Etienne Decroly

List of Publications by Year
in descending order

		50276	42399
102 papers	9,720 citations	46 h-index	92 g-index
120 all docs	120 docs citations	120 times ranked	12363 citing authors

#	Article	IF	Citations
1	Fluoxetine targets an allosteric site in the enterovirus 2C AAA+ ATPase and stabilizes a ring-shaped hexameric complex. Science Advances, 2022, 8, eabj7615.	10.3	11
2	A dual mechanism of action of AT-527 against SARS-CoV-2 polymerase. Nature Communications, 2022, 13, 621.	12.8	52
3	Synthesis, Structureâ€“Activity Relationships, and Antiviral Profiling of 1-Heteroaryl-2-Alkoxyphenyl Analogs as Inhibitors of SARS-CoV-2 Replication. Molecules, 2022, 27, 1052.	3.8	4
4	Distinctive Roles of Furin and TMPRSS2 in SARS-CoV-2 Infectivity. Journal of Virology, 2022, 96, e0012822.	3.4	64
5	Potent Inhibition of SARS-CoV-2 nsp14 <i>N</i>7-Methyltransferase by Sulfonamide-Based Bisubstrate Analogues. Journal of Medicinal Chemistry, 2022, 65, 6231-6249.	6.4	24
6	Identification of potent inhibitors of arenavirus and SARS-CoV-2 exoribonucleases by fluorescence polarization assay. Antiviral Research, 2022, 204, 105364.	4.1	2
7	First insights into the structural features of Ebola virus methyltransferase activities. Nucleic Acids Research, 2021, 49, 1737-1748.	14.5	14
8	Tracing the origins of SARS-COV-2 in coronavirus phylogenies: a review. Environmental Chemistry Letters, 2021, 19, 769-785.	16.2	53
9	The methyltransferase domain of the Respiratory Syncytial Virus L protein catalyzes cap N7 and 2â€™-O-methylation. PLoS Pathogens, 2021, 17, e1009562.	4.7	11
10	The enzymes for genome size increase and maintenance of large (+)RNA viruses. Trends in Biochemical Sciences, 2021, 46, 866-877.	7.5	9
11	Structure and Sequence Requirements for RNA Capping at the Venezuelan Equine Encephalitis Virus RNA 5â€² End. Journal of Virology, 2021, 95, e0077721.	3.4	2
12	An appeal for an objective, open, and transparent scientific debate about the origin of SARS-CoV-2. Lancet, The, 2021, 398, 1402-1404.	13.7	17
13	System-oriented optimization of multi-target 2,6-diaminopurine derivatives: Easily accessible broad-spectrum antivirals active against flaviviruses, influenza virus and SARS-CoV-2. European Journal of Medicinal Chemistry, 2021, 224, 113683.	5.5	9
14	COVID-19 epidemiologic surveillance using wastewater. Environmental Chemistry Letters, 2021, 19, 1911-1915.	16.2	22
15	Structureâ€“function analysis of the nsp14 N7â€“guanine methyltransferase reveals an essential role in<i>Betacoronavirus</i>replication. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	26
16	Design, Synthesis and Discovery of <i>N,Nâ€™</i>â€Carbazoylâ€arylâ€urea Inhibitors of Zika NS5 Methyltransferase and Virus Replication. ChemMedChem, 2020, 15, 385-390.	3.2	16
17	Synthesis and biological evaluation of novel flexible nucleoside analogues that inhibit flavivirus replication in vitro. Bioorganic and Medicinal Chemistry, 2020, 28, 115713.	3.0	19
18	Drugs against SARSâ€CoV â€2: What do we know about their mode of action?. Reviews in Medical Virology, 2020, 30, 1-10.	8.3	30

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19	Structure-based drug repositioning over the human TMPRSS2 protease domain: search for chemical probes able to repress SARS-CoV-2 Spike protein cleavages. European Journal of Pharmaceutical Sciences, 2020, 153, 105495.	4.0	40
20	Mutations on VEEV nsP1 relate RNA capping efficiency to ribavirin susceptibility. Antiviral Research, 2020, 182, 104883.	4.1	7
21	In vitro screening of a FDA approved chemical library reveals potential inhibitors of SARS-CoV-2 replication. Scientific Reports, 2020, 10, 13093.	3.3	311
22	Rapid incorporation of Favipiravir by the fast and permissive viral RNA polymerase complex results in SARS-CoV-2 lethal mutagenesis. Nature Communications, 2020, 11, 4682.	12.8	210
23	Novel Class of Chikungunya Virus Small Molecule Inhibitors That Targets the Viral Capping Machinery. Antimicrobial Agents and Chemotherapy, 2020, 64, .	3.2	15
24	Synthesis of adenine dinucleosides SAM analogs as specific inhibitors of SARS-CoV nsp14 RNA cap guanine-N7-methyltransferase. European Journal of Medicinal Chemistry, 2020, 201, 112557.	5.5	56
25	The spike glycoprotein of the new coronavirus 2019-nCoV contains a furin-like cleavage site absent in CoV of the same clade. Antiviral Research, 2020, 176, 104742.	4.1	1,450
26	Remdesivir and SARS-CoV-2: Structural requirements at both nsp12 RdRp and nsp14 Exonuclease active-sites. Antiviral Research, 2020, 178, 104793.	4.1	271
27	The C-Terminal Domain of the Sudan Ebolavirus L Protein Is Essential for RNA Binding and Methylation. Journal of Virology, 2020, 94, .	3.4	12
28	A N7-guanine RNA cap methyltransferase signature-sequence as a genetic marker of large genome, non-mammalian Tobaniviridae. NAR Genomics and Bioinformatics, 2020, 2, lqz022.	3.2	10
29	Synthesis of Adenine Dinucleosides 2â€²,5â€²â€Bridged by Sulfurâ€Containing Linkers as Bisubstrate SAM Analogues for Viral RNA 2â€²â€‹<i>O</i>â€Methyltransferases. European Journal of Organic Chemistry, 2019, 2019, 6486-6495.	2.4	5
30	Structure of the Respiratory Syncytial Virus Polymerase Complex. Cell, 2019, 179, 193-204.e14.	28.9	108
31	The Curious Case of the Nidovirus Exoribonuclease: Its Role in RNA Synthesis and Replication Fidelity. Frontiers in Microbiology, 2019, 10, 1813.	3.5	130
32	C3P3-G1: first generation of a eukaryotic artificial cytoplasmic expression system. Nucleic Acids Research, 2019, 47, 2681-2698.	14.5	15
33	Approved drugs screening against the nsP1 capping enzyme of Venezuelan equine encephalitis virus using an immuno-based assay. Antiviral Research, 2019, 163, 59-69.	4.1	15
34	FTSJ3 is an RNA 2â€²-O-methyltransferase recruited by HIV to avoid innate immune sensing. Nature, 2019, 565, 500-504.	27.8	151
35	Optimization of a fragment linking hit toward Dengue and Zika virus NS5 methyltransferases inhibitors. European Journal of Medicinal Chemistry, 2019, 161, 323-333.	5.5	18
36	Hijacking DNA methyltransferase transition state analogues to produce chemical scaffolds for PRMT inhibitors. Philosophical Transactions of the Royal Society B: Biological Sciences, 2018, 373, 20170072.	4.0	24

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37	Structural and molecular basis of mismatch correction and ribavirin excision from coronavirus RNA. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, E162-E171.	7.1	331
38	Filovirus proteins for antiviral drug discovery: Structure/function of proteins involved in assembly and budding. Antiviral Research, 2018, 150, 183-192.	4.1	18
39	The methyltransferase domain of the Sudan ebolavirus L protein specifically targets internal adenosines of RNA substrates, in addition to the cap structure. Nucleic Acids Research, 2018, 46, 7902-7912.	14.5	39
40	Filovirus proteins for antiviral drug discovery: Structure/function bases of the replication cycle. Antiviral Research, 2017, 141, 48-61.	4.1	29
41	Antiviral activity of [1,2,3]triazolo[4,5- d]pyrimidin-7(6 H)-ones against chikungunya virus targeting the viral capping nsP1. Antiviral Research, 2017, 144, 216-222.	4.1	44
42	Biochemical principles and inhibitors to interfere with viral capping pathways. Current Opinion in Virology, 2017, 24, 87-96.	5.4	32
43	Zika Virus Methyltransferase: Structure and Functions for Drug Design Perspectives. Journal of Virology, 2017, 91, .	3.4	109
44	Binding of the Methyl Donor <i>S</i> -Adenosyl- <scp>l</scp> -Methionine to Middle East Respiratory Syndrome Coronavirus 2â€²- <i>O</i> -Methyltransferase nsp16 Promotes Recruitment of the Allosteric Activator nsp10. Journal of Virology, 2017, 91, .	3.4	61
45	Toward the identification of viral cap-methyltransferase inhibitors by fluorescence screening assay. Antiviral Research, 2017, 144, 330-339.	4.1	43
46	Discovery of novel dengue virus NS5 methyltransferase non-nucleoside inhibitors by fragment-based drug design. European Journal of Medicinal Chemistry, 2017, 125, 865-880.	5.5	74
47	Filovirus proteins for antiviral drug discovery: A structure/function analysis of surface glycoproteins and virus entry. Antiviral Research, 2016, 135, 1-14.	4.1	33
48	The Nonstructural Proteins Directing Coronavirus RNA Synthesis and Processing. Advances in Virus Research, 2016, 96, 59-126.	2.1	477
49	Reevaluation of possible outcomes of infections with human immunodeficiency virus. Clinical Microbiology and Infection, 2016, 22, 299-311.	6.0	7
50	Involvement of an Arginine Triplet in M1 Matrix Protein Interaction with Membranes and in M1 Recruitment into Virus-Like Particles of the Influenza A(H1N1)pdm09 Virus. PLoS ONE, 2016, 11, e0165421.	2.5	20
51	mRNA Capping by Venezuelan Equine Encephalitis Virus nsP1: Functional Characterization and Implications for Antiviral Research. Journal of Virology, 2015, 89, 8292-8303.	3.4	52
52	X-ray structure and activities of an essential Mononegavirales L-protein domain. Nature Communications, 2015, 6, 8749.	12.8	49
53	A closed-handed affair: positive-strand RNA virus polymerases. Future Virology, 2014, 9, 769-784.	1.8	1
54	Insights into RNA synthesis, capping, and proofreading mechanisms of SARS-coronavirus. Virus Research, 2014, 194, 90-99.	2.2	191

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55	Coronavirus Nsp10, a Critical Co-factor for Activation of Multiple Replicative Enzymes. Journal of Biological Chemistry, 2014, 289, 25783-25796.	3.4	178
56	SARS-CoV ORF1b-encoded nonstructural proteins 12â€"16: Replicative enzymes as antiviral targets. Antiviral Research, 2014, 101, 122-130.	4.1	153
57	The methyltransferase domain of dengue virus protein NS5 ensures efficient RNA synthesis initiation and elongation by the polymerase domain. Nucleic Acids Research, 2014, 42, 11642-11656.	14.5	61
58	One severe acute respiratory syndrome coronavirus protein complex integrates processive RNA polymerase and exonuclease activities. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, E3900-9.	7.1	482
59	Assessment of Dengue virus helicase and methyltransferase as targets for fragment-based drug discovery. Antiviral Research, 2014, 106, 61-70.	4.1	55
60	Solid-phase synthesis of 5â€™-capped mRNA with a methylene bridge within triphosphate chain. , 2014, , .		0
61	Development of specific dengue virus 2â€²-O- and N7-methyltransferase assays for antiviral drug screening. Antiviral Research, 2013, 99, 292-300.	4.1	39
62	Evaluation of Adamantane Derivatives as Inhibitors of Dengue Virus mRNA Cap Methyltransferase by Docking and Molecular Dynamics Simulations. Molecular Informatics, 2013, 32, 155-164.	2.5	12
63	Structures and exoribonuclease activity fonctions in arenavirus and coronavirus. Virologie, 2013, 17, 317-330.	0.1	0
64	RNA 3'-end mismatch excision by the severe acute respiratory syndrome coronavirus nonstructural protein nsp10/nsp14 exoribonuclease complex. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 9372-9377.	7.1	297
65	Synthesis of 5â€² cap-0 and cap-1 RNAs using solid-phase chemistry coupled with enzymatic methylation by human (guanine-<i>N</i>⁷)-methyl transferase. Rna, 2012, 18, 856-868.	3.5	47
66	The viral RNA capping machinery as a target for antiviral drugs. Antiviral Research, 2012, 96, 21-31.	4.1	79
67	Conventional and unconventional mechanisms for capping viral mRNA. Nature Reviews Microbiology, 2012, 10, 51-65.	28.6	373
68	Les enzymes de la rÃ©plication/transcription chez les coronavirus. Virologie, 2012, 16, 199-209.	0.1	1
69	Crystallization and diffraction analysis of the SARS coronavirus nsp10â€"nsp16 complex. Acta Crystallographica Section F: Structural Biology Communications, 2011, 67, 404-408.	0.7	15
70	Crystal Structure and Functional Analysis of the SARS-Coronavirus RNA Cap 2â€²-O-Methyltransferase nsp10/nsp16 Complex. PLoS Pathogens, 2011, 7, e1002059.	4.7	295
71	Structure and functionality in flavivirus NS-proteins: Perspectives for drug design. Antiviral Research, 2010, 87, 125-148.	4.1	289
72	Biochemical characterization of the (nucleoside-2'O)-methyltransferase activity of dengue virus protein NS5 using purified capped RNA oligonucleotides 7MeGpppACn and GpppACn. Journal of General Virology, 2010, 91, 112-121.	2.9	51

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73	Molecular Mapping of the RNA Cap 2â€²-O-Methyltransferase Activation Interface between Severe Acute Respiratory Syndrome Coronavirus nsp10 and nsp16*. Journal of Biological Chemistry, 2010, 285, 33230-33241.	3.4	56
74	In Vitro Reconstitution of SARS-Coronavirus mRNA Cap Methylation. PLoS Pathogens, 2010, 6, e1000863.	4.7	322
75	Human Discs Large Is a New Negative Regulator of Human Immunodeficiency Virus-1 Infectivity. Molecular Biology of the Cell, 2009, 20, 498-508.	2.1	21
76	Flaviviral methyltransferase/RNA interaction: Structural basis for enzyme inhibition. Antiviral Research, 2009, 83, 28-34.	4.1	64
77	Recognition of RNA Cap in the Wesselsbron Virus NS5 Methyltransferase Domain: Implications for RNA-Capping Mechanisms in Flavivirus. Journal of Molecular Biology, 2009, 385, 140-152.	4.2	78
78	Coronavirus Nonstructural Protein 16 Is a Cap-0 Binding Enzyme Possessing (Nucleoside-2â€² <i>O</i>) Tj ETQq0 0 0 rgBT /Overlock 10	3.4	220
79	High-yield production of short GpppA- and 7MeGpppA-capped RNAs and HPLC-monitoring of methyltransfer reactions at the guanine-N7 and adenosine-2'O positions. Nucleic Acids Research, 2007, 35, e26-e26.	14.5	52
80	Structural and Functional Analysis of Methylation and 5â€²-RNA Sequence Requirements of Short Capped RNAs by the Methyltransferase Domain of Dengue Virus NS5. Journal of Molecular Biology, 2007, 372, 723-736.	4.2	152
81	Virtual screening and bioassay study of novel inhibitors for dengue virus mRNA cap (nucleoside-2â€²O)-methyltransferase. Bioorganic and Medicinal Chemistry, 2007, 15, 7795-7802.	3.0	72
82	APOBEC3G Ubiquitination by Nedd4-1 Favors its Packaging into HIV-1 Particles. Journal of Molecular Biology, 2005, 345, 547-558.	4.2	13
83	Cooperative and Specific Binding of Vif to the 5â€² Region of HIV-1 Genomic RNA. Journal of Molecular Biology, 2005, 354, 55-72.	4.2	46
84	The tyrosine kinases Fyn and Hck favor the recruitment of tyrosine-phosphorylated APOBEC3G into vif-defective HIV-1 particles. Biochemical and Biophysical Research Communications, 2005, 329, 917-924.	2.1	24
85	The Vif protein of human immunodeficiency virus type 1 is posttranslationally modified by ubiquitin. Biochemical and Biophysical Research Communications, 2004, 315, 66-72.	2.1	30
86	HIV-1 and MLV Gag proteins are sufficient to recruit APOBEC3G into virus-like particles. Biochemical and Biophysical Research Communications, 2004, 321, 566-573.	2.1	88
87	Processing of alpha4 integrin by the proprotein convertases: histidine at position P6 regulates cleavage. Biochemical Journal, 2003, 373, 475-484.	3.7	56
88	The Tyrosine Kinase Hck Is an Inhibitor of HIV-1 Replication Counteracted by the Viral Vif Protein. Journal of Biological Chemistry, 2001, 276, 16885-16893.	3.4	55
89	Interaction of human immunodeficiency virus type 1 Vif with Gag and Gagâ€"Pol precursors: co-encapsidation and interference with viral protease-mediated Gag processing. Journal of General Virology, 2001, 82, 2719-2733.	2.9	37
90	Maturation of HIV envelope glycoprotein precursors by cellular endoproteases. BBA - Biomembranes, 2000, 1469, 121-132.	8.0	118

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91	An Anti-Human Immunodeficiency Virus Multiple Antigen Peptide Encompassing the Cleavage Region of the Env Precursor Interferes With Membrane Fusion at a Post-CD4 Binding Step. Virology, 2000, 273, 169-177.	2.4	11
92	The Prosegments of Furin and PC7 as Potent Inhibitors of Proprotein Convertases. Journal of Biological Chemistry, 1999, 274, 33913-33920.	3.4	122
93	Occurrence of an HIV-1 gp160 endoproteolytic activity in low-density vesicles and evidence for a distinct density distribution from endogenously expressed furin and PC7/LPC convertases. FEBS Letters, 1999, 456, 97-102.	2.8	17
94	The Pore-forming Toxin Proaerolysin Is Activated by Furin. Journal of Biological Chemistry, 1998, 273, 32656-32661.	3.4	130
95	Furin and proprotein convertase 7 (PC7)/lymphoma PC endogenously expressed in rat liver can be resolved into distinct post-Golgi compartments. Biochemical Journal, 1998, 336, 311-316.	3.7	39
96	Comparative functional role of PC7 and furin in the processing of the HIV envelope glycoprotein gp160. FEBS Letters, 1997, 405, 68-72.	2.8	54
97	Comparative processing of bovine leukemia virus envelope glycoprotein gp72 by subtilisin/kexin-like mammalian convertases. FEBS Letters, 1997, 406, 205-210.	2.8	23
98	Comparative cellular processing of the human immunodeficiency virus (HIV-1) envelope glycoprotein gp160 by the mammalian subtilisin/kexin-like convertases. Biochemical Journal, 1996, 314, 521-532.	3.7	105
99	Identification of the Paired Basic Convertases Implicated in HIV gp160 Processing Based on in Vitro Assays and Expression in CD4+ Cell Lines. Journal of Biological Chemistry, 1996, 271, 30442-30450.	3.4	109
100	Orientation and structure of the NH2-terminal HIV-1 gp41 peptide in fused and aggregated liposomes. Biochimica Et Biophysica Acta - Biomembranes, 1993, 1145, 124-133.	2.6	99
101	Secondary structure of gp160 and gp120 envelope glycoproteins of human immunodeficiency virus type 1: a Fourier transform infrared spectroscopic study. Journal of Virology, 1993, 67, 3552-3560.	3.4	16
102	Properties of HIV Membrane Reconstituted from Its Recombinant gp160 Envelope Glycoprotein. AIDS Research and Human Retroviruses, 1992, 8, 1823-1831.	1.1	7