Darrell J Irvine

List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

19,544 207 137 79 h-index g-index citations papers 15.6 229 23,142 7.14 ext. citations avg, IF L-index ext. papers

#	Paper	IF	Citations
207	Mannose-binding lectin and complement mediate follicular localization and enhanced immunogenicity of diverse protein nanoparticle immunogens <i>Cell Reports</i> , 2022 , 38, 110217	10.6	1
206	An adjuvant strategy enabled by modulation of the physical properties of microbial ligands expands antigen immunogenicity <i>Cell</i> , 2022 , 185, 614-629.e21	56.2	7
205	Intratumourally injected alum-tethered cytokines elicit potent and safer local and systemic anticancer immunity <i>Nature Biomedical Engineering</i> , 2022 ,	19	5
204	Structure-guided changes at the V2 apex of HIV-1 clade C trimer enhance elicitation of autologous neutralizing and broad V1V2-scaffold antibodies <i>Cell Reports</i> , 2022 , 38, 110436	10.6	1
203	Immunogenic cell stress and injury versus immunogenic cell death: implications for improving cancer treatment with immune checkpoint blockade <i>Molecular and Cellular Oncology</i> , 2022 , 9, 2039038	3 ^{1.2}	
202	STING agonist delivery by tumour-penetrating PEG-lipid nanodiscs primes robust anticancer immunity. <i>Nature Materials</i> , 2022 , 21, 710-720	27	4
201	Sequential immunization of macaques elicits heterologous neutralizing antibodies targeting the V3-glycan patch of HIV-1 Env. <i>Science Translational Medicine</i> , 2021 , 13, eabk1533	17.5	4
200	Reprogramming NK cells and macrophages via combined antibody and cytokine therapy primes tumors for elimination by checkpoint blockade. <i>Cell Reports</i> , 2021 , 37, 110021	10.6	2
199	A particulate saponin/TLR agonist vaccine adjuvant alters lymph flow and modulates adaptive immunity. <i>Science Immunology</i> , 2021 , 6, eabf1152	28	5
198	The injury response to DNA damage in live tumor cells promotes antitumor immunity. <i>Science Signaling</i> , 2021 , 14, eabc4764	8.8	4
197	Ivermectin converts cold tumors hot and synergizes with immune checkpoint blockade for treatment of breast cancer. <i>Npj Breast Cancer</i> , 2021 , 7, 22	7.8	6
196	Exploiting albumin as a mucosal vaccine chaperone for robust generation of lung-resident memory T cells. <i>Science Immunology</i> , 2021 , 6,	28	11
195	Engineered SARS-CoV-2 receptor binding domain improves immunogenicity in mice and elicits protective immunity in hamsters 2021 ,		10
194	Immunotherapy-induced antibodies to endogenous retroviral envelope glycoprotein confer tumor protection in mice. <i>PLoS ONE</i> , 2021 , 16, e0248903	3.7	0
193	Engineering Strategies for Immunomodulatory Cytokine Therapies - Challenges and Clinical Progress. <i>Advanced Therapeutics</i> , 2021 , 4, 2100035	4.9	7
192	A participant-derived xenograft model of HIV enables long-term evaluation of autologous immunotherapies. <i>Journal of Experimental Medicine</i> , 2021 , 218,	16.6	2
191	Disassembly of HIV envelope glycoprotein trimer immunogens is driven by antibodies elicited via immunization. <i>Science Advances</i> , 2021 , 7,	14.3	9

(2020-2021)

190	In[Vivo Validation of a Reversible Small Molecule-Based Switch for Synthetic Self-Amplifying mRNA Regulation. <i>Molecular Therapy</i> , 2021 , 29, 1164-1173	11.7	4	
189	Surface Plasmon-Enhanced Short-Wave Infrared Fluorescence for Detecting Sub-Millimeter-Sized Tumors. <i>Advanced Materials</i> , 2021 , 33, e2006057	24	4	
188	Morphological Definition of Actin Architecture at the T Cell Immunological Synapse. <i>Journal of the Indian Institute of Science</i> , 2021 , 101, 47-50	2.4		
187	IgG-Engineered Protective Antigen for Cytosolic Delivery of Proteins into Cancer Cells. <i>ACS Central Science</i> , 2021 , 7, 365-378	16.8	3	
186	Disassembly of HIV envelope glycoprotein trimer immunogens is driven by antibodies elicited via immunization 2021 ,		2	
185	Temporal dynamics of intradermal cytokine response to tuberculin in Mycobacterium bovis BCG-vaccinated cattle using sampling microneedles. <i>Scientific Reports</i> , 2021 , 11, 7074	4.9	2	
184	Combined PET and whole-tissue imaging of lymphatic-targeting vaccines in non-human primates. <i>Biomaterials</i> , 2021 , 275, 120868	15.6	4	
183	Evolution of Toll-like receptor 7/8 agonist therapeutics and their delivery approaches: From antiviral formulations to vaccine adjuvants. <i>Advanced Drug Delivery Reviews</i> , 2021 , 175, 113803	18.5	13	
182	Low neoantigen expression and poor T-cell priming underlie early immune escape in colorectal cancer. <i>Nature Cancer</i> , 2021 , 2, 1071-1085	15.4	8	
181	Covalent Functionalization of DNA Origami Virus-like Particles. ACS Nano, 2021 , 15, 14316-14322	16.7	5	
180	Engineered SARS-CoV-2 receptor binding domain improves manufacturability in yeast and immunogenicity in mice. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021 , 118,	11.5	13	
179	STING Activation with the cGAMP-STINGIM Signaling Complex. <i>Bio-protocol</i> , 2021 , 11, e3905	0.9		
178	Phosphate-mediated coanchoring of RBD immunogens and molecular adjuvants to alum potentiates humoral immunity against SARS-CoV-2. <i>Science Advances</i> , 2021 , 7, eabj6538	14.3	3	
177	Pharmacokinetic tuning of protein-antigen fusions enhances the immunogenicity of T-cell vaccines. <i>Nature Biomedical Engineering</i> , 2020 , 4, 636-648	19	23	
176	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	24	
175	Self-assembled cGAMP-STINGIIM signaling complex as a bioinspired platform for cGAMP delivery. <i>Science Advances</i> , 2020 , 6, eaba7589	14.3	17	
174	Shaping humoral immunity to vaccines through antigen-displaying nanoparticles. <i>Current Opinion in Immunology</i> , 2020 , 65, 1-6	7.8	33	
173	Role of nanoscale antigen organization on B-cell activation probed using DNA origami. <i>Nature Nanotechnology</i> , 2020 , 15, 716-723	28.7	101	

172	Controlling timing and location in vaccines. Advanced Drug Delivery Reviews, 2020, 158, 91-115	18.5	55
171	Engineered immunogen binding to alum adjuvant enhances humoral immunity. <i>Nature Medicine</i> , 2020 , 26, 430-440	50.5	80
170	Enhancing cancer immunotherapy with nanomedicine. <i>Nature Reviews Immunology</i> , 2020 , 20, 321-334	36.5	245
169	Cytoskeletal tension actively sustains the migratory T-cell synaptic contact. <i>EMBO Journal</i> , 2020 , 39, e102783	13	33
168	DOCK2 Sets the Threshold for Entry into the Virtual Memory CD8 T Cell Compartment by Negatively Regulating Tonic TCR Triggering. <i>Journal of Immunology</i> , 2020 , 204, 49-57	5.3	4
167	Murine CD8 T-cell functional avidity is stable in vivo but not in vitro: Independence from homologous prime/boost time interval and antigen density. <i>European Journal of Immunology</i> , 2020 , 50, 505-514	6.1	4
166	Multifaceted Effects of Antigen Valency on B Cell Response Composition and Differentiation In[Vivo. <i>Immunity</i> , 2020 , 53, 548-563.e8	32.3	59
165	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	11.5	13
164	Cancer Cell Coating Nanoparticles for Optimal Tumor-Specific Cytokine Delivery. <i>ACS Nano</i> , 2020 , 14, 11238-11253	16.7	15
163	Resistance to PD1 blockade in the absence of metalloprotease-mediated LAG3 shedding. <i>Science Immunology</i> , 2020 , 5,	28	10
162	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,	17.5	18
161	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	15.4	38
160	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	9.5	20
159	Donor cell engineering with GSK3 inhibitor-loaded nanoparticles enhances engraftment after in utero transplantation. <i>Blood</i> , 2019 , 134, 1983-1995	2.2	7
158	Immunogenicity of RNA Replicons Encoding HIV Env Immunogens Designed for Self-Assembly into Nanoparticles. <i>Molecular Therapy</i> , 2019 , 27, 2080-2090	11.7	27
157	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	7.4	39
156	Immunization expands B cells specific to HIV-1 V3 glycan in mice and macaques. <i>Nature</i> , 2019 , 570, 468-	-4 <i>5</i> 634	95
155	Slow Delivery Immunization Enhances HIV Neutralizing Antibody and Germinal Center Responses via Modulation of Immunodominance. <i>Cell</i> , 2019 , 177, 1153-1171.e28	56.2	143

(2018-2019)

154	In vitro evolution of enhanced RNA replicons for immunotherapy. Scientific Reports, 2019, 9, 6932	4.9	15
153	Order of administration of combination cytokine therapies can decouple toxicity from efficacy in syngeneic mouse tumor models. <i>Oncolmmunology</i> , 2019 , 8, e1558678	7.2	7
152	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	16.7	77
151	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, 16473-1647.	8 ^{11.5}	86
150	Anchoring of intratumorally administered cytokines to collagen safely potentiates systemic cancer immunotherapy. <i>Science Translational Medicine</i> , 2019 , 11,	17.5	79
149	A multilamellar nanoliposome stabilized by interlayer hydrogen bonds increases antimalarial drug efficacy. <i>Nanomedicine: Nanotechnology, Biology, and Medicine</i> , 2019 , 22, 102099	6	12
148	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	10.6	27
147	Enhanced CAR-T cell activity against solid tumors by vaccine boosting through the chimeric receptor. <i>Science</i> , 2019 , 365, 162-168	33.3	148
146	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	32.3	96
145	Innate immune recognition of glycans targets HIV nanoparticle immunogens to germinal centers. <i>Science</i> , 2019 , 363, 649-654	33.3	138
144	Amphiphilic nanoparticle delivery enhances the anticancer efficacy of a TLR7 ligand via local immune activation. <i>Biomaterials</i> , 2019 , 190-191, 111-120	15.6	31
143	Structure-Property Relationships of Amphiphilic Nanoparticles That Penetrate or Fuse Lipid Membranes. <i>Bioconjugate Chemistry</i> , 2018 , 29, 1131-1140	6.3	23
142	Nanoparticle anchoring targets immune agonists to tumors enabling anti-cancer immunity without systemic toxicity. <i>Nature Communications</i> , 2018 , 9, 6	17.4	124
141	Enhancing T cell therapy through TCR-signaling-responsive nanoparticle drug delivery. <i>Nature Biotechnology</i> , 2018 , 36, 707-716	44.5	283
140	Enhancement of Peptide Vaccine Immunogenicity by Increasing Lymphatic Drainage and Boosting Serum Stability. <i>Cancer Immunology Research</i> , 2018 , 6, 1025-1038	12.5	30
139	Targeting small molecule drugs to T cells with antibody-directed cell-penetrating gold nanoparticles. <i>Biomaterials Science</i> , 2018 , 7, 113-124	7.4	45
138	Enhancing Humoral Responses Against HIV Envelope Trimers via Nanoparticle Delivery with Stabilized Synthetic Liposomes. <i>Scientific Reports</i> , 2018 , 8, 16527	4.9	52
137	Cell and fluid sampling microneedle patches for monitoring skin-resident immunity. <i>Science Translational Medicine</i> , 2018 , 10,	17.5	81

136	Combined HDAC and BET Inhibition Enhances Melanoma Vaccine Immunogenicity and Efficacy. <i>Journal of Immunology</i> , 2018 , 201, 2744-2752	5.3	8
135	Synthetic Charge-Invertible Polymer for Rapid and Complete Implantation of Layer-by-Layer Microneedle Drug Films for Enhanced Transdermal Vaccination. <i>ACS Nano</i> , 2018 , 12, 10272-10280	16.7	56
134	Material aid for vaccines. <i>Nature Materials</i> , 2018 , 17, 472-473	27	9
133	Structurally Programmed Assembly of Translation Initiation Nanoplex for Superior mRNA Delivery. <i>ACS Nano</i> , 2017 , 11, 2531-2544	16.7	59
132	High-throughput quantitation of inorganic nanoparticle biodistribution at the single-cell level using mass cytometry. <i>Nature Communications</i> , 2017 , 8, 14069	17.4	74
131	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	16.7	84
130	Nanoscience and Nanotechnology Cross Borders. ACS Nano, 2017, 11, 1123-1126	16.7	3
129	Delivering safer immunotherapies for cancer. Advanced Drug Delivery Reviews, 2017, 114, 79-101	18.5	154
128	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	32.3	204
127	Radiation-enhanced delivery of systemically administered amphiphilic-CpG oligodeoxynucleotide. <i>Journal of Controlled Release</i> , 2017 , 266, 248-255	11.7	18
126	Roles for Innate Immunity in Combination Immunotherapies. Cancer Research, 2017, 77, 5215-5221	10.1	54
125	T cell-targeting nanoparticles focus delivery of immunotherapy to improve antitumor immunity. <i>Nature Communications</i> , 2017 , 8, 1747	17.4	240
124	Immunogenic Cell Death Amplified by Co-localized Adjuvant Delivery for Cancer Immunotherapy. <i>Nano Letters</i> , 2017 , 17, 7387-7393	11.5	139
123	Synthetic Lift-off Polymer beneath Layer-by-Layer Films for Surface-Mediated Drug Delivery. <i>ACS Macro Letters</i> , 2017 , 6, 1320-1324	6.6	8
122	Smart Radiation Therapy Biomaterials. <i>International Journal of Radiation Oncology Biology Physics</i> , 2017 , 97, 624-637	4	30
121	Synthesis of Lymph Node-Targeting Adjuvants. <i>Methods in Molecular Biology</i> , 2017 , 1494, 145-152	1.4	4
120	Antigen recognition-triggered drug delivery mediated by nanocapsule-functionalized cytotoxic T-cells. <i>Biomaterials</i> , 2017 , 117, 44-53	15.6	48
119	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	50.5	302

118	A Receptor for All Occasions. <i>Cell</i> , 2016 , 164, 599-600	56.2	4
117	A DOCK8-WIP-WASp complex links T cell receptors to the actin cytoskeleton. <i>Journal of Clinical Investigation</i> , 2016 , 126, 3837-3851	15.9	70
116	Beyond antigens and adjuvants: formulating future vaccines. <i>Journal of Clinical Investigation</i> , 2016 , 126, 799-808	15.9	216
115	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	7.6	99
114	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. <i>Journal of Virology</i> , 2016 , 90, 8875-90	6.6	12
113	Targeting dendritic cells to accelerate T-cell activation overcomes a bottleneck in tuberculosis vaccine efficacy. <i>Nature Communications</i> , 2016 , 7, 13894	17.4	66
112	Temporally Programmed CD8IDC Activation Enhances Combination Cancer Immunotherapy. <i>Cell Reports</i> , 2016 , 17, 2503-2511	10.6	32
111	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	11.5	164
110	HIV Vaccine Design to Target Germline Precursors of Glycan-Dependent Broadly Neutralizing Antibodies. <i>Immunity</i> , 2016 , 45, 483-496	32.3	232
109	Influence of the glycocalyx and plasma membrane composition on amphiphilic gold nanoparticle association with erythrocytes. <i>Nanoscale</i> , 2015 , 7, 11420-32	7.7	42
108	Synthetic Nanoparticles for Vaccines and Immunotherapy. <i>Chemical Reviews</i> , 2015 , 115, 11109-46	68.1	502
107	Engineering New Approaches to Cancer Vaccines. Cancer Immunology Research, 2015, 3, 836-43	12.5	42
106	Nanoparticulate STING agonists are potent lymph node-targeted vaccine adjuvants. <i>Journal of Clinical Investigation</i> , 2015 , 125, 2532-46	15.9	235
105	Guiding principles in the design of molecular bioconjugates for vaccine applications. <i>Bioconjugate Chemistry</i> , 2015 , 26, 791-801	6.3	62
104	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	24.3	114
103	Biomaterial Strategies for Immunomodulation. <i>Annual Review of Biomedical Engineering</i> , 2015 , 17, 317	-4 9 2	110
102	Big thinking for adjuvants. <i>Nature Biotechnology</i> , 2015 , 33, 1146-8	44.5	14
101	CD4+ T cell-dependent and CD4+ T cell-independent cytokine-chemokine network changes in the immune responses of HIV-infected individuals. <i>Science Signaling</i> , 2015 , 8, ra104	8.8	14

100	Active targeting of chemotherapy to disseminated tumors using nanoparticle-carrying T cells. <i>Science Translational Medicine</i> , 2015 , 7, 291ra94	17.5	186
99	Microfluidic squeezing for intracellular antigen loading in polyclonal B-cells as cellular vaccines. <i>Scientific Reports</i> , 2015 , 5, 10276	4.9	61
98	Manipulating the selection forces during affinity maturation to generate cross-reactive HIV antibodies. <i>Cell</i> , 2015 , 160, 785-797	56.2	125
97	Liposomal vaccines incorporating molecular adjuvants and intrastructural T-cell help promote the immunogenicity of HIV membrane-proximal external region peptides. <i>Vaccine</i> , 2015 , 33, 861-8	4.1	61
96	Actin foci facilitate activation of the phospholipase C-lin primary T lymphocytes via the WASP pathway. <i>ELife</i> , 2015 , 4,	8.9	145
95	Structure-based programming of lymph-node targeting in molecular vaccines. <i>Nature</i> , 2014 , 507, 519-2	250.4	582
94	Implantable silk composite microneedles for programmable vaccine release kinetics and enhanced immunogenicity in transcutaneous immunization. <i>Advanced Healthcare Materials</i> , 2014 , 3, 47-58	10.1	110
93	Antigen delivery by lipid-enveloped PLGA microparticle vaccines mediated by in situ vesicle shedding. <i>Biomacromolecules</i> , 2014 , 15, 2475-81	6.9	29
92	Enhancing radiotherapy by lipid nanocapsule-mediated delivery of amphiphilic gold nanoparticles to intracellular membranes. <i>ACS Nano</i> , 2014 , 8, 8992-9002	16.7	82
91	Design of lipid nanocapsule delivery vehicles for multivalent display of recombinant Env trimers in HIV vaccination. <i>Bioconjugate Chemistry</i> , 2014 , 25, 1470-8	6.3	36
90	High avidity CD8+ T cells efficiently eliminate motile HIV-infected targets and execute a locally focused program of anti-viral function. <i>PLoS ONE</i> , 2014 , 9, e87873	3.7	25
89	Histone deacetylase inhibitors impair the elimination of HIV-infected cells by cytotoxic T-lymphocytes. <i>PLoS Pathogens</i> , 2014 , 10, e1004287	7.6	151
88	Cell Engineering with Glycogen Synthase Kinase-3 Beta Inhibitor-Loaded Synthetic Nanoparticles Enhances Hematopoietic Engraftment of Bone Marrow Mononuclear Cells Following in Utero Transplantation. <i>Blood</i> , 2014 , 124, 2414-2414	2.2	
87	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, 4060-7	11.5	192
86	Engineering synthetic vaccines using cues from natural immunity. <i>Nature Materials</i> , 2013 , 12, 978-90	27	403
85	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, 31888-901	5.4	33
84	Drug Delivery: Composite Dissolving Microneedles for Coordinated Control of Antigen and Adjuvant Delivery Kinetics in Transcutaneous Vaccination (Adv. Funct. Mater. 2/2013). <i>Advanced Functional Materials</i> , 2013 , 23, 138-138	15.6	
83	Synergistic antitumor activity from two-stage delivery of targeted toxins and endosome-disrupting nanoparticles. <i>Biomacromolecules</i> , 2013 , 14, 1093-102	6.9	15

(2011-2013)

82	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, 1547-58	10.1	146
81	Rapid conformational epitope mapping of anti-gp120 antibodies with a designed mutant panel displayed on yeast. <i>Journal of Molecular Biology</i> , 2013 , 425, 444-56	6.5	52
80	In vivo targeting of adoptively transferred T-cells with antibody- and cytokine-conjugated liposomes. <i>Journal of Controlled Release</i> , 2013 , 172, 426-35	11.7	94
79	Vaccine delivery with microneedle skin patches in nonhuman primates. <i>Nature Biotechnology</i> , 2013 , 31, 1082-5	44.5	72
78	Polymer multilayer tattooing for enhanced DNAD accination. <i>Nature Materials</i> , 2013 , 12, 367-76	27	206
77	Composite dissolving microneedles for coordinated control of antigen and adjuvant delivery kinetics in transcutaneous vaccination. <i>Advanced Functional Materials</i> , 2013 , 23, 161-172	15.6	114
76	Koch Institute Symposium on Cancer Immunology and Immunotherapy. <i>Cancer Immunology Research</i> , 2013 , 1, 217-222	12.5	O
75	Generation of effector memory T cell-based mucosal and systemic immunity with pulmonary nanoparticle vaccination. <i>Science Translational Medicine</i> , 2013 , 5, 204ra130	17.5	125
74	Enhanced phagocytic activity of HIV-specific antibodies correlates with natural production of immunoglobulins with skewed affinity for FcR2a and FcR2b. <i>Journal of Virology</i> , 2013 , 87, 5468-76	6.6	72
73	Synapse-directed delivery of immunomodulators using T-cell-conjugated nanoparticles. <i>Biomaterials</i> , 2012 , 33, 5776-87	15.6	141
72	Robust IgG responses to nanograms of antigen using a biomimetic lipid-coated particle vaccine. Journal of Controlled Release, 2012 , 157, 354-65	11.7	79
71	Releasable layer-by-layer assembly of stabilized lipid nanocapsules on microneedles for enhanced transcutaneous vaccine delivery. <i>ACS Nano</i> , 2012 , 6, 8041-51	16.7	145
70	Cellular barcodes for efficiently profiling single-cell secretory responses by microengraving. <i>Analytical Chemistry</i> , 2012 , 84, 10531-6	7.8	43
69	Engineering nano- and microparticles to tune immunity. <i>Advanced Materials</i> , 2012 , 24, 3724-46	24	298
68	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> , 2012 , 109, 1080-5	11.5	250
67	Antigen-displaying lipid-enveloped PLGA nanoparticles as delivery agents for a Plasmodium vivax malaria vaccine. <i>PLoS ONE</i> , 2012 , 7, e31472	3.7	112
66	In chemotaxing fibroblasts, both high-fidelity and weakly biased cell movements track the localization of PI3K signaling. <i>Biophysical Journal</i> , 2011 , 100, 1893-901	2.9	24
65	T cell receptor internalization from the immunological synapse is mediated by TC21 and RhoG GTPase-dependent phagocytosis. <i>Immunity</i> , 2011 , 35, 208-22	32.3	122

64	Interbilayer-crosslinked multilamellar vesicles as synthetic vaccines for potent humoral and cellular immune responses. <i>Nature Materials</i> , 2011 , 10, 243-51	27	426
63	A robust, high-throughput assay to determine the phagocytic activity of clinical antibody samples. <i>Journal of Immunological Methods</i> , 2011 , 366, 8-19	2.5	266
62	Particulate vaccines: on the quest for optimal delivery and immune response. <i>Drug Discovery Today</i> , 2011 , 16, 569-82	8.8	227
61	In vitro and in vivo mRNA delivery using lipid-enveloped pH-responsive polymer nanoparticles. <i>Molecular Pharmaceutics</i> , 2011 , 8, 774-87	5.6	184
60	Bio-inspired, bioengineered and biomimetic drug delivery carriers. <i>Nature Reviews Drug Discovery</i> , 2011 , 10, 521-35	64.1	866
59	Induction of potent anti-tumor responses while eliminating systemic side effects via liposome-anchored combinatorial immunotherapy. <i>Biomaterials</i> , 2011 , 32, 5134-47	15.6	133
58	Membrane Anchored Immunostimulatory Oligonucleotides for In Vivo Cell Modification and Localized Immunotherapy. <i>Angewandte Chemie</i> , 2011 , 123, 7190-7193	3.6	17
57	Oligonucleotide Delivery by Cell-Penetrating Striped[Nanoparticles. <i>Angewandte Chemie</i> , 2011 , 123, 12520-12523	3.6	11
56	Membrane anchored immunostimulatory oligonucleotides for in vivo cell modification and localized immunotherapy. <i>Angewandte Chemie - International Edition</i> , 2011 , 50, 7052-5	16.4	96
55	Oligonucleotide delivery by cell-penetrating "striped" nanoparticles. <i>Angewandte Chemie - International Edition</i> , 2011 , 50, 12312-12315	16.4	66
54	Engineering chemoattractant gradients using chemokine-releasing polysaccharide microspheres. <i>Biomaterials</i> , 2011 , 32, 4903-13	15.6	53
53	Enhancing Cell therapies from the Outside In: Cell Surface Engineering Using Synthetic Nanomaterials. <i>Nano Today</i> , 2011 , 6, 309-325	17.9	181
52	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, 11530-5	11.5	153
51	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, 15745-50	11.5	177
50	Signaling thresholds govern heterogeneity in IL-7-receptor-mediated responses of nalle CD8(+) T cells. <i>Immunology and Cell Biology</i> , 2011 , 89, 581-94	5	51
49	Regulation of thymocyte positive selection and motility by GIT2. <i>Nature Immunology</i> , 2010 , 11, 503-11	19.1	39
48	Therapeutic cell engineering with surface-conjugated synthetic nanoparticles. <i>Nature Medicine</i> , 2010 , 16, 1035-41	50.5	489
47	Wound Healing Versus Regeneration: Role of the Tissue Environment in Regenerative Medicine. <i>MRS Bulletin</i> , 2010 , 35, 597	3.2	60

(2007-2010)

46	Freely suspended cellular "backpacks" lead to cell aggregate self-assembly. <i>Biomacromolecules</i> , 2010 , 11, 1826-32	6.9	55
45	Nano-layered microneedles for transcutaneous delivery of polymer nanoparticles and plasmid DNA. <i>Advanced Materials</i> , 2010 , 22, 4851-6	24	129
44	Control of T helper cell differentiation through cytokine receptor inclusion in the immunological synapse. <i>Journal of Experimental Medicine</i> , 2009 , 206, 877-92	16.6	44
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10	Nanoscale clustering of RGD peptides at surfaces using comb polymers. 2. Surface segregation of comb polymers in polylactide. <i>Biomacromolecules</i> , 2001 , 2, 545-56	6.9	127
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6	Role of nanoscale antigen organization on B-cell activation probed using DNA origami		3
5	Targeting HIV Env immunogens to B cell follicles in non-human primates through immune complex or protein nanoparticle formulations		2
4	Controlling wireframe DNA origami nuclease degradation with minor groove binders		1
3	Broadly neutralizing antibodies to SARS-related viruses can be readily induced in rhesus macaques		4
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