

SARS-CoV-2 and bat RaTG13 spike glycoprotein structure furin-cleavage effects

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Citation Report

#	ARTICLE	IF	CITATIONS
1	Tissue-specific and interferon-inducible expression of nonfunctional ACE2 through endogenous retroelement co-option. <i>Nature Genetics</i> , 2020, 52, 1294-1302.	9.4	82
2	Virus-Receptor Interactions of Glycosylated SARS-CoV-2 Spike and Human ACE2 Receptor. <i>Cell Host and Microbe</i> , 2020, 28, 586-601.e6.	5.1	334
3	Chemosensory Dysfunction in COVID-19: Integration of Genetic and Epidemiological Data Points to D614G Spike Protein Variant as a Contributing Factor. <i>ACS Chemical Neuroscience</i> , 2020, 11, 3180-3184.	1.7	59
4	Profile of SARS-CoV-2. <i>Wiener Klinische Wochenschrift</i> , 2020, 132, 635-644.	1.0	4
5	Cryo-EM Structures of SARS-CoV-2 Spike without and with ACE2 Reveal a pH-Dependent Switch to Mediate Endosomal Positioning of Receptor-Binding Domains. <i>Cell Host and Microbe</i> , 2020, 28, 867-879.e5.	5.1	316
6	Receptor binding and priming of the spike protein of SARS-CoV-2 for membrane fusion. <i>Nature</i> , 2020, 588, 327-330.	13.7	684
7	Real-Time Conformational Dynamics of SARS-CoV-2 Spikes on Virus Particles. <i>Cell Host and Microbe</i> , 2020, 28, 880-891.e8.	5.1	153
8	The structural basis of accelerated host cell entry by SARS-CoV-2. <i>FEBS Journal</i> , 2021, 288, 5010-5020.	2.2	129
9	Peptide and peptide-based inhibitors of SARS-CoV-2 entry. <i>Advanced Drug Delivery Reviews</i> , 2020, 167, 47-65.	6.6	132
10	Deep Mutational Scanning of SARS-CoV-2 Receptor Binding Domain Reveals Constraints on Folding and ACE2 Binding. <i>Cell</i> , 2020, 182, 1295-1310.e20.	13.5	1,726
11	Targeting Crucial Host Factors of SARS-CoV-2. <i>ACS Infectious Diseases</i> , 2020, 6, 2844-2865.	1.8	28
12	The Importance of Research on the Origin of SARS-CoV-2. <i>Viruses</i> , 2020, 12, 1203.	1.5	27
13	Antibody-mediated disruption of the SARS-CoV-2 spike glycoprotein. <i>Nature Communications</i> , 2020, 11, 5337.	5.8	43
14	Free fatty acid binding pocket in the locked structure of SARS-CoV-2 spike protein. <i>Science</i> , 2020, 370, 725-730.	6.0	348
15	SARS-CoV-2 and Three Related Coronaviruses Utilize Multiple ACE2 Orthologs and Are Potently Blocked by an Improved ACE2-Ig. <i>Journal of Virology</i> , 2020, 94, .	1.5	100
16	The Antiviral, Anti-Inflammatory Effects of Natural Medicinal Herbs and Mushrooms and SARS-CoV-2 Infection. <i>Nutrients</i> , 2020, 12, 2573.	1.7	66
17	Genomic Cues From Beta-Coronaviruses and Mammalian Hosts Sheds Light on Probable Origins and Infectivity of SARS-CoV-2 Causing COVID-19. <i>Frontiers in Genetics</i> , 2020, 11, 902.	1.1	5
18	Identification of immunodominant linear epitopes from SARS-CoV-2 patient plasma. <i>PLoS ONE</i> , 2020, 15, e0238089.	1.1	71

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19	New Consensus pattern in Spike CoV-2: potential implications in coagulation process and cell-cell fusion. Cell Death Discovery, 2020, 6, 134.	2.0	18
20	The SARS-CoV-2 spike protein: balancing stability and infectivity. Cell Research, 2020, 30, 1059-1060.	5.7	82
21	Case Study: Prolonged Infectious SARS-CoV-2 Shedding from an Asymptomatic Immunocompromised Individual with Cancer. Cell, 2020, 183, 1901-1912.e9.	13.5	618
22	Preexisting and de novo humoral immunity to SARS-CoV-2 in humans. Science, 2020, 370, 1339-1343.	6.0	735
23	Characteristics of SARS-CoV-2 and COVID-19. Nature Reviews Microbiology, 2021, 19, 141-154.	13.6	3,334
24	Challenges and opportunities for antiviral monoclonal antibodies as COVID-19 therapy. Advanced Drug Delivery Reviews, 2021, 169, 100-117.	6.6	63
25	Novel SARS-CoV-2 encoded small RNAs in the passage to humans. Bioinformatics, 2021, 36, 5571-5581.	1.8	24
26	Structural basis of severe acute respiratory syndrome coronavirus 2 infection. Current Opinion in HIV and AIDS, 2021, 16, 74-81.	1.5	7
27	Conformational dynamics of SARS-CoV-2 trimeric spike glycoprotein in complex with receptor ACE2 revealed by cryo-EM. Science Advances, 2021, 7, .	4.7	320
28	Molecular diversity of coronavirus host cell entry receptors. FEMS Microbiology Reviews, 2021, 45, .	3.9	75
29	Modeling in the Time of COVID-19: Statistical and Rule-based Mesoscale Models. IEEE Transactions on Visualization and Computer Graphics, 2021, 27, 722-732.	2.9	20
30	The Genetic Variant of SARS-CoV-2: Would it matter for Controlling the Devastating Pandemic?. International Journal of Biological Sciences, 2021, 17, 1476-1485.	2.6	23
31	Nucleic Acid-Based Diagnostic Tests for the Detection SARS-CoV-2: An Update. Diagnostics, 2021, 11, 53.	1.3	66
32	COVID-19: Recent Developments in Therapeutic Approaches. , 2021, , 249-274.		4
33	Loss of furin cleavage site attenuates SARS-CoV-2 pathogenesis. Nature, 2021, 591, 293-299.	13.7	579
36	3044 Cases reveal important prognosis signatures of COVID-19 patients. Computational and Structural Biotechnology Journal, 2021, 19, 1163-1175.	1.9	11
38	Insight into the origin of SARS-CoV-2 through structural analysis of receptor recognition: a molecular simulation study. RSC Advances, 2021, 11, 8718-8729.	1.7	1
39	Development and structural basis of a two-MAb cocktail for treating SARS-CoV-2 infections. Nature Communications, 2021, 12, 264.	5.8	81

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40	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
41	Structural Analysis of Neutralizing Epitopes of the SARS-CoV-2 Spike to Guide Therapy and Vaccine Design Strategies. <i>Viruses</i> , 2021, 13, 134.	1.5	56
42	Antiviral Resistance against Viral Mutation: Praxis and Policy for SARS-CoV-2. <i>Computational and Mathematical Biophysics</i> , 2021, 9, 81-89.	0.6	3
43	Effective virus-neutralizing activities in antisera from the first wave of severe COVID-19 survivors. <i>JCI Insight</i> , 2021, 6, .	2.3	10
44	SARS-CoV-2 Genomic Variation in Space and Time in Hospitalized Patients in Philadelphia. <i>MBio</i> , 2021, 12, .	1.8	27
46	Mapping major SARS-CoV-2 drug targets and assessment of druggability using computational fragment screening: Identification of an allosteric small-molecule binding site on the Nsp13 helicase. <i>PLoS ONE</i> , 2021, 16, e0246181.	1.1	15
48	Are the emerging SARS-COV-2 mutations friend or foe?. <i>Immunology Letters</i> , 2021, 230, 63-64.	1.1	13
49	SARS-CoV-2 evolution during treatment of chronic infection. <i>Nature</i> , 2021, 592, 277-282.	13.7	802
51	Structure and binding properties of Pangolin-CoV spike glycoprotein inform the evolution of SARS-CoV-2. <i>Nature Communications</i> , 2021, 12, 837.	5.8	55
52	Angiotensin-converting enzyme 2 (ACE2) expression increases with age in patients requiring mechanical ventilation. <i>PLoS ONE</i> , 2021, 16, e0247060.	1.1	73
55	A Biochemical Perspective of the Nonstructural Proteins (NSPs) and the Spike Protein of SARS CoV-2. <i>Protein Journal</i> , 2021, 40, 260-295.	0.7	24
56	The effect of the D614G substitution on the structure of the spike glycoprotein of SARS-CoV-2. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021, 118, .	3.3	131
59	Insights into biological therapeutic strategies for COVID-19. <i>Fundamental Research</i> , 2021, 1, 166-178.	1.6	2
60	Site-Specific O-Glycosylation Analysis of SARS-CoV-2 Spike Protein Produced in Insect and Human Cells. <i>Viruses</i> , 2021, 13, 551.	1.5	57
62	Post-acute COVID-19 syndrome. <i>Nature Medicine</i> , 2021, 27, 601-615.	15.2	3,051
63	Should we discount the laboratory origin of COVID-19?. <i>Environmental Chemistry Letters</i> , 2021, 19, 2743-2757.	8.3	23
64	Bat and pangolin coronavirus spike glycoprotein structures provide insights into SARS-CoV-2 evolution. <i>Nature Communications</i> , 2021, 12, 1607.	5.8	76
66	COVID-19, hydroxychloroquine and the importance of disease progression. <i>Toxicology Research</i> , 2021, 10, 299-311.	0.9	2

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68	Structural basis for the different states of the spike protein of SARS-CoV-2 in complex with ACE2. <i>Cell Research</i> , 2021, 31, 717-719.	5.7	77
71	Profiles of current COVID-19 vaccines. <i>Wiener Klinische Wochenschrift</i> , 2021, 133, 271-283.	1.0	32
74	Modular basis for potent SARS-CoV-2 neutralization by a prevalent VH1-2-derived antibody class. <i>Cell Reports</i> , 2021, 35, 108950.	2.9	54
75	The SARS-CoV-2 and other human coronavirus spike proteins are fine-tuned towards temperature and proteases of the human airways. <i>PLoS Pathogens</i> , 2021, 17, e1009500.	2.1	91
76	SARS-CoV-2 can recruit a heme metabolite to evade antibody immunity. <i>Science Advances</i> , 2021, 7, .	4.7	107
78	The Polybasic Cleavage Site in SARS-CoV-2 Spike Modulates Viral Sensitivity to Type I Interferon and IFITM2. <i>Journal of Virology</i> , 2021, 95, .	1.5	121
79	Insights into SARS-CoV-2: Medicinal Chemistry Approaches to Combat Its Structural and Functional Biology. <i>Topics in Current Chemistry</i> , 2021, 379, 23.	3.0	6
80	The role of cell surface sialic acids for SARS-CoV-2 infection. <i>Glycobiology</i> , 2021, 31, 1245-1253.	1.3	73
81	Structural insights into SARS-CoV-2 infection and therapeutics development. <i>Stem Cell Research</i> , 2021, 52, 102219.	0.3	7
84	N-terminal domain antigenic mapping reveals a site of vulnerability for SARS-CoV-2. <i>Cell</i> , 2021, 184, 2332-2347.e16.	13.5	784
85	Immunogenicity and efficacy of mRNA COVID-19 vaccine MRT5500 in preclinical animal models. <i>Npj Vaccines</i> , 2021, 6, 61.	2.9	66
87	Genomics and epidemiology of the P.1 SARS-CoV-2 lineage in Manaus, Brazil. <i>Science</i> , 2021, 372, 815-821.	6.0	1,125
88	The PRRA Insert at the S1/S2 Site Modulates Cellular Tropism of SARS-CoV-2 and ACE2 Usage by the Closely Related Bat RaTG13. <i>Journal of Virology</i> , 2021, 95, .	1.5	15
92	Characterization of an attenuated SARS-CoV-2 variant with a deletion at the S1/S2 junction of the spike protein. <i>Nature Communications</i> , 2021, 12, 2790.	5.8	26
94	Comparative Immunomodulatory Evaluation of the Receptor Binding Domain of the SARS-CoV-2 Spike Protein; a Potential Vaccine Candidate Which Imparts Potent Humoral and Th1 Type Immune Response in a Mouse Model. <i>Frontiers in Immunology</i> , 2021, 12, 641447.	2.2	20
95	Profiling COVID-19 Genetic Research: A Data-Driven Study Utilizing Intelligent Bibliometrics. <i>Frontiers in Research Metrics and Analytics</i> , 2021, 6, 683212.	0.9	12
96	Potent SARS-CoV-2 neutralizing antibodies directed against spike N-terminal domain target a single supersite. <i>Cell Host and Microbe</i> , 2021, 29, 819-833.e7.	5.1	444
98	Brief review on repurposed drugs and vaccines for possible treatment of COVID-19. <i>European Journal of Pharmacology</i> , 2021, 898, 173977.	1.7	29

#	ARTICLE	IF	CITATIONS
100	Evolution, Ecology, and Zoonotic Transmission of Betacoronaviruses: A Review. <i>Frontiers in Veterinary Science</i> , 2021, 8, 644414.	0.9	10
102	Neurological pathogenesis of SARS-CoV-2 (COVID-19): from virological features to clinical symptoms. <i>Inflammation and Regeneration</i> , 2021, 41, 15.	1.5	11
103	SARS-CoV-2 Portrayed against HIV: Contrary Viral Strategies in Similar Disguise. <i>Microorganisms</i> , 2021, 9, 1389.	1.6	4
104	SARS-CoV-2 variants, spike mutations and immune escape. <i>Nature Reviews Microbiology</i> , 2021, 19, 409-424.	13.6	2,650
105	The <i>Rhinolophus affinis</i> bat ACE2 and multiple animal orthologs are functional receptors for bat coronavirus RaTG13 and SARS-CoV-2. <i>Science Bulletin</i> , 2021, 66, 1215-1227.	4.3	24
106	Immune Evasion of SARS-CoV-2 Emerging Variants: What Have We Learnt So Far?. <i>Viruses</i> , 2021, 13, 1192.	1.5	150
108	In silico comparison of SARS-CoV-2 spike protein-ACE2 binding affinities across species and implications for virus origin. <i>Scientific Reports</i> , 2021, 11, 13063.	1.6	77
109	Does Covera-19 know when to hold or when to fold? A translational thought experiment. <i>Translational Medicine Communications</i> , 2021, 6, 12.	0.5	1
110	Molecular mechanism of interaction between SARS-CoV-2 and host cells and interventional therapy. <i>Signal Transduction and Targeted Therapy</i> , 2021, 6, 233.	7.1	203
112	Binding and molecular basis of the bat coronavirus RaTG13 virus to ACE2 in humans and other species. <i>Cell</i> , 2021, 184, 3438-3451.e10.	13.5	100
113	Recurrent emergence of SARS-CoV-2 spike deletion H69/V70 and its role in the Alpha variant B.1.1.7. <i>Cell Reports</i> , 2021, 35, 109292.	2.9	375
115	Exploring the utility of extracellular vesicles in ameliorating viral infection-associated inflammation, cytokine storm and tissue damage. <i>Translational Oncology</i> , 2021, 14, 101095.	1.7	23
118	COVID-19: $\frac{1}{4} \Delta, \tilde{N}, \tilde{N} \cdot \Delta, \tilde{N} \in \Delta \mu \Delta^{\circ} \Delta \gg \tilde{N} \in \Delta \frac{1}{2} \Delta \frac{3}{4} \tilde{N}, \tilde{N} \in \Delta$. <i>Biochemistry</i> , 2021, 86, 964-984.	0.0	0
120	Computational Chemistry to Repurposing Drugs for the Control of COVID-19. <i>Biologics</i> , 2021, 1, 111-128.	2.3	8
121	Role of host factors in SARS-CoV-2 entry. <i>Journal of Biological Chemistry</i> , 2021, 297, 100847.	1.6	67
122	Antibody and B cell responses to SARS-CoV-2 infection and vaccination. <i>Cell Host and Microbe</i> , 2021, 29, 1063-1075.	5.1	99
123	HIV-1 and SARS-CoV-2: Patterns in the evolution of two pandemic pathogens. <i>Cell Host and Microbe</i> , 2021, 29, 1093-1110.	5.1	73
124	Commentary: Lethal Pneumonia Cases in Mojiang Miners (2012) and the Mineshaft Could Provide Important Clues to the Origin of SARS-CoV-2. <i>Frontiers in Public Health</i> , 2021, 9, 702199.	1.3	5

#	ARTICLE	IF	CITATIONS
125	SARS-CoV-2 Spike Protein Extrapolation for COVID Diagnosis and Vaccine Development. <i>Frontiers in Molecular Biosciences</i> , 2021, 8, 607886.	1.6	11
127	Antibody Mediated Immunity to SARS-CoV-2 and Human Coronaviruses: Multiplex Beads Assay and Volumetric Absorptive Microsampling to Generate Immune Repertoire Cartography. <i>Frontiers in Immunology</i> , 2021, 12, 696370.	2.2	14
128	COVID-19: Myths and Reality. <i>Biochemistry (Moscow)</i> , 2021, 86, 800-817.	0.7	10
129	Design and proof of concept for targeted phage-based COVID-19 vaccination strategies with a streamlined cold-free supply chain. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021, 118, .	3.3	35
130	TMPRSS2 expression dictates the entry route used by SARS-CoV-2 to infect host cells. <i>EMBO Journal</i> , 2021, 40, e107821.	3.5	223
132	Why All the Fury over Furin?. <i>Journal of Medicinal Chemistry</i> , 2022, 65, 2747-2784.	2.9	23
134	Effect of SARS-CoV-2 B.1.1.7 mutations on spike protein structure and function. <i>Nature Structural and Molecular Biology</i> , 2021, 28, 731-739.	3.6	124
135	A selective sweep in the Spike gene has driven SARS-CoV-2 human adaptation. <i>Cell</i> , 2021, 184, 4392-4400.e4.	13.5	69
137	SARS-CoV-2 N protein promotes NLRP3 inflammasome activation to induce hyperinflammation. <i>Nature Communications</i> , 2021, 12, 4664.	5.8	281
139	Molecular Dynamics Simulation Study of the Interaction between Human Angiotensin Converting Enzyme 2 and Spike Protein Receptor Binding Domain of the SARS-CoV-2 B.1.617 Variant. <i>Biomolecules</i> , 2021, 11, 1244.	1.8	17
140	Jumping a Moving Train: SARS-CoV-2 Evolution in Real Time. <i>Journal of the Pediatric Infectious Diseases Society</i> , 2021, 10, S96-S105.	0.6	9
141	D614G Substitution of SARS-CoV-2 Spike Protein Increases Syncytium Formation and Virus Titer via Enhanced Furin-Mediated Spike Cleavage. <i>MBio</i> , 2021, 12, e0058721.	1.8	34
142	SARS-CoV-2 Infection: New Molecular, Phylogenetic, and Pathogenetic Insights. Efficacy of Current Vaccines and the Potential Risk of Variants. <i>Viruses</i> , 2021, 13, 1687.	1.5	57
145	Natural Bioactive Molecules as Potential Agents Against SARS-CoV-2. <i>Frontiers in Pharmacology</i> , 2021, 12, 702472.	1.6	8
147	Computational screening of 645 antiviral peptides against the receptor-binding domain of the spike protein in SARS-CoV-2. <i>Computers in Biology and Medicine</i> , 2021, 136, 104759.	3.9	35
148	Material strategies and considerations for serologic testing of global infectious diseases. <i>MRS Bulletin</i> , 2021, , 1-5.	1.7	3
151	Genetic and structural basis for SARS-CoV-2 variant neutralization by a two-antibody cocktail. <i>Nature Microbiology</i> , 2021, 6, 1233-1244.	5.9	237
152	Characterising proteolysis during SARS-CoV-2 infection identifies viral cleavage sites and cellular targets with therapeutic potential. <i>Nature Communications</i> , 2021, 12, 5553.	5.8	76

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153	Proteolytic activation of SARS-CoV-2 spike protein. <i>Microbiology and Immunology</i> , 2022, 66, 15-23.	0.7	106
154	The Possible Role of Microbial Proteases in Facilitating SARS-CoV-2 Brain Invasion. <i>Biology</i> , 2021, 10, 966.	1.3	6
155	D614G mutation in the SARS-CoV-2 spike protein enhances viral fitness by desensitizing it to temperature-dependent denaturation. <i>Journal of Biological Chemistry</i> , 2021, 297, 101238.	1.6	46
156	SARS-CoV-2 B.1.617.2 Delta variant replication and immune evasion. <i>Nature</i> , 2021, 599, 114-119.	13.7	1,041
157	Evolutionary Dynamics and Epidemiology of Endemic and Emerging Coronaviruses in Humans, Domestic Animals, and Wildlife. <i>Viruses</i> , 2021, 13, 1908.	1.5	29
158	A potent SARS-CoV-2 neutralising nanobody shows therapeutic efficacy in the Syrian golden hamster model of COVID-19. <i>Nature Communications</i> , 2021, 12, 5469.	5.8	102
159	Pseudoephedrine and its derivatives antagonize wild and mutated severe acute respiratory syndrome (SARS-CoV-2) viruses through blocking virus invasion and antiinflammatory effect. <i>Phytotherapy Research</i> , 2021, 35, 5847-5860.	2.8	8
160	Deamidation drives molecular aging of the SARS-CoV-2 spike protein receptor-binding motif. <i>Journal of Biological Chemistry</i> , 2021, 297, 101175.	1.6	3
162	Computational modeling of protein conformational changes - Application to the opening SARS-CoV-2 spike. <i>Journal of Computational Physics</i> , 2021, 444, 110591.	1.9	6
163	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
164	SARS-CoV-2 entry into human airway organoids is serine protease-mediated and facilitated by the multibasic cleavage site. <i>ELife</i> , 2021, 10, .	2.8	115
183	Molecular-Level Anatomy of SARS-CoV-2 for the Battle against the COVID-19 Pandemic. <i>Bulletin of the Chemical Society of Japan</i> , 2021, 94, 1478-1490.	2.0	24
185	Recent Advances of Conducting Polymers and Their Composites for Electrochemical Biosensing Applications. <i>Journal of Functional Biomaterials</i> , 2020, 11, 71.	1.8	35
186	Computational Analysis of SARS-CoV-2 and SARS-Like Coronavirus Diversity in Human, Bat and Pangolin Populations. <i>Viruses</i> , 2021, 13, 49.	1.5	19
187	Viral and Host Attributes Underlying the Origins of Zoonotic Coronaviruses in Bats. <i>Comparative Medicine</i> , 2021, 71, 442-450.	0.4	6
188	Heterologous humoral immunity to human and zoonotic coronaviruses: Aiming for the achilles heel. <i>Seminars in Immunology</i> , 2021, 55, 101507.	2.7	16
189	Imaging and visualizing SARS-CoV-2 in a new era for structural biology. <i>Interface Focus</i> , 2021, 11, 20210019.	1.5	5
190	Expression and characterization of SARS-CoV-2 spike proteins. <i>Nature Protocols</i> , 2021, 16, 5339-5356.	5.5	31

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191	Pathogenesis, Symptomatology, and Transmission of SARS-CoV-2 through Analysis of Viral Genomics and Structure. <i>MSystems</i> , 2021, 6, e0009521.	1.7	26
192	Two-Component Nanoparticle Vaccine Displaying Glycosylated Spike S1 Domain Induces Neutralizing Antibody Response against SARS-CoV-2 Variants. <i>MBio</i> , 2021, 12, e0181321.	1.8	28
193	Peptides and peptidomimetics as therapeutic agents for Covid-19. <i>Peptide Science</i> , 2022, 114, e24245.	1.0	8
194	Global Diversification and Distribution of Coronaviruses With Furin Cleavage Sites. <i>Frontiers in Microbiology</i> , 2021, 12, 649314.	1.5	11
195	Personal observations on COVID-19 and the conduct and application of biomedical science. <i>Interface Focus</i> , 2021, 11, 20210053.	1.5	1
196	Conformational variability of loops in the SARS-CoV-2 spike protein. <i>Proteins: Structure, Function and Bioinformatics</i> , 2022, 90, 691-703.	1.5	1
197	Mechanisms of Lung Injury Induced by SARS-CoV-2 Infection. <i>Physiology</i> , 2022, 37, 88-100.	1.6	18
198	Temporal-Geographical Dispersion of SARS-CoV-2 Spike Glycoprotein Variant Lineages and Their Functional Prediction Using in Silico Approach. <i>MBio</i> , 2021, 12, e0268721.	1.8	3
199	Effective chimeric antigen receptor T cells against SARS-CoV-2. <i>IScience</i> , 2021, 24, 103295.	1.9	14
202	Protein-protein interactions at a glance: Protocols for the visualization of biomolecular interactions. <i>Methods in Cell Biology</i> , 2021, 166, 271-307.	0.5	2
203	The Emergence of the Spike Furin Cleavage Site in SARS-CoV-2. <i>Molecular Biology and Evolution</i> , 2022, 39, .	3.5	42
204	The molecular mechanism by which vitamin D protects against COVID-19. <i>Timocki Medicinski Glasnik</i> , 2021, 46, 103-104.	0.0	0
205	Pathogenic Basis of Thromboinflammation and Endothelial Injury in COVID-19: Current Findings and Therapeutic Implications. <i>International Journal of Molecular Sciences</i> , 2021, 22, 12081.	1.8	21
210	Longitudinal analysis of SARS-CoV-2 spike and RNA-dependent RNA polymerase protein sequences reveals the emergence and geographic distribution of diverse mutations. <i>Infection, Genetics and Evolution</i> , 2022, 97, 105153.	1.0	16
211	Spike residue 403 affects binding of coronavirus spikes to human ACE2. <i>Nature Communications</i> , 2021, 12, 6855.	5.8	25
212	Analysis of Glycosylation and Disulfide Bonding of Wild-Type SARS-CoV-2 Spike Glycoprotein. <i>Journal of Virology</i> , 2022, 96, JVI0162621.	1.5	24
214	High-resolution epitope mapping and characterization of SARS-CoV-2 antibodies in large cohorts of subjects with COVID-19. <i>Communications Biology</i> , 2021, 4, 1317.	2.0	27
215	TMPRSS2 promotes SARS-CoV-2 evasion from NCOA7-mediated restriction. <i>PLoS Pathogens</i> , 2021, 17, e1009820.	2.1	13

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216	The SARS-CoV-2 Spike protein disrupts human cardiac pericytes function through CD147 receptor-mediated signalling: a potential non-infective mechanism of COVID-19 microvascular disease. <i>Clinical Science</i> , 2021, 135, 2667-2689.	1.8	97
217	A 3D structural SARS-CoV-2 human interactome to explore genetic and drug perturbations. <i>Nature Methods</i> , 2021, 18, 1477-1488.	9.0	17
218	Coronavirus Disease (COVID-19) Control between Drug Repurposing and Vaccination: A Comprehensive Overview. <i>Vaccines</i> , 2021, 9, 1317.	2.1	35
219	Haplotype distribution of SARS-CoV-2 variants in low and high vaccination rate countries during ongoing global COVID-19 pandemic in early 2021. <i>Infection, Genetics and Evolution</i> , 2022, 97, 105164.	1.0	9
220	Occurrence of a substitution or deletion of SARS-CoV-2 spike amino acid 677 in various lineages in Marseille, France. <i>Virus Genes</i> , 2022, 58, 53-58.	0.7	8
221	Modeling coronavirus spike protein dynamics: implications for immunogenicity and immune escape. <i>Biophysical Journal</i> , 2021, 120, 5592-5618.	0.2	17
222	Structure and Mutations of SARS-CoV-2 Spike Protein: A Focused Overview. <i>ACS Infectious Diseases</i> , 2022, 8, 29-58.	1.8	32
223	Reduced neutralisation of the Delta (B.1.617.2) SARS-CoV-2 variant of concern following vaccination. <i>PLoS Pathogens</i> , 2021, 17, e1010022.	2.1	139
224	CD147-spike protein interaction in COVID-19: Get the ball rolling with a novel receptor and therapeutic target. <i>Science of the Total Environment</i> , 2022, 808, 152072.	3.9	66
225	SARS-CoV-2: Genetic variability, mutations and variants of concern for the global world. <i>Medicinski Podmladak</i> , 2021, 72, 1-7.	0.2	0
226	A rigorous framework for detecting SARS-CoV-2 spike protein mutational ensemble from genomic and structural features. <i>Current Research in Structural Biology</i> , 2021, 3, 290-300.	1.1	17
228	Zoonotic disease and virome diversity in bats. <i>Current Opinion in Virology</i> , 2022, 52, 192-202.	2.6	60
229	EMDA: A Python package for Electron Microscopy Data Analysis. <i>Journal of Structural Biology</i> , 2022, 214, 107826.	1.3	22
230	SARS-CoV-2 host cell surface interactions and potential antiviral therapies. <i>Interface Focus</i> , 2022, 12, 20200081.	1.5	4
232	Postcovid syndrome polymorphism of disorders in a new coronavirus infection. <i>HIV Infection and Immunosuppressive Disorders</i> , 2022, 13, 7-20.	0.1	7
233	Insights on the mutational landscape of the SARS-CoV-2 Omicron variant receptor-binding domain. <i>Cell Reports Medicine</i> , 2022, 3, 100527.	3.3	47
234	Mapping cross-variant neutralizing sites on the SARS-CoV-2 spike protein. <i>Emerging Microbes and Infections</i> , 2022, 11, 351-367.	3.0	19
235	Insights Into the Changing Landscape of Coronavirus Disease 2019. <i>Frontiers in Cellular and Infection Microbiology</i> , 2021, 11, 761521.	1.8	11

#	ARTICLE	IF	CITATIONS
237	Structure genomics of SARS-CoV-2 and its Omicron variant: drug design templates for COVID-19. <i>Acta Pharmacologica Sinica</i> , 2022, 43, 3021-3033.	2.8	65
238	The SARS-CoV-2 Lambda variant exhibits enhanced infectivity and immune resistance. <i>Cell Reports</i> , 2022, 38, 110218.	2.9	148
240	Allosteric perspective on the mutability and druggability of the SARS-CoV-2 Spike protein. <i>Structure</i> , 2022, 30, 590-607.e4.	1.6	24
241	Evaluation of protein descriptors in computer-aided rational protein engineering tasks and its application in property prediction in SARS-CoV-2 spike glycoprotein. <i>Computational and Structural Biotechnology Journal</i> , 2022, 20, 788-798.	1.9	12
242	HiSpike Method for High-Throughput Cost Effective Sequencing of the SARS-CoV-2 Spike Gene. <i>Frontiers in Medicine</i> , 2021, 8, 798130.	1.2	7
243	Alpha-Soluble NSF Attachment Protein Prevents the Cleavage of the SARS-CoV-2 Spike Protein by Functioning as an Interferon-Upregulated Furin Inhibitor. <i>MBio</i> , 2022, 13, e0244321.	1.8	8
244	Structural insights in cell-type specific evolution of intra-host diversity by SARS-CoV-2. <i>Nature Communications</i> , 2022, 13, 222.	5.8	23
245	Diversity and evolution of the animal virome. <i>Nature Reviews Microbiology</i> , 2022, 20, 321-334.	13.6	82
246	Preclinical evaluation of a SARS-CoV-2 mRNA vaccine PTX-COVID19-B. <i>Science Advances</i> , 2022, 8, eabj9815.	4.7	29
247	Rapid identification of neutralizing antibodies against SARS-CoV-2 variants by mRNA display. <i>Cell Reports</i> , 2022, 38, 110348.	2.9	14
248	Fine-tuning the spike: role of the nature and topology of the glycan shield in the structure and dynamics of the SARS-CoV-2 S. <i>Chemical Science</i> , 2022, 13, 386-395.	3.7	58
249	Structural biology of SARS-CoV-2: open the door for novel therapies. <i>Signal Transduction and Targeted Therapy</i> , 2022, 7, 26.	7.1	139
250	The T cell immune response against SARS-CoV-2. <i>Nature Immunology</i> , 2022, 23, 186-193.	7.0	785
252	SARS-CoV-2 variants preferentially emerge at intrinsically disordered protein sites helping immune evasion. <i>FEBS Journal</i> , 2022, 289, 4240-4250.	2.2	25
256	A SARS-CoV-2 variant elicits an antibody response with a shifted immunodominance hierarchy. <i>PLoS Pathogens</i> , 2022, 18, e1010248.	2.1	48
257	Waves and variants of SARS-CoV-2: understanding the causes and effect of the COVID-19 catastrophe. <i>Infection</i> , 2022, 50, 309-325.	2.3	112
258	The emergence, genomic diversity and global spread of SARS-CoV-2. <i>Nature</i> , 2021, 600, 408-418.	13.7	249
259	A single intranasal dose of a live-attenuated parainfluenza virus-vectored SARS-CoV-2 vaccine is protective in hamsters. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021, 118, .	3.3	43

#	ARTICLE	IF	CITATIONS
261	Mutagenic Distinction between the Receptor-Binding and Fusion Subunits of the SARS-CoV-2 Spike Glycoprotein and Its Upshot. <i>Vaccines</i> , 2021, 9, 1509.	2.1	5
263	Structural Bases of Zoonotic and Zooanthroponotic Transmission of SARS-CoV-2. <i>Viruses</i> , 2022, 14, 418.	1.5	8
264	Clinical and Molecular Relationships between COVID-19 and Feline Infectious Peritonitis (FIP). <i>Viruses</i> , 2022, 14, 481.	1.5	9
265	Cooperative multivalent receptor binding promotes exposure of the SARS-CoV-2 fusion machinery core. <i>Nature Communications</i> , 2022, 13, 1002.	5.8	30
266	Structural basis for SARS-CoV-2 Delta variant recognition of ACE2 receptor and broadly neutralizing antibodies. <i>Nature Communications</i> , 2022, 13, 871.	5.8	107
267	COVID-19 mRNA vaccines: Platforms and current developments. <i>Molecular Therapy</i> , 2022, 30, 1850-1868.	3.7	102
268	Rapid development of an updated mRNA vaccine against the SARS-CoV-2 Omicron variant. <i>Cell Research</i> , 2022, 32, 401-403.	5.7	37
269	SARS-CoV-2 host prediction based on virus-host genetic features. <i>Scientific Reports</i> , 2022, 12, 4576.	1.6	0
271	Mutations and Evolution of the SARS-CoV-2 Spike Protein. <i>Viruses</i> , 2022, 14, 640.	1.5	111
272	A highly immunogenic live-attenuated vaccine candidate prevents SARS-CoV-2 infection and transmission in hamsters. <i>Innovation(China)</i> , 2022, 3, 100221.	5.2	5
273	Evolution of the SARS-CoV-2 spike protein in the human host. <i>Nature Communications</i> , 2022, 13, 1178.	5.8	44
275	Selection Analysis Identifies Clusters of Unusual Mutational Changes in Omicron Lineage BA.1 That Likely Impact Spike Function. <i>Molecular Biology and Evolution</i> , 2022, 39, .	3.5	84
276	Coagulation factors directly cleave SARS-CoV-2 spike and enhance viral entry. <i>ELife</i> , 2022, 11, .	2.8	34
277	Importance of Efferocytosis in COVID-19 Mortality. <i>Infection and Drug Resistance</i> , 2022, Volume 15, 995-1007.	1.1	1
278	The inherent flexibility of receptor binding domains in SARS-CoV-2 spike protein. <i>ELife</i> , 2022, 11, .	2.8	40
279	Computational Modeling of T Cell Hypersensitivity during Coronavirus Infections Leading to Autoimmunity and Lethality. <i>Computational and Mathematical Methods in Medicine</i> , 2022, 2022, 1-21.	0.7	1
280	Mechanistic Origin of Different Binding Affinities of SARS-CoV and SARS-CoV-2 Spike RBDs to Human ACE2. <i>Cells</i> , 2022, 11, 1274.	1.8	8
281	SARS-CoV-2 gained a novel spike protein S1â€™N-Terminal Domain (S1-NTD). <i>Environmental Research</i> , 2022, 211, 113047.	3.7	7

#	ARTICLE	IF	CITATIONS
282	Millisecond dynamic of SARS-CoV-2 spike and its interaction with ACE2 receptor and small extracellular vesicles. <i>Journal of Extracellular Vesicles</i> , 2021, 10, e12170.	5.5	21
283	Computational Electrostatics Predict Variations in SARS-CoV-2 Spike and Human ACE2 Interactions. , 2021, , .		0
285	The atomic portrait of SARS-CoV-2 as captured by cryo-electron microscopy. <i>Journal of Cellular and Molecular Medicine</i> , 2022, 26, 25-34.	1.6	6
286	COVID-19 status quo: Emphasis on gastrointestinal and liver manifestations. <i>World Journal of Gastroenterology</i> , 2021, 27, 7969-7981.	1.4	5
287	Sensitivity of SARS-CoV-2 towards Alcohols: Potential for Alcohol-Related Toxicity in Humans. <i>Life</i> , 2021, 11, 1334.	1.1	9
288	Post-COVID syndrome: prevalence, organ pathogenesis and routes of correction. A systematic review. <i>Kuban Scientific Medical Bulletin</i> , 2021, 28, 90-116.	0.1	4
290	Host Manipulation Mechanisms of SARS-CoV-2. <i>Acta Biotheoretica</i> , 2022, 70, 4.	0.7	0
292	Rural Medical Care and COVID-19. <i>Journal of the Japanese Association of Rural Medicine</i> , 2022, 70, 594-603.	0.0	0
295	Effects of SARS-CoV-2 Inflammation on Selected Organ Systems of the Human Body. <i>International Journal of Molecular Sciences</i> , 2022, 23, 4178.	1.8	16
296	Subgenomic RNA profiling suggests novel mechanism in coronavirus gene regulation and host adaption. <i>Life Science Alliance</i> , 2022, 5, e202101347.	1.3	3
297	Nanoparticles for Coronavirus Control. <i>Nanomaterials</i> , 2022, 12, 1602.	1.9	9
298	Furin and COVID-19: Structure, Function and Chemoinformatic Analysis of Representative Active Site Inhibitors. <i>Frontiers in Drug Discovery</i> , 2022, 2, .	1.1	7
299	Pseudotyped Bat Coronavirus RaTG13 is efficiently neutralised by convalescent sera from SARS-CoV-2 infected patients. <i>Communications Biology</i> , 2022, 5, 409.	2.0	5
300	Emerging SARS-CoV-2 variants: Why, how, and what's next?. , 2022, 1, 100029.		26
301	Multivalent 9-O-Acetylated-sialic acid glycoclusters as potent inhibitors for SARS-CoV-2 infection. <i>Nature Communications</i> , 2022, 13, 2564.	5.8	32
302	Multifaceted membrane binding head of the SARS-CoV-2 spike protein. <i>Current Research in Structural Biology</i> , 2022, , .	1.1	6
306	Le virus SARS-CoV-2 utilise différentes voies d'entrée pour infecter les cellules. <i>Medecine/Sciences</i> , 2022, 38, 419-422.	0.0	0
308	Human interaction targets of SARS-CoV-2 spike protein: A systematic review. <i>European Journal of Inflammation</i> , 2022, 20, 1721727X2210953.	0.2	3

#	ARTICLE	IF	CITATIONS
309	Human Cell Organelles in SARS-CoV-2 Infection: An Up-to-Date Overview. <i>Viruses</i> , 2022, 14, 1092.	1.5	3
311	Variant-driven early warning via unsupervised machine learning analysis of spike protein mutations for COVID-19. <i>Scientific Reports</i> , 2022, 12, .	1.6	17
312	Uncovering cryptic pockets in the SARS-CoV-2 spike glycoprotein. <i>Structure</i> , 2022, 30, 1062-1074.e4.	1.6	21
313	COVID-19 vaccines uptake: Public knowledge, awareness, perception and acceptance among adult Africans. <i>PLoS ONE</i> , 2022, 17, e0268230.	1.1	12
314	Novel cleavage sites identified in SARS-CoV-2 spike protein reveal mechanism for cathepsin L-facilitated viral infection and treatment strategies. <i>Cell Discovery</i> , 2022, 8, .	3.1	40
315	Effect of the Graphene Nanosheet on Bio-Functions of the Spike Protein at Open and Closed States: The Comparison Between SARS-CoV-2 WT and Omicron Variant. <i>SSRN Electronic Journal</i> , 0, , .	0.4	0
316	Comparison of Insertion, Deletion, and Point Mutations in the Genomes of Human Adenovirus HAdV-C-2 and SARS-CoV-2. <i>Tohoku Journal of Experimental Medicine</i> , 2022, , .	0.5	5
317	The Spike Protein of SARS-CoV-2 Is Adapting Because of Selective Pressures. <i>Vaccines</i> , 2022, 10, 864.	2.1	17
318	The Cellular Characterization of SARS-CoV-2 Spike Protein in Virus-Infected Cells Using the Receptor Binding Domain Binding Specific Human Monoclonal Antibodies. <i>Journal of Virology</i> , 0, , .	1.5	0
320	Lysozyme Protects Against Severe Acute Respiratory Syndrome Coronavirus 2 Infection and Inflammation in Human Corneal Epithelial Cells. , 2022, 63, 16.		9
321	Natural selection plays a significant role in governing the codon usage bias in the novel SARS-CoV-2 variants of concern (VOC). <i>PeerJ</i> , 0, 10, e13562.	0.9	4
322	Structural Plasticity and Immune Evasion of SARS-CoV-2 Spike Variants. <i>Viruses</i> , 2022, 14, 1255.	1.5	30
323	Binding and structural basis of equine ACE2 to RBDs from SARS-CoV, SARS-CoV-2 and related coronaviruses. <i>Nature Communications</i> , 2022, 13, .	5.8	16
324	The SARS-CoV-2 Delta variant induces an antibody response largely focused on class 1 and 2 antibody epitopes. <i>PLoS Pathogens</i> , 2022, 18, e1010592.	2.1	13
325	Intranasal immunization with avian paramyxovirus type 3 expressing SARS-CoV-2 spike protein protects hamsters against SARS-CoV-2. <i>Npj Vaccines</i> , 2022, 7, .	2.9	7
326	Molecular Mechanisms of the Medicines for COVID-19. <i>Bulletin of the Chemical Society of Japan</i> , 2022, 95, 1308-1317.	2.0	19
327	In vitro evolution predicts emerging SARS-CoV-2 mutations with high affinity for ACE2 and cross-species binding. <i>PLoS Pathogens</i> , 2022, 18, e1010733.	2.1	28
328	A Retinol Derivative Inhibits SARS-CoV-2 Infection by Interrupting Spike-Mediated Cellular Entry. <i>MBio</i> , 2022, 13, .	1.8	14

#	ARTICLE	IF	CITATIONS
330	Correlation between the binding affinity and the conformational entropy of nanobody SARS-CoV-2 spike protein complexes. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, .	3.3	11
331	SARS-CoV-2 and the Missing Link of Intermediate Hosts in Viral Emergence - What We Can Learn From Other Betacoronaviruses. Frontiers in Virology, 0, 2, .	0.7	3
332	Progressive membrane-binding mechanism of SARS-CoV-2 variant spike proteins. IScience, 2022, 25, 104722.	1.9	8
334	Study of protease-mediated processes initiating viral infection and cell viral spreading of SARS-CoV-2. Journal of Molecular Modeling, 2022, 28, .	0.8	2
335	Expanded ACE2 dependencies of diverse SARS-like coronavirus receptor binding domains. PLoS Biology, 2022, 20, e3001738.	2.6	19
336	Neuropilin-1 in the pathogenesis of preeclampsia, HIV-1, and SARS-CoV-2 infection: A review. Virus Research, 2022, 319, 198880.	1.1	5
337	Engineered disulfide reveals structural dynamics of locked SARS-CoV-2 spike. PLoS Pathogens, 2022, 18, e1010583.	2.1	12
338	The Local Topological Free Energy of the SARS-CoV-2 Spike Protein. Polymers, 2022, 14, 3014.	2.0	1
339	Molecular dynamics simulations explore effects of electric field orientations on spike proteins of SARS-CoV-2 virions. Scientific Reports, 2022, 12, .	1.6	6
341	Omicron SARS-CoV-2 mutations stabilize spike up-RBD conformation and lead to a non-RBM-binding monoclonal antibody escape. Nature Communications, 2022, 13, .	5.8	66
342	A Bispecific Antibody Targeting RBD and S2 Potently Neutralizes SARS-CoV-2 Omicron and Other Variants of Concern. Journal of Virology, 2022, 96, .	1.5	14
343	Recombinant Decoy Exhibits Broad Protection against Omicron and Resistance Potential to Future Variants. Pharmaceuticals, 2022, 15, 1002.	1.7	3
344	Cross-Neutralization of SARS-CoV-2-Specific Antibodies in Convalescent and Immunized Human Sera against the Bat and Pangolin Coronaviruses. Viruses, 2022, 14, 1793.	1.5	2
345	Detection of COVID-19-related biomarkers by electrochemical biosensors and potential for diagnosis, prognosis, and prediction of the course of the disease in the context of personalized medicine. Analytical and Bioanalytical Chemistry, 2023, 415, 1003-1031.	1.9	11
346	A neutralizing epitope on the SD1 domain of SARS-CoV-2 spike targeted following infection and vaccination. Cell Reports, 2022, 40, 111276.	2.9	29
348	Carbohydrate-binding protein from stinging nettle as fusion inhibitor for SARS-CoV-2 variants of concern. Frontiers in Cellular and Infection Microbiology, 0, 12, .	1.8	7
349	Myotis fimbriatus Virome, a Window to Virus Diversity and Evolution in the Genus Myotis. Viruses, 2022, 14, 1899.	1.5	5
350	Broad spectrum antiviral activity of <i>Spatholobus suberectus</i> Dunn against SARS-CoV-2, SARS-CoV-1, H5N1, and other enveloped viruses. Phytotherapy Research, 2022, 36, 3232-3247.	2.8	12

#	ARTICLE	IF	CITATIONS
353	COVID-19 Spotlights Connections between Disease and Multiple Lifestyle Factors. American Journal of Lifestyle Medicine, 0, , 155982762211230.	0.8	4
354	Receptor-binding domain-anchored peptides block binding of severe acute respiratory syndrome coronavirus 2 spike proteins with cell surface angiotensin-converting enzyme 2. Frontiers in Microbiology, 0, 13, .	1.5	1
355	Structural heterogeneity and precision of implications drawn from cryo-electron microscopy structures: SARS-CoV-2 spike-protein mutations as a test case. European Biophysics Journal, 2022, 51, 555-568.	1.2	4
356	Looking for SARS-CoV-2 Therapeutics Through Computational Approaches. Current Medicinal Chemistry, 2023, 30, 3158-3214.	1.2	3
358	Perspective Chapter: Real-Time Genomic Surveillance for SARS-CoV-2 on Center Stage. Infectious Diseases, 0, , .	4.0	0
359	Insight into genomic organization of pathogenic coronaviruses, SARS-CoV-2: Implication for emergence of new variants, laboratory diagnosis and treatment options. Frontiers in Molecular Medicine, 0, 2, .	0.6	0
360	Advances in Targeting ACE2 for Developing COVID-19 Therapeutics. Annals of Biomedical Engineering, 2022, 50, 1734-1749.	1.3	5
361	A snapshot of protein trafficking in SARS-CoV-2 infection. Biology of the Cell, 2023, 115, .	0.7	8
362	Proviral role of human respiratory epithelial cell-derived small extracellular vesicles in SARS-CoV-2 infection. Journal of Extracellular Vesicles, 2022, 11, .	5.5	7
363	Cell Entry and Unusual Replication of SARS-CoV-2. Current Drug Targets, 2022, 23, 1539-1554.	1.0	1
365	SARS-CoV-2 variant evasion of monoclonal antibodies based on in vitro studies. Nature Reviews Microbiology, 2023, 21, 112-124.	13.6	128
366	Essential role of TMPRSS2 in SARS-CoV-2 infection in murine airways. Nature Communications, 2022, 13, .	5.8	46
367	Genomic Determinants Potentially Associated with Clinical Manifestations of Human-Pathogenic Tick-Borne Flaviviruses. International Journal of Molecular Sciences, 2022, 23, 13404.	1.8	1
368	Effect of the Graphene Nanosheet on Functions of the Spike Protein in Open and Closed States: Comparison between SARS-CoV-2 Wild Type and the Omicron Variant. Langmuir, 2022, 38, 13972-13982.	1.6	3
369	Persistent cross-species SARS-CoV-2 variant infectivity predicted via comparative molecular dynamics simulation. Royal Society Open Science, 2022, 9, .	1.1	3
370	In Silico Protein Folding Prediction of COVID-19 Mutations and Variants. Biomolecules, 2022, 12, 1665.	1.8	4
372	Structural effects of spike protein D614G mutation in SARS-CoV-2. Biophysical Journal, 2023, 122, 2910-2920.	0.2	11
373	Electron cryotomography of SARS-CoV-2 virions reveals cylinder-shaped particles with a double layer RNP assembly. Communications Biology, 2022, 5, .	2.0	8

#	ARTICLE	IF	CITATIONS
374	Involvement of sialoglycans in SARS-CoV-2 infection: Opportunities and challenges for glyco-based inhibitors. <i>IUBMB Life</i> , 2022, 74, 1253-1263.	1.5	3
375	Conformational stability of SARS-CoV-2 glycoprotein spike variants. <i>IScience</i> , 2023, 26, 105696.	1.9	5
376	Heparin Inhibits SARS-CoV-2 Replication in Human Nasal Epithelial Cells. <i>Viruses</i> , 2022, 14, 2620.	1.5	1
377	Probing the biophysical constraints of SARS-CoV-2 spike N-terminal domain using deep mutational scanning. <i>Science Advances</i> , 2022, 8, .	4.7	16
378	The free fatty acid binding pocket is a conserved hallmark in pathogenic Î²-coronavirus spike proteins from SARS-CoV to Omicron. <i>Science Advances</i> , 2022, 8, .	4.7	21
379	Methotrexate inhibition of SARS-CoV-2 entry, infection and inflammation revealed by bioinformatics approach and a hamster model. <i>Frontiers in Immunology</i> , 0, 13, .	2.2	2
381	Network analysis uncovers the communication structure of SARS-CoV-2 spike protein identifying sites for immunogen design. <i>IScience</i> , 2023, 26, 105855.	1.9	7
382	Discovery of novel spike/ACE2 inhibitory macrocycles using in silico reinforcement learning. <i>Frontiers in Drug Discovery</i> , 0, 2, .	1.1	2
383	Biology of SARS-CoV-2 Coronavirus; Origin, Structure, and Variants. <i>Contemporary Cardiology</i> , 2022, , 3-18.	0.0	0
384	Through an ecological lens. <i>EMBO Reports</i> , 0, , .	2.0	3
385	Epitope-directed anti-SARS-CoV-2 scFv engineered against the key spike protein region could block membrane fusion. <i>Protein Science</i> , 0, , .	3.1	1
386	Effect of polymorphism in <i>Rhinolophus affinis</i> ACE2 on entry of SARS-CoV-2 related bat coronaviruses. <i>PLoS Pathogens</i> , 2023, 19, e1011116.	2.1	7
387	SARS-CoV-2 Omicron (B.1.1.529) Variant: A Challenge with COVID-19. <i>Diagnostics</i> , 2023, 13, 559.	1.3	12
388	Limited cross-species virus transmission in a spatially restricted coral reef fish community. <i>Virus Evolution</i> , 2023, 9, .	2.2	4
389	Adaptive Evolution of the Spike Protein in Coronaviruses. <i>Molecular Biology and Evolution</i> , 2023, 40, .	3.5	6
390	Cryo-EM reveals binding of linoleic acid to SARS-CoV-2 spike glycoprotein, suggesting an antiviral treatment strategy. <i>Acta Crystallographica Section D: Structural Biology</i> , 2023, 79, 111-121.	1.1	9
391	The role of influenza-A virus and coronavirus viral glycoprotein cleavage in host adaptation. <i>Current Opinion in Virology</i> , 2023, 58, 101303.	2.6	3
393	Severe Acute Respiratory Syndrome Coronaviruses-2 (SARS-CoV-2)., 2023, , 1-15.		0

#	ARTICLE	IF	CITATIONS
394	O-Linked Sialoglycans Modulate the Proteolysis of SARS-CoV-2 Spike and Likely Contribute to the Mutational Trajectory in Variants of Concern. ACS Central Science, 2023, 9, 393-404.	5.3	8
395	Establishment of angiotensin-converting enzyme 2 and cluster of differentiation 147 dual target cell membrane chromatography based on SNAP-tag technology for screening anti severe acute respiratory syndrome coronavirus 2 active components. Journal of Chromatography A, 2023, 1693, 463903.	1.8	6
396	Combined in silico strategy for repurposing DrugBank entries towards introducing potential anti-SARS-CoV-2 drugs. Canadian Journal of Physiology and Pharmacology, 0, , .	0.7	0
397	SARS-CoV-2 S Mutations: A Lesson from the Viral World to Understand How Human Furin Works. International Journal of Molecular Sciences, 2023, 24, 4791.	1.8	2
398	Structural dynamics in the evolution of SARS-CoV-2 spike glycoprotein. Nature Communications, 2023, 14, .	5.8	21
400	Comprehensive deep mutational scanning reveals the pH induced stability and binding differences between SARS-CoV-2 spike RBD and human ACE2. Journal of Biomolecular Structure and Dynamics, 2023, 41, 15207-15218.	2.0	1
402	Uncovering the Role of <i>N</i> -Glycan Occupancy on the Cooperative Assembly of Spike and Angiotensin Converting Enzyme 2 Complexes: Insights from Glycoengineering and Native Mass Spectrometry. Journal of the American Chemical Society, 2023, 145, 8021-8032.	6.6	3
403	Total escape of SARS-CoV-2 from dual monoclonal antibody therapy in an immunocompromised patient. Nature Communications, 2023, 14, .	5.8	5
404	Evaluating the effect of SARS-CoV-2 spike mutations with a linear doubly robust learner. Frontiers in Cellular and Infection Microbiology, 0, 13, .	1.8	0
415	Biological Mechanisms of Transplacental SARS-COV-2 Transmission. , 2023, , 49-62.		0
442	Severe Acute Respiratory Syndrome Coronaviruses-2 (SARS-CoV-2). , 2023, , 1529-1543.		0
455	Main and papain-like proteases as prospective targets for pharmacological treatment of coronavirus SARS-CoV-2. RSC Advances, 2023, 13, 35500-35524.	1.7	0
462	Structural biology of SARS-CoV-2. Progress in Molecular Biology and Translational Science, 2024, , 31-43.	0.9	0
464	An introduction to principles of virus structure. , 2024, , 2073-2084.		0