Dongwei Kang

List of Publications by Year in Descending Order

96 papers	1,700 citations	25 h-index	36 g-index
103 ext. papers	2,342 ext. citations	6.9 avg, IF	4.9 L-index

#	Paper	IF	Citations
96	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	6.8	1
95	Contemporary Medicinal Chemistry Strategies for the Discovery and Development of Novel HIV-1 Non-nucleoside Reverse Transcriptase Inhibitors.. *Journal of Medicinal Chemistry*, **2022**,	8.3	6
94	Novel RNase H inhibitors blocking RNA-directed strand displacement DNA synthesis by HIV-1 reverse transcriptase.. *Journal of Molecular Biology*, **2022**, 167507	6.5	0
93	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	6.8	0
92	Indolylarylsulfones bearing phenylboronic acid and phenylboronate ester functionalities as potent HIV-1 non-nucleoside reverse transcriptase inhibitors. *Bioorganic and Medicinal Chemistry*, **2021**, 53, 116531	3.4	2
91	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	6.8	2
90	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	8.3	11
89	The development of an effective synthetic route of rilpivirine. *BMC Chemistry*, **2021**, 15, 22	3.7	4
88	SARS-CoV-2 Entry inhibitors targeting virus-ACE2 or virus-TMPRSS2 interactions. *Current Medicinal Chemistry*, **2021**,	4.3	1
87	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	3.4	1
86	Design, synthesis, and biological evaluation of piperidinyl-substituted [1,2,4]triazolo[1,5-a]pyrimidine derivatives as potential anti-HIV-1 agents with reduced cytotoxicity. *Chemical Biology and Drug Design*, **2021**, 97, 67-76	2.9	5
85	Novel indolylarylsulfone derivatives as covalent HIV-1 reverse transcriptase inhibitors specifically targeting the drug-resistant mutant Y181C. *Bioorganic and Medicinal Chemistry*, **2021**, 30, 115927	3.4	6
84	Design, synthesis, and evaluation of "dual-site"-binding diarylpyrimidines targeting both NNIBP and the NNRTI adjacent site of the HIV-1 reverse transcriptase. *European Journal of Medicinal Chemistry*, **2021**, 211, 113063	6.8	5
83	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 Fsp values and favorable drug-like properties. *European Journal of Medicinal Chemistry*, **2021**, 213, 113051	6.8	4
82	Punicalagin is a neuraminidase inhibitor of influenza viruses. *Journal of Medical Virology*, **2021**, 93, 3465-3472	19.7	7
81	Search, Identification, and Design of Effective Antiviral Drugs Against Pandemic Human Coronaviruses. *Advances in Experimental Medicine and Biology*, **2021**, 1322, 219-260	3.6	1
80	Recent developments in the medicinal chemistry of single boron atom-containing compounds. *Acta Pharmaceutica Sinica B*, **2021**, 11, 3035-3059	15.5	28

79	Medicinal chemistry strategies for discovering antivirals effective against drug-resistant viruses. *Chemical Society Reviews*, **2021**, 50, 4514-4540	58.5	30
78	Boronic acid-containing diarylpyrimidine derivatives as novel HIV-1 NNRTIs: Design, synthesis and biological evaluation. *Chinese Chemical Letters*, **2021**,	8.1	4
77	Discovery of Novel Dihydrothiopyrano[4,3-]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	8.3	2
76	Medicinal chemistry strategies towards the development of effective SARS-CoV-2 inhibitors. *Acta Pharmaceutica Sinica B*, **2021**,	15.5	5
75	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	8.3	1
74	Design, synthesis, and antiviral activity of phenylalanine derivatives as HIV-1 capsid inhibitors. *Bioorganic and Medicinal Chemistry*, **2021**, 48, 116414	3.4	0
73	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	5.1	1
72	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	6.8	3
71	Design, synthesis, and mechanism study of dimerized phenylalanine derivatives as novel HIV-1 capsid inhibitors. *European Journal of Medicinal Chemistry*, **2021**, 226, 113848	6.8	4
70	Discovery of potential dual-target prodrugs of HIV-1 reverse transcriptase and nucleocapsid protein 7. *Bioorganic and Medicinal Chemistry Letters*, **2020**, 30, 127287	2.9	
69	Recent Developments in Small Molecular HIV-1 and Hepatitis B Virus RNase H Inhibitors **2020**, 273-292		
68	New techniques and strategies in drug discovery. *Chinese Chemical Letters*, **2020**, 31, 1695-1708	8.1	45
67	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	6.8	11
66	Structure-Activity Relationship Exploration of NNIBP Tolerant Region I Leads to Potent HIV-1 NNRTIs. *ACS Infectious Diseases*, **2020**, 6, 2225-2234	5.5	8
65	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	8.3	20
64	Structure-Based Bioisosterism Yields HIV-1 NNRTIs with Improved Drug-Resistance Profiles and Favorable Pharmacokinetic Properties. *Journal of Medicinal Chemistry*, **2020**, 63, 4837-4848	8.3	20
63	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	21	123
62	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	6.8	3

61	Discovery and optimizing polycyclic pyridone compounds as anti-HBV agents. *Expert Opinion on Therapeutic Patents*, **2020**, 30, 715-721	6.8	1
60	Novel Human Urate Transporter 1 Inhibitors as Hypouricemic Drug Candidates with Favorable Druggability. *Journal of Medicinal Chemistry*, **2020**, 63, 10829-10854	8.3	8
59	Exploring the hydrophobic channel of NNIBP leads to the discovery of novel piperidine-substituted thiophene[3,2-]pyrimidine derivatives as potent HIV-1 NNRTIs. *Acta Pharmaceutica Sinica B*, **2020**, 10, 878-894	15.5	26
58	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	8.3	18
57	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	6.8	11
56	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	8.3	47
55	Recent applications of click chemistry in drug discovery. *Expert Opinion on Drug Discovery*, **2019**, 14, 779-789	6.8	70
54	Contemporary medicinal-chemistry strategies for discovery of blood coagulation factor Xa inhibitors. *Expert Opinion on Drug Discovery*, **2019**, 14, 915-931	6.2	6
53	Molecular design opportunities presented by solvent-exposed regions of target proteins. *Medicinal Research Reviews*, **2019**, 39, 2194-2238	14.4	16
52	Overview of Recent Strategic Advances in Medicinal Chemistry. *Journal of Medicinal Chemistry*, **2019**, 62, 9375-9414	8.3	53
51	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	8.3	7
50	Discovery of novel anti-influenza agents via contemporary medicinal chemistry strategies (2014-2018 update). *Future Medicinal Chemistry*, **2019**, 11, 375-378	4.1	5
49	Discovery of novel indolylarylsulfones as potent HIV-1 NNRTIs via structure-guided scaffold morphing. *European Journal of Medicinal Chemistry*, **2019**, 182, 111619	6.8	7
48	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,	6.3	15
47	Novel urate transporter 1 (URAT1) inhibitors: a review of recent patent literature (2016-2019). *Expert Opinion on Therapeutic Patents*, **2019**, 29, 871-879	6.8	20
46	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	3.9	28
45	Discovery of novel 1,4-disubstituted 1,2,3-triazole phenylalanine derivatives as HIV-1 capsid inhibitors. *RSC Advances*, **2019**, 9, 28961-28986	3.7	24
44	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	3.4	12

43	Contemporary medicinal-chemistry strategies for the discovery of selective butyrylcholinesterase inhibitors. *Drug Discovery Today*, **2019**, 24, 629-635	8.8	24
42	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	8.3	41
41	Discovery of potent HIV-1 non-nucleoside reverse transcriptase inhibitors by exploring the structure-activity relationship of solvent-exposed regions I. *Chemical Biology and Drug Design*, **2019**, 93, 430-437	2.9	8
40	Efficient drug discovery by rational lead hybridization based on crystallographic overlay. *Drug Discovery Today*, **2019**, 24, 805-813	8.8	15
39	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	2.9	8
38	Discovery of Novel Diarylpyrimidine Derivatives as Potent HIV-1 NNRTIs Targeting the "NNRTI Adjacent" Binding Site. *ACS Medicinal Chemistry Letters*, **2018**, 9, 334-338	4.3	25
37	Further Exploring Solvent-Exposed Tolerant Regions of Allosteric Binding Pocket for Novel HIV-1 NNRTIs Discovery. *ACS Medicinal Chemistry Letters*, **2018**, 9, 370-375	4.3	21
36	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	3.4	7
35	Current insights into anti-HIV drug discovery and development: a review of recent patent literature (2014-2017). *Expert Opinion on Therapeutic Patents*, **2018**, 28, 299-316	6.8	27
34	Discovery of novel diarylpyrimidines as potent HIV-1 NNRTIs by investigating the chemical space of a less explored "hydrophobic channel". *Organic and Biomolecular Chemistry*, **2018**, 16, 1014-1028	3.9	18
33	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	6.8	44
32	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	2.9	8
31	Design, synthesis and biological evaluation of tacrine-1,2,3-triazole derivatives as potent cholinesterase inhibitors. *MedChemComm*, **2018**, 9, 149-159	5	39
30	Development of a practical synthesis of etravirine via a microwave-promoted amination. *Chemistry Central Journal*, **2018**, 12, 144		1
29	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	8.3	24
28	Structural basis for potent and broad inhibition of HIV-1 RT by thiophene[3,2-]pyrimidine non-nucleoside inhibitors. *ELife*, **2018**, 7,	8.9	41
27	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	6.8	36
26	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	8.3	32

25	Inhibitors of Influenza Virus Polymerase Acidic (PA) Endonuclease: Contemporary Developments and Perspectives. *Journal of Medicinal Chemistry*, **2017**, 60, 3533-3551	8.3	40
24	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	6.8	17
23	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	6.8	16
22	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	8.3	65
21	Discovery of Thiophene[3,2-]pyrimidine Derivatives as Potent HIV-1 NNRTIs Targeting the Tolerant Region I of NNIBP. *ACS Medicinal Chemistry Letters*, **2017**, 8, 1188-1193	4.3	21
20	Design, synthesis and anti-HIV evaluation of novel diarylpyridine derivatives as potent HIV-1 NNRTIs. *European Journal of Medicinal Chemistry*, **2017**, 140, 383-391	6.8	11
19	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	6.8	5
18	The development of an effective synthetic route of lesinurad (RDEA594). *Chemistry Central Journal*, **2017**, 11, 86		8
17	An improved synthesis approach of the HIV-1 inhibitor RDEA427, a pyrrolo[2,3-d]pyrimidine derivative. *Arkivoc*, **2017**, 2016, 45-51	0.9	3
16	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	8.3	84
15	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	6.8	16
14	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, 281-9	6.8	19
13	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	6.8	26
12	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	6.8	26
11	Design, synthesis, and biological evaluation of novel 5-Alkyl-6-Adamantylmethylpyrimidin-4(3H)-ones as HIV-1 non-nucleoside reverse-transcriptase inhibitors. *Chemical Biology and Drug Design*, **2016**, 88, 380-5	2.9	2
10	First discovery of novel 3-hydroxy-quinazoline-2,4(1H,3H)-diones as specific anti-vaccinia and adenovirus agents via Tprivileged scaffoldTrefining approach. *Bioorganic and Medicinal Chemistry Letters*, **2016**, 26, 5182-5186	2.9	25
9	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	3.4	7
8	Fragment-based approaches to anti-HIV drug discovery: state of the art and future opportunities. *Expert Opinion on Drug Discovery*, **2015**, 10, 1271-81	6.2	6

7	Synthesis and Biological Evaluation of a Series of 2-((1-substituted-1H-1,2,3-triazol-4-yl)methylthio)-6-(naphthalen-1-ylmethyl)pyrimidin-4(3H)-one As Potential HIV-1 Inhibitors. *Chemical Biology and Drug Design*, **2015**, 86, 614-8	2.9	13
6	Synthesis and Preliminary Antiviral Activities of Piperidine-substituted Purines against HIV and Influenza A/H1N1 Infections. *Chemical Biology and Drug Design*, **2015**, 86, 568-77	2.9	14
5	"Old Dogs with New Tricks": exploiting alternative mechanisms of action and new drug design strategies for clinically validated HIV targets. *Molecular BioSystems*, **2014**, 10, 1998-2022		24
4	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	6.8	29
3	"Old friends in new guise": exploiting privileged structures for scaffold re-evolution/refining. *Combinatorial Chemistry and High Throughput Screening*, **2014**, 17, 536-53	1.3	50
2	Discovery of novel pyridazinylthioacetamides as potent HIV-1 NNRTIs using a structure-based bioisosterism approach. *MedChemComm*, **2013**, 4, 810	5	7
1	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	2.3	