Markus Hoffmann

List of Publications by Year
in descending order

101 papers	25,594 citations	109137 35 h-index	34900 98 g-index
129 all docs	129 docs citations	129 times ranked	43045 citing authors

#	Article	IF	Citations
1	SARS-CoV-2 Cell Entry Depends on ACE2 and TMPRSS2 and Is Blocked by a Clinically Proven Protease Inhibitor. Cell, 2020, 181, 271-280.e8.	13.5	16,161
2	A Multibasic Cleavage Site in the Spike Protein of SARS-CoV-2 Is Essential for Infection of Human Lung Cells. Molecular Cell, 2020, 78, 779-784.e5.	4.5	1,527
3	SARS-CoV-2 variants B.1.351 and P.1 escape from neutralizing antibodies. Cell, 2021, 184, 2384-2393.e12.	13.5	848
4	The Omicron variant is highly resistant against antibody-mediated neutralization: Implications for control of the COVID-19 pandemic. Cell, 2022, 185, 447-456.e11.	13.5	736
5	Structural Basis for Potent Neutralization of Betacoronaviruses by Single-Domain Camelid Antibodies. Cell, 2020, 181, 1004-1015.e15.	13.5	506
6	Nafamostat Mesylate Blocks Activation of SARS-CoV-2: New Treatment Option for COVID-19. Antimicrobial Agents and Chemotherapy, 2020, 64, .	1.4	394
7	Chloroquine does not inhibit infection of human lung cells with SARS-CoV-2. Nature, 2020, 585, 588-590.	13.7	370
8	Immune responses against SARS-CoV-2 variants after heterologous and homologous ChAdOx1 nCoV-19/BNT162b2 vaccination. Nature Medicine, 2021, 27, 1525-1529.	15.2	363
9	Camostat mesylate inhibits SARS-CoV-2 activation by TMPRSS2-related proteases and its metabolite GBPA exerts antiviral activity. EBioMedicine, 2021, 65, 103255.	2.7	256
10	SARS-CoV-2 variant B.1.617 is resistant to bamlanivimab and evades antibodies induced by infection and vaccination. Cell Reports, 2021, 36, 109415.	2.9	206
11	LY6E impairs coronavirus fusion and confers immune control of viral disease. Nature Microbiology, 2020, 5, 1330-1339.	5.9	170
12	Protective mucosal immunity against SARS-CoV-2 after heterologous systemic prime-mucosal boost immunization. Nature Communications, 2021, 12, 6871.	5.8	147
13	Pharmacological Inhibition of Acid Sphingomyelinase Prevents Uptake of SARS-CoV-2 by Epithelial Cells. Cell Reports Medicine, 2020, 1, 100142.	3.3	142
14	Functional analysis of potential cleavage sites in the MERS-coronavirus spike protein. Scientific Reports, 2018, 8, 16597.	1.6	131
15	Mutations in the Spike Protein of Middle East Respiratory Syndrome Coronavirus Transmitted in Korea Increase Resistance to Antibody-Mediated Neutralization. Journal of Virology, 2019, 93, .	1.5	111
16	SARS-CoV-2 neutralizing antibodies: Longevity, breadth, and evasion by emerging viral variants. PLoS Medicine, 2021, 18, e1003656.	3.9	109
17	Heterologous ChAdOx1 nCoV-19 and BNT162b2 prime-boost vaccination elicits potent neutralizing antibody responses and T cell reactivity against prevalent SARS-CoV-2 variants. EBioMedicine, 2022, 75, 103761.	2.7	104
18	Differential Sensitivity of Bat Cells to Infection by Enveloped RNA Viruses: Coronaviruses, Paramyxoviruses, Filoviruses, and Influenza Viruses. PLoS ONE, 2013, 8, e72942.	1.1	103

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19	Low serum neutralizing anti-SARS-CoV-2 S antibody levels in mildly affected COVID-19 convalescent patients revealed by two different detection methods. Cellular and Molecular Immunology, 2021, 18, 936-944.	4.8	98
20	The SARS-CoV-2 and other human coronavirus spike proteins are fine-tuned towards temperature and proteases of the human airways. PLoS Pathogens, 2021, 17, e1009500.	2.1	91
21	Alpha-1 antitrypsin inhibits TMPRSS2 protease activity and SARS-CoV-2 infection. Nature Communications, 2021, 12, 1726.	5.8	86
22	Fusion-active glycoprotein G mediates the cytotoxicity of vesicular stomatitis virus M mutants lacking host shut-off activity. Journal of General Virology, 2010, 91, 2782-2793.	1.3	79
23	Comparable neutralisation evasion of SARS-CoV-2 omicron subvariants BA.1, BA.2, and BA.3. Lancet Infectious Diseases, The, 2022, 22, 766-767.	4.6	79
24	Augmented neutralisation resistance of emerging omicron subvariants BA.2.12.1, BA.4, and BA.5. Lancet Infectious Diseases, The, 2022, 22, 1117-1118.	4.6	79
25	Polymorphisms in dipeptidyl peptidase 4 reduce host cell entry of Middle East respiratory syndrome coronavirus. Emerging Microbes and Infections, 2020, 9, 155-168.	3.0	77
26	SARS-CoV-2 mutations acquired in mink reduce antibody-mediated neutralization. Cell Reports, 2021, 35, 109017.	2.9	77
27	B.1.617.2 enters and fuses lung cells with increased efficiency and evades antibodies induced by infection and vaccination. Cell Reports, 2021, 37, 109825.	2.9	73
28	Different residues in the SARS-CoV spike protein determine cleavage and activation by the host cell protease TMPRSS2. PLoS ONE, 2017, 12, e0179177.	1.1	71
29	Priming Time: How Cellular Proteases Arm Coronavirus Spike Proteins. , 2018, , 71-98.		69
30	Molecular mechanism of inhibiting the SARS-CoV-2 cell entry facilitator TMPRSS2 with camostat and nafamostat. Chemical Science, 2021, 12, 983-992.	3.7	66
31	Comparative Analysis of Ebola Virus Glycoprotein Interactions With Human and Bat Cells. Journal of Infectious Diseases, 2011, 204, S840-S849.	1.9	64
32	Inhibition of acid sphingomyelinase by ambroxol prevents SARS-CoV-2 entry into epithelial cells. Journal of Biological Chemistry, 2021, 296, 100701.	1.6	63
33	Interferon-Induced Transmembrane Proteinâ€"Mediated Inhibition of Host Cell Entry of Ebolaviruses. Journal of Infectious Diseases, 2015, 212, S210-S218.	1.9	58
34	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, .	3.3	54
35	TMPRSS11A activates the influenza A virus hemagglutinin and the MERS coronavirus spike protein and is insensitive against blockade by HAI-1. Journal of Biological Chemistry, 2018, 293, 13863-13873.	1.6	47
36	Delta variant (B.1.617.2) sublineages do not show increased neutralization resistance. Cellular and Molecular Immunology, 2021, 18, 2557-2559.	4.8	41

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37	The glycoprotein of vesicular stomatitis virus promotes release of virus-like particles from tetherin-positive cells. PLoS ONE, 2017, 12, e0189073.	1.1	40
38	SARS-CoV-2 Omicron sublineages show comparable cell entry but differential neutralization by therapeutic antibodies. Cell Host and Microbe, 2022, 30, 1103-1111.e6.	5.1	38
39	Modulation of HIV-1 Gag/Gag-Pol frameshifting by tRNA abundance. Nucleic Acids Research, 2019, 47, 5210-5222.	6.5	35
40	Neutralization of the SARS-CoV-2 Delta variant after heterologous and homologous BNT162b2 or ChAdOx1 nCoV-19 vaccination. Cellular and Molecular Immunology, 2021, 18, 2455-2456.	4.8	35
41	Sphingosine prevents binding of SARSâ€“CoV-2 spike to its cellular receptor ACE2. Journal of Biological Chemistry, 2020, 295, 15174-15182.	1.6	34
42	A Polymorphism within the Internal Fusion Loop of the Ebola Virus Glycoprotein Modulates Host Cell Entry. Journal of Virology, 2017, 91, .	1.5	33
43	Novel SARS-CoV-2 receptors: ASGR1 and KREMEN1. Cell Research, 2022, 32, 1-2.	5.7	33
44	The Glycoproteins of All Filovirus Species Use the Same Host Factors for Entry into Bat and Human Cells but Entry Efficiency Is Species Dependent. PLoS ONE, 2016, 11, e0149651.	1.1	30
45	Humoral and Cellular Immune Responses Against Severe Acute Respiratory Syndrome Coronavirus 2 Variants and Human Coronaviruses After Single BNT162b2 Vaccination. Clinical Infectious Diseases, 2021, 73, 2000-2008.	2.9	30
46	Rapid SARS-CoV-2 Adaptation to Available Cellular Proteases. Journal of Virology, 2022, 96, jvi0218621.	1.5	30
47	Rapid response flow cytometric assay for the detection of antibody responses to SARS-CoV-2. European Journal of Clinical Microbiology and Infectious Diseases, 2021, 40, 751-759.	1.3	29
48	The MEK1/2-inhibitor ATR-002 efficiently blocks SARS-CoV-2 propagation and alleviates pro-inflammatory cytokine/chemokine responses. Cellular and Molecular Life Sciences, 2022, 79, 65.	2.4	29
49	A system for production of defective interfering particles in the absence of infectious influenza A virus. PLoS ONE, 2019, 14, e0212757.	1.1	27
50	Omicron: Master of immune evasion maintains robust ACE2 binding. Signal Transduction and Targeted Therapy, 2022, 7, 118.	7.1	27
51	Therapeutic Application of Alpha-1 Antitrypsin in COVID-19. American Journal of Respiratory and Critical Care Medicine, 2021, 204, 224-227.	2.5	25
52	The spike protein of SARS-CoV-2 variant A.30 is heavily mutated and evades vaccine-induced antibodies with high efficiency. Cellular and Molecular Immunology, 2021, 18, 2673-2675.	4.8	25
53	Spike residue 403 affects binding of coronavirus spikes to human ACE2. Nature Communications, 2021, 12, 6855.	5.8	25
54	A pair of noncompeting neutralizing human monoclonal antibodies protecting from disease in a SARSâ€CoVâ€2 infection model. European Journal of Immunology, 2022, 52, 770-783.	1.6	24

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55	SARS-CoV-2 delta variant neutralisation after heterologous ChAdOx1-S/BNT162b2 vaccination. Lancet, The, 2021, 398, 1041-1042.	6.3	24
56	Completion of Hepatitis C Virus Replication Cycle in Heterokaryons Excludes Dominant Restrictions in Human Non-liver and Mouse Liver Cell Lines. PLoS Pathogens, 2011, 7, e1002029.	2.1	23
57	The Hemagglutinin of Bat-Associated Influenza Viruses Is Activated by TMPRSS2 for pH-Dependent Entry into Bat but Not Human Cells. PLoS ONE, 2016, 11, e0152134.	1.1	23
58	Mutation D614G increases SARS-CoV-2 transmission. Signal Transduction and Targeted Therapy, 2021, 6, 101.	7.1	22
59	Characterization of African bat henipavirus GH-M74a glycoproteins. Journal of General Virology, 2014, 95, 539-548.	1.3	21
60	The Tetherin Antagonism of the Ebola Virus Glycoprotein Requires an Intact Receptor-Binding Domain and Can Be Blocked by GP1-Specific Antibodies. Journal of Virology, 2016, 90, 11075-11086.	1.5	21
61	How SARS-CoV-2 makes the cut. Nature Microbiology, 2021, 6, 828-829.	5.9	21
62	Surface Glycoproteins of an African Henipavirus Induce Syncytium Formation in a Cell Line Derived from an African Fruit Bat, Hypsignathus monstrosus. Journal of Virology, 2013, 87, 13889-13891.	1.5	20
63	Dynamic Ca2+ sensitivity stimulates the evolved SARS-CoV-2 spike strain-mediated membrane fusion for enhanced entry. Cell Reports, 2022, 39, 110694.	2.9	19
64	Tetherin Inhibits Nipah Virus but Not Ebola Virus Replication in Fruit Bat Cells. Journal of Virology, 2019, 93, .	1.5	18
65	Functional Properties and Genetic Relatedness of the Fusion and Hemagglutinin-Neuraminidase Proteins of a Mumps Virus-Like Bat Virus. Journal of Virology, 2015, 89, 4539-4548.	1.5	17
66	Evidence for an ACE2-Independent Entry Pathway That Can Protect from Neutralization by an Antibody Used for COVID-19 Therapy. MBio, 2022, 13, e0036422.	1.8	17
67	The Upper Respiratory Tract of Felids Is Highly Susceptible to SARS-CoV-2 Infection. International Journal of Molecular Sciences, 2021, 22, 10636.	1.8	16
68	Isolation and Characterization of New Variant Strains of Infectious Bronchitis Virus in Northern Egypt. Advances in Animal and Veterinary Sciences, 2015, 3, 362-371.	0.1	14
69	Entry, Replication, Immune Evasion, and Neurotoxicity of Synthetically Engineered Bat-Borne Mumps Virus. Cell Reports, 2018, 25, 312-320.e7.	2.9	13
70	Calu-3â€¯cells are largely resistant to entry driven by filovirus glycoproteins and the entry defect can be rescued by directed expression of DC-SIGN or cathepsin L. Virology, 2019, 532, 22-29.	1.1	13
71	Release of Immunomodulatory Ebola Virus Glycoprotein-Containing Microvesicles Is Suppressed by Tetherin in a Species-Specific Manner. Cell Reports, 2019, 26, 1841-1853.e6.	2.9	13
72	A GXXXA Motif in the Transmembrane Domain of the Ebola Virus Glycoprotein Is Required for Tetherin Antagonism. Journal of Virology, 2018, 92, .	1.5	12

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73	Synergistic inhibition of SARS-CoV-2 cell entry by otamixaban and covalent protease inhibitors: pre-clinical assessment of pharmacological and molecular properties. Chemical Science, 2021, 12, 12600-12609.	3.7	11
74	Improved cellular and humoral immunity upon a second BNT162b2 and mRNA-1273 boost in prime-boost vaccination no/low responders with end-stage renal disease. Kidney International, 2021, 100, 1335-1337.	2.6	11
75	Attachment Protein G of an African Bat Henipavirus Is Differentially Restricted in Chiropteran and Nonchiropteran Cells. Journal of Virology, 2014, 88, 11973-11980.	1.5	10
76	Augmented neutralization of SARSâ€CoVâ€2 Omicron variant by boost vaccination and monoclonal antibodies. European Journal of Immunology, 2022, 52, 970-977.	1.6	10
77	Virion Background and Efficiency of Virion Incorporation Determine Susceptibility of Simian Immunodeficiency Virus Env-Driven Viral Entry to Inhibition by IFITM Proteins. Journal of Virology, 2017, 91, .	1.5	9
78	Spike proteins of novel MERS-coronavirus isolates from North- and West-African dromedary camels mediate robust viral entry into human target cells. Virology, 2019, 535, 261-265.	1.1	9
79	Neutralizing antibody responses 300 days after SARSâ€CoVâ€2 infection and induction of high antibody titers after vaccination. European Journal of Immunology, 2022, 52, 810-815.	1.6	9
80	Exploring antiviral and anti-inflammatory effects of thiol drugs in COVID-19. American Journal of Physiology - Lung Cellular and Molecular Physiology, 2022, 323, L372-L389.	1.3	9
81	Cell Entry of Influenza A Viruses: Sweet Talk between HA and CaV1.2. Cell Host and Microbe, 2018, 23, 697-699.	5.1	8
82	Dalbavancin: novel candidate for COVID-19 treatment. Cell Research, 2021, 31, 243-244.	5.7	8
83	MCMV-based vaccine vectors expressing full-length viral proteins provide long-term humoral immune protection upon a single-shot vaccination. Cellular and Molecular Immunology, 2022, 19, 234-244.	4.8	8
84	Functional analysis of polymorphisms at the S1/S2 site of SARS-CoV-2 spike protein. PLoS ONE, 2022, 17, e0265453.	1.1	8
85	Ex vivo assay to evaluate the efficacy of drugs targeting sphingolipids in preventing SARS-CoV-2 infection of nasal epithelial cells. STAR Protocols, 2021, 2, 100356.	0.5	7
86	No evidence for increased cell entry or antibody evasion by Delta sublineage AY.4.2. Cellular and Molecular Immunology, 2022, 19, 449-452.	4.8	7
87	Peptidomimetic inhibitors of TMPRSS2 block SARS-CoV-2 infection in cell culture. Communications Biology, 2022, 5, .	2.0	6
88	Fusogenicity of the Ghana Virus (Henipavirus: Ghanaian bat henipavirus) Fusion Protein is Controlled by the Cytoplasmic Domain of the Attachment Glycoprotein. Viruses, 2019, 11, 800.	1.5	5
89	Recombinant mumps viruses expressing the batMuV fusion glycoprotein are highly fusion active and neurovirulent. Journal of General Virology, 2016, 97, 2837-2848.	1.3	5
90	SARS-CoV-2 variants C.1.2 and B.1.621 (Mu) partially evade neutralization by antibodies elicited upon infection or vaccination. Cell Reports, 2022, 39, 110754.	2.9	5

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91	Disease Manifestation and Viral Sequences in a Bonobo More Than 30 Years after Papillomavirus Infection. Pathogens, 2019, 8, 13.	1.2	4
92	Analysis of Resistance of Ebola Virus Glycoprotein-Driven Entry Against MDL28170, An Inhibitor of Cysteine Cathepsins. Pathogens, 2019, 8, 192.	1.2	3
93	A surrogate cellâ€based SARSâ€CoVâ€2 spike blocking assay. European Journal of Immunology, 2021, 51, 2665-2676.	1.6	3
94	Understanding Omicron: Transmissibility, immune evasion and antiviral intervention. Clinical and Translational Medicine, 2022, 12, e839.	1.7	3
95	Mutagenic Analysis of the HIV Restriction Factor Shiftless. Viruses, 2022, 14, 1454.	1.5	3
96	Nafamostat-Mediated Inhibition of SARS-CoV-2 Ribosomal Frameshifting Is Insufficient to Impair Viral Replication in Vero Cells. Comment on Munshi et al. Identifying Inhibitors of âˆ’1 Programmed Ribosomal Frameshifting in a Broad Spectrum of Coronaviruses. Viruses 2022, 14, 177. Viruses, 2022, 14, 1526.	1.5	3
97	Role of rhesus macaque IFITM3(2) in simian immunodeficiency virus infection of macaques. PLoS ONE, 2019, 14, e0224082.	1.1	1
98	Development and Evaluation of Peptidomimetic Compounds against SARSâ€CoVâ€2 Spike Protein: An <i>in silico</i> and <i>in vitro</i> Study. Molecular Informatics, 2022, 41, .	1.4	1
99	40 COMPLETION OF HEPATITIS C VIRUS REPLICATION CYCLE IN HETEROKARYONS EXCLUDES DOMINANT RESTRICTION FACTORS IN HUMAN NON-LIVER AND MOUSE LIVER CELL LINES. Journal of Hepatology, 2011, 54, S18-S19.	1.8	0
100	The Amino Acid at Position 8 of the Proteolytic Cleavage Site of the Mumps Virus Fusion Protein Affects Viral Proteolysis and Fusogenicity. Journal of Virology, 2020, 94, .	1.5	0
101	Efficient antibody evasion but reduced ACE2 binding by the emerging SARS-CoV-2 variant B.1.640.2. , 2022, , .		0