

William M Wuest

List of Publications by Year in descending order

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96
papers

3,708
citations

136950

32
h-index

138484

58
g-index

109
all docs

109
docs citations

109
times ranked

4510
citing authors

#	ARTICLE	IF	CITATIONS
1	Quaternary Phosphonium Compounds: An Examination of Non-Nitrogenous Cationic Amphiphiles That Evade Disinfectant Resistance. <i>ACS Infectious Diseases</i> , 2022, 8, 387-397.	3.8	16
2	nTZDpa (non-thiazolidinedione PPAR β partial agonist) derivatives retain antimicrobial activity without improving renal toxicity. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2022, 64, 128678.	2.2	2
3	Exploration of inhibitors of the bacterial LexA repressor-protease. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2022, 65, 128702.	2.2	4
4	Rigidity-Activity Relationships of bisQPC Scaffolds against Pathogenic Bacteria. <i>ChemMedChem</i> , 2022, 17, .	3.2	5
5	Tricepyridinium-inspired QACs yield potent antimicrobials and provide insight into QAC resistance. <i>ChemMedChem</i> , 2021, 16, 463-466.	3.2	10
6	Building <i>trans</i> -bicyclo[4.4.0]decanes/decenes in complex multifunctional frameworks: the case for antibiotic development. <i>Natural Product Reports</i> , 2021, 38, 880-889.	10.3	4
7	Synthesis and biological evaluation of an antibacterial azaborine retinoid isostere. <i>Tetrahedron Letters</i> , 2021, 62, 152667.	1.4	8
8	Metalloocene QACs: The Incorporation of Ferrocene Moieties into monoQAC and bisQAC Structures. <i>ChemMedChem</i> , 2021, 16, 467-471.	3.2	6
9	Collaboration in Natural Product Total Synthesis: Carolacton – A Decade of Discovery. <i>Synlett</i> , 2021, 32, 241-248.	1.8	3
10	Broad Spectrum Antibiotic Xanthocillin X Effectively Kills <i>Acinetobacter baumannii</i> via Dysregulation of Heme Biosynthesis. <i>ACS Central Science</i> , 2021, 7, 488-498.	11.3	16
11	Pyochelin Biosynthetic Metabolites Bind Iron and Promote Growth in <i>Pseudomonads</i> Demonstrating Siderophore-like Activity. <i>ACS Infectious Diseases</i> , 2021, 7, 544-551.	3.8	16
12	Mining for mouth metabolites. <i>Nature Chemical Biology</i> , 2021, 17, 505-506.	8.0	0
13	The silent pandemic: Emergent antibiotic resistances following the global response to SARS-CoV-2. <i>IScience</i> , 2021, 24, 102304.	4.1	98
14	Trivalent sulfonium compounds (TSCs): Tetrahydrothiophene-based amphiphiles exhibit similar antimicrobial activity to analogous ammonium-based amphiphiles. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2021, 37, 127809.	2.2	11
15	An Efficient Synthesis of 3-Alkylpyridine Alkaloids Enables Their Biological Evaluation. <i>ChemMedChem</i> , 2021, 16, 2487-2490.	3.2	2
16	Promiscuous <i>Pseudomonas</i> : Uptake of non-endogenous ligands for iron acquisition. <i>Tetrahedron Letters</i> , 2021, 75, 153204.	1.4	1
17	Using membrane perturbing small molecules to target chronic persistent infections. <i>RSC Medicinal Chemistry</i> , 2021, 12, 1312-1324.	3.9	7
18	Structure-Activity Relationship and Anticancer Profile of Second-Generation Anti-MRSA Synthetic Retinoids. <i>ACS Medicinal Chemistry Letters</i> , 2020, 11, 393-397.	2.8	12

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19	A Bisphenolic Honokiol Analog Outcompetes Oral Antimicrobial Agent Cetylpyridinium Chloride via a Membrane-Associated Mechanism. <i>ACS Infectious Diseases</i> , 2020, 6, 74-79.	3.8	16
20	Analysis of the Destabilization of Bacterial Membranes by Quaternary Ammonium Compounds: A Combined Experimental and Computational Study. <i>ChemBioChem</i> , 2020, 21, 1510-1516.	2.6	41
21	Repurposing human kinase inhibitors to create an antibiotic active against drug-resistant <i>Staphylococcus aureus</i> , persisters and biofilms. <i>Nature Chemistry</i> , 2020, 12, 145-158.	13.6	78
22	A look around the West Indies: The spices of life are secondary metabolites. <i>Bioorganic and Medicinal Chemistry</i> , 2020, 28, 115792.	3.0	3
23	Advancements in the Development of Non-Nitrogen-Based Amphiphilic Antiseptics to Overcome Pathogenic Bacterial Resistance. <i>ChemMedChem</i> , 2020, 15, 1974-1984.	3.2	21
24	Are Quaternary Ammonium Compounds, the Workhorse Disinfectants, Effective against Severe Acute Respiratory Syndrome-Coronavirus-2?. <i>ACS Infectious Diseases</i> , 2020, 6, 1553-1557.	3.8	96
25	Addition of ethylamines to the phenols of bithionol and synthetic retinoids does not elicit activity in gram-negative bacteria. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2020, 30, 127099.	2.2	3
26	Asymmetric Total Synthesis of the Naturally Occurring Antibiotic Anthracimycin. <i>Organic Letters</i> , 2020, 22, 5550-5554.	4.6	8
27	Virulence attenuating combination therapy: a potential multi-target synergy approach to treat <i>Pseudomonas aeruginosa</i> infections in cystic fibrosis patients. <i>RSC Medicinal Chemistry</i> , 2020, 11, 358-369.	3.9	19
28	Further Investigations into Rigidity-Activity Relationships in BisQAC Amphiphilic Antiseptics. <i>ChemMedChem</i> , 2020, 15, 667-670.	3.2	17
29	Phylogeny-Guided Approach Yields Glycopeptides with Unique Action. <i>Trends in Pharmacological Sciences</i> , 2020, 41, 297-299.	8.7	5
30	Broadening Activity of Polymyxin by Quaternary Ammonium Grafting. <i>ACS Infectious Diseases</i> , 2020, 6, 1427-1435.	3.8	9
31	Target-Based Design of Promysalin Analogues Identifies a New Putative Binding Cleft in Succinate Dehydrogenase. <i>ACS Infectious Diseases</i> , 2020, 6, 1372-1377.	3.8	6
32	Total synthesis of (+)-pilosinine via a stereodivergent conjugate addition strategy. <i>Tetrahedron Letters</i> , 2020, 61, 151945.	1.4	2
33	The histone-like protein AlgP regulon is distinct in mucoid and nonmucoid <i>Pseudomonas aeruginosa</i> and does not include alginate biosynthesis genes. <i>Microbiology (United Kingdom)</i> , 2020, 166, 861-866.	1.8	4
34	From General to Specific: Can <i>Pseudomonas</i> Primary Metabolism Be Exploited for Narrow-Spectrum Antibiotics?. <i>ChemBioChem</i> , 2019, 20, 34-39.	2.6	8
35	A selective membrane-targeting repurposed antibiotic with activity against persistent methicillin-resistant <i>Staphylococcus aureus</i> . <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019, 116, 16529-16534.	7.1	117
36	More QACs, more questions: Recent advances in structure activity relationships and hurdles in understanding resistance mechanisms. <i>Tetrahedron Letters</i> , 2019, 60, 150935.	1.4	48

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37	Combined inhibition of Aurora A and p21-activated kinase 1 as a new treatment strategy in breast cancer. <i>Breast Cancer Research and Treatment</i> , 2019, 177, 369-382.	2.5	36
38	Synthetic Simplification of Carolacton Enables Chemical Genetic Studies in <i>Streptococcus mutans</i> . <i>ACS Infectious Diseases</i> , 2019, 5, 1480-1486.	3.8	7
39	Hijacking the Bacterial Circuitry of Biofilm Processes via Chemical "Hot-Wiring": An Under-explored Avenue for Therapeutic Development. <i>ACS Infectious Diseases</i> , 2019, 5, 789-795.	3.8	1
40	Targeting <i>S. mutans</i> biofilms: a perspective on preventing dental caries. <i>MedChemComm</i> , 2019, 10, 1057-1067.	3.4	60
41	Connecting iron acquisition and biofilm formation in the ESKAPE pathogens as a strategy for combatting antibiotic resistance. <i>MedChemComm</i> , 2019, 10, 505-512.	3.4	27
42	The Natural Product Elegaphenone Potentiates Antibiotic Effects against <i>Pseudomonas aeruginosa</i> . <i>Angewandte Chemie - International Edition</i> , 2019, 58, 8581-8584.	13.8	13
43	Signed, Sealed, Delivered: Conjugate and Prodrug Strategies as Targeted Delivery Vectors for Antibiotics. <i>ACS Infectious Diseases</i> , 2019, 5, 816-828.	3.8	31
44	Der Naturstoff Elegaphenon verstärkt antibiotische Effekte gegen <i>Pseudomonas aeruginosa</i> . <i>Angewandte Chemie</i> , 2019, 131, 8670-8674.	2.0	2
45	An Investigation into Rigidity-Activity Relationships in BisQAC Amphiphilic Antiseptics. <i>ChemMedChem</i> , 2019, 14, 83-87.	3.2	22
46	Identification of Specific and Nonspecific Inhibitors of <i>Bacillus anthracis</i> Type-III Pantothenate Kinase (Pank). <i>ChemMedChem</i> , 2019, 14, 78-82.	3.2	3
47	Claramines: A New Class Of Broad-Spectrum Antimicrobial Agents With Bimodal Activity. <i>ChemMedChem</i> , 2018, 13, 1018-1027.	3.2	23
48	Dual Inhibitor of <i>Staphylococcus aureus</i> Virulence and Biofilm Attenuates Expression of Major Toxins and Adhesins. <i>Biochemistry</i> , 2018, 57, 1814-1820.	2.5	10
49	Diverted Total Synthesis of the Baulamycins and Analogues Reveals an Alternate Mechanism of Action. <i>Organic Letters</i> , 2018, 20, 1126-1129.	4.6	12
50	Promysalin Elicits Species-Selective Inhibition of <i>Pseudomonas aeruginosa</i> by Targeting Succinate Dehydrogenase. <i>Journal of the American Chemical Society</i> , 2018, 140, 1774-1782.	13.7	63
51	A new class of synthetic retinoid antibiotics effective against bacterial persisters. <i>Nature</i> , 2018, 556, 103-107.	27.8	307
52	Honokiol-Inspired Analogs as Inhibitors of Oral Bacteria. <i>ACS Infectious Diseases</i> , 2018, 4, 118-122.	3.8	20
53	Canvass: A Crowd-Sourced, Natural-Product Screening Library for Exploring Biological Space. <i>ACS Central Science</i> , 2018, 4, 1727-1741.	11.3	32
54	Epoxy Isonitriles, A Unique Class of Antibiotics: Synthesis of Their Metabolites and Biological Investigations. <i>ChemBioChem</i> , 2018, 19, 2448-2452.	2.6	8

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55	Biologically Inspired Total Synthesis of Ulbactin F, an Iron-Binding Natural Product. <i>Organic Letters</i> , 2018, 20, 5922-5926.	4.6	15
56	Transcriptomic Profiling Suggests That Promysalin Alters the Metabolic Flux, Motility, and Iron Regulation in <i>Pseudomonas putida</i> KT2440. <i>ACS Infectious Diseases</i> , 2018, 4, 1179-1187.	3.8	6
57	Discovery and Optimization of nTZDpa as an Antibiotic Effective Against Bacterial Persisters. <i>ACS Infectious Diseases</i> , 2018, 4, 1540-1545.	3.8	33
58	Twelve-membered macrolactones: privileged scaffolds for the development of new therapeutics. <i>Chemical Biology and Drug Design</i> , 2017, 89, 169-191.	3.2	10
59	The Development of Next-Generation Pyridinium-Based multiQAC Antiseptics. <i>ChemMedChem</i> , 2017, 12, 280-283.	3.2	32
60	Ester- and amide-containing multiQACs: Exploring multicationic soft antimicrobial agents. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2017, 27, 2107-2112.	2.2	31
61	Diverted Total Synthesis of Carolacton-Inspired Analogs Yields Three Distinct Phenotypes in <i>Streptococcus mutans</i> Biofilms. <i>Journal of the American Chemical Society</i> , 2017, 139, 7188-7191.	13.7	27
62	Efflux Pumps Might Not Be the Major Drivers of QAC Resistance in Methicillin-Resistant <i>Staphylococcus aureus</i> . <i>ChemBioChem</i> , 2017, 18, 1573-1577.	2.6	33
63	A novel application of the Staudinger ligation to access neutral cyclic di-nucleotide analog precursors via a divergent method. <i>RSC Advances</i> , 2017, 7, 29835-29838.	3.6	4
64	Hybrid BisQACs: Potent Biscationic Quaternary Ammonium Compounds Merging the Structures of Two Commercial Antiseptics. <i>ChemMedChem</i> , 2017, 12, 1931-1934.	3.2	20
65	EroS Enzyme from <i>Aliivibrio fischeri</i> Plays Cupid to Choanoflagellates. <i>ChemBioChem</i> , 2017, 18, 2298-2300.	2.6	0
66	Natural Products as Platforms To Overcome Antibiotic Resistance. <i>Chemical Reviews</i> , 2017, 117, 12415-12474.	47.7	393
67	Building a Better Quaternary Ammonium Compound (QAC): Branched Tetracationic Antiseptic Amphiphiles. <i>ChemMedChem</i> , 2016, 11, 1401-1405.	3.2	45
68	Diverted Total Synthesis of Promysalin Analogs Demonstrates That an Iron-Binding Motif Is Responsible for Its Narrow-Spectrum Antibacterial Activity. <i>Journal of the American Chemical Society</i> , 2016, 138, 5833-5836.	13.7	29
69	Structure-Resistance Relationships: Interrogating Antiseptic Resistance in Bacteria with Multicationic Quaternary Ammonium Dyes. <i>ChemMedChem</i> , 2016, 11, 958-962.	3.2	36
70	William M. Wuest. <i>Tetrahedron</i> , 2016, 72, 3548.	1.9	0
71	An optimized synthesis of the potent and selective Pak1 inhibitor FRAX-1036. <i>Tetrahedron Letters</i> , 2016, 57, 449-451.	1.4	5
72	The enantioselective synthesis and biological evaluation of chimeric promysalin analogs facilitated by diverted total synthesis. <i>Journal of Antibiotics</i> , 2016, 69, 337-339.	2.0	9

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73	From antimicrobial activity to mechanism of resistance: the multifaceted role of simple quaternary ammonium compounds in bacterial eradication. <i>Tetrahedron</i> , 2016, 72, 3559-3566.	1.9	85
74	Natural product-derived quaternary ammonium compounds with potent antimicrobial activity. <i>Journal of Antibiotics</i> , 2016, 69, 344-347.	2.0	28
75	Polymeric Quaternary Ammonium Compounds: Versatile Antimicrobial Materials. <i>Current Topics in Medicinal Chemistry</i> , 2016, 17, 305-318.	2.1	62
76	Scaffold Hopping of Multicationic Amphiphiles Yields Three New Classes of Antimicrobials. <i>ChemBioChem</i> , 2015, 16, 2299-2303.	2.6	36
77	Quaternary Ammonium Compounds: An Antimicrobial Mainstay and Platform for Innovation to Address Bacterial Resistance. <i>ACS Infectious Diseases</i> , 2015, 1, 288-303.	3.8	441
78	Total Synthesis and Biological Investigation of (α^+)-Promysalin. <i>Journal of the American Chemical Society</i> , 2015, 137, 7314-7317.	13.7	34
79	The Rhizosphere Microbiome: A Playground for Natural Product Chemists. <i>Synlett</i> , 2015, 26, 2739-2744.	1.8	15
80	Molecular Simulation of Conformational Pre-Organization in Cyclic RGD Peptides. <i>Journal of Chemical Information and Modeling</i> , 2015, 55, 806-813.	5.4	43
81	Bioorganic Investigation of Multicationic Antimicrobials to Combat QAC-Resistant <i>Staphylococcus aureus</i> . <i>ACS Infectious Diseases</i> , 2015, 1, 304-309.	3.8	73
82	The antimicrobial activity of mono-, bis-, tris-, and tetracationic amphiphiles derived from simple polyamine platforms. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2014, 24, 5824-5828.	2.2	41
83	Computational Screening and Selection of Cyclic Peptide Hairpin Mimetics by Molecular Simulation and Kinetic Network Models. <i>Journal of Chemical Information and Modeling</i> , 2014, 54, 1425-1432.	5.4	47
84	A Concise Synthesis of Carolacton. <i>Organic Letters</i> , 2014, 16, 1148-1151.	4.6	33
85	Biofilm Eradicating Properties of Quaternary Ammonium Amphiphiles: Simple Mimics of Antimicrobial Peptides. <i>ChemBioChem</i> , 2014, 15, 2211-2215.	2.6	126
86	Synthesis of cyclic dimeric methyl morpholinolide a common synthetic precursor to cyclic dinucleotide analogs. <i>Tetrahedron Letters</i> , 2014, 55, 4966-4968.	1.4	11
87	Draining the moat: disrupting bacterial biofilms with natural products. <i>Tetrahedron</i> , 2014, 70, 6373-6383.	1.9	29
88	Beyond paraquats: Dialkyl 3,3'- and 3,4'-bipyridinium amphiphiles as antibacterial agents. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2014, 24, 3706-3709.	2.2	22
89	TMEDA-derived biscationic amphiphiles: An economical preparation of potent antibacterial agents. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2014, 24, 99-102.	2.2	34
90	Enzymatic Timing and Tailoring of Macrolactamization in Syringolin Biosynthesis. <i>Organic Letters</i> , 2011, 13, 4518-4521.	4.6	12

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91	Three Siderophores from One Bacterial Enzymatic Assembly Line. <i>Journal of the American Chemical Society</i> , 2009, 131, 5056-5057.	13.7	65
92	SylC Catalyzes Ureido-Bond Formation During Biosynthesis of the Proteasome Inhibitor Syringolin A. <i>Journal of the American Chemical Society</i> , 2009, 131, 18263-18265.	13.7	41
93	<i>Ortho</i> -TMS Benzaldehyde: An Effective Linchpin for Type-II Anion Relay Chemistry (ARC). <i>Angewandte Chemie - International Edition</i> , 2008, 47, 7082-7086.	13.8	46
94	Evolution of multi-component anion relay chemistry (ARC): construction of architecturally complex natural and unnatural products. <i>Chemical Communications</i> , 2008, , 5883.	4.1	135
95	Total Synthesis of (âˆš)-2-epi-Peloruside A. <i>Organic Letters</i> , 2008, 10, 5501-5504.	4.6	36
96	Intramolecular Hydroamination of Aminoalkynes with Silverâˆš-Phenanthroline Catalysts. <i>Organic Letters</i> , 2008, 10, 3903-3906.	4.6	70