Hyeryun Choe

List of Publications by Year
in descending order

80 papers	25,449 citations	36303 51 h-index	64796 79 g-index
84 all docs	84 docs citations	84 times ranked	27063 citing authors

#	Article	IF	Citations
1	Mechanisms of SARS-CoV-2 entry into cells. Nature Reviews Molecular Cell Biology, 2022, 23, 3-20.	37.0	1,532
2	Functional importance of the D614G mutation in the SARS-CoV-2 spike protein. Biochemical and Biophysical Research Communications, 2021, 538, 108-115.	2.1	79
3	Hydroxychloroquine-mediated inhibition of SARS-CoV-2 entry is attenuated by TMPRSS2. PLoS Pathogens, 2021, 17, e1009212.	4.7	167
4	How SARS-CoV-2 first adapted in humans. Science, 2021, 372, 466-467.	12.6	21
5	Mutations derived from horseshoe bat ACE2 orthologs enhance ACE2-Fc neutralization of SARS-CoV-2. PLoS Pathogens, 2021, 17, e1009501.	4.7	97
6	An Engineered Receptor-Binding Domain Improves the Immunogenicity of Multivalent SARS-CoV-2 Vaccines. MBio, 2021, 12, .	4.1	20
7	Clinical Antiviral Drug Arbidol Inhibits Infection by SARS-CoV-2 and Variants through Direct Binding to the Spike Protein. ACS Chemical Biology, 2021, 16, 2845-2851.	3.4	16
8	SARS-CoV-2 spike-protein D614G mutation increases virion spike density and infectivity. Nature Communications, 2020, 11, 6013.	12.8	828
9	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
10	Phosphatidylethanolamine and Phosphatidylserine Synergize To Enhance GAS6/AXL-Mediated Virus Infection and Efferocytosis. Journal of Virology, 2020, 95, .	3.4	19
11	Transferrin receptor 1 is a cellular receptor for human heme-albumin. Communications Biology, 2020, 3, 621.	4.4	19
12	AAV vectors engineered to target insulin receptor greatly enhance intramuscular gene delivery. Molecular Therapy - Methods and Clinical Development, 2020, 19, 496-506.	4.1	8
13	Zika Virus-Immune Plasmas from Symptomatic and Asymptomatic Individuals Enhance Zika Pathogenesis in Adult and Pregnant Mice. MBio, 2019, 10, .	4.1	30
14	Reply to Marques and Drexler, â€œComplex Scenario of Homotypic and Heterotypic Zika Virus Immune Enhancementâ€• MBio, 2019, 10, .	4.1	1
15	Label-free pathogen detection by a deoxyribozyme cascade with visual signal readout. Sensors and Actuators B: Chemical, 2019, 282, 945-951.	7.8	14
16	Diverse pathways of escape from all well-characterized VRC01-class broadly neutralizing HIV-1 antibodies. PLoS Pathogens, 2018, 14, e1007238.	4.7	18
17	AXL-dependent infection of human fetal endothelial cells distinguishes Zika virus from other pathogenic flaviviruses. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 2024-2029.	7.1	177
18	Ontogeny of the B- and T-cell response in a primary Zika virus infection of a dengue-naÃ¯ve individual during the 2016 outbreak in Miami, FL. PLoS Neglected Tropical Diseases, 2017, 11, e0006000.	3.0	48

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19	Zika virus infection during the period of maximal brain growth causes microcephaly and corticospinal neuron apoptosis in wild type mice. Scientific Reports, 2016, 6, 34793.	3.3	80
20	Ebselen, a Small-Molecule Capsid Inhibitor of HIV-1 Replication. Antimicrobial Agents and Chemotherapy, 2016, 60, 2195-2208.	3.2	91
21	Virion-associated phosphatidylethanolamine promotes TIM1-mediated infection by Ebola, dengue, and West Nile viruses. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 14682-14687.	7.1	120
22	Novel Arenavirus Entry Inhibitors Discovered by Using a Minigenome Rescue System for High-Throughput Drug Screening. Journal of Virology, 2015, 89, 8428-8443.	3.4	27
23	Human and Host Species Transferrin Receptor 1 Use by North American Arenaviruses. Journal of Virology, 2014, 88, 9418-9428.	3.4	31
24	TIM-family Proteins Promote Infection of Multiple Enveloped Viruses through Virion-associated Phosphatidylserine. PLoS Pathogens, 2013, 9, e1003232.	4.7	288
25	Dual Host-Virus Arms Races Shape an Essential Housekeeping Protein. PLoS Biology, 2013, 11, e1001571.	5.6	116
26	An Antibody Recognizing the Apical Domain of Human Transferrin Receptor 1 Efficiently Inhibits the Entry of All New World Hemorrhagic Fever Arenaviruses. Journal of Virology, 2012, 86, 4024-4028.	3.4	47
27	Enhanced Recognition and Neutralization of HIV-1 by Antibody-Derived CCR5-Mimetic Peptide Variants. Journal of Virology, 2012, 86, 12417-12421.	3.4	24
28	Transferrin receptor 1 in the zoonosis and pathogenesis of New World hemorrhagic fever arenaviruses. Current Opinion in Microbiology, 2011, 14, 476-482.	5.1	46
29	A Tyrosine-Sulfated CCR5-Mimetic Peptide Promotes Conformational Transitions in the HIV-1 Envelope Glycoprotein. Journal of Virology, 2011, 85, 7563-7571.	3.4	18
30	Distinct Patterns of IFITM-Mediated Restriction of Filoviruses, SARS Coronavirus, and Influenza A Virus. PLoS Pathogens, 2011, 7, e1001258.	4.7	518
31	Structural basis for receptor recognition by New World hemorrhagic fever arenaviruses. Nature Structural and Molecular Biology, 2010, 17, 438-444.	8.2	125
32	Chapter 7 Tyrosine Sulfation of HIVâ€1 Coreceptors and Other Chemokine Receptors. Methods in Enzymology, 2009, 461, 147-170.	1.0	31
33	A New World Primate Deficient in Tetherin-Mediated Restriction of Human Immunodeficiency Virus Type 1. Journal of Virology, 2009, 83, 8771-8780.	3.4	21
34	Host-Species Transferrin Receptor 1 Orthologs Are Cellular Receptors for Nonpathogenic New World Clade B Arenaviruses. PLoS Pathogens, 2009, 5, e1000358.	4.7	96
35	Influenza A Virus Neuraminidase Limits Viral Superinfection. Journal of Virology, 2008, 82, 4834-4843.	3.4	130
36	Protein evolution with an expanded genetic code. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 17688-17693.	7.1	138

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37	Receptor determinants of zoonotic transmission of New World hemorrhagic fever arenaviruses. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 2664-2669.	7.1	112
38	Transferrin receptor 1 is a cellular receptor for New World haemorrhagic fever arenaviruses. Nature, 2007, 446, 92-96.	27.8	374
39	Severe Acute Respiratory Syndrome Coronavirus Entry as a Target of Antiviral Therapies. Antiviral Therapy, 2007, 12, 639-650.	1.0	17
40	Tyrosine sulfate trapped by amber. Nature Biotechnology, 2006, 24, 1361-1362.	17.5	4
41	Conserved Receptor-binding Domains of Lake Victoria Marburgvirus and Zaire Ebolavirus Bind a Common Receptor. Journal of Biological Chemistry, 2006, 281, 15951-15958.	3.4	115
42	Animal Origins of the Severe Acute Respiratory Syndrome Coronavirus: Insight from ACE2-S-Protein Interactions. Journal of Virology, 2006, 80, 4211-4219.	3.4	247
43	A Tyrosine-sulfated Peptide Derived from the Heavy-chain CDR3 Region of an HIV-1-neutralizing Antibody Binds gp120 and Inhibits HIV-1 Infection. Journal of Biological Chemistry, 2006, 281, 28529-28535.	3.4	58
44	SARS Coronavirus, but Not Human Coronavirus NL63, Utilizes Cathepsin L to Infect ACE2-expressing Cells. Journal of Biological Chemistry, 2006, 281, 3198-3203.	3.4	328
45	Insights from the Association of SARS-CoV S-Protein with its Receptor, ACE2. Advances in Experimental Medicine and Biology, 2006, 581, 209-218.	1.6	20
46	SARS-CoV, But not HCoV-NL63, Utilizes Cathepsins to Infect Cells: Viral Entry. Advances in Experimental Medicine and Biology, 2006, 581, 335-338.	1.6	21
47	Sulphated tyrosines mediate association of chemokines and Plasmodium vivax Duffy binding protein with the Duffy antigen/receptor for chemokines (DARC). Molecular Microbiology, 2005, 55, 1413-1422.	2.5	136
48	Mapping binding residues in the Plasmodium vivax domain that binds Duffy antigen during red cell invasion. Molecular Microbiology, 2005, 55, 1423-1434.	2.5	104
49	Receptor and viral determinants of SARS-coronavirus adaptation to human ACE2. EMBO Journal, 2005, 24, 1634-1643.	7.8	892
50	Efficient Replication of Severe Acute Respiratory Syndrome Coronavirus in Mouse Cells Is Limited by Murine Angiotensin-Converting Enzyme 2. Journal of Virology, 2004, 78, 11429-11433.	3.4	164
51	Structural basis of tyrosine sulfation and VH-gene usage in antibodies that recognize the HIV type 1 coreceptor-binding site on gp120. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 2706-2711.	7.1	278
52	A 193-Amino Acid Fragment of the SARS Coronavirus S Protein Efficiently Binds Angiotensin-converting Enzyme 2. Journal of Biological Chemistry, 2004, 279, 3197-3201.	3.4	618
53	Retroviruses Pseudotyped with the Severe Acute Respiratory Syndrome Coronavirus Spike Protein Efficiently Infect Cells Expressing Angiotensin-Converting Enzyme 2. Journal of Virology, 2004, 78, 10628-10635.	3.4	240
54	Potent neutralization of severe acute respiratory syndrome (SARS) coronavirus by a human mAb to S1 protein that blocks receptor association. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 2536-2541.	7.1	543

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55	Angiotensin-converting enzyme 2 is a functional receptor for the SARS coronavirus. Nature, 2003, 426, 450-454.	27.8	5,168
56	Tyrosine Sulfation of Human Antibodies Contributes to Recognition of the CCR5 Binding Region of HIV-1 gp120. Cell, 2003, 114, 161-170.	28.9	186
57	Sulfation of Tyrosine 174 in the Human C3a Receptor Is Essential for Binding of C3a Anaphylatoxin. Journal of Biological Chemistry, 2003, 278, 37902-37908.	3.4	47
58	Tyrosine-sulfated Peptides Functionally Reconstitute a CCR5 Variant Lacking a Critical Amino-terminal Region. Journal of Biological Chemistry, 2002, 277, 40397-40402.	3.4	54
59	The Role of Post-translational Modifications of the CXCR4 Amino Terminus in Stromal-derived Factor 1Î± Association and HIV-1 Entry. Journal of Biological Chemistry, 2002, 277, 29484-29489.	3.4	193
60	Sulfated Tyrosines Contribute to the Formation of the C5a Docking Site of the Human C5a Anaphylatoxin Receptor. Journal of Experimental Medicine, 2001, 193, 1059-1066.	8.5	83
61	Sialylated O-Glycans and Sulfated Tyrosines in the NH2-Terminal Domain of CC Chemokine Receptor 5 Contribute to High Affinity Binding of Chemokines. Journal of Experimental Medicine, 2001, 194, 1661-1674.	8.5	147
62	A Tyrosine-sulfated Peptide Based on the N Terminus of CCR5 Interacts with a CD4-enhanced Epitope of the HIV-1 gp120 Envelope Glycoprotein and Inhibits HIV-1 Entry. Journal of Biological Chemistry, 2000, 275, 33516-33521.	3.4	138
63	Apelin, the Natural Ligand of the Orphan Seven-Transmembrane Receptor APJ, Inhibits Human Immunodeficiency Virus Type 1 Entry. Journal of Virology, 2000, 74, 11972-11976.	3.4	87
64	Tyrosine Sulfation of the Amino Terminus of CCR5 Facilitates HIV-1 Entry. Cell, 1999, 96, 667-676.	28.9	658
65	Adaptation of a CCR5-Using, Primary Human Immunodeficiency Virus Type 1 Isolate for CD4-Independent Replication. Journal of Virology, 1999, 73, 8120-8126.	3.4	145
66	Chemokine receptors in HIV-1 and SIV infection. Archives of Pharmacal Research, 1998, 21, 634-639.	6.3	14
67	Structural interactions between chemokine receptors, gp120 Env and CD4. Seminars in Immunology, 1998, 10, 249-257.	5.6	53
68	A Tyrosine-Rich Region in the N Terminus of CCR5 Is Important for Human Immunodeficiency Virus Type 1 Entry and Mediates an Association between gp120 and CCR5. Journal of Virology, 1998, 72, 1160-1164.	3.4	187
69	Use of Murine CXCR-4 as a Second Receptor by Some T-Cell-Tropic Human Immunodeficiency Viruses. Journal of Virology, 1998, 72, 1652-1656.	3.4	23
70	The Orphan Seven-Transmembrane Receptor Apj Supports the Entry of Primary T-Cell-Line-Tropic and Dualtropic Human Immunodeficiency Virus Type 1. Journal of Virology, 1998, 72, 6113-6118.	3.4	192
71	Stabilization of Human Immunodeficiency Virus Type 1 Envelope Glycoprotein Trimers by Disulfide Bonds Introduced into the gp41 Glycoprotein Ectodomain. Journal of Virology, 1998, 72, 7620-7625.	3.4	70
72	Two Orphan Seven-Transmembrane Segment Receptors Which Are Expressed in CD4-positive Cells Support Simian Immunodeficiency Virus Infection. Journal of Experimental Medicine, 1997, 186, 405-411.	8.5	316

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73	CCR5 Levels and Expression Pattern Correlate with Infectability by Macrophage-tropic HIV-1, In Vitro. Journal of Experimental Medicine, 1997, 185, 1681-1692.	8.5	728
74	HIV-1 Entry and Macrophage Inflammatory Protein-1Î²-mediated Signaling Are Independent Functions of the Chemokine Receptor CCR5. Journal of Biological Chemistry, 1997, 272, 6854-6857.	3.4	186
75	CD4-Independent Binding of SIV gp120 to Rhesus CCR5. Science, 1997, 278, 1470-1473.	12.6	123
76	CCR3 and CCR5 are co-receptors for HIV-1 infection of microglia. Nature, 1997, 385, 645-649.	27.8	945
77	The Î²-Chemokine Receptors CCR3 and CCR5 Facilitate Infection by Primary HIV-1 Isolates. Cell, 1996, 85, 1135-1148.	28.9	2,432
78	The lymphocyte chemoattractant SDF-1 is a ligand for LESTR/fusin and blocks HIV-1 entry. Nature, 1996, 382, 829-833.	27.8	1,958
79	CD4-induced interaction of primary HIV-1 gp120 glycoproteins with the chemokine receptor CCR-5. Nature, 1996, 384, 179-183.	27.8	1,224
80	Angiotensin-Converting Enzyme 2, the Cellular Receptor for Severe Acute Respiratory Syndrome Coronavirus and Human Coronavirus NL63. , 0, , 147-156.		1