Kevin O Saunders

List of Publications by Year
in descending order

75 papers	5,213 citations	117625 34 h-index	110387 64 g-index
94 all docs	94 docs citations	94 times ranked	6919 citing authors

#	Article	IF	Citations
1	Nucleoside-modified mRNA vaccines induce potent T follicular helper and germinal center B cell responses. Journal of Experimental Medicine, 2018, 215, 1571-1588.	8.5	366
2	Effect of natural mutations of SARS-CoV-2 on spike structure, conformation, and antigenicity. Science, 2021, 373, .	12.6	318
3	A Single Immunization with Nucleoside-Modified mRNA Vaccines Elicits Strong Cellular and Humoral Immune Responses against SARS-CoV-2 in Mice. Immunity, 2020, 53, 724-732.e7.	14.3	267
4	InÂvitro and inÂvivo functions of SARS-CoV-2 infection-enhancing and neutralizing antibodies. Cell, 2021, 184, 4203-4219.e32.	28.9	228
5	Maturation and Diversity of the VRC01-Antibody Lineage over 15 Years of Chronic HIV-1 Infection. Cell, 2015, 161, 470-485.	28.9	226
6	Staged induction of HIV-1 glycanâ€"dependent broadly neutralizing antibodies. Science Translational Medicine, 2017, 9, .	12.4	212
7	Conceptual Approaches to Modulating Antibody Effector Functions and Circulation Half-Life. Frontiers in Immunology, 2019, 10, 1296.	4.8	211
8	Neutralizing antibody vaccine for pandemic and pre-emergent coronaviruses. Nature, 2021, 594, 553-559.	27.8	199
9	Chimeric spike mRNA vaccines protect against Sarbecovirus challenge in mice. Science, 2021, 373, 991-998.	12.6	144
10	Pentavalent HIV-1 vaccine protects against simian-human immunodeficiency virus challenge. Nature Communications, 2017, 8, 15711.	12.8	137
11	Structural diversity of the SARS-CoV-2 Omicron spike. Molecular Cell, 2022, 82, 2050-2068.e6.	9.7	125
12	Potent and broad HIV-neutralizing antibodies in memory B cells and plasma. Science Immunology, 2017, 2, .	11.9	119
13	Targeted selection of HIV-specific antibody mutations by engineering B cell maturation. Science, 2019, 366, .	12.6	118
14	Broadly Neutralizing Human Immunodeficiency Virus Type 1 Antibody Gene Transfer Protects Nonhuman Primates from Mucosal Simian-Human Immunodeficiency Virus Infection. Journal of Virology, 2015, 89, 8334-8345.	3.4	100
15	Functional Relevance of Improbable Antibody Mutations for HIV Broadly Neutralizing Antibody Development. Cell Host and Microbe, 2018, 23, 759-765.e6.	11.0	98
16	Vaccine Induction of Heterologous Tier 2 HIV-1 Neutralizing Antibodies in Animal Models. Cell Reports, 2017, 21, 3681-3690.	6.4	97
17	A broadly cross-reactive antibody neutralizes and protects against sarbecovirus challenge in mice. Science Translational Medicine, 2022, 14, eabj7125.	12.4	93
18	Sustained Delivery of a Broadly Neutralizing Antibody in Nonhuman Primates Confers Long-Term Protection against Simian/Human Immunodeficiency Virus Infection. Journal of Virology, 2015, 89, 5895-5903.	3.4	92

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19	Pandemic Preparedness: Developing Vaccines and Therapeutic Antibodies For COVID-19. Cell, 2020, 181, 1458-1463.	28.9	92
20	SARS-CoV-2 Neutralizing Antibodies for COVID-19 Prevention and Treatment. Annual Review of Medicine, 2022, 73, 1-16.	12.2	91
21	Antibodies VRC01 and 10E8 Neutralize HIV-1 with High Breadth and Potency Even with Ig-Framework Regions Substantially Reverted to Germline. Journal of Immunology, 2014, 192, 1100-1106.	0.8	86
22	Mimicry of an HIV broadly neutralizing antibody epitope with a synthetic glycopeptide. Science Translational Medicine, 2017, 9, .	12.4	81
23	Initiation of HIV neutralizing B cell lineages with sequential envelope immunizations. Nature Communications, 2017, 8, 1732.	12.8	76
24	Cryo-EM structures of SARS-CoV-2 Omicron BA.2 spike. Cell Reports, 2022, 39, 111009.	6.4	74
25	Vaccine Elicitation of High Mannose-Dependent Neutralizing Antibodies against the V3-Glycan Broadly Neutralizing Epitope in Nonhuman Primates. Cell Reports, 2017, 18, 2175-2188.	6.4	69
26	Cold sensitivity of the SARS-CoV-2 spike ectodomain. Nature Structural and Molecular Biology, 2021, 28, 128-131.	8.2	65
27	Mapping the SARS-CoV-2 spike glycoprotein-derived peptidome presented by HLA class II on dendritic cells. Cell Reports, 2021, 35, 109179.	6.4	63
28	Inference of the HIV-1 VRC01 Antibody Lineage Unmutated Common Ancestor Reveals Alternative Pathways to Overcome a Key Glycan Barrier. Immunity, 2018, 49, 1162-1174.e8.	14.3	61
29	Fab-dimerized glycan-reactive antibodies are a structural category of natural antibodies. Cell, 2021, 184, 2955-2972.e25.	28.9	57
30	Neutralization-guided design of HIV-1 envelope trimers with high affinity for the unmutated common ancestor of CH235 lineage CD4bs broadly neutralizing antibodies. PLoS Pathogens, 2019, 15, e1008026.	4.7	56
31	Recapitulation of HIV-1 Env-antibody coevolution in macaques leading to neutralization breadth. Science, 2021, 371, .	12.6	49
32	Broad neutralization of H1 and H3 viruses by adjuvanted influenza HA stem vaccines in nonhuman primates. Science Translational Medicine, 2021, 13, .	12.4	49
33	Lipid nanoparticle encapsulated nucleoside-modified mRNA vaccines elicit polyfunctional HIV-1 antibodies comparable to proteins in nonhuman primates. Npj Vaccines, 2021, 6, 50.	6.0	46
34	Co-immunization of DNA and Protein in the Same Anatomical Sites Induces Superior Protective Immune Responses against SHIV Challenge. Cell Reports, 2020, 31, 107624.	6.4	43
35	Disruption of the HIV-1 Envelope allosteric network blocks CD4-induced rearrangements. Nature Communications, 2020, 11, 520.	12.8	42
36	Consistent elicitation of cross-clade HIV-neutralizing responses achieved in guinea pigs after fusion peptide priming by repetitive envelope trimer boosting. PLoS ONE, 2019, 14, e0215163.	2.5	41

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37	Development of mRNA manufacturing for vaccines and therapeutics: mRNA platform requirements and development of a scalable production process to support early phase clinical trials. Translational Research, 2022, 242, 38-55.	5.0	41
38	Comparison of Immunogenicity in Rhesus Macaques of Transmitted-Founder, HIV-1 Group M Consensus, and Trivalent Mosaic Envelope Vaccines Formulated as a DNA Prime, NYVAC, and Envelope Protein Boost. Journal of Virology, 2015, 89, 6462-6480.	3.4	40
39	Boosting of HIV envelope CD4 binding site antibodies with long variable heavy third complementarity determining region in the randomized double blind RV305 HIV-1 vaccine trial. PLoS Pathogens, 2017, 13, e1006182.	4.7	38
40	HIV-1 envelope glycan modifications that permit neutralization by germline-reverted VRC01-class broadly neutralizing antibodies. PLoS Pathogens, 2018, 14, e1007431.	4.7	36
41	Difficult-to-neutralize global HIV-1 isolates are neutralized by antibodies targeting open envelope conformations. Nature Communications, 2019, 10, 2898.	12.8	35
42	Selection of immunoglobulin elbow region mutations impacts interdomain conformational flexibility in HIV-1 broadly neutralizing antibodies. Nature Communications, 2019, 10, 654.	12.8	34
43	Safety and tolerability of AAV8 delivery of a broadly neutralizing antibody in adults living with HIV: a phase 1, dose-escalation trial. Nature Medicine, 2022, 28, 1022-1030.	30.7	34
44	Star nanoparticles delivering HIV-1 peptide minimal immunogens elicit near-native envelope antibody responses in nonhuman primates. PLoS Biology, 2019, 17, e3000328.	5.6	33
45	Secretion of MIP-1Î² and MIP-1Î± by CD8+ T-lymphocytes correlates with HIV-1 inhibition independent of coreceptor usage. Cellular Immunology, 2011, 266, 154-164.	3.0	28
46	Safety and immune responses after a 12-month booster in healthy HIV-uninfected adults in HVTN 100 in South Africa: AÂrandomized double-blind placebo-controlled trial of ALVAC-HIV (vCP2438) and bivalent subtype C gp120/MF59 vaccines. PLoS Medicine, 2020, 17, e1003038.	8.4	27
47	Immune checkpoint modulation enhances HIV-1 antibody induction. Nature Communications, 2020, 11, 948.	12.8	27
48	Maternal Broadly Neutralizing Antibodies Can Select for Neutralization-Resistant, Infant-Transmitted/Founder HIV Variants. MBio, 2020, 11, .	4.1	25
49	mRNA-encoded HIV-1 Env trimer ferritin nanoparticles induce monoclonal antibodies that neutralize heterologous HIV-1 isolates in mice. Cell Reports, 2022, 38, 110514.	6.4	23
50	Glycoengineering HIV-1 Env creates â€˜superchargedâ€™ and â€˜hybridâ€™ glycans to increase neutralizing antibody potency, breadth and saturation. PLoS Pathogens, 2018, 14, e1007024.	4.7	22
51	Antibody responses to the HIV-1 envelope high mannose patch. Advances in Immunology, 2019, 143, 11-73.	2.2	22
52	Neonatal Rhesus Macaques Have Distinct Immune Cell Transcriptional Profiles following HIV Envelope Immunization. Cell Reports, 2020, 30, 1553-1569.e6.	6.4	21
53	HIV DNA-Adenovirus Multiclade Envelope Vaccine Induces gp41 Antibody Immunodominance in Rhesus Macaques. Journal of Virology, 2017, 91, .	3.4	20
54	Strategies for induction of HIVâ€1 envelopeâ€reactive broadly neutralizing antibodies. Journal of the International AIDS Society, 2021, 24, e25831.	3.0	19

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55	HIV vaccine delayed boosting increases Env variable region 2â€“specific antibody effector functions. JCI Insight, 2020, 5, .	5.0	18
56	Epigenetic regulation of CD8+ T-lymphocyte mediated suppression of HIV-1 replication. Virology, 2010, 405, 234-242.	2.4	15
57	Mouse and human antibodies bind HLA-E-leader peptide complexes and enhance NK cell cytotoxicity. Communications Biology, 2022, 5, 271.	4.4	14
58	Therapeutic vaccination with IDLV-SIV-Gag results in durable viremia control in chronically SHIV-infected macaques. Npj Vaccines, 2020, 5, 36.	6.0	12
59	Immunogenicity, safety, and efficacy of sequential immunizations with an SIV-based IDLV expressing CH505 Envs. Npj Vaccines, 2020, 5, 107.	6.0	11
60	Functional Homology for Antibody-Dependent Phagocytosis Across Humans and Rhesus Macaques. Frontiers in Immunology, 2021, 12, 678511.	4.8	11
61	Immunogenicity of NYVAC Prime-Protein Boost Human Immunodeficiency Virus Type 1 Envelope Vaccination and Simian-Human Immunodeficiency Virus Challenge of Nonhuman Primates. Journal of Virology, 2018, 92, .	3.4	10
62	Rapid selection of HIV envelopes that bind to neutralizing antibody B cell lineage members with functional improbable mutations. Cell Reports, 2021, 36, 109561.	6.4	9
63	HIV envelope antigen valency on peptide nanofibers modulates antibody magnitude and binding breadth. Scientific Reports, 2021, 11, 14494.	3.3	6
64	B cells expressing IgM B cell receptors of HIV-1 neutralizing antibodies discriminate antigen affinities by sensing binding association rates. Cell Reports, 2022, 39, 111021.	6.4	6
65	Cooperation between somatic mutation and germline-encoded residues enables antibody recognition of HIV-1 envelope glycans. PLoS Pathogens, 2019, 15, e1008165.	4.7	5
66	Antigenicity and Immunogenicity of HIV-1 Envelope Trimers Complexed to a Small-Molecule Viral Entry Inhibitor. Journal of Virology, 2020, 94, .	3.4	5
67	Frequent Development of Broadly Neutralizing Antibodies in Early Life in a Large Cohort of Children With Human Immunodeficiency Virus. Journal of Infectious Diseases, 2022, 225, 1731-1740.	4.0	5
68	Parallel Induction of CH505 B Cell Ontogeny-Guided Neutralizing Antibodies and tHIVconsvX Conserved Mosaic-Specific T Cells against HIV-1. Molecular Therapy - Methods and Clinical Development, 2019, 14, 148-160.	4.1	4
69	Exploiting Pre-Existing CD4+ T Cell Help from Bacille Calmetteâ€“GuÃ©rin Vaccination to Improve Antiviral Antibody Responses. Journal of Immunology, 2020, 205, 425-437.	0.8	3
70	Polyclonal Broadly Neutralizing Antibody Activity Characterized by CD4 Binding Site and V3-Glycan Antibodies in a Subset of HIV-1 Virus Controllers. Frontiers in Immunology, 2021, 12, 670561.	4.8	3
71	Structural and genetic convergence of HIV-1 neutralizing antibodies in vaccinated non-human primates. PLoS Pathogens, 2021, 17, e1009624.	4.7	2
72	ÂÂÂÂRapid Selection of HIV Envelopes that Bind to Neutralizing Antibody B Cell Lineage Members with Functional Improbable Mutations. SSRN Electronic Journal, 0, , .	0.4	1

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73	Structure and Fc-Effector Function of Rhesusized Variants of Human Anti-HIV-1 IgG1s. Frontiers in Immunology, 2021, 12, 787603.	4.8	1
74	-Deficient Mice Exhibit Cytokine-Related Transcriptomic Signatures. ImmunoHorizons, 2020, 4, 713-728.	1.8	0
75	RAB11FIP5-Deficient Mice Exhibit Cytokine-Related Transcriptomic Signatures. ImmunoHorizons, 2020, 4, 713-728.	1.8	0