	50
115	Nanoparticulate STING agonists are potent lymph nodeâ€“targeted vaccine adjuvants. Journal of Clinical Investigation, 2015, 125, 2532-2546.	8.2	306
116	Guiding Principles in the Design of Molecular Bioconjugates for Vaccine Applications. Bioconjugate Chemistry, 2015, 26, 791-801.	3.6	74
117	Synergistic Innate and Adaptive Immune Response to Combination Immunotherapy with Anti-Tumor Antigen Antibodies and Extended Serum Half-Life IL-2. Cancer Cell, 2015, 27, 489-501.	16.8	158
118	Biomaterial Strategies for Immunomodulation. Annual Review of Biomedical Engineering, 2015, 17, 317-349.	12.3	132
119	Big thinking for adjuvants. Nature Biotechnology, 2015, 33, 1146-1148.	17.5	18
120	CD4 ⁺ T cellâ€“dependent and CD4 ⁺ T cellâ€“independent cytokine-chemokine network changes in the immune responses of HIV-infected individuals. Science Signaling, 2015, 8, ra104.	3.6	20
121	Editorial overview: Special section: Immunological engineering. Current Opinion in Immunology, 2015, 35, ix-xi.	5.5	0
122	Actin foci facilitate activation of the phospholipase C-Î³ in primary T lymphocytes via the WASP pathway. ELife, 2015, 4, .	6.0	200
123	High Avidity CD8+ T Cells Efficiently Eliminate Motile HIV-Infected Targets and Execute a Locally Focused Program of Anti-Viral Function. PLoS ONE, 2014, 9, e87873.	2.5	31
124	Histone Deacetylase Inhibitors Impair the Elimination of HIV-Infected Cells by Cytotoxic T-Lymphocytes. PLoS Pathogens, 2014, 10, e1004287.	4.7	179
125	Structure-based programming of lymph-node targeting in molecular vaccines. Nature, 2014, 507, 519-522.	27.8	760
126	Implantable Silk Composite Microneedles for Programmable Vaccine Release Kinetics and Enhanced Immunogenicity in Transcutaneous Immunization. Advanced Healthcare Materials, 2014, 3, 47-58.	7.6	139

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127	Antigen Delivery by Lipid-Enveloped PLGA Microparticle Vaccines Mediated by in Situ Vesicle Shedding. Biomacromolecules, 2014, 15, 2475-2481.	5.4	35
128	Enhancing Radiotherapy by Lipid Nanocapsule-Mediated Delivery of Amphiphilic Gold Nanoparticles to Intracellular Membranes. ACS Nano, 2014, 8, 8992-9002.	14.6	97
129	Design of Lipid Nanocapsule Delivery Vehicles for Multivalent Display of Recombinant Env Trimers in HIV Vaccination. Bioconjugate Chemistry, 2014, 25, 1470-1478.	3.6	38
130	Cell Engineering with Glycogen Synthase Kinase-3 Beta Inhibitor-Loaded Synthetic Nanoparticles Enhances Hematopoietic Engraftment of Bone Marrow Mononuclear Cells Following in Utero Transplantation. Blood, 2014, 124, 2414-2414.	1.4	0
131	Effect of Particle Diameter and Surface Composition on the Spontaneous Fusion of Monolayer-Protected Gold Nanoparticles with Lipid Bilayers. Nano Letters, 2013, 13, 4060-4067.	9.1	236
132	Engineering synthetic vaccines using cues from natural immunity. Nature Materials, 2013, 12, 978-990.	27.5	500
133	Immunogenicity of Membrane-bound HIV-1 gp41 Membrane-proximal External Region (MPER) Segments Is Dominated by Residue Accessibility and Modulated by Stereochemistry. Journal of Biological Chemistry, 2013, 288, 31888-31901.	3.4	43
134	Drug Delivery: Composite Dissolving Microneedles for Coordinated Control of Antigen and Adjuvant Delivery Kinetics in Transcutaneous Vaccination (Adv. Funct. Mater. 2/2013). Advanced Functional Materials, 2013, 23, 138-138.	14.9	0
135	Synergistic Antitumor Activity from Two-Stage Delivery of Targeted Toxins and Endosome-Disrupting Nanoparticles. Biomacromolecules, 2013, 14, 1093-1102.	5.4	18
136	Localized Immunotherapy via Liposome-Anchored Anti-CD137 + IL-2 Prevents Lethal Toxicity and Elicits Local and Systemic Antitumor Immunity. Cancer Research, 2013, 73, 1547-1558.	0.9	176
137	Rapid Conformational Epitope Mapping of Anti-gp120 Antibodies with a Designed Mutant Panel Displayed on Yeast. Journal of Molecular Biology, 2013, 425, 444-456.	4.2	56
138	In vivo targeting of adoptively transferred T-cells with antibody- and cytokine-conjugated liposomes. Journal of Controlled Release, 2013, 172, 426-435.	9.9	122
139	Vaccine delivery with microneedle skin patches in nonhuman primates. Nature Biotechnology, 2013, 31, 1082-1085.	17.5	85
140	Polymer multilayer tattooing for enhanced DNAÂvaccination. Nature Materials, 2013, 12, 367-376.	27.5	242
141	Composite Dissolving Microneedles for Coordinated Control of Antigen and Adjuvant Delivery Kinetics in Transcutaneous Vaccination. Advanced Functional Materials, 2013, 23, 161-172.	14.9	147
142	Koch Institute Symposium on Cancer Immunology and Immunotherapy. Cancer Immunology Research, 2013, 1, 217-222.	3.4	1
143	Generation of Effector Memory T Cellâ€"Based Mucosal and Systemic Immunity with Pulmonary Nanoparticle Vaccination. Science Translational Medicine, 2013, 5, 204ra130.	12.4	157
144	Enhanced Phagocytic Activity of HIV-Specific Antibodies Correlates with Natural Production of Immunoglobulins with Skewed Affinity for FcÎ³R2a and FcÎ³R2b. Journal of Virology, 2013, 87, 5468-5476.	3.4	94

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145	Enhancing humoral responses to a malaria antigen with nanoparticle vaccines that expand T _{fh} cells and promote germinal center induction. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 1080-1085.	7.1	291
146	Releasable Layer-by-Layer Assembly of Stabilized Lipid Nanocapsules on Microneedles for Enhanced Transcutaneous Vaccine Delivery. ACS Nano, 2012, 6, 8041-8051.	14.6	170
147	Cellular Barcodes for Efficiently Profiling Single-Cell Secretory Responses by Microengraving. Analytical Chemistry, 2012, 84, 10531-10536.	6.5	44
148	Engineering Nanoâ€•and Microparticles to Tune Immunity. Advanced Materials, 2012, 24, 3724-3746.	21.0	334
149	Synapse-directed delivery of immunomodulators using T-cell-conjugated nanoparticles. Biomaterials, 2012, 33, 5776-5787.	11.4	168
150	Robust IgG responses to nanograms of antigen using a biomimetic lipid-coated particle vaccine. Journal of Controlled Release, 2012, 157, 354-365.	9.9	93
151	Antigen-Displaying Lipid-Enveloped PLGA Nanoparticles as Delivery Agents for a Plasmodium vivax Malaria Vaccine. PLoS ONE, 2012, 7, e31472.	2.5	133
152	In Chemotaxing Fibroblasts, Both High-Fidelity and Weakly Biased Cell Movements Track the Localization of PI3K Signaling. Biophysical Journal, 2011, 100, 1893-1901.	0.5	27
153	T Cell Receptor Internalization from the Immunological Synapse Is Mediated by TC21 and RhoG GTPase-Dependent Phagocytosis. Immunity, 2011, 35, 208-222.	14.3	152
154	Interbilayer-crosslinked multilamellar vesicles as synthetic vaccines for potent humoral and cellular immune responses. Nature Materials, 2011, 10, 243-251.	27.5	498
155	One nanoparticle, one kill. Nature Materials, 2011, 10, 342-343.	27.5	130
156	A robust, high-throughput assay to determine the phagocytic activity of clinical antibody samples. Journal of Immunological Methods, 2011, 366, 8-19.	1.4	393
157	Particulate vaccines: on the quest for optimal delivery and immune response. Drug Discovery Today, 2011, 16, 569-582.	6.4	265
158	In Vitro and in Vivo mRNA Delivery Using Lipid-Enveloped pH-Responsive Polymer Nanoparticles. Molecular Pharmaceutics, 2011, 8, 774-787.	4.6	226
159	Bio-inspired, bioengineered and biomimetic drug delivery carriers. Nature Reviews Drug Discovery, 2011, 10, 521-535.	46.4	1,038
160	Induction of potent anti-tumor responses while eliminating systemic side effects via liposome-anchored combinatorial immunotherapy. Biomaterials, 2011, 32, 5134-5147.	11.4	164
161	Membrane Anchored Immunostimulatory Oligonucleotides for In Vivo Cell Modification and Localized Immunotherapy. Angewandte Chemie - International Edition, 2011, 50, 7052-7055.	13.8	122
162	Oligonucleotide Delivery by Cellâ€Penetrating â€œStripedâ€•Nanoparticles. Angewandte Chemie - International Edition, 2011, 50, 12312-12315.	13.8	71

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163	Engineering chemoattractant gradients using chemokine-releasing polysaccharide microspheres. Biomaterials, 2011, 32, 4903-4913.	11.4	61
164	Enhancing cell therapies from the outside in: Cell surface engineering using synthetic nanomaterials. Nano Today, 2011, 6, 309-325.	11.9	215
165	Coordinate linkage of HIV evolution reveals regions of immunological vulnerability. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 11530-11535.	7.1	183
166	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.	7.1	206
167	Signaling thresholds govern heterogeneity in ILâ€7â€receptorâ€mediated responses of naÃ¯ve CD8⁺ T cells. Immunology and Cell Biology, 2011, 89, 581-594.	2.3	60
168	Nanoâ€Layered Microneedles for Transcutaneous Delivery of Polymer Nanoparticles and Plasmid DNA. Advanced Materials, 2010, 22, 4851-4856.	21.0	145
169	Regulation of thymocyte positive selection and motility by GIT2. Nature Immunology, 2010, 11, 503-511.	14.5	40
170	Therapeutic cell engineering with surface-conjugated synthetic nanoparticles. Nature Medicine, 2010, 16, 1035-1041.	30.7	599
171	Wound Healing Versus Regeneration: Role of the Tissue Environment in Regenerative Medicine. MRS Bulletin, 2010, 35, 597-606.	3.5	82
172	Freely Suspended Cellular â€œBackpacksâ€•Lead to Cell Aggregate Self-Assembly. Biomacromolecules, 2010, 11, 1826-1832.	5.4	63
173	DNA nanogel encapsulated by a lipid vesicle. , 2010, , .		0
174	Control of T helper cell differentiation through cytokine receptor inclusion in the immunological synapse. Journal of Experimental Medicine, 2009, 206, 877-892.	8.5	50
175	Modular injectable matrices based on alginate solution/microsphere mixtures that gel in situ and co-deliver immunomodulatory factors. Acta Biomaterialia, 2009, 5, 969-982.	8.3	111
176	Engulfing tumors with synthetic extracellular matrices for cancer immunotherapy. Biomaterials, 2009, 30, 6757-6767.	11.4	63
177	Cytosolic Delivery Mediated via Electrostatic Surface Binding of Protein, Virus, or siRNA Cargos to pH-Responsive Coreâ”Shell Gel Particles. Biomacromolecules, 2009, 10, 756-765.	5.4	71
178	Block Copolymer Micelles as Nanocontainers for Controlled Release of Proteins from Biocompatible Oil Phases. Biomacromolecules, 2009, 10, 732-741.	5.4	36
179	Layer-by-Layer-Assembled Multilayer Films for Transcutaneous Drug and Vaccine Delivery. ACS Nano, 2009, 3, 3719-3729.	14.6	154
180	Injectable dendritic cell-carrying alginate gels for immunization and immunotherapy. Biomaterials, 2008, 29, 3671-3682.	11.4	159

#	Article	IF	Citations
181	Interleukin-7 Receptor Signaling Network: An Integrated Systems Perspective. Cellular and Molecular Immunology, 2008, 5, 79-89.	10.5	112
182	Surface-structure-regulated cell-membrane penetration by monolayer-protected nanoparticles. Nature Materials, 2008, 7, 588-595.	27.5	1,179
183	Lymphoid tissue engineering: Invoking lymphoid tissue neogenesis in immunotherapy and models of immunity. Seminars in Immunology, 2008, 20, 137-146.	5.6	45
184	Polymer-supported lipid shells, onions, and flowers. Soft Matter, 2008, 4, 1787.	2.7	77
185	Functional Nanocavity Arrays via Amphiphilic Block Copolymer Thin Films. Macromolecules, 2008, 41, 1739-1744.	4.8	25
186	Surface Functionalization of Living Cells with Multilayer Patches. Nano Letters, 2008, 8, 4446-4453.	9.1	174
187	Synthetic surfaces as artificial antigen presenting cells in the study of T cell receptor triggering and immunological synapse formation. Seminars in Immunology, 2007, 19, 245-254.	5.6	21
188	Cytosolic Delivery of Membrane-Impermeable Molecules in Dendritic Cells Using pH-Responsive Coreâ˜Shell Nanoparticles. Nano Letters, 2007, 7, 3056-3064.	9.1	276
189	Patterned surfaces as tools to study ligand recognition and synapse formation by T cells. Current Opinion in Immunology, 2007, 19, 463-469.	5.5	14
190	Creating Patterned Carbon Nanotube Catalysts through the Microcontact Printing of Block Copolymer Micellar Thin Films. Langmuir, 2006, 22, 8273-8276.	3.5	45
191	Composition-Tunable Properties of Amphiphilic Comb Copolymers Containing Protected Methacrylic Acid Groups for Multicomponent Protein Patterning. Langmuir, 2006, 22, 353-359.	3.5	50
192	Homeostatic Lymphoid Chemokines Synergize with Adhesion Ligands to Trigger T and B Lymphocyte Chemokinesis. Journal of Immunology, 2006, 177, 2340-2348.	0.8	74
193	Immunological synapse arrays: Patterned protein surfaces that modulate immunological synapse structure formation in T cells. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 5700-5705.	7.1	159
194	Î²â€“Amino Ester Polymers Facilitate in Vivo DNA Transfection and Adjuvant Plasmid DNA Immunization. Molecular Therapy, 2005, 12, 164-170.	8.2	52
195	Strategies for Controlling the Planar Arrangement of Block Copolymer Micelles and Inorganic Nanoclusters. Macromolecules, 2005, 38, 10728-10735.	4.8	47
196	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.	5.4	68
197	T cell killing does not require the formation of a stable mature immunological synapse. Nature Immunology, 2004, 5, 524-530.	14.5	496
198	CD4 enhances T cell sensitivity to antigen by coordinating Lck accumulation at the immunological synapse. Nature Immunology, 2004, 5, 791-799.	14.5	228

#	Article	IF	Citations
199	A role for the immunological synapse in lineage commitment of CD4 lymphocytes. Nature, 2004, 431, 527-532.	27.8	169
200	Large Area Two-Dimensional B Cell Arrays for Sensing and Cell-Sorting Applications. Biomacromolecules, 2004, 5, 822-827.	5.4	56
201	Photogenerated Polyelectrolyte Bilayers from an Aqueous-Processible Photoresist for Multicomponent Protein Patterning. Journal of the American Chemical Society, 2004, 126, 9170-9171.	13.7	119
202	Dynamics of Cell Surface Molecules During T Cell Recognition. Annual Review of Biochemistry, 2003, 72, 717-742.	11.1	105
203	Function-specific variations in the immunological synapses formed by cytotoxic T cells. Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 13739-13740.	7.1	8
204	Quantifying signaling-induced reorientation of T cell receptors during immunological synapse formation. Proceedings of the National Academy of Sciences of the United States of America, 2002, 99, 15024-15029.	7.1	54
205	Simulations of Cell-Surface Integrin Binding to Nanoscale-Clustered Adhesion Ligands. Biophysical Journal, 2002, 82, 120-132.	0.5	133
206	Direct observation of ligand recognition by T cells. Nature, 2002, 419, 845-849.	27.8	725
207	Co-regulation of cell adhesion by nanoscale RGD organization and mechanical stimulus. Journal of Cell Science, 2002, 115, 1423-33.	2.0	282
208	Nanoscale Clustering of RGD Peptides at Surfaces Using Comb Polymers. 2. Surface Segregation of Comb Polymers in Polylactide. Biomacromolecules, 2001, 2, 545-556.	5.4	132
209	Nanoscale Clustering of RGD Peptides at Surfaces Using Comb Polymers. 1. Synthesis and Characterization of Comb Thin Films. Biomacromolecules, 2001, 2, 85-94.	5.4	182
210	Contrasting the compatibilizing activity of comb and linear copolymers. Macromolecules, 1994, 27, 720-724.	4.8	48
211	Identification of Highly Cross-Reactive Mimotopes for a Public T Cell Response in Murine Melanoma. Frontiers in Immunology, 0, 13, .	4.8	5