William M Wuest

List of Publications by Year
in descending order

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96 papers	3,708 citations	136740 32 h-index	138251 58 g-index
109 all docs	109 docs citations	109 times ranked	4510 citing authors

#	Article	IF	Citations
1	Quaternary Ammonium Compounds: An Antimicrobial Mainstay and Platform for Innovation to Address Bacterial Resistance. ACS Infectious Diseases, 2015, 1, 288-303.	1.8	441
2	Natural Products as Platforms To Overcome Antibiotic Resistance. Chemical Reviews, 2017, 117, 12415-12474.	23.0	393
3	A new class of synthetic retinoid antibiotics effective against bacterial persisters. Nature, 2018, 556, 103-107.	13.7	307
4	Evolution of multi-component anion relay chemistry (ARC): construction of architecturally complex natural and unnatural products. Chemical Communications, 2008, , 5883.	2.2	135
5	Biofilmâ€Eradicating Properties of Quaternary Ammonium Amphiphiles: Simple Mimics of Antimicrobial Peptides. ChemBioChem, 2014, 15, 2211-2215.	1.3	126
6	A selective membrane-targeting repurposed antibiotic with activity against persistent methicillin-resistant Staphylococcus aureus. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 16529-16534.	3.3	117
7	The silent pandemic: Emergent antibiotic resistances following the global response to SARS-CoV-2. IScience, 2021, 24, 102304.	1.9	98
8	Are Quaternary Ammonium Compounds, the Workhorse Disinfectants, Effective against Severe Acute Respiratory Syndrome-Coronavirus-2?. ACS Infectious Diseases, 2020, 6, 1553-1557.	1.8	96
9	From antimicrobial activity to mechanism of resistance: the multifaceted role of simple quaternary ammonium compounds in bacterial eradication. Tetrahedron, 2016, 72, 3559-3566.	1.0	85
10	Repurposing human kinase inhibitors to create an antibiotic active against drug-resistant Staphylococcus aureus, persisters and biofilms. Nature Chemistry, 2020, 12, 145-158.	6.6	78
11	Bioorganic Investigation of Multicationic Antimicrobials to Combat QAC-Resistant Staphylococcus aureus. ACS Infectious Diseases, 2015, 1, 304-309.	1.8	73
12	Intramolecular Hydroamination of Aminoalkynes with Silverâ^'Phenanthroline Catalysts. Organic Letters, 2008, 10, 3903-3906.	2.4	70
13	Three Siderophores from One Bacterial Enzymatic Assembly Line. Journal of the American Chemical Society, 2009, 131, 5056-5057.	6.6	65
14	Promysalin Elicits Species-Selective Inhibition of Pseudomonas aeruginosa by Targeting Succinate Dehydrogenase. Journal of the American Chemical Society, 2018, 140, 1774-1782.	6.6	63
15	Polymeric Quaternary Ammonium Compounds: Versatile Antimicrobial Materials. Current Topics in Medicinal Chemistry, 2016, 17, 305-318.	1.0	62
16	Targeting S. mutans biofilms: a perspective on preventing dental caries. MedChemComm, 2019, 10, 1057-1067.	3.5	60
17	More QACs, more questions: Recent advances in structure activity relationships and hurdles in understanding resistance mechanisms. Tetrahedron Letters, 2019, 60, 150935.	0.7	48
18	Computational Screening and Selection of Cyclic Peptide Hairpin Mimetics by Molecular Simulation and Kinetic Network Models. Journal of Chemical Information and Modeling, 2014, 54, 1425-1432.	2.5	47

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19	Orthoâ€TMS Benzaldehyde: An Effective Linchpin for Typeâ€...II Anion Relay Chemistry (ARC). Angewandte Chemie - International Edition, 2008, 47, 7082-7086.	7.2	46
20	Building a Better Quaternary Ammonium Compound (QAC): Branched Tetracationic Antiseptic Amphiphiles. ChemMedChem, 2016, 11, 1401-1405.	1.6	45
21	Molecular Simulation of Conformational Pre-Organization in Cyclic RGD Peptides. Journal of Chemical Information and Modeling, 2015, 55, 806-813.	2.5	43
22	SylC Catalyzes Ureido-Bond Formation During Biosynthesis of the Proteasome Inhibitor Syringolin A. Journal of the American Chemical Society, 2009, 131, 18263-18265.	6.6	41
23	The antimicrobial activity of mono-, bis-, tris-, and tetracationic amphiphiles derived from simple polyamine platforms. Bioorganic and Medicinal Chemistry Letters, 2014, 24, 5824-5828.	1.0	41
24	Analysis of the Destabilization of Bacterial Membranes by Quaternary Ammonium Compounds: A Combined Experimental and Computational Study. ChemBioChem, 2020, 21, 1510-1516.	1.3	41
25	Total Synthesis of (â^')-2-epi-Peloruside A. Organic Letters, 2008, 10, 5501-5504.	2.4	36
26	Scaffoldâ€Hopping of Multicationic Amphiphiles Yields Three New Classes of Antimicrobials. ChemBioChem, 2015, 16, 2299-2303.	1.3	36
27	Structureâ€“Resistance Relationships: Interrogating Antiseptic Resistance in Bacteria with Multicationic Quaternary Ammonium Dyes. ChemMedChem, 2016, 11, 958-962.	1.6	36
28	Combined inhibition of Aurora A and p21-activated kinase 1 as a new treatment strategy in breast cancer. Breast Cancer Research and Treatment, 2019, 177, 369-382.	1.1	36
29	TMEDA-derived biscationic amphiphiles: An economical preparation of potent antibacterial agents. Bioorganic and Medicinal Chemistry Letters, 2014, 24, 99-102.	1.0	34
30	Total Synthesis and Biological Investigation of (â^')-Promysalin. Journal of the American Chemical Society, 2015, 137, 7314-7317.	6.6	34
31	A Concise Synthesis of Carolacton. Organic Letters, 2014, 16, 1148-1151.	2.4	33
32	Efflux Pumps Might Not Be the Major Drivers of QAC Resistance in Methicillinâ€Resistant Staphylococcus aureus. ChemBioChem, 2017, 18, 1573-1577.	1.3	33
33	Discovery and Optimization of nTZDpa as an Antibiotic Effective Against Bacterial Persisters. ACS Infectious Diseases, 2018, 4, 1540-1545.	1.8	33
34	The Development of Nextâ€Generation Pyridiniumâ€Based multiQAC Antiseptics. ChemMedChem, 2017, 12, 280-283.	1.6	32
35	Canvass: A Crowd-Sourced, Natural-Product Screening Library for Exploring Biological Space. ACS Central Science, 2018, 4, 1727-1741.	5.3	32
36	Ester- and amide-containing multiQACs: Exploring multicationic soft antimicrobial agents. Bioorganic and Medicinal Chemistry Letters, 2017, 27, 2107-2112.	1.0	31

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37	Signed, Sealed, Delivered: Conjugate and Prodrug Strategies as Targeted Delivery Vectors for Antibiotics. ACS Infectious Diseases, 2019, 5, 816-828.	1.8	31
38	Draining the moat: disrupting bacterial biofilms with natural products. Tetrahedron, 2014, 70, 6373-6383.	1.0	29
39	Diverted Total Synthesis of Promysalin Analogs Demonstrates That an Iron-Binding Motif Is Responsible for Its Narrow-Spectrum Antibacterial Activity. Journal of the American Chemical Society, 2016, 138, 5833-5836.	6.6	29
40	Natural product-derived quaternary ammonium compounds with potent antimicrobial activity. Journal of Antibiotics, 2016, 69, 344-347.	1.0	28
41	Diverted Total Synthesis of Carolacton-Inspired Analogs Yields Three Distinct Phenotypes in Streptococcus mutans Biofilms. Journal of the American Chemical Society, 2017, 139, 7188-7191.	6.6	27
42	Connecting iron acquisition and biofilm formation in the ESKAPE pathogens as a strategy for combatting antibiotic resistance. MedChemComm, 2019, 10, 505-512.	3.5	27
43	Claramines: A New Class Of Broadâ€Spectrum Antimicrobial Agents With Bimodal Activity. ChemMedChem, 2018, 13, 1018-1027.	1.6	23
44	Beyond paraquats: Dialkyl 3,3â€²- and 3,4â€²-bipyridinium amphiphiles as antibacterial agents. Bioorganic and Medicinal Chemistry Letters, 2014, 24, 3706-3709.	1.0	22
45	An Investigation into Rigidityâ€"Activity Relationships in BisQAC Amphiphilic Antiseptics. ChemMedChem, 2019, 14, 83-87.	1.6	22
46	Advancements in the Development of Nonâ€Nitrogenâ€Based Amphiphilic Antiseptics to Overcome Pathogenic Bacterial Resistance. ChemMedChem, 2020, 15, 1974-1984.	1.6	21
47	Hybrid BisQACs: Potent Biscationic Quaternary Ammonium Compounds Merging the Structures of Two Commercial Antiseptics. ChemMedChem, 2017, 12, 1931-1934.	1.6	20
48	Honokiol-Inspired Analogs as Inhibitors of Oral Bacteria. ACS Infectious Diseases, 2018, 4, 118-122.	1.8	20
49	Virulence attenuating combination therapy: a potential multi-target synergy approach to treatPseudomonas aeruginosainfections in cystic fibrosis patients. RSC Medicinal Chemistry, 2020, 11, 358-369.	1.7	19
50	Further Investigations into Rigidityâ€Activity Relationships in BisQAC Amphiphilic Antiseptics. ChemMedChem, 2020, 15, 667-670.	1.6	17
51	A Bisphenolic Honokiol Analog Outcompetes Oral Antimicrobial Agent Cetylpyridinium Chloride via a Membrane-Associated Mechanism. ACS Infectious Diseases, 2020, 6, 74-79.	1.8	16
52	Broad Spectrum Antibiotic Xanthocillin X Effectively Kills Acinetobacter baumannii via Dysregulation of Heme Biosynthesis. ACS Central Science, 2021, 7, 488-498.	5.3	16
53	Pyochelin Biosynthetic Metabolites Bind Iron and Promote Growth in Pseudomonads Demonstrating Siderophore-like Activity. ACS Infectious Diseases, 2021, 7, 544-551.	1.8	16
54	Quaternary Phosphonium Compounds: An Examination of Non-Nitrogenous Cationic Amphiphiles That Evade Disinfectant Resistance. ACS Infectious Diseases, 2022, 8, 387-397.	1.8	16

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55	The Rhizosphere Microbiome: A Playground for Natural Product Chemists. Synlett, 2015, 26, 2739-2744.	1.0	15
56	Biologically Inspired Total Synthesis of Ulbactin F, an Iron-Binding Natural Product. Organic Letters, 2018, 20, 5922-5926.	2.4	15
57	The Natural Product Elegaphenone Potentiates Antibiotic Effects against Pseudomonas aeruginosa. Angewandte Chemie - International Edition, 2019, 58, 8581-8584.	7.2	13
58	Enzymatic Timing and Tailoring of Macrolactamization in Syringolin Biosynthesis. Organic Letters, 2011, 13, 4518-4521.	2.4	12
59	Diverted Total Synthesis of the Baulamycins and Analogues Reveals an Alternate Mechanism of Action. Organic Letters, 2018, 20, 1126-1129.	2.4	12
60	Structureâ€“Activity Relationship and Anticancer Profile of Second-Generation Anti-MRSA Synthetic Retinoids. ACS Medicinal Chemistry Letters, 2020, 11, 393-397.	1.3	12
61	Synthesis of cyclic dimeric methyl morpholinosideâ€”a common synthetic precursor to cyclic dinucleotide analogs. Tetrahedron Letters, 2014, 55, 4966-4968.	0.7	11
62	Trivalent sulfonium compounds (TSCs): Tetrahydrothiophene-based amphiphiles exhibit similar antimicrobial activity to analogous ammonium-based amphiphiles. Bioorganic and Medicinal Chemistry Letters, 2021, 37, 127809.	1.0	11
63	Twelveâ€membered macrolactones: privileged scaffolds for the development of new therapeutics. Chemical Biology and Drug Design, 2017, 89, 169-191.	1.5	10
64	Dual Inhibitor of Staphylococcus aureus Virulence and Biofilm Attenuates Expression of Major Toxins and Adhesins. Biochemistry, 2018, 57, 1814-1820.	1.2	10
65	Tricepyridiniumâ€inspired QACs yield potent antimicrobials and provide insight into QAC resistance. ChemMedChem, 2021, 16, 463-466.	1.6	10
66	The enantioselective synthesis and biological evaluation of chimeric promysalin analogs facilitated by diverted total synthesis. Journal of Antibiotics, 2016, 69, 337-339.	1.0	9
67	Broadening Activity of Polymyxin by Quaternary Ammonium Grafting. ACS Infectious Diseases, 2020, 6, 1427-1435.	1.8	9
68	Epoxy Isonitriles, A Unique Class of Antibiotics: Synthesis of Their Metabolites and Biological Investigations. ChemBioChem, 2018, 19, 2448-2452.	1.3	8
69	From General to Specific: Can Pseudomonas Primary Metabolism Be Exploited for Narrowâ€Spectrum Antibiotics?. ChemBioChem, 2019, 20, 34-39.	1.3	8
70	Asymmetric Total Synthesis of the Naturally Occurring Antibiotic Anthracimycin. Organic Letters, 2020, 22, 5550-5554.	2.4	8
71	Synthesis and biological evaluation of an antibacterial azaborine retinoid isostere. Tetrahedron Letters, 2021, 62, 152667.	0.7	8
72	Synthetic Simplification of Carolacton Enables Chemical Genetic Studies in Streptococcus mutans. ACS Infectious Diseases, 2019, 5, 1480-1486.	1.8	7

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73	Using membrane perturbing small molecules to target chronic persistent infections. RSC Medicinal Chemistry, 2021, 12, 1312-1324.	1.7	7
74	Transcriptomic Profiling Suggests That Promysalin Alters the Metabolic Flux, Motility, and Iron Regulation in Pseudomonas putida KT2440. ACS Infectious Diseases, 2018, 4, 1179-1187.	1.8	6
75	Target-Based Design of Promysalin Analogues Identifies a New Putative Binding Cleft in Succinate Dehydrogenase. ACS Infectious Diseases, 2020, 6, 1372-1377.	1.8	6
76	Metallocene QACs: The Incorporation of Ferrocene Moieties into monoQAC and bisQAC Structures. ChemMedChem, 2021, 16, 467-471.	1.6	6
77	An optimized synthesis of the potent and selective Pak1 inhibitor FRAX-1036. Tetrahedron Letters, 2016, 57, 449-451.	0.7	5
78	Phylogeny-Guided Approach Yields Glycopeptides with Unique Action. Trends in Pharmacological Sciences, 2020, 41, 297-299.	4.0	5
79	Rigidityâ€Activity Relationships of bisQPC Scaffolds against Pathogenic Bacteria. ChemMedChem, 2022, 17, .	1.6	5
80	A novel application of the Staudinger ligation to access neutral cyclic di-nucleotide analog precursors via a divergent method. RSC Advances, 2017, 7, 29835-29838.	1.7	4
81	Building trans-bicyclo[4.4.0]decanes/decenes in complex multifunctional frameworks: the case for antibiotic development. Natural Product Reports, 2021, 38, 880-889.	5.2	4
82	The histone-like protein AlgP regulon is distinct in mucoid and nonmucoid Pseudomonas aeruginosa and does not include alginate biosynthesis genes. Microbiology (United Kingdom), 2020, 166, 861-866.	0.7	4
83	Exploration of inhibitors of the bacterial LexA repressor-protease. Bioorganic and Medicinal Chemistry Letters, 2022, 65, 128702.	1.0	4
84	Identification of Specific and Nonspecific Inhibitors of Bacillus anthracis Typeâ€…III Pantothenate Kinase (PanK). ChemMedChem, 2019, 14, 78-82.	1.6	3
85	A look around the West Indies: The spices of life are secondary metabolites. Bioorganic and Medicinal Chemistry, 2020, 28, 115792.	1.4	3
86	Addition of ethylamines to the phenols of bithionol and synthetic retinoids does not elicit activity in gram-negative bacteria. Bioorganic and Medicinal Chemistry Letters, 2020, 30, 127099.	1.0	3
87	Collaboration in Natural Product Total Synthesis: Carolacton â€“ A Decade of Discovery. Synlett, 2021, 32, 241-248.	1.0	3
88	Der Naturstoff Elegaphenon verstÃrkt antibiotische Effekte gegen Pseudomonas aeruginosa. Angewandte Chemie, 2019, 131, 8670-8674.	1.6	2
89	Total synthesis of (+)-pilosinine via a stereodivergent conjugate addition strategy. Tetrahedron Letters, 2020, 61, 151945.	0.7	2
90	An Efficient Synthesis of 3â€Alkylpyridine Alkaloids Enables Their Biological Evaluation. ChemMedChem, 2021, 16, 2487-2490.	1.6	2

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91	nTZDpa (non-thiazolidinedione PPARÎ³ partial agonist) derivatives retain antimicrobial activity without improving renal toxicity. Bioorganic and Medicinal Chemistry Letters, 2022, 64, 128678.	1.0	2
92	Hijacking the Bacterial Circuitry of Biofilm Processes via Chemical â€œHot-Wiringâ€: An Under-explored Avenue for Therapeutic Development. ACS Infectious Diseases, 2019, 5, 789-795.	1.8	1
93	Promiscuous Pseudomonas: Uptake of non-endogenous ligands for iron acquisition. Tetrahedron Letters, 2021, 75, 153204.	0.7	1
94	William M. Wuest. Tetrahedron, 2016, 72, 3548.	1.0	0
95	EroS Enzyme from Aliivibrio fischeri Plays Cupid to Choanoflagellates. ChemBioChem, 2017, 18, 2298-2300.	1.3	0
96	Mining for mouth metabolites. Nature Chemical Biology, 2021, 17, 505-506.	3.9	0