# Stefan G Sarafianos

List of Publications by Year
in descending order



| 170 | 9,162 | 36271 51 | 48277 88 |
|---|---|---|---|
| papers | citations | h-index | g-index |

| 173 | 173 | 173 | 7147 |
|---|---|---|---|
| all docs | docs citations | times ranked | 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. | 2.0 | 426 |
| 2 | Crystal structure of HIV-1 reverse transcriptase in complex with a polypurine tract RNA:DNA. EMBO Journal, 2001, 20, 1449-1461. | 3.5 | 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. | 2.0 | 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. | 3.3 | 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. | 1.5 | 263 |
| 6 | Selective Excision of AZTMP by Drug-Resistant Human Immunodeficiency Virus Reverse Transcriptase. Journal of Virology, 2001, 75, 4832-4842. | 1.5 | 241 |
| 7 | The RNA Polymerase â€œSwitch Regionâ€•Is a Target for Inhibitors. Cell, 2008, 135, 295-307. | 13.5 | 234 |
| 8 | X-ray crystal structures of native HIV-1 capsid protein reveal conformational variability. Science, 2015, 349, 99-103. | 6.0 | 212 |
| 9 | Structures of HIV-1 reverse transcriptase with pre- and post-translocation AZTMP-terminated DNA. EMBO Journal, 2002, 21, 6614-6624. | 3.5 | 185 |
| 10 | Inhibition of Bacterial RNA Polymerase by Streptolydigin: Stabilization of a Straight-Bridge-Helix Active-Center Conformation. Cell, 2005, 122, 541-552. | 13.5 | 183 |
| 11 | Molecular model of SARS coronavirus polymerase: implications for biochemical functions and drug design. Nucleic Acids Research, 2003, 31, 7117-7130. | 6.5 | 170 |
| 12 | Novel Inhibitors of Severe Acute Respiratory Syndrome Coronavirus Entry That Act by Three Distinct Mechanisms. Journal of Virology, 2013, 87, 8017-8028. | 1.5 | 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. | 3.6 | 157 |
| 14 | Mechanism of Nucleic Acid Unwinding by SARS-CoV Helicase. PLoS ONE, 2012, 7, e36521. | 1.1 | 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. | 5.1 | 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. | 1.6 | 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. | 2.6 | 130 |
| 18 | CODAS Syndrome Is Associated with Mutations of LONP1, Encoding Mitochondrial AAA+ Lon Protease. American Journal of Human Genetics, 2015, 96, 121-135. | 2.6 | 127 |

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| 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. | 2.0 | 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. | 1.6 | 117 |
| 21 | Structural basis of HIV-1 resistance to AZT by excision. Nature Structural and Molecular Biology, 2010, 17, 1202-1209. | 3.6 | 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. | 1.2 | 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. | 2.9 | 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. | 6.2 | 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. | 3.3 | 107 |
| 26 | Expression, purification, and characterization of SARS coronavirus RNA polymerase. Virology, 2005, 335, 165-176. | 1.1 | 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. | 1.4 | 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. | 3.3 | 101 |
| 29 | Identification and characterization of coumestans as novel HCV NS5B polymerase inhibitors. Nucleic Acids Research, 2008, 36, 1482-1496. | 6.5 | 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. | 2.1 | 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. | 1.4 | 96 |
| 32 | HIV-1 replication complexes accumulate in nuclear speckles and integrate into speckle-associated genomic domains. Nature Communications, 2020, 11, 3505. | 5.8 | 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. | 1.5 | 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. | 1.5 | 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. | 1.5 | 85 |
| 36 | Antiviral drugs specific for coronaviruses in preclinical development. Current Opinion in Virology, 2014, 8, 45-53. | 2.6 | 85 |

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| 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. | 2.0 | 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. | 1.4 | 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. | 1.6 | 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. | 1.6 | 80 |
| 41 | Trapping HIV-1 Reverse Transcriptase Before and After Translocation on DNA. Journal of Biological Chemistry, 2003, 278, 16280-16288. | 1.6 | 79 |
| 42 | 4â€²-Ethynyl-2-fluoro-2â€²-deoxyadenosine, MK-8591. Current Opinion in HIV and AIDS, 2018, 13, 294-299. | 1.5 | 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. | 3.3 | 73 |
| 44 | Expression and purification of SARS coronavirus proteins using SUMO-fusions. Protein Expression and Purification, 2005, 42, 100-110. | 0.6 | 72 |
| 45 | Structural Aspects of Drug Resistance and Inhibition of HIV-1 Reverse Transcriptase. Viruses, 2010, 2, 606-638. | 1.5 | 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. | 1.4 | 70 |
| 47 | Site-directed Mutagenesis of Arginine 72 of HIV-1 Reverse Transcriptase. Journal of Biological Chemistry, 1995, 270, 19729-19735. | 1.6 | 68 |
| 48 | Why Do HIV-1 and HIV-2 Use Different Pathways to Develop AZT Resistance?. PLoS Pathogens, 2006, 2, e10. | 2.1 | 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. | 1.4 | 61 |
| 50 | Biochemical Mechanism of HIV-1 Resistance to Rilpivirine. Journal of Biological Chemistry, 2012, 287, 38110-38123. | 1.6 | 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. | 3.3 | 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. | 2.9 | 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. | 1.5 | 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. | 1.4 | 50 |

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| 55 | Multiplex single-cell visualization of nucleic acids and protein during HIV infection. Nature Communications, 2017, 8, 1882. | 5.8 | 50 |
| 56 | Avoiding Drug Resistance in HIV Reverse Transcriptase. Chemical Reviews, 2021, 121, 3271-3296. | 23.0 | 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. | 1.2 | 45 |
| 58 | Inhibitors of HIV-1 Reverse Transcriptaseâ€"Associated Ribonuclease H Activity. Biology, 2012, 1, 521-541. | 1.3 | 45 |
| 59 | 4â€²â€modified nucleoside analogs: Potent inhibitors active against entecavirâ€resistant hepatitis B virus. Hepatology, 2015, 62, 1024-1036. | 3.6 | 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. | 1.6 | 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. | 1.6 | 41 |
| 62 | Antiviral therapies: Focus on hepatitis B reverse transcriptase. International Journal of Biochemistry and Cell Biology, 2012, 44, 1060-1071. | 1.2 | 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. | 2.9 | 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. | 1.7 | 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. | 2.9 | 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. | 1.9 | 38 |
| 67 | Broad-spectrum aptamer inhibitors of HIV reverse transcriptase closely mimic natural substrates. Nucleic Acids Research, 2011, 39, 8237-8247. | 6.5 | 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. | 2.9 | 38 |
| 69 | Resistance Profiles of Novel Electrostatically Constrained HIV-1 Fusion Inhibitors. Journal of Biological Chemistry, 2010, 285, 39471-39480. | 1.6 | 37 |
| 70 | Hypersusceptibility mechanism of Tenofovir-resistant HIV to EFdA. Retrovirology, 2013, 10, 65. | 0.9 | 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. | 2.6 | 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. | 1.4 | 35 |

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| 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. | 2.6 | 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. | 1.5 | 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. | 1.5 | 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. | 1.4 | 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. | 2.0 | 30 |
| 78 | Long-Acting Anti-HIV Drugs Targeting HIV-1 Reverse Transcriptase and Integrase. Pharmaceuticals, 2019, 12, 62. | 1.7 | 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. | 2.0 | 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. | 1.1 | 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. | 2.6 | 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. | 1.2 | 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. | 1.5 | 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. | 1.2 | 27 |
| 85 | Drug Resistance in Non-B Subtype HIV-1: Impact of HIV-1 Reverse Transcriptase Inhibitors. Viruses, 2014, 6, 3535-3562. | 1.5 | 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. | 2.6 | 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. | 7.6 | 27 |
| 88 | Rotten to the core: antivirals targeting the HIV-1 capsid core. Retrovirology, 2021, 18, 41. | 0.9 | 27 |
| 89 | Feasibility of Known RNA Polymerase Inhibitors as Anti-SARS-CoV-2 Drugs. Pathogens, 2020, 9, 320. | 1.2 | 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. | 1.5 | 25 |

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| 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. | 1.5 | 25 |
| 92 | SAMHD1 Has Differential Impact on the Efficacies of HIV Nucleoside Reverse Transcriptase Inhibitors. Antimicrobial Agents and Chemotherapy, 2014, 58, 4915-4919. | 1.4 | 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. | 1.4 | 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. | 2.6 | 23 |
| 95 | Subunit-Specific Analysis of the Human Immunodeficiency Virus Type 1 Reverse Transcriptase In Vivo. Journal of Virology, 2004, 78, 7089-7096. | 1.5 | 22 |
| 96 | Multifunctionality of a Picornavirus Polymerase Domain: Nuclear Localization Signal and Nucleotide Recognition. Journal of Virology, 2015, 89, 6848-6859. | 1.5 | 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. | 2.6 | 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. | 5.7 | 22 |
| 99 | Structural Determinants of Slippage-mediated Mutations by Human Immunodeficiency Virus Type 1 Reverse Transcriptase. Journal of Biological Chemistry, 2006, 281, 7421-7428. | 1.6 | 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. | 1.4 | 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. | 2.6 | 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, . | 1.3 | 21 |
| 103 | Inhibitors of Foot and Mouth Disease Virus Targeting a Novel Pocket of the RNA-Dependent RNA Polymerase. PLoS ONE, 2010, 5, e15049. | 1.1 | 21 |
| 104 | Marine Natural Products as Leads against SARS-CoV-2 Infection. Journal of Natural Products, 2022, 85, 657-665. | 1.5 | 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. | 1.1 | 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. | 1.4 | 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. | 2.5 | 20 |
| 108 | Toward Structurally Novel and Metabolically Stable HIV-1 Capsid-Targeting Small Molecules. Viruses, 2020, 12, 452. | 1.5 | 20 |

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| 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. | 1.7 | 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, . | 1.4 | 19 |
| 111 | 3-Hydroxypyrimidine-2,4-Diones as Novel Hepatitis B Virus Antivirals Targeting the Viral Ribonuclease H. Antimicrobial Agents and Chemotherapy, 2017, 61, . | 1.4 | 19 |
| 112 | Structural Implications of Genotypic Variations in HIV-1 Integrase From Diverse Subtypes. Frontiers in Microbiology, 2018, 9, 1754. | 1.5 | 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, . | 1.4 | 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, . | 1.4 | 17 |
| 115 | 5-Aminothiophene-2,4-dicarboxamide analogues as hepatitis B virus capsid assembly effectors. European Journal of Medicinal Chemistry, 2019, 164, 179-192. | 2.6 | 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. | 1.9 | 16 |
| 117 | Chemical profiling of HIV-1 capsid-targeting antiviral PF74. European Journal of Medicinal Chemistry, 2020, 200, 112427. | 2.6 | 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. | 1.7 | 15 |
| 119 | Biochemical, inhibition and inhibitor resistance studies of xenotropic murine leukemia virus-related virus reverse transcriptase. Nucleic Acids Research, 2012, 40, 345-359. | 6.5 | 14 |
| 120 | Preformulation studies of EFdA, a novel nucleoside reverse transcriptase inhibitor for HIV prevention. Drug Development and Industrial Pharmacy, 2014, 40, 1101-1111. | 0.9 | 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. | 1.5 | 14 |
| 122 | Novel HIV-1 capsid-targeting small molecules of the PF74 binding site. European Journal of Medicinal Chemistry, 2020, 204, 112626. | 2.6 | 14 |
| 123 | Discovery of New Small Molecule Hits as Hepatitis B Virus Capsid Assembly Modulators: Structure and Pharmacophore-Based Approaches. Viruses, 2021, 13, 770. | 1.5 | 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. | 0.9 | 13 |
| 125 | Molecular and Functional Bases of Selection against a Mutation Bias in an RNA Virus. Genome Biology and Evolution, 2017, 9, 1212-1228. | 1.1 | 13 |
| 126 | Novel Intersubunit Interaction Critical for HIV-1 Core Assembly Defines a Potentially Targetable Inhibitor Binding Pocket. MBio, 2019, 10, . | 1.8 | 13 |

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| 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. | 1.8 | 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. | 2.5 | 12 |
| 129 | Visualization of HIV-1 RNA Transcription from Integrated HIV-1 DNA in Reactivated Latently Infected Cells. Viruses, 2018, 10, 534. | 1.5 | 12 |
| 130 | Identification of a Structural Element in HIV-1 Gag Required for Virus Particle Assembly and Maturation. MBio, 2018, 9, . | 1.8 | 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. | 1.3 | 12 |
| 132 | Effect of Pâ€body component Mov10 on HCV virus production and infectivity. FASEB Journal, 2020, 34, 9433-9449. | 0.2 | 11 |
| 133 | Design, Synthesis and Characterization of HIV-1 CA-Targeting Small Molecules: Conformational Restriction of PF74. Viruses, 2021, 13, 479. | 1.5 | 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. | 1.5 | 11 |
| 135 | Effects of Moloney Leukemia Virus 10 Protein on Hepatitis B Virus Infection and Viral Replication. Viruses, 2019, 11, 651. | 1.5 | 10 |
| 136 | Determinants of Active-Site Inhibitor Interaction with HIV-1 RNase H. ACS Infectious Diseases, 2019, 5, 1963-1974. | 1.8 | 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. | 1.4 | 10 |
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