David B Olsen

List of Publications by Year in Descending Order

102 papers	4,505 citations	32 h-index	64 g-index
113 ext. papers	4,929 ext. citations	5.1 avg, IF	4.36 L-index

#	Paper	IF	Citations
102	Identification of β-Lactams Active against by a Consortium of Pharmaceutical Companies and Academic Institutions.. *ACS Infectious Diseases*, **2022**,	5.5	2
101	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	2.9	1
100	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,	11.5	18
99	SARS-CoV-2 tropism, entry, replication, and propagation: Considerations for drug discovery and development. *PLoS Pathogens*, **2021**, 17, e1009225	7.6	74
98	Dual Plasmepsin-Targeting Antimalarial Agents Disrupt Multiple Stages of the Malaria Parasite Life Cycle. *Cell Host and Microbe*, **2020**, 27, 642-658.e12	23.4	30
97	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	8.3	7
96	Identification of cyclic hexapeptides natural products with inhibitory potency against Mycobacterium tuberculosis. *BMC Research Notes*, **2018**, 11, 416	2.3	1
95	Discovery and Structure-Activity-Relationship Study of N-Alkyl-5-hydroxypyrimidinone Carboxamides as Novel Antitubercular Agents Targeting Decaprenylphosphoryl-β-d-ribose 2′-Oxidase. *Journal of Medicinal Chemistry*, **2018**, 61, 9952-9965	8.3	18
94	Thiazomycin, nocathiacin and analogs show strong activity against clinical strains of drug-resistant Mycobacterium tuberculosis. *Journal of Antibiotics*, **2017**, 70, 671-674	3.7	5
93	Affinity Selection-Mass Spectrometry Identifies a Novel Antibacterial RNA Polymerase Inhibitor. *ACS Chemical Biology*, **2017**, 12, 1346-1352	4.9	12
92	Development of a New Structural Class of Broadly Acting HCV Non-Nucleoside Inhibitors Leading to the Discovery of MK-8876. *ChemMedChem*, **2017**, 12, 1436-1448	3.7	10
91	Linking High-Throughput Screens to Identify MoAs and Novel Inhibitors of Mycobacterium tuberculosis Dihydrofolate Reductase. *ACS Chemical Biology*, **2017**, 12, 2448-2456	4.9	18
90	In Vitro and In Vivo Characterization of the Novel Oxabicyclooctane-Linked Bacterial Topoisomerase Inhibitor AM-8722, a Selective, Potent Inhibitor of Bacterial DNA Gyrase. *Antimicrobial Agents and Chemotherapy*, **2016**, 60, 4830-9	5.9	14
89	2′-Modified Guanosine Analogs for the Treatment of HCV. *Nucleosides, Nucleotides and Nucleic Acids*, **2016**, 35, 277-94	1.4	3
88	Synthesis of amino heterocycle aspartyl protease inhibitors. *Organic and Biomolecular Chemistry*, **2016**, 14, 4970-85	3.9	8
87	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, 3636-43	2.9	13
86	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, 2409-15	2.9	15

85	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, 3630-5	2.9	14
84	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, 1831-5	2.9	20
83	Elucidation of DnaE as the Antibacterial Target of the Natural Product, Nargenicin. *Chemistry and Biology*, **2015**, 22, 1362-73		25
82	C1□2-linker substituted 1,5-naphthyridine analogues of oxabicyclooctane-linked NBTIs as broad-spectrum antibacterial agents (part 7). *MedChemComm*, **2015**, 6, 1773-1780	5	8
81	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, 2473-8	2.9	19
80	P2-quinazolinones and bis-macrocycles as new templates for next-generation hepatitis C virus NS3/4a protease inhibitors: discovery of MK-2748 and MK-6325. *ChemMedChem*, **2015**, 10, 727-35	3.7	19
79	MK-5172, a Selective Inhibitor of Hepatitis C Virus NS3/4a Protease with Broad Activity across Genotypes and Resistant Variants. *Antimicrobial Agents and Chemotherapy*, **2014**, 58, 4995-4995	5.9	1
78	Design, synthesis, structure-function relationship, bioconversion, and pharmacokinetic evaluation of ertapenem prodrugs. *Journal of Medicinal Chemistry*, **2014**, 57, 8421-44	8.3	12
77	Oxabicyclooctane-linked novel bacterial topoisomerase inhibitors as broad spectrum antibacterial agents. *ACS Medicinal Chemistry Letters*, **2014**, 5, 609-14	4.3	53
76	Syntheses of 1?,2?-cyclopentyl nucleosides as potential antiviral agents. *Tetrahedron Letters*, **2014**, 55, 5092-5095	2	4
75	Syntheses of nucleosides with a 1?,2?-□lactam moiety as potential inhibitors of hepatitis C virus NS5B polymerase. *Tetrahedron Letters*, **2014**, 55, 5576-5579	2	4
74	Syntheses of 4?-spirocyclic phosphono-nucleosides as potential inhibitors of hepatitis C virus NS5B polymerase. *Tetrahedron Letters*, **2014**, 55, 4407-4409	2	11
73	Syntheses of nucleosides with 2?-spirolactam and 2?-spiropyrrolidine moieties as potential inhibitors of hepatitis C virus NS5B polymerase. *Tetrahedron Letters*, **2014**, 55, 3813-3816	2	5
72	Kibdelomycin is a potent and selective agent against toxigenic Clostridium difficile. *Antimicrobial Agents and Chemotherapy*, **2014**, 58, 2387-92	5.9	16
71	Discovery of MK-8742: an HCV NS5A inhibitor with broad genotype activity. *ChemMedChem*, **2013**, 8, 1930-40	3.7	174
70	Design, synthesis, and evaluation of prodrugs of ertapenem. *ACS Medicinal Chemistry Letters*, **2013**, 4, 715-9	4.3	7
69	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, 4161-7	5.9	224
68	Discovery of MK-5172, a Macrocyclic Hepatitis C Virus NS3/4a Protease Inhibitor. *ACS Medicinal Chemistry Letters*, **2012**, 3, 332-6	4.3	163

67	Development of potent macrocyclic inhibitors of genotype 3a HCV NS3/4A protease. *Bioorganic and Medicinal Chemistry Letters*, **2012**, 22, 7201-6	2.9	6
66	Development of macrocyclic inhibitors of HCV NS3/4A protease with cyclic constrained P2-P4 linkers. *Bioorganic and Medicinal Chemistry Letters*, **2012**, 22, 7207-13	2.9	8
65	Human monoclonal antibody HCV1 effectively prevents and treats HCV infection in chimpanzees. *PLoS Pathogens*, **2012**, 8, e1002895	7.6	118
64	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, 207-12	4.3	28
63	Sustained viral response in a hepatitis C virus-infected chimpanzee via a combination of direct-acting antiviral agents. *Antimicrobial Agents and Chemotherapy*, **2011**, 55, 937-9	5.9	43
62	Antiviral efficacy upon administration of a HepDirect prodrug of 2∀C-methylcytidine to hepatitis C virus-infected chimpanzees. *Antimicrobial Agents and Chemotherapy*, **2011**, 55, 3854-60	5.9	18
61	MK-7009, a potent and selective inhibitor of hepatitis C virus NS3/4A protease. *Antimicrobial Agents and Chemotherapy*, **2010**, 54, 305-11	5.9	131
60	Discovery of vaniprevir (MK-7009), a macrocyclic hepatitis C virus NS3/4a protease inhibitor. *Journal of Medicinal Chemistry*, **2010**, 53, 2443-63	8.3	145
59	PD-1 blockade in rhesus macaques: impact on chronic infection and prophylactic vaccination. *Journal of Immunology*, **2009**, 182, 980-7	5.3	101
58	Robust antiviral efficacy upon administration of a nucleoside analog to hepatitis C virus-infected chimpanzees. *Antimicrobial Agents and Chemotherapy*, **2009**, 53, 926-34	5.9	80
57	Phosphoramidate prodrugs of 2∀C-methylcytidine for therapy of hepatitis C virus infection. *Journal of Medicinal Chemistry*, **2009**, 52, 5394-407	8.3	45
56	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, 5217-27	8.3	38
55	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	2.6	15
54	Molecular modeling based approach to potent P2-P4 macrocyclic inhibitors of hepatitis C NS3/4A protease. *Journal of the American Chemical Society*, **2008**, 130, 4607-9	16.4	128
53	Synthesis of 2?-□C-methyl-neplanocin derivatives as anti-HCV agents. *Tetrahedron Letters*, **2008**, 49, 4149-4152	2	12
52	Bismacrocyclic inhibitors of hepatitis C NS3/4a protease. *Angewandte Chemie - International Edition*, **2008**, 47, 9104-7	16.4	29
51	A time-resolved, internally quenched fluorescence assay to characterize inhibition of hepatitis C virus nonstructural protein 3-4A protease at low enzyme concentrations. *Analytical Biochemistry*, **2008**, 373, 1-8	3.1	31
50	Liver-targeted prodrugs of 2∀C-methyladenosine for therapy of hepatitis C virus infection. *Journal of Medicinal Chemistry*, **2007**, 50, 3891-6	8.3	36

49	Synthesis and HCV inhibitory properties of 9-deaza- and 7,9-dideaza-7-oxa-2∀C-methyladenosine. *Bioorganic and Medicinal Chemistry*, **2007**, 15, 5219-29	3.4	27
48	Synthesis of novel HIV protease inhibitors (PI) with activity against PI-resistant virus. *Bioorganic and Medicinal Chemistry Letters*, **2007**, 17, 5432-6	2.9	8
47	Gene expression profiling of rat liver reveals a mechanistic basis for ritonavir-induced hyperlipidemia. *Genomics*, **2007**, 90, 464-73	4.3	23
46	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	10.8	15
45	Design, synthesis, and biological evaluation of monopyrrolinone-based HIV-1 protease inhibitors possessing augmented P2∀side chains. *Bioorganic and Medicinal Chemistry Letters*, **2006**, 16, 859-63	2.9	19
44	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, 2059-69	5.9	114
43	Synthesis and evaluation of S-acyl-2-thioethyl esters of modified nucleoside 5∀monophosphates as inhibitors of hepatitis C virus RNA replication. *Journal of Medicinal Chemistry*, **2005**, 48, 1199-210	8.3	33
42	Orally bioavailable highly potent HIV protease inhibitors against PI-resistant virus. *Bioorganic and Medicinal Chemistry Letters*, **2005**, 15, 5311-4	2.9	8
41	Inhibitory effect of 2∀substituted nucleosides on hepatitis C virus replication correlates with metabolic properties in replicon cells. *Antimicrobial Agents and Chemotherapy*, **2005**, 49, 2050-8	5.9	41
40	Characterization of the inhibition of hepatitis C virus RNA replication by nonnucleosides. *Journal of Virology*, **2004**, 78, 938-46	6.6	118
39	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, 3944-53	5.9	200
38	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, 9353-61	5.4	30
37	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, 6237-47	3.4	10
36	P1∀oxadiazole protease inhibitors with excellent activity against native and protease inhibitor-resistant HIV-1. *Bioorganic and Medicinal Chemistry Letters*, **2004**, 14, 4651-4	2.9	17
35	Structure-activity relationship of heterobase-modified 2∀C-methyl ribonucleosides as inhibitors of hepatitis C virus RNA replication. *Journal of Medicinal Chemistry*, **2004**, 47, 5284-97	8.3	174
34	Structure-activity relationship of purine ribonucleosides for inhibition of hepatitis C virus RNA-dependent RNA polymerase. *Journal of Medicinal Chemistry*, **2004**, 47, 2283-95	8.3	193
33	Hinnuliquinone, a C2-symmetric dimeric non-peptide fungal metabolite inhibitor of HIV-1 protease. *Biochemical and Biophysical Research Communications*, **2004**, 324, 108-13	3.4	30
32	Characterization of resistance to non-obligate chain-terminating ribonucleoside analogs that inhibit hepatitis C virus replication in vitro. *Journal of Biological Chemistry*, **2003**, 278, 49164-70	5.4	284

31	Novel HIV-1 protease inhibitors active against multiple PI-resistant viral strains: coadministration with indinavir. *Bioorganic and Medicinal Chemistry Letters*, **2003**, 13, 4027-30	2.9	12
30	Synthesis and evaluation of optically pure dioxolanes as inhibitors of hepatitis C virus RNA replication. *Bioorganic and Medicinal Chemistry Letters*, **2003**, 13, 4455-8	2.9	12
29	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, 2573-6	2.9	12
28	HIV protease inhibitors with picomolar potency against PI-Resistant HIV-1 by extension of the P3 substituent. *Bioorganic and Medicinal Chemistry Letters*, **2003**, 13, 2569-72	2.9	12
27	HIV-1 protease inhibitors with picomolar potency against PI-resistant HIV-1 by modification of the P1V substituent. *Bioorganic and Medicinal Chemistry Letters*, **2003**, 13, 3323-6	2.9	9
26	Design and synthesis of highly potent HIV protease inhibitors with activity against resistant virus. *Bioorganic and Medicinal Chemistry Letters*, **2003**, 13, 1821-4	2.9	17
25	Design, synthesis, and biological evaluation of monopyrrolinone-based HIV-1 protease inhibitors. *Journal of Medicinal Chemistry*, **2003**, 46, 1831-44	8.3	44
24	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, 2777-80	5.4	130
23	Inhibition of hepatitis C virus RNA replication by 2V modified nucleoside analogs. *Journal of Biological Chemistry*, **2003**, 278, 11979-84	5.4	285
22	A combinatorial library of indinavir analogues and its in vitro and in vivo studies. *Bioorganic and Medicinal Chemistry Letters*, **2002**, 12, 529-32	2.9	11
21	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, 2419-22	2.9	29
20	Combinatorial library of indinavir analogues: replacement for the aminoindanol at P2V *Bioorganic and Medicinal Chemistry Letters*, **2002**, 12, 2855-8	2.9	9
19	Synthesis and activity of novel HIV protease inhibitors with improved potency against multiple PI-resistant viral strains. *Bioorganic and Medicinal Chemistry Letters*, **2002**, 12, 2423-6	2.9	11
18	An alternate binding site for the P1-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, 381-8		23
17	Combinatorial diversification of indinavir: in vivo mixture dosing of an HIV protease inhibitor library. *Bioorganic and Medicinal Chemistry Letters*, **2000**, 10, 1527-30	2.9	19
16	Identification of MK-944a: a second clinical candidate from the hydroxylaminepentanamide isostere series of HIV protease inhibitors. *Journal of Medicinal Chemistry*, **2000**, 43, 3386-99	8.3	45
15	Non-active site changes elicit broad-based cross-resistance of the HIV-1 protease to inhibitors. *Journal of Biological Chemistry*, **1999**, 274, 23699-701	5.4	59
14	Expression and purification of retroviral HIV-1 reverse transcriptase. *Methods in Enzymology*, **1996**, 275, 122-33	1.7	9

13	Preparation and use of synthetic oligoribonucleotides as tools for study of viral polymerases. *Methods in Enzymology*, **1996**, 275, 365-82	1.7	17
12	Elucidation of basic mechanistic and kinetic properties of influenza endonuclease using chemically synthesized RNAs. *Journal of Biological Chemistry*, **1996**, 271, 7435-9	5.4	21
11	Assay for influenza virus endonuclease using DNA polymerase extension of a specific cleavage product. *Analytical Biochemistry*, **1995**, 231, 309-14	3.1	4
10	Sensitivity of HIV-1 reverse transcriptase and its mutants to inhibition by azidothymidine triphosphate. *Biochemistry*, **1994**, 33, 2113-20	3.2	59
9	Site-directed mutagenesis of single-stranded and double-stranded DNA by phosphorothioate approach. *Methods in Enzymology*, **1993**, 217, 189-217	1.7	11
8	Direct sequencing of polymerase chain reaction products. *Methods in Enzymology*, **1993**, 218, 79-92	1.7	3
7	Overview: High Efficiency Oligonucleotide-Directed Mutagenesis of Double-stranded DNA Vectors. *Current Opinion in Therapeutic Patents*, **1992**, 2, 1023-1029		
6	Investigation of the substrate binding and catalytic groups of the P-C bond cleaving enzyme, phosphonoacetaldehyde hydrolase. *Archives of Biochemistry and Biophysics*, **1992**, 296, 144-51	4.1	26
5	Study of a hammerhead ribozyme containing 2¥modified adenosine residues. *Biochemistry*, **1991**, 30, 9735-41	3.2	100
4	Investigation of the inhibitory role of phosphorothioate internucleotidic linkages on the catalytic activity of the restriction endonuclease EcoRV. *Biochemistry*, **1990**, 29, 9546-51	3.2	20
3	Inhibition of restriction endonuclease hydrolysis by phosphorothioate-containing DNA. *Nucleic Acids Research*, **1989**, 17, 9495	20.1	16
2	Incomplete primer extension during in vitro DNA amplification catalyzed by Taq polymerase; exploitation for DNA sequencing. *Nucleic Acids Research*, **1989**, 17, 9613-20	20.1	48
1	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, 2229-34	3.2	44