

# Matthias Gärtte

## List of Publications by Year in descending order

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56  
papers

3,786  
citations

293460

24  
h-index

182931

54  
g-index

59  
all docs

59  
docs citations

59  
times ranked

6156  
citing authors

#	ARTICLE	IF	CITATIONS
1	Sandacrabins – Structurally Unique Antiviral RNA Polymerase Inhibitors from a Rare Myxobacterium**. Chemistry - A European Journal, 2022, 28, e202104484.	1.7	10
2	Efficient incorporation and template-dependent polymerase inhibition are major determinants for the broad-spectrum antiviral activity of remdesivir. Journal of Biological Chemistry, 2022, 298, 101529.	1.6	25
3	Efficient Incorporation and Template-Dependent Polymerase Inhibition are Major Determinants for the Broad-Spectrum Antiviral Activity of Remdesivir. FASEB Journal, 2022, 36, .	0.2	0
4	Mutations in the SARS-CoV-2 RNA-dependent RNA polymerase confer resistance to remdesivir by distinct mechanisms. Science Translational Medicine, 2022, 14, eabo0718.	5.8	108
5	Human endogenous retrovirus-K (HERV-K) reverse transcriptase (RT) structure and biochemistry reveals remarkable similarities to HIV-1 RT and opportunities for HERV-K-specific inhibition. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, .	3.3	16
6	The Nucleoside/Nucleotide Analogs Tenofovir and Emtricitabine Are Inactive against SARS-CoV-2. Molecules, 2022, 27, 4212.	1.7	9
7	Molnupiravir promotes SARS-CoV-2 mutagenesis via the RNA template. Journal of Biological Chemistry, 2021, 297, 100770.	1.6	200
8	Remdesivir for the treatment of Covid-19: the value of biochemical studies. Current Opinion in Virology, 2021, 49, 81-85.	2.6	17
9	The active form of the influenza cap-snatching endonuclease inhibitor baloxavir marboxil is a tight binding inhibitor. Journal of Biological Chemistry, 2021, 296, 100486.	1.6	12
10	Inhibition of viral RNA-dependent RNA polymerases with clinically relevant nucleotide analogs. The Enzymes, 2021, 49, 315-354.	0.7	9
11	Knowledge Gaps in the Understanding of Antimicrobial Resistance in Canada. Frontiers in Public Health, 2021, 9, 726484.	1.3	26
12	Remdesivir targets a structurally analogous region of the Ebola virus and SARS-CoV-2 polymerases. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 26946-26954.	3.3	54
13	Application of Molecular Dynamics Simulations to the Design of Nucleotide Inhibitors Binding to Norovirus Polymerase. Journal of Chemical Information and Modeling, 2020, 60, 6566-6578.	2.5	4
14	Template-dependent inhibition of coronavirus RNA-dependent RNA polymerase by remdesivir reveals a second mechanism of action. Journal of Biological Chemistry, 2020, 295, 16156-16165.	1.6	120
15	Independent inhibition of the polymerase and deubiquitinase activities of the Crimean-Congo Hemorrhagic Fever Virus full-length L-protein. PLoS Neglected Tropical Diseases, 2020, 14, e0008283.	1.3	12
16	Independent Inhibition of the Polymerase and Deubiquitinase Activities of the Crimean-Congo Hemorrhagic Fever Virus Full-Length L-Protein. Proceedings (mdpi), 2020, 50, .	0.2	0
17	The antiviral compound remdesivir potently inhibits RNA-dependent RNA polymerase from Middle East respiratory syndrome coronavirus. Journal of Biological Chemistry, 2020, 295, 4773-4779.	1.6	659
18	Remdesivir is a direct-acting antiviral that inhibits RNA-dependent RNA polymerase from severe acute respiratory syndrome coronavirus 2 with high potency. Journal of Biological Chemistry, 2020, 295, 6785-6797.	1.6	752

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19	Hepatitis C Virus Helicase Binding Activity Monitored through Site-Specific Labeling Using an Expanded Genetic Code. <i>ACS Infectious Diseases</i> , 2019, 5, 2118-2126.	1.8	2
20	Mechanism of Inhibition of Ebola Virus RNA-Dependent RNA Polymerase by Remdesivir. <i>Viruses</i> , 2019, 11, 326.	1.5	478
21	Recombinant RNA-Dependent RNA Polymerase Complex of Ebola Virus. <i>Scientific Reports</i> , 2018, 8, 3970.	1.6	45
22	Pharmacophore requirements for HIV-1 reverse transcriptase inhibitors that selectively "freeze" the pre-translocated complex during the polymerization catalytic cycle. <i>Bioorganic and Medicinal Chemistry</i> , 2018, 26, 1713-1726.	1.4	8
23	Conformational Changes Spanning Angstroms to Nanometers via a Combined Protein-Induced Fluorescence Enhancement "Förster Resonance Energy Transfer Method. <i>Journal of Physical Chemistry B</i> , 2017, 121, 2039-2048.	1.2	17
24	Guanine $\beta$ -carboxy nucleoside phosphonate (G $\beta$ -CNP) shows a different inhibitory kinetic profile against the DNA polymerases of human immunodeficiency virus (HIV) and herpes viruses. <i>Biochemical Pharmacology</i> , 2017, 136, 51-61.	2.0	9
25	Dynamic Interconversions of HCV Helicase Binding Modes on the Nucleic Acid Substrate. <i>ACS Infectious Diseases</i> , 2017, 3, 99-109.	1.8	3
26	Zika Virus Hijacks Stress Granule Proteins and Modulates the Host Stress Response. <i>Journal of Virology</i> , 2017, 91, .	1.5	96
27	Tribute to Mark Wainberg. <i>Retrovirology</i> , 2017, 14, 38.	0.9	0
28	Direct-acting antiviral agents for hepatitis C: structural and mechanistic insights. <i>Nature Reviews Gastroenterology and Hepatology</i> , 2016, 13, 338-351.	8.2	144
29	Interactions of the Disordered Domain II of Hepatitis C Virus NS5A with Cyclophilin A, NS5B, and Viral RNA Show Extensive Overlap. <i>ACS Infectious Diseases</i> , 2016, 2, 839-851.	1.8	24
30	A Complex Network of Interactions between S282 and G283 of Hepatitis C Virus Nonstructural Protein 5B and the Template Strand Affects Susceptibility to Sofosbuvir and Ribavirin. <i>Antimicrobial Agents and Chemotherapy</i> , 2016, 60, 2018-2027.	1.4	11
31	Derivatives of Mesoxalic Acid Block Translocation of HIV-1 Reverse Transcriptase. <i>Journal of Biological Chemistry</i> , 2015, 290, 1474-1484.	1.6	14
32	Contrasting Effects of W781V and W780V Mutations in Helix N of Herpes Simplex Virus 1 and Human Cytomegalovirus DNA Polymerases on Antiviral Drug Susceptibility. <i>Journal of Virology</i> , 2015, 89, 4636-4644.	1.5	13
33	Alpha-carboxy nucleoside phosphonates as universal nucleoside triphosphate mimics. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, 3475-3480.	3.3	29
34	Nucleotide Sugar Pucker Preference Mitigates Excision by HIV-1 RT. <i>ACS Chemical Biology</i> , 2015, 10, 2024-2033.	1.6	11
35	Pronounced Inhibition Shift from HIV Reverse Transcriptase to Herpetic DNA Polymerases by Increasing the Flexibility of $\beta$ -Carboxy Nucleoside Phosphonates. <i>Journal of Medicinal Chemistry</i> , 2015, 58, 8110-8127.	2.9	9
36	Resistance Patterns Associated with HCV NS5A Inhibitors Provide Limited Insight into Drug Binding. <i>Viruses</i> , 2014, 6, 4227-4241.	1.5	31

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37	Dynamics of Hepatitis C Virus (HCV) RNA-dependent RNA Polymerase NS5B in Complex with RNA. <i>Journal of Biological Chemistry</i> , 2014, 289, 14399-14411.	1.6	22
38	Resistance to nucleotide analogue inhibitors of hepatitis C virus NS5B: mechanisms and clinical relevance. <i>Current Opinion in Virology</i> , 2014, 8, 104-108.	2.6	14
39	Inhibition of the Ribonuclease H Activity of HIV-1 Reverse Transcriptase by GSK5750 Correlates with Slow Enzyme-Inhibitor Dissociation. <i>Journal of Biological Chemistry</i> , 2014, 289, 16270-16277.	1.6	26
40	Binding Kinetics and Affinities of Heterodimeric versus Homodimeric HIV-1 Reverse Transcriptase on DNA-DNA Substrates at the Single-Molecule Level. <i>Journal of Physical Chemistry B</i> , 2013, 117, 4560-4567.	1.2	31
41	The distinct contributions of fitness and genetic barrier to the development of antiviral drug resistance. <i>Current Opinion in Virology</i> , 2012, 2, 644-650.	2.6	47
42	Initiation of HIV Reverse Transcription: Is Enzyme Flipping Required?. <i>Viruses</i> , 2011, 3, 331-335.	1.5	1
43	Reverse transcriptase in motion: Conformational dynamics of enzyme-substrate interactions. <i>Biochimica Et Biophysica Acta - Proteins and Proteomics</i> , 2010, 1804, 1202-1212.	1.1	33
44	N348I in HIV-1 Reverse Transcriptase Can Counteract the Nevirapine-mediated Bias toward RNase H Cleavage during Plus-strand Initiation. <i>Journal of Biological Chemistry</i> , 2010, 285, 26966-26975.	1.6	28
45	Nucleic acid polymerases use a general acid for nucleotidyl transfer. <i>Nature Structural and Molecular Biology</i> , 2009, 16, 212-218.	3.6	199
46	HIV ribonuclease H: continuing the search for small molecule antagonists. <i>HIV Therapy</i> , 2009, 3, 39-53.	0.6	3
47	Acyclovir Is Activated into a HIV-1 Reverse Transcriptase Inhibitor in Herpesvirus-Infected Human Tissues. <i>Cell Host and Microbe</i> , 2008, 4, 260-270.	5.1	119
48	Mechanisms of resistance associated with excision of incorporated nucleotide analogue inhibitors of HIV-1 reverse transcriptase. <i>Current Opinion in HIV and AIDS</i> , 2007, 2, 103-107.	1.5	5
49	Should We Include Connection Domain Mutations of HIV-1 Reverse Transcriptase in HIV Resistance Testing?. <i>PLoS Medicine</i> , 2007, 4, e346.	3.9	16
50	Effects of Nucleotides and Nucleotide Analogue Inhibitors of HIV-1 Reverse Transcriptase in a Ratchet Model of Polymerase Translocation. <i>Current Pharmaceutical Design</i> , 2006, 12, 1867-1877.	0.9	32
51	Control of Template Positioning during de Novo Initiation of RNA Synthesis by the Bovine Viral Diarrhea Virus NS5B Polymerase. <i>Journal of Biological Chemistry</i> , 2006, 281, 24991-24998.	1.6	13
52	Indolopyridones Inhibit Human Immunodeficiency Virus Reverse Transcriptase with a Novel Mechanism of Action. <i>Journal of Virology</i> , 2006, 80, 12283-12292.	1.5	95
53	Inhibition of HIV-1 reverse transcription: basic principles of drug action and resistance. <i>Expert Review of Anti-Infective Therapy</i> , 2004, 2, 707-716.	2.0	24
54	The M184V Substitution in Human Immunodeficiency Virus Type 1 Reverse Transcriptase Delays the Development of Resistance to Amprenavir and Efavirenz in Subtype B and C Clinical Isolates. <i>Antimicrobial Agents and Chemotherapy</i> , 2003, 47, 2376-2379.	1.4	25

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55	Biochemical mechanisms involved in overcoming HIV resistance to nucleoside inhibitors of reverse transcriptase. Drug Resistance Updates, 2000, 3, 30-38.	6.5	37
56	Nucleoside Analogue Inhibitors of Human Immunodeficiency Virus Reverse Transcriptase. , 0, , 51-70.		2