Sean P J Whelan

List of Publications by Year in descending order

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100
papers

11,414
citations

41344
49
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127
all docs

127
docs citations

127
times ranked

16143
citing authors

#	Article	IF	Citations
1	Human immunoglobulin from transchromosomic bovines hyperimmunized with SARS-CoV-2 spike antigen efficiently neutralizes viral variants. Human Vaccines and Immunotherapeutics, 2022, 18, 1-10.	3.3	20
2	Longitudinal Study after Sputnik V Vaccination Shows Durable SARS-CoV-2 Neutralizing Antibodies and Reduced Viral Variant Escape to Neutralization over Time. MBio, 2022, 13, e0344221.	4.1	19
3	Antibody-mediated broad sarbecovirus neutralization through ACE2 molecular mimicry. Science, 2022, 375, 449-454.	12.6	108
4	JIB-04 Has Broad-Spectrum Antiviral Activity and Inhibits SARS-CoV-2 Replication and Coronavirus Pathogenesis. MBio, 2022, 13, e0337721.	4.1	14
5	SARS-CoV-2 spreads through cell-to-cell transmission. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, .	7.1	145
6	Germinal centre-driven maturation of B cell response to mRNA vaccination. Nature, 2022, 604, 141-145.	27.8	198
7	Defining the risk of SARS-CoV-2 variants on immune protection. Nature, 2022, 605, 640-652.	27.8	117
8	CD164 is a host factor for lymphocytic choriomeningitis virus entry. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, e2119676119.	7.1	12
9	SARS-CoV-2 productively infects primary human immune system cells <i>in vitro</i> and in COVID-19 patients. Journal of Molecular Cell Biology, 2022, 14, .	3.3	26
10	Multivalent designed proteins neutralize SARS-CoV-2 variants of concern and confer protection against infection in mice. Science Translational Medicine, 2022, 14, eabn1252.	12.4	68
11	Detection of Bourbon Virus-Specific Serum Neutralizing Antibodies in Human Serum in Missouri, USA. MSphere, 2022, 7, .	2.9	9
12	Complete Mapping of Mutations to the SARS-CoV-2 Spike Receptor-Binding Domain that Escape Antibody Recognition. Cell Host and Microbe, 2021, 29, 44-57.e9.	11.0	937
13	Identification of SARS-CoV-2 spike mutations that attenuate monoclonal and serum antibody neutralization. Cell Host and Microbe, 2021, 29, 477-488.e4.	11.0	700
14	N-terminal domain antigenic mapping reveals a site of vulnerability for SARS-CoV-2. Cell, 2021, 184, 2332-2347.e16.	28.9	784
15	In vivo monoclonal antibody efficacy against SARS-CoV-2 variant strains. Nature, 2021, 596, 103-108.	27.8	222
16	Methylation of viral mRNA cap structures by PCIF1 attenuates the antiviral activity of interferon-Î². Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	21
17	Broad sarbecovirus neutralization by a human monoclonal antibody. Nature, 2021, 597, 103-108.	27.8	220
18	SARS-CoV-2 RBD antibodies that maximize breadth and resistance to escape. Nature, 2021, 597, 97-102.	27.8	385

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19	Systematic analysis of SARS-CoV-2 infection of an ACE2-negative human airway cell. Cell Reports, 2021, 36, 109364.	6.4	109
20	Isolation of Reconstructed Functional Ribonucleoprotein Complexes of Machupo Virus. Journal of Virology, 2021, 95, e0105421.	3.4	7
21	Effect of Immunosuppression on the Immunogenicity of mRNA Vaccines to SARS-CoV-2. Annals of Internal Medicine, 2021, 174, 1572-1585.	3.9	273
22	Vesicular Stomatitis Virus Chimeras Expressing the Oropouche Virus Glycoproteins Elicit Protective Immune Responses in Mice. MBio, 2021, 12, e0046321.	4.1	9
23	A potently neutralizing SARS-CoV-2 antibody inhibits variants of concern by utilizing unique binding residues in a highly conserved epitope. Immunity, 2021, 54, 2399-2416.e6.	14.3	79
24	A vaccine-induced public antibody protects against SARS-CoV-2 and emerging variants. Immunity, 2021, 54, 2159-2166.e6.	14.3	52
25	Neutralizing Monoclonal Antibodies That Target the Spike Receptor Binding Domain Confer Fc Receptor-Independent Protection against SARS-CoV-2 Infection in Syrian Hamsters. MBio, 2021, 12, e0239521.	4.1	13
26	Lrp1 is a host entry factor for Rift Valley fever virus. Cell, 2021, 184, 5163-5178.e24.	28.9	46
27	A class II MHC-targeted vaccine elicits immunity against SARS-CoV-2 and its variants. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	22
28	A novel class of TMPRSS2 inhibitors potently block SARS-CoV-2 and MERS-CoV viral entry and protect human epithelial lung cells. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	54
29	Structural mechanism of SARS-CoV-2 neutralization by two murine antibodies targeting the RBD. Cell Reports, 2021, 37, 109881.	6.4	14
30	Structure and function of negative-strand RNA virus polymerase complexes. The Enzymes, 2021, 50, 21-78.	1.7	10
31	A broad-spectrum antiviral molecule, QL47, selectively inhibits eukaryotic translation. Journal of Biological Chemistry, 2020, 295, 1694-1703.	3.4	3
32	Structure of the Vesicular Stomatitis Virus L Protein in Complex with Its Phosphoprotein Cofactor. Cell Reports, 2020, 30, 53-60.e5.	6.4	51
33	Structure of the Receptor Binding Domain of EnvP(b)1, an Endogenous Retroviral Envelope Protein Expressed in Human Tissues. MBio, 2020, 11, .	4.1	6
34	Cholesterol 25-hydroxylase suppresses SARS-CoV-2 replication by blocking membrane fusion. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 32105-32113.	7.1	192
35	Replication-Competent Vesicular Stomatitis Virus Vaccine Vector Protects against SARS-CoV-2-Mediated Pathogenesis in Mice. Cell Host and Microbe, 2020, 28, 465-474.e4.	11.0	156
36	Inhibition of PIKfyve kinase prevents infection by Zaire ebolavirus and SARS-CoV-2. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 20803-20813.	7.1	154

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37	Oligomerization of the Vesicular Stomatitis Virus Phosphoprotein Is Dispensable for mRNA Synthesis but Facilitates RNA Replication. Journal of Virology, 2020, 94, .	3.4	7
38	TMPRSS2 and TMPRSS4 promote SARS-CoV-2 infection of human small intestinal enterocytes. Science Immunology, 2020, 5, .	11.9	811
39	Neutralizing Antibody and Soluble ACE2 Inhibition of a Replication-Competent VSV-SARS-CoV-2 and a Clinical Isolate of SARS-CoV-2. Cell Host and Microbe, 2020, 28, 475-485.e5.	11.0	380
40	Rapid isolation and profiling of a diverse panel of human monoclonal antibodies targeting the SARS-CoV-2 spike protein. Nature Medicine, 2020, 26, 1422-1427.	30.7	450
41	Structure of a rabies virus polymerase complex from electron cryo-microscopy. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 2099-2107.	7.1	58
42	SARS-CoV-2 Viral RNA Shedding for More Than 87 Days in an Individual With an Impaired CD8+ T Cell Response. Frontiers in Immunology, 2020, 11, 618402.	4.8	14
43	Neutralizing Antibody and Soluble ACE2 Inhibition of a Replication-Competent VSV-SARS-CoV-2 and a Clinical Isolate of SARS-CoV-2. SSRN Electronic Journal, 2020, , 3606354.	0.4	16
44	Human, Nonhuman Primate, and Bat Cells Are Broadly Susceptible to Tibrovirus Particle Cell Entry. Frontiers in Microbiology, 2019, 10, 856.	3.5	8
45	Global analysis of polysome-associated mRNA in vesicular stomatitis virus infected cells. PLoS Pathogens, 2019, 15, e1007875.	4.7	22
46	Sulfated glycosaminoglycans and low-density lipoprotein receptor contribute to Clostridium difficile toxin A entry into cells. Nature Microbiology, 2019, 4, 1760-1769.	13.3	71
47	RNA ligands activate the Machupo virus polymerase and guide promoter usage. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 10518-10524.	7.1	19
48	Vesicular Stomatitis Virus Transcription Is Inhibited by TRIM69 in the Interferon-Induced Antiviral State. Journal of Virology, 2019, 93, .	3.4	28
49	STING-dependent translation inhibition restricts RNA virus replication. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, E2058-E2067.	7.1	131
50	Phase Transitions Drive the Formation of Vesicular Stomatitis Virus Replication Compartments. MBio, 2018, 9, .	4.1	183
51	Reconstruction of the cell entry pathway of an extinct virus. PLoS Pathogens, 2018, 14, e1007123.	4.7	18
52	Identification of Potent Ebola Virus Entry Inhibitors with Suitable Properties for in Vivo Studies. Journal of Medicinal Chemistry, 2018, 61, 6293-6307.	6.4	20
53	Mechanism of membrane fusion induced by vesicular stomatitis virus G protein. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, E28-E36.	7.1	98
54	An <i>In Vitro</i> RNA Synthesis Assay for Rabies Virus Defines Ribonucleoprotein Interactions Critical for Polymerase Activity. Journal of Virology, 2017, 91, .	3.4	30

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55	Repeatable Population Dynamics among Vesicular Stomatitis Virus Lineages Evolved under High Co-infection. Frontiers in Microbiology, 2016, 7, 370.	3.5	14
56	Phenotypic lentivirus screens to identify functional single domain antibodies. Nature Microbiology, 2016, 1, 16080.	13.3	46
57	Production of immunogenic West Nile virus-like particles using a herpes simplex virus 1 recombinant vector. Virology, 2016, 496, 186-193.	2.4	23
58	Infectious Entry Pathway Mediated by the Human Endogenous Retrovirus K Envelope Protein. Journal of Virology, 2016, 90, 3640-3649.	3.4	22
59	Rabies Internalizes into Primary Peripheral Neurons via Clathrin Coated Pits and Requires Fusion at the Cell Body. PLoS Pathogens, 2016, 12, e1005753.	4.7	45
60	Structure of the L Protein of Vesicular Stomatitis Virus from Electron Cryomicroscopy. Cell, 2015, 162, 314-327.	28.9	211
61	Recoding of the Vesicular Stomatitis Virus L Gene by Computer-Aided Design Provides a Live, Attenuated Vaccine Candidate. MBio, 2015, 6, .	4.1	52
62	Tracking the Fate of Genetically Distinct Vesicular Stomatitis Virus Matrix Proteins Highlights the Role for Late Domains in Assembly. Journal of Virology, 2015, 89, 11750-11760.	3.4	19
63	Sensitivity of the Polymerase of Vesicular Stomatitis Virus to 2â€² Substitutions in the Template and Nucleotide Triphosphate during Initiation and Elongation. Journal of Biological Chemistry, 2014, 289, 9961-9969.	3.4	14
64	mRNA Cap Methylation Influences Pathogenesis of Vesicular Stomatitis Virus<i>In Vivo</i>. Journal of Virology, 2014, 88, 2913-2926.	3.4	41
65	A Genome-Wide Small Interfering RNA Screen Identifies Host Factors Required for Vesicular Stomatitis Virus Infection. Journal of Virology, 2014, 88, 8355-8360.	3.4	29
66	The polymerase of negative-stranded RNA viruses. Current Opinion in Virology, 2013, 3, 103-110.	5.4	62
67	Uptake of Rabies Virus into Epithelial Cells by Clathrin-Mediated Endocytosis Depends upon Actin. Journal of Virology, 2013, 87, 11637-11647.	3.4	81
68	A ribosome-specialized translation initiation pathway is required for cap-dependent translation of vesicular stomatitis virus mRNAs. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 324-329.	7.1	155
69	Mechanism of RNA synthesis initiation by the vesicular stomatitis virus polymerase. EMBO Journal, 2012, 31, 1320-1329.	7.8	79
70	Niemann-Pick C1 (NPC1)/NPC1-like1 Chimeras Define Sequences Critical for NPC1â€™s Function as a Filovirus Entry Receptor. Viruses, 2012, 4, 2471-2484.	3.3	36
71	Structural Properties of the C Terminus of Vesicular Stomatitis Virus N Protein Dictate N-RNA Complex Assembly, Encapsidation, and RNA Synthesis. Journal of Virology, 2012, 86, 8720-8729.	3.4	15
72	Critical phosphoprotein elements that regulate polymerase architecture and function in vesicular stomatitis virus. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 14628-14633.	7.1	57

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73	Genetic Inactivation of COPI Coatomer Separately Inhibits Vesicular Stomatitis Virus Entry and Gene Expression. Journal of Virology, 2012, 86, 655-666.	3.4	37
74	Architecture and regulation of negative-strand viral enzymatic machinery. RNA Biology, 2012, 9, 941-948.	3.1	27
75	La protÃ©ine L des Mononegavirales. Virologie, 2012, 16, 258-268.	0.1	2
76	Biochemical and Structural Insights into Vesicular Stomatitis Virus Transcription. , 2011, , 127-147.		1
77	Arenavirus Z protein controls viral RNA synthesis by locking a polymeraseâ€"promoter complex. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 19743-19748.	7.1	77
78	A Recombinant Vesicular Stomatitis Virus Bearing a Lethal Mutation in the Glycoprotein Gene Uncovers a Second Site Suppressor That Restores Fusion. Journal of Virology, 2011, 85, 8105-8115.	3.4	32
79	Anterograde or retrograde transsynaptic labeling of CNS neurons with vesicular stomatitis virus vectors. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 15414-15419.	7.1	172
80	A Freeze Frame View of Vesicular Stomatitis Virus Transcription Defines a Minimal Length of RNA for 5â€² Processing. PLoS Pathogens, 2011, 7, e1002073.	4.7	36
81	Infectious Lassa Virus, but Not Filoviruses, Is Restricted by BST-2/Tetherin. Journal of Virology, 2010, 84, 10569-10580.	3.4	125
82	Assembly of a functional Machupo virus polymerase complex. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 20069-20074.	7.1	64
83	Molecular architecture of the vesicular stomatitis virus RNA polymerase. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 20075-20080.	7.1	91
84	Protein Expression Redirects Vesicular Stomatitis Virus RNA Synthesis to Cytoplasmic Inclusions. PLoS Pathogens, 2010, 6, e1000958.	4.7	125
85	The Length of Vesicular Stomatitis Virus Particles Dictates a Need for Actin Assembly during Clathrin-Dependent Endocytosis. PLoS Pathogens, 2010, 6, e1001127.	4.7	149
86	Ribose 2â€²-O Methylation of the Vesicular Stomatitis Virus mRNA Cap Precedes and Facilitates Subsequent Guanine-N-7 Methylation by the Large Polymerase Protein. Journal of Virology, 2009, 83, 11043-11050.	3.4	88
87	Opposing Effects of Inhibiting Cap Addition and Cap Methylation on Polyadenylation during Vesicular Stomatitis Virus mRNA Synthesis. Journal of Virology, 2009, 83, 1930-1940.	3.4	37
88	Vesicular Stomatitis Virus Enters Cells through Vesicles Incompletely Coated with Clathrin That Depend upon Actin for Internalization. PLoS Pathogens, 2009, 5, e1000394.	4.7	290
89	Response to â€œNon-segmented negative-strand RNA virus RNA synthesis in vivoâ€• Virology, 2008, 371, 234-237.	2.4	10
90	A Conserved Motif in Region V of the Large Polymerase Proteins of Nonsegmented Negative-Sense RNA Viruses That Is Essential for mRNA Capping. Journal of Virology, 2008, 82, 775-784.	3.4	122

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91	Vesicular Stomatitis Viruses Resistant to the Methylase Inhibitor Sinefungin Upregulate RNA Synthesis and Reveal Mutations That Affect mRNA Cap Methylation. Journal of Virology, 2007, 81, 4104-4115.	3.4	35
92	Vesicular Stomatitis Virus mRNA Capping Machinery Requires Specific <i>cis</i> -Acting Signals in the RNA. Journal of Virology, 2007, 81, 11499-11506.	3.4	41
93	A unique strategy for mRNA cap methylation used by vesicular stomatitis virus. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 8493-8498.	7.1	130
94	Amino Acid Residues within Conserved Domain VI of the Vesicular Stomatitis Virus Large Polymerase Protein Essential for mRNA Cap Methyltransferase Activity. Journal of Virology, 2005, 79, 13373-13384.	3.4	109
95	Genome-wide RNAi screen reveals a specific sensitivity of IRES-containing RNA viruses to host translation inhibition. Genes and Development, 2005, 19, 445-452.	5.9	193
96	Transcription and replication initiate at separate sites on the vesicular stomatitis virus genome. Proceedings of the National Academy of Sciences of the United States of America, 2002, 99, 9178-9183.	7.1	92
97	Transcriptional control of the RNA-dependent RNA polymerase of vesicular stomatitis virus. Biochimica Et Biophysica Acta Gene Regulatory Mechanisms, 2002, 1577, 337-353.	2.4	100
98	Identification of a Minimal Size Requirement for Termination of Vesicular Stomatitis Virus mRNA: Implications for the Mechanism of Transcription. Journal of Virology, 2000, 74, 8268-8276.	3.4	57
99	Regulation of RNA Synthesis by the Genomic Termini of Vesicular Stomatitis Virus: Identification of Distinct Sequences Essential for Transcription but Not Replication. Journal of Virology, 1999, 73, 297-306.	3.4	84
100	The 5â€² Terminal Trailer Region of Vesicular Stomatitis Virus Contains a Position-Dependent <i>cis</i> -Acting Signal for Assembly of RNA into Infectious Particles. Journal of Virology, 1999, 73, 307-315.	3.4	39