

# Dennis W Wolan

## List of Publications by Year in descending order

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70  
papers

4,125  
citations

172457

29  
h-index

123424

61  
g-index

86  
all docs

86  
docs citations

86  
times ranked

6129  
citing authors

#	ARTICLE	IF	CITATIONS
1	METLIN: A Technology Platform for Identifying Knowns and Unknowns. <i>Analytical Chemistry</i> , 2018, 90, 3156-3164.	6.5	696
2	Proteome-wide covalent ligand discovery in native biological systems. <i>Nature</i> , 2016, 534, 570-574.	27.8	651
3	Antitumor activity of a systemic STING-activating non-nucleotide cGAMP mimetic. <i>Science</i> , 2020, 369, 993-999.	12.6	259
4	Domain Swapping in Inducible Nitric-oxide Synthase. <i>Journal of Biological Chemistry</i> , 1998, 273, 18950-18958.	3.4	171
5	Small-Molecule Activators of a Proenzyme. <i>Science</i> , 2009, 326, 853-858.	12.6	147
6	Acetone-Linked Peptides: A Convergent Approach for Peptide Macrocyclization and Labeling. <i>Angewandte Chemie - International Edition</i> , 2015, 54, 8665-8668.	13.8	143
7	Turning a protein kinase on or off from a single allosteric site via disulfide trapping. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2011, 108, 6056-6061.	7.1	134
8	SuFEx-enabled, agnostic discovery of covalent inhibitors of human neutrophil elastase. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019, 116, 18808-18814.	7.1	134
9	Sulfur(VI) Fluoride Exchange (SuFEx)-Enabled High-Throughput Medicinal Chemistry. <i>Journal of the American Chemical Society</i> , 2020, 142, 10899-10904.	13.7	105
10	Crystal structure of the murine NK cell-activating receptor NKG2D at 1.95 Å... <i>Nature Immunology</i> , 2001, 2, 248-254.	14.5	85
11	Diversity Oriented Clicking (DOC): Divergent Synthesis of SuFExable Pharmacophores from 2-Substituted-Alkynyl-Sulfonyl Fluoride (SASF) Hubs. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 12460-12469.	13.8	83
12	Antifungal Imidazoles Block Assembly of Inducible NO Synthase into an Active Dimer. <i>Journal of Biological Chemistry</i> , 1999, 274, 930-938.	3.4	81
13	Self-Assembling Small Molecules Form Nanofibrils That Bind Procaspase-3 To Promote Activation. <i>Journal of the American Chemical Society</i> , 2011, 133, 19630-19633.	13.7	74
14	Inducible nitric oxide synthase: role of the N-terminal Î2-hairpin hook and pterin-binding segment in dimerization and tetrahydrobiopterin interaction. <i>EMBO Journal</i> , 1999, 18, 6260-6270.	7.8	68
15	Quantitative Metaproteomics and Activity-Based Probe Enrichment Reveals Significant Alterations in Protein Expression from a Mouse Model of Inflammatory Bowel Disease. <i>Journal of Proteome Research</i> , 2017, 16, 1014-1026.	3.7	65
16	Virtual Screening of Human 5-Aminoimidazole-4-carboxamide Ribonucleotide Transformylase against the NCI Diversity Set by Use of AutoDock to Identify Novel Nonfolate Inhibitors. <i>Journal of Medicinal Chemistry</i> , 2004, 47, 6681-6690.	6.4	63
17	Genetic basis for the cooperative bioactivation of plant lignans by <i>Eggerthella lenta</i> and other human gut bacteria. <i>Nature Microbiology</i> , 2020, 5, 56-66.	13.3	63
18	Mutational Analysis of the Tetrahydrobiopterin-binding Site in Inducible Nitric-oxide Synthase. <i>Journal of Biological Chemistry</i> , 1999, 274, 24100-24112.	3.4	61

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19	Structure-based optimization and synthesis of antiviral drug Arbidol analogues with significantly improved affinity to influenza hemagglutinin. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2017, 27, 3744-3748.	2.2	48
20	Selective Detection of Caspase-3 versus Caspase-7 Using Activity-Based Probes with Key Unnatural Amino Acids. <i>ACS Chemical Biology</i> , 2013, 8, 1558-1566.	3.4	47
21	Expanding the Use of Spectral Libraries in Proteomics. <i>Journal of Proteome Research</i> , 2018, 17, 4051-4060.	3.7	47
22	Chemical Inhibition of ENL/AF9 YEATS Domains in Acute Leukemia. <i>ACS Central Science</i> , 2021, 7, 815-830.	11.3	46
23	Fibrils Colocalize Caspase-3 with Procaspace-3 to Foster Maturation. <i>Journal of Biological Chemistry</i> , 2012, 287, 33781-33795.	3.4	45
24	A comprehensive and scalable database search system for metaproteomics. <i>BMC Genomics</i> , 2016, 17, 642.	2.8	45
25	Selective Detection and Inhibition of Active Caspase-3 in Cells with Optimized Peptides. <i>Journal of the American Chemical Society</i> , 2013, 135, 12869-12876.	13.7	44
26	Crystal Structures of Human Bifunctional Enzyme Aminoimidazole-4-carboxamide Ribonucleotide Transformylase/IMP Cyclohydrolase in Complex with Potent Sulfonyl-containing Antifolates. <i>Journal of Biological Chemistry</i> , 2004, 279, 18034-18045.	3.4	42
27	Structural Insights into the Avian AICAR Transformylase Mechanism. <i>Biochemistry</i> , 2002, 41, 15505-15513.	2.5	40
28	Lipoprotein Signal Peptidase Inhibitors with Antibiotic Properties Identified through Design of a Robust In Vitro HT Platform. <i>Cell Chemical Biology</i> , 2018, 25, 301-308.e12.	5.2	33
29	Discovery of small-molecule enzyme activators by activity-based protein profiling. <i>Nature Chemical Biology</i> , 2020, 16, 997-1005.	8.0	31
30	Structural Insights into the Human and Avian IMP Cyclohydrolase Mechanism via Crystal Structures with the Bound XMP Inhibitor. <i>Biochemistry</i> , 2004, 43, 1171-1183.	2.5	30
31	Discovery of a Highly Selective Caspase-3 Substrate for Imaging Live Cells. <i>ACS Chemical Biology</i> , 2014, 9, 2199-2203.	3.4	28
32	Substrate Profiling and High Resolution Co-complex Crystal Structure of a Secreted C11 Protease Conserved across Commensal Bacteria. <i>ACS Chemical Biology</i> , 2017, 12, 1556-1565.	3.4	27
33	Selective Neutral pH Inhibitor of Cathepsin B Designed Based on Cleavage Preferences at Cytosolic and Lysosomal pH Conditions. <i>ACS Chemical Biology</i> , 2021, 16, 1628-1643.	3.4	27
34	Diversity Oriented Clicking (DOC): Divergent Synthesis of SuFExable Pharmacophores from 2-Substituted Alkynyl Sulfonyl Fluoride (SASF) Hubs. <i>Angewandte Chemie</i> , 2020, 132, 12560-12569.	2.0	26
35	An influenza A hemagglutinin small-molecule fusion inhibitor identified by a new high-throughput fluorescence polarization screen. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 18431-18438.	7.1	25
36	Nitrosipurines En Route to Potently Cytotoxic Asmarines. <i>Angewandte Chemie - International Edition</i> , 2015, 54, 2410-2415.	13.8	23

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37	Data Streaming for Metabolomics: Accelerating Data Processing and Analysis from Days to Minutes. <i>Analytical Chemistry</i> , 2017, 89, 1254-1259.	6.5	23
38	Structure of Avian AICAR Transformylase with a Multisubstrate Adduct Inhibitor $\hat{I}^2$ -DADF Identifies the Folate Binding Site. <i>Biochemistry</i> , 2003, 42, 10904-10914.	2.5	22
39	Molecules that modulate Apaf-1 activity. <i>Medicinal Research Reviews</i> , 2011, 31, 649-675.	10.5	21
40	Synthesis and Sulfur Electrophilicity of the <i>Nuphar</i> Thiaspirane Pharmacophore. <i>ACS Central Science</i> , 2016, 2, 401-408.	11.3	20
41	Metabolomics activity screening of T cell-induced colitis reveals anti-inflammatory metabolites. <i>Science Signaling</i> , 2021, 14, eabf6584.	3.6	19
42	Selective and Rapid Cell-Permeable Inhibitor of Human Caspase-3. <i>ACS Chemical Biology</i> , 2019, 14, 2463-2470.	3.4	18
43	ComPIL 2.0: An Updated Comprehensive Metaproteomics Database. <i>Journal of Proteome Research</i> , 2019, 18, 616-622.	3.7	18
44	Small-Molecule Procaspase Activators Identified Using Fluorescence Polarization. <i>ChemBioChem</i> , 2013, 14, 1419-1422.	2.6	17
45	Quantitative Metaproteomics and Activity-based Protein Profiling of Patient Fecal Microbiome Identifies Host and Microbial Serine-type Endopeptidase Activity Associated With Ulcerative Colitis. <i>Molecular and Cellular Proteomics</i> , 2022, 21, 100197.	3.8	17
46	Selective Inhibition of Initiator versus Executioner Caspases Using Small Peptides Containing Unnatural Amino Acids. <i>ACS Chemical Biology</i> , 2014, 9, 2194-2198.	3.4	16
47	N-Terminomics/TAILS Profiling of Proteases and Their Substrates in Ulcerative Colitis. <i>ACS Chemical Biology</i> , 2019, 14, 2471-2483.	3.4	16
48	Identification of an N-acetylneuraminic acid-presenting bacteria isolated from a human microbiome. <i>Scientific Reports</i> , 2021, 11, 4763.	3.3	16
49	Metaproteomics Analysis of SARS-CoV-2-Infected Patient Samples Reveals Presence of Potential Coinfecting Microorganisms. <i>Journal of Proteome Research</i> , 2021, 20, 1451-1454.	3.7	15
50	A Commensal Dipeptidyl Aminopeptidase with Specificity for N-Terminal Glycine Degrades Human-Produced Antimicrobial Peptides <i>in Vitro</i> . <i>ACS Chemical Biology</i> , 2018, 13, 2513-2521.	3.4	14
51	Ultrahigh and High Resolution Structures and Mutational Analysis of Monomeric <i>Streptococcus pyogenes</i> SpeB Reveal a Functional Role for the Glycine-rich C-terminal Loop. <i>Journal of Biological Chemistry</i> , 2012, 287, 24412-24426.	3.4	13
52	Synthetic Elaboration of Native DNA by RASS (SENDR). <i>ACS Central Science</i> , 2020, 6, 1789-1799.	11.3	12
53	Metaproteomics of Colonic Microbiota Unveils Discrete Protein Functions among Colitic Mice and Control Groups. <i>Proteomics</i> , 2018, 18, 1700391.	2.2	10
54	The Development of the Bengamides as New Antibiotics against Drug-Resistant Bacteria. <i>Marine Drugs</i> , 2022, 20, 373.	4.6	10

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55	A glycal-based photoaffinity probe that enriches sialic acid binding proteins. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2019, 29, 2609-2612.	2.2	9
56	Mitochondrial Permeability Transition Causes Mitochondrial Reactive Oxygen Species- and Caspase 3-Dependent Atrophy of Single Adult Mouse Skeletal Muscle Fibers. <i>Cells</i> , 2021, 10, 2586.	4.1	9
57	Probing substrate recognition of bacterial lipoprotein signal peptidase using <scp>FRET</scp> reporters. <i>FEBS Letters</i> , 2018, 592, 2289-2296.	2.8	8
58	Sialic acid diversity in the human gut: Molecular impacts and tools for future discovery. <i>Current Opinion in Structural Biology</i> , 2022, 75, 102397.	5.7	8
59	Identification and Co-complex Structure of a New <i>S. pyogenes</i> SpeB Small Molecule Inhibitor. <i>Biochemistry</i> , 2015, 54, 4365-4373.	2.5	7
60	Nanobody-based binding assay for the discovery of potent inhibitors of CFTR inhibitory factor (Cif). <i>Analytica Chimica Acta</i> , 2019, 1057, 106-113.	5.4	7
61	An Irreversible Inhibitor to Probe the Role of <i>Streptococcus pyogenes</i> Cysteine Protease SpeB in Evasion of Host Complement Defenses. <i>ACS Chemical Biology</i> , 2020, 15, 2060-2069.	3.4	7
62	X-ray structure of an inactive zymogen clostripain-like protease from<i>Parabacteroides distasonis</i>. <i>Acta Crystallographica Section D: Structural Biology</i> , 2019, 75, 325-332.	2.3	6
63	Triflic Acid Treatment Enables LC-MS/MS Analysis of Insoluble Bacterial Biomass. <i>Journal of Proteome Research</i> , 2018, 17, 2978-2986.	3.7	5
64	Integrative X-ray Structure and Molecular Modeling for the Rationalization of Procaspace-8 Inhibitor Potency and Selectivity. <i>ACS Chemical Biology</i> , 2020, 15, 575-586.	3.4	5
65	X-ray Structures of Two <i>Bacteroides thetaiotaomicron</i> C11 Proteases in Complex with Peptide-Based Inhibitors. <i>Biochemistry</i> , 2019, 58, 1728-1737.	2.5	4
66	A photoaffinity probe that targets folate-binding proteins. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2021, 40, 127903.	2.2	3
67	CHEMICAL BIOLOGICAL PROTEOMICS OF BACTERIAL PROTEIN FUNCTIONALITIES IN THE HUMAN DISTAL GUT MICROBIOME. , 2014, , .		0
68	Front Cover: Metaproteomics of Colonic Microbiota Unveils Discrete Protein Functions among Colitic Mice and Control Groups. <i>Proteomics</i> , 2018, 18, 1870031.	2.2	0
69	Announcement of 2019 Keystone Symposia Conference: "Microbiome: Chemical Mechanisms and Biological Consequences" MSystems, 2018, 3, .	3.8	0
70	Small Molecule Activation of Apoptotic Caspases. <i>FASEB Journal</i> , 2010, 24, 914.5.	0.5	0