Stefan G Sarafianos

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/5191190/publications.pdf

Version: 2024-02-01

170 papers	9,162 citations	36303 51 h-index	48315 88 g-index
173 all docs	173 docs citations	173 times ranked	7147 citing authors

#	Article	IF	Citations
1	Structure and Function of HIV-1 Reverse Transcriptase: Molecular Mechanisms of Polymerization and Inhibition. Journal of Molecular Biology, 2009, 385, 693-713.	4.2	426
2	Crystal structure of HIV-1 reverse transcriptase in complex with a polypurine tract RNA:DNA. EMBO Journal, 2001, 20, 1449-1461.	7.8	388
3	Structure and functional implications of the polymerase active site region in a complex of HIV-1 RT with a double-stranded DNA template-primer and an antibody fab fragment at 2.8 Å... resolution. Journal of Molecular Biology, 1998, 284, 1095-1111.	4.2	317
4	Lamivudine (3TC) resistance in HIV-1 reverse transcriptase involves steric hindrance with beta -branched amino acids. Proceedings of the National Academy of Sciences of the United States of America, 1999, 96, 10027-10032.	7.1	288
5	Molecular Modeling and Biochemical Characterization Reveal the Mechanism of Hepatitis B Virus Polymerase Resistance to Lamivudine (3TC) and Emtricitabine (FTC). Journal of Virology, 2001, 75, 4771-4779.	3.4	263
6	Selective Excision of AZTMP by Drug-Resistant Human Immunodeficiency Virus Reverse Transcriptase. Journal of Virology, 2001, 75, 4832-4842.	3.4	241
7	The RNA Polymerase â€œSwitch Regionâ€•Is a Target for Inhibitors. Cell, 2008, 135, 295-307.	28.9	234
8	X-ray crystal structures of native HIV-1 capsid protein reveal conformational variability. Science, 2015, 349, 99-103.	12.6	212
9	Structures of HIV-1 reverse transcriptase with pre- and post-translocation AZTMP-terminated DNA. EMBO Journal, 2002, 21, 6614-6624.	7.8	185
10	Inhibition of Bacterial RNA Polymerase by Streptolydigin: Stabilization of a Straight-Bridge-Helix Active-Center Conformation. Cell, 2005, 122, 541-552.	28.9	183
11	Molecular model of SARS coronavirus polymerase: implications for biochemical functions and drug design. Nucleic Acids Research, 2003, 31, 7117-7130.	14.5	170
12	Novel Inhibitors of Severe Acute Respiratory Syndrome Coronavirus Entry That Act by Three Distinct Mechanisms. Journal of Virology, 2013, 87, 8017-8028.	3.4	159
13	Structures of HIV-1 RTâ€“DNA complexes before and after incorporation of the anti-AIDS drug tenofovir. Nature Structural and Molecular Biology, 2004, 11, 469-474.	8.2	157
14	Mechanism of Nucleic Acid Unwinding by SARS-CoV Helicase. PLoS ONE, 2012, 7, e36521.	2.5	150
15	Capsid-CPSF6 Interaction Licenses Nuclear HIV-1 Trafficking to Sites of Viral DNA Integration. Cell Host and Microbe, 2018, 24, 392-404.e8.	11.0	141
16	HIV-1 Reverse Transcriptase Structure with RNase H Inhibitor Dihydroxy Benzoyl Naphthyl Hydrazone Bound at a Novel Site. ACS Chemical Biology, 2006, 1, 702-712.	3.4	132
17	Taking aim at a moving target: designing drugs to inhibit drug-resistant HIV-1 reverse transcriptases. Current Opinion in Structural Biology, 2004, 14, 716-730.	5.7	130
18	CODAS Syndrome Is Associated with Mutations of LONP1, Encoding Mitochondrial AAA+ Lon Protease. American Journal of Human Genetics, 2015, 96, 121-135.	6.2	127

#	Article	IF	Citations
19	The role of steric hindrance in 3TC resistance of human immunodeficiency virus type-1 reverse transcriptase 1 1Edited by A. R. Fersht. Journal of Molecular Biology, 2000, 300, 403-418.	4.2	122
20	Mechanism of Inhibition of HIV-1 Reverse Transcriptase by 4â€²-Ethynyl-2-fluoro-2â€²-deoxyadenosine Triphosphate, a Translocation-defective Reverse Transcriptase Inhibitor. Journal of Biological Chemistry, 2009, 284, 35681-35691.	3.4	117
21	Structural basis of HIV-1 resistance to AZT by excision. Nature Structural and Molecular Biology, 2010, 17, 1202-1209.	8.2	115
22	2â€²-Deoxy-4â€²-C-ethynyl-2-halo-adenosines active against drug-resistant human immunodeficiency virus type 1 variants. International Journal of Biochemistry and Cell Biology, 2008, 40, 2410-2420.	2.8	114
23	Design, Synthesis, Biochemical, and Antiviral Evaluations of C6 Benzyl and C6 Biarylmethyl Substituted 2-Hydroxylisoquinoline-1,3-diones: Dual Inhibition against HIV Reverse Transcriptase-Associated RNase H and Polymerase with Antiviral Activities. Journal of Medicinal Chemistry, 2015, 58, 651-664.	6.4	112
24	Touching the heart of HIV-1 drug resistance: the fingers close down on the dNTP at the polymerase active site. Chemistry and Biology, 1999, 6, R137-R146.	6.0	107
25	Nonnucleoside reverse transcriptase inhibitors are chemical enhancers of dimerization of the HIV type 1 reverse transcriptase. Proceedings of the National Academy of Sciences of the United States of America, 2001, 98, 7188-7193.	7.1	107
26	Expression, purification, and characterization of SARS coronavirus RNA polymerase. Virology, 2005, 335, 165-176.	2.4	105
27	Severe Acute Respiratory Syndrome Coronavirus Replication Inhibitor That Interferes with the Nucleic Acid Unwinding of the Viral Helicase. Antimicrobial Agents and Chemotherapy, 2012, 56, 4718-4728.	3.2	105
28	Mutations in the RNase H domain of HIV-1 reverse transcriptase affect the initiation of DNA synthesis and the specificity of RNase H cleavage in vivo. Proceedings of the National Academy of Sciences of the United States of America, 2002, 99, 9515-9520.	7.1	101
29	Identification and characterization of coumestans as novel HCV NS5B polymerase inhibitors. Nucleic Acids Research, 2008, 36, 1482-1496.	14.5	96
30	The Hepatitis B Virus Ribonuclease H Is Sensitive to Inhibitors of the Human Immunodeficiency Virus Ribonuclease H and Integrase Enzymes. PLoS Pathogens, 2013, 9, e1003125.	4.7	96
31	Evaluation of SSYA10-001 as a Replication Inhibitor of Severe Acute Respiratory Syndrome, Mouse Hepatitis, and Middle East Respiratory Syndrome Coronaviruses. Antimicrobial Agents and Chemotherapy, 2014, 58, 4894-4898.	3.2	96
32	HIV-1 replication complexes accumulate in nuclear speckles and integrate into speckle-associated genomic domains. Nature Communications, 2020, 11, 3505.	12.8	93
33	Nucleoside Analog Resistance Caused by Insertions in the Fingers of Human Immunodeficiency Virus Type 1 Reverse Transcriptase Involves ATP-Mediated Excision. Journal of Virology, 2002, 76, 9143-9151.	3.4	89
34	Amino Acid Mutation N348I in the Connection Subdomain of Human Immunodeficiency Virus Type 1 Reverse Transcriptase Confers Multiclass Resistance to Nucleoside and Nonnucleoside Reverse Transcriptase Inhibitors. Journal of Virology, 2008, 82, 3261-3270.	3.4	88
35	The M184V Mutation Reduces the Selective Excision of Zidovudine 5â€²-Monophosphate (AZTMP) by the Reverse Transcriptase of Human Immunodeficiency Virus Type 1. Journal of Virology, 2002, 76, 3248-3256.	3.4	85
36	Antiviral drugs specific for coronaviruses in preclinical development. Current Opinion in Virology, 2014, 8, 45-53.	5.4	85

#	Article	IF	Citations
37	Crystal Structures of Clinically Relevant Lys103Asn/Tyr181Cys Double Mutant HIV-1 Reverse Transcriptase in Complexes with ATP and Non-nucleoside Inhibitor HBY 097. Journal of Molecular Biology, 2007, 365, 77-89.	4.2	83
38	SC29EK, a Peptide Fusion Inhibitor with Enhanced Î±-Helicity, Inhibits Replication of Human Immunodeficiency Virus Type 1 Mutants Resistant to Enfuvirtide. Antimicrobial Agents and Chemotherapy, 2009, 53, 1013-1018.	3.2	82
39	Structural Basis for the Role of the K65R Mutation in HIV-1 Reverse Transcriptase Polymerization, Excision Antagonism, and Tenofovir Resistance. Journal of Biological Chemistry, 2009, 284, 35092-35100.	3.4	81
40	4â€²-Ethynyl-2-fluoro-2â€²-deoxyadenosine (EFdA) Inhibits HIV-1 Reverse Transcriptase with Multiple Mechanisms. Journal of Biological Chemistry, 2014, 289, 24533-24548.	3.4	80
41	Trapping HIV-1 Reverse Transcriptase Before and After Translocation on DNA. Journal of Biological Chemistry, 2003, 278, 16280-16288.	3.4	79
42	4â€²-Ethynyl-2-fluoro-2â€²-deoxyadenosine, MK-8591. Current Opinion in HIV and AIDS, 2018, 13, 294-299.	3.8	76
43	Structural basis of HIV inhibition by translocation-defective RT inhibitor 4â€²-ethynyl-2-fluoro-2â€²-deoxyadenosine (EFdA). Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 9274-9279.	7.1	73
44	Expression and purification of SARS coronavirus proteins using SUMO-fusions. Protein Expression and Purification, 2005, 42, 100-110.	1.3	72
45	Structural Aspects of Drug Resistance and Inhibition of HIV-1 Reverse Transcriptase. Viruses, 2010, 2, 606-638.	3.3	70
46	Oral Administration of the Nucleoside EFdA (4â€²-Ethynyl-2-Fluoro-2â€²-Deoxyadenosine) Provides Rapid Suppression of HIV Viremia in Humanized Mice and Favorable Pharmacokinetic Properties in Mice and the Rhesus Macaque. Antimicrobial Agents and Chemotherapy, 2015, 59, 4190-4198.	3.2	70
47	Site-directed Mutagenesis of Arginine 72 of HIV-1 Reverse Transcriptase. Journal of Biological Chemistry, 1995, 270, 19729-19735.	3.4	68
48	Why Do HIV-1 and HIV-2 Use Different Pathways to Develop AZT Resistance?. PLoS Pathogens, 2006, 2, e10.	4.7	62
49	Effect of Mutations at Position E138 in HIV-1 Reverse Transcriptase and Their Interactions with the M184I Mutation on Defining Patterns of Resistance to Nonnucleoside Reverse Transcriptase Inhibitors Rilpivirine and Etravirine. Antimicrobial Agents and Chemotherapy, 2013, 57, 3100-3109.	3.2	61
50	Biochemical Mechanism of HIV-1 Resistance to Rilpivirine. Journal of Biological Chemistry, 2012, 287, 38110-38123.	3.4	59
51	Analysis of mutations at positions 115 and 116 in the dNTP binding site of HIV-1 reverse transcriptase. Proceedings of the National Academy of Sciences of the United States of America, 2000, 97, 3056-3061.	7.1	58
52	Design, Synthesis, and Biological Evaluations of Hydroxypyridonecarboxylic Acids as Inhibitors of HIV Reverse Transcriptase Associated RNase H. Journal of Medicinal Chemistry, 2016, 59, 5051-5062.	6.4	54
53	Mutation of Amino Acids in the Connection Domain of Human Immunodeficiency Virus Type 1 Reverse Transcriptase That Contact the Template-Primer Affects RNase H Activity. Journal of Virology, 2003, 77, 8548-8554.	3.4	52
54	Response of Simian Immunodeficiency Virus to the Novel Nucleoside Reverse Transcriptase Inhibitor 4â€²-Ethynyl-2-Fluoro-2â€²-Deoxyadenosine In Vitro and In Vivo. Antimicrobial Agents and Chemotherapy, 2012, 56, 4707-4712.	3.2	50

#	Article	IF	Citations
55	Multiplex single-cell visualization of nucleic acids and protein during HIV infection. Nature Communications, 2017, 8, 1882.	12.8	50
56	Avoiding Drug Resistance in HIV Reverse Transcriptase. Chemical Reviews, 2021, 121, 3271-3296.	47.7	46
57	Designing anti-AIDS drugs targeting the major mechanism of HIV-1 RT resistance to nucleoside analog drugs. International Journal of Biochemistry and Cell Biology, 2004, 36, 1706-1715.	2.8	45
58	Inhibitors of HIV-1 Reverse Transcriptaseâ€"Associated Ribonuclease H Activity. Biology, 2012, 1, 521-541.	2.8	45
59	4â€²â€modified nucleoside analogs: Potent inhibitors active against entecavirâ€resistant hepatitis B virus. Hepatology, 2015, 62, 1024-1036.	7.3	43
60	Design of Peptide-based Inhibitors for Human Immunodeficiency Virus Type 1 Strains Resistant to T-20*. Journal of Biological Chemistry, 2009, 284, 4914-4920.	3.4	41
61	The N348I Mutation at the Connection Subdomain of HIV-1 Reverse Transcriptase Decreases Binding to Nevirapine. Journal of Biological Chemistry, 2010, 285, 38700-38709.	3.4	41
62	Antiviral therapies: Focus on hepatitis B reverse transcriptase. International Journal of Biochemistry and Cell Biology, 2012, 44, 1060-1071.	2.8	40
63	3-Hydroxypyrimidine-2,4-dione-5-N-benzylcarboxamides Potently Inhibit HIV-1 Integrase and RNase H. Journal of Medicinal Chemistry, 2016, 59, 6136-6148.	6.4	40
64	Vaginal Microbicide Film Combinations of Two Reverse Transcriptase Inhibitors, EFdA and CSIC, for the Prevention of HIV-1 Sexual Transmission. Pharmaceutical Research, 2015, 32, 2960-2972.	3.5	39
65	3-Hydroxypyrimidine-2,4-diones as Selective Active Site Inhibitors of HIV Reverse Transcriptase-Associated RNase H: Design, Synthesis, and Biochemical Evaluations. Journal of Medicinal Chemistry, 2016, 59, 2648-2659.	6.4	39
66	Clinical relevance of substitutions in the connection subdomain and RNase H domain of HIV-1 reverse transcriptase from a cohort of antiretroviral treatment-naÃ¯ve patients. Antiviral Research, 2009, 82, 115-121.	4.1	38
67	Broad-spectrum aptamer inhibitors of HIV reverse transcriptase closely mimic natural substrates. Nucleic Acids Research, 2011, 39, 8237-8247.	14.5	38
68	Double-Winged 3-Hydroxypyrimidine-2,4-diones: Potent and Selective Inhibition against HIV-1 RNase H with Significant Antiviral Activity. Journal of Medicinal Chemistry, 2017, 60, 5045-5056.	6.4	38
69	Resistance Profiles of Novel Electrostatically Constrained HIV-1 Fusion Inhibitors. Journal of Biological Chemistry, 2010, 285, 39471-39480.	3.4	37
70	Hypersusceptibility mechanism of Tenofovir-resistant HIV to EFdA. Retrovirology, 2013, 10, 65.	2.0	36
71	Design, synthesis and biological evaluations of N-Hydroxy thienopyrimidine-2,4-diones as inhibitors of HIV reverse transcriptase-associated RNase H. European Journal of Medicinal Chemistry, 2017, 141, 149-161.	5.5	36
72	Effects of Substitutions at the 4â€² and 2 Positions on the Bioactivity of 4â€²-Ethynyl-2-Fluoro-2â€²-Deoxyadenosine. Antimicrobial Agents and Chemotherapy, 2013, 57, 6254-6264.	3.2	35

#	Article	IF	Citations
73	Development of a vaginal delivery film containing EFdA, a novel anti-HIV nucleoside reverse transcriptase inhibitor. International Journal of Pharmaceutics, 2014, 461, 203-213.	5.2	33
74	Effects of Mutations in the G Tract of the Human Immunodeficiency Virus Type 1 Polypurine Tract on Virus Replication and RNase H Cleavage. Journal of Virology, 2004, 78, 13315-13324.	3.4	32
75	Effects of the Î”67 Complex of Mutations in Human Immunodeficiency Virus Type 1 Reverse Transcriptase on Nucleoside Analog Excision. Journal of Virology, 2004, 78, 9987-9997.	3.4	31
76	Structural and Inhibition Studies of the RNase H Function of Xenotropic Murine Leukemia Virus-Related Virus Reverse Transcriptase. Antimicrobial Agents and Chemotherapy, 2012, 56, 2048-2061.	3.2	31
77	Identification of Amino Acid Residues in the Human Immunodeficiency Virus Type-1 Reverse Transcriptase Tryptophan-repeat Motif that are Required for Subunit Interaction Using Infectious Virions. Journal of Molecular Biology, 2005, 349, 673-684.	4.2	30
78	Long-Acting Anti-HIV Drugs Targeting HIV-1 Reverse Transcriptase and Integrase. Pharmaceuticals, 2019, 12, 62.	3.8	30
79	Similarities and differences in the RNase H activities of human immunodeficiency virus type 1 reverse transcriptase and moloney murine leukemia virus reverse transcriptase. Journal of Molecular Biology, 1999, 294, 1097-1113.	4.2	29
80	K70Q Adds High-Level Tenofovir Resistance to â€œQ151M Complexâ€•HIV Reverse Transcriptase through the Enhanced Discrimination Mechanism. PLoS ONE, 2011, 6, e16242.	2.5	29
81	6-Biphenylmethyl-3-hydroxypyrimidine-2,4-diones potently and selectively inhibited HIV reverse transcriptase-associated RNase H. European Journal of Medicinal Chemistry, 2018, 156, 680-691.	5.5	28
82	Interactions of Conformationally Biased North and South 2â€˜-Fluoro-2â€˜,3â€˜-dideoxynucleoside 5â€˜-Triphosphates with the Active Site of HIV-1 Reverse Transcriptase. Biochemistry, 2000, 39, 11205-11215.	2.5	27
83	YADD Mutants of Human Immunodeficiency Virus Type 1 and Moloney Murine Leukemia Virus Reverse Transcriptase Are Resistant to Lamivudine Triphosphate (3TCTP) In Vitro. Journal of Virology, 2001, 75, 6321-6328.	3.4	27
84	3â€˜-Azido-3â€˜-deoxythymidine-(5â€˜)-tetraphospho-(5â€˜)-adenosine, the Product of ATP-Mediated Excision of Chain-Terminating AZTMP, Is a Potent Chain-Terminating Substrate for HIV-1 Reverse Transcriptaseâ€. Biochemistry, 2007, 46, 828-836.	2.5	27
85	Drug Resistance in Non-B Subtype HIV-1: Impact of HIV-1 Reverse Transcriptase Inhibitors. Viruses, 2014, 6, 3535-3562.	3.3	27
86	6-Arylthio-3-hydroxypyrimidine-2,4-diones potently inhibited HIV reverse transcriptase-associated RNase H with antiviral activity. European Journal of Medicinal Chemistry, 2018, 156, 652-665.	5.5	27
87	Cutting into the Substrate Dominance: Pharmacophore and Structure-Based Approaches toward Inhibiting Human Immunodeficiency Virus Reverse Transcriptase-Associated Ribonuclease H. Accounts of Chemical Research, 2020, 53, 218-230.	15.6	27
88	Rotten to the core: antivirals targeting the HIV-1 capsid core. Retrovirology, 2021, 18, 41.	2.0	27
89	Feasibility of Known RNA Polymerase Inhibitors as Anti-SARS-CoV-2 Drugs. Pathogens, 2020, 9, 320.	2.8	26
90	Mutations in the 5â€² End of the Human Immunodeficiency Virus Type 1 Polypurine Tract Affect RNase H Cleavage Specificity and Virus Titer. Journal of Virology, 2003, 77, 11150-11157.	3.4	25

#	Article	IF	Citations
91	Divergent Evolution in Reverse Transcriptase (RT) of HIV-1 Group O and M Lineages: Impact on Structure, Fitness, and Sensitivity to Nonnucleoside RT Inhibitors. Journal of Virology, 2010, 84, 9817-9830.	3.4	25
92	SAMHD1 Has Differential Impact on the Efficacies of HIV Nucleoside Reverse Transcriptase Inhibitors. Antimicrobial Agents and Chemotherapy, 2014, 58, 4915-4919.	3.2	25
93	Mechanism of Interaction of Human Mitochondrial DNA Polymerase Î³ with the Novel Nucleoside Reverse Transcriptase Inhibitor 4â€²-Ethynyl-2-Fluoro-2â€²-Deoxyadenosine Indicates a Low Potential for Host Toxicity. Antimicrobial Agents and Chemotherapy, 2012, 56, 1630-1634.	3.2	23
94	Synthesis, biological evaluation and molecular modeling of 2-Hydroxyisoquinoline-1,3-dione analogues as inhibitors of HIV reverse transcriptase associated ribonuclease H and polymerase. European Journal of Medicinal Chemistry, 2017, 133, 85-96.	5.5	23
95	Subunit-Specific Analysis of the Human Immunodeficiency Virus Type 1 Reverse Transcriptase In Vivo. Journal of Virology, 2004, 78, 7089-7096.	3.4	22
96	Multifunctionality of a Picornavirus Polymerase Domain: Nuclear Localization Signal and Nucleotide Recognition. Journal of Virology, 2015, 89, 6848-6859.	3.4	22
97	Pharmacophore-based design of novel 3-hydroxypyrimidine-2,4-dione subtypes as inhibitors of HIV reverse transcriptase-associated RNase H: Tolerance of a nonflexible linker. European Journal of Medicinal Chemistry, 2019, 166, 390-399.	5.5	22
98	Novel PF74-like small molecules targeting the HIV-1 capsid protein: Balance of potency and metabolic stability. Acta Pharmaceutica Sinica B, 2021, 11, 810-822.	12.0	22
99	Structural Determinants of Slippage-mediated Mutations by Human Immunodeficiency Virus Type 1 Reverse Transcriptase. Journal of Biological Chemistry, 2006, 281, 7421-7428.	3.4	21
100	Evaluation of Combinations of 4â€²-Ethynyl-2-Fluoro-2â€²-Deoxyadenosine with Clinically Used Antiretroviral Drugs. Antimicrobial Agents and Chemotherapy, 2013, 57, 4554-4558.	3.2	21
101	6-Cyclohexylmethyl-3-hydroxypyrimidine-2,4-dione as an inhibitor scaffold of HIV reverase transcriptase: Impacts of the 3-OH on inhibiting RNase H and polymerase. European Journal of Medicinal Chemistry, 2017, 128, 168-179.	5.5	21
102	The Heteroaryldihydropyrimidine Bay 38-7690 Induces Hepatitis B Virus Core Protein Aggregates Associated with Promyelocytic Leukemia Nuclear Bodies in Infected Cells. MSphere, 2018, 3, .	2.9	21
103	Inhibitors of Foot and Mouth Disease Virus Targeting a Novel Pocket of the RNA-Dependent RNA Polymerase. PLoS ONE, 2010, 5, e15049.	2.5	21
104	Marine Natural Products as Leads against SARS-CoV-2 Infection. Journal of Natural Products, 2022, 85, 657-665.	3.0	21
105	Combining mutations in HIV-1 reverse transcriptase with mutations in the HIV-1 polypurine tract affects RNase H cleavages involved in PPT utilization. Virology, 2006, 348, 378-388.	2.4	20
106	Fast Hepatitis C Virus RNA Elimination and NS5A Redistribution by NS5A Inhibitors Studied by a Multiplex Assay Approach. Antimicrobial Agents and Chemotherapy, 2015, 59, 3482-3492.	3.2	20
107	The High Genetic Barrier of EFdA/MK-8591 Stems from Strong Interactions with the Active Site of Drug-Resistant HIV-1 Reverse Transcriptase. Cell Chemical Biology, 2018, 25, 1268-1278.e3.	5.2	20
108	Toward Structurally Novel and Metabolically Stable HIV-1 Capsid-Targeting Small Molecules. Viruses, 2020, 12, 452.	3.3	20

#	Article	IF	Citations
109	Comparison of anti-SARS-CoV-2 activity and intracellular metabolism of remdesivir and its parent nucleoside. Current Research in Pharmacology and Drug Discovery, 2021, 2, 100045.	3.6	20
110	Impact of HIV-1 Integrase L74F and V75I Mutations in a Clinical Isolate on Resistance to Second-Generation Integrase Strand Transfer Inhibitors. Antimicrobial Agents and Chemotherapy, 2017, 61, .	3.2	19
111	3-Hydroxypyrimidine-2,4-Diones as Novel Hepatitis B Virus Antivirals Targeting the Viral Ribonuclease H. Antimicrobial Agents and Chemotherapy, 2017, 61, .	3.2	19
112	Structural Implications of Genotypic Variations in HIV-1 Integrase From Diverse Subtypes. Frontiers in Microbiology, 2018, 9, 1754.	3.5	19
113	A 2-Hydroxyisoquinoline-1,3-Dione Active-Site RNase H Inhibitor Binds in Multiple Modes to HIV-1 Reverse Transcriptase. Antimicrobial Agents and Chemotherapy, 2017, 61, .	3.2	17
114	CMCdG, a Novel Nucleoside Analog with Favorable Safety Features, Exerts Potent Activity against Wild-Type and Entecavir-Resistant Hepatitis B Virus. Antimicrobial Agents and Chemotherapy, 2019, 63, .	3.2	17
115	5-Aminothiophene-2,4-dicarboxamide analogues as hepatitis B virus capsid assembly effectors. European Journal of Medicinal Chemistry, 2019, 164, 179-192.	5.5	17
116	Probing the molecular mechanism of action of the HIV-1 reverse transcriptase inhibitor 4â€²-ethynyl-2-fluoro-2â€²-deoxyadenosine (EFdA) using pre-steady-state kinetics. Antiviral Research, 2014, 106, 1-4.	4.1	16
117	Chemical profiling of HIV-1 capsid-targeting antiviral PF74. European Journal of Medicinal Chemistry, 2020, 200, 112427.	5.5	16
118	In vitro transport characteristics of EFdA, a novel nucleoside reverse transcriptase inhibitor using Caco-2 and MDCKII cell monolayers. European Journal of Pharmacology, 2014, 732, 86-95.	3.5	15
119	Biochemical, inhibition and inhibitor resistance studies of xenotropic murine leukemia virus-related virus reverse transcriptase. Nucleic Acids Research, 2012, 40, 345-359.	14.5	14
120	Preformulation studies of EFdA, a novel nucleoside reverse transcriptase inhibitor for HIV prevention. Drug Development and Industrial Pharmacy, 2014, 40, 1101-1111.	2.0	14
121	Visualization of Positive and Negative Sense Viral RNA for Probing the Mechanism of Direct-Acting Antivirals against Hepatitis C Virus. Viruses, 2019, 11, 1039.	3.3	14
122	Novel HIV-1 capsid-targeting small molecules of the PF74 binding site. European Journal of Medicinal Chemistry, 2020, 204, 112626.	5.5	14
123	Discovery of New Small Molecule Hits as Hepatitis B Virus Capsid Assembly Modulators: Structure and Pharmacophore-Based Approaches. Viruses, 2021, 13, 770.	3.3	14
124	The mutation T477A in HIV-1 reverse transcriptase (RT) restores normal proteolytic processing of RT in virus with Gag-Pol mutated in the p51-RNH cleavage site. Retrovirology, 2010, 7, 6.	2.0	13
125	Molecular and Functional Bases of Selection against a Mutation Bias in an RNA Virus. Genome Biology and Evolution, 2017, 9, 1212-1228.	2.5	13
126	Novel Intersubunit Interaction Critical for HIV-1 Core Assembly Defines a Potentially Targetable Inhibitor Binding Pocket. MBio, 2019, 10, .	4.1	13

#	Article	IF	Citations
127	Novel Hepatitis B Virus Capsid-Targeting Antiviral That Aggregates Core Particles and Inhibits Nuclear Entry of Viral Cores. ACS Infectious Diseases, 2019, 5, 750-758.	3.8	13
128	Increased replication capacity following evolution of PYxE insertion in Gagâ€p6 is associated with enhanced virulence in HIVâ€1 subtype C from East Africa. Journal of Medical Virology, 2017, 89, 106-111.	5.0	12
129	Visualization of HIV-1 RNA Transcription from Integrated HIV-1 DNA in Reactivated Latently Infected Cells. Viruses, 2018, 10, 534.	3.3	12
130	Identification of a Structural Element in HIV-1 Gag Required for Virus Particle Assembly and Maturation. MBio, 2018, 9, .	4.1	12
131	Antiretroviral potency of 4â€²-ethnyl-2â€²-fluoro-2â€²-deoxyadenosine, tenofovir alafenamide and second-generation NNRTIs across diverse HIV-1 subtypes. Journal of Antimicrobial Chemotherapy, 2018, 73, 2721-2728.	3.0	12
132	Effect of Pâ€body component Mov10 on HCV virus production and infectivity. FASEB Journal, 2020, 34, 9433-9449.	0.5	11
133	Design, Synthesis and Characterization of HIV-1 CA-Targeting Small Molecules: Conformational Restriction of PF74. Viruses, 2021, 13, 479.	3.3	11
134	Molecular Dynamics Free Energy Simulations Reveal the Mechanism for the Antiviral Resistance of the M66I HIV-1 Capsid Mutation. Viruses, 2021, 13, 920.	3.3	11
135	Effects of Moloney Leukemia Virus 10 Protein on Hepatitis B Virus Infection and Viral Replication. Viruses, 2019, 11, 651.	3.3	10
136	Determinants of Active-Site Inhibitor Interaction with HIV-1 RNase H. ACS Infectious Diseases, 2019, 5, 1963-1974.	3.8	10
137	Development of Human Immunodeficiency Virus Type 1 Resistance to 4â€²-Ethynyl-2-Fluoro-2â€²-Deoxyadenosine Starting with Wild-Type or Nucleoside Reverse Transcriptase Inhibitor-Resistant Strains. Antimicrobial Agents and Chemotherapy, 2021, 65, e0116721.	3.2	10
138	Synthesis of AZTp_Sp_{CX2}pp_SA and AZTp_Sp_{CX2}pp_SAZT:â€‰ Hydrolysis-Resistant Potential Inhibitors of the AZT Excision Reaction of HIV-1 RT. Organic Letters, 2007, 9, 5243-5246.	4.6	9
139	Synthesis of boranoate, selenoate, and thioate analogs of AZTp4A and Ap4A. Tetrahedron, 2009, 65, 7915-7920.	1.9	9
140	HIV-1 Reverse Transcriptase (RT) Polymorphism 172K Suppresses the Effect of Clinically Relevant Drug Resistance Mutations to Both Nucleoside and Non-nucleoside RT Inhibitors. Journal of Biological Chemistry, 2012, 287, 29988-29999.	3.4	9
141	Selection and identification of an RNA aptamer that specifically binds the HIV-1 capsid lattice and inhibits viral replication. Nucleic Acids Research, 2022, 50, 1701-1717.	14.5	9
142	Repeated exposure to 5D9, an inhibitor of 3D polymerase, effectively limits the replication of foot-and-mouth disease virus in host cells. Antiviral Research, 2013, 98, 380-385.	4.1	8
143	RNase H Cleavage of the 5â€² End of the Human Immunodeficiency Virus Type 1 Genome. Journal of Virology, 2001, 75, 11874-11880.	3.4	7
144	An HIV secret uncovered. Nature, 2008, 453, 169-170.	27.8	7

#	Article	IF	Citations
145	Effect of tRNA on the Maturation of HIV-1 Reverse Transcriptase. Journal of Molecular Biology, 2018, 430, 1891-1900.	4.2	7
146	Conformational Changes in HIV-1 Reverse Transcriptase that Facilitate Its Maturation. Structure, 2019, 27, 1581-1593.e3.	3.3	7
147	7-Deaza-7-fluoro modification confers on 4â€²-cyano-nucleosides potent activity against entecavir/adefovir-resistant HBV variants and favorable safety. Antiviral Research, 2020, 176, 104744.	4.1	7
148	Rev-derived peptides inhibit HIV-1 replication by antagonism of Rev and a co-receptor, CXCR4. International Journal of Biochemistry and Cell Biology, 2010, 42, 1482-1488.	2.8	6
149	Mechanism of resistance to S138A substituted enfuvirtide and its application to peptide design. International Journal of Biochemistry and Cell Biology, 2013, 45, 908-915.	2.8	6
150	Future treatment strategies for novel Middle East respiratory syndrome coronavirus infection. Future Medicinal Chemistry, 2013, 5, 2119-2122.	2.3	6
151	HIV-1 Resistance Mechanism to an Electrostatically Constrained Peptide Fusion Inhibitor That Is Active against T-20-Resistant Strains. Antimicrobial Agents and Chemotherapy, 2013, 57, 4035-4038.	3.2	6
152	Factors influencing the efficacy of rilpivirine in HIV-1 subtype C in low- and middle-income countries. Journal of Antimicrobial Chemotherapy, 2016, 71, 367-371.	3.0	6
153	Specific mutations in the HIV-1 G-tract of the 3â€²-polypurine tract cause resistance to integrase strand transfer inhibitors. Journal of Antimicrobial Chemotherapy, 2022, 77, 574-577.	3.0	6
154	Structure-based virtual screening workflow to identify antivirals targeting HIV-1 capsid. Journal of Computer-Aided Molecular Design, 2022, 36, 193-203.	2.9	6
155	Restriction fragment mass polymorphism (RFMP) analysis based on MALDI-TOF mass spectrometry for detecting antiretroviral resistance in HIV-1 infected patients. Clinical Microbiology and Infection, 2013, 19, E263-E270.	6.0	5
156	Structural requirements for RNA degradation by HIV-1 reverse transcriptase. Nature Structural and Molecular Biology, 2013, 20, 1341-1342.	8.2	5
157	Contribution of a Multifunctional Polymerase Region of Foot-and-Mouth Disease Virus to Lethal Mutagenesis. Journal of Virology, 2018, 92, .	3.4	5
158	TRIM5Î± Restriction of HIV-1-N74D Viruses in Lymphocytes Is Caused by a Loss of Cyclophilin A Protection. Viruses, 2022, 14, 363.	3.3	5
159	Potent Anti-HIV-1 Activity of N-HR-Derived Peptides Including a Deep Pocket-Forming Region without Antagonistic Effects on T-20. Antiviral Chemistry and Chemotherapy, 2011, 22, 51-55.	0.6	3
160	AT32P-dependent estimation of nanomoles of fatty acids: Its use in the assay of phospholipase A2 activity. Analytical Biochemistry, 1990, 186, 374-379.	2.4	2
161	Structural basis of cladeâ€specific HIVâ€1 neutralization by humanized antiâ€V3 monoclonal antibody KDâ€247. FASEB Journal, 2015, 29, 70-80.	0.5	2
162	Hepatitis B Virus genotypic differences map structurally close to NRTI resistance hot spots. International Journal of Current Chemistry, 2011, 2, 253-260.	1.0	2

#	Article	IF	Citations
163	Single-Cell Multiplexed Fluorescence Imaging to Visualize Viral Nucleic Acids and Proteins and Monitor HIV, HTLV, HBV, HCV, Zika Virus, and Influenza Infection. Journal of Visualized Experiments, 2020, , .	0.3	2
164	RT Slides Home.... Science, 2008, 322, 1059-1060.	12.6	1
165	Proteins and Disease | Structural Basis of HIV Reverse Transcription, Inhibition, and Drug Resistance. , 2021, , 92-104.		1
166	Potency and metabolic stability: a molecular hybrid case in the design of novel PF74-like small molecules targeting HIV-1 capsid protein. RSC Medicinal Chemistry, 2021, 12, 2031-2044.	3.9	1
167	HIV-1 Reverse Transcriptase Structure. , 2004, , 388-392.		0
168	HIV-1 Reverse Transcriptase Inhibitors and Mechanisms of Resistance. , 2009, , 549-570.		0
169	Remembering Professor Walter A. Scott. Viruses, 2014, 6, 3873-3874.	3.3	0
170	Single-cell Multiplexed Fluorescence Imaging to Visualize Viral Nucleic Acids and Proteins and Monitor HIV, HTLV, HBV, HCV, Zika Virus, and Influenza Infection. Journal of Visualized Experiments, 2020, , .	0.3	0