Dongwei Kang

List of Publications by Year
in descending order

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101	2,981	147566	205818
papers	citations	31 h-index	48 g-index

103	103	103	2940
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	From design to biological mechanism evaluation of phenylalanine-bearing HIV-1 capsid inhibitors targeting a vital assembly interface. Chinese Chemical Letters, 2023, 34, 107611.	4.8	6
2	SARS-CoV-2 Entry Inhibitors Targeting Virus-ACE2 or Virus-TMPRSS2 Interactions. Current Medicinal Chemistry, 2022, 29, 682-699.	1.2	5
3	Medicinal chemistry strategies towards the development of effective SARS-CoV-2 inhibitors. Acta Pharmaceutica Sinica B, 2022, 12, 581-599.	5.7	33
4	Design, synthesis, and mechanistic investigations of phenylalanine derivatives containing a benzothiazole moiety as HIV-1 capsid inhibitors with improved metabolic stability. European Journal of Medicinal Chemistry, 2022, 227, 113903.	2.6	11
5	Indolylarylsulfones bearing phenylboronic acid and phenylboronate ester functionalities as potent HIVâ€'1 non-nucleoside reverse transcriptase inhibitors. Bioorganic and Medicinal Chemistry, 2022, 53, 116531.	1.4	8
6	Development of Novel Dihydrofuro[3,4-d]pyrimidine Derivatives as HIV-1 NNRTIs to Overcome the Highly Resistant Mutant Strains F227L/V106A and K103N/Y181C. Journal of Medicinal Chemistry, 2022, 65, 2458-2470.	2.9	10
7	Newly Emerging Strategies in Antiviral Drug Discovery: Dedicated to Prof. Dr. Erik De Clercq on Occasion of His 80th Anniversary. Molecules, 2022, 27, 850.	1.7	15
8	Contemporary Medicinal Chemistry Strategies for the Discovery and Development of Novel HIV-1 Non-nucleoside Reverse Transcriptase Inhibitors. Journal of Medicinal Chemistry, 2022, 65, 3729-3757.	2.9	33
9	HIV-1 capsid inhibitors: a sword to destroy the virus. Future Medicinal Chemistry, 2022, 14, 605-607.	1.1	8
10	Novel RNase H Inhibitors Blocking RNA-directed Strand Displacement DNA Synthesis by HIV-1 Reverse Transcriptase. Journal of Molecular Biology, 2022, 434, 167507.	2.0	9
11	Chemical space exploration around indolylarylsulfone scaffold led to a novel class of highly active HIV-1 NNRTIs with spiro structural features. European Journal of Medicinal Chemistry, 2022, 238, 114471.	2.6	6
12	Design, synthesis, and biological evaluation of novel double-winged galloyl derivatives as HIV-1 RNase H inhibitors. European Journal of Medicinal Chemistry, 2022, 240, 114563.	2.6	4
13	Design, synthesis, and biological evaluation of piperidinylâ€substituted [1,2,4]triazolo[1,5â€a]pyrimidine derivatives as potential antiâ€HIVâ€1 agents with reduced cytotoxicity. Chemical Biology and Drug Design, 2021, 97, 67-76.	1.5	16
14	Novel indolylarylsulfone derivatives as covalent HIV-1 reverse transcriptase inhibitors specifically targeting the drug-resistant mutant Y181C. Bioorganic and Medicinal Chemistry, 2021, 30, 115927.	1.4	11
15	Design, synthesis, and evaluation of â€œdual-siteâ€•binding diarylpyrimidines targeting both NNIBP and the NNRTI adjacent site of the HIV-1 reverse transcriptase. European Journal of Medicinal Chemistry, 2021, 211, 113063.	2.6	15
16	Exploiting the tolerant region I of the non-nucleoside reverse transcriptase inhibitor (NNRTI) binding pocket. Part 2: Discovery of diarylpyrimidine derivatives as potent HIV-1 NNRTIs with high Fsp3 values and favorable drug-like properties. European Journal of Medicinal Chemistry, 2021, 213, 113051.	2.6	15
17	Punicalagin is a neuraminidase inhibitor of influenza viruses. Journal of Medical Virology, 2021, 93, 3465-3472.	2.5	23
18	Search, Identification, and Design of Effective Antiviral Drugs Against Pandemic Human Coronaviruses. Advances in Experimental Medicine and Biology, 2021, 1322, 219-260.	0.8	5

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19	Recent developments in the medicinal chemistry of single boron atom-containing compounds. Acta Pharmaceutica Sinica B, 2021, 11, 3035-3059.	5.7	70
20	Medicinal chemistry strategies for discovering antivirals effective against drug-resistant viruses. Chemical Society Reviews, 2021, 50, 4514-4540.	18.7	84
21	Boronic acid-containing diarylpyrimidine derivatives as novel HIV-1 NNRTIs: Design, synthesis and biological evaluation. Chinese Chemical Letters, 2021, 32, 4053-4057.	4.8	16
22	Identification of novel potent HIV-1 inhibitors by exploiting the tolerant regions of the NNRTIs binding pocket. European Journal of Medicinal Chemistry, 2021, 214, 113204.	2.6	6
23	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.	2.9	33
24	The development of an effective synthetic route of rilpivirine. BMC Chemistry, 2021, 15, 22.	1.6	5
25	Exploiting the hydrophobic channel of the NNIBP: Discovery of novel diarylpyrimidines as HIV-1 NNRTIs against wild-type and K103N mutant viruses. Bioorganic and Medicinal Chemistry, 2021, 42, 116239.	1.4	3
26	Discovery of Novel Dihydrothiopyrano[4,3-d]pyrimidine Derivatives as Potent HIV-1 NNRTIs with Significantly Reduced hERG Inhibitory Activity and Improved Resistance Profiles. Journal of Medicinal Chemistry, 2021, 64, 13658-13675.	2.9	14
27	Structure-Based Design and Discovery of Pyridyl-Bearing Fused Bicyclic HIV-1 Inhibitors: Synthesis, Biological Characterization, and Molecular Modeling Studies. Journal of Medicinal Chemistry, 2021, 64, 13604-13621.	2.9	10
28	Design, synthesis, and antiviral activity of phenylalanine derivatives as HIV-1 capsid inhibitors. Bioorganic and Medicinal Chemistry, 2021, 48, 116414.	1.4	4
29	Design, synthesis, and antiviral evaluation of novel piperidine-substituted arylpyrimidines as HIV-1 NNRTIs by exploring the hydrophobic channel of NNIBP. Bioorganic Chemistry, 2021, 116, 105353.	2.0	5
30	Discovery, optimization, and target identification of novel coumarin derivatives as HIV-1 reverse transcriptase-associated ribonuclease H inhibitors. European Journal of Medicinal Chemistry, 2021, 225, 113769.	2.6	9
31	Design, synthesis, and mechanism study of dimerized phenylalanine derivatives as novel HIV-1 capsid inhibitors. European Journal of Medicinal Chemistry, 2021, 226, 113848.	2.6	15
32	Identification of C5-NH₂ Modified Oseltamivir Derivatives as Novel Influenza Neuraminidase Inhibitors with Highly Improved Antiviral Activities and Favorable Druggability. Journal of Medicinal Chemistry, 2021, 64, 17992-18009.	2.9	12
33	Exploring the hydrophobic channel of NNIBP leads to the discovery of novel piperidine-substituted thiophene[3,2-d]pyrimidine derivatives as potent HIV-1 NNRTIs. Acta Pharmaceutica Sinica B, 2020, 10, 878-894.	5.7	39
34	Targeting dual tolerant regions of binding pocket: Discovery of novel morpholine-substituted diarylpyrimidines as potent HIV-1 NNRTIs with significantly improved water solubility. European Journal of Medicinal Chemistry, 2020, 206, 112811.	2.6	10
35	Discovery and optimizing polycyclic pyridone compounds as anti-HBV agents. Expert Opinion on Therapeutic Patents, 2020, 30, 715-721.	2.4	9
36	Novel Human Urate Transporter 1 Inhibitors as Hypouricemic Drug Candidates with Favorable Druggability. Journal of Medicinal Chemistry, 2020, 63, 10829-10854.	2.9	30

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37	Discovery of potential dual-target prodrugs of HIV-1 reverse transcriptase and nucleocapsid protein 7. Bioorganic and Medicinal Chemistry Letters, 2020, 30, 127287.	1.0	3
38	New techniques and strategies in drug discovery. Chinese Chemical Letters, 2020, 31, 1695-1708.	4.8	82
39	In situ click chemistry-based rapid discovery of novel HIV-1 NNRTIs by exploiting the hydrophobic channel and tolerant regions of NNIBP. European Journal of Medicinal Chemistry, 2020, 193, 112237.	2.6	23
40	Structureâ€“Activity Relationship Exploration of NNIBP Tolerant Region I Leads to Potent HIV-1 NNRTIs. ACS Infectious Diseases, 2020, 6, 2225-2234.	1.8	12
41	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.	2.9	37
42	Structure-Based Bioisosterism Yields HIV-1 NNRTIs with Improved Drug-Resistance Profiles and Favorable Pharmacokinetic Properties. Journal of Medicinal Chemistry, 2020, 63, 4837-4848.	2.9	50
43	Design, Synthesis, and Mechanism Study of Benzenesulfonamide-Containing Phenylalanine Derivatives as Novel HIV-1 Capsid Inhibitors with Improved Antiviral Activities. Journal of Medicinal Chemistry, 2020, 63, 4790-4810.	2.9	41
44	Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) membrane (M) protein inhibits type I and III interferon production by targeting RIG-I/MDA-5 signaling. Signal Transduction and Targeted Therapy, 2020, 5, 299.	7.1	232
45	Discovery of novel indolylarylsulfones as potent HIV-1 NNRTIs via structure-guided scaffold morphing. European Journal of Medicinal Chemistry, 2019, 182, 111619.	2.6	16
46	Discovery of piperidine-substituted thiazolo[5,4-d]pyrimidine derivatives as potent and orally bioavailable HIV-1 non-nucleoside reverse transcriptase inhibitors. Communications Chemistry, 2019, 2, .	2.0	24
47	Novel urate transporter 1 (URAT1) inhibitors: a review of recent patent literature (2016â€“2019). Expert Opinion on Therapeutic Patents, 2019, 29, 871-879.	2.4	39
48	Identification of highly potent and selective Cdc25 protein phosphatases inhibitors from miniaturization click-chemistry-based combinatorial libraries. European Journal of Medicinal Chemistry, 2019, 183, 111696.	2.6	26
49	Exploiting the Tolerant Region I of the Non-Nucleoside Reverse Transcriptase Inhibitor (NNRTI) Binding Pocket: Discovery of Potent Diarylpyrimidine-Typed HIV-1 NNRTIs against Wild-Type and E138K Mutant Virus with Significantly Improved Water Solubility and Favorable Safety Profiles. Journal of Medicinal Chemistry, 2019, 62, 2083-2098.	2.9	66
50	Recent applications of click chemistry in drug discovery. Expert Opinion on Drug Discovery, 2019, 14, 779-789.	2.5	151
51	Contemporary medicinal-chemistry strategies for discovery of blood coagulation factor Xa inhibitors. Expert Opinion on Drug Discovery, 2019, 14, 915-931.	2.5	10
52	Molecular design opportunities presented by solventâ€exposed regions of target proteins. Medicinal Research Reviews, 2019, 39, 2194-2238.	5.0	28
53	Overview of Recent Strategic Advances in Medicinal Chemistry. Journal of Medicinal Chemistry, 2019, 62, 9375-9414.	2.9	108
54	Resurrecting the Condemned: Identification of N-Benzoxaborole Benzofuran GSK8175 as a Clinical Candidate with Reduced Metabolic Liability. Journal of Medicinal Chemistry, 2019, 62, 3251-3253.	2.9	11

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55	Discovery of novel anti-influenza agents via contemporary medicinal chemistry strategies (2014â€“2018) Tj ETQq1 1 0.784314 rgBT	1.1	12
56	Targeting the hydrophobic channel of NNIBP: discovery of novel 1,2,3-triazole-derived diarylpyrimidines as novel HIV-1 NNRTIs with high potency against wild-type and K103N mutant virus. Organic and Biomolecular Chemistry, 2019, 17, 3202-3217.	1.5	39
57	Discovery of novel 1,4-disubstituted 1,2,3-triazole phenylalanine derivatives as HIV-1 capsid inhibitors. RSC Advances, 2019, 9, 28961-28986.	1.7	42
58	Design, synthesis and biological evaluation of novel acetamide-substituted doravirine and its prodrugs as potent HIV-1 NNRTIs. Bioorganic and Medicinal Chemistry, 2019, 27, 447-456.	1.4	24
59	Contemporary medicinal-chemistry strategies for the discovery of selective butyrylcholinesterase inhibitors. Drug Discovery Today, 2019, 24, 629-635.	3.2	35
60	Identification of Dihydrofuro[3,4-d]pyrimidine Derivatives as Novel HIV-1 Non-Nucleoside Reverse Transcriptase Inhibitors with Promising Antiviral Activities and Desirable Physicochemical Properties. Journal of Medicinal Chemistry, 2019, 62, 1484-1501.	2.9	70
61	Discovery of potent <scp>HIV</scp>â€1 nonâ€nucleoside reverse transcriptase inhibitors by exploring the structureâ€“activity relationship of solventâ€exposed regions I. Chemical Biology and Drug Design, 2019, 93, 430-437.	1.5	13
62	Efficient drug discovery by rational lead hybridization based on crystallographic overlay. Drug Discovery Today, 2019, 24, 805-813.	3.2	22
63	First discovery of a potential carbonate prodrug of NNRTI drug candidate RDEA427 with submicromolar inhibitory activity against HIV-1 K103N/Y181C double mutant strain. Bioorganic and Medicinal Chemistry Letters, 2018, 28, 1348-1351.	1.0	13
64	Discovery of Novel Diarylpyrimidine Derivatives as Potent HIV-1 NNRTIs Targeting the â€œNNRTI Adjacentâ€• Binding Site. ACS Medicinal Chemistry Letters, 2018, 9, 334-338.	1.3	32
65	Further Exploring Solvent-Exposed Tolerant Regions of Allosteric Binding Pocket for Novel HIV-1 NNRTIs Discovery. ACS Medicinal Chemistry Letters, 2018, 9, 370-375.	1.3	28
66	The discovery of novel diarylpyri(mi)dine derivatives with high level activity against a wide variety of HIV-1 strains as well as against HIV-2. Bioorganic and Medicinal Chemistry, 2018, 26, 2051-2060.	1.4	10
67	Current insights into anti-HIV drug discovery and development: a review of recent patent literature (2014â€“2017). Expert Opinion on Therapeutic Patents, 2018, 28, 299-316.	2.4	36
68	Discovery of novel diarylpyrimidines as potent HIV-1 NNRTIs by investigating the chemical space of a less explored â€œhydrophobic channelâ€• Organic and Biomolecular Chemistry, 2018, 16, 1014-1028.	1.5	26
69	Targeting the entrance channel of NNIBP: Discovery of diarylnicotinamide 1,4-disubstituted 1,2,3-triazoles as novel HIV-1 NNRTIs with high potency against wild-type and E138K mutant virus. European Journal of Medicinal Chemistry, 2018, 151, 339-350.	2.6	68
70	Design, synthesis and biological evaluation of tacrine-1,2,3-triazole derivatives as potent cholinesterase inhibitors. MedChemComm, 2018, 9, 149-159.	3.5	55
71	Development of a practical synthesis of etravirine via a microwave-promoted amination. Chemistry Central Journal, 2018, 12, 144.	2.6	5
72	Structure-Based Optimization of N-Substituted Oseltamivir Derivatives as Potent Anti-Influenza A Virus Agents with Significantly Improved Potency against Oseltamivir-Resistant N1-H274Y Variant. Journal of Medicinal Chemistry, 2018, 61, 9976-9999.	2.9	35

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73	Structural basis for potent and broad inhibition of HIV-1 RT by thiophene[3,2-d]pyrimidine non-nucleoside inhibitors. ELife, 2018, 7, .	2.8	57
74	Discovery of phenylalanine derivatives as potent HIV-1 capsid inhibitors from click chemistry-based compound library. European Journal of Medicinal Chemistry, 2018, 158, 478-492.	2.6	51
75	Optimization of N-Substituted Oseltamivir Derivatives as Potent Inhibitors of Group-1 and -2 Influenza A Neuraminidases, Including a Drug-Resistant Variant. Journal of Medicinal Chemistry, 2018, 61, 6379-6397.	2.9	46
76	Design, synthesis, and antiviral evaluation of novel hydrazone-substituted thiophene[3,2-d]pyrimidine derivatives as potent human immunodeficiency virus-1 inhibitors. Chemical Biology and Drug Design, 2018, 92, 2009-2021.	1.5	16
77	Inhibitors of Influenza Virus Polymerase Acidic (PA) Endonuclease: Contemporary Developments and Perspectives. Journal of Medicinal Chemistry, 2017, 60, 3533-3551.	2.9	60
78	Discovery of uracil-bearing DAPYs derivatives as novel HIV-1 NNRTIs via crystallographic overlay-based molecular hybridization. European Journal of Medicinal Chemistry, 2017, 130, 209-222.	2.6	30
79	Novel fused pyrimidine and isoquinoline derivatives as potent HIV-1 NNRTIs: a patent evaluation of WO2016105532A1, WO2016105534A1 and WO2016105564A1. Expert Opinion on Therapeutic Patents, 2017, 27, 383-391.	2.4	22
80	Structure-Based Optimization of Thiophene[3,2-d]pyrimidine Derivatives as Potent HIV-1 Non-nucleoside Reverse Transcriptase Inhibitors with Improved Potency against Resistance-Associated Variants. Journal of Medicinal Chemistry, 2017, 60, 4424-4443.	2.9	79
81	Discovery of Thiophene[3,2-d]pyrimidine Derivatives as Potent HIV-1 NNRTIs Targeting the Tolerant Region I of NNIBP. ACS Medicinal Chemistry Letters, 2017, 8, 1188-1193.	1.3	30
82	Design, synthesis and anti-HIV evaluation of novel diarylpyridine derivatives as potent HIV-1 NNRTIs. European Journal of Medicinal Chemistry, 2017, 140, 383-391.	2.6	12
83	Novel diaryltriazines with a picolinonitrile moiety as potent HIV-1 RT inhibitors: a patent evaluation of WO2016059647(A2). Expert Opinion on Therapeutic Patents, 2017, 27, 9-15.	2.4	9
84	The development of an effective synthetic route of lesinurad (RDEA594). Chemistry Central Journal, 2017, 11, 86.	2.6	11
85	An improved synthesis approach of the HIV-1 inhibitor RDEA427, a pyrrolo[2,3-d]pyrimidine derivative. Arkivoc, 2017, 2016, 45-51.	0.3	3
86	Design, synthesis, and biological evaluation of novel 5â€Alkylâ€6â€Adamantylmethylpyrimidinâ€4(3H)â€ones as <scp>HIV</scp>â€1 nonâ€nucleoside reverseâ€transcriptase inhibitors. Chemical Biology and Drug Design, 2016, 88, 380-385.	1.5	2
87	First discovery of novel 3-hydroxy-quinazoline-2,4(1H,3H)-diones as specific anti-vaccinia and adenovirus agents via â€˜privileged scaffoldâ€™ refining approach. Bioorganic and Medicinal Chemistry Letters, 2016, 26, 5182-5186.	1.0	33
88	Arylazolyl(azinyl)thioacetanilides. Part 20: Discovery of novel purinylthioacetanilides derivatives as potent HIV-1 NNRTIs via a structure-based bioisosterism approach. Bioorganic and Medicinal Chemistry, 2016, 24, 4424-4433.	1.4	12
89	Design, Synthesis, and Evaluation of Thiophene[3,2-d]pyrimidine Derivatives as HIV-1 Non-nucleoside Reverse Transcriptase Inhibitors with Significantly Improved Drug Resistance Profiles. Journal of Medicinal Chemistry, 2016, 59, 7991-8007.	2.9	107
90	Design, synthesis and evaluation of novel HIV-1 NNRTIs with dual structural conformations targeting the entrance channel of the NNRTI binding pocket. European Journal of Medicinal Chemistry, 2016, 115, 53-62.	2.6	21

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91	Novel diarylpyrimidines and diaryltriazines as potent HIV-1 NNRTIs with dramatically improved solubility: a patent evaluation of US20140378443A1. Expert Opinion on Therapeutic Patents, 2016, 26, 281-289.	2.4	21
92	Design, synthesis and anti-HIV evaluation of novel diarylpyridine derivatives targeting the entrance channel of NNRTI binding pocket. European Journal of Medicinal Chemistry, 2016, 109, 294-304.	2.6	28
93	Discovery of non-peptide small molecular CXCR4 antagonists as anti-HIV agents: Recent advances and future opportunities. European Journal of Medicinal Chemistry, 2016, 114, 65-78.	2.6	30
94	Synthesis and Biological Evaluation of a Series of 2â€((1â€substitutedâ€1Hâ€1,2,3â€triazolâ€4â€yl)methylthio)â€6â€(naphthalenâ€1â€ylmethyl)pyrimidinâ€4(3H)â€one Potential <scp>HIV</scp>â€1 Inhibitors. Chemical Biology and Drug Design, 2015, 86, 614-618.	1.5	17
95	Synthesis and Preliminary Antiviral Activities of Piperidineâ€substituted Purines against <scp>HIV</scp> and Influenza A/H1N1 Infections. Chemical Biology and Drug Design, 2015, 86, 568-577.	1.5	17
96	Fragment-based approaches to anti-HIV drug discovery: state of the art and future opportunities. Expert Opinion on Drug Discovery, 2015, 10, 1271-1281.	2.5	9
97	â€œOld Dogs with New Tricksâ€: exploiting alternative mechanisms of action and new drug design strategies for clinically validated HIV targets. Molecular BioSystems, 2014, 10, 1998.	2.9	25
98	Discovery and characterization of novel imidazopyridine derivative CHEQ-2 as a potent CDC25 inhibitor and promising anticancer drug candidate. European Journal of Medicinal Chemistry, 2014, 82, 293-307.	2.6	35
99	â€œOld Friends in New Guiseâ€: Exploiting Privileged Structures for Scaffold Re-Evolution/Refining. Combinatorial Chemistry and High Throughput Screening, 2014, 17, 536-553.	0.6	58
100	Discovery of novel pyridazinylthioacetamides as potent HIV-1 NNRTIs using a structure-based bioisosterism approach. MedChemComm, 2013, 4, 810.	3.5	8
101	Design, Synthesis, and Acetylcholinesterase Inhibition Assay of Novel 9-(1-(Substituted-benzyl)piperidin-4-yl)-2-chloro-9H-purin-6-amine Derivatives. Journal of Chemistry, 2013, 2013, 1-9.	0.9	1