David B Olsen

List of Publications by Year
in descending order

104 papers	5,242 citations	117625 34 h-index	91884 69 g-index
113 all docs	113 docs citations	113 times ranked	4868 citing authors

#	Article	IF	Citations
1	DNA-Dependent Binding of Nargenicin to DnaE1 Inhibits Replication in Mycobacterium tuberculosis. ACS Infectious Diseases, 2022, 8, 612-625.	3.8	11
2	Identification of Î²-Lactams Active against Mycobacterium tuberculosis by a Consortium of Pharmaceutical Companies and Academic Institutions. ACS Infectious Diseases, 2022, 8, 557-573.	3.8	13
3	Basis for drug selectivity of plasmepsin IX and X inhibition in Plasmodium falciparum and vivax. Structure, 2022, 30, 947-961.e6.	3.3	9
4	Structure activity relationship of N-1 substituted 1,5-naphthyrid-2-one analogs of oxabicyclooctane-linked novel bacterial topoisomerase inhibitors as broad-spectrum antibacterial agents (Part-9). Bioorganic and Medicinal Chemistry Letters, 2022, , 128808.	2.2	2
5	SARS-CoV-2 tropism, entry, replication, and propagation: Considerations for drug discovery and development. PLoS Pathogens, 2021, 17, e1009225.	4.7	160
6	Generation of SARS-CoV-2 reporter replicon for high-throughput antiviral screening and testing. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	64
7	Dual Plasmepsin-Targeting Antimalarial Agents Disrupt Multiple Stages of the Malaria Parasite Life Cycle. Cell Host and Microbe, 2020, 27, 642-658.e12.	11.0	94
8	Structure-Guided Drug Design of 6-Substituted Adenosine Analogues as Potent Inhibitors of Mycobacterium tuberculosis Adenosine Kinase. Journal of Medicinal Chemistry, 2019, 62, 4483-4499.	6.4	11
9	Discovery and Structureâ€“Activity-Relationship Study of N-Alkyl-5-hydroxypyrimidinone Carboxamides as Novel Antitubercular Agents Targeting Decaprenylphosphoryl-Î²-<scp>d</scp>-ribose 2â€²-Oxidase. Journal of Medicinal Chemistry, 2018, 61, 9952-9965.	6.4	29
10	Identification of cyclic hexapeptides natural products with inhibitory potency against Mycobacterium tuberculosis. BMC Research Notes, 2018, 11, 416.	1.4	1
11	Thiazomycin, nocathiacin and analogs show strong activity against clinical strains of drug-resistant Mycobacterium tuberculosis. Journal of Antibiotics, 2017, 70, 671-674.	2.0	10
12	Affinity Selectionâ€“Mass Spectrometry Identifies a Novel Antibacterial RNA Polymerase Inhibitor. ACS Chemical Biology, 2017, 12, 1346-1352.	3.4	15
13	Development of a New Structural Class of Broadly Acting HCV Nonâ€Nucleoside Inhibitors Leading to the Discovery of MKâ€8876. ChemMedChem, 2017, 12, 1436-1448.	3.2	12
14	Linking High-Throughput Screens to Identify MoAs and Novel Inhibitors of Mycobacterium tuberculosis Dihydrofolate Reductase. ACS Chemical Biology, 2017, 12, 2448-2456.	3.4	24
15	2â€²-Modified Guanosine Analogs for the Treatment of HCV. Nucleosides, Nucleotides and Nucleic Acids, 2016, 35, 277-294.	1.1	5
16	Synthesis of amino heterocycle aspartyl protease inhibitors. Organic and Biomolecular Chemistry, 2016, 14, 4970-4985.	2.8	10
17	In VitroandIn VivoCharacterization of the Novel Oxabicyclooctane-Linked Bacterial Topoisomerase Inhibitor AM-8722, a Selective, Potent Inhibitor of Bacterial DNA Gyrase. Antimicrobial Agents and Chemotherapy, 2016, 60, 4830-4839.	3.2	19
18	Hydroxy tricyclic 1,5-naphthyridinone oxabicyclooctane-linked novel bacterial topoisomerase inhibitors as broad-spectrum antibacterial agents-SAR of RHS moiety (Part-3). Bioorganic and Medicinal Chemistry Letters, 2015, 25, 2473-2478.	2.2	22

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19	P2â€Quinazolinones and Bisâ€Macrocycles as New Templates for Nextâ€Generation Hepatitisâ€...C Virus NS3/4a Protease Inhibitors: Discovery of MKâ€2748 and MKâ€6325. ChemMedChem, 2015, 10, 727-735.	3.2	22
20	Structure activity relationship of pyridoxazinone substituted RHS analogs of oxabicyclooctane-linked 1,5-naphthyridinyl novel bacterial topoisomerase inhibitors as broad-spectrum antibacterial agents (Part-6). Bioorganic and Medicinal Chemistry Letters, 2015, 25, 3636-3643.	2.2	14
21	Structure activity relationship of substituted 1,5-naphthyridine analogs of oxabicyclooctane-linked novel bacterial topoisomerase inhibitors as broad-spectrum antibacterial agents (Part-4). Bioorganic and Medicinal Chemistry Letters, 2015, 25, 2409-2415.	2.2	15
22	Structure activity relationship of C-2 ether substituted 1,5-naphthyridine analogs of oxabicyclooctane-linked novel bacterial topoisomerase inhibitors as broad-spectrum antibacterial agents (Part-5). Bioorganic and Medicinal Chemistry Letters, 2015, 25, 3630-3635.	2.2	16
23	Tricyclic 1,5-naphthyridinone oxabicyclooctane-linked novel bacterial topoisomerase inhibitors as broad-spectrum antibacterial agents-SAR of left-hand-side moiety (Part-2). Bioorganic and Medicinal Chemistry Letters, 2015, 25, 1831-1835.	2.2	32
24	Elucidation of DnaE as the Antibacterial Target of the Natural Product, Nargenicin. Chemistry and Biology, 2015, 22, 1362-1373.	6.0	29
25	C1â€“C2-linker substituted 1,5-naphthyridine analogues of oxabicyclooctane-linked NBTIs as broad-spectrum antibacterial agents (part 7). MedChemComm, 2015, 6, 1773-1780.	3.4	10
26	Kibdelomycin Is a Potent and Selective Agent against Toxigenic Clostridium difficile. Antimicrobial Agents and Chemotherapy, 2014, 58, 2387-2392.	3.2	19
27	Design, Synthesis, Structureâ€“Function Relationship, Bioconversion, and Pharmacokinetic Evaluation of Ertapenem Prodrugs. Journal of Medicinal Chemistry, 2014, 57, 8421-8444.	6.4	15
28	Oxabicyclooctane-Linked Novel Bacterial Topoisomerase Inhibitors as Broad Spectrum Antibacterial Agents. ACS Medicinal Chemistry Letters, 2014, 5, 609-614.	2.8	64
29	Syntheses of 1â€²,2â€²-cyclopentyl nucleosides as potential antiviral agents. Tetrahedron Letters, 2014, 55, 5092-5095.	1.4	5
30	Syntheses of nucleosides with a 1â€²,2â€²-Î²-lactam moiety as potential inhibitors of hepatitis C virus NS5B polymerase. Tetrahedron Letters, 2014, 55, 5576-5579.	1.4	6
31	Syntheses of 4â€²-spirocyclic phosphono-nucleosides as potential inhibitors of hepatitis C virus NS5B polymerase. Tetrahedron Letters, 2014, 55, 4407-4409.	1.4	13
32	Syntheses of nucleosides with 2â€²-spirolactam and 2â€²-spiropyrrolidine moieties as potential inhibitors of hepatitis C virus NS5B polymerase. Tetrahedron Letters, 2014, 55, 3813-3816.	1.4	7
33	Discovery of MKâ€8742: An HCV NS5A Inhibitor with Broad Genotype Activity. ChemMedChem, 2013, 8, 1930-1940.	3.2	183
34	Design, Synthesis, and Evaluation of Prodrugs of Ertapenem. ACS Medicinal Chemistry Letters, 2013, 4, 715-719.	2.8	7
35	Human Monoclonal Antibody HCV1 Effectively Prevents and Treats HCV Infection in Chimpanzees. PLoS Pathogens, 2012, 8, e1002895.	4.7	160
36	MK-5172, a Selective Inhibitor of Hepatitis C Virus NS3/4a Protease with Broad Activity across Genotypes and Resistant Variants. Antimicrobial Agents and Chemotherapy, 2012, 56, 4161-4167.	3.2	242

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37	Discovery of MK-5172, a Macrocyclic Hepatitis C Virus NS3/4a Protease Inhibitor. ACS Medicinal Chemistry Letters, 2012, 3, 332-336.	2.8	181
38	Development of potent macrocyclic inhibitors of genotype 3a HCV NS3/4A protease. Bioorganic and Medicinal Chemistry Letters, 2012, 22, 7201-7206.	2.2	6
39	Development of macrocyclic inhibitors of HCV NS3/4A protease with cyclic constrained P2â€“P4 linkers. Bioorganic and Medicinal Chemistry Letters, 2012, 22, 7207-7213.	2.2	9
40	Discovery of MK-1220: A Macrocyclic Inhibitor of Hepatitis C Virus NS3/4A Protease with Improved Preclinical Plasma Exposure. ACS Medicinal Chemistry Letters, 2011, 2, 207-212.	2.8	30
41	Sustained Viral Response in a Hepatitis C Virus-Infected Chimpanzee via a Combination of Direct-Acting Antiviral Agents. Antimicrobial Agents and Chemotherapy, 2011, 55, 937-939.	3.2	46
42	Antiviral Efficacy upon Administration of a HepDirect Prodrug of 2â€²- C -Methylcytidine to Hepatitis C Virus-Infected Chimpanzees. Antimicrobial Agents and Chemotherapy, 2011, 55, 3854-3860.	3.2	20
43	MK-7009, a Potent and Selective Inhibitor of Hepatitis C Virus NS3/4A Protease. Antimicrobial Agents and Chemotherapy, 2010, 54, 305-311.	3.2	141
44	Discovery of Vaniprevir (MK-7009), a Macrocyclic Hepatitis C Virus NS3/4a Protease Inhibitor. Journal of Medicinal Chemistry, 2010, 53, 2443-2463.	6.4	166
45	PD-1 Blockade in Rhesus Macaques: Impact on Chronic Infection and Prophylactic Vaccination. Journal of Immunology, 2009, 182, 980-987.	0.8	126
46	Robust Antiviral Efficacy upon Administration of a Nucleoside Analog to Hepatitis C Virus-Infected Chimpanzees. Antimicrobial Agents and Chemotherapy, 2009, 53, 926-934.	3.2	82
47	Phosphoramidate Prodrugs of 2â€²-C-Methylcytidine for Therapy of Hepatitis C Virus Infection. Journal of Medicinal Chemistry, 2009, 52, 5394-5407.	6.4	48
48	Identification and Biological Evaluation of a Series of 1H-Benzo[de]isoquinoline-1,3(2H)-diones as Hepatitis C Virus NS5B Polymerase Inhibitors. Journal of Medicinal Chemistry, 2009, 52, 5217-5227.	6.4	42
49	Synthesis of 2â€²-Î²-C-methyl-neplanocin derivatives as anti-HCV agents. Tetrahedron Letters, 2008, 49, 4149-4152.	1.4	12
50	Bismacrocyclic Inhibitors of Hepatitisâ€…C NS3/4a Protease. Angewandte Chemie - International Edition, 2008, 47, 9104-9107.	13.8	31
51	A time-resolved, internally quenched fluorescence assay to characterize inhibition of hepatitis C virus nonstructural protein 3â€“4A protease at low enzyme concentrations. Analytical Biochemistry, 2008, 373, 1-8.	2.4	32
52	A transient cell-based phenotype assay for hepatitis C NS3/4A protease: Application to potency determinations of a novel macrocyclic inhibitor against diverse protease sequences isolated from plasma infected with HCV. Journal of Virological Methods, 2008, 151, 301-307.	2.1	15
53	Molecular Modeling Based Approach to Potent P2â^'P4 Macrocyclic Inhibitors of Hepatitis C NS3/4A Protease. Journal of the American Chemical Society, 2008, 130, 4607-4609.	13.7	137
54	Gene expression profiling of rat liver reveals a mechanistic basis for ritonavir-induced hyperlipidemia. Genomics, 2007, 90, 464-473.	2.9	24

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55	Liver-Targeted Prodrugs of 2â€˜-C-Methyladenosine for Therapy of Hepatitis C Virus Infection. Journal of Medicinal Chemistry, 2007, 50, 3891-3896.	6.4	37
56	Synthesis and HCV inhibitory properties of 9-deaza- and 7,9-dideaza-7-oxa-2â€²-C-methyladenosine. Bioorganic and Medicinal Chemistry, 2007, 15, 5219-5229.	3.0	30
57	Synthesis of novel HIV protease inhibitors (PI) with activity against PI-resistant virus. Bioorganic and Medicinal Chemistry Letters, 2007, 17, 5432-5436.	2.2	8
58	Design, synthesis, and biological evaluation of monopyrrolinone-based HIV-1 protease inhibitors possessing augmented P2â€² side chains. Bioorganic and Medicinal Chemistry Letters, 2006, 16, 859-863.	2.2	22
59	A genotype 2b NS5B polymerase with novel substitutions supports replication of a chimeric HCV 1b:2b replicon containing a genotype 1b NS3-5A background. Antiviral Research, 2006, 69, 24-30.	4.1	15
60	Synthesis and Evaluation ofS-Acyl-2-thioethyl Esters of Modified Nucleoside 5â€˜-Monophosphates as Inhibitors of Hepatitis C Virus RNA Replication. Journal of Medicinal Chemistry, 2005, 48, 1199-1210.	6.4	34
61	Orally bioavailable highly potent HIV protease inhibitors against PI-resistant virus. Bioorganic and Medicinal Chemistry Letters, 2005, 15, 5311-5314.	2.2	10
62	Inhibitory Effect of 2â€²-Substituted Nucleosides on Hepatitis C Virus Replication Correlates with Metabolic Properties in Replicon Cells. Antimicrobial Agents and Chemotherapy, 2005, 49, 2050-2058.	3.2	43
63	Replication Fitness and NS5B Drug Sensitivity of Diverse Hepatitis C Virus Isolates Characterized by Using a Transient Replication Assay. Antimicrobial Agents and Chemotherapy, 2005, 49, 2059-2069.	3.2	118
64	Characterization of the Inhibition of Hepatitis C Virus RNA Replication by Nonnucleosides. Journal of Virology, 2004, 78, 938-946.	3.4	128
65	A 7-Deaza-Adenosine Analog Is a Potent and Selective Inhibitor of Hepatitis C Virus Replication with Excellent Pharmacokinetic Properties. Antimicrobial Agents and Chemotherapy, 2004, 48, 3944-3953.	3.2	221
66	X-ray Crystallographic and Site-directed Mutagenesis Analysis of the Mechanism of Schiff-base Formation in Phosphonoacetaldehyde Hydrolase Catalysis. Journal of Biological Chemistry, 2004, 279, 9353-9361.	3.4	34
67	P1â€² Oxadiazole Protease Inhibitors with Excellent Activity Against Native and Protease Inhibitor-Resistant HIV-1.. ChemInform, 2004, 35, no.	0.0	0
68	Synthesis and biological evaluation of 5R- and 5S-methyl substituted d- and l-configuration 1,3-dioxolane nucleoside analogs. Bioorganic and Medicinal Chemistry, 2004, 12, 6237-6247.	3.0	10
69	P1â€² oxadiazole protease inhibitors with excellent activity against native and protease inhibitor-resistant HIV-1. Bioorganic and Medicinal Chemistry Letters, 2004, 14, 4651-4654.	2.2	22
70	Structureâ^'Activity Relationship of Heterobase-Modified 2â€˜-C-Methyl Ribonucleosides as Inhibitors of Hepatitis C Virus RNA Replication. Journal of Medicinal Chemistry, 2004, 47, 5284-5297.	6.4	188
71	Structureâ^'Activity Relationship of Purine Ribonucleosides for Inhibition of Hepatitis C Virus RNA-Dependent RNA Polymerase. Journal of Medicinal Chemistry, 2004, 47, 2283-2295.	6.4	200
72	Hinnuliquinone, a C2-symmetric dimeric non-peptide fungal metabolite inhibitor of HIV-1 protease. Biochemical and Biophysical Research Communications, 2004, 324, 108-113.	2.1	40

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73	Novel HIV-1 protease inhibitors active against multiple PI-Resistant viral strains: coadministration with indinavir. Bioorganic and Medicinal Chemistry Letters, 2003, 13, 4027-4030.	2.2	13
74	Synthesis and evaluation of optically pure dioxolanes as inhibitors of hepatitis C virus RNA replication. Bioorganic and Medicinal Chemistry Letters, 2003, 13, 4455-4458.	2.2	14
75	The design, synthesis and evaluation of novel HIV-1 protease inhibitors with high potency against PI-resistant viral strains. Bioorganic and Medicinal Chemistry Letters, 2003, 13, 2573-2576.	2.2	14
76	HIV protease inhibitors with picomolar potency against PI-Resistant HIV-1 by extension of the P3 substituent. Bioorganic and Medicinal Chemistry Letters, 2003, 13, 2569-2572.	2.2	15
77	HIV-1 protease inhibitors with picomolar potency against PI-resistant HIV-1 by modification of the P1â€² substituent. Bioorganic and Medicinal Chemistry Letters, 2003, 13, 3323-3326.	2.2	11
78	Design and synthesis of highly potent HIV protease inhibitors with activity against resistant virus. Bioorganic and Medicinal Chemistry Letters, 2003, 13, 1821-1824.	2.2	18
79	Design, Synthesis, and Biological Evaluation of Monopyrrolinone-Based HIV-1 Protease Inhibitors. Journal of Medicinal Chemistry, 2003, 46, 1831-1844.	6.4	55
80	Inhibition of HIV-1 Ribonuclease H by a Novel Diketo Acid, 4-[5-(Benzoylamino)thien-2-yl]-2,4-dioxobutanoic Acid. Journal of Biological Chemistry, 2003, 278, 2777-2780.	3.4	148
81	Inhibition of Hepatitis C Virus RNA Replication by 2â€²-Modified Nucleoside Analogs. Journal of Biological Chemistry, 2003, 278, 11979-11984.	3.4	314
82	Characterization of Resistance to Non-obligate Chain-terminating Ribonucleoside Analogs That Inhibit Hepatitis C Virus Replication in Vitro. Journal of Biological Chemistry, 2003, 278, 49164-49170.	3.4	305
83	A Combinatorial Library of Indinavir Analogues and Its In Vitro and In Vivo Studies. Bioorganic and Medicinal Chemistry Letters, 2002, 12, 529-532.	2.2	13
84	Indinavir analogues with blocked metabolism sites as HIV protease inhibitors with improved pharmacological profiles and high potency against PI-Resistant viral strains. Bioorganic and Medicinal Chemistry Letters, 2002, 12, 2419-2422.	2.2	32
85	Combinatorial library of indinavir analogues: replacement for the aminoindanol at P2â€². Bioorganic and Medicinal Chemistry Letters, 2002, 12, 2855-2858.	2.2	13
86	Synthesis and activity of novel HIV protease inhibitors with improved potency against multiple PI-resistant viral strains. Bioorganic and Medicinal Chemistry Letters, 2002, 12, 2423-2426.	2.2	14
87	An alternate binding site for the P1â€“P3 group of a class of potent HIV-1 protease inhibitors as a result of concerted structural change in the 80s loop of the protease. Acta Crystallographica Section D: Biological Crystallography, 2000, 56, 381-388.	2.5	25
88	Combinatorial diversification of indinavir: in vivo mixture dosing of an HIV protease inhibitor library. Bioorganic and Medicinal Chemistry Letters, 2000, 10, 1527-1530.	2.2	21
89	Identification of MK-944a:â€‰ A Second Clinical Candidate from the Hydroxylaminepentanamide Isostere Series of HIV Protease Inhibitors. Journal of Medicinal Chemistry, 2000, 43, 3386-3399.	6.4	53
90	Non-active Site Changes Elicit Broad-based Cross-resistance of the HIV-1 Protease to Inhibitors. Journal of Biological Chemistry, 1999, 274, 23699-23701.	3.4	65

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91	[20] Preparation and use of synthetic oligoribonucleotides as tools for study of viral polymerases. Methods in Enzymology, 1996, 275, 365-382.	1.0	17
92	Elucidation of Basic Mechanistic and Kinetic Properties of Influenza Endonuclease Using Chemically Synthesized RNAs. Journal of Biological Chemistry, 1996, 271, 7435-7439.	3.4	22
93	[8] Expression and purification of retroviral HIV-1 reverse transcriptase. Methods in Enzymology, 1996, 275, 122-133.	1.0	11
94	Assay for Influenza Virus Endonuclease Using DNA Polymerase Extension of a Specific Cleavage Product. Analytical Biochemistry, 1995, 231, 309-314.	2.4	4
95	Sensitivity of HIV-1 Reverse Transcriptase and Its Mutants to Inhibition by Azidothymidine Triphosphate. Biochemistry, 1994, 33, 2113-2120.	2.5	64
96	[13] Site-directed mutagenesis of single-stranded and double-stranded DNA by phosphorothioate approach. Methods in Enzymology, 1993, 217, 189-217.	1.0	16
97	[8] Direct sequencing of polymerase chain reaction products. Methods in Enzymology, 1993, 218, 79-92.	1.0	3
98	Overview: High Efficiency Oligonucleotide-Directed Mutagenesis of Double-stranded DNA Vectors. Current Opinion in Therapeutic Patents, 1992, 2, 1023-1029.	0.0	0
99	Investigation of the substrate binding and catalytic groups of the Pî—¸C bond cleaving enzyme, phosphonoacetaldehyde hydrolase. Archives of Biochemistry and Biophysics, 1992, 296, 144-151.	3.0	31
100	Study of a hammerhead ribozyme containing 2'-modified adenosine residues. Biochemistry, 1991, 30, 9735-9741.	2.5	103
101	Investigation of the inhibitory role of phosphorothioate internucleotidic linkages on the catalytic activity of the restriction endonuclease EcoRV. Biochemistry, 1990, 29, 9546-9551.	2.5	20
102	Inhibition of restriction endonuclease hydrolysis by phosphorothioate-containing DNA. Nucleic Acids Research, 1989, 17, 9495-9495.	14.5	19
103	Incomplete primer extension duringin vitroDNA amplification catalyzed byTaqpolymerase; exploitation for DNA sequencing. Nucleic Acids Research, 1989, 17, 9613-9620.	14.5	55
104	Investigation of the Bacillus cereus phosphonoacetaldehyde hydrolase. Evidence for a Schiff base mechanism and sequence analysis of an active-site peptide containing the catalytic lysine residue. Biochemistry, 1988, 27, 2229-2234.	2.5	48