Marcel Alexander MÃ¼ller

List of Publications by Year
in descending order

125 papers	43,145 citations	15466 65 h-index	14702 127 g-index
147 all docs	147 docs citations	147 times ranked	62691 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	Virological assessment of hospitalized patients with COVID-2019. Nature, 2020, 581, 465-469.	13.7	5,822
3	Dipeptidyl peptidase 4 is a functional receptor for the emerging human coronavirus-EMC. Nature, 2013, 495, 251-254.	13.7	1,731
4	Severe Acute Respiratory Syndrome Coronavirus 2â˜Specific Antibody Responses in Coronavirus Disease Patients. Emerging Infectious Diseases, 2020, 26, 1478-1488.	2.0	1,389
5	SARS-CoV-2-reactive T cells in healthy donors and patients with COVID-19. Nature, 2020, 587, 270-274.	13.7	1,115
6	Evidence that TMPRSS2 Activates the Severe Acute Respiratory Syndrome Coronavirus Spike Protein for Membrane Fusion and Reduces Viral Control by the Humoral Immune Response. Journal of Virology, 2011, 85, 4122-4134.	1.5	963
7	Middle East respiratory syndrome coronavirus neutralising serum antibodies in dromedary camels: a comparative serological study. Lancet Infectious Diseases, The, 2013, 13, 859-866.	4.6	616
8	Bats host major mammalian paramyxoviruses. Nature Communications, 2012, 3, 796.	5.8	546
9	Nafamostat Mesylate Blocks Activation of SARS-CoV-2: New Treatment Option for COVID-19. Antimicrobial Agents and Chemotherapy, 2020, 64, .	1.4	394
10	Rapid reconstruction of SARS-CoV-2 using a synthetic genomics platform. Nature, 2020, 582, 561-565.	13.7	377
11	Chloroquine does not inhibit infection of human lung cells with SARS-CoV-2. Nature, 2020, 585, 588-590.	13.7	370
12	The SARS-Coronavirus-Host Interactome: Identification of Cyclophilins as Target for Pan-Coronavirus Inhibitors. PLoS Pathogens, 2011, 7, e1002331.	2.1	367
13	Serological assays for emerging coronaviruses: Challenges and pitfalls. Virus Research, 2014, 194, 175-183.	1.1	344
14	Clinical features and virological analysis of a case of Middle East respiratory syndrome coronavirus infection. Lancet Infectious Diseases, The, 2013, 13, 745-751.	4.6	343
15	Transmission of MERS-Coronavirus in Household Contacts. New England Journal of Medicine, 2014, 371, 828-835.	13.9	338
16	Genomic Characterization of Severe Acute Respiratory Syndrome-Related Coronavirus in European Bats and Classification of Coronaviruses Based on Partial RNA-Dependent RNA Polymerase Gene Sequences. Journal of Virology, 2010, 84, 11336-11349.	1.5	329
17	Assays for laboratory confirmation of novel human coronavirus (hCoV-EMC) infections. Eurosurveillance, 2012, 17, .	3.9	314
18	Viral Shedding and Antibody Response in 37 Patients With Middle East Respiratory Syndrome Coronavirus Infection. Clinical Infectious Diseases, 2016, 62, civ951.	2.9	312

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19	The Spike Protein of the Emerging Betacoronavirus EMC Uses a Novel Coronavirus Receptor for Entry, Can Be Activated by TMPRSS2, and Is Targeted by Neutralizing Antibodies. Journal of Virology, 2013, 87, 5502-5511.	1.5	305
20	Human Infection with MERS Coronavirus after Exposure to Infected Camels, Saudi Arabia, 2013. Emerging Infectious Diseases, 2014, 20, 1012-1015.	2.0	305
21	A Therapeutic Non-self-reactive SARS-CoV-2 Antibody Protects from Lung Pathology in a COVID-19 Hamster Model. Cell, 2020, 183, 1058-1069.e19.	13.5	305
22	SKP2 attenuates autophagy through Beclin1-ubiquitination and its inhibition reduces MERS-Coronavirus infection. Nature Communications, 2019, 10, 5770.	5.8	286
23	Challenges of Convalescent Plasma Infusion Therapy in Middle East Respiratory Coronavirus Infection: A Single Centre Experience. Antiviral Therapy, 2018, 23, 617-622.	0.6	275
24	Comparison of seven commercial SARS-CoV-2 rapid point-of-care antigen tests: a single-centre laboratory evaluation study. Lancet Microbe, The, 2021, 2, e311-e319.	3.4	274
25	Presence of Middle East respiratory syndrome coronavirus antibodies in Saudi Arabia: a nationwide, cross-sectional, serological study. Lancet Infectious Diseases, The, 2015, 15, 559-564.	4.6	270
26	Cleavage and Activation of the Severe Acute Respiratory Syndrome Coronavirus Spike Protein by Human Airway Trypsin-Like Protease. Journal of Virology, 2011, 85, 13363-13372.	1.5	259
27	MERS Coronavirus Neutralizing Antibodies in Camels, Eastern Africa, 1983â€“1997. Emerging Infectious Diseases, 2014, 20, 2093-5.	2.0	249
28	Bats Worldwide Carry Hepatitis E Virus-Related Viruses That Form a Putative Novel Genus within the Family Hepeviridae. Journal of Virology, 2012, 86, 9134-9147.	1.5	222
29	Cross-reactive CD4 ⁺ T cells enhance SARS-CoV-2 immune responses upon infection and vaccination. Science, 2021, 374, eabh1823.	6.0	221
30	Antibodies against MERS Coronavirus in Dromedary Camels, United Arab Emirates, 2003 and 2013. Emerging Infectious Diseases, 2014, 20, 552-559.	2.0	217
31	Distant Relatives of Severe Acute Respiratory Syndrome Coronavirus and Close Relatives of Human Coronavirus 229E in Bats, Ghana. Emerging Infectious Diseases, 2009, 15, 1377-1384.	2.0	212
32	Transcriptomic profiling of SARS-CoV-2 infected human cell lines identifies HSP90 as target for COVID-19 therapy. IScience, 2021, 24, 102151.	1.9	202
33	Antibodies against MERS Coronavirus in Dromedary Camels, Kenya, 1992â€“2013. Emerging Infectious Diseases, 2014, 20, 1319-22.	2.0	191
34	Replication of human coronaviruses SARS-CoV, HCoV-NL63 and HCoV-229E is inhibited by the drug FK506. Virus Research, 2012, 165, 112-117.	1.1	189
35	Evidence for Novel Hepaciviruses in Rodents. PLoS Pathogens, 2013, 9, e1003438.	2.1	187
36	Efficient Replication of the Novel Human Betacoronavirus EMC on Primary Human Epithelium Highlights Its Zoonotic Potential. MBio, 2013, 4, e00611-12.	1.8	183

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37	Attenuation of replication by a 29 nucleotide deletion in SARS-coronavirus acquired during the early stages of human-to-human transmission. Scientific Reports, 2018, 8, 15177.	1.6	181
38	Henipavirus RNA in African Bats. PLoS ONE, 2009, 4, e6367.	1.1	181
39	Human Coronavirus EMC Does Not Require the SARS-Coronavirus Receptor and Maintains Broad Replicative Capability in Mammalian Cell Lines. MBio, 2012, 3, .	1.8	180
40	Human Adaptation of Ebola Virus during the West African Outbreak. Cell, 2016, 167, 1079-1087.e5.	13.5	180
41	Middle East Respiratory Syndrome Coronavirus Accessory Protein 4a Is a Type I Interferon Antagonist. Journal of Virology, 2013, 87, 12489-12495.	1.5	179
42	Amplification of Emerging Viruses in a Bat Colony. Emerging Infectious Diseases, 2011, 17, 449-456.	2.0	176
43	Middle East Respiratory Syndrome coronavirus (MERS-CoV) serology in major livestock species in an affected region in Jordan, June to September 2013. Eurosurveillance, 2013, 18, 20662.	3.9	174
44	p53 down-regulates SARS coronavirus replication and is targeted by the SARS-unique domain and PL ^{pro} via E3 ubiquitin ligase RCHY1. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, E5192-201.	3.3	172
45	SARS-CoV-2-mediated dysregulation of metabolism and autophagy uncovers host-targeting antivirals. Nature Communications, 2021, 12, 3818.	5.8	172
46	Human Coronavirus NL63 and 229E Seroconversion in Children. Journal of Clinical Microbiology, 2008, 46, 2368-2373.	1.8	171
47	Poor Clinical Sensitivity of Rapid Antigen Test for Influenza A Pandemic (H1N1) 2009 Virus. Emerging Infectious Diseases, 2009, 15, 1662-1664.	2.0	167
48	Bats carry pathogenic hepadnaviruses antigenically related to hepatitis B virus and capable of infecting human hepatocytes. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 16151-16156.	3.3	154
49	Detection and Prevalence Patterns of Group I Coronaviruses in Bats, Northern Germany. Emerging Infectious Diseases, 2008, 14, 626-631.	2.0	148
50	Rapid point of care diagnostic tests for viral and bacterial respiratory tract infectionsâ€"needs, advances, and future prospects. Lancet Infectious Diseases, The, 2014, 14, 1123-1135.	4.6	143
51	Targeting Membrane-Bound Viral RNA Synthesis Reveals Potent Inhibition of Diverse Coronaviruses Including the Middle East Respiratory Syndrome Virus. PLoS Pathogens, 2014, 10, e1004166.	2.1	136
52	Link of a ubiquitous human coronavirus to dromedary camels. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 9864-9869.	3.3	122
53	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
54	Filovirus receptor NPC1 contributes to species-specific patterns of ebolavirus susceptibility in bats. ELife, 2015, 4, .	2.8	110

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55	In-vitro renal epithelial cell infection reveals a viral kidney tropism as a potential mechanism for acute renal failure during Middle East Respiratory Syndrome (MERS) Coronavirus infection. Virology Journal, 2013, 10, 359.	1.4	109
56	Characterization of a Novel Betacoronavirus Related to Middle East Respiratory Syndrome Coronavirus in European Hedgehogs. Journal of Virology, 2014, 88, 717-724.	1.5	104
57	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
58	Accelerated viral dynamics in bat cell lines, with implications for zoonotic emergence. ELife, 2020, 9, .	2.8	91
59	Replicative Capacity of MERS Coronavirus in Livestock Cell Lines. Emerging Infectious Diseases, 2014, 20, 276-9.	2.0	85
60	Reference gene selection for quantitative real-time PCR analysis in virus infected cells: SARS corona virus, Yellow fever virus, Human Herpesvirus-6, Camelpox virus and Cytomegalovirus infections. Virology Journal, 2005, 2, 7.	1.4	82
61	Investigation of Anti-Middle East Respiratory Syndrome Antibodies in Blood Donors and Slaughterhouse Workers in Jeddah and Makkah, Saudi Arabia, Fall 2012. Journal of Infectious Diseases, 2014, 209, 243-246.	1.9	81
62	Specific serology for emerging human coronaviruses by protein microarray. Eurosurveillance, 2013, 18, 20441.	3.9	80
63	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
64	Interferon antagonism by SARS-CoV-2: a functional study using reverse genetics. Lancet Microbe, The, 2021, 2, e210-e218.	3.4	71
65	Serologic responses of 42 MERS-coronavirus-infected patients according to the disease severity. Diagnostic Microbiology and Infectious Disease, 2017, 89, 106-111.	0.8	70
66	Seroprevalence and correlates of SARS-CoV-2 neutralizing antibodies from a population-based study in Bonn, Germany. Nature Communications, 2021, 12, 2117.	5.8	70
67	Type I Interferon Reaction to Viral Infection in Interferon-Competent, Immortalized Cell Lines from the African Fruit Bat Eidolon helvum. PLoS ONE, 2011, 6, e28131.	1.1	68
68	Occupational Exposure to Dromedaries and Risk for MERS-CoV Infection, Qatar, 2013â€“2014. Emerging Infectious Diseases, 2015, 21, 1422-1425.	2.0	66
69	Comparative Analysis of Ebola Virus Glycoprotein Interactions With Human and Bat Cells. Journal of Infectious Diseases, 2011, 204, S840-S849.	1.9	64
70	The papain-like protease determines a virulence trait that varies among members of the SARS-coronavirus species. PLoS Pathogens, 2018, 14, e1007296.	2.1	64
71	Plaque assay for human coronavirus NL63 using human colon carcinoma cells. Virology Journal, 2008, 5, 138.	1.4	62
72	Two Novel Parvoviruses in Frugivorous New and Old World Bats. PLoS ONE, 2011, 6, e29140.	1.1	62

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73	Coronavirus Antibodies in African Bat Species. Emerging Infectious Diseases, 2007, 13, 1367-1370.	2.0	61
74	A metaanalysis of bat phylogenetics and positive selection based on genomes and transcriptomes from 18 species. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 11351-11360.	3.3	57
75	Combined action of type I and type III interferon restricts initial replication of severe acute respiratory syndrome coronavirus in the lung but fails to inhibit systemic virus spread. Journal of General Virology, 2012, 93, 2601-2605.	1.3	56
76	MERS-CoV Antibodies in Humans, Africa, 2013â€“2014. Emerging Infectious Diseases, 2016, 22, 1086-1089.	2.0	53
77	Evolution and Antiviral Specificities of Interferon-Induced Mx Proteins of Bats against Ebola, Influenza, and Other RNA Viruses. Journal of Virology, 2017, 91, .	1.5	53
78	Enzootic patterns of Middle East respiratory syndrome coronavirus in imported African and local Arabian dromedary camels: a prospective genomic study. Lancet Planetary Health, The, 2019, 3, e521-e528.	5.1	52
79	Disease Severity, Fever, Age, and Sex Correlate With SARS-CoV-2 Neutralizing Antibody Responses. Frontiers in Immunology, 2020, 11, 628971.	2.2	51
80	Provenance and Geographic Spread of St. Louis Encephalitis Virus. MBio, 2013, 4, e00322-13.	1.8	50
81	Infectious Middle East Respiratory Syndrome Coronavirus Excretion and Serotype Variability Based on Live Virus Isolates from Patients in Saudi Arabia. Journal of Clinical Microbiology, 2015, 53, 2951-2955.	1.8	47
82	Serologic Assessment of Possibility for MERS-CoV Infection in Equids. Emerging Infectious Diseases, 2015, 21, 181-182.	2.0	45
83	Mammalian deltavirus without hepadnavirus coinfection in the neotropical rodent Proechimys semispinosus. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 17977-17983.	3.3	44
84	Susceptibility of different eukaryotic cell lines to SARS-coronavirus. Archives of Virology, 2005, 150, 1023-1031.	0.9	43
85	SARS-CoV-2 Proteome-Wide Analysis Revealed Significant Epitope Signatures in COVID-19 Patients. Frontiers in Immunology, 2021, 12, 629185.	2.2	42
86	Serological Evidence of Influenza A Viruses in Frugivorous Bats from Africa. PLoS ONE, 2015, 10, e0127035.	1.1	39
87	Serologic Evidence for MERS-CoV Infection in Dromedary Camels, Punjab, Pakistan, 2012â€“2015. Emerging Infectious Diseases, 2017, 23, 550-551.	2.0	38
88	Time Course of MERS-CoV Infection and Immunity in Dromedary Camels. Emerging Infectious Diseases, 2016, 22, 2171-2173.	2.0	37
89	Virus- and Interferon Alpha-Induced Transcriptomes of Cells from the Microbat Myotis daubentonii. IScience, 2019, 19, 647-661.	1.9	37
90	Comparative Serological Study for the Prevalence of Anti-MERS Coronavirus Antibodies in High- and Low-Risk Groups in Qatar. Journal of Immunology Research, 2019, 2019, 1-8.	0.9	37

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91	Human Coronavirus NL63 Open Reading Frame 3 encodes a virion-incorporated N-glycosylated membrane protein. Virology Journal, 2010, 7, 6.	1.4	35
92	An RNA-dependent RNA polymerase gene in bat genomes derived from an ancient negative-strand RNA virus. Scientific Reports, 2016, 6, 25873.	1.6	35
93	Shared Common Ancestry of Rodent Alphacoronaviruses Sampled Globally. Viruses, 2019, 11, 125.	1.5	35
94	Inhibition of Proprotein Convertases Abrogates Processing of the Middle Eastern Respiratory Syndrome Coronavirus Spike Protein in Infected Cells but Does Not Reduce Viral Infectivity. Journal of Infectious Diseases, 2015, 211, 889-897.	1.9	34
95	Impaired performance of SARS-CoV-2 antigen-detecting rapid diagnostic tests at elevated and low temperatures. Journal of Clinical Virology, 2021, 138, 104796.	1.6	33
96	CD26/DPP4 Cell-Surface Expression in Bat Cells Correlates with Bat Cell Susceptibility to Middle East Respiratory Syndrome Coronavirus (MERS-CoV) Infection and Evolution of Persistent Infection. PLoS ONE, 2014, 9, e112060.	1.1	33
97	No Serologic Evidence of Middle East Respiratory Syndrome Coronavirus Infection Among Camel Farmers Exposed to Highly Seropositive Camel Herds: A Household Linked Study, Kenya, 2013. American Journal of Tropical Medicine and Hygiene, 2017, 96, 1318-1324.	0.6	33
98	Evidence for widespread infection of African bats with Crimean-Congo hemorrhagic fever-like viruses. Scientific Reports, 2016, 6, 26637.	1.6	30
99	Influenza A Virus Polymerase Is a Site for Adaptive Changes during Experimental Evolution in Bat Cells. Journal of Virology, 2014, 88, 12572-12585.	1.5	28
100	A Novel Rhabdovirus Isolated from the Straw-Colored Fruit Bat Eidolon helvum, with Signs of Antibodies in Swine and Humans. Journal of Virology, 2015, 89, 4588-4597.	1.5	26
101	Transcriptome profile of lung dendritic cells after in vitro porcine reproductive and respiratory syndrome virus (PRRSV) infection. PLoS ONE, 2017, 12, e0187735.	1.1	25
102	Bat Airway Epithelial Cells: A Novel Tool for the Study of Zoonotic Viruses. PLoS ONE, 2014, 9, e84679.	1.1	24
103	Detection of distinct MERS-Coronavirus strains in dromedary camels from Kenya, 2017. Emerging Microbes and Infections, 2018, 7, 1-4.	3.0	24
104	Antiviral and Immunomodulatory Effects of Pelargonium sidoides DC. Root Extract EPsÂ® 7630 in SARS-CoV-2-Infected Human Lung Cells. Frontiers in Pharmacology, 2021, 12, 757666.	1.6	23
105	Broad and Temperature Independent Replication Potential of Filoviruses on Cells Derived From Old and New World Bat Species. Journal of Infectious Diseases, 2016, 214, S297-S302.	1.9	22
106	Factors determining human-to-human transmissibility of zoonotic pathogens via contact. Current Opinion in Virology, 2017, 22, 7-12.	2.6	21
107	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
108	Suggested new breakpoints of anti-MERS-CoV antibody ELISA titers: performance analysis of serologic tests. European Journal of Clinical Microbiology and Infectious Diseases, 2017, 36, 2179-2186.	1.3	19

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109	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
110	Transgene expression in the genome of Middle East respiratory syndrome coronavirus based on a novel reverse genetics system utilizing Red-mediated recombination cloning. Journal of General Virology, 2017, 98, 2461-2469.	1.3	16
111	Comparison of Serologic Assays for Middle East Respiratory Syndrome Coronavirus. Emerging Infectious Diseases, 2019, 25, 1878-1883.	2.0	16
112	Cutting Edge: Serum but Not Mucosal Antibody Responses Are Associated with Pre-Existing SARS-CoV-2 Spike Cross-Reactive CD4+ T Cells following BNT162b2 Vaccination in the Elderly. Journal of Immunology, 2022, 208, 1001-1005.	0.4	16
113	A patient with severe respiratory failure caused by novel human coronavirus. Infection, 2014, 42, 203-206.	2.3	14
114	Surface glycoproteins of the recently identified African Henipavirus promote viral entry and cell fusion in a range of human, simian and bat cell lines. Virus Research, 2014, 181, 77-80.	1.1	14
115	Serologic Evaluation of MERS Screening Strategy for Healthcare Personnel During a Hospital-Associated Outbreak. Infection Control and Hospital Epidemiology, 2017, 38, 234-238.	1.0	13
116	Entry, Replication, Immune Evasion, and Neurotoxicity of Synthetically Engineered Bat-Borne Mumps Virus. Cell Reports, 2018, 25, 312-320.e7.	2.9	13
117	Impact of dexamethasone on SARS-CoV-2 concentration kinetics and antibody response in hospitalized COVID-19 patients: results from a prospective observational study. Clinical Microbiology and Infection, 2021, 27, 1520.e7-1520.e10.	2.8	13
118	Functional comparison of MERS-coronavirus lineages reveals increased replicative fitness of the recombinant lineage 5. Nature Communications, 2021, 12, 5324.	5.8	11
119	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
120	Epithelial cell lines of the cotton rat (Sigmodon hispidus) are highly susceptible in vitro models to zoonotic Bunya-, Rhabdo-, and Flaviviruses. Virology Journal, 2016, 13, 74.	1.4	9
121	Nonhuman Transferrin Receptor 1 Is an Efficient Cell Entry Receptor for Ocozocoautla de Espinosa Virus. Journal of Virology, 2013, 87, 13930-13935.	1.5	5
122	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
123	Human Lungs Show Limited Permissiveness for SARS-CoV-2 Due to Scarce ACE2 Levels But Strong Virus-Induced Immune Activation in Alveolar Macrophages. SSRN Electronic Journal, 0, , .	0.4	5
124	Reduced IFN-ÃŸ inhibitory activity of Lagos bat virus phosphoproteins in human compared to Eidolon helvum bat cells. PLoS ONE, 2022, 17, e0264450.	1.1	4
125	A Sars-Cov-2 Neutralizing Antibody Protects from Lung Pathology in a Covid-19 Hamster Model. SSRN Electronic Journal, 0, , .	0.4	3