Transmission, infectivity, and neutralization of a spike

Cell 184, 3426-3437.e8 DOI: 10.1016/j.cell.2021.04.025

Citation Report

#	Article	IF	CITATIONS
1	A rapid screening assay for L452R and T478K spike mutations in SARS-CoV-2 Delta variant using high-resolution melting analysis. Journal of Toxicological Sciences, 2021, 46, 471-476.	0.7	27
6	The surveillance of spike protein for patients with COVIDâ€19 detected in Hong Kong in 2020. Journal of Medical Virology, 2021, 93, 5644-5647.	2.5	9
9	The Spike of Concern—The Novel Variants of SARS-CoV-2. Viruses, 2021, 13, 1002.	1.5	92
13	Rapid generation of potent antibodies by autonomous hypermutation in yeast. Nature Chemical Biology, 2021, 17, 1057-1064.	3.9	59
14	Up State of the SARS-COV-2 Spike Homotrimer Favors an Increased Virulence for New Variants. Frontiers in Medical Technology, 2021, 3, 694347.	1.3	22
15	In vitro Characterization of Fitness and Convalescent Antibody Neutralization of SARS-CoV-2 Cluster 5 Variant Emerging in Mink at Danish Farms. Frontiers in Microbiology, 2021, 12, 698944.	1.5	40
16	SARS-CoV-2 Infectivity and Severity of COVID-19 According to SARS-CoV-2 Variants: Current Evidence. Journal of Clinical Medicine, 2021, 10, 2635.	1.0	36
17	Nucleic Acid Testing of SARS-CoV-2. International Journal of Molecular Sciences, 2021, 22, 6150.	1.8	42
18	SARS-CoV-2 Portrayed against HIV: Contrary Viral Strategies in Similar Disguise. Microorganisms, 2021, 9, 1389.	1.6	4
19	Variants of Concern Are Overrepresented Among Postvaccination Breakthrough Infections of Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2) in Washington State. Clinical Infectious Diseases, 2022, 74, 1089-1092.	2.9	38
20	An ACE2 Triple Decoy that neutralizes SARS-CoV-2 shows enhanced affinity for virus variants. Scientific Reports, 2021, 11, 12740.	1.6	54
21	In vivo monoclonal antibody efficacy against SARS-CoV-2 variant strains. Nature, 2021, 596, 103-108.	13.7	222
22	Tackling COVID-19 with neutralizing monoclonal antibodies. Cell, 2021, 184, 3086-3108.	13.5	309
23	COVID-19: Structural Considerations for Virus Pathogenesis, Therapeutic Strategies and Vaccine Design in the Novel SARS-CoV-2 Variants Era. Molecular Biotechnology, 2021, 63, 885-897.	1.3	8
25	Characterization of a Lineage C.36 SARS-CoV-2 Isolate with Reduced Susceptibility to Neutralization Circulating in Lombardy, Italy. Viruses, 2021, 13, 1514.	1.5	12
26	Assessment of infectivity and the impact on neutralizing activity of immune sera of the COVID-19 variant, CAL.20C. Signal Transduction and Targeted Therapy, 2021, 6, 285.	7.1	8
27	SARS-CoV-2 immune evasion by the B.1.427/B.1.429 variant of concern. Science, 2021, 373, 648-654.	6.0	385
28	SARS-CoV-2 spike L452R variant evades cellular immunity and increases infectivity. Cell Host and Microbe, 2021, 29, 1124-1136.e11.	5.1	421

#	Article	IF	CITATIONS
29	Potency of BNT162b2 and mRNAâ€1273 vaccineâ€induced neutralizing antibodies against severe acute respiratory syndromeâ€CoVâ€2 variants of concern: A systematic review of in vitro studies. Reviews in Medical Virology, 2022, 32, e2277.	3.9	57
30	Conformational Variability Correlation Prediction of Transmissibility and Neutralization Escape Ability for Multiple Mutation SARS-CoV-2 Strains using SSSCPreds. ACS Omega, 2021, 6, 19323-19329.	1.6	6
32	The SARS-CoV-2 spike L452R-E484Q variant in the Indian B.1.617 strain showed significant reduction in the neutralization activity of immune sera. Precision Clinical Medicine, 2021, 4, 149-154.	1.3	7
33	Mapping mutations to the SARS-CoV-2 RBD that escape binding by different classes of antibodies. Nature Communications, 2021, 12, 4196.	5.8	332
34	HIV-1 and SARS-CoV-2: Patterns in the evolution of two pandemic pathogens. Cell Host and Microbe, 2021, 29, 1093-1110.	5.1	73
36	Impact of Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2) Variant-Associated Receptor Binding Domain (RBD) Mutations on the Susceptibility to Serum Antibodies Elicited by Coronavirus Disease 2019 (COVID-19) Infection or Vaccination. Clinical Infectious Diseases, 2022, 74, 1623-1630.	2.9	42
38	The origins and potential future of SARS-CoV-2 variants of concern in the evolving COVID-19 pandemic. Current Biology, 2021, 31, R918-R929.	1.8	246
39	SARS-CoV-2 Spike Mutations, L452R, T478K, E484Q and P681R, in the Second Wave of COVID-19 in Maharashtra, India. Microorganisms, 2021, 9, 1542.	1.6	521
40	COVID-19: Unmasking Emerging SARS-CoV-2 Variants, Vaccines and Therapeutic Strategies. Biomolecules, 2021, 11, 993.	1.8	136
41	Broad sarbecovirus neutralization by a human monoclonal antibody. Nature, 2021, 597, 103-108.	13.7	220
42	Emerging SARS-CoV-2 variants of concern and potential intervention approaches. Critical Care, 2021, 25, 244.	2.5	186
45	Original Hosts, Clinical Features, Transmission Routes, and Vaccine Development for Coronavirus Disease (COVID-19). Frontiers in Medicine, 2021, 8, 702066.	1.2	14
49	The Rise and Fall of a Local SARS-CoV-2 Variant with the Spike Protein Mutation L452R. Vaccines, 2021, 9, 937.	2.1	12
51	Predominance of the SARS-CoV-2 Lineage P.1 and Its Sublineage P.1.2 in Patients from the Metropolitan Region of Porto Alegre, Southern Brazil in March 2021. Pathogens, 2021, 10, 988.	1.2	11
52	Acquisition of the L452R Mutation in the ACE2-Binding Interface of Spike Protein Triggers Recent Massive Expansion of SARS-CoV-2 Variants. Journal of Clinical Microbiology, 2021, 59, e0092121.	1.8	140
56	One year into the pandemic: Short-term evolution of SARS-CoV-2 and emergence of new lineages. Infection, Genetics and Evolution, 2021, 92, 104869.	1.0	49
57	Antibody-Mediated Neutralization of Authentic SARS-CoV-2 B.1.617 Variants Harboring L452R and T478K/E484Q. Viruses, 2021, 13, 1693.	1.5	69
58	Facing the wrath of enigmatic mutations: a review on the emergence of severe acute respiratory syndrome coronavirus 2 variants amid coronavirus diseaseâ€19 pandemic. Environmental Microbiology, 2022, 24, 2615-2629.	1.8	23

#	Article	IF	CITATIONS
60	Reduced neutralization of SARS-CoV-2 B.1.617 by vaccine and convalescent serum. Cell, 2021, 184, 4220-4236.e13.	13.5	630
62	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. Biomolecules, 2021, 11, 1244.	1.8	17
64	An Analysis Based on Molecular Docking and Molecular Dynamics Simulation Study of Bromelain as Anti-SARS-CoV-2 Variants. Frontiers in Pharmacology, 2021, 12, 717757.	1.6	28
66	Jumping a Moving Train: SARS-CoV-2 Evolution in Real Time. Journal of the Pediatric Infectious Diseases Society, 2021, 10, S96-S105.	0.6	9
68	mRNA-1273 protects against SARS-CoV-2 beta infection in nonhuman primates. Nature Immunology, 2021, 22, 1306-1315.	7.0	57
70	Novel SARS-CoV-2 variants: the pandemics within the pandemic. Clinical Microbiology and Infection, 2021, 27, 1109-1117.	2.8	290
71	α-Hemolysin-Aided Oligomerization of the Spike Protein RBD Resulted in Improved Immunogenicity and Neutralization Against SARS-CoV-2 Variants. Frontiers in Immunology, 2021, 12, 757691.	2.2	2
72	B.1.617.2 enters and fuses lung cells with increased efficiency and evades antibodies induced by infection and vaccination. Cell Reports, 2021, 37, 109825.	2.9	73
73	Interleukin-1RA Mitigates SARS-CoV-2–Induced Inflammatory Lung Vascular Leakage and Mortality in Humanized K18-hACE-2 Mice. Arteriosclerosis, Thrombosis, and Vascular Biology, 2021, 41, 2773-2785.	1.1	20
74	Application of omics technology to combat the COVIDâ€19 pandemic. MedComm, 2021, 2, 381-401.	3.1	11
75	Molecular evolutionary characteristics of SARSâ€CoVâ€2 emerging in the United States. Journal of Medical Virology, 2022, 94, 310-317.	2.5	59
76	Could live attenuated vaccines better control COVID-19?. Vaccine, 2021, 39, 5719-5726.	1.7	29
78	Genetic and structural basis for SARS-CoV-2 variant neutralization by a two-antibody cocktail. Nature Microbiology, 2021, 6, 1233-1244.	5.9	237
79	Serological Assays for Assessing Postvaccination SARS-CoV-2 Antibody Response. Microbiology Spectrum, 2021, 9, e0073321.	1.2	22
81	Shooting at a Moving Target—Effectiveness and Emerging Challenges for SARS-CoV-2 Vaccine Development. Vaccines, 2021, 9, 1052.	2.1	22
82	The biological and clinical significance of emerging SARS-CoV-2 variants. Nature Reviews Genetics, 2021, 22, 757-773.	7.7	778
83	Emerging SARS-CoV-2 Variants of Concern (VOCs): An Impending Global Crisis. Biomedicines, 2021, 9, 1303.	1.4	87
85	Revealing the Threat of Emerging SARS-CoV-2 Mutations to Antibody Therapies. Journal of Molecular Biology, 2021, 433, 167155.	2.0	53

#	Article	IF	CITATIONS
86	Elicitation of broadly protective sarbecovirus immunity by receptor-binding domain nanoparticle vaccines. Cell, 2021, 184, 5432-5447.e16.	13.5	131
87	Current diagnostic approaches to detect two important betacoronaviruses: Middle East respiratory syndrome coronavirus (MERS-CoV) and severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). Pathology Research and Practice, 2021, 225, 153565.	1.0	8
88	Association of E484K spike protein mutation with SARS-CoV-2 infection in vaccinated personsMaryland, January $\hat{a} \in May 2021$. Clinical Infectious Diseases, 2021, , .	2.9	10
89	Impact of the Delta variant on vaccine efficacy and response strategies. Expert Review of Vaccines, 2021, 20, 1201-1209.	2.0	177
90	A tetrameric ACE2 protein broadly neutralizes SARS-CoV-2 spike variants of concern with elevated potency. Antiviral Research, 2021, 194, 105147.	1.9	11
91	Trajectory of Growth of Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2) Variants in Houston, Texas, January through May 2021, Based on 12,476 Genome Sequences. American Journal of Pathology, 2021, 191, 1754-1773.	1.9	26
92	The Delta SARS-CoV-2 variant has a higher viral load than the Beta and the historical variants in nasopharyngeal samples from newly diagnosed COVID-19 patients. Journal of Infection, 2021, 83, e1-e3.	1.7	146
93	Transmission, viral kinetics and clinical characteristics of the emergent SARS-CoV-2 Delta VOC in Guangzhou, China. EClinicalMedicine, 2021, 40, 101129.	3.2	176
94	Impact of temperature on the affinity of SARS-CoV-2 Spike glycoprotein for host ACE2. Journal of Biological Chemistry, 2021, 297, 101151.	1.6	42
95	GB-2 blocking the interaction between ACE2 and wild type and mutation of spike protein of SARS-CoV-2. Biomedicine and Pharmacotherapy, 2021, 142, 112011.	2.5	6
96	The existence, spread, and strategies for environmental monitoring and control of SARS-CoV-2 in environmental media. Science of the Total Environment, 2021, 795, 148949.	3.9	4
97	Contribution of single mutations to selected SARS-CoV-2 emerging variants spike antigenicity. Virology, 2021, 563, 134-145.	1.1	74
98	Wastewater SARS-CoV-2 monitoring as a community-level COVID-19 trend tracker and variants in Ohio, United States. Science of the Total Environment, 2021, 801, 149757.	3.9	107
99	Diagnostic pre-screening method based on N-gene dropout or delay to increase feasibility of SARS-CoV-2 VOC B.1.1.7 detection. Diagnostic Microbiology and Infectious Disease, 2021, 101, 115491.	0.8	16
100	SARS-CoV-2 Variants of Concern. Yonsei Medical Journal, 2021, 62, 961.	0.9	183
101	Research on the Epidemiology of SARS-CoV-2 in Essential Response Personnel (RECOVER): Protocol for a Multisite Longitudinal Cohort Study. JMIR Research Protocols, 2021, 10, e31574.	0.5	17
102	Structure–Function Analysis of Resistance to Bamlanivimab by SARS-CoV-2 Variants Kappa, Delta, and Lambda. Journal of Chemical Information and Modeling, 2021, 61, 5133-5140.	2.5	21
103	Partial resistance of SARS-CoV-2 Delta variants to vaccine-elicited antibodies and convalescent sera. IScience, 2021, 24, 103341.	1.9	47

#	Article	IF	CITATIONS
104	Comparing COVID-19 vaccines for their characteristics, efficacy and effectiveness against SARS-CoV-2 and variants of concern: a narrative review. Clinical Microbiology and Infection, 2022, 28, 202-221.	2.8	569
105	Molecular rationale for SARS-CoV-2 spike circulating mutations able to escape bamlanivimab and etesevimab monoclonal antibodies. Scientific Reports, 2021, 11, 20274.	1.6	33
106	Mutational Hotspot in the SARS-CoV-2 Spike Protein N-Terminal Domain Conferring Immune Escape Potential. Viruses, 2021, 13, 2114.	1.5	10
107	Mechanisms of SARS-CoV-2 entry into cells. Nature Reviews Molecular Cell Biology, 2022, 23, 3-20.	16.1	1,532
108	The global epidemic of SARSâ€CoVâ€2 variants and their mutational immune escape. Journal of Medical Virology, 2022, 94, 847-857.	2.5	80
110	Virologic Features of Severe Acute Respiratory Syndrome Coronavirus 2 Infection in Children. Journal of Infectious Diseases, 2021, 224, 1821-1829.	1.9	53
111	Biological Significance of the Genomic Variation and Structural Dynamics of SARS-CoV-2 B.1.617. Frontiers in Microbiology, 2021, 12, 750725.	1.5	11
115	Ten emerging SARS-CoV-2 spike variants exhibit variable infectivity, animal tropism, and antibody neutralization. Communications Biology, 2021, 4, 1196.	2.0	49
117	SARS-CoV-2 Variants Detection Using TaqMan SARS-CoV-2 Mutation Panel Molecular Genotyping Assays. Infection and Drug Resistance, 2021, Volume 14, 4471-4479.	1.1	30
119	Reinfections in COVID-19 Patients: Impact of Virus Genetic Variability and Host Immunity. Vaccines, 2021, 9, 1168.	2.1	19
120	Genetic Analysis of SARS-CoV-2 Variants in Mexico during the First Year of the COVID-19 Pandemic. Viruses, 2021, 13, 2161.	1.5	32
121	Investigation of SARS-CoV-2 Epsilon Variant and Hospitalization Status by Genomic Surveillance in a Single Large Health System During the 2020-2021 Winter Surge in Southern California. American Journal of Clinical Pathology, 2022, 157, 649-652.	0.4	9
122	Dynamics of SARS-CoV-2 variants of concern (VOC) in Bangladesh during the first half of 2021. Virology, 2022, 565, 29-37.	1.1	7
123	Implication of SARS-CoV-2 Immune Escape Spike Variants on Secondary and Vaccine Breakthrough Infections. Frontiers in Immunology, 2021, 12, 742167.	2.2	32
124	Recognition of Variants of Concern by Antibodies and T Cells Induced by a SARS-CoV-2 Inactivated Vaccine. Frontiers in Immunology, 2021, 12, 747830.	2.2	69
125	Variant SARS-CoV-2 mRNA vaccines confer broad neutralization as primary or booster series in mice. Vaccine, 2021, 39, 7394-7400.	1.7	63
126	A review of epidemiology, clinical features and disease course, transmission dynamics, and neutralization efficacy of SARS-CoV-2 variants. Egyptian Journal of Bronchology, 2021, 15, .	0.3	4
127	Pathogenic and transcriptomic differences of emerging SARS-CoV-2 variants in the Syrian golden hamster model. EBioMedicine, 2021, 73, 103675.	2.7	26

#	Article	IF	CITATIONS
129	Structural and functional insights into the spike protein mutations of emerging SARS-CoV-2 variants. Cellular and Molecular Life Sciences, 2021, 78, 7967-7989.	2.4	40
130	Understanding the Secret of SARS-CoV-2 Variants of Concern/Interest and Immune Escape. Frontiers in Immunology, 2021, 12, 744242.	2.2	44
131	Longitudinal analysis of SARS-CoV-2 spike and RNA-dependent RNA polymerase protein sequences reveals the emergence and geographic distribution of diverse mutations. Infection, Genetics and Evolution, 2022, 97, 105153.	1.0	16
132	Reduced sensitivity of the SARS-CoV-2 Lambda variant to monoclonal antibodies and neutralizing antibodies induced by infection and vaccination. Emerging Microbes and Infections, 2022, 11, 18-29.	3.0	25
133	A monoclonal antibody that neutralizes SARS-CoV-2 variants, SARS-CoV, and other sarbecoviruses. Emerging Microbes and Infections, 2022, 11, 147-157.	3.0	25
134	A Bacterial Cell-Based Assay To Study SARS-CoV-2 Protein-Protein Interactions. MBio, 2021, , e0293621.	1.8	1
135	A defective viral genome strategy elicits broad protective immunity against respiratory viruses. Cell, 2021, 184, 6037-6051.e14.	13.5	33
136	Emerging SARSâ€CoVâ€2 variants can potentially break set epidemiological barriers in COVIDâ€19. Journal of Medical Virology, 2022, 94, 1300-1314.	2.5	32
137	Cross-Neutralization of Emerging SARS-CoV-2 Variants of Concern by Antibodies Targeting Distinct Epitopes on Spike. MBio, 2021, 12, e0297521.	1.8	24
138	Coronavirus Disease (COVID-19) Control between Drug Repurposing and Vaccination: A Comprehensive Overview. Vaccines, 2021, 9, 1317.	2.1	35
139	Re-emergence of Gamma-like-II and emergence of Gamma-S:E661D SARS-CoV-2 lineages in the south of Brazil after the 2021 outbreak. Virology Journal, 2021, 18, 222.	1.4	8
140	Structure and Mutations of SARS-CoV-2 Spike Protein: A Focused Overview. ACS Infectious Diseases, 2022, 8, 29-58.	1.8	32
141	SARS CoV-2 Delta variant exhibits enhanced infectivity and a minor decrease in neutralization sensitivity to convalescent or post-vaccination sera. IScience, 2021, 24, 103467.	1.9	26
142	Reduced neutralization of SARS-CoV-2 B.1.617 variant by convalescent and vaccinated sera. Genes and Diseases, 2022, 9, 1290-1300.	1.5	13
144	Predominance of antibody-resistant SARS-CoV-2 variants in vaccine breakthrough cases from the San Francisco Bay Area, California. Nature Microbiology, 2022, 7, 277-288.	5.9	37
145	A systematic review of Vaccine Breakthrough Infections by SARS-CoV-2 Delta Variant. International Journal of Biological Sciences, 2022, 18, 889-900.	2.6	40
146	Emergence of two distinct variants of SARS-CoV-2 and an explosive second wave of COVID-19: the experience of a tertiary care hospital in Pune, India. Archives of Virology, 2022, 167, 393-403.	0.9	5
147	In Silico Screening of Potential Phytocompounds from Several Herbs against SARS-CoV-2 Indian Delta Variant B.1.617.2 to Inhibit the Spike Glycoprotein Trimer. Applied Sciences (Switzerland), 2022, 12, 665.	1.3	8

#	Article	IF	CITATIONS
148	A fractal scaling analysis of the SARS-CoV-2 genome sequence. Biomedical Signal Processing and Control, 2022, 73, 103433.	3.5	4
151	Memory Gaps in America: Mutational and Immunoinformatic Analysis of Evolving SARS-CoV-2 Variants of Concern and Interest. ImmunoHorizons, 2022, 6, 1-7.	0.8	0
153	The ins and outs of SARS-CoV-2 variants of concern (VOCs). Archives of Virology, 2022, 167, 327-344.	0.9	35
154	Targeting the Fusion Process of SARS-CoV-2 Infection by Small Molecule Inhibitors. MBio, 2022, 13, e0323821.	1.8	11
157	Viral Load in COVID-19 Patients: Implications for Prognosis and Vaccine Efficacy in the Context of Emerging SARS-CoV-2 Variants. Frontiers in Medicine, 2021, 8, 836826.	1.2	15
158	The Variation of SARS-CoV-2 and Advanced Research on Current Vaccines. Frontiers in Medicine, 2021, 8, 806641.	1.2	22
160	Shorter Incubation Period among Unvaccinated Delta Variant Coronavirus Disease 2019 Patients in Japan. International Journal of Environmental Research and Public Health, 2022, 19, 1127.	1.2	24
161	Rapid identification of neutralizing antibodies against SARS-CoV-2 variants by mRNA display. Cell Reports, 2022, 38, 110348.	2.9	14
162	Pseudotyped Vesicular Stomatitis Virus-Severe Acute Respiratory Syndrome-Coronavirus-2 Spike for the Study of Variants, Vaccines, and Therapeutics Against Coronavirus Disease 2019. Frontiers in Microbiology, 2021, 12, 817200.	1.5	14
164	Severe Acute Respiratory Syndrome Type 2 ausing Coronavirus: Variants and Preventive Strategies. Advanced Science, 2022, 9, e2104495.	5.6	16
165	Antigenicity of the Mu (B.1.621) and A.2.5 SARS-CoV-2 Spikes. Viruses, 2022, 14, 144.	1.5	12
166	COVID-19 reinfections among naturally infected and vaccinated individuals. Scientific Reports, 2022, 12, 1438.	1.6	79
167	Establishment of a Rapid Typing Method for Coronavirus Disease 2019 Mutant Strains Based on PARMS Technology. Micromachines, 2022, 13, 145.	1.4	0
168	Structural biology of SARS-CoV-2: open the door for novel therapies. Signal Transduction and Targeted Therapy, 2022, 7, 26.	7.1	139
169	Advances in the development of therapeutic strategies against COVID-19 and perspectives in the drug design for emerging SARS-CoV-2 variants. Computational and Structural Biotechnology Journal, 2022, 20, 824-837.	1.9	49
170	Increased Antibody Avidity and Cross-Neutralization of Severe Acute Respiratory Syndrome Coronavirus 2 Variants by Hyperimmunized Transchromosomic Bovine–Derived Human Immunoglobulins for Treatment of Coronavirus Disease 2019. Journal of Infectious Diseases, 2022, 226, 655.662	1.9	4
171	Charge Matters: Mutations in Omicron Variant Favor Binding to Cells. ChemBioChem, 2022, 23, e202100681.	1.3	62
172	Mutations in the receptor-binding domain of human SARS CoV-2 spike protein increases its affinity to bind human ACE-2 receptor. Journal of Biomolecular Structure and Dynamics, 2023, 41, 2368-2381.	2.0	7

#	Article	IF	CITATIONS
173	The SARS-CoV-2 mutations versus vaccine effectiveness: New opportunities to new challenges. Journal of Infection and Public Health, 2022, 15, 228-240.	1.9	122
174	Multiplex PCR Assays for Identifying all Major Severe Acute Respiratory Syndrome Coronavirus 2 Variants. Journal of Molecular Diagnostics, 2022, 24, 309-319.	1.2	36
175	Genomic characterization unravelling the causative role of SARS-CoV-2 Delta variant of lineage B.1.617.2 in 2nd wave of COVID-19 pandemic in Chhattisgarh, India. Microbial Pathogenesis, 2022, 164, 105404.	1.3	14
176	The B.1.427/1.429 (epsilon) SARS-CoV-2 variants are more virulent than ancestral B.1 (614G) in Syrian hamsters. PLoS Pathogens, 2022, 18, e1009914.	2.1	26
177	Household Transmission of Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2) Alpha Variant—United States, 2021. Clinical Infectious Diseases, 2022, 75, e122-e132.	2.9	18
178	A Detailed Overview of Immune Escape, Antibody Escape, Partial Vaccine Escape of SARS-CoV-2 and Their Emerging Variants With Escape Mutations. Frontiers in Immunology, 2022, 13, 801522.	2.2	73
179	Emerging Vaccine-Breakthrough SARS-CoV-2 Variants. ACS Infectious Diseases, 2022, 8, 546-556.	1.8	59
180	A SARS-CoV-2 variant elicits an antibody response with a shifted immunodominance hierarchy. PLoS Pathogens, 2022, 18, e1010248.	2.1	48
181	SARS-CoV-2–Specific Vaccine Candidates; the Contribution of Structural Vaccinology. Vaccines, 2022, 10, 236.	2.1	14
182	Imparting reusable and SARS-CoV-2 inhibition properties to standard masks through metal-organic nanocoatings. Journal of Hazardous Materials, 2022, 431, 128441.	6.5	16
183	The variants of SARS oVâ€2 and the challenges of vaccines. Journal of Medical Virology, 2022, 94, 1366-1372.	2.5	29
184	Emerging SARS-CoV-2 Variants: Genetic Variability and Clinical Implications. Current Microbiology, 2022, 79, 20.	1.0	48
185	Waves and variants of SARS-CoV-2: understanding the causes and effect of the COVID-19 catastrophe. Infection, 2022, 50, 309-325.	2.3	112
186	Structural analysis of receptor binding domain mutations in SARS-CoV-2 variants of concern that modulate ACE2 and antibody binding. Cell Reports, 2021, 37, 110156.	2.9	67
187	Rapid assessment of SARS-CoV-2–evolved variants using virus-like particles. Science, 2021, 374, 1626-1632.	6.0	216
188	SARS-CoV-2 Delta Variant Displays Moderate Resistance to Neutralizing Antibodies and Spike Protein Properties of Higher Soluble ACE2 Sensitivity, Enhanced Cleavage and Fusogenic Activity. Viruses, 2021, 13, 2485.	1.5	23
189	B.1.617.2 (Delta) Variant of SARS-CoV-2: features, transmission and potential strategies. International Journal of Biological Sciences, 2022, 18, 1844-1851.	2.6	34
190	A low proportion of asymptomatic COVID-19 patients with the Delta variant infection by viral transmission through household contact at the time of confirmation in Ibaraki, Japan. Global Health & Medicine, 2022, , .	0.6	2

~		~	
(11		1JED(דסר
\sim	IAL	NLP	ואכ

#	Article	IF	CITATIONS
191	Cold atmospheric plasma for preventing infection of viruses that use ACE2 for entry. Theranostics, 2022, 12, 2811-2832.	4.6	8
194	Assessment of Virological Contributions to COVID-19 Outcomes in a Longitudinal Cohort of Hospitalized Adults. Open Forum Infectious Diseases, 2022, 9, ofac027.	0.4	8
195	COVIDâ€19: A systematic review and update on prevention, diagnosis, and treatment. MedComm, 2022, 3, e115.	3.1	30
196	Real-Time RT-PCR Allelic Discrimination Assay for Detection of N501Y Mutation in the Spike Protein of SARS-CoV-2 Associated with B.1.1.7 Variant of Concern. Microbiology Spectrum, 2022, 10, e0068121.	1.2	5
197	Whole genome sequence analysis showing unique SARS-CoV-2 lineages of B.1.524 and AU.2 in Malaysia. PLoS ONE, 2022, 17, e0263678.	1.1	8
199	Evolutionary dynamics of the severe acute respiratory syndrome coronavirus 2 genomes. Medical Review, 2022, 2, 3-22.	0.3	7
201	Molecular variants of SARS-CoV-2: antigenic properties and current vaccine efficacy. Medical Microbiology and Immunology, 2022, 211, 79-103.	2.6	9
202	Structure/Function Analysis of Truncated Amino-Terminal ACE2 Peptide Analogs That Bind to SARS-CoV-2 Spike Glycoprotein. Molecules, 2022, 27, 2070.	1.7	3
203	Structural Dynamics and Molecular Evolution of the SARS-CoV-2 Spike Protein. MBio, 2022, 13, e0203021.	1.8	10
204	Comparative characterization of SARS oVâ€2 variants of concern and mouseâ€adapted strains in mice. Journal of Medical Virology, 2022, 94, 3223-3232.	2.5	12
205	The dynamics of circulating SARS-CoV-2 lineages in Bogor and surrounding areas reflect variant shifting during the first and second waves of COVID-19 in Indonesia. PeerJ, 2022, 10, e13132.	0.9	9
206	A potent alpaca-derived nanobody that neutralizes SARS-CoV-2 variants. IScience, 2022, 25, 103960.	1.9	16
208	Conserved Targets to Prevent Emerging Coronaviruses. Viruses, 2022, 14, 563.	1.5	2
209	Increased Secondary Attack Rate among Unvaccinated Household Contacts of Coronavirus Disease 2019 Patients with Delta Variant in Japan. International Journal of Environmental Research and Public Health, 2022, 19, 3889.	1.2	7
211	High avidity of vaccine-induced immunoglobulin G against SARS-CoV-2: potential relevance for protective humoral immunity. Exploration of Immunology, 0, , 133-156.	1.7	7
212	Antibody escape and global spread of SARS-CoV-2 lineage A.27. Nature Communications, 2022, 13, 1152.	5.8	20
213	SARS-CoV-2 variants, immune escape, and countermeasures. Frontiers of Medicine, 2022, 16, 196-207.	1.5	39
214	The Runaway Evolution of SARS-CoV-2 Leading to the Highly Evolved Delta Strain. Molecular Biology and Evolution, 2022, 39, .	3.5	14

#	Article	IF	CITATIONS
215	Global trends in COVID-19. , 2022, 1, 31-39.		8
216	Transmissibility and pathogenicity of SARS-CoV-2 variants in animal models. Journal of Microbiology, 2022, 60, 255-267.	1.3	9
217	Neutralisation Hierarchy of SARS-CoV-2 Variants of Concern Using Standardised, Quantitative Neutralisation Assays Reveals a Correlation With Disease Severity; Towards Deciphering Protective Antibody Thresholds. Frontiers in Immunology, 2022, 13, 773982.	2.2	10
219	Decreased and Heterogeneous Neutralizing Antibody Responses Against RBD of SARS-CoV-2 Variants After mRNA Vaccination. Frontiers in Immunology, 2022, 13, 816389.	2.2	5
220	Advances in Pathogenesis, Progression, Potential Targets and Targeted Therapeutic Strategies in SARS-CoV-2-Induced COVID-19. Frontiers in Immunology, 2022, 13, 834942.	2.2	10
221	Early Emergence Phase of SARS-CoV-2 Delta Variant in Florida, US. Viruses, 2022, 14, 766.	1.5	1
222	Genetic Surveillance of Five SARS-CoV-2 Clinical Samples in Henan Province Using Nanopore Sequencing. Frontiers in Immunology, 2022, 13, 814806.	2.2	5
223	Analysis of SARS-CoV-2 variants B.1.617: host tropism, proteolytic activation, cell–cell fusion, and neutralization sensitivity. Emerging Microbes and Infections, 2022, 11, 1024-1036.	3.0	5
224	Human organoid models to study SARS-CoV-2 infection. Nature Methods, 2022, 19, 418-428.	9.0	73
225	Application of pseudovirus system in the development of vaccine, antiviral-drugs, and neutralizing antibodies. Microbiological Research, 2022, 258, 126993.	2.5	22
229	SARS-CoV-2 Variants: Mutations and Effective Changes. Biotechnology and Bioprocess Engineering, 2021, 26, 859-870.	1.4	12
230	A Highly Conserved Peptide Vaccine Candidate Activates Both Humoral and Cellular Immunity Against SARS-CoV-2 Variant Strains. Frontiers in Immunology, 2021, 12, 789905.	2.2	7
232	Tracking SARS-CoV-2 Spike Protein Mutations in the United States (January 2020—March 2021) Using a Statistical Learning Strategy. Viruses, 2022, 14, 9.	1.5	10
233	Emergence of novel combinations of SARS-CoV-2 spike receptor binding domain variants in Senegal. Scientific Reports, 2021, 11, 23644.	1.6	4
235	Impact of SARS-CoV-2 Mutations on Global Travel and the Increasing Number of Re-Infections: A Risk-Assessment Perspective. The Open Covid Journal, 2021, 1, 196-204.	0.4	2
237	Mutational Effect of Some Major COVID-19 Variants on Binding of the S Protein to ACE2. Biomolecules, 2022, 12, 572.	1.8	8
238	US Severe Acute Respiratory Syndrome Coronavirus 2 Epsilon Variant: Highly Transmissible but With an Adjusted Muted Host T-Cell Response. Clinical Infectious Diseases, 2022, 75, 1940-1949.	2.9	3
239	Comparative genomics, evolutionary epidemiology, and RBD-hACE2 receptor binding pattern in B.1.1.7 (Alpha) and B.1.617.2 (Delta) related to their pandemic response in UK and India. Infection, Genetics and Evolution, 2022, 101, 105282.	1.0	7

#	Article	IF	CITATIONS
241	Research progress on vaccine efficacy against SARS-CoV-2 variants of concern. Human Vaccines and Immunotherapeutics, 2022, 18, 1-12.	1.4	10
242	COVIDâ€19 in vaccinated versus unvaccinated hematologic malignancy patients. Transplant Infectious Disease, 2022, 24, .	0.7	4
243	Variant Analysis and Strategic Clustering to Sub-Lineage of Double Mutant Strain B.1.617 of SARS-CoV-2. Covid, 2022, 2, 513-531.	0.7	1
244	Development of antibody resistance in emerging mutant strains of SARS CoVâ€2: Impediment for COVIDâ€19 vaccines. Reviews in Medical Virology, 2022, 32, e2346.	3.9	16
245	Differences in Transmission between SARS-CoV-2 Alpha (B.1.1.7) and Delta (B.1.617.2) Variants. Microbiology Spectrum, 2022, 10, e0000822.	1.2	17
246	Use of wastewater surveillance for early detection of Alpha and Epsilon SARS-CoV-2 variants of concern and estimation of overall COVID-19 infection burden. Science of the Total Environment, 2022, 835, 155410.	3.9	34
247	Omicron BA.2 (B.1.1.529.2): High Potential for Becoming the Next Dominant Variant. Journal of Physical Chemistry Letters, 2022, 13, 3840-3849.	2.1	79
248	Clinical Characteristics, Transmissibility, Pathogenicity, Susceptible Populations, and Re-infectivity of Prominent COVID-19 Variants. , 2022, 13, 402.		28
249	SARS-CoV-2: Evolution and Emergence of New Viral Variants. Viruses, 2022, 14, 653.	1.5	39
251	Impact of SARS-CoV-2 Mutations on PCR Assay Sequence Alignment. Frontiers in Public Health, 2022, 10, 889973.	1.3	2
252	RBD-mRNA vaccine induces broadly neutralizing antibodies against Omicron and multiple other variants and protects mice from SARS-CoV-2 challenge. Translational Research, 2022, 248, 11-21.	2.2	13
253	Tracking SARS-CoV-2 Omicron diverse spike gene mutations identifies multiple inter-variant recombination events. Signal Transduction and Targeted Therapy, 2022, 7, 138.	7.1	140
254	Delta variant (B.1.617.2) of SARS-CoV-2: Mutations, impact, challenges and possible solutions. Human Vaccines and Immunotherapeutics, 2022, 18, 2068883.	1.4	44
255	Whole genome sequencing of SARS-CoV2 strains circulating in Iran during five waves of pandemic. PLoS ONE, 2022, 17, e0267847.	1.1	20
256	Assessment of Neutralizing Antibody Response Against SARS-CoV-2 Variants After 2 to 3 Doses of the BNT162b2 mRNA COVID-19 Vaccine. JAMA Network Open, 2022, 5, e2210780.	2.8	27
257	Emerging SARS-CoV-2 variants: Why, how, and what's next?. , 2022, 1, 100029.		26
258	Physicochemical effect of the N501Y, E484K/Q, K417N/T, L452R and T478K mutations on the SARS-CoV-2 spike protein RBD and its influence on agent fitness and on attributes developed by emerging variants of concern. Virology, 2022, 572, 44-54.	1.1	21
259	SARS-CoV-2 Lineage A.27: New Data from African Countries and Dynamics in the Context of the COVID-19 Pandemic. Viruses, 2022, 14, 1007.	1.5	5

ARTICLE IF CITATIONS # COVID-19 vaccines provide better protection against related pneumonia than previous symptomatic 260 1.5 7 infection. International Journal of Infectious Diseases, 2022, 120, 142-145. Evolution of the SARS-CoV-2 pandemic in India. Medical Journal Armed Forces India, 2022, 78, 264-270. 0.3 Recent Progress on Rapid Lateral Flow Assay-Based Early Diagnosis of COVID-19. Frontiers in 263 2.0 21 Bioengineering and Biotechnology, 2022, 10, 866368. Analysis of 6.4 million SARS-CoV-2 genomes identifies mutations associated with fitness. Science, 2022, 376, 1327-1332. Structure, receptor recognition, and antigenicity of the human coronavirus CCoV-HuPn-2018 spike 267 13.5 25 glycoprotein. Cell, 2022, 185, 2279-2291.e17. SARS-CoV-2 variants and COVID-19 vaccines: Current challenges and future strategies. International 1.5 Reviews of Immunology, 2023, 42, 393-414. 270 An early warning system for emerging SARS-CoV-2 variants. Nature Medicine, 2022, 28, 1110-1115. 15.247 Mutations of the SARS-CoV-2 Spike Glycoprotein Detected in Cats and Their Effect on Its Structure and 271 1.8 Function. Frontiers in Cellular and Infection Microbiology, 2022, 12, . Towards the discovery of potential RdRp inhibitors for the treatment of COVID-19: structure guided 273 virtual screening, computational ADME and molecular dynamics study. Structural Chemistry, 2022, 33, 1.0 5 1569-1583. Developing Pseudovirus-Based Neutralization Assay against Omicron-Included SARS-CoV-2 Variants. 274 1.5 Viruses, 2022, 14, 1332. Biological Properties of SARS-CoV-2 Variants: Epidemiological Impact and Clinical Consequences. 275 2.1 23 Vaccines, 2022, 10, 919. Singular Interface Dynamics of the SARS-CoV-2 Delta Variant Explained with Contact Perturbation 2.5 Analysis. Journal of Ćhemical Information and Modeling, 2022, 62, 3107-3122. Molecular characteristics, immune evasion, and impact of SARS-CoV-2 variants. Signal Transduction 277 7.1 59 and Targeted Therapy, 2022, 7, . Identification of SARS-CoV-2 Variants of Concern Using Amplicon Next-Generation Sequencing. 278 1.2 Microbiology Spectrum, 2022, 10, . 3D Human Organoids: The Next "Viral―Model for the Molecular Basis of Infectious Diseases. 279 1.4 6 Biomedicines, 2022, 10, 1541. The SARS-CoV-2 Delta variant induces an antibody response largely focused on class 1 and 2 antibody 280 epitopes. PLoS Pathogens, 2022, 18, e1010592. Detection of SARS-CoV-2 intra-host recombination during superinfection with Alpha and Epsilon 281 5.8 22 variants in New York City. Nature Communications, 2022, 13, . Production and characterization of lentivirus vector-based SARS-CoV-2 pseudoviruses with dual reporters: Evaluation of anti-SARS-CoV-2 viral effect of Korean Red Ginseng. Journal of Ginseng Research, 2023, 47, 123-132.

#	Article	IF	CITATIONS
284	From 15 Minutes to 15 Seconds: How the Delta Variant Changed the Risk of Exposure to COVID-19. A Comparative Epidemiological Investigation Using Community Mobility Data From the Metropolitan Area of Genoa, Italy. Frontiers in Public Health, 0, 10, .	1.3	0
285	A panel of nanobodies recognizing conserved hidden clefts of all SARS-CoV-2 spike variants including Omicron. Communications Biology, 2022, 5, .	2.0	26
286	Genomic surveillance of SARS-CoV-2 in US military compounds in Afghanistan reveals multiple introductions and outbreaks of Alpha and Delta variants. BMC Genomics, 2022, 23, .	1.2	2
287	Two Years of Evolutionary Dynamics of SARS-CoV-2 in Mexico, With Emphasis on the Variants of Concern. Frontiers in Microbiology, 0, 13, .	1.5	3
288	<scp>COVID</scp> â€19 and plasma cells: Is there longâ€lived protection?*. Immunological Reviews, 2022, 309, 40-63.	2.8	26
289	Novel Lateral Flow-Based Assay for Simple and Visual Detection of SARS-CoV-2 Mutations. Frontiers in Cellular and Infection Microbiology, 0, 12, .	1.8	1
290	Insight into Genetic Characteristics of Identified SARS-CoV-2 Variants in Egypt from March 2020 to May 2021. Pathogens, 2022, 11, 834.	1.2	9
291	Molecular characterization of SARS-CoV-2 detected in Tokyo, Japan during five waves: Identification of the amino acid substitutions associated with transmissibility and severity. Frontiers in Microbiology, 0, 13, .	1.5	7
292	Evaluation of immune evasion in SARS-CoV-2 Delta and Omicron variants. Computational and Structural Biotechnology Journal, 2022, 20, 4501-4516.	1.9	8
293	The Local Topological Free Energy of the SARS-CoV-2 Spike Protein. Polymers, 2022, 14, 3014.	2.0	1
294	Molecular adaptations during viral epidemics. EMBO Reports, 2022, 23, .	2.0	18
295	Tracking the turnover of SARS-CoV-2 VOCs Gamma to Delta in a Brazilian state (Minas Gerais) with a high-vaccination status. Virus Evolution, 2022, 8, .	2.2	10
296	A bibliometric analysis of the 100 most cited articles describing SARS-CoV-2 variants. Frontiers in Public Health, 0, 10, .	1.3	0
297	Conformational flexibility in neutralization of SARS-CoV-2 by naturally elicited anti-SARS-CoV-2 antibodies. Communications Biology, 2022, 5, .	2.0	5
298	Emergence and evolution of SARS-CoV-2 genetic variants during the Cuban epidemic. Journal of Clinical Virology Plus, 2022, 2, 100104.	0.4	3
299	Uninvited Guest: Arrival and Dissemination of Omicron Lineage SARS-CoV-2 in St. Petersburg, Russia. Microorganisms, 2022, 10, 1676.	1.6	5
302	Promising natural products against <scp>SARSâ€CoV</scp> â€2: Structure, function, and clinical trials. Phytotherapy Research, 2022, 36, 3833-3858.	2.8	9
304	Design and Immunoinformatic Assessment of Candidate Multivariant mRNA Vaccine Construct against Immune Escape Variants of SARS-CoV-2. Polymers, 2022, 14, 3263.	2.0	3

#	Article	IF	CITATIONS
305	Multimodal surveillance of SARS-CoV-2 at a university enables development of a robust outbreak response framework. Med, 2022, 3, 883-900.e13.	2.2	15
306	Towards novel nano-based vaccine platforms for SARS-CoV-2 and its variants of concern: Advances, challenges and limitations. Journal of Drug Delivery Science and Technology, 2022, 76, 103762.	1.4	0
307	The mechanisms of immune response and evasion by the main SARS-CoV-2 variants. IScience, 2022, 25, 105044.	1.9	8
308	Mathematical artificial intelligence design of mutation-proof COVID-19 monoclonal antibodies. Communications in Information and Systems, 2022, 22, 339-361.	0.3	2
309	SARS-CoV-2 Variants: Impact of Spike Mutations on Vaccine and Therapeutic Strategies. , 2022, , 143-160.		0
310	Will New Variants Emerge after Delta and Omicron?. , 2022, 13, 1317.		1
311	Antibody-mediated immunity to SARS-CoV-2 spike. Advances in Immunology, 2022, , 1-69.	1.1	12
312	Distinct Molecular Mechanisms Characterizing Pathogenesis of SARS-CoV-2. Journal of Microbiology and Biotechnology, 2022, 32, 1073-1085.	0.9	2
314	SARS-CoV-2 Delta variant induces enhanced pathology and inflammatory responses in K18-hACE2 mice. PLoS ONE, 2022, 17, e0273430.	1.1	17
316	Retrospective Cohort Study of COVID-19 in Patients of the Brazilian Public Health System with SARS-CoV-2 Omicron Variant Infection. Vaccines, 2022, 10, 1504.	2.1	2
318	Transcriptomics and RNA-Based Therapeutics as Potential Approaches to Manage SARS-CoV-2 Infection. International Journal of Molecular Sciences, 2022, 23, 11058.	1.8	2
319	Prospects of animal models and their application in studies on adaptive immunity to SARS-CoV-2. Frontiers in Immunology, 0, 13, .	2.2	4
320	An antibody cocktail with broadened mutational resistance and effective protection against SARS-CoV-2. Science China Life Sciences, 0, , .	2.3	2
321	Proteomicsâ€based mass spectrometry profiling of SARSâ€CoVâ€2 infection from human nasopharyngeal samples. Mass Spectrometry Reviews, 2024, 43, 193-229.	2.8	2
322	Murine Hepatitis Virus, a Biosafety Level 2 Model for SARS-CoV-2, Can Remain Viable on Meat and Meat Packaging Materials for at Least 48 Hours. Microbiology Spectrum, 2022, 10, .	1.2	3
323	Characteristics of replication and pathogenicity of SARS-CoV-2 Alpha and Delta isolates. Virologica Sinica, 2022, 37, 804-812.	1.2	4
324	Key mutations on spike protein altering ACE2 receptor utilization and potentially expanding host range of emerging SARSâ€CoVâ€2 variants. Journal of Medical Virology, 2023, 95, .	2.5	11
325	Intrahost SARS-CoV-2 k-mer Identification Method (iSKIM) for Rapid Detection of Mutations of Concern Reveals Emergence of Global Mutation Patterns. Viruses, 2022, 14, 2128.	1.5	0

#	Article	IF	CITATIONS
326	Delta variant: Partially sensitive to vaccination, but still worth global attention. Journal of Translational Internal Medicine, 2022, 10, 227-235.	1.0	2
327	SARS-CoV-2 Delta and Omicron variants evade population antibody response by mutations in a single spike epitope. Nature Microbiology, 2022, 7, 1635-1649.	5.9	25
328	A critical overview of current progress for COVID-19: development of vaccines, antiviralÂdrugs, and therapeutic antibodies. Journal of Biomedical Science, 2022, 29, .	2.6	64
329	Variant-specific RT-qPCR for rapid screening of B.1.617 mutations in SARS-CoV-2. Libyan Journal of Medicine, 2022, 17, .	0.8	2
330	CHARMMâ€GUI <i>Enhanced Sampler</i> for <scp>various collective variables</scp> and <scp>enhanced sampling methods</scp> . Protein Science, 2022, 31, .	3.1	9
331	Temperature Influences the Interaction between SARS-CoV-2 Spike from Omicron Subvariants and Human ACE2. Viruses, 2022, 14, 2178.	1.5	5
332	Perspective Chapter: Real-Time Genomic Surveillance for SARS-CoV-2 on Center Stage. Infectious Diseases, 0, , .	4.0	0
333	Shared IGHV1-69-encoded neutralizing antibodies contribute to the emergence of L452R substitution in SARS-CoV-2 variants. Emerging Microbes and Infections, 2022, 11, 2749-2761.	3.0	9
334	Dissecting Naturally Arising Amino Acid Substitutions at Position L452 of SARS-CoV-2 Spike. Journal of Virology, 2022, 96, .	1.5	5
335	COVID-19 vaccine update: vaccine effectiveness, SARS-CoV-2 variants, boosters, adverse effects, and immune correlates of protection. Journal of Biomedical Science, 2022, 29, .	2.6	77
337	Amphiphile-CpG vaccination induces potent lymph node activation and COVID-19 immunity in mice and non-human primates. Npj Vaccines, 2022, 7, .	2.9	4
338	Evolutionary Pattern Comparisons of the SARS-CoV-2 Delta Variant in Countries/Regions with High and Low Vaccine Coverage. Viruses, 2022, 14, 2296.	1.5	4
339	Naturally occurring spike mutations influence the infectivity and immunogenicity of SARS-CoV-2. , 2022, 19, 1302-1310.		17
340	Longitudinal Analyses after COVID-19 Recovery or Prolonged Infection Reveal Unique Immunological Signatures after Repeated Vaccinations. Vaccines, 2022, 10, 1815.	2.1	0
342	Characterization of SARS-CoV-2 Omicron BA.4 and BA.5 isolates in rodents. Nature, 2022, 612, 540-545.	13.7	60
343	Computational modeling of the effect of five mutations on the structure of the ACE2 receptor and their correlation with infectivity and virulence of some emerged variants of SARS-CoV-2 suggests mechanisms of binding affinity dysregulation. Chemico-Biological Interactions, 2022, 368, 110244.	1.7	4
344	High-Throughput Molecular Dynamics-Based Alchemical Free Energy Calculations for Predicting the Binding Free Energy Change Associated with the Selected Omicron Mutations in the Spike Receptor-Binding Domain of SARS-CoV-2. Biomedicines, 2022, 10, 2779.	1.4	2
345	Bioinformatic Analysis of B- and T-cell Epitopes from SARS-CoV-2 Structural Proteins and their Potential Cross-reactivity with Emerging Variants and other Human Coronaviruses. Archives of Medical Research, 2022, 53, 694-710.	1.5	5

#	Article	IF	Citations
346	Multiple partition Markov model for B.1.1.7, B.1.351, B.1.617.2, and P.1 variants of SARS-CoV 2 virus. Computational Statistics, 0, , .	0.8	1
347	SARS-CoV-2 variants: Impact on biological and clinical outcome. Frontiers in Medicine, 0, 9, .	1.2	7
348	Enhanced virulence and waning vaccine-elicited antibodies account for breakthrough infections caused by SARS-CoV-2 delta and beyond. IScience, 2022, 25, 105507.	1.9	10
349	The Increased Amyloidogenicity of Spike RBD and pH-Dependent Binding to ACE2 May Contribute to the Transmissibility and Pathogenic Properties of SARS-CoV-2 Omicron as Suggested by In Silico Study. International Journal of Molecular Sciences, 2022, 23, 13502.	1.8	6
350	Mutations in Spike Gene of SARS-CoV-2 that Are Associated with a Higher Viral Load: A Clinical Case Study. Case Reports in Clinical Medicine, 2022, 11, 474-486.	0.1	1
351	Panorama of Breakthrough Infection Caused by SARS-CoV-2: A Review. Medicina (Lithuania), 2022, 58, 1733.	0.8	2
352	Modelling optimal lockdowns with waning immunity. Economic Theory, 2024, 77, 197-234.	0.5	7
353	SARS-CoV-2 Delta Variant: Interplay between Individual Mutations and Their Allosteric Synergy. Biomolecules, 2022, 12, 1742.	1.8	6
354	Inferring selection effects in SARS-CoV-2 with Bayesian Viral Allele Selection. PLoS Genetics, 2022, 18, e1010540.	1.5	8
355	Genomic analysis of SARS-CoV-2 variants of concern circulating in Hawai'i to facilitate public-health policies. PLoS ONE, 2022, 17, e0278287.	1.1	0
356	Broadly neutralizing and protective nanobodies against SARS-CoV-2 Omicron subvariants BA.1, BA.2, and BA.4/5 and diverse sarbecoviruses. Nature Communications, 2022, 13, .	5.8	17
357	An NMR-Based Model to Investigate the Metabolic Phenoreversion of COVID-19 Patients throughout a Longitudinal Study. Metabolites, 2022, 12, 1206.	1.3	6
358	The SARS-CoV-2 Delta (B.1.617.2) variant with Spike N501Y mutation in the shadow of Omicron emergence. Heliyon, 2022, , e12650.	1.4	0
359	Epidemiology and Characteristics of SARS-CoV-2 Variants of Concern: The Impacts of the Spike Mutations. Microorganisms, 2023, 11, 30.	1.6	11
360	Modified DNA vaccine confers improved humoral immune response and effective virus protection against SARS-CoV-2 delta variant. Scientific Reports, 2022, 12, .	1.6	5
361	Mixing age and risk groups for accessing COVID-19 vaccines: a modelling study. BMJ Open, 2022, 12, e061139.	0.8	1
362	SARS-CoV-2 Lineage P.4 Detection in Southeast Brazil: A Retrospective Genomic and Clinical Overview. Covid, 2022, 2, 1768-1777.	0.7	1
363	Key mutations in the spike protein of SARSâ€CoVâ€2 affecting neutralization resistance and viral internalization. Journal of Medical Virology, 2023, 95, .	2.5	15

	CITATION	on Report	
#	Article	IF	CITATIONS
366	The Relationship between the Transmission of Different SARS-CoV-2 Strains and Air Quality: A Case Study in China. International Journal of Environmental Research and Public Health, 2023, 20, 1943.	1.2	1
367	The case fatality rate of COVIDâ€19 during the Delta and the Omicron epidemic phase: A metaâ€analysis. Journal of Medical Virology, 2023, 95, .	2.5	13
369	Dual-Domain Reporter Approach for Multiplex Identification of Major SARS-CoV-2 Variants of Concern in a Microarray-Based Assay. Biosensors, 2023, 13, 269.	2.3	1
370	Combined Use of RT-qPCR and NGS for Identification and Surveillance of SARS-CoV-2 Variants of Concern in Residual Clinical Laboratory Samples in Miami-Dade County, Florida. Viruses, 2023, 15, 593.	1.5	2
371	Dual mechanism: Epigenetic inhibitor apabetalone reduces SARS-CoV-2 Delta and Omicron variant spike binding and attenuates SARS-CoV-2 RNA induced inflammation. International Immunopharmacology, 2023, 117, 109929.	1.7	2
372	Delta (B1.617.2) variant of SARS-CoV-2 induces severe neurotropic patterns in K18-hACE2 mice. Scientific Reports, 2023, 13, .	1.6	6
373	An update on SARS-CoV-2 immunization and future directions. Frontiers in Pharmacology, 0, 14, .	1.6	2
374	Comprehensive structural analysis reveals broad-spectrum neutralizing antibodies against SARS-CoV-2 Omicron variants. Cell Discovery, 2023, 9, .	3.1	2
375	SARS-CoV-2: Structure, Pathogenesis, and Diagnosis. , 2024, , 24-51.		0
376	Human airway and nasal organoids reveal escalating replicative fitness of SARS-CoV-2 emerging variants. Proceedings of the National Academy of Sciences of the United States of America, 2023, 120, .	3.3	16
381	Omicron variant evolved: Signs, symptoms and complications. AIP Conference Proceedings, 2023, , .	0.3	0
395	Role of cellular fatty acids in combating the corona virus. , 2023, , 439-453.		0
403	Research on Variation of Sars-Cov-2 and Rapid Detection. , 2023, , .		0
410	Overview of diagnostic tools and nano-based therapy of SARS-CoV-2 infection. Chemical Papers, 2024, 78, 2123-2154.	1.0	0