

Stefan G Sarafianos

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173
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8,491
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#	Paper	IF	Citations
161	Crystal structure of HIV-1 reverse transcriptase in complex with a polypurine tract RNA:DNA. <i>EMBO Journal</i> , 2001 , 20, 1449-61	13	360
160	Structure and function of HIV-1 reverse transcriptase: molecular mechanisms of polymerization and inhibition. <i>Journal of Molecular Biology</i> , 2009 , 385, 693-713	6.5	355
159	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. <i>Journal of Molecular Biology</i> , 1998 , 284, 1095-111	6.5	302
158	Lamivudine (3TC) resistance in HIV-1 reverse transcriptase involves steric hindrance with beta-branched amino acids. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 1999 , 96, 10027-32	11.5	261
157	Molecular modeling and biochemical characterization reveal the mechanism of hepatitis B virus polymerase resistance to lamivudine (3TC) and emtricitabine (FTC). <i>Journal of Virology</i> , 2001 , 75, 4771-9	6.6	235
156	Selective excision of AZTMP by drug-resistant human immunodeficiency virus reverse transcriptase. <i>Journal of Virology</i> , 2001 , 75, 4832-42	6.6	232
155	The RNA polymerase "switch region" is a target for inhibitors. <i>Cell</i> , 2008 , 135, 295-307	56.2	191
154	Structures of HIV-1 reverse transcriptase with pre- and post-translocation AZTMP-terminated DNA. <i>EMBO Journal</i> , 2002 , 21, 6614-24	13	167
153	Inhibition of bacterial RNA polymerase by streptolydigin: stabilization of a straight-bridge-helix active-center conformation. <i>Cell</i> , 2005 , 122, 541-52	56.2	166
152	STRUCTURAL VIROLOGY. X-ray crystal structures of native HIV-1 capsid protein reveal conformational variability. <i>Science</i> , 2015 , 349, 99-103	33.3	156
151	Structures of HIV-1 RT-DNA complexes before and after incorporation of the anti-AIDS drug tenofovir. <i>Nature Structural and Molecular Biology</i> , 2004 , 11, 469-74	17.6	145
150	Molecular model of SARS coronavirus polymerase: implications for biochemical functions and drug design. <i>Nucleic Acids Research</i> , 2003 , 31, 7117-30	20.1	135
149	Novel inhibitors of severe acute respiratory syndrome coronavirus entry that act by three distinct mechanisms. <i>Journal of Virology</i> , 2013 , 87, 8017-28	6.6	119
148	HIV-1 reverse transcriptase structure with RNase H inhibitor dihydroxy benzoyl naphthyl hydrazone bound at a novel site. <i>ACS Chemical Biology</i> , 2006 , 1, 702-12	4.9	118
147	Taking aim at a moving target: designing drugs to inhibit drug-resistant HIV-1 reverse transcriptases. <i>Current Opinion in Structural Biology</i> , 2004 , 14, 716-30	8.1	118
146	The role of steric hindrance in 3TC resistance of human immunodeficiency virus type-1 reverse transcriptase. <i>Journal of Molecular Biology</i> , 2000 , 300, 403-18	6.5	116
145	Mechanism of nucleic acid unwinding by SARS-CoV helicase. <i>PLoS ONE</i> , 2012 , 7, e36521	3.7	112

144	Mechanism of inhibition of HIV-1 reverse transcriptase by 4REthynyl-2-fluoro-2Rdeoxyadenosine triphosphate, a translocation-defective reverse transcriptase inhibitor. <i>Journal of Biological Chemistry</i> , 2009 , 284, 35681-91	5.4	104
143	Nonnucleoside reverse transcriptase inhibitors are chemical enhancers of dimerization of the HIV type 1 reverse transcriptase. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2001 , 98, 7188-93	11.5	101
142	Touching the heart of HIV-1 drug resistance: the fingers close down on the dNTP at the polymerase active site. <i>Chemistry and Biology</i> , 1999 , 6, R137-46		98
141	Structural basis of HIV-1 resistance to AZT by excision. <i>Nature Structural and Molecular Biology</i> , 2010 , 17, 1202-9	17.6	97
140	Capsid-CPSF6 Interaction Licenses Nuclear HIV-1 Trafficking to Sites of Viral DNA Integration. <i>Cell Host and Microbe</i> , 2018 , 24, 392-404.e8	23.4	96
139	CODAS syndrome is associated with mutations of LONP1, encoding mitochondrial AAA+ Lon protease. <i>American Journal of Human Genetics</i> , 2015 , 96, 121-35	11	95
138	2Rdeoxy-4RC-ethynyl-2-halo-adenosines active against drug-resistant human immunodeficiency virus type 1 variants. <i>International Journal of Biochemistry and Cell Biology</i> , 2008 , 40, 2410-20	5.6	90
137	Expression, purification, and characterization of SARS coronavirus RNA polymerase. <i>Virology</i> , 2005 , 335, 165-76	3.6	89
136	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. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2002 , 99, 9515-20	11.5	87
135	The hepatitis B virus ribonuclease H is sensitive to inhibitors of the human immunodeficiency virus ribonuclease H and integrase enzymes. <i>PLoS Pathogens</i> , 2013 , 9, e1003125	7.6	85
134	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. <i>Journal of Virology</i> , 2008 , 82, 3261-70	6.6	84
133	Identification and characterization of coumestans as novel HCV NS5B polymerase inhibitors. <i>Nucleic Acids Research</i> , 2008 , 36, 1482-96	20.1	84
132	Design, synthesis, biochemical, and antiviral evaluations of C6 benzyl and C6 biarylmethyl substituted 2-hydroxyisoquinoline-1,3-diones: dual inhibition against HIV reverse transcriptase-associated RNase H and polymerase with antiviral activities. <i>Journal of Medicinal Chemistry</i> , 2015 , 58, 651-64	8.3	82
131	Nucleoside analog resistance caused by insertions in the fingers of human immunodeficiency virus type 1 reverse transcriptase involves ATP-mediated excision. <i>Journal of Virology</i> , 2002 , 76, 9143-51	6.6	82
130	The M184V mutation reduces the selective excision of zidovudine 5Rmonophosphate (AZTMP) by the reverse transcriptase of human immunodeficiency virus type 1. <i>Journal of Virology</i> , 2002 , 76, 3248-56	6.6	81
129	Evaluation of SSYA10-001 as a replication inhibitor of severe acute respiratory syndrome, mouse hepatitis, and Middle East respiratory syndrome coronaviruses. <i>Antimicrobial Agents and Chemotherapy</i> , 2014 , 58, 4894-8	5.9	80
128	Crystal structures of clinically relevant Lys103Asn/Tyr181Cys double mutant HIV-1 reverse transcriptase in complexes with ATP and non-nucleoside inhibitor HBY 097. <i>Journal of Molecular Biology</i> , 2007 , 365, 77-89	6.5	79
127	SC29EK, a peptide fusion inhibitor with enhanced alpha-helicity, inhibits replication of human immunodeficiency virus type 1 mutants resistant to enfuvirtide. <i>Antimicrobial Agents and Chemotherapy</i> , 2009 , 53, 1013-8	5.9	76

126	Structural basis for the role of the K65R mutation in HIV-1 reverse transcriptase polymerization, excision antagonism, and tenofovir resistance. <i>Journal of Biological Chemistry</i> , 2009 , 284, 35092-100	5.4	72
125	Severe acute respiratory syndrome coronavirus replication inhibitor that interferes with the nucleic acid unwinding of the viral helicase. <i>Antimicrobial Agents and Chemotherapy</i> , 2012 , 56, 4718-28	5.9	72
124	Trapping HIV-1 reverse transcriptase before and after translocation on DNA. <i>Journal of Biological Chemistry</i> , 2003 , 278, 16280-8	5.4	66
123	Site-directed mutagenesis of arginine 72 of HIV-1 reverse transcriptase. Catalytic role and inhibitor sensitivity. <i>Journal of Biological Chemistry</i> , 1995 , 270, 19729-35	5.4	65
122	Antiviral drugs specific for coronaviruses in preclinical development. <i>Current Opinion in Virology</i> , 2014 , 8, 45-53	7.5	64
121	Expression and purification of SARS coronavirus proteins using SUMO-fusions. <i>Protein Expression and Purification</i> , 2005 , 42, 100-10	2	63
120	Oral administration of the nucleoside EFdA (4Rethynyl-2-fluoro-2Rdeoxyadenosine) provides rapid suppression of HIV viremia in humanized mice and favorable pharmacokinetic properties in mice and the rhesus macaque. <i>Antimicrobial Agents and Chemotherapy</i> , 2015 , 59, 4190-8	5.9	61
119	Structural Aspects of Drug Resistance and Inhibition of HIV-1 Reverse Transcriptase. <i>Viruses</i> , 2010 , 2, 606-638	6.2	60
118	4REthynyl-2-fluoro-2Rdeoxyadenosine (EFdA) inhibits HIV-1 reverse transcriptase with multiple mechanisms. <i>Journal of Biological Chemistry</i> , 2014 , 289, 24533-48	5.4	58
117	Analysis of mutations at positions 115 and 116 in the dNTP binding site of HIV-1 reverse transcriptase. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2000 , 97, 3056-61	11.5	57
116	Why do HIV-1 and HIV-2 use different pathways to develop AZT resistance?. <i>PLoS Pathogens</i> , 2006 , 2, e10	7.6	55
115	4REthynyl-2-fluoro-2Rdeoxyadenosine, MK-8591: a novel HIV-1 reverse transcriptase translocation inhibitor. <i>Current Opinion in HIV and AIDS</i> , 2018 , 13, 294-299	4.2	53
114	Structural basis of HIV inhibition by translocation-defective RT inhibitor 4Rethynyl-2-fluoro-2Rdeoxyadenosine (EFdA). <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016 , 113, 9274-9	11.5	53
113	Biochemical mechanism of HIV-1 resistance to rilpivirine. <i>Journal of Biological Chemistry</i> , 2012 , 287, 38110-23	5.4	51
112	HIV-1 replication complexes accumulate in nuclear speckles and integrate into speckle-associated genomic domains. <i>Nature Communications</i> , 2020 , 11, 3505	17.4	48
111	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. <i>Journal of Virology</i> , 2003 , 77, 8548-54	6.6	47
110	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. <i>Antimicrobial Agents and Chemotherapy</i> , 2013 , 57, 3100-9	5.9	46
109	Response of simian immunodeficiency virus to the novel nucleoside reverse transcriptase inhibitor 4Rethynyl-2-fluoro-2Rdeoxyadenosine in vitro and in vivo. <i>Antimicrobial Agents and Chemotherapy</i> , 2012 , 56, 4707-12	5.9	44

108	Design, Synthesis, and Biological Evaluations of Hydroxypyridonecarboxylic Acids as Inhibitors of HIV Reverse Transcriptase Associated RNase H. <i>Journal of Medicinal Chemistry</i> , 2016 , 59, 5051-62	8.3	42
107	The N348I mutation at the connection subdomain of HIV-1 reverse transcriptase decreases binding to nevirapine. <i>Journal of Biological Chemistry</i> , 2010 , 285, 38700-9	5.4	39
106	Designing anti-AIDS drugs targeting the major mechanism of HIV-1 RT resistance to nucleoside analog drugs. <i>International Journal of Biochemistry and Cell Biology</i> , 2004 , 36, 1706-15	5.6	39
105	Inhibitors of HIV-1 Reverse Transcriptase-Associated Ribonuclease H Activity. <i>Biology</i> , 2012 , 1, 521-41	4.9	38
104	Multiplex single-cell visualization of nucleic acids and protein during HIV infection. <i>Nature Communications</i> , 2017 , 8, 1882	17.4	37
103	Design of peptide-based inhibitors for human immunodeficiency virus type 1 strains resistant to T-20. <i>Journal of Biological Chemistry</i> , 2009 , 284, 4914-20	5.4	37
102	4Rmodified nucleoside analogs: potent inhibitors active against entecavir-resistant hepatitis B virus. <i>Hepatology</i> , 2015 , 62, 1024-36	11.2	36
101	Broad-spectrum aptamer inhibitors of HIV reverse transcriptase closely mimic natural substrates. <i>Nucleic Acids Research</i> , 2011 , 39, 8237-47	20.1	36
100	Vaginal Microbicide Film Combinations of Two Reverse Transcriptase Inhibitors, EFdA and CSIC, for the Prevention of HIV-1 Sexual Transmission. <i>Pharmaceutical Research</i> , 2015 , 32, 2960-72	4.5	34
99	Antiviral therapies: focus on hepatitis B reverse transcriptase. <i>International Journal of Biochemistry and Cell Biology</i> , 2012 , 44, 1060-71	5.6	34
98	Resistance profiles of novel electrostatically constrained HIV-1 fusion inhibitors. <i>Journal of Biological Chemistry</i> , 2010 , 285, 39471-80	5.4	34
97	Clinical relevance of substitutions in the connection subdomain and RNase H domain of HIV-1 reverse transcriptase from a cohort of antiretroviral treatment-naïve patients. <i>Antiviral Research</i> , 2009 , 82, 115-21	10.8	34
96	3-Hydroxypyrimidine-2,4-dione-5-N-benzylcarboxamides Potently Inhibit HIV-1 Integrase and RNase H. <i>Journal of Medicinal Chemistry</i> , 2016 , 59, 6136-48	8.3	31
95	3-Hydroxypyrimidine-2,4-diones as Selective Active Site Inhibitors of HIV Reverse Transcriptase-Associated RNase H: Design, Synthesis, and Biochemical Evaluations. <i>Journal of Medicinal Chemistry</i> , 2016 , 59, 2648-59	8.3	31
94	Hypersusceptibility mechanism of Tenofovir-resistant HIV to EFdA. <i>Retrovirology</i> , 2013 , 10, 65	3.6	30
93	Effects of the Delta67 complex of mutations in human immunodeficiency virus type 1 reverse transcriptase on nucleoside analog excision. <i>Journal of Virology</i> , 2004 , 78, 9987-97	6.6	30
92	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. <i>Journal of Molecular Biology</i> , 2005 , 349, 673-84	6.5	29
91	Design, synthesis and biological evaluations of N-Hydroxy thienopyrimidine-2,4-diones as inhibitors of HIV reverse transcriptase-associated RNase H. <i>European Journal of Medicinal Chemistry</i> , 2017 , 141, 149-161	6.8	28

90	Development of a vaginal delivery film containing EFdA, a novel anti-HIV nucleoside reverse transcriptase inhibitor. <i>International Journal of Pharmaceutics</i> , 2014 , 461, 203-13	6.5	28
89	Effects of substitutions at the 4R and 2 positions on the bioactivity of 4Rethynyl-2-fluoro-2Rdeoxyadenosine. <i>Antimicrobial Agents and Chemotherapy</i> , 2013 , 57, 6254-64	5.9	28
88	K70Q adds high-level tenofovir resistance to "Q151M complex" HIV reverse transcriptase through the enhanced discrimination mechanism. <i>PLoS ONE</i> , 2011 , 6, e16242	3.7	28
87	Similarities and differences in the RNase H activities of human immunodeficiency virus type 1 reverse transcriptase and Moloney murine leukemia virus reverse transcriptase. <i>Journal of Molecular Biology</i> , 1999 , 294, 1097-113	6.5	28
86	Double-Winged 3-Hydroxypyrimidine-2,4-diones: Potent and Selective Inhibition against HIV-1 RNase H with Significant Antiviral Activity. <i>Journal of Medicinal Chemistry</i> , 2017 , 60, 5045-5056	8.3	27
85	Structural and inhibition studies of the RNase H function of xenotropic murine leukemia virus-related virus reverse transcriptase. <i>Antimicrobial Agents and Chemotherapy</i> , 2012 , 56, 2048-61	5.9	27
84	3RAzido-3Rdeoxythymidine-(5R-tetraphospho-(5R-adenosine, the product of ATP-mediated excision of chain-terminating AZTMP, is a potent chain-terminating substrate for HIV-1 reverse transcriptase. <i>Biochemistry</i> , 2007 , 46, 828-36	3.2	27
83	Effects of mutations in the G tract of the human immunodeficiency virus type 1 polypurine tract on virus replication and RNase H cleavage. <i>Journal of Virology</i> , 2004 , 78, 13315-24	6.6	27
82	Long-Acting Anti-HIV Drugs Targeting HIV-1 Reverse Transcriptase and Integrase. <i>Pharmaceuticals</i> , 2019 , 12,	5.2	25
81	Interactions of conformationally biased north and south 2Rfluoro-2R,3Rdideoxynucleoside 5Rtriphosphates with the active site of HIV-1 reverse transcriptase. <i>Biochemistry</i> , 2000 , 39, 11205-15	3.2	25
80	Feasibility of Known RNA Polymerase Inhibitors as Anti-SARS-CoV-2 Drugs. <i>Pathogens</i> , 2020 , 9,	4.5	22
79	Drug resistance in non-B subtype HIV-1: impact of HIV-1 reverse transcriptase inhibitors. <i>Viruses</i> , 2014 , 6, 3535-62	6.2	22
78	Divergent evolution in reverse transcriptase (RT) of HIV-1 group O and M lineages: impact on structure, fitness, and sensitivity to nonnucleoside RT inhibitors. <i>Journal of Virology</i> , 2010 , 84, 9817-30	6.6	22
77	YADD mutants of human immunodeficiency virus type 1 and Moloney murine leukemia virus reverse transcriptase are resistant to lamivudine triphosphate (3TCTP) in vitro. <i>Journal of Virology</i> , 2001 , 75, 6321-8	6.6	22
76	SAMHD1 has differential impact on the efficacies of HIV nucleoside reverse transcriptase inhibitors. <i>Antimicrobial Agents and Chemotherapy</i> , 2014 , 58, 4915-9	5.9	21
75	Mechanism of interaction of human mitochondrial DNA polymerase γ with the novel nucleoside reverse transcriptase inhibitor 4Rethynyl-2-fluoro-2Rdeoxyadenosine indicates a low potential for host toxicity. <i>Antimicrobial Agents and Chemotherapy</i> , 2012 , 56, 1630-4	5.9	21
74	Subunit-specific analysis of the human immunodeficiency virus type 1 reverse transcriptase in vivo. <i>Journal of Virology</i> , 2004 , 78, 7089-96	6.6	20
73	Mutations in the 5R end of the human immunodeficiency virus type 1 polypurine tract affect RNase H cleavage specificity and virus titer. <i>Journal of Virology</i> , 2003 , 77, 11150-7	6.6	20

72	Inhibitors of foot and mouth disease virus targeting a novel pocket of the RNA-dependent RNA polymerase. <i>PLoS ONE</i> , 2010 , 5, e15049	3.7	20
71	Fast hepatitis C virus RNA elimination and NS5A redistribution by NS5A inhibitors studied by a multiplex assay approach. <i>Antimicrobial Agents and Chemotherapy</i> , 2015 , 59, 3482-92	5.9	19
70	Structural determinants of slippage-mediated mutations by human immunodeficiency virus type 1 reverse transcriptase. <i>Journal of Biological Chemistry</i> , 2006 , 281, 7421-8	5.4	19
69	6-Biphenylmethyl-3-hydroxypyrimidine-2,4-diones potently and selectively inhibited HIV reverse transcriptase-associated RNase H. <i>European Journal of Medicinal Chemistry</i> , 2018 , 156, 680-691	6.8	18
68	Avoiding Drug Resistance in HIV Reverse Transcriptase. <i>Chemical Reviews</i> , 2021 , 121, 3271-3296	68.1	18
67	Multifunctionality of a picornavirus polymerase domain: nuclear localization signal and nucleotide recognition. <i>Journal of Virology</i> , 2015 , 89, 6848-59	6.6	17
66	Combining mutations in HIV-1 reverse transcriptase with mutations in the HIV-1 polypurine tract affects RNase H cleavages involved in PPT utilization. <i>Virology</i> , 2006 , 348, 378-88	3.6	17
65	Cutting into the Substrate Dominance: Pharmacophore and Structure-Based Approaches toward Inhibiting Human Immunodeficiency Virus Reverse Transcriptase-Associated Ribonuclease H. <i>Accounts of Chemical Research</i> , 2020 , 53, 218-230	24.3	17
64	Evaluation of Combinations of 4REthynyl-2-Fluoro-2RDeoxyadenosine with Clinically Used Antiretroviral Drugs. <i>Antimicrobial Agents and Chemotherapy</i> , 2013 , 57, 4554-4558	5.9	16
63	The High Genetic Barrier of EFdA/MK-8591 Stems from Strong Interactions with the Active Site of Drug-Resistant HIV-1 Reverse Transcriptase. <i>Cell Chemical Biology</i> , 2018 , 25, 1268-1278.e3	8.2	16
62	Impact of HIV-1 Integrase L74F and V75I Mutations in a Clinical Isolate on Resistance to Second-Generation Integrase Strand Transfer Inhibitors. <i>Antimicrobial Agents and Chemotherapy</i> , 2017 , 61,	5.9	15
61	Synthesis, biological evaluation and molecular modeling of 2-Hydroxyisoquinoline-1,3-dione analogues as inhibitors of HIV reverse transcriptase associated ribonuclease H and polymerase. <i>European Journal of Medicinal Chemistry</i> , 2017 , 133, 85-96	6.8	15
60	6-Cyclohexylmethyl-3-hydroxypyrimidine-2,4-dione as an inhibitor scaffold of HIV reverse transcriptase: Impacts of the 3-OH on inhibiting RNase H and polymerase. <i>European Journal of Medicinal Chemistry</i> , 2017 , 128, 168-179	6.8	14
59	6-Arylthio-3-hydroxypyrimidine-2,4-diones potently inhibited HIV reverse transcriptase-associated RNase H with antiviral activity. <i>European Journal of Medicinal Chemistry</i> , 2018 , 156, 652-665	6.8	14
58	Probing the molecular mechanism of action of the HIV-1 reverse transcriptase inhibitor 4REthynyl-2-fluoro-2Rdeoxyadenosine (EFdA) using pre-steady-state kinetics. <i>Antiviral Research</i> , 2014 , 106, 1-4	10.8	14
57	In vitro transport characteristics of EFdA, a novel nucleoside reverse transcriptase inhibitor using Caco-2 and MDCKII cell monolayers. <i>European Journal of Pharmacology</i> , 2014 , 732, 86-95	5.3	13
56	Biochemical, inhibition and inhibitor resistance studies of xenotropic murine leukemia virus-related virus reverse transcriptase. <i>Nucleic Acids Research</i> , 2012 , 40, 345-59	20.1	13
55	3-Hydroxypyrimidine-2,4-Diones as Novel Hepatitis B Virus Antivirals Targeting the Viral Ribonuclease H. <i>Antimicrobial Agents and Chemotherapy</i> , 2017 , 61,	5.9	12

54	Toward Structurally Novel and Metabolically Stable HIV-1 Capsid-Targeting Small Molecules. <i>Viruses</i> , 2020 , 12,	6.2	12
53	The Heteroaryldihydropyrimidine Bay 38-7690 Induces Hepatitis B Virus Core Protein Aggregates Associated with Promyelocytic Leukemia Nuclear Bodies in Infected Cells. <i>MSphere</i> , 2018 , 3,	5	12
52	Preformulation studies of EFdA, a novel nucleoside reverse transcriptase inhibitor for HIV prevention. <i>Drug Development and Industrial Pharmacy</i> , 2014 , 40, 1101-11	3.6	12
51	Chemical profiling of HIV-1 capsid-targeting antiviral PF74. <i>European Journal of Medicinal Chemistry</i> , 2020 , 200, 112427	6.8	12
50	CMCdG, a Novel Nucleoside Analog with Favorable Safety Features, Exerts Potent Activity against Wild-Type and Entecavir-Resistant Hepatitis B Virus. <i>Antimicrobial Agents and Chemotherapy</i> , 2019 , 63,	5.9	11
49	Novel Intersubunit Interaction Critical for HIV-1 Core Assembly Defines a Potentially Targetable Inhibitor Binding Pocket. <i>MBio</i> , 2019 , 10,	7.8	11
48	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. <i>European Journal of Medicinal Chemistry</i> , 2019 , 166, 390-399	6.8	11
47	Structural Implications of Genotypic Variations in HIV-1 Integrase From Diverse Subtypes. <i>Frontiers in Microbiology</i> , 2018 , 9, 1754	5.7	11
46	A 2-Hydroxyisoquinoline-1,3-Dione Active-Site RNase H Inhibitor Binds in Multiple Modes to HIV-1 Reverse Transcriptase. <i>Antimicrobial Agents and Chemotherapy</i> , 2017 , 61,	5.9	11
45	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. <i>Retrovirology</i> , 2010 , 7, 6	3.6	11
44	5-Aminothiophene-2,4-dicarboxamide analogues as hepatitis B virus capsid assembly effectors. <i>European Journal of Medicinal Chemistry</i> , 2019 , 164, 179-192	6.8	11
43	Increased replication capacity following evolution of PYxE insertion in Gag-p6 is associated with enhanced virulence in HIV-1 subtype C from East Africa. <i>Journal of Medical Virology</i> , 2017 , 89, 106-111	19.7	10
42	Molecular and Functional Bases of Selection against a Mutation Bias in an RNA Virus. <i>Genome Biology and Evolution</i> , 2017 , 9, 1212-1228	3.9	10
41	Antiretroviral potency of 4Rethnyl-2Rfluoro-2Rdeoxyadenosine, tenofovir alafenamide and second-generation NNRTIs across diverse HIV-1 subtypes. <i>Journal of Antimicrobial Chemotherapy</i> , 2018 , 73, 2721-2728	5.1	10
40	Novel HIV-1 capsid-targeting small molecules of the PF74 binding site. <i>European Journal of Medicinal Chemistry</i> , 2020 , 204, 112626	6.8	10
39	Synthesis of Boranoate, Selenoate, and Thioate Analogs of AZTp(4)A and Ap(4)A. <i>Tetrahedron</i> , 2009 , 65, 7915-7920	2.4	9
38	Synthesis of AZTpSpCX2ppSA and AZTpSpCX2ppSAZT: hydrolysis-resistant potential inhibitors of the AZT excision reaction of HIV-1 RT. <i>Organic Letters</i> , 2007 , 9, 5243-6	6.2	9
37	HIV-1 reverse transcriptase (RT) polymorphism 172K suppresses the effect of clinically relevant drug resistance mutations to both nucleoside and non-nucleoside RT inhibitors. <i>Journal of Biological Chemistry</i> , 2012 , 287, 29988-99	5.4	8

36	Novel Hepatitis B Virus Capsid-Targeting Antiviral That Aggregates Core Particles and Inhibits Nuclear Entry of Viral Cores. <i>ACS Infectious Diseases</i> , 2019 , 5, 750-758	5.5	8
35	Identification of a Structural Element in HIV-1 Gag Required for Virus Particle Assembly and Maturation. <i>MBio</i> , 2018 , 9,	7.8	8
34	RNase H cleavage of the 5' end of the human immunodeficiency virus type 1 genome. <i>Journal of Virology</i> , 2001 , 75, 11874-80	6.6	7
33	Novel PF74-like small molecules targeting the HIV-1 capsid protein: Balance of potency and metabolic stability. <i>Acta Pharmaceutica Sinica B</i> , 2021 , 11, 810-822	15.5	7
32	Determinants of Active-Site Inhibitor Interaction with HIV-1 RNase H. <i>ACS Infectious Diseases</i> , 2019 , 5, 1963-1974	5.5	6
31	7-Deaza-7-fluoro modification confers on 4Rcyano-nucleosides potent activity against entecavir/adefovir-resistant HBV variants and favorable safety. <i>Antiviral Research</i> , 2020 , 176, 104744	10.8	6
30	Factors influencing the efficacy of rilpivirine in HIV-1 subtype C in low- and middle-income countries. <i>Journal of Antimicrobial Chemotherapy</i> , 2016 , 71, 367-71	5.1	6
29	Repeated exposure to 5D9, an inhibitor of 3D polymerase, effectively limits the replication of foot-and-mouth disease virus in host cells. <i>Antiviral Research</i> , 2013 , 98, 380-5	10.8	6
28	HIV-1 resistance mechanism to an electrostatically constrained peptide fusion inhibitor that is active against T-20-resistant strains. <i>Antimicrobial Agents and Chemotherapy</i> , 2013 , 57, 4035-8	5.9	6
27	Visualization of HIV-1 RNA Transcription from Integrated HIV-1 DNA in Reactivated Latently Infected Cells. <i>Viruses</i> , 2018 , 10,	6.2	6
26	Effect of tRNA on the Maturation of HIV-1 Reverse Transcriptase. <i>Journal of Molecular Biology</i> , 2018 , 430, 1891-1900	6.5	5
25	Effects of Moloney Leukemia Virus 10 Protein on Hepatitis B Virus Infection and Viral Replication. <i>Viruses</i> , 2019 , 11,	6.2	5
24	Mechanism of resistance to S138A substituted enfuvirtide and its application to peptide design. <i>International Journal of Biochemistry and Cell Biology</i> , 2013 , 45, 908-15	5.6	5
23	Design, Synthesis and Characterization of HIV-1 CA-Targeting Small Molecules: Conformational Restriction of PF74. <i>Viruses</i> , 2021 , 13,	6.2	5
22	Molecular Dynamics Free Energy Simulations Reveal the Mechanism for the Antiviral Resistance of the M66I HIV-1 Capsid Mutation. <i>Viruses</i> , 2021 , 13,	6.2	5
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