Eddy Arnold

List of Publications by Year
in descending order

70 papers	5,516 citations	109321 35 h-index	98798 67 g-index
71 all docs	71 docs citations	71 times ranked	4729 citing authors

#	Article	IF	Citations
1	Roles of Conformational and Positional Adaptability in Structure-Based Design of TMC125-R165335 (Etravirine) and Related Non-nucleoside Reverse Transcriptase Inhibitors That Are Highly Potent and Effective against Wild-Type and Drug-Resistant HIV-1 Variants. Journal of Medicinal Chemistry, 2004, 47, 2550-2560.	6.4	507
2	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
3	In Search of a Novel Anti-HIV Drug:Â Multidisciplinary Coordination in the Discovery of 4-[[4-[[4-[(1E)-2-Cyanoethenyl]-2,6-dimethylphenyl]amino]-2- pyrimidinyl]amino]benzonitrile (R278474,) Tj ETQq1 1 0.784314 rgBT /O	6.4	346
4	High-resolution structures of HIV-1 reverse transcriptase/TMC278 complexes: Strategic flexibility explains potency against resistance mutations. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 1466-1471.	7.1	310
5	Structures of influenza A proteins and insights into antiviral drug targets. Nature Structural and Molecular Biology, 2010, 17, 530-538.	8.2	292
6	Crystallography and the design of anti-AIDS drugs: conformational flexibility and positional adaptability are important in the design of non-nucleoside HIV-1 reverse transcriptase inhibitors. Progress in Biophysics and Molecular Biology, 2005, 88, 209-231.	2.9	210
7	Structural basis for suppression of a host antiviral response by influenza A virus. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 13093-13098.	7.1	193
8	Structures of HIV-1 reverse transcriptase with pre- and post-translocation AZTMP-terminated DNA. EMBO Journal, 2002, 21, 6614-6624.	7.8	185
9	HIV-1 reverse transcriptase complex with DNA and nevirapine reveals non-nucleoside inhibition mechanism. Nature Structural and Molecular Biology, 2012, 19, 253-259.	8.2	176
10	Crystal Structures for HIV-1 Reverse Transcriptase in Complexes with Three Pyridinone Derivatives:Â A New Class of Non-Nucleoside Inhibitors Effective against a Broad Range of Drug-Resistant Strains. Journal of Medicinal Chemistry, 2005, 48, 7582-7591.	6.4	132
11	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
12	Structures of RNA polymeraseâ€“antibiotic complexes. Current Opinion in Structural Biology, 2009, 19, 715-723.	5.7	132
13	Two-dimensional infrared spectra reveal relaxation of the nonnucleoside inhibitor TMC278 complexed with HIV-1 reverse transcriptase. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 1472-1477.	7.1	131
14	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
15	HIV-1 reverse transcriptase and antiviral drug resistance. Part 1. Current Opinion in Virology, 2013, 3, 111-118.	5.4	126
16	Concentration and pH Dependent Aggregation of Hydrophobic Drug Molecules and Relevance to Oral Bioavailability. Journal of Medicinal Chemistry, 2005, 48, 1974-1983.	6.4	119
17	Synthesis of Novel Diarylpyrimidine Analogues and Their Antiviral Activity against Human Immunodeficiency Virus Type 1. Journal of Medicinal Chemistry, 2005, 48, 2072-2079.	6.4	118
18	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

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19	Crystal engineering of HIV-1 reverse transcriptase for structure-based drug design. Nucleic Acids Research, 2008, 36, 5083-5092.	14.5	91
20	Snapshot of the equilibrium dynamics of a drug bound to HIV-1 reverse transcriptase. Nature Chemistry, 2013, 5, 174-181.	13.6	88
21	Synthesis, Biological Activity, and Crystal Structure of Potent Nonnucleoside Inhibitors of HIV-1 Reverse Transcriptase That Retain Activity against Mutant Forms of the Enzyme. Journal of Medicinal Chemistry, 2007, 50, 4003-4015.	6.4	87
22	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
23	HIV-1 reverse transcriptase and antiviral drug resistance. Part 2. Current Opinion in Virology, 2013, 3, 119-128.	5.4	83
24	Detecting Allosteric Sites of HIV-1 Reverse Transcriptase by X-ray Crystallographic Fragment Screening. Journal of Medicinal Chemistry, 2013, 56, 2738-2746.	6.4	78
25	Crystallographic Fragment Screening and Structure-Based Optimization Yields a New Class of Influenza Endonuclease Inhibitors. ACS Chemical Biology, 2013, 8, 2501-2508.	3.4	76
26	Synthesis, Activity, and Structural Analysis of Novel Î±-Hydroxytropolone Inhibitors of Human Immunodeficiency Virus Reverse Transcriptase-Associated Ribonuclease H. Journal of Medicinal Chemistry, 2011, 54, 4462-4473.	6.4	74
27	Crystal Structure oftert-Butyldimethylsilyl-spiroaminooxathioledioxide-thymine (TSAO-T) in Complex with HIV-1 Reverse Transcriptase (RT) Redefines the Elastic Limits of the Non-nucleoside Inhibitor-Binding Pocket. Journal of Medicinal Chemistry, 2011, 54, 2727-2737.	6.4	66
28	Structures of HIV-1 RT-RNA/DNA ternary complexes with dATP and nevirapine reveal conformational flexibility of RNA/DNA: insights into requirements for RNase H cleavage. Nucleic Acids Research, 2014, 42, 8125-8137.	14.5	60
29	Phenyl Substituted 4-Hydroxypyridazin-3(2H)-ones and 5-Hydroxypyrimidin-4(3H)-ones: Inhibitors of Influenza A Endonuclease. Journal of Medicinal Chemistry, 2014, 57, 8086-8098.	6.4	50
30	Design, Synthesis, and SAR of a Novel Pyrazinone Series with Non-Nucleoside HIV-1 Reverse Transcriptase Inhibitory Activity. Journal of Medicinal Chemistry, 2005, 48, 1910-1918.	6.4	49
31	Linear Interaction Energy (LIE) Models for Ligand Binding in Implicit Solvent:â€‰ Theory and Application to the Binding of NNRTIs to HIV-1 Reverse Transcriptase. Journal of Chemical Theory and Computation, 2007, 3, 256-277.	5.3	45
32	3-Hydroxyquinolin-2(1H)-ones As Inhibitors of Influenza A Endonuclease. ACS Medicinal Chemistry Letters, 2013, 4, 547-550.	2.8	44
33	Evolving understanding of HIV-1 reverse transcriptase structure, function, inhibition, and resistance. Current Opinion in Structural Biology, 2020, 61, 113-123.	5.7	43
34	On the detection of multiple-binding modes of ligands to proteins, from biological, structural, and modeling data. Journal of Computer-Aided Molecular Design, 2003, 17, 129-134.	2.9	42
35	4-Benzyl and 4-Benzoyl-3-dimethylaminopyridin-2(1H)-ones:Â In Vitro Evaluation of New C-3-Amino-Substituted and C-5,6-Alkyl-Substituted Analogues against Clinically Important HIV Mutant Strains. Journal of Medicinal Chemistry, 2005, 48, 1948-1964.	6.4	38
36	Conformational States of HIV-1 Reverse Transcriptase for Nucleotide Incorporation vs Pyrophosphorolysisâ€”Binding of Foscarnet. ACS Chemical Biology, 2016, 11, 2158-2164.	3.4	38

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37	Discovery and Characterization of Fluorine-Substituted Diarylpyrimidine Derivatives as Novel HIV-1 NNRTIs with Highly Improved Resistance Profiles and Low Activity for the hERG Ion Channel. Journal of Medicinal Chemistry, 2020, 63, 1298-1312.	6.4	37
38	Structure of a Dihydroxycoumarin Active-Site Inhibitor in Complex with the RNase H Domain of HIV-1 Reverse Transcriptase and Structureâ€"Activity Analysis of Inhibitor Analogs. Journal of Molecular Biology, 2014, 426, 2617-2631.	4.2	36
39	Identification of Alternative Binding Sites for Inhibitors of HIV-1 Ribonuclease H Through Comparative Analysis of Virtual Enrichment Studies. Journal of Chemical Information and Modeling, 2011, 51, 1986-1998.	5.4	35
40	Conformational Landscape of the Human Immunodeficiency Virus Type 1 Reverse Transcriptase Non-Nucleoside Inhibitor Binding Pocket: Lessons for Inhibitor Design from a Cluster Analysis of Many Crystal Structures. Journal of Medicinal Chemistry, 2009, 52, 6413-6420.	6.4	33
41	Extension into the entrance channel of HIV-1 reverse transcriptaseâ€"Crystallography and enhanced solubility. Bioorganic and Medicinal Chemistry Letters, 2013, 23, 5209-5212.	2.2	33
42	Structure of <scp>HIV</scp>â€1 reverse transcriptase bound to a novel 38â€mer hairpin templateâ€primer <scp>DNA</scp> aptamer. Protein Science, 2016, 25, 46-55.	7.6	33
43	2,4,5-Trisubstituted Pyrimidines as Potent HIV-1 NNRTIs: Rational Design, Synthesis, Activity Evaluation, and Crystallographic Studies. Journal of Medicinal Chemistry, 2021, 64, 4239-4256.	6.4	33
44	Phenyl substituted 3-hydroxypyridin-2(1H)-ones: Inhibitors of influenza A endonuclease. Bioorganic and Medicinal Chemistry, 2013, 21, 6435-6446.	3.0	30
45	Developing and Evaluating Inhibitors against the RNase H Active Site of HIV-1 Reverse Transcriptase. Journal of Virology, 2018, 92, .	3.4	30
46	A comparison of the ability of rilpivirine (TMC278) and selected analogues to inhibit clinically relevant HIV-1 reverse transcriptase mutants. Retrovirology, 2012, 9, 99.	2.0	29
47	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
48	Drug Resistance in Non-B Subtype HIV-1: Impact of HIV-1 Reverse Transcriptase Inhibitors. Viruses, 2014, 6, 3535-3562.	3.3	27
49	Epistasis and entrenchment of drug resistance in HIV-1 subtype B. ELife, 2019, 8, .	6.0	25
50	Binding interface and impact on protease cleavage for an RNA aptamer to HIV-1 reverse transcriptase. Nucleic Acids Research, 2020, 48, 2709-2722.	14.5	22
51	Mutations in the Thumb Allow Human Immunodeficiency Virus Type 1 Reverse Transcriptase To Be Cleaved by Protease in Virions. Journal of Virology, 2009, 83, 12336-12344.	3.4	20
52	Fragment Screening and HIV Therapeutics. Topics in Current Chemistry, 2011, 317, 181-200.	4.0	20
53	Structural Basis of HIV-1 Inhibition by Nucleotide-Competing Reverse Transcriptase Inhibitor INDOPY-1. Journal of Medicinal Chemistry, 2019, 62, 9996-10002.	6.4	20
54	Correlations between Factors Determining the Pharmacokinetics and Antiviral Activity of HIV-1 Non-Nucleoside Reverse Transcriptase Inhibitors of the Diaryltriazine and Diarylpyrimidine Classes of Compounds. Drugs in R and D, 2004, 5, 245-257.	2.2	19

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55	Molecular Dynamics Study of Non-nucleoside Reverse Transcriptase Inhibitor 4-[[4-[[4-[(E)-2-Cyanoethenyl]-2,6-dimethylphenyl]amino]-2-pyrimidinyl]amino]benzonitrile (TMC278/Rilpivirine) Aggregates: Correlation between Amphiphilic Properties of the Drug and Oral Bioavailability. Journal of Medicinal Chemistry, 2009, 52, 5896-5905.	6.4	17
56	Molecular dynamics study of HIVâ€1 RTâ€DNAâ€nevirapine complexes explains NNRTI inhibition and resistance by connection mutations. Proteins: Structure, Function and Bioinformatics, 2014, 82, 815-829.	2.6	15
57	Non-Nucleoside Reverse Transcriptase Inhibitors Join Forces with Integrase Inhibitors to Combat HIV. Pharmaceuticals, 2020, 13, 122.	3.8	13
58	Crystallographic Study of a Novel Subnanomolar Inhibitor Provides Insight on the Binding Interactions of Alkenyldiarylmethanes with Human Immunodeficiency Virus-1 Reverse Transcriptase. Journal of Medicinal Chemistry, 2009, 52, 6467-6473.	6.4	11
59	Structure of HIVâ€1 reverse transcriptase/d4TTP complex: Novel DNA crossâ€linking site and pHâ€dependent conformational changes. Protein Science, 2019, 28, 587-597.	7.6	11
60	Synthesis of boranoate, selenoate, and thioate analogs of AZTp4A and Ap4A. Tetrahedron, 2009, 65, 7915-7920.	1.9	9
61	Analysis of the Zidovudine Resistance Mutations T215Y, M41L, and L210W in HIV-1 Reverse Transcriptase. Antimicrobial Agents and Chemotherapy, 2015, 59, 7184-7196.	3.2	8
62	Integrative structural biology studies of HIV-1 reverse transcriptase binding to a high-affinity DNA aptamer. Current Research in Structural Biology, 2020, 2, 116-129.	2.2	8
63	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
64	Aryl and Arylalkyl Substituted 3â€Hydroxypyridinâ€2(1 H)â€ones: Synthesis and Evaluation as Inhibitors of Influenzaâ€…A Endonuclease. ChemMedChem, 2019, 14, 1204-1223.	3.2	4
65	HIV-1 gp120 Antagonists Also Inhibit HIV-1 Reverse Transcriptase by Bridging the NNRTI and NRTI Sites. Journal of Medicinal Chemistry, 2021, 64, 16530-16540.	6.4	4
66	Structural basis of HIV inhibition by L-nucleosides: Opportunities for drug development and repurposing. Drug Discovery Today, 2022, 27, 1832-1846.	6.4	4
67	Nonnucleoside Reverse Transcriptase Inhibitors (NNRTIs). , 2013, , 123-139.		1
68	Considerations for Structure-Based Drug Design Targeting HIV-1 Reverse Transcriptase. NATO Science for Peace and Security Series A: Chemistry and Biology, 2015, , 69-81.	0.5	1
69	HIV-1 Reverse Transcriptase Structure. , 2004, , 388-392.		0
70	Viruses Rock and Roll with Their Receptors. Structure, 2005, 13, 944-945.	3.3	0