

CITATION REPORT

List of articles citing

Characterization of spike glycoprotein of SARS-CoV-2 on virus entry and its immune cross-reactivity with SARS-Co

DOI: 10.1038/s41467-020-15562-9
Nature Communications, 2020, 11, 1620.

Source: <https://exaly.com/paper-pdf/76993646/citation-report.pdf>

Version: 2024-04-17

This report has been generated based on the citations recorded by exaly.com for the above article. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

#	Paper	IF	Citations
2267	Novel 2019-coronavirus on new year's Eve. 2019 , 37, 459-477		12
2266	Variations in SARS-CoV-2 Spike Protein Cell Epitopes and Glycosylation Profiles During Global Transmission Course of COVID-19. 2020 , 11, 565278		28
2265	COVID-19: Current Developments and Further Opportunities in Drug Delivery and Therapeutics. 2020 , 12,		9
2264	Actualizaci ³ n de la Declaraci ³ n de consenso en medicina critica para la atenci ³ n multidisciplinaria del paciente con sospecha o confirmaci ³ n diagn ³ stica de COVID-19. 2020 , 20, 1-112		2
2263	Assessing the SARS-CoV-2 threat to wildlife: Potential risk to a broad range of mammals. 2020 , 18, 223-234		13
2262	The SARS-CoV-2 spike protein alters barrier function in 2D static and 3D microfluidic in-vitro models of the human blood-brain barrier. 2020 , 146, 105131		174
2261	Structural analysis of SARS-CoV-2 genome and predictions of the human interactome. 2020 , 48, 11270-11283		36
2260	Role of proteolytic enzymes in the COVID-19 infection and promising therapeutic approaches. 2020 , 182, 114225		40
2259	Synthesis, biological evaluation and toxicity of novel tetrandrine analogues. 2020 , 207, 112810		5
2258	Can pentoxifylline and similar xanthine derivatives find a niche in COVID-19 therapeutic strategies? A ray of hope in the midst of the pandemic. 2020 , 887, 173561		8
2257	Biosensor and molecular-based methods for the detection of human coronaviruses: A review. 2020 , 54, 101662		22
2256	Chloroquine and hydroxychloroquine as ACE2 blockers to inhibit viropexis of 2019-nCoV Spike pseudotyped virus. 2020 , 79, 153333		31
2255	COVID-19 Vaccine: A comprehensive status report. 2020 , 288, 198114		380
2254	Quantification of SARS-CoV-2 neutralizing antibody by a pseudotyped virus-based assay. 2020 , 15, 3699-3715		113
2253	Targeting the endolysosomal host-SARS-CoV-2 interface by clinically licensed functional inhibitors of acid sphingomyelinase (FIASMA) including the antidepressant fluoxetine. 2020 , 9, 2245-2255		73
2252	Structure-Based Repositioning of Approved Drugs for Spike Glycoprotein S2 Domain Fusion Peptide of SARS-CoV-2: Rationale from Molecular Dynamics and Binding Free Energy Calculations. 2020 , 5,		17
2251	Immune-Boosting, Antioxidant and Anti-inflammatory Food Supplements Targeting Pathogenesis of COVID-19. 2020 , 11, 570122		106

2250	An investigation into the molecular basis of cancer comorbidities in coronavirus infection. 2020 , 10, 2363-2374	5
2249	The influence of ABO blood groups on COVID-19 susceptibility and severity: A molecular hypothesis based on carbohydrate-carbohydrate interactions. 2020 , 144, 110155	30
2248	Structural and functional modelling of SARS-CoV-2 entry in animal models. 2020 , 10, 15917	37
2247	Mapping Neutralizing and Immunodominant Sites on the SARS-CoV-2 Spike Receptor-Binding Domain by Structure-Guided High-Resolution Serology. 2020 , 183, 1024-1042.e21	601
2246	Experimental Models for the Study of Central Nervous System Infection by SARS-CoV-2. 2020 , 11, 2163	17
2245	Variability in genes related to SARS-CoV-2 entry into host cells (ACE2, TMPRSS2, TMPRSS11A, ELANE, and CTSL) and its potential use in association studies. 2020 , 260, 118313	27
2244	Potential Therapeutic Options for COVID-19. 2020 , 2, 89-95	
2243	Cross-Sectional Evaluation of Humoral Responses against SARS-CoV-2 Spike. 2020 , 1, 100126	134
2242	ACE2 mouse models: a toolbox for cardiovascular and pulmonary research. <i>Nature Communications</i> , 2020 , 11, 5165	17.4 31
2241	Can endolysosomal deacidification and inhibition of autophagy prevent severe COVID-19?. 2020 , 262, 118541	4
2240	2020 update on human coronaviruses: One health, one world. 2020 , 8, 100043	12
2239	Structure-Based Design with Tag-Based Purification and In-Process Biotinylation Enable Streamlined Development of SARS-CoV-2 Spike Molecular Probes. 2020 , 33, 108322	35
2238	Targeting Proteases for Treating COVID-19. 2020 , 19, 4316-4326	36
2237	Immunoinformatics approach to understand molecular interaction between multi-epitopic regions of SARS-CoV-2 spike-protein with TLR4/MD-2 complex. 2020 , 85, 104587	36
2236	Exploring the role of triazole functionalized heteroatom co-doped carbon quantum dots against human coronaviruses. 2020 , 35, 101001	22
2235	A perspective on potential target proteins of COVID-19: Comparison with SARS-CoV for designing new small molecules. 2020 , 104, 104326	12
2234	Heterogeneous expression of the SARS-Coronavirus-2 receptor ACE2 in the human respiratory tract. 2020 , 60, 102976	94
2233	Structure of the Pandemic. 2020 , 28, 874-878	3

2232	Successful transfer of anti-SARS-CoV-2 immunity using convalescent plasma in an MM patient with hypogammaglobulinemia and COVID-19. 2020 , 4, 4864-4868	14
2231	Ultrastructure of cell trafficking pathways and coronavirus: how to recognise the wolf amongst the sheep. 2020 , 252, 346-357	6
2230	Obesity, Diabetes and COVID-19: An Infectious Disease Spreading From the East Collides With the Consequences of an Unhealthy Western Lifestyle. 2020 , 11, 582870	22
2229	Managing hyperlipidaemia in patients with COVID-19 and during its pandemic: An expert panel position statement from HEART UK. 2020 , 313, 126-136	30
2228	Two-pore channels as master regulators of membrane trafficking and endocytic well-being. 2020 , 17, 163-168	12
2227	Azithromycin and ambroxol as potential pharmacotherapy for SARS-CoV-2. 2020 , 56, 106192	8
2226	Structural Basis of SARS-CoV-2 and SARS-CoV Antibody Interactions. 2020 , 41, 1006-1022	46
2225	A systematic review of SARS-CoV-2 vaccine candidates. 2020 , 5, 237	257
2224	Novel corona virus (COVID-19) pandemic: current status and possible strategies for detection and treatment of the disease. 2020 , 1-24	11
2223	Various interferon (IFN)-inducible transmembrane (IFITM) proteins for COVID-19, is there a role for the combination of mycophenolic acid and interferon?. 2020 , 177, 50-52	2
2222	A serological aptamer-assisted proximity ligation assay for COVID-19 diagnosis and seeking neutralizing aptamers. 2020 , 11, 12157-12164	42
2221	Cross-reactive neutralization of SARS-CoV-2 by serum antibodies from recovered SARS patients and immunized animals. 2020 , 6,	44
2220	SARS-CoV-2 immunity: review and applications to phase 3 vaccine candidates. 2020 , 396, 1595-1606	342
2219	SARS-CoV-2 Infects the Brain Choroid Plexus and Disrupts the Blood-CSF Barrier in Human Brain Organoids. 2020 , 27, 951-961.e5	171
2218	Host Receptors of Influenza Viruses and Coronaviruses-Molecular Mechanisms of Recognition. 2020 , 8,	6
2217	Peptides: Prospects for Use in the Treatment of COVID-19. 2020 , 25,	13
2216	Antibody seroconversion in asymptomatic and symptomatic patients infected with severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). 2020 , 9, e1182	42
2215	SARS-CoV-2, an Underestimated Pathogen of the Nervous System. 2020 , 2, 1-10	30

2214	The inorganic polymer, polyphosphate, blocks binding of SARS-CoV-2 spike protein to ACE2 receptor at physiological concentrations. 2020 , 182, 114215	28
2213	Antigen-Specific Adaptive Immunity to SARS-CoV-2 in Acute COVID-19 and Associations with Age and Disease Severity. 2020 , 183, 996-1012.e19	711
2212	Food proteins are a potential resource for mining cathepsin L inhibitory drugs to combat SARS-CoV-2. 2020 , 885, 173499	8
2211	Emerging strategies on in silico drug development against COVID-19: challenges and opportunities. 2020 , 155, 105522	17
2210	Molecular biology of coronaviruses: current knowledge. 2020 , 6, e04743	40
2209	Exploit T cell Immunity for Rapid, Safe and Effective COVID-19 Vaccines. 2020 , 19, 781-784	
2208	Robust and persistent SARS-CoV-2 infection in the human intestinal brush border expressing cells. 2020 , 9, 2169-2179	21
2207	Establishment of replication-competent vesicular stomatitis virus-based recombinant viruses suitable for SARS-CoV-2 entry and neutralization assays. 2020 , 9, 2269-2277	18
2206	Protein-sol pKa: prediction of electrostatic frustration, with application to coronaviruses. 2020 , 36, 5112-5114	3
2205	COVID-19, Mast Cells, Cytokine Storm, Psychological Stress, and Neuroinflammation. 2020 , 26, 402-414	103
2204	SARS-CoV-2 Phylogenetic Analysis, Lazio Region, Italy, February-March 2020. 2020 , 26, 1842-1845	24
2203	Atomistic simulation reveals structural mechanisms underlying D614G spike glycoprotein-enhanced fitness in SARS-COV-2. 2020 , 41, 2158-2161	30
2202	Body temperature and host species preferences of SARS-CoV-2. 2020 , 26, 1709-1710	3
2201	Old Drugs for a New Virus: Repurposed Approaches for Combating COVID-19. 2020 , 6, 2304-2318	25
2200	Inhibiting fusion with cellular membrane system: therapeutic options to prevent severe acute respiratory syndrome coronavirus-2 infection. 2020 , 319, C500-C509	4
2199	Potential Repurposed Therapeutics and New Vaccines against COVID-19 and Their Clinical Status. 2020 , 25, 1097-1107	2
2198	Drugs targeting various stages of the SARS-CoV-2 life cycle: Exploring promising drugs for the treatment of Covid-19. 2020 , 74, 109721	63
2197	Computational solutions of the HIV-1 infection of CD4 T-cells fractional mathematical model that causes acquired immunodeficiency syndrome (AIDS) with the effect of antiviral drug therapy. 2020 , 139, 110092	39

2196	Targeting SARS-CoV-2 spike protein of COVID-19 with naturally occurring phytochemicals: an study for drug development. 2021 , 39, 6306-6316	94
2195	Review of Viral Testing (Polymerase Chain Reaction) and Antibody/Serology Testing for Severe Acute Respiratory Syndrome-Coronavirus-2 for the Intensivist. 2020 , 2, e0154	12
2194	Humoral and circulating follicular helper T cell responses in recovered patients with COVID-19. 2020 , 26, 1428-1434	223
2193	The molecular virology of coronaviruses. 2020 , 295, 12910-12934	175
2192	Coagulation Abnormalities and Thrombosis in Patients Infected With SARS-CoV-2 and Other Pandemic Viruses. 2020 , 40, 2033-2044	78
2191	Severe acute respiratory syndrome coronavirus 2 may be an underappreciated pathogen of the central nervous system. 2020 , 27, 2348-2360	35
2190	FDA approved drugs with pharmacotherapeutic potential for SARS-CoV-2 (COVID-19) therapy. 2020 , 53, 100719	79
2189	Guidance for the management of adult patients with coronavirus disease 2019. 2020 , 133, 1575-1594	16
2188	SARS-CoV-2 Infections and ACE2: Clinical Outcomes Linked With Increased Morbidity and Mortality in Individuals With Diabetes. 2020 , 69, 1875-1886	35
2187	COVID-19/SARS-CoV-2 Infection: Lysosomes and Lysosomotropism Implicate New Treatment Strategies and Personal Risks. 2020 , 21,	22
2186	Evidence supporting the use of peptides and peptidomimetics as potential SARS-CoV-2 (COVID-19) therapeutics. 2020 , 12, 1647-1656	33
2185	Targeting Two-Pore Channels: Current Progress and Future Challenges. 2020 , 41, 582-594	21
2184	Insights in Chloroquine Action: Perspectives and Implications in Malaria and COVID-19. 2020 , 97, 872-881	6
2183	Endocytic uptake of SARS-CoV-2: the critical roles of pH, Ca ²⁺ , and NAADP. 2020 , 1,	20
2182	Could Ergothioneine Aid in the Treatment of Coronavirus Patients?. 2020 , 9,	29
2181	The renin-angiotensin-aldosterone system: Role in pathogenesis and potential therapeutic target in COVID-19. 2020 , 8, e00623	7
2180	Involvement of Spike Protein, Furin, and ACE2 in SARS-CoV-2-Related Cardiovascular Complications. 2020 , 2, 1-6	9
2179	Current and Future Direct-Acting Antivirals Against COVID-19. 2020 , 11, 587944	10

2178	COVID-19 during Pregnancy and Postpartum. 2020 , 1-28	8
2177	nSARS-Cov-2, pulmonary edema and thrombosis: possible molecular insights using miRNA-gene circuits in regulatory networks. 2020 , 2, 16	1
2176	Virus-induced p38 MAPK activation facilitates viral infection. 2020 , 10, 12223-12240	22
2175	Natural Products Database Screening for the Discovery of Naturally Occurring SARS-Cov-2 Spike Glycoprotein Blockers. 2020 , 5, 13309-13317	11
2174	Gastrointestinal pathophysiology of SARS-CoV2 - a literature review. 2020 , 10, 523-528	15
2173	Computational Analysis of Targeting SARS-CoV-2, Viral Entry Proteins ACE2 and TMPRSS2, and Interferon Genes by Host MicroRNAs. 2020 , 11,	22
2172	Plasma-activated water: An alternative disinfectant for S protein inactivation to prevent SARS-CoV-2 infection. 2021 , 421, 127742	44
2171	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. 2020 , 28, 867-879.e5	168
2170	SARS-CoV-2 spike-protein D614G mutation increases virion spike density and infectivity. <i>Nature Communications</i> , 2020 , 11, 6013	17.4 450
2169	Understanding the relationship between viral infections and trace elements from a metallomics perspective: implications for COVID-19. 2020 , 12, 1912-1930	7
2168	SARS-CoV-2 Receptors and Entry Genes Are Expressed in the Human Olfactory Neuroepithelium and Brain. 2020 , 23, 101839	84
2167	Data-Driven Supervised Learning for Life Science Data. 2020 , 6,	3
2166	Investigation of the Effect of Temperature on the Structure of SARS-CoV-2 Spike Protein by Molecular Dynamics Simulations. 2020 , 7, 583523	21
2165	Enhancing host cell infection by SARS-CoV-2. 2020 , 370, 765-766	33
2164	Molecular mechanisms of the novel coronavirus SARS-CoV-2 and potential anti-COVID19 pharmacological targets since the outbreak of the pandemic. 2020 , 146, 111805	18
2163	Refractory celiac disease and COVID-19 outbreak: Findings from a high incidence scenario in Northern Italy. 2020 , 44, e115-e120	7
2162	Clinically Approved Antiviral Drug in an Orally Administrable Nanoparticle for COVID-19. 2020 , 3, 1371-1380	14
2161	On the Challenges for the Diagnosis of SARS-CoV-2 Based on a Review of Current Methodologies. 2020 , 5, 3655-3677	38

2160	The biomaterial polyphosphate blocks stoichiometric binding of the SARS-CoV-2 S-protein to the cellular ACE2 receptor. 2020 , 8, 6603-6610	13
2159	The structural basis of accelerated host cell entry by SARS-CoV-2 2021 , 288, 5010-5020	73
2158	FDA efficiency for approval process of COVID-19 therapeutics. 2020 , 15, 73	5
2157	Possible Role of Adenosine in COVID-19 Pathogenesis and Therapeutic Opportunities. 2020 , 11, 594487	13
2156	Heparan sulfate assists SARS-CoV-2 in cell entry and can be targeted by approved drugs in vitro. 2020 , 6, 80	86
2155	Antibody-Based Immunotherapeutic Strategies for COVID-19. 2020 , 9,	9
2154	Recent advances in therapeutic applications of neutralizing antibodies for virus infections: an overview. 2020 , 68, 325-339	18
2153	SARS-CoV-2 receptor is co-expressed with elements of the kinin-kallikrein, renin-angiotensin and coagulation systems in alveolar cells. 2020 , 10, 19522	21
2152	Synergy of melanin and vitamin-D may play a fundamental role in preventing SARS-CoV-2 infections and halt COVID-19 by inactivating furin protease. 2020 , 5, 21	2
2151	COMPLEXITY-BASED DETECTION OF SIMILARITY BETWEEN ANIMAL CORONAVIRUSES AND SARS-CoV-2 IN HUMANS. 2020 , 28, 2150031	9
2150	Cell Clearing Systems as Targets of Polyphenols in Viral Infections: Potential Implications for COVID-19 Pathogenesis. 2020 , 9,	18
2149	Molecular targeting of vulnerable RNA sequences in SARS CoV-2: identifying clinical feasibility. 2020 ,	9
2148	Peptide and peptide-based inhibitors of SARS-CoV-2 entry. 2020 , 167, 47-65	63
2147	Genetic variability in the expression of the SARS-CoV-2 host cell entry factors across populations. 2020 , 21, 269-272	29
2146	Ion Channels as Therapeutic Targets for Viral Infections: Further Discoveries and Future Perspectives. 2020 , 12,	15
2145	Surface Chemistry Can Unlock Drivers of Surface Stability of SARS-CoV-2 in a Variety of Environmental Conditions. 2020 , 6, 2135-2146	42
2144	Morphogenesis and cytopathic effect of SARS-CoV-2 infection in human airway epithelial cells. <i>Nature Communications</i> , 2020 , 11, 3910	17.4 151
2143	Surface engineering of personal protective equipments (PPEs) to prevent the contagious infections of SARS-CoV-2. 2020 , 36, 901-907	18

2142	Antibody-based immunotherapeutics and use of convalescent plasma to counter COVID-19: advances and prospects. 2020 , 20, 1033-1046	54
2141	Screening and testing for COVID-19 before surgery. 2020 , 90, 1845-1856	23
2140	Current Status of Laboratory Diagnosis for COVID-19: A Narrative Review. 2020 , 13, 2657-2665	40
2139	Impaired NLRP3 inflammasome activation/pyroptosis leads to robust inflammatory cell death via caspase-8/RIPK3 during coronavirus infection. 2020 , 295, 14040-14052	76
2138	SARS-CoV-2 and the next generations: which impact on reproductive tissues?. 2020 , 37, 2399-2403	23
2137	Where are we with understanding of COVID-19?. 2020 , 77, 100745	1
2136	Identification of the nucleotide substitutions in 62 SARS-CoV-2 sequences from Turkey. 2020 , 44, 178-184	10
2135	Insight into the pediatric and adult dichotomy of COVID-19: Age-related differences in the immune response to SARS-CoV-2 infection. 2020 , 55, 2556-2564	25
2134	The Long Road Toward COVID-19 Herd Immunity: Vaccine Platform Technologies and Mass Immunization Strategies. 2020 , 11, 1817	104
2133	Approaching coronavirus disease 2019: Mechanisms of action of repurposed drugs with potential activity against SARS-CoV-2. 2020 , 180, 114169	19
2132	A SARS-CoV-2 surrogate virus neutralization test based on antibody-mediated blockage of ACE2-spike protein-protein interaction. 2020 , 38, 1073-1078	528
2131	While We Wait for a Vaccine Against SARS-CoV-2, Why Not Think About Available Drugs?. 2020 , 11, 820	12
2130	Expansion of Single Cell Transcriptomics Data of SARS-CoV Infection in Human Bronchial Epithelial Cells to COVID-19. 2020 , 22, 16	11
2129	Potential Anti-COVID-19 Therapeutics that Block the Early Stage of the Viral Life Cycle: Structures, Mechanisms, and Clinical Trials. 2020 , 21,	27
2128	Linear B-cell epitopes in the spike and nucleocapsid proteins as markers of SARS-CoV-2 exposure and disease severity. 2020 , 58, 102911	61
2127	Could the antipsychotic chlorpromazine be a potential treatment for SARS-CoV-2?. 2020 , 223, 373-375	9
2126	Drug Discovery Strategies for SARS-CoV-2. 2020 , 375, 127-138	51
2125	Neutrophil Extracellular Traps (NETs) and Damage-Associated Molecular Patterns (DAMPs): Two Potential Targets for COVID-19 Treatment. 2020 , 2020, 7527953	87

2124	Discovering genomic patterns in SARS-CoV-2 variants. 2020 , 35, 1680-1698	9
2123	Mechanistic insights of host cell fusion of SARS-CoV-1 and SARS-CoV-2 from atomic resolution structure and membrane dynamics. 2020 , 265, 106438	28
2122	In silico study of azithromycin, chloroquine and hydroxychloroquine and their potential mechanisms of action against SARS-CoV-2 infection. 2020 , 56, 106119	24
2121	Identification of an anti-SARS-CoV-2 receptor-binding domain-directed human monoclonal antibody from a naïve semisynthetic library. 2020 , 295, 12814-12821	32
2120	Unlocking COVID therapeutic targets: A structure-based rationale against SARS-CoV-2, SARS-CoV and MERS-CoV Spike. 2020 , 18, 2117-2131	17
2119	Construction of SARS-CoV-2 Virus-Like Particles by Mammalian Expression System. 2020 , 8, 862	49
2118	Differences and similarities between SARS-CoV and SARS-CoV-2: spike receptor-binding domain recognition and host cell infection with support of cellular serine proteases. 2020 , 48, 665-669	35
2117	SARS-CoV-2 Vaccine Development: Current Status. 2020 , 95, 2172-2188	61
2116	Fruitful Neutralizing Antibody Pipeline Brings Hope To Defeat SARS-Cov-2. 2020 , 41, 815-829	66
2115	Hypertension and related diseases in the era of COVID-19: a report from the Japanese Society of Hypertension Task Force on COVID-19. 2020 , 43, 1028-1046	65
2114	The Effects of Chloroquine and Hydroxychloroquine on ACE2-Related Coronavirus Pathology and the Cardiovascular System: An Evidence-Based Review. 2020 , 1,	10
2113	Serologic responses to SARS-CoV-2 infection among hospital staff with mild disease in eastern France. 2020 , 59, 102915	78
2112	Development of cell-based pseudovirus entry assay to identify potential viral entry inhibitors and neutralizing antibodies against SARS-CoV-2. 2020 , 7, 551-557	43
2111	Smell and taste disorders in Spanish patients with mild COVID-19. 2020 , 35, 633-638	11
2110	Clinical and Laboratory Diagnosis of SARS-CoV-2, the Virus Causing COVID-19. 2020 , 6, 2319-2336	27
2109	Longitudinal Dynamics of the Neutralizing Antibody Response to Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2) Infection. 2021 , 73, e531-e539	125
2108	Potential Therapeutic Agents and Associated Bioassay Data for COVID-19 and Related Human Coronavirus Infections. 2020 , 3, 813-834	17
2107	An enzyme-based immunodetection assay to quantify SARS-CoV-2 infection. 2020 , 181, 104882	25

2106	Evaluation of the Quotient \square MosaiQ COVID-19 antibody microarray for the detection of IgG and IgM antibodies to SARS-CoV-2 virus in humans. 2020 , 130, 104571	12
2105	The pathophysiology of SARS-CoV-2: A suggested model and therapeutic approach. 2020 , 258, 118166	43
2104	Structural and functional properties of SARS-CoV-2 spike protein: potential antiviral drug development for COVID-19. 2020 , 41, 1141-1149	739
2103	Inhibition of PIKfyve kinase prevents infection by Zaire ebolavirus and SARS-CoV-2. 2020 , 117, 20803-20813	87
2102	Identification of potential anti-TMPRSS2 natural products through homology modelling, virtual screening and molecular dynamics simulation studies. 2020 , 1-16	33
2101	Lymphocystis Disease Virus () Enters Flounder () Gill Cells via a Caveolae-Mediated Endocytosis Mechanism Facilitated by Viral Receptors. 2020 , 21,	0
2100	Destabilizing the structural integrity of COVID-19 by caulerpin and its derivatives along with some antiviral drugs: An in silico approaches for a combination therapy. 2020 , 31, 1-22	20
2099	Assessing the extent of SARS-CoV-2 circulation through serological studies. 2020 , 26, 1171-1172	34
2098	Plants Metabolites: Possibility of Natural Therapeutics Against the COVID-19 Pandemic. 2020 , 7, 444	53
2097	Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) and glial cells: Insights and perspectives. 2020 , 7, 100127	36
2096	Derivatization and combination therapy of current COVID-19 therapeutic agents: a review of mechanistic pathways, adverse effects, and binding sites. 2020 , 25, 1822-1838	5
2095	Pathophysiology of COVID-19: Mechanisms Underlying Disease Severity and Progression. 2020 , 35, 288-301	82
2094	Vaccine Candidates against Coronavirus Infections. Where Does COVID-19 Stand?. 2020 , 12,	25
2093	Endo-Lysosomal Cation Channels and Infectious Diseases. 2020 , 1	11
2092	Optimized Pseudotyping Conditions for the SARS-COV-2 Spike Glycoprotein. 2020 , 94,	78
2091	Dexamethasone for the Treatment of Coronavirus Disease (COVID-19): a Review. 2020 , 2, 1-10	66
2090	Structural analysis of experimental drugs binding to the SARS-CoV-2 target TMPRSS2. 2020 , 100, 107710	16
2089	Virus isolation of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) for diagnostic and research purposes. 2020 , 52, 760-763	10

2088	A Testimony of the Surgent SARS-CoV-2 in the Immunological Panorama of the Human Host. 2020 , 10, 575404	3
2087	Kinetics and isotype assessment of antibodies targeting the spike protein receptor-binding domain of severe acute respiratory syndrome-coronavirus-2 in COVID-19 patients as a function of age, biological sex and disease severity. 2020 , 9, e1189	23
2086	ACE2 in the Era of SARS-CoV-2: Controversies and Novel Perspectives. 2020 , 7, 588618	49
2085	COVID-19 update: The race to therapeutic development. 2020 , 53, 100733	33
2084	COVID-19-Induced Neurovascular Injury: a Case Series with Emphasis on Pathophysiological Mechanisms. 2020 , 2, 2109-2125	12
2083	Understanding the complexities of SARS-CoV2 infection and its immunology: A road to immune-based therapeutics. 2020 , 88, 106980	20
2082	SARS-CoV-2 Infection Boosts Antiviral Effector in COVID-19 Patients. 2020 , 23, 101585	32
2081	Targeting Crucial Host Factors of SARS-CoV-2. 2020 , 6, 2844-2865	13
2080	High-throughput virtual screening of drug databanks for potential inhibitors of SARS-CoV-2 spike glycoprotein. 2020 , 1-14	16
2079	Secondary metabolites from spice and herbs as potential multitarget inhibitors of SARS-CoV-2 proteins. 2020 , 1-20	58
2078	Understanding Severe Acute Respiratory Syndrome Coronavirus 2 Replication to Design Efficient Drug Combination Therapies. 2020 , 63, 2-9	11
2077	A 21st Century Evil: Immunopathology and New Therapies of COVID-19. 2020 , 11, 562264	5
2076	Evolutionary Analysis of Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2) Reveals Genomic Divergence with Implications for Universal Vaccine Efficacy. 2020 , 8,	3
2075	Development of a novel platform of virus-like particle (VLP)-based vaccine against COVID-19 by exposing epitopes: an immunoinformatics approach. 2020 , 38, 100786	30
2074	Molecular Basis of SARS-CoV-2 Infection and Rational Design of Potential Antiviral Agents: Modeling and Simulation Approaches. 2020 , 19, 4291-4315	36
2073	Synthetic Carbohydrate Chemistry and Translational Medicine. 2020 , 85, 15780-15800	7
2072	Structural basis for potent neutralization of SARS-CoV-2 and role of antibody affinity maturation. <i>Nature Communications</i> , 2020 , 11, 5413	17.4 105
2071	Immunoinflammatory, Thrombohaemostatic, and Cardiovascular Mechanisms in COVID-19. 2020 , 120, 1629-1641	25

2070	The SARS-CoV-2 Spike Glycoprotein Biosynthesis, Structure, Function, and Antigenicity: Implications for the Design of Spike-Based Vaccine Immunogens. 2020 , 11, 576622	137
2069	Smell and taste disorders in Spanish patients with mild COVID-19. 2020 , 35, 633-638	0
2068	Can Neurotropic Free-Living Amoeba Serve as a Model to Study SARS-CoV-2 Pathogenesis?. 2020 , 11, 3697-3700	
2067	Roadmap to the Bioanalytical Testing of COVID-19: From Sample Collection to Disease Surveillance. 2020 , 5, 3328-3345	22
2066	Therapeutic modalities and novel approaches in regenerative medicine for COVID-19. 2020 , 56, 106208	15
2065	Developing infectious disease surveillance systems. <i>Nature Communications</i> , 2020 , 11, 4962	17.4 3
2064	A combinational approach to restore cytokine balance and to inhibit virus growth may promote patient recovery in severe COVID-19 cases. 2020 , 136, 155228	4
2063	The past, present and future of RNA respiratory viruses: influenza and coronaviruses. 2020 , 78,	5
2062	Managing the COVID-19 Pandemic: Research Strategies Based on the Evolutionary and Molecular Characteristics of Coronaviruses. 2020 , 2, 1-10	1
2061	A SARS-CoV-2 vaccine candidate would likely match all currently circulating variants. 2020 , 117, 23652-23662	133
2060	The 2020 Pandemic: Current SARS-CoV-2 Vaccine Development. 2020 , 11, 1880	45
2059	Correlation between CNS Tuberculosis and the COVID-19 Pandemic: The Neurological and Therapeutic Insights. 2020 , 11, 2789-2792	1
2058	A molecular trap against COVID-19. 2020 , 369, 1167-1168	5
2057	Evolution of Early SARS-CoV-2 and Cross-Coronavirus Immunity. 2020 , 5,	28
2056	A Simplified Quantitative Real-Time PCR Assay for Monitoring SARS-CoV-2 Growth in Cell Culture. 2020 , 5,	20
2055	Elevated FiO increases SARS-CoV-2 co-receptor expression in respiratory tract epithelium. 2020 , 319, L670-L674	7
2054	Neurological Aspects of SARS-CoV-2 Infection: Mechanisms and Manifestations. 2020 , 11, 1039	35
2053	SARS-CoV-2 serology and virology trends in donors and recipients of convalescent plasma. 2020 , 59, 102922	16

2052	Direct or Collateral Liver Damage in SARS-CoV-2-Infected Patients. 2020 , 40, 321-330	15
2051	Positively Charged Electroceutical Spun Chitosan Nanofibers Can Protect Health Care Providers From COVID-19 Infection: An Opinion. 2020 , 8, 885	19
2050	Zinc(II)-The Overlooked ^ hinese Grise of Chloroquine's Fight against COVID-19?. 2020 , 13,	13
2049	Potential of Ocular Transmission of SARS-CoV-2: A Review. 2020 , 4,	19
2048	Switching Host Metabolism as an Approach to Dampen SARS-CoV-2 Infection. 2020 , 76, 297-303	19
2047	The pandemic COVID-19: a tale of viremia, cellular oxidation and immune dysfunction. 2020 , 36, 188	4
2046	Ultrapotent human antibodies protect against SARS-CoV-2 challenge via multiple mechanisms. 2020 , 370, 950-957	314
2045	SARS-CoV-2 Infection of Pluripotent Stem Cell-Derived Human Lung Alveolar Type 2 Cells Elicits a Rapid Epithelial-Intrinsic Inflammatory Response. 2020 , 27, 962-973.e7	136
2044	Human Pluripotent Stem Cell-Derived Neural Cells and Brain Organoids Reveal SARS-CoV-2 Neurotropism Predominates in Choroid Plexus Epithelium. 2020 , 27, 937-950.e9	151
2043	Genetic grouping of SARS-CoV-2 coronavirus sequences using informative subtype markers for pandemic spread visualization. 2020 , 16, e1008269	20
2042	SARS-CoV-2 Infection: A Role for S1P/S1P Receptor Signaling in the Nervous System?. 2020 , 21,	11
2041	Central Nervous System Targets and Routes for SARS-CoV-2: Current Views and New Hypotheses. 2020 , 11, 2793-2803	27
2040	Nanoparticle-Based Strategies to Combat COVID-19. 2020 , 3, 8557-8580	90
2039	Quantum Dot-Conjugated SARS-CoV-2 Spike Pseudo-Virions Enable Tracking of Angiotensin Converting Enzyme 2 Binding and Endocytosis. 2020 , 14, 12234-12247	45
2038	Coronaviruses: Is Sialic Acid a Gate to the Eye of Cytokine Storm? From the Entry to the Effects. 2020 , 9,	17
2037	In Silico Identification of Potential Natural Product Inhibitors of Human Proteases Key to SARS-CoV-2 Infection. 2020 , 25,	32
2036	From SARS and MERS to COVID-19: a brief summary and comparison of severe acute respiratory infections caused by three highly pathogenic human coronaviruses. 2020 , 21, 224	223
2035	Targeting the sAC-Dependent cAMP Pool to Prevent SARS-Cov-2 Infection. 2020 , 9,	6

2034	Coronavirus Antiviral Research Database (CoV-RDB): An Online Database Designed to Facilitate Comparisons between Candidate Anti-Coronavirus Compounds. 2020 , 12,	32
2033	Antibody response to SARS-Co-V-2, diagnostic and therapeutic implications. 2020 , 4, 1731	4
2032	An Enzymatic TMPRSS2 Assay for Assessment of Clinical Candidates and Discovery of Inhibitors as Potential Treatment of COVID-19. 2020 , 3, 997-1007	58
2031	Potential protease inhibitors and their combinations to block SARS-CoV-2. 2020 , 1-15	7
2030	Mass Spectrometry and Structural Biology Techniques in the Studies on the Coronavirus-Receptor Interaction. 2020 , 25,	6
2029	Control Measures for SARS-CoV-2: A Review on Light-Based Inactivation of Single-Stranded RNA Viruses. 2020 , 9,	29
2028	Characterisation of SARS-CoV-2 Lentiviral Pseudotypes and Correlation between Pseudotype-Based Neutralisation Assays and Live Virus-Based Micro Neutralisation Assays. 2020 , 12,	28
2027	Insights on SARS-CoV-2 Molecular Interactions With the Renin-Angiotensin System. 2020 , 8, 559841	23
2026	Hijacking SARS-CoV-2/ACE2 Receptor Interaction by Natural and Semi-synthetic Steroidal Agents Acting on Functional Pockets on the Receptor Binding Domain. 2020 , 8, 572885	32
2025	The Challenges of Vaccine Development against Betacoronaviruses: Antibody Dependent Enhancement and Sendai Virus as a Possible Vaccine Vector. 2020 , 54, 1-15	11
2024	In Silico Drug Repurposing for SARS-CoV-2 Main Proteinase and Spike Proteins. 2020 , 19, 4637-4648	25
2023	Robust neutralization assay based on SARS-CoV-2 S-protein-bearing vesicular stomatitis virus (VSV) pseudovirus and ACE2-overexpressing BHK21 cells. 2020 , 9, 2105-2113	62
2022	From ACE2 to COVID-19: A multiorgan endothelial disease. 2020 , 100, 425-430	6
2021	Cross-neutralization activity against SARS-CoV-2 is present in currently available intravenous immunoglobulins. 2020 , 12, 1247-1255	18
2020	Hyperinflammation and Fibrosis in Severe COVID-19 Patients: Galectin-3, a Target Molecule to Consider. 2020 , 11, 2069	36
2019	Can data from paediatric cohorts solve the COVID-19 puzzle?. 2020 , 16, e1008798	5
2018	Genetic and pathogenic characterization of SARS-CoV-2: a review. 2020 , 15, 533-549	7
2017	No small matter: a perspective on nanotechnology-enabled solutions to fight COVID-19. 2020 , 15, 2411-2427	13

2016	Covid-19: Perspectives on Innate Immune Evasion. 2020 , 11, 580641	64
2015	Gold Metallo drugs to Target Coronavirus Proteins: Inhibitory Effects on the Spike-ACE2 Interaction and on PLpro Protease Activity by Auranofin and Gold Organometallics*. 2020 , 26, 15140-15144	26
2014	Impact of glycan cloud on the B-cell epitope prediction of SARS-CoV-2 Spike protein. 2020 , 5, 81	11
2013	The Pathophysiology, Diagnosis and Treatment of Corona Virus Disease 2019 (COVID-19). 2020 , 35, 1-12	9
2012	An integrated drug repurposing strategy for the rapid identification of potential SARS-CoV-2 viral inhibitors. 2020 , 10, 13866	61
2011	A novel biparatopic hybrid antibody-ACE2 fusion that blocks SARS-CoV-2 infection: implications for therapy. 2020 , 12, 1804241	18
2010	Cyclosporine: an old weapon in the fight against coronaviruses. 2020 , 56,	11
2009	Repurposing Drugs, Ongoing Vaccine, and New Therapeutic Development Initiatives Against COVID-19. 2020 , 11, 1258	61
2008	Role of probiotics to combat viral infections with emphasis on COVID-19. 2020 , 104, 8089-8104	62
2007	Animal and translational models of SARS-CoV-2 infection and COVID-19. 2020 , 13, 877-891	106
2006	A comparison of four serological assays for detecting anti-SARS-CoV-2 antibodies in human serum samples from different populations. 2020 , 12,	143
2005	ACE2 (Angiotensin-Converting Enzyme 2) in Cardiopulmonary Diseases: Ramifications for the Control of SARS-CoV-2. 2020 , 76, 651-661	38
2004	COVID-19 pandemic: Insights into structure, function, and hACE2 receptor recognition by SARS-CoV-2. 2020 , 16, e1008762	96
2003	A cross-reactive human IgA monoclonal antibody blocks SARS-CoV-2 spike-ACE2 interaction. <i>Nature Communications</i> , 2020 , 11, 4198	17.4 69
2002	New Anti SARS-Cov-2 Targets for Quinoline Derivatives Chloroquine and Hydroxychloroquine. 2020 , 21,	15
2001	Deciphering SARS-CoV-2 Virologic and Immunologic Features. 2020 , 21,	12
2000	Role of Endolysosomes in Severe Acute Respiratory Syndrome Coronavirus-2 Infection and Coronavirus Disease 2019 Pathogenesis: Implications for Potential Treatments. 2020 , 11, 595888	23
1999	A single dose of recombinant VSV- Γ -spike vaccine provides protection against SARS-CoV-2 challenge. <i>Nature Communications</i> , 2020 , 11, 6402	17.4 102

1998	Challenges and Opportunities from Targeting Inflammatory Responses to SARS-CoV-2 Infection: A Narrative Review. 2020 , 9,	8
1997	Mini-review: antibody therapeutics targeting G protein-coupled receptors and ion channels. 2020 , 3, 257-264	1
1996	Virus-Mediated Cell-Cell Fusion. 2020 , 21,	21
1995	SARS-CoV-2 Spike Alterations Enhance Pseudoparticle Titers and Replication-Competent VSV-SARS-CoV-2 Virus. 2020 , 12,	18
1994	Cathepsin L in COVID-19: From Pharmacological Evidences to Genetics. 2020 , 10, 589505	43
1993	Will SARS-CoV-2 Infection Elicit Long-Lasting Protective or Sterilising Immunity? Implications for Vaccine Strategies (2020). 2020 , 11, 571481	28
1992	Plant Molecular Farming as a Strategy Against COVID-19 - The Italian Perspective. 2020 , 11, 609910	7
1991	Vascular Endothelial Glycocalyx Damage in COVID-19. 2020 , 21,	32
1990	HCoV-NL63 and SARS-CoV-2 Share Recognized Epitopes by the Humoral Response in Sera of People Collected Pre- and during CoV-2 Pandemic. 2020 , 8,	11
1989	Bat-Borne Coronaviruses in Jordan and Saudi Arabia: A Threat to Public Health?. 2020 , 12,	0
1988	Monitoring Viral Entry in Real-Time Using a Luciferase Recombinant Vesicular Stomatitis Virus Producing SARS-CoV-2, EBOV, LASV, CHIKV, and VSV Glycoproteins. 2020 , 12,	9
1987	An ACE2 Microbody Containing a Single Immunoglobulin Fc Domain Is a Potent Inhibitor of SARS-CoV-2. 2020 , 33, 108528	39
1986	COVID-19: from an acute to chronic disease? Potential long-term health consequences. 2021 , 58, 297-310	69
1985	Association of Cigarette Smoking, COPD, and Lung Cancer With Expression of SARS-CoV-2 Entry Genes in Human Airway Epithelial Cells. 2020 , 7, 619453	4
1984	Nuclear Medicine in Times of COVID-19: How Radiopharmaceuticals Could Help to Fight the Current and Future Pandemics. 2020 , 12,	5
1983	The Roborovski Dwarf Hamster Is A Highly Susceptible Model for a Rapid and Fatal Course of SARS-CoV-2 Infection. 2020 , 33, 108488	40
1982	Evaluation of SARS-CoV-2 prototype serologic test in hospitalized patients. 2020 , 86, 8-14	9
1981	Integrative analyses of SARS-CoV-2 genomes from different geographical locations reveal unique features potentially consequential to host-virus interaction, pathogenesis and clues for novel therapies. 2020 , 6, e04658	71

1980	Identification of Potent and Safe Antiviral Therapeutic Candidates Against SARS-CoV-2. 2020 , 11, 586572	30
1979	Spike Proteins of SARS-CoV and SARS-CoV-2 Utilize Different Mechanisms to Bind With Human ACE2. 2020 , 7, 591873	30
1978	Comprehensive Structural and Molecular Comparison of Spike Proteins of SARS-CoV-2, SARS-CoV and MERS-CoV, and Their Interactions with ACE2. 2020 , 9,	57
1977	Mechanisms of Dysregulated Humoral and Cellular Immunity by SARS-CoV-2. 2020 , 9,	11
1976	Host metabolism dysregulation and cell tropism identification in human airway and alveolar organoids upon SARS-CoV-2 infection. 2021 , 12, 717-733	33
1975	Emerging Molecular Prospective of SARS-CoV-2: Feasible Nanotechnology Based Detection and Inhibition. 2020 , 11, 2098	5
1974	Docked severe acute respiratory syndrome coronavirus 2 proteins within the cutaneous and subcutaneous microvasculature and their role in the pathogenesis of severe coronavirus disease 2019. 2020 , 106, 106-116	16
1973	Coronavirus (SARS-CoV-2) Pandemic: Future Challenges for Dental Practitioners. 2020 , 8,	26
1972	Structure and inhibition of the SARS-CoV-2 main protease reveal strategy for developing dual inhibitors against M and cathepsin L. 2020 , 6,	155
1971	De novo design of potent and resilient hACE2 decoys to neutralize SARS-CoV-2. 2020 , 370, 1208-1214	98
1970	Preexisting and de novo humoral immunity to SARS-CoV-2 in humans. 2020 , 370, 1339-1343	441
1969	Revisiting the Immune Balance Theory: A Neurological Insight Into the Epidemic of COVID-19 and Its Alike. 2020 , 11, 566680	4
1968	The Role of Phosphatidylinositol Phosphate Kinases during Viral Infection. 2020 , 12,	6
1967	Isolation of a human monoclonal antibody specific for the receptor binding domain of SARS-CoV-2 using a competitive phage biopanning strategy. 2020 , 3, 95-100	43
1966	No evidence for an increased liver uptake of SARS-CoV-2 in metabolic-associated fatty liver disease. 2020 , 73, 717-718	28
1965	The lysosome: A potential juncture between SARS-CoV-2 infectivity and Niemann-Pick disease type C, with therapeutic implications. 2020 , 34, 7253-7264	51
1964	Potential differential effects of renin-angiotensin system inhibitors on SARS-CoV-2 infection and lung injury in COVID-19. 2020 , 43, 837-840	18
1963	Understanding SARS-CoV-2 endocytosis for COVID-19 drug repurposing. 2020 , 287, 3664-3671	95

1962	COVID-19 vaccines: Knowing the unknown. 2020 , 50, 939-943	14
1961	Cell entry mechanisms of SARS-CoV-2. 2020 , 117, 11727-11734	1620
1960	COVID-19, an opportunity to reevaluate the correlation between long-term effects of anthropogenic pollutants on viral epidemic/pandemic events and prevalence. 2020 , 141, 111418	83
1959	The current understanding and potential therapeutic options to combat COVID-19. 2020 , 254, 117765	55
1958	Protocol and Reagents for Pseudotyping Lentiviral Particles with SARS-CoV-2 Spike Protein for Neutralization Assays. 2020 , 12,	360
1957	The underpinning biology relating to multiple sclerosis disease modifying treatments during the COVID-19 pandemic. 2020 , 43, 102174	46
1956	Lessons From COVID-19 in Children: Key Hypotheses to Guide Preventative and Therapeutic Strategies. 2020 , 71, 2006-2013	22
1955	Immune response to SARS-CoV-2 and mechanisms of immunopathological changes in COVID-19. 2020 , 75, 1564-1581	496
1954	Could the Inhibition of Endo-Lysosomal Two-Pore Channels (TPCs) by the Natural Flavonoid Naringenin Represent an Option to Fight SARS-CoV-2 Infection?. 2020 , 11, 970	23
1953	Hypertension, Thrombosis, Kidney Failure, and Diabetes: Is COVID-19 an Endothelial Disease? A Comprehensive Evaluation of Clinical and Basic Evidence. 2020 , 9,	285
1952	An Update on Current Therapeutic Drugs Treating COVID-19. 2020 , 6, 1-15	300
1951	Identification of potassium and calcium channel inhibitors as modulators of polyomavirus endosomal trafficking. 2020 , 179, 104819	7
1950	Conserved High Free Energy Sites in Human Coronavirus Spike Glycoprotein Backbones. 2020 , 27, 1622-1630	4
1949	TMPRSS2 and TMPRSS4 promote SARS-CoV-2 infection of human small intestinal enterocytes. 2020 , 5,	531
1948	Comparing the Binding Interactions in the Receptor Binding Domains of SARS-CoV-2 and SARS-CoV. 2020 , 11, 4897-4900	63
1947	Discovery of lipophilic two-pore channel agonists. 2020 , 287, 5284-5293	10
1946	In Vitro and Animal Models for SARS-CoV-2 research. 2020 , 41, 513-517	104
1945	Current Perspective of Antiviral Strategies against COVID-19. 2020 , 6, 1624-1634	31

1944	Evidence for mutations in SARS-CoV-2 Italian isolates potentially affecting virus transmission. 2020 , 92, 2232-2237	21
1943	Nasopharyngeal and Oropharyngeal Swabs, And/Or Serology for SARS COVID-19: What Are We Looking For?. 2020 , 17,	2
1942	Could an endo-lysosomal ion channel be the Achilles heel of SARS-CoV2?. 2020 , 88, 102212	26
1941	Comparison of Severe Acute Respiratory Syndrome Coronavirus 2 Spike Protein Binding to ACE2 Receptors from Human, Pets, Farm Animals, and Putative Intermediate Hosts. 2020 , 94,	90
1940	Currently available intravenous immunoglobulin contains antibodies reacting against severe acute respiratory syndrome coronavirus 2 antigens. 2020 , 12, 571-576	59
1939	COVID-19: Learning from Lessons To Guide Treatment and Prevention Interventions. 2020 , 5,	44
1938	Key residues of the receptor binding motif in the spike protein of SARS-CoV-2 that interact with ACE2 and neutralizing antibodies. 2020 , 17, 621-630	250
1937	Diagnostic performance of immunochromatography assay for rapid detection of IgM and IgG in coronavirus disease 2019. 2020 , 92, 2567-2572	24
1936	Targeting Nephrylsin (NEP) pathways: A potential new hope to defeat COVID-19 ghost. 2020 , 178, 114057	22
1935	A Mouse Model of SARS-CoV-2 Infection and Pathogenesis. 2020 , 28, 124-133.e4	348
1934	Cathepsin L-selective inhibitors: A potentially promising treatment for COVID-19 patients. 2020 , 213, 107587	131
1933	Gene of the month: the 2019-nCoV/SARS-CoV-2 novel coronavirus spike protein. 2020 , 73, 366-369	83
1932	Potential COVID-19 therapeutics from a rare disease: weaponizing lipid dysregulation to combat viral infectivity. 2020 , 61, 972-982	28
1931	SARS-CoV-2 entry in host cells-multiple targets for treatment and prevention. 2020 , 175, 93-98	37
1930	Immune response in COVID-19: addressing a pharmacological challenge by targeting pathways triggered by SARS-CoV-2. 2020 , 5, 84	330
1929	Metatranscriptomic Characterization of Coronavirus Disease 2019 Identified a Host Transcriptional Classifier Associated With Immune Signaling. 2021 , 73, 376-385	41
1928	COVID-19: Structural predictions of viral success. 2020 , 74, e13568	
1927	Overview of lethal human coronaviruses. 2020 , 5, 89	128

1926	Thrombotic complications of COVID-19 may reflect an upregulation of endothelial tissue factor expression that is contingent on activation of endosomal NADPH oxidase. 2020 , 7,	30
1925	COVID19 in South Asians/Asian Indians: Heterogeneity of data and implications for pathophysiology and research. 2020 , 165, 108267	24
1924	Involvement of cardiovascular system as the critical point in coronavirus disease 2019 (COVID-19) prognosis and recovery. 2020 , 61, 381-395	29
1923	Role of RNA Guanine Quadruplexes in Favoring the Dimerization of SARS Unique Domain in Coronaviruses. 2020 , 11, 5661-5667	17
1922	Assessing the application of a pseudovirus system for emerging SARS-CoV-2 and re-emerging avian influenza virus H5 subtypes in vaccine development. 2020 , 43, 375-387	11
1921	Safety of Drugs During Previous and Current Coronavirus Pandemics: Lessons for Inflammatory Bowel Disease. 2020 , 14, 1632-1643	9
1920	Evolutionary relationships and sequence-structure determinants in human SARS coronavirus-2 spike proteins for host receptor recognition. 2020 , 88, 1387-1393	16
1919	Tackling SARS-CoV-2: proposed targets and repurposed drugs. 2020 , 12, 1579-1601	32
1918	Where are we with understanding of COVID-19?. 2020 , 78, 100738	3
1917	Molecular Diagnosis of COVID-19: Challenges and Research Needs. 2020 , 92, 10196-10209	155
1916	Structures of Human Antibodies Bound to SARS-CoV-2 Spike Reveal Common Epitopes and Recurrent Features of Antibodies. 2020 , 182, 828-842.e16	485
1915	COVID-19 diagnostics in context. 2020 , 12,	182
1914	Broad-Spectrum Coronavirus Fusion Inhibitors to Combat COVID-19 and Other Emerging Coronavirus Diseases. 2020 , 21,	23
1913	Advances in the use of chloroquine and hydroxychloroquine for the treatment of COVID-19. 2020 , 132, 604-613	19
1912	Targeting SARS-CoV-2 receptors as a means for reducing infectivity and improving antiviral and immune response: an algorithm-based method for overcoming resistance to antiviral agents. 2020 , 9, 1397-1406	31
1911	An approach towards development of monoclonal IgY antibodies against SARS CoV-2 spike protein (S) using phage display method: A review. 2020 , 85, 106654	24
1910	Adaptive Flexible Sialylated Nanogels as Highly Potent Influenza A Virus Inhibitors. 2020 , 132, 12517-12522	4
1909	Broad neutralization of SARS-related viruses by human monoclonal antibodies. 2020 , 369, 731-736	376

1908	Immune Response, Inflammation, and the Clinical Spectrum of COVID-19. 2020 , 11, 1441	320
1907	Vaccines and Therapies in Development for SARS-CoV-2 Infections. 2020 , 9,	31
1906	The vascular endothelium: the cornerstone of organ dysfunction in severe SARS-CoV-2 infection. 2020 , 24, 353	251
1905	Identification of bioactive compounds from as possible inhibitor of SARS-CoV-2 spike glycoprotein and non-structural protein-15: a pharmacoinformatics study. 2021 , 39, 4686-4700	49
1904	COVID-19 and the elderly: insights into pathogenesis and clinical decision-making. 2020 , 32, 1599-1608	138
1903	A Human Pluripotent Stem Cell-based Platform to Study SARS-CoV-2 Tropism and Model Virus Infection in Human Cells and Organoids. 2020 , 27, 125-136.e7	338
1902	Dengue Fever, COVID-19 (SARS-CoV-2), and Antibody-Dependent Enhancement (ADE): A Perspective. 2020 , 97, 662-667	54
1901	Clinical performance of different SARS-CoV-2 IgG antibody tests. 2020 , 92, 2243-2247	91
1900	SARS-CoV-2 antibody characterization in emergency department, hospitalized and convalescent patients by two semi-quantitative immunoassays. 2020 , 509, 117-125	34
1899	Brief clinical evaluation of six high-throughput SARS-CoV-2 IgG antibody assays. 2020 , 129, 104480	135
1898	Identification of SARS-CoV-2 Vaccine Epitopes Predicted to Induce Long-Term Population-Scale Immunity. 2020 , 1, 100036	39
1897	COVID-19: Drug Targets and Potential Treatments. 2020 , 63, 12359-12386	207
1896	Proteolytic Cleavage of the SARS-CoV-2 Spike Protein and the Role of the Novel S1/S2 Site. 2020 , 23, 101212	177
1895	Insights into SARS-CoV-2 genome, structure, evolution, pathogenesis and therapies: Structural genomics approach. 2020 , 1866, 165878	404
1894	Analysis of a SARS-CoV-2-Infected Individual Reveals Development of Potent Neutralizing Antibodies with Limited Somatic Mutation. 2020 , 53, 98-105.e5	260
1893	COVID-19 and the cardiovascular system: A review of current data, summary of best practices, outline of controversies, and illustrative case reports. 2020 , 226, 174-187	8
1892	Discovering small-molecule therapeutics against SARS-CoV-2. 2020 , 25, 1535-1544	61
1891	Letter to the Editor Regarding the Viewpoint "Evidence of the COVID-19 Virus Targeting the CNS: Tissue Distribution, Host-Virus Interaction, and Proposed Neurotropic Mechanism". 2020 , 11, 1192-1194	47

1890	The New Challenge of Geriatrics: Saving Frail Older People from the SARS-COV-2 Pandemic Infection. 2020 , 24, 466-470	54
1889	The Global Phosphorylation Landscape of SARS-CoV-2 Infection. 2020 , 182, 685-712.e19	439
1888	Severe Acute Respiratory Syndrome Coronavirus 2: From Gene Structure to Pathogenic Mechanisms and Potential Therapy. 2020 , 11, 1576	20
1887	Recombinant SARS-CoV-2 spike S1-Fc fusion protein induced high levels of neutralizing responses in nonhuman primates. 2020 , 38, 5653-5658	34
1886	SARS-CoV-2 pathophysiology and assessment of coronaviruses in CNS diseases with a focus on therapeutic targets. 2020 , 1866, 165889	38
1885	Gene signatures of SARS-CoV/SARS-CoV-2-infected ferret lungs in short- and long-term models. 2020 , 85, 104438	32
1884	The mechanism and energetics of a ligand-controlled hydrophobic gate in a mammalian two pore channel. 2020 , 22, 15664-15674	7
1883	SARS-CoV-2 Dissemination Through Peripheral Nerves Explains Multiple Organ Injury. 2020 , 14, 229	42
1882	Antibodies to SARS-CoV-2 and their potential for therapeutic passive immunization. 2020 , 9,	61
1881	GS-5734: a potentially approved drug by FDA against SARS-Cov-2. 2020 , 44, 12417-12429	9
1880	Pathological Role of Angiotensin II in Severe COVID-19. 2020 , 4, e138-e144	47
1879	Regulation of V-ATPase Activity and Organelle pH by Phosphatidylinositol Phosphate Lipids. 2020 , 8, 510	19
1878	Data and Text Mining Help Identify Key Proteins Involved in the Molecular Mechanisms Shared by SARS-CoV-2 and HIV-1. 2020 , 25,	6
1877	Neutralizing Antibody and Soluble ACE2 Inhibition of a Replication-Competent VSV-SARS-CoV-2 and a Clinical Isolate of SARS-CoV-2. 2020 , 28, 475-485.e5	252
1876	COVID-19 and the Chemical Senses: Supporting Players Take Center Stage. 2020 , 107, 219-233	148
1875	The ACE2 expression in Sertoli cells and germ cells may cause male reproductive disorder after SARS-CoV-2 infection. 2020 , 24, 9472-9477	92
1874	Natural history of COVID-19 and current knowledge on treatment therapeutic options. 2020 , 129, 110493	59
1873	The effect of latitude and PM on spreading of SARS-CoV-2 in tropical and temperate zone countries. 2020 , 266, 115176	10

1872	Potential benefits of combination of and Zn supplements to treat COVID-19. 2020 , 23, 100382	27
1871	CORDITE: The Curated CORona Drug InTERactions Database for SARS-CoV-2. 2020 , 23, 101297	19
1870	Update on therapeutic approaches and emerging therapies for SARS-CoV-2 virus. 2020 , 883, 173348	45
1869	Is the presence of lung injury in COVID-19 an independent risk factor for secondary lung cancer?. 2020 , 143, 110074	9
1868	Canonical and Noncanonical Autophagy as Potential Targets for COVID-19. 2020 , 9,	34
1867	Sex differences in SARS-CoV-2 infection rates and the potential link to prostate cancer. 2020 , 3, 374	77
1866	Tackling COVID-19 infection through complement-targeted immunotherapy. 2021 , 178, 2832-2848	22
1865	Human-IgG-Neutralizing Monoclonal Antibodies Block the SARS-CoV-2 Infection. 2020 , 32, 107918	107
1864	SARS-CoV-2 infection risk assessment in the endometrium: viral infection-related gene expression across the menstrual cycle. 2020 , 114, 223-232	37
1863	SARS-CoV-2 environmental contamination associated with persistently infected COVID-19 patients. 2020 , 14, 688-699	42
1862	Coronavirus Disease 2019-COVID-19. 2020 , 33,	386
1861	In-silico investigation of phytochemicals from <i>Asparagus racemosus</i> as plausible antiviral agent in COVID-19. 2020 , 1-15	26
1860	COVID-19 Hyperinflammation: What about Neutrophils?. 2020 , 5,	65
1859	Coronavirus in Continuous Flux: From SARS-CoV to SARS-CoV-2. 2020 , 7, 2001474	8
1858	SARS-CoV-2: An Update on Potential Antivirals in Light of SARS-CoV Antiviral Drug Discoveries. 2020 , 8,	29
1857	When science goes viral: The research response during three months of the COVID-19 outbreak. 2020 , 129, 110451	34
1856	Cathepsin B Protease Facilitates Chikungunya Virus Envelope Protein-Mediated Infection via Endocytosis or Macropinocytosis. 2020 , 12,	3
1855	Harnessing adenosine A2A receptors as a strategy for suppressing the lung inflammation and thrombotic complications of COVID-19: Potential of pentoxifylline and dipyridamole. 2020 , 143, 110051	14

1854	A Replication-Competent Vesicular Stomatitis Virus for Studies of SARS-CoV-2 Spike-Mediated Cell Entry and Its Inhibition. 2020 , 28, 486-496.e6	116
1853	Influence of Herbal Medicines on HMGB1 Release, SARS-CoV-2 Viral Attachment, Acute Respiratory Failure, and Sepsis. A Literature Review. 2020 , 21,	18
1852	COVID-19: Progress in diagnostics, therapy and vaccination. 2020 , 10, 7821-7835	77
1851	The impact of PD-L1 N-linked glycosylation on cancer therapy and clinical diagnosis. 2020 , 27, 77	30
1850	Preliminary Virtual Screening Studies to Identify GRP78 Inhibitors Which May Interfere with SARS-CoV-2 Infection. 2020 , 13,	39
1849	An updated analysis of variations in SARS-CoV-2 genome. 2020 , 44, 157-167	42
1848	Revisiting potential druggable targets against SARS-CoV-2 and repurposing therapeutics under preclinical study and clinical trials: A comprehensive review. 2020 , 81, 919	17
1847	Characteristics and serological patterns of COVID-19 convalescent plasma donors: optimal donors and timing of donation. 2020 , 60, 1765-1772	40
1846	On the origin and continuing evolution of SARS-CoV-2. 2020 , 7, 1012-1023	868
1845	Is SARS-CoV-2 Also an Enteric Pathogen With Potential Fecal-Oral Transmission? A COVID-19 Virological and Clinical Review. 2020 , 159, 53-61	115
1844	Antibody therapies for the treatment of COVID-19. 2020 , 3, 101-108	7
1843	The biological characteristics of SARS-CoV-2 spike protein Pro330-Leu650. 2020 , 38, 5071-5075	11
1842	Harnessing innate immunity to eliminate SARS-CoV-2 and ameliorate COVID-19 disease. 2020 , 52, 217-221	56
1841	Coronavirus membrane fusion mechanism offers a potential target for antiviral development. 2020 , 178, 104792	418
1840	COVID-19, immune system response, hyperinflammation and repurposing antirheumatic drugs. 2020 , 50, 620-632	232
1839	COVID-19 Drug Discovery Using Intensive Approaches. 2020 , 21,	40
1838	COVID-19 pathophysiology: A review. 2020 , 215, 108427	761
1837	COVID-19: Immunology and treatment options. 2020 , 215, 108448	321

1836	Infectious Diseases Society of America Guidelines on the Treatment and Management of Patients with COVID-19. 2020 ,	432
1835	A short review on antibody therapy for COVID-19. 2020 , 35, 100682	40
1834	Human monoclonal antibodies block the binding of SARS-CoV-2 spike protein to angiotensin converting enzyme 2 receptor. 2020 , 17, 647-649	259
1833	SARS-CoV-2: Olfaction, Brain Infection, and the Urgent Need for Clinical Samples Allowing Earlier Virus Detection. 2020 , 11, 1200-1203	218
1832	SARS-CoV-2, testosterone and frailty in males (PROTEGGIMI): A multidimensional research project. 2021 , 9, 19-22	35
1831	Can Zn Be a Critical Element in COVID-19 Treatment?. 2021 , 199, 550-558	66
1830	Structural Basis of SARS-CoV-2- and SARS-CoV-Receptor Binding and Small-Molecule Blockers as Potential Therapeutics. 2021 , 61, 465-493	19
1829	Microstructure, pathophysiology, and potential therapeutics of COVID-19: A comprehensive review. 2021 , 93, 275-299	33
1828	Human coronavirus spike protein-host receptor recognition. 2021 , 161, 39-53	15
1827	A Founder Effect Led Early SARS-CoV-2 Transmission in Spain. 2021 , 95,	24
1826	Cholesterol, lipoproteins, and COVID-19: Basic concepts and clinical applications. 2021 , 1866, 158849	35
1825	A diagnostic genomic signal processing (GSP)-based system for automatic feature analysis and detection of COVID-19. 2021 , 22, 1197-1205	8
1824	Emerging Human Coronavirus Infections (SARS, MERS, and COVID-19): Where They Are Leading Us. 2021 , 40, 5-53	13
1823	Advances in research on ACE2 as a receptor for 2019-nCoV. 2021 , 78, 531-544	50
1822	Molecular Insights into Small-Molecule Drug Discovery for SARS-CoV-2. 2021 , 60, 9789-9802	23
1821	Molecular Insights into Small-Molecule Drug Discovery for SARS-CoV-2. 2021 , 133, 9873-9886	4
1820	Hypothetical targets and plausible drugs of coronavirus infection caused by SARS-CoV-2. 2021 , 68, 318-332	4
1819	What HIV in the Brain Can Teach Us About SARS-CoV-2 Neurological Complications?. 2021 , 37, 255-265	7

1818	Neutralizing and cross-reacting antibodies: implications for immunotherapy and SARS-CoV-2 vaccine development. 2021 , 17, 84-87	15
1817	Primed for global coronavirus pandemic: Emerging research and clinical outcome. 2021 , 209, 112862	10
1816	Screening for natural and derived bio-active compounds in preclinical and clinical studies: One of the frontlines of fighting the coronaviruses pandemic. 2021 , 85, 153311	25
1815	Characteristics of SARS-CoV-2 and COVID-19. 2021 , 19, 141-154	1287
1814	COVID-19: Discovery, diagnostics and drug development. 2021 , 74, 168-184	133
1813	Evolution of SARS-CoV-2 genome from December 2019 to late March 2020: Emerged haplotypes and informative Tag nucleotide variations. 2021 , 93, 2010-2020	4
1812	Hunting coronavirus by transmission electron microscopy - a guide to SARS-CoV-2-associated ultrastructural pathology in COVID-19 tissues. 2021 , 78, 358-370	45
1811	Rapid diagnostics of coronavirus disease 2019 in early stages using nanobiosensors: Challenges and opportunities. 2021 , 223, 121704	15
1810	COVID-19: Current understanding of its Pathophysiology, Clinical presentation and Treatment. 2021 , 97, 312-320	172
1809	Genome-wide CRISPR Screens Reveal Host Factors Critical for SARS-CoV-2 Infection. 2021 , 184, 76-91.e13	202
1808	Higher binding affinity of furin for SARS-CoV-2 spike (S) protein D614G mutant could be associated with higher SARS-CoV-2 infectivity. 2021 , 103, 611-616	24
1807	Site-specific N-glycosylation Characterization of Recombinant SARS-CoV-2 Spike Proteins. 2020 , 100058	62
1806	Human Hematopoietic Stem, Progenitor, and Immune Cells Respond Ex Vivo to SARS-CoV-2 Spike Protein. 2021 , 17, 253-265	27
1805	The role of kallikrein-kinin and renin-angiotensin systems in COVID-19 infection. 2021 , 135, 170428	5
1804	The wastewater microbiome: A novel insight for COVID-19 surveillance. 2021 , 764, 142867	11
1803	Angiotensin-converting enzyme 2 (ACE2): SARS-CoV-2 receptor and RAS modulator. 2021 , 11, 1-12	40
1802	Neutralizing antibody response elicited by SARS-CoV-2 receptor-binding domain. 2021 , 17, 654-655	1
1801	Gastrointestinal and renal complications in SARS-CoV-2-infected patients: Role of immune system. 2021 , 93, e12999	3

1800	Repurposing existing drugs for the treatment of COVID-19/SARS-CoV-2 infection: A review describing drug mechanisms of action. 2021 , 183, 114296	44
1799	SARS-CoV 2; Possible alternative virus receptors and pathophysiological determinants. 2021 , 146, 110368	8
1798	Dynamics of Neutralizing Antibody Titers in the Months After Severe Acute Respiratory Syndrome Coronavirus 2 Infection. 2021 , 223, 197-205	119
1797	Pathophysiological mechanisms of liver injury in COVID-19. 2021 , 41, 20-32	99
1796	Exploring the magic bullets to identify Achilles' heel in SARS-CoV-2: Delving deeper into the sea of possible therapeutic options in Covid-19 disease: An update. 2021 , 147, 111887	6
1795	New vaccine production platforms used in developing SARS-CoV-2 vaccine candidates. 2021 , 39, 197-201	34
1794	N-Glycan Modification in Covid-19 Pathophysiology: In vitro Structural Changes with Limited Functional Effects. 2021 , 41, 335-344	9
1793	Dysregulation of endocytic machinery and ACE2 in small airways of smokers and COPD patients can augment their susceptibility to SARS-CoV-2 (COVID-19) infections. 2021 , 320, L158-L163	9
1792	Can food and food supplements be deployed in the fight against the COVID 19 pandemic?. 2021 , 1865, 129801	18
1791	Human cathepsin X/Z is a biologically active homodimer. 2021 , 1869, 140567	1
1790	Nanotechnology for virus treatment. 2021 , 36, 101031	25
1789	Antiviral drugs targeting endosomal membrane proteins inhibit distant animal and human pathogenic viruses. 2021 , 186, 104990	9
1788	Systemic and mucosal antibody responses specific to SARS-CoV-2 during mild versus severe COVID-19. 2021 , 147, 545-557.e9	160
1787	Assessing the consequences of environmental exposures on the expression of the human receptor and proteases involved in SARS-CoV-2 cell-entry. 2021 , 195, 110317	7
1786	Dalbavancin binds ACE2 to block its interaction with SARS-CoV-2 spike protein and is effective in inhibiting SARS-CoV-2 infection in animal models. 2021 , 31, 17-24	43
1785	Why is COVID-19 less severe in children? A review of the proposed mechanisms underlying the age-related difference in severity of SARS-CoV-2 infections. 2020 ,	166
1784	SARS-CoV-2: Targeted managements and vaccine development. 2021 , 58, 16-29	21
1783	Occurrence, fate and removal of SARS-CoV-2 in wastewater: Current knowledge and future perspectives. 2021 , 9, 104870	30

1782	Drug repurposing approach to combating coronavirus: Potential drugs and drug targets. 2021 , 41, 1375-1426	11
1781	Two-pore and TRP cation channels in endolysosomal osmo-/mechanosensation and volume regulation. 2021 , 1868, 118921	8
1780	evaluation of flavonoids as effective antiviral agents on the spike glycoprotein of SARS-CoV-2. 2021 , 28, 1040-1051	30
1779	Humoral immune responses and neutralizing antibodies against SARS-CoV-2; implications in pathogenesis and protective immunity. 2021 , 538, 187-191	39
1778	Direct inhibitory effect on viral entry of influenza A and SARS-CoV-2 viruses by azithromycin. 2021 , 54, e12953	8
1777	Coronapp: A web application to annotate and monitor SARS-CoV-2 mutations. 2021 , 93, 3238-3245	42
1776	Current methods for diagnosis of human coronaviruses: pros and cons. 2021 , 413, 2311-2330	24
1775	Prefusion spike protein stabilization through computational mutagenesis. 2021 , 89, 399-408	1
1774	High GRP78 levels in Covid-19 infection: A case-control study. 2021 , 265, 118781	42
1773	The SARS-CoV-2 envelope and membrane proteins modulate maturation and retention of the spike protein, allowing assembly of virus-like particles. 2021 , 296, 100111	74
1772	Early use of non-steroidal anti-inflammatory drugs in COVID-19 might reverse pathogenesis, prevent complications and improve clinical outcomes. 2021 , 133, 110982	31
1771	A review on possible mechanistic insights of Nitazoxanide for repurposing in COVID-19. 2021 , 891, 173748	31
1770	Genetic influences on viral-induced cytokine responses in the lung. 2021 , 14, 14-25	15
1769	Genetic Screens Identify Host Factors for SARS-CoV-2 and Common Cold Coronaviruses. 2021 , 184, 106-119.e1450	50
1768	COVID-19: neonatal-perinatal perspectives. 2021 , 41, 940-951	33
1767	Design of an epitope-based peptide vaccine against the SARS-CoV-2: a vaccine-informatics approach. 2021 , 22, 1309-1323	15
1766	Lung and Kidney ACE2 and TMPRSS2 in Renin-Angiotensin System Blocker-Treated Comorbid Diabetic Mice Mimicking Host Factors That Have Been Linked to Severe COVID-19. 2021 , 70, 759-771	10
1765	Quantifying the risk of indoor drainage system in multi-unit apartment building as a transmission route of SARS-CoV-2. 2021 , 762, 143056	10

1764	Using Cardiovascular Cells from Human Pluripotent Stem Cells for COVID-19 Research: Why the Heart Fails. 2021 , 16, 385-397	13
1763	Alimentary system is directly attacked by SARS-COV-2 and further prevents immune dysregulation caused by COVID-19. 2021 , 75, e13893	1
1762	Micronutrients and bioactive substances: Their potential roles in combating COVID-19. 2021 , 84, 111103	16
1761	Spike glycoprotein and host cell determinants of SARS-CoV-2 entry and cytopathic effects. 2020 ,	39
1760	3D culture models to study SARS-CoV-2 infectivity and antiviral candidates: From spheroids to bioprinting. 2021 , 44, 31-42	11
1759	COVID-19 prevalence among health-care workers of Gastroenterology department: An audit from a tertiary-care hospital in India. 2021 , 5, 56-63	4
1758	Evaluation of serum IgM and IgG antibodies in COVID-19 patients by enzyme linked immunosorbent assay. 2021 , 93, 2857-2866	10
1757	Are losartan and imatinib effective against SARS-CoV2 pathogenesis? A pathophysiologic-based in silico study. 2021 , 9, 1	16
1756	Integrating Proteomics for Facilitating Drug Identification and Repurposing During an Emerging Virus Pandemic. 2021 , 7, 1303-1316	0
1755	Hyperactivation of P2X7 receptors as a culprit of COVID-19 neuropathology. 2021 , 26, 1044-1059	44
1754	SARS-CoV-2 vaccine candidates in rapid development. 2021 , 17, 644-653	18
1753	Coronavirus biology and replication: implications for SARS-CoV-2. 2021 , 19, 155-170	830
1752	Molecular diversity of coronavirus host cell entry receptors. 2021 , 45,	37
1751	Challenges of drug development during the COVID-19 pandemic: Key considerations for clinical trial designs. 2021 , 87, 2170-2185	7
1750	Dysregulation of Angiotensin Converting Enzyme 2 Expression and Function in Comorbid Disease Conditions Possibly Contributes to Coronavirus Infectious Disease 2019 Complication Severity. 2021 , 99, 17-28	9
1749	Superiority of cilostazol among antiplatelet FDA-approved drugs against COVID 19 M and spike protein: Drug repurposing approach. 2021 , 82, 217-229	6
1748	Naringenin is a powerful inhibitor of SARS-CoV-2 infection in vitro. 2021 , 163, 105255	42
1747	Biochemical and immunological aspects of COVID-19 infection and therapeutical intervention of oral low dose cytokine therapy: a systematic review. 2021 , 43, 22-29	0

1746	Exploring lectin-glycan interactions to combat COVID-19: Lessons acquired from other enveloped viruses. 2021 , 31, 358-371	15
1745	Low serum neutralizing anti-SARS-CoV-2 S antibody levels in mildly affected COVID-19 convalescent patients revealed by two different detection methods. 2021 , 18, 936-944	62
1744	Viral infection neutralization tests: A focus on severe acute respiratory syndrome-coronavirus-2 with implications for convalescent plasma therapy. 2021 , 31, e2170	20
1743	Comprehensive annotations of the mutational spectra of SARS-CoV-2 spike protein: a fast and accurate pipeline. 2021 , 68, 1625-1638	16
1742	A Dielectric Modulated Biosensor for SARS-CoV-2. 2021 , 21, 14483-14490	8
1741	A survey assessing the early effects of COVID-19 pandemic on oral and maxillofacial surgery training programs. 2021 , 131, 27-42	15
1740	Targeted therapy strategies against SARS-CoV-2 cell entry mechanisms: A systematic review of in vitro and in vivo studies. 2021 , 236, 2364-2392	43
1739	Origin-independent analysis links SARS-CoV-2 local genomes with COVID-19 incidence and mortality. 2021 , 22, 905-913	0
1738	Potential Pathogenicity Determinants Identified from Structural Proteomics of SARS-CoV and SARS-CoV-2. 2021 , 38, 702-715	12
1737	Azithromycin in the treatment of COVID-19: a review. 2021 , 19, 147-163	71
1736	Immune response and possible therapeutics in COVID-19.. 2020 , 11, 960-977	2
1735	Ligand-Based Approaches for the Development of Drugs Against SARS-CoV-2. 2021 , 117	1
1734	Evaluation of COVID-19 Antigen Fluorescence Immunoassay Test for Rapid Detection of SARS-CoV-2. 2021 , 13, 91-93	3
1733	COVID-19: A Novel Disease. 2021 , 7-19	
1732	Nursing diagnoses, results, and interventions in the care for Covid-19 patients in critical condition. 2021 , 55, e20200499	2
1731	DBPOM: a comprehensive database of pharmaco-omics for cancer precision medicine.	
1730	The Genetic Variant of SARS-CoV-2: would It Matter for Controlling the Devastating Pandemic?. 2021 , 17, 1476-1485	11
1729	Introduction to the Virus and Its Infection Stages. 2021 , 1-26	

1728	Population Dynamics and Structural Effects at Short and Long Range Support the Hypothesis of the Selective Advantage of the G614 SARS-CoV-2 Spike Variant. 2021 , 38, 1966-1979	6
1727	SARS-CoV-2 Host cell interactions and pathways: understanding its physiology, pathology, and targeted drug therapy. 2021 , 185-210	
1726	Inflammatory Mechanism and Clinical Implication of Asthma in COVID-19. 2021 , 15, 11795484211042711	1
1725	Host cell glutamine metabolism as a potential antiviral target. 2021 , 135, 305-325	12
1724	Exploring the Association Between Sialic Acid and SARS-CoV-2 Spike Protein Through a Molecular Dynamics-Based Approach.. 2020 , 2, 614652	9
1723	Targeting Endolysosomal Two-Pore Channels to Treat Cardiovascular Disorders in the Novel COroNaVirus Disease 2019. 2021 , 12, 629119	9
1722	Inhibition of SARS-CoV-2 pseudovirus invasion by ACE2 protecting and Spike neutralizing peptides: An alternative approach to COVID19 prevention and therapy. 2021 , 17, 2957-2969	4
1721	Neutralization assay with SARS-CoV-1 and SARS-CoV-2 spike pseudotyped murine leukemia virions. 2021 , 18, 1	35
1720	Temporal increase in D614G mutation of SARS-CoV-2 in the Middle East and North Africa. 2021 , 7, e06035	15
1719	Computational analysis of dynamic allostery and control in the SARS-CoV-2 main protease. 2021 , 18, 20200591	17
1718	The role of CD4FoxP3 regulatory T cells in the immunopathogenesis of COVID-19: implications for treatment. 2021 , 17, 1507-1520	19
1717	Prevalence and 6-month recovery of olfactory dysfunction: a multicentre study of 1363 COVID-19 patients. 2021 , 290, 451-461	75
1716	Computational assessment of saikosaponins as adjuvant treatment for COVID-19: molecular docking, dynamics, and network pharmacology analysis. 2021 , 25, 1889-1904	12
1715	SARS-CoV-2 spike glycoprotein vaccine candidate NVX-CoV2373 immunogenicity in baboons and protection in mice. <i>Nature Communications</i> , 2021 , 12, 372	17.4 176
1714	The Main Sources and Potential Effects of COVID-19-Related Discrimination. 2021 , 1318, 705-725	4
1713	Elucidation of host-virus surfaceome interactions using spatial proteotyping. 2021 , 109, 105-134	2
1712	The key role of the central cavity in sodium transport through ligand-gated two-pore channels. 2021 , 23, 18461-18474	2
1711	Integrated photothermal decontamination device for N95 respirators. 2021 , 11, 1822	5

1710	COVID 19 infection: Pediatric perspectives. 2021 , 2, e12375	11
1709	Exploring G protein-coupled receptors and yeast surface display strategies for viral detection in baker's yeast: SARS-CoV-2 as a case study. 2021 , 21,	2
1708	Oral manifestations and dental practice recommendations during COVID-19 pandemic. 2021 , 10, 102-109	1
1707	Spectroscopic investigation on the affinity of SARS-CoV-2 spike protein to gold nano-particles. 2021 , 40, 100356	5
1706	Genome-scale metabolic modeling reveals SARS-CoV-2-induced host metabolic reprogramming and identifies metabolic antiviral targets. 2021 ,	1
1705	A nano perspective behind the COVID-19 pandemic. 2021 , 6, 842-855	1
1704	Optimised Method for the Production and Titration of Lentiviral Vectors Pseudotyped with the SARS-CoV-2 Spike. 2021 , 11,	
1703	Prediction of the COVID-19 epidemic trends based on SEIR and AI models. 2021 , 16, e0245101	16
1702	Domains and Functions of Spike Protein in Sars-Cov-2 in the Context of Vaccine Design. 2021 , 13,	73
1701	The role of chemical biology in the fight against SARS-CoV-2. 2021 , 478, 157-177	2
1700	Impact of COVID-19 on Mitochondrial-Based Immunity in Aging and Age-Related Diseases. 2020 , 12, 614650	22
1699	Micro-fusion inhibition tests: quantifying antibody neutralization of virus-mediated cell-cell fusion. 2021 , 102,	11
1698	Cell fusion as a link between the SARS-CoV-2 spike protein, COVID-19 complications, and vaccine side effects.. 2021 , 12, 2476-2488	1
1697	Computational Drug Repurposing for the Development of Drugs Against Coronaviruses. 2021 , 135	
1696	Morphological Analysis of Angiotensin-Converting Enzyme 2 Expression in the Salivary Glands and Associated Tissues. 2021 , 30, 265-272	3
1695	Human induced pluripotent stem cells as a tool for disease modeling and drug screening for COVID-19. 2020 , 44, e20200198	1
1694	Serial co-expression analysis of host factors from SARS-CoV viruses highly converges with former high-throughput screenings and proposes key regulators. 2021 , 22, 1038-1052	
1693	Insight into molecular characteristics of SARS-CoV-2 spike protein following D614G point mutation, a molecular dynamics study. 2021 , 1-9	10

1692	SARS-CoV-2 infection elicits a rapid neutralizing antibody response that correlates with disease severity. 2021 , 11, 2608	40
1691	Pathogenesis of Multiple Organ Injury in COVID-19 and Potential Therapeutic Strategies. 2021 , 12, 593223	42
1690	Antibody response to SARS-CoV-2 in infected patients with different clinical outcome. 2021 , 93, 2548-2552	5
1689	The Power of Using Novel Nanopore Sequencing Technology for Diagnosis, Genomic and Pathological Studies of Covid-19. 2021 , 271, 04024	
1688	Endolysosomal Ca signaling in cardiovascular health and disease. 2021 , 363, 203-269	8
1687	A comprehensive review on current COVID-19 detection methods: From lab care to point of care diagnosis. 2021 , 2, 100119	17
1686	Proteolytic Activation of SARS-CoV-2 Spike at the S1/S2 Boundary: Potential Role of Proteases beyond Furin. 2021 , 7, 264-272	60
1685	The journey of SARS-CoV-2 in human hosts: a review of immune responses, immunosuppression, and their consequences. 2021 , 12, 1771-1794	6
1684	Protective Effects of Lactoferrin against SARS-CoV-2 Infection In Vitro. 2021 , 13,	38
1683	Hydroxychloroquine-mediated inhibition of SARS-CoV-2 entry is attenuated by TMPRSS2. 2021 , 17, e1009212	85
1682	Environmentally-induced contributes to the severity of COVID-19 through fostering expression of SARS-CoV-2 receptor NRPs and glycan metabolism. 2021 , 11, 7970-7983	2
1681	Characterization of MW06, a human monoclonal antibody with cross-neutralization activity against both SARS-CoV-2 and SARS-CoV. 2021 , 13, 1953683	8
1680	Furin cleavage sites naturally occur in coronaviruses. 2020 , 50, 102115	25
1679	Newly designed analogues from SARS-CoV inhibitors mimicking the druggable properties against SARS-CoV-2 and its novel variants.. 2021 , 11, 31460-31476	
1678	Molecular mechanism, diagnosis, and potential treatment for novel coronavirus (COVID-19): a current literature review and perspective. 2021 , 11, 94	3
1677	SARS-CoV-2 specific antibody and neutralization assays reveal the wide range of the humoral immune response to virus. 2021 , 4, 129	46
1676	ACE2 expression is elevated in airway epithelial cells from older and male healthy individuals but reduced in asthma. 2021 , 26, 442-451	30
1675	Short linear motif candidates in the cell entry system used by SARS-CoV-2 and their potential therapeutic implications. 2021 , 14,	31

1674	Rapid Development of SARS-CoV-2 Spike Protein Receptor-Binding Domain Self-Assembled Nanoparticle Vaccine Candidates. 2021 , 15, 2738-2752	57
1673	SARS-CoV-2-neutralising monoclonal antibodies for treatment of COVID-19.	11
1672	Paired heavy and light chain signatures contribute to potent SARS-CoV-2 neutralization in public antibody responses. 2021 ,	14
1671	Clinical Manifestations of Cytokine Storm and Immune Response to COVID-19: Literature Review. 2021 , 11, 151-174	
1670	Rationale for Effective Prophylaxis Against COVID-19 Through Simultaneous Blockade of Both Endosomal and Non-Endosomal SARS-CoV-2 Entry into Host Cell. 2021 , 14, 431-433	4
1669	COVID-19 Pandemic and Vaccines. 2021 , 205-235	
1668	Specific epitopes form extensive hydrogen-bonding networks to ensure efficient antibody binding of SARS-CoV-2: Implications for advanced antibody design. 2021 , 19, 1661-1671	4
1667	Effective virus-neutralizing activities in antisera from the first wave of survivors of severe COVID-19. 2021 , 6,	3
1666	Designing a conserved peptide-based subunit vaccine against SARS-CoV-2 using immunoinformatics approach. 2021 , 9, 8	2
1665	A comparative study of human betacoronavirus spike proteins: structure, function and therapeutics. 2021 , 166, 697-714	8
1664	Impaired Consciousness in a Coronavirus Disease 2019 Patient Caused by Low Serum Sodium: A Case Report. 2021 , 4, 293-296	
1663	Computational and network pharmacology analysis of bioflavonoids as possible natural antiviral compounds in COVID-19. 2021 , 22, 100504	22
1662	Immunogenicity of Multiple Doses of pDNA Vaccines against SARS-CoV-2. 2021 , 14,	1
1661	MVA Vector Vaccines Inhibit SARS CoV-2 Replication in Upper and Lower Respiratory Tracts of Transgenic Mice and Prevent Lethal Disease. 2021 ,	5
1660	Intravenous immunoglobulin as adjuvant therapy for COVID-19: A case report and literature review. 2021 , 9, 2050313X211029699	
1659	Human iPSC-Based Modeling of Central Nerve System Disorders for Drug Discovery. 2021 , 22,	10
1658	Computational drug repurposing strategy predicted peptide-based drugs that can potentially inhibit the interaction of SARS-CoV-2 spike protein with its target (humanACE2). 2021 , 16, e0245258	9
1657	SARS-CoV-2 infection and disease outcomes in non-human primate models: advances and implications. 2021 , 10, 1881-1889	1

1656	The scRNA-seq Expression Profiling of the Receptor ACE2 and the Cellular Protease TMPRSS2 Reveals Human Organs Susceptible to SARS-CoV-2 Infection. 2021 , 18,	34
1655	Lysine 164 is critical for SARS-CoV-2 Nsp1 inhibition of host gene expression. 2021 , 102,	9
1654	The therapeutic potential of inorganic polyphosphate: A versatile physiological polymer to control coronavirus disease (COVID-19). 2021 , 11, 6193-6213	6
1653	The dual role of the immune system in the course of COVID-19. The fatal impact of the aging immune system. 2021 , 46, 1-9	5
1652	A Study on COVID-19 Prediction and Detection With Artificial Intelligence-Based Real-Time Healthcare Monitoring Systems. 2021 , 52-63	
1651	Structure and Function of Major SARS-CoV-2 and SARS-CoV Proteins. 2021 , 15, 11779322211025876	15
1650	Temperature effect on the SARS-CoV-2: A molecular dynamics study of the spike homotrimeric glycoprotein. 2021 , 19, 1848-1862	9
1649	Furin cleavage of SARS-CoV-2 Spike promotes but is not essential for infection and cell-cell fusion. 2021 , 17, e1009246	135
1648	Immune response to COVID-19 infection: a double-edged sword. 2021 , 44, 187-196	7
1647	Exploring COVID-19: Relating the spike protein to infectivity, pathogenicity and Immunogenicity. 2021 , 5, 001-010	0
1646	Proteomics-Based Insights Into the SARS-CoV-2-Mediated COVID-19 Pandemic: A Review of the First Year of Research. 2021 , 20, 100103	7
1645	Apilimod alters TGF β signaling pathway and prevents cardiac fibrotic remodeling. 2021 , 11, 6491-6506	4
1644	Expression of the SARS-CoV-2 Receptor ACE2 and Proinflammatory Cytokines Induced by the Periodontopathic Bacterium in Human Respiratory Epithelial Cells. 2021 , 22,	13
1643	Triazavirin might be the new hope to fight Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2). 2021 , 70, 18-25	2
1642	Targeting conserved viral virulence determinants by single domain antibodies to block SARS-CoV2 infectivity.	
1641	Novel signaling pathways regulate SARS-CoV and SARS-CoV-2 infectious disease. 2021 , 100, e24321	7
1640	Environmentally-induced mdig is a major contributor to the severity of COVID-19 through fostering expression of SARS-CoV-2 receptor NRPs and glycan metabolism.	
1639	Sentiment analysis of COVID-19 vaccine in Indonesia using Na \hat{c} ve Bayes Algorithm. 2021 , 1088, 012045	6

1638	Low compositions of human toll-like receptor 7/8-stimulating RNA motifs in the MERS-CoV, SARS-CoV and SARS-CoV-2 genomes imply a substantial ability to evade human innate immunity. 2021 , 9, e11008	1
1637	Inhibitors of endosomal acidification suppress SARS-CoV-2 replication and relieve viral pneumonia in hACE2 transgenic mice. 2021 , 18, 46	15
1636	Effects of Covid-19 on male reproductive system. 2021 , 47, 185-190	7
1635	Remote nursing training model combined with proceduralization in the intensive care unit dealing with patients with COVID-19. 2021 , 9, 999-1004	2
1634	Can be a potential candidate to target immunity, inflammation, and infection - The trinity of coronavirus disease 2019. 2021 , 7, e05990	6
1633	Challenges for Targeting SARS-CoV-2 Proteases as a Therapeutic Strategy for COVID-19. 2021 , 7, 1457-1468	33
1632	Biological activity-based modeling identifies antiviral leads against SARS-CoV-2. 2021 , 39, 747-753	14
1631	Nanotechnology: an emerging approach to combat COVID-19. 2021 , 4, 1-12	19
1630	COVID-19 and Dentistry in 72 Questions: An Overview of the Literature. 2021 , 10,	6
1629	SARS-CoV-2 (Covid-19): A short update on molecular biochemistry, pathology, diagnosis and therapeutic strategies. 2021 , 4563221992390	0
1628	Ultimate COVID-19 Detection Protocol Based on Saliva Sampling and qRT-PCR with Risk Probability Assessment. 2021 , 30, 13-31	
1627	Expression of human ACE2 N-terminal domain, part of the receptor for SARS-CoV-2, in fusion with maltose binding protein, E. coli ribonuclease I and human RNase A.	
1626	COVID-19 Antibody Tests and Their Limitations. 2021 , 6, 593-612	56
1625	Effects of Cell Proteostasis Network on the Survival of SARS-CoV-2. 2021 , 23, 8	6
1624	Generation of Nonmosaic, Two-Pore Channel 2 Biallelic Knockout Pigs in One Generation by CRISPR-Cas9 Microinjection Before Oocyte Insemination. 2021 , 4, 132-146	5
1623	Demystifying Excess Immune Response in COVID-19 to Reposition an Orphan Drug for Down-Regulation of NF- κ B: A Systematic Review. 2021 , 13,	7
1622	Insights into neutralizing antibody responses in individuals exposed to SARS-CoV-2 in Chile. 2021 , 7,	12
1621	Mechanistic and Therapeutic Implications of Extracellular Vesicles as a Potential Link Between Covid-19 and Cardiovascular Disease Manifestations. 2021 , 9, 640723	5


1620	Recombinant SARS-CoV-2 S Protein Binds to Glycans of the Lactosamine Family in vitro. 2021 , 86, 243-247	8
1619	Phylogenetic analysis in the understanding of the current COVID-19 pandemic and its utility in vaccine and antiviral design and assessment. 2021 , 17, 2437-2444	2
1618	A plasmid DNA-launched SARS-CoV-2 reverse genetics system and coronavirus toolkit for COVID-19 research. 2021 , 19, e3001091	60
1617	Experimental Models of SARS-CoV-2 Infection: Possible Platforms to Study COVID-19 Pathogenesis and Potential Treatments. 2021 ,	5
1616	A CRISPR-Cas12a-derived biosensor enabling portable personal glucose meter readout for quantitative detection of SARS-CoV-2. 2021 , 118, 1587-1596	18
1615	SARS-CoV-2 genomic surveillance in Rondônia, Brazilian Western Amazon. 2021 , 11, 3770	2
1614	The Host Interactome of Spike Expands the Tropism of SARS-CoV-2. 2021 ,	0
1613	Targeting Host Cell Proteases to Prevent SARS-CoV-2 Invasion. 2021 , 22, 192-201	17
1612	Comparison of the binding characteristics of SARS-CoV and SARS-CoV-2 RBDs to ACE2 at different temperatures by MD simulations. 2021 , 22, 1122-1136	13
1611	Drugs, Metabolites, and Lung Accumulating Small Lysosomotropic Molecules: Multiple Targeting Impedes SARS-CoV-2 Infection and Progress to COVID-19. 2021 , 22,	8
1610	Multi-organ proteomic landscape of COVID-19 autopsies. 2021 , 184, 775-791.e14	108
1609	COVID-19: Understanding Inter-Individual Variability and Implications for Precision Medicine. 2021 , 96, 446-463	23
1608	The Spike D614G mutation increases SARS-CoV-2 infection of multiple human cell types. 2021 , 10,	86
1607	Simultaneous Inhibition of SARS-CoV-2 Entry Pathways by Cyclosporine. 2021 , 12, 930-944	10
1606	Innate Immune Cells and Hypertension: Neutrophils and Neutrophil Extracellular Traps (NETs). 2021 , 11, 1575-1589	3
1605	Axial Chiral Binaphthoquinone and Perylenequinones from the Stromata of Are SARS-CoV-2 Entry Inhibitors. 2021 , 84, 436-443	8
1604	Identification of COVID-19 prognostic markers and therapeutic targets through meta-analysis and validation of Omics data from nasopharyngeal samples.	
1603	Current understanding of the impact of COVID-19 on gastrointestinal disease: Challenges and openings. 2021 , 27, 449-469	12

1602	SARS-CoV-2 tropism, entry, replication, and propagation: Considerations for drug discovery and development. 2021 , 17, e1009225	74
1601	COVID-19: Diagnostics, Therapeutic Advances, and Vaccine Development. 2021 , 8, 1-15	7
1600	Retrospective study of COVID-19 seroprevalence among tissue donors at the onset of the outbreak before implementation of strict lockdown measures in France. 2021 , 22, 511-518	2
1599	Membrane remodeling by SARS-CoV-2 - double-enveloped viral replication. 2021 , 10, 17	3
1598	Elevation in viral entry genes and innate immunity compromise underlying increased infectivity and severity of COVID-19 in cancer patients. 2021 , 11, 4533	1
1597	SARS-CoV-2 proteins: Are they useful as targets for COVID-19 drugs and vaccines?. 2021 ,	1
1596	Multiple Sites on SARS-CoV-2 Spike Protein are Susceptible to Proteolysis by Cathepsins B, K, L, S, and V.	
1595	A Combination Adjuvant for the Induction of Potent Antiviral Immune Responses for a Recombinant SARS-CoV-2 Protein Vaccine. 2021 ,	1
1594	Immunopathogenesis and perspectives for immunotherapy of coronavirus infection. 2021 , 12, 7-22	0
1593	Familiar dermatologic drugs as therapies for COVID-19. 2021 , 112, 118-126	0
1592	Drug Repurposing and Polypharmacology to Fight SARS-CoV-2 Through Inhibition of the Main Protease. 2021 , 12, 636989	17
1591	TMPRSS11D and TMPRSS13 Activate the SARS-CoV-2 Spike Protein. 2021 , 13,	27
1590	Computational and Experimental Studies Reveal That Thymoquinone Blocks the Entry of Coronaviruses Into In Vitro Cells. 2021 , 10, 483-494	14
1589	SARS-CoV-2 vaccine candidates: A beginning of the end of COVID-19 pandemic- Editorial. 2021 , 62, 460-462	2
1588	Role of the SphK-S1P-S1PRs pathway in invasion of the nervous system by SARS-CoV-2 infection. 2021 , 48, 637-650	3
1587	A single mRNA immunization boosts cross-variant neutralizing antibodies elicited by SARS-CoV-2 infection. 2021 ,	47
1586	BNT162b vaccines protect rhesus macaques from SARS-CoV-2. 2021 , 592, 283-289	223
1585	Evolution of SARS-CoV-2 Envelope, Membrane, Nucleocapsid, and Spike Structural Proteins from the Beginning of the Pandemic to September 2020: A Global and Regional Approach by Epidemiological Week. 2021 , 13,	26

1584	Neutralization of viruses with European, South African, and United States SARS-CoV-2 variant spike proteins by convalescent sera and BNT162b2 mRNA vaccine-elicited antibodies. 2021,	54
1583	Prevalence of Foreign Body Aspiration in Children in a Tertiary Care Hospital. 2021, 59, 111-115	
1582	Potential differences in cleavage of the S protein and type-1 interferon together control human coronavirus infection, propagation, and neuropathology within the central nervous system. 2021,	8
1581	Early Transmission Dynamics, Spread, and Genomic Characterization of SARS-CoV-2 in Panama. 2021, 27, 612-615	13
1580	A Timely Call to Arms: COVID-19, the Circadian Clock, and Critical Care. 2021, 36, 55-70	11
1579	Silence of the Lambs: The Immunological and Molecular Mechanisms of COVID-19 in Children in Comparison with Adults. 2021, 9,	5
1578	DNA-launched RNA replicon vaccines induce potent anti-SARS-CoV-2 immune responses in mice. 2021, 11, 3125	7
1577	A rapid and cost-effective multiplex ARMS-PCR method for the simultaneous genotyping of the circulating SARS-CoV-2 phylogenetic clades. 2021, 93, 2962-2970	8
1576	High Initial Titres of Anti-Spike Antibodies following SARS-CoV-2 Infection is Associated with Faster Decay Rates at Four Months Follow-Up.	
1575	Plant Metabolites as Antiviral Preparations Against Coronaviruses. 2021, 24, 1028-1038	
1574	Development and pre-clinical evaluation of Newcastle disease virus-vectored SARS-CoV-2 intranasal vaccine candidate.	0
1573	Radiological and clinical spectrum of COVID-19: A major concern for public health. 2021, 13, 53-63	6
1572	Immunogenicity and Neutralizing Activity Comparison of SARS-CoV-2 Spike Full-Length and Subunit Domain Proteins in Young Adult and Old-Aged Mice. 2021, 9,	1
1571	Genetic and epigenetic factors associated with increased severity of Covid-19. 2021, 45, 1158-1174	18
1570	The race to treat COVID-19: Potential therapeutic agents for the prevention and treatment of SARS-CoV-2. 2021, 213, 113157	15
1569	SARS-CoV-2 triggers an MDA-5-dependent interferon response which is unable to control replication in lung epithelial cells. 2021,	67
1568	The FDA-approved drug cobicistat synergizes with remdesivir to inhibit SARS-CoV-2 replication.	3
1567	Docking and toxicity assessment of compounds as potential antiviral agents against SARS-CoV-2. 2021, 33, 1-24	12

1566	Viral Prevalence in Wild Serval Population is Driven by Season and Sex. 2021 , 18, 113-122	
1565	Automated Western immunoblotting detection of anti-SARS-CoV-2 serum antibodies. 2021 , 40, 1309-1317	8
1564	Current Understanding of Novel Coronavirus: Molecular Pathogenesis, Diagnosis, and Treatment Approaches. 2021 , 1, 30-66	11
1563	Single-cell longitudinal analysis of SARS-CoV-2 infection in human airway epithelium identifies target cells, alterations in gene expression, and cell state changes. 2021 , 19, e3001143	62
1562	Repurposing Quinoline and Artemisinin Antimalarials as Therapeutics for SARS-CoV-2: Rationale and Implications. 2021 , 4, 613-623	3
1561	ES SARS-CoV-2 in vitro ES ES 2021 , 86, 291-296	
1560	Review Recent Development of Detection Methods for Controlling COVID-19 Outbreak. 2021 , 168, 037511	3
1559	Cytoplasmic domain and enzymatic activity of ACE2 is not required for PI4KB dependent endocytosis entry of SARS-CoV-2 into host cells.	
1558	A Commentary on Realities of Developing COVID-19 Vaccines Discussed through the Global Health Safety Perspective. 2021 , 9,	3
1557	Common Genetic Variation in Humans Impacts In Vitro Susceptibility to SARS-CoV-2 Infection. 2021 , 16, 505-518	22
1556	SARS-CoV-2 variants reveal features critical for replication in primary human cells. 2021 , 19, e3001006	26
1555	Persistent positivity of SARS-CoV-2 nucleic acid in asymptomatic healthcare worker: infective virion or inactive nucleic acid?. 2021 , 14,	3
1554	Performance evaluation of the Roche Elecsys Anti-SARS-CoV-2 S immunoassay.	9
1553	Antidepressant and antipsychotic drugs reduce viral infection by SARS-CoV-2 and fluoxetine show antiviral activity against the novel variants in vitro.	7
1552	COVID-19 into Chemical Science Perspective: Chemical Preventive Measures and Drug Development. 2021 , 6, 2010-2028	3
1551	Longitudinal Profiling of Antibody Response in Patients With COVID-19 in a Tertiary Care Hospital in Beijing, China. 2021 , 12, 614436	10
1550	Identification of Plitidepsin as Potent Inhibitor of SARS-CoV-2-Induced Cytopathic Effect After a Drug Repurposing Screen. 2021 , 12, 646676	17
1549	Potential neutralizing antibodies discovered for novel corona virus using machine learning. 2021 , 11, 5261	28

1548	Evidence for CAT gene being functionally involved in the susceptibility of COVID-19. 2021 , 35, e21384	2
1547	Do Cellular Entry Mechanisms of SARS-Cov-2 Affect Myocardial Cells and Contribute to Cardiac Injury in COVID-19 Patients?. 2021 , 12, 630778	0
1546	A rational design of a multi-epitope vaccine against SARS-CoV-2 which accounts for the glycan shield of the spike glycoprotein. 2021 , 1-15	8
1545	Inhibition of S-protein RBD and hACE2 Interaction for Control of SARSCoV- 2 Infection (COVID-19). 2021 , 21, 689-703	3
1544	Blockade of SARS-CoV-2 spike protein-mediated cell-cell fusion using COVID-19 convalescent plasma. 2021 , 11, 5558	9
1543	A Clinical-Stage Cysteine Protease Inhibitor blocks SARS-CoV-2 Infection of Human and Monkey Cells. 2021 , 16, 642-650	23
1542	A Rapid and Efficient Screening System for Neutralizing Antibodies and Its Application for SARS-CoV-2. 2021 , 12, 653189	11
1541	COVID-19 vaccines: rapid development, implications, challenges and future prospects. 2021 , 34, 711-733	71
1540	COVID-19 Pandemic: Review of Contemporary and Forthcoming Detection Tools. 2021 , 14, 1049-1082	21
1539	Antivirals with common targets against highly pathogenic viruses. 2021 , 184, 1604-1620	24
1538	Diagnosis for COVID-19: current status and future prospects. 2021 , 21, 269-288	14
1537	Proof of Concept for a Quick and Highly Sensitive On-Site Detection of SARS-CoV-2 by Plasmonic Optical Fibers and Molecularly Imprinted Polymers. 2021 , 21,	25
1536	Essentials in saline pharmacology for nasal or respiratory hygiene in times of COVID-19. 2021 , 77, 1275-1293	10
1535	Establishment of a well-characterized SARS-CoV-2 lentiviral pseudovirus neutralization assay using 293T cells with stable expression of ACE2 and TMPRSS2. 2021 , 16, e0248348	41
1534	One or two injections of MVA-vectored vaccine shields hACE2 transgenic mice from SARS-CoV-2 upper and lower respiratory tract infection. 2021 , 118,	27
1533	SARS-CoV-2 Infects Human Pluripotent Stem Cell-Derived Cardiomyocytes, Impairing Electrical and Mechanical Function. 2021 , 16, 478-492	29
1532	Community Use of Face Masks against the Spread of COVID-19. 2021 , 18,	5
1531	Pan-India novel coronavirus SARS-CoV-2 genomics and global diversity analysis in spike protein. 2021 , 7, e06564	13

1530	Cathepsin L plays a key role in SARS-CoV-2 infection in humans and humanized mice and is a promising target for new drug development. 2021 , 6, 134	106
1529	mRNA vaccination boosts cross-variant neutralizing antibodies elicited by SARS-CoV-2 infection. 2021 , 372,	217
1528	Essential requirement for JPT2 in NAADP-evoked Ca signaling. 2021 , 14,	42
1527	Blockade of SARS-CoV-2 infection in vitro by highly potent PI3K- m mTOR/BRD4 inhibitor. 2021 ,	8
1526	SARS-CoV 2 in Cellular Level: Do we dominate the whole picture and how can we intervene?. 2021 , 11, 248-253	
1525	An Overview of a Year with COVID-19: What We Know?. 2021 , 18, em286	2
1524	MRC5 cells engineered to express ACE2 serve as a model system for the discovery of antivirals targeting SARS-CoV-2. 2021 , 11, 5376	9
1523	Stem cells and COVID-19: are the human amniotic cells a new hope for therapies against the SARS-CoV-2 virus?. 2021 , 12, 155	5
1522	Repurposing of anticancer phytochemicals for identifying potential fusion inhibitor for SARS-CoV-2 using molecular docking and molecular dynamics (MD) simulations. 2021 , 1-18	4
1521	An Active Site Inhibitor Induces Conformational Penalties for ACE2 Recognition by the Spike Protein of SARS-CoV-2. 2021 , 125, 2533-2550	7
1520	Repurposing the Ebola and Marburg Virus Inhibitors Tilorone, Quinacrine, and Pyronaridine: Activity against SARS-CoV-2 and Potential Mechanisms. 2021 , 6, 7454-7468	20
1519	Correlates of Vaccine-Induced Protection against SARS-CoV-2. 2021 , 9,	26
1518	Comparative research on nucleocapsid and spike glycoprotein as the rapid immunodetection targets of COVID-19 and establishment of immunoassay strips. 2021 , 131, 6-12	8
1517	Severely low testosterone in males with COVID-19: A case-control study. 2021 , 9, 1043-1052	35
1516	An Overview of Spike Surface Glycoprotein in Severe Acute Respiratory Syndrome-Coronavirus. 2021 , 8, 637550	4
1515		0
1514	The characteristics of gastrointestinal symptoms in patients with severe COVID-19: a systematic review and meta-analysis. 2021 , 56, 409-420	10
1513	Clomipramine suppresses ACE2-mediated SARS-CoV-2 entry.	1

1512	1,2,3,4,6-Pentagalloyl Glucose, a RBD-ACE2 Binding Inhibitor to Prevent SARS-CoV-2 Infection. 2021 , 12, 634176	11
1511	A spatial multi-scale fluorescence microscopy toolbox discloses entry checkpoints of SARS-CoV-2 variants in Vero E6 cells.	
1510	Innate and Adaptive Immunity Alterations in Metabolic Associated Fatty Liver Disease and Its Implication in COVID-19 Severity. 2021 , 12, 651728	3
1509	Stable neutralizing antibody levels 6 months after mild and severe COVID-19 episodes. 2021 , 2, 313-320.e4	38
1508	Systematic analysis of SARS-CoV-2 infection of an ACE2-negative human airway cell. 2021 ,	4
1507	Significant non-existence of sequences in genomes and proteomes. 2021 , 49, 3139-3155	2
1506	COMPLEXITY-BASED ANALYSIS OF THE ALTERATIONS IN THE STRUCTURE OF CORONAVIRUSES. 2021 , 29, 2150123	5
1505	Fomite Transmission, Physicochemical Origin of Virus-Surface Interactions, and Disinfection Strategies for Enveloped Viruses with Applications to SARS-CoV-2. 2021 , 6, 6509-6527	22
1504	Severe Acute Respiratory Syndrome-Associated Coronavirus 2 Infection and Organ Dysfunction in the ICU: Opportunities for Translational Research. 2021 , 3, e0374	12
1503	Germline Genetic Variants of Viral Entry and Innate Immunity May Influence Susceptibility to SARS-CoV-2 Infection: Toward a Polygenic Risk Score for Risk Stratification. 2021 , 12, 653489	2
1502	Genome-wide CRISPR screening identifies TMEM106B as a proviral host factor for SARS-CoV-2. 2021 , 53, 435-444	62
1501	Different Therapeutic Strategies to Tackle the Infection Associated with COVID-19.	
1500	Clinical Reviews of COVID-19 for Otorhinolaryngologists. 2021 , 28, 1-13	0
1499	Toward the Effective Bioengineering of a Pathological Tissue for Cardiovascular Disease Modeling: Old Strategies and New Frontiers for Prevention, Diagnosis, and Therapy. 2020 , 7, 591583	1
1498	The RNA sensor MDA5 detects SARS-CoV-2 infection.	1
1497	Circular RNA Vaccines against SARS-CoV-2 and Emerging Variants.	7
1496	Quantitative assays reveal cell fusion at minimal levels of SARS-CoV-2 spike protein and fusion from without. 2021 , 24, 102170	16
1495	Polyunsaturated Ω 3 fatty acids inhibit ACE2-controlled SARS-CoV-2 binding and cellular entry. 2021 , 11, 5207	24

1494	Gene signatures and potential therapeutic targets of Middle East respiratory syndrome coronavirus (MERS-CoV)-infected human lung adenocarcinoma epithelial cells. 2021 , 54, 845-857	7
1493	What makes (hydroxy)chloroquine ineffective against COVID-19: insights from cell biology. 2021 , 13, 175-184	5
1492	Plasma ACE2 levels predict outcome of COVID-19 in hospitalized patients.	2
1491	Molecular strategies for antibody binding and escape of SARS-CoV-2 and its mutations.	1
1490	Precision therapeutic targets for COVID-19. 2021 , 18, 66	15
1489	Lysosomal ion channels involved in cellular entry and uncoating of enveloped viruses: Implications for therapeutic strategies against SARS-CoV-2. 2021 , 94, 102360	13
1488	Ultrapotent SARS-CoV-2 neutralizing antibodies with protective efficacy against newly emerged mutational variants.	1
1487	Glycans of SARS-CoV-2 Spike Protein in Virus Infection and Antibody Production. 2021 , 8, 629873	19
1486	Chinese herbal medicine: Fighting SARS-CoV-2 infection on all fronts. 2021 , 270, 113869	23
1485	Recent advances in nanomaterials based biosensors for point of care (PoC) diagnosis of Covid-19 - A minireview. 2021 , 137, 116205	32
1484	Impairment of SARS-CoV-2 spike glycoprotein maturation and fusion activity by the broad-spectrum anti-infective drug nitazoxanide.	4
1483	COVID-19 and thrombosis: From bench to bedside. 2021 , 31, 143-160	39
1482	SARS-CoV-2 requires cholesterol for viral entry and pathological syncytia formation. 2021 , 10,	49
1481	Drug repurposing screens reveal cell-type-specific entry pathways and FDA-approved drugs active against SARS-Cov-2. 2021 , 35, 108959	77
1480	SARS-CoV-2, Inflammatory Apoptosis, and Cytokine Storm Syndrome. 2021 , 1, 22-31	1
1479	Identification and Characterization of Species-Specific Severe Acute Respiratory Syndrome Coronavirus 2 Physicochemical Properties. 2021 , 20, 2942-2952	2
1478	Seroprevalence of SARS-CoV-2 Assessed by Four Chemiluminescence Immunoassays and One Immunocromatography Test for SARS-Cov-2. 2021 , 9, 649781	0
1477	SARS-CoV-2 Viral Entry Proteins in Hyperandrogenemic Female Mice: Implications for Women with PCOS and COVID-19. 2021 , 22,	6

1476	A stable platform for the production of virus-like particles pseudotyped with the severe acute respiratory syndrome coronavirus-2 (SARS-CoV-2) spike protein. 2021 , 295, 198305	6
1475	Convalescent Plasma for the Prevention and Treatment of COVID-19: A Systematic Review and Quantitative Analysis. 2021 , 7, e25500	8
1474	Elucidating the Antiviral Mechanism of Different MARCH Factors. 2021 , 12,	3
1473	Multiple sites on SARS-CoV-2 spike protein are susceptible to proteolysis by cathepsins B, K, L, S, and V. 2021 , 30, 1131-1143	14
1472	Phytochemicals from Plant Foods as Potential Source of Antiviral Agents: An Overview. 2021 , 14,	12
1471	Neuropilin-1 Mediates SARS-CoV-2 Infection in Bone Marrow-derived Macrophages.	0
1470	COVID-19 PANDEMIC: A SYSTEMATIC REVIEW ON THE CORONAVIRUSES OF ANIMALS AND SARS-CoV-2. 2021 , 9, 117-130	0
1469	A real-time and high-throughput neutralization test based on SARS-CoV-2 pseudovirus containing monomeric infrared fluorescent protein as reporter. 2021 , 10, 894-904	4
1468	Bioinformatic analysis of the whole genome sequences of SARS-CoV-2 from Indonesia. 2021 , 13, 145-155	1
1467	PRINCIPAIS ASPECTOS DO NOVO CORONAVÍRUS SARS-CoV-2: UMA AMPLA REVISÃO. 2021 , 25, 73-90	
1466	The Involvement of MicroRNAs in SARS-CoV-2 Infection Comorbid with HIV-Associated Preeclampsia. 2021 , 23, 20	4
1465	Analysis of glycosylation and disulfide bonding of wild-type SARS-CoV-2 spike glycoprotein. 2021 ,	6
1464	Cardiovascular protective properties of oxytocin against COVID-19. 2021 , 270, 119130	12
1463	The furin cleavage site in the SARS-CoV-2 spike protein is required for transmission in ferrets. 2021 , 6, 899-909	206
1462	The role of cell surface sialic acids for SARS-CoV-2 infection. 2021 , 31, 1245-1253	25
1461	Human ACE2 receptor polymorphisms and altered susceptibility to SARS-CoV-2. 2021 , 4, 475	43
1460	Mechanism of Viral Glycoprotein Targeting by Membrane-Associated RING-CH Proteins. 2021 , 12,	6
1459	Multifunctional angiotensin converting enzyme 2, the SARS-CoV-2 entry receptor, and critical appraisal of its role in acute lung injury. 2021 , 136, 111193	14

1458	The Role of the SARS-CoV-2 S-Protein Glycosylation in the Interaction of SARS-CoV-2/ACE2 and Immunological Responses. 2021 , 34, 165-173	22
1457	Term Human Placental Trophoblasts Express SARS-CoV-2 Entry Factors ACE2, TMPRSS2, and Furin. 2021 , 6,	21
1456	A majority of uninfected adults show preexisting antibody reactivity against SARS-CoV-2. 2021 , 6,	18
1455	SARS-CoV-2 Entry inhibitors targeting virus-ACE2 or virus-TMPRSS2 interactions. 2021 ,	1
1454	Deciphering the Role of Endolysosomal Ca Channels in Immunity. 2021 , 12, 656965	1
1453	SARS-CoV-2 binding to ACE2 triggers pericyte-mediated angiotensin-evoked cerebral capillary constriction.	4
1452	Landscape of humoral immune responses against SARS-CoV-2 in patients with COVID-19 disease and the value of antibody testing. 2021 , 7, e06836	3
1451	Coiled-coil heterodimers with increased stability for cellular regulation and sensing SARS-CoV-2 spike protein-mediated cell fusion. 2021 , 11, 9136	2
1450	Host cell membrane capture by the SARS CoV-2 spike protein fusion intermediate.	1
1449	Efficacy and breadth of adjuvanted SARS-CoV-2 receptor-binding domain nanoparticle vaccine in macaques. 2021 ,	5
1448	Drug synergy of combinatory treatment with remdesivir and the repurposed drugs fluoxetine and itraconazole effectively impairs SARS-CoV-2 infection in vitro. 2021 , 178, 2339-2350	32
1447	Neuropathophysiology of coronavirus disease 2019: neuroinflammation and blood brain barrier disruption are critical pathophysiological processes that contribute to the clinical symptoms of SARS-CoV-2 infection. 2021 , 29, 939-963	15
1446	Coronavirus entry: how we arrived at SARS-CoV-2. 2021 , 47, 113-120	27
1445	Pharmaceutical Aspects and Clinical Evaluation of COVID-19 Vaccines. 2021 , 50, 743-779	8
1444	SARS-CoV-2 and SARS-CoV Spike-Mediated Cell-Cell Fusion Differ in Their Requirements for Receptor Expression and Proteolytic Activation. 2021 , 95,	37
1443	N-terminal domain antigenic mapping reveals a site of vulnerability for SARS-CoV-2. 2021 , 184, 2332-2347.e16	391
1442	SARS-CoV-2 variant B.1.1.7 is susceptible to neutralizing antibodies elicited by ancestral spike vaccines. 2021 , 29, 529-539.e3	225
1441	COVID-19 and the human innate immune system. 2021 , 184, 1671-1692	175

1440	Computationally prioritized drugs inhibit SARS-CoV-2 infection and syncytia formation.	1
1439	Systemic and Oral Immunogenicity of Porcine Epidemic Diarrhea Virus Antigen Fused to Poly-Fc of Immunoglobulin G and Expressed in XT/FT Plants. 2021 , 12, 653064	1
1438	Natural resources to control COVID-19: could lactoferrin amend SARS-CoV-2 infectivity?. 2021 , 9, e11303	5
1437	Detection of SARS-CoV-2 antibodies in pediatric kidney transplant patients. 2021 , 22, 123	3
1436	Novel Human Lung Tissue Model for the Study of SARS-CoV-2 Entry, Inflammation and New Therapeutics.	1
1435	IL-6 modulation for COVID-19: the right patients at the right time?. 2021 , 9,	12
1434	Linking COVID-19 and Heme-Driven Pathophysiologies: A Combined Computational-Experimental Approach. 2021 , 11,	5
1433	Markers of Polyfunctional SARS-CoV-2 Antibodies in Convalescent Plasma. 2021 , 12,	24
1432	Biological characteristics and biomarkers of novel SARS-CoV-2 facilitated rapid development and implementation of diagnostic tools and surveillance measures. 2021 , 177, 112969	6
1431	Twelve-month specific IgG response to SARS-CoV-2 receptor-binding domain among COVID-19 convalescent plasma donors in Wuhan.	3
1430	Impact of virus genetic variability and host immunity for the success of COVID-19 vaccines. 2021 , 136, 111272	42
1429	Host-Directed FDA-Approved Drugs with Antiviral Activity against SARS-CoV-2 Identified by Hierarchical In Silico/In Vitro Screening Methods. 2021 , 14,	9
1428	SARS-CoV-2 immune evasion by variant B.1.427/B.1.429. 2021 ,	62
1427	Molecular Aspects Concerning the Use of the SARS-CoV-2 Receptor Binding Domain as a Target for Preventive Vaccines. 2021 , 7, 757-767	24
1426	Review of the COVID-19 Risk in Multiple Sclerosis. 2021 , 3, 68-77	12
1425	Prefusion conformation of SARS-CoV-2 receptor-binding domain favours interactions with human receptor ACE2.	1
1424	Mutational heterogeneity in spike glycoproteins of severe acute respiratory syndrome coronavirus 2. 2021 , 11, 236	
1423	Affinity Sensors for the Diagnosis of COVID-19. 2021 , 12,	27

1422	Genome-wide CRISPR activation screen identifies novel receptors for SARS-CoV-2 entry.	2
1421	Coagulation factors directly cleave SARS-CoV-2 spike and enhance viral entry. 2021,	9
1420	Influenza virus and SARS-CoV-2: pathogenesis and host responses in the respiratory tract. 2021, 19, 425-441	47
1419	The Mechanisms and Animal Models of SARS-CoV-2 Infection. 2021, 9, 578825	13
1418	A Canadian perspective on severe acute respiratory syndrome coronavirus 2 infection and treatment: how prevalent underlying inflammatory disease contributes to pathogenesis. 2021, 99, 173-194	3
1417	Structural basis for broad sarbecovirus neutralization by a human monoclonal antibody. 2021,	14
1416	Intermolecular Interaction Analyses on SARS-CoV-2 Spike Protein Receptor Binding Domain and Human Angiotensin-Converting Enzyme 2 Receptor-Blocking Antibody/Peptide Using Fragment Molecular Orbital Calculation. 2021, 12, 4059-4066	10
1415	Reduced neutralization of SARS-CoV-2 B.1.1.7 variant by convalescent and vaccine sera. 2021, 184, 2201-2211. e79	69
1414	COVID-19 and Cardiovascular Disease: From Bench to Bedside. 2021, 128, 1214-1236	57
1413	Human cell receptors: potential drug targets to combat COVID-19. 2021, 53, 813-842	6
1412	Combination of a Sindbis-SARS-CoV-2 spike vaccine and DX40 antibody elicits protective immunity against SARS-CoV-2 induced disease and potentiates long-term SARS-CoV-2-specific humoral and T-cell immunity. 2021,	3
1411	Role of Serine Proteases and Host Cell Receptors Involved in Proteolytic Activation, Entry of SARS-CoV-2 and Its Current Therapeutic Options. 2021, 14, 1883-1892	5
1410	Human-Based Advanced Approaches to Investigate Lung Fibrosis and Pulmonary Effects of COVID-19. 2021, 8, 644678	10
1409	A human-airway-on-a-chip for the rapid identification of candidate antiviral therapeutics and prophylactics. 2021, 5, 815-829	62
1408	D. Don Inhibits the Main Proteases (M and TMPRSS2) of Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2) Infection. 2021, 13,	5
1407	Cardiovascular Impacts on COVID-19 Infected Patients. 2021, 8, 670659	4
1406	A weak COPI binding motif in the cytoplasmic tail of SARS-CoV-2 spike glycoprotein is necessary for its cleavage, glycosylation, and localization. 2021, 595, 1758-1767	5
1405	ICPMS based multiplexed bioassay: Principles, approaches and progresses. 1-26	3

1404	SARS-CoV-2 B.1.617.2 Delta variant replication, sensitivity to neutralising antibodies and vaccine breakthrough.	62
1403	Therapeutic approaches to coronavirus infection according to "One Health" concept. 2021 , 136, 81-88	1
1402	Maternal respiratory SARS-CoV-2 infection in pregnancy is associated with a robust inflammatory response at the maternal-fetal interface. 2021 , 2, 591-610.e10	43
1401	SARS-CoV-2 vaccines for cancer patients: a call to action. 2021 , 148, 316-327	26
1400	SARS-CoV-2 cell entry and targeted antiviral development. 2021 , 11, 3879-3879	5
1399	Formulation of a Composite Nasal Spray Enabling Enhanced Surface Coverage and Prophylaxis of SARS-COV-2. 2021 , 33, e2008304	18
1398	Safety, immunogenicity and protection provided by unadjuvanted and adjuvanted formulations of recombinant plant-derived virus-like particle vaccine candidate for COVID-19 in non-human primates.	2
1397	Wrapping and Blocking of Influenza A Viruses by Sialylated 2D Nanoplatfoms. 2021 , 8, 2100285	5
1396	Latest updates on SARS-CoV-2 genomic characterization, drug, and vaccine development; a comprehensive bioinformatics review. 2021 , 154, 104809	2
1395	Impaired Cytotoxic Response in PBMCs From Patients With COVID-19 Admitted to the ICU: Biomarkers to Predict Disease Severity. 2021 , 12, 665329	12
1394	Targeting the viral-entry facilitators of SARS-CoV-2 as a therapeutic strategy in COVID-19. 2021 , 93, 5260-52768	
1393	SARS-CoV-2 spike protein induces brain pericyte immunoreactivity in absence of productive viral infection.	1
1392	Pathophysiological Association of Endothelial Dysfunction with Fatal Outcome in COVID-19. 2021 , 22,	9
1391	Zebrafish as a Translational Model: An Experimental Alternative to Study the Mechanisms Involved in Anosmia and Possible Neurodegenerative Aspects of COVID-19?. 2021 , 8,	4
1390	The Discovery of Naringenin as Endolysosomal Two-Pore Channel Inhibitor and Its Emerging Role in SARS-CoV-2 Infection. 2021 , 10,	10
1389	The Immunological Role of the Placenta in SARS-CoV-2 Infection-Viral Transmission, Immune Regulation, and Lactoferrin Activity. 2021 , 22,	3
1388	Allicin inhibits SARS-CoV-2 replication and abrogates the antiviral host response in the Calu-3 proteome.	1
1387	Multifactorial Traits of SARS-CoV-2 Cell Entry Related to Diverse Host Proteases and Proteins. 2021 , 29, 249-262	0

1386	Mass spectrometry-based proteomic platforms for better understanding of SARS-CoV-2 induced pathogenesis and potential diagnostic approaches. 2021 , 21, e2000279	7
1385	Targeting Multiple Signal Transduction Pathways of SARS-CoV-2: Approaches to COVID-19 Therapeutic Candidates. 2021 , 26,	7
1384	Potent Molecular Feature-based Neutralizing Monoclonal Antibodies as Promising Therapeutics Against SARS-CoV-2 Infection. 2021 , 8, 670815	5
1383	Effect of Biomedical Materials in the Implementation of a Long and Healthy Life Policy. 2021 , 9, 865	9
1382	CD4 T Cells of Prostate Cancer Patients Have Decreased Immune Responses to Antigens Derived From SARS-CoV-2 Spike Glycoprotein. 2021 , 12, 629102	3
1381	Exploring SARS-CoV-2 Spikes Glycoproteins for Designing Potential Antiviral Targets. 2021 , 34, 510-521	0
1380	Interfering with Host Proteases in SARS-CoV-2 Entry as a Promising Therapeutic Strategy. 2021 ,	1
1379	SARS-CoV-2 inactivation by human defensin HNP1 and retrocyclin RC-101.	1
1378	Multichannel Immunosensor Platform for the Rapid Detection of SARS-CoV-2 and Influenza A(H1N1) Virus. 2021 , 13, 22262-22270	12
1377	Stem cell therapy in COVID-19: Pooled evidence from SARS-CoV-2, SARS-CoV, MERS-CoV and ARDS: A systematic review. 2021 , 137, 111300	12
1376	Does Trypsin Oral Spray (Viruprotect/ColdZyme) Protect against COVID-19 and Common Colds or Induce Mutation? Caveats in Medical Device Regulations in the European Union. 2021 , 18,	1
1375	Pathogenesis and Management of COVID-19. 2021 , 11, 77-93	2
1374	Bidirectional genome-wide CRISPR screens reveal host factors regulating SARS-CoV-2, MERS-CoV and seasonal coronaviruses. 2021 ,	5
1373	Dynamic Continuum of Nanoscale Peptide Assemblies Facilitates Endocytosis and Endosomal Escape. 2021 , 21, 4078-4085	9
1372	Identification of T Cell Epitopes in the Spike Glycoprotein of Severe Acute Respiratory Syndrome Coronavirus 2 in Rhesus Macaques. 2021 , 206, 2527-2535	1
1371	Bidirectional genome-wide CRISPR screens reveal host factors regulating SARS-CoV-2, MERS-CoV and seasonal HCoVs. 2021 ,	3
1370	Identification of SARS-CoV-2 viral entry inhibitors using machine learning and cell-based pseudotyped particle assay. 2021 , 38, 116119	3
1369	Potent and Persistent Antibody Response in COVID-19 Recovered Patients. 2021 , 12, 659041	2

1368	Highly functional Cellular Immunity in SARS-CoV-2 Non-Seroconvertors is associated with immune protection.	0
1367	Dual-Fluorescence Labeling Pseudovirus for Real-Time Imaging of Single SARS-CoV-2 Entry in Respiratory Epithelial Cells. 2021 , 13, 24477-24486	3
1366	Comprehensive Comparison of RNA-Seq Data of SARS-CoV-2, SARS-CoV and MERS-CoV Infections: Alternative Entry Routes and Innate Immune Responses. 2021 , 12, 656433	3
1365	Small-Molecule Inhibitors of the Coronavirus Spike: ACE2 Protein-Protein Interaction as Blockers of Viral Attachment and Entry for SARS-CoV-2. 2021 , 7, 1519-1534	20
1364	Cross-reactive coronavirus antibodies with diverse epitope specificities and Fc effector functions. 2021 , 2, 100313	24
1363	The Physiological TMPRSS2 Inhibitor HAI-2 Alleviates SARS-CoV-2 Infection. 2021 , 95,	2
1362	Comparative immunogenicity analysis of intradermal versus intramuscular administration of SARS-CoV-2 RBD epitope peptide-based immunogen In vivo. 2021 , 23, 104843	1
1361	Kite-shaped molecules block SARS-CoV-2 cell entry at a post-attachment step.	
1360	SARS-CoV-2: One Year in the Pandemic. What Have We Learned, the New Vaccine Era and the Threat of SARS-CoV-2 Variants. 2021 , 9,	4
1359	The Contribution of Biophysics and Structural Biology to Current Advances in COVID-19. 2021 , 50, 493-523	3
1358	SARS-CoV-2-Morphology, Transmission and Diagnosis during Pandemic, Review with Element of Meta-Analysis. 2021 , 10,	4
1357	Extensive genetic diversity with novel mutations in spike glycoprotein of severe acute respiratory syndrome coronavirus 2, Bangladesh in late 2020. 2021 , 41, 100889	5
1356	Human pluripotent stem cell-based organoids and cell platforms for modelling SARS-CoV-2 infection and drug discovery. 2021 , 53, 102207	8
1355	Unravelling Pathophysiology of Neurological and Psychiatric Complications of COVID-19 Using Brain Organoids. 2021 , 10738584211015136	7
1354	Endothelial Dysfunction and SARS-CoV-2 Infection: Association and Therapeutic Strategies. 2021 , 10,	9
1353	FunCoup 5: Functional Association Networks in All Domains of Life, Supporting Directed Links and Tissue-Specificity. 2021 , 433, 166835	4
1352	Single-virus fusion measurements yield an opportunistic model for SARS-CoV-2 fusion.	1
1351	SARS-CoV-2 spike glycoprotein-reactive T cells can be readily expanded from COVID-19 vaccinated donors.	0

1350	Structural basis for cell-type specific evolution of viral fitness by SARS-CoV-2.	2
1349	Lipid kinases VPS34 and PIKfyve coordinate a phosphoinositide cascade to regulate Retriever-mediated recycling on endosomes.	0
1348	SARS-CoV-2-neutralising monoclonal antibodies to prevent COVID-19.	1
1347	Human Immunodeficiency Viruses Pseudotyped with SARS-CoV-2 Spike Proteins Infect a Broad Spectrum of Human Cell Lines through Multiple Entry Mechanisms. 2021 , 13,	8
1346	FN3-based monobodies selective for the receptor binding domain of the SARS-CoV-2 spike protein. 2021 , 62, 79-85	1
1345	SARS-COV-2 Recombinant Receptor-Binding-Domain (RBD) Induces Neutralising Antibodies Against Variant Strains of SARS-CoV-2 and SARS-CoV-1.	
1344	Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) seroprevalence: Navigating the absence of a gold standard.	1
1343	Exploring insights of hydroxychloroquine, a controversial drug in Covid-19: An update. 2021 , 151, 112106	3
1342	Ceramide and Related Molecules in Viral Infections. 2021 , 22,	6
1341	Prophylactic effects of probiotics on respiratory viruses including COVID-19: a review. 2021 , 30, 1-9	7
1340	Importance of community containment measures in combating the COVID-19 epidemic: From the perspective of urban planning. 2021 , 24, 363-371	4
1339	Previous SARS-CoV-2 Infection Increases B.1.1.7 Cross-Neutralization by Vaccinated Individuals. 2021 , 13,	6
1338	Understanding Post Entry Sorting of Adenovirus Capsids; A Chance to Change Vaccine Vector Properties. 2021 , 13,	3
1337	Use of Lateral Flow Immunoassay to Characterize SARS-CoV-2 RBD-Specific Antibodies and Their Ability to React with the UK, SA and BR P.1 Variant RBDs. 2021 , 11,	5
1336	N-Glycosylation Network Construction and Analysis to Modify Glycans on the Spike (S) Glycoprotein of SARS-CoV-2. 2021 , 1,	2
1335	Real-time, selective, and low-cost detection of trace level SARS-CoV-2 spike-protein for cold-chain food quarantine. 2021 , 5, 12	9
1334	Mathematical Multidimensional Modelling and Structural Artificial Intelligence Pipelines Provide Insights for the Designing of Highly Specific AntiSARS-CoV2 Agents. 2021 , 15, 877	2
1333	MPI8 is Potent Against SARS-CoV-2 by Inhibiting Dually and Selectively the SARS-CoV-2 Main Protease and the Host Cathepsin L.	

1332	Sex differences in the incidence, mortality, and fatality of COVID-19 in Peru. 2021 , 16, e0253193	10
1331	Identification of a High-Frequency Intrahost SARS-CoV-2 Spike Variant with Enhanced Cytopathic and Fusogenic Effects. 2021 , 12, e0078821	4
1330	SARS-CoV-2 Infects Syncytiotrophoblast and Activates Inflammatory Responses in the Placenta. 2021 ,	5
1329	Innate Immune Response to SARS-CoV-2 Infection: From Cells to Soluble Mediators. 2021 , 22,	13
1328	Interleukin-6 Perpetrator of the COVID-19 Cytokine Storm. 2021 , 36, 1-11	7
1327	Potential Therapeutic Targets and Vaccine Development for SARS-CoV-2/COVID-19 Pandemic Management: A Review on the Recent Update. 2021 , 12, 658519	24
1326	Macrophage biomimetic nanocarriers for anti-inflammation and targeted antiviral treatment in COVID-19. 2021 , 19, 173	8
1325	Type-2 Diabetes as a Risk Factor for Severe COVID-19 Infection. 2021 , 9,	9
1324	Antimicrobial Peptides and Physical Activity: A Great Hope against COVID 19. 2021 , 9,	4
1323	Prediction and identification of T cell epitopes of COVID-19 with balanced cytokine response for the development of peptide based vaccines. 2021 , 9, 40	3
1322	Key Considerations for the Development of Safe and Effective SARS-CoV-2 Subunit Vaccine: A Peptide-Based Vaccine Alternative. 2021 , 8, e2100985	8
1321	Role of SARS-CoV-2 and ACE2 variations in COVID-19. 2021 , 44, 235-244	8
1320	Naturally Occurring Bioactives as Antivirals: Emphasis on Coronavirus Infection. 2021 , 12, 575877	6
1319	A Multidisciplinary Approach to Coronavirus Disease (COVID-19). 2021 , 26,	3
1318	Signal-regulatory protein alpha is an anti-viral entry factor targeting viruses using endocytic pathways. 2021 , 17, e1009662	5
1317	The COVID-19 pandemic face mask waste: A blooming threat to the marine environment. 2021 , 272, 129601	72
1316	IMMUNO-COV v2.0: Development and Validation of a High-Throughput Clinical Assay for Measuring SARS-CoV-2-Neutralizing Antibody Titers. 2021 , 6, e0017021	4
1315	The Novel Drug Discovery to Combat COVID-19 by Repressing Important Virus Proteins Involved in Pathogenesis Using Medicinal Herbal Compounds. 2021 , 13, 107-115	4

1314	The bat ACE2 and multiple animal orthologs are functional receptors for bat coronavirus RaTG13 and SARS-CoV-2. 2021 , 66, 1215-1227	9
1313	Synergistic block of SARS-CoV-2 infection by combined drug inhibition of the host entry factors PIKfyve kinase and TMPRSS2 protease. 2021 ,	1
1312	Pinpointing the potential hits for hindering interaction of SARS-CoV-2 S-protein with ACE2 from the pool of antiviral phytochemicals utilizing molecular docking and molecular dynamics (MD) simulations. 2021 , 105, 107874	19
1311	Temporal evolution, most influential studies and sleeping beauties of the coronavirus literature. 2021 , 126, 1-46	3
1310	The SARS-CoV-2 host cell membrane fusion protein TMPRSS2 is a tumor suppressor and its downregulation correlates with increased antitumor immunity and immunotherapy response in lung adenocarcinoma.	
1309	SARS-CoV-2 Production in a Scalable High Cell Density Bioreactor. 2021 , 9,	3
1308	Identification of ACE2 modifiers by CRISPR screening. 2021 ,	2
1307	Notable and Emerging Variants of SARS-CoV-2 Virus: A Quick Glance. 2021 , 36, 1-8	1
1306	Advances in Neutralization Assays for SARS-CoV-2. 2021 , 94, e13088	10
1305	COVID-19-associated diarrhea. 2021 , 27, 3208-3222	8
1304	Coronavirus Disease 2019 (COVID-19): Current Situation and Therapeutic Options. 2021 , 2, 481-491	10
1303	Choreographing endo-lysosomal Ca throughout the life of a phagosome. 2021 , 1868, 119040	5
1302	Human single-chain antibodies neutralize SARS-CoV-2 variants by engaging an essential epitope of the spike: a new weapon against COVID-19.	0
1301	Genome-scale CRISPR Screens Identify Host Factors that Promote Human Coronavirus Infection.	
1300	Studying SARS-CoV-2 with Fluorescence Microscopy. 2021 , 22,	6
1299	Inhibitory effect on SARS-CoV-2 infection of neferine by blocking Ca ²⁺ -dependent membrane fusion. 2021 , 93, 5825-5832	4
1298	Molecular mechanism of interaction between SARS-CoV-2 and host cells and interventional therapy. 2021 , 6, 233	60
1297	Convalescent-Phase Sera and Vaccine-Elicited Antibodies Largely Maintain Neutralizing Titer against Global SARS-CoV-2 Variant Spikes. 2021 , 12, e0069621	37

1296	Performance of the EUROIMMUN Anti-SARS-CoV-2 ELISA Assay for detection of IgA and IgG antibodies in South Africa. 2021 , 16, e0252317	4
1295	Phenolic compounds disrupt spike-mediated receptor-binding and entry of SARS-CoV-2 pseudo-virions. 2021 , 16, e0253489	16
1294	BACTERIAL TRANSLOCATION: MICROBIOTA-INTESTINE-LUNG AXIS AND PRO-INFLAMMATORY STATUS IN THE SEVERITY OF COVID-19. 2021 , 9, 239-253	
1293	Full-Length Computational Model of the SARS-CoV-2 Spike Protein and Its Implications for a Viral Membrane Fusion Mechanism. 2021 , 13,	3
1292	Available COVID-19 serial seroconversion panel for validation of SARS-CoV-2 antibody assays. 2021 , 100, 115340	2
1291	SARS-CoV-2 mutations in Brazil: from genomics to putative clinical conditions. 2021 , 11, 11998	2
1290	Review of Sertoli cell dysfunction caused by COVID-19 that could affect male fertility. 2021 , 1-8	3
1289	Different Neutralization Sensitivity of SARS-CoV-2 Cell-to-Cell and Cell-Free Modes of Infection to Convalescent Sera. 2021 , 13,	7
1288	A high-throughput screen for TMPRSS2 expression identifies FDA-approved compounds that can limit SARS-CoV-2 entry. <i>Nature Communications</i> , 2021 , 12, 3907	17.4 10
1287	SARS-CoV-2 Spike protein binding of glycosylated serum albumin - its potential role in the pathogenesis of the COVID-19 clinical syndromes and bias towards individuals with pre-diabetes/type 2 diabetes & metabolic diseases.	0
1286	Seroprevalence of SARS-CoV-2 Antibodies Among Rural Healthcare Workers.	
1285	Whole genome comparison of Pakistani Corona virus with Chinese and US Strains along with its predictive severity of COVID-19. 2021 , 23, 101139	2
1284	Cytoplasmic tail truncation of SARS-CoV-2 Spike protein enhances titer of pseudotyped vectors but masks the effect of the D614G mutation.	1
1283	The consequential impact of JUUL on youth vaping and the landscape of tobacco products: The state of play in the COVID-19 era. 2021 , 22, 101374	3
1282	A prospective study on COVID-19 convalescent plasma donor (CCP) recruitment strategies in a resource constrained blood centre. 2021 ,	1
1281	Computational design of ultrashort peptide inhibitors of the receptor-binding domain of the SARS-CoV-2 S protein. 2021 , 22,	5
1280	Drug delivery systems as immunomodulators for therapy of infectious disease: Relevance to COVID-19. 2021 , 178, 113848	2
1279	Plasma ACE2 predicts outcome of COVID-19 in hospitalized patients. 2021 , 16, e0252799	33

1278	SARS-CoV-2 Spreads through Cell-to-Cell Transmission. 2021,	9
1277	In Vitro Models for Studying Entry, Tissue Tropism, and Therapeutic Approaches of Highly Pathogenic Coronaviruses. 2021, 2021, 8856018	3
1276	Green chemistry and coronavirus. 2021, 21, 100415	15
1275	Rapid, reliable, and reproducible cell fusion assay to quantify SARS-Cov-2 spike interaction with hACE2. 2021, 17, e1009683	6
1274	From Pinocytosis to Methuosis-Fluid Consumption as a Risk Factor for Cell Death. 2021, 9, 651982	3
1273	DNA Mutations via Chern-Simons Currents.	1
1272	Escherichia coli recombinant expression of SARS-CoV-2 protein fragments.	
1271	Genetic and epigenetic control of ACE2 expression and its possible role in COVID-19. 2021, 39, 713-726	7
1270	Anti-SARS-CoV-2 hyperimmune immunoglobulin provides potent and robust neutralization capacity and antibody-dependent cellular cytotoxicity and phagocytosis induction through N and S proteins.	1
1269	Use of Antioxidants for the Neuro-Therapeutic Management of COVID-19. 2021, 10,	6
1268	Innovative Nanotechnology a Boon for Fight Against Pandemic COVID-19. 2021, 3,	1
1267	Screening a Library of FDA-Approved and Bioactive Compounds for Antiviral Activity against SARS-CoV-2. 2021, 7, 2337-2351	8
1266	SARS-CoV-2 RNAemia and proteomic trajectories inform prognostication in COVID-19 patients admitted to intensive care. <i>Nature Communications,</i> 2021, 12, 3406	17.4 41
1265	SARS-CoV-2 Antiviral Therapy. 2021, e0010921	12
1264	MPI8 is Potent against SARS-CoV-2 by Inhibiting Dually and Selectively the SARS-CoV-2 Main Protease and the Host Cathepsin L*. 2021,	10
1263	Expression of SARS-CoV-2 receptor "ACE2" in human pancreatic cells: to be or not to be!. 2021, 13, 106-114	3
1262	Implications of Spike-glycoprotein processing at S1/S2 by Furin, at S2 by Furin and/or TMPRSS2 and shedding of ACE2: cell-to-cell fusion, cell entry and infectivity of SARS-CoV-2.	0
1261	One Health: EAACI Position Paper on coronaviruses at the human-animal interface, with a specific focus on comparative and zoonotic aspects of SARS-Cov-2. 2021,	8

1260	Cigarette Smoke Specifically Affects Small Airway Epithelial Cell Populations and Triggers the Expansion of Inflammatory and Squamous Differentiation Associated Basal Cells. 2021 , 22,	3
1259	Relevance of BET Family Proteins in SARS-CoV-2 Infection. 2021 , 11,	3
1258	Multisystem inflammatory syndrome in children is driven by zonulin-dependent loss of gut mucosal barrier. 2021 , 131,	46
1257	Long-Term Persistence of Spike Antibody and Predictive Modeling of Antibody Dynamics Following Infection with SARS-CoV-2. 2021 ,	11
1256	SARS-CoV-2 immune evasion by the B.1.427/B.1.429 variant of concern. 2021 , 373, 648-654	197
1255	Preexisting vs. de novo antibodies against SARS-CoV-2 in individuals without or with virus infection: impact on antibody therapy, vaccine research and serological testing. 2021 , 6, 13	1
1254	Mutations in Glioma: Double-Edged Sword in Clinical Applications?. 2021 , 9,	4
1253	COVID-19 and the Challenges of Chemotherapy: The Failure Case of Hydroxychloroquine in the Clinical Treatment of SARS-CoV-2 Infection. 2021 , 2,	
1252	One mucosal administration of a live attenuated recombinant COVID-19 vaccine protects nonhuman primates from SARS-CoV-2.	3
1251	SARS-CoV-2 Infected Pediatric Cerebral Cortical Neurons: Transcriptomic Analysis and Potential Role of Toll-like Receptors in Pathogenesis. 2021 , 22,	4
1250	Functional binding dynamics relevant to the evolution of zoonotic spillovers in endemic and emergent strains. 2021 , 1-19	4
1249	Dysregulation of host cell calcium signaling during viral infections: Emerging paradigm with high clinical relevance. 2021 , 81, 101004	11
1248	Role of host factors in SARS-CoV-2 entry. 2021 , 297, 100847	25
1247	Recent advances in developing small-molecule inhibitors against SARS-CoV-2. 2021 ,	12
1246	Marine sulfated polysaccharides as potential antiviral drug candidates to treat Corona Virus disease (COVID-19). 2021 , 505, 108326	19
1245	Enhanced sampling protocol to elucidate fusion peptide opening of SARS-CoV-2 spike protein. 2021 , 120, 2848-2858	2
1244	Strategies to target SARS-CoV-2 entry and infection using dual mechanisms of inhibition by acidification inhibitors. 2021 , 17, e1009706	8
1243	Qualification of ELISA and neutralization methodologies to measure SARS-CoV-2 humoral immunity using human clinical samples. 2021 ,	1

1242	Immunoinformatics approach for multi-epitope vaccine design against structural proteins and ORF1a polyprotein of severe acute respiratory syndrome coronavirus-2 (SARS-CoV-2). 2021 , 7, 22	3
1241	Possible Link between SARS-CoV-2 Infection and Parkinson's Disease: The Role of Toll-Like Receptor 4. 2021 , 22,	3
1240	Pharmacological Treatment for the Management of COVID 19: A Narrative Review. 2021 , 59, 614-621	2
1239	pH dependent electrical properties of the inner- and outer- leaflets of biomimetic cell membranes. 2021 , 594, 279-289	1
1238	SARS-CoV-2 Mutations and their Viral Variants. 2021 , 63, 10-10	13
1237	SARS-CoV-2 spike glycoprotein-reactive T cells can be readily expanded from COVID-19 vaccinated donors. 2021 , 9, 1452-1467	2
1236	Reduced neutralization of SARS-CoV-2 B.1.617 variant by inactivated and RBD-subunit vaccine.	1
1235	An Appraisal of the Current Scenario in Vaccine Research for COVID-19. 2021 , 13,	2
1234	The Spike of SARS-CoV-2: Uniqueness and Applications. 2021 , 12, 663912	2
1233	Combination of a Sindbis-SARS-CoV-2 Spike Vaccine and 4D5 Antibody Elicits Protective Immunity Against SARS-CoV-2 Induced Disease and Potentiates Long-Term SARS-CoV-2-Specific Humoral and T-Cell Immunity. 2021 , 12, 719077	3
1232	Biochemical features and mutations of key proteins in SARS-CoV-2 and their impacts on RNA therapeutics. 2021 , 189, 114424	17
1231	Does airborne pollen influence COVID-19 outbreak?. 2021 , 70, 102887	15
1230	CRISPRa screening with real world evidence identifies potassium channels as neuronal entry factors and druggable targets for SARS-CoV-2.	1
1229	SARS-CoV 2 spike protein S1 subunit as an ideal target for stable vaccines: A bioinformatic study. 2021 , 49, 904-904	1
1228	Emerging mutation in SARS-CoV-2 spike: Widening distribution over time in different geographic areas. 2021 , 44, 570-581	2
1227	Current Status of Baricitinib as a Repurposed Therapy for COVID-19. 2021 , 14,	3
1226	Can SARS-CoV-2 infect the central nervous system via the olfactory bulb or the blood-brain barrier?. 2021 , 95, 7-14	17
1225	Twelve-month specific IgG response to SARS-CoV-2 receptor-binding domain among COVID-19 convalescent plasma donors in Wuhan. <i>Nature Communications</i> , 2021 , 12, 4144	17.4 21

1224	Seroprevalence of SARS-CoV-2 antibodies among rural healthcare workers. 2021 , 93, 6611-6618	0
1223	A dossier on COVID-19 chronicle. 2021 ,	2
1222	Mesalamine Reduces Intestinal ACE2 Expression Without Modifying SARS-CoV-2 Infection or Disease Severity in Mice. 2021 ,	3
1221	In silico investigation of potential inhibitors to main protease and spike protein of SARS-CoV-2 in propolis. 2021 , 26, 100969	10
1220	Anti-SARS-CoV-2 Immune Responses in Patients Receiving an Allogeneic Stem Cell or Organ Transplant. 2021 , 9,	1
1219	COVID-19 patient with an incubation period of 27 d: A case report. 2021 , 9, 5955-5962	0
1218	Production of Proteins of the SARS-CoV-2 Proteome for Drug Discovery. 2021 , 6, 19983-19994	1
1217	Effects of Basic Amino Acids and Their Derivatives on SARS-CoV-2 and Influenza-A Virus Infection. 2021 , 13,	3
1216	Keep out! SARS-CoV-2 entry inhibitors: their role and utility as COVID-19 therapeutics. 2021 , 18, 154	4
1215	Promising role of curcumin against viral diseases emphasizing COVID-19 management: A review on the mechanistic insights with reference to host-pathogen interaction and immunomodulation. 2021 , 82, 104503	2
1214	SARS-CoV-2 exposure in wild white-tailed deer (<i>Odocoileus virginianus</i>).	20
1213	SARS-CoV-2: is there neuroinvasion?. 2021 , 18, 32	15
1212	Molecular Insights into COVID-19 Pathophysiology, Immune Pathogenesis, Detection, and Treatment. 2021 , 40, 858-868	
1211	SARS-CoV-2 Exploits Sexually Dimorphic and Adaptive IFN and TNF α Signaling to Gain Entry into Alveolar Epithelium.	
1210	Dual inhibition of COVID-19 spike glycoprotein and main protease 3CLpro by Withanone from. 2021 , 13, 359-369	6
1209	An update review of globally reported SARS-CoV-2 vaccines in preclinical and clinical stages. 2021 , 96, 107763	14
1208	The RNA sensor MDA5 detects SARS-CoV-2 infection. 2021 , 11, 13638	27
1207	Broad sarbecovirus neutralization by a human monoclonal antibody. 2021 , 597, 103-108	94

1206	Diverse high-affinity DNA aptamers for wild-type and B.1.1.7 SARS-CoV-2 spike proteins from a pre-structured DNA library. 2021 , 49, 7267-7279	13
1205	Executable Network of SARS-CoV-2-Host Interaction Predicts Drug Combination Treatments.	
1204	Wastewater-Based Epidemiology for Community Monitoring of SARS-CoV-2: Progress and Challenges.	5
1203	Synopsis of Pharmotechnological Approaches in Diagnostic and Management Strategies for Fighting Against COVID-19. 2021 , 27, 4086-4099	0
1202	TMPRSS2 expression dictates the entry route used by SARS-CoV-2 to infect host cells. 2021 , 40, e107821	51
1201	Impact of temperature on the affinity of SARS-CoV-2 Spike for ACE2. 2021 ,	3
1200	TMPRSS2 promotes SARS-CoV-2 evasion from NCOA7-mediated restriction.	1
1199	Systematic analysis of SARS-CoV-2 infection of an ACE2-negative human airway cell. 2021 , 36, 109364	42
1198	Identification of COVID-19 prognostic markers and therapeutic targets through meta-analysis and validation of Omics data from nasopharyngeal samples. 2021 , 70, 103525	3
1197	Listeria exploits IFITM3 to suppress antibacterial activity in phagocytes. <i>Nature Communications</i> , 2021 , 12, 4999	17.4 4
1196	An unexpected biomaterial against SARS-CoV-2: Bio-polyphosphate blocks binding of the viral spike to the cell receptor. 2021 , 51, 504-504	2
1195	Deliver the promise: RNAs as a new class of molecular entities for therapy and vaccination. 2021 , 230, 107967	7
1194	Post-mortem tissue proteomics reveals the pathogenesis of multi-organ injuries of COVID-19. 2021 , 8, nwab143	4
1193	An enveloped virus-like particle vaccine expressing a stabilized prefusion form of the SARS-CoV-2 spike protein elicits highly potent immunity. 2021 , 39, 4988-5001	5
1192	HD5 and LL-37 Inhibit SARS-CoV and SARS-CoV-2 Binding to Human ACE2 by Molecular Simulation. 2021 , 13, 766-777	2
1191	Dielectric modulated GaAs1k Sb X FinFET as a label-free biosensor: device proposal and investigation. 2021 , 36, 095033	4
1190	In silico analysis of RNA-dependent RNA polymerase of the SARS-CoV-2 and therapeutic potential of existing antiviral drugs. 2021 , 135, 104591	4
1189	Defective Severe Acute Respiratory Syndrome Coronavirus 2 Immune Responses in an Immunocompromised Individual With Prolonged Viral Replication. 2021 , 8, ofab359	0

1188	Host variations in SARS-CoV-2 infection. 2021 , 45, 404-424	1
1187	Predicting the Relative Binding Affinity for Reversible Covalent Inhibitors by Free Energy Perturbation Calculations. 2021 , 61, 4733-4744	5
1186	Antibody Response to SARS-CoV-2 Membrane Protein in Patients of the Acute and Convalescent Phase of COVID-19. 2021 , 12, 679841	6
1185	High-Affinity Dimeric Aptamers Enable the Rapid Electrochemical Detection of Wild-Type and B.1.1.7 SARS-CoV-2 in Unprocessed Saliva. 2021 , 133, 24468	0
1184	Risk HLA alleles in South America and potential new epitopes for SARS-CoV2. 2021 , 82, 561-567	1
1183	What Binds Cationic Photosensitizers Better: Brownian Dynamics Reveals Key Interaction Sites on Spike Proteins of SARS-CoV, MERS-CoV, and SARS-CoV-2. 2021 , 13,	1
1182	Comprehensive evaluation of eight commercial SARS-CoV-2 IgG assays. 2021 , 100, 115382	0
1181	Traces of SARS-CoV-2 RNA in Peripheral Blood Cells of Patients with COVID-19. 2021 , 25, 475-483	1
1180	An ancient viral epidemic involving host coronavirus interacting genes more than 20,000 years ago in East Asia. 2021 , 31, 3504-3514.e9	15
1179	Synergistic Block of SARS-CoV-2 Infection by Combined Drug Inhibition of the Host Entry Factors PIKfyve Kinase and TMPRSS2 Protease. 2021 , 95, e0097521	11
1178	COVID-19: the CaMKII-like system of S protein drives membrane fusion and induces syncytial multinucleated giant cells. 2021 , 69, 496-519	1
1177	Genomics-guided identification of potential modulators of SARS-CoV-2 entry proteases, TMPRSS2 and Cathepsins B/L. 2021 , 16, e0256141	4
1176	T Cell Predominant Response to AAV-Spike Protects hACE2 Mice from SARS-CoV-2 Pneumonia.	
1175	Development of an in vitro model for animal species susceptibility to SARS-CoV-2 replication based on expression of ACE2 and TMPRSS2 in avian cells.	
1174	Inhaled aerosols: Their role in COVID-19 transmission, including biophysical interactions in the lungs. 2021 , 54, 101451	15
1173	Effects of Spike Mutations in SARS-CoV-2 Variants of Concern on Human or Animal ACE2-Mediated Virus Entry and Neutralization. 2021 ,	3
1172	Interaction of spike protein with angiotensin converting enzyme inhibitors and selected compounds from the chemical entities of biological interest. 2021 , 10, 48	0
1171	SARS-CoV-2 infection induces beta cell transdifferentiation. 2021 , 33, 1577-1591.e7	42

1170	High-Affinity Dimeric Aptamers Enable the Rapid Electrochemical Detection of Wild-Type and B.1.1.7 SARS-CoV-2 in Unprocessed Saliva. 2021 , 60, 24266-24274	19
1169	Human Stem Cell Models of SARS-CoV-2 Infection in the Cardiovascular System. 2021 , 17, 2107-2119	
1168	Small Structural Proteins E and M Render the SARS-CoV-2 Pseudovirus More Infectious and Reveal the Phenotype of Natural Viral Variants. 2021 , 22,	4
1167	Potent prophylactic and therapeutic efficacy of recombinant human ACE2-Fc against SARS-CoV-2 infection in vivo. 2021 , 7, 65	7
1166	SARS-CoV-2 effects on male reproduction: should men be worried??. 2021 , 1-11	1
1165	Gene editing and synthetically accessible inhibitors reveal role for TPC2 in HCC cell proliferation and tumor growth. 2021 , 28, 1119-1131.e27	17
1164	A screening pipeline identifies a broad-spectrum inhibitor of bacterial AB toxins with cross protection against influenza A virus H1N1 and SARS-CoV-2.	
1163	Comparison of Anti-SARS-CoV-2 S1 Receptor-Binding Domain Antibody Immunoassays in Health Care Workers Before and After the BNT162b2 mRNA Vaccine. 2021 ,	3
1162	Recent SARS-CoV-2 Outlook and Implications in a COVID-19 Vaccination Era. 2021 , 3, 125-133	
1161	Machine Learning Models Identify Inhibitors of SARS-CoV-2. 2021 , 61, 4224-4235	5
1160	Identification of cell lines CL-14, CL-40 and CAL-51 as suitable models for SARS-CoV-2 infection studies. 2021 , 16, e0255622	7
1159	Natural Bioactive Molecules as Potential Agents Against SARS-CoV-2. 2021 , 12, 702472	1
1158	A systems-level study reveals host-targeted repurposable drugs against SARS-CoV-2 infection. 2021 , 17, e10239	5
1157	"Molecular Masks" for ACE2 to Effectively and Safely Block SARS-CoV-2 Virus Entry. 2021 , 22,	2
1156	Structural Basis and Mode of Action for Two Broadly Neutralizing Antibodies Against SARS-CoV-2 Emerging Variants of Concern. 2021 ,	5
1155	Harnessing immunological targets for COVID-19 immunotherapy. 2021 ,	0
1154	Genome-wide CRISPR activation screen identifies candidate receptors for SARS-CoV-2 entry. 2021 , 1	7
1153	Fusion Peptide of SARS-CoV-2 Spike Rearranges into a Wedge Inserted in Bilayered Micelles. 2021 , 143, 13205-13211	12

1152	Morphological cell profiling of SARS-CoV-2 infection identifies drug repurposing candidates for COVID-19. 2021 , 118,	39
1151	Lectin from (WGA) Inhibits Infection with SARS-CoV-2 and Its Variants of Concern Alpha and Beta. 2021 , 22,	3
1150	TRIM28 regulates SARS-CoV-2 cell entry by targeting ACE2. 2021 , 85, 110064	6
1149	SARS-CoV-2 Isolates Show Impaired Replication in Human Immune Cells but Differential Ability to Replicate and Induce Innate Immunity in Lung Epithelial Cells. 2021 , 9, e0077421	7
1148	Computational screening of 645 antiviral peptides against the receptor-binding domain of the spike protein in SARS-CoV-2. 2021 , 136, 104759	8
1147	The Long-Term Characteristics of Immunity Conferred by COVID-19 Using Antibody Tests. 2021 , 13, e17731	1
1146	Epitope Profiling Reveals the Critical Antigenic Determinants in SARS-CoV-2 RBD-Based Antigen. 2021 , 12, 707977	6
1145	Anti-SARS-CoV-2 Activity of Extracellular Vesicle Inhibitors: Screening, Validation, and Combination with Remdesivir. 2021 , 9,	4
1144	Inhibition of SARS-CoV-2 Infection by Human Defensin HNP1 and Retrocyclin RC-101. 2021 , 167225	2
1143	A Combination Adjuvant for the Induction of Potent Antiviral Immune Responses for a Recombinant SARS-CoV-2 Protein Vaccine. 2021 , 12, 729189	6
1142	Systemic DPP4/CD26 is associated with natural HIV-1 control: Implications for COVID-19 susceptibility. 2021 , 230, 108824	2
1141	A Machine Learning Method for Differentiating and Predicting Human-Infective Coronavirus Based on Physicochemical Features and Composition of the Spike Protein. 2021 , 30, 815-823	0
1140	Analysis of the Role of N-Linked Glycosylation in Cell Surface Expression, Function, and Binding Properties of SARS-CoV-2 Receptor ACE2. 2021 , 9, e0119921	1
1139	Cardiac and Renal SARS-CoV-2 Viral Entry Protein Regulation by Androgens and Diet: Implications for Polycystic Ovary Syndrome and COVID-19. 2021 , 22,	0
1138	SARS-CoV-2-neutralising monoclonal antibodies for treatment of COVID-19. 2021 , 9, CD013825	39
1137	Roles of existing drug and drug targets for COVID-19 management. 2021 , 11, 100103	3
1136	Could live attenuated vaccines better control COVID-19?. 2021 , 39, 5719-5726	4
1135	Cellular host factors for SARS-CoV-2 infection. 2021 , 6, 1219-1232	26

1134	Discovery of highly potent pancoronavirus fusion inhibitors that also effectively inhibit COVID-19 variants from the UK (Alpha), South Africa (Beta), and India (Delta).		
1133	Mass Spectrometry-based Proteomics and Glycoproteomics in COVID-19 Biomarkers Identification: A Mini-review. 2021 , 1-16		6
1132	An optimized and robust SARS-CoV-2 pseudovirus system for viral entry research. 2021 , 295, 114221		3
1131	Characterising proteolysis during SARS-CoV-2 infection identifies viral cleavage sites and cellular targets with therapeutic potential. <i>Nature Communications</i> , 2021 , 12, 5553	17.4	19
1130	Development of a rapid and sensitive quantum dot nanobead-based double-antigen sandwich lateral flow immunoassay and its clinical performance for the detection of SARS-CoV-2 total antibodies. 2021 , 343, 130139		9
1129	The Engineered MARCH8-Resistant Vesicular Stomatitis Virus Glycoprotein Enhances Lentiviral Vector Transduction. 2021 , 32, 936-948		
1128	Theoretical Analysis of S, M and N Structural Proteins by the Protein-RNA Recognition Code Leads to Genes/proteins that Are Relevant to the SARS-CoV-2 Life Cycle and Pathogenesis. 2021 , 12, 763995		1
1127	Efficacy and breadth of adjuvanted SARS-CoV-2 receptor-binding domain nanoparticle vaccine in macaques. 2021 , 118,		12
1126	Proteolytic activation of SARS-CoV-2 spike protein. 2021 ,		23
1125	A Simple and Fast Method to Sequence the Full-Length Spike Gene for SARS-CoV-2 Variant Identification from Patient Samples. 2021 , 1, 337-344		1
1124	Endocytosis and Transcytosis of SARS-CoV-2 Across the Intestinal Epithelium and Other Tissue Barriers. 2021 , 12, 636966		6
1123	Interactions of the Receptor Binding Domain of SARS-CoV-2 Variants with hACE2: Insights from Molecular Docking Analysis and Molecular Dynamic Simulation. 2021 , 10,		14
1122	Impaired Antibody-Dependent Cellular Cytotoxicity in a Spanish Cohort of Patients With COVID-19 Admitted to the ICU. 2021 , 12, 742631		3
1121	A reverse vaccinology and immunoinformatics approach for designing a multiepitope vaccine against SARS-CoV-2. 2021 , 73, 459-477		3
1120	Good Cholesterol Gone Bad? HDL and COVID-19. 2021 , 22,		1
1119	SARS-COV-2 recombinant Receptor-Binding-Domain (RBD) induces neutralizing antibodies against variant strains of SARS-CoV-2 and SARS-CoV-1. 2021 , 39, 5769-5779		4
1118	A bioluminescent and homogeneous SARS-CoV-2 spike RBD and hACE2 interaction assay for antiviral screening and monitoring patient neutralizing antibody levels. 2021 , 11, 18428		3
1117	Impact of mutations in SARS-COV-2 spike on viral infectivity and antigenicity. 2021 ,		8

1116	Induction of trained immunity by influenza vaccination - impact on COVID-19.	4
1115	Qualification of ELISA and neutralization methodologies to measure SARS-CoV-2 humoral immunity using human clinical samples. 2021 , 499, 113160	2
1114	Blending of Designer Synthetic Polymers to a Dual Targeted Nanoformulation for SARS-CoV-2 Associated Kidney Damage. 2021 , 22, 4244-4250	0
1113	Cytoplasmic Tail Truncation of SARS-CoV-2 Spike Protein Enhances Titer of Pseudotyped Vectors but Masks the Effect of the D614G Mutation. 2021 , 95, e0096621	6
1112	Bottom-up microwave-assisted seed-mediated synthesis of gold nanoparticles onto nanocellulose to boost stability and high performance for SERS applications. 2021 , 561, 150060	6
1111	ACE2 in the Gut: The Center of the 2019-nCoV Infected Pathology. 2021 , 8, 708336	3
1110	Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) seroprevalence: Navigating the absence of a gold standard. 2021 , 16, e0257743	7
1109	SARS-CoV-2 B.1.617.2 Delta variant replication and immune evasion. 2021 , 599, 114-119	334
1108	Evolutionary Dynamics and Epidemiology of Endemic and Emerging Coronaviruses in Humans, Domestic Animals, and Wildlife. 2021 , 13,	5
1107	Design and Development of Nanomaterial-Based Drug Carriers to Overcome the Blood-Brain Barrier by Using Different Transport Mechanisms. 2021 , 22,	3
1106	Kinetic Multi-omic Analysis of Responses to SARS-CoV-2 Infection in a Model of Severe COVID-19. 2021 , 95, e0101021	2
1105	Direct detection of human adenovirus or SARS-CoV-2 with ability to inform infectivity using DNA aptamer-nanopore sensors. 2021 , 7, eabh2848	8
1104	Paired heavy- and light-chain signatures contribute to potent SARS-CoV-2 neutralization in public antibody responses. 2021 , 37, 109771	20
1103	A comprehensive review of COVID-19 biology, diagnostics, therapeutics, and disease impacting the central nervous system. 2021 , 27, 667-690	5
1102	Host proviral and antiviral factors for SARS-CoV-2. 2021 , 57, 475-488	3
1101	Mechanisms of Damage to the Cardiovascular System in COVID-19. 2021 , 76, 287-297	3
1100	The SARS-CoV-2 spike (S) and the orthoreovirus p15 cause neuronal and glial fusion.	1
1099	Combination Therapy with Fluoxetine and the Nucleoside Analog GS-441524 Exerts Synergistic Antiviral Effects against Different SARS-CoV-2 Variants In Vitro. 2021 , 13,	7

1098	Featuring ACE2 binding SARS-CoV and SARS-CoV-2 through a conserved evolutionary pattern of amino acid residues. 2021 , 1-10	1
1097	Comparing Immunoassays for SARS-CoV-2 Antibody Detection in Patients with and without Laboratory-Confirmed SARS-CoV-2 Infection. 2021 , 59, e0138121	6
1096	A Barcoded Flow Cytometric Assay to Explore the Antibody Responses Against SARS-CoV-2 Spike and Its Variants. 2021 , 12, 730766	2
1095	Regional TMPRSS2 V197M Allele Frequencies Are Correlated with COVID-19 Case Fatality Rates. 2021 , 44, 680-687	4
1094	SARS-CoV-2 (Covid-19) vaccines structure, mechanisms and effectiveness: A review. 2021 , 188, 740-750	25
1093	Identification of Niemann-Pick C1 protein as a potential novel SARS-CoV-2 intracellular target. 2021 , 194, 105167	6
1092	Cell entry by SARS-CoV-2. 2021 , 46, 848-860	34
1091	SARS-CoV-2 virion physicochemical characteristics pertinent to abiotic substrate attachment. 2021 , 55, 101466	1
1090	CD38 in the age of COVID-19: a medical perspective. 2021 , 101, 1457-1486	9
1089	Endocytosis of abiotic nanomaterials and nanobiovectors: Inhibition of membrane trafficking. 2021 , 40, 101279	9
1088	Discovery and evolution of 12N-substituted aloperine derivatives as anti-SARS-CoV-2 agents through targeting late entry stage. 2021 , 115, 105196	1
1087	SARS-CoV spike proteins can compete for electrolytes in physiological fluids according to structure-based quantum-chemical calculations. 2021 , 1204, 113392	
1086	Distinct Regulation of U-ACE2 and P-ACE2 (Urinary and Plasma Angiotensin-Converting Enzyme 2) in a Japanese General Population. 2021 , 78, 1138-1149	1
1085	Colorimetric and electrochemical detection of SARS-CoV-2 spike antigen with a gold nanoparticle-based biosensor. 2021 , 1182, 338939	28
1084	Potential therapeutic approaches for the early entry of SARS-CoV-2 by interrupting the interaction between the spike protein on SARS-CoV-2 and angiotensin-converting enzyme 2 (ACE2). 2021 , 192, 114724	2
1083	Targeting cathepsins: A potential link between COVID-19 and associated neurological manifestations. 2021 , 7, e08089	2
1082	Active components in Ephedra sinica stapf disrupt the interaction between ACE2 and SARS-CoV-2 RBD: Potent COVID-19 therapeutic agents. 2021 , 278, 114303	3
1081	Impact of temperature on the affinity of SARS-CoV-2 Spike glycoprotein for host ACE2. 2021 , 297, 101151	12

1080	Know your enemy and know yourself - the case of SARS-CoV-2 host factors. 2021 , 50, 159-170	2
1079	From the environment to the cells: An overview on pivotal factors which affect spreading and infection in COVID-19 pandemic. 2021 , 201, 111555	1
1078	Development of an ultrasensitive fluorescent immunochromatographic assay based on multilayer quantum dot nanobead for simultaneous detection of SARS-CoV-2 antigen and influenza A virus. 2021 , 345, 130372	15
1077	Pathogenesis of taste impairment and salivary dysfunction in COVID-19 patients. 2021 , 57, 111-122	11
1076	Performance evaluation of the Roche Elecsys Anti-SARS-CoV-2 S immunoassay. 2021 , 297, 114271	28
1075	Rapid determination of infectious SARS-CoV-2 in PCR-positive samples by SDS-PMA assisted RT-qPCR. 2021 , 797, 149085	2
1074	A focused review on technologies, mechanisms, safety, and efficacy of available COVID-19 vaccines. 2021 , 100, 108162	17
1073	The iron(III) and nickel(II) complexes with tetradentate thiosemicarbazones. Synthesis, experimental, theoretical characterization, and antiviral effect against SARS-CoV-2. 2021 , 1246, 131166	5
1072	SARS-CoV-2 spike promotes inflammation and apoptosis through autophagy by ROS-suppressed PI3K/AKT/mTOR signaling. 2021 , 1867, 166260	14
1071	Identification of a dual acting SARS-CoV-2 proteases inhibitor through in silico design and step-by-step biological characterization. 2021 , 226, 113863	4
1070	Symptomatology and Clinical Features of Human COVID-19. 2022 , 28-57	0
1069	Effect of selected wastewater characteristics on estimation of SARS-CoV-2 viral load in wastewater. 2022 , 203, 111877	5
1068	An Updated Investigation Prior To COVID-19 Vaccination Program In Indonesia: Full-Length Genome Mutation Analysis Of SARS-CoV-2.	3
1067	Viral Assays to Detect the Effects of Nanoparticles on SARS CoV2. 2021 , 127-136	
1066	Differential investment in visual and olfactory brain regions mirrors the sensory needs of a paper wasp social parasite and its host.	0
1065	COVID-19 Infection in the Human Reproductive Tract of Men and Nonpregnant Women. 2021 ,	7
1064	Detection of SARS-CoV-2 and Other Infectious Agents in Lower Respiratory Tract Samples Belonging to Patients Admitted to Intensive Care Units of a Tertiary-Care Hospital, Located in an Epidemic Area, during the Italian Lockdown. 2021 , 9,	3
1063	Renin-angiotensin-aldosterone system blockers and region-specific variations in COVID-19 outcomes: findings from a systematic review and meta-analysis. 2021 , 12, 20420986211011345	4

1062	Screening of world approved drugs against highly dynamical spike glycoprotein of SARS-CoV-2 using CaverDock and machine learning. 2021 , 19, 3187-3197	2
1061	Rational design of thioamide peptides as selective inhibitors of cysteine protease cathepsin L.. 2021 , 12, 10825-10835	2
1060	Optimised Method for the Production and Titration of Lentiviral Vectors Pseudotyped with the SARS-CoV-2 Spike. 2021 , 11, e4194	1
1059	Construction and applications of SARS-CoV-2 pseudoviruses: a mini review. 2021 , 17, 1574-1580	12
1058	A Comprehensive Summary of the Knowledge on COVID-19 Treatment. 2021 , 12, 155-191	13
1057	Potential detrimental role of soluble ACE2 in severe COVID-19 comorbid patients. 2021 , 31, 1-12	22
1056	Drug Repurposing Screen for Compounds Inhibiting the Cytopathic Effect of SARS-CoV-2. 2020 , 11, 592737	39
1055	T cell epitopes of SARS-CoV-2 spike protein and conserved surface protein of share sequence homology. 2021 , 16, 630-640	0
1054	SARS-CoV-2 variants with mutations at the S1/S2 cleavage site are generated in vitro during propagation in TMPRSS2-deficient cells. 2021 , 17, e1009233	72
1053	No evidence for basigin/CD147 as a direct SARS-CoV-2 spike binding receptor. 2021 , 11, 413	77
1052	SARS-CoV-2 variant B.1.1.7 is susceptible to neutralizing antibodies elicited by ancestral Spike vaccines. 2021 ,	29
1051	Human SARS CoV-2 spike protein mutations. 2021 , 89, 569-576	67
1050	AXL is a candidate receptor for SARS-CoV-2 that promotes infection of pulmonary and bronchial epithelial cells. 2021 , 31, 126-140	165
1049	Elucidating the Interactions Between Heparin/Heparan Sulfate and SARS-CoV-2-Related Proteins-An Important Strategy for Developing Novel Therapeutics for the COVID-19 Pandemic. 2020 , 7, 628551	17
1048	Modeling SARS-CoV-2 infection in individuals with opioid use disorder with brain organoids. 2021 , 12, 2041731420985299	2
1047	Severe acute respiratory syndrome Coronavirus 2 virus-like particle and its application in Chinese medical research. 2021 ,	2
1046	State-of-the-art equipment for rapid and accurate diagnosis of COVID-19. 2021 , 19-40	
1045	H,C and N chemical shift assignments of the SUD domains of SARS-CoV-2 non-structural protein 3c: "The SUD-M and SUD-C domains". 2021 , 15, 165-171	1

1044	Mutations in the SARS CoV-2 spike protein may cause functional changes in the protein quaternary structure. 2021 , 46, 137-144	2
1043	Variation analysis of SARS-CoV-2 complete sequences from Iran.	0
1042	A Bioelectromagnetic Proposal Approaching the Complex Challenges of COVID-19. 2021 , 11, 1-67	1
1041	Computational and experimental approaches to controlling bacterial microcompartment assembly.	
1040	Structure of SARS-CoV-2 Spike Glycoprotein for Therapeutic and Preventive Target. 2021 , 21, e8	2
1039	Microsecond simulations and CD spectroscopy reveals the intrinsically disordered nature of SARS-CoV-2 Spike-C-terminal cytoplasmic tail (residues 1242-1273) in isolation.	
1038	Aspiration of periodontopathic bacteria due to poor oral hygiene potentially contributes to the aggravation of COVID-19. 2020 , 63, 1-3	33
1037	SARS-CoV-2 therapeutics: how far do we stand from a remedy?. 2021 , 73, 750-768	6
1036	Inside the story about the research and development of COVID-19 vaccines. 2021 , 10, 154-170	8
1035	Recent progress in the development of potential drugs against SARS-CoV-2. 2021 , 2, 100057	0
1034	Unraveling the Interconnection Patterns Across Lung Microbiome, Respiratory Diseases, and COVID-19. 2020 , 10, 619075	8
1033	Emerging insights on the role of V-ATPase in human diseases: Therapeutic challenges and opportunities. 2021 , 41, 1927-1964	5
1032	Human genome diversity data reveal that L564P is the predominant TPC2 variant and a prerequisite for the blond hair associated M484L gain-of-function effect. 2021 , 17, e1009236	7
1031	Degradation of SARS-CoV-2 receptor ACE2 by the E3 ubiquitin ligase Skp2 in lung epithelial cells. 2021 , 15, 252-263	7
1030	Potent mouse monoclonal antibodies that block SARS-CoV-2 infection. 2021 , 296, 100346	9
1029	Next generation vaccine platform: polymersomes as stable nanocarriers for a highly immunogenic and durable SARS-CoV-2 spike protein subunit vaccine.	2
1028	Molecular optimization, docking, and dynamic simulation profiling of selective aromatic phytochemical ligands in blocking the SARS-CoV-2 S protein attachment to ACE2 receptor: an approach of targeted drug designing. 2021 , 8, 24-35	7
1027	Generation of SARS-CoV-2 Spike Pseudotyped Virus for Viral Entry and Neutralization Assays: A 1-Week Protocol. 2020 , 7, 618651	24

1026	Computational Insight Into the Mechanism of SARS-CoV-2 Membrane Fusion. 2021 , 61, 423-431	7
1025	The SARS-Coronavirus Infection Cycle: A Survey of Viral Membrane Proteins, Their Functional Interactions and Pathogenesis. 2021 , 22,	35
1024	Mechanism of Viral Glycoprotein Targeting by Membrane-associated-RING-CH Proteins. 2021 ,	0
1023	The rapid diagnosis and effective inhibition of coronavirus using spike antibody attached gold nanoparticles. 2021 , 3, 1588-1596	28
1022	Drug repurposing screens reveal FDA approved drugs active against SARS-Cov-2.	1
1021	Management of Coronavirus Disease 2019 (COVID-19) Pandemic: From Diagnosis to Treatment Strategies. 2020 , 4, 2000173	2
1020	Adaptive Flexible Sialylated Nanogels as Highly Potent Influenza A Virus Inhibitors. 2020 , 59, 12417-12422	22
1019	An updated review of the association of host genetic factors with susceptibility and resistance to COVID-19. 2021 , 236, 49-54	22
1018	Pharmacological hypothesis: TPC2 antagonist tetrandrine as a potential therapeutic agent for COVID-19. 2020 , 8, e00653	16
1017	Classical and alternative receptors for SARS-CoV-2 therapeutic strategy. 2021 , 31, 1-9	18
1016	Virus-Free and Live-Cell Visualizing SARS-CoV-2 Cell Entry for Studies of Neutralizing Antibodies and Compound Inhibitors. 2021 , 5, 2001031	16
1015	Human Monoclonal Antibodies: On the Menu of Targeted Therapeutics Against COVID-19. 2020 , 35, 713-724	7
1014	Druggable targets of SARS-CoV-2 and treatment opportunities for COVID-19. 2020 , 104, 104269	37
1013	COVID-19 and Cancer: Current Challenges and Perspectives. 2020 , 38, 629-646	92
1012	IL-6: Relevance for immunopathology of SARS-CoV-2. 2020 , 53, 13-24	141
1011	Coronavirus disease-19 and fertility: viral host entry protein expression in male and female reproductive tissues. 2020 , 114, 33-43	94
1010	Considerations for Oral and Maxillofacial Surgeons in COVID-19 Era: Can We Sustain the Solutions to Keep Our Patients and Healthcare Personnel Safe?. 2020 , 78, 1241-1256	14
1009	Coronaviruses pathogenesis, comorbidities and multi-organ damage - A review. 2020 , 255, 117839	116

1008	Peptides to combat viral infectious diseases. 2020 , 134, 170402	13
1007	Biomaterials-Based Opportunities to Engineer the Pulmonary Host Immune Response in COVID-19. 2021 , 7, 1742-1764	7
1006	Molecular structure analyses suggest strategies to therapeutically target SARS-CoV-2. <i>Nature Communications</i> , 2020 , 11, 2920	17.4 25
1005	Human Intestinal Defensin 5 Inhibits SARS-CoV-2 Invasion by Cloaking ACE2. 2020 , 159, 1145-1147.e4	61
1004	Repurposing approved drugs as inhibitors of SARS-CoV-2 S-protein from molecular modeling and virtual screening. 2021 , 39, 3924-3933	75
1003	Promising near-infrared plasmonic biosensor employed for specific detection of SARS-CoV-2 and its spike glycoprotein. 2020 , 22, 103046	27
1002	Nanotechnology based approaches for combatting COVID-19 viral infection. 2020 , 1, 022003	25
1001	Perspectives on the development of neutralizing antibodies against SARS-CoV-2. 2020 , 3, 109-114	28
1000	The impact of structural bioinformatics tools and resources on SARS-CoV-2 research and therapeutic strategies. 2021 , 22, 742-768	16
999	Identifying the natural polyphenol catechin as a multi-targeted agent against SARS-CoV-2 for the plausible therapy of COVID-19: an integrated computational approach. 2021 , 22, 1346-1360	26
998	Double lock of a potent human therapeutic monoclonal antibody against SARS-CoV-2. 2021 , 8, nwa297	14
997	Innate immunology in COVID-19-a living review. Part I: viral entry, sensing and evasion. 2020 , 1, iqaa004	4
996	Potential benefits, mechanisms, and uncertainties of convalescent plasma therapy for COVID-19.. 2020 , 2, 71-75	2
995	SARS-CoV-2 growth, furin-cleavage-site adaptation and neutralization using serum from acutely infected hospitalized COVID-19 patients. 2020 , 101, 1156-1169	86
994	Teicoplanin potently blocks the cell entry of 2019-nCoV.	58
993	Site-specific N-glycosylation Characterization of Recombinant SARS-CoV-2 Spike Proteins.	24
992	Recombination and purifying selection preserves covariant movements of mosaic SARS-CoV-2 protein S.	2
991	SARS-CoV-2 receptor and entry genes are expressed by sustentacular cells in the human olfactory neuroepithelium.	47

990	Human ACE2 receptor polymorphisms predict SARS-CoV-2 susceptibility.	70
989	Currently available intravenous immunoglobulin (Gamunex [®] -C and Flebogamma [®] DIF) contains antibodies reacting against SARS-CoV-2 antigens.	9
988	Genetic Grouping of SARS-CoV-2 Coronavirus Sequences using Informative Subtype Markers for Pandemic Spread Visualization.	2
987	Robust neutralization assay based on SARS-CoV-2 S-bearing vesicular stomatitis virus (VSV) pseudovirus and ACE2-overexpressed BHK21 cells.	16
986	Human organ chip-enabled pipeline to rapidly repurpose therapeutics during viral pandemics.	39
985	The scRNA-seq expression profiling of the receptor ACE2 and the cellular protease TMPRSS2 reveals human organs susceptible to COVID-19 infection.	16
984	COVID-19 experience: first Italian survey on healthcare staff members from a Mother-Child Research Hospital using combined molecular and rapid immunoassays test.	8
983	Protocol and reagents for pseudotyping lentiviral particles with SARS-CoV-2 Spike protein for neutralization assays.	45
982	Cross-reactive neutralization of SARS-CoV-2 by serum antibodies from recovered SARS patients and immunized animals.	1
981	Recombinant SARS-CoV-2 spike S1-Fc fusion protein induced high levels of neutralizing responses in nonhuman primates.	6
980	protein-sol pKa: prediction of electrostatic frustration, with application to coronaviruses.	0
979	TMPRSS2 and TMPRSS4 mediate SARS-CoV-2 infection of human small intestinal enterocytes.	35
978	Identification of potential treatments for COVID-19 through artificial intelligence-enabled phenomic analysis of human cells infected with SARS-CoV-2.	28
977	SARS-CoV-2 serological analysis of COVID-19 hospitalized patients, pauci-symptomatic individuals and blood donors.	36
976	Heterogeneous expression of the SARS-Coronavirus-2 receptor ACE2 in the human respiratory tract. 2020,	9
975	Identification of Plitidepsin as Potent Inhibitor of SARS-CoV-2-Induced Cytopathic Effect after a Drug Repurposing Screen.	7
974	A SARS-CoV-2 vaccine candidate would likely match all currently circulating strains.	8
973	Identification of Drugs Blocking SARS-CoV-2 Infection using Human Pluripotent Stem Cell-derived Colonic Organoids.	7

972	Design of an Epitope-Based Peptide Vaccine against the Severe Acute Respiratory Syndrome Coronavirus-2 (SARS-CoV-2): A Vaccine-informatics Approach.	6
971	Single-cell longitudinal analysis of SARS-CoV-2 infection in human airway epithelium. 2020,	39
970	Clinical performance of SARS-CoV-2 IgG antibody tests and potential protective immunity.	15
969	Cross-sectional IgM and IgG profiles in SARS-CoV-2 infection. 2020,	8
968	Characterization of neutralizing antibodies from a SARS-CoV-2 infected individual. 2020,	43
967	A rapid, point of care red blood cell agglutination assay for detecting antibodies against SARS-CoV-2.	3
966	Pre-existing and de novo humoral immunity to SARS-CoV-2 in humans.	59
965	Broad sarbecovirus neutralizing antibodies define a key site of vulnerability on the SARS-CoV-2 spike protein. 2020,	18
964	IgA MAb blocks SARS-CoV-2 Spike-ACE2 interaction providing mucosal immunity. 2020,	14
963	Neutralizing antibody and soluble ACE2 inhibition of a replication-competent VSV-SARS-CoV-2 and a clinical isolate of SARS-CoV-2. 2020,	10
962	A replication-competent vesicular stomatitis virus for studies of SARS-CoV-2 spike-mediated cell entry and its inhibition. 2020,	9
961	Epidemiological study to detect active SARS-CoV-2 infections and seropositive persons in a selected cohort of employees in the Frankfurt am Main metropolitan area.	12
960	Systemic and mucosal antibody secretion specific to SARS-CoV-2 during mild versus severe COVID-19.	42
959	Recombinant SARS-CoV-2 spike proteins for sero-surveillance and epitope mapping.	10
958	Morphological Cell Profiling of SARS-CoV-2 Infection Identifies Drug Repurposing Candidates for COVID-19. 2020,	46
957	Structures of human antibodies bound to SARS-CoV-2 spike reveal common epitopes and recurrent features of antibodies. 2020,	30
956	Optimized pseudotyping conditions for the SARS-COV2 Spike glycoprotein.	4
955	coronapp: A Web Application to Annotate and Monitor SARS-CoV-2 Mutations.	7

954	Cross-sectional evaluation of humoral responses against SARS-CoV-2 Spike. 2020,	9
953	Unravelling the debate on heme effects in COVID-19 infections.	3
952	Prediction of non-canonical routes for SARS-CoV-2 infection in human placenta cells.	3
951	Structural basis for potent neutralization of SARS-CoV-2 and role of antibody affinity maturation. 2020,	15
950	The D614G mutation in the SARS-CoV-2 spike protein reduces S1 shedding and increases infectivity. 2020,	294
949	A novel biparatopic antibody-ACE2 fusion that blocks SARS-CoV-2 infection: implications for therapy.	2
948	The Spike D614G mutation increases SARS-CoV-2 infection of multiple human cell types. 2020,	62
947	The SARS-CoV-2 spike protein alters barrier function in 2D static and 3D microfluidic in vitro models of the human blood-brain barrier. 2020,	18
946	Machine Learning Models Identify Inhibitors of SARS-CoV-2.	6
945	Genome-wide CRISPR screen reveals host genes that regulate SARS-CoV-2 infection. 2020,	32
944	A single dose of recombinant VSV- Δ -spike vaccine provides protection against SARS-CoV-2 challenge.	17
943	SARS-CoV-2 growth, furin-cleavage-site adaptation and neutralization using serum from acutely infected, hospitalized COVID-19 patients. 2020,	11
942	Cross-neutralization activity against SARS-CoV-2 is present in currently available intravenous immunoglobulins.	2
941	Drug repurposing screens reveal FDA approved drugs active against SARS-Cov-2.	35
940	D614G mutation of SARS-CoV-2 spike protein enhances viral infectivity.	88
939	Detailed phylogenetic analysis of SARS-CoV-2 reveals latent capacity to bind human ACE2 receptor.	2
938	Structure-Based Design with Tag-Based Purification and In-Process Biotinylation Enable Streamlined Development of SARS-CoV-2 Spike Molecular Probes. 2020,	4
937	An Enzymatic TMPRSS2 Assay for Assessment of Clinical Candidates and Discovery of Inhibitors as Potential Treatment of COVID-19. 2020,	12

936	Molecular Evolution of SARS-CoV-2 Structural Genes: Evidence of Positive Selection in Spike Glycoprotein.	6
935	Highly efficient intercellular spreading of protein misfolding mediated by viral ligand - receptor interactions.	1
934	A facile Q-RT-PCR assay for monitoring SARS-CoV-2 growth in cell culture. 2020,	4
933	SARS-CoV-2 spike glycoprotein vaccine candidate NVX-CoV2373 elicits immunogenicity in baboons and protection in mice.	32
932	SARS-CoV-2 Infection of Pluripotent Stem Cell-derived Human Lung Alveolar Type 2 Cells Elicits a Rapid Epithelial-Intrinsic Inflammatory Response. 2020,	11
931	Highly predictive regression model of active cases of COVID-19 in a population by screening wastewater viral load.	18
930	Cryo-EM Structures Delineate a pH-Dependent Switch that Mediates Endosomal Positioning of SARS-CoV-2 Spike Receptor-Binding Domains. 2020,	28
929	Identification of potent and safe antiviral therapeutic candidates against SARS-CoV-2.	4
928	A rapidly adaptable biomaterial vaccine for SARS-CoV-2.	2
927	Novel SARS-CoV-2 specific antibody and neutralization assays reveal wide range of humoral immune response during COVID-19. 2020,	19
926	Novel surrogate virus neutralization test reveals low serum neutralizing anti-SARS-CoV-2-S antibodies levels in mildly affected COVID-19 convalescents.	5
925	Longitudinal dynamics of the neutralizing antibody response to SARS-CoV-2 infection.	14
924	Heparan sulfate assists SARS-CoV-2 in cell entry and can be targeted by approved drugs. 2020,	6
923	Kinetics and Isotype Assessment of Antibodies Targeting the Spike Protein Receptor Binding Domain of SARS-CoV-2 In COVID-19 Patients as a function of Age and Biological Sex. 2020,	8
922	Humoral Response Dynamics Following Infection with SARS-CoV-2.	23
921	Neutralization Assay with SARS-CoV-1 and SARS-CoV-2 Spike Pseudotyped Murine Leukemia Virions. 2020,	4
920	The D614G mutation in the SARS-CoV2 Spike protein increases infectivity in an ACE2 receptor dependent manner. 2020,	25
919	Virus-free and live-cell visualizing SARS-CoV-2 cell entry for studies of neutralizing antibodies and compound inhibitors.	1

918	Elucidation of Genome Polymorphisms in Emerging SARS-CoV-2.	1
917	Protective effects of VIP and PACAP in SARS-CoV-2 infection.	5
916	No evidence for basigin/CD147 as a direct SARS-CoV-2 spike binding receptor.	13
915	ACE2 Expression is elevated in Airway Epithelial Cells from aged and male donors but reduced in asthma.	2
914	Structure and inhibition of the SARS-CoV-2 main protease reveals strategy for developing dual inhibitors against M and cathepsin L. 2020,	8
913	Human Pluripotent Stem Cell-Derived Neural Cells and Brain Organoids Reveal SARS-CoV-2 Neurotropism. 2020,	13
912	Early transmission dynamics, spread, and genomic characterization of SARS-CoV-2 in Panama.	3
911	Functional immune mapping with deep-learning enabled phenomics applied to immunomodulatory and COVID-19 drug discovery.	5
910	design of ACE2 protein decoys to neutralize SARS-CoV-2. 2020,	6
909	Dynamics of neutralizing antibody titers in the months after SARS-CoV-2 infection.	38
908	Human Embryonic Stem Cell-derived Lung Organoids: a Model for SARS-CoV-2 Infection and Drug Test.	4
907	Maraviroc inhibits SARS-CoV-2 multiplication and s-protein mediated cell fusion in cell culture. 2020	16
906	TRIM28 regulates SARS-CoV-2 cell entry by targeting ACE2.	1
905	Drug Repurposing Screen for Compounds Inhibiting the Cytopathic Effect of SARS-CoV-2. 2020,	13
904	A rapid and efficient screening system for neutralizing antibodies and its application for the discovery of potent neutralizing antibodies to SARS-CoV-2 S-RBD.	8
903	SARS-CoV-2 infects brain choroid plexus and disrupts the blood-CSF-barrier.	10
902	The receptor binding domain of SARS-CoV-2 spike is the key target of neutralizing antibody in human polyclonal sera.	14
901	SARS-CoV-2 variants with mutations at the S1/S2 cleavage site are generated in vitro during propagation in TMPRSS2-deficient cells.	8

900	A prefusion SARS-CoV-2 spike RNA vaccine is highly immunogenic and prevents lung infection in non-human primates.	61
899	Retrospective study of COVID-19 seroprevalence among tissue donors at the onset of the outbreak before implementation of strict lockdown measures in France.	1
898	A key linear epitope for a potent neutralizing antibody to SARS-CoV-2 S-RBD.	3
897	Ceftazidime Is a Potential Drug to Inhibit SARS-CoV-2 Infection In Vitro by Blocking Spike Protein-ACE2 Interaction.	1
896	Identification of potential biomarkers and inhibitors for SARS-CoV-2 infection.	5
895	SARS-CoV-2 antibody signatures robustly predict diverse antiviral functions relevant for convalescent plasma therapy. 2020,	13
894	Characterisation of protease activity during SARS-CoV-2 infection identifies novel viral cleavage sites and cellular targets with therapeutic potential.	6
893	Efficient production of Moloney murine leukemia virus-like particles pseudotyped with the severe acute respiratory syndrome coronavirus-2 (SARS-CoV-2) spike protein.	2
892	A soluble ACE2 microbody protein fused to a single immunoglobulin Fc domain is a potent inhibitor of SARS-CoV-2 infection in cell culture.	1
891	Common genetic variation in humans impacts susceptibility to SARS-CoV-2 infection. 2020,	4
890	A natural mutation between SARS-CoV-2 and SARS-CoV determines neutralization by a cross-reactive antibody. 2020,	2
889	JIB-04 has broad-spectrum antiviral activity and inhibits SARS-CoV-2 replication and coronavirus pathogenesis. 2021,	8
888	Functional genomic screens identify human host factors for SARS-CoV-2 and common cold coronaviruses. 2020,	14
887	Identification of TMEM106B as proviral host factor for SARS-CoV-2.	7
886	The furin cleavage site of SARS-CoV-2 spike protein is a key determinant for transmission due to enhanced replication in airway cells.	43
885	Potent mouse monoclonal antibodies that block SARS-CoV-2 infection.	1
884	Antibody reactivity to SARS-CoV-2 is common in unexposed adults and infants under 6 months. 2020,	1
883	Preferential recognition and antagonism of SARS-CoV-2 spike glycoprotein binding to 3- -sulfated heparan sulfate. 2020,	7

882	Within-patient genetic diversity of SARS-CoV-2.	12
881	Degradation of SARS-CoV-2 receptor ACE2 by tobacco carcinogen-induced Skp2 in lung epithelial cells.	1
880	SARS-CoV-2 Variants Reveal Features Critical for Replication in Primary Human Cells.	2
879	Small-Molecule In Vitro Inhibitors of the Coronavirus Spike Δ ACE2 Protein-Protein Interaction as Blockers of Viral Attachment and Entry for SARS-CoV-2.	2
878	Spike glycoprotein and host cell determinants of SARS-CoV-2 entry and cytopathic effects.	5
877	A cysteine protease inhibitor blocks SARS-CoV-2 infection of human and monkey cells. 2020,	9
876	Cathepsin L plays a key role in SARS-CoV-2 infection in humans and humanized mice and is a promising target for new drug development.	4
875	Rapid development of SARS-CoV-2 receptor binding domain-conjugated nanoparticle vaccine candidate.	1
874	Phase 1 trial of a Candidate Recombinant Virus-Like Particle Vaccine for Covid-19 Disease Produced in Plants.	32
873	An ancient viral epidemic involving host coronavirus interacting genes more than 20,000 years ago in East Asia.	4
872	Challenges for targeting SARS-CoV-2 proteases as a therapeutic strategy for COVID-19.	4
871	Development of an Optical Assay to Detect SARS-CoV-2 Spike Protein Binding Interactions with ACE2 and Disruption of these Interactions Using Electric Current.	2
870	Double Lock of a Potent Human Monoclonal Antibody against SARS-CoV-2.	3
869	Repurposing the Ebola and Marburg Virus Inhibitors Tilorone, Quinacrine and Pyronaridine: In vitro Activity Against SARS-CoV-2 and Potential Mechanisms. 2020,	4
868	Identification of a High-frequency Intra-host SARS-CoV-2 spike Variant with Enhanced Cytopathic and Fusogenic Effect.	3
867	SARS-CoV-2 D614 and G614 spike variants impair neuronal synapses and exhibit differential fusion ability.	4
866	Distant Residues Modulate Conformational Opening in SARS-CoV-2 Spike Protein.	9
865	BNT162b vaccines are immunogenic and protect non-human primates against SARS-CoV-2.	6

864	SARS-CoV-2 Requires Cholesterol for Viral Entry and Pathological Syncytia Formation.	6
863	Niclosamide inhibits SARS-CoV2 entry by blocking internalization through pH-dependent CLIC/GEEC endocytic pathway.	4
862	Implications of Spike-glycoprotein processing at S1/S2 by Furin, at S2 by Furin and/or TMPRSS2 and shedding of ACE2: cell-to-cell fusion, cell entry and infectivity of SARS-CoV-2.	8
861	Cross-reactive coronavirus antibodies with diverse epitope specificities and extra-neutralization functions. 2020,	7
860	Fatty Acid Synthase inhibition prevents palmitoylation of SARS-CoV2 Spike Protein and improves survival of mice infected with murine hepatitis virus.	6
859	Cetylpyridinium chloride-containing mouthwashes reduce the infectivity of SARS-CoV-2 variants in vitro.	1
858	Host Cell Proteases Drive Early or Late SARS-CoV-2 Penetration.	10
857	Differential Dynamic Behavior of Prefusion Spike Proteins of SARS Coronaviruses 1 and 2. 2021,	1
856	Establishment of a well-characterized SARS-CoV-2 lentiviral pseudovirus neutralization assay using 293T cells with stable expression of ACE2 and TMPRSS2.	2
855	Screening a library of FDA-approved and bioactive compounds for antiviral activity against SARS-CoV-2.	3
854	Manipulation of ACE2 expression in COVID-19. 2020, 7,	26
853	Neutralizing antibody against SARS-CoV-2 spike in COVID-19 patients, health care workers, and convalescent plasma donors. 2020, 5,	40
852	A comprehensive review on promising anti-viral therapeutic candidates identified against main protease from SARS-CoV-2 through various computational methods. 2020, 18, 69	20
851	Molecular-level Anatomy of SARS-CoV-2 for the Battle against COVID-19 Pandemic.	7
850	Prediction of repurposed drugs for treating lung injury in COVID-19. 2020, 9, 609	17
849	Prediction of repurposed drugs for treating lung injury in COVID-19. 2020, 9, 609	17
848	The SARS-CoV-2 Spike protein has a broad tropism for mammalian ACE2 proteins. 2020, 18, e3001016	90
847	Targeting TMPRSS2 and Cathepsin B/L together may be synergistic against SARS-CoV-2 infection. 2020, 16, e1008461	49

846	Recombination events are concentrated in the spike protein region of Betacoronaviruses. 2020 , 16, e1009272	27
845	The role of cysteine peptidases in coronavirus cell entry and replication: The therapeutic potential of cathepsin inhibitors. 2020 , 16, e1009013	35
844	A natural mutation between SARS-CoV-2 and SARS-CoV determines neutralization by a cross-reactive antibody. 2020 , 16, e1009089	33
843	The origin of SARS-CoV-2 in Istanbul: Sequencing findings from the epicenter of the pandemic in Turkey. 2020 , 7, 203-209	8
842	Might proton pump or sodium-hydrogen exchanger inhibitors be of value to ameliorate SARS-CoV-2 pathophysiology?. 2021 , 8, e14649	4
841	A comparative analysis of remdesivir and other repurposed antivirals against SARS-CoV-2. 2021 , 13, e13105	32
840	COVID-19: molecular targets, drug repurposing and new avenues for drug discovery. 2020 , 115, e200254	11
839	Salivary Glands, Saliva and Oral Findings in COVID-19 Infection. 2020 , 20,	9
838	Neuropathology of COVID-19 (neuro-COVID): clinicopathological update. 2021 , 2,	26
837	Molecular and cellular mechanisms of central nervous system alteration in COVID-19. 2020 , 9, 72-85	4
836	SARS-CoV-2, immunosenescence and inflammaging: partners in the COVID-19 crime. 2020 , 12, 18778-18789	23
835	A high throughput screen for TMPRSS2 expression identifies FDA-approved and clinically advanced compounds that can limit SARS-CoV-2 entry. 2020 ,	6
834	Proteolytic Cleavage of the SARS-CoV-2 Spike Protein and the Role of the Novel S1/S2 Site. 2020 , 3581359	14
833	Neutralizing Antibody and Soluble ACE2 Inhibition of a Replication-Competent VSV-SARS-CoV-2 and a Clinical Isolate of SARS-CoV-2. 2020 , 3606354	12
832	Progress in Studies on Structural and Remedial Aspects of Newly Born Coronavirus, SARS-CoV-2. 2020 , 20, 2362-2378	4
831	Existing antiviral options against SARS-CoV-2 replication in COVID-19 patients. 2020 , 15, 1747-1758	16
830	Therapeutic Modalities for Sars-Cov-2 (Covid-19): Current Status and Role of Protease Inhibitors to Block Viral Entry Into Host Cells. 2020 , 14, 1695-1703	3
829	Vaccines against Coronavirus Disease: Target Proteins, Immune Responses, and Status of Ongoing Clinical Trials. 2020 , 14, 2253-2263	2

828	Molecular Characterization and Amino Acid Homology of Nucleocapsid (N) Protein in SARS-CoV-1, SARS-CoV-2, MERS-CoV, and Bat Coronavirus. 2020 , 14, 757-763	7
827	Genetic Variant of SARS-CoV-2 Isolates in Indonesia: Spike Glycoprotein Gene. 2020 , 14, 971-978	11
826	Clinical implications and economic effects of the Coronavirus pandemic on gynecology, obstetrics and reproductive medicine in Germany: learning from Italy. 2020 , 72, 171-177	4
825	Cardiovascular system is at higher risk of affecting by COVID-19. 2020 , 91, e2020018	4
824	COVID-19 Outbreak in Malaysia. 2020 , 11, 93-100	65
823	Anti-SARS-CoV Natural Products With the Potential to Inhibit SARS-CoV-2 (COVID-19). 2020 , 11, 561334	54
822	Rational Drug Repurposing: Focus on Lysosomotropism, Targets in Disease Process, Drug Profile, and Pulmonary Tissue Accumulation in SARS-CoV-2 Infection/COVID-19. 2020 , 11, 584881	5
821	An Italian Guidance Model for the Management of Suspected or Confirmed COVID-19 Patients in the Primary Care Setting. 2020 , 8, 572042	6
820	Inhibition of Human Cathepsins B and L by Caffeic Acid and Its Derivatives. 2020 , 11,	1
819	The PIKfyve Inhibitor Apilimod: A Double-Edged Sword against COVID-19. 2020 , 10,	14
818	Impact of Comorbidities on SARS-CoV-2 Viral Entry-Related Genes. 2020 , 10,	13
817	Renin Angiotensin System, COVID-19 and Male Fertility: Any Risk for Conceiving?. 2020 , 8,	11
816	Markers Associated with COVID-19 Susceptibility, Resistance, and Severity. 2020 , 13,	14
815	Pathogen Genomics and Host Cellular Susceptibility Factors of COVID-19. 2020 , 107-126	2
814	COVID-19 FARMAKOTERAPIS 2020 , 11, 80-114	1
813	Comprehensive analysis of drugs to treat SARS-CoV-2 infection: Mechanistic insights into current COVID-19 therapies (Review). 2020 , 46, 467-488	86
812	Potential ocular and systemic COVID-19 prophylaxis approaches for healthcare professionals. 2020 , 68, 1349-1356	8
811	Update on the target structures of SARS-CoV-2: A systematic review. 2020 , 52, 142-149	33

810	Impact of SARS-CoV-2 on periodontal tissue manifestation. 2020 , 12, 90	3
809	The Progression of SARS Coronavirus 2 (SARS-CoV2): Mutation in the Receptor Binding Domain of Spike Gene. 2020 , 20, e41	17
808	Why is There Low Morbidity and Mortality of COVID-19 in Africa?. 2020 , 103, 564-569	78
807	Mutations Observed in the SARS-CoV-2 Spike Glycoprotein and Their Effects in the Interaction of Virus with ACE-2 Receptor. 2020 , 35, 253-260	12
806	Druggability for COVID-19: in silico discovery of potential drug compounds against nucleocapsid (N) protein of SARS-CoV-2. 2020 , 18, e43	5
805	ACE2: Evidence of role as entry receptor for SARS-CoV-2 and implications in comorbidities. 2020 , 9,	143
804	A potential role for Galectin-3 inhibitors in the treatment of COVID-19. 2020 , 8, e9392	43
803	Comparative analysis of candidate vaccines to prevent covid 19 pandemic. 2021 , 309, 01038	
802	Pathological and biochemical alteration in COVID-19. 2021 , 11, 42	
801	When Immunity Kills: The Lessons of SARS-CoV-2 Outbreak. 2021 , 12, 692598	2
800	Catechins: Therapeutic Perspectives in COVID-19-Associated Acute Kidney Injury. 2021 , 26,	3
799	Caracterizaci3n y fisiopatolog3a del Sars-Cov-2, Revisi3n de la literatura actual. 2021 , 34,	
798	Two-Pore Channels in Cancer Hallmarks: An Update Review. 2021 , 14, 1481-1500	
797	Induction of trained immunity by influenza vaccination - impact on COVID-19. 2021 , 17, e1009928	12
796	Vaccination against COVID-19 for hematologic patients: A review of clinical guidelines. 2021 , 66, 458-470	
795	Glycyrrhizic Acid Inhibits SARS-CoV-2 Infection by Blocking Spike Protein-Mediated Cell Attachment. 2021 , 26,	8
794	Imaging and visualizing SARS-CoV-2 in a new era for structural biology.. 2021 , 11, 20210019	1
793	Epigenetic targeting of the ACE2 and NRP1 viral receptors limits SARS-CoV-2 infectivity. 2021 , 13, 187	4

792	Lung-selective Cas13d-based nanotherapy inhibits lethal SARS-CoV-2 infection by targeting host protease Ctsl.		1
791	Mitoxantrone modulates a glycosaminoglycan-spike complex to inhibit SARS-CoV-2 infection.		
790	Pathogenesis, Symptomatology, and Transmission of SARS-CoV-2 through Analysis of Viral Genomics and Structure. 2021 , 6, e0009521		8
789	An airway organoid-based screen identifies a role for the HIF1 α -glycolysis axis in SARS-CoV-2 infection. 2021 , 37, 109920		4
788	Acquisition and onward transmission of a SARS-CoV-2 E484K variant among household contacts of a bamlanivimab-treated patient.		3
787	Microvascular Skin Manifestations Caused by COVID-19. 2021 , 41, 387-396		1
786	Current Understanding of the Innate Control of Toll-like Receptors in Response to SARS-CoV-2 Infection. 2021 , 13,		4
785	Human Cell Receptors and Downstream Cascades: A Review of Molecular Aspects and Potential Therapeutic Targets against COVID-19. 2021 , In Press,		
784	Association between molecular markers of COVID-19 and Alzheimer's disease. 2021 ,		1
783	Uncovering a conserved vulnerability site in SARS-CoV-2 by a human antibody. 2021 , 13, e14544		1
782	Highly efficient intercellular spreading of protein misfolding mediated by viral ligand-receptor interactions. <i>Nature Communications</i> , 2021 , 12, 5739	17.4	11
781	Distant residues modulate conformational opening in SARS-CoV-2 spike protein. 2021 , 118,		11
780	Anti-SARS-CoV-2 hyperimmune globulin demonstrates potent neutralization and antibody-dependent cellular cytotoxicity and phagocytosis through N and S proteins. 2021 ,		4
779	Peptides and peptidomimetics as therapeutic agents for Covid-19.. 2021 , e24245		2
778	Replication and single-cycle delivery of SARS-CoV-2 replicons. 2021 , 374, 1099-1106		7
777	Cathepsin L, transmembrane peptidase/serine subfamily member 2/4, and other host proteases in COVID-19 pathogenesis - with impact on gastrointestinal tract. 2021 , 27, 6590-6600		0
776	Targeting autophagy with natural products to prevent SARS-CoV-2 infection. 2021 ,		6
775	Polymersomes as Stable Nanocarriers for a Highly Immunogenic and Durable SARS-CoV-2 Spike Protein Subunit Vaccine. 2021 , 15, 15754-15770		6

774	A Made-in-Canada serology solution for profiling humoral immune responses to SARS-CoV-2 infection and vaccination.	4
773	Using an online nominal group technique to determine key implementation factors for COVID-19 vaccination programmes in community pharmacies. 2021 , 43, 1705-1717	2
772	A randomized, double-blind phase I clinical trial of two recombinant dimeric RBD COVID-19 vaccine candidates: safety, reactogenicity and immunogenicity.	1
771	Transient lipid-bound states of spike protein heptad repeats provide insights into SARS-CoV-2 membrane fusion. 2021 , 7, eabk2226	0
770	Mechanisms of Lung Injury Induced by SARS-CoV-2 Infection. 2021 ,	2
769	SARS-CoV-2 S1 Protein Induces Endolysosome Dysfunction and Neuritic Dystrophy. 2021 , 15, 777738	1
768	Neurotropism of SARS-CoV-2 and neurological diseases of the central nervous system in COVID-19 patients. 2021 , 1	7
767	Host cell-intrinsic innate immune recognition of SARS-CoV-2. 2021 , 52, 30-38	3
766	Resonance Interaction of the Protein Fragment of the Viral Capsid and the RNA Fragment in the Body Cell. 2021 , 43, 355-360	
765	Spike residue 403 affects binding of coronavirus spikes to human ACE2. <i>Nature Communications</i> , 2021 , 12, 6855	17.4 3
764	Glycosylation and disulfide bonding of wild-type SARS-CoV-2 spike glycoprotein. 2021 , JVI0162621	2
763	Pathogenesis and Mechanism of Gastrointestinal Infection With COVID-19. 2021 , 12, 674074	4
762	SARS-CoV-2: Overview and Its Impact on Oral Health. 2021 , 9,	1
761	Kite-Shaped Molecules Block SARS-CoV-2 Cell Entry at a Post-Attachment Step. 2021 , 13,	1
760	Conserved recombination patterns across coronavirus subgenera.	2
759	Perspectives on SARS-CoV-2 Main Protease Inhibitors. 2021 , 64, 16922-16955	14
758	Rheumatoid arthritis patients treated with Janus kinase inhibitors show reduced humoral immune responses following BNT162b2 vaccination. 2021 ,	2
757	Mesalamine Reduces Intestinal ACE2 Expression Without Modifying SARS-CoV-2 Infection or Disease Severity in Mice. 2021 ,	1

756	In Silico Evaluation of Different Flavonoids from Medicinal Plants for Their Potency against SARS-CoV-2. 2021 , 1, 416-434	3
755	EpiCurator: an immunoinformatic workflow to predict and prioritize SARS-CoV-2 epitopes.. 2021 , 9, e12548	0
754	Alternative RAS in Various Hypoxic Conditions: From Myocardial Infarction to COVID-19. 2021 , 22,	2
753	Improved SARS-CoV-2 Spike Glycoproteins for Pseudotyping Lentiviral Vectors. 2021 , 1,	1
752	Overview of Neutralizing Antibodies and Their Potential in COVID-19.. 2021 , 9,	5
751	Treatment of SARS-CoV-2 (COVID-19): A safety perspective. 2021 , 10, 1-32	0
750	Detection of Antibodies Against the SARS-CoV-2 Spike Protein and Analysis of the Peripheral Blood Mononuclear Cell Transcriptomic Profile, 15 Years After Recovery From SARS. 2021 , 11, 768993	0
749	Structures and functions of coronavirus replication-transcription complexes and their relevance for SARS-CoV-2 drug design. 2021 ,	29
748	Stapled Peptides Targeting SARS-CoV-2 Spike Protein HR1 Inhibit the Fusion of Virus to Its Cell Receptor. 2021 , 64, 17486-17495	2
747	Study of Various Diagnostic Tests for COVID-19: A Review. 2021 , 1, 153-162	
746	TMPRSS2 promotes SARS-CoV-2 evasion from NCOA7-mediated restriction. 2021 , 17, e1009820	2
745	Phylogenetic and full-length genome mutation analysis of SARS-CoV-2 in Indonesia prior to COVID-19 vaccination program in 2021. 2021 , 45, 200	0
744	A colorimetric sandwich-type bioassay for SARS-CoV-2 using a hACE2-based affinity peptide pair.. 2021 , 425, 127923	1
743	Seroprevalence of Antibodies to SARS-CoV-2 in Guangdong Province, China between March to June 2020. 2021 , 10,	0
742	Single-cell landscape of peripheral immune responses to fatal SFTS. 2021 , 37, 110039	2
741	NAADP-binding proteins find their identity. 2021 ,	3
740	Hindrance of the Proteolytic Activity of Neutrophil-Derived Serine Proteases by Serine Protease Inhibitors as a Management of Cardiovascular Diseases and Chronic Inflammation. 2021 , 9, 784003	3
739	LRRC15 is an inhibitory receptor blocking SARS-CoV-2 spike-mediated entry. 2021 ,	0

738	Neurological complications and infection mechanism of SARS-COV-2. 2021 , 6, 406	16
737	Clinical Antiviral Drug Arbidol Inhibits Infection by SARS-CoV-2 and Variants through Direct Binding to the Spike Protein. 2021 ,	2
736	Research advances and prospects of legume lectins. 2021 , 46, 1	2
735	COVID-19 Specific Immune Markers Revealed by Single Cell Phenotypic Profiling.. 2021 , 9,	1
734	Target identification for repurposed drugs active against SARS-CoV-2 via high-throughput inverse docking. 2021 , 1	1
733	Neuroinflammation and Its Impact on the Pathogenesis of COVID-19.. 2021 , 8, 745789	4
732	Natural Bioactive Molecules: An Alternative Approach to the Treatment and Control of COVID-19. 2021 , 22,	15
731	Nature of the Interplay Between Periodontal Diseases and COVID-19. 2,	1
730	Post-mortem lung tissue: the fossil record of the pathophysiology and immunopathology of severe COVID-19. 2021 ,	5
729	Denaturation of the SARS-CoV-2 spike protein under non-thermal microwave radiation. 2021 , 11, 23373	1
728	Molecular dynamic simulation analysis of SARS-CoV-2 spike mutations and evaluation of ACE2 from pets and wild animals for infection risk.. 2021 , 96, 107613	2
727	SARS-CoV-2 deregulates the vascular and immune functions of brain pericytes via Spike protein. 2021 , 161, 105561	9
726	Immune mechanisms in cancer patients that lead to poor outcomes of SARS-CoV-2 infection. 2021 ,	2
725	Reduced neutralization of SARS-CoV-2 B.1.617 variant by convalescent and vaccinated sera. 2021 ,	2
724	Detection of SARS-CoV-2 in COVID-19 Patient Nasal Swab Samples Using Signal Processing.. 2022 , 16, 164-174	0
723	Targeting mechanism for SARS-CoV-2 : interaction and key groups of TMPRSS2 toward four potential drugs. 2021 , 13, 19218-19237	0
722	An overview of the ongoing challenges in SARS-CoV-2 global control. 2021 , 1, 1-18	3
721	WOMEN AND MEN WITH CANCER AND A FUTURE DESIRE FOR CHILDREN - WHAT SHOULD CLINICIANS CONSIDER IN COVID-19 PANDEMIC TIMES?. 2021 , 17, 234-240	0

720	Plausible Impacts of SARS-CoV-2 on Human Reproductive System. 2021 , 401-418	
719	The high diversity of SARS-CoV-2-related coronaviruses in pangolins alerts potential ecological risks. 2021 , 42, 834-844	2
718	Inferring the stabilization effects of SARS-CoV-2 variants on the binding with ACE2 receptor.. 2022 , 5, 1421	1
717	Comprehensive Analysis of CD4 T Cell Response Cross-Reactive to SARS-CoV-2 Antigens at the Single Allele Level of HLA Class II.. 2021 , 12, 774491	0
716	Antiviral properties of whey proteins and their activity against SARS-CoV-2 infection.. 2022 , 89, 104932	4
715	Establishment of a pseudovirus neutralization assay based on SARS-CoV-2 S protein incorporated into lentiviral particles.. 2022 , 4, 38-38	0
714	The ins and outs of virus trafficking through acidic Ca stores.. 2022 , 102, 102528	1
713	Structural basis and mode of action for two broadly neutralizing antibodies against SARS-CoV-2 emerging variants of concern.. 2021 , 110210	26
712	Traditional herbal compounds as candidates to inhibit the SARS-CoV-2 main protease: an in silico study. 1-14	1
711	Analysis of Hetero-Stacked Source TFET and Heterostructure Vertical TFET as Dielectrically Modulated Label-Free Biosensors. 2022 , 22, 939-947	1
710	Structural and functional insights into the major mutations of SARS-CoV-2 Spike RBD and its interaction with human ACE2 receptor.. 2021 , 101773	2
709	Screening of potential spike glycoprotein / ACE2 dual antagonists against COVID-19 in silico molecular docking.. 2021 , 301, 114424	3
708	Dual-detection fluorescent immunochromatographic assay for quantitative detection of SARS-CoV-2 spike RBD-ACE2 blocking neutralizing antibody.. 2021 , 199, 113883	2
707	The spike protein of SARS-CoV-2 virus induces heme oxygenase-1: Pathophysiologic implications.. 2021 , 1868, 166322	4
706	In vitro potential antiviral SARS-CoV-19- activity of natural product thymohydroquinone and dithymoquinone from <i>Nigella sativa</i> .. 2022 , 120, 105587	5
705	COVID-19: Notes on its Etiology, Pathogenesis and Mediation. 2020 , 045-057	
704	Deep learning-assisted pipeline for Virtual Screening of ligand compound databases: Application on inhibiting the entry of SARS-CoV-2 into human cells. 2020 ,	0
703	Pulmonary pathology of COVID-19. 2020 , 7, 79-83	

702	General ophthalmological aspects of the COVID-19 infection. 2021 , 20, 102-108	
701	Comparative analysis of existing platforms for the development of vaccines against dangerous and extremely dangerous viral infections with pandemic potential. 2021 , 21, 225-233	
700	COVID-19 Vaccines Global Information Management through Bibliometrics. 2021 , 29, 0-0	
699	SARS-CoV-2-host cell surface interactions and potential antiviral therapies.. 2022 , 12, 20200081	0
698	ASGR1 is a candidate receptor for SARS-CoV-2 that promotes infection of liver cells.	
697	Evaluation of SARS-CoV-2 entry, inflammation and new therapeutics in human lung tissue cells.. 2022 , 18, e1010171	3
696	A new screening system for entry inhibitors based on cell-to-cell transmitted syncytia formation mediated by self-propagating hybrid VEEV-SARS-CoV-2 replicon.. 2022 , 1-28	0
695	Potential metal-related strategies for prevention and treatment of COVID-19.. 2022 , 41, 1-13	1
694	Wearable AI-Eigen-Based Lateral Flow Test Strip for Rapid Detection of SARS-CoV-2 RBD Protein and N Protein.. 2022 , 3, 100740	0
693	Computational screening of potential drugs against COVID-19 disease: the Neuropilin-1 receptor as molecular target.. 2022 , 1-9	3
692	Impaired Immune Response to COVID-19 Vaccination in Patients with B-Cell Malignancies after CD19 CART Cell Therapy.. 2021 ,	0
691	The discovery and development of transmembrane serine protease 2 (TMPRSS2) inhibitors as candidate drugs for the treatment of COVID-19.. 2022 , 1-16	2
690	An insight into SARS-CoV2 structure, Pathogenesis, target hunting for drug development and vaccine initiatives.	0
689	Insights Into the Changing Landscape of Coronavirus Disease 2019.. 2021 , 11, 761521	2
688	Structure and Interaction Based Design of Anti-SARS-CoV-2 Aptamers.. 2022 ,	1
687	Adverse Effects of COVID-19 Treatments: A Special Focus on Susceptible Populations. 2022 ,	
686	The "LLQY" motif on SARS-CoV-2 spike protein affects S incorporation into virus particles.. 2022 , jvi0189721	0
685	Activation of TCA cycle restrains virus-metabolic hijacking and viral replication in mouse hepatitis virus-infected cells.. 2022 , 12, 7	0

684	Exogenous Chemical Exposure Increased Transcription Levels of the Host Virus Receptor Involving Coronavirus Infection.. 2022 ,	
683	Inhalable SARS-CoV-2 Mimetic Particles Induce Pleiotropic Antigen Presentation.. 2022 ,	0
682	Neutralizing SARS-CoV-2 by dimeric side chain-to-side chain cross-linked ACE2 peptide mimetics.. 2022 ,	
681	Evaluation of Clinical and Immune Responses in Recovered Children with Mild COVID-19.. 2022 , 14,	0
680	Harringtonine has the effects of double blocking SARS-CoV-2 membrane fusion.	
679	Safety, immunogenicity, and protection provided by unadjuvanted and adjuvanted formulations of a recombinant plant-derived virus-like particle vaccine candidate for COVID-19 in nonhuman primates.. 2022 ,	5
678	SARS-CoV-2 and the Host Cell: A Tale of Interactions. 2022 , 1,	3
677	Biosensors for the Determination of SARS-CoV-2 Virus and Diagnosis of COVID-19 Infection.. 2022 , 23,	12
676	Obatoclox inhibits SARS-CoV-2 entry by altered endosomal acidification and impaired cathepsin and furin activity .. 2022 , 1-29	1
675	Animal models for SARS-CoV-2 and SARS-CoV-1 pathogenesis, transmission and therapeutic evaluation.. 2022 , 11, 40-56	1
674	Systematic Investigation of SARS-CoV-2 Receptor Protein Distribution along Viral Entry Routes in Humans.. 2022 , 1-9	0
673	Structural insights in cell-type specific evolution of intra-host diversity by SARS-CoV-2.. <i>Nature Communications</i> , 2022 , 13, 222	17.4 2
672	SARS-COV-2 Variants: Differences and Potential of Immune Evasion.. 2021 , 11, 781429	22
671	JIB-04 Has Broad-Spectrum Antiviral Activity and Inhibits SARS-CoV-2 Replication and Coronavirus Pathogenesis.. 2022 , e0337721	2
670	Antidepressant and Antipsychotic Drugs Reduce Viral Infection by SARS-CoV-2 and Fluoxetine Shows Antiviral Activity Against the Novel Variants .. 2021 , 12, 755600	6
669	Site Density Functional Theory and Structural Bioinformatics Analysis of the SARS-CoV Spike Protein and hACE2 Complex.. 2022 , 27,	0
668	SNX27 suppresses SARS-CoV-2 infection by inhibiting viral lysosome/late endosome entry.. 2022 , 119,	7
667	Genome-scale CRISPR screens identify host factors that promote human coronavirus infection.. 2022 , 14, 10	5

666	SARS-CoV-2 S Protein Subunit 1 Elicits Ca Influx - Dependent Ca Signals in Pancreatic Stellate Cells and Macrophages .. 2022 , 3, zqac002	2
665	Impact of SARS-CoV-2 on Saliva: TNF- α , IL-6, IL-10, Lactoferrin, Lysozyme, IgG, IgA, and IgM.. 2022 ,	0
664	Engineered small extracellular vesicles displaying ACE2 variants on the surface protect against SARS-CoV-2 infection.. 2022 , 11, e12179	5
663	Targeting SARS-CoV-2 infection through CAR T cells and bispecific T cell engagers.	
662	In-vitro and In-vivo Experimental Models for MERS-CoV, SARS-CoV and SARS-CoV-2 Viral Infection: A Compendious Review.. 2022 ,	
661	Matrix metalloproteinases and tissue inhibitors of metalloproteinases in murine coronavirus-induced neuroinflammation.. 2022 , 566, 122-135	0
660	Psychological Distress During COVID-19 Curfews and Social Distancing in Saudi Arabia: A Cross-Sectional Study.. 2021 , 9, 792533	1
659	Humoral immune responses against SARS-CoV-2 variants including omicron in solid organ transplant recipients after three doses of a COVID-19 mRNA vaccine.	0
658	Endolysosomal Cation Channels and Lung Disease.. 2022 , 11,	0
657	Growth, Antigenicity, and Immunogenicity of SARS-CoV-2 Spike Variants Revealed by a Live rVSV-SARS-CoV-2 Virus.. 2021 , 8, 793437	1
656	Anticoagulation Prior to COVID-19 Infection Has No Impact on 6 Months Mortality: A Propensity Score-Matched Cohort Study.. 2022 , 11,	1
655	Lipid kinases VPS34 and PIKfyve coordinate a phosphoinositide cascade to regulate Retriever-mediated recycling on endosomes.. 2022 , 11,	6
654	COVID-19 and varicocele: the possible overlap factors and the common therapeutic approaches.. 2021 ,	0
653	Dynamics of infection-elicited SARS-CoV-2 antibodies in children over time.. 2022 ,	1
652	Identification of the SARS-CoV-2 surface therapeutic targets and drugs using molecular modeling methods for inhibition the virus entry.. 2022 , 132488	1
651	Clinical course impacts early kinetics, magnitude, and amplitude of SARS-CoV-2 neutralizing antibodies beyond 1 year after infection.. 2022 , 3, 100523	1
650	Evidence of a SARS-CoV-2 double Spike mutation D614G/S939F potentially affecting immune response of infected subjects.. 2022 , 20, 733-733	1
649	Insight into COVID-19's epidemiology, pathology, and treatment.. 2022 , 8, e08799	6

648	Exploring Toxins for Hunting SARS-CoV-2 Main Protease Inhibitors: Molecular Docking, Molecular Dynamics, Pharmacokinetic Properties, and Reactome Study.. 2022 , 15,	6
647	A Defective Viral Particle Approach to COVID-19.. 2022 , 11,	0
646	Duodenal mucosal expression of COVID-19-related genes in health, diabetes gastroenteropathy and functional dyspepsia.. 2022 ,	0
645	Discovery of a SARS-CoV-2 Broadly-Acting Neutralizing Antibody with Activity against Omicron and Omicron + R346K Variants.	2
644	Role of Polypeptide Inflammatory Biomarkers in the Diagnosis and Monitoring of COVID-19.. 2022 , 28, 59	1
643	Bioconjugated Nanomaterial for Targeted Diagnosis of SARS-CoV-2.	3
642	Structural biology of SARS-CoV-2: open the door for novel therapies.. 2022 , 7, 26	8
641	Mechanisms contributing to adverse outcomes of COVID-19 in obesity.. 2022 , 477, 1155	2
640	A review on covid-19: From molecular variability, drug development to status of vaccine clinical trials. 2022 , 12, 55-71	
639	A 'Multiomic' Approach of Saliva Metabolomics, Microbiota, and Serum Biomarkers to Assess the Need of Hospitalization in Coronavirus Disease 2019.. 2022 , 1, 194-209	1
638	Emergence of Omicron third lineage BA.3 and its importance.. 2022 ,	25
637	SARS-CoV-2 Infections, Impaired Tissue, and Metabolic Health: Pathophysiology and Potential Therapeutics.. 2022 ,	1
636	Immunology of SARS-CoV-2 infection in children.. 2022 , 23, 177-185	11
635	A pseudotyped lentivirus-based assay to titer SARS-CoV-2 neutralizing antibodies in Mexico.	
634	Palladium-Catalysed Intermolecular Direct C-H Bond Arylation of Heteroarenes with Reagents Alternative to Aryl Halides: Current State of the Art. 2022 , 26,	
633	Emergence and onward transmission of a SARS-CoV-2 E484K variant among household contacts of a bamlanivimab-treated patient.. 2022 , 103, 115656	0
632	Immune response to SARS-CoV-2 variants: A focus on severity, susceptibility, and preexisting immunity.. 2022 , 15, 277-288	2
631	Innate immunity: the first line of defense against SARS-CoV-2.. 2022 , 23, 165-176	37

630	ACE2 internalization induced by a SARS-CoV-2 recombinant protein is modulated by angiotensin II type 1 and bradykinin 2 receptors.. 2022 , 293, 120284	0
629	Data structures associated with biomedical research. 2022 , 19-43	
628	Mutations in human SARS-CoV-2 spike proteins, potential drug binding and epitope sites for COVID-19 therapeutics development.. 2022 , 4, 41-50	4
627	Accelerating the discovery of the beyond rule of five compounds that have high affinities toward SARS-CoV-2 spike RBD.. 2022 , 1-10	
626	Olfactory dysfunction as a post-infectious symptom of SARS-CoV-2 infection.. 2022 , 75, 103352	4
625	Diversity of Coronaviruses with Particular Attention to the Interspecies Transmission of SARS-CoV-2.. 2022 , 12,	0
624	Herbal Remedies, Nutraceuticals, and Dietary Supplements for COVID-19 Management: An update. 2022 , 100021	7
623	Longitudinal Plasma Proteomics Analysis Reveals Novel Candidate Biomarkers in Acute COVID-19.. 2022 ,	4
622	Human inhalable antibody fragments neutralizing SARS-CoV-2 variants for COVID-19 therapy.. 2022 ,	0
621	Biomimetic Alveolus-on-a-Chip for SARS-CoV-2 Infection Recapitulation.. 2022 , 2022, 9819154	3
620	Known Cellular and Receptor Interactions of Animal and Human Coronaviruses: A Review.. 2022 , 14,	1
619	The mouse resource at National Resource Center for Mutant Mice.. 2022 , 33, 143	
618	Dual Inhibition of Cathepsin L and 3CL-Pro by GC-376 Constrains SARS Cov2 Infection Including Omicron Variant.	2
617	Magnetic Enrichment of SARS-CoV-2 Antigen-Binding B Cells for Analysis of Transcriptome and Antibody Repertoire. 2022 , 8, 23	0
616	Escherichia coli recombinant expression of SARS-CoV-2 protein fragments.. 2022 , 21, 21	1
615	A randomized, double-blind phase I clinical trial of two recombinant dimeric RBD COVID-19 vaccine candidates: Safety, reactogenicity and immunogenicity.. 2022 ,	3
614	Development of an in vitro model for animal species susceptibility to SARS-CoV-2 replication based on expression of ACE2 and TMPRSS2 in avian cells.. 2022 , 569, 1-12	0
613	Drug repurposing against SARS-CoV-2 using computational approaches.. 2022 ,	4

612	Analytical characterization of the SARS-CoV-2 EURM-017 reference material.. 2021 , 101, 19-19	0
611	Deep dissection of the antiviral immune profile of patients with COVID-19.. 2021 , 4, 1389	3
610	SARS-CoV-2 spreads through cell-to-cell transmission.. 2022 , 119,	20
609	A serum-stable RNA aptamer specific for SARS-CoV-2 neutralizes viral entry. 2021 , 118,	4
608	SARS-CoV-2 spike conformation determines plasma neutralizing activity.. 2021 ,	6
607	Interactions of renin-angiotensin system and COVID-19: the importance of daily rhythms in ACE2, ADAM17 and TMPRSS2 expression.. 2021 , 70, S177-S194	6
606	Prediction of repurposed drugs for treating lung injury in COVID-19. 2020 ,	
605	Pathogenesis, Symptomatology, and Transmission of SARS-CoV-2 through analysis of Viral Genomics and Structure. 2021 ,	
604	The pancreas and COVID-19: a clinical conundrum. 2021 , 13, 11004-11013	
603	Research advances and prospects of legume lectins. 2021 , 46,	
602	Epidemiology and Etiopathogeny of COVID-19.. 2021 , 1352, 45-71	
601	A scalable serology solution for profiling humoral immune responses to SARS-CoV-2 infection and vaccination.. 2022 , 11, e1380	3
600	Immune response and potential therapeutic strategies for the SARS-CoV-2 associated with the COVID-19 pandemic.. 2022 , 18, 1865-1877	0
599	Monoclonal antibody therapies in the management of SARS-CoV-2 infection.. 2022 , 1-18	4
598	Identification of Potential Inhibitors Against SARS-CoV-2 3CLpro, PLpro, and RdRP Proteins: An In-Silico Approach. 2022 , 85-112	
597	Gate-all-around junctionless FET based label-free dielectric/charge modulation detection of SARS-CoV-2 virus.. 2022 , 12, 9202-9209	1
596	Blocking viral infections with lysine-based polymeric nanostructures: a critical review.. 2022 ,	
595	Collection of Monoclonal Antibodies Targeting SARS-CoV-2 Proteins.. 2022 , 14,	0

594	SARS-CoV-2 Permissive Glioblastoma Cell Line for High Throughput Antiviral Screening.	
593	A Novel Bacterial Protease Inhibitor Adjuvant in RBD-Based COVID-19 Vaccine Formulations Containing Alum Increases Neutralizing Antibodies, Specific Germinal Center B Cells and Confers Protection Against SARS-CoV-2 Infection in Mice.. 2022 , 13, 844837	1
592	Diltiazem inhibits SARS-CoV-2 cell attachment and internalization and decreases the viral infection in mouse lung.. 2022 , 18, e1010343	3
591	Molecular and Physiological Aspects of SARS-CoV-2 Infection in Women and Pregnancy.. 2022 , 3, 756362	
590	Two-pore channel blockade by phosphoinositide kinase inhibitors YM201636 and PI-103 determined by a histidine residue near pore-entrance.	1
589	Identification of a SARS-CoV-2 host metalloproteinase-dependent entry pathway differentially used by SARS-CoV-2 and variants of concern Alpha, Delta, and Omicron.	1
588	Molecular Interactions of Tannic Acid with Proteins Associated with SARS-CoV-2 Infectivity.. 2022 , 23,	1
587	Reduction of Cell Fusion by Deletion in the Hypervariable Region of the Spike Protein of Mouse Hepatitis Virus.. 2022 , 14,	
586	Vaccine Candidate Against COVID-19 Based on Structurally Modified Plant Virus as an Adjuvant.. 2022 , 13, 845316	0
585	Capturing a Crucial 'Disorder-to-Order Transition' at the Heart of the Coronavirus Molecular Pathology-Triggered by Highly Persistent, Interchangeable Salt-Bridges.. 2022 , 10,	0
584	Neuropilin-1-Mediated SARS-CoV-2 Infection in Bone Marrow-Derived Macrophages Inhibits Osteoclast Differentiation.. 2022 , e2200007	1
583	Executable network of SARS-CoV-2-host interaction predicts drug combination treatments.. 2022 , 5, 18	1
582	Depletion and Dysfunction of Dendritic Cells: Understanding SARS-CoV-2 Infection.. 2022 , 13, 843342	3
581	Evolutionary dynamics of the severe acute respiratory syndrome coronavirus 2 genomes. 2022 , 2, 3-22	0
580	Identification of cell type specific ACE2 modifiers by CRISPR screening.. 2022 , 18, e1010377	1
579	iSpray. 2022 , 6, 1-29	
578	Transcriptome Analysis of and Characterization of Norcochlorine-6-O-Methyltransferase Involved in Benzylisoquinoline Alkaloid Biosynthesis.. 2022 , 13, 874583	
577	Molecular variants of SARS-CoV-2: antigenic properties and current vaccine efficacy.. 2022 , 1	2

576	mRNA vaccine-a desirable therapeutic strategy for surmounting COVID-19 pandemic.. 2022 , 18, 2040330	1
575	Thiopurines inhibit coronavirus Spike protein processing and incorporation into progeny virions.	0
574	The vital role of animal, marine, and microbial natural products against COVID-19.. 2022 , 60, 509-524	1
573	IgG response to SARS-CoV-2 and seasonal coronaviruses contributes to complement overactivation in severe COVID-19 patients.. 2022 ,	0
572	SARS-CoV-2 Spike evolution influences GBP and IFITM sensitivity.	1
571	Cytoplasmic domain and enzymatic activity of ACE2 are not required for PI4KB dependent endocytosis entry of SARS-CoV-2 into host cells.. 2022 ,	0
570	Persistent Overactive Cytotoxic Immune Response in a Spanish Cohort of Individuals With Long-COVID: Identification of Diagnostic Biomarkers.. 2022 , 13, 848886	6
569	Multiple SARS-CoV-2 Variants Exhibit Variable Target Cell Infectivity and Ability to Evade Antibody Neutralization.. 2022 , 13, 836232	0
568	Resilience of S309 and AZD7442 monoclonal antibody treatments against infection by SARS-CoV-2 Omicron lineage strains.	3
567	The Bright and Dark Sides of Reactive Oxygen Species Generated by CopperPeptide Complexes. 2022 , 9, 73	1
566	Impaired Neutralizing Antibody Activity against B.1.617.2 (Delta) after Anti-SARS-CoV-2 Vaccination in Patients Receiving Anti-CD20 Therapy.. 2022 , 11,	0
565	SARS-CoV-2: Receptor and Co-receptor Tropism Probability.. 2022 , 79, 133	5
564	Does COVID-19 infection increase the risk of pressure injury in critically ill patients?: A narrative review.. 2022 , 101,	0
563	Antimicrobial Peptides: A plausible approach for COVID-19 treatment.. 2022 ,	4
562	A highly immunogenic live-attenuated vaccine candidate prevents SARS-CoV-2 infection and transmission in hamsters.. 2022 , 100221	0
561	Dual inhibition of vacuolar ATPase and TMPRSS2 is required for complete blockade of SARS-CoV-2 entry into cells.	0
560	Inkjet Printing: A Viable Technology for Biosensor Fabrication. 2022 , 10, 103	3
559	Detection, prevention and treatment of COVID-19 and opportunities for nanobiotechnology. 20200181	3

558	Coagulation factors directly cleave SARS-CoV-2 spike and enhance viral entry.. 2022 , 11,	4
557	Omicron BA.1 and BA.2 neutralizing activity elicited by a comprehensive panel of human vaccines.. 2022 ,	3
556	Functional analysis of polymorphisms at the S1/S2 site of SARS-CoV-2 spike protein.. 2022 , 17, e0265453	2
555	Pfizer-BioNTech COVID-19 Vaccine (BNT162b2) Side Effects: A Systematic Review.. 2022 , 14, e23526	0
554	Study of Viral Photoinactivation by UV-C Light and Photosensitizer Using a Pseudotyped Model.. 2022 , 14,	1
553	The FDA-Approved Drug Cobicistat Synergizes with Remdesivir To Inhibit SARS-CoV-2 Replication and Decreases Viral Titers and Disease Progression in Syrian Hamsters.. 2022 , e0370521	1
552	Distinctive Roles of Furin and TMPRSS2 in SARS-CoV-2 Infectivity.. 2022 , e0012822	7
551	Histones released by NETosis enhance the infectivity of SARS-CoV-2 by bridging the spike protein subunit 2 and sialic acid on host cells.. 2022 ,	1
550	Cellulosic copper nanoparticles and a hydrogen peroxide-based disinfectant protect Vero E6 cells against infection by viral pseudotyped particles expressing SARS-CoV-2, SARS-CoV or MERS-CoV Spike protein.	0
549	Evolution of Anti-RBD IgG Avidity following SARS-CoV-2 Infection.. 2022 , 14,	0
548	Detection of SARS-CoV-2 using dielectric modulated TFET-based biosensor. 1	1
547	Circular RNA vaccines against SARS-CoV-2 and emerging variants.. 2022 ,	21
546	Elucidating Design Principles for Engineering Cell-Derived Vesicles to Inhibit SARS-CoV-2 Infection.. 2022 , e2200125	1
545	Imatinib inhibits SARS-CoV-2 infection by an off-target-mechanism.. 2022 , 12, 5758	1
544	Coronavirus-A Crippling Affliction to Humans.. 2022 ,	
543	Potential Immunogenic Activity of Computationally Designed mRNA- and Peptide-Based Prophylactic Vaccines against MERS, SARS-CoV, and SARS-CoV-2: A Reverse Vaccinology Approach.. 2022 , 27,	1
542	Virus Detection: From State-of-the-Art Laboratories to Smartphone-Based Point-of-Care Testing.. 2022 , e2105904	2
541	Demonstration of antibodies against SARS-CoV-2, neutralizing or binding, in seroconversion panels after mRNA-1273, BNT-162b2 and Ad26.COVS vaccine administration.	

540	Two Different Therapeutic Approaches for SARS-CoV-2 in hiPSCs-Derived Lung Organoids.. 2022 , 11,	2
539	SARS-CoV-2 Infection Induces Ferroptosis of Sinoatrial Node Pacemaker Cells.. 2022 , CIRCRESAHA121320518	1
538	Prefusion Spike Protein Conformational Changes Are Slower in SARS-CoV-2 than in SARS-CoV-1.. 2022 , 101814	3
537	Development of optimized drug-like small molecule inhibitors of the SARS-CoV-2 3CL protease for treatment of COVID-19.. <i>Nature Communications</i> , 2022 , 13, 1891	17.4 6
536	Epitope mapping of neutralising anti-SARS-CoV-2 monoclonal antibodies: Implications for immunotherapy and vaccine design.. 2022 , e2347	1
535	Effectiveness, Adverse Events, and Immune Response Following Double Vaccination with BNT162b2 in Staff at the National Comprehensive Cancer Center (NCCC).. 2022 , 10,	0
534	Impairment of SARS-CoV-2 spike glycoprotein maturation and fusion activity by nitazoxanide: an effect independent of spike variants emergence.. 2022 , 79, 227	1
533	Understanding on the possible routes for SARS CoV-2 invasion via ACE2 in the host linked with multiple organs damage.. 2022 , 99, 105254	2
532	SARS-CoV-2 Spike Protein Binding of Glycated Serum Albumin-Its Potential Role in the Pathogenesis of the COVID-19 Clinical Syndromes and Bias towards Individuals with Pre-Diabetes/Type 2 Diabetes and Metabolic Diseases.. 2022 , 23,	2
531	Targeted protein S-nitrosylation of ACE2 as potential treatment to prevent spread of SARS-CoV-2 infection.. 2022 ,	1
530	Exploring the inhibitory potential of and phytoconstituents against the Spike glycoprotein receptor binding domain of SARS-CoV-2 Delta (B.1.617.2) variant and the main protease (M) as therapeutic candidates, using Molecular docking, DFT, and ADME/Tox studies.. 2022 , 133032	2
529	Clinical Variables Correlate with Serum Neutralizing Antibody Titers after COVID-19 mRNA Vaccination in an Adult, US-based Population.. 2022 ,	0
528	A global picture: therapeutic perspectives for COVID-19.. 2022 ,	13
527	Endolysosomal cation channels point the way towards precision medicine of cancer and infectious diseases.. 2022 , 148, 112751	1
526	Trace element homeostasis in the neurological system after SARS-CoV-2 infection: Insight into potential biochemical mechanisms.. 2022 , 71, 126964	0
525	Application of pseudovirus system in the development of vaccine, antiviral-drugs, and neutralizing antibodies.. 2022 , 258, 126993	3
524	The accessible promoter-mediated supplementary effect of host factors provides new insight into the tropism of SARS-CoV-2.. 2022 ,	0
523	SARS-CoV-2 gained a novel spike protein S1-N-Terminal Domain (S1-NTD).. 2022 , 211, 113047	0

522	Infectious Diseases Dynamic Transmissibility with Age Structure and Medical Resources. 2021,	1
521	Analysis of Some Physiological and Biochemical Indices in Patients with Covid-19 Pneumonia Using Mathematical Methods.. 2021, 57, 1394-1407	1
520	Next Generation Sequence Prediction Intelligent System for SARS-COV-2 Using Deep Learning Neural Network. 2021,	0
519	Naringenin as a Possible Candidate Against SARS-CoV-2 Infection and in the Pathogenesis of COVID-19. 2021, 16, 1934578X2110667	3
518	A novel bacterial protease inhibitor adjuvant in RBD-based COVID-19 vaccine formulations increases neutralizing antibodies, specific germinal center B cells and confers protection against SARS-CoV-2 infection.	0
517	Immune dysfunction in COVID-19 and judicious use of anti-rheumatic drugs for the treatment of hyperinflammation. 2021,	1
516	Discovery of Highly Potent Fusion Inhibitors with Potential Pan-Coronavirus Activity That Effectively Inhibit Major COVID-19 Variants of Concern (VOCs) in Pseudovirus-Based Assays.. 2021, 14,	3
515	Preclinical evaluation of a candidate naked plasmid DNA vaccine against SARS-CoV-2.. 2021, 6, 156	2
514	Antigenic characterization of influenza and SARS-CoV-2 viruses.. 2021,	1
513	A Narrative Review of COVID-19 Vaccines.. 2021, 10,	5
512	SARS-CoV-2 Therapeutic Landscape, Opportunity and Future Threats. 2021, 1, 205-215	
511	Potential COVID-19 therapeutic approaches targeting angiotensin-converting enzyme 2; An updated review.. 2021, e2321	4
510	Assessment of serological tests for antibodies to different antigens of the SARS-CoV-2 virus: comparison of six immunoassays. 2021, 23, 1395-1404	0
509	Channels and Transporters of the Pulmonary Lamellar Body in Health and Disease.. 2021, 11,	1
508	COVID-19 Transcriptomic Atlas: A Comprehensive Analysis of COVID-19 Related Transcriptomics Datasets.. 2021, 12, 755222	5
507	Persimmon-derived tannin has antiviral effects and reduces the severity of infection and transmission of SARS-CoV-2 in a Syrian hamster model. 2021, 11, 23695	3
506	COVID-19 pandemisinin ilk yřında ^ ħendiklerimiz.	
505	Aptamer Sandwich Assay for the Detection of SARS-CoV-2 Spike Protein Antigen.. 2021, 6, 35657-35666	2

504	Coronavirus Infection-Associated Cell Death Signaling and Potential Therapeutic Targets.. 2021 , 26,	2
503	Entrectinib-A SARS-CoV-2 Inhibitor in Human Lung Tissue (HLT) Cells.. 2021 , 22,	2
502	Role of the cellular immunity in the formation of the immune response in coronavirus infections. 2021 , 23, 1229-1238	1
501	The Development of SARS-CoV-2 Variants: The Gene Makes the Disease.. 2021 , 9,	6
500	Quantitation of SARS-CoV-2 neutralizing antibodies with a virus-free, authentic test.	
499	SARS-CoV-2 uses metabotropic glutamate receptor subtype 2 as an internalization factor to infect cells.. 2021 , 7, 119	5
498	Why Does the Severity of COVID-19 Differ With Age?: Understanding the Mechanisms Underlying the Age Gradient in Outcome Following SARS-CoV-2 Infection.. 2021 , 41,	3
497	SARS-CoV-2 Infection and Pancreatic β Cell Failure.. 2021 , 11,	5
496	Phosphate-mediated coanchoring of RBD immunogens and molecular adjuvants to alum potentiates humoral immunity against SARS-CoV-2. 2021 , 7, eabj6538	3
495	Iota-Carrageenan Inhibits Replication of SARS-CoV-2 and the Respective Variants of Concern Alpha, Beta, Gamma and Delta.. 2021 , 22,	3
494	Elucidating design principles for engineering cell-derived vesicles to inhibit SARS-CoV-2 infection.. 2021 ,	
493	Drug repurposing strategies and key challenges for COVID-19 management. 2021 , 1-17	4
492	Capturing a crucial disorder-to-order transition at the heart of the coronavirus molecular pathology triggered by highly persistent, interchangeable salt-bridges.	
491	Label-Free Biosensing using Dielectric Modulated GaAs _{1-x} Sbx FinFET under Dry/Wet Environment. 2021 ,	
490	DeepNGlyPred: A Deep Neural Network-Based Approach for Human N-Linked Glycosylation Site Prediction. 2021 , 26,	0
489	Impact of SARS-CoV-2 Mutations on Global Travel and the Increasing Number of Re-Infections: A Risk-Assessment Perspective. 2021 , 1, 196-204	1
488	Risk-focused differences in molecular processes implicated in SARS-CoV-2 infection: corollaries in DNA methylation and gene expression.. 2021 , 14, 54	3
487	Recent Developments in SARS-CoV-2 Neutralizing Antibody Detection Methods.. 2021 , 41, 1052	4

486	In silico Identification of a Viral Surface Glycoprotein Site Suitable for the Development of Low Molecular Weight Inhibitors for Various Variants of the SARS-CoV-2. 2021 , 84, 34-43	
485	Virus Entry Inhibitors: Past, Present, and Future.. 2022 , 1366, 1-13	
484	Rural Medical Care and COVID-19. 2022 , 70, 594-603	
483	Detection of Anti-SARS-CoV-2-S1 RBD-Specific Antibodies Prior to and during the Pandemic in 2011-2021 and COVID-19 Observational Study in 2019-2021.. 2022 , 10,	0
482	Mitoxantrone modulates a heparan sulfate-spike complex to inhibit SARS-CoV-2 infection.. 2022 , 12, 6294	0
481	Current drug targets for gut microbiota biocorrection during the SARS-CoV-2 pandemic: a systematic review.. 2022 ,	1
480	Identification of Transcription Factors Regulating SARS-CoV-2 Tropism Factor Expression by Inferring Cell-Type-Specific Transcriptional Regulatory Networks in Human Lungs.. 2022 , 14,	0
479	Changes in the immune response against SARS-CoV-2 in individuals with severe COVID-19 treated with high dose of vitamin D.. 2022 , 150, 112965	2
478	Synthetic Carbohydrate Binding Agents neutralize SARS-CoV-2 by inhibiting binding of the spike protein to ACE2.. 2022 , 104239	2
477	The Endolysosomal System: The Acid Test for SARS-CoV-2.. 2022 , 23,	1
476	Peptide-Based Vaccines and Therapeutics for COVID-19.. 2022 , 28, 94	2
475	Addressing service profit chain with artificial and emotional intelligence. 1-27	1
474	Sensitivity Enhancement of Dual Gate FET Based Biosensor Using Modulated Dielectric for Covid Detection. 1	1
473	Unique Mode of Antiviral Action of a Marine Alkaloid against Ebola Virus and SARS-CoV-2.. 2022 , 14,	0
472	Quantitation of SARS-CoV-2 neutralizing antibodies with a virus-free, authentic test.	0
471	Peptide-Based Vaccine against SARS-CoV-2: Peptide Antigen Discovery and Screening of Adjuvant Systems.. 2022 , 14,	0
470	COVID-19 Vaccines: Current and Future Perspectives.. 2022 , 10,	3
469	Inflammatory Responses in the Placenta upon SARS-CoV-2 Infection Late in Pregnancy.. 2022 , 104223	6

- 468 An Imported Case of Afebrile Malaria Infection from Tanzania in a Returning Traveler to the Republic of Korea following an Earlier COVID-19 Infection.. **2022**, 7,
- 467 Protease inhibitor Camostat Mesyalte blocks wild type SARS-CoV-2 and D614G viral entry in human engineered miniature lungs.. **2022**, 285, 121509 0
- 466 SARS-CoV-2 spike protein-induced cell fusion activates the cGAS-STING pathway and the interferon response.. **2022**, 15, eabg8744 5
- 465 Table_1.XLSX. **2020**,
- 464 Table_2.XLSX. **2020**,
- 463 Table_3.XLSX. **2020**,
- 462 Image_1.jpeg. **2020**,
- 461 Table_1.doc. **2020**,
- 460 Data_Sheet_1.docx. **2020**,
- 459 Data_Sheet_1.PDF. **2020**,
- 458 Presentation_1.pdf. **2020**,
- 457 Video_1.mp4. **2020**,
- 456 Video_2.mp4. **2020**,
- 455 Video_3.mp4. **2020**,
- 454 Video_4.mp4. **2020**,
- 453 Video_5.mp4. **2020**,
- 452 SARS-CoV-2 Infection: Host Response, Immunity, and Therapeutic Targets.. **2022**, 1 0
- 451 Transcriptional regulation and small compound targeting of ACE2 in lung epithelial cells.. **2022**, 1

450	Berbamine hydrochloride potently inhibits SARS-CoV-2 infection by blocking S protein-mediated membrane fusion.. 2022 , 16, e0010363	2
449	Pseudovirus-Based Assays for the Measurement of Antibody-Mediated Neutralization of SARS-CoV-2.. 2022 , 2452, 361-378	0
448	Humoral immunity against SARS-CoV-2 variants including omicron in solid organ transplant recipients after three doses of a COVID-19 mRNA vaccine.. 2022 , 11, e1391	3
447	A smartphone-based three-in-one biosensor for co-detection of SARS-CoV-2 viral RNA, antigen and antibody.. 2022 , 58, 6108-6111	2
446	Neutralization Assay for SARS-CoV-2 Infection: Plaque Reduction Neutralization Test.. 2022 , 2452, 353-360	
445	Analysis of the Protective Efficacy of Approved COVID-19 Vaccines Against Various Mutants.. 2022 , 13, 804945	1
444	Transcriptomic Profiling of Ganoderic Acid Me-mediated Prevention of Sendai Virus Infection. 2022 , 17,	
443	Glycopeptide Antibiotic Teicoplanin Inhibits Cell Entry of SARS-CoV-2 by Suppressing the Proteolytic Activity of Cathepsin L.. 2022 , 13, 884034	1
442	Developing Small-Molecule Inhibitors of Protein-Protein Interactions Involved in Viral Entry as Potential Antivirals for COVID-19. 2022 , 2,	0
441	Microfluidics Technology in SARS-CoV-2 Diagnosis and Beyond: A Systematic Review. 2022 , 12, 649	2
440	Genetic Associations and Differential mRNA Expression Levels of Host Genes Suggest a Viral Trigger for Endemic Pemphigus Foliaceus. 2022 , 14, 879	1
439	Immune-related therapeutics: an update on antiviral drugs and vaccines to tackle the COVID-19 pandemic.. 2022 , 13, 84-100	
438	Advances in Research on Antiviral Activities of Sulfated Polysaccharides from Seaweeds. 2022 , 15, 581	0
437	Serine Protease Inhibitors Restrict Host Susceptibility to SARS-CoV-2 Infections.. 2022 , e0089222	0
436	SARS-CoV-2 and Emerging Variants: Unmasking Structure, Function, Infection, and Immune Escape Mechanisms. 2022 , 12,	1
435	Furin and TMPRSS2 Resistant Spike Induces Robust Humoral and Cellular Immunity Against SARS-CoV-2 Lethal Infection.. 2022 , 13, 872047	0
434	Vaccine-induced T cells against Sars-Cov-2 and its Omicron variant in B cell-depleted lymphoma patients after CART.. 2022 ,	2
433	[Biological activity of interferons in the novel coronavirus infection COVID-19].. 2022 , 67, 142-152	1

432	Containing the spread of COVID-19 virus facing to its high mutation rate: approach to intervention using a nonspecific way of blocking its entry into the cells.. 2022 , 1-37	0
431	Skewed Cellular Distribution and Low Activation of Functional T-Cell Responses in SARS-CoV-2 Non-Seroconvertors. 2022 , 13,	0
430	Lectins and lectibodies: potential promising antiviral agents.. 2022 , 27, 37	2
429	ADAM10 and ADAM17 promote SARS-CoV-2 cell entry and spike protein-mediated lung cell fusion.. 2022 , e54305	6
428	3D Bioprinted Neural-Like Tissue as a Platform to Study Neurotropism of Mouse-Adapted SARS-CoV-2.. 2022 , e2200002	0
427	Binding of synthetic carbohydrate receptors to enveloped virus glycans: Insights from molecular dynamics simulations. 2022 , 108574	0
426	Consensus Receptor-Binding Domain-Targeted Aptamer Selection and Designing of a Photonic Crystal-Decorated Aptasensor for SARS-CoV-2.. 2022 ,	2
425	Therapeutic approaches and vaccination in fighting COVID-19 infections: A review.. 2022 , 27, 101619	0
424	Drug repurposing for the treatment of COVID-19. 2022 , 149, 108-114	1
423	Virus-like siRNA construct dynamically responsive to sequential microenvironments for potent RNA interference.. 2022 , 622, 938-949	0
422	Virological and Clinical Determinants of the Magnitude of Humoral Responses to SARS-CoV-2 in Mild-Symptomatic Individuals.. 2022 , 13, 860215	0
421	Synthesis, crystal structure elucidation, DFT analysis, drug-likeness and ADMET evaluation and molecular docking studies of triazole derivatives: Binary inhibition of spike protein and ACE2 receptor protein of COVID -19.	0
420	NGS data vectorization, clustering, and finding key codons in SARS-CoV-2 variations.. 2022 , 23, 187	0
419	Multifaceted membrane binding head of the SARS-CoV-2 spike protein. 2022 ,	1
418	Early Cellular and Humoral Responses Developed in Oncohematological Patients after Vaccination with One Dose against COVID-19. 2022 , 11, 2803	1
417	Roles of PIKfyve in multiple cellular pathways.. 2022 , 76, 102086	3
416	Nitric-oxide enriched plasma-activated water inactivates 229E coronavirus and alters antiviral response genes in human lung host cells.. 2023 , 19, 569-580	2
415	ACE2 Decoy Receptor Generated by High-throughput Saturation Mutagenesis Efficiently Neutralizes SARS-CoV-2 and Its Prevalent Variants.. 2022 , 1-0	0

414	Recent Progress on Rapid Lateral Flow Assay-Based Early Diagnosis of COVID-19.. 2022 , 10, 866368	2
413	Uncovering the structural flexibility of SARS-CoV-2 glycoprotein spike variants.	
412	The chimera of S1 and N proteins of SARS-CoV-2: can it be a potential vaccine candidate for COVID-19?.	
411	Drugs repurposing for SARS-CoV-2: new insight of COVID-19 druggability.	
410	Virtual screening and molecular dynamics simulation analysis of Forsythoside A as a plant-derived inhibitor of SARS-CoV-2 3CLpro. 2022 ,	4
409	A Bispecific Antibody Targeting RBD and S2 Potently Neutralizes SARS-CoV-2 Omicron and Other Variants of Concern.	
408	SARS-CoV-2 infects human cardiac myocytes promoted by inflammation and oxidative stress. 2022 ,	0
407	A mechanical-thermodynamic model for understanding endocytosis of COVID-19 virus SARS-CoV-2. 095440622210985	
406	SARS-CoV-2 ORF7a potentially inhibits the antiviral effect of the host factor SERINC5. <i>Nature Communications</i> , 2022 , 13,	17.4 1
405	Role of COVID-19 Vaccines in SARS-CoV-2 Variants. 2022 , 13,	1
404	SARS-CoV-2 Permissive glioblastoma cell line for high throughput antiviral screening. 2022 , 203, 105342	0
403	Human interaction targets of SARS-COV-2 spike protein: A systematic review. 2022 , 20, 1721727X2210953	0
402	Serum Neutralizing Antibody Titers 12 months after COVID-19 mRNA Vaccination: Correlation to Clinical Variables in an Adult, US-Population.	1
401	The ORF8 Protein of SARS-CoV-2 Modulates the Spike Protein and Its Implications in Viral Transmission. 2022 , 13,	2
400	The SARS-CoV-2 spike protein binds and modulates estrogen receptors.	1
399	Central Nervous System Pericytes Contribute to Health and Disease. 2022 , 11, 1707	1
398	The key role of Calpain in COVID-19 as a therapeutic strategy.	1
397	A Multivalent Vaccine Based on Ferritin Nanocage Elicits Potent Protective Immune Responses against SARS-CoV-2 Mutations. 2022 , 23, 6123	1

396	Effects of Spike Mutations in SARS-CoV-2 Variants of Concern on Human or Animal ACE2-Mediated Virus Entry and Neutralization.	2
395	Mapping of SARS-CoV-2 spike protein evolution during first and second waves of COVID-19 infections in India.	1
394	Novel cleavage sites identified in SARS-CoV-2 spike protein reveal mechanism for cathepsin L-facilitated viral infection and treatment strategies. 2022 , 8,	2
393	A paper-based optical sensor for the screening of viruses through the cysteine residues of their surface proteins: A proof of concept on the detection of coronavirus infection. 2022 , 248, 123630	0
392	Target-Specific Drug Discovery of Natural Products against SARS-CoV-2 Life Cycle and Cytokine Storm in COVID-19. 2022 , 50, 927-959	0
391	Current therapeutic strategies to combat coronavirus disease 2019. 2022 , 137-151	
390	SARS-CoV-2 vaccine challenge based on spike glycoprotein against several new variants. 2022 , 11, 173	
389	Polyphosphate in Antiviral Protection: A Polyanionic Inorganic Polymer in the Fight Against Coronavirus SARS-CoV-2 Infection. 2022 , 145-189	1
388	SARS-CoV-2-neutralising monoclonal antibodies to prevent COVID-19. 2022 , 2022,	1
387	Evolution of host protease interactions among SARS-CoV-2 variants of concern and related coronaviruses.	
386	Understanding the pivotal roles of ACE2 in SARS-CoV-2 infection: from structure/function to therapeutic implication. 2022 , 23,	0
385	Circulating tissue factor-positive extracellular vesicles and their association with thrombosis in different diseases.	1
384	Developing Pseudovirus-Based Neutralization Assay against Omicron-Included SARS-CoV-2 Variants. 2022 , 14, 1332	0
383	Cell deaths: Involvement in the pathogenesis and intervention therapy of COVID-19. 2022 , 7,	3
382	Spotlight on therapeutic efficiency of mesenchymal stem cells in viral infections with a focus on COVID-19. 2022 , 13,	1
381	TMED3 Complex Mediates ER Stress-Associated Secretion of CFTR, Pendrin, and SARS-CoV-2 Spike. 2105320	0
380	The Variable Nature of Vitamin CDoes It Help When Dealing with Coronavirus?. 2022 , 11, 1247	0
379	Proper Selection of In Vitro Cell Model Affects the Characterization of the Neutralizing Antibody Response against SARS-CoV-2. 2022 , 14, 1232	1

378	Development of an efficient reproducible cell-cell transmission assay for rapid quantification of SARS-CoV-2 Spike interaction with hACE2. 2022 , 100252	1
377	SARS-CoV-2 Spike Glikoproteinlerinin Farklı İnkubasyon Koşullarında Karbonhidrat Biyoinformatik Analizleri. 68-73	
376	Identification of characteristics frequency and hot-spots in protein sequence of COVID-19 disease. 2022 , 103909	
375	Targeting Virus-Induced Reprogrammed Cell Metabolism via Glycolytic Inhibitors: An Effective Therapeutic Approach Against SARS-CoV-2. 2022 , 22,	
374	Venetoclax Decreases the Expression of the Spike Protein through Amino Acids Q493 and S494 in SARS-CoV-2. 2022 , 11, 1924	0
373	Dual Inhibition of Vacuolar-ATPase and TMPRSS2 Is Required for Complete Blockade of SARS-CoV-2 Entry into Cells.	1
372	Immune Response to SARS-CoV-2 Vaccines. 2022 , 10, 1464	2
371	Conformational rearrangements in 2nd voltage sensor domain switch PIP2- and voltage-gating modes in two-pore channels.	0
370	SARS-CoV-2 Spike Furin Cleavage Site and S2? Basic Residues Modulate the Entry Process in a Host Cell-Dependent Manner.	3
369	Preparation and application of chikungunya pseudovirus containing double reporter genes. 2022 , 12,	1
368	Intranasal vaccination of hamsters with a Newcastle disease virus vector expressing the S1 subunit protects animals against SARS-CoV-2 disease. 2022 , 12,	0
367	A Multicenter Evaluation of the Temporal and Clinical Differences of COVID-19 in Two Different Regions in Turkey: Comparison of İstanbul and Diyarbakır. 2022 , 7, 180-188	
366	Inhibitors of Activin Receptor-like Kinase 5 Interfere with SARS-CoV-2 S-Protein Processing and Spike-Mediated Cell Fusion via Attenuation of Furin Expression. 2022 , 14, 1308	1
365	Conserved Recombination Patterns Across Coronavirus Subgenera.	0
364	Cross-Reactivity of IgG Antibodies and Virus Neutralization in mRNA-Vaccinated People Against Wild-Type SARS-CoV-2 and the Five Most Common SARS-CoV-2 Variants of Concern. 13,	0
363	SARS-CoV-2 requires acidic pH to infect cells.	0
362	Evolution of SARS-CoV-2 in Spain during the First Two Years of the Pandemic: Circulating Variants, Amino Acid Conservation, and Genetic Variability in Structural, Non-Structural, and Accessory Proteins. 2022 , 23, 6394	0
361	Plasma Angiotensin II Is Increased in Critical Coronavirus Disease 2019. 9,	1

- 360 Clinical and Genetic Characteristics of Coronaviruses with Particular Emphasis on SARS-CoV-2 Virus. **2022**, 71, 141-159
- 359 A comprehensive account of SARS-CoV-2 genome structure, incurred mutations, lineages and COVID-19 vaccination program. 1
- 358 COVID-19 Diagnosis: A Comprehensive Review of the RT-qPCR Method for Detection of SARS-CoV-2. **2022**, 12, 1503 3
- 357 Cellulosic copper nanoparticles and a hydrogen peroxide-based disinfectant trigger rapid inactivation of pseudoviral particles expressing the Spike protein of SARS-CoV-2, SARS-CoV and MERS-CoV. 1
- 356 Significant role of host sialylated glycans in the infection and spread of severe acute respiratory syndrome coronavirus 2. **2022**, 18, e1010590 2
- 355 Robust anti-SARS-CoV2 single domain antibodies cross neutralize multiple viruses. **2022**, 25, 104549 0
- 354 C910 chemical compound inhibits the trafficking of several bacterial AB toxins with cross-protection against influenza virus. **2022**, 25, 104537
- 353 Computational repurposing approach for targeting the critical spike mutations in B.1.617.2 (delta), AY.1 (delta plus) and C.37 (lambda) SARS-CoV-2 variants using exhaustive structure-based virtual screening, molecular dynamic simulations and MM-PBSA methods. **2022**, 147, 105709 0
- 352 COVID-19 Therapies: Protease Inhibitions and Novel Degradation Strategies. 2, 0
- 351 Severe acute respiratory syndrome Coronavirus-2 [A surge of CoronaVirus Disease-2019: An epidemiological study in Coimbatore District. **2022**, 14, 360
- 350 Glycoprotein molecular dynamics analysis: SARS-CoV-2 spike glycoprotein case study. **2022**,
- 349 SARS, MERS, nSARS-CoV-2 infections and diseases: Emerging threats to public health. **2022**, 235-252
- 348 Interaction between Sars-CoV-2 structural proteins and host cellular receptors: From basic mechanisms to clinical perspectives. **2022**,
- 347 Experimental Models of SARS-COV-2 Infection in the Central Nervous System. **2022**, 14, 117957352211022
- 346 Databases, DrugBank, and virtual screening platforms for therapeutic development. **2022**, 291-334
- 345 Gal-3BP in Viral Infections: An Emerging Role in Severe Acute Respiratory Syndrome Coronavirus 2. **2022**, 23, 7314 0
- 344 Landscape determinants of infectivity and insights into vaccine development and effectiveness [Novel Coronavirus. **2022**, 19,
- 343 Inhibitors of Deubiquitinating Enzymes Interfere with the SARS-CoV-2 Papain-like Protease and Block Virus Replication In Vitro. **2022**, 14, 1404 1

- 342 The spike glycoprotein of highly pathogenic human coronaviruses: structural insights for understanding infection, evolution and inhibition. 1
- 341 Review on In silico Methods, High-throughput Screening Techniques, and Cell Culture Based In Vitro Assays for SARS-CoV-2... 2022, 29, 1
- 340 The impact of infection with COVID-19 on the respiratory microbiome: A narrative review. 2022, 13, 1076-1087
- 339 The Advances of Broad-Spectrum and Hot Anti-Coronavirus Drugs. 2022, 10, 1294
- 338 Identification of SARS-CoV-2 Variants of Concern Using Amplicon Next-Generation Sequencing. 0
- 337 Comparing the Cytokine Storms of COVID-19 and Pandemic Influenza. 0
- 336 Sec61 Inhibitor Apratoxin S4 Potently Inhibits SARS-CoV-2 and Exhibits Broad-Spectrum Antiviral Activity. 2022, 8, 1265-1279 1
- 335 Enzymes in the time of COVID-19: An overview about the effects in the human body, enzyme market, and perspectives for new drugs. 0
- 334 Dimethoxycurcumin Acidifies Endolysosomes and Inhibits SARS-CoV-2 Entry. 2, 0
- 333 Distinct airway epithelial immune responses after infection with SARS-CoV-2 compared to H1N1. 1
- 332 An outlook on potential protein targets of COVID-19 as a druggable site. 0
- 331 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. 2022, 0
- 330 COVID-19 disease and autoimmune disorders: A mutual pathway. 2022, 12, 200-223 0
- 329 T cell responses against SARS-CoV-2 and its Omicron variant in a patient with B cell lymphoma after multiple doses of a COVID-19 mRNA vaccine. 2022, 10, e004953 2
- 328 Human Air-Liquid-Interface Organotypic Airway Cultures Express Significantly More ACE2 Receptor Protein and Are More Susceptible to HCoV-NL63 Infection than Monolayer Cultures of Primary Respiratory Epithelial Cells. 1
- 327 Andrographolide induces anti-SARS-CoV-2 response through host-directed mechanism: an in silico study. 1
- 326 COVID-19 Pathogen Viral Evolution Leading to Increased Infectivity. 2022, 0
- 325 Peptidomimetic inhibitors of TMPRSS2 block SARS-CoV-2 infection in cell culture. 2022, 5, 1

324	Cell and Animal Models for SARS-CoV-2 Research. 2022 , 14, 1507	3
323	Significant perspectives on various viral infections targeted antiviral drugs and vaccines including COVID-19 pandemicity. 2022 , 3,	
322	Animal models for COVID-19: advances, gaps and perspectives. 2022 , 7,	4
321	Pre-Clinical Development of a Potent Neutralizing Antibody MW3321 With Extensive SARS-CoV-2 Variants Coverage. 13,	
320	Durability of SARS-CoV-2 Specific IgG Antibody Responses Following Two Doses of Match and Mixed COVID-19 Vaccines Regimens in Saudi Population. Volume 15, 3791-3800	1
319	Identification of Surface Glycoprotein Mutations of SARS-CoV-2 in Isolated Strains from Iraq. 2022 , 24, 729-740	0
318	Therapeutic potential of P2X7 purinergic receptor modulation in the main organs affected by the COVID-19 cytokine storm. 2022 , 28,	1
317	Resilience of S309 and AZD7442 monoclonal antibody treatments against infection by SARS-CoV-2 Omicron lineage strains. <i>Nature Communications</i> , 2022 , 13,	17.4 4
316	Carbohydrate-Binding Protein from Stinging Nettle as Fusion Inhibitor for SARS-CoV-2 Variants of Concern.	
315	Rapid Antigen Diagnostics as Frontline Testing in the COVID-19 Pandemic. 2200009	0
314	Tissue repair strategies: What we have learned from COVID-19 in the application of MSCs therapy. 2022 , 182, 106334	1
313	Progressive membrane-binding mechanism of SARS-CoV-2 variant spike proteins. 2022 , 25, 104722	1
312	A comparison of conventional and advanced electroanalytical methods to detect SARS-CoV-2 virus: A concise review. 2022 , 307, 135645	
311	Carlina oxide inhibits the interaction of SARS-CoV-2 S glycoprotein with angiotensin-converting enzyme 2. 2022 , 187, 115338	0
310	Oral antiviral treatments for COVID-19: opportunities and challenges.	4
309	Cas13d knockdown of lung protease Ctsl prevents and treats SARS-CoV-2 infection.	3
308	Mutational induction in SARS-CoV-2 major lineages by experimental exposure to neutralising sera. 2022 , 12,	1
307	GDF15 and ACE2 stratify COVID-19 patients according to severity while ACE2 mutations increase infection susceptibility. 12,	

- 306 The Glycan-Binding Trait of the Sarbecovirus Spike N-Terminal Domain Reveals an Evolutionary Footprint. 1
- 305 Human IgG antibody responses to severe acute respiratory syndrome coronavirus 2 viral antigens receptor-binding domain, spike, and nucleocapsid, in vaccinated adults from Merida, Mexico. 9,
- 304 Omicron spike function and neutralizing activity elicited by a comprehensive panel of vaccines. 12
- 303 Immunopathology of COVID-19 and its implications in the development of rhino-orbital-cerebral mucormycosis: a major review. 1-10
- 302 Bidirectional genome-wide CRISPR screens reveal host factors regulating SARS-CoV-2, MERS-CoV and seasonal HCoVs. 1
- 301 Molecular mechanisms and therapeutic effects of different vitamins and minerals in COVID-19 patients. **2022**, 73, 127044 1
- 300 Insight into coronaviruses and natural products-based approach for COVID-19 treatment. **2022**, 443-469
- 299 NAADP-Mediated Ca²⁺ Signalling. **2022**, 1
- 298 (+)-Usnic acid and its salts, inhibitors of SARS-CoV-2, identified by using in silico methods and in vitro assay. **2022**, 12, 3
- 297 Mucosal administration of a live attenuated recombinant COVID-19 vaccine protects nonhuman primates from SARS-CoV-2. **2022**, 7, 1
- 296 Host Cell Proteases Mediating SARS-CoV-2 Entry: An Overview.. **2022**, 22, 3
- 295 Long-Term Health Consequences of SARS-CoV-2: Assumptions Based on SARS-CoV-1 and MERS-CoV Infections. **2022**, 12, 1852
- 294 Development of a Multiepitope Vaccine Against SARS-CoV-2: Immunoinformatics Study. **2022**, 3, e36100 0
- 293 Appraisal of SARS-CoV-2 mutations and their impact on vaccination efficacy: an overview.
- 292 SARS-CoV-2 triggers pericyte-mediated cerebral capillary constriction. 0
- 291 Sequence Similarity Network Analysis Provides Insight into the Temporal and Geographical Distribution of Mutations in SARS-CoV-2 Spike Protein. **2022**, 14, 1672
- 290 Two-pore channel blockade by phosphoinositide kinase inhibitors YM201636 and PI-103 determined by a histidine residue near pore-entrance. **2022**, 5,
- 289 Role of aging in BloodBrain Barrier dysfunction and susceptibility to SARS-CoV-2 infection: impacts on neurological symptoms of COVID-19. **2022**, 19, 1

- 288 Role of the Pangolin in Origin of SARS-CoV-2: An Evolutionary Perspective. **2022**, 23, 9115
- 287 Efficacy of SARS-CoV-2 vaccination in patients with monoclonal gammopathies: A cross sectional study. **2022**, 5, e202201479 0
- 286 COVID-19 and Pregnancy: Clinical outcomes; Mechanisms, and Vaccine Efficacy. **2022**, 1
- 285 Discovery of a Phage Peptide Specifically Binding to the SARS-CoV-2 Spike S1 Protein for the Sensitive Phage-Based Enzyme-Linked Chemiluminescence Immunoassay of the SARS-CoV-2 Antigen. **2022**, 94, 11591-11599 0
- 284 Azithromycin through the Lens of the COVID-19 Treatment. **2022**, 11, 1063 1
- 283 Expression profiles of respiratory V-ATPase and calprotectin in SARS-CoV-2 infection. **2022**, 8, 1
- 282 A Bispecific Antibody Targeting RBD and S2 Potently Neutralizes SARS-CoV-2 Omicron and Other Variants of Concern. **2022**, 96, 2
- 281 Neurological manifestations of SARS-CoV-2 infections: towards quantum dots based management approaches. 1-14
- 280 Role of tannic acid against SARS-cov-2 cell entry by targeting the interface region between S-protein-RBD and human ACE2. 13,
- 279 Lessons from SARS-CoV, MERS-CoV, and SARS-CoV-2 Infections: What We Know So Far. **2022**, 2022, 1-13 1
- 278 Improving the treatment of the novel coronavirus infection (COVID-19) in children at risk for the development of severe disease with the use of virus-neutralizing monoclonal antibodies. **2022**, 67, 23-33
- 277 COVID-19 metabolism: Mechanisms and therapeutic targets. **2022**, 3, 1
- 276 Sphingosine kinases promote Ebola virus infection and can be targeted to inhibit filoviruses, coronaviruses, and arenaviruses using late endocytic trafficking to enter cells.
- 275 Two-pore channels: going with the flows.
- 274 Evaluation of humoral immune responses induced by different SARS-CoV-2 spike trimers from wild-type and emerging variants with individual, sequential, and combinational delivered strategies. 0
- 273 Production of single-cycle infectious SARS-CoV-2 through a trans-complemented replicon. 0
- 272 Two Years into the COVID-19 Pandemic: Lessons Learned. 4
- 271 Development of a novel peptide to prevent entry of SARS-CoV-2 into lung and olfactory bulb cells of hACE2 expressing mice. **2022**, 15, 0

270	Unmasking the Asymptomatic COVID-19: A Nose Question. 2022 , 12, 1248	0
269	Structural and Phylogenetic Analysis of SARS-CoV-2 Spike Glycoprotein from the Most Widespread Variants. 2022 , 12, 1245	2
268	3D ex vivo tissue platforms to investigate the early phases of influenza A virus- and SARS-CoV-2-induced respiratory diseases. 1-30	0
267	Kinetic Characterization of Cerium and Gallium Ions as Inhibitors of Cysteine Cathepsins L, K, and S. 2022 , 23, 8993	
266	Structures of the SARS-CoV-2 spike glycoprotein and applications for novel drug development. 13,	3
265	A systematic review assessing the effectiveness of COVID-19 mRNA vaccines in chronic kidney disease (CKD) individuals. 11, 909	
264	Environmental contributions to the interactions of COVID-19 and asthma: a secondary publication and update. 2022 , 100686	1
263	N1-methylpseudouridine found within COVID-19 mRNA vaccines produces faithful protein products. 2022 , 111300	1
262	Pathogenic role of cytokines in COVID-19, its association with contributing co-morbidities and possible therapeutic regimens.	2
261	FASN inhibitor TVB-3166 prevents S-acylation of the spike protein of human coronaviruses. 2022 , 63, 100256	0
260	Mast cells promote viral entry of SARS-CoV-2 via formation of chymase/spike protein complex. 2022 , 930, 175169	3
259	Potential of targeting host cell calcium dynamics to curtail SARS-CoV-2 infection and COVID-19 pathogenesis. 2022 , 106, 102637	0
258	Omicron (B.1.1.529) - A new heavily mutated variant: Mapped location and probable properties of its mutations with an emphasis on S-glycoprotein. 2022 , 219, 980-997	1
257	Cerebral microvascular complications associated with SARS-CoV-2 infection: How did it occur and how should it be treated?. 2022 , 154, 113534	0
256	Importance of wastewater-based epidemiology for detecting and monitoring SARS-CoV-2. 2022 , 6, 100241	0
255	Thiopurines inhibit coronavirus Spike protein processing and incorporation into progeny virions. 2022 , 18, e1010832	0
254	Kinase-independent activity of DYRK1A promotes viral entry of highly pathogenic human coronaviruses.	0
253	Beyond the vaccines: a glance at the small molecule and peptide-based anti-COVID19 arsenal. 2022 , 29,	2

252	Identification of trypsin-degrading commensals in the large intestine. 2022 , 609, 582-589	3
251	Singularity and Commonality in Response to SARS-CoV-2 in Lung and Colon Cell Models. 2022 , 23, 10451	0
250	The FDA-approved drug Auranofin has a dual inhibitory effect on SARS-CoV-2 entry and NF- κ B signaling. 2022 , 25, 105066	0
249	Current clinical testing approach of COVID. 2022 , 231-274	0
248	The Plant Vacuole as Heterologous System to Characterize the Functional Properties of TPC Channels. 2022 ,	0
247	Hamster organotypic kidney culture model of early-stage SARS-CoV-2 infection highlights a two-step renal susceptibility. 2022 , 13, 204173142211221	0
246	Nanoluciferase-based cell fusion assay for rapid and high-throughput assessment of SARS-CoV-2-neutralizing antibodies in patient samples. 2022 ,	1
245	COVID-19 Impact on Host at Pathophysiological and Cellular Level. 2022 , 67-111	0
244	Genetics and Biological Characteristics of SARS-CoV-2. 2022 , 49-66	0
243	Recent advances in the applications of porous organic cages.	4
242	NAADP-Dependent TPC Current. 2022 ,	0
241	SARS-CoV-2 genome sequencing and promising druggable targets. 2022 , 3-22	1
240	Expanding the Toolbox: Novel Modulators of Endolysosomal Cation Channels. 2022 ,	2
239	Development of a Multiepitope Vaccine Against SARS-CoV-2: Immunoinformatics Study (Preprint).	0
238	Antibody-mediated immunity to SARS-CoV-2 spike. 2022 , 1-69	0
237	A review on COVID-19 vaccinations. 2022 , 6, 50	0
236	Traditional chinese medicine pattern classification and herbal medicine for COVID-19: A comparative study of data from different sources. 2022 , 0	0
235	SARS-CoV-2 Infections in Vaccinated and Unvaccinated Populations in Camp Lemonnier, Djibouti, from April 2020 to January 2022. 2022 , 14, 1918	0

234	The SARS-CoV-2 Spike S1 Protein Induces Global Proteomic Changes in ATII-Like Rat L2 Cells that are Attenuated by Hyaluronan.	0
233	Carbohydrate-binding protein from stinging nettle as fusion inhibitor for SARS-CoV-2 variants of concern. 12,	0
232	S2 Subunit of SARS-CoV-2 Spike Protein Induces Domain Fusion in Natural Pulmonary Surfactant Monolayers. 2022 , 13, 8359-8364	0
231	Impact of COVID 19 on erectile function. 2022 , 25, 202-216	3
230	Broad-Spectrum Small-Molecule Inhibitors of the SARS-CoV-2 Spike-ACE2 Protein-Protein Interaction from a Chemical Space of Privileged Protein Binders. 2022 , 15, 1084	1
229	Proteomics research of SARS-CoV-2 and COVID-19 disease. 2022 , 2, 427-445	0
228	Tetrandrine Treatment May Improve Clinical Outcome in Patients with COVID-19. 2022 , 58, 1194	0
227	Neurological Complications of SARS-CoV-2 Infection and COVID-19 Vaccines: From Molecular Mechanisms to Clinical Manifestations. 2022 , 23,	1
226	In Silico Evaluation of Natural Flavonoids as a Potential Inhibitor of Coronavirus Disease. 2022 , 27, 6374	3
225	Long COVID-19 and the heart: is cardiac mitochondria the missing link?.	0
224	Intranasal Immunization with Liposome-Displayed Receptor-Binding Domain Induces Mucosal Immunity and Protection against SARS-CoV-2. 2022 , 11, 1035	0
223	Identification and Utilization of a Chemical Probe to Interrogate the Roles of PIKfyve in the Lifecycle of Coronavirus.	0
222	Structurally Modified Bioactive Peptide Inhibits SARS-CoV-2 Lentiviral Particles Expression. 2022 , 14, 2045	1
221	Using In Silico Bioinformatics Algorithms for the Accurate Prediction of the Impact of Spike Protein Mutations on the Pathogenicity, Stability, and Functionality of the SARS-CoV-2 Virus and Analysis of Potential Therapeutic Targets.	0
220	Prospects of animal models and their application in studies on adaptive immunity to SARS-CoV-2. 13,	1
219	Mamestra brassicae NIAS-Mb-32 cell strain 2g2 enables high-yield recombinant protein production in baculovirus-free and baculovirus-based insect cell expression. 2022 ,	0
218	Mucosal nanobody IgA as inhalable and affordable prophylactic and therapeutic treatment against SARS-CoV-2 and emerging variants. 13,	0
217	Lycopene: a therapeutic strategy against coronavirus disease 19 (COVID- 19).	2

216	SARS-CoV-2 requires acidic pH to infect cells. 2022 , 119,	6
215	Targeted protein S-nitrosylation of ACE2 inhibits SARS-CoV-2 infection.	1
214	Baculovirus-Free SARS-CoV-2 Virus-like Particle Production in Insect Cells for Rapid Neutralization Assessment. 2022 , 14, 2087	0
213	Spike mutations contributing to the altered entry preference of SARS-CoV-2 omicron BA.1 and BA.2. 2022 , 11, 2275-2287	5
212	Hydrolysis improves the inhibition efficacy of bovine lactoferrin against infection by SARS-CoV-2 pseudovirus. 2022 , 105488	1
211	Air exposure and cell differentiation are essential for investigation of SARS-CoV-2 entry genes in human primary airway epithelial cells in vitro. 9,	0
210	ACE2 Affects the Expression and Function of IFITM3 During SARS-CoV-2 Pseudovirus Infection in Vero E6 Cells.	0
209	Immunology to Immunotherapeutics of SARS-CoV-2: Identification of Immunogenic Epitopes for Vaccine Development. 2022 , 79,	0
208	Broad Tricyclic Ring Inhibitors Block SARS-CoV-2 Spike Function Required for Viral Entry.	0
207	Tissue factor and COVID-19: an update. 2022 , 23,	2
206	The Mechanisms of Zinc Action as a Potent Anti-Viral Agent: The Clinical Therapeutic Implication in COVID-19. 2022 , 11, 1862	1
205	Parallel use of pluripotent human stem cell lung and heart models provide new insights for treatment of SARS-CoV-2.	1
204	Recent advances in small-molecular therapeutics for COVID-19.	0
203	Complement and endothelial cell activation in COVID-19 patients compared to controls with suspected SARS-CoV-2 infection: A prospective cohort study. 13,	0
202	Tetraspanin-enriched Microdomain Containing CD151, CD9, and TSPAN 8 [Potential Mediators of Entry and Exit Mechanisms in Respiratory Viruses Including SARS-CoV-2. 2022 , 28,	0
201	Fast-track development of vaccines for SARS-CoV-2: The shots that saved the world. 13,	2
200	Druggable targets and therapeutic development for COVID-19. 10,	0
199	Revisiting potential value of antitumor drugs in the treatment of COVID-19. 2022 , 12,	0

198	Multi-target direct-acting SARS-CoV-2 antivirals against the nucleotide-binding pockets of virus-specific proteins. 2022,	0
197	Molecular-Level Targets for the Development of Therapies Against Coronavirus Diseases. 2021, 69-84	0
196	Computational Modeling of Protease Inhibitors for the Development of Drugs Against Coronaviruses. 2021, 473-493	0
195	HIF-1a in immune pathogenesis of SARS-CoV-2-pneumonia. 2022, 71	0
194	Targeting SARS-CoV -2 infection through CAR-T-like bispecific T cell engagers incorporating ACE2. 2022, 11,	0
193	COVID-19: Lesson Learnt from Diagnostics to Therapeutics. 2022, 345-374	0
192	MatchTope: A tool to predict the cross reactivity of peptides complexed with Major Histocompatibility Complex I. 13,	0
191	Supported Natural Membranes on Microspheres for ProteinProtein Interaction Studies.	0
190	Alternation of Organ-Specific Exposure in LPS-Induced Pneumonia Mice after the Inhalation of Tetrandrine Is Governed by Metabolizing Enzyme Suppression and Lysosomal Trapping. 2022, 23, 12948	0
189	The relationship of skin disorders, COVID-19, and the therapeutic potential of ginseng: a review. 2022,	0
188	A pseudovirus-based platform to measure neutralizing antibodies in Mexico using SARS-CoV-2 as proof-of-concept. 2022, 12,	2
187	A snapshot of protein trafficking in SARS-CoV-2 infection.	1
186	Uncovering the information immunology journals transmitted for COVID-19: A bibliometric and visualization analysis. 13,	0
185	SARS-CoV-2 modulates inflammatory responses of alveolar epithelial type II cells via PI3K/AKT pathway. 13,	1
184	Targeting COVID-19 pandemic: in silico evaluation of 2-hydroxy-1, 2-diphenylethanone N(4)-methyl-N(4)-phenylthiosemicarbazone as a potential inhibitor of SARS-CoV-2.	0
183	Spike protein mediated membrane fusion during SARS-CoV-2 infection.	0
182	SARS-CoV-2 Vaccines: Types, Working Principle, and Its Impact on Thrombosis and Gastrointestinal Disorders.	1
181	Possible Role of Endocannabinoids in Olfactory and Taste Dysfunctions in COVID-19 Patients and Volumetric Changes in the Brain.	0

180	Effector-Memory B-Lymphocytes and Follicular Helper T-Lymphocytes as Central Players in the Immune Response in Vaccinated and Nonvaccinated Populations against SARS-CoV-2. 2022 , 10, 1761	0
179	Variation analysis of SARS-CoV-2 complete sequences from Iran.	0
178	Neuropilin-1 Mediates SARS-CoV-2 Infection of Astrocytes in Brain Organoids, Inducing Inflammation Leading to Dysfunction and Death of Neurons.	0
177	The Comparison of Mutational Progression in SARS-CoV-2: A Short Updated Overview. 2022 , 3, 201-218	3
176	Membrane attachment and fusion of HIV-1, influenza A, and SARS-CoV-2: resolving the mechanisms with biophysical methods. 2022 , 14, 1109-1140	0
175	SARS-CoV-2 downregulates ACE2 through lysosomal degradation.	1
174	Tissue- and cell-expression of druggable host proteins provide insights into repurposing drugs for COVID -19.	0
173	Development of Bivalent mRNA Vaccines against SARS-CoV-2 Variants. 2022 , 10, 1807	1
172	SARS-CoV-2 Morphometry Analysis and Prediction of Real Virus Levels Based on Full Recurrent Neural Network Using TEM Images. 2022 , 14, 2386	0
171	A Deletion Encompassing the Furin Cleavage Site in the Spike Encoding Gene Does Not Alter SARS-CoV-2 Replication in Lung Tissues of Mink and Neutralization by Convalescent Human Serum Samples. 2022 , 11, 1152	0
170	LRRC15 inhibits SARS-CoV-2 cellular entry in trans. 2022 , 20, e3001805	1
169	Essential role of TMPRSS2 in SARS-CoV-2 infection in murine airways. 2022 , 13,	1
168	Rapid and Highly Sensitive Method for Evaluating Surface Coatings against an Enveloped RNA Virus.	0
167	Renoprotective Effects of Luteolin: Therapeutic Potential for COVID-19-Associated Acute Kidney Injuries. 2022 , 12, 1544	1
166	Post-COVID-19 vaccine SARS-CoV-2 antibody investigation in healthcare professionals. 1-8	0
165	Analyzing the Impermeable Structure and Myriad of Antiviral Therapies for SARS-CoV-2. 2022 , 70, 80-84	0
164	A multi-population-based genomic analysis uncovers unique haplotype variants and crucial mutant genes in SARS-CoV-2. 2022 , 20,	0
163	A systematic review of current status and challenges of vaccinating children against SARS-CoV-2. 2022 , 15, 1212-1224	0

162	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.	0
161	Identification and differential usage of a host metalloproteinase entry pathway by SARS-CoV-2 Delta and Omicron. 2022 , 25, 105316	2
160	Cysteine cathepsins: A long and winding road towards clinics. 2022 , 88, 101150	0
159	Peptides, lipopeptides, and severe acute respiratory syndrome coronavirus-2. 2023 , 381-422	0
158	Nitriles: an attractive approach to the development of covalent inhibitors.	1
157	A Meta-Analysis on The Comparison of The Sensitivity of Three Test Methods Used in the Diagnosis of COVID-19. 2022 , 26,	0
156	Whole-genome sequence analysis reveals the circulation of multiple SARS-CoV-2 variants of concern in Nairobi and neighboring counties, Kenya between March and July 2021. 2022 , 19,	0
155	SARS-CoV-2 spike conformation determines plasma neutralizing activity elicited by a wide panel of human vaccines.	4
154	Beta-Cyclodextrins as affordable antivirals to treat coronavirus infection.	0
153	Performance Analysis of Reverse T-Shaped Tunnel Field Effect transistor (RT-DG-TFET) based label-free dielectric modulation detection of SARS-CoV-2 virus.	0
152	Efficient SARS-CoV-2 detection utilizing chitin-immobilized nanobodies synthesized in <i>Ustilago maydis</i> .	0
151	Antiviral effects of phytochemicals against severe acute respiratory syndrome coronavirus 2 and their mechanisms of action: A review.	2
150	Review of Developments in Combating COVID-19 by Vaccines, Inhibitors, Radiations, and Nonthermal Plasma. 2022 , 44, 5666-5690	1
149	Fusion assays for screening of fusion inhibitors targeting SARS-CoV-2 entry and syncytia formation. 13,	1
148	Beyond PI3Ks: targeting phosphoinositide kinases in disease.	3
147	Strong Humoral but Not Cellular Immune Responses against SARS-CoV-2 in Individuals with Oncohematological Disease Who Were Treated with Rituximab before Receiving a Vaccine Booster. 2022 , 14, 5537	0
146	Whole Genome CRISPR Screening Strategy for Identification of Host Genes Contributing to Envelope Mediated Entry of SARS-CoV-2 Spike and VSV-G.	0
145	dbSCI: A manually curated database of SARS-CoV-2 inhibitors for COVID-19. 2023 , 47, 367-371	0

- 144 Conformational stability of SARS-CoV-2 glycoprotein spike variants. **2023**, 26, 105696 0
- 143 Phenothiazines inhibit SARS-CoV-2 cell entry via a blockade of spike protein binding to neuropilin-1. **2023**, 209, 105481 1
- 142 The effects of preconception and early gestation SARS-CoV-2 infection on pregnancy outcomes and placental pathology. **2023**, 62, 152076 0
- 141 COVID-19 signalome: Potential therapeutic interventions. **2023**, 103, 110559 0
- 140 The effect of temperature on interaction and dynamical study of protease inhibitors as a SARS-CoV-2 potential drug. **2022**, 0
- 139 Gustatory disorders in COVID-19. **2022**, 122, 23 0
- 138 Atomic-level characterization of the conformational transition pathways in SARS-CoV-1 and SARS-CoV-2 spike proteins. 0
- 137 COVID in children and the digestive system: clinical and pathogenetic correlation. **2022**, 41-49 0
- 136 COVID-19 in patients with chronic lung disease. **2022**, 0
- 135 Pilot Findings on SARS-CoV-2 Vaccine-Induced Pituitary Diseases: A Mini Review from Diagnosis to Pathophysiology. **2022**, 10, 2004 0
- 134 Inhibition of the predicted allosteric site of the SARS-CoV-2 main protease through flavonoids. 1-18 0
- 133 Differential haplotype expression in class I MHC genes during SARS-CoV-2 infection of human lung cell lines. 0
- 132 Broad strategies for neutralizing SARS-CoV-2 and other human coronaviruses with monoclonal antibodies. 0
- 131 In silico analysis of the antidepressant fluoxetine and similar drugs as inhibitors of the human protein acid sphingomyelinase: a related SARS-CoV-2 inhibition pathway. 1-14 2
- 130 Sensitivity Enhanced Plasmonic Biosensor Using Bi₂Se₃-Graphene Heterostructures: A Theoretical Analysis. **2022**, 12, 4078 2
- 129 COVID-19 and pulmonary manifestations. **2022**, 181, 0
- 128 A systematic review assessing the effectiveness of COVID-19 mRNA vaccines in chronic kidney disease (CKD) individuals. 11, 909 0
- 127 SARS-PLEX: Multiplex Serological ELISA with a Holistic Approach. **2022**, 14, 2593 0

126	Prediction of Omicron Virus Using Combined Extended Convolutional and Recurrent Neural Networks Technique on CT-Scan Images. 2022 , 2022, 1-11	1
125	The SARS-CoV-2 spike protein binds and modulates estrogen receptors. 2022 , 8,	2
124	Desloratadine, an FDA-approved cationic amphiphilic drug, inhibits SARS-CoV-2 infection in cell culture and primary human nasal epithelial cells by blocking viral entry. 2022 , 12,	0
123	Neuromasts and Olfactory Organs of Zebrafish Larvae Represent Possible Sites of SARS-CoV-2 Pseudovirus Host Cell Entry. 2022 , 96,	0
122	Advanced Plasmonic Nanoparticle-Based Techniques for the Prevention, Detection, and Treatment of Current COVID-19.	1
121	Severe COVID-19 May Impact Hepatic Fibrosis /Hepatic Stellate Cells Activation as Indicated by a Pathway and Population Genetic Study. 2023 , 14, 22	0
120	Rapid Point-of-Care Assay by SERS Detection of SARS-CoV-2 Virus and Its Variants. 2022 , 94, 17795-17802	2
119	Pathfinder-Driven Chemical Space Exploration and Multiparameter Optimization in Tandem with Glide/IFD and QSAR-Based Active Learning Approach to Prioritize Design Ideas for FEP+ Calculations of SARS-CoV-2 PLpro Inhibitors. 2022 , 27, 8569	0
118	Ivermectin Affects Neutrophil-Induced Inflammation through Inhibition of Hydroxylysine but Stimulation of Cathepsin G and Phenylalanine Secretion. 2022 , 10, 3284	0
117	Loss of furin site enhances SARS-CoV-2 spike protein pseudovirus infection. 2022 , 147144	0
116	The long-term dynamics of serum antibodies against SARS-CoV-2. 10, e14547	0
115	Cellular electrical impedance to profile SARS-CoV-2 fusion inhibitors and to assess the fusogenic potential of spike mutants.	0
114	Small molecules in the treatment of COVID-19. 2022 , 7,	3
113	Understanding the challenges to COVID-19 vaccines and treatment options, herd immunity and probability of reinfection. 2022 ,	0
112	Characterization of SARS-CoV-2 Glycoprotein Using a Quantitative Cell-Cell Fusion System. 2023 , 179-186	0
111	Focus on Marine Animal Safety and Marine Bioresources in Response to the SARS-CoV-2 Crisis. 2022 , 23, 15136	0
110	Development of Fluorescence-Tagged SARS-CoV-2 Virus-like Particles by a Tri-Cistronic Vector Expression System for Investigating the Cellular Entry of SARS-CoV-2. 2022 , 14, 2825	0
109	Optimized ACE2 decoys neutralize antibody-resistant SARS-CoV-2 variants through functional receptor mimicry and treat infection in vivo. 2022 , 8,	0

108	Therapeutic and diagnostic applications of nanoparticles in the management of COVID-19: a comprehensive overview. 2022 , 19,	0
107	Cholesterol and ceramide facilitate SARS-CoV-2 Spike protein-mediated membrane fusion.	0
106	A Lentiviral Pseudotype System to Characterize SARS-CoV-2 Glycoprotein. 2023 , 187-199	0
105	Identification of a pharmacological approach to reduce ACE2 expression and development of an in vitro COVID-19 viral entry model. 2022 , 8, 100307	0
104	TRPC3-Nox2 Protein Complex Formation Increases the Risk of SARS-CoV-2 Spike Protein-Induced Cardiomyocyte Dysfunction through ACE2 Upregulation. 2023 , 24, 102	1
103	Effective extraction of bioactive alkaloids from the roots of <i>Stephania tetrandra</i> by deep eutectic solvents-based ultrasound-assisted extraction. 2022 , 463746	0
102	Sertraline Is an Effective SARS-CoV-2 Entry Inhibitor Targeting the Spike Protein. 2022 , 96,	0
101	Novel Affibody Molecules Specifically Bind to SARS-CoV-2 Spike Protein and Efficiently Neutralize Delta and Omicron Variants.	0
100	Salmonella-mediated oral delivery of multiple-target vaccine constructs with conserved and variable regions of SARS-CoV-2 protect against the Delta and Omicron variants in hamster. 2023 , 105101	0
99	An Outlook on Dental Practices to Avoid the Oral Transmission of COVID-19. 2023 , 11, 146	0
98	mRNA in the Context of Protein Replacement Therapy. 2023 , 15, 166	0
97	Theoretical Investigation of 5-Fluorouracil and Tamoxifen Complex [Structural, Spectrum, DFT, ADMET and Docking Simulation. 1-18	1
96	In-depth genetic characterization of the SARS-CoV-2 pandemic in a two-year frame in North Macedonia using second and third generation sequencing technologies. 2,	0
95	The role of SARS-CoV-2 spike protein in growth of cervical cancer cells.	0
94	Risk Factors of Severe COVID-19: A Review of Host, Viral and Environmental Factors. 2023 , 15, 175	5
93	The SARS-CoV-2 Spike protein induces long-term transcriptional perturbations of mitochondrial metabolic genes, causes cardiac fibrosis, and reduces myocardial contractile in obese mice.	0
92	Pathophysiology of SARS-CoV-2 Infection of Nasal Respiratory and Olfactory Epithelia and Its Clinical Impact.	1
91	COVID-19-related liver injury: Focus on genetic and drug-induced perspectives. 12, 53-67	0

90	6-Shogaol Exhibits Anti-viral and Anti-inflammatory Activity in COVID-19-Associated Inflammation by Regulating NLRP3 Inflammasomes. 2023 , 8, 2618-2628	1
89	Short-term ex vivo tissue culture models help study human lung infectionsA review. 2023 , 102, e32589	0
88	Kinetics of Covid-19 antibodies in terms of titre and duration among healthcare workers: A longitudinal study. 35, 201-205	0
87	Investigating the possible mechanisms of autonomic dysfunction post-COVID-19. 2023 , 245, 103071	1
86	Comparative In-Silico Molecular Docking of Silymarin for SARS-CoV-2 Receptor. 2022 , 2, 58-67	0
85	Intrinsic D614G and P681R/H mutations in SARS-CoV-2 VoCs Alpha, Delta, Omicron and viruses with D614G plus key signature mutations in spike protein alters fusogenicity and infectivity.	0
84	Aptamer-Linked Photonic Crystal Assay for High-Throughput Screening of HIV and SARS-CoV-2.	0
83	A review on COVID-19, colonising microflora and microbial links to age-related differences and off-target effect of live vaccines like BCG. 2022 , 8, 279-287	0
82	An inactivated recombinant rabies virus chimerically expressed RBD induces humoral and cellular immunity against SARS-CoV-2 and RABV. 2022 ,	0
81	Toxin-like Peptides from the Bacterial Cultures Derived from Gut Microbiome Infected by SARS-CoV-2New Data for a Possible Role in the Long COVID Pattern. 2023 , 11, 87	4
80	Assessment of cytotoxicity and antiviral activity against SARS-CoV-2 of the mixture of lactoferrin, artemisinin, and azithromycin in vitro. 2022 ,	0
79	SKI-1/S1P Facilitates SARS-CoV-2 Spike Induced Cell-to-Cell Fusion via Activation of SREBP-2 and Metalloproteases, Whereas PCSK9 Enhances the Degradation of ACE2. 2023 , 15, 360	0
78	Potential of Lactoferrin in the Treatment of Lung Diseases. 2023 , 16, 192	1
77	Neutralizing Efficacy of Encapsulin Nanoparticles against SARS-CoV2 Variants of Concern. 2023 , 15, 346	0
76	Antiviral effects and tissue exposure of tetrandrine against SARS-CoV-2 infection and COVID-19. 2023 , 4,	0
75	SARS-CoV-2 and microbiome. 2023 , 279-337	0
74	Establishment of a neutralization assay for Nipah virus using a high-titer pseudovirus system.	0
73	Sustained Cytotoxic Response of Peripheral Blood Mononuclear Cells from Unvaccinated Individuals Admitted to the ICU Due to Critical COVID-19 Is Essential to Avoid a Fatal Outcome. 2023 , 20, 1947	0

- 72 Proteomic understanding of SARS-CoV-2 infection and COVID-19: Biological, diagnostic, and therapeutic perspectives. **2023**, 61-85 ○
- 71 Effect of polymorphism in *Rhinolophus affinis* ACE2 on entry of SARS-CoV-2 related bat coronaviruses. **2023**, 19, e1011116 ○
- 70 Discovery of highly potent small molecule pan-coronavirus fusion inhibitors. ○
- 69 Cutaneous manifestations in elderly patients with confirmed coronavirus disease 2019 and the disease outcomes: A systematic review. ○
- 68 Innate immune recognition against SARS-CoV-2. **2023**, 43, 1
- 67 Metamaterial enhanced novel plasmonic biosensor for specific detection of SARS-CoV-2 spike protein. **2023**, ○
- 66 Mechanisms of SARS-CoV-2 Inactivation using UVC Laser Radiation. ○
- 65 SARS-CoV-2 Infection of Human Neurons Is TMPRSS2 Independent, Requires Endosomal Cell Entry, and Can Be Blocked by Inhibitors of Host Phosphoinositol-5 Kinase. ○
- 64 Adaptive evolution of the Spike protein in coronaviruses. ○
- 63 Veklury[®] (remdesivir) formulations inhibit initial membrane-coupled events of SARS-CoV-2 infection due to their sulfobutylether- β -cyclodextrin content. ○
- 62 Cellular electrical impedance to profile SARS-CoV-2 fusion inhibitors and to assess the fusogenic potential of spike mutants. **2023**, 213, 105587 ○
- 61 Honeycomb-like CuO@C for electroreduction of carbon dioxide to ethylene. **2023**, 640, 783-790 ○
- 60 The role of Ca²⁺ signalling in the pathology of exocrine pancreas. **2023**, 112, 102740 ○
- 59 Immunological aspects of coronavirus disease caused by SARS-CoV-2. **2020**, 15, 14-21 ○
- 58 Beta-coronaviruses exploit cellular stress responses by modulating TFEB and TFE3 activity. **2023**, 26, 106169 ○
- 57 Decoding the bidirectional relationship between gut microbiota and COVID-19. **2023**, 9, e13801 ○
- 56 The development of microfluidic-based western blotting: Technical advances and future perspectives. **2023**, 1691, 463813 ○
- 55 A Novel Monoclonal Antibody Targeting a Large Surface of the Receptor Binding Motif Shows Pan-neutralizing SARS-CoV-2 Activity Including BQ.1.1 Variant. ○

- 54 Differential haplotype expression in class I MHC genes during SARS-CoV-2 infection of human lung cell lines. 13,
- 53 High-throughput saturation mutagenesis generates a high-affinity antibody against SARS-CoV-2 variants using protein surface display assay on a human cell. **2023**, 19, e1011119
- 52 Treatment with integrase inhibitors alters SARS-CoV-2 neutralization levels measured with HIV-based pseudotypes in people living with HIV. **2023**, 95,
- 51 Transcriptome profiling and bioinformatic analysis of the effect of ganoderic acid T prevents Sendai virus infection. **2023**, 862, 147252
- 50 A Competitive Panning Method Reveals an Anti-SARS-CoV-2 Nanobody Specific for an RBD-ACE2 Binding Site. **2023**, 11, 371
- 49 Venous thromboembolism in viral diseases: A comprehensive literature review. **2023**, 6,
- 48 SARS-CoV-2 infection of intestinal epithelia cells sensed by RIG-I and DHX-15 evokes innate immune response and immune cross-talk. 12,
- 47 Alzheimer's disease and COVID-19: Interactions, intrinsic linkages, and the role of immunoinflammatory responses in this process. 14,
- 46 Risk factors for heart failure in patients with COVID-19. **2023**, 28, 5169
- 45 Protein expression/secretion boost by a novel unique 21-mer cis-regulatory motif (Exin21) via mRNA stabilization. **2023**, 31, 1136-1158
- 44 P2X7 purinergic receptor: A potential target in heart diseases (Review). **2023**, 27,
- 43 Permethrin as a Potential Furin Inhibitor through a Novel Non-Competitive Allosteric Inhibition. **2023**, 28, 1883
- 42 Plasma proteome dynamics of COVID-19 severity learnt by a graph convolutional network of multi-scale topology. **2023**, 6, e202201624
- 41 Incorporation of SARS-CoV-2 spike NTD to RBD protein vaccine improves immunity against viral variants. **2023**, 26, 106256
- 40 Oral manifestations of COVID-19: A review. **2023**, 1-11
- 39 Molecular Determinants of the Early Life Immune Response to COVID-19 Infection and Immunization. **2023**, 11, 509
- 38 Current status in cellular-based therapies for prevention and treatment of COVID-19. 1-25
- 37 Review on the Biogenesis of Platelets in Lungs and Its Alterations in SARS-CoV-2 Infection Patients. **2023**, 2023, 1-10

- 36 COVID-19 Biogenesis and Intracellular Transport. **2023**, 24, 4523 2
- 35 Infections of the cardiovascular system. **2023**, 255-326 0
- 34 The Latest Cellular and Molecular Mechanisms of COVID-19 on Non-Lung Organs. **2023**, 13, 415 0
- 33 Antitarget, Anti-SARS-CoV-2 Leads, Drugs, and the Drug Discovery Genetics Alliance Perspective. **2023**, 66, 3664-3702 0
- 32 SIM imaging resolves endocytosis of SARS-CoV-2 spike RBD in living cells. **2023**, 30, 248-260.e4 0
- 31 Cellular and Molecular Mechanisms of Pathogenic and Protective Immune Responses to SARS-CoV-2 and Implications of COVID-19 Vaccines. **2023**, 11, 615 0
- 30 COVID-19-induced neurological symptoms: focus on the role of metal ions. 0
- 29 Infectious Agents: From the Red Queen Paradigm to Some of Their Genuine Traits. **2023**, 47-107 0
- 28 Stable and durable antibody responses in SARS-recovered donors vaccinated with inactivated SARS-CoV-2 vaccine. **2023**, 95, 0
- 27 Spike Protein Impairs Mitochondrial Function in Human Cardiomyocytes: Mechanisms Underlying Cardiac Injury in COVID-19. **2023**, 12, 877 0
- 26 Urine proteomic characterization of active and recovered COVID-19 patients. 0
- 25 Murine Alveolar Macrophages Rapidly Accumulate Intranasally Administered SARS-CoV-2 Spike Protein leading to Neutrophil Recruitment and Damage. 0
- 24 Nanobodies against SARS-CoV-2 reduced virus load in the brain of challenged mice and neutralized Wuhan, Delta and Omicron Variants. 0
- 23 Application of Pseudotyped Viruses. **2023**, 45-60 0
- 22 Longer intervals between SARS-CoV-2 infection and mRNA-1273 doses improve the neutralization of different variants of concern. **2023**, 95, 0
- 21 Surface-modified biomaterials as disinfectants to combat viral infections: a SARS-COV-2 case study. **2023**, 147-169 0
- 20 Efficient virus detection utilizing chitin-immobilized nanobodies synthesized in *Ustilago maydis*. **2023**, 366, 72-84 0
- 19 Reviews of drug candidates for COVID-19. 36, 219-226 0

- 18 Inhibition of Rab1B Impairs Trafficking and Maturation of SARS-CoV-2 Spike Protein. **2023**, 15, 824 ○
- 17 Receptors and Cofactors That Contribute to SARS-CoV-2 Entry: Can Skin Be an Alternative Route of Entry?. **2023**, 24, 6253 ○
- 16 Interfacial Click Chemistry Enabled Strong Adhesion toward Ultra-Durable Crack-Based Flexible Strain Sensors. ○
- 15 Copper(II) and Cobalt(II) Complexes Based on Abietate Ligands from Pinus Resin: Synthesis, Characterization and Their Antibacterial and Antiviral Activity against SARS-CoV-2. **2023**, 13, 1202 ○
- 14 Two Resveratrol Oligomers Inhibit Cathepsin L Activity to Suppress SARS-CoV-2 Entry. **2023**, 71, 5535-5546 ○
- 13 Photoactive conjugated polymer-based strategy to effectively inactivate RNA viruses. **2023**, 15, ○
- 12 Biomimetic SARS-CoV-2 Spike Protein Nanoparticles. ○
- 11 Efficacy and Safety of Garadacimab in Combination with Standard of Care Treatment in Patients with Severe COVID-19. **2023**, 201, 159-170 ○
- 10 Factor Xa cleaves SARS-CoV-2 spike protein to block viral entry and infection. **2023**, 14, ○
- 9 Performance Analysis of Dielectric Modulated Dual Material Double Gate Hetero Stack (DM-DMDG-HS) TFET. **2023**, ○
- 8 High-throughput screening of spike variants uncovers the key residues that alter the affinity and antigenicity of SARS-CoV-2. **2023**, 9, ○
- 7 Sphingosine Kinases Promote Ebola Virus Infection and Can Be Targeted to Inhibit Filoviruses, Coronaviruses, and Arenaviruses Using Late Endocytic Trafficking to Enter Cells. ○
- 6 Stability of SARS-CoV-2 in cold-chain transportation environments and the efficacy of disinfection measures. 13, ○
- 5 Combination of Recombinant Proteins S1/N and RBD/N as Potential Vaccine Candidates. **2023**, 11, 864 ○
- 4 Discovery of Highly Potent Small Molecule Pan-Coronavirus Fusion Inhibitors. **2023**, 15, 1001 ○
- 3 Nonlinear interdependence of the results of measuring anti-SARS-CoV-2 IgG levels using Abbott and Euroimmun test systems. **2023**, 105448 ○
- 2 SARS-CoV-2 Enters Human Leydig Cells and Affects Testosterone Production In Vitro. **2023**, 12, 1198 ○
- 1 Porcine deltacoronavirus resists antibody neutralization through cell-to-cell transmission. **2023**, 12, ○

