

# David N Frick

## List of Publications by Year in descending order

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74  
papers

4,264  
citations

101543

36  
h-index

110387

64  
g-index

98  
all docs

98  
docs citations

98  
times ranked

4633  
citing authors

#	ARTICLE	IF	CITATIONS
1	The MutT Proteins or "Nudix" Hydrolases, a Family of Versatile, Widely Distributed, "Housecleaning" Enzymes. <i>Journal of Biological Chemistry</i> , 1996, 271, 25059-25062.	3.4	619
2	DNA Primases. <i>Annual Review of Biochemistry</i> , 2001, 70, 39-80.	11.1	341
3	Ivermectin is a potent inhibitor of flavivirus replication specifically targeting NS3 helicase activity: new prospects for an old drug. <i>Journal of Antimicrobial Chemotherapy</i> , 2012, 67, 1884-1894.	3.0	329
4	Studies on the ADP-ribose Pyrophosphatase Subfamily of the Nudix Hydrolases and Tentative Identification of trgB, a Gene Associated with Tellurite Resistance. <i>Journal of Biological Chemistry</i> , 1999, 274, 32318-32324.	3.4	138
5	PSI-7851, a Pronucleotide of 2'-Deoxy-2-Fluoro-2-Methyluridine Monophosphate, Is a Potent and Pan-Genotype Inhibitor of Hepatitis C Virus Replication. <i>Antimicrobial Agents and Chemotherapy</i> , 2010, 54, 3187-3196.	3.2	137
6	The hepatitis C virus NS3 protein: a model RNA helicase and potential drug target. <i>Current Issues in Molecular Biology</i> , 2007, 9, 1-20.	2.4	119
7	Hepatitis C Virus Subgenomic Replicon Requires an Active NS3 RNA Helicase. <i>Journal of Virology</i> , 2006, 80, 404-411.	3.4	112
8	The Nonstructural Protein 3 Protease/Helicase Requires an Intact Protease Domain to Unwind Duplex RNA Efficiently. <i>Journal of Biological Chemistry</i> , 2004, 279, 1269-1280.	3.4	97
9	Understanding Helicases as a Means of Virus Control. <i>Current Pharmaceutical Design</i> , 2006, 12, 1315-1338.	1.9	96
10	Molecular Basis for ADP-Ribose Binding to the Mac1 Domain of SARS-CoV-2 nsp3. <i>Biochemistry</i> , 2020, 59, 2608-2615.	2.5	96
11	Solution Structure of the MutT Enzyme, a Nucleoside Triphosphate Pyrophosphohydrolase. <i>Biochemistry</i> , 1995, 34, 14997-15005.	2.5	94
12	Discovering New Medicines Targeting Helicases: Challenges and Recent Progress. <i>Journal of Biomolecular Screening</i> , 2013, 18, 761-781.	2.6	93
13	Cloning, Purification, and Properties of a Novel NADH Pyrophosphatase. <i>Journal of Biological Chemistry</i> , 1995, 270, 1529-1534.	3.4	88
14	DNA damage alters DNA polymerase $\beta$ to a form that exhibits increased discrimination against modified template bases and mismatched primers. <i>Nucleic Acids Research</i> , 2008, 37, 647-657.	14.5	74
15	Solution Structure of the Quaternary MutT <sup>M2+</sup> AMPCPP <sup>M2+</sup> Complex and Mechanism of Its Pyrophosphohydrolase Action. <i>Biochemistry</i> , 1997, 36, 1199-1211.	2.5	73
16	Development of novel therapies for hepatitis C. <i>Antiviral Research</i> , 2010, 86, 79-92.	4.1	70
17	Ebselen Inhibits Hepatitis C Virus NS3 Helicase Binding to Nucleic Acid and Prevents Viral Replication. <i>ACS Chemical Biology</i> , 2014, 9, 2393-2403.	3.4	70
18	Orf186 Represents a New Member of the Nudix Hydrolases, Active on Adenosine(5')triphospho(5')adenosine, ADP-ribose, and NADH. <i>Journal of Biological Chemistry</i> , 1998, 273, 3192-3197.	3.4	69

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19	An N-terminal fragment of the gene 4 helicase/primase of bacteriophage T7 retains primase activity in the absence of helicase activity. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 1998, 95, 7957-7962.	7.1	69
20	Helicases as antiviral drug targets. <i>Drug News and Perspectives</i> , 2003, 16, 355.	1.5	69
21	Escherichia coli orf17 Codes for a Nucleoside Triphosphate Pyrophosphohydrolase Member of the MutT Family of Proteins. <i>Journal of Biological Chemistry</i> , 1996, 271, 24649-24654.	3.4	62
22	Optimization of Potent Hepatitis C Virus NS3 Helicase Inhibitors Isolated from the Yellow Dyes Thioflavine S and Primuline. <i>Journal of Medicinal Chemistry</i> , 2012, 55, 3319-3330.	6.4	62
23	A Novel GDP-Mannose Mannosyl Hydrolase Shares Homology with the MutT Family of Enzymes. <i>Journal of Biological Chemistry</i> , 1995, 270, 24086-24091.	3.4	61
24	Analysis of the Evolutionary Forces in an Immunodominant CD8 Epitope in Hepatitis C Virus at a Population Level. <i>Journal of Virology</i> , 2008, 82, 3438-3451.	3.4	58
25	Hepatitis C Virus NS3 ATPases/Helicases from Different Genotypes Exhibit Variations in Enzymatic Properties. <i>Journal of Virology</i> , 2003, 77, 3950-3961.	3.4	57
26	Two Novel Conserved Motifs in the Hepatitis C Virus NS3 Protein Critical for Helicase Action. <i>Journal of Biological Chemistry</i> , 2003, 278, 44514-44524.	3.4	56
27	The Role of Glu 57 in the Mechanism of the Escherichia coli MutT Enzyme by Mutagenesis and Heteronuclear NMR. <i>Biochemistry</i> , 1996, 35, 6715-6726.	2.5	55
28	Monitoring helicase activity with molecular beacons. <i>BioTechniques</i> , 2008, 45, 433-442.	1.8	54
29	The p12 Subunit of Human Polymerase $\epsilon$ Modulates the Rate and Fidelity of DNA Synthesis. <i>Biochemistry</i> , 2010, 49, 3545-3554.	2.5	53
30	Interaction of Bacteriophage T7 Gene 4 Primase with Its Template Recognition Site. <i>Journal of Biological Chemistry</i> , 1999, 274, 35889-35898.	3.4	51
31	Identification and analysis of hepatitis C virus NS3 helicase inhibitors using nucleic acid binding assays. <i>Nucleic Acids Research</i> , 2012, 40, 8607-8621.	14.5	51
32	Role of Divalent Metal Cations in ATP Hydrolysis Catalyzed by the Hepatitis C Virus NS3 Helicase: Magnesium Provides a Bridge for ATP to Fuel Unwinding. <i>Journal of Molecular Biology</i> , 2007, 365, 1017-1032.	4.2	49
33	Helicase inhibitors as specifically targeted antiviral therapy for hepatitis C. <i>Future Virology</i> , 2009, 4, 277-293.	1.8	49
34	NMR Studies of the Conformations and Location of Nucleotides Bound to the Escherichia coli MutT Enzyme. <i>Biochemistry</i> , 1995, 34, 5577-5586.	2.5	45
35	Benzothiazole and Pyrrolone Flavivirus Inhibitors Targeting the Viral Helicase. <i>ACS Infectious Diseases</i> , 2015, 1, 140-148.	3.8	44
36	A Complex of the Bacteriophage T7 Primase-Helicase and DNA Polymerase Directs Primer Utilization. <i>Journal of Biological Chemistry</i> , 2001, 276, 21809-21820.	3.4	36

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37	Discovery of Drug-Like Ligands for the Mac1 Domain of SARS-CoV-2 Nsp3. <i>SLAS Discovery</i> , 2020, 25, 1162-1170.	2.7	36
38	Cyclophilin B stimulates RNA synthesis by the HCV RNA dependent RNA polymerase. <i>Biochemical Pharmacology</i> , 2009, 77, 1173-1180.	4.4	35
39	Interaction of Ribonucleoside Triphosphates with the Gene 4 Primase of Bacteriophage T7. <i>Journal of Biological Chemistry</i> , 1999, 274, 35899-35907.	3.4	34
40	Aurintricarboxylic Acid Modulates the Affinity of Hepatitis C Virus NS3 Helicase for Both Nucleic Acid and ATP. <i>Biochemistry</i> , 2013, 52, 6151-6159.	2.5	32
41	Enhanced nucleic acid binding to ATP-bound hepatitis C virus NS3 helicase at low pH activates RNA unwinding. <i>Nucleic Acids Research</i> , 2004, 32, 4060-4070.	14.5	31
42	Sequence-specific assignments of the backbone proton, carbon-13, nitrogen-15 resonances of the MutT enzyme by heteronuclear multidimensional NMR. <i>Biochemistry</i> , 1993, 32, 13071-13080.	2.5	30
43	Electrostatic analysis of the hepatitis C virus NS3 helicase reveals both active and allosteric site locations. <i>Nucleic Acids Research</i> , 2004, 32, 5519-5528.	14.5	30
44	Mechanism and Specificity of a Symmetrical Benzimidazolephenylcarboxamide Helicase Inhibitor. <i>Biochemistry</i> , 2010, 49, 1822-1832.	2.5	28
45	Computer-aided identification, synthesis and evaluation of substituted thienopyrimidines as novel inhibitors of HCV replication. <i>European Journal of Medicinal Chemistry</i> , 2016, 123, 31-47.	5.5	26
46	Discovery of the 2-phenyl-4,5,6,7-Tetrahydro-1H-indole as a novel anti-hepatitis C virus targeting scaffold. <i>European Journal of Medicinal Chemistry</i> , 2015, 96, 250-258.	5.5	24
47	Effects of Mutagenic and Chain-Terminating Nucleotide Analogs on Enzymes Isolated from Hepatitis C Virus Strains of Various Genotypes. <i>Antimicrobial Agents and Chemotherapy</i> , 2008, 52, 1901-1911.	3.2	22
48	Fuel Specificity of the Hepatitis C Virus NS3 Helicase. <i>Journal of Molecular Biology</i> , 2009, 388, 851-864.	4.2	21
49	The interdomain interface in bifunctional enzyme protein 3/4A (NS3/4A) regulates protease and helicase activities. <i>Protein Science</i> , 2013, 22, 1786-1798.	7.6	20
50	Fluorescent primuline derivatives inhibit hepatitis C virus NS3-catalyzed RNA unwinding, peptide hydrolysis and viral replicase formation. <i>Antiviral Research</i> , 2012, 96, 245-255.	4.1	18
51	Identification and Analysis of Inhibitors Targeting the Hepatitis C Virus NS3 Helicase. <i>Methods in Enzymology</i> , 2012, 511, 463-483.	1.0	18
52	In silico identification, design and synthesis of novel piperazine-based antiviral agents targeting the hepatitis C virus helicase. <i>European Journal of Medicinal Chemistry</i> , 2017, 125, 1115-1131.	5.5	18
53	An Ire1-Phk1 Chimera Reveals a Dispensable Role of Autokinase Activity in Endoplasmic Reticulum Stress Response. <i>Journal of Molecular Biology</i> , 2013, 425, 2083-2099.	4.2	17
54	Characterization of a Novel DNA Primase from the Salmonella typhimurium Bacteriophage SP6. <i>Biochemistry</i> , 2000, 39, 1643-1654.	2.5	13

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55	A Method to Simultaneously Monitor Hepatitis C Virus NS3 Helicase and Protease Activities. <i>Methods in Molecular Biology</i> , 2009, 587, 223-233.	0.9	13
56	Ceestatin, a Novel Small Molecule Inhibitor of Hepatitis C Virus Replication, Inhibits 3-Hydroxy-3-Methylglutaryl-Coenzyme A Synthase. <i>Journal of Infectious Diseases</i> , 2011, 204, 609-616.	4.0	12
57	Primuline Derivatives That Mimic RNA to Stimulate Hepatitis C Virus NS3 Helicase-catalyzed ATP Hydrolysis. <i>Journal of Biological Chemistry</i> , 2013, 288, 19949-19957.	3.4	11
58	Shape-based virtual screening, synthesis and evaluation of novel pyrrolone derivatives as antiviral agents against HCV. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2017, 27, 936-940.	2.2	11
59	Simultaneously Targeting the NS3 Protease and Helicase Activities for More Effective Hepatitis C Virus Therapy. <i>ACS Chemical Biology</i> , 2015, 10, 1887-1896.	3.4	10
60	Quantitative microspectroscopic imaging reveals viral and cellular RNA helicase interactions in live cells. <i>Journal of Biological Chemistry</i> , 2017, 292, 11165-11177.	3.4	9
61	Step-by-step progress toward understanding the hepatitis C virus RNA helicase. <i>Hepatology</i> , 2006, 43, 1392-1395.	7.3	6
62	Bicyclic octahydrocyclohepta[ b ]pyrrol-4(1 H )one derivatives as novel selective anti-hepatitis C virus agents. <i>European Journal of Medicinal Chemistry</i> , 2016, 122, 319-325.	5.5	6
63	Fluorescent probe displacement assays reveal unique nucleic acid binding properties of human nudix enzymes. <i>Analytical Biochemistry</i> , 2020, 595, 113622.	2.4	6
64	The Hepatitis C Virus Replicase: Insights into RNA-dependent RNA Replication and Prospects for Rational Drug Design. <i>Current Organic Chemistry</i> , 2004, 8, 223-241.	1.6	6
65	Thioflavin S inhibits hepatitis C virus RNA replication and the viral helicase with a novel mechanism. <i>FASEB Journal</i> , 2010, 24, lb202.	0.5	4
66	Development of a Novel, Small-Molecule Brain-Penetrant Histone Deacetylase Inhibitor That Enhances Spatial Memory Formation in Mice. <i>Journal of Medicinal Chemistry</i> , 2022, , .	6.4	4
67	Analysis of the Enzymatic Activity of an NS3 Helicase Genotype 3a Variant Sequence Obtained from a Relapse Patient. <i>PLoS ONE</i> , 2015, 10, e0144638.	2.5	3
68	Novel symmetrical phenylenediamines as potential anti-hepatitis C virus agents. <i>Antiviral Chemistry and Chemotherapy</i> , 2015, 24, 155-160.	0.6	1
69	New Techniques to Study Intracellular Receptors in Living Cells: Insights Into RIG-I-Like Receptor Signaling. <i>Advances in Experimental Medicine and Biology</i> , 2018, 1111, 219-240.	1.6	1
70	Role of the Conserved DECH-Box Cysteine in Coupling Hepatitis C Virus Helicase-Catalyzed ATP Hydrolysis to RNA Unwinding. <i>Biochemistry</i> , 2018, 57, 6247-6255.	2.5	1
71	A transplant recipient's pandemic perspective. <i>Transplant Infectious Disease</i> , 2021, 23, e13738.	1.7	1
72	RNA unwinding by the hepatitis C virus NS3 inhibits its ability to cleave the viral polyprotein. <i>FASEB Journal</i> , 2006, 20, A43.	0.5	0

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73	The NS3 Helicase RNA Unwinding Activity Is Critical for Hepatitis C Virus Replication. FASEB Journal, 2006, 20, A940.	0.5	0
74	A Mutant of PCNA that Exhibits Decreased Binding to Human DNA Polymerase Delta. FASEB Journal, 2006, 20, .	0.5	0