Robert A Seder

List of Publications by Year
in descending order

111 papers	19,887 citations	20797 60 h-index	22147 113 g-index
132 all docs	132 docs citations	132 times ranked	22052 citing authors

#	Article	IF	Citations
1	Protection from SARS-CoV-2 Delta one year after mRNA-1273 vaccination in rhesus macaques coincides with anamnestic antibody response in the lung. Cell, 2022, 185, 113-130.e15.	13.5	64
2	SARS-CoV-2 Omicron virus causes attenuated disease in mice and hamsters. Nature, 2022, 603, 687-692.	13.7	475
3	The light chain of the L9 antibody is critical for binding circumsporozoite protein minor repeats and preventing malaria. Cell Reports, 2022, 38, 110367.	2.9	11
4	Defining the risk of SARS-CoV-2 variants on immune protection. Nature, 2022, 605, 640-652.	13.7	117
5	mRNA-1273 or mRNA-Omicron boost in vaccinated macaques elicits similar B cell expansion, neutralizing responses, and protection from Omicron. Cell, 2022, 185, 1556-1571.e18.	13.5	179
6	mRNA-1273 vaccination protects against SARS-CoV-2â€“elicited lung inflammation in nonhuman primates. JCI Insight, 2022, 7, .	2.3	3
7	Highly protective antimalarial antibodies via precision library generation and yeast display screening. Journal of Experimental Medicine, 2022, 219, .	4.2	9
8	Intravenous nanoparticle vaccination generates stem-like TCF1+ neoantigen-specific CD8+ T cells. Nature Immunology, 2021, 22, 41-52.	7.0	110
9	Atypical B cells are part of an alternative lineage of B cells that participates in responses to vaccination and infection in humans. Cell Reports, 2021, 34, 108684.	2.9	134
10	T Cells Specific for a Mycobacterial Glycolipid Expand after Intravenous Bacillus Calmetteâ€“GuÃ©rin Vaccination. Journal of Immunology, 2021, 206, 1240-1250.	0.4	18
11	Enhancing durability of CIS43 monoclonal antibody by Fc mutation or AAV delivery for malaria prevention. JCI Insight, 2021, 6, .	2.3	25
12	Design of Alphavirus Virus-Like Particles Presenting Circumsporozoite Junctional Epitopes That Elicit Protection against Malaria. Vaccines, 2021, 9, 272.	2.1	16
13	Serum Neutralizing Activity Elicited by mRNA-1273 Vaccine. New England Journal of Medicine, 2021, 384, 1468-1470.	13.9	417
14	Neutralizing antibody vaccine for pandemic and pre-emergent coronaviruses. Nature, 2021, 594, 553-559.	13.7	199
15	Fab-dimerized glycan-reactive antibodies are a structural category of natural antibodies. Cell, 2021, 184, 2955-2972.e25.	13.5	57
16	Functional human IgA targets a conserved site on malaria sporozoites. Science Translational Medicine, 2021, 13, .	5.8	21
17	Protective antibodies elicited by SARS-CoV-2 spike protein vaccination are boosted in the lung after challenge in nonhuman primates. Science Translational Medicine, 2021, 13, .	5.8	56
18	SARS-CoV-2 variant prediction and antiviral drug design are enabled by RBD in vitro evolution. Nature Microbiology, 2021, 6, 1188-1198.	5.9	314

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19	InÂvitro and inÂvivo functions of SARS-CoV-2 infection-enhancing and neutralizing antibodies. Cell, 2021, 184, 4203-4219.e32.	13.5	228
20	A Monoclonal Antibody for Malaria Prevention. New England Journal of Medicine, 2021, 385, 803-814.	13.9	95
21	mRNA-1273 protects against SARS-CoV-2 beta infection in nonhuman primates. Nature Immunology, 2021, 22, 1306-1315.	7.0	57
22	Immune correlates of protection by mRNA-1273 vaccine against SARS-CoV-2 in nonhuman primates. Science, 2021, 373, eabj0299.	6.0	244
23	Safety, immunogenicity and efficacy of PfSPZ Vaccine against malaria in infants in western Kenya: a double-blind, randomized, placebo-controlled phase 2 trial. Nature Medicine, 2021, 27, 1636-1645.	15.2	47
24	Protection against SARS-CoV-2 Beta variant in mRNA-1273 vaccineâ€“boosted nonhuman primates. Science, 2021, 374, 1343-1353.	6.0	83
25	A SARS-CoV-2 spike ferritin nanoparticle vaccine protects hamsters against Alpha and Beta virus variant challenge. Npj Vaccines, 2021, 6, 129.	2.9	47
26	Variant SARS-CoV-2 mRNA vaccines confer broad neutralization as primary or booster series in mice. Vaccine, 2021, 39, 7394-7400.	1.7	63
27	The P. falciparum CSP repeat region contains three distinct epitopes required for protection by antibodies in vivo. PLoS Pathogens, 2021, 17, e1010042.	2.1	21
28	Robust IgM responses following intravenous vaccination with Bacille Calmetteâ€“GuÃ©rin associate with prevention of Mycobacterium tuberculosis infection in macaques. Nature Immunology, 2021, 22, 1515-1523.	7.0	55
29	Vaccination in a humanized mouse model elicits highly protective PfCSP-targeting anti-malarial antibodies. Immunity, 2021, 54, 2859-2876.e7.	6.6	19
30	Protective effects of combining monoclonal antibodies and vaccines against the Plasmodium falciparum circumsporozoite protein. PLoS Pathogens, 2021, 17, e1010133.	2.1	20
31	Safety, Tolerability, and Immunogenicity of Plasmodium falciparum Sporozoite Vaccine Administered by Direct Venous Inoculation to Infants and Young Children: Findings From an Age De-escalation, Dose-Escalation, Double-blind, Randomized Controlled Study in Western Kenya. Clinical Infectious Diseases, 2020, 71, 1063-1071.	2.9	25
32	Prevention of tuberculosis in macaques after intravenous BCG immunization. Nature, 2020, 577, 95-102.	13.7	394
33	Increase of Dose Associated With Decrease in Protection Against Controlled Human Malaria Infection by PfSPZ Vaccine in Tanzanian Adults. Clinical Infectious Diseases, 2020, 71, 2849-2857.	2.9	46
34	A Potent Anti-Malarial Human Monoclonal Antibody Targets Circumsporozoite Protein Minor Repeats and Neutralizes Sporozoites in the Liver. Immunity, 2020, 53, 733-744.e8.	6.6	99
35	Antibody Feedback Limits the Expansion of B Cell Responses to Malaria Vaccination but Drives Diversification of the Humoral Response. Cell Host and Microbe, 2020, 28, 572-585.e7.	5.1	87
36	<scp>OMIPâ€067</scp>: 28â€Color Flow Cytometry Panel to Evaluate Human Tâ€Cell Phenotype and Function. Cytometry Part A: the Journal of the International Society for Analytical Cytology, 2020, 97, 1032-1036.	1.1	10

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37	Evaluation of the mRNA-1273 Vaccine against SARS-CoV-2 in Nonhuman Primates. New England Journal of Medicine, 2020, 383, 1544-1555.	13.9	936
38	Stochastic Expansions Maintain the Clonal Stability of CD8+ T Cell Populations Undergoing Memory Inflation Driven by Murine Cytomegalovirus. Journal of Immunology, 2020, 204, 112-121.	0.4	21
39	Evaluation of heterologous prime-boost vaccination strategies using chimpanzee adenovirus and modified vaccinia virus for TB subunit vaccination in rhesus macaques. Npj Vaccines, 2020, 5, 39.	2.9	13
40	Caregiver and community perceptions and experiences participating in an infant malaria prevention trial of PfSPZ Vaccine administered by direct venous inoculation: a qualitative study in Siaya County, western Kenya. Malaria Journal, 2020, 19, 226.	0.8	6
41	Peptideâ€"TLR-7/8a conjugate vaccines chemically programmed for nanoparticle self-assembly enhance CD8 T-cell immunity to tumor antigens. Nature Biotechnology, 2020, 38, 320-332.	9.4	210
42	Monocytes Acquire the Ability to Prime Tissue-Resident T Cells via IL-10-Mediated TGF-Î² Release. Cell Reports, 2019, 28, 1127-1135.e4.	2.9	45
43	Star nanoparticles delivering HIV-1 peptide minimal immunogens elicit near-native envelope antibody responses in nonhuman primates. PLoS Biology, 2019, 17, e3000328.	2.6	33
44	Boosting BCG with proteins or rAd5 does not enhance protection against tuberculosis in rhesus macaques. Npj Vaccines, 2019, 4, 21.	2.9	44
45	Impact of Polymer-TLR-7/8 Agonist (Adjuvant) Morphology on the Potency and Mechanism of CD8 T Cell Induction. Biomacromolecules, 2019, 20, 854-870.	2.6	32
46	Bystander responses impact accurate detection of murine and human antigen-specific CD8+ T cells. Journal of Clinical Investigation, 2019, 129, 3894-3908.	3.9	29
47	Safety and Differential Antibody and T-Cell Responses to the Plasmodium falciparum Sporozoite Malaria Vaccine, PfSPZ Vaccine, by Age in Tanzanian Adults, Adolescents, Children, and Infants. American Journal of Tropical Medicine and Hygiene, 2019, 100, 1433-1444.	0.6	61
48	A human monoclonal antibody prevents malaria infection by targeting a new site of vulnerability on the parasite. Nature Medicine, 2018, 24, 408-416.	15.2	235
49	Safety, Immunogenicity, and Protective Efficacy against Controlled Human Malaria Infection of Plasmodium falciparum Sporozoite Vaccine in Tanzanian Adults. American Journal of Tropical Medicine and Hygiene, 2018, 99, 338-349.	0.6	114
50	Malaria prevention: from immunological concepts to effective vaccines and protective antibodies. Nature Immunology, 2018, 19, 1199-1211.	7.0	137
51	Malaria Vaccines: Recent Advances and New Horizons. Cell Host and Microbe, 2018, 24, 43-56.	5.1	234
52	Attenuated PfSPZ Vaccine induces strain-transcending T cells and durable protection against heterologous controlled human malaria infection. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 2711-2716.	3.3	201
53	Sterile protection against human malaria by chemoattenuated PfSPZ vaccine. Nature, 2017, 542, 445-449.	13.7	332
54	Humoral protection against mosquito bite-transmitted Plasmodium falciparum infection in humanized mice. Npj Vaccines, 2017, 2, 27.	2.9	44

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55	Albumin/vaccine nanocomplexes that assemble in vivo for combination cancer immunotherapy. Nature Communications, 2017, 8, 1954.	5.8	237
56	Innate transcriptional effects by adjuvants on the magnitude, quality, and durability of HIV envelope responses in NHPs. Blood Advances, 2017, 1, 2329-2342.	2.5	90
57	Protection against malaria at 1 year and immune correlates following PfSPZ vaccination. Nature Medicine, 2016, 22, 614-623.	15.2	313
58	Thermoresponsive Polymer Nanoparticles Co-deliver RSV F Trimers with a TLR-7/8 Adjuvant. Bioconjugate Chemistry, 2016, 27, 2372-2385.	1.8	44
59	Quality and quantity of T _{FH} cells are critical for broad antibody development in SHIV _{AD8} infection. Science Translational Medicine, 2015, 7, 298ra120.	5.8	119
60	Human Anti-CD40 Antibody and Poly IC:LC Adjuvant Combination Induces Potent T Cell Responses in the Lung of Nonhuman Primates. Journal of Immunology, 2015, 195, 1015-1024.	0.4	36
61	Analysis of immunoglobulin transcripts and hypermutation following SHIVAD8 infection and protein-plus-adjuvant immunization. Nature Communications, 2015, 6, 6565.	5.8	77
62	Combination recombinant simian or chimpanzee adenoviral vectors for vaccine development. Vaccine, 2015, 33, 7344-7351.	1.7	16
63	Progress with Plasmodium falciparum sporozoite (PfSPZ)-based malaria vaccines. Vaccine, 2015, 33, 7452-7461.	1.7	152
64	In vivo characterization of the physicochemical properties of polymer-linked TLR agonists that enhance vaccine immunogenicity. Nature Biotechnology, 2015, 33, 1201-1210.	9.4	362
65	Antigen expression determines adenoviral vaccine potency independent of IFN and STING signaling. Journal of Clinical Investigation, 2015, 125, 1129-1146.	3.9	97
66	A nonhuman primate toxicology and immunogenicity study evaluating aerosol delivery of AERAS-402/Ad35 vaccine. Human Vaccines and Immunotherapeutics, 2014, 10, 2199-2210.	1.4	25
67	Progress with PfSPZ Vaccine, a radiation attenuated Plasmodium falciparum sporozoite vaccine. Malaria Journal, 2014, 13, .	0.8	0
68	Aerosol Vaccination with AERAS-402 Elicits Robust Cellular Immune Responses in the Lungs of Rhesus Macaques but Fails To Protect against High-Dose Mycobacterium tuberculosis Challenge. Journal of Immunology, 2014, 193, 1799-1811.	0.4	87
69	Dendritic cell-targeted vaccines â€" hope or hype?. Nature Reviews Immunology, 2014, 14, 705-711.	10.6	189
70	Chemical cross-linking of HIV-1 Env for direct TLR7/8 ligand conjugation compromises recognition of conserved antigenic determinants. Virology, 2013, 446, 56-65.	1.1	15
71	Protection Against Malaria by Intravenous Immunization with a Nonreplicating Sporozoite Vaccine. Science, 2013, 341, 1359-1365.	6.0	686
72	Full-Length Plasmodium falciparum Circumsporozoite Protein Administered with Long-Chain Poly(IÂ·C) or the Toll-Like Receptor 4 Agonist Glucopyranosyl Lipid Adjuvant-Stable Emulsion Elicits Potent Antibody and CD4⁺T Cell Immunity and Protection in Mice. Infection and Immunity, 2013, 81, 789-800.	1.0	74

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73	Comparative Analysis of the Magnitude, Quality, Phenotype, and Protective Capacity of Simian Immunodeficiency Virus Gag-Specific CD8+ T Cells following Human-, Simian-, and Chimpanzee-Derived Recombinant Adenoviral Vector Immunization. Journal of Immunology, 2013, 190, 2720-2735.	0.4	99
74	Polyinosinic-Polycytidylic Acid Is the Most Effective TLR Adjuvant for SIV Gag Proteinâ€"Induced T Cell Responses In Nonhuman Primates. Journal of Immunology, 2013, 190, 4103-4115.	0.4	49
75	Coadministration of Polyinosinic:Polycytidylic Acid and Immunostimulatory Complexes Modifies Antigen Processing in Dendritic Cell Subsets and Enhances HIV Gag-Specific T Cell Immunity. Journal of Immunology, 2013, 191, 5085-5096.	0.4	19
76	Type I IFN Induced by Adenovirus Serotypes 28 and 35 Has Multiple Effects on T Cell Immunogenicity. Journal of Immunology, 2012, 188, 6109-6118.	0.4	44
77	SIV infection of rhesus macaques results in dysfunctional T- and B-cell responses to neo and recall Leishmania major vaccination. Blood, 2011, 118, 5803-5812.	0.6	45
78	Human and rhesus plasmacytoid dendritic cell and B-cell responses to Toll-like receptor stimulation. Immunology, 2011, 134, 257-269.	2.0	43
79	Rapid SIV Env-specific mucosal and serum antibody induction augments cellular immunity in protecting immunized, elite-controller macaques against high dose heterologous SIV challenge. Virology, 2011, 411, 87-102.	1.1	22
80	Immunization with HIV Gag targeted to dendritic cells followed by recombinant New York vaccinia virus induces robust T-cell immunity in nonhuman primates. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 7131-7136.	3.3	121
81	Vaccine Adjuvants: Putting Innate Immunity to Work. Immunity, 2010, 33, 492-503.	6.6	1,522
82	IL-10 production differentially influences the magnitude, quality, and protective capacity of Th1 responses depending on the vaccine platform. Journal of Experimental Medicine, 2010, 207, 1421-1433.	4.2	81
83	Genetic immunization in the lung induces potent local and systemic immune responses. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 22213-22218.	3.3	65
84	CD8+ T Cell Responses following Replication-Defective Adenovirus Serotype 5 Immunization Are Dependent on CD11c+ Dendritic Cells but Show Redundancy in Their Requirement of TLR and Nucleotide-Binding Oligomerization Domain-Like Receptor Signaling. Journal of Immunology, 2010, 185, 1513-1521.	0.4	66
85	Poly(I:C) is an effective adjuvant for antibody and multi-functional CD4+ T cell responses to Plasmodium falciparum circumsporozoite protein (CSP) and Î±DEC-CSP in non human primates. Vaccine, 2010, 28, 7256-7266.	1.7	119
86	Tuberculosis Subunit Vaccination Provides Long-Term Protective Immunity Characterized by Multifunctional CD4 Memory T Cells. Journal of Immunology, 2009, 182, 8047-8055.	0.4	379
87	T-cell quality in memory and protection: implications for vaccine design. Nature Reviews Immunology, 2008, 8, 247-258.	10.6	1,410
88	IFN-Î³ Mediates the Death of Th1 Cells in a Paracrine Manner. Journal of Immunology, 2008, 180, 842-849.	0.4	22
89	Multifunctional TH1 cells define a correlate of vaccine-mediated protection against Leishmania major. Nature Medicine, 2007, 13, 843-850.	15.2	1,272
90	Th1 memory: implications for vaccine development. Immunological Reviews, 2006, 211, 58-66.	2.8	98

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91	Toll-like receptor agonists influence the magnitude and quality of memory T cell responses after prime-boost immunization in nonhuman primates. Journal of Experimental Medicine, 2006, 203, 1249-1258.	4.2	270
92	Hostâ€“pathogen interactions in the 21st century. Current Opinion in Immunology, 2005, 17, 335-337.	2.4	3
93	HIV Gag protein conjugated to a Toll-like receptor 7/8 agonist improves the magnitude and quality of Th1 and CD8+ T cell responses in nonhuman primates. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 15190-15194.	3.3	323
94	The role of cytokine DNAs as vaccine adjuvants for optimizing cellular immune responses. Immunological Reviews, 2004, 202, 266-274.	2.8	96
95	Memory may not need reminding. Nature Medicine, 2004, 10, 1045-1047.	15.2	6
96	Immunological and pathological evaluation of rhesus macaques infected with Leishmania major. Experimental Parasitology, 2003, 103, 160-168.	0.5	13
97	Similarities and differences in CD4+ and CD8+ effector and memory T cell generation. Nature Immunology, 2003, 4, 835-842.	7.0	740
98	CpG Oligodeoxynucleotides as Vaccine Adjuvants in Primates. Journal of Immunology, 2002, 168, 1659-1663.	0.4	184
99	Vaccination with Heat-killed Leishmania Antigen or Recombinant Leishmanial Protein and CpG Oligodeoxynucleotides Induces Long-Term Memory CD4+and CD8+T Cell Responses and Protection Against Leishmania major Infection. Journal of Experimental Medicine, 2002, 195, 1565-1573.	4.2	162
100	Distinct lineages of TH1 cells have differential capacities for memory cell generation in vivo. Nature Immunology, 2002, 3, 852-858.	7.0	258
101	The Potency and Durability of DNA- and Protein-Based Vaccines Against Leishmania major Evaluated Using Low-Dose, Intradermal Challenge. Journal of Immunology, 2001, 166, 5122-5128.	0.4	131
102	Cytokine regulation of IL-12 receptor Î²2 expression: differential effects on human T and NK cells. European Journal of Immunology, 2000, 30, 1364-1374.	1.6	63
103	Vaccines against intracellular infections requiring cellular immunity. Nature, 2000, 406, 793-798.	13.7	334
104	Requirements for the Maintenance of Th1 Immunity In Vivo Following DNA Vaccination: A Potential Immunoregulatory Role for CD8+ T Cells. Journal of Immunology, 2000, 165, 915-924.	0.4	132
105	DNA Vaccines: Immunology, Application, and Optimization. Annual Review of Immunology, 2000, 18, 927-974.	9.5	1,104
106	Vaccine requirements for sustained cellular immunity to an intracellular parasitic infection. Nature Medicine, 1998, 4, 1409-1415.	15.2	223
107	Are Differentiated Human T Helper Cells Reversible?. International Archives of Allergy and Immunology, 1997, 113, 163-166.	0.9	7
108	Vaccination with DNA Encoding the Immunodominant LACK Parasite Antigen Confers Protective Immunity to Mice Infected with Leishmania major. Journal of Experimental Medicine, 1997, 186, 1137-1147.	4.2	348

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109	Regulation of transforming growth factor-Î² production by interleukin-12. European Journal of Immunology, 1997, 27, 1213-1220.	1.6	73
110	FcÎµ receptor-positive cells are a major source of antigen-induced interleukin-4 in spleens of mice infected withSchistosoma mansoni. European Journal of Immunology, 1993, 23, 1910-1916.	1.6	54
111	Increased frequency of interleukin 4-producing T cells as a result of polyclonal priming. Use of a single-cell assay to detect interleukin 4-producing cells. European Journal of Immunology, 1991, 21, 1241-1247.	1.6	41