CITATION REPORT List of articles citing

SARS-CoV-2 Cell Entry Depends on ACE2 and TMPRSS2 and Is Blocked by a Clinically Proven Protease Inhibitor

DOI: 10.1016/j.cell.2020.02.052 Cell, 2020, 181, 271-280.e8.

Source: https://exaly.com/paper-pdf/77050788/citation-report.pdf

Version: 2024-04-23

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 |
|------|--|----|-----------|
| 2199 | The good, the bad, and the ugly in chemical and biological data for machine learning. 2019 , 32-33, 3-8 | | 10 |
| 2198 | Pediatric Endocrinology in the Time of the COVID-19 Pandemic. 2019 , 92, 345-346 | | 2 |
| 2197 | Anti-tuberculosis (TB) chemotherapy dynamically rescues Th1 and CD8+ T effector levels in Han Chinese pulmonary TB patients. 2020 , 22, 119-126 | | 5 |
| 2196 | Occult Colonic Perforation in a Patient With Coronavirus Disease 2019 After Interleukin-6 Receptor Antagonist Therapy. 2020 , 7, ofaa424 | | 4 |
| 2195 | Predicting susceptibility to SARS-CoV-2 infection based on structural differences in ACE2 across species. 2020 , 34, 15946-15960 | | 24 |
| 2194 | A review of severe acute respiratory syndrome coronavirus 2 infection in the reproductive system. 2020 , 83, 895-897 | | 10 |
| 2193 | Potential Immunotherapeutic Targets for Hypoxia Due to COVI-Flu. 2020 , 54, 438-450 | | 13 |
| 2192 | Expression of SARS-CoV-2 receptor and the protease suggests susceptibility of the human embryo in the first trimester. 2020 , 10, 200162 | | 43 |
| 2191 | Special issue on COVID-19 and pregnancy: Consequences for maternal and neonatal health. 2020 , 84, e13354 | | 2 |
| 2190 | Angiotensin-converting enzyme inhibitors or angiotensin II receptor blockers and prognosis of hypertensive patients hospitalised with COVID-19. 2020 , 50, 1483-1491 | | 11 |
| 2189 | The COVID-19 pandemic: a global health crisis. 2020 , 52, 549-557 | | 93 |
| 2188 | Clinical and Proteomic Correlates of Plasma ACE2 (Angiotensin-Converting Enzyme 2) in Human Heart Failure. 2020 , 76, 1526-1536 | | 26 |
| 2187 | Severe Acute Respiratory Syndrome Coronavirus 2, COVID-19, and the Renin-Angiotensin System: Pressing Needs and Best Research Practices. 2020 , 76, 1350-1367 | | 36 |
| 2186 | COVID-19 pandemic: current knowledge about the role of pets and other animals in disease transmission. 2020 , 17, 143 | | 36 |
| 2185 | How COVID-19 induces cytokine storm with high mortality. 2020 , 40, 37 | | 238 |
| 2184 | In-silico drug repurposing study predicts the combination of pirfenidone and melatonin as a promising candidate therapy to reduce SARS-CoV-2 infection progression and respiratory distress caused by cytokine storm. 2020 , 15, e0240149 | | 31 |
| 2183 | The Role of Type I Interferons in the Pathogenesis and Treatment of COVID-19. 2020 , 11, 595739 | | 46 |

| | COVID-19-Related Anosmia: The Olfactory Pathway Hypothesis and Early Intervention. 2020 , 11, 956 | 20 |
|--------------------------------------|--|----------------------------|
| 2181 | Iran's Approach to COVID-19: Evolving Treatment Protocols and Ongoing Clinical Trials. 2020 , 8, 551889 | 10 |
| 2180 | The management of allergic diseases in children during the SARS-CoV-2 pandemic. 2020, 7, 153-161 | О |
| 2179 | [Association of hypertension and antihypertensive agents and the severity of COVID-19 pneumonia. A monocentric French prospective study]. 2020 , 69, 247-254 | 5 |
| 2178 | The prophylaxis and treatment potential of supplements for COVID-19. 2020 , 887, 173530 | 29 |
| 2177 | SARS-CoV-2 pathophysiology and its clinical implications: An integrative overview of the pharmacotherapeutic management of COVID-19. 2020 , 146, 111769 | 82 |
| 2176 | Evidence of a wide gap between COVID-19 in humans and animal models: a systematic review. 2020 , 24, 594 | 24 |
| 2175 | Drug Weaponry to Fight Against SARS-CoV-2. 2020 , 7, 204 | 2 |
| 2174 | Endothelial Cell Contributions to COVID-19. 2020 , 9, | 12 |
| | | |
| 2173 | Angiotensin-converting enzyme 2: A protective factor in regulating disease virulence of SARS-COV-2. 2020 , 72, 2533-2545 | 8 |
| 2173 | | 13 |
| 2172 | SARS-COV-2. 2020 , 72, 2533-2545 | |
| 2172 | SARS-COV-2. 2020, 72, 2533-2545 Assessing the SARS-CoV-2 threat to wildlife: Potential risk to a broad range of mammals. 2020, 18, 223-234 | 13 |
| 2172 | SARS-COV-2. 2020, 72, 2533-2545 Assessing the SARS-CoV-2 threat to wildlife: Potential risk to a broad range of mammals. 2020, 18, 223-234 SARS-CoV-2 host tropism: An in silico analysis of the main cellular factors. 2020, 289, 198154 | 13 |
| 2172 2171 2170 | SARS-COV-2. 2020, 72, 2533-2545 Assessing the SARS-CoV-2 threat to wildlife: Potential risk to a broad range of mammals. 2020, 18, 223-234 SARS-CoV-2 host tropism: An in silico analysis of the main cellular factors. 2020, 289, 198154 The Impact of COVID-19 on Blood Glucose: A Systematic Review and Meta-Analysis. 2020, 11, 574541 Differential Expression of Viral Transcripts From Single-Cell RNA Sequencing of Moderate and | 13 10 30 |
| 2172 2171 2170 2169 2168 | Assessing the SARS-CoV-2 threat to wildlife: Potential risk to a broad range of mammals. 2020, 18, 223-234 SARS-CoV-2 host tropism: An in silico analysis of the main cellular factors. 2020, 289, 198154 The Impact of COVID-19 on Blood Glucose: A Systematic Review and Meta-Analysis. 2020, 11, 574541 Differential Expression of Viral Transcripts From Single-Cell RNA Sequencing of Moderate and Severe COVID-19 Patients and Its Implications for Case Severity. 2020, 11, 603509 | 13 10 30 20 |
| 2172 2171 2170 2169 2168 | Assessing the SARS-CoV-2 threat to wildlife: Potential risk to a broad range of mammals. 2020, 18, 223-234 SARS-CoV-2 host tropism: An in silico analysis of the main cellular factors. 2020, 289, 198154 The Impact of COVID-19 on Blood Glucose: A Systematic Review and Meta-Analysis. 2020, 11, 574541 Differential Expression of Viral Transcripts From Single-Cell RNA Sequencing of Moderate and Severe COVID-19 Patients and Its Implications for Case Severity. 2020, 11, 603509 Host Immune Response Driving SARS-CoV-2 Evolution. 2020, 12, | 13 10 30 20 42 |

| 2164 | Renin-angiotensin system blockers and severe acute respiratory syndrome coronavirus 2. 2020 , 113, 572-578 | 2 |
|------|--|----|
| 2163 | Cardiovascular diseases burden in COVID-19: Systematic review and meta-analysis. 2021 , 46, 382-391 | 32 |
| 2162 | Androgen deprivation and SARS-CoV-2 in men with prostate cancer. 2020 , 31, 1417-1418 | 17 |
| 2161 | Does androgen deprivation therapy protect against severe complications from COVID-19?. 2020 , 31, 1419-1420 | 41 |
| 2160 | Potential of natural astaxanthin in alleviating the risk of cytokine storm in COVID-19. 2020 , 132, 110886 | 27 |
| 2159 | ACE2 enhance viral infection or viral infection aggravate the underlying diseases. 2020 , 18, 2100-2106 | 4 |
| 2158 | The Scientific Foundation of Chinese Herbal Medicine against COVID-19. 2020 , 6, 1099-1107 | 12 |
| 2157 | Computer-aided drug design against spike glycoprotein of SARS-CoV-2 to aid COVID-19 treatment. 2020 , 6, e05278 | 15 |
| 2156 | Leaving no stone unturned: Allosteric targeting of SARS-CoV-2 spike protein at putative druggable sites disrupts human angiotensin-converting enzyme interactions at the receptor binding domain. 2020 , 21, 100451 | 11 |
| 2155 | Immunotherapeutic approaches to curtail COVID-19. 2020 , 88, 106924 | 29 |
| 2154 | Age-Related Differences in Immunological Responses to SARS-CoV-2. 2020 , 8, 3251-3258 | 26 |
| 2153 | SARS-CoV-2 antibodies, serum inflammatory biomarkers and clinical severity of hospitalized COVID-19 patients. 2020 , 131, 104611 | 38 |
| 2152 | The Architecture of Inactivated SARS-CoV-2 with Postfusion Spikes Revealed by Cryo-EM and Cryo-ET. 2020 , 28, 1218-1224.e4 | 62 |
| 2151 | Tissue-specific and interferon-inducible expression of nonfunctional ACE2 through endogenous retroelement co-option. 2020 , 52, 1294-1302 | 54 |
| 2150 | The sequence at Spike S1/S2 site enables cleavage by furin and phospho-regulation in SARS-CoV2 but not in SARS-CoV1 or MERS-CoV. 2020 , 10, 16944 | 50 |
| 2149 | Coronavirus infection and PARP expression dysregulate the NAD metabolome: An actionable component of innate immunity. 2020 , 295, 17986-17996 | 70 |
| 2148 | Placenta-Derived Cell Therapy to Treat Patients With Respiratory Failure Due to Coronavirus Disease 2019. 2020 , 2, e0207 | 8 |
| 2147 | The Controversy of Renin-Angiotensin-System Blocker Facilitation Versus Countering COVID-19 Infection. 2020 , 76, 397-406 | 9 |

| 2146 | Therapeutic Potential of B-1a Cells in COVID-19. 2020 , 54, 586-594 | 10 |
|------|---|-----|
| 2145 | SARS-CoV-2 virus infection: Targets and antiviral pharmacological strategies. 2020 , 13, 255-260 | 12 |
| 2144 | Potential application of mesenchymal stem cells and their exosomes in lung injury: an emerging therapeutic option for COVID-19 patients. 2020 , 11, 437 | 28 |
| 2143 | Syncytia formation by SARS-CoV-2-infected cells. 2020 , 39, e106267 | 167 |
| 2142 | COVID-19 in Children: A Review and Parallels to Other Hyperinflammatory Syndromes. 2020 , 8, 593455 | 13 |
| 2141 | Efficacy of Early Combination Therapy With Lianhuaqingwen and Arbidol in Moderate and Severe COVID-19 Patients: A Retrospective Cohort Study. 2020 , 11, 560209 | 11 |
| 2140 | Regulation of Angiotensin- Converting Enzyme 2 in Obesity: Implications for COVID-19. 2020 , 11, 555039 | 47 |
| 2139 | Pathophysiology of Cardiovascular Complications in COVID-19. 2020 , 11, 575600 | 21 |
| 2138 | Protease Inhibitory Effect of Natural Polyphenolic Compounds on SARS-CoV-2: An In Silico Study. 2020 , 25, | 16 |
| 2137 | Comprehensive analysis of two potential novel SARS-CoV-2 entries, TMPRSS2 and IFITM3, in healthy individuals and cancer patients. 2020 , 16, 3028-3036 | 8 |
| 2136 | Cell-mediated and humoral adaptive immune responses to SARS-CoV-2 are lower in asymptomatic than symptomatic COVID-19 patients. 2020 , 50, 2013-2024 | 35 |
| 2135 | Proprotein convertase furin in SARS-CoV-2 and non-small cell lung cancer. 2020 , 9, 945-947 | O |
| 2134 | ACE2/ADAM17/TMPRSS2 Interplay May Be the Main Risk Factor for COVID-19. 2020 , 11, 576745 | 98 |
| 2133 | Research Progress of Genetic Structure, Pathogenic Mechanism, Clinical Characteristics, and Potential Treatments of Coronavirus Disease 2019. 2020 , 11, 1327 | 3 |
| 2132 | Stem Cells Secretome from Oral Tissue Could Represent a Promising Therapeutic Approach in COVID-19-Disease?. 2020 , 21, | 2 |
| 2131 | New SARS-CoV-2 Infection Detected in an Italian Pet Cat by RT-qPCR from Deep Pharyngeal Swab. 2020 , 9, | 25 |
| 2130 | Co-expression of peripheral olfactory receptors with SARS-CoV-2 infection mediators: Potential implications beyond loss of smell as a COVID-19 symptom. 2020 , 46, 949-956 | 24 |
| 2129 | Unraveling the Possible Routes of SARS-COV-2 Invasion into the Central Nervous System. 2020 , 22, 37 | 38 |

| 2128 | Role of proteolytic enzymes in the COVID-19 infection and promising therapeutic approaches. 2020 , 182, 114225 | | 40 |
|------|--|------|-----|
| 2127 | The emergence of COVID-19 as a global pandemic: Understanding the epidemiology, immune response and potential therapeutic targets of SARS-CoV-2. 2020 , 179, 85-100 | | 47 |
| 2126 | Propolis and its potential against SARS-CoV-2 infection mechanisms and COVID-19 disease: Running title: Propolis against SARS-CoV-2 infection and COVID-19. 2020 , 131, 110622 | | 89 |
| 2125 | Development and effectiveness of pseudotyped SARS-CoV-2 system as determined by neutralizing efficiency and entry inhibition test. 2020 , 2, 226-231 | | 33 |
| 2124 | A Single-Dose Intranasal ChAd Vaccine Protects Upper and Lower Respiratory Tracts against SARS-CoV-2. <i>Cell</i> , 2020 , 183, 169-184.e13 | 56.2 | 221 |
| 2123 | Effects of COVID-19 on the Nervous System. <i>Cell</i> , 2020 , 183, 16-27.e1 | 56.2 | 268 |
| 2122 | On the genetics and immunopathogenesis of COVID-19. 2020 , 220, 108591 | | 22 |
| 2121 | Potential use of polyphenols in the battle against COVID-19. 2020 , 32, 149-155 | | 52 |
| 2120 | COVID-19 pathways for brain and heart injury in comorbidity patients: A role of medical imaging and artificial intelligence-based COVID severity classification: A review. 2020 , 124, 103960 | | 44 |
| 2119 | Repurposing anticancer drugs for the management of COVID-19. 2020 , 141, 40-61 | | 30 |
| 2118 | Azithromycin: The First Broad-spectrum Therapeutic. 2020 , 207, 112739 | | 25 |
| 2117 | Should ACE2 be given a chance in COVID-19 therapeutics: A semi-systematic review of strategies enhancing ACE2. 2020 , 887, 173545 | | 23 |
| 2116 | COVID-19 associated complications and potential therapeutic targets. 2020 , 886, 173548 | | 10 |
| 2115 | Curcumin, a traditional spice component, can hold the promise against COVID-19?. 2020 , 886, 173551 | | 52 |
| 2114 | 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 |
| 2113 | Angiotensin-converting enzymes (ACE, ACE2) gene variants and COVID-19 outcome. 2020 , 762, 145102 | | 76 |
| 2112 | Nucleic acid-based therapy for coronavirus disease 2019. 2020 , 6, e05007 | | 17 |
| 2111 | COVID-19 and Microvascular Disease: Pathophysiology of SARS-CoV-2 Infection With Focus on the Renin-Angiotensin System. 2020 , 29, 1596-1602 | | 22 |

| 2110 | Biosensor and molecular-based methods for the detection of human coronaviruses: A review. 2020 , 54, 101662 | 22 |
|--------------|---|-------------|
| 2109 | Chloroquine and hydroxychloroquine as ACE2 blockers to inhibit viropexis of 2019-nCoV Spike pseudotyped virus. 2020 , 79, 153333 | 31 |
| 2108 | Antiviral properties of placental growth factors: A novel therapeutic approach for COVID-19 treatment. 2020 , 99, 117-130 | 3 |
| 2107 | COVID-19 Vaccine: A comprehensive status report. 2020 , 288, 198114 | 3 80 |
| 2106 | Techniques and Strategies for Potential Protein Target Discovery and Active Pharmaceutical Molecule Screening in a Pandemic. 2020 , 19, 4242-4258 | 5 |
| 2105 | Quantification of SARS-CoV-2 neutralizing antibody by a pseudotyped virus-based assay. 2020 , 15, 3699-3715 | 113 |
| 2104 | 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 |
| 2103 | Expression of ACE2 in airways: Implication for COVID-19 risk and disease management in patients with chronic inflammatory respiratory diseases. 2020 , 50, 1313-1324 | 41 |
| 2102 | COVID-19 hygiene measures: hand eczema and insights into ACE2 and integrins as key molecules for SARS-CoV-2 cutaneous transmission. 2020 , 59, 1409-1410 | 1 |
| 2101 | 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 |
| 2 100 | COVID-19 and Respiratory System Disorders: Current Knowledge, Future Clinical and Translational Research Questions. 2020 , 40, 2586-2597 | 44 |
| 2099 | Severe COVID-19: what have we learned with the immunopathogenesis?. 2020 , 60, 50 | 29 |
| 2098 | Unraveling the Epidemiology, Geographical Distribution, and Genomic Evolution of Potentially Lethal Coronaviruses (SARS, MERS, and SARS CoV-2). 2020 , 10, 499 | 10 |
| 2097 | Immune-Boosting, Antioxidant and Anti-inflammatory Food Supplements Targeting Pathogenesis of COVID-19. 2020 , 11, 570122 | 106 |
| 2096 | Evaluation of Neutralizing Antibodies Against Highly Pathogenic Coronaviruses: A Detailed Protocol for a Rapid Evaluation of Neutralizing Antibodies Using Vesicular Stomatitis Virus Pseudovirus-Based Assay. 2020 , 11, 2020 | 26 |
| 2095 | Use of Enoxaparin to Counteract COVID-19 Infection and Reduce Thromboembolic Venous Complications: A Review of the Current Evidence. 2020 , 11, 579886 | 14 |
| 2094 | Oxidative Stress, Proton Fluxes, and Chloroquine/Hydroxychloroquine Treatment for COVID-19. 2020 , 9, | 9 |
| 2093 | Molecular Features of Non-Selective Small Molecule Antagonists of the Bradykinin Receptors. 2020 , 13, | 8 |

2092 An investigation into the molecular basis of cancer comorbidities in coronavirus infection. **2020**, 10, 2363-23745

| 2091 | ACE2, TMPRSS2 distribution and extrapulmonary organ injury in patients with COVID-19. 2020 , 131, 110678 | 98 |
|------|---|----|
| 2090 | Metformin Is Associated with Higher Incidence of Acidosis, but Not Mortality, in Individuals with COVID-19 and Pre-existing Type 2 Diabetes. 2020 , 32, 537-547.e3 | 81 |
| 2089 | The SARS-CoV-2 host cell receptor ACE2 correlates positively with immunotherapy response and is a potential protective factor for cancer progression. 2020 , 18, 2438-2444 | 18 |
| 2088 | Taming the cytokine storm: repurposing montelukast for the attenuation and prophylaxis of severe COVID-19 symptoms. 2020 , 25, 2076-2079 | 19 |
| 2087 | Acute Kidney Injury in COVID-19: The Chinese Experience. 2020 , 40, 430-442 | 17 |
| 2086 | COVID-19 in the Pediatric Population-Review and Current Evidence. 2020 , 22, 29 | 12 |
| 2085 | Druggable targets from coronaviruses for designing new antiviral drugs. 2020 , 28, 115745 | 10 |
| 2084 | Activation of the SARS-CoV-2 Receptor Ace2 through JAK/STAT-Dependent Enhancers during Pregnancy. 2020 , 32, 108199 | 13 |
| 2083 | Computational biophysical characterization of the SARS-CoV-2 spike protein binding with the ACE2 receptor and implications for infectivity. 2020 , 18, 2573-2582 | 26 |
| 2082 | Chloroquine against malaria, cancers and viral diseases. 2020 , 25, 2012-2012 | 23 |
| 2081 | Cardiac inflammation in COVID-19: Lessons from heart failure. 2020 , 260, 118482 | 40 |
| 2080 | The influence of ABO blood groups on COVID-19 susceptibility and severity: A molecular hypothesis based on carbohydrate-carbohydrate interactions. 2020 , 144, 110155 | 30 |
| 2079 | Thermodynamic equilibrium dose-response models for MERS-CoV infection reveal a potential protective role of human lung mucus but not for SARS-CoV-2. 2020 , 16, 100140 | 12 |
| 2078 | Structural and functional modelling of SARS-CoV-2 entry in animal models. 2020 , 10, 15917 | 37 |
| 2077 | Diagnosis of SARS-CoV-2 infection in the setting of the cytokine release syndrome. 2020 , 20, 1087-1097 | 12 |
| 2076 | Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2) and its effect on gametogenesis and early pregnancy. 2020 , 84, e13351 | 13 |
| 2075 | ACEIs and ARBs and Their Correlation with COVID-19: A Review. 2020 , 13, 3217-3224 | 15 |

| 2074 | COVID-19: Significance of antibodies. 2020 , 28, 287-297 | 13 |
|------|--|-----|
| 2073 | SARS-CoV-2 Treatment Approaches: Numerous Options, No Certainty for a Versatile Virus. 2020 , 11, 1224 | 17 |
| 2072 | Mapping Neutralizing and Immunodominant Sites on the SARS-CoV-2 Spike Receptor-Binding Domain by Structure-Guided High-Resolution Serology. <i>Cell</i> , 2020 , 183, 1024-1042.e21 | 601 |
| 2071 | A Single-Cell RNA Expression Map of Human Coronavirus Entry Factors. 2020 , 32, 108175 | 118 |
| 2070 | Gastrointestinal symptoms, pathophysiology, and treatment in COVID-19. 2021 , 8, 385-400 | 18 |
| 2069 | Identification of twenty-five mutations in surface glycoprotein (Spike) of SARS-CoV-2 among Indian isolates and their impact on protein dynamics. 2020 , 21, 100891 | 10 |
| 2068 | Predicted therapeutic targets for COVID-19 disease by inhibiting SARS-CoV-2 and its related receptors. 2020 , 20, 100407 | 40 |
| 2067 | The role of Interleukin-4 in COVID-19 associated male infertility - A hypothesis. 2020 , 142, 103213 | 16 |
| 2066 | Mechanisms and treatments of myocardial injury in patients with corona virus disease 2019. 2020 , 262, 118496 | 3 |
| 2065 | Environmental pollutant exposure can exacerbate COVID-19 neurologic symptoms. 2020 , 144, 110136 | 2 |
| 2064 | Relevance of SARS-CoV-2 related factors ACE2 and TMPRSS2 expressions in gastrointestinal tissue with pathogenesis of digestive symptoms, diabetes-associated mortality, and disease recurrence in COVID-19 patients. 2020 , 144, 110271 | 29 |
| 2063 | Multivalent nanomedicines to treat COVID-19: A slow train coming. 2020 , 35, 100962 | 22 |
| 2062 | A structured review of placental morphology and histopathological lesions associated with SARS-CoV-2 infection. 2020 , 101, 13-29 | 69 |
| 2061 | Angiotensin-converting enzyme 2 (ACE2) levels in relation to risk factors for COVID-19 in two large cohorts of patients with atrial fibrillation. 2020 , 41, 4037-4046 | 52 |
| 2060 | Investigation of the psychological status of suspected patients during the Coronavirus disease 2019 epidemic. 2020 , 99, e22260 | 6 |
| 2059 | Pathophysiology of coronavirus disease 2019 for wound care professionals. 2020 , 17, 1935-1940 | 6 |
| 2058 | Antiviral Drug Discovery To Address the COVID-19 Pandemic. 2020 , 11, | 5 |
| 2057 | Therapeutic mechanism of Toujie Quwen granules in COVID-19 based on network pharmacology. 2020 , 13, 15 | 8 |

| 2056 | Experimental Models for the Study of Central Nervous System Infection by SARS-CoV-2. 2020 , 11, 2163 | 17 |
|------|--|-----|
| 2055 | Familial Mediterranean Fever and COVID-19: Friends or Foes?. 2020 , 11, 574593 | 7 |
| 2054 | Lower Circulating Interferon-Gamma Is a Risk Factor for Lung Fibrosis in COVID-19 Patients. 2020 , 11, 585647 | 40 |
| 2053 | The Potential of Antiviral Peptides as COVID-19 Therapeutics. 2020 , 11, 575444 | 31 |
| 2052 | Interaction of Human ACE2 to Membrane-Bound SARS-CoV-1 and SARS-CoV-2 S Glycoproteins. 2020 , 12, | 17 |
| 2051 | SARS-CoV-2-Related Kidney Injury: Current Concern and Challenges. 2020 , 2, 1-10 | 4 |
| 2050 | Virus-Receptor Interactions of Glycosylated SARS-CoV-2 Spike and Human ACE2 Receptor. 2020 , 28, 586-601.e6 | 192 |
| 2049 | A review of medications used to control and improve the signs and symptoms of COVID-19 patients. 2020 , 887, 173568 | 2 |
| 2048 | 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 |
| 2047 | COVID-19 in children: what did we learn from the first wave?. 2020 , 30, 438-443 | 6 |
| 2046 | anti-HCoV: A web resource to collect natural compounds against human coronaviruses. 2020, 106, 1-11 | 2 |
| 2045 | Transcription-based drug repurposing for COVID-19. 2020 , 290, 198176 | 4 |
| 2044 | Identifying pathophysiological bases of disease in COVID-19. 2020 , 5, 15 | 4 |
| 2043 | Metabolic impact of weight loss induced reduction of adipose ACE-2 - Potential implication in COVID-19 infections?. 2020 , 113, 154401 | 14 |
| 2042 | Predictive indicators of severe COVID-19 independent of comorbidities and advanced age: a nested case-control study. 2020 , 148, e255 | 12 |
| 2041 | A high-stringency blueprint of the human proteome. 2020 , 11, 5301 | 59 |
| 2040 | Potential Therapeutic Options for COVID-19. 2020 , 2, 89-95 | |
| 2039 | COVID-19-Associated Coagulopathy and Inflammatory Response: What Do We Know Already and What Are the Knowledge Gaps?. 2020 , 131, 1324-1333 | 34 |

| 2038 | The Potential Intermediate Hosts for SARS-CoV-2. 2020 , 11, 580137 | 55 |
|------|---|-----|
| 2037 | Inflammation as a Driver of Prostate Cancer Metastasis and Therapeutic Resistance. 2020 , 12, | 29 |
| 2036 | Why Do Immunosuppressed Patients with Inflammatory Bowel Disease Not Seem to Be at a Higher Risk of COVID-19?. 2021 , 66, 2855-2864 | 6 |
| 2035 | Emergence and Evolution of Olfactory and Gustatory Symptoms in Patients with COVID-19 in the Outpatient Setting. 2020 , 1-7 | 4 |
| 2034 | A Crowned Killer's Raum Genome, Structure, Receptors, and Origin of SARS-CoV-2. 2020 , 35, 673-684 | 7 |
| 2033 | Cancerona: Challenges of Cancer Management in Times of COVID-19 Pandemic. 2020 , 2, 1-10 | 1 |
| 2032 | A Therapeutic Non-self-reactive SARS-CoV-2 Antibody Protects from Lung Pathology in a COVID-19 Hamster Model. <i>Cell</i> , 2020 , 183, 1058-1069.e19 | 182 |
| 2031 | Short term follow-up of patients presenting with acute onset diabetes and diabetic ketoacidosis during an episode of COVID-19. 2020 , 14, 2039-2041 | 17 |
| 2030 | Human Lung Stem Cell-Based Alveolospheres Provide Insights into SARS-CoV-2-Mediated Interferon Responses and Pneumocyte Dysfunction. 2020 , 27, 890-904.e8 | 119 |
| 2029 | Cross-Sectional Evaluation of Humoral Responses against SARS-CoV-2 Spike. 2020 , 1, 100126 | 134 |
| 2028 | The COVID-19 Pandemic from a Human Genetic Perspective. 2020 , 19, 4374-4379 | 1 |
| 2027 | Interferons and viruses induce a novel truncated ACE2 isoform and not the full-length SARS-CoV-2 receptor. 2020 , 52, 1283-1293 | 132 |
| 2026 | Transcriptional and proteomic insights into the host response in fatal COVID-19 cases. 2020 , 117, 28336-2834. | 377 |
| 2025 | Comparison of transgenic and adenovirus hACE2 mouse models for SARS-CoV-2 infection. 2020 , 9, 2433-2445 | 86 |
| 2024 | Higher mortality of COVID-19 in males: sex differences in immune response and cardiovascular comorbidities. 2020 , 116, 2197-2206 | 62 |
| 2023 | ACE2 and SCARF expression in human dorsal root ganglion nociceptors: implications for SARS-CoV-2 virus neurological effects. 2020 , 161, 2494-2501 | 42 |
| 2022 | Neuropilin-1 facilitates SARS-CoV-2 cell entry and infectivity. 2020 , 370, 856-860 | 809 |
| 2021 | Neuropilin-1 is a host factor for SARS-CoV-2 infection. 2020 , 370, 861-865 | 568 |

| 2020 | COVID-19 and Gastrointestinal Disease: Implications for the Gastroenterologist. 2021 , 39, 119-139 | 36 |
|--------------|---|-----|
| 2019 | Harnessing the immune system to overcome cytokine storm and reduce viral load in COVID-19: a review of the phases of illness and therapeutic agents. 2020 , 17, 154 | 38 |
| 2018 | Immunopathogenesis of SARS-CoV-2-induced pneumonia: lessons from influenza virus infection. 2020 , 40, 39 | 24 |
| 2017 | A comprehensive review about SARS-CoV-2. 2020 , 15, 625-648 | 37 |
| 2016 | Analysis of the Spectrum of Variation Suggests a Possible Influence of Rare and Common Variants on Susceptibility to COVID-19 and Severity of Outcome. 2020 , 11, 551220 | 12 |
| 2015 | Investigation on the Inhibiting Role of Nicotine/Caffeine by Blocking the S Protein of SARS-CoV-2 Versus ACE2 Receptor. 2020 , 8, | 9 |
| 2014 | Molecular docking between human TMPRSS2 and SARS-CoV-2 spike protein: conformation and intermolecular interactions. 2020 , 6, 350-360 | 34 |
| 2013 | Seroprevalence of anti-SARS-CoV-2 antibodies in COVID-19 patients and healthy volunteers up to 6 months post disease onset. 2020 , 50, 2025-2040 | 111 |
| 2012 | A systematic review and meta-analysis of the use of renin-angiotensin system drugs and COVID-19 clinical outcomes: What is the evidence so far?. 2020 , 8, e00666 | 8 |
| 2011 | Neurological manifestations of COVID-19: a systematic review and meta-analysis of proportions. 2020 , 41, 3437-3470 | 74 |
| 2 010 | SARS-CoV, MERS-CoV, and 2019-nCoV viruses: an overview of origin, evolution, and genetic variations. 2020 , 31, 1-13 | 13 |
| 2009 | First case of persistent pancytopenia associated with SARS-CoV-2 bone marrow infiltration in an immunocompromised patient. 2020 , 31, 1418-1419 | 14 |
| 2008 | Genetic and hormonal influence on SARS-CoV-2-infection susceptibility: Re: The potential influence of human Y-chromosome haplogroup on COVID-19 prevalence and mortality. 2020 , 31, 1584-1585 | 1 |
| 2007 | An immunoinformatics study on the spike protein of SARS-CoV-2 revealing potential epitopes as vaccine candidates. 2020 , 6, e04865 | 5 |
| 2006 | 2020 update on human coronaviruses: One health, one world. 2020 , 8, 100043 | 12 |
| 2005 | SĒdrome inflamatorio multisistĒnico en niēs con COVID-19: una visiēl desde la reumatologēl. 2020 , 28, 289-289 | |
| 2004 | Three-Dimensional Human Alveolar Stem Cell Culture Models Reveal Infection Response to SARS-CoV-2. 2020 , 27, 905-919.e10 | 92 |
| 2003 | Converging pathways in pulmonary fibrosis and Covid-19 - The fibrotic link to disease severity. 2020 , 2, 100023 | 19 |

| 2002 | for COVID-19. 2020 , 10, 17772 | 27 |
|------|--|-----|
| 2001 | Rapid production of SARS-CoV-2 receptor binding domain (RBD) and spike specific monoclonal antibody CR3022 in Nicotiana benthamiana. 2020 , 10, 17698 | 58 |
| 2000 | A systematic review of etiology, epidemiology, clinical manifestations, image findings, and medication of 2019 Corona Virus Disease-19 in Wuhan, China. 2020 , 99, e22688 | 3 |
| 1999 | Bibliometric Analysis of Early COVID-19 Research: The Top 50 Cited Papers. 2020 , 13, 1178633720962935 | 16 |
| 1998 | Examining the effector mechanisms of Xuebijing injection on COVID-19 based on network pharmacology. 2020 , 13, 17 | 9 |
| 1997 | How to boost the immune defence prior to respiratory virus infections with the special focus on coronavirus infections. 2020 , 12, 47 | 9 |
| 1996 | The epigenetic implication in coronavirus infection and therapy. 2020 , 12, 156 | 29 |
| 1995 | The Role of the Ocular Tissue in SARS-CoV-2 Transmission. 2020 , 14, 3017-3024 | 12 |
| 1994 | Identifying Pathways and Networks Associated With the SARS-CoV-2 Cell Receptor ACE2 Based on Gene Expression Profiles in Normal and SARS-CoV-2-Infected Human Tissues. 2020 , 7, 568954 | 14 |
| 1993 | Assessment of Chloroquine and Hydroxychloroquine Safety Profiles: A Systematic Review and Meta-Analysis. 2020 , 11, 562777 | 7 |
| 1992 | Innate and adaptive immune responses against coronavirus. 2020 , 132, 110859 | 34 |
| 1991 | 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 |
| 1990 | Quantitative assessment of olfactory dysfunction accurately detects asymptomatic COVID-19 carriers. 2020 , 28, 100575 | 24 |
| 1989 | Mass Spectrometry Analysis of Newly Emerging Coronavirus HCoV-19 Spike Protein and Human ACE2 Reveals Camouflaging Glycans and Unique Post-Translational Modifications. 2021 , 7, 1441-1451 | 32 |
| 1988 | Antiviral Peptides as Promising Therapeutics against SARS-CoV-2. 2020 , 124, 9785-9792 | 33 |
| 1987 | Targeting Proteases for Treating COVID-19. 2020 , 19, 4316-4326 | 36 |
| 1986 | Chest CT in COVID-19: What the Radiologist Needs to Know. 2020 , 40, 1848-1865 | 135 |
| 1985 | Human genetic factors associated with susceptibility to SARS-CoV-2 infection and COVID-19 disease severity. 2020 , 14, 40 | 61 |

| 1984 | Finding potent inhibitors for COVID-19 main protease (M): an approach using SARS-CoV-3CL protease inhibitors for combating CORONA. 2020 , 1-12 | 12 |
|------|--|-----|
| 1983 | Cytokine Storm in COVID-19 Patients, Its Impact on Organs and Potential Treatment by QTY Code-Designed Detergent-Free Chemokine Receptors. 2020 , 2020, 8198963 | 23 |
| 1982 | Use of Angiotensin-Converting Enzyme Inhibitors and Angiotensin II Receptor Blockers During the COVID-19 Pandemic: A Modeling Analysis. 2020 , 16, e1008235 | 5 |
| 1981 | Advances in Computational Intelligence. 2020, | |
| 1980 | [COVID-19 and venous thromboembolism]. 2020, 69, 370-375 | 2 |
| 1979 | Intestinal permeability changes with bacterial translocation as key events modulating systemic host immune response to SARS-CoV-2: A working hypothesis. 2020 , 52, 1383-1389 | 27 |
| 1978 | Expression profiles of the SARS-CoV-2 host invasion genes in nasopharyngeal and oropharyngeal swabs of COVID-19 patients. 2020 , 6, e05143 | 8 |
| 1977 | An aberrant STAT pathway is central to COVID-19. 2020 , 27, 3209-3225 | 95 |
| 1976 | Metallodrug ranitidine bismuth citrate suppresses SARS-CoV-2 replication and relieves virus-associated pneumonia in Syrian hamsters. 2020 , 5, 1439-1448 | 76 |
| 1975 | Convalescent plasma therapy: a promising coronavirus disease 2019 treatment strategy. 2020 , 10, 200174 | 10 |
| 1974 | Immunology of COVID-19 and disease-modifying therapies: The good, the bad and the unknown. 2021 , 28, 3503-3516 | 13 |
| 1973 | Repurposing existing drugs for COVID-19: an endocrinology perspective. 2020 , 20, 149 | 28 |
| 1972 | T-Cell Hyperactivation and Paralysis in Severe COVID-19 Infection Revealed by Single-Cell Analysis. 2020 , 11, 589380 | 69 |
| 1971 | Neurologist role during the SARS-COV-2 pandemic. 2020 , 29, 133-140 | |
| 1970 | Catch me if you can: SARS-CoV-2 detection in brains of deceased patients with COVID-19. 2020 , 19, 883-884 | 6 |
| 1969 | A perspective on potential target proteins of COVID-19: Comparison with SARS-CoV for designing new small molecules. 2020 , 104, 104326 | 12 |
| 1968 | Endothelial glycocalyx damage as a systemic inflammatory microvascular endotheliopathy in COVID-19. 2020 , 43, 399-413 | 25 |
| 1967 | Furin Inhibitors Block SARS-CoV-2 Spike Protein Cleavage to Suppress Virus Production and Cytopathic Effects. 2020 , 33, 108254 | 107 |

| Neurological complications in a predominantly African American sample of COVID-19 predict worse outcomes during hospitalization. 2020 , 197, 106173 | 20 |
|--|--|
| COVID-19 and the kidney: A matter of concern. 2020 , 10, 165-168 | 6 |
| Heterogeneous expression of the SARS-Coronavirus-2 receptor ACE2 in the human respiratory tract. 2020 , 60, 102976 | 94 |
| Tissue distributions of antiviral drugs affect their capabilities of reducing viral loads in COVID-19 treatment. 2020 , 889, 173634 | 21 |
| Furin: A Potential Therapeutic Target for COVID-19. 2020 , 23, 101642 | 86 |
| Study presence of COVID-19 (SARS-CoV-2) in the sweat of patients infected with Covid-19. 2020 , 149, 104556 | 12 |
| Circulating levels of soluble Dipeptidylpeptidase-4 are reduced in human subjects hospitalized for severe COVID-19 infections. 2020 , 44, 2335-2338 | 21 |
| Molecular dynamics analysis predicts ritonavir and naloxegol strongly block the SARS-CoV-2 spike protein-hACE2 binding. 2020 , 1-10 | 7 |
| Comorbidities, Cardiovascular Therapies, and COVID-19 Mortality: A Nationwide, Italian Observational Study (ItaliCO). 2020 , 7, 585866 | 35 |
| Coagulopathy and thromboembolic events in patients with SARS-CoV-2 infection: pathogenesis and management strategies. 2020 , 99, 1953-1965 | 27 |
| Impact of COVID-19 on Prostate Cancer Management: Guidelines for Urologists. 2020 , 20, 1-11 | 6 |
| Sex Differences in Mortality Rates and Underlying Conditions for COVID-19 Deaths in England and Wales. 2020 , 95, 2110-2124 | 22 |
| Apparent difference in fatalities between Central Europe and East Asia due to SARS-COV-2 and COVID-19: Four hypotheses for possible explanation. 2020 , 144, 110160 | 42 |
| ANMCO POSITION PAPER: Considerations on in-hospital cardiological consultations and cardiology outpatient clinics during the COVID-19 pandemic. 2020 , 22, G228-G232 | O |
| Preparedness needs research: How fundamental science and international collaboration accelerated the response to COVID-19. 2020 , 16, e1008902 | 12 |
| Ultrastructure of cell trafficking pathways and coronavirus: how to recognise the wolf amongst the sheep. 2020 , 252, 346-357 | 6 |
| Targeting the SARS-CoV-2 main protease using FDA-approved Isavuconazonium, a P2-P3 Eketoamide derivative and Pentagastrin: An in-silico drug discovery approach. 2020 , 101, 107730 | 13 |
| 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 |
| | COVID-19 and the kidney: A matter of concern. 2020, 10, 165-168 Heterogeneous expression of the SARS-Coronavirus-2 receptor ACE2 in the human respiratory tract. 2020, 60, 102976 Tissue distributions of antiviral drugs affect their capabilities of reducing viral loads in COVID-19 treatment. 2020, 889, 173634 Furin: A Potential Therapeutic Target for COVID-19. 2020, 23, 101642 Study presence of COVID-19 (SARS-COV-2) in the sweat of patients infected with Covid-19. 2020, 149, 104556 Circulating levels of soluble Dipeptidylpeptidase-4 are reduced in human subjects hospitalized for severe COVID-19 infections. 2020, 44, 2335-2338 Molecular dynamics analysis predicts ritonavir and naloxegol strongly block the SARS-CoV-2 spike protein-hACE2 binding. 2020, 1-10 Comorbidities, Cardiovascular Therapies, and COVID-19 Mortality: A Nationwide, Italian Observational Study (ItaliCO). 2020, 7, 585866 Coagulopathy and thromboembolic events in patients with SARS-CoV-2 infection: pathogenesis and management strategies. 2020, 99, 1953-1965 Impact of COVID-19 on Prostate Cancer Management: Guidelines for Urologists. 2020, 20, 1-11 Sex Differences in Mortality Rates and Underlying Conditions for COVID-19 Deaths in England and Wales. 2020, 95, 2110-2124 Apparent difference in fatalities between Central Europe and East Asia due to SARS-COV-2 and COVID-19: Four hypotheses for possible explanation. 2020, 144, 110160 ANMCO POSITION PAPER: Considerations on in-hospital cardiological consultations and cardiology outpatient clinics during the COVID-19 pandemic. 2020, 22, G228-G232 Preparedness needs research: How fundamental science and international collaboration accelerated the response to COVID-19 pandemic. 2020, 22, G228-G232 Preparedness needs research: How fundamental science and international collaboration accelerated the response to COVID-19 and part and international collaboration accelerated the response to COVID-19: An in-silico drug discovery approach. 2020, 101, 107730 Obesity, Diabetes and COVID-19: An Infectious |

| 1948 | Proteomics Insights Into the Molecular Basis of SARS-CoV-2 Infection: What We Can Learn From the Human Olfactory Axis. 2020 , 11, 2101 | 7 |
|------------------------------|--|--------------------------|
| 1947 | Tissue Proteases and Immune Responses: Influencing Factors of COVID-19 Severity and Mortality. 2020 , 9, | 2 |
| 1946 | The Good, The Bad and The Ugly: A Mathematical Model Investigates the Differing Outcomes Among CoVID-19 Patients. 2020 , 100, 1-9 | 5 |
| 1945 | The expression of SARS-CoV-2 receptor ACE2 and CD147, and protease TMPRSS2 in human and mouse brain cells and mouse brain tissues. 2020 , 533, 867-871 | 40 |
| 1944 | Structural Basis of SARS-CoV-2 and SARS-CoV Antibody Interactions. 2020 , 41, 1006-1022 | 46 |
| 1943 | Involvement of the nervous system in COVID-19: The bell should toll in the brain. 2020 , 262, 118568 | 25 |
| 1942 | Mesenchymal stem cell immunomodulation and regeneration therapeutics as an ameliorative approach for COVID-19 pandemics. 2020 , 263, 118588 | 16 |
| 1941 | Drugs and the liver. 2020 , 21, 517-523 | 2 |
| 1940 | Structures and dynamics of the novel S1/S2 protease cleavage site loop of the SARS-CoV-2 spike glycoprotein. 2020 , 4, 100038 | 13 |
| | | |
| 1939 | A systematic review of SARS-CoV-2 vaccine candidates. 2020 , 5, 237 | 257 |
| 1939 1938 | A systematic review of SARS-CoV-2 vaccine candidates. 2020 , 5, 237 Type 2 and interferon inflammation regulate SARS-CoV-2 entry factor expression in the airway epithelium. 2020 , 11, 5139 | 257 68 |
| | Type 2 and interferon inflammation regulate SARS-CoV-2 entry factor expression in the airway | |
| 1938 | Type 2 and interferon inflammation regulate SARS-CoV-2 entry factor expression in the airway epithelium. 2020 , 11, 5139 Novel corona virus (COVID-19) pandemic: current status and possible strategies for detection and | 68 |
| 1938 | Type 2 and interferon inflammation regulate SARS-CoV-2 entry factor expression in the airway epithelium. 2020, 11, 5139 Novel corona virus (COVID-19) pandemic: current status and possible strategies for detection and treatment of the disease. 2020, 1-24 Validation and clinical evaluation of a SARS-CoV-2 surrogate virus neutralisation test (sVNT). 2020, | 68 |
| 1938 1937 1936 | Type 2 and interferon inflammation regulate SARS-CoV-2 entry factor expression in the airway epithelium. 2020, 11, 5139 Novel corona virus (COVID-19) pandemic: current status and possible strategies for detection and treatment of the disease. 2020, 1-24 Validation and clinical evaluation of a SARS-CoV-2 surrogate virus neutralisation test (sVNT). 2020, 9, 2394-2403 Novel coronavirus disease in patients with end-stage kidney disease. 2021, 25, 544-550 | 68 |
| 1938 1937 1936 1935 | Type 2 and interferon inflammation regulate SARS-CoV-2 entry factor expression in the airway epithelium. 2020, 11, 5139 Novel corona virus (COVID-19) pandemic: current status and possible strategies for detection and treatment of the disease. 2020, 1-24 Validation and clinical evaluation of a SARS-CoV-2 surrogate virus neutralisation test (sVNT). 2020, 9, 2394-2403 Novel coronavirus disease in patients with end-stage kidney disease. 2021, 25, 544-550 | 68 11 60 4 |
| 1938 1937 1936 1935 | Type 2 and interferon inflammation regulate SARS-CoV-2 entry factor expression in the airway epithelium. 2020, 11, 5139 Novel corona virus (COVID-19) pandemic: current status and possible strategies for detection and treatment of the disease. 2020, 1-24 Validation and clinical evaluation of a SARS-CoV-2 surrogate virus neutralisation test (sVNT). 2020, 9, 2394-2403 Novel coronavirus disease in patients with end-stage kidney disease. 2021, 25, 544-550 Week 2020 Poster Presentations. 2020, 8, 144-887 Nano-sized formazan analogues: Synthesis, structure elucidation, antimicrobial activity and docking | 68 11 60 4 3 |

| 1930 | New Frontiers for Selective Biosensing with Biomembrane-Based Organic Transistors. 2020 , 14, 12271-12280 | 14 |
|------|--|-----|
| 1929 | Ebselen, Disulfiram, Carmofur, PX-12, Tideglusib, and Shikonin Are Nonspecific Promiscuous SARS-CoV-2 Main Protease Inhibitors. 2020 , 3, 1265-1277 | 95 |
| 1928 | An Overview of the Progress Made on the Coronavirus Vaccine. 2020 , 185, 03042 | |
| 1927 | Understanding the SARS-CoV-2 to Manage COVID-19. 2020 , 5, 285-293 | |
| 1926 | Swine acute diarrhea syndrome coronavirus replication in primary human cells reveals potential susceptibility to infection. 2020 , 117, 26915-26925 | 49 |
| 1925 | Cross-reactive neutralization of SARS-CoV-2 by serum antibodies from recovered SARS patients and immunized animals. 2020 , 6, | 44 |
| 1924 | Inhibiting Ebola virus and SARS-CoV-2 entry. 2020 , 370, 167-168 | 6 |
| 1923 | Remdesivir against COVID-19 and Other Viral Diseases. 2020 , 34, | 97 |
| 1922 | COVID-19 and obesity: an opportunity for change. 2020 , 11, 2042018820949742 | 1 |
| 1921 | Pharmacogenomics and Pharmacogenetics: In Silico Prediction of Drug Effects in Treatments for Novel Coronavirus SARS-CoV2 Disease. 2020 , 13, 463-484 | 5 |
| 1920 | TMPRSS2 Correlated With Immune Infiltration Serves as a Prognostic Biomarker in Prostatic Adenocarcinoma: Implication for the COVID-2019. 2020 , 11, 575770 | 2 |
| 1919 | Prevention and Management of Type 2 Diabetes and Metabolic Syndrome in the Time of COVID-19: Should We Add a Cup of Coffee?. 2020 , 7, 581680 | 2 |
| 1918 | COVID-19 Genetic and Environmental Risk Factors: A Look at the Evidence. 2020 , 11, 579415 | 9 |
| 1917 | Nanoparticles-assisted delivery of antiviral-siRNA as inhalable treatment for human respiratory viruses: A candidate approach against SARS-COV-2. 2020 , 1, 612 | 6 |
| 1916 | GB-2 inhibits ACE2 and TMPRSS2 expression: In vivo and in vitro studies. 2020 , 132, 110816 | 7 |
| 1915 | Host-pathogen interaction in COVID-19: Pathogenesis, potential therapeutics and vaccination strategies. 2020 , 225, 152008 | 39 |
| 1914 | Coronaviruses: Innate Immunity, Inflammasome Activation, Inflammatory Cell Death, and Cytokines. 2020 , 41, 1083-1099 | 87 |
| 1913 | SARS-CoV-2 Infects the Brain Choroid Plexus and Disrupts the Blood-CSF Barrier in Human Brain Organoids. 2020 , 27, 951-961.e5 | 171 |

| 1912 | DeepH-DTA: Deep Learning for Predicting Drug-Target Interactions: A Case Study of COVID-19 Drug Repurposing. 2020 , 8, 170433-170451 | 11 |
|------|--|-----|
| 1911 | Potential Therapeutic Effect of Traditional Chinese Medicine on Coronavirus Disease 2019: A Review. 2020 , 11, 570893 | 5 |
| 1910 | Identification of Novel Hypothalamic MicroRNAs as Promising Therapeutics for SARS-CoV-2 by Regulating ACE2 and TMPRSS2 Expression: An In Silico Analysis. 2020 , 10, | 20 |
| 1909 | Association between HLA gene polymorphisms and mortality of COVID-19: An in silico analysis. 2020 , 8, 684-694 | 48 |
| 1908 | Biomarkers of COVID-19 and technologies to combat SARS-CoV-2. 2020 , 2, 1-23 | 45 |
| 1907 | In silico drug discovery of major metabolites from spices as SARS-CoV-2 main protease inhibitors. 2020 , 126, 104046 | 64 |
| 1906 | Chloroquine to fight COVID-19: A consideration of mechanisms and adverse effects?. 2020 , 6, e04900 | 9 |
| 1905 | Mechanisms of SARS-CoV-2 Transmission and Pathogenesis. 2020 , 41, 1100-1115 | 345 |
| 1904 | Vitamin D and survival in COVID-19 patients: A quasi-experimental study. 2020 , 204, 105771 | 101 |
| 1903 | Development of a High-Throughput Homogeneous AlphaLISA Drug Screening Assay for the Detection of SARS-CoV-2 Nucleocapsid. 2020 , 3, 1233-1241 | 4 |
| 1902 | A materials-science perspective on tackling COVID-19. 2020 , 1-14 | 123 |
| 1901 | High aspartate aminotransferase to alanine aminotransferase ratio on admission as risk factor for poor prognosis in COVID-19 patients. 2020 , 10, 16496 | 13 |
| 1900 | Role of angiotensin-converting enzyme 2 and pericytes in cardiac complications of COVID-19 infection. 2020 , 319, H1059-H1068 | 13 |
| 1899 | Short-Term Follow-Up of Self-Isolated COVID-19 Patients with Smell and Taste Dysfunction in Greece: Two Phenotypes of Recovery. 2020 , 82, 295-303 | 25 |
| 1898 | SARS-CoV-2: From Structure to Pathology, Host Immune Response and Therapeutic Management. 2020 , 8, | 3 |
| 1897 | Peptides: Prospects for Use in the Treatment of COVID-19. 2020 , 25, | 13 |
| 1896 | Angiotensin-converting enzyme inhibitor/angiotensin II receptor blocker treatment and haemodynamic factors are associated with increased cardiac mRNA expression of angiotensin-converting enzyme 2 in patients with cardiovascular disease. 2020 , 22, 2248-2257 | 8 |
| 1895 | Is vitamin D deficiency a risk factor for COVID-19 in children?. 2020 , 55, 3595-3601 | 23 |

| 1894 | Analysis of COVID-19 Pandemic Using Artificial Intelligence. 2020 , 65-73 | Ο |
|------|--|-----|
| 1893 | ACE2 expression in allergic airway disease may decrease the risk and severity of COVID-19. 2021 , 278, 2637-2640 | 9 |
| 1892 | What GI Physicians Need to Know During COVID-19 Pandemic. 2021 , 66, 2865-2875 | 6 |
| 1891 | Circulating ACE2: a novel biomarker of cardiovascular risk. 2020 , 396, 937-939 | 10 |
| 1890 | Neuropathology of patients with COVID-19 in Germany: a post-mortem case series. 2020 , 19, 919-929 | 465 |
| 1889 | [Are renin-angiotensin system inhibitors protective or deleterious in patients with COVID-19?]. 2020 , 2020, 20-24 | |
| 1888 | The inorganic polymer, polyphosphate, blocks binding of SARS-CoV-2 spike protein to ACE2 receptor at physiological concentrations. 2020 , 182, 114215 | 28 |
| 1887 | Insights into antiviral mechanisms of remdesivir, lopinavir/ritonavir and chloroquine/hydroxychloroquine affecting the new SARS-CoV-2. 2020 , 131, 110668 | 59 |
| 1886 | Biosurfactants and anti-inflammatory activity: A potential new approach towards COVID-19. 2020 , 17, 72-81 | 17 |
| 1885 | Site mapping and small molecule blind docking reveal a possible target site on the SARS-CoV-2 main protease dimer interface. 2020 , 89, 107372 | 16 |
| 1884 | Potential clinical drugs as covalent inhibitors of the priming proteases of the spike protein of SARS-CoV-2. 2020 , 18, 2200-2208 | 8 |
| 1883 | Food proteins are a potential resource for mining cathepsin L inhibitory drugs to combat SARS-CoV-2. 2020 , 885, 173499 | 8 |
| 1882 | Can selective serotonin reuptake inhibitors have a neuroprotective effect during COVID-19?. 2020 , 889, 173629 | 12 |
| 1881 | SARS-CoV-2 Entry Factors: and Are Expressed in Peri-Implantation Embryos and the Maternal-Fetal Interface. 2020 , 6, 1162-1169 | 15 |
| 1880 | Control of systemic inflammation through early nitric oxide supplementation with nitric oxide releasing nanoparticles. 2020 , 161, 15-22 | 4 |
| 1879 | Novel insights into the treatment of SARS-CoV-2 infection: An overview of current clinical trials. 2020 , 165, 18-43 | 27 |
| 1878 | Implications of Sex Differences in Immunity for SARS-CoV-2 Pathogenesis and Design of Therapeutic Interventions. 2020 , 53, 487-495 | 73 |
| 1877 | Incidence and impact of cardiac arrhythmias in coronavirus disease 2019 (COVID-19): A systematic review and meta-analysis. 2020 , 20, 193-198 | 29 |

| 1876 | Azithromycin: The First Broad-spectrum Therapeutic. 2020 , 100062 | 1 |
|------|---|-----|
| 1875 | Utilizing drug repurposing against COVID-19 - Efficacy, limitations, and challenges. 2020 , 259, 118275 | 44 |
| 1874 | New insights on possible vaccine development against SARS-CoV-2. 2020 , 260, 118421 | 5 |
| 1873 | A survey of genetic variants in SARS-CoV-2 interacting domains of ACE2, TMPRSS2 and TLR3/7/8 across populations. 2020 , 85, 104507 | 15 |
| 1872 | COVID-19, myocardial edema and dexamethasone. 2020 , 145, 110307 | 6 |
| 1871 | Immune response in COVID-19: What do we currently know?. 2020 , 148, 104484 | 11 |
| 1870 | Potential role of ACE2-related microRNAs in COVID-19-associated nephropathy. 2020 , 5, 153-166 | 30 |
| 1869 | Fertility preservation during the COVID-19 pandemic: mitigating the viral contamination risk to reproductive cells in cryostorage. 2020 , 41, 991-997 | 5 |
| 1868 | Enhanced elicitation of potent neutralizing antibodies by the SARS-CoV-2 spike receptor binding domain Fc fusion protein in mice. 2020 , 38, 7205-7212 | 15 |
| 1867 | Prospect of SARS-CoV-2 spike protein: Potential role in vaccine and therapeutic development. 2020 , 288, 198141 | 59 |
| 1866 | Robust T Cell Response Toward Spike, Membrane, and Nucleocapsid SARS-CoV-2 Proteins Is Not Associated with Recovery in Critical COVID-19 Patients. 2020 , 1, 100092 | 77 |
| 1865 | Molecular Simulations and Network Modeling Reveal an Allosteric Signaling in the SARS-CoV-2 Spike Proteins. 2020 , 19, 4587-4608 | 26 |
| 1864 | Imatinib is not a potent anti-SARS-CoV-2 drug. 2020, 34, 3085-3087 | 20 |
| 1863 | Predicting the response of the dental pulp to SARS-CoV2 infection: a transcriptome-wide effect cross-analysis. 2020 , 21, 360-363 | 13 |
| 1862 | SARS-CoV2-mediated suppression of NRF2-signaling reveals potent antiviral and anti-inflammatory activity of 4-octyl-itaconate and dimethyl fumarate. 2020 , 11, 4938 | 122 |
| 1861 | Early prediction of disease progression in COVID-19 pneumonia patients with chest CT and clinical characteristics. 2020 , 11, 4968 | 105 |
| 1860 | Consensus transcriptional regulatory networks of coronavirus-infected human cells. 2020 , 7, 314 | 14 |
| 1859 | SARS-CoV-2 spike protein predicted to form complexes with host receptor protein orthologues from a broad range of mammals. 2020 , 10, 16471 | 65 |

| 1858 | The immuno-oncological challenge of COVID-19 2020 , 1, 946-964 | 52 |
|------|---|----------------|
| 1857 | Superantigenic character of an insert unique to SARS-CoV-2 spike supported by skewed TCR repertoire in patients with hyperinflammation. 2020 , 117, 25254-25262 | 116 |
| 1856 | Decoy nanoparticles protect against COVID-19 by concurrently adsorbing viruses and inflammatory cytokines. 2020 , 117, 27141-27147 | 91 |
| 1855 | Pharmacophore based virtual screening, molecular docking, molecular dynamics and MM-GBSA approach for identification of prospective SARS-CoV-2 inhibitor from natural product databases. 2020 , 1-24 | 9 |
| 1854 | In silico exploration of small-molecule ⊞elix mimetics as inhibitors of SARS-COV-2 attachment to ACE2. 2020 , 1-12 | 3 |
| 1853 | Making a case for using IT cells against SARS-CoV-2. 2020 , 46, 689-702 | 13 |
| 1852 | SARS-CoV-2 and the reproductive system: assessment of risk and recommendations for infection control in reproductive departments. 2020 , 66, 343-346 | 4 |
| 1851 | Robust and persistent SARS-CoV-2 infection in the human intestinal brush border expressing cells. 2020 , 9, 2169-2179 | 21 |
| 1850 | Establishment of replication-competent vesicular stomatitis virus-based recombinant viruses suitable for SARS-CoV-2 entry and neutralization assays. 2020 , 9, 2269-2277 | 18 |
| 1849 | Insult to Injury-Potential Contribution of Coronavirus Disease-19 to Neuroinflammation and the Development of HIV-Associated Neurocognitive Disorders. 2021 , 37, 601-609 | |
| 1848 | Cilastatin: a potential treatment strategy against COVID-19 that may decrease viral replication and protect from the cytokine storm. 2020 , 13, 903-905 | 3 |
| 1847 | An overview of the safety, clinical application and antiviral research of the COVID-19 therapeutics. 2020 , 13, 1405-1414 | 21 |
| 1846 | COVID-19 and cardiovascular disease: from basic mechanisms to clinical perspectives. 2020 , 17, 543-558 | 560 |
| 1845 | COVID-19 and diabetes: Insulin requirements parallel illness severity in critically unwell patients. 2020 , 93, 390-393 | 40 |
| 1844 | Viral Coagulopathy in Patients With COVID-19: Treatment and Care. 2020, 26, 1076029620936776 | 40 |
| 1843 | Multiorgan Failure With Emphasis on Acute Kidney Injury and Severity of COVID-19: Systematic Review and Meta-Analysis. 2020 , 7, 2054358120938573 | 7 ² |
| 1842 | COVID-19 and andrology: Recommendations of the French-speaking society of andrology (SociED d'Andrologie de langue FranBise SALF). 2020 , 30, 10 | 11 |
| 1841 | Oncology-Inspired Treatment Options for COVID-19. 2020 , 61, 1720-1723 | 11 |

| 1840 | Oral Microbiome and SARS-CoV-2: Beware of Lung Co-infection. 2020 , 11, 1840 | 67 |
|------|--|-----|
| 1839 | Targeting TMPRSS2 in SARS-CoV-2 Infection. 2020 , 95, 1989-1999 | 48 |
| 1838 | Hepatic manifestations and impact of COVID-19 on the cirrhotic patient. 2020 , 85, 303-311 | 1 |
| 1837 | Old Drugs for a New Virus: Repurposed Approaches for Combating COVID-19. 2020 , 6, 2304-2318 | 25 |
| 1836 | Could a specific ACE2 activator drug improve the clinical outcome of SARS-CoV-2? A potential pharmacological insight. 2020 , 13, 807-811 | 4 |
| 1835 | Cholesterol-modifying drugs in COVID-19. 2020 , 1, iqaa001 | 14 |
| 1834 | Model-informed drug repurposing: Viral kinetic modelling to prioritize rational drug combinations for COVID-19. 2021 , 87, 3439-3450 | 14 |
| 1833 | Distinct conformational states of SARS-CoV-2 spike protein. 2020 , 369, 1586-1592 | 552 |
| 1832 | Inhibiting fusion with cellular membrane system: therapeutic options to prevent severe acute respiratory syndrome coronavirus-2 infection. 2020 , 319, C500-C509 | 4 |
| 1831 | COVID-19 and the Heart and Vasculature: Novel Approaches to Reduce Virus-Induced Inflammation in Patients With Cardiovascular Disease. 2020 , 40, 2045-2053 | 15 |
| 1830 | Age-Dependent Progression of SARS-CoV-2 Infection in Syrian Hamsters. 2020 , 12, | 112 |
| 1829 | Inhibition of SARS-CoV-2 entry through the ACE2/TMPRSS2 pathway: a promising approach for uncovering early COVID-19 drug therapies. 2020 , 76, 1623-1630 | 51 |
| 1828 | The Natural History, Pathobiology, and Clinical Manifestations of SARS-CoV-2 Infections. 2020 , 15, 359-386 | 199 |
| 1827 | Reply to "MRI Evaluation of the Olfactory Clefts in Patients with SARS-CoV-2 Infection Revealed an Unexpected Mechanism for Olfactory Function Loss". 2020 , 27, 1192 | 1 |
| 1826 | Drugs targeting various stages of the SARS-CoV-2 life cycle: Exploring promising drugs for the treatment of Covid-19. 2020 , 74, 109721 | 63 |
| 1825 | Lack of antibody-mediated cross-protection between SARS-CoV-2 and SARS-CoV infections. 2020 , 58, 102890 | 15 |
| 1824 | Lung Protection by Cathepsin C Inhibition: A New Hope for COVID-19 and ARDS?. 2020 , 63, 13258-13265 | 27 |
| 1823 | SARS-CoV-2 proteome microarray for global profiling of COVID-19 specific IgG and IgM responses. 2020 , 11, 3581 | 158 |

| 1822 Immune-mediated approaches against COVID-19. 2020 , 15, 630-645 | 178 |
|--|-----|
| Humoral and circulating follicular helper T cell responses in recovered patients with COVID-19. 2020 , 26, 1428-1434 | 223 |
| 1820 Are sex discordant outcomes in COVID-19 related to sex hormones?. 2020 , 47, 335-340 | 26 |
| 1819 The molecular virology of coronaviruses. 2020 , 295, 12910-12934 | 175 |
| Design of engineered surfaces for prospective detection of SARS-CoV-2 using quartz crystal microbalance-based techniques. 2020 , 17, 425-432 | 27 |
| 1817 Covid-19, ACE2 and the kidney. 2020 , 230, e13539 | 14 |
| Practical management of inflammatory bowel disease patients during the COVID-19 pandemic: expert commentary from the Gastroenterological Society of Australia Inflammatory Bowel Disease faculty. 2020 , 50, 798-804 | 6 |
| The role of host genetics in the immune response to SARS-CoV-2 and COVID-19 susceptibility and severity. 2020 , 296, 205-219 | 99 |
| Broad and Differential Animal Angiotensin-Converting Enzyme 2 Receptor Usage by SARS-CoV-2. 2020 , 94, | 89 |
| Coagulation Abnormalities and Thrombosis in Patients Infected With SARS-CoV-2 and Other Pandemic Viruses. 2020 , 40, 2033-2044 | 78 |
| 1812 Role of angiotensin-converting enzyme 2 (ACE2) in COVID-19. 2020 , 24, 422 | 378 |
| 1811 SARS-COV-2 in Ophthalmology: Current Evidence and Standards for Clinical Practice. 2020 , 33, 593-600 | 5 |
| 1810 The pivotal role of TMPRSS2 in coronavirus disease 2019 and prostate cancer. 2020 , 16, 2029-2033 | 70 |
| 1809 COVID-19, Renin-Angiotensin System and Endothelial Dysfunction. 2020 , 9, | 125 |
| 1808 Diabetes and Novel Coronavirus Infection: Implications for Treatment. 2020 , 11, 1915-1924 | 4 |
| 1807 Minireview of progress in the structural study of SARS-CoV-2 proteins. 2020 , 1, 53-61 | 23 |
| 1806 Coagulopathy in COVID-19: Focus on vascular thrombotic events. 2020 , 146, 32-40 | 31 |
| 1805 Exploring the SARS-CoV-2 virus-host-drug interactome for drug repurposing. 2020 , 11, 3518 | 104 |

| 1804 | COVID-19 vaccine development and a potential nanomaterial path forward. 2020 , 15, 646-655 | 302 |
|------|---|-----|
| 1803 | Impact of COVID-19 Pandemic on Laboratory Utilization. 2020 , 5, 1194-1205 | 13 |
| 1802 | Severe acute respiratory syndrome coronavirus 2 may be an underappreciated pathogen of the central nervous system. 2020 , 27, 2348-2360 | 35 |
| 1801 | COVID-19 and chronic obstructive pulmonary disease: therapeutic potential of blocking SARS-CoV2 adhesion factors. 2020 , 50, 1153-1154 | 1 |
| 1800 | Identification of therapeutic target in S2 domain of SARS nCov-2 Spike glycoprotein: Key to design and discover drug candidates for inhibition of viral entry into host cell. 2020 , 19, 2050028 | 3 |
| 1799 | New insights into genetic susceptibility of COVID-19: an ACE2 and TMPRSS2 polymorphism analysis. 2020 , 18, 216 | 179 |
| 1798 | Polycystic ovary syndrome (PCOS) and COVID-19: an overlooked female patient population at potentially higher risk during the COVID-19 pandemic. 2020 , 18, 220 | 46 |
| 1797 | Lessons learned from the mechanisms of posttraumatic inflammation extrapolated to the inflammatory response in COVID-19: a review. 2020 , 14, 28 | 3 |
| 1796 | Aging, Male Sex, Obesity, and Metabolic Inflammation Create the Perfect Storm for COVID-19. 2020 , 69, 1857-1863 | 94 |
| 1795 | Clinical Presentation of COVID-19: Case Series and Review of the Literature. 2020 , 17, | 29 |
| 1794 | Lactoferrin as Protective Natural Barrier of Respiratory and Intestinal Mucosa against Coronavirus Infection and Inflammation. 2020 , 21, | 46 |
| 1793 | Immunoglobulin fragment F(ab') against RBD potently neutralizes SARS-CoV-2 in vitro. 2020 , 182, 104868 | 34 |
| 1792 | Tackling COVID-19 pandemic through nanocoatings: Confront and exactitude. 2020 , 3, 100011 | 40 |
| 1791 | Particulate matter (PM) enhances RNA virus infection through modulation of innate immune responses. 2020 , 266, 115148 | 24 |
| 1790 | Association between COVID-19 and cardiovascular disease. 2020 , 29, 100583 | 14 |
| 1789 | Dynamic Regulation of SARS-Cov-2 Binding and Cell Entry Mechanisms in Remodeled Human Ventricular Myocardium. 2020 , 5, 871-883 | 26 |
| 1788 | Immune response in COVID-19: A review. 2020 , 13, 1619-1629 | 143 |
| 1787 | Gaining insights on immune responses to the novel coronavirus, COVID-19 and therapeutic challenges. 2020 , 257, 118058 | 9 |

| 1786 | The dual impact of ACE2 in COVID-19 and ironical actions in geriatrics and pediatrics with possible therapeutic solutions. 2020 , 257, 118075 | 57 |
|------|---|-----|
| 1785 | SARS-CoV-2 Infections: An ACE in the Hole and Systems Biology Studies-a Research Agenda. 2020 , 95, 1838-1841 | 3 |
| 1784 | Why the lower reported prevalence of asthma in patients diagnosed with COVID-19 validates repurposing EDTA solutions to prevent and manage treat COVID-19 disease. 2020 , 144, 110027 | 6 |
| 1783 | Natural protection of ocular surface from viral infections - A hypothesis. 2020 , 143, 110082 | 4 |
| 1782 | Human Organs-on-Chips for Virology. 2020 , 28, 934-946 | 50 |
| 1781 | Repurpose Open Data to Discover Therapeutics for COVID-19 Using Deep Learning. 2020 , 19, 4624-4636 | 102 |
| 1780 | SARS-CoV-2/COVID-19: a primer for cardiologists. 2020 , 28, 366-383 | 9 |
| 1779 | Histopathology and ultrastructural findings of fatal COVID-19 infections in Washington State: a case series. 2020 , 396, 320-332 | 446 |
| 1778 | ACE2 imbalance as a key player for the poor outcomes in COVID-19 patients with age-related comorbidities - Role of gut microbiota dysbiosis. 2020 , 62, 101123 | 70 |
| 1777 | FDA approved drugs with pharmacotherapeutic potential for SARS-CoV-2 (COVID-19) therapy. 2020 , 53, 100719 | 79 |
| 1776 | COVID-19 treatment: Much research and testing, but far, few magic bullets against SARS-CoV-2 coronavirus. 2020 , 203, 112647 | 17 |
| 1775 | COVID-19 and post-mortem microbiological studies. 2020 , 46, 127-138 | 6 |
| 1774 | Computer-aided screening for potential TMPRSS2 inhibitors: a combination of pharmacophore modeling, molecular docking and molecular dynamics simulation approaches. 2021 , 39, 5638-5656 | 26 |
| 1773 | Outcomes of renin-angiotensin-aldosterone system blockers in patients with COVID-19: a systematic review and meta-analysis. 2020 , 6, 335-337 | 13 |
| 1772 | Comment on: COVID-19 and Older Adults: What We Know. 2020 , 68, 2197 | 2 |
| 1771 | SARS-CoV-2 (COVID-19) and cystic fibrosis. 2020 , 319, L408-L415 | 14 |
| 1770 | SARS-CoV-2 induces transcriptional signatures in human lung epithelial cells that promote lung fibrosis. 2020 , 21, 182 | 75 |
| 1769 | Kidney and Lung ACE2 Expression after an ACE Inhibitor or an Ang II Receptor Blocker: Implications for COVID-19. 2020 , 31, 1941-1943 | 74 |

| 1768 | SARS-CoV-2 Infections and ACE2: Clinical Outcomes Linked With Increased Morbidity and Mortality in Individuals With Diabetes. 2020 , 69, 1875-1886 | | 35 |
|------|--|------|-----|
| 1767 | Pregnancy, Viral Infection, and COVID-19. 2020 , 11, 1672 | | 37 |
| 1766 | Systematic Review and Meta-Analysis of Sex-Specific COVID-19 Clinical Outcomes. 2020 , 7, 348 | | 60 |
| 1765 | Mild and Asymptomatic Covid-19 Infections: Implications for Maternal, Fetal, and Reproductive Health. 2020 , 2, | | 5 |
| 1764 | Men and COVID-19: A Biopsychosocial Approach to Understanding Sex Differences in Mortality and Recommendations for Practice and Policy Interventions. 2020 , 17, E63 | | 108 |
| 1763 | A comprehensive investigation of the mRNA and protein level of ACE2, the putative receptor of SARS-CoV-2, in human tissues and blood cells. 2020 , 17, 1522-1531 | | 52 |
| 1762 | Diarrhoea and the COVID-19 pandemic. 2020 , 21, 146-150 | | 1 |
| 1761 | Longitudinal Isolation of Potent Near-Germline SARS-CoV-2-Neutralizing Antibodies from COVID-19 Patients. <i>Cell</i> , 2020 , 182, 843-854.e12 | 56.2 | 185 |
| 1760 | Elevated Glucose Levels Favor SARS-CoV-2 Infection and Monocyte Response through a HIF-1#Glycolysis-Dependent Axis. 2020 , 32, 437-446.e5 | | 268 |
| 1759 | Advances in the possible treatment of COVID-19: A review. 2020 , 883, 173372 | | 38 |
| 1758 | A molecular docking study revealed that synthetic peptides induced conformational changes in the structure of SARS-CoV-2 spike glycoprotein, disrupting the interaction with human ACE2 receptor. 2020 , 164, 66-76 | | 25 |
| 1757 | Matrix metallopeptidase 9 as a host protein target of chloroquine and melatonin for immunoregulation in COVID-19: A network-based meta-analysis. 2020 , 257, 118096 | | 24 |
| 1756 | Comprehensive Review on Current Interventions, Diagnostics, and Nanotechnology Perspectives against SARS-CoV-2. 2020 , 31, 2021-2045 | | 36 |
| 1755 | Current and Perspective Diagnostic Techniques for COVID-19. 2020 , 6, 1998-2016 | | 67 |
| 1754 | The epidemiology and therapeutic options for the COVID-19. 2020 , 3, 71-84 | | 7 |
| 1753 | The interaction between SARS-CoV-2 and ACE2 may have consequences for skeletal muscle viral susceptibility and myopathies. 2020 , 129, 864-867 | | 40 |
| 1752 | Effects of Renin-Angiotensin Inhibition on ACE2 (Angiotensin-Converting Enzyme 2) and TMPRSS2 (Transmembrane Protease Serine 2) Expression: Insights Into COVID-19. 2020 , 76, e29-e30 | | 25 |
| 1751 | Musculoskeletal Consequences of COVID-19. 2020 , 102, 1197-1204 | | 115 |

| 1750 | COVID-19/SARS-CoV-2 Infection: Lysosomes and Lysosomotropism Implicate New Treatment Strategies and Personal Risks. 2020 , 21, | 22 |
|------|---|-----|
| 1749 | Saxifraga spinulosa-Derived Components Rapidly Inactivate Multiple Viruses Including SARS-CoV-2. 2020 , 12, | 11 |
| 1748 | A new threat from an old enemy: Re-emergence of coronavirus (Review). 2020 , 45, 1631-1643 | 137 |
| 1747 | SARS-CoV-2 as a Factor to Disbalance the Renin-Angiotensin System: A Suspect in the Case of Exacerbated IL-6 Production. 2020 , 205, 1198-1206 | 16 |
| 1746 | Evidence supporting the use of peptides and peptidomimetics as potential SARS-CoV-2 (COVID-19) therapeutics. 2020 , 12, 1647-1656 | 33 |
| 1745 | Risk Factors Associated With Mortality Among Patients With COVID-19 in Intensive Care Units in Lombardy, Italy. 2020 , 180, 1345-1355 | 604 |
| 1744 | State-of-the-Art review: Hypertension practice guidelines in the era of COVID-19. 2020 , 2, 100038 | 10 |
| 1743 | The bio-mission of interleukin-6 in the pathogenesis of COVID-19: A brief look at potential therapeutic tactics. 2020 , 257, 118097 | 36 |
| 1742 | Contribution of monocytes and macrophages to the local tissue inflammation and cytokine storm in COVID-19: Lessons from SARS and MERS, and potential therapeutic interventions. 2020 , 257, 118102 | 141 |
| 1741 | Obesity and COVID-19: A Virchow's Triad for the 21st Century. 2020 , 120, 1590-1593 | 10 |
| 1740 | SARS-CoV2 and pregnancy: An invisible enemy?. 2020 , 84, e13308 | 20 |
| 1739 | COVID-19 and post-traumatic stress disorder: A vicious circle involving immunosuppression. 2020 , 26, 876-878 | 15 |
| 1738 | Assessment of neurological manifestations in hospitalized patients with COVID-19. 2020 , 27, 2322-2328 | 19 |
| 1737 | and expression by clinical, HLA, immune, and microbial correlates across 34 human cancers and matched normal tissues: implications for SARS-CoV-2 COVID-19. 2020 , 8, | 26 |
| 1736 | Gene expression and protein profiling of candidate SARS-CoV-2 receptors in human airway epithelial cells and lung tissue. 2020 , 56, | 93 |
| 1735 | MAIT Cells in COVID-19: Heroes, Villains, or Both?. 2020 , 40, 173-184 | 3 |
| 1734 | Pathogenesis and management of myocardial injury in coronavirus disease 2019. 2020 , 22, 1994-2006 | 19 |
| 1733 | An updated insight into the molecular pathogenesis, secondary complications and potential therapeutics of COVID-19 pandemic. 2020 , 257, 118105 | 30 |

Uso teraplitico de los inhibidores de la enzima convertidora de angiotensina en pacientes con COVID-19: las «dos caras de la moneda». **2020**, 27, 212-222

| 1731 Safety perspectives on presently considered drugs for the treatment of COVID-19. 2020 , 177, 4353-4374 | 9 |
|---|-----|
| Rapid Quantification of SARS-CoV-2-Neutralizing Antibodies Using Propagation-Defective Vesicular Stomatitis Virus Pseudotypes. 2020 , 8, | 48 |
| The Anatomic Pathology laboratory adjustments in the era of COVID-19 pandemic: The experience of a laboratory in a Portuguese central hospital. 2020 , 48, 151560 | 5 |
| Neutralizing nanobodies bind SARS-CoV-2 spike RBD and block interaction with ACE2. 2020 , 27, 846-854 | 275 |
| Imatinib a Tyrosine Kinase Inhibitor: a potential treatment for SARS- COV-2 induced pneumonia. 2020, 56, 68-72 | 5 |
| 1726 Endocytic uptake of SARS-CoV-2: the critical roles of pH, Ca2+, and NAADP. 2020 , 1, | 20 |
| 1725 Cardiac manifestations in COVID-19 patients-A systematic review. 2020 , 35, 1988-2008 | 73 |
| Focus on Characteristics of COVID-19 with the Special Reference to the Impact of COVID-19 on the Urogenital System. 2020 , 14, 79-84 | 3 |
| Association Between Renin-Angiotensin-Aldosterone System Inhibitors and COVID-19 Infection in South Korea. 2020 , 76, 742-749 | 26 |
| 1722 Endocrine Significance of SARS-CoV-2's Reliance on ACE2. 2020 , 161, | 72 |
| 1721 Could Ergothioneine Aid in the Treatment of Coronavirus Patients?. 2020 , 9, | 29 |
| SARS-CoV-2, ACE2, and Hydroxychloroquine: Cardiovascular Complications, Therapeutics, and Clinical Readouts in the Current Settings. 2020 , 9, | 23 |
| Scientific solidarity in the face of the COVID-19 pandemic: researchers, publishers, and medical associations. 2020 , 2, 56-59 | 4 |
| ACE2, the Receptor that Enables Infection by SARS-CoV-2: Biochemistry, Structure, Allostery and Evaluation of the Potential Development of ACE2 Modulators. 2020 , 15, 1682-1690 | 17 |
| 1717 Opportunities for biomaterials to address the challenges of COVID-19. 2020 , 108, 1974-1990 | 30 |
| The renin-angiotensin-aldosterone system: Role in pathogenesis and potential therapeutic target in COVID-19. 2020 , 8, e00623 | 7 |
| 1715 Lessons from dermatology about inflammatory responses in Covid-19. 2020 , 30, e2130 | 20 |

| 1714 | Emerging pharmacological therapies for ARDS: COVID-19 and beyond. 2020 , 46, 2265-2283 | 27 |
|------|---|--------------|
| 1713 | Should Angiotensin-Converting Enzyme Inhibitors ever Be Used for the Management of Hypertension?. 2020 , 22, 95 | 11 |
| 1712 | Obesity and COVID-19: A Fatal Alliance. 2020 , 35, 1-8 | 19 |
| 1711 | Vascular Manifestations of COVID-19 - Thromboembolism and Microvascular Dysfunction. 2020 , 7, 598400 | 27 |
| 1710 | Coronavirus Disease-19: An Interim Evidence Synthesis of the World Association for Infectious Diseases and Immunological Disorders (Waidid). 2020 , 7, 572485 | 10 |
| 1709 | Current and Future Direct-Acting Antivirals Against COVID-19. 2020 , 11, 587944 | 10 |
| 1708 | Clinical Features and Pathogenic Mechanisms of Gastrointestinal Injury in COVID-19. 2020 , 9, | 8 |
| 1707 | Profile of SARS-CoV-2. 2020 , 132, 635-644 | 2 |
| 1706 | Infections of the lung: a predictive, preventive and personalized perspective through the lens of evolution, the emergence of SARS-CoV-2 and its pathogenesis. 2020 , 11, 1-21 | 8 |
| 1705 | Integrative Imaging Reveals SARS-CoV-2-Induced Reshaping of Subcellular Morphologies. 2020 , 28, 853-866.6 | •5 76 |
| 1704 | New onset diabetes, type 1 diabetes and COVID-19. 2020 , 14, 2211-2217 | 45 |
| 1703 | Computational Design of 25-mer Peptide Binders of SARS-CoV-2. 2020 , 124, 10930-10942 | 23 |
| 1702 | Bioengineered Tissue Models to Study SARS-CoV-2 Pathogenesis and Therapeutic Validation. 2020 , 6, 6540-6555 | 13 |
| 1701 | COVID-19 during Pregnancy and Postpartum. 2020 , 1-28 | 8 |
| 1700 | Potential Roles of the Renin-Angiotensin System in the Pathogenesis and Treatment of COVID-19. 2020 , 2020, 7520746 | О |
| 1699 | Single-Cell Sequencing of Glioblastoma Reveals Central Nervous System Susceptibility to SARS-CoV-2. 2020 , 10, 566599 | 3 |
| 1698 | Coronavirus Disease-19 Infection: Implications on Male Fertility and Reproduction. 2020 , 11, 574761 | 16 |
| 1697 | Biological Context Linking Hypertension and Higher Risk for COVID-19 Severity. 2020 , 11, 599729 | 3 |

| 1696 | Cardiovascular Disease and SARS-CoV-2: the Role of Host Immune Response Versus Direct Viral Injury. 2020 , 21, | 2 |
|------|---|-----|
| 1695 | Clinical Health Care during the COVID-19 Pandemic. 2020 , 9, | |
| 1694 | Trace Element Zinc, a Nature's Gift to Fight Unprecedented Global Pandemic COVID-19. 2021 , 199, 3213-3221 | 7 |
| 1693 | Chloroquine, hydroxychloroquine, and COVID-19: Systematic review and narrative synthesis of efficacy and safety. 2020 , 28, 1760-1776 | 14 |
| 1692 | Targeting the renin-angiotensin signaling pathway in COVID-19: Unanswered questions, opportunities, and challenges. 2020 , 117, 29274-29282 | 13 |
| 1691 | Mortality and use of angiotensin-converting enzyme inhibitors in COVID 19 disease: a systematic review. 2020 , 5, e085 | 6 |
| 1690 | Myocardial Injury at Early Stage and Its Association With the Risk of Death in COVID-19 Patients: A Hospital-Based Retrospective Cohort Study. 2020 , 7, 590688 | 6 |
| 1689 | Impact of SARS-CoV-2 on Male Reproductive Health: A Review of the Literature on Male Reproductive Involvement in COVID-19. 2020 , 7, 594364 | 12 |
| 1688 | Renal Carcinoma Is Associated With Increased Risk of Coronavirus Infections. 2020 , 7, 579422 | 8 |
| 1687 | The Rationale for Angiotensin Receptor Neprilysin Inhibitors in a Multi-Targeted Therapeutic Approach to COVID-19. 2020 , 21, | 11 |
| 1686 | Large-Scale Plasma Analysis Revealed New Mechanisms and Molecules Associated with the Host Response to SARS-CoV-2. 2020 , 21, | 81 |
| 1685 | Overcoming nonstructural protein 15-nidoviral uridylate-specific endoribonuclease (nsp15/NendoU) activity of SARS-CoV-2. 2020 , 2, FDD42 | 6 |
| 1684 | Clinical Outcomes of COVID-19 Patients with Pre-existing, Compromised Immune Systems: A Review of Case Reports. 2020 , 17, 2974-2986 | 9 |
| 1683 | SARS-CoV-2 Targets by the pscRNA Profiling of ACE2, TMPRSS2 and Furin Proteases. 2020 , 23, 101744 | 29 |
| 1682 | Biochemical parameters and pathogenesis of SARS-CoV-2 infection in vital organs: COVID-19 outbreak in Iran. 2020 , 38, 100792 | 3 |
| 1681 | COVID-19 and Body Iron: A Survey on Phenomenological and Genetic Correlations. 2020 , 11, 3996-4000 | 6 |
| 1680 | SARS-CoV-2 structure and replication characterized by in situ cryo-electron tomography. 2020 , 11, 5885 | 230 |
| 1679 | Efficacy and safety of transfusing plasma from COVID-19 survivors to COVID-19 victims with severe illness. A double-blinded controlled preliminary study. 2020 , 36, 264-272 | 12 |

| 1678 | angiotensin-converting enzyme 2 (ACE2) in the kidney. 2020 , 41, 4580-4588 | 22 |
|------|---|-----|
| 1677 | Combinatorial therapeutic trial plans for COVID-19 treatment armed up with antiviral, antiparasitic, cell-entry inhibitor, and immune-boosters. 2020 , 31, 1-11 | 3 |
| 1676 | STAT2 signaling restricts viral dissemination but drives severe pneumonia in SARS-CoV-2 infected hamsters. 2020 , 11, 5838 | 122 |
| 1675 | COVID-19 and COPD: a narrative review of the basic science and clinical outcomes. 2020 , 29, | 25 |
| 1674 | Epidemiological and Clinical Characteristics of COVID-19 in Indian Children in the Initial Phase of the Pandemic. 2020 , 57, 914-917 | 15 |
| 1673 | Effective screening of SARS-CoV-2 neutralizing antibodies in patient serum using lentivirus particles pseudotyped with SARS-CoV-2 spike glycoprotein. 2020 , 10, 19076 | 14 |
| 1672 | Treatment Options for Coronavirus Disease 2019 in Patients With Reduced or Absent Kidney Function. 2020 , 27, 434-441 | 2 |
| 1671 | The Secretive Liaison of Particulate Matter and SARS-CoV-2. A Hypothesis and Theory Investigation. 2020 , 11, 579964 | 6 |
| 1670 | Bilirubin Levels as Potential Indicators of Disease Severity in Coronavirus Disease Patients: A Retrospective Cohort Study. 2020 , 7, 598870 | 15 |
| 1669 | Gastrointestinal Symptoms Associated With Unfavorable Prognosis of COVID-19 Patients: A Retrospective Study. 2020 , 7, 608259 | 14 |
| 1668 | The Need for Ocular Protection for Health Care Workers During SARS-CoV-2 Outbreak and a Hypothesis for a Potential Personal Protective Equipment. 2020 , 8, 599757 | 4 |
| 1667 | Target-Centered Drug Repurposing Predictions of Human Angiotensin-Converting Enzyme 2 (ACE2) and Transmembrane Protease Serine Subtype 2 (TMPRSS2) Interacting Approved Drugs for Coronavirus Disease 2019 (COVID-19) Treatment through a Drug-Target Interaction Deep Learning | 9 |
| 1666 | The COVID-19 pandemic and diabetes mellitus. 2020 , 5, e200-e205 | 3 |
| 1665 | Clinical and epidemiological features of COVID-19 deaths in Nepal. 2020 , 38, 100797 | 7 |
| 1664 | Cells of the adult human heart. 2020 , 588, 466-472 | 274 |
| 1663 | Gastrointestinal pathophysiology of SARS-CoV2 - a literature review. 2020 , 10, 523-528 | 15 |
| 1662 | Androgen-deprivation therapy and SARS-Cov-2 infection: the potential double-face role of testosterone. 2020 , 11, 2042018820969019 | 9 |
| 1661 | Prolonged Neuropsychological Deficits, Central Nervous System Involvement, and Brain Stem Affection After COVID-19-A Case Series. 2020 , 11, 574004 | 9 |

| 1660 | Cordycepin: a bioactive metabolite of C and polyadenylation inhibitor with therapeutic potential against COVID-19. 2020 , 1-8 | 7 |
|------|--|-----|
| 1659 | COVID-19 and cardiovascular diseases. 2021 , 13, 161-167 | 1 |
| 1658 | Three Properties of SARS-CoV-2 That Promote COVID-19. 2020 , 28, 324-326 | 1 |
| 1657 | Cardiovascular Manifestations of COVID-19 Infection. 2020 , 9, | 49 |
| 1656 | Computational Analysis of Targeting SARS-CoV-2, Viral Entry Proteins ACE2 and TMPRSS2, and Interferon Genes by Host MicroRNAs. 2020 , 11, | 22 |
| 1655 | COVID-19 Infection Detection and Prevention by SARS-CoV-2 Active Antigens: A Synthetic Vaccine Approach. 2020 , 8, | 1 |
| 1654 | Fibroblast growth factor 23-Klotho and hypertension: experimental and clinical mechanisms. 2021 , 36, 3007-3022 | 7 |
| 1653 | Plasma-activated water: An alternative disinfectant for S protein inactivation to prevent SARS-CoV-2 infection. 2021 , 421, 127742 | 44 |
| 1652 | 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 |
| 1651 | Androgen Signaling Regulates SARS-CoV-2 Receptor Levels and Is Associated with Severe COVID-19 Symptoms in Men. 2020 , 27, 876-889.e12 | 85 |
| 1650 | Olfactory epithelium histopathological findings in long-term coronavirus disease 2019 related anosmia. 2020 , 134, 1123-1127 | 39 |
| 1649 | Bimodular effects of D614G mutation on the spike glycoprotein of SARS-CoV-2 enhance protein processing, membrane fusion, and viral infectivity. 2020 , 5, 268 | 28 |
| 1648 | Evidence for treatment with estradiol for women with SARS-CoV-2 infection. 2020 , 18, 369 | 53 |
| 1647 | Systems Biology Approaches for Therapeutics Development Against COVID-19. 2020 , 10, 560240 | 5 |
| 1646 | SARS-CoV-2: Structure, Biology, and Structure-Based Therapeutics Development. 2020 , 10, 587269 | 199 |
| 1645 | Comparative Transcriptome Analysis Reveals the Intensive Early Stage Responses of Host Cells to SARS-CoV-2 Infection. 2020 , 11, 593857 | 37 |
| 1644 | Food Ingredients and Active Compounds against the Coronavirus Disease (COVID-19) Pandemic: A Comprehensive Review. 2020 , 9, | 92 |
| 1643 | Impact of COVID-19 on the thyroid gland: an update. 2020 , 1 | 70 |

| 1642 | Nanoparticle Vaccines Based on the Receptor Binding Domain (RBD) and Heptad Repeat (HR) of SARS-CoV-2 Elicit Robust Protective Immune Responses. 2020 , 53, 1315-1330.e9 | 99 |
|------|---|-----------------|
| 1641 | SARS-CoV-2 spike-protein D614G mutation increases virion spike density and infectivity. 2020 , 11, 6013 | 45 ⁰ |
| 1640 | HDL-scavenger receptor B type 1 facilitates SARS-CoV-2 entry. 2020 , 2, 1391-1400 | 95 |
| 1639 | Low toxicity and high immunogenicity of an inactivated vaccine candidate against COVID-19 in different animal models. 2020 , 9, 2606-2618 | 14 |
| 1638 | The Potential Role of Osteopontin and Furin in Worsening Disease Outcomes in COVID-19 Patients with Pre-Existing Diabetes. 2020 , 9, | 14 |
| 1637 | Pregnancy and Childbirth in the COVID-19 Era-The Course of Disease and Maternal-Fetal Transmission. 2020 , 9, | 10 |
| 1636 | A Novel Purification Procedure for Active Recombinant Human DPP4 and the Inability of DPP4 to Bind SARS-CoV-2. 2020 , 25, | 17 |
| 1635 | Caring for Hospitalized Patients with Diabetes Mellitus, Hyperglycemia, and COVID-19: Bridging the Remaining Knowledge Gaps. 2020 , 20, 77 | 5 |
| 1634 | Airborne Transmission of COVID-19: Aerosol Dispersion, Lung Deposition, and Virus-Receptor Interactions. 2020 , | 51 |
| 1633 | Possible Correlations between Atherosclerosis, Acute Coronary Syndromes and COVID-19. 2020 , 9, | 15 |
| 1632 | Viral Infection-Induced Gut Dysbiosis, Neuroinflammation, and Esynuclein Aggregation: Updates and Perspectives on COVID-19 and Neurodegenerative Disorders. 2020 , 11, 4012-4016 | 17 |
| 1631 | Cholesterol 25-hydroxylase suppresses SARS-CoV-2 replication by blocking membrane fusion. 2020 , 117, 32105-32113 | 96 |
| 1630 | Multivessel spontaneous coronary artery dissection in a patient after mild COVID-19: A case report 2020 , 8, 2050313X20975989 | 1 |
| 1629 | Assessing COVID-19 susceptibility through analysis of the genetic and epigenetic diversity of ACE2-mediated SARS-CoV-2 entry. 2020 , 21, 1311-1329 | 16 |
| 1628 | Nanomedicine & Nanotoxicology Future Could Be Reshaped Post-COVID-19 Pandemic. 2020 , 2, | 3 |
| 1627 | Innate and Adaptive Immunity of Murine Neural Stem Cell-Derived piRNA Exosomes/Microvesicles against Pseudotyped SARS-CoV-2 and HIV-Based Lentivirus. 2020 , 23, 101806 | 10 |
| 1626 | Sex Disparities in COVID-19 Severity and Outcome: Are Men Weaker or Women Stronger?. 2021 , 111, 1066-1085 | 31 |
| 1625 | Management of Pediatric Kidney Transplant Patients During the COVID-19 Pandemic: Guidance From the Canadian Society of Transplantation Pediatric Group. 2020 , 7, 2054358120967845 | 9 |

| 1624 | SARS-CoV-2 Receptors and Entry Genes Are Expressed in the Human Olfactory Neuroepithelium and Brain. 2020 , 23, 101839 | 84 |
|------|---|-----|
| 1623 | Effects of Recent Use of Renin-Angiotensin System Inhibitors on Mortality of Patients With Coronavirus Disease 2019. 2020 , 7, ofaa519 | 3 |
| 1622 | A comprehensive review of the impact of COVID-19 on human reproductive biology, assisted reproduction care and pregnancy: a Canadian perspective. 2020 , 13, 140 | 39 |
| 1621 | Ocular Involvement in Coronavirus Disease 2019: Up-to-Date Information on Its Manifestation, Testing, Transmission, and Prevention. 2020 , 7, 569126 | 6 |
| 1620 | Camostat Mesylate May Reduce Severity of Coronavirus Disease 2019 Sepsis: A First Observation. 2020 , 2, e0284 | 25 |
| 1619 | The testis in patients with COVID-19: virus reservoir or immunization resource?. 2020 , 9, 1897-1900 | 7 |
| 1618 | Impact of Diabetes in Patients Diagnosed With COVID-19. 2020 , 11, 576818 | 35 |
| 1617 | Structural Characterization of SARS-CoV-2: Where We Are, and Where We Need to Be. 2020 , 7, 605236 | 60 |
| 1616 | [COVID-19 and the kidneys]. 2020 , 15, 1-5 | 1 |
| 1615 | Clinical Characteristics and Outcomes of Severe or Critical COVID-19 Patients Presenting No Respiratory Symptoms or Fever at Onset. 2021 , 7, 1452-1458 | 3 |
| 1614 | In silico studies evidenced the role of structurally diverse plant secondary metabolites in reducing SARS-CoV-2 pathogenesis. 2020 , 10, 20584 | 29 |
| 1613 | Tempering Macrophage Plasticity for Controlling SARS-CoV-2 Infection for Managing COVID-19 Disease. 2020 , 11, 570698 | 6 |
| 1612 | Potential Role of Autonomic Dysfunction in Covid-19 Morbidity and Mortality. 2020 , 11, 561749 | 22 |
| 1611 | Drugs Repurposing Using QSAR, Docking and Molecular Dynamics for Possible Inhibitors of the SARS-CoV-2 M Protease. 2020 , 25, | 23 |
| 1610 | SARS-CoV-2 and the safety margins of cell-based biological medicinal products. 2020 , 68, 122-124 | 9 |
| 1609 | Receptor binding and priming of the spike protein of SARS-CoV-2 for membrane fusion. 2020 , 588, 327-330 | 339 |
| 1608 | Enhancing host cell infection by SARS-CoV-2. 2020 , 370, 765-766 | 33 |
| 1607 | Histological Evidence for the Enteric Nervous System and the Choroid Plexus as Alternative Routes of Neuroinvasion by SARS-CoV2. 2020 , 14, 596439 | 32 |

| 1606 Real-Time Conformational Dynamics of SARS-CoV-2 Spikes on Virus Particles. 2020 , 28, 880-891.e8 | 70 |
|---|-----------------------|
| 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 |
| Targeting SARS-CoV-2 Proteases and Polymerase for COVID-19 Treatment: State of the Art and Future Opportunities. 2020 , | 57 |
| Identifying the Zoonotic Origin of SARS-CoV-2 by Modeling the Binding Affinity between the Spike Receptor-Binding Domain and Host ACE2. 2020 , 19, 4844-4856 | 15 |
| The SKI complex is a broad-spectrum, host-directed antiviral drug target for coronaviruses, influenza, and filoviruses. 2020 , 117, 30687-30698 | 7 |
| 1601 A highly immunogenic and effective measles virus-based Th1-biased COVID-19 vaccine. 2020 , 117, 326 | 57-32666 ₇ |
| A nomogramic model based on clinical and laboratory parameters at admission for predicting the survival of COVID-19 patients. 2020 , 20, 899 | 6 |
| 1599 SARS coronavirus 2: from genome to infectome. 2020 , 21, 318 | 30 |
| 1598 The Perspective on Bio-Nano Interface Technology for Covid-19. 2020 , 2, | 7 |
| Carnosine to Combat Novel Coronavirus (nCoV): Molecular Docking and Modeling to Cocrystallized Host Angiotensin-Converting Enzyme 2 (ACE2) and Viral Spike Protein. 2020 , 25, | 3 |
| 1596 Convalescent plasma - Is it useful for treating SARS Co-V2 infection?. 2020 , 38, 252-260 | 4 |
| Lethality of SARS-CoV-2 infection in K18 human angiotensin-converting enzyme 2 transgenic mice. 2020 , 11, 6122 | 141 |
| 1594 SARS-CoV-2 neutralizing antibody structures inform therapeutic strategies. 2020 , 588, 682-687 | 651 |
| Of Cross-immunity, Herd Immunity and Country-specific Plans: Experiences from COVID-19 in India. 2020 , 11, 1339-1344 | 11 |
| Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2) Infection: Triggering a Lethal Fight to Keep Control of the Ten-Eleven Translocase (TET)-Associated DNA Demethylation?. 2020 , 9, | 1 |
| 1591 Full Issue PDF. 2020 , 5, I-CIX | |
| Actionable Cytopathogenic Host Responses of Human Alveolar Type 2 Cells to SARS-CoV-2. 2020 , 80, 1104-1122.e9 | 38 |
| Molecular Dynamics Reveals Complex Compensatory Effects of Ionic Strength on the Severe Acute Respiratory Syndrome Coronavirus 2 Spike/Human Angiotensin-Converting Enzyme 2 Interaction. 2020 , 11, 10446-10453 | 10 |

| 1588 | Non-Receptor-Mediated Lipid Membrane Permeabilization by the SARS-CoV-2 Spike Protein S1 Subunit. 2020 , 12, 55649-55658 | 12 |
|------------------------------|--|---------------------------|
| 1587 | Comparative Multiplexed Interactomics of SARS-CoV-2 and Homologous Coronavirus Nonstructural Proteins Identifies Unique and Shared Host-Cell Dependencies. 2020 , 6, 3174-3189 | 44 |
| 1586 | On the Challenges for the Diagnosis of SARS-CoV-2 Based on a Review of Current Methodologies. 2020 , 5, 3655-3677 | 38 |
| 1585 | Development of a multi-antigenic SARS-CoV-2 vaccine candidate using a synthetic poxvirus platform. 2020 , 11, 6121 | 36 |
| 1584 | Time dynamics of COVID-19. 2020 , 10, 21040 | 18 |
| 1583 | The biomaterial polyphosphate blocks stoichiometric binding of the SARS-CoV-2 S-protein to the cellular ACE2 receptor. 2020 , 8, 6603-6610 | 13 |
| 1582 | Detection of breastmilk antibodies targeting SARS-CoV-2 nucleocapsid, spike and receptor-binding-domain antigens. 2020 , 9, 2728-2731 | 18 |
| 1581 | Multiepitope Subunit Vaccine Design against COVID-19 Based on the Spike Protein of SARS-CoV-2: An Analysis. 2020 , 2020, 8893483 | 14 |
| 1580 | FDA efficiency for approval process of COVID-19 therapeutics. 2020 , 15, 73 | 5 |
| | | |
| 1579 | Possible Role of Adenosine in COVID-19 Pathogenesis and Therapeutic Opportunities. 2020 , 11, 594487 | 13 |
| 1579 1578 | Possible Role of Adenosine in COVID-19 Pathogenesis and Therapeutic Opportunities. 2020 , 11, 594487 Identification of an Antiviral Compound from the Pandemic Response Box that Efficiently Inhibits SARS-CoV-2 Infection In Vitro. 2020 , 8, | 13 |
| | Identification of an Antiviral Compound from the Pandemic Response Box that Efficiently Inhibits | |
| 1578 | Identification of an Antiviral Compound from the Pandemic Response Box that Efficiently Inhibits SARS-CoV-2 Infection In Vitro. 2020 , 8, | 14 |
| 1578 1577 | Identification of an Antiviral Compound from the Pandemic Response Box that Efficiently Inhibits SARS-CoV-2 Infection In Vitro. 2020 , 8, In Silico Discovery of Antimicrobial Peptides as an Alternative to Control SARS-CoV-2. 2020 , 25, Modeling the Molecular Impact of SARS-CoV-2 Infection on the Renin-Angiotensin System. 2020 , | 14 |
| 1578 1577 1576 | Identification of an Antiviral Compound from the Pandemic Response Box that Efficiently Inhibits SARS-CoV-2 Infection In Vitro. 2020 , 8, In Silico Discovery of Antimicrobial Peptides as an Alternative to Control SARS-CoV-2. 2020 , 25, Modeling the Molecular Impact of SARS-CoV-2 Infection on the Renin-Angiotensin System. 2020 , 12, Computational Insights into the Conformational Accessibility and Binding Strength of SARS-CoV-2 | 14 8 8 |
| 1578 1577 1576 1575 | Identification of an Antiviral Compound from the Pandemic Response Box that Efficiently Inhibits SARS-CoV-2 Infection In Vitro. 2020, 8, In Silico Discovery of Antimicrobial Peptides as an Alternative to Control SARS-CoV-2. 2020, 25, Modeling the Molecular Impact of SARS-CoV-2 Infection on the Renin-Angiotensin System. 2020, 12, Computational Insights into the Conformational Accessibility and Binding Strength of SARS-CoV-2 Spike Protein to Human Angiotensin-Converting Enzyme 2. 2020, 11, 10482-10488 | 14 8 8 |
| 1578 1577 1576 1575 | Identification of an Antiviral Compound from the Pandemic Response Box that Efficiently Inhibits SARS-CoV-2 Infection In Vitro. 2020, 8, In Silico Discovery of Antimicrobial Peptides as an Alternative to Control SARS-CoV-2. 2020, 25, Modeling the Molecular Impact of SARS-CoV-2 Infection on the Renin-Angiotensin System. 2020, 12, Computational Insights into the Conformational Accessibility and Binding Strength of SARS-CoV-2 Spike Protein to Human Angiotensin-Converting Enzyme 2. 2020, 11, 10482-10488 CD147-spike protein is a novel route for SARS-CoV-2 infection to host cells. 2020, 5, 283 | 14 8 8 16 399 |

| 1570 | Similarity and Specificity of Traditional Chinese Medicine Formulas for Management of Coronavirus Disease 2019 and Rheumatoid Arthritis. 2020 , 5, 30519-30530 | 3 |
|------|--|----------|
| 1569 | Little to no expression of angiotensin-converting enzyme-2 on most human peripheral blood immune cells but highly expressed on tissue macrophages. 2020 , | 35 |
| 1568 | ACE2 partially dictates the host range and tropism of SARS-CoV-2. 2020 , 18, 4040-4047 | 14 |
| 1567 | The Intersection between COVID-19, the Gene Family of ACE2 and Alzheimer's Disease. 2020 , 15, 2633105520 |)9475743 |
| 1566 | Molecular epidemiology of SARS-CoV-2 clusters caused by asymptomatic cases in Anhui Province, China. 2020 , 20, 930 | 3 |
| 1565 | Autonomic balance determines the severity of COVID-19 courses. 2020 , 6, 22 | 15 |
| 1564 | Efforts at COVID-19 Vaccine Development: Challenges and Successes. 2020 , 8, | 47 |
| 1563 | Adaptive Evolution of Peptide Inhibitors for Mutating SARS-CoV-2. 2020 , 3, 2000156 | 9 |
| 1562 | Heparan sulfate assists SARS-CoV-2 in cell entry and can be targeted by approved drugs in vitro. 2020 , 6, 80 | 86 |
| 1561 | COVID-19 during Pregnancy and Postpartum. 2020 , 1-37 | 8 |
| 1560 | A Novel In-Cell ELISA Assay Allows Rapid and Automated Quantification of SARS-CoV-2 to Analyze Neutralizing Antibodies and Antiviral Compounds. 2020 , 11, 573526 | 20 |
| 1559 | Cognitive and Neuropsychiatric Manifestations of COVID-19 and Effects on Elderly Individuals With Dementia. 2020 , 12, 588872 | 60 |
| 1558 | Cardiovascular Active Peptides of Marine Origin with ACE Inhibitory Activities: Potential Role as Anti-Hypertensive Drugs and in Prevention of SARS-CoV-2 Infection. 2020 , 21, | 8 |
| 1557 | Antibody-Based Immunotherapeutic Strategies for COVID-19. 2020 , 9, | 9 |
| 1556 | SARS-CoV-2´cell receptor gene ACE2 -mediated immunomodulation in breast cancer subtypes. 2020 , 24, 100844 | O |
| 1555 | Attributes of dysgeusia and anosmia of coronavirus disease 2019 (COVID-19) in hospitalized patients. 2020 , | 6 |
| 1554 | Multiple Expression Assessments of ACE2 and TMPRSS2 SARS-CoV-2 Entry Molecules in the Urinary Tract and Their Associations with Clinical Manifestations of COVID-19. 2020 , 13, 3977-3990 | 16 |
| 1553 | Clinical Impact Potential of Supplemental Nutrients as Adjuncts of Therapy in High-Risk COVID-19 for Obese Patients. 2020 , 7, 580504 | 10 |

| 1552 | Pulmonary Arterial Thrombosis in COVID-19 With Fatal Outcome: Results From a Prospective, Single-Center, Clinicopathologic Case Series. 2020 , 173, 350-361 | 434 |
|------|--|-----|
| 1551 | Vitamin D high doses supplementation could represent a promising alternative to prevent or treat COVID-19 infection. 2020 , 32, 267-277 | 4 |
| 1550 | The potential effectiveness of acetazolamide in the prevention of acute kidney injury in COVID-19: A hypothesis. 2020 , 888, 173487 | 7 |
| 1549 | Sewage surveillance system using urological wastewater: Key to COVID-19 monitoring?. 2020 , | 3 |
| 1548 | Infection of human sweat glands by SARS-CoV-2. 2020 , 6, 84 | 17 |
| 1547 | 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 |
| 1546 | Potential use of RNA-dependent RNA polymerase (RdRp) inhibitors against SARS-CoV2 infection. 2020 , 13, 608-614 | 7 |
| 1545 | Long-Term Modeling of SARS-CoV-2 Infection of Cultured Polarized Human Airway Epithelium. 2020 , 11, | 38 |
| 1544 | 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 |
| 1543 | Ultrasound Imaging Findings of Acute Testicular Infection in Patients With Coronavirus Disease 2019: A Single-Center-Based Study in Wuhan, China. 2021 , 40, 1787-1794 | 19 |
| 1542 | Dissecting the Drug Development Strategies Against SARS-CoV-2 Through Diverse Computational Modeling Techniques. 2020 , 329 | 4 |
| 1541 | SARS-CoV-2 Cell Entry Factors ACE2 and TMPRSS2 Are Expressed in the Microvasculature and Ducts of Human Pancreas but Are Not Enriched in Cells. 2020 , 32, 1028-1040.e4 | 79 |
| 1540 | Asthma in COVID-19 patients: An extra chain fitting around the neck?. 2020 , 175, 106205 | 9 |
| 1539 | Obesity and the increased risk for COVID-19: mechanisms and nutritional management. 2021 , 34, 209-221 | 4 |
| 1538 | Human coronaviruses: ophthalmic manifestations. 2020 , 5, e000630 | 11 |
| 1537 | Cholesterol 25-Hydroxylase inhibits SARS-CoV-2 and other coronaviruses by depleting membrane cholesterol. 2020 , 39, e106057 | 100 |
| 1536 | I mmunosenescence and Inflammaging: Risk Factors of Severe COVID-19 in Older People. 2020 , 11, 579220 | 58 |
| 1535 | Systematic Analysis of Coronavirus Disease 2019 (COVID-19) Receptor ACE2 in Malignant Tumors: Pan-Cancer Analysis. 2020 , 7, 569414 | 8 |

| 1534 | Coronavirus-19: Possible Therapeutic Implications of Spironolactone and Dry Extract of L. (Licorice). 2020 , 11, 558418 | 4 |
|------|---|----|
| 1533 | The Role of Molecular Chaperones in Virus Infection and Implications for Understanding and Treating COVID-19. 2020 , 9, | 12 |
| 1532 | Spike Glycoprotein-Mediated Entry of SARS Coronaviruses. 2020 , 12, | 20 |
| 1531 | Sistema renina-angiotensina-aldosterona y COVID19. Implicaciones clāicas. 2020 , 20, 27-32 | О |
| 1530 | Peptide and peptide-based inhibitors of SARS-CoV-2 entry. 2020 , 167, 47-65 | 63 |
| 1529 | COVID-19 and cardiovascular disease. 2020 , 32, 263-266 | 1 |
| 1528 | Renin-angiotensin system inhibition and risk of infection and mortality in COVID-19: a systematic review and meta-analysis. 2020 , 50, 1468-1474 | 5 |
| 1527 | Defensive Properties of Mucin Glycoproteins during Respiratory Infections-Relevance for SARS-CoV-2. 2020 , 11, | 30 |
| 1526 | Computational Studies of SARS-CoV-2 3CLpro: Insights from MD Simulations. 2020 , 21, | 29 |
| 1525 | Tobacco, but Not Nicotine and Flavor-Less Electronic Cigarettes, Induces ACE2 and Immune Dysregulation. 2020 , 21, | 19 |
| 1524 | Are patients with chronic rhinosinusitis with nasal polyps at a decreased risk of COVID-19 infection?. 2020 , 10, 1182-1185 | 11 |
| 1523 | Association of angiotensin converting enzyme inhibitors and angiotensin II receptor blockers with risk of COVID-19, inflammation level, severity, and death in patients with COVID-19: A rapid systematic review and meta-analysis. 2020 , | 42 |
| 1522 | Patterns of Gustatory Recovery in Patients Affected by the COVID-19 Outbreak. 2020 , 35, 833-837 | 10 |
| 1521 | Genetic variability in the expression of the SARS-CoV-2 host cell entry factors across populations. 2020 , 21, 269-272 | 29 |
| 1520 | [Neurological damage linked to coronaviruses : SARS-CoV-2 and other human coronaviruses]. 2020 , 36, 775-782 | 1 |
| 1519 | Effect of mutation on structure, function and dynamics of receptor binding domain of human SARS-CoV-2 with host cell receptor ACE2: a molecular dynamics simulations study. 2021 , 39, 7231-7245 | 29 |
| 1518 | Coronavirus disease 2019-Historical context, virology, pathogenesis, immunotherapy, and vaccine development. 2020 , 16, 2992-3000 | 6 |
| 1517 | Comparative Genomic Analysis of Rapidly Evolving SARS-CoV-2 Reveals Mosaic Pattern of Phylogeographical Distribution. 2020 , 5, | 35 |

| 1516 | Can phytotherapy with polyphenols serve as a powerful approach for the prevention and therapy tool of novel coronavirus disease 2019 (COVID-19)?. 2020 , 319, E689-E708 | 22 |
|------|---|-----|
| 1515 | Central nervous system complications associated with SARS-CoV-2 infection: integrative concepts of pathophysiology and case reports. 2020 , 17, 231 | 120 |
| 1514 | Remodeling of the Immune Response With Aging: Immunosenescence and Its Potential Impact on COVID-19 Immune Response. 2020 , 11, 1748 | 84 |
| 1513 | Special Issues Encountered When Cancer Patients Confront COVID-19. 2020 , 10, 1380 | 3 |
| 1512 | COVID-19: The Immune Responses and Clinical Therapy Candidates. 2020 , 21, | 16 |
| 1511 | COVID-19 and the Kidney: From Epidemiology to Clinical Practice. 2020 , 9, | 41 |
| 1510 | COVID-19 and Obesity: Dangerous Liaisons. 2020 , 9, | 64 |
| 1509 | Postulated Adjuvant Therapeutic Strategies for COVID-19. 2020 , 10, | 15 |
| 1508 | Stem cell therapy for COVID-19: Possibilities and challenges. 2020 , 44, 2182-2191 | 29 |
| 1507 | Coronavirus (Covid-19) sepsis: revisiting mitochondrial dysfunction in pathogenesis, aging, inflammation, and mortality. 2020 , 69, 1077-1085 | 69 |
| 1506 | Molecular Basis for Pathogenicity of Human Coronaviruses. 2020 , 13, 2385-2405 | 7 |
| 1505 | Physiologically-Based Pharmacokinetic Modeling to Predict the Clinical Efficacy of the Coadministration of Lopinavir and Ritonavir against SARS-CoV-2. 2020 , 108, 1176-1184 | 4 |
| 1504 | Updated information on new coronavirus disease 2019 occurrence, drugs, and prediction of a potential receptor. 2020 , 34, e22594 | 2 |
| 1503 | Coronavirus Disease 2019 (COVID-19) and Its Neuroinvasive Capacity: Is It Time for Melatonin?. 2020 , 1 | 13 |
| 1502 | Cardiac Injury Patterns and Inpatient Outcomes Among Patients Admitted With COVID-19. 2020 , 133, 154-161 | 23 |
| 1501 | Approaches and Challenges in SARS-CoV-2 Vaccine Development. 2020 , 28, 364-370 | 64 |
| 1500 | SARS-CoV-2 and ACE2: The biology and clinical data settling the ARB and ACEI controversy. 2020 , 58, 102907 | 75 |
| 1499 | COVID-19: A review of the proposed pharmacological treatments. 2020 , 886, 173451 | 54 |

| 1498 | and in vivo and in vitro results. 2020 , 887, 173467 | 12 |
|------|--|-----|
| 1497 | SARS-CoV-2 causes a specific dysfunction of the kidney proximal tubule. 2020 , 98, 1296-1307 | 91 |
| 1496 | COVID-19: Time to exonerate the pangolin from the transmission of SARS-CoV-2 to humans. 2020 , 84, 104493 | 48 |
| 1495 | Why do children seem to be more protected against COVID-19? A hypothesis. 2020 , 143, 110151 | 3 |
| 1494 | Pathogenesis of SARS-CoV-2 induced cardiac injury from the perspective of the virus. 2020 , 147, 12-17 | 19 |
| 1493 | Structure-guided covalent stabilization of coronavirus spike glycoprotein trimers in the closed conformation. 2020 , 27, 942-949 | 89 |
| 1492 | [Tracing the origins of SARS-COV-2 in coronavirus phylogenies]. 2020 , 36, 783-796 | 7 |
| 1491 | Resolution of coronavirus disease 2019 (COVID-19). 2020 , 18, 1201-1211 | 38 |
| 1490 | Medication therapy strategies for the coronavirus disease 2019 (COVID-19): recent progress and challenges. 2020 , 13, 957-975 | 5 |
| 1489 | Association between hypertension and pneumonia caused by SARS-CoV-2 in Mexican population. 2020 , 38, 1857-1858 | |
| 1488 | Characterization of the SARS-CoV-2 S Protein: Biophysical, Biochemical, Structural, and Antigenic Analysis. 2020 , | 15 |
| 1487 | Asymptomatic COVID-19 and saliva: Let's ask "Do you feel that saliva in your mouth had reduced in recent times?". 2020 , 74, e13657 | 1 |
| 1486 | COVID-19 as a Blood Clotting Disorder Masquerading as a Respiratory Illness: A Cerebrovascular Perspective and Therapeutic Implications for Stroke Thrombectomy. 2020 , 30, 555-561 | 26 |
| 1485 | Rheumatology Drugs and COVID-19. 2020 , 20, 1-3 | |
| 1484 | A gendered magnifying glass on COVID-19. 2020 , 18, 14 | 14 |
| 1483 | Overview of Immune Response During SARS-CoV-2 Infection: Lessons From the Past. 2020 , 11, 1949 | 163 |
| 1482 | SARS-CoV-2 Infection and Lung Cancer: Potential Therapeutic Modalities. 2020 , 12, | 7 |
| 1481 | The Global Emergency of Novel Coronavirus (SARS-CoV-2): An Update of the Current Status and Forecasting. 2020 , 17, | 25 |

| 1480 Emerging Therapeutic Modalities against COVID-19. 2020 , 13, | 11 |
|--|------|
| An analysis of SARS-CoV-2 cell entry genes identifies the intestine and colorectal cancer as susceptible tissues. 2020 , 107, e452-e454 | 2 |
| Digital Tomosynthesis and COVID-19: An Improvement in the Assessment of Pulmonary Opacities. 2020 , 56, 761-763 | 2 |
| Functional prediction and comparative population analysis of variants in genes for proteases and innate immunity related to SARS-CoV-2 infection. 2020 , 84, 104498 | 12 |
| 1476 Interdiction of Protein Folding for Therapeutic Drug Development in SARS CoV-2. 2020 , 124, 8201-8208 | 7 |
| Fractional diffusion on the human proteome as an alternative to the multi-organ damage of SARS-CoV-2. 2020 , 30, 081104 | 10 |
| Impaired NLRP3 inflammasome activation/pyroptosis leads to robust inflammatory cell death via caspase-8/RIPK3 during coronavirus infection. 2020 , 295, 14040-14052 | 76 |
| 1473 Drugs against SARS-CoV-2: What do we know about their mode of action?. 2020 , 30, 1-10 | 20 |
| 1472 SARS-CoV-2 and the next generations: which impact on reproductive tissues?. 2020 , 37, 2399-2403 | 23 |
| Repurposing metocurine as main protease inhibitor to develop novel antiviral therapy for COVID-19. 2020 , 31, 1-13 | 18 |
| Molecular docking suggests repurposing of brincidofovir as a potential drug targeting SARS-CoV-2 ACE2 receptor and main protease. 2020 , 9, 56 | 12 |
| 1469 Inhibition of TMPRSS2 by HAI-2 reduces prostate cancer cell invasion and metastasis. 2020 , 39, 5950-5963 | 3 12 |
| 1468 A perspective on potential antibody-dependent enhancement of SARS-CoV-2. 2020 , 584, 353-363 | 289 |
| 1467 The TLC-Bioautography as a Tool for Rapid Enzyme Inhibitors detection - A Review. 2020, 1-19 | 5 |
| Tiotropium is Predicted to be a Promising Drug for COVID-19 Through Transcriptome-Based Comprehensive Molecular Pathway Analysis. 2020 , 12, | 10 |
| 1465 COVID-19: a short message to rheumatologists. 2020 , 58, 130-133 | 3 |
| 1464 [The virology of SARS-CoV-2]. 2020 , 61, 789-792 | 5 |
| 1463 OUTBREAK of novel corona virus disease (COVID-19): Antecedence and aftermath. 2020 , 884, 173381 | 9 |

| 1462 | Mutations Strengthened SARS-CoV-2 Infectivity. 2020 , 432, 5212-5226 | 221 |
|------|---|-----|
| 1461 | Identification of a potential SARS-CoV2 inhibitor via molecular dynamics simulations and amino acid decomposition analysis. 2021 , 39, 6633-6648 | 17 |
| 1460 | Promise and challenges in the development of COVID-19 vaccines. 2020 , 16, 2604-2608 | 22 |
| 1459 | Vitamin D and COVID-19: Lessons from Spaceflight Analogs. 2020 , 150, 2624-2627 | 6 |
| 1458 | Non-neuronal expression of SARS-CoV-2 entry genes in the olfactory system suggests mechanisms underlying COVID-19-associated anosmia. 2020 , 6, | 514 |
| 1457 | COvid MEdicaTion (COMET) study: protocol for a cohort study. 2020 , 27, 191-193 | 3 |
| 1456 | Potential Drugs and Remedies for the Treatment of COVID-19: a Critical Review. 2020 , 22, 15 | 12 |
| 1455 | Pre-existing traits associated with Covid-19 illness severity. 2020 , 15, e0236240 | 69 |
| 1454 | Identification of Novel Candidate Epitopes on SARS-CoV-2 Proteins for South America: A Review of HLA Frequencies by Country. 2020 , 11, 2008 | 12 |
| 1453 | 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 |
| 1452 | Frequency and outcome of olfactory impairment and sinonasal involvement in hospitalized patients with COVID-19. 2020 , 41, 2331-2338 | 25 |
| 1451 | Incidence, risk factors, and prognosis of abnormal liver biochemical tests in COVID-19 patients: a systematic review and meta-analysis. 2020 , 14, 621-637 | 59 |
| 1450 | COVID-19 cardiovascular epidemiology, cellular pathogenesis, clinical manifestations and management. 2020 , 29, 100589 | 27 |
| 1449 | Prioritizing potential ACE2 inhibitors in the COVID-19 pandemic: Insights from a molecular mechanics-assisted structure-based virtual screening experiment. 2020 , 100, 107697 | 32 |
| 1448 | The Chief Scientist Office Cardiovascular and Pulmonary Imaging in SARS Coronavirus disease-19 (CISCO-19) study. 2020 , 116, 2185-2196 | 13 |
| 1447 | Coagulation Status and Venous Thromboembolism Risk in African Americans: A Potential Risk Factor in COVID-19. 2020 , 26, 1076029620943671 | 17 |
| 1446 | Preventing SARS-CoV-2 infection by blocking a tissue serine protease. 2020 , 7, 2049936120933076 | 0 |
| 1445 | Identification of SARS-CoV-2 Cell Entry Inhibitors by Drug Repurposing Using Structure-Based Virtual Screening Approach. 2020 , 11, 1664 | 109 |

| 1444 | Molecular Pathogenesis, Immunopathogenesis and Novel Therapeutic Strategy Against COVID-19. 2020 , 7, 196 | 32 | |
|----------------------|--|-------------|--|
| 1443 | The Yin and Yang of ACE/ACE2 Pathways: The Rationale for the Use of Renin-Angiotensin System Inhibitors in COVID-19 Patients. 2020 , 9, | 21 | |
| 1442 | The COVID-19 Pandemic: Does Our Early Life Environment, Life Trajectory and Socioeconomic Status Determine Disease Susceptibility and Severity?. 2020 , 21, | 14 | |
| 1441 | Substance Use Disorder in the COVID-19 Pandemic: A Systematic Review of Vulnerabilities and Complications. 2020 , 13, | 47 | |
| 1440 | COVID-19: Mechanisms of Vaccination and Immunity. 2020 , 8, | 43 | |
| 1439 | Immunogenic SARS-CoV-2 Epitopes: In Silico Study Towards Better Understanding of COVID-19 Disease-Paving the Way for Vaccine Development. 2020 , 8, | 11 | |
| 1438 | Sex-related differences in COVID-19 lethality. 2020, 177, 4375-4385 | 36 | |
| 1437 | The Effects of Type 2 Diabetes Mellitus on Organ Metabolism and the Immune System. 2020 , 11, 1582 | 69 | |
| 1436 | COVID-19: Underlying Adipokine Storm and Angiotensin 1-7 Umbrella. 2020 , 11, 1714 | 17 | |
| 1435 | The Long Road Toward COVID-19 Herd Immunity: Vaccine Platform Technologies and Mass Immunization Strategies. 2020 , 11, 1817 | 104 | |
| 1434 | Mechanisms Underlying Potential Therapeutic Approaches for COVID-19. 2020 , 11, 1841 | 6 | |
| 1433 | Innate Immune Responses to Highly Pathogenic Coronaviruses and Other Significant Respiratory Viral Infections. 2020 , 11, 1979 | 14 | |
| | | | |
| 1432 | Point-of-Use Rapid Detection of SARS-CoV-2: Nanotechnology-Enabled Solutions for the COVID-19 Pandemic. 2020 , 21, | 61 | |
| 1432 | | 61 | |
| | Pandemic. 2020 , 21, Abnormal Liver Function Tests in Patients With COVID-19: Relevance and Potential Pathogenesis. | 108 | |
| 1431 | Pandemic. 2020 , 21, Abnormal Liver Function Tests in Patients With COVID-19: Relevance and Potential Pathogenesis. 2020 , 72, 1864-1872 | 108 | |
| 1431 1430 1429 | Pandemic. 2020, 21, Abnormal Liver Function Tests in Patients With COVID-19: Relevance and Potential Pathogenesis. 2020, 72, 1864-1872 Acute chloroquine and hydroxychloroquine toxicity: A review for emergency clinicians. 2020, 38, 2209-221 Approaching coronavirus disease 2019: Mechanisms of action of repurposed drugs with potential | 108 7 21 | |

| SARS-CoV-2 genomic variations associated with mortality rate of COVID-19. 2020 , 65, 1075-1082 | 204 |
|---|-------------------------------|
| A SARS-CoV-2 surrogate virus neutralization test based on antibody-mediated blockage of ACE2-spike protein-protein interaction. 2020 , 38, 1073-1078 | 528 |
| 1424 Controlling the SARS-CoV-2 spike glycoprotein conformation. 2020 , 27, 925-933 | 200 |
| 1423 Potential repurposed SARS-CoV-2 (COVID-19) infection drugs 2020 , 10, 26895-26916 | 20 |
| Intracellular autoactivation of TMPRSS11A, an airway epithelial transmembrane serine protease. 2020 , 295, 12686-12696 | 10 |
| Pharmacotherapy in COVID-19 patients: a review of ACE2-raising drugs and their clinical safety. 2020 , 28, 683-699 | 17 |
| Continued In-Hospital Angiotensin-Converting Enzyme Inhibitor and Angiotensin II Receptor Blocker Use in Hypertensive COVID-19 Patients Is Associated With Positive Clinical Outcome. 202 222, 1256-1264 | 20, 68 |
| 1419 Non-steroidal anti-inflammatory drugs, prostaglandins, and COVID-19. 2020 , 177, 4899-4920 | 35 |
| 1418 The role of the renin-angiotensin system in skin physiology and pathophysiology. 2020 , 29, 891-9 | 01 9 |
| | |
| 1417 Structure-based design of prefusion-stabilized SARS-CoV-2 spikes. 2020 , 369, 1501-1505 | 450 |
| Structure-based design of prefusion-stabilized SARS-CoV-2 spikes. 2020 , 369, 1501-1505 1416 Answer to August 2020 Photo Quiz. 2020 , 58, | 450 |
| | |
| 1416 Answer to August 2020 Photo Quiz. 2020 , 58, Type I and Type III Interferons Restrict SARS-CoV-2 Infection of Human Airway Epithelial Cultures | . 152 |
| Answer to August 2020 Photo Quiz. 2020 , 58, Type I and Type III Interferons Restrict SARS-CoV-2 Infection of Human Airway Epithelial Cultures 2020 , 94, | 152 |
| 1416 Answer to August 2020 Photo Quiz. 2020 , 58, Type I and Type III Interferons Restrict SARS-CoV-2 Infection of Human Airway Epithelial Cultures 2020 , 94, Is there an association between the level of ambient air pollution and COVID-19?. 2020 , 319, L416 | . ₁₅₂ 5-L421 24 |
| Type I and Type III Interferons Restrict SARS-CoV-2 Infection of Human Airway Epithelial Cultures 2020, 94, Is there an association between the level of ambient air pollution and COVID-19?. 2020, 319, L416 Geographic components of SARS-CoV-2 expansion: a hypothesis. 2020, 129, 257-262 | . ₁₅₂ 5-L421 24 |
| 1416 Answer to August 2020 Photo Quiz. 2020, 58, Type I and Type III Interferons Restrict SARS-CoV-2 Infection of Human Airway Epithelial Cultures 2020, 94, 1414 Is there an association between the level of ambient air pollution and COVID-19?. 2020, 319, L416 1413 Geographic components of SARS-CoV-2 expansion: a hypothesis. 2020, 129, 257-262 1412 Mesenchymal stem cells: current clinical progress in ARDS and COVID-19. 2020, 11, 305 | . 152 5-L421 24 8 37 |

| 1408 | BCG Against SARS-CoV-2: Second Youth of an Old Age Vaccine?. 2020 , 11, 1050 | 7 |
|------|---|-----|
| 1407 | While We Wait for a Vaccine Against SARS-CoV-2, Why Not Think About Available Drugs?. 2020 , 11, 820 | 12 |
| 1406 | Advances and challenges in the prevention and treatment of COVID-19. 2020 , 17, 1803-1810 | 10 |
| 1405 | The Thrilling Journey of SARS-CoV-2 into the Intestine: From Pathogenesis to Future Clinical Implications. 2020 , 26, 1306-1314 | 22 |
| 1404 | Genetic gateways to COVID-19 infection: Implications for risk, severity, and outcomes. 2020 , 34, 8787-8795 | 61 |
| 1403 | Covid-19 Kills More Men Than Women: An Overview of Possible Reasons. 2020 , 7, 131 | 23 |
| 1402 | Potential Anti-COVID-19 Therapeutics that Block the Early Stage of the Viral Life Cycle: Structures, Mechanisms, and Clinical Trials. 2020 , 21, | 27 |
| 1401 | Clinical retrospective study on the efficacy of Qingfei Paidu decoction combined with Western medicine for COVID-19 treatment. 2020 , 129, 110500 | 46 |
| 1400 | Potential treatment methods targeting 2019-nCoV infection. 2020 , 205, 112687 | 20 |
| 1399 | Structure-based drug repositioning over the human TMPRSS2 protease domain: search for chemical probes able to repress SARS-CoV-2 Spike protein cleavages. 2020 , 153, 105495 | 28 |
| 1398 | The Lord of the NanoRings: Cyclodextrins and the battle against SARS-CoV-2. 2020 , 588, 119689 | 24 |
| 1397 | A comparative overview of COVID-19, MERS and SARS: Review article. 2020 , 81, 1-8 | 45 |
| 1396 | COVID-19 and SARS-CoV-2. Modeling the present, looking at the future. 2020 , 869, 1-51 | 90 |
| 1395 | Contribution of acute-phase reaction proteins to the diagnosis and treatment of 2019 novel coronavirus disease (COVID-19). 2020 , 148, e164 | 16 |
| 1394 | Human neutralizing antibodies elicited by SARS-CoV-2 infection. 2020 , 584, 115-119 | 982 |
| 1393 | A human neutralizing antibody targets the receptor-binding site of SARS-CoV-2. 2020 , 584, 120-124 | 844 |
| 1392 | An overview of key potential therapeutic strategies for combat in the COVID-19 battle. 2020 , 10, 28243-2826 | 625 |
| 1391 | Drug Discovery Strategies for SARS-CoV-2. 2020 , 375, 127-138 | 51 |

| 1390 | Immunometabolic Status of COVID-19 Cancer Patients. 2020 , 100, 1839-1850 | 9 |
|------|--|-----|
| 1389 | MDM2-Mediated Ubiquitination of Angiotensin-Converting Enzyme 2 Contributes to the Development of Pulmonary Arterial Hypertension. 2020 , 142, 1190-1204 | 31 |
| 1388 | A Single-Cell Atlas of the Human Healthy Airways. 2020 , 202, 1636-1645 | 95 |
| 1387 | The Southwest Monsoon During COVID-19 Pandemic: A Potential Concern. 2020 , 32, 374-375 | 3 |
| 1386 | Characterisation of the transcriptome and proteome of SARS-CoV-2 reveals a cell passage induced in-frame deletion of the furin-like cleavage site from the spike glycoprotein. 2020 , 12, 68 | 228 |
| 1385 | Integrative analysis of miRNA and mRNA sequencing data reveals potential regulatory mechanisms of ACE2 and TMPRSS2. 2020 , 15, e0235987 | 47 |
| 1384 | Interplay between SARS-CoV-2 and the type I interferon response. 2020 , 16, e1008737 | 244 |
| 1383 | COVID-19: The Influence of ACE Genotype and ACE-I and ARBs on the Course of SARS-CoV-2 Infection in Elderly Patients. 2020 , 15, 1231-1240 | 18 |
| 1382 | Renin-Angiotensin-Aldosterone System Blockers Are Not Associated With Coronavirus Disease 2019 (COVID-19) Hospitalization: Study of 1,439 UK Biobank Cases. 2020 , 7, 138 | 13 |
| 1381 | COVID-19 and the Kidneys: An Update. 2020 , 7, 423 | 48 |
| 1380 | A Message from the Human Placenta: Structural and Immunomodulatory Defense against SARS-CoV-2. 2020 , 9, | 28 |
| 1379 | Pharmacokinetics/Pharmacodynamics of Antiviral Agents Used to Treat SARS-CoV-2 and Their Potential Interaction with Drugs and Other Supportive Measures: A Comprehensive Review by the PK/PD of Anti-Infectives Study Group of the European Society of Antimicrobial Agents. 2020 , 59, 1195-1216 | 18 |
| 1378 | Coronavirus Disease of 2019: a Mimicker of Dengue Infection?. 2020 , 2, 1-11 | 20 |
| 1377 | 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 |
| 1376 | The four horsemen of a viral Apocalypse: The pathogenesis of SARS-CoV-2 infection (COVID-19). 2020 , 58, 102887 | 78 |
| 1375 | Prior infection with intestinal coronaviruses moderates symptom severity and mortality in patients with COVID-19: A hypothesis and preliminary evidence. 2020 , 143, 110116 | 1 |
| 1374 | Evaluation of the mRNA-1273 Vaccine against SARS-CoV-2 in Nonhuman Primates. 2020 , 383, 1544-1555 | 612 |
| 1373 | Nasopharyngeal Microbiota Profiling of SARS-CoV-2 Infected Patients. 2020 , 22, 18 | 42 |

| 1372 | SARS-CoV-2: characteristics and current advances in research. 2020 , 17, 117 | 39 |
|--------------|---|-------------------|
| 1371 | Clinical Factors Associated with Progression and Prolonged Viral Shedding in COVID-19 Patients: A Multicenter Study. 2020 , 11, 1069-1081 | 21 |
| 1370 | Hypercoagulopathy and Adipose Tissue Exacerbated Inflammation May Explain Higher Mortality in COVID-19 Patients With Obesity. 2020 , 11, 530 | 43 |
| 1369 | Non-invasive Auricular Vagus Nerve Stimulation as a Potential Treatment for Covid19-Originated Acute Respiratory Distress Syndrome. 2020 , 11, 890 | 20 |
| 1368 | Innate immune evasion by SARS-CoV-2: Comparison with SARS-CoV. 2020 , 30, 1-9 | 30 |
| 1367 | COVID-19: A Concern for Cardiovascular Disease Patients. 2020 , 20, 443-447 | 4 |
| 1366 | Classification of the present pharmaceutical agents based on the possible effective mechanism on the COVID-19 infection. 2020 , 28, 745-764 | 9 |
| 1365 | SARS-CoV-2 in fruit bats, ferrets, pigs, and chickens: an experimental transmission study. 2020 , 1, e218-e225 | 278 |
| 1364 | Unlocking COVID therapeutic targets: A structure-based rationale against SARS-CoV-2, SARS-CoV and MERS-CoV Spike. 2020 , 18, 2117-2131 | 17 |
| 1363 | SARS-CoV-2 and cancer: Are they really partners in crime?. 2020 , 89, 102068 | 42 |
| 1362 | Lactoferrin as potential preventative and adjunct treatment for COVID-19. 2020 , 56, 106118 | 68 |
| 1361 | Shedding of SARS-CoV-2 in feces and urine and its potential role in person-to-person transmission and the environment-based spread of COVID-19. 2020 , 749, 141364 | 130 |
| 1360 | Corneal transplantation in the aftermath of the COVID-19 pandemic: an international perspective. 2020 , 104, 1477-1481 | 16 |
| 1359 | COVID-19-Associated Coagulopathy: An Exacerbated Immunothrombosis Response. 2020 , 26, 1076029620943 | 3293 |
| | | , 4 45 |
| 1358 | Plasmapheresis, Anti-ACE2 and Anti-FcRII Monoclonal Antibodies: A Possible Treatment for Severe Cases of COVID-19. 2020 , 14, 2607-2611 | 5 |
| 1358 1357 | Plasmapheresis, Anti-ACE2 and Anti-FcRII Monoclonal Antibodies: A Possible Treatment for Severe | <u>'</u> |
| | Plasmapheresis, Anti-ACE2 and Anti-FcRII Monoclonal Antibodies: A Possible Treatment for Severe Cases of COVID-19. 2020 , 14, 2607-2611 | 5 |

| 135 | Angiotensin-Converting Enzyme Gene Polymorphism and Severe Lung Injury in Patients with Coronavirus Disease 2019. 2020 , 190, 2013-2017 | 34 |
|-----|---|-----|
| 135 | Repurposing approved drugs as potential inhibitors of 3CL-protease of SARS-CoV-2: Virtual screening and structure based drug design. 2020 , 88, 107351 | 40 |
| 135 | SARS-CoV-2 Vaccine Development: Current Status. 2020 , 95, 2172-2188 | 61 |
| 135 | $_{ m I}$ Fruitful Neutralizing Antibody Pipeline Brings Hope To Defeat SARS-Cov-2. 2020 , 41, 815-829 | 66 |
| 135 | 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 |
| 134 | The Effects of Chloroquine and Hydroxychloroquine on ACE2-Related Coronavirus Pathology and the Cardiovascular System: An Evidence-Based Review. 2020 , 1, | 10 |
| 134 | Emergent Large Vessel Occlusion Stroke During New York City's COVID-19 Outbreak: Clinical Characteristics and Paraclinical Findings. 2020 , 51, 2656-2663 | 64 |
| 134 | Cellular and Molecular Pathways of COVID-19 and Potential Points of Therapeutic Intervention. 2020 , 11, 1169 | 59 |
| 134 | 6 Medicinal Plants as Sources of Active Molecules Against COVID-19. 2020 , 11, 1189 | 73 |
| 134 | Cardiovascular disease and COVID-19: Australian and New Zealand consensus statement. 2020 , 213, 182-187 | 32 |
| 134 | The African-American population with a low allele frequency of SNP rs1990760 (T allele) in IFIH1 predicts less IFN-beta expression and potential vulnerability to COVID-19 infection. 2020 , 72, 387-391 | 16 |
| 134 | COVID-19, Virology and Geroscience: A Perspective. 2020 , 24, 685-691 | 40 |
| 134 | 2 COVID-19 and the central nervous system. 2020 , 198, 106116 | 17 |
| 134 | Serologic responses to SARS-CoV-2 infection among hospital staff with mild disease in eastern France. 2020 , 59, 102915 | 78 |
| 134 | O Vascular occlusion by neutrophil extracellular traps in COVID-19. 2020 , 58, 102925 | 210 |
| 133 | Angiotensin-converting enzyme 2 (ACE2) receptor and SARS-CoV-2: Potential therapeutic targeting. 2020 , 884, 173455 | 45 |
| 133 | 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 |
| 133 | Smell and taste disorders in Spanish patients with mild COVID-19. 2020 , 35, 633-638 | 11 |
| | | |

| 1336 | Dynamic Asymmetry Exposes 2019-nCoV Prefusion Spike. 2020 , 11, 7021-7027 | 22 |
|------------------------------|--|----------------------|
| 1335 | Clinical and Laboratory Diagnosis of SARS-CoV-2, the Virus Causing COVID-19. 2020 , 6, 2319-2336 | 27 |
| 1334 | Convergent antibody responses to SARS-CoV-2 in convalescent individuals. 2020 , 584, 437-442 | 1167 |
| 1333 | COVID-19 Pandemic: Time to Revive the Cyclophilin Inhibitor Alisporivir. 2020 , 71, 2191-2194 | 14 |
| 1332 | Endothelial dysfunction in COVID-19: a position paper of the ESC Working Group for Atherosclerosis and Vascular Biology, and the ESC Council of Basic Cardiovascular Science. 2020 , 116, 2177-2184 | 184 |
| 1331 | Engineering human ACE2 to optimize binding to the spike protein of SARS coronavirus 2. 2020 , 369, 1261-126 | 55269 |
| 1330 | Mapping the situation of research on coronavirus disease-19 (COVID-19): a preliminary bibliometric analysis during the early stage of the outbreak. 2020 , 20, 561 | 47 |
| 1329 | Targeting the cholinergic anti-inflammatory pathway with vagus nerve stimulation in patients with Covid-19?. 2020 , 6, 15 | 27 |
| 1328 | Diagnostic and Treatment Strategies for COVID-19. 2020 , 21, 222 | 17 |
| | | |
| 1327 | Prospects for RNAi Therapy of COVID-19. 2020 , 8, 916 | 40 |
| 1327 1326 | | 40 |
| | | |
| 1326 | Racial Disparities-Associated COVID-19 Mortality among Minority Populations in the US. 2020 , 9, Is Antioxidant Therapy a Useful Complementary Measure for Covid-19 Treatment? An Algorithm for | 106 |
| 1326 1325 | Racial Disparities-Associated COVID-19 Mortality among Minority Populations in the US. 2020 , 9, Is Antioxidant Therapy a Useful Complementary Measure for Covid-19 Treatment? An Algorithm for Its Application. 2020 , 56, Bioinformatic Analysis of Correlation between Immune Infiltration and COVID-19 in Cancer | 106 |
| 1326 1325 1324 | Racial Disparities-Associated COVID-19 Mortality among Minority Populations in the US. 2020 , 9, Is Antioxidant Therapy a Useful Complementary Measure for Covid-19 Treatment? An Algorithm for Its Application. 2020 , 56, Bioinformatic Analysis of Correlation between Immune Infiltration and COVID-19 in Cancer Patients. 2020 , 16, 2464-2476 | 106 24 9 |
| 1326 1325 1324 1323 | Racial Disparities-Associated COVID-19 Mortality among Minority Populations in the US. 2020, 9, Is Antioxidant Therapy a Useful Complementary Measure for Covid-19 Treatment? An Algorithm for Its Application. 2020, 56, Bioinformatic Analysis of Correlation between Immune Infiltration and COVID-19 in Cancer Patients. 2020, 16, 2464-2476 At High Altitude COVID-19 Is Less Frequent: The Experience of Peru. 2020, 56, 760-761 Potential Therapeutic Agents and Associated Bioassay Data for COVID-19 and Related Human | 106 24 9 |
| 1326 1325 1324 1323 | Racial Disparities-Associated COVID-19 Mortality among Minority Populations in the US. 2020, 9, Is Antioxidant Therapy a Useful Complementary Measure for Covid-19 Treatment? An Algorithm for Its Application. 2020, 56, Bioinformatic Analysis of Correlation between Immune Infiltration and COVID-19 in Cancer Patients. 2020, 16, 2464-2476 At High Altitude COVID-19 Is Less Frequent: The Experience of Peru. 2020, 56, 760-761 Potential Therapeutic Agents and Associated Bioassay Data for COVID-19 and Related Human Coronavirus Infections. 2020, 3, 813-834 In silico identification of widely used and well-tolerated drugs as potential SARS-CoV-2 3C-like protease and viral RNA-dependent RNA polymerase inhibitors for direct use in clinical trials. 2021, | 106 24 9 13 |

| 1318 | Silico Studies. 2020 , 9, | 18 |
|------|---|-----|
| 1317 | Point-of-Care Diagnostics of COVID-19: From Current Work to Future Perspectives. 2020 , 20, | 41 |
| 1316 | Smoking and COVID-19: Similar bronchial ACE2 and TMPRSS2 expression and higher TMPRSS4 expression in current versus never smokers. 2020 , 81, 1073 | 21 |
| 1315 | Can a Combination of AT1R Antagonist and Vitamin D Treat the Lung Complication of COVID-19?. 2020 , 360, 338-341 | 9 |
| 1314 | An enzyme-based immunodetection assay to quantify SARS-CoV-2 infection. 2020 , 181, 104882 | 25 |
| 1313 | Roles of flavonoids against coronavirus infection. 2020 , 328, 109211 | 124 |
| 1312 | ACE2 Co-evolutionary Pattern Suggests Targets for Pharmaceutical Intervention in the COVID-19 Pandemic. 2020 , 23, 101384 | 8 |
| 1311 | The pathophysiology of SARS-CoV-2: A suggested model and therapeutic approach. 2020 , 258, 118166 | 43 |
| 1310 | SARS-CoV-2 can infect the placenta and is not associated with specific placental histopathology: a series of 19 placentas from COVID-19-positive mothers. 2020 , 33, 2092-2103 | 117 |
| 1309 | Structural and functional properties of SARS-CoV-2 spike protein: potential antivirus drug development for COVID-19. 2020 , 41, 1141-1149 | 739 |
| 1308 | Structural basis for the neutralization of SARS-CoV-2 by an antibody from a convalescent patient. 2020 , 27, 950-958 | 175 |
| 1307 | Inhibition of PIKfyve kinase prevents infection by Zaire ebolavirus and SARS-CoV-2. 2020 , 117, 20803-20813 | 87 |
| 1306 | Identification of potential anti-TMPRSS2 natural products through homology modelling, virtual screening and molecular dynamics simulation studies. 2020 , 1-16 | 33 |
| 1305 | Molecular docking, molecular dynamics simulations and reactivity, studies on approved drugs library targeting ACE2 and SARS-CoV-2 binding with ACE2. 2021 , 39, 7246-7262 | 20 |
| 1304 | Nonsteroidal anti-inflammatory drugs (NSAIDs) consideration by dermatologists during the COVID19 pandemic. 2020 , 1-2 | |
| 1303 | Naturally occurring SARS-CoV-2 gene deletions close to the spike S1/S2 cleavage site in the viral quasispecies of COVID19 patients. 2020 , 9, 1900-1911 | 36 |
| 1302 | Decoding the proteome of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) for cell-penetrating peptides involved in pathogenesis or applicable as drug delivery vectors. 2020 , 85, 104474 | 11 |
| 1301 | Future antiviral surfaces: Lessons from COVID-19 pandemic. 2020 , 25, e00203 | 41 |

| 1300 | Crosstalk between COVID-19 and prostate cancer. 2020 , 23, 561-563 | 17 |
|------|---|------------------|
| 1299 | Real-World Issues and Potential Solutions in Hematopoietic Cell Transplantation during the COVID-19 Pandemic: Perspectives from the Worldwide Network for Blood and Marrow Transplantation and Center for International Blood and Marrow Transplant Research Health | 27 |
| 1298 | COVID-19 and liver disease: An update. 2020 , 43, 472-480 | 12 |
| 1297 | Differential immune activation profile of SARS-CoV-2 and SARS-CoV infection in human lung and intestinal cells: Implications for treatment with IFN-land IFN inducer. 2020 , 81, e1-e10 | 29 |
| 1296 | The interaction of RAAS inhibitors with COVID-19: Current progress, perspective and future. 2020 , 257, 118142 | 11 |
| 1295 | Kawasaki-like disease in children with COVID-19: A hypothesis. 2020 , 143, 110117 | 11 |
| 1294 | Placental barrier against COVID-19. 2020 , 99, 45-49 | 37 |
| 1293 | False negative SARS-CoV-2 PCR - A case report and literature review. 2020 , 31, 101140 | 8 |
| 1292 | Interaction of Drug Candidates with Various SARS-CoV-2 Receptors: An in Silico Study to Combat COVID-19. 2020 , 19, 4567-4575 | 23 |
| 1291 | Studying the Effects of ACE2 Mutations on the Stability, Dynamics, and Dissociation Process of SARS-CoV-2 S1/hACE2 Complexes. 2020 , 19, 4609-4623 | 12 |
| 1290 | COVID-19: a novel menace for the practice of nephrology and how to manage it with minor devastation?. 2020 , 42, 710-725 | 7 |
| 1289 | The Novel Insight of SARS-CoV-2 Molecular Biology and Pathogenesis and Therapeutic Options. 2020 , 39, 1741-1753 | 23 |
| 1288 | Association Between Nonsteroidal Antiinflammatory Drug Use and Adverse Clinical Outcomes Among Adults Hospitalized With Coronavirus 2019 in South Korea: A Nationwide Study. 2021 , 73, e4179-e418 | 38 ¹⁶ |
| 1287 | Acute Kidney Injury in Patients with the Coronavirus Disease 2019: A Multicenter Study. 2020 , 45, 612-622 | 18 |
| 1286 | Genetic Associations With Plasma Angiotensin Converting Enzyme 2 Concentration: Potential Relevance to COVID-19 Risk. 2020 , 142, 1117-1119 | 11 |
| 1285 | Vascular inflammation and endothelial injury in SARS-CoV-2 infection: The overlooked regulatory cascades implicated by the ACE2 gene cluster. 2020 , | 10 |
| 1284 | Genomic variance of Open Reading Frames (ORFs) and Spike protein in severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). 2020 , 83, 725-732 | 7 |
| 1283 | Understanding immunopathological fallout of human coronavirus infections including COVID-19: Will they cross the path of rheumatologists?. 2020 , 23, 998-1008 | 7 |

| 1282 | Potential effects of SARS-CoV-2 infection during pregnancy on fetuses and newborns are worthy of attention. 2020 , 46, 1951-1957 | 17 |
|------|--|-----|
| 1281 | Plants Metabolites: Possibility of Natural Therapeutics Against the COVID-19 Pandemic. 2020 , 7, 444 | 53 |
| 1280 | High affinity interaction of Solanum tuberosum and Brassica juncea residue smoke water compounds with proteins involved in coronavirus infection. 2020 , 34, 3400-3410 | 4 |
| 1279 | Significance of liver dysfunction associated with decreased hepatic CT attenuation values in Japanese patients with severe COVID-19. 2020 , 55, 1098-1106 | 6 |
| 1278 | Deep Mutational Scanning of SARS-CoV-2 Receptor Binding Domain Reveals Constraints on Folding and ACE2 Binding. <i>Cell</i> , 2020 , 182, 1295-1310.e20 | 935 |
| 1277 | Longitudinal analyses reveal immunological misfiring in severe COVID-19. 2020 , 584, 463-469 | 901 |
| 1276 | Single-cell landscape of immunological responses in patients with COVID-19. 2020 , 21, 1107-1118 | 230 |
| 1275 | Commentary on: "Does COVID19 Infect the Brain? If So, Smokers Might Be at a Higher Risk". 2020 , 98, 382-383 | 2 |
| 1274 | Role of the renin-angiotensin system in the development of severe COVID-19 in hypertensive patients. 2020 , 319, L596-L602 | 5 |
| 1273 | Unspecific post-mortem findings despite multiorgan viral spread in COVID-19 patients. 2020 , 24, 495 | 145 |
| 1272 | Small Molecule Inhibitors in the Treatment of Rheumatoid Arthritis and Beyond: Latest Updates and Potential Strategy for Fighting COVID-19. 2020 , 9, | 14 |
| 1271 | Association of Nonsteroidal Anti-inflammatory Drug Use and Adverse Outcomes Among Patients Hospitalized With Influenza. 2020 , 3, e2013880 | 12 |
| 1270 | Outcomes Associated With Use of a Kinin B2 Receptor Antagonist Among Patients With COVID-19. 2020 , 3, e2017708 | 37 |
| 1269 | Tackling challenges in care of Alzheimer's disease and other dementias amid the COVID-19 pandemic, now and in the future. 2020 , 16, 1571-1581 | 61 |
| 1268 | [Can androgen deprivation therapy play a protective role in SARS-CoV-infections?]. 2020, 59, 1251-1253 | |
| 1267 | 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 |
| 1266 | Systemic Screening in Drug Discovery for Coronavirus Disease (COVID-19) with an Online Interactive Web Server. 2020 , 60, 5735-5745 | 14 |
| 1265 | Potent neutralizing antibodies against multiple epitopes on SARS-CoV-2 spike. 2020 , 584, 450-456 | 848 |

| 1264 | Rationale for the use of N-acetylcysteine in both prevention and adjuvant therapy of COVID-19. 2020 , 34, 13185-13193 | 75 |
|------|--|-----|
| 1263 | The pharmacological development of direct acting agents for emerging needed therapy against severe acute respiratory syndrome coronavirus-2. 2020 , 83, 712-718 | 1 |
| 1262 | Impact of COVID-19 and other viruses on reproductive health. 2020 , 52, e13791 | 29 |
| 1261 | Case Series of Headache Characteristics in COVID-19: Headache Can Be an Isolated Symptom. 2020 , 60, 1788-1792 | 34 |
| 1260 | Pathophysiology of COVID-19: Mechanisms Underlying Disease Severity and Progression. 2020 , 35, 288-301 | 82 |
| 1259 | Obesity and COVID-19: A Perspective from the European Association for the Study of Obesity on Immunological Perturbations, Therapeutic Challenges, and Opportunities in Obesity. 2020 , 13, 439-452 | 26 |
| 1258 | Immunosuppressive Drugs and COVID-19: A Review. 2020 , 11, 1333 | 48 |
| 1257 | SARS-CoV-2 Entry Inhibitors: Small Molecules and Peptides Targeting Virus or Host Cells. 2020 , 21, | 35 |
| 1256 | Second Update for Anaesthetists on Clinical Features of COVID-19 Patients and Relevant Management. 2020 , 9, | 1 |
| 1255 | A Focus on the Nowadays Potential Antiviral Strategies in Early Phase of Coronavirus Disease 2019 (Covid-19): A Narrative Review. 2020 , 10, | 4 |
| 1254 | Immune Response and COVID-19: A mirror image of Sepsis. 2020 , 16, 2479-2489 | 32 |
| 1253 | Impact of climate and ambient air pollution on the epidemic growth during COVID-19 outbreak in Japan. 2020 , 190, 110042 | 57 |
| 1252 | Molecular diagnostic technologies for COVID-19: Limitations and challenges. 2020 , 26, 149-159 | 137 |
| 1251 | Significant Unresolved Questions and Opportunities for Bioengineering in Understanding and Treating COVID-19 Disease Progression. 2020 , 13, 1-26 | 4 |
| 1250 | Animal Models to Study Emerging Technologies Against SARS-CoV-2. 2020 , 13, 1-11 | 6 |
| 1249 | Scalable COVID-19 Detection Enabled by Lab-on-Chip Biosensors. 2020 , 13, 1-17 | 48 |
| 1248 | Hohes Mortalittsrisiko bei Diabetespatienten mit COVID-19. 2020 , 14, 16-17 | |
| 1247 | COVID-19 aus der Sicht der Gastroenterologie. 2020 , 1, 65-67 | |

| 1246 | Antimalarials as Antivirals for COVID-19: Believe it or Not!. 2020 , 360, 618-630 | 14 |
|------|---|-----|
| 1245 | Cardiovascular involvement during COVID-19 and clinical implications in elderly patients. A review. 2020 , 57, 236-243 | 23 |
| 1244 | Potently neutralizing and protective human antibodies against SARS-CoV-2. 2020 , 584, 443-449 | 609 |
| 1243 | COVID-19 and the workplace: Research questions for the aerosol science community. 2020 , 54, 1117-1123 | 5 |
| 1242 | Defining heart disease risk for death in COVID-19 infection. 2020 , 113, 876-882 | 18 |
| 1241 | Obesity as a contributor to immunopathology in pregnant and non-pregnant adults with COVID-19. 2020 , 84, e13320 | 8 |
| 1240 | Optimized Pseudotyping Conditions for the SARS-COV-2 Spike Glycoprotein. 2020 , 94, | 78 |
| 1239 | SARS-CoV-2 on the ocular surface: is it truly a novel transmission route?. 2021 , 105, 1190-1195 | 19 |
| 1238 | COVID-19 and COPD. 2020 , 56, | 124 |
| 1237 | Severe acute respiratory syndrome coronavirus-2 (SARS-CoV-2) and coronavirus disease 19 (COVID-19) - anatomic pathology perspective on current knowledge. 2020 , 15, 103 | 60 |
| 1236 | SARS-CoV-2 Bound Human Serum Albumin and Systemic Septic Shock. 2020 , 7, 153 | 19 |
| 1235 | Revisiting the role of vitamin D levels in the prevention of COVID-19 infection and mortality in European countries post infections peak. 2020 , 32, 1609-1612 | 22 |
| 1234 | The Pursuit of COVID-19 Biomarkers: Putting the Spotlight on and Regulatory Sequences. 2020 , 7, 582793 | 8 |
| 1233 | Targeting Macrophages as a Therapeutic Option in Coronavirus Disease 2019. 2020 , 11, 577571 | 24 |
| 1232 | Renin-Angiotensin System: An Important Player in the Pathogenesis of Acute Respiratory Distress Syndrome. 2020 , 21, | 20 |
| 1231 | The noncoding and coding transcriptional landscape of the peripheral immune response in patients with COVID-19. 2020 , 10, e200 | 43 |
| 1230 | Transcriptomic analysis reveals novel mechanisms of SARS-CoV-2 infection in human lung cells. 2020 , 8, 753-762 | 8 |
| 1229 | The burden of type 2 diabetes pre-and during the COVID-19 pandemic - a review. 2020 , 19, 1-9 | 7 |

| 1228 | Dexamethasone for the Treatment of Coronavirus Disease (COVID-19): a Review. 2020 , 2, 1-10 | 66 |
|------|---|----|
| 1227 | S1-Leitlinie: Neurologische Manifestationen bei COVID-19. 2020 , 3, 495-519 | 3 |
| 1226 | Evaluation of mechanisms of action of re-purposed drugs for treatment of COVID-19. 2020 , 358, 104240 | 4 |
| 1225 | Structural analysis of experimental drugs binding to the SARS-CoV-2 target TMPRSS2. 2020 , 100, 107710 | 16 |
| 1224 | Virus isolation of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) for diagnostic and research purposes. 2020 , 52, 760-763 | 10 |
| 1223 | Vascular underpinning of COVID-19. 2020 , 10, 200208 | 16 |
| 1222 | Why Severe COVID-19 Patients Are at Greater Risk of Developing Depression: A Molecular Perspective. 2020 , 1073858420967892 | 15 |
| 1221 | Noncoding RNAs implication in cardiovascular diseases in the COVID-19 era. 2020 , 18, 408 | 11 |
| 1220 | Role of Kinins in Hypertension and Heart Failure. 2020 , 13, | 9 |
| 1219 | [The virology of SARS-CoV-2]. 2020 , 17, 1-4 | 1 |
| 1218 | Potential neuroinvasive and neurotrophic properties of SARS-CoV-2 in pediatric patients: comparison of SARS-CoV-2 with non-segmented RNA viruses. 2020 , 26, 929-940 | 1 |
| 1217 | The Perfect Storm: COVID-19 Health Disparities in US Blacks. 2021 , 8, 1153-1160 | 27 |
| 1216 | Electrochemical investigations for COVID-19 detection-A comparison with other viral detection methods. 2021 , 420, 127575 | 38 |
| 1215 | Use of protease inhibitors for the prevention of COVID-19. 2020 , 141, 106280 | 6 |
| 1214 | COVID-19-associated gastrointestinal and liver injury: clinical features and potential mechanisms. 2020 , 5, 256 | 88 |
| 1213 | Possible affective cognitive cerebellar syndrome in a young patient with COVID-19 CNS vasculopathy and stroke. 2020 , 13, | 7 |
| 1212 | Cationic drugs and COVID-19. 2020 , 34, 2058738420966078 | 2 |
| | Role of Renin-Angiotensin System in Acute Lung Injury Caused by Viral Infection. 2020 , 13, 3715-3725 | |

| 121 | A Testimony of the Surgent SARS-CoV-2 in the Immunological Panorama of the Human Host. 2020 , 10, 575404 | 3 |
|-------------|---|-----|
| 120 | Rheumatic Musculoskeletal Diseases and COVID-19 A Review of the First 6 Months of the Pandemic. 2020 , 7, 562142 | 11 |
| 12 0 | 8 Physical Exercise and the Renin Angiotensin System: Prospects in the COVID-19. 2020 , 11, 561403 | 4 |
| 120 | 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 |
| 12 0 | Risk factors for severity of COVID-19 in chronic dialysis patients from a multicentre French cohort. 2020 , 13, 878-888 | 22 |
| 12 0 | 5 ACE2 in the Era of SARS-CoV-2: Controversies and Novel Perspectives. 2020 , 7, 588618 | 49 |
| 12 0 | Cognitive profile following COVID-19 infection: Clinical predictors leading to neuropsychological impairment. 2020 , 9, 100163 | 91 |
| 120 | 3 COVID-19 update: The race to therapeutic development. 2020 , 53, 100733 | 33 |
| 12 0 | 2 Cardiovascular Manifestations and Mechanisms in Patients with COVID-19. 2020 , 31, 893-904 | 19 |
| 12 0 | Concanavalin A targeting -linked glycans in spike proteins influence viral interactions. 2020 , 49, 13538-13543 | 2 |
| 12 0 | Prevention of SARS-CoV-2 cell entry: insight from interaction of drug-like alkaloids with spike glycoprotein, human ACE2, and TMPRSS2. 2020 , 1-25 | 17 |
| 119 | 9 SARS-CoV-2-triggered neutrophil extracellular traps mediate COVID-19 pathology. 2020 , 217, | 325 |
| 119 | 8 Mouse model of SARS-CoV-2 reveals inflammatory role of type I interferon signaling. 2020 , 217, | 223 |
| 119 | Severe acute respiratory syndrome coronavirus-2 infection and the gut-liver axis. 2020 , 21, 687-695 | 5 |
| 119 | SARS-CoV-2 Is Restricted by Zinc Finger Antiviral Protein despite Preadaptation to the Low-CpG Environment in Humans. 2020 , 11, | 60 |
| 119 | Dynamic changes of T-lymphocyte subsets and the correlations with 89 patients with coronavirus disease 2019 (COVID-19). 2020 , 8, 1145 | 11 |
| 119 | 4 Stabilizing Cellular Barriers: Raising the Shields Against COVID-19. 2020 , 11, 583006 | 3 |
| 119 | 3 Understanding Gender-Bias in Critically Ill Patients With COVID-19. 2020 , 7, 564117 | 3 |
| | | |

| 1192 | Genetic Spectrum and Distinct Evolution Patterns of SARS-CoV-2. 2020 , 11, 593548 | 23 |
|------|---|----|
| 1191 | Thrombosis and COVID-19: The Potential Role of Nutrition. 2020 , 7, 583080 | 19 |
| 1190 | Citation Network Analysis of the Novel Coronavirus Disease 2019 (COVID-19). 2020 , 17, | 10 |
| 1189 | COVID-19-Induced Neurovascular Injury: a Case Series with Emphasis on Pathophysiological Mechanisms. 2020 , 2, 2109-2125 | 12 |
| 1188 | Angiotensin-converting enzyme inhibitors and angiotensin-receptor blockers and the risk of COVID-19 infection or severe disease: Systematic review and meta-analysis. 2020 , 31, 100627 | 17 |
| 1187 | Applying computer simulations in battling with COVID-19,. 2020 , 21, 100458 | 8 |
| 1186 | Cardiorenal Tissues Express SARS-CoV-2 Entry Genes and Basigin (BSG/CD147) Increases With Age in Endothelial Cells. 2020 , 5, 1111-1123 | 21 |
| 1185 | Computational Identification of Human Biological Processes and Protein Sequence Motifs Putatively Targeted by SARS-CoV-2 Proteins Using Protein-Protein Interaction Networks. 2020 , 19, 4553-4566 | 6 |
| 1184 | The global population of SARS-CoV-2 is composed of six major subtypes. 2020 , 10, 18289 | 29 |
| 1183 | Catecholamine physiology and its implications in patients with COVID-19. 2020 , 8, 978-986 | 19 |
| 1182 | ACE2 coding variants in different populations and their potential impact on SARS-CoV-2 binding affinity. 2020 , 24, 100798 | 18 |
| 1181 | Probing infectious disease by single-cell RNA sequencing: Progresses and perspectives. 2020 , 18, 2962-2971 | 8 |
| 1180 | Understanding the complexities of SARS-CoV2 infection and its immunology: A road to immune-based therapeutics. 2020 , 88, 106980 | 20 |
| 1179 | SARS-CoV-2 Infection Boosts Antiviral Effector in COVID-19 Patients. 2020 , 23, 101585 | 32 |
| 1178 | The nervous system-A new territory being explored of SARS-CoV-2. 2020 , 82, 87-92 | 3 |
| 1177 | A graph-based approach identifies dynamic H-bond communication networks in spike protein S of SARS-CoV-2. 2020 , 212, 107617 | 19 |
| 1176 | Electrochemical SARS-CoV-2 Sensing at Point-of-Care and Artificial Intelligence for Intelligent COVID-19 Management. 2020 , 3, 7306-7325 | 80 |
| 1175 | Targeting Crucial Host Factors of SARS-CoV-2. 2020 , 6, 2844-2865 | 13 |

| 1174 | Identifying SARS-CoV-2 Entry Inhibitors through Drug Repurposing Screens of SARS-S and MERS-S Pseudotyped Particles. 2020 , 3, 1165-1175 | 42 |
|------|---|----|
| 1173 | Genetically modified mouse models to help fight COVID-19. 2020 , 15, 3777-3787 | 15 |
| 1172 | RAAS Inhibitors and Risk of Covid-19. 2020 , 383, 1990-1991 | 10 |
| 1171 | High-throughput virtual screening of drug databanks for potential inhibitors of SARS-CoV-2 spike glycoprotein. 2020 , 1-14 | 16 |
| 1170 | COVID-19-Lessons Learned and Questions Remaining. 2021 , 72, 2225-2240 | 34 |
| 1169 | Acute Pancreatitis During COVID-19 Pneumonia. 2020 , 49, e106-e108 | 5 |
| 1168 | Understanding Severe Acute Respiratory Syndrome Coronavirus 2 Replication to Design Efficient Drug Combination Therapies. 2020 , 63, 2-9 | 11 |
| 1167 | A painful lesson from the COVID-19 pandemic: the need for broad-spectrum, host-directed antivirals. 2020 , 18, 390 | 21 |
| 1166 | Patient Satisfaction and Associated Factors During COVID-19 Pandemic in North Shoa Health Care Facilities. 2020 , 14, 1923-1934 | 16 |
| 1165 | The Current Recommended Drugs and Strategies for the Treatment of Coronavirus Disease (COVID-19). 2020 , 16, 933-946 | 4 |
| 1164 | A 21st Century Evil: Immunopathology and New Therapies of COVID-19. 2020 , 11, 562264 | 5 |
| 1163 | 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 |
| 1162 | ACE2 and TMPRSS2 Potential Involvement in Genetic Susceptibility to SARS-COV-2 in Cancer Patients. 2020 , 29, 963689720968749 | 14 |
| 1161 | Lung Secretoglobin Scgb1a1 Influences Alveolar Macrophage-Mediated Inflammation and Immunity. 2020 , 11, 584310 | 9 |
| 1160 | High-Density Amplicon Sequencing Identifies Community Spread and Ongoing Evolution of SARS-CoV-2 in the Southern United States. 2020 , 33, 108352 | 23 |
| 1159 | Nonstructural Protein 1 of SARS-CoV-2 Is a Potent Pathogenicity Factor Redirecting Host Protein Synthesis Machinery toward Viral RNA. 2020 , 80, 1055-1066.e6 | 65 |
| 1158 | Consistent localization of SARS-CoV-2 spike glycoprotein and ACE2 over TMPRSS2 predominance in placental villi of 15 COVID-19 positive maternal-fetal dyads. 2020 , 100, 69-74 | 50 |
| 1157 | Sexual Dimorphism of Coronavirus 19 Morbidity and Lethality. 2020 , 31, 918-927 | 31 |
| | | |

| 1156 | ACE2 localizes to the respiratory cilia and is not increased by ACE inhibitors or ARBs. 2020 , 11, 5453 | | 100 |
|------|---|------|-----|
| 1155 | Structural basis for potent neutralization of SARS-CoV-2 and role of antibody affinity maturation. 2020 , 11, 5413 | | 105 |
| 1154 | Immunoinflammatory, Thrombohaemostatic, and Cardiovascular Mechanisms in COVID-19. 2020 , 120, 1629-1641 | | 25 |
| 1153 | analysis of the interactions of certain flavonoids with the receptor-binding domain of 2019 novel coronavirus and cellular proteases and their pharmacokinetic properties. 2020 , 1-15 | | 14 |
| 1152 | Inhibition of Coronavirus Entry and by a Lipid-Conjugated Peptide Derived from the SARS-CoV-2 Spike Glycoprotein HRC Domain. 2020 , 11, | | 33 |
| 1151 | The role of nicotinic receptors in SARS-CoV-2 receptor ACE2 expression in intestinal epithelia. 2020 , 6, 20 | | 3 |
| 1150 | Triglyceride to High-Density Lipoprotein Cholesterol Ratio is an Important Determinant of Cardiovascular Risk and Poor Prognosis in Coronavirus Disease-19: A Retrospective Case Series Study. 2020 , 13, 3925-3936 | | 15 |
| 1149 | Host Genetic Variants Potentially Associated With SARS-CoV-2: A Multi-Population Analysis. 2020 , 11, 578523 | | 11 |
| 1148 | The SARS-CoV-2 Spike Glycoprotein Biosynthesis, Structure, Function, and Antigenicity: Implications for the Design of Spike-Based Vaccine Immunogens. 2020 , 11, 576622 | | 137 |
| 1147 | Systematic Review and Pharmacological Considerations for Chloroquine and Its Analogs in the Treatment for COVID-19. 2020 , 11, 554172 | | 4 |
| 1146 | COVID-19-Associated Neurological Disorders: The Potential Route of CNS Invasion and Blood-Brain Relevance. 2020 , 9, | | 61 |
| 1145 | Aprotinin Inhibits SARS-CoV-2 Replication. 2020 , 9, | | 42 |
| 1144 | Covid-19: Fat, Obesity, Inflammation, Ethnicity, and Sex Differences. 2020 , 9, | | 10 |
| 1143 | Kakkonto, shosaikoto, Platycodon grandiflorum root, and gypsum (a Japanese original combination drug known as saikatsugekito): Pharmacological review of its activity against viral infections and respiratory inflammatory conditions and a discussion of its applications to COVID-19. 2020 , 7, 115-127 | | 10 |
| 1142 | Severe acute respiratory syndrome coronavirus 2 and renin-angiotensin system blockers: A review and pooled analysis. 2020 , 113, 797-810 | | 1 |
| 1141 | Elicitation of Potent Neutralizing Antibody Responses by Designed Protein Nanoparticle Vaccines for SARS-CoV-2. <i>Cell</i> , 2020 , 183, 1367-1382.e17 | 56.2 | 217 |
| 1140 | Smell and taste disorders in Spanish patients with mild COVID-19. 2020 , 35, 633-638 | | 0 |
| 1139 | Coronavirus disease 2019 and the pancreas. 2020 , 20, 1567-1575 | | 28 |

| 1138 | Roadmap to the Bioanalytical Testing of COVID-19: From Sample Collection to Disease Surveillance. 2020 , 5, 3328-3345 | 22 |
|------|---|-----|
| 1137 | Society for Immunotherapy of Cancer clinical and biomarkers data sharing resource document: Volume I-conceptual challenges. 2020 , 8, | 5 |
| 1136 | CoVaccine HTIAdjuvant Potentiates Robust Immune Responses to Recombinant SARS-CoV-2 Spike S1 Immunization. 2020 , 11, 599587 | 13 |
| 1135 | Mucin-Inspired, High Molecular Weight Virus Binding Inhibitors Show Biphasic Binding Behavior to Influenza A Viruses. 2020 , 16, e2004635 | 9 |
| 1134 | identification of drug candidates against COVID-19. 2020 , 21, 100461 | 5 |
| 1133 | Prognostic Impact of Prior Heart Failure in Patients Hospitalized With COVID-19. 2020 , 76, 2334-2348 | 78 |
| 1132 | Role of testosterone in COVID-19 patients - A double-edged sword?. 2020 , 144, 110287 | 14 |
| 1131 | Sunitinib reduces the infection of SARS-CoV, MERS-CoV and SARS-CoV-2 partially by inhibiting AP2M1 phosphorylation. 2020 , 6, 71 | 14 |
| 1130 | Comparative ACE2 variation and primate COVID-19 risk. 2020 , 3, 641 | 83 |
| 1129 | Cytokine storm and COVID-19: a chronicle of pro-inflammatory cytokines. 2020 , 10, 200160 | 116 |
| 1128 | Animal models for SARS-CoV-2 research: A comprehensive literature review. 2021 , 68, 1868-1885 | 28 |
| 1127 | Alteration in angiotensin-converting enzyme 2 by PM during the development of emphysema in rats. 2020 , 6, | 7 |
| | | |
| 1126 | Targeting Lipid Rafts-A Potential Therapy for COVID-19. 2020 , 11, 574508 | 19 |
| 1126 | Targeting Lipid Rafts-A Potential Therapy for COVID-19. 2020 , 11, 574508 Expression Pattern of the SARS-CoV-2 Entry Genes and in the Respiratory Tract. 2020 , 12, | 19 |
| | | |
| 1125 | Expression Pattern of the SARS-CoV-2 Entry Genes and in the Respiratory Tract. 2020 , 12, A combinational approach to restore cytokine balance and to inhibit virus growth may promote | 12 |
| 1125 | Expression Pattern of the SARS-CoV-2 Entry Genes and in the Respiratory Tract. 2020 , 12, A combinational approach to restore cytokine balance and to inhibit virus growth may promote patient recovery in severe COVID-19 cases. 2020 , 136, 155228 | 12 |

| 1120 | The role of host genetics in susceptibility to severe viral infections in humans and insights into host genetics of severe COVID-19: A systematic review. 2020 , 289, 198163 | 28 |
|------|---|----|
| 1119 | Antibody-mediated disruption of the SARS-CoV-2 spike glycoprotein. 2020 , 11, 5337 | 23 |
| 1118 | Deep mutagenesis in the study of COVID-19: a technical overview for the proteomics community. 2020 , 17, 633-638 | 5 |
| 1117 | Immune asynchrony in COVID-19 pathogenesis and potential immunotherapies. 2020 , 217, | 41 |
| 1116 | An ace model for SARS-CoV-2 infection. 2020 , 217, | 2 |
| 1115 | GRL-0920, an Indole Chloropyridinyl Ester, Completely Blocks SARS-CoV-2 Infection. 2020 , 11, | 34 |
| 1114 | Surfactant replacement might help recovery of low-compliance lung in severe COVID-19 pneumonia. 2020 , 14, 1753466620951043 | 16 |
| 1113 | Risk factors and outcome of COVID-19 in patients with hematological malignancies. 2020 , 9, 21 | 57 |
| 1112 | SARS-CoV-2 Spike 1 Protein Controls Natural Killer Cell Activation via the HLA-E/NKG2A Pathway. 2020 , 9, | 30 |
| 1111 | Understanding the Immunologic Characteristics of Neurologic Manifestations of SARS-CoV-2 and Potential Immunological Mechanisms. 2020 , 57, 5263-5275 | 37 |
| 1110 | COVID-19 and cardiovascular consequences: Is the endothelial dysfunction the hardest challenge?. 2020 , 196, 143-151 | 41 |
| 1109 | Chronic kidney disease and acute kidney injury in the COVID-19 Spanish outbreak. 2020 , 35, 1353-1361 | 52 |
| 1108 | The clinical characteristics of coronavirus-associated nephropathy. 2020 , 35, 1279-1281 | 6 |
| 1107 | Possible routes of SARS-CoV-2 invasion in brain: In context of neurological symptoms in COVID-19 patients. 2020 , 98, 2376-2383 | 27 |
| 1106 | Prognostic Value of Elevated Cardiac Troponin I in Hospitalized Covid-19 Patients. 2020 , 135, 150-153 | 19 |
| 1105 | The Resilient Child: Sex-Steroid Hormones and COVID-19 Incidence in Pediatric Patients. 2020 , 4, bvaa106 | 9 |
| 1104 | COVID-19 and Genetic Variants of Protein Involved in the SARS-CoV-2 Entry into the Host Cells. 2020 , 11, | 48 |
| 1103 | A Decision Aide for the Risk Stratification of GU Cancer Patients at Risk of SARS-CoV-2 Infection, COVID-19 Related Hospitalization, Intubation, and Mortality. 2020 , 9, | 4 |

| 1102 | Cardiovascular System in COVID-19: Simply a Viewer or a Leading Actor?. 2020 , 10, | 3 |
|------|---|----|
| 1101 | Host genetic factors and susceptibility to SARS-CoV-2 infection. 2020 , 32, e23497 | 3 |
| 1100 | Snatching the Crown from SARS-CoV-2. 2020 , 28, 360-363 | 4 |
| 1099 | Spontaneous subcutaneous emphysema and pneumomediastinum in non-intubated patients with COVID-19. 2020 , 67, 207-213 | 25 |
| 1098 | Autoantibody-negative insulin-dependent diabetes mellitus after SARS-CoV-2 infection: a case report. 2020 , 2, 1021-1024 | 86 |
| 1097 | Soft matter science and the COVID-19 pandemic. 2020 , 16, 8310-8324 | 33 |
| 1096 | Current perspective on diagnosis, epidemiological assessment, prevention strategies, and potential therapeutic interventions for severe acute respiratory infections caused by 2019 novel coronavirus (SARS-CoV-2). 2020 , 16, 3001-3010 | 5 |
| 1095 | Systemic innate and adaptive immune responses to SARS-CoV-2 as it relates to other coronaviruses. 2020 , 16, 2980-2991 | 16 |
| 1094 | COVID-19 in Hospitalized Adults With HIV. 2020 , 7, ofaa327 | 21 |
| 1093 | Bromhexine Hydrochloride Tablets for the Treatment of Moderate COVID-19: An Open-Label Randomized Controlled Pilot Study. 2020 , 13, 1096-1102 | 21 |
| 1092 | Gene of the month: (transmembrane serine protease 2). 2020 , 73, 773-776 | 36 |
| 1091 | Renin-Angiotensin-Aldosterone System Inhibitors and Risks of Severe Acute Respiratory Syndrome Coronavirus 2 Infection: A Systematic Review and Meta-Analysis. 2020 , 76, 1563-1571 | 19 |
| 1090 | Severe Acute Respiratory Syndrome Coronavirus 2 Impact on the Central Nervous System: Are Astrocytes and Microglia Main Players or Merely Bystanders?. 2020 , 12, 1759091420954960 | 32 |
| 1089 | Lipidomics Issues on Human Positive ssRNA Virus Infection: An Update. 2020 , 10, | 4 |
| 1088 | Molecular mechanisms involved in the positive effects of physical activity on coping with COVID-19. 2020 , 120, 2569-2582 | 22 |
| 1087 | An Indian study: impact of COVID-19 on clinical decision-making and consensus in cardiac surgery practice across the country. 2020 , 36, 1-13 | 2 |
| 1086 | Locked-In with COVID-19. 2020 , 79, 80-83 | 8 |
| 1085 | Identification of promising antiviral drug candidates against non-structural protein 15 (NSP15) from SARS-CoV-2: an assisted drug-repurposing study. 2020 , 1-11 | 18 |

| 1084 Ocular manifestations in SARS-CoV-2 positive patients: a systematic review. 2020 , 15, 367-375 | 1 |
|---|----------------------|
| Human Induced Pluripotent Stem Cell-Derived Lung Epithelial System for SARS-CoV-2 Infection Modeling and Its Potential in Drug Repurposing. 2020 , 29, 1365-1369 | 7 |
| A Simplified Quantitative Real-Time PCR Assay for Monitoring SARS-CoV-2 Growth in Cell Culture. 2020 , 5, | 20 |
| Elevated FiO increases SARS-CoV-2 co-receptor expression in respiratory tract epithelium. 2020 , 319, L670-L674 | 7 |
| SARS-CoV-2/COVID-19 and advances in developing potential therapeutics and vaccines to counter this emerging pandemic. 2020 , 19, 40 | 62 |
| 1079 Neurological Aspects of SARS-CoV-2 Infection: Mechanisms and Manifestations. 2020 , 11, 1039 | 35 |
| SARS-CoV-2 in children: spectrum of disease, transmission and immunopathological underpinnings. 2020 , 52, 801-808 | 40 |
| 1077 Immunological considerations for COVID-19 vaccine strategies. 2020 , 20, 615-632 | 480 |
| 1076 Direct or Collateral Liver Damage in SARS-CoV-2-Infected Patients. 2020 , 40, 321-330 | 15 |
| | |
| 1075 COVID-19-related disease severity in pregnancy. 2020 , 84, e13339 | 9 |
| 1075 COVID-19-related disease severity in pregnancy. 2020 , 84, e13339 1074 SARS-CoV-2 binds platelet ACE2 to enhance thrombosis in COVID-19. 2020 , 13, 120 | 265 |
| | |
| SARS-CoV-2 binds platelet ACE2 to enhance thrombosis in COVID-19. 2020 , 13, 120 Genetic Association of rs2285666 Polymorphism With COVID-19 Spatial Distribution in India. 2020 , | 265 |
| SARS-CoV-2 binds platelet ACE2 to enhance thrombosis in COVID-19. 2020 , 13, 120 Genetic Association of rs2285666 Polymorphism With COVID-19 Spatial Distribution in India. 2020 , 11, 564741 Computational and Transcriptome Analyses Revealed Preferential Induction of Chemotaxis and | 265 36 |
| SARS-CoV-2 binds platelet ACE2 to enhance thrombosis in COVID-19. 2020 , 13, 120 Genetic Association of rs2285666 Polymorphism With COVID-19 Spatial Distribution in India. 2020 , 11, 564741 Computational and Transcriptome Analyses Revealed Preferential Induction of Chemotaxis and Lipid Synthesis by SARS-CoV-2. 2020 , 9, Natural Flavonoids as Potential Angiotensin-Converting Enzyme 2 Inhibitors for Anti-SARS-CoV-2. | 265 36 7 |
| SARS-CoV-2 binds platelet ACE2 to enhance thrombosis in COVID-19. 2020, 13, 120 Genetic Association of rs2285666 Polymorphism With COVID-19 Spatial Distribution in India. 2020, 11, 564741 Computational and Transcriptome Analyses Revealed Preferential Induction of Chemotaxis and Lipid Synthesis by SARS-CoV-2. 2020, 9, Natural Flavonoids as Potential Angiotensin-Converting Enzyme 2 Inhibitors for Anti-SARS-CoV-2. 2020, 25, | 265 36 7 46 |
| SARS-CoV-2 binds platelet ACE2 to enhance thrombosis in COVID-19. 2020, 13, 120 Genetic Association of rs2285666 Polymorphism With COVID-19 Spatial Distribution in India. 2020, 11, 564741 Computational and Transcriptome Analyses Revealed Preferential Induction of Chemotaxis and Lipid Synthesis by SARS-CoV-2. 2020, 9, Natural Flavonoids as Potential Angiotensin-Converting Enzyme 2 Inhibitors for Anti-SARS-CoV-2. 2020, 25, Potential of Ocular Transmission of SARS-CoV-2: A Review. 2020, 4, | 265 36 7 46 |

| Role of Drugs Used for Chronic Disease Management on Susceptibility and Severity of COVID-19: A Large Case-Control Study. 2020 , 108, 1185-1194 | 39 |
|---|-----|
| 1065 Using primary literature on SARS-CoV-2 to promote student learning about evolution. 2020 , 10, 12418 | 1 |
| 1064 COVID-19 and Extracellular Vesicles: An Intriguing Interplay. 2020 , 45, 661-670 | 28 |
| $_{1063}$ The use of mesenchymal stromal cells in the treatment of coronavirus disease 2019. 2020 , 18, 359 | 15 |
| (SARS-CoV-2) Exhibits High Predicted Binding Affinity to ACE2 from Lagomorphs (Rabbits and Pikas). 2020 , 10, | 10 |
| 1061 A Call for Action to Safely Deliver Oral Health Care during and Post COVID-19 Pandemic. 2020 , 17, | 3 |
| 1060 Kinins and Their Receptors in Infectious Diseases. 2020 , 13, | 12 |
| The Case Fatality Rate in COVID-19 Patients With Cardiovascular Disease: Global Health Challenge and Paradigm in the Current Pandemic. 2020 , 6, 1-10 | 9 |
| 1058 Carotane sesquiterpenes from : analysis as SARS-CoV-2 binding inhibitors 2020 , 10, 34541-34548 | 4 |
| 1057 SARS-CoV-2 infects and induces cytotoxic effects in human cardiomyocytes. 2020 , 116, 2207-2215 | 101 |
| Transmission of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) to animals: an updated review. 2020 , 18, 358 | 51 |
| 1055 Stroke care in Italy at the time of the COVID-19 pandemic: a lesson to learn. 2021 , 268, 2307-2313 | 5 |
| Early predictors of in-hospital mortality in patients with COVID-19 in a large American cohort. 2020 , 15, 1485-1499 | 44 |
| Cytokine Hemoadsorption in the Management of a Pregnant Woman with COVID-19 Pneumonia: 1053 Case Report. 2020 , 2, 1-5 | 1 |
| 1052 Beyond Shielding: The Roles of Glycans in the SARS-CoV-2 Spike Protein. 2020 , 6, 1722-1734 | 340 |
| Does severe acute respiratory syndrome coronavirus-2 (SARS-CoV-2) cause orchitis in patients with coronavirus disease 2019 (COVID-19)?. 2020 , 18, 129-133 | 5 |
| 1050 COVID-19: benefits and risks of passive immunotherapeutics. 2020 , 16, 2963-2972 | 5 |
| Ultrapotent human antibodies protect against SARS-CoV-2 challenge via multiple mechanisms. 2020 , 370, 950-957 | 314 |

| 1048 | Mitigating Coronavirus Induced Dysfunctional Immunity for At-Risk Populations in COVID-19: Trained Immunity, BCG and "New Old Friends". 2020 , 11, 2059 | 11 |
|------|---|-----|
| 1047 | Immune Modulation as a Therapeutic Option During the SARS-CoV-2 Outbreak: The Case for Antimalarial Aminoquinolines. 2020 , 11, 2159 | 6 |
| 1046 | Neurological Damage by Coronaviruses: A Catastrophe in the Queue!. 2020 , 11, 565521 | 19 |
| 1045 | Induction of the Antiviral Immune Response and Its Circumvention by Coronaviruses. 2020 , 12, | 5 |
| 1044 | SARS-CoV-2 and the possible connection to ERs, ACE2, and RAGE: Focus on susceptibility factors. 2020 , 34, 14103-14119 | 20 |
| 1043 | Systematic Review and Meta-analysis of Smell and Taste Disorders in COVID-19. 2020 , 4, 2473974X20957975 | 40 |
| 1042 | Molecular Architecture of the SARS-CoV-2 Virus. <i>Cell</i> , 2020 , 183, 730-738.e13 | 385 |
| 1041 | Structurally Resolved SARS-CoV-2 Antibody Shows High Efficacy in Severely Infected Hamsters and Provides a Potent Cocktail Pairing Strategy. <i>Cell</i> , 2020 , 183, 1013-1023.e13 | 145 |
| 1040 | Advanced drug delivery systems can assist in targeting coronavirus disease (COVID-19): A hypothesis. 2020 , 144, 110254 | 17 |
| 1039 | 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 |
| 1038 | 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 |
| 1037 | COVID19: an announced pandemic. 2020 , 11, 799 | 23 |
| 1036 | Vertical transmission of SARS-CoV-2 infection in early pregnancy: what is the evidence?. 2020 , 1-2 | 1 |
| 1035 | Ethnic differences in alpha-1 antitrypsin deficiency allele frequencies may partially explain national differences in COVID-19 fatality rates. 2020 , 34, 14160-14165 | 23 |
| 1034 | TMPRSS2, a SARS-CoV-2 internalization protease is downregulated in head and neck cancer patients. 2020 , 39, 200 | 15 |
| 1033 | Impact of Treatment with Renin-Angiotensin System Inhibitors on Clinical Outcomes in Hypertensive Patients Hospitalized with COVID-19. 2020 , 27, 561-568 | 12 |
| 1032 | Lung Barrier Function in COVID-19?. 2020 , 2, 1-3 | 4 |
| 1031 | Hypokalemia as a sensitive biomarker of disease severity and the requirement for invasive mechanical ventilation requirement in COVID-19 pneumonia: A case series of 306 Mediterranean patients. 2020 , 100, 449-454 | 31 |

| STAT3 isoforms differentially affect ACE2 expression: A potential target for COVID-19 therapy. 2020, 24, 12864-12868 | 5 |
|--|----------------------------|
| A Review of the Preclinical and Clinical Efficacy of Remdesivir, Hydroxychloroquine, and Lopinavir-Ritonavir Treatments against COVID-19. 2020 , 25, 1108-1122 | 20 |
| SARS-CoV-2 Infection: A Role for S1P/S1P Receptor Signaling in the Nervous System?. 2020 , 21, | 11 |
| 1027 Trendbericht Biochemie: Strukturbiologie von Sars-Cov-2 mit NMR-Spektroskopie. 2020 , 68, 55-58 | |
| The application of direct viral cytopathic hypothesis to design drug trials in the battle against COVID-19. 2020 , 28, 813-814 | 1 |
| 1025 Artificial intelligence in COVID-19 drug repurposing. 2020 , 2, e667-e676 | 188 |
| Relation of Statin Use Prior to Admission to Severity and Recovery Among COVID-19 Inpatients. 2020 , 136, 149-155 | 96 |
| 1023 Evaluation of organ function in patients with severe COVID-19 infections. 2020 , 155, 191-196 | 4 |
| 1022 Double-Barreled CRISPR Technology as a Novel Treatment Strategy For COVID-19. 2020 , 3, 790-800 | 14 |
| 1021 SARS-CoV-2 Vaccine Development: An Overview and Perspectives. 2020 , 3, 844-858 | |
| | 20 |
| 1020 Molecular features of IGHV3-53-encoded antibodies elicited by SARS-CoV-2. 2020 , 5, 170 | 9 |
| | |
| Molecular features of IGHV3-53-encoded antibodies elicited by SARS-CoV-2. 2020 , 5, 170 Assessment of proton-coupled conformational dynamics of SARS and MERS coronavirus papain-like | 9 |
| Molecular features of IGHV3-53-encoded antibodies elicited by SARS-CoV-2. 2020 , 5, 170 Assessment of proton-coupled conformational dynamics of SARS and MERS coronavirus papain-like proteases: Implication for designing broad-spectrum antiviral inhibitors. 2020 , 153, 115101 SARS-CoV-2 Targeting the Retina: Host-virus Interaction and Possible Mechanisms of Viral Tropism. | 9 |
| Molecular features of IGHV3-53-encoded antibodies elicited by SARS-CoV-2. 2020 , 5, 170 Assessment of proton-coupled conformational dynamics of SARS and MERS coronavirus papain-like proteases: Implication for designing broad-spectrum antiviral inhibitors. 2020 , 153, 115101 SARS-CoV-2 Targeting the Retina: Host-virus Interaction and Possible Mechanisms of Viral Tropism. 2020 , 28, 1301-1304 | 9 18 10 |
| Molecular features of IGHV3-53-encoded antibodies elicited by SARS-CoV-2. 2020 , 5, 170 Assessment of proton-coupled conformational dynamics of SARS and MERS coronavirus papain-like proteases: Implication for designing broad-spectrum antiviral inhibitors. 2020 , 153, 115101 SARS-CoV-2 Targeting the Retina: Host-virus Interaction and Possible Mechanisms of Viral Tropism. 2020 , 28, 1301-1304 Sex differences in severity and mortality from COVID-19: are males more vulnerable?. 2020 , 11, 53 | 9 18 10 |
| Molecular features of IGHV3-53-encoded antibodies elicited by SARS-CoV-2. 2020, 5, 170 Assessment of proton-coupled conformational dynamics of SARS and MERS coronavirus papain-like proteases: Implication for designing broad-spectrum antiviral inhibitors. 2020, 153, 115101 SARS-CoV-2 Targeting the Retina: Host-virus Interaction and Possible Mechanisms of Viral Tropism. 2020, 28, 1301-1304 Sex differences in severity and mortality from COVID-19: are males more vulnerable?. 2020, 11, 53 The COVID-19 pandemic: is there a role for magnesium? Hypotheses and perspectives. 2020, 33, 21-27 Prevalence of Kidney Injury and Associations with Critical Illness and Death in Patients with | 9 18 10 109 25 |

| 1012 | Neurological Implications of Non-critically Ill Patients With Coronavirus Disease 2019 in a Fangcang Shelter Hospital in Wuhan, China. 2020 , 11, 895 | 4 |
|------|---|-----|
| 1011 | The Potential Role of SARS-COV-2 in the Pathogenesis of Parkinson's Disease. 2020 , 11, 1044 | 18 |
| 1010 | Cardiovascular Complications Associated with COVID-19 and Potential Therapeutic~Strategies. 2020 , 21, | 32 |
| 1009 | The Efficacy of the Mineralcorticoid Receptor Antagonist Canrenone in COVID-19 Patients. 2020 , 9, | 7 |
| 1008 | COVID-19-Induced Thrombosis in Patients without Gastrointestinal Symptoms and Elevated Fecal Calprotectin: Hypothesis Regarding Mechanism of Intestinal Damage Associated with COVID-19. 2020 , 5, | 17 |
| 1007 | SeXX and COVID-19: tussle between the two. 2020 , 90, | 11 |
| 1006 | Linking ACE2 and angiotensin II to pulmonary immunovascular dysregulation in SARS-CoV-2 infection. 2020 , 101, 42-45 | 13 |
| 1005 | Free fatty acid binding pocket in the locked structure of SARS-CoV-2 spike protein. 2020 , 370, 725-730 | 182 |
| 1004 | MS, pregnancy and COVID-19. 2020 , 26, 1137-1146 | 3 |
| 1003 | Anal swab as a potentially optimal specimen for SARS-CoV-2 detection to evaluate hospital discharge of COVID-19 patients. 2020 , 15, 1101-1107 | 10 |
| 1002 | Overview of the First 6 Months of Clinical Trials for COVID-19 Pharmacotherapy: The Most Studied Drugs. 2020 , 8, 497 | 10 |
| 1001 | Risk Factors, Presentation, and Course of Coronavirus Disease 2019 in a Large, Academic Long-Term Care Facility. 2020 , 21, 1378-1383.e1 | 53 |
| 1000 | Association of obesity and its genetic predisposition with the risk of severe COVID-19: Analysis of population-based cohort data. 2020 , 112, 154345 | 36 |
| 999 | Lifting the mask on neurological manifestations of COVID-19. 2020 , 16, 636-644 | 190 |
| 998 | Curcumin to inhibit binding of spike glycoprotein to ACE2 receptors: computational modelling, simulations, and ADMET studies to explore curcuminoids against novel SARS-CoV-2 targets 2020 , 10, 31385-31399 | 18 |
| 997 | Severe acute respiratory syndrome coronavirus-2 (SARS-CoV-2), a newly emerged pathogen: an overview. 2020 , 78, | 10 |
| 996 | COVID-19 and the Cardiovascular System. 2020 , 43, 381-389 | 6 |
| 995 | Electrocautery, Diathermy, and Surgical Energy Devices: Are Surgical Teams at Risk During the COVID-19 Pandemic?. 2020 , 272, e257-e262 | 22 |

| 994 | Renin-Angiotensin System and Coronavirus Disease 2019: A Narrative Review. 2020 , 7, 143 | 23 |
|-----|--|-----|
| 993 | The Significance of Natural Product Derivatives and Traditional Medicine for COVID-19. 2020 , 8, 937 | 10 |
| 992 | Of Mice and Men: The Coronavirus MHV and Mouse Models as a Translational Approach to Understand SARS-CoV-2. 2020 , 12, | 49 |
| 991 | Chinese Therapeutic Strategy for Fighting COVID-19 and Potential Small-Molecule Inhibitors against Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2). 2020 , 63, 13205-13227 | 18 |
| 990 | Central Nervous System Targets and Routes for SARS-CoV-2: Current Views and New Hypotheses. 2020 , 11, 2793-2803 | 27 |
| 989 | COVID-19 and renin-angiotensin system modulators: what do we know so far?. 2020 , 18, 743-748 | 3 |
| 988 | Individuals with obesity and COVID-19: A global perspective on the epidemiology and biological relationships. 2020 , 21, e13128 | 427 |
| 987 | Friends or foes? The knowns and unknowns of natural killer cell biology in COVID-19 and other coronaviruses in July 2020. 2020 , 16, e1008820 | 9 |
| 986 | Canakinumab to reduce deterioration of cardiac and respiratory function in SARS-CoV-2 associated myocardial injury with heightened inflammation (canakinumab in Covid-19 cardiac injury: The three C study). 2020 , 43, 1055-1063 | 30 |
| 985 | The Interplay Between Coagulation and Inflammation Pathways in COVID-19-Associated Respiratory Failure: A Narrative Review. 2020 , 6, 215-231 | 7 |
| 984 | Colchicine as a Potential Therapeutic Agent Against Cardiovascular Complications of COVID-19: an Exploratory Review. 2020 , 2, 1-11 | 15 |
| 983 | A genetic barcode of SARS-CoV-2 for monitoring global distribution of different clades during the COVID-19 pandemic. 2020 , 100, 216-223 | 33 |
| 982 | Protein Surface Printer for Exploring Protein Domains. 2020 , 60, 5255-5264 | 1 |
| 981 | Nanoparticle-Based Strategies to Combat COVID-19. 2020 , 3, 8557-8580 | 90 |
| 980 | Lung innervation in the eye of a cytokine storm: neuroimmune interactions and COVID-19. 2020 , 16, 645-652 | 33 |
| 979 | The diagnostic methods in the COVID-19 pandemic, today and in the future. 2020 , 20, 985-993 | 20 |
| 978 | Vaccination against SARS-CoV-2 and disease enhancement - knowns and unknowns. 2020 , 19, 691-698 | 13 |
| 977 | Epithelial cell-specific loss of function of causes a spontaneous COPD-like phenotype and up-regulates expression in mice. 2020 , 6, eabb7238 | 8 |

| 976 | SARS-CoV-2 and Three Related Coronaviruses Utilize Multiple ACE2 Orthologs and Are Potently Blocked by an Improved ACE2-Ig. 2020 , 94, | 48 |
|-----|--|-----|
| 975 | Understanding the epidemiology, pathophysiology, diagnosis and management of SARS-CoV-2. 2020 , 48, 300060520949077 | 14 |
| 974 | Anticipating and managing coagulopathy and thrombotic manifestations of severe COVID-19. 2020 , 192, E1156-E1161 | 19 |
| 973 | Can Drinking Microfiltered Raw Immune Milk From Cows Immunized Against SARS-CoV-2 Provide Short-Term Protection Against COVID-19?. 2020 , 11, 1888 | 9 |
| 972 | ACE2 Protein Landscape in the Head and Neck Region: The Conundrum of SARS-CoV-2 Infection. 2020 , 9, | 25 |
| 971 | Thrombosis in COVID-19. 2020 , 95, 1578-1589 | 92 |
| 970 | Elevated carcinoembryonic antigen in patients with COVID-19 pneumonia. 2020, 146, 3385-3388 | 5 |
| 969 | Quantum Dot-Conjugated SARS-CoV-2 Spike Pseudo-Virions Enable Tracking of Angiotensin Converting Enzyme 2 Binding and Endocytosis. 2020 , 14, 12234-12247 | 45 |
| 968 | Obesity: A critical risk factor in the COVID-19 pandemic. 2020 , 10, e12403 | 81 |
| 967 | MHC class II transactivator CIITA induces cell resistance to Ebola virus and SARS-like coronaviruses. 2020 , 370, 241-247 | 33 |
| 966 | Interaction of SARS-CoV-2 and Other Coronavirus With ACE (Angiotensin-Converting Enzyme)-2 as Their Main Receptor: Therapeutic Implications. 2020 , 76, 1339-1349 | 86 |
| 965 | Azithromycin Downregulates Gene Expression of IL-1land Pathways Involving TMPRSS2 and TMPRSS11D Required by SARS-CoV-2. 2020 , 63, 707-709 | 11 |
| 964 | Management of a Parkinson's disease patient with severe COVID-19 pneumonia. 2020 , 11, 204062232094942 | 236 |
| 963 | Genetic Analysis of the Coronavirus SARS-CoV-2 Host Protease in Different Populations. 2020 , 11, 872 | 22 |
| 962 | Understanding the Pathophysiology of COVID-19: Could the Contact System Be the Key?. 2020 , 11, 2014 | 25 |
| 961 | The Immune Response and Immunopathology of COVID-19. 2020 , 11, 2037 | 61 |
| 960 | Antivirals Against Coronaviruses: Candidate Drugs for SARS-CoV-2 Treatment?. 2020 , 11, 1818 | 50 |
| 959 | CoronaVR: A Computational Resource and Analysis of Epitopes and Therapeutics for Severe Acute Respiratory Syndrome Coronavirus-2. 2020 , 11, 1858 | 13 |

| 958 | Immune Dysfunction and Multiple Treatment Modalities for the SARS-CoV-2 Pandemic: Races of Uncontrolled Running Sweat?. 2020 , 9, | 2 |
|-----|--|-----|
| 957 | In Silico Identification of Potential Natural Product Inhibitors of Human Proteases Key to SARS-CoV-2 Infection. 2020 , 25, | 32 |
| 956 | Renin-Angiotensin-Aldosterone System Inhibitors and Risk of Death in Patients Hospitalised with COVID-19: A Retrospective Italian Cohort Study of 43,000 Patients. 2020 , 43, 1297-1308 | 35 |
| 955 | A panel of human neutralizing mAbs targeting SARS-CoV-2 spike at multiple epitopes. 2020 , 11, 4303 | 94 |
| 954 | Outcome of COVID-19 in patients with chronic myeloid leukemia receiving tyrosine kinase inhibitors. 2020 , 26, 1676-1682 | 20 |
| 953 | 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 |
| 952 | Is Nanotechnology Helping in the Fight Against COVID-19?. 2020 , 2, | 19 |
| 951 | Implication of Aging Related Chronic Neuroinflammation on COVID-19 Pandemic. 2020, 10, | 16 |
| 950 | Monocyte activation in systemic Covid-19 infection: Assay and rationale. 2020 , 59, 102964 | 44 |
| 949 | Targeting the sAC-Dependent cAMP Pool to Prevent SARS-Cov-2 Infection. 2020 , 9, | 6 |
| 948 | Towards effective COVID-19 vaccines: Updates, perspectives and challenges (Review). 2020 , 46, 3-16 | 178 |
| 947 | Beta-Adrenergic Blockers as a Potential Treatment for COVID-19 Patients. 2020 , 42, e2000094 | 39 |
| 946 | Various Facets of Pathogenic Lipids in Infectious Diseases: Exploring Virulent Lipid-Host Interactome and Their Druggability. 2020 , 253, 399-423 | 9 |
| 945 | Entry Inhibitors: Efficient Means to Block Viral Infection. 2020 , 253, 425-444 | 17 |
| 944 | Central neurological complications and potential neuropathogenesis of COVID-19. 2020 , 15, 1605-1608 | 3 |
| 943 | Hydroxychloroquine in COVID-19: Potential Mechanism of Action Against SARS-CoV-2. 2020 , 6, 1-9 | 37 |
| 942 | COVID-19 and Comorbid Hypertension: Is ACE2 the Culprit?. 2020 , 35, 700-701 | 1 |
| 941 | Genetic Hypothesis and Pharmacogenetics Side of Renin-Angiotensin-System in COVID-19. 2020 , 11, | 20 |

| 940 | The Natural-Mineral-Based Novel Nanomaterial IFMC Increases Intravascular Nitric Oxide without Its Intake: Implications for COVID-19 and beyond. 2020 , 10, | 1 |
|-----|--|-----|
| 939 | Guidance for the Management of Patients with Vascular Disease or Cardiovascular Risk Factors and COVID-19: Position Paper from VAS-European Independent Foundation in Angiology/Vascular Medicine. 2020 , 120, 1597-1628 | 73 |
| 938 | Effects of Angiotensin Receptor Blockers (ARBs) on In-Hospital Outcomes of Patients With Hypertension and Confirmed or Clinically Suspected COVID-19. 2020 , 33, 1102-1111 | 27 |
| 937 | Serological Assays Estimate Highly Variable SARS-CoV-2 Neutralizing Antibody Activity in Recovered COVID-19 Patients. 2020 , 58, | 110 |
| 936 | Antiviral Activity of Type I, II, and III Interferons Counterbalances ACE2 Inducibility and Restricts SARS-CoV-2. 2020 , 11, | 81 |
| 935 | Silent hypoxia: a frequently overlooked clinical entity in patients with COVID-19. 2020 , 13, | 18 |
| 934 | Vimentin as a target for the treatment of COVID-19. 2020 , 7, | 13 |
| 933 | Age-Dependent Assessment of Genes Involved in Cellular Senescence, Telomere, and Mitochondrial Pathways in Human Lung Tissue of Smokers, COPD, and IPF: Associations With SARS-CoV-2 COVID-19 ACE2-TMPRSS2-Furin-DPP4 Axis. 2020 , 11, 584637 | 26 |
| 932 | Coronavirus Antiviral Research Database (CoV-RDB): An Online Database Designed to Facilitate Comparisons between Candidate Anti-Coronavirus Compounds. 2020 , 12, | 32 |
| 931 | Antibody response to SARS-Co-V-2, diagnostic and therapeutic implications. 2020 , 4, 1731 | 4 |
| 930 | Renin-Angiotensin System Inhibitors and COVID-19: a Systematic Review and Meta-Analysis. Evidence for Significant Geographical Disparities. 2020 , 22, 90 | 22 |
| 929 | Geographical Overlap Between Alpha-1 Antitrypsin Deficiency and COVID-19 Infection in Italy: Casual or Causal?. 2020 , 56, 609-610 | 23 |
| 928 | An Enzymatic TMPRSS2 Assay for Assessment of Clinical Candidates and Discovery of Inhibitors as Potential Treatment of COVID-19. 2020 , 3, 997-1007 | 58 |
| 927 | Sphingosine prevents binding of SARS-CoV-2 spike to its cellular receptor ACE2. 2020 , 295, 15174-15182 | 19 |
| 926 | Potential protease inhibitors and their combinations to block SARS-CoV-2. 2020 , 1-15 | 7 |
| 925 | Naltrexone a potential therapeutic candidate for COVID-19. 2020 , 1-8 | 8 |
| 924 | Prospects for mucosal vaccine: shutting the door on SARS-CoV-2. 2020 , 16, 2921-2931 | 37 |
| 923 | RNA Drugs and RNA Targets for Small Molecules: Principles, Progress, and Challenges. 2020 , 72, 862-898 | 69 |

| 922 | MERS and COVID-19): rapid systematic review and field synopsis. 2020 , 14, 30 | 40 |
|-----|---|-----|
| 921 | COVID-19: Review of a 21st Century Pandemic from Etiology to Neuro-psychiatric Implications. 2020 , 77, 459-504 | 39 |
| 920 | Harnessing Recent Advances in Synthetic DNA and Electroporation Technologies for Rapid Vaccine Development Against COVID-19 and Other Emerging Infectious Diseases 2020 , 2, 571030 | 12 |
| 919 | Smoking and COVID-19: Adding Fuel to the Flame. 2020 , 21, | 31 |
| 918 | Mass Spectrometry and Structural Biology Techniques in the Studies on the Coronavirus-Receptor Interaction. 2020 , 25, | 6 |
| 917 | Immune Response to COVID-19: Can We Benefit from the SARS-CoV and MERS-CoV Pandemic Experience?. 2020 , 9, | O |
| 916 | Characterisation of SARS-CoV-2 Lentiviral Pseudotypes and Correlation between Pseudotype-Based Neutralisation Assays and Live Virus-Based Micro Neutralisation Assays. 2020 , 12, | 28 |
| 915 | SARS-CoV-2 multifaceted interaction with the human host. Part II: Innate immunity response, immunopathology, and epigenetics. 2020 , 72, 2331-2354 | 16 |
| 914 | ACEIs, ARBs, ibuprofen originally linked to COVID-19: the other side of the mirror. 2020 , 28, 1477-1480 | 8 |
| 913 | Identification of potential mRNA panels for severe acute respiratory syndrome coronavirus 2 (COVID-19) diagnosis and treatment using microarray dataset and bioinformatics methods. 2020 , 10, 422 | 18 |
| 912 | Chloroquine does not inhibit infection of human lung cells with SARS-CoV-2. 2020 , 585, 588-590 | 243 |
| 911 | Case 29-2020: A 66-Year-Old Man with Fever and Shortness of Breath after Liver Transplantation. 2020 , 383, 1168-1180 | 6 |
| 910 | Low Baseline Pulmonary Levels of Cytotoxic Lymphocytes as a Predisposing Risk Factor for Severe COVID-19. 2020 , 5, | 3 |
| 909 | Targeted, Site-Specific, Delivery Vehicles of Therapeutics for COVID-19 Patients. Brief Review. 2020 , 26, 1076029620954911 | 7 |
| 908 | Why COVID-19 Transmission Is More Efficient and Aggressive Than Viral Transmission in Previous Coronavirus Epidemics?. 2020 , 10, | 23 |
| 907 | ACE polymorphisms and COVID-19-related mortality in Europe. 2020 , 98, 1505-1509 | 21 |
| 906 | Neuromuscular presentations in patients with COVID-19. 2020 , 41, 3039-3056 | 98 |
| 905 | Obesity is a potential risk factor contributing to clinical manifestations of COVID-19. 2020 , 44, 2479-2485 | 26 |

| 904 | Structural models of human ACE2 variants with SARS-CoV-2 Spike protein for structure-based drug design. 2020 , 7, 309 | 15 |
|-----|--|----|
| 903 | The Intestinal Perspective of COVID-19: NOS2 and AOC1 Genes as Epidemiological Factors, and a Homeopathic Approach to their Functional Improvement. 2020 , 33, 196-221 | 1 |
| 902 | A Multicentered Study on Epidemiologic and Clinical Characteristics of 37 Neonates With Community-acquired COVID-19. 2020 , 39, e297-e302 | 18 |
| 901 | SARS-CoV-2/COVID-19: Evolving Reality, Global Response, Knowledge Gaps, and Opportunities. 2020 , 54, 416-437 | 22 |
| 900 | Pathophysiology and treatment strategies for COVID-19. 2020 , 18, 353 | 28 |
| 899 | Expression of ACE2 and a viral virulence-regulating factor CCN family member 1 in human iPSC-derived neural cells: implications for COVID-19-related CNS disorders. 2020 , 40, 32 | 9 |
| 898 | The New Coronavirus COVID-19 Infection. 2020 , 35, 53-60 | 3 |
| 897 | Insights on SARS-CoV-2 Molecular Interactions With the Renin-Angiotensin System. 2020 , 8, 559841 | 23 |
| 896 | 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 |
| 895 | Can Nuclear Imaging of Activated Macrophages with Folic Acid-Based Radiotracers Serve as a Prognostic Means to Identify COVID-19 Patients at Risk?. 2020 , 13, | 6 |
| 894 | Infection of Brain Organoids and 2D Cortical Neurons with SARS-CoV-2 Pseudovirus. 2020, 12, | 26 |
| 893 | Ferritin Nanocage-Based Methyltransferase SETD6 for COVID-19 Therapy. 2020 , 30, 2006110 | 3 |
| 892 | SARS-CoV-2 multifaceted interaction with human host. Part I: What we have learnt and done so far, and the still unknown realities. 2020 , 72, 2313-2330 | 7 |
| 891 | A Concise Review of Baseline Facts of SARS-CoV-2 for Interdisciplinary Research. 2020 , 5, 10897-10923 | 4 |
| 890 | Ratios of neutrophil-to-lymphocyte and platelet-to-lymphocyte predict all-cause mortality in inpatients with coronavirus disease 2019 (COVID-19): a retrospective cohort study in a single medical centre. 2020 , 148, e211 | 23 |
| 889 | SARS-CoV-2 seroprevalence and neutralizing activity in donor and patient blood. 2020 , 11, 4698 | 81 |
| 888 | Identification of potential inhibitors of SARS-CoV-2 main protease and spike receptor from 10 important spices through structure-based virtual screening and molecular dynamic study. 2020 , 1-22 | 23 |
| 887 | Molecular basis of the potential interaction of SARS-CoV-2 spike protein to CD147 in COVID-19 associated-lymphopenia. 2020 , 1-11 | 35 |

| | COVID-19 and seizures: Is there a link?. 2020 , 61, 1840-1853 | 36 |
|--------------------------------------|--|--------------------|
| 885 | Randomized elimination and prolongation of ACE inhibitors and ARBs in coronavirus 2019 (REPLACE COVID) Trial Protocol. 2020 , 22, 1780-1788 | 13 |
| 884 | Effects of Asthma and Human Rhinovirus A16 on the Expression of SARS-CoV-2 Entry Factors in Human Airway Epithelium. 2020 , 63, 859-863 | 11 |
| 883 | COVID-19 and Diabetes: A Collision and Collusion of Two Diseases. 2020 , 69, 2549-2565 | 40 |
| 882 | Commentary: SARS-CoV-2 Cell Entry Depends on ACE2 and TMPRSS2 and Is Blocked by a Clinically Proven Protease Inhibitor. 2020 , 10, 1448 | 23 |
| 881 | A consideration of convalescent plasma and plasma derivatives in the care of Severely-ill patients with COVID-19. 2020 , 59, 102936 | 10 |
| 880 | Inhibitors of type II transmembrane serine proteases in the treatment of diseases of the respiratory tract - A review of patent literature. 2020 , 30, 807-824 | 7 |
| 879 | Hypertension and Age-Related Cognitive Impairment: Common Risk Factors and a Role for Precision Aging. 2020 , 22, 80 | 11 |
| 878 | 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 |
| | | |
| 877 | In vivo antiviral host transcriptional response to SARS-CoV-2 by viral load, sex, and age. 2020 , 18, e3000849 | 129 |
| 8 ₇₇ 8 ₇ 6 | In vivo antiviral host transcriptional response to SARS-CoV-2 by viral load, sex, and age. 2020 , 18, e3000849 Optimal delivery management for the prevention of early neonatal SARS-CoV-2 infection. 2020 , | 129 78 |
| | | |
| 876 | Optimal delivery management for the prevention of early neonatal SARS-CoV-2 infection. 2020 , | 78 |
| 8 ₇ 6 | Optimal delivery management for the prevention of early neonatal SARS-CoV-2 infection. 2020 , Managing rheumatic diseases during COVID-19. 2020 , 39, 3245-3254 | 78 |
| 8 ₇ 6 8 ₇ 5 | Optimal delivery management for the prevention of early neonatal SARS-CoV-2 infection. 2020 , Managing rheumatic diseases during COVID-19. 2020 , 39, 3245-3254 Propofol and SARS-CoV-2 infection. 2020 , 125, e475-e476 | 78 10 4 |
| 876 875 874 873 | Optimal delivery management for the prevention of early neonatal SARS-CoV-2 infection. 2020 , Managing rheumatic diseases during COVID-19. 2020 , 39, 3245-3254 Propofol and SARS-CoV-2 infection. 2020 , 125, e475-e476 From ACE2 to COVID-19: A multiorgan endothelial disease. 2020 , 100, 425-430 | 78 10 4 |
| 876 875 874 873 | Optimal delivery management for the prevention of early neonatal SARS-CoV-2 infection. 2020, Managing rheumatic diseases during COVID-19. 2020, 39, 3245-3254 Propofol and SARS-CoV-2 infection. 2020, 125, e475-e476 From ACE2 to COVID-19: A multiorgan endothelial disease. 2020, 100, 425-430 MicroRNAs targeting the SARS-CoV-2 entry receptor ACE2 in cardiomyocytes. 2020, 148, 46-49 Praktische Empfehlungen der Deutschen Diabetes Gesellschaft zum Diabetesmanagement bei | 78 10 4 6 |

| 868 | Genomic Cues From Beta-Coronaviruses and Mammalian Hosts Sheds Light on Probable Origins and Infectivity of SARS-CoV-2 Causing COVID-19. 2020 , 11, 902 | 3 |
|-----|---|-----|
| 867 | Cardiovascular Damage in COVID-19: Therapeutic Approaches Targeting the Renin-Angiotensin-Aldosterone System. 2020 , 21, | 12 |
| 866 | High-Resolution Mass Spectrometry-Based Approaches for the Detection and Quantification of Peptidase Activity in Plasma. 2020 , 25, | 4 |
| 865 | [COVID-19 infection-update]. 2020 , 25, 1-8 | |
| 864 | Ethnic Prevalence of Angiotensin-Converting Enzyme Deletion (D) Polymorphism and COVID-19 Risk: Rationale for Use of Angiotensin-Converting Enzyme Inhibitors/Angiotensin Receptor Blockers. 2021 , 8, 973-980 | 15 |
| 863 | Asymptomatic SARS Coronavirus 2 infection: Invisible yet invincible. 2020 , 100, 112-116 | 115 |
| 862 | Antibody-dependent enhancement and SARS-CoV-2 vaccines and therapies. 2020 , 5, 1185-1191 | 329 |
| 861 | [COVID-19: Questions and answers from infectiology]. 2020 , 145, 1051-1056 | 1 |
| 860 | Identification of immunodominant linear epitopes from SARS-CoV-2 patient plasma. 2020 , 15, e0238089 | 41 |
| 859 | No small matter: a perspective on nanotechnology-enabled solutions to fight COVID-19. 2020 , 15, 2411-2427 | 13 |
| 858 | Single-Cell RNA-seq Identifies Cell Subsets in Human Placenta That Highly Expresses Factors Driving Pathogenesis of SARS-CoV-2. 2020 , 8, 783 | 49 |
| 857 | Anosmia and Ageusia as Predictive Signs of COVID-19 in Healthcare Workers in Italy: A Prospective Case-Control Study. 2020 , 9, | 16 |
| 856 | Covid-19: Perspectives on Innate Immune Evasion. 2020 , 11, 580641 | 64 |
| 855 | Racial/Ethnic Variation in Nasal Gene Expression of Transmembrane Serine Protease 2 (TMPRSS2). 2020 , 324, 1567-1568 | 30 |
| 854 | Gold Metallodrugs 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 |
| 853 | [Renin-Angiotensin-System (RAS) and COVID-19 - On The Prescription of RAS Blockers]. 2020, 74, 611-614 | |
| 852 | COVID-19 in the Healthy Patient Population: Demographic and Clinical Phenotypic Characterization and Predictors of In-Hospital Outcomes. 2020 , 40, 2764-2775 | 12 |
| 851 | Cardio-oncology care in the era of the coronavirus disease 2019 (COVID-19) pandemic: An International Cardio-Oncology Society (ICOS) statement. 2020 , 70, 480-504 | 16 |

| 850 | Dendritic Cells and SARS-CoV-2 Infection: Still an Unclarified Connection. 2020, 9, | 29 |
|---------------------------------|--|---|
| 849 | The HMOX1 Pathway as a Promising Target for the Treatment and Prevention of SARS-CoV-2 of 2019 (COVID-19). 2020 , 21, | 16 |
| 848 | Scoping review: hotspots for COVID-19 urological research: what is being published and from where?. 2021 , 39, 3151-3160 | 1 |
| 847 | Virological Characterization of the First 2 COVID-19 Patients Diagnosed in Italy: Phylogenetic Analysis, Virus Shedding Profile From Different Body Sites, and Antibody Response Kinetics. 2020 , 7, ofaa403 | 9 |
| 846 | Severe acute respiratory syndrome coronavirus-2 and the deduction effect of angiotensin-converting enzyme 2 in pregnancy. 2020 , 83, 812-816 | 10 |
| 845 | COVID-19 Pandemic: A Case for Phytomedicines. 2020 , 15, 1934578X20945086 | 14 |
| 844 | The protein expression profile of ACE2 in human tissues. 2020 , 16, e9610 | 405 |
| 843 | Evaluating the Association of Clinical Characteristics With Neutralizing Antibody Levels in Patients Who Have Recovered From Mild COVID-19 in Shanghai, China. 2020 , 180, 1356-1362 | 152 |
| 842 | Obesity, noncommunicable diseases, and COVID-19: A perfect storm. 2020 , 32, e23484 | 9 |
| | | |
| 841 | Immuno-epidemiology and pathophysiology of coronavirus disease 2019 (COVID-19). 2020 , 98, 1369-1383 | 19 |
| 841 840 | Immuno-epidemiology and pathophysiology of coronavirus disease 2019 (COVID-19). 2020 , 98, 1369-1383 [ACE2 - the hijacked all-rounder]. 2020 , 15, 1-4 | 19 O |
| | | |
| 840 | [ACE2 - the hijacked all-rounder]. 2020, 15, 1-4 | 0 |
| 840 | [ACE2 - the hijacked all-rounder]. 2020 , 15, 1-4 The Pathophysiology, Diagnosis and Treatment of Corona Virus Disease 2019 (COVID-19). 2020 , 35, 1-12 An integrated drug repurposing strategy for the rapid identification of potential SARS-CoV-2 viral | 9 |
| 840 839 838 | [ACE2 - the hijacked all-rounder]. 2020, 15, 1-4 The Pathophysiology, Diagnosis and Treatment of Corona Virus Disease 2019 (COVID-19). 2020, 35, 1-12 An integrated drug repurposing strategy for the rapid identification of potential SARS-CoV-2 viral inhibitors. 2020, 10, 13866 | o 9 61 |
| 840 839 838 | [ACE2 - the hijacked all-rounder]. 2020, 15, 1-4 The Pathophysiology, Diagnosis and Treatment of Corona Virus Disease 2019 (COVID-19). 2020, 35, 1-12 An integrated drug repurposing strategy for the rapid identification of potential SARS-CoV-2 viral inhibitors. 2020, 10, 13866 Role for Anti-Cytokine Therapies in Severe Coronavirus Disease 2019. 2020, 2, e0178 The Virological, Immunological, and Imaging Approaches for COVID-19 Diagnosis and Research. | o 9 61 25 |
| 840 839 838 837 836 | [ACE2 - the hijacked all-rounder]. 2020, 15, 1-4 The Pathophysiology, Diagnosis and Treatment of Corona Virus Disease 2019 (COVID-19). 2020, 35, 1-12 An integrated drug repurposing strategy for the rapid identification of potential SARS-CoV-2 viral inhibitors. 2020, 10, 13866 Role for Anti-Cytokine Therapies in Severe Coronavirus Disease 2019. 2020, 2, e0178 The Virological, Immunological, and Imaging Approaches for COVID-19 Diagnosis and Research. 2020, 25, 522-544 | 0961259 |

| 832 | Repurposing Drugs, Ongoing Vaccine, and New Therapeutic Development Initiatives Against COVID-19. 2020 , 11, 1258 | 61 |
|-----|--|-----|
| 831 | COVID-19 Usurps Host Regulatory Networks. 2020 , 11, 1278 | 14 |
| 830 | The Enigma of Endothelium in COVID-19. 2020 , 11, 989 | 40 |
| 829 | COVID-19 and therapy with essential oils having antiviral, anti-inflammatory, and immunomodulatory properties. 2020 , 28, 1153-1161 | 62 |
| 828 | Cross-Talk Between Key Players in Patients with COVID-19 and Ischemic Stroke: A Review on Neurobiological Insight of the Pandemic. 2020 , 57, 4921-4928 | 12 |
| 827 | Novel Insights into the Transmission of SARS-CoV-2 Through the Ocular Surface and its Detection in Tears and Conjunctival Secretions: A Review. 2020 , 37, 4086-4095 | 19 |
| 826 | Genes encoding ACE2, TMPRSS2 and related proteins mediating SARS-CoV-2 viral entry are upregulated with age in human cardiomyocytes. 2020 , 147, 88-91 | 14 |
| 825 | SARS-CoV-2 Receptor Is Enriched in a Subpopulation of Mouse Tongue Epithelial Cells in Nongustatory Papillae but Not in Taste Buds or Embryonic Oral Epithelium. 2020 , 3, 749-758 | 29 |
| 824 | Screening the General Population for SARS-CoV-2 Virus and COVID-19 Antibodies: A Counterargument. 2020 , 5, 1107-1110 | 5 |
| 823 | Effect of Common Medications on the Expression of SARS-CoV-2 Entry Receptors in Kidney Tissue. 2020 , 13, 1048-1054 | 13 |
| 822 | Artificial Intelligence for COVID-19 Drug Discovery and Vaccine Development. 2020 , 3, 65 | 80 |
| 821 | Obesity and COVID-19: Molecular Mechanisms Linking Both Pandemics. 2020 , 21, | 49 |
| 820 | COVID-19 Is a Multifaceted Challenging Pandemic Which Needs Urgent Public Health Interventions. 2020 , 8, | 17 |
| 819 | Effect of common medications on the expression of SARS-CoV-2 entry receptors in liver tissue. 2020 , 94, 4037-4041 | 7 |
| 818 | Role of probiotics to combat viral infections with emphasis on COVID-19. 2020 , 104, 8089-8104 | 62 |
| 817 | A narrative review of the potential pharmacological influence and safety of ibuprofen on coronavirus disease 19 (COVID-19), ACE2, and the immune system: a dichotomy of expectation and reality. 2020 , 28, 1141-1152 | 28 |
| 816 | Histopathological findings and viral tropism in UK patients with severe fatal COVID-19: a post-mortem study. 2020 , 1, e245-e253 | 270 |
| 815 | Animal and translational models of SARS-CoV-2 infection and COVID-19. 2020 , 13, 877-891 | 106 |

| 814 | Comparison of nonhuman primates identified the suitable model for COVID-19. 2020 , 5, 157 | 122 |
|-----|--|-----|
| 813 | Possible molecular and paracrine involvement underlying the pathogenesis of COVID-19 cardiovascular complications. 2020 , 9, 121-124 | 8 |
| 812 | A comparison of four serological assays for detecting anti-SARS-CoV-2 antibodies in human serum samples from different populations. 2020 , 12, | 143 |
| 811 | Broad Anti-coronavirus Activity of Food and Drug Administration-Approved Drugs against SARS-CoV-2 and SARS-CoV. 2020 , 94, | 113 |
| 810 | ACE2 (Angiotensin-Converting Enzyme 2) in Cardiopulmonary Diseases: Ramifications for the Control of SARS-CoV-2. 2020 , 76, 651-661 | 38 |
| 809 | Mortality and Pre-Hospitalization use of Renin-Angiotensin System Inhibitors in Hypertensive COVID-19 Patients. 2020 , 9, e017736 | 17 |
| 808 | COVID-19 and Diabetes: What Should We Expect?. 2020 , 14, 1133-1134 | 4 |
| 807 | Elevated ACE-2 expression in the olfactory neuroepithelium: implications for anosmia and upper respiratory SARS-CoV-2 entry and replication. 2020 , 56, | 102 |
| 806 | Treatment of severe COVID-19 with human umbilical cord mesenchymal stem cells. 2020, 11, 361 | 115 |
| 805 | Isolation, Sequence, Infectivity, and Replication Kinetics of Severe Acute Respiratory Syndrome Coronavirus 2. 2020 , 26, 2054-2063 | 63 |
| 804 | Neuroradiologic manifestations of COVID-19: what the emergency radiologist needs to know. 2020 , 27, 737-745 | 6 |
| 803 | An adenovirus-vectored COVID-19 vaccine confers protection from SARS-COV-2 challenge in rhesus macaques. 2020 , 11, 4207 | 109 |
| 802 | Broad host range of SARS-CoV-2 predicted by comparative and structural analysis of ACE2 in vertebrates. 2020 , 117, 22311-22322 | 267 |
| 801 | COVID-19 pandemic: Insights into structure, function, and hACE2 receptor recognition by SARS-CoV-2. 2020 , 16, e1008762 | 96 |
| 800 | Neonatal and Children's Immune System and COVID-19: Biased Immune Tolerance versus Resistance Strategy. 2020 , 205, 1990-1997 | 12 |
| 799 | Gastrointestinal symptoms associated with COVID-19: impact on the gut microbiome. 2020 , 226, 57-69 | 141 |
| 798 | Accurate serology for SARS-CoV-2 and common human coronaviruses using a multiplex approach. 2020 , 9, 1965-1973 | 26 |
| 797 | Plasmin Cascade Mediates Thrombotic Events in SARS-CoV-2 Infection via Complement and Platelet-Activating Systems. 2020 , 1, 220-227 | 1 |

| 796 | Macrophage activation syndrome and COVID-19. 2020 , 40, 19 | 58 |
|------------------|--|----|
| 795 | COVID-19-Associated Carotid Atherothrombosis and Stroke. 2020 , 41, 1993-1995 | 12 |
| 794 | Resilience of Alzheimer's Disease to COVID-19. 2020 , 77, 67-73 | 10 |
| 793 | Coronavirus Disease-2019 Conundrum: RAS Blockade and Geriatric-Associated Neuropsychiatric Disorders. 2020 , 7, 515 | 3 |
| 792 | Sex Hormones and Hormone Therapy during COVID-19 Pandemic: Implications for Patients with Cancer. 2020 , 12, | 38 |
| 791 | Nicotinic Cholinergic System and COVID-19: In Silico Identification of an Interaction between SARS-CoV-2 and Nicotinic Receptors with Potential Therapeutic Targeting Implications. 2020 , 21, | 39 |
| 790 | New Anti SARS-Cov-2 Targets for Quinoline Derivatives Chloroquine and Hydroxychloroquine. 2020 , 21, | 15 |
| 789 | Deciphering SARS-CoV-2 Virologic and Immunologic Features. 2020 , 21, | 12 |
| 788 | 4,4'-Diaminodiphenyl Sulfone (DDS) as an Inflammasome Competitor. 2020 , 21, | 9 |
| 787 | SARS-CoV-2 ORF8 and SARS-CoV ORF8ab: Genomic Divergence and Functional Convergence. 2020 , 9, | 22 |
| 786 | The Sialoside-Binding Pocket of SARS-CoV-2 Spike Glycoprotein Structurally Resembles MERS-CoV. 2020 , 12, | 32 |
| 785 | Computational Alanine Scanning and Structural Analysis of the SARS-CoV-2 Spike Protein/Angiotensin-Converting Enzyme 2 Complex. 2020 , 14, 11821-11830 | 33 |
| 7 ⁸ 4 | Association between renin-angiotensin-aldosterone system inhibitor treatment, neutrophil-lymphocyte ratio, D-Dimer and clinical severity of COVID-19 in hospitalized patients: a multicenter, observational study. 2021 , 35, 588-597 | 13 |
| 783 | COVID-19 and possible links with Parkinson's disease and parkinsonism: from bench to bedside. 2020 , 6, 18 | 66 |
| 782 | Role of Endolysosomes in Severe Acute Respiratory Syndrome Coronavirus-2 Infection and Coronavirus Disease 2019 Pathogenesis: Implications for Potential Treatments. 2020 , 11, 595888 | 23 |
| 781 | Assessment of the Relationship between Mortality and Troponin I Levels in Hospitalized Patients with the Novel Coronavirus (COVID-19). 2020 , 56, | 4 |
| 78o | Nano-Biomimetic Drug Delivery Vehicles: Potential Approaches for COVID-19 Treatment. 2020 , 25, | 15 |
| 779 | Leveraging 3D Model Systems to Understand Viral Interactions with the Respiratory Mucosa. 2020 , 12, | 9 |

| 778 | Modulation of Autophagy by SARS-CoV-2: A Potential Threat for Cardiovascular System. 2020 , 11, 611275 | 12 |
|-----|--|---------|
| 777 | SARS-CoV-2 and Viral Sepsis: Immune Dysfunction and Implications in Kidney Failure. 2020 , 9, | 16 |
| 776 | Liver Disease and Coronavirus Disease 2019: From Pathogenesis to Clinical Care. 2021 , 74, 1088-1100 | 22 |
| 775 | A single dose of recombinant VSV- G -spike vaccine provides protection against SARS-CoV-2 challenge. 2020 , 11, 6402 | 102 |
| 774 | Development of vaccines and antivirals for combating viral pandemics. 2020 , 4, 1128-1133 | 27 |
| 773 | Adverse impact of renin-angiotensin system blockade on the clinical course in hospitalized patients with severe COVID-19: a retrospective cohort study. 2020 , 10, 20250 | 14 |
| 772 | Angiotensin-converting enzyme 2, the complement system, the kallikrein-kinin system, type-2 diabetes, interleukin-6, and their interactions regarding the complex COVID-19 pathophysiological crossroads. 2020 , 21, 1470320320979097 | 3 |
| 771 | Differences in RAAS/vitamin D linked to genetics and socioeconomic factors could explain the higher mortality rate in African Americans with COVID-19. 2020 , 14, 1753944720977715 | 4 |
| 770 | A 30-year-old male with COVID-19 presenting with seizures and leukoencephalopathy 2020 , 8, 2050313X20 | 9747032 |
| 769 | Temporal Profile of Olfactory Dysfunction in COVID-19. 2020 , 4, 2473974X20978133 | 2 |
| 768 | Host DDX Helicases as Possible SARS-CoV-2 Proviral Factors: A Structural Overview of Their Hijacking Through Multiple Viral Proteins. 2020 , 8, 602162 | 10 |
| 767 | Molecular Mechanisms Lead to Sex-Specific COVID-19 Prognosis and Targeted Therapies. 2020 , 7, 589060 | 4 |
| 766 | COVID-19-Induced Modifications in the Tumor Microenvironment: Do They Affect Cancer Reawakening and Metastatic Relapse?. 2020 , 10, 592891 | 9 |
| 765 | Rationale for COVID-19 Treatment by Nebulized Interferon-Ell b-Literature Review and Personal Preliminary Experience. 2020 , 11, 592543 | 5 |
| 764 | Redox Regulation of Microvascular Permeability: IL-1 Potentiation of Bradykinin-Induced Permeability Is Prevented by Simvastatin. 2020 , 9, | 0 |
| 763 | Evidence of SARS-CoV-2 Transcriptional Activity in Cardiomyocytes of COVID-19 Patients without Clinical Signs of Cardiac Involvement. 2020 , 8, | 35 |
| 762 | Virus-Mediated Cell-Cell Fusion. 2020 , 21, | 21 |
| 761 | Morphogenetic (Mucin Expression) as Well as Potential Anti-Corona Viral Activity of the Marine Secondary Metabolite Polyphosphate on A549 Cells. 2020 , 18, | 12 |

| 760 | SARS-CoV-2 Spike Alterations Enhance Pseudoparticle Titers and Replication-Competent VSV-SARS-CoV-2 Virus. 2020 , 12, | 18 |
|-----|--|----|
| 759 | Integrative medicine considerations for convalescence from mild-to-moderate COVID-19 disease. 2020 , 18, 140-140 | 11 |
| 758 | In silico trial to test COVID-19 candidate vaccines: a case study with UISS platform. 2020 , 21, 527 | 17 |
| 757 | Extracellular RNA as a Versatile DAMP and Alarm Signal That Influences Leukocyte Recruitment in Inflammation and Infection. 2020 , 8, 619221 | 15 |
| 756 | The Role of MSC Therapy in Attenuating the Damaging Effects of the Cytokine Storm Induced by COVID-19 on the Heart and Cardiovascular System. 2020 , 7, 602183 | 13 |
| 755 | SARS-CoV-2: Immune Response Elicited by Infection and Development of Vaccines and Treatments. 2020 , 11, 569760 | 12 |
| 754 | Will SARS-CoV-2 Infection Elicit Long-Lasting Protective or Sterilising Immunity? Implications for Vaccine Strategies (2020). 2020 , 11, 571481 | 28 |
| 753 | Host Genetics at the Intersection of Autoimmunity and COVID-19: A Potential Key for Heterogeneous COVID-19 Severity. 2020 , 11, 586111 | 14 |
| 752 | NF-B Pathway as a Potential Target for Treatment of Critical Stage COVID-19 Patients. 2020, 11, 598444 | 66 |
| 751 | Public Database-Driven Insights Into Aging Stress-Associated Defective Gut Barrier With Low SARS-CoV-2 Receptors. 2020 , 7, 606991 | |
| 750 | Surveying the Side-Chain Network Approach to Protein Structure and Dynamics: The SARS-CoV-2 Spike Protein as an Illustrative Case. 2020 , 7, 596945 | 4 |
| 749 | Deletion of BST2 Cytoplasmic and Transmembrane N-Terminal Domains Results in SARS-CoV, SARS-CoV-2, and Influenza Virus Production Suppression in a Vero Cell Line. 2020 , 7, 616798 | 4 |
| 748 | SARS-CoV-2 Is Not Detected in the Cerebrospinal Fluid of Encephalopathic COVID-19 Patients. 2020 , 11, 587384 | 15 |
| 747 | Potential Simultaneous Inhibitors of Angiotensin-Converting Enzyme 2 and Transmembrane Protease, Serine 2. 2020 , 11, 584158 | 6 |
| 746 | Physiology of Midkine and Its Potential Pathophysiological Role in COVID-19. 2020 , 11, 616552 | 3 |
| 745 | Early Phase Management of the SARS-CoV-2 Pandemic in the Geographic Area of the Veneto Region, in One of the World's Oldest Populations. 2020 , 17, | 2 |
| 744 | Vascular Endothelial Glycocalyx Damage in COVID-19. 2020 , 21, | 32 |
| 743 | 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 |

| 742 | Outcomes Associated with the Use of Renin-Angiotensin-Aldosterone System Blockade in Hospitalized Patients with SARS-CoV-2 Infection. 2020 , 1, 801-809 | 17 |
|------------------|---|----|
| 74 ¹ | Immunohistochemical Study of SARS-CoV-2 Viral Entry Factors in the Cornea and Ocular Surface. 2020 , 39, 1556-1562 | 32 |
| 740 | Renal complications in coronavirus disease 2019: a systematic review. 2020 , 40, 31 | 11 |
| 739 | A bioinformatics analysis on the potential role of ACE2 in cardiac impairment of patients with coronavirus disease 2019. 2020 , 8, 1403 | 1 |
| 738 | Whole Genome Identification of Potential G-Quadruplexes and Analysis of the G-Quadruplex Binding Domain for SARS-CoV-2. 2020 , 11, 587829 | 20 |
| 737 | Post-Translational Modifications of Circulating Alpha-1-Antitrypsin Protein. 2020 , 21, | 11 |
| 736 | COVID-19 and cardiovascular disease. 2020 , 32, 263-266 | |
| 735 | An ACE2 Microbody Containing a Single Immunoglobulin Fc Domain Is a Potent Inhibitor of SARS-CoV-2. 2020 , 33, 108528 | 39 |
| 734 | Negative Clinical Evolution in COVID-19 Patients Is Frequently Accompanied With an Increased Proportion of Undifferentiated Th Cells and a Strong Underrepresentation of the Th1 Subset. 2020 , 11, 596553 | 23 |
| 733 | Recombinant ACE2 Expression Is Required for SARS-CoV-2 To Infect Primary Human Endothelial Cells and Induce Inflammatory and Procoagulative Responses. 2020 , 11, | 45 |
| 732 | Pathophysiology and potential future therapeutic targets using preclinical models of COVID-19. 2020 , 6, | 6 |
| 731 | Evaluating ELISA, Immunofluorescence, and Lateral Flow Assay for SARS-CoV-2 Serologic Assays. 2020 , 11, 597529 | 22 |
| 730 | Arterial Hypertension as a Risk Comorbidity Associated with COVID-19 Pathology. 2020 , 2020, 8019360 | 12 |
| 729 | Investigating the Potential for Ultraviolet Light to Modulate Morbidity and Mortality From COVID-19: A Narrative Review and Update. 2020 , 7, 616527 | 7 |
| 728 | Sharing CD4+ T Cell Loss: When COVID-19 and HIV Collide on Immune System. 2020 , 11, 596631 | 30 |
| 727 | 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 |
| 726 | Dual TMPRSS2:ERG Fusion in a Patient with Lung and Prostate Cancers. 2020 , 10, | O |
| 7 2 5 | Nuclear Medicine in Times of COVID-19: How Radiopharmaceuticals Could Help to Fight the Current and Future Pandemics. 2020 , 12, | 5 |

| 724 | Premises among SARS-CoV-2, dysbiosis and diarrhea: Walking through the ACE2/mTOR/autophagy route. 2020 , 144, 110243 | 11 |
|-----|---|----|
| 723 | The Vagal Autonomic Pathway of COVID-19 at the Crossroad of Alzheimer's Disease and Aging: A Review of Knowledge. 2020 , 4, 537-551 | 13 |
| 722 | An analysis of cancer patients with asymptomatic infection of SARS-CoV-2 in a cancer center in Wuhan, China. 2020 , 31, 1420-1422 | 4 |
| 721 | Digital Tomosynthesis and COVID-19: An improvement in the assessment of pulmonary opacities. 2020 , 56, 761-763 | O |
| 720 | Statins in COVID-19: Is there any foundation?. 2020 , 32, 278-281 | 1 |
| 719 | SARS-CoV-2 neutralizing antibody levels are correlated with severity of COVID-19 pneumonia. 2020 , 130, 110629 | 32 |
| 718 | Don't sugar coat the COVID (only the vasculature). 2020 , 43, 393-398 | |
| 717 | The Roborovski Dwarf Hamster Is A Highly Susceptible Model for a Rapid and Fatal Course of SARS-CoV-2 Infection. 2020 , 33, 108488 | 40 |
| 716 | Evaluation of SARS-CoV-2 prototype serologic test in hospitalized patients. 2020 , 86, 8-14 | 9 |
| 715 | Liver transplant immunosuppression during the COVID-19 pandemic. 2020 , 43, 457-463 | 1 |
| 714 | Plausible mechanisms explaining the role of cucurbitacins as potential therapeutic drugs against coronavirus 2019. 2020 , 21, 100484 | 6 |
| 713 | Sex-Biased Vulnerability of the Heart to COVID-19. 2020 , 95, 2332-2335 | 9 |
| 712 | Protein-driven mechanism of multiorgan damage in COVID-19. 2020 , 100069 | 6 |
| 711 | Intrinsic disorder perspective of an interplay between the renin-angiotensin-aldosterone system and SARS-CoV-2. 2020 , 85, 104510 | 6 |
| 710 | COVID-19 and the renin-angiotensin system (RAS): A spark that sets the forest alight?. 2020 , 144, 110231 | 27 |
| 709 | Pharmacological Inhibition of Acid Sphingomyelinase Prevents Uptake of SARS-CoV-2 by Epithelial Cells. 2020 , 1, 100142 | 76 |
| 708 | How our specialty can contribute and benefit from COVID-19 research. 2020 , 10, 1274-1275 | |
| 707 | COVID-19, microthromboses, inflammation, and platelet activating factor. 2020 , 46, 927-933 | 25 |

| 706 | Higher COVID-19 risk for patients with cancer. 2020 , 1, 418 | 1 |
|-----|---|----|
| 705 | Genetic architecture of host proteins involved in SARS-CoV-2 infection. 2020 , 11, 6397 | 22 |
| 704 | Interpretation of SARS-CoV-2 behaviour on different substrates and denaturation of virions using ethanol: an atomic force microscopy study 2020 , 10, 44079-44086 | 5 |
| 703 | Host-Viral Interactions Revealed among Shared Transcriptomics Signatures of ARDS and Thrombosis: A Clue into COVID-19 Pathogenesis. 2020 , 4, e403-e412 | 5 |
| 702 | COVID-19;-The origin, genetics,and management of the infection of mothers and babies. 2020 , 7, 371-388 | |
| 701 | Chasing COVID-19 through SARS-CoV-2 spike glycoprotein. 2020 , 31, 1-9 | 7 |
| 700 | Utilizing microbiome approaches to assist source tracking, treatment and prevention of COVID-19: Review and assessment. 2020 , 18, 3615-3622 | 6 |
| 699 | ReninAngiotensinAldosterone System as an Old New Target in Heart Failure Therapy. 2023 , 307-330 | O |
| 698 | Pathogenesis and Mechanisms of SARS-CoV-2 Infection in the Intestine, Liver, and Pancreas. 2023 , 12, 262 | 2 |
| 697 | Use of Hu-PBL Mice to Study Pathogenesis of Human-Restricted Viruses. 2023 , 15, 228 | O |
| 696 | Design of a multi-epitope-based vaccine consisted of immunodominant epitopes of structural proteins of SARS-CoV-2 using immunoinformatics approach. | О |
| 695 | The Complex Interplay between Serum Testosterone and the Clinical Course of Coronavirus Disease 19 Pandemic: A Systematic Review of Clinical and Preclinical Evidence. 41, | O |
| 694 | Establishment of multicenter COVID-19 therapeutics preclinical test system in Republic of Korea. 2023 , 102189 | О |
| 693 | Urokinase System in Pathogenesis of Pulmonary Fibrosis: A Hidden Threat of COVID-19. 2023 , 24, 1382 | O |
| 692 | Optimizing variant-specific therapeutic SARS-CoV-2 decoys using deep-learning-guided molecular dynamics simulations. 2023 , 13, | 1 |
| 691 | Integrated Data Analysis Uncovers New COVID-19 Related Genes and Potential Drug Re-Purposing Candidates. 2023 , 24, 1431 | O |
| 690 | Potential long-term effects of SARS-CoV-2 infection on the pulmonary vasculature: Multilayered cross-talks in the setting of coinfections and comorbidities. 2023 , 19, e1011063 | О |
| 689 | A Heterologous Challenge Rescues the Attenuated Immunogenicity of SARS-CoV-2 Omicron BA.1 Variant in Syrian Hamster Model. | O |

| 688 | Identification of novel antiviral drug candidates using an optimized SARS-CoV-2 phenotypic screening platform. 2023 , 105944 | 2 |
|-----|--|---|
| 687 | Humoral immunity for durable control of SARS-CoV-2 and its variants. 2023 , 43, | O |
| 686 | Biphenyl furanocoumarin compounds inhibit SARS-CoV-2 spike pseudovirus infection by binding ACE2. | О |
| 685 | New insights into the mucosal immune pathogenesis of IgA nephropathy from the perspective of COVID-19 vaccination. | O |
| 684 | Estimated prevalence and trends in smoking among adolescents in South Korea, 2005\(\textbf{Q} 021: a \) nationwide serial study. | O |
| 683 | Teaching vaccine development in schools: Learnings from a survey and curriculum design for a course. 7, | O |
| 682 | Hydroxychloroquine: Chemistry and Medicinal Applications. 2023, 106, | 0 |
| 681 | Regulation of ACE2 isoforms by type 2 inflammation and viral infection in human airway epithelium. 2023 , | O |
| 680 | Endothelial dysfunction in patients with COVID-19 is a key mechanism for the development of complications. 2023 , 19, 37-44 | 0 |
| 679 | TMPRSS2 Is Essential for SARS-CoV-2 Beta and Omicron Infection. 2023 , 15, 271 | 1 |
| 678 | Intensive Care during the COVID-19 Pandemic. 2023 , 11, 125 | 0 |
| 677 | SARS-CoV-2 variant biology: immune escape, transmission and fitness. | 1 |
| 676 | Atemlos nach Corona Dysfunktionale Atmung bei Long Covid. 2023 , 21, 48-52 | 0 |
| 675 | SARS-CoV-2 viral entry and replication is impaired in Cystic Fibrosis airways due to ACE2 downregulation. 2023 , 14, | 2 |
| 674 | 6-Shogaol Exhibits Anti-viral and Anti-inflammatory Activity in COVID-19-Associated Inflammation by Regulating NLRP3 Inflammasomes. 2023 , 8, 2618-2628 | 1 |
| 673 | Post-COVID syndrome. | 1 |
| 672 | A Review on COVID-19: Primary Receptor, Endothelial Dysfunction, Related Comorbidities, and Therapeutics. | 0 |
| 671 | Validation and Establishment of the SARS-CoV-2 Lentivirus Surrogate Neutralization Assay as a Prescreening Tool for the Plaque Reduction Neutralization Test. | O |

(2023-2023)

| 670 | Identification of a short ACE2-derived stapled peptide targeting the SARS-CoV-2 spike protein. 2023 , 115118 | О |
|-----|---|---|
| 669 | Toxicity and therapeutic applications of citrus essential oils (CEOs): a review. 2023, 26, 301-326 | 2 |
| 668 | Acute-on-chronic liver failure in patients with severe acute respiratory syndrome coronavirus 2 infection. 15, 41-51 | 3 |
| 667 | Heart rate variability as an indicator of COVID-19 induced myocardial injury: a retrospective cohort study. 2023 , 23, | Ο |
| 666 | The oral manifestations and related mechanisms of COVID-19 caused by SARS-CoV-2 infection. 16, | О |
| 665 | Acute liver injury in a COVID-19 infected woman with mild symptoms: A case report. 11, 472-478 | O |
| 664 | COVID-19 VaccinesAll You Want to Know. 2023 , 44, 143-172 | 1 |
| 663 | The rapid and highly parallel identification of antibodies with defined biological activities by SLISY. 2023 , 14, | O |
| 662 | Bionics design of affinity peptide inhibitors for SARS-CoV-2 RBD to block SARS-CoV-2 RBD-ACE2 interactions. 2023 , e12890 | О |
| 661 | Cutaneous manifestations of COVID -19 and COVID -19 vaccination. | 1 |
| 660 | Lipopolysaccharide aggravates canine influenza a (H3N2) virus infection and lung damage via mTOR/autophagy in vivo and in vitro. 2023 , 172, 113597 | O |
| 659 | Potential of green tea EGCG in neutralizing SARS-CoV-2 Omicron variant with greater tropism toward the upper respiratory tract. 2023 , 132, 40-53 | 1 |
| 658 | COVID-19: A state of art on immunological responses, mutations, and treatment modalities in riposte. 2023 , 16, 233-249 | O |
| 657 | From Immunogen to COVID-19 vaccines: Prospects for the post-pandemic era. 2023 , 158, 114208 | O |
| 656 | Therapeutic potential of green tea catechin, (-)-epigallocatechin-3-O-gallate (EGCG) in SARS-CoV-2 infection: Major interactions with host/virus proteases. 2023 , 3, 100402 | О |
| 655 | Relationship between the inclusion/exclusion criteria and sample size in randomized controlled trials for SARS-CoV-2 entry inhibitors. 2023 , 561, 111403 | O |
| 654 | SARS-CoV-2 E protein: Pathogenesis and potential therapeutic development. 2023, 159, 114242 | О |
| 653 | Investigating the possible mechanisms of autonomic dysfunction post-COVID-19. 2023 , 245, 103071 | 1 |

| 652 | Stable production of recombinant SARS-CoV-2 receptor-binding domain in mammalian cells with co-expression of a fluorescent reporter and its validation as antigenic target for COVID-19 serology testing. 2023 , 37, e00780 | O |
|-----|--|---|
| 651 | Comparative In-Silico Molecular Docking of Silymarin for SARS-CoV-2 Receptor. 2022 , 2, 58-67 | O |
| 650 | New method of sterilization and disinfection of objects infected with COVID 19 and prototype test. 2022 , 7, 279-292 | O |
| 649 | Omicron. 2023 , 367-413 | O |
| 648 | Profiling ACE2 and TMPRSS2 expression in sinonasal mucosa. 2022 , 8, 020-026 | O |
| 647 | SARS-CoV-2 Main Protease Drug Design, Assay Development, and Drug Resistance Studies. 2023 , 56, 157-168 | 2 |
| 646 | Advances of CRISPR-Cas13 system in COVID-19 diagnosis and treatment. 2022 , | O |
| 645 | Efficacy and safety of Qi and Blood Tonic Chinese Medicines in the treatment of COVID-19: A protocol for systematic review and meta-analysis. 2022 , 101, e32136 | O |
| 644 | S-PDB: Analysis and Classification of SARS-CoV-2 Spike Protein Structures. 2022 , | 0 |
| 643 | Effects of in Utero SARS-CoV-2 Exposure on Newborn Health Outcomes. 2023 , 3, 15-27 | 1 |
| 642 | The Effects of COVID-19 Pandemic and Lockdown on Pediatric Nutritional and Metabolic Diseases: A Narrative Review. 2023 , 15, 88 | 2 |
| 641 | Androgen deprivation therapy and hormonal status in men with COVID-19. 2023 , 10, 141-154 | O |
| 640 | Dual effects of NV-CoV-2 biomimetic polymer: An antiviral regimen against COVID-19. 2022 , 17, e0278963 | 0 |
| 639 | The association of prior paracetamol intake with outcome of very old intensive care patients with COVID-19: results from an international prospective multicentre trial. 2022 , 22, | O |
| 638 | Identification and quantitative analysis of bioactive components from Potentilla kleiniana Wight et Arn with anti HIV-1 proteases activity. 1-4 | O |
| 637 | 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. | O |
| 636 | Right atrial thrombus, junctional tachycardia, and critical lower limb ischemia: three rare complications of severe acute respiratory syndrome coronavirus 2 infection. 583-591 | O |
| 635 | Tissue protective role of Ganetespib in SARS-CoV-2-infected Syrian golden hamsters. | O |

| 634 | Incursions by severe acute respiratory syndrome coronavirus-2 on the host anti-viral immunity during mild, moderate, and severe coronavirus disease 2019 disease. 794-811 | 0 |
|-----|---|---|
| 633 | The role of SARS-CoV-2 nucleocapsid protein in antiviral immunity and vaccine development. | O |
| 632 | Pharmacologic Therapeutics for COVID-19. 2023 , 290-318 | О |
| 631 | In vitro infection of human ocular tissues by SARS-CoV-2 lineage A isolates. 2022 , 22, | O |
| 630 | Efficacy of Bromhexine versus Standard of Care in Reducing Viral Load in Patients with Mild-to-Moderate COVID-19 Disease Attended in Primary Care: A Randomized Open-Label Trial. 2023 , 12, 142 | 0 |
| 629 | Multiformin-Type Azaphilones Prevent SARS-CoV-2 Binding to ACE2 Receptor. 2023 , 12, 83 | O |
| 628 | COVID-19: Risk Stratification. 2023 , 149-164 | 0 |
| 627 | Potential Inhibitors of SARS-CoV-2 Main Protease (Mpro) Identified from the Library of FDA-Approved Drugs Using Molecular Docking Studies. 2023 , 11, 85 | О |
| 626 | A second update on mapping the human genetic architecture of COVID-19. | О |
| 625 | Previous infection with SARS-CoV-2 impacts embryo morphokinetics but not clinical outcomes în a time-lapse imaging system. | O |
| 624 | Associations between Periodontitis, COVID-19, and Cardiometabolic Complications: Molecular Mechanisms and Clinical Evidence. 2023 , 13, 40 | O |
| 623 | COVID-19: Inpatient Management. 2023 , 182-232 | O |
| 622 | Analysis of Antibody Neutralisation Activity against SARS-CoV-2 Variants and Seasonal Human Coronaviruses NL63, HKU1, and 229E Induced by Three Different COVID-19 Vaccine Platforms. 2023 , 11, 58 | O |
| 621 | The Cold-Adapted, Temperature-Sensitive SARS-CoV-2 Strain TS11 Is Attenuated in Syrian Hamsters and a Candidate Attenuated Vaccine. 2023 , 15, 95 | O |
| 620 | Unglycosylated Soluble SARS-CoV-2 Receptor Binding Domain (RBD) Produced in E. coli Combined with the Army Liposomal Formulation Containing QS21 (ALFQ) Elicits Neutralizing Antibodies against Mismatched Variants. 2023 , 11, 42 | 0 |
| 619 | An immobilization-based, loop-mediated isothermal amplification device for nucleic acid detection of SARS-CoV-2 N gene. 2022 , 36, 838-847 | О |
| 618 | Emerging Dominant SARS-CoV-2 Variants. 2023 , 63, 335-342 | 5 |
| 617 | Effectiveness of Sotrovimab in the Omicron Storm Time: A Case Series. 2023 , 15, 102 | 0 |

| 616 | Severe SARS-CoV-2 Infection With Multiorgan Involvement Followed by MIS-C in an Adolescent. 2022 , 29, 155 | О |
|-----|--|---|
| 615 | Effect of physical activity on COVID-19 and underlying mechanisms. 2, | O |
| 614 | Spike substitution T813S increases Sarbecovirus fusogenicity by enhancing the usage of TMPRSS2. | О |
| 613 | Thorectidiol A Isolated from the Marine Sponge Dactylospongia elegans Disrupts Interactions of the SARS-CoV-2 Spike Receptor Binding Domain with the Host ACE2 Receptor. | O |
| 612 | Exploring the Role of Immune System and Inflammatory Cytokines in SARS-CoV-2 Induced Lung Disease: A Narrative Review. 2023 , 12, 177 | О |
| 611 | Pulmonary fibrosis: A short- or long-term sequelae of severe COVID-19?. 2023 , | O |
| 610 | Defining neutralization and allostery by antibodies against COVID-19 variants. | O |
| 609 | Blood-brain barrier disruption in Long COVID-associated cognitive impairment. | O |
| 608 | 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 | O |
| 607 | Assessment of the Prevalence and Incidence of COVID-19 in Saudi Arabia. Volume 16, 227-236 | O |
| 606 | Links between COVID-19 and Parkinson disease/Alzheimer disease: reciprocal impacts, medical care strategies and underlying mechanisms. 2023 , 12, | 1 |
| 605 | Coronavirus disease 2019 and severe asthma. Publish Ahead of Print, | O |
| 604 | Viral infection and its management. 2023 , 189-207 | O |
| 603 | Molecular Epidemiology of SARS-CoV-2: The Dominant Role of Arginine in Mutations and Infectivity. 2023 , 15, 309 | O |
| 602 | Safety, Biodistribution, and Dosimetry Study of Meplazumab, a Potential COVID-19 Therapeutic Drug, with 131I-Labeling and SPECT Imaging. | 0 |
| 601 | COVID-19, Obesity and Bariatric Surgery. 2023 , 1463-1473 | O |
| 600 | Genetic predisposition to COVID-19 and post-COVID syndrome. 2023 , 173-184 | 0 |
| 599 | Coronavirus infection in chemosensory cells. | O |

| 598 | Innate immune responses in COVID-19. 2023 , 63-128 | О |
|-----|---|---|
| 597 | COVID-19 phenomics. 2023 , 191-218 | O |
| 596 | In-silicoAnalysis of SARS-Cov2 Spike Proteins of Different Field Variants. | 0 |
| 595 | Transmissible Gastroenteritis Virus: An Update Review and Perspective. 2023 , 15, 359 | 2 |
| 594 | Ocular Symptoms Associated with COVID-19 Are Correlated with the Expression Profile of Mouse SARS-CoV-2 Binding Sites. 2023 , 15, 354 | O |
| 593 | Sex and ABO Blood Differences in SARS-CoV-2 Infection Susceptibility. 2023 , 10, 22-26 | O |
| 592 | Altered host protease determinants for SARS-CoV-2 Omicron. 2023 , 9, | O |
| 591 | A hepatitis B virus core antigen-based virus-like particle vaccine expressing SARS-CoV-2 B and T cell epitopes induces epitope-specific humoral and cell-mediated immune responses but confers limited protection against SARS-CoV-2 infection. 2023 , 95, | O |
| 590 | Early administration of SARS-CoV-2 monoclonal antibody reduces the risk of mortality in hematologic malignancy and hematopoietic cell transplant patients with COVID-19. | О |
| 589 | The Potential of Nanobodies for COVID-19 Diagnostics and Therapeutics. | O |
| 588 | Blood pH and COVID-19. | O |
| 587 | A Spike-destructing human antibody effectively neutralizes Omicron-included SARS-CoV-2 variants with therapeutic efficacy. 2023 , 19, e1011085 | O |
| 586 | A retrospective study on prevalence and profile of reverse transcriptase polymerase chain reaction positive severe acute respiratory syndrome corona virus 2 samples tested in a tertiary care hospital, South India. 2023 , 0 | О |
| 585 | Dissecting Platelet Role in Viral Infection: A Double-Edged Effector of the Immune System. 2023 , 24, 2009 | O |
| 584 | SARS-CoV-2 Possible Etiology of Cerebral Venous Thrombosis in a Teenager: Case Report and Review of Literature. 2023 , 15, 405 | O |
| 583 | Transcriptomic approaches in COVID-19: From infection to vaccines. 2023 , 125-144 | O |
| 582 | miRNAomics in COVID-19. 2023 , 145-160 | O |
| 581 | Peptide-based inhibitors hold great promise as the broad-spectrum agents against coronavirus. 13, | O |

| 580 | The gastrointestinal tract is the gate of entrance for COVID-19. 2023 , 152-156 | 0 |
|-----|--|---|
| 579 | Strong Association Between Angiotensin-Converting Enzyme Gene InDel Polymorphism and COVID-19 Diseases. 2023 , | O |
| 578 | Revealing the Molecular Interactions between Human ACE2 and the Receptor Binding Domain of the SARS-CoV-2 Wild-Type, Alpha and Delta Variants. 2023 , 24, 2517 | 1 |
| 577 | A Bibliometric Visualization Analysis on Vaccine Development of Coronavirus Disease 2019 (COVID-19). 2023 , 11, 295 | O |
| 576 | A Case of Acute Severe Ulcerative Colitis Triggered by COVID-19 Infection. 2023, | 0 |
| 575 | Targeting RNA G-quadruplex with repurposed drugs blocks SARS-CoV-2 entry. 2023 , 19, e1011131 | 1 |
| 574 | Epitope-directed anti-SARS-CoV -2 scFv engineered against the key spike protein region could block membrane fusion. | 0 |
| 573 | Atherosclerosis, Cardiovascular Disorders and COVID-19: Comorbid Pathogenesis. 2023 , 13, 478 | 2 |
| 572 | SARS-CoV-2 Establishes a Productive Infection in Hepatoma and Glioblastoma Multiforme Cell Lines. 2023 , 15, 632 | 1 |
| 571 | Antiviral effects and tissue exposure of tetrandrine against SARS-CoV-2 infection and COVID-19. 2023 , 4, | O |
| 570 | Nuclear translocation of spike mRNA and protein is a novel feature of SARS-CoV-2. 14, | 0 |
| 569 | COVID-19 and atrial fibrillation: Intercepting lines. 10, | o |
| 568 | A Supine Position and Dual-Dose Applications Enhance Spray Dosing to the Posterior Nose: Paving the Way for Mucosal Immunization. 2023 , 15, 359 | О |
| 567 | Highlights in TMPRSS2 inhibition mechanism with guanidine derivatives approved drugs for COVID-19 treatment. 1-15 | O |
| 566 | Therapeutic and vaccine-induced cross-reactive antibodies with effector function against emerging Omicron variants. | 0 |
| 565 | Menstrual Irregularities Post-COVID-19 Infection/Vaccination in Indian Population. 2023 , 14, 694-699 | O |
| 564 | SARS-CoV-2-free residual proteins mediated phenotypic and metabolic changes in peripheral blood monocytic-derived macrophages in support of viral pathogenesis. 2023 , 18, e0280592 | О |
| 563 | Epigenetic modifications and regulation in infection. 2023 , 181-209 | O |

| 562 | SARS-CoV-2 spike and ACE2 entanglement-like binding. 2023 , 5, | O |
|-----|---|---|
| 561 | Interaction of copper potential metallodrugs with TMPRSS2: A comparative study of docking tools and its implications on COVID-19. 11, | Ο |
| 560 | COVID-19: Diabetes Perspective Pathophysiology and Management. 2023, 12, 184 | 1 |
| 559 | COVID-19 in childhood and phenotypes of pediatric inflammatory multisystem syndrome. 2023 , 91-100 | O |
| 558 | Gut microbiome and COVID-19. 2023 , 263-277 | 0 |
| 557 | Alpha to Omicron (Variants of Concern): Mutation Journey, Vaccines, and Therapy. | O |
| 556 | Bromhexine: Into the spotlight. 2023 , 719-731 | Ο |
| 555 | Dietary factors influencing the COVID-19 epidemic process. 2023 , 15, 463-471 | 0 |
| 554 | Effects of previous exposure to different medications on the clinical course of COVID-19 patients in Istanbul, Turkey. 2023 , 7, 79-85 | 0 |
| 553 | Modulation of NBAS-Related Functions in the Early Response to SARS-CoV-2 Infection. 2023 , 24, 2634 | Ο |
| 552 | An Overview of Fluvoxamine and its Use in SARS-CoV-2 Treatment. 2023 , | 0 |
| 551 | Highlights on molecular targets in the management of COVID-19: Possible role of pharmacogenomics. 2023 , 51, 030006052311537 | O |
| 550 | Vitamin D and estrogen steroid hormones and their immunogenetic roles in Infectious respiratory (TB and COVID-19) diseases. 2023 , 46, | 0 |
| 549 | Omics approaches in COVID-19: An overview. 2023 , 3-21 | O |
| 548 | Impacts of viral pathogenesis and vaccine immunization on the host humoral immune response in SARS-CoV-2 and associated variants of concern (VOCs) infection. 2023 , 237-262 | 0 |
| 547 | Semen parameters and male reproductive potential are not adversely affected after three or more months of recovery from COVID-19 disease. 4, | O |
| 546 | SARS-CoV-2 variant-related abnormalities detected by prenatal MRI: a prospective caseflontrol study. 2023 , 100587 | О |
| 545 | Novel coronavirus infection and pregnancy: features of the course of gestation and the possibility of predicting the progression of COVID-19 severity in pregnant women. 2023 , 23, 30 | Ο |

| 544 | Crohn disease and COVID-19: points of contact. 2023 , 242-246 | О |
|-----|---|---|
| 543 | Unveiling the prevalence and impact of diabetes on COVID-19. 2023 , 287-301 | О |
| 542 | Targeting TLR-4 Signaling to Treat COVID-19-induced Acute Kidney Injury. 0976500X2211477 | О |
| 541 | Applications of genetic engineering in COVID-19. 2023 , 219-237 | O |
| 540 | Comparison of COVID-19 Outcomes With Alpha-1 Antitrypsin Deficiency Prevalence in Europe: A Cross-Sectional Study. 2023 , | О |
| 539 | Impact of COVID-19 vaccination in post-COVID cardiac complications. 2023, | O |
| 538 | The OM-85 bacterial lysate: A new tool against SARS-CoV-2?. 18, | O |
| 537 | Survival-based CRISPR genetic screens across a panel of permissive cell lines identify common and cell-specific SARS-CoV-2 host factors. 2023 , 9, e12744 | O |
| 536 | Effect of continuing the use of renin Ingiotensin system inhibitors on mortality in patients hospitalized for coronavirus disease 2019: a systematic review, meta-analysis, and meta-regression analysis. 2023 , 23, | 1 |
| 535 | Prognostic biomarkers for cardiovascular injury in patients with COVID-19: a review. 2023 , 13, 14-23 | O |
| 534 | The effect of COVID-19 on patients with preexisting autoimmune diseases. 2023 , 495-528 | 0 |
| 533 | Effect of polymorphism in Rhinolophus affinis ACE2 on entry of SARS-CoV-2 related bat coronaviruses. 2023 , 19, e1011116 | О |
| 532 | Therapeutic Repurposing Approach: New Opportunity for Developing Drugs Against COVID-19. 2023 , 543-568 | О |
| 531 | In silico disease modeling for COVID-19. 2023 , 291-299 | О |
| 530 | Currently available COVID-19 management options. 2023 , 111-124 | О |
| 529 | Sex and diet, but not exercise, alter cardiovascular ACE2 and TMPRSS2 mRNA levels in aortic banded swine. | О |
| 528 | Role of natural products in infectious diseases. 2023 , 757-770 | 0 |
| 527 | Agent-based modeling and phylogenetic analysis suggests that COVID-19 will remain a low-severity albeit highly transmissible disease. | O |

| 526 | Higher Angiotensin I Converting Enzyme 2 (ACE2) levels in the brain of individuals with Alzheimer disease. | O |
|-----|--|---|
| 525 | Epididymitis, orchitis, and epididymo-orchitis associated with SARS-CoV-2 infection in pediatric patients: A systematic review. 2, | O |
| 524 | Convergent Evolution Dynamics of SARS-CoV-2 and HIV Surface Envelope Glycoproteins Driven by Host Cell Surface Receptors and Lipid Rafts: Lessons for the Future. 2023 , 24, 1923 | Ο |
| 523 | A Systematic Survey of Reversibly Covalent Dipeptidyl Inhibitors of the SARS-CoV-2 Main Protease. | O |
| 522 | An emerging natural antioxidant therapy for COVID-19 infection patients: Current and future directions. | 0 |
| 521 | Risk of COVID-19 Diagnosis and Hospitalisation in Patients with Osteoarthritis or Back Pain Treated with Ibuprofen Compared to Other NSAIDs or Paracetamol: A Network Cohort Study. | Ο |
| 520 | Innate immune recognition against SARS-CoV-2. 2023 , 43, | 1 |
| 519 | Solanum nigrum L. in COVID-19 and post-COVID complications: a propitious candidate. | Ο |
| 518 | Botanical inhibitors of SARS-CoV-2 viral entry: a phylogenetic perspective. 2023 , 13, | 0 |
| 517 | Evaluating the Adverse Events Associated with Three Doses of the COVID-19 Vaccination in Adults in the Western Region of Saudi Arabia: A Cross-Sectional Study. 2023 , 11, 266 | Ο |
| 516 | Coronaviruses use ACE2 monomers as entry receptors. | 0 |
| 515 | Role of vitamin D in modulating the immune response to SARS-CoV-2 and other coronavirus infections. 2023 , 26, 95 | O |
| 514 | Comprehensive analysis of SARS-CoV -2 receptor proteins in human respiratory tissues identifies alveolar macrophages as potential virus entry site. | 0 |
| 513 | COVID-19 in Older Adults. 2023 , 1-19 | O |
| 512 | Enzymatic approaches against SARS-CoV-2 infection with an emphasis on the telomere-associated enzymes. | 0 |
| 511 | Type 2 Immunity and Its Impact on COVID-19 Infection in the Airways. 2023 , 15, 402 | O |
| 510 | Alterations in Gut Microbiota Composition in Patients with COVID-19: A Pilot Study of Whole Hypervariable 16S rRNA Gene Sequencing. 2023 , 11, 367 | 1 |
| 509 | The lung employs an intrinsic surfactant-mediated inflammatory response for viral defense. | O |

| 508 | Association of SARS-CoV-2 viral load with biochemical profile of COVID-19 patients: A nigerian experience. 2023 , 26, 109 | O |
|-----|--|---|
| 507 | Hospitalizations and deaths of children and adolescents with Severe Acute Respiratory Infection due to COVID-19 during the epidemiological year of 2020. 65, | O |
| 506 | Viral Invasion Flow-Chart for Pathogens With Replication Target in a Host Cell. 2023, 33-53 | O |
| 505 | The D405N Mutation in the Spike Protein of SARS-CoV-2 Omicron BA.5 Inhibits Spike/Integrins Interaction and Viral Infection of Human Lung Microvascular Endothelial Cells. 2023 , 15, 332 | O |
| 504 | Viruses and Endocrine Diseases. 2023 , 11, 361 | O |
| 503 | Safety and efficacy of glucocorticoids in the treatment of COVID-19: A meta-analysis of randomized control trials. | O |
| 502 | Association of combustible cigarettes and heated tobacco products use with SARS-CoV-2 infection and severe COVID-19 in Japan: a JASTIS 2022 cross-sectional study. 2023 , 13, | O |
| 501 | Semen quality changes during infection and recovery phases of mild-to-moderate COVID-19 in reproductive-aged patients: a prospective case series. 2023 , 33, | O |
| 500 | A review article on neuroprotective, immunomodulatory, and anti-inflammatory role of vitamin-D3 in elderly COVID-19 patients. 2023 , 59, | О |
| 499 | SARS-CoV-2 Omicron (B.1.1.529) Variant: A Challenge with COVID-19. 2023 , 13, 559 | 1 |
| 498 | Tissue distribution of angiotensin-converting enzyme 2 (ACE2) receptor in wild animals with a focus on artiodactyls, mustelids and phocids. 2023 , 16, 100492 | О |
| 497 | The role of spike protein entry inhibitors in the treatment of mild-to-moderate covid-19 in nonhospitalized patients. 2022 , 9, 52-59 | O |
| 496 | Trend and Co-occurrence Network of COVID-19 Symptoms From Large-Scale Social Media Data: Infoveillance Study (Preprint). | О |
| 495 | Therapeutic Potential of Nitric Oxide in the Management of COVID-19 Induced Acute Respiratory Distress Syndrome (ARDS). 2023 , 249-258 | O |
| 494 | Predictive analytics of genetic variation in the COVID-19 genome sequence: a data science perspective. 2023 , 229-247 | О |
| 493 | Antimalarials and macrolides: a review of off-label pharmacotherapies during the first wave of the SARS-CoV-2 pandemic. 59, | O |
| 492 | Cellular mechanisms of transcriptional regulation of human cell lines exposed to cadmium-based quantum dots. 2023 , 10, 1177-1189 | О |
| 491 | Dimerized fusion inhibitor peptides targeting the HR1HR2 interaction of SARS-CoV-2. 2023 , 13, 8779-8793 | O |

| 490 | Virtual Screening for SARS-COV-2 Entry Inhibitors by Dual Targeting of TMPRSS2 and CTSL. 2023 , 14, 9-18 | O |
|-----|--|---|
| 489 | Study immunity and genetic in Covid 19. 2023 , | O |
| 488 | Angiotensin in the gut. 2023 , 669-679 | O |
| 487 | Immune Factors Drive Expression of SARS-CoV-2 Receptor Genes Amid Sexual Disparity. 2023 , 15, 657 | O |
| 486 | ACE2 in pulmonary diseases. 2023, 285-316 | Ο |
| 485 | Morphological aspect of the angiotensin-converting enzyme 2. 2023 , 389-417 | O |
| 484 | Angiotensin and COVID-19. 2023 , 473-489 | О |
| 483 | Prospective role of NSAIDs with antiviral properties for pharmacological management of postsurgical procedures during COVID-19. 2023 , 109, 109-111 | O |
| 482 | Mechanisms of SARS-CoV-2 Inactivation using UVC Laser Radiation. | О |
| 481 | Chronic alcohol consumption and COVID -19 infection risk: A narrative review. | O |
| 480 | SARS-CoV-2 nucleocapsid: Biological functions and implication for disease diagnosis and vaccine design. | 2 |
| 479 | STING Agonist-Derived LNP-mRNA Vaccine Enhances Protective Immunity Against SARS-CoV-2. 2023 , 23, 2593-2600 | O |
| 478 | Diversity of immune responses in children highly exposed to SARS-CoV-2. 14, | О |
| 477 | SARS-CoV-2 Spike protein induces TLR4-mediated long-term cognitive dysfunction recapitulating post-COVID-19 syndrome in mice. 2023 , 42, 112189 | O |
| 476 | Identification of the regulatory mechanism of ACE2 in COVID-19Induced kidney damage with systems genetics approach. 2023 , 101, 449-460 | О |
| 475 | CuMV VLPs Containing the RBM from SARS-CoV-2 Spike Protein Drive Dendritic Cell Activation and Th1 Polarization. 2023 , 15, 825 | O |
| 474 | Genome-scale CRISPR-Cas9 screen identifies novel host factors as potential therapeutic targets for SARS-CoV-2 infection. | О |
| 473 | Modelling the viral dynamics of the SARS-CoV-2 Delta and Omicron variants in different cell types. | O |

| 472 | Molecular recognition of SARS-CoV-2 spike protein with three essential partners: exploring possible immune escape mechanisms of viral mutants. 2023 , 29, | O |
|-----|---|---|
| 471 | THE EFFECT OF THE PRESENCE OF FRAGMENTED QRS IN THE ECG ON THE LENGTH OF STAY IN INTENSIVE CARE UNIT AND MORTALITY IN INTENSIVE CARE COVID-19 PATIENTS. 2023 , 24, 201-205 | O |
| 470 | New insights into how popular electronic cigarette aerosols and aerosol constituents affect SARS-CoV-2 infection of human bronchial epithelial cells. 2023 , 13, | O |
| 469 | Microbiota-derived short chain fatty acids: Their role and mechanisms in viral infections. 2023 , 160, 114414 | О |
| 468 | Endogenous IFITMs boost SARS-coronavirus 1 and 2 replication whereas overexpression inhibits infection by relocalizing ACE2. 2023 , 26, 106395 | О |
| 467 | Structural and Physiological Changes of the Kidney with Age and its Impact on Chronic Conditions and COVID-19. 2023 , 101932 | O |
| 466 | nanoCLAMP potently neutralizes SARS-CoV-2 and protects K18-hACE2 mice from infection. | 0 |
| 465 | Dong COVID-19Dand viral fibromyalgia-nessDSuggesting a mechanistic role for fascial myofibroblasts (Nineveh, the shadow is in the fascia). 10, | О |
| 464 | Identifying environmental risk factors for post-acute sequelae of SARS-CoV-2 infection: An EHR-based cohort study from the recover program. 2023 , 11, 100352 | 0 |
| 463 | 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. | О |
| 462 | Convalescent plasma (hyperimmune immunoglobulin) for COVID-19 management: An update. 2023 , 127, 66-81 | О |
| 461 | Explanatory predictive model for COVID-19 severity risk employing machine learning, shapley addition, and LIME. 2023 , 13, | O |
| 460 | Intranasal soluble ACE2 improves survival and prevents brain SARS-CoV-2 infection. 2023, 6, e202301969 | О |
| 459 | Aged brain and neuroimmune responses to COVID-19: post-acute sequelae and modulatory effects of behavioral and nutritional interventions. 2023 , 20, | O |
| 458 | Seroprevalence of SARS-CoV-2 in hospital workers in the southern region of Minas Gerais state in Brazil: An analysis of the pre-vaccine period. | О |
| 457 | SARS-CoV-2 Related Antibody-Dependent Enhancement Phenomena In Vitro and In Vivo. 2023 , 11, 1015 | О |
| 456 | Risk of Thrombosis during and after a SARS-CoV-2 Infection: Pathogenesis, Diagnostic Approach, and Management. 2023 , 15, 225-243 | О |
| 455 | Veklury (remdesivir) formulations inhibit initial membrane-coupled events of SARS-CoV-2 infection due to their sulfobutylether-Etyclodextrin content. | О |

| 454 | Adipokines in obesity and metabolic-related-diseases. 2023, | O |
|-----|---|---|
| 453 | Density estimation of SARS-CoV2 spike proteins using super pixels segmentation technique. 2023 , 138, 110210 | O |
| 452 | Is intestinal transport dysfunctional in COVID-19-related diarrhea?. 2023 , 324, G415-G418 | О |
| 451 | Cellular electrical impedance to profile SARS-CoV-2 fusion inhibitors and to assess the fusogenic potential of spike mutants. 2023 , 213, 105587 | O |
| 450 | Inflammasome genes polymorphisms are associated with progression to mechanical ventilation and death in a cohort of hospitalized COVID-19 patients in a reference hospital in Rio de Janeiro, Brazil. 2023 , 865, 147325 | О |
| 449 | The multiple roles of nsp6 in the molecular pathogenesis of SARS-CoV-2. 2023 , 213, 105590 | O |
| 448 | Burgeoning therapeutic strategies to curb the contemporary surging viral infections. 2023 , 179, 106088 | 0 |
| 447 | FDA approved drugs with antiviral activity against SARS-CoV-2: From structure-based repurposing to host-specific mechanisms. 2023 , 162, 114614 | О |
| 446 | Potential treatments of COVID-19: Drug repurposing and therapeutic interventions. 2023, 152, 1-21 | 0 |
| 445 | In SARS-CoV-2 delta variants, Spike-P681R and D950N promote membrane fusion, Spike-P681R enhances spike cleavage, but neither substitution affects pathogenicity in hamsters. 2023 , 91, 104561 | О |
| 444 | Genetic susceptibility to severe COVID-19. 2023 , 110, 105426 | О |
| 443 | The role of Ca2+ signalling in the pathology of exocrine pancreas. 2023 , 112, 102740 | Ο |
| 442 | Neutralization of the new coronavirus by extracting their spikes using engineered liposomes. 2023 , 50, 102674 | 0 |
| 441 | Molecularly imprinted miniature electrochemical biosensor for SARS-CoV-2 spike protein based on Au nanoparticles and reduced graphene oxide modified acupuncture needle. 2023 , 151, 108375 | 2 |
| 440 | Development of SARS-CoV-2 neutralizing antibody detection assay by using recombinant plant-produced proteins. 2023 , 38, e00796 | 0 |
| 439 | Chromatographic impurity profile assessment of dual action binary combination: Ecological analysis with comparative statistics. 2023 , 33, 101075 | O |
| 438 | COVID-19 therapeutics: Small-molecule drug development targeting SARS-CoV-2 main protease. 2023 , 28, 103579 | 0 |
| 437 | A systematic review on immunity functionalities and nutritional food recommendations to develop immunity against viral infection. 2023 , 3, 100291 | O |

| 436 | Development and applications of mRNA treatment based on lipid nanoparticles. 2023, 65, 108130 | O |
|-----|--|---|
| 435 | Metallo-antiviral aspirants: Answer to the upcoming virus outbreak. 2023 , 8, 100104 | O |
| 434 | The severity of COVID-19 in hypertensive patients is associated with mirSNPs in the 3? UTR of ACE2 that associate with miR-3658: In silico and in vitro studies. 2023 , 18, 1030-1047 | 0 |
| 433 | Decoding the bidirectional relationship between gut microbiota and COVID-19. 2023 , 9, e13801 | O |
| 432 | Platelet IbB integrin binds to SARS-CoV-2 spike protein of alpha strain but not wild type and omicron strains. 2023 , 657, 80-85 | О |
| 431 | Applications of deep learning in single-cell analysis. | O |
| 430 | ANALYSIS OF CLINICAL AND FUNCTIONAL INDICES OF CARDIOVASCULAR SYSTEM IN POST-COVID-19 EMERGENCY WORKERS OF THE CHORNOBYL ACCIDENT. 2022 , 27, 290-306 | 0 |
| 429 | Interaction of Anti-COVID-19 Drugs with Cardiovascular Therapy. 2022 , 255-261 | O |
| 428 | Cryo-EM reveals binding of linoleic acid to SARS-CoV-2 spike glycoprotein, suggesting an antiviral treatment strategy. 2023 , 79, 111-121 | 1 |
| 427 | Electrical biosensing system utilizing ion-producing enzymes conjugated with aptamers for the sensing of severe acute respiratory syndrome coronavirus 2. 2023 , 39, 100549 | 1 |
| 426 | Spatial shifting of COVID-19 clusters and disease association with environmental parameters in India: A time series analysis. 2023 , 222, 115288 | 0 |
| 425 | Broadly neutralizing aptamers to SARS-CoV-2: A diverse panel of modified DNA antiviral agents. 2023 , 31, 370-382 | O |
| 424 | The Need for Speed and Efficiency: A Brief Review of Small Molecule Antivirals for COVID-19. 2, | 0 |
| 423 | Thymus vulgaris, a natural pharmacy against COVID-19: A molecular review. 2023 , 38, 100635 | 1 |
| 422 | The development of COVID-19 treatment. 14, | 2 |
| 421 | Drug delivery as a sustainable avenue to future therapies. 2023 , 354, 746-754 | O |
| 420 | The Role of the Plasminogen/Plasmin System in Inflammation of the Oral Cavity. 2023, 12, 445 | O |
| 419 | Intramuscular mRNA BNT162b2 vaccine against SARS-CoV-2 induces neutralizing salivary IgA. 13, | O |

| 418 | Role of Sex and Age in Fatal Outcomes of COVID-19: Women and Older Centenarians Are More Resilient. 2023 , 24, 2638 | О |
|-----|--|---|
| 417 | Epigenetic Targets and Pathways Linked to SARS-CoV-2 Infection and Pathology. 2023, 11, 341 | O |
| 416 | Hydrocephalus As Possible Prodromal Manifestation of COVID-19: A Report of Two Cases. 2023, | 0 |
| 415 | Insight into SARS-CoV-2 Omicron variant immune escape possibility and variant independent potential therapeutic opportunities. 2023 , 9, e13285 | O |
| 414 | SARS-CoV-2 Spike Protein Post-Translational Modification Landscape and Its Impact on Protein Structure and Function via Computational Prediction. 2023 , 6, | 0 |
| 413 | Susceptibility of domestic and companion animals to SARS-CoV-2: a comprehensive review. 2023 , 55, | O |
| 412 | Mucociliary Clearance Augmenting Drugs Block SARS-Cov-2 Replication in Human Airway Epithelial Cells. | О |
| 411 | Structural prediction of chimeric immunogens to elicit targeted antibodies against betacoronaviruses. | О |
| 410 | Chronological changes of viral shedding in adult inpatients with Omicron infection in Shanghai, China. 14, | О |
| 409 | Exploring the Protective Effect of Food Drugs against Viral Diseases: Interaction of Functional Food Ingredients and SARS-CoV-2, Influenza Virus, and HSV. 2023 , 13, 402 | 3 |
| 408 | Differential haplotype expression in class I MHC genes during SARS-CoV-2 infection of human lung cell lines. 13, | О |
| 407 | Quantitative profiling of N-glycosylation of SARS-CoV-2 spike protein variants. 2023 , 33, 188-202 | O |
| 406 | High-depth sequencing characterization of viral dynamics across tissues in fatal COVID-19 reveals compartmentalized infection. 2023 , 14, | О |
| 405 | Mouse-Adapted SARS-CoV-2 MA10 Strain Displays Differential Pulmonary Tropism and Accelerated Viral Replication, Neurodissemination, and Pulmonary Host Responses in K18-hACE2 Mice. 2023 , 8, | О |
| 404 | Angiotensin-converting enzyme 2日t the heart of the COVID-19 pandemic. 2023 , 186, 906-922 | О |
| 403 | Liver injury associated with the severity of COVID-19: A meta-analysis. 11, | О |
| 402 | Interactions between Humans and Dogs during the COVID-19 Pandemic: Recent Updates and Future Perspectives. 2023 , 13, 524 | О |
| 401 | Inhibiting the Deubiquitinase UCHL1 Reduces SARS-CoV-2 Viral Uptake by ACE2. | O |

| 400 | Angiotensin II increases respiratory rhythmic activity in the preBEzinger complex without inducing astroglial calcium signaling. 17, | 0 |
|-----|---|---|
| 399 | Thyroid storm in a pregnant woman with COVID-19 infection: A case report and review of literatures. 11, 888-895 | Ο |
| 398 | Periodontitis and COVID-19: Immunological Characteristics, Related Pathways, and Association. 2023 , 24, 3012 | 0 |
| 397 | Co-infection associated with SARS-CoV-2 and their management. 2022 , 8, | 2 |
| 396 | Urological complications of COVID-19: a systematic review. 2023 , 49, 24-40 | 0 |
| 395 | Repurposing of US-FDA approved drugs against SARS-CoV-2 main protease (Mpro) by using STD-NMR spectroscopy, in silico studies and antiviral assays. 2023 , 234, 123540 | Ο |
| 394 | LRRC15 mediates an accessory interaction with the SARS-CoV-2 spike protein. 2023 , 21, e3001959 | 1 |
| 393 | Vitamin D Deficiency: An Underestimated Factor in Sepsis?. 2023 , 24, 2924 | Ο |
| 392 | Specialized pro-resolving lipid mediators regulate inflammatory macrophages: A paradigm shift from antibiotics to immunotherapy for mitigating COVID-19 pandemic. 10, | 0 |
| 391 | Nucleolin mediates SARS-CoV-2 replication and viral-induced apoptosis of host cells. 2023 , 211, 105550 | Ο |
| 390 | Comparison of truncated human angiotensin-converting enzyme 2 (hACE2) expression in pET28a(+) versus pET-SUMO vector and two Escherichia coli strains. 2023 , 68, 61-70 | 0 |
| 389 | Appearance of extrapyramidal symptoms in adolescent psychiatry patients during COVID-19 infection. 2023 , 95, | O |
| 388 | Green synthesis, Single-Crystal X-RD, Hirshfeld Analysis and Anti-Covid-19 Molecular Docking Investigation of Symmetrical Azines. 2023 , 8, | 0 |
| 387 | A Competitive Panning Method Reveals an Anti-SARS-CoV-2 Nanobody Specific for an RBD-ACE2 Binding Site. 2023 , 11, 371 | O |
| 386 | Recombinant Protein Vaccines Formulated with Enantio-Specific Cationic Lipid R-DOTAP Induce Protective Cellular and Antibody-Mediated Immune Responses in Mice. 2023 , 15, 432 | 0 |
| 385 | Cell-autonomous requirement for ACE2 across organs in lethal mouse SARS-CoV-2 infection. 2023 , 21, e3001989 | O |
| 384 | Computational design of candidate multi-epitope vaccine against SARS-CoV-2 targeting structural (S and N) and non-structural (NSP3 and NSP12) proteins. 1-20 | O |
| 383 | SARS-CoV-2 infection of intestinal epithelia cells sensed by RIG-I and DHX-15 evokes innate immune response and immune cross-talk. 12, | O |

| 382 | Exploring the potential mechanisms of impairment on genitourinary system associated with coronavirus disease 2019 infection: Bioinformatics and molecular simulation analyses. 2023 , | 0 |
|-----|--|---|
| 381 | Impact of omalizumab therapy on the course of COVID-19 in a patient with severe asthma: A case report. 1-5 | O |
| 380 | A Protein Co-Conservation Network Model Characterizes Mutation Effects on SARS-CoV-2 Spike Protein. 2023 , 24, 3255 | О |
| 379 | A Monoclonal Human Alveolar Epithelial Cell Line (Arlonwith Pronounced Barrier Function for Studying Drug Permeability and Viral Infections. 2023 , 10, | O |
| 378 | Bacillus subtilis spores displaying RBD domain of SARS-CoV-2 spike protein. 2023, 21, 1550-1556 | О |
| 377 | Protease-Responsive Potential-Tunable AIEgens for Cell Selective Imaging of TMPRSS2 and Accurate Inhibitor Screening. 2023 , 95, 3789-3798 | O |
| 376 | Potential antiviral effects of pantethine against SARS-CoV-2. 2023 , 13, | О |
| 375 | Apalutamide Prevents SARS-CoV-2 Infection in Lung Epithelial Cells and in Human Nasal Epithelial Cells. 2023 , 24, 3288 | O |
| 374 | In silico analysis reveals hypoxia-induced miR-210-3p specifically targets SARS-CoV-2 RNA. 1-23 | О |
| 373 | Ferritin and procalcitonin in COVID-19 associated acute kidney injury Igender disparities, but similar outcomes. 2023 , 31, 35-42 | O |
| 372 | SARS-CoV-2 infection of kidney tissues from severe COVID-19 patients. 2023 , 95, | 1 |
| 371 | Autoimmunity, COVID-19 Omicron Variant, and Olfactory Dysfunction: A Literature Review. 2023 , 13, 641 | O |
| 370 | Androgen receptor, a possible anti-infective therapy target and a potent immune respondent in SARS-CoV-2 spike binding: a computational approach. 2023 , 21, 317-327 | 1 |
| 369 | Relationship between severe acute respiratory syndrome coronavirus 2 and diabetes mellitus (review). 2023 , 26, 66-74 | O |
| 368 | Induced Pluripotent Stem Cell-Derived Organoids: Their Implication in COVID-19 Modeling. 2023 , 24, 3459 | О |
| 367 | Seroprevalence of four endemic human coronaviruses and, reactivity and neutralization capability against SARS-CoV-2 among children in the Philippines. 2023 , 13, | O |
| 366 | Suppression of angiotensin converting enzyme 2, a host receptor for SARS-CoV-2 infection, using 5-aminolevulinic acid in vitro. 2023 , 18, e0281399 | О |
| 365 | HuCoPIA: An Atlas of Human vs. SARS-CoV-2 Interactome and the Comparative Analysis with Other Coronaviridae Family Viruses. 2023 , 15, 492 | O |

| 364 | Performance characteristics of the boson rapid SARSDov antigen test card vs RTBCR: CrossDeactivity and emerging variants. 2023 , 9, e13642 | О |
|-----|--|---|
| 363 | SARS-CoV-2 leverages airway epithelial protective mechanism for viral infection. 2023 , 26, 106175 | O |
| 362 | Outcomes of COVID-19 patients with acute kidney injury and longitudinal analysis of laboratory markers during the hospital stay: A multi-center retrospective cohort experience from Pakistan. 2023 , 102, e32919 | О |
| 361 | Altered microRNA Transcriptome in Cultured Human Airway Cells upon Infection with SARS-CoV-2. 2023 , 15, 496 | O |
| 360 | Towards Quantum-Chemical Level Calculations of SARS-CoV-2 Spike Protein Variants of Concern by First Principles Density Functional Theory. 2023 , 11, 517 | 0 |
| 359 | COVID-19 and Its Impact on Onset and Progression of Parkinson and Cognitive Dysfunction. | O |
| 358 | Chronic alcohol intake regulates expression of SARS-CoV2 infection-relevant genes in an organ-specific manner. 2023 , 47, 76-86 | 2 |
| 357 | Transferrin Receptor Protein 1 Cooperates with mGluR2 To Mediate the Internalization of Rabies Virus and SARS-CoV-2. 2023 , 97, | Ο |
| 356 | Impact of COVID-19 on Cardiovascular Disease. 2023 , 15, 508 | 0 |
| 355 | Reversal of the unique Q493R mutation increases the affinity of Omicron S1-RBD for ACE2. 2023 , 21, 1966-1977 | O |
| 354 | Analytical approaches for determination of COVID-19 candidate drugs in human biological matrices. 2023 , 160, 116964 | 0 |
| 353 | A recombinant Mycobacterium smegmatis-based surface display system for developing the T cell-based COVID-19 vaccine. 2023 , 19, | O |
| 352 | Cardiovascular complications of the coronavirus disease (COVID-19). 2022, 8, 6-14 | O |
| 351 | High-Throughput Neutralization and Serology Assays Reveal Correlated but Highly Variable Humoral Immune Responses in a Large Population of Individuals Infected with SARS-CoV-2 in the US between March and August 2020. | O |
| 350 | Role of Vitamin D, ACE2 and the Proteases as TMPRSS2 and Furin on SARS-CoV-2 Pathogenesis and COVID-19 Severity. 2023 , 54, 223-230 | O |
| 349 | Thrombosis and Anticoagulation Strategies in Patients with COVID-19 Including Japanese Perspective. 2023 , 30, 311-320 | O |
| 348 | How the Competition for Cysteine May Promote Infection of SARS-CoV-2 by Triggering Oxidative Stress. 2023 , 12, 483 | О |
| 347 | Transcription regulation of SARS-CoV-2 receptor ACE2 by Sp1: a potential therapeutic target. | Ο |

| 346 | Optimal Delivery Management for the Prevention of Early Neonatal SARS-CoV-2 Infection: Systematic review and Meta-analysis. | 0 |
|---------------------------------|---|-------------|
| 345 | Human brain organoids to explore SARS-CoV-2-induced effects on the central nervous system. 2023 , 33, | 0 |
| 344 | P-Selectin promotes SARS-CoV-2 interactions with platelets and the endothelium. | Ο |
| 343 | Severe Acute Respiratory Syndrome Coronaviruses-2 (SARS-CoV-2). 2023 , 1-15 | Ο |
| 342 | The Role of Immunity in the Pathogenesis of SARS-CoV-2 Infection and in the Protection Generated by COVID-19 Vaccines in Different Age Groups. 2023 , 12, 329 | 0 |
| 341 | O-Linked Sialoglycans Modulate the Proteolysis of SARS-CoV-2 Spike and Likely Contribute to the Mutational Trajectory in Variants of Concern. 2023 , 9, 393-404 | O |
| 340 | Alliance of Heart and Endoderm: Multilineage Organoids to Model Co-development. 2023, 132, 511-518 | 1 |
| 339 | Uptake of severe acute respiratory syndrome coronavirus 2 spike protein mediated by angiotensin converting enzyme 2 and ganglioside in human cerebrovascular cells. 17, | Ο |
| 338 | Origin and evolution of SARS-CoV-2. 2023 , 138, | 1 |
| | | |
| 337 | Hyperinflammatory Response in COVID-19: A Systematic Review. 2023 , 15, 553 | Ο |
| 337 | Hyperinflammatory Response in COVID-19: A Systematic Review. 2023 , 15, 553 Autonomic heart rate modulation in patients with coronavirus disease 2019 in mechanical ventilation. 2023 , 69, 181-185 | 0 |
| | Autonomic heart rate modulation in patients with coronavirus disease 2019 in mechanical | |
| 336 | Autonomic heart rate modulation in patients with coronavirus disease 2019 in mechanical ventilation. 2023 , 69, 181-185 Human Nasal Epithelium Damage as the Probable Mechanism Involved in the Development of | 0 |
| 336 335 | Autonomic heart rate modulation in patients with coronavirus disease 2019 in mechanical ventilation. 2023, 69, 181-185 Human Nasal Epithelium Damage as the Probable Mechanism Involved in the Development of Post-COVID-19 Parosmia. The Comparison of Retinal Microvascular Findings in Acute COVID-19 and 1-Year after Hospital | 0 |
| 336 335 334 | Autonomic heart rate modulation in patients with coronavirus disease 2019 in mechanical ventilation. 2023, 69, 181-185 Human Nasal Epithelium Damage as the Probable Mechanism Involved in the Development of Post-COVID-19 Parosmia. The Comparison of Retinal Microvascular Findings in Acute COVID-19 and 1-Year after Hospital Discharge Assessed with Multimodal Imaging Prospective Longitudinal Cohort Study. 2023, 24, 4032 Multi-omics analysis reveals genomic, clinical and immunological features of SARS-CoV-2 virus | 0 0 |
| 336 335 334 333 | Autonomic heart rate modulation in patients with coronavirus disease 2019 in mechanical ventilation. 2023, 69, 181-185 Human Nasal Epithelium Damage as the Probable Mechanism Involved in the Development of Post-COVID-19 Parosmia. The Comparison of Retinal Microvascular Findings in Acute COVID-19 and 1-Year after Hospital Discharge Assessed with Multimodal Imaging Prospective Longitudinal Cohort Study. 2023, 24, 4032 Multi-omics analysis reveals genomic, clinical and immunological features of SARS-CoV-2 virus target genes in pan-cancer. 14, SARS-CoV-2-Induced TSLP Is Associated with Duration of Hospital Stay in COVID-19 Patients. 2023, | o o o |
| 336 335 334 333 332 | Autonomic heart rate modulation in patients with coronavirus disease 2019 in mechanical ventilation. 2023, 69, 181-185 Human Nasal Epithelium Damage as the Probable Mechanism Involved in the Development of Post-COVID-19 Parosmia. The Comparison of Retinal Microvascular Findings in Acute COVID-19 and 1-Year after Hospital Discharge Assessed with Multimodal Imaging Prospective Longitudinal Cohort Study. 2023, 24, 4032 Multi-omics analysis reveals genomic, clinical and immunological features of SARS-CoV-2 virus target genes in pan-cancer. 14, SARS-CoV-2-Induced TSLP Is Associated with Duration of Hospital Stay in COVID-19 Patients. 2023, 15, 556 Rapidly Adaptable Multiplexed Yeast Surface Display Serological Assay for Immune Escape | 0 0 0 |

| 328 | Plasma proteome dynamics of COVID-19 severity learnt by a graph convolutional network of multi-scale topology. 2023 , 6, e202201624 | 0 |
|-----|--|---|
| 327 | SARS-CoV-2 Infection and the Male Reproductive System: A Brief Review. 2023 , 13, 586 | Ο |
| 326 | Chemosensory Ability and Sensitivity in Health and Disease: Epigenetic Regulation and COVID-19. 2023 , 24, 4179 | 0 |
| 325 | SARS-CoV-2 Affects Both Humans and Animals: What Is the Potential Transmission Risk? A Literature Review. 2023 , 11, 514 | O |
| 324 | Gastrointestinal and Hepatobiliary Symptoms and Disorders with Long (Chronic) COVID Infection. 2023 , 52, 139-156 | 0 |
| 323 | SARS-CoV-2 S Glycoprotein Stabilization Strategies. 2023 , 15, 558 | O |
| 322 | Melastoma malabathricum L. Suppresses Neutrophil Extracellular Trap Formation Induced by Synthetic Analog of Viral Double-Stranded RNA Associated with SARS-CoV-2 Infection. 2023 , 12, 341 | 0 |
| 321 | Potent Therapeutic Strategies for COVID-19 with Single-Domain Antibody Immunoliposomes Neutralizing SARS-CoV-2 and Lip/cGAMP Enhancing Protective Immunity. 2023 , 24, 4068 | Ο |
| 320 | In silico analysis of dietary polyphenols and their gut microbial metabolites suggest inhibition of SARS-CoV-2 infection, replication, and host inflammatory mediators. 1-19 | 0 |
| 319 | SARS-CoV-2 infection alkalinizes the ERGIC and lysosomes through the viroporin activity of the viral envelope protein. 2023 , 136, | Ο |
| 318 | Diagnostic TR-FRET assays for detection of antibodies in patient samples. 2023 , 3, 100421 | 0 |
| 317 | Crosstalk between COVID-19 Infection and Kidney Diseases: A Review on the Metabolomic Approaches. 2023 , 11, 489 | Ο |
| 316 | SARS-CoV-2 infection causes fibrotic pathogenesis through deregulating mitochondrial beta-oxidation. | 0 |
| 315 | Antibody-mediated cell entry of SARS-CoV-2. | 0 |
| 314 | Comparing the Clinical Manifestations of Bell Palsy between Pre-COVID-19 Pandemic and COVID-19 Pandemic Periods. 2023 , 12, 1700 | 0 |
| 313 | The paradigm of prophylactic viral outbreaks measures by microbial biosurfactants. 2023, 16, 575-587 | O |
| 312 | Regulating the microenvironment with nanomaterials: Potential strategies to ameliorate COVID-19. 2023 , | О |
| 311 | Oral manifestations of COVID-19: A review. 2023 , 1-11 | O |

| 310 | Mucociliary clearance augmenting drugs block SARS-CoV-2 replication in human airway epithelial cells. 2023 , 324, L493-L506 | O |
|-----|---|---|
| 309 | OligoBinders: Bioengineered Soluble Amyloid-like Nanoparticles to Bind and Neutralize SARS-CoV-2. 2023 , 15, 11444-11457 | O |
| 308 | Pathways of Coagulopathy and Inflammatory Response in SARS-CoV-2 Infection among Type 2 Diabetic Patients. 2023 , 24, 4319 | 0 |
| 307 | Investigating the competition between ACE2 natural molecular interactors and SARS-CoV-2 candidate inhibitors. 2023 , 374, 110380 | O |
| 306 | Molecular mechanisms of human coronavirus NL63 infection and replication. 2023, 327, 199078 | O |
| 305 | Trend and Co-occurrence Network of COVID-19 Symptoms From Large-Scale Social Media Data: Infoveillance Study. 25, e45419 | O |
| 304 | Ectopic expression of SARS-CoV-2 S and ORF-9B proteins alters metabolic profiles and impairs contractile function in cardiomyocytes. 11, | O |
| 303 | Human ACE2 expression, a major tropism determinant for SARS-CoV-2, is regulated by upstream and intragenic elements. 2023 , 19, e1011168 | O |
| 302 | Cell transplantation for COVID-19 treatment: transmission of stem stomal (mesenchimal) cells. 2020 , 15, 10-19 | О |
| 301 | Insights into the Scenario of SARS-CoV-2 Infection in Male Reproductive Toxicity. 2023 , 11, 510 | O |
| 300 | SARS-CoV-2 infection of airway organoids reveals conserved use of Tetraspanin-8 by Ancestral, Delta, and Omicron variants. 2023 , 18, 636-653 | О |
| 299 | Study of the Effects of Several SARS-CoV-2 Structural Proteins on Antiviral Immunity. 2023 , 11, 524 | O |
| 298 | Dual mechanism: Epigenetic inhibitor apabetalone reduces SARS-CoV-2 Delta and Omicron variant spike binding and attenuates SARS-CoV-2 RNA induced inflammation. 2023 , 117, 109929 | O |
| 297 | Glycan masking of a non-neutralising epitope enhances neutralising antibodies targeting the RBD of SARS-CoV-2 and its variants. 14, | O |
| 296 | [Hypothesis] The protective role of Testosterone in COVID-19. | Ο |
| 295 | Mutation-driven parallel evolution in emergence of ACE2-utilizing sarbecoviruses. 14, | O |
| 294 | A Polysaccharide-RBD-Fc-Conjugated COVID-19 Vaccine, SCTV01A, Showed High Immunogenicity and Low Toxicity in Animal Models. 2023 , 11, 526 | O |
| 293 | Analysis of the SARS-CoV-2 spike protein revealed that blocked receptor-binding domain antigenicity decreases the production of neutralizing antibodies in vivo. | O |

| 292 | Lessons Learnt from COVID-19: Computational Strategies for Facing Present and Future Pandemics. 2023 , 24, 4401 | О |
|-------------|--|---|
| 291 | Molecular Determinants of the Early Life Immune Response to COVID-19 Infection and Immunization. 2023 , 11, 509 | O |
| 2 90 | Infecties (COVID-19). 2022 , 311-323 | O |
| 289 | In Vitro Pharmacokinetic Behavior of Antiviral 3-Amidinophenylalanine Derivatives in Rat, Dog and Monkey Hepatocytes. 2023 , 11, 682 | O |
| 288 | Detection of Adverse Drug Reactions in COVID-19 Hospitalized Patients in Saudi Arabia: A Retrospective Study by ADR Prompt Indicators. 2023 , 11, 660 | 0 |
| 287 | Machine learning combines atomistic simulations to predict SARS-CoV-2 Mpro inhibitors from natural compounds. | O |
| 286 | SARS-CoV-2 pandemics: An update of CRISPR in diagnosis and hostWirus interaction studies. 2023 , | О |
| 285 | Insights into organoid-based modeling of COVID-19 pathology. 2023 , 20, | O |
| 284 | Potential soluble angiotensin-converting enzyme 2 in oral and salivary coronavirus infection therapy. 2022 , 9, 12-15 | O |
| 283 | Mutating novel interaction sites in NRP1 reduces SARS-CoV-2 spike protein internalization. 2023 , 26, 106274 | O |
| 282 | Establishment of angiotensin-converting enzyme 2 and cluster of differentiation 147 dual target cell membrane chromatography based on SNAP-tag technology for screening anti severe acute respiratory syndrome coronavirus 2 active components. 2023 , 1693, 463903 | О |
| 281 | Internal Carotid Artery Dissection With Thrombosis in a Child With Prothrombin Gene Mutation. 2023 , | 0 |
| 280 | Evidence of SARS-CoV-2 infection in postmortem lung, kidney, and liver samples, revealing cellular targets involved in COVID-19 pathogenesis. 2023 , 168, | О |
| 279 | Structure-based design of oligomeric receptor-binding domain (RBD) recombinant proteins as potent vaccine candidates against SARS-CoV-2. 2023 , 19, | O |
| 278 | Review on the Biogenesis of Platelets in Lungs and Its Alterations in SARS-CoV-2 Infection Patients. 2023 , 2023, 1-10 | O |
| 277 | The Prevalence of Irritable Bowel Syndrome after Severe Acute Respiratory Syndrome Coronavirus 2 Infection and Their Association: A Systematic Review and Meta-Analysis of Observational Studies. 2023 , 12, 1865 | O |
| 276 | Significance of Conserved Regions in Coronavirus Spike Protein for Developing a Novel Vaccine against SARS-CoV-2 Infection. 2023 , 11, 545 | О |
| 275 | COVID-19 Biogenesis and Intracellular Transport. 2023 , 24, 4523 | 2 |

| 274 | Assessment of GO-Based Protein Interaction Affinities in the Large-Scale Humantoronavirus Family Interactome. 2023 , 11, 549 | О |
|-----|---|---|
| 273 | Association of COVID-19 with Comorbidities: An Update. 2023 , 6, 334-354 | O |
| 272 | MDTOMO: Continuous conformational variability analysis in cryo electron subtomogram data using flexible fitting based on Molecular Dynamics simulations. | 0 |
| 271 | Nasal sprays for treating COVID-19: a scientific note. 2023 , 75, 249-265 | O |
| 270 | Pituitary and SARS CoV-2: An unremitting conundrum. 2023 , 101752 | O |
| 269 | Single-domain antibody for binding the conserved epitope in the SARS-CoV-2 spike protein receptor-binding domain. 2023 , | O |
| 268 | Thyroid Function Abnormalities and Outcomes in Hospitalized Patients with COVID-19 Infection: A Cross-Sectional Study. 2023 , 55, 169-175 | О |
| 267 | Repurposing Astragalus Polysaccharide PG2 for Inhibiting ACE2 and SARS-CoV-2 Spike Syncytial Formation and Anti-Inflammatory Effects. 2023 , 15, 641 | O |
| 266 | The Latest Cellular and Molecular Mechanisms of COVID-19 on Non-Lung Organs. 2023, 13, 415 | О |
| 265 | Angiotensin-Converting Enzyme 2 Expression and Severity of SARS-CoV-2 Infection. 2023 , 11, 612 | O |
| 264 | Design and characterization of novel SARS-CoV-2 fusion inhibitors with N-terminally extended HR2 peptides. 2023 , 212, 105571 | O |
| 263 | The Outcome of COVID-19 Infection in Patients With Gastrointestinal Diseases: An Experience at a Tertiary Center. 2023 , | O |
| 262 | Bioinformatics analysis based on high-throughput sequencing data to identify hub genes related to different clinical types of COVID-19. 2023 , 23, | О |
| 261 | Female reproductive health during the COVID-19 pandemic: latest evidence and understanding. | O |
| 260 | Development of a screening platform to discover natural products active against SARS-CoV-2 infection using lung organoid models. 2023 , 27, | 0 |
| 259 | Antitarget, Anti-SARS-CoV-2 Leads, Drugs, and the Drug DiscoveryGenetics Alliance Perspective. 2023 , 66, 3664-3702 | O |
| 258 | COVID-19 aus Sicht der Gastroenterologie. 2023 , 18, 84-92 | O |
| 257 | Low vitamin D levels predict outcomes of COVID-19 in patients with both severe and non-severe disease at hospitalization. | 1 |

| 256 | COVID-19: Insights into long-term manifestations and lockdown impacts. 2023 , | 0 |
|--------------------------|--|---------|
| 255 | Does the variant positivity and negativity affect the clinical course in COVID-19?: A cohort study. 2023 , 102, e33132 | O |
| 254 | SARS-CoV-2 Delta (B.1.617.2) variant replicates and induces syncytia formation in human induced pluripotent stem cell-derived macrophages. 11, e14918 | 0 |
| 253 | CRISPR techniques and potential for the detection and discrimination of SARS-CoV-2 variants of concern. 2023 , 161, 117000 | O |
| 252 | The Evolving Management and Treatment Options for Patients with Pulmonary Hypertension: Current Evidence and Challenges. Volume 19, 103-126 | 0 |
| 251 | Interactions between the renin Ingiotensin Ildosterone system and COVID-19. 2023, 355-373 | O |
| 250 | The renin-angiotensin system in the eye. 2023 , 419-447 | 0 |
| 249 | Using Real-Time PCR Fluorescence Reaction Values to Improve SARS-CoV-2 Virus Detection and Benefit Clinical Decision-Making. 2023 , 13, 683 | О |
| 248 | Transgenic animal models for the functional analysis of ACE2. 2023 , 491-503 | O |
| | | |
| 247 | COVID-19 vaccination and thyroiditis. 2023 , 101759 | O |
| 247 246 | COVID-19 vaccination and thyroiditis. 2023 , 101759 Association of Apal rs7975232 and Bsml rs1544410 in clinical outcomes of COVID-19 patients according to different SARS-CoV-2 variants. 2023 , 13, | 0 |
| | Association of Apal rs7975232 and Bsml rs1544410 in clinical outcomes of COVID-19 patients | |
| 246 | Association of Apal rs7975232 and Bsml rs1544410 in clinical outcomes of COVID-19 patients according to different SARS-CoV-2 variants. 2023 , 13, Short-Chain Fatty Acids in the Microbiota Cut Brain Axis: Role in Neurodegenerative Disorders and | 0 |
| 246 245 | Association of Apal rs7975232 and Bsml rs1544410 in clinical outcomes of COVID-19 patients according to different SARS-CoV-2 variants. 2023 , 13, Short-Chain Fatty Acids in the Microbiota Cut Brain Axis: Role in Neurodegenerative Disorders and Viral Infections. 2023 , 14, 1045-1062 | 0 |
| 246 245 244 | Association of Apal rs7975232 and Bsml rs1544410 in clinical outcomes of COVID-19 patients according to different SARS-CoV-2 variants. 2023 , 13, Short-Chain Fatty Acids in the Microbiota GutBrain Axis: Role in Neurodegenerative Disorders and Viral Infections. 2023 , 14, 1045-1062 Immune evasion of neutralizing antibodies by SARS-CoV-2 Omicron. 2023 , 70, 13-25 | 0 0 |
| 246 245 244 243 | Association of Apal rs7975232 and Bsml rs1544410 in clinical outcomes of COVID-19 patients according to different SARS-CoV-2 variants. 2023, 13, Short-Chain Fatty Acids in the Microbiota@utBrain Axis: Role in Neurodegenerative Disorders and Viral Infections. 2023, 14, 1045-1062 Immune evasion of neutralizing antibodies by SARS-CoV-2 Omicron. 2023, 70, 13-25 Persistent olfactory learning deficits during and post-COVID-19 infection. 2023, 4, 100081 | 0 0 |
| 246 245 244 243 | Association of Apal rs7975232 and Bsml rs1544410 in clinical outcomes of COVID-19 patients according to different SARS-CoV-2 variants. 2023, 13, Short-Chain Fatty Acids in the Microbiota@utBrain Axis: Role in Neurodegenerative Disorders and Viral Infections. 2023, 14, 1045-1062 Immune evasion of neutralizing antibodies by SARS-CoV-2 Omicron. 2023, 70, 13-25 Persistent olfactory learning deficits during and post-COVID-19 infection. 2023, 4, 100081 A Scoping Review on COVID-19-Induced Cardiovascular Complications. 2023, 3, 348-369 Application of the PHENotype SIMulator for rapid identification of potential candidates in effective | O O O O |

| 238 | Virologists' Sex- and Gender-Based Medical Knowledge of COVID-19 Affects Quality of Students' Education. 2023 , 4, 118-125 | O |
|-----|---|---|
| 237 | Importance of ACE2 for SARS-CoV-2 Infection of Kidney Cells. 2023 , 13, 472 | O |
| 236 | Understanding COVID-19 in children: immune determinants and post-infection conditions. | 0 |
| 235 | Vitamin C promotes ACE2 degradation and protects against SARS-CoV-2 infection. 2023 , 24, | 1 |
| 234 | Short-Lived Antibody-Mediated Saliva Immunity against SARS-CoV-2 after Vaccination. 2023, 11, | 0 |
| 233 | Cooperative and structural relationships of the trimeric Spike with infectivity and antibody escape of the strains Delta (B.1.617.2) and Omicron (BA.2, BA.5, and BQ.1). | O |
| 232 | Investigating antigenic features of the SARS-CoV-2 isolated in Russian Federation in 2021 2022 by hyperimmune mouse serum neutralisation. 2023 , 13, 37-45 | 0 |
| 231 | Interferon-induced transmembrane protein 3 (IFITM3) limits lethality of SARS-CoV-2 in mice. 2023 , 24, | O |
| 230 | Role of the microbiota-gut-brain axis in postacute COVID syndrome. 2023 , 324, G322-G328 | О |
| 229 | Antiviral Molecular Targets of Essential Oils against SARS-CoV-2: A Systematic Review. 2023 , 91, 15 | 2 |
| 228 | Unraveling the Interactions between Human DPP4 Receptor, SARS-CoV-2 Variants, and MERS-CoV, converged for Pulmonary Disorders Integrating through Immunoinformatics and Molecular Dynamics. | О |
| 227 | Systematic Guidelines for Effective Utilization of COVID-19 Databases in Genomic, Epidemiologic, and Clinical Research. 2023 , 15, 692 | O |
| 226 | Deep Learning in COVID-19 Diagnosis, Prognosis and Treatment Selection. 2023, 11, 1279 | 0 |
| 225 | SARS-CoV-2 infection of kidney tissues in some severe and fatal cases of COVID-19. 2023 , 95, | O |
| 224 | Potential use of renin-angiotensin-aldosterone system inhibitors to reduce COVID-19 severity. 2023 , 42, 373-383 | 1 |
| 223 | Severe COVID-19versusmultisystem inflammatory syndrome: comparing two critical outcomes of SARS-CoV-2 infection. 2023 , 32, 220197 | O |
| 222 | Development of Fully Human, Bispecific Antibodies that Effectively Block Omicron Variant Pseudovirus Infections. | O |
| 221 | Examining the associations between COVID-19 infection and pediatric type 1 diabetes. 1-9 | O |

| 220 | Phenome-wide association study to explore the long-term symptoms after infection with novel coronavirus in the UK Biobank. | 0 |
|-----|---|---|
| 219 | Predicting the feasibility of targeting a conserved region on the S2 domain of the SARS-CoV-2 spike protein. | O |
| 218 | Immunometabolic rewiring in long COVID patients with chronic headache. | О |
| 217 | Neurological manifestations associated with SARS-CoV-2 infection: an updated review 2023 , 64, 108-122 | Ο |
| 216 | Thyroglobulin levels in COVID-19-positive patients: Correlations with thyroid function tests, inflammatory markers, and glucocorticoid use. 13, | 0 |
| 215 | Rescuing fertility during COVID-19 infection: exploring potential pharmacological and natural therapeutic approaches for comorbidity, by focusing on NLRP3 inflammasome mechanism | O |
| 214 | Cellular and Molecular Mechanisms of Pathogenic and Protective Immune Responses to SARS-CoV-2 and Implications of COVID-19 Vaccines. 2023 , 11, 615 | 0 |
| 213 | Pharmacological disruption of mSWI/SNF complex activity restricts SARS-CoV-2 infection. 2023 , 55, 471-483 | О |
| 212 | The impact of the COVID-19 pandemic on semen quality of uninfected men. 2023 , 33, | 0 |
| 211 | A Multiparametric and High-Throughput Platform for Host⊠irus Binding Screens. | O |
| 210 | Early transcriptional responses of human nasal epithelial cells to infection with Influenza A and SARS-CoV-2 virus differ and are influenced by physiological temperature. | 0 |
| 209 | Long-Term Adverse Effects of Mild COVID-19 Disease on Arterial Stiffness, and Systemic and Central Hemodynamics: A Pre-Post Study. 2023 , 12, 2123 | O |
| 208 | Epidemiology of the Acceptance of Anti COVID-19 Vaccine in Urban and Rural Settings in Cameroon. 2023 , 11, 625 | 0 |
| 207 | Trimeric protein vaccine based on Beta variant elicits robust immune response against BA.4/5-included SARS-CoV-2 Omicron variants. 2023 , 4, | O |
| 206 | Ultrapotent SARS coronavirus-neutralizing single-domain antibodies that bind a conserved membrane proximal epitope of the spike. | O |
| 205 | A bibliometric analysis of chronic obstructive pulmonary disease and COVID-19. 2023 , 102, e33240 | O |
| 204 | Infectious Agents: From the Red Queen Paradigm to Some of Their Genuine Traits. 2023, 47-107 | 0 |
| 203 | Identification of Z-Tyr-Ala-CHN2, a Cathepsin L Inhibitor with Broad-Spectrum Cell-Specific Activity against Coronaviruses, including SARS-CoV-2. 2023 , 11, 717 | O |

| 202 | Evaluation of COVID-19 Patients with the Assessment of Selfreported Olfactory Functioning and Olfaction-related Quality of Life Questionnaire. 2023 , 39, 39-43 | О |
|-----|--|---|
| 201 | Cigarette smoke preferentially induces full length ACE2 expression in differentiated primary human airway cultures but does not alter the efficiency of cellular SARS-CoV-2 infection. 2023 , 9, e14383 | О |
| 200 | DOENAS AUTOIMUNES RELACIONADOS A SNDROME DO PS-COVID-19: NOVOS DESDOBRAMENTOS DA PANDEMIA. 2023 , 3, 1103-1118 | О |
| 199 | Epigenetic perspectives associated with COVID-19 infection and related cytokine storm: an updated review. | O |
| 198 | B cell-related tertiary lymphoid structure may exert inhibitory effects on lung adenocarcinoma and SARS-COV-2. 2023 , 9, e14334 | 0 |
| 197 | In vitrocomparison of SARS-CoV-2 variants. | O |
| 196 | Spike Protein Impairs Mitochondrial Function in Human Cardiomyocytes: Mechanisms Underlying Cardiac Injury in COVID-19. 2023 , 12, 877 | 0 |
| 195 | Foetal Intrapartum Compromise at Term: Could COVID-19 Infection Be Involved? A Case Report. 2023 , 59, 552 | O |
| 194 | Transmission of SARS-CoV-2 from mother to fetus or neonate: What to know and what to do?. 2023 , 101429 | 0 |
| 193 | The effect of COVID-19 infection on the menstrual cycle: a cross-sectional investigation in the MENA region. 1-7 | O |
| 192 | Ginsenosides, potential TMPRSS2 inhibitors, a trade-off between the therapeutic combination for anti-PD-1 immunotherapy and the treatment of COVID-19 infection of LUAD patients. 14, | О |
| 191 | Urine proteomic characterization of active and recovered COVID-19 patients. | О |
| 190 | 30th Annual GP2A Medicinal Chemistry Conference. 2023 , 16, 432 | О |
| 189 | COVID-19-Induced Myocarditis: Pathophysiological Roles of ACE2 and Toll-like Receptors. 2023 , 24, 5374 | О |
| 188 | Sequence analysis of hot spot regions of spike and RNA-dependent-RNA polymerase (RdRp) genes of SARS-CoV-2 in Kerman, Iran. | О |
| 187 | Structural dynamics in the evolution of SARS-CoV-2 spike glycoprotein. 2023 , 14, | О |
| 186 | Artificial Intelligence: A Next-Level Approach in Confronting the COVID-19 Pandemic. 2023, 11, 854 | О |
| 185 | Understanding the Renin-Angiotensin System in Coronavirus Disease 2019. 2023 , 79-93 | O |

| 184 | Motile cilia and microvillar: accomplices of SARS-CoV-2 in penetrating mucus barrier and infecting airway epithelium. 2023 , 8, | 0 |
|-----|--|---|
| 183 | The origin and evolution of emerged swine acute diarrhea syndrome coronavirus with zoonotic potential. 2023 , 95, | O |
| 182 | SARS-CoV-2 and male infertility: from short- to long-term impacts. | О |
| 181 | Human Brain Microvascular Endothelial Cells Exposure to SARS-CoV-2 Leads to Inflammatory Activation through NF-B Non-Canonical Pathway and Mitochondrial Remodeling. 2023 , 15, 745 | O |
| 180 | Dopamine Transmission Imbalance in Neuroinflammation: Perspectives on Long-Term COVID-19. 2023 , 24, 5618 | О |
| 179 | Pseudotyped Viruses for Coronaviruses. 2023 , 133-151 | O |
| 178 | Genetic analysis of ACE2 peptidase domain in SARS-CoV-2-positive and SARS-CoV-2-negative individuals from Pakistan. | О |
| 177 | Pseudotyped Viruses. 2023 , 1-27 | O |
| 176 | Murine Alveolar Macrophages Rapidly Accumulate Intranasally Administered SARS-CoV-2 Spike Protein leading to Neutrophil Recruitment and Damage. | О |
| 175 | Application of Pseudotyped Viruses. 2023 , 45-60 | O |
| 174 | Getting in on the action: New tools to see SARS-CoV-2 infect a cell. 2023 , 30, 233-234 | О |
| 173 | Advances in developing ACE2 derivatives against SARS-CoV-2. 2023 , | O |
| 172 | COVID-19: Pandemic Effect on Human Reproduction. 2023 , 3-15 | О |
| 171 | Review of therapeutic mechanisms and applications based on SARS-CoV-2 neutralizing antibodies. 14, | O |
| 170 | Deep Structural Analysis of Myriads of Omicron Sub-Variants Revealed Hotspot for Vaccine Escape Immunity. 2023 , 11, 668 | О |
| 169 | COVID-19 related liver injuries in pregnancy. 11, 1918-1929 | O |
| 168 | At the crossroads of epidemiology and biology: Bridging the gap between SARS-CoV-2 viral strain properties and epidemic wave characteristics. 2023 , | О |
| 167 | Intraduodenal Delivery of Exosome-Loaded SARS-CoV-2 RBD mRNA Induces a Neutralizing Antibody Response in Mice. 2023 , 11, 673 | O |

| 166 | A comprehensive assessment of the antimicrobial and immunomodulatory effects of frequently consumed fermented foods: insights in the management of COVID-19. 2023 , 134, | 0 |
|-----|--|---|
| 165 | Large-Scale Virtual Screening for the Discovery of SARS-CoV-2 Papain-like Protease (PLpro) Non-covalent Inhibitors. 2023 , 63, 2158-2169 | O |
| 164 | Mechanisms of COVID-19 Associated Pulmonary Thrombosis: A Narrative Review. 2023 , 11, 929 | О |
| 163 | Surface-modified biomaterials as disinfectants to combat viral infections: a SARS-COV-2 case study. 2023 , 147-169 | Ο |
| 162 | The role of the bloodBrain barrier during neurological disease and infection. | 0 |
| 161 | Drug-induced liver injury in COVID-19 patients during hospitalization. 2023 , 102, e33294 | O |
| 160 | Efficacy of N-acetyl Cysteine in Severe COVID-19 Patients: A Randomized Controlled Phase III Clinical Trial. 2023 , 18, | 0 |
| 159 | Early Transcriptional Responses of Human Nasal Epithelial Cells to Infection with Influenza A and SARS-CoV-2 Virus Differ and Are Influenced by Physiological Temperature. 2023 , 12, 480 | O |
| 158 | Postmortem lung and heart examination of COVID-19 patients in a case series from Jordan. 2023 , 57, 102-112 | 0 |
| 157 | COVID-19 Disease in Under-5 Children: Current Status and Strategies for Prevention including Vaccination. 2023 , 11, 693 | O |
| 156 | Host Cell Targets for Unconventional Antivirals against RNA Viruses. 2023, 15, 776 | 0 |
| 155 | Bioactive Antimicrobial Peptides from Food Proteins: Perspectives and Challenges for Controlling Foodborne Pathogens. 2023 , 12, 477 | Ο |
| 154 | The possible effects of COVID-19 on the human reproductive system. 1-7 | 0 |
| 153 | Clinical Aspects Of Hypertensive Patients With COVID-19 Hospitalized In A Campaign Hospital In Northeast Brazil. 2023 , 36, | О |
| 152 | Extracellular Vesicles of COVID-19 Patients Reflect Inflammation, Thrombogenicity, and Disease Severity. 2023 , 24, 5918 | 0 |
| 151 | Serum Angiotensin II as a Biomarker in COVID-19. 2023 , 917-940 | O |
| 150 | Organoids to Remodel SARS-CoV-2 Research: Updates, Limitations and Perspectives. 2023 , 0 | О |
| 149 | Association of Cardiovascular Medications with Adverse Outcomes in a Matched Analysis of a National Cohort of Patients with COVID-19. 2023 , 100040 | O |

| 148 | COVID-19 and Cardiovascular Diseases: From Cellular Mechanisms to Clinical Manifestations. 2023 , 0 | O |
|-------------------|---|-----|
| 147 | Canine Coronavirus Infection Modulates the Biogenesis and Composition of Cell-Derived Extracellular Vesicles. 2023 , 11, 976 | O |
| 146 | Dietary fish intake increased the concentration of soluble ACE2 in rats: can fish consumption reduce the risk of COVID-19 infection through interception of SARS-CoV-2 by soluble ACE2?. 1-8 | 0 |
| 145 | Reviews of drug candidates for COVID-19. 36, 219-226 | O |
| 144 | Evaluation of Broad Anti-Coronavirus Activity of Autophagy-Related Compounds Using Human Airway Organoids. 2023 , 20, 2276-2287 | 0 |
| 143 | Many Roles of Carbohydrates: A Computational Spotlight on the Coronavirus S Protein Binding. | O |
| 142 | Myocarditis: causes, mechanisms, and evolving therapies. 1-14 | 0 |
| 141 | Serum neutralization of SARS-CoV-2 Omicron BA.2, BA.2.75, BA.2.76, BA.5, BF.7, BQ.1.1 and XBB.1.5 in individuals receiving Evusheld. | O |
| 140 | Regulation of Epithelial Sodium Transport by SARS-CoV-2 Is Closely Related with Fibrinolytic System-Associated Proteins. 2023 , 13, 578 | 0 |
| 139 | Characterization of SARS-CoV-2 Omicron BA.2.75 clinical isolates. 2023 , 14, | O |
| 138 | Impact of Drug Repurposing on SARS-Cov-2 Main Protease. 2022 , 96, 3311-3330 | |
| | | Ο |
| 137 | Add fuel to the fire: Inflammation and immune response in lung cancer combined with COVID-19. | 0 |
| 137 136 | | |
| | 14, Unraveling the Underlying Molecular Mechanism of Bilent HypoxialIn COVID-19 Patients Suggests a Central Role for Angiotensin II Modulation of the AT1R-Hypoxia-Inducible Factor Signaling | O |
| 136 | Unraveling the Underlying Molecular Mechanism of Bilent Hypoxialin COVID-19 Patients Suggests a Central Role for Angiotensin II Modulation of the AT1R-Hypoxia-Inducible Factor Signaling Pathway. 2023, 12, 2445 Multiscale network analysis identifies potential receptors for SARS-CoV -2 and reveals their | 0 |
| 136 | Unraveling the Underlying Molecular Mechanism of Bilent Hypoxialin COVID-19 Patients Suggests a Central Role for Angiotensin II Modulation of the AT1R-Hypoxia-Inducible Factor Signaling Pathway. 2023, 12, 2445 Multiscale network analysis identifies potential receptors for SARS-CoV -2 and reveals their tissue-specific and age-dependent expression. | 0 0 |
| 136 135 134 | Unraveling the Underlying Molecular Mechanism of Bilent Hypoxialin COVID-19 Patients Suggests a Central Role for Angiotensin II Modulation of the AT1R-Hypoxia-Inducible Factor Signaling Pathway. 2023, 12, 2445 Multiscale network analysis identifies potential receptors for SARS-CoV -2 and reveals their tissue-specific and age-dependent expression. Drugs for COVID-19 Treatment: A New Challenge. | 0 0 |

| 130 | Temporal pattern of humoral immune response in mild cases of COVID-19. 14, 40-51 | O |
|-----|--|---|
| 129 | Exploring the research landscape of COVID-19-induced olfactory dysfunction: A bibliometric study. 17, | O |
| 128 | Inhibition of Rab1B Impairs Trafficking and Maturation of SARS-CoV-2 Spike Protein. 2023, 15, 824 | O |
| 127 | COVID-19 Related Predisposition to Diabetic Ketoacidosis. 2023 , | O |
| 126 | Comprehensive review on the evolution of SARS-CoV-2(COVID-19): From emergence, outbreak,molecular characterization to the clinical challenges in designing and developing potential drugs, vaccines and therapies to counter SARSCoV-2. 2020 , 8, 43-48 | O |
| 125 | Uncovering a link between COVID-19 and renal cell carcinoma. | O |
| 124 | Receptors and Cofactors That Contribute to SARS-CoV-2 Entry: Can Skin Be an Alternative Route of Entry?. 2023 , 24, 6253 | O |
| 123 | In Silico Analysis of SARS-CoV-2 Spike Proteins of Different Field Variants. 2023 , 11, 736 | O |
| 122 | Evaluation of Salivary Galectin-3 Level and its Potential Role in Increasing the Severity of COVID-19 Infection in Patients with Periodontitis. 2023 , 14, 3-8 | O |
| 121 | Intestinal Damage, Inflammation and Microbiota Alteration during COVID-19 Infection. 2023 , 11, 1014 | O |
| 120 | Abiotic Synthetic Antibody Inhibitor with Broad-Spectrum Neutralization and Antiviral Efficacy against Escaping SARS-CoV-2 Variants. 2023 , 17, 7017-7034 | 0 |
| 119 | Epidemiological pattern of COVID-19 and its association with periodontal health in an urban Indian cohort. 11, | O |
| 118 | Autoimmune liver diseases and SARS-CoV-2. 29, 1838-1851 | O |
| 117 | A low dose of RBD and TLR7/8 agonist displayed on influenza virosome particles protects rhesus macaque against SARS-CoV-2 challenge. 2023 , 13, | O |
| 116 | A Comparison of Etiology, Pathogenesis, Vaccinal and Antiviral Drug Development between Influenza and COVID-19. 2023 , 24, 6369 | O |
| 115 | Association of ACE ID, MTHFR C677T, and MIF-173GC variants with the clinical course of COVID-19 patients. 1-15 | O |
| 114 | In vitro studies of the renin-angiotensin system in human adipose tissue/adipocytes and possible relationship to SARS-CoV-2: a scoping review. 2023 , 12, | O |
| 113 | PM2 .5 promotes lung cancer progression through activation of the AhR-TMPRSS2-IL18 pathway. | O |

| 112 | Enhancement of SARS-CoV-2 infection and growth by an ACE2-specific monoclonal antibody. 2023 , 95, | O |
|-----|---|---|
| 111 | ACEI or not to ACEI: Review on using ACEI and ARBs on COVID-19 patients: Systemic review. | O |
| 110 | SARS-CoV-2 Receptors and Their Involvement in Cell Infection. 2023 , 17, 1-11 | O |
| 109 | Elicitation of potent neutralizing antibodies in obese mice by ISA 51-adjuvanted SARS-CoV-2 spike RBD-Fc vaccine. 2023 , 107, 2983-2995 | O |
| 108 | Transient loss and recovery of oral chemesthesis, taste and smell with COVID-19: a small case-control series. | O |
| 107 | Long COVID in autoimmune rheumatic diseases. | O |
| 106 | Amuvatinib Blocks SARS-CoV-2 Infection at the Entry Step of the Viral Life Cycle. | О |
| 105 | The SARS-CoV-2 Spike Protein Activates the Epidermal Growth Factor Receptor-Mediated Signaling. 2023 , 11, 768 | O |
| 104 | Interferon-lambda: New functions on intestinal symptoms in COVID-19. 29, 1942-1954 | 0 |
| 103 | COVID-19 and preeclampsia: The unique and the mutually nonexclusive clinical manifestations. 2023 , 89, | O |
| 102 | Two Resveratrol Oligomers Inhibit Cathepsin L Activity to Suppress SARS-CoV-2 Entry. 2023 , 71, 5535-5546 | 0 |
| 101 | Uncovering the Correlation between COVID-19 and Neurodegenerative Processes: Toward a New Approach Based on EEG Entropic Analysis. 2023 , 10, 435 | O |
| 100 | Comprehensive deep mutational scanning reveals the pH induced stability and binding differences between SARS-CoV-2 spike RBD and human ACE2. 1-12 | О |
| 99 | Virtual and In Vitro Screening of Natural Products Identifies Indole and Benzene Derivatives as Inhibitors of SARS-CoV-2 Main Protease (Mpro). 2023 , 12, 519 | O |
| 98 | Therapeutic Targets in the Virological Mechanism and in the Hyperinflammatory Response of Severe Acute Respiratory Syndrome Coronavirus Type 2 (SARS-CoV-2). 2023 , 13, 4471 | O |
| 97 | Spatiotemporally organized immunomodulatory response to SARS-CoV-2 virus in primary human broncho-alveolar epithelia. | O |
| 96 | Biomimetic SARS-CoV-2 Spike Protein Nanoparticles. | О |
| 95 | At-home sampling to meet geographical challenges for serological assessment of SARS-CoV-2 exposure in a rural region of northern Sweden, March to May 2021: a retrospective cohort study. 2023 , 28, | O |

| 94 | Determinants of species-specific utilization of ACE2 by human and animal coronaviruses. | O |
|----|---|---|
| 93 | Whole Sequencing and Detailed Analysis of SARS-CoV-2 Genomes in Southeast Spain: Identification of Recurrent Mutations in the 20E (EU1) Variant with Some Clinical Implications. 2023 , 11, 54 | 0 |
| 92 | Persistence of SARS-CoV-2 Antigens in the Nasal Mucosa of Eight Patients with Inflammatory Rhinopathy for over 80 Days following Mild COVID-19 Diagnosis. 2023 , 15, 899 | 0 |
| 91 | HLA Variation and SARS-CoV-2 Specific Antibody Response. 2023 , 15, 906 | 0 |
| 90 | Effect some parameter of immunity CD4 and IL1 in Covid 19. 2023 , | 0 |
| 89 | Evolution of Immune Evasion and Host Range Expansion by the SARS-CoV-2 B.1.1.529 (Omicron) Variant. | O |
| 88 | Molecular Understanding of ACE-2 and HLA-Conferred Differential Susceptibility to COVID-19: Host-Directed Insights Opening New Windows in COVID-19 Therapeutics. 2023 , 12, 2645 | О |
| 87 | Cyanometabolites: molecules with immense antiviral potential. 2023 , 205, | O |
| 86 | Features of Liver Injury in COVID-19 Pathophysiological, Biological and Clinical Particularities. 2023 , 14, 156-169 | О |
| 85 | Antiviral Activity of Cell Membrane-Bound Amphiphilic Polymers. 2023 , 39, 5408-5417 | O |
| 84 | Pregnancy-specific responses to COVID-19 revealed by high-throughput proteomics of human plasma. 2023 , 3, | 0 |
| 83 | Lymphocytes regulate expression of the SARS-CoV -2 cell entry factor ACE2 in the pancreas of T2DM patients. | O |
| 82 | Murine Coronavirus Disease 2019 Lethality Is Characterized by Lymphoid Depletion Associated with Suppressed Antigen-Presenting Cell Functionality. 2023 , | 0 |
| 81 | The evolution of SARS-CoV-2. | 0 |
| 80 | COVID-19 and the Cardiovascular System. 2024 , 137-158 | О |
| 79 | Non-Hepatotropic Viral, Bacterial and Parasitic Infections of the Liver. 2024 , 448-526 | O |
| 78 | Factor Xa cleaves SARS-CoV-2 spike protein to block viral entry and infection. 2023, 14, | О |
| 77 | Lung Expression of Macrophage Markers CD68 and CD163, Angiotensin Converting Enzyme 2 (ACE2), and Caspase-3 in COVID-19. 2023 , 59, 714 | 0 |

| 76 | SARS-CoV-2 Spike Protein Accumulation in the Skull-Meninges-Brain Axis: Potential Implications for Long-Term Neurological Complications in post-COVID-19. | 0 |
|----|--|---|
| 75 | The purinergic receptor P2X7 and the NLRP3 inflammasome are druggable host factors required for SARS-CoV-2 infection. | O |
| 74 | Repurposing immune boosting and anti-viral efficacy of Parkia bioactive entities as multi-target directed therapeutic approach for SARS-CoV-2: exploration of lead drugs by drug likeness, molecular docking and molecular dynamics simulation methods. 1-39 | О |
| 73 | SARS-CoV-2: Structure, Pathogenesis, and Diagnosis. 2024 , 24-51 | O |
| 72 | Oral Cavity and COVID-19: Clinical Manifestations, Pathology, and Dental Profession. 2024 , 173-190 | 0 |
| 71 | COVID-19: Natural History and Spectrum of Disease. 2024 , 72-98 | O |
| 70 | A Multiplexed SERS Microassay for Accurate Detection of SARS-CoV-2 and Variants of Concern. | 0 |
| 69 | Spatial Distribution of SARS-CoV-2 Receptors and Proteases in Testicular Cells. 002215542311689 | 0 |
| 68 | Revolutionizing viral disease vaccination: the promising clinical advancements of non-replicating mRNA vaccines. 2023 , 20, | 0 |
| 67 | Revisiting the COVID-19 Pandemic: An Insight into Long-Term Post-COVID Complications and Repurposing of Drugs. 2023 , 3, 494-519 | 0 |
| 66 | Assessment of the potential value of combining western medicine therapies with traditional chinese medicine in the treatment of COVID-19: Mechanistic perspectives. 2023 , 1-16 | O |
| 65 | Development of a Peptide Sensor Derived from Human ACE2 for Fluorescence Polarization Assays of the SARS-CoV-2 Receptor Binding Domain. 2023 , 95, 6198-6202 | O |
| 64 | A new tractable method for generating Human Alveolar Macrophage Like cells in vitro to study lung inflammatory processes and diseases. | O |
| 63 | Nano-Drug Delivery Systems for COVID-19 Drug Delivery. 2023 , 295-309 | O |
| 62 | Inflammation as a Regulator of the Airway Surface Liquid pH in Cystic Fibrosis. 2023, 12, 1104 | O |
| 61 | Cell culture systems for isolation of SARS-CoV-2 clinical isolates and generation of recombinant virus. 2023 , 106634 | O |
| 60 | The Use of Azithromycin and Lopinavir-Ritonavir in the Treatment of COVID-19. 2023, 339-360 | 0 |
| 59 | Prospecting native and analogous peptides with anti-SARS-CoV-2 potential derived from the trypsin inhibitor purified from tamarind seeds. 2023 , 16, 104886 | 0 |

| 58 | DPP-4 Inhibitors as a savior for COVID-19 patients with diabetes. | 0 |
|----|---|---|
| 57 | SARS-CoV-2 infection aggravates cigarette smoke-exposed cell damage in primary human airway epithelia. 2023 , 20, | O |
| 56 | Effect of Angiotensin-Converting Enzyme Inhibitor and Angiotensin Receptor Blocker Initiation on Organ Support B ree Days in Patients Hospitalized With COVID-19. 2023 , 329, 1183 | 0 |
| 55 | Disrupted chromatin architecture in olfactory sensory neurons: looking for the link from COVID-19 infection to anosmia. 2023 , 13, | Ο |
| 54 | Modulation of in Vitro SARS-CoV-2 Infection by Stephania tetrandra and Its Alkaloid Constituents. | 0 |
| 53 | Comparative study between non-severe and severe Covid-19 infections in the levels of albumin, creatinine, and lactate dehydrogenase. 2023 , | 0 |
| 52 | Phytochemicals of Withania somnifera as a Future Promising Drug against SARS-CoV-2: Pharmacological Role, Molecular Mechanism, Molecular Docking Evaluation, and Efficient Delivery. 2023 , 11, 1000 | O |
| 51 | Correlation of covid-19 and Guillain-Barr yndrome: A Mechanistic Perspective. 2023, 100493 | O |
| 50 | Association between soluble angiotensin-converting enzyme 2 in saliva and SARS-CoV-2 infection: a cross-sectional study. 2023 , 13, | Ο |
| 49 | Repurposing niclosamide as a novel anti-SARS-Cov-2 drug by restricting entry protein CD147. | Ο |
| 48 | Genetic polymorphisms of ACE1, ACE2, IFTM3, TMPRSS2 and TNFEgenes associated with susceptibility and severity of SARS-CoV-2 infection: a systematic review and meta-analysis. | 0 |
| 47 | Changes in intestinal morphology, number of mucus-producing cells and expression of coronavirus receptors APN, DPP4, ACE2 and TMPRSS2 in pigs with aging. 2023 , 54, | O |
| 46 | Portable Surface Plasmon Resonance Detector for COVID-19 Infection. 2023 , 23, 3946 | 0 |
| 45 | Sphingosine Kinases Promote Ebola Virus Infection and Can Be Targeted to Inhibit Filoviruses, Coronaviruses, and Arenaviruses Using Late Endocytic Trafficking to Enter Cells. | 0 |
| 44 | Headache Features in Children and Adolescents with COVID-19. 2023, 165-177 | 0 |
| 43 | Seroprevalence of IgG and Subclasses against the Nucleocapsid of SARS-CoV-2 in Health Workers. 2023 , 15, 955 | O |
| 42 | Mechanisms of gastrointestinal barrier dysfunction in COVID-19 patients. 29, 2283-2293 | 0 |
| 41 | Immune-Mediated Neuropathies: Pathophysiology and Management. 2023 , 24, 7288 | O |

| 40 | Potential Mechanism of Curcumin and Resveratrol against SARS-CoV-2. | O |
|----|---|---|
| 39 | The impact of the COVID-19 pandemic on Clostridioides difficile infection and utilization of fecal microbiota transplantation. 2023 , 16, 175628482311655 | O |
| 38 | Identification of Common Dysregulated Genes in COVID-19 and Hypersensitivity Pneumonitis: A Systems Biology and Machine Learning Approach. | О |
| 37 | Small molecules in the race of COVID-19 drug development. 1-22 | O |
| 36 | RECAST: Study protocol for an observational study for the understanding of the increased REsilience of Children compared to Adults in SARS-CoV-2 infection. 2023 , 13, e065221 | 0 |
| 35 | Gut distress and intervention via communications of SARS-CoV-2 with mucosal exposome. 11, | O |
| 34 | Infection routes, invasion mechanisms, and drug inhibition pathways of human coronaviruses on the nervous system. 17, | О |
| 33 | The Role of Inflammatory Cytokines (Interleukin-1 and Interleukin-6) as a Potential Biomarker in the Different Stages of COVID-19 (Mild, Severe, and Critical). 2023 , 43, 147-163 | O |
| 32 | Omicsynin B4 potently blocks coronavirus infection by inhibiting host proteases cathepsin L and TMPRSS2. 2023 , 105606 | 0 |
| 31 | Human airway ex vivo models: new tools to study the airway epithelial cell response to SARS-CoV-2 infection. | O |
| 30 | Headaches associated with COVID-19. 2023 , 61-67 | 0 |
| 29 | Features of the Immune Response in COVID-19. 2023 , 12, 122-129 | O |
| 28 | A tool for nuclear imaging of the SARS-CoV-2 entry receptor: molecular model and preclinical development of ACE2-selective radiopeptides. 2023 , 13, | О |
| 27 | Molecular networking-based drug repurposing strategies for SARS-CoV-2 infection by targeting alpha-1-antitrypsin (SERPINA1). | O |
| 26 | Role of macrophages in pulmonary arterial hypertension. 14, | 0 |
| 25 | COVID-19 and Obstructive Sleep Apnoea. 2023 , 231-243 | 0 |
| 24 | Therapeutic strategies for COVID-19: progress and lessons learned. | 0 |
| 23 | Mice Humanized for MHC and hACE2 with High Permissiveness to SARS-CoV-2 Omicron Replication. 2023 , 105142 | O |

| 22 | Biogenic Zinc Oxide Nanoparticles and Their Biomedical Applications: A Review. | O |
|----|--|---|
| 21 | Home-based exercise alters pulmonary function and cellular stress markers in overweight middle-aged men during covid-19 Home quarantine. 2023 , 15, | O |
| 20 | COVID-19 and liver injury: Pathophysiology, risk factors, outcome and management in special populations. 15, 441-459 | 0 |
| 19 | Routine placental histopathology findings from women testing positive for SARS-CoV -2 during pregnancy: Retrospective cohort comparative study. | O |
| 18 | Drug repositioning in the COVID-19 pandemic: fundamentals, synthetic routes, and overview of clinical studies. | 0 |
| 17 | Statistical analysis and data visualization of Indonesia and Malaysia SARS Cov-2 metadata. 2023 , | O |
| 16 | Diabetes mellitus in relation to COVID-19. 2023 , 77-89 | O |
| 15 | Biochemical, inflammatory and oxidative stress biomarkers in obese patients after COVID-19. | Ο |
| 14 | SARS-CoV-2 Enters Human Leydig Cells and Affects Testosterone Production In Vitro. 2023, 12, 1198 | O |
| 13 | Use of monoclonal antibody therapy in hematologic patients with mild-to-moderate COVID -19: A retrospective single-center experience. | Ο |
| 12 | Nebulizer spray delivery of phytopharmaceutical nanosuspension via oral and nasal route. 2023, 437-457 | 0 |
| 11 | MicroRNAs and COVID-19. 2023 , 109-122 | O |
| 10 | Dietary intervention with functional foods modulating gut microbiota for improving the efficacy of COVID-19 vaccines. 2023 , e15668 | 0 |
| 9 | Self-replicating RNA nanoparticle vaccine elicits protective immune responses against SARS-CoV-2. 2023 , | O |
| 8 | Novel insight into the underlying dysregulation mechanisms of immune cell-to-cell communication by analyzing multitissue single-cell atlas of two COVID-19 patients. 2023 , 14, | 0 |
| 7 | Spatiotemporal transcriptome atlas of human embryos after gastrulation. | O |
| 6 | SARS-CoV-2 infection dysregulates the expression of clinically relevant drug metabolizing enzymes in Vero E6 cells and membrane transporters in human lung tissues. 14, | O |
| 5 | Myricetin possesses the potency against SARS-CoV-2 infection through blocking viral-entry facilitators and suppressing inflammation in rats and mice. 2023 , 116, 154858 | O |

| 4 | Repurposing clinically available drugs and therapies for pathogenic targets to combat SARS-CoV-2. 2023 , 4, | O |
|---|---|---|
| 3 | Cigarette smoke increases susceptibility of alveolar macrophages to SARS-CoV-2 infection through inducing reactive oxygen species-upregulated angiotensin-converting enzyme 2 expression. 2023 , 13, | O |
| 2 | Nanotechnologies for the Diagnosis and Treatment of SARS-CoV-2 and Its Variants. | O |
| 1 | Gastrointestinal manifestations of long-term effects after COVID-19 infection in patients with dialysis or kidney transplantation: An observational cohort study. 29, 3013-3026 | O |