Charles J Russell

List of Publications by Year
in descending order

75 papers	3,671 citations	117571 34 h-index	138417 58 g-index
80 all docs	80 docs citations	80 times ranked	3985 citing authors

#	Article	IF	Citations
1	Influenza virus hemagglutinin concentrates in lipid raft microdomains for efficient viral fusion. Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 14610-14617.	3.3	323
2	Influenza HA Subtypes Demonstrate Divergent Phenotypes for Cleavage Activation and pH of Fusion: Implications for Host Range and Adaptation. PLoS Pathogens, 2013, 9, e1003151.	2.1	183
3	Novel Inhibitors of Influenza Virus Fusion: Structure-Activity Relationship and Interaction with the Viral Hemagglutinin. Journal of Virology, 2010, 84, 4277-4288.	1.5	137
4	Influenza Hemagglutinin Protein Stability, Activation, and Pandemic Risk. Trends in Microbiology, 2018, 26, 841-853.	3.5	134
5	The pH of Activation of the Hemagglutinin Protein Regulates H5N1 Influenza Virus Pathogenicity and Transmissibility in Ducks. Journal of Virology, 2010, 84, 1527-1535.	1.5	124
6	Fusion Protein of the Paramyxovirus SV5: Destabilizing and Stabilizing Mutants of Fusion Activation. Virology, 2000, 270, 17-30.	1.1	122
7	The Genesis of a Pandemic Influenza Virus. Cell, 2005, 123, 368-371.	13.5	116
8	Acid Stability of the Hemagglutinin Protein Regulates H5N1 Influenza Virus Pathogenicity. PLoS Pathogens, 2011, 7, e1002398.	2.1	110
9	Molecular requirements for a pandemic influenza virus: An acid-stable hemagglutinin protein. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 1636-1641.	3.3	105
10	A dual-functional paramyxovirus F protein regulatory switch segment. Journal of Cell Biology, 2003, 163, 363-374.	2.3	100
11	Amino Acid Residues in the Fusion Peptide Pocket Regulate the pH of Activation of the H5N1 Influenza Virus Hemagglutinin Protein. Journal of Virology, 2009, 83, 3568-3580.	1.5	94
12	The pH of Activation of the Hemagglutinin Protein Regulates H5N1 Influenza Virus Replication and Pathogenesis in Mice. Journal of Virology, 2013, 87, 4826-4834.	1.5	90
13	Mammalian adaptation of influenza A(H7N9) virus is limited by a narrow genetic bottleneck. Nature Communications, 2015, 6, 6553.	5.8	90
14	The ectodomain of HA2 of influenza virus promotes rapid ph dependent membrane fusion 1 1Edited by A. R. Fersht. Journal of Molecular Biology, 1999, 286, 489-503.	2.0	84
15	Viral factors in influenza pandemic risk assessment. ELife, 2016, 5, .	2.8	82
16	Increased Acid Stability of the Hemagglutinin Protein Enhances H5N1 Influenza Virus Growth in the Upper Respiratory Tract but Is Insufficient for Transmission in Ferrets. Journal of Virology, 2013, 87, 9911-9922.	1.5	81
17	Drivers of airborne human-to-human pathogen transmission. Current Opinion in Virology, 2017, 22, 22-29.	2.6	81
18	Direct Determination of the Membrane Affinities of Individual Amino Acidsâ€. Biochemistry, 1996, 35, 1803-1809.	1.2	78

#	ARTICLE	IF	CITATIONS
19	Activation of a paramyxovirus fusion protein is modulated by inside-out signaling from the cytoplasmic tail. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 9217-9222.	3.3	78
20	Acid-Induced Membrane Fusion by the Hemagglutinin Protein and Its Role in Influenza Virus Biology. Current Topics in Microbiology and Immunology, 2014, 385, 93-116.	0.7	75
21	Conserved Glycine Residues in the Fusion Peptide of the Paramyxovirus Fusion Protein Regulate Activation of the Native State. Journal of Virology, 2004, 78, 13727-13742.	1.5	66
22	Computer-assisted study of the relationship between molecular structure and Henry's law constant. Analytical Chemistry, 1992, 64, 1350-1355.	3.2	60
23	Novel Highly Pathogenic Avian A(H5N2) and A(H5N8) Influenza Viruses of Clade 2.3.4.4 from North America Have Limited Capacity for Replication and Transmission in Mammals. MSphere, 2016, 1, .	1.3	56
24	Ferrets as Models for Influenza Virus Transmission Studies and Pandemic Risk Assessments. Emerging Infectious Diseases, 2018, 24, 965-971.	2.0	56
25	A Contributing Role for Anti-Neuraminidase Antibodies on Immunity to Pandemic H1N1 2009 Influenza A Virus. PLoS ONE, 2011, 6, e26335.	1.1	55
26	Influenza Virus Overcomes Cellular Blocks To Productively Replicate, Impacting Macrophage Function. Journal of Virology, 2017, 91, .	1.5	55
27	The structural basis of paramyxovirus invasion. Trends in Microbiology, 2006, 14, 243-246.	3.5	54
28	Human PIV-2 recombinant Sendai virus (rSeV) elicits durable immunity and combines with two additional rSeVs to protect against hPIV-1, hPIV-2, hPIV-3, and RSV. Vaccine, 2009, 27, 1848-1857.	1.7	52
29	Novel Roles of Focal Adhesion Kinase in Cytoplasmic Entry and Replication of Influenza A Viruses. Journal of Virology, 2014, 88, 6714-6728.	1.5	52
30	The Receptor-Binding Domain of Influenza Virus Hemagglutinin Produced in <i>Escherichia coli</i> Folds into Its Native, Immunogenic Structure. Journal of Virology, 2011, 85, 865-872.	1.5	49
31	An Influenza A/H1N1/2009 Hemagglutinin Vaccine Produced in Escherichia coli. PLoS ONE, 2010, 5, e11694.	1.1	48
32	Contribution of H7 haemagglutinin to amantadine resistance and infectivity of influenza virus. Journal of General Virology, 2007, 88, 1266-1274.	1.3	46
33	Sendai virus recombinant vaccine expressing hPIV-3 HN or F elicits protective immunity and combines with a second recombinant to prevent hPIV-1, hPIV-3 and RSV infections. Vaccine, 2008, 26, 3480-3488.	1.7	43
34	Illumination of Parainfluenza Virus Infection and Transmission in Living Animals Reveals a Tissue-Specific Dichotomy. PLoS Pathogens, 2011, 7, e1002134.	2.1	43
35	Hemagglutinin Stability and Its Impact on Influenza A Virus Infectivity, Pathogenicity, and Transmissibility in Avians, Mice, Swine, Seals, Ferrets, and Humans. Viruses, 2021, 13, 746.	1.5	39
36	Mode of Parainfluenza Virus Transmission Determines the Dynamics of Primary Infection and Protection from Reinfection. PLoS Pathogens, 2013, 9, e1003786.	2.1	34

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37	Safety and Immunogenicity of an Intranasal Sendai Virus-Based Human Parainfluenza Virus Type 1 Vaccine in 3- to 6-Year-Old Children. Vaccine Journal, 2015, 22, 298-303.	3.2	34
38	Temperature Dependence of Polypeptide Partitioning between Water and Phospholipid Bilayersâ€. Biochemistry, 1996, 35, 9526-9532.	1.2	33
39	Spring-Loaded Heptad Repeat Residues Regulate the Expression and Activation of Paramyxovirus Fusion Protein. Journal of Virology, 2007, 81, 3130-3141.	1.5	32
40	H1N1 influenza viruses varying widely in hemagglutinin stability transmit efficiently from swine to swine and to ferrets. PLoS Pathogens, 2017, 13, e1006276.	2.1	29
41	Characterizing Emerging Canine H3 Influenza Viruses. PLoS Pathogens, 2020, 16, e1008409.	2.1	29
42	Effect of Hemagglutinin-Neuraminidase Inhibitors BCX 2798 and BCX 2855 on Growth and Pathogenicity of Sendai/Human Parainfluenza Type 3 Chimera Virus in Mice. Antimicrobial Agents and Chemotherapy, 2009, 53, 3942-3951.	1.4	26
43	Sendai virus as a backbone for vaccines against RSV and other human paramyxoviruses. Expert Review of Vaccines, 2016, 15, 189-200.	2.0	25
44	Focal adhesion kinase (FAK) regulates polymerase activity of multiple influenza A virus subtypes. Virology, 2016, 499, 369-374.	1.1	19
45	Safety and immunogenicity of an intranasal sendai virus-based vaccine for human parainfluenza virus type I and respiratory syncytial virus (SeVRSV) in adults. Human Vaccines and Immunotherapeutics, 2021, 17, 554-559.	1.4	19
46	HA stabilization promotes replication and transmission of swine H1N1 gamma influenza viruses in ferrets. ELife, 2020, 9, .	2.8	19
47	An Amino Acid in the Stalk Domain of N1 Neuraminidase Is Critical for Enzymatic Activity. Journal of Virology, 2017, 91, .	1.5	18
48	Hemagglutinin Stability Regulates H1N1 Influenza Virus Replication and Pathogenicity in Mice by Modulating Type I Interferon Responses in Dendritic Cells. Journal of Virology, 2020, 94, .	1.5	18
49	The Membrane Affinities of the Aliphatic Amino Acid Side Chains in an Î±-Helical Context Are Independent of Membrane Immersion Depthâ€. Biochemistry, 1999, 38, 337-346.	1.2	17
50	2-Substituted-4,5-Dihydroxypyrimidine-6-Carboxamide Antiviral Targeted Libraries. ACS Combinatorial Science, 2009, 11, 1100-1104.	3.3	17
51	Sendai virus recombinant vaccine expressing a secreted, unconstrained respiratory syncytial virus fusion protein protects against RSV in cotton rats. International Immunology, 2015, 27, 229-236.	1.8	17
52	Sendai virus-based RSV vaccine protects against RSV challenge in an in vivo maternal antibody model. Vaccine, 2014, 32, 3264-3273.	1.7	16
53	Vaccines for the Paramyxoviruses and Pneumoviruses: Successes, Candidates, and Hurdles. Viral Immunology, 2018, 31, 133-141.	0.6	15
54	Residues in the Heptad Repeat A Region of the Fusion Protein Modulate the Virulence of Sendai Virus in Mice. Journal of Virology, 2010, 84, 810-821.	1.5	14

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55	Non-invasive Imaging of Sendai Virus Infection in Pharmacologically Immunocompromised Mice: NK and T Cells, but not Neutrophils, Promote Viral Clearance after Therapy with Cyclophosphamide and Dexamethasone. PLoS Pathogens, 2016, 12, e1005875.	2.1	14
56	Pathogenicity and peramivir efficacy in immunocompromised murine models of influenza B virus infection. Scientific Reports, 2017, 7, 7345.	1.6	13
57	A pharmacologically immunosuppressed mouse model for assessing influenza B virus pathogenicity and oseltamivir treatment. Antiviral Research, 2017, 148, 20-31.	1.9	13
58	Directed Evolution of an Influenza Reporter Virus To Restore Replication and Virulence and Enhance Noninvasive Bioluminescence Imaging in Mice. Journal of Virology, 2018, 92, .	1.5	12
59	Relationship between hemagglutinin stability and influenza virus persistence after exposure to low pH or supraphysiological heating. PLoS Pathogens, 2021, 17, e1009910.	2.1	12
60	Robustness of the Ferret Model for Influenza Risk Assessment Studies: a Cross-Laboratory Exercise. MBio, 2022, 13, .	1.8	12
61	Fecal Influenza in Mammals: Selection of Novel Variants. Journal of Virology, 2013, 87, 11476-11486.	1.5	11
62	A Sendai virus recombinant vaccine expressing a gene for truncated human metapneumovirus (hMPV) fusion protein protects cotton rats from hMPV challenge. Virology, 2017, 509, 60-66.	1.1	11
63	Stalking Influenza Diversity with a Universal Antibody. New England Journal of Medicine, 2011, 365, 1541-1542.	13.9	10
64	Changes to the dynamic nature of hemagglutinin and the emergence of the 2009 pandemic H1N1 influenza virus. Scientific Reports, 2015, 5, 12828.	1.6	10
65	Relationships among Dissemination of Primary Parainfluenza Virus Infection in the Respiratory Tract, Mucosal and Peripheral Immune Responses, and Protection from Reinfection: a Noninvasive Bioluminescence-Imaging Study. Journal of Virology, 2015, 89, 3568-3583.	1.5	10
66	Human Metapneumovirus: A Largely Unrecognized Threat to Human Health. Pathogens, 2020, 9, 109.	1.2	10
67	Sendai Virus-Vectored Vaccines That Express Envelope Glycoproteins of Respiratory Viruses. Viruses, 2021, 13, 1023.	1.5	10
68	Influence of Antigen Insertion Site and Vector Dose on Immunogenicity and Protective Capacity in Sendai Virus-Based Human Parainfluenza Virus Type 3 Vaccines. Journal of Virology, 2013, 87, 5959-5969.	1.5	8
69	Swine H1N1 Influenza Virus Variants with Enhanced Polymerase Activity and HA Stability Promote Airborne Transmission in Ferrets. Journal of Virology, 2022, 96, e0010022.	1.5	8
70	Dynamics of Sendai Virus Spread, Clearance, and Immunotherapeutic Efficacy after Hematopoietic Cell Transplant Imaged Noninvasively in Mice. Journal of Virology, 2018, 92, .	1.5	6
71	Quantifying dose-, strain-, and tissue-specific kinetics of parainfluenza virus infection. PLoS Computational Biology, 2021, 17, e1009299.	1.5	5
72	Interplay between H1N1 influenza a virus infection, extracellular and intracellular respiratory tract pH, and host responses in a mouse model. PLoS ONE, 2021, 16, e0251473.	1.1	3

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73	Development of Sendai virus-based vaccines to prevent pediatric respiratory virus infections. Procedia in Vaccinology, 2009, 1, 41-44.	0.4	0
74	Parainfluenza Virus Spread, Clearance, and Treatment in a Hematopoietic Cell Transplant Model Using Monoclonal Antibodies, Adoptively Transferred NK Cells, and T Lymphocytes. Biology of Blood and Marrow Transplantation, 2018, 24, S100.	2.0	0
75	Novel Vaccines and Drugs That Target the Surface Glycoproteins of Influenza Viruses, RSV, Parainfluenza Viruses, and SARS-CoV-2. Viruses, 2022, 14, 1160.	1.5	0