

Wei-Chieh Cheng

List of Publications by Year in descending order

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Version: 2024-02-01

49
papers

1,824
citations

361296

20
h-index

265120

42
g-index

53
all docs

53
docs citations

53
times ranked

1696
citing authors

#	ARTICLE	IF	CITATIONS
1	Nonlinear partial differential equations and applications: Chemical chaperones increase the cellular activity of N370S β -glucosidase: A therapeutic strategy for Gaucher disease. Proceedings of the National Academy of Sciences of the United States of America, 2002, 99, 15428-15433.	3.3	495
2	Crystal structure of the membrane-bound bifunctional transglycosylase PBP1b from <i>Escherichia coli</i> . Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 8824-8829.	3.3	180
3	A convenient approach toward the synthesis of enantiopure isomers of DMDP and ADMDP. Tetrahedron, 2009, 65, 93-100.	1.0	105
4	Novel Five-Membered Iminocyclitol Derivatives as Selective and Potent Glycosidase Inhibitors: New Structures for Antivirals and Osteoarthritis. ChemBioChem, 2006, 7, 165-173.	1.3	99
5	Crystal structure of <i>Staphylococcus aureus</i> transglycosylase in complex with a lipid II analog and elucidation of peptidoglycan synthesis mechanism. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 6496-6501.	3.3	87
6	Synthesis and biological evaluation of a 2-aryl polyhydroxylated pyrrolidine alkaloid-based library. Bioorganic and Medicinal Chemistry, 2008, 16, 10198-10204.	1.4	66
7	Domain requirement of moenomycin binding to bifunctional transglycosylases and development of high-throughput discovery of antibiotics. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 431-436.	3.3	66
8	Synthesis and Evaluation of a New Fluorescent Transglycosylase Substrate: Lipid II-Based Molecule Possessing a Dansyl-C20 Polyprenyl Moiety. Organic Letters, 2010, 12, 1608-1611.	2.4	49
9	A New Synthetic Approach toward Bacterial Transglycosylase Substrates, Lipid II and Lipid IV. Organic Letters, 2011, 13, 4600-4603.	2.4	43
10	New Continuous Fluorometric Assay for Bacterial Transglycosylase Using Förster Resonance Energy Transfer. Journal of the American Chemical Society, 2013, 135, 17078-17089.	6.6	40
11	Combinatorial approach toward synthesis of small molecule libraries as bacterial transglycosylase inhibitors. Organic and Biomolecular Chemistry, 2010, 8, 2586.	1.5	38
12	Straightforward Synthesis of Diverse 1-Deoxyazapyranosides via Stereocontrolled Nucleophilic Additions to Six-Membered Cyclic Nitrones. European Journal of Organic Chemistry, 2010, 2010, 5555-5559.	1.2	34
13	Carbohydrate scaffolds as glycosyltransferase inhibitors with in vivo antibacterial activity. Nature Communications, 2015, 6, 7719.	5.8	34
14	Rapid Discovery of Potent Sulfotransferase Inhibitors by Diversity-Oriented Reaction in Microplates Followed by in situ Screening. ChemBioChem, 2004, 5, 811-819.	1.3	33
15	Solid-Phase Organic Synthesis of Polyisoprenoid Alcohols with Traceless Sulfone Linker. Journal of Organic Chemistry, 2008, 73, 7197-7203.	1.7	27
16	From Natural Product-Inspired Pyrrolidine Scaffolds to the Development of New Human Golgi β -Mannosidase II Inhibitors. Chemistry - an Asian Journal, 2013, 8, 2600-2604.	1.7	27
17	Parallel synthesis of natural product-like polyhydroxylated pyrrolidine and piperidine alkaloids. Molecular Diversity, 2011, 15, 203-214.	2.1	26
18	Effect of the Peptide Moiety of Lipid II on Bacterial Transglycosylase. Angewandte Chemie - International Edition, 2012, 51, 10123-10126.	7.2	26

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19	Rapid modifications of N-substitution in iminosugars: Development of new Î ² -glucocerebrosidase inhibitors and pharmacological chaperones for Gaucher disease. <i>Bioorganic and Medicinal Chemistry</i> , 2013, 21, 5021-5028.	1.4	26
20	Affinity-Based Screen for Inhibitors of Bacterial Transglycosylase. <i>Journal of the American Chemical Society</i> , 2018, 140, 2752-2755.	6.6	24
21	Total Synthesis of Polyprenyl <i>N</i> -Glycolyl Lipid II as a Mycobacterial Transglycosylase Substrate. <i>Organic Letters</i> , 2011, 13, 5306-5309.	2.4	23
22	Solution-phase parallel synthesis of highly diverse spiroisoxazolinohydantoins. <i>Tetrahedron Letters</i> , 2008, 49, 1008-1011.	0.7	19
23	Synthesis of Diverse <i>N</i> -Substituted Muramyl Dipeptide Derivatives and Their Use in a Study of Human NOD2 Stimulation Activity. <i>Chemistry - A European Journal</i> , 2015, 21, 11984-11988.	1.7	19
24	Traceless sulfone linker cleavage triggered by ozonolysis: solid-phase synthesis of diverse Î±-Î²-unsaturated carbonyl compounds. <i>Tetrahedron Letters</i> , 2008, 49, 543-547.	0.7	18
25	Rapid Preparation of Mycobacterium <i>N</i> -Glycolyl Lipid I and Lipid II Derivatives: A Biocatalytic Approach. <i>Chemistry - A European Journal</i> , 2013, 19, 834-838.	1.7	17
26	Synthesis and Inhibition Study of Bicyclic Iminosugar-Based Alkaloids, Scaffolds, and Libraries towards Glucosidase. <i>Israel Journal of Chemistry</i> , 2015, 55, 403-411.	1.0	17
27	Solution-Phase Parallel Synthesis of Novel Spirooxazolinoisoxazolines. <i>ACS Combinatorial Science</i> , 2009, 11, 281-287.	3.3	16
28	Bioevaluation of sixteen ADMDP stereoisomers toward alpha-galactosidase A: Development of a new pharmacological chaperone for the treatment of Fabry disease and potential enhancement of enzyme replacement therapy efficiency. <i>European Journal of Medicinal Chemistry</i> , 2016, 123, 14-20.	2.6	15
29	Synthesis of novel polyhydroxylated pyrrolidine-triazole-isoxazole hybrid molecules. <i>Organic and Biomolecular Chemistry</i> , 2015, 13, 2100-2107.	1.5	14
30	Structural establishment of polygalatenosides A and B by total synthesis. <i>Tetrahedron Letters</i> , 2008, 49, 2895-2898.	0.7	13
31	Structural Investigation of Parkin's Nucleotide on Bacterial Translocase MraY: Discovery of Unexpected MraY Inhibitors. <i>Scientific Reports</i> , 2016, 6, 31579.	1.6	13
32	Rapid preparation of (3R,4S,5R) polyhydroxylated pyrrolidine-based libraries to discover a pharmacological chaperone for treatment of Fabry disease. <i>European Journal of Medicinal Chemistry</i> , 2017, 126, 1-6.	2.6	13
33	Synthesis of <i>N</i> -Glycoside-Linked Lipid Analogs Toward Bacterial Transglycosylase Inhibition. <i>Chemistry - A European Journal</i> , 2015, 21, 7511-7519.	1.7	12
34	A combinatorial approach towards the synthesis of non-hydrolysable triazole-iduronic acid hybrid inhibitors of human Î±-iduronidase: discovery of enzyme stabilizers for the potential treatment of MPSI. <i>Chemical Communications</i> , 2018, 54, 2647-2650.	2.2	11
35	Further Insights on Structural Modifications of Muramyl Dipeptides to Study the Human NOD2 Stimulating Activity. <i>Chemistry - an Asian Journal</i> , 2020, 15, 3836-3844.	1.7	11
36	Solid-Phase Synthesis of Diverse Spiroisoxazolinodiketopiperazines. <i>ACS Combinatorial Science</i> , 2013, 15, 425-434.	3.8	9

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37	One-pot synthesis of phosphate diesters and phosphonate monoesters via a combination of microwave-CCl ₃ CN-pyridine coupling conditions. <i>Tetrahedron Letters</i> , 2012, 53, 243-246.	0.7	8
38	Harnessing natural-product-inspired combinatorial chemistry and computation-guided synthesis to develop N-glycan modulators as anticancer agents. <i>Chemical Science</i> , 2022, 13, 6233-6243.	3.7	8
39	Effect of the lipid II sugar moiety on bacterial transglycosylase: the 4-hydroxy epimer of lipid II is a TGase inhibitor. <i>Chemical Communications</i> , 2017, 53, 771-774.	2.2	7
40	Divergent Synthesis of Bicyclic Iminosugars: Preparation of Swainsonine-Based Alkaloids and Their Inhibition Study towards Human Mannosidases. <i>Asian Journal of Organic Chemistry</i> , 2019, 8, 2233-2242.	1.3	7
41	Expedient Synthesis of Enantiopure, Orthogonally Protected Bis-Amino Acids (OPBAAs) and their Use in a Study of Nod1 Stimulation. <i>Chemistry - an Asian Journal</i> , 2015, 10, 474-482.	1.7	6
42	A concise approach to the synthesis of the unique N-mannosyl-1,2-hydroxyenduracididine moiety in the mannopeptimycin series of natural products. <i>Organic and Biomolecular Chemistry</i> , 2016, 14, 4054-4060.	1.5	6
43	Synthesis of (3S,4S,5S)-trihydroxypiperidine derivatives as enzyme stabilizers to improve therapeutic enzyme activity in Fabry patient cell lines. <i>European Journal of Medicinal Chemistry</i> , 2018, 144, 626-634.	2.6	6
44	Rapid Synthesis of a Natural Product-Inspired Uridine Containing Library. <i>ACS Combinatorial Science</i> , 2020, 22, 600-607.	3.8	2
45	Design and Synthesis of Orthogonally Protected d- and l-1,2-Hydroxyenduracididines from d-lyxono-1,4-Lactone. <i>Organic Letters</i> , 2016, 18, 5216-5219.	2.4	1
46	Harnessing Fluorescent Moenomycin A Antibiotics for Bacterial Cell Wall Imaging Studies. <i>ChemBioChem</i> , 2021, 22, 3462-3468.	1.3	1
47	Synthesis of Nitrone-derived Pyrrolidine Scaffolds and Their Combinatorial Libraries to Develop Selective Rhamnosidase Inhibitors. <i>Chemistry - an Asian Journal</i> , 2022, , .	1.7	1
48	Synthesis and Evaluation of Diverse N-Substituted Disaccharide Dipeptides for Human NOD2 Stimulation Activity. <i>Chemistry - an Asian Journal</i> , 2021, , .	1.7	0
49	Versatile Azido-Functionalized Carbon Dots for Cancer Cell Imaging. <i>ACS Applied Nano Materials</i> , 2022, 5, 12374-12379.	2.4	0