

Ready, Set, Fuse! The Coronavirus Spike Protein and Ac

Viruses

4, 557-580

DOI: [10.3390/v4040557](https://doi.org/10.3390/v4040557)

Citation Report

#	ARTICLE	IF	CITATIONS
1	Middle East Respiratory Syndrome Coronavirus Spike Protein Delivered by Modified Vaccinia Virus Ankara Efficiently Induces Virus-Neutralizing Antibodies. <i>Journal of Virology</i> , 2013, 87, 11950-11954.	1.5	127
2	Contributions of the S2 spike ectodomain to attachment and host range of infectious bronchitis virus. <i>Virus Research</i> , 2013, 177, 127-137.	1.1	34
3	Proteolytic activation of the SARS-coronavirus spike protein: Cutting enzymes at the cutting edge of antiviral research. <i>Antiviral Research</i> , 2013, 100, 605-614.	1.9	354
4	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. <i>Journal of Virology</i> , 2013, 87, 5502-5511.	1.5	305
5	Human Coronavirus HKU1 Infection of Primary Human Type II Alveolar Epithelial Cells: Cytopathic Effects and Innate Immune Response. <i>PLoS ONE</i> , 2013, 8, e70129.	1.1	25
6	Identification and Characterization of a Proteolytically Primed Form of the Murine Coronavirus Spike Proteins after Fusion with the Target Cell. <i>Journal of Virology</i> , 2014, 88, 4943-4952.	1.5	27
7	Membrane proteins of arterivirus particles: Structure, topology, processing and function. <i>Virus Research</i> , 2014, 194, 16-36.	1.1	51
8	Membrane ectopeptidases targeted by human coronaviruses. <i>Current Opinion in Virology</i> , 2014, 6, 55-60.	2.6	37
9	Influence of hydrophobic and electrostatic residues on SARS coronavirus S2 protein stability: Insights into mechanisms of general viral fusion and inhibitor design. <i>Protein Science</i> , 2014, 23, 603-617.	3.1	34
10	Receptor usage and cell entry of bat coronavirus HKU4 provide insight into bat-to-human transmission of MERS coronavirus. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014, 111, 12516-12521.	3.3	232
11	DESC1 and MSPL Activate Influenza A Viruses and Emerging Coronaviruses for Host Cell Entry. <i>Journal of Virology</i> , 2014, 88, 12087-12097.	1.5	76
12	Identification of novel functional regions within the spike glycoprotein of MHV-A59 based on a bioinformatics approach. <i>Virus Research</i> , 2014, 189, 177-188.	1.1	5
13	Protein-Protein Interactions of Viroporins in Coronaviruses and Paramyxoviruses: New Targets for Antivirals?. <i>Viruses</i> , 2015, 7, 2858-2883.	1.5	27
14	Cleavage of a Neuroinvasive Human Respiratory Virus Spike Glycoprotein by Proprotein Convertases Modulates Neurovirulence and Virus Spread within the Central Nervous System. <i>PLoS Pathogens</i> , 2015, 11, e1005261.	2.1	62
15	A Single Point Mutation Creating a Furin Cleavage Site in the Spike Protein Renders Porcine Epidemic Diarrhea Coronavirus Trypsin Independent for Cell Entry and Fusion. <i>Journal of Virology</i> , 2015, 89, 8077-8081.	1.5	33
16	Coronavirus envelope (E) protein remains at the site of assembly. <i>Virology</i> , 2015, 478, 75-85.	1.1	173
17	Two Mutations Were Critical for Bat-to-Human Transmission of Middle East Respiratory Syndrome Coronavirus. <i>Journal of Virology</i> , 2015, 89, 9119-9123.	1.5	119
18	Genotyping coronaviruses associated with feline infectious peritonitis. <i>Journal of General Virology</i> , 2015, 96, 1358-1368.	1.3	47

#	ARTICLE	IF	CITATIONS
19	Ebola Virus and Severe Acute Respiratory Syndrome Coronavirus Display Late Cell Entry Kinetics: Evidence that Transport to NPC1 Endolysosomes Is a Rate-Defining Step. <i>Journal of Virology</i> , 2015, 89, 2931-2943.	1.5	117
20	Incorporation of Spike and Membrane Glycoproteins into Coronavirus Virions. <i>Viruses</i> , 2015, 7, 1700-1725.	1.5	123
21	Human Coronavirus HKU1 Spike Protein Uses <i>O</i> -Acetylated Sialic Acid as an Attachment Receptor Determinant and Employs Hemagglutinin-Esterase Protein as a Receptor-Destroying Enzyme. <i>Journal of Virology</i> , 2015, 89, 7202-7213.	1.5	218
22	Inhibition of Proprotein Convertases Abrogates Processing of the Middle Eastern Respiratory Syndrome Coronavirus Spike Protein in Infected Cells but Does Not Reduce Viral Infectivity. <i>Journal of Infectious Diseases</i> , 2015, 211, 889-897.	1.9	34
24	Viral and Cellular mRNA Translation in Coronavirus-Infected Cells. <i>Advances in Virus Research</i> , 2016, 96, 165-192.	0.9	182
25	Principles of Virus Uncoating: Cues and the Snooker Ball. <i>Traffic</i> , 2016, 17, 569-592.	1.3	105
26	Structure, Function, and Evolution of Coronavirus Spike Proteins. <i>Annual Review of Virology</i> , 2016, 3, 237-261.	3.0	2,142
27	Targeting the Channel Activity of Viroporins. <i>Advances in Protein Chemistry and Structural Biology</i> , 2016, 104, 307-355.	1.0	28
28	The requirement of environmental acidification for Ibaraki virus infection to host cells. <i>Journal of Veterinary Medical Science</i> , 2016, 78, 153-156.	0.3	5
30	Cell Entry of Porcine Epidemic Diarrhea Coronavirus Is Activated by Lysosomal Proteases. <i>Journal of Biological Chemistry</i> , 2016, 291, 24779-24786.	1.6	43
31	Cellular entry of the porcine epidemic diarrhea virus. <i>Virus Research</i> , 2016, 226, 117-127.	1.1	128
32	Comparison of lentiviruses pseudotyped with S proteins from coronaviruses and cell tropisms of porcine coronaviruses. <i>Virologica Sinica</i> , 2016, 31, 49-56.	1.2	20
33	Coronaviruses and the human airway: a universal system for virus-host interaction studies. <i>Virology Journal</i> , 2016, 13, 24.	1.4	86
34	Neurovirulent Murine Coronavirus JHM.SD Uses Cellular Zinc Metalloproteases for Virus Entry and Cell-Cell Fusion. <i>Journal of Virology</i> , 2017, 91, .	1.5	59
35	Betacoronavirus Adaptation to Humans Involved Progressive Loss of Hemagglutinin-Esterase Lectin Activity. <i>Cell Host and Microbe</i> , 2017, 21, 356-366.	5.1	83
36	Channel-Inactivating Mutations and Their Revertant Mutants in the Envelope Protein of Infectious Bronchitis Virus. <i>Journal of Virology</i> , 2017, 91, .	1.5	27
37	Protection against infectious bronchitis virus by spike ectodomain subunit vaccine. <i>Vaccine</i> , 2017, 35, 5864-5871.	1.7	23
38	Mac-1 deficiency induces respiratory failure by affecting type I alveolar epithelial cells. <i>Genetics and Molecular Research</i> , 2017, 16, .	0.3	0

#	ARTICLE	IF	CITATIONS
39	Prevalence and genetic diversity analysis of human coronaviruses among cross-border children. <i>Virology Journal</i> , 2017, 14, 230.	1.4	33
40	Structural model of the SARS coronavirus E channel in LMPG micelles. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 2018, 1860, 1309-1317.	1.4	155
41	Cryo-Electron Microscopy Structure of Porcine Deltacoronavirus Spike Protein in the Prefusion State. <i>Journal of Virology</i> , 2018, 92, .	1.5	101
42	Crystal structure of the post-fusion core of the Human coronavirus 229E spike protein at 1.86Å resolution. <i>Acta Crystallographica Section D: Structural Biology</i> , 2018, 74, 841-851.	1.1	18
43	Host Cell Proteases: Cathepsins. , 2018, , 249-276.		11
44	Middle East Respiratory Syndrome Coronavirus Spike Protein Is Not Activated Directly by Cellular Furin during Viral Entry into Target Cells. <i>Journal of Virology</i> , 2018, 92, .	1.5	60
45	Cryo-EM structure of infectious bronchitis coronavirus spike protein reveals structural and functional evolution of coronavirus spike proteins. <i>PLoS Pathogens</i> , 2018, 14, e1007009.	2.1	96
46	The C-terminal domain of the MERS coronavirus M protein contains a trans-Golgi network localization signal. <i>Journal of Biological Chemistry</i> , 2019, 294, 14406-14421.	1.6	100
47	Biochemical Analysis of Coronavirus Spike Glycoprotein Conformational Intermediates during Membrane Fusion. <i>Journal of Virology</i> , 2019, 93, .	1.5	23
48	Recombinant Chimeric Transmissible Gastroenteritis Virus (TGEV) - Porcine Epidemic Diarrhea Virus (PEDV) Virus Provides Protection against Virulent PEDV. <i>Viruses</i> , 2019, 11, 682.	1.5	22
49	Middle East Respiratory Syndrome Coronavirus in Dromedaries in Ethiopia Is Antigenically Different From the Middle East Isolate EMC. <i>Frontiers in Microbiology</i> , 2019, 10, 1326.	1.5	14
50	Structural insights into coronavirus entry. <i>Advances in Virus Research</i> , 2019, 105, 93-116.	0.9	669
51	Human coronaviruses OC43 and HKU1 bind to 9-O-acetylated sialic acids via a conserved receptor-binding site in spike protein domain A. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019, 116, 2681-2690.	3.3	335
52	Coronavirus envelope protein: current knowledge. <i>Virology Journal</i> , 2019, 16, 69.	1.4	1,449
53	Diagnosis of Feline Infectious Peritonitis: A Review of the Current Literature. <i>Viruses</i> , 2019, 11, 1068.	1.5	88
54	Minimum Determinants of Transmissible Gastroenteritis Virus Enteric Tropism Are Located in the N-Terminus of Spike Protein. <i>Pathogens</i> , 2020, 9, 2.	1.2	15
55	Genetics of COVID-19. <i>Jornal De Pediatria</i> , 2021, 97, 378-386.	0.9	17
56	The sequence at Spike S1/S2 site enables cleavage by furin and phospho-regulation in SARS-CoV2 but not in SARS-CoV1 or MERS-CoV. <i>Scientific Reports</i> , 2020, 10, 16944.	1.6	125

#	ARTICLE	IF	CITATIONS
57	Furin Inhibitors Block SARS-CoV-2 Spike Protein Cleavage to Suppress Virus Production and Cytopathic Effects. <i>Cell Reports</i> , 2020, 33, 108254.	2.9	195
58	Inhibiting Ebola virus and SARS-CoV-2 entry. <i>Science</i> , 2020, 370, 167-168.	6.0	6
59	Emerging strategies on in silico drug development against COVID-19: challenges and opportunities. <i>European Journal of Pharmaceutical Sciences</i> , 2020, 155, 105522.	1.9	25
60	Novel insights into the treatment of SARS-CoV-2 infection: An overview of current clinical trials. <i>International Journal of Biological Macromolecules</i> , 2020, 165, 18-43.	3.6	35
61	Protein-sol pKa: prediction of electrostatic frustration, with application to coronaviruses. <i>Bioinformatics</i> , 2020, 36, 5112-5114.	1.8	6
62	Minireview of progress in the structural study of SARS-CoV-2 proteins. <i>Current Research in Microbial Sciences</i> , 2020, 1, 53-61.	1.4	43
63	Application prospect of polysaccharides in the development of anti-novel coronavirus drugs and vaccines. <i>International Journal of Biological Macromolecules</i> , 2020, 164, 331-343.	3.6	121
64	Dynamic Regulation of SARS-Cov-2 Binding and Cell Entry Mechanisms in Remodeled Human Ventricular Myocardium. <i>JACC Basic To Translational Science</i> , 2020, 5, 871-883.	1.9	51
65	COVID-19/SARS-CoV-2 Infection: Lysosomes and Lysosomotropism Implicate New Treatment Strategies and Personal Risks. <i>International Journal of Molecular Sciences</i> , 2020, 21, 4953.	1.8	41
66	COVID-19 during Pregnancy and Postpartum:. <i>Journal of Dietary Supplements</i> , 2022, 19, 115-142.	1.4	24
67	The Potential Role of Osteopontin and Furin in Worsening Disease Outcomes in COVID-19 Patients with Pre-Existing Diabetes. <i>Cells</i> , 2020, 9, 2528.	1.8	22
68	Kallikrein 13 serves as a priming protease during infection by the human coronavirus HKU1. <i>Science Signaling</i> , 2020, 13, .	1.6	10
69	The Role of Molecular Chaperones in Virus Infection and Implications for Understanding and Treating COVID-19. <i>Journal of Clinical Medicine</i> , 2020, 9, 3518.	1.0	30
70	Spike Glycoprotein-Mediated Entry of SARS Coronaviruses. <i>Viruses</i> , 2020, 12, 1289.	1.5	35
71	Structure-guided covalent stabilization of coronavirus spike glycoprotein trimers in the closed conformation. <i>Nature Structural and Molecular Biology</i> , 2020, 27, 942-949.	3.6	153
72	Targeting SARS-CoV-2 RBD Interface: a Supervised Computational Data-Driven Approach to Identify Potential Modulators. <i>ChemMedChem</i> , 2020, 15, 1921-1931.	1.6	7
73	Differences and similarities between SARS-CoV and SARS-CoV-2: spike receptor-binding domain recognition and host cell infection with support of cellular serine proteases. <i>Infection</i> , 2020, 48, 665-669.	2.3	78
74	Naturally occurring SARS-CoV-2 gene deletions close to the spike S1/S2 cleavage site in the viral quasispecies of COVID19 patients. <i>Emerging Microbes and Infections</i> , 2020, 9, 1900-1911.	3.0	57

#	ARTICLE	IF	CITATIONS
75	LY6E impairs coronavirus fusion and confers immune control of viral disease. <i>Nature Microbiology</i> , 2020, 5, 1330-1339.	5.9	170
76	The Novel Insight of SARS-CoV-2 Molecular Biology and Pathogenesis and Therapeutic Options. <i>DNA and Cell Biology</i> , 2020, 39, 1741-1753.	0.9	37
77	ACE2, COVID-19 Infection, Inflammation, and Coagulopathy: Missing Pieces in the Puzzle. <i>Frontiers in Physiology</i> , 2020, 11, 574753.	1.3	54
78	ACE2 in the Era of SARS-CoV-2: Controversies and Novel Perspectives. <i>Frontiers in Molecular Biosciences</i> , 2020, 7, 588618.	1.6	77
79	Neurological injuries in COVID-19 patients: direct viral invasion or a bystander injury after infection of epithelial/endothelial cells. <i>Journal of NeuroVirology</i> , 2020, 26, 631-641.	1.0	38
80	Mass Spectrometry and Structural Biology Techniques in the Studies on the Coronavirus-Receptor Interaction. <i>Molecules</i> , 2020, 25, 4133.	1.7	10
81	The V617I Substitution in Avian Coronavirus IBV Spike Protein Plays a Crucial Role in Adaptation to Primary Chicken Kidney Cells. <i>Frontiers in Microbiology</i> , 2020, 11, 604335.	1.5	9
82	Virus-Mediated Cell-Cell Fusion. <i>International Journal of Molecular Sciences</i> , 2020, 21, 9644.	1.8	70
83	An ACE2 Microbody Containing a Single Immunoglobulin Fc Domain Is a Potent Inhibitor of SARS-CoV-2. <i>Cell Reports</i> , 2020, 33, 108528.	2.9	77
84	Coronavirus in human diseases: Mechanisms and advances in clinical treatment. <i>MedComm</i> , 2020, 1, 270-301.	3.1	22
85	Evolution of Transmissible Gastroenteritis Virus (TGEV): A Codon Usage Perspective. <i>International Journal of Molecular Sciences</i> , 2020, 21, 7898.	1.8	14
86	The lysosome: A potential juncture between SARS-CoV-2 infectivity and Niemann-Pick disease type C, with therapeutic implications. <i>FASEB Journal</i> , 2020, 34, 7253-7264.	0.2	83
87	On the interactions of the receptor-binding domain of SARS-CoV-1 and SARS-CoV-2 spike proteins with monoclonal antibodies and the receptor ACE2. <i>Virus Research</i> , 2020, 285, 198021.	1.1	49
88	Acute Kidney Injury in SARS-CoV-2 Infection: Direct Effect of Virus on Kidney Proximal Tubule Cells. <i>International Journal of Molecular Sciences</i> , 2020, 21, 3275.	1.8	59
89	Cell entry mechanisms of SARS-CoV-2. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 11727-11734.	3.3	2,654
90	Evaluation of SARS-CoV-2 neutralizing antibodies using a CPE-based colorimetric live virus micro-neutralization assay in human serum samples. <i>Journal of Medical Virology</i> , 2020, 92, 2096-2104.	2.5	157
91	Establishment of stable Vero cell lines expressing TMPRSS2 and MSPL: A useful tool for propagating porcine epidemic diarrhea virus in the absence of exogenous trypsin. <i>Virulence</i> , 2020, 11, 669-685.	1.8	8
92	Doxycycline: From Ocular Rosacea to COVID-19 Anosmia. <i>New Insight Into the Coronavirus Outbreak. Frontiers in Medicine</i> , 2020, 7, 200.	1.2	20

#	ARTICLE	IF	CITATIONS
93	NOVEL CORONAVIRUS (2019-nCoV): DISEASE BRIEFINGS. Asian Journal of Pharmaceutical and Clinical Research, 0, , 22-27.	0.3	2
94	Advances in the use of chloroquine and hydroxychloroquine for the treatment of COVID-19. Postgraduate Medicine, 2020, 132, 604-613.	0.9	24
95	Structure of mouse coronavirus spike protein complexed with receptor reveals mechanism for viral entry. PLoS Pathogens, 2020, 16, e1008392.	2.1	126
96	Structure, Function, and Antigenicity of the SARS-CoV-2 Spike Glycoprotein. Cell, 2020, 181, 281-292.e6.	13.5	6,979
97	A Unique Protease Cleavage Site Predicted in the Spike Protein of the Novel Pneumonia Coronavirus (2019-nCoV) Potentially Related to Viral Transmissibility. Virologica Sinica, 2020, 35, 337-339.	1.2	110
98	COVID-19: Epidemiology, Evolution, and Cross-Disciplinary Perspectives. Trends in Molecular Medicine, 2020, 26, 483-495.	3.5	470
99	Using the spike protein feature to predict infection risk and monitor the evolutionary dynamic of coronavirus. Infectious Diseases of Poverty, 2020, 9, 33.	1.5	58
100	Clinical and Analytical Performance of an Automated Serological Test That Identifies S1/S2-Neutralizing IgG in COVID-19 Patients Semiquantitatively. Journal of Clinical Microbiology, 2020, 58, .	1.8	137
101	ACE2 as a Therapeutic Target for COVID-19; Its Role in Infectious Processes and Regulation by Modulators of the RAAS System. Journal of Clinical Medicine, 2020, 9, 2096.	1.0	27
102	Analysis of therapeutic targets for SARS-CoV-2 and discovery of potential drugs by computational methods. Acta Pharmaceutica Sinica B, 2020, 10, 766-788.	5.7	1,704
103	Molecular Mechanism for Antibody-Dependent Enhancement of Coronavirus Entry. Journal of Virology, 2020, 94, .	1.5	539
104	Coronavirus membrane fusion mechanism offers a potential target for antiviral development. Antiviral Research, 2020, 178, 104792.	1.9	635
105	Glycoprotein 5 Is Cleaved by Cathepsin E during Porcine Reproductive and Respiratory Syndrome Virus Membrane Fusion. Journal of Virology, 2020, 94, .	1.5	10
106	Role of the Eye in Transmitting Human Coronavirus: What We Know and What We Do Not Know. Frontiers in Public Health, 2020, 8, 155.	1.3	117
107	Andrographolide as a potential inhibitor of SARS-CoV-2 main protease: an in silico approach. Journal of Biomolecular Structure and Dynamics, 2021, 39, 1-7.	2.0	271
108	Ca ²⁺ Ions Promote Fusion of Middle East Respiratory Syndrome Coronavirus with Host Cells and Increase Infectivity. Journal of Virology, 2020, 94, .	1.5	93
109	Phylogenetic Analysis and Structural Modeling of SARS-CoV-2 Spike Protein Reveals an Evolutionary Distinct and Proteolytically Sensitive Activation Loop. Journal of Molecular Biology, 2020, 432, 3309-3325.	2.0	406
110	A review on the cleavage priming of the spike protein on coronavirus by angiotensin-converting enzyme-2 and furin. Journal of Biomolecular Structure and Dynamics, 2021, 39, 3025-3033.	2.0	230

#	ARTICLE	IF	CITATIONS
111	Ligand-Based Approaches for the Development of Drugs Against SARS-CoV-2. <i>Methods in Pharmacology and Toxicology</i> , 2021, , 117.	0.1	1
112	COVID-19 and Sepsis. <i>Turkish Journal of Medical Sciences</i> , 2021, 51, 3301-3311.	0.4	37
113	Introduction to COVID-19. , 2021, , 1-32.		1
114	Computational Drug Repurposing for the Development of Drugs Against Coronaviruses. <i>Methods in Pharmacology and Toxicology</i> , 2021, , 135.	0.1	0
116	Serial co-expression analysis of host factors from SARS-CoV viruses highly converges with former high-throughput screenings and proposes key regulators. <i>Briefings in Bioinformatics</i> , 2021, 22, 1038-1052.	3.2	3
117	Proteolytic Activation of SARS-CoV-2 Spike at the S1/S2 Boundary: Potential Role of Proteases beyond Furin. <i>ACS Infectious Diseases</i> , 2021, 7, 264-272.	1.8	122
118	CORONAVIRUSES â€“ HOW PROTEIN INTERACTIONS CHANGED OUR PERCEPTION OF THE WORLD. <i>Postepy Mikrobiologii</i> , 2021, 60, 121-135.	0.1	0
120	Inhibitors of endosomal acidification suppress SARS-CoV-2 replication and relieve viral pneumonia in hACE2 transgenic mice. <i>Virology Journal</i> , 2021, 18, 46.	1.4	40
121	Contributions of human ACE2 and TMPRSS2 in determining hostâ€“pathogen interaction of COVID-19. <i>Journal of Genetics</i> , 2021, 100, 1.	0.4	85
122	The Spike D614G mutation increases SARS-CoV-2 infection of multiple human cell types. <i>ELife</i> , 2021, 10, .	2.8	173
123	SARSâ€“CoVâ€“2, Covidâ€“19, and the debunking of conspiracy theories. <i>Reviews in Medical Virology</i> , 2021, 31, e2222.	3.9	35
124	Preliminary Identification of Hamamelitannin and Rosmarinic Acid as COVID-19 Inhibitors Based on Molecular Docking. <i>Letters in Drug Design and Discovery</i> , 2021, 18, 67-75.	0.4	7
125	Comorbidities and inflammation associated with ovarian cancer and its influence on SARS-CoV-2 infection. <i>Journal of Ovarian Research</i> , 2021, 14, 39.	1.3	5
126	Potential Differences in Cleavage of the S Protein and Type 1 Interferon Together Control Human Coronavirus Infection, Propagation, and Neuropathology within the Central Nervous System. <i>Journal of Virology</i> , 2021, 95, .	1.5	14
127	The polybasic insert, the RBD of the SARS-CoV-2 spike protein, and the feline coronavirus â€“ evolved or yet to evolve. <i>Biochemistry and Biophysics Reports</i> , 2021, 25, 100907.	0.7	6
128	A Clinical-Stage Cysteine Protease Inhibitor blocks SARS-CoV-2 Infection of Human and Monkey Cells. <i>ACS Chemical Biology</i> , 2021, 16, 642-650.	1.6	74
129	Binding mode of SARS-CoV-2 fusion peptide to human cellular membrane. <i>Biophysical Journal</i> , 2021, 120, 2914-2926.	0.2	31
130	The COVID-19 mRNA Vaccines and the Pandemic: Do They Represent the Beginning of the End or the End of the Beginning?. <i>Clinical Therapeutics</i> , 2021, 43, 549-556.	1.1	13

#	ARTICLE	IF	CITATIONS
131	Identification of Potential SARS-CoV-2 Main Protease and Spike Protein Inhibitors from the Genus Aloe: An In Silico Study for Drug Development. <i>Molecules</i> , 2021, 26, 1767.	1.7	26
132	Biomechanical characterization of SARS-CoV-2 spike RBD and human ACE2 protein-protein interaction. <i>Biophysical Journal</i> , 2021, 120, 1011-1019.	0.2	87
133	Recent Progress in Torovirus Molecular Biology. <i>Viruses</i> , 2021, 13, 435.	1.5	5
134	Evidence for SARS-CoV-2 Spike Protein in the Urine of COVID-19 Patients. <i>Kidney360</i> , 2021, 2, 924-936.	0.9	34
135	SARS-CoV-2 requires cholesterol for viral entry and pathological syncytia formation. <i>ELife</i> , 2021, 10, .	2.8	160
136	D936Y and Other Mutations in the Fusion Core of the SARS-CoV-2 Spike Protein Heptad Repeat 1: Frequency, Geographical Distribution, and Structural Effect. <i>Molecules</i> , 2021, 26, 2622.	1.7	21
138	Coronavirus entry: how we arrived at SARS-CoV-2. <i>Current Opinion in Virology</i> , 2021, 47, 113-120.	2.6	51
139	SARS-CoV-2 and SARS-CoV Spike-Mediated Cell-Cell Fusion Differ in Their Requirements for Receptor Expression and Proteolytic Activation. <i>Journal of Virology</i> , 2021, 95, .	1.5	79
140	Computational epitope map of SARS-CoV-2 spike protein. <i>PLoS Computational Biology</i> , 2021, 17, e1008790.	1.5	109
141	Mutational heterogeneity in spike glycoproteins of severe acute respiratory syndrome coronavirus 2. <i>3 Biotech</i> , 2021, 11, 236.	1.1	1
142	COVID-19 and Preparing Planetary Health for Future Ecological Crises: Hopes from Glycomics for Vaccine Innovation. <i>OMICS A Journal of Integrative Biology</i> , 2021, 25, 234-241.	1.0	10
143	Role of phytoconstituents in the management of COVID-19. <i>Chemico-Biological Interactions</i> , 2021, 341, 109449.	1.7	25
144	Therapeutic approaches to coronavirus infection according to "One Health" concept. <i>Research in Veterinary Science</i> , 2021, 136, 81-88.	0.9	1
145	Proton-Binding Motifs of Membrane-Bound Proteins: From Bacteriorhodopsin to Spike Protein S. <i>Frontiers in Chemistry</i> , 2021, 9, 685761.	1.8	6
146	The human pandemic coronaviruses on the show: The spike glycoprotein as the main actor in the coronaviruses play. <i>International Journal of Biological Macromolecules</i> , 2021, 179, 1-19.	3.6	17
147	SARS-CoV-2 vaccines in advanced clinical trials: Where do we stand?. <i>Advanced Drug Delivery Reviews</i> , 2021, 172, 314-338.	6.6	75
148	Trypsin-Enhanced Infection with Porcine Epidemic Diarrhea Virus Is Determined by the S2 Subunit of the Spike Glycoprotein. <i>Journal of Virology</i> , 2021, 95, .	1.5	11
149	COVID-19 Vaccines in Clinical Trials and their Mode of Action for Immunity against the Virus. <i>Current Pharmaceutical Design</i> , 2021, 27, 1553-1563.	0.9	13

#	ARTICLE	IF	CITATIONS
150	Computational designing of a peptide that potentially blocks the entry of SARS-CoV, SARS-CoV-2 and MERS-CoV. PLoS ONE, 2021, 16, e0251913.	1.1	8
151	Pulmonary Edema in COVID-19 Patients: Mechanisms and Treatment Potential. Frontiers in Pharmacology, 2021, 12, 664349.	1.6	44
152	Molecular biology of the SARS-CoV-2 spike protein: A review of current knowledge. Journal of Medical Virology, 2021, 93, 5729-5741.	2.5	37
153	A brief molecular insight of COVID-19: epidemiology, clinical manifestation, molecular mechanism, cellular tropism and immuno-pathogenesis. Molecular and Cellular Biochemistry, 2021, 476, 3987-4002.	1.4	6
154	Molecular mechanism of interaction between SARS-CoV-2 and host cells and interventional therapy. Signal Transduction and Targeted Therapy, 2021, 6, 233.	7.1	203
155	Interactive Interface for Graph-Based Analyses of Dynamic H-Bond Networks: Application to Spike Protein S. Journal of Chemical Information and Modeling, 2021, 61, 2998-3014.	2.5	17
156	Characterization of antibody response in asymptomatic and symptomatic SARS-CoV-2 infection. PLoS ONE, 2021, 16, e0253977.	1.1	35
157	Enhanced sampling protocol to elucidate fusion peptide opening of SARS-CoV-2 spike protein. Biophysical Journal, 2021, 120, 2848-2858.	0.2	7
158	Effect of clinical isolate or cleavage site mutations in the SARS-CoV-2 spike protein on protein stability, cleavage, and cell-cell fusion. Journal of Biological Chemistry, 2021, 297, 100902.	1.6	17
160	Why All the Fury over Furin?. Journal of Medicinal Chemistry, 2022, 65, 2747-2784.	2.9	23
161	Deciphering the O-Glycosylation of HKU1 Spike Protein With the Dual-Functional Hydrophilic Interaction Chromatography Materials. Frontiers in Chemistry, 2021, 9, 707235.	1.8	6
162	Spike protein mutational landscape in India during the complete lockdown phase: Could Muller's ratchet be a future game-changer for COVID-19?. Infection, Genetics and Evolution, 2021, 92, 104874.	1.0	1
163	Main protease inhibitors and drug surface hotspots for the treatment of COVID-19: A drug repurposing and molecular docking approach. Biomedicine and Pharmacotherapy, 2021, 140, 111742.	2.5	15
164	Therapeutic targets and interventional strategies in COVID-19: mechanisms and clinical studies. Signal Transduction and Targeted Therapy, 2021, 6, 317.	7.1	68
167	Peptide-Based Inhibitors for SARS-CoV-2 and SARS-CoV. Advanced Therapeutics, 2021, 4, 2100104.	1.6	11
169	Novel severe acute respiratory syndrome coronavirus 2 (SARS-COV-2) infection: Microbiologic perspectives and anatomic considerations for sanctuary sites. Journal of Infection and Public Health, 2021, 14, 1237-1246.	1.9	0
170	Enzyme inhibition as a potential therapeutic strategy to treat COVID-19 infection. Bioorganic and Medicinal Chemistry, 2021, 48, 116389.	1.4	7
171	Potential therapeutic approaches for the early entry of SARS-CoV-2 by interrupting the interaction between the spike protein on SARS-CoV-2 and angiotensin-converting enzyme 2 (ACE2). Biochemical Pharmacology, 2021, 192, 114724.	2.0	8

#	ARTICLE	IF	CITATIONS
173	Furin cleavage sites in the spike proteins of bat and rodent coronaviruses: Implications for virus evolution and zoonotic transfer from rodent species. <i>One Health</i> , 2021, 13, 100282.	1.5	19
174	Supramolecular Architecture of the Coronavirus Particle. <i>Advances in Virus Research</i> , 2016, 96, 1-27.	0.9	104
175	Neutralizing antibodies against SARS-CoV-2: current understanding, challenge and perspective. <i>Antibody Therapeutics</i> , 2020, 3, 285-299.	1.2	34
176	The contribution of the cytoplasmic retrieval signal of severe acute respiratory syndrome coronavirus to intracellular accumulation of S proteins and incorporation of S protein into virus-like particles. <i>Journal of General Virology</i> , 2016, 97, 1853-1864.	1.3	58
177	SARS-CoV-2 growth, furin-cleavage-site adaptation and neutralization using serum from acutely infected hospitalized COVID-19 patients. <i>Journal of General Virology</i> , 2020, 101, 1156-1169.	1.3	131
202	In silico screening of known small molecules to bind ACE2 specific RBD on Spike glycoprotein of SARS-CoV-2 for repurposing against COVID-19. <i>F1000Research</i> , 2020, 9, 663.	0.8	23
203	Role of the Spike Glycoprotein of Human Middle East Respiratory Syndrome Coronavirus (MERS-CoV) in Virus Entry and Syncytia Formation. <i>PLoS ONE</i> , 2013, 8, e76469.	1.1	210
204	COVID-19: molecular targets, drug repurposing and new avenues for drug discovery. <i>Memorias Do Instituto Oswaldo Cruz</i> , 2020, 115, e200254.	0.8	26
205	Intestinal Tropism of an Infectious Bronchitis Virus Isolate Not Explained by Spike Protein Binding Specificity. <i>Avian Diseases</i> , 2019, 64, 23.	0.4	4
207	TMPRSS2 and furin are both essential for proteolytic activation of SARS-CoV-2 in human airway cells. <i>Life Science Alliance</i> , 2020, 3, e202000786.	1.3	597
208	Racemization Hypothesis of COVID-19. Tip of the Iceberg. <i>Journal of Psychology and Neuroscience</i> , 0, , .	0.0	1
209	Viral and Host Attributes Underlying the Origins of Zoonotic Coronaviruses in Bats. <i>Comparative Medicine</i> , 2021, 71, 442-450.	0.4	6
210	Highly Efficient SARS-CoV-2 Infection of Human Cardiomyocytes: Spike Protein-Mediated Cell Fusion and Its Inhibition. <i>Journal of Virology</i> , 2021, 95, e0136821.	1.5	29
211	Therapeutic strategies for Covid-19 based on molecular docking and dynamic studies to the ACE-2 receptors, Furin, and viral spike proteins. <i>Journal of Biomolecular Structure and Dynamics</i> , 2022, 40, 13291-13309.	2.0	24
213	Spike Glycoprotein Is Central to Coronavirus Pathogenesis-Parallel Between m-CoV and SARS-CoV-2. <i>Annals of Neurosciences</i> , 2021, 28, 201-218.	0.9	7
214	SARS-CoV-2: Potential Drug Targets and Its Virtual Screening. <i>Studies in Systems, Decision and Control</i> , 2022, , 203-244.	0.8	2
215	Dynamic Regulation of SARS-CoV-2 Binding and Cell Entry Mechanisms in Remodeled Human Ventricular Myocardium. <i>SSRN Electronic Journal</i> , 0, , .	0.4	1
216	Update on treatment and preventive interventions against COVID-19: an overview of potential pharmacological agents and vaccines. <i>Molecular Biomedicine</i> , 2020, 1, 16.	1.7	4

#	ARTICLE	IF	CITATIONS
217	Does Virus-Receptor Interplay Influence Human Coronaviruses Infection Outcome?. <i>Medical Science Monitor</i> , 2020, 26, e928572.	0.5	1
218	In-silico nucleotide and protein analyses of S-gene region in selected zoonotic coronaviruses reveal conserved domains and evolutionary emergence with trajectory course of viral entry from SARS-CoV-2 genomic data. <i>Pan African Medical Journal</i> , 2020, 37, 285.	0.3	0
219	Clinical Evidence and Therapeutic Treatments at the Time of the Coronaviruses Responsible for SARS: A Perspective Point of View.. <i>SSRN Electronic Journal</i> , 0, , .	0.4	0
223	TMPRSS2 As an Influential Human Gene for COVID-19. <i>Journal of Human Genetics and Genomics</i> , 2021, 4, .	0.0	0
224	A second functional furin site in the SARS-CoV-2 spike protein. <i>Emerging Microbes and Infections</i> , 2022, 11, 182-194.	3.0	19
225	Tracking the amino acid changes of spike proteins across diverse host species of severe acute respiratory syndrome coronavirus 2. <i>IScience</i> , 2022, 25, 103560.	1.9	5
227	Obatoclox inhibits SARS-CoV-2 entry by altered endosomal acidification and impaired cathepsin and furin activity in vitro. <i>Emerging Microbes and Infections</i> , 2022, 11, 483-497.	3.0	16
228	Direct Comparison of RT-ddPCR and Targeted Amplicon Sequencing for SARS-CoV-2 Mutation Monitoring in Wastewater. <i>SSRN Electronic Journal</i> , 0, , .	0.4	1
229	Unraveling Muscle Impairment Associated With COVID-19 and the Role of 3D Culture in Its Investigation. <i>Frontiers in Nutrition</i> , 2022, 9, 825629.	1.6	15
230	Diversity of Coronaviruses with Particular Attention to the Interspecies Transmission of SARS-CoV-2. <i>Animals</i> , 2022, 12, 378.	1.0	14
231	Known Cellular and Receptor Interactions of Animal and Human Coronaviruses: A Review. <i>Viruses</i> , 2022, 14, 351.	1.5	11
233	Development of an in vitro model for animal species susceptibility to SARS-CoV-2 replication based on expression of ACE2 and TMPRSS2 in avian cells. <i>Virology</i> , 2022, 569, 1-12.	1.1	6
234	Efficacy of defensins as neutralizing agents against the deadly SARS-CoV-2. <i>Journal of Biomolecular Structure and Dynamics</i> , 2023, 41, 2911-2925.	2.0	0
235	Kidney Injury in COVID-19: Epidemiology, Molecular Mechanisms and Potential Therapeutic Targets. <i>International Journal of Molecular Sciences</i> , 2022, 23, 2242.	1.8	17
236	Agathis robusta Bark Essential Oil Effectiveness against COVID-19: Chemical Composition, In Silico and In Vitro Approaches. <i>Plants</i> , 2022, 11, 663.	1.6	17
237	Construction of SARS-CoV-2 spike-pseudotyped retroviral vector inducing syncytia formation. <i>Virus Genes</i> , 2022, 58, 172-179.	0.7	4
238	Structural Dynamics and Molecular Evolution of the SARS-CoV-2 Spike Protein. <i>MBio</i> , 2022, 13, e0203021.	1.8	10
239	Structural Basis for Human Receptor Recognition by SARS-CoV-2 Omicron Variant BA.1. <i>Journal of Virology</i> , 2022, 96, e0024922.	1.5	36

#	ARTICLE	IF	CITATIONS
240	COVID-19: impact on Public Health and hypothesis-driven investigations on genetic susceptibility and severity. <i>Immunogenetics</i> , 2022, 74, 381-407.	1.2	5
241	Demystifying mRNA vaccines: an emerging platform at the forefront of cryptic diseases. <i>RNA Biology</i> , 2022, 19, 386-410.	1.5	19
242	The role of membrane and circulating forms of ACE 2 in pathological processes in COVID-19 infection. <i>Arterial Hypertension (Russian Federation)</i> , 2022, 27, 608-616.	0.1	0
243	Swine Enteric Coronavirus: Diverse Pathogen-Host Interactions. <i>International Journal of Molecular Sciences</i> , 2022, 23, 3953.	1.8	21
244	Direct comparison of RT-ddPCR and targeted amplicon sequencing for SARS-CoV-2 mutation monitoring in wastewater. <i>Science of the Total Environment</i> , 2022, 833, 155059.	3.9	29
245	The spike glycoprotein of SARS-CoV-2: A review of how mutations of spike glycoproteins have driven the emergence of variants with high transmissibility and immune escape. <i>International Journal of Biological Macromolecules</i> , 2022, 208, 105-125.	3.6	41
246	COVID-19 and the liver: A brief and core review. <i>World Journal of Hepatology</i> , 2021, 13, 2013-2023.	0.8	8
247	A CRISPR-Cas9 screen reveals a role for WD repeat-containing protein 81 (WDR81) in the entry of late penetrating viruses. <i>PLoS Pathogens</i> , 2022, 18, e1010398.	2.1	6
248	Two Consecutive Prolines in the Fusion Peptide of Murine Î²-Coronavirus Spike Protein Predominantly Determine Fusogenicity and May Be Essential but Not Sufficient to Cause Demyelination. <i>Viruses</i> , 2022, 14, 834.	1.5	1
254	SARS-CoV-2 and Emerging Variants: Unmasking Structure, Function, Infection, and Immune Escape Mechanisms. <i>Frontiers in Cellular and Infection Microbiology</i> , 2022, 12, .	1.8	15
255	Amentoflavone derivatives significantly act towards the main protease (3CLPRO/MPRO) of SARS-CoV-2: in silico admet profiling, molecular docking, molecular dynamics simulation, network pharmacology. <i>Molecular Diversity</i> , 2023, 27, 857-871.	2.1	26
256	SARS-CoV-2 Spike Furin Cleavage Site and S2â€™ Basic Residues Modulate the Entry Process in a Host Cell-Dependent Manner. <i>Journal of Virology</i> , 2022, 96, .	1.5	20
257	Insight towards the effect of the multi basic cleavage site of SARS-CoV-2 spike protein on cellular proteases. <i>Virus Research</i> , 2022, 318, 198845.	1.1	5
258	Genomic, proteomic and metabolomic profiling of severe acute respiratory syndrome-Coronavirus-2. , 2022, , 49-76.		0
259	Nanotechnology for SARS-CoV-2 diagnosis. <i>Nanofabrication</i> , 0, 7, .	1.1	1
260	Study of protease-mediated processes initiating viral infection and cellâ€™cell viral spreading of SARS-CoV-2. <i>Journal of Molecular Modeling</i> , 2022, 28, .	0.8	2
261	Predictive Models of within- and between-Species SARS-CoV-2 Transmissibility. <i>Viruses</i> , 2022, 14, 1565.	1.5	1
262	Establishment and Cross-Protection Efficacy of a Recombinant Avian Gammacoronavirus Infectious Bronchitis Virus Harboring a Chimeric S1 Subunit. <i>Frontiers in Microbiology</i> , 0, 13, .	1.5	3

#	ARTICLE	IF	CITATIONS
263	SARS-CoV-2 Is Not Special, but the Pandemic Is: The Ecology, Evolution, Policy, and Future of the Deadliest Pandemic in Living Memory. <i>Annual Review of Anthropology</i> , 2022, 51, 527-548.	0.4	2
264	Identification and semisynthesis of (âˆ™)-anisomelic acid as oral agent against SARS-CoV-2 in mice. <i>National Science Review</i> , 2022, 9, .	4.6	1
265	Unravelling the Mechanistic Role of ACE2 and TMPRSS2 in Hypertension: A Risk Factor for COVID-19. <i>Current Hypertension Reviews</i> , 2022, 18, 130-137.	0.5	5
266	Current therapeutic strategies and possible effective drug delivery strategies against COVID-19. <i>Current Drug Delivery</i> , 2022, 19, .	0.8	1
267	DNAJA3 Interacts with PEDV S1 Protein and Inhibits Virus Replication by Affecting Virus Adsorption to Host Cells. <i>Viruses</i> , 2022, 14, 2413.	1.5	0
268	Neurotropic SARS-CoV-2: Causalities and Realities. , 0, , .		1
270	Pathophysiology of SARS-CoV-2 Infection of Nasal Respiratory and Olfactory Epithelia and Its Clinical Impact. <i>Current Allergy and Asthma Reports</i> , 2023, 23, 121-131.	2.4	6
271	Amentoflavone derivatives against SARS-CoV-2 main protease (M ^{PRO}): An inÂsilico study. <i>Main Group Chemistry</i> , 2023, , 1-15.	0.4	0
272	Prolineâ€“Proline Dyad in the Fusion Peptide of the Murine Î²â€“Coronavirus Spike Proteinâ€™s S2 Domain Modulates Its Neuroglial Tropism. <i>Viruses</i> , 2023, 15, 215.	1.5	1
273	Effect of Covid-19 pandemic on sexual activity. <i>Journal of Microbiology & Experimentation</i> , 2023, 11, 46-50.	0.1	0
274	Quantitative profiling of N-glycosylation of SARS-CoV-2 spike protein variants. <i>Glycobiology</i> , 2023, 33, 188-202.	1.3	7
275	SARS-CoV-2 spike gene Sanger sequencing methodology to identify variants of concern. <i>BioTechniques</i> , 2023, 74, 69-75.	0.8	2
276	Recent Advances in Nanomaterialsâ€“Based FETs for SARSâ€“CoVâ€“2 (COVIDâ€“19 Virus) Diagnosis. <i>Advanced Functional Materials</i> , 2023, 33, .	7.8	6
277	Insights on genetic characterization and pathogenesis of a GI-19 (QX-like) infectious bronchitis virus isolated in China. <i>Poultry Science</i> , 2023, 102, 102719.	1.5	1
281	Phytochemicals: recent trends and future prospective in COVID-19. , 2023, , 511-533.		0