Erin E Carlson

List of Publications by Year
in descending order

69 papers	5,387 citations	201674 27 h-index	91884 69 g-index
87 all docs	87 docs citations	87 times ranked	8368 citing authors

#	Article	IF	Citations
1	Activity-based ATP analog probes for bacterial histidine kinases. Methods in Enzymology, 2022, 664, 59-84.	1.0	3
2	High-level carbapenem tolerance requires antibiotic-induced outer membrane modifications. PLoS Pathogens, 2022, 18, e1010307.	4.7	18
3	Expanded profiling of Î²-lactam selectivity for penicillin-binding proteins in Streptococcus pneumoniae D39. Biological Chemistry, 2022, 403, 433-443.	2.5	5
4	Live-Cell Profiling of Penicillin-Binding Protein Inhibitors in Escherichia coli MG1655. ACS Infectious Diseases, 2022, 8, 1241-1252.	3.8	5
5	Organization of peptidoglycan synthesis in nodes and separate rings at different stages of cell division of Streptococcus pneumoniae. Molecular Microbiology, 2021, 115, 1152-1169.	2.5	22
6	Comparison of Bioorthogonal Î²â€Lactone Activityâ€Based Probes for Selective Labeling of Penicillinâ€Binding Proteins. ChemBioChem, 2021, 22, 193-202.	2.6	11
7	Targeting a highly conserved domain in bacterial histidine kinases to generate inhibitors with broad spectrum activity. Current Opinion in Microbiology, 2021, 61, 107-114.	5.1	17
8	Looks can be deceiving: Bacterial enzymes work through unanticipated mechanism. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, e2114568118.	7.1	1
9	Ion Mobility Mass Spectrometry as an Efficient Tool for Identification of Streptorubin B in Streptomyces coelicolor M145. Journal of Natural Products, 2020, 83, 159-163.	3.0	4
10	Enzyme-targeted fluorescent small-molecule probes for bacterial imaging. Current Opinion in Chemical Biology, 2020, 57, 155-165.	6.1	21
11	Modified nucleoside triphosphates in bacterial research for in vitro and live-cell applications. RSC Chemical Biology, 2020, 1, 333-351.	4.1	13
12	2â€Aminobenzothiazoles Inhibit Virulence Gene Expression and Block Polymyxin Resistance in Salmonella enterica. ChemBioChem, 2020, 21, 3500-3503.	2.6	6
13	Advancing Chemical Microbiology. ACS Chemical Biology, 2020, 15, 1115-1118.	3.4	1
14	Harnessing Î²-Lactam Antibiotics for Illumination of the Activity of Penicillin-Binding Proteins in Bacillus subtilis. ACS Chemical Biology, 2020, 15, 1242-1251.	3.4	29
15	Mechanistic Studies of Bioorthogonal ATP Analogues for Assessment of Histidine Kinase Autophosphorylation. ACS Chemical Biology, 2020, 15, 1252-1260.	3.4	11
16	Chemical tools for selective activity profiling of bacterial penicillin-binding proteins. Methods in Enzymology, 2020, 638, 27-55.	1.0	14
17	Chronic exposure to complex metal oxide nanoparticles elicits rapid resistance in Shewanella oneidensis MR-1. Chemical Science, 2019, 10, 9768-9781.	7.4	22
18	Biological impact of nanoscale lithium intercalating complex metal oxides to model bacteriumB. subtilis. Environmental Science: Nano, 2019, 6, 305-314.	4.3	9

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19	Preferential Binding of Cytochrome c to Anionic Ligand-Coated Gold Nanoparticles: A Complementary Computational and Experimental Approach. ACS Nano, 2019, 13, 6856-6866.	14.6	31
20	Structure Elucidation of Macrolide Antibiotics Using MSⁿ Analysis and Deuterium Labelling. Journal of the American Society for Mass Spectrometry, 2019, 30, 1464-1480.	2.8	4
21	Streptomyces Volatile Compounds Influence Exploration and Microbial Community Dynamics by Altering Iron Availability. MBio, 2019, 10, .	4.1	47
22	Silencing cryptic specialized metabolism in Streptomyces by the nucleoid-associated protein Lsr2. ELife, 2019, 8, .	6.0	48
23	Screening serine/threonine and tyrosine kinase inhibitors for histidine kinase inhibition. Bioorganic and Medicinal Chemistry, 2018, 26, 5322-5326.	3.0	12
24	Activity-Based Protein Profiling Methods to Study Bacteria: The Power of Small-Molecule Electrophiles. Current Topics in Microbiology and Immunology, 2018, 420, 23-48.	1.1	13
25	Exploration of the Effects of Î³-Phosphate-Modified ATP Analogues on Histidine Kinase Autophosphorylation. Biochemistry, 2018, 57, 4368-4373.	2.5	13
26	Tiny Things with Enormous Impact: Nanotechnology in the Fight Against Infectious Disease. ACS Infectious Diseases, 2018, 4, 1432-1435.	3.8	15
27	Disarming the virulence arsenal of Pseudomonas aeruginosa by blocking two-component system signaling. Chemical Science, 2018, 9, 7332-7337.	7.4	31
28	Real-Time Visualization of in Vitro Transcription of a Fluorescent RNA Aptamer: An Experiment for the Upper-Division Undergraduate or First-Year Graduate Laboratory. Journal of Chemical Education, 2018, 95, 1867-1871.	2.3	13
29	Novel Electrophilic Scaffold for Imaging of Essential Penicillin-Binding Proteins in Streptococcus pneumoniae. ACS Chemical Biology, 2017, 12, 2849-2857.	3.4	32
30	Rational Design of Selective Adenine-Based Scaffolds for Inactivation of Bacterial Histidine Kinases. Journal of Medicinal Chemistry, 2017, 60, 8170-8182.	6.4	17
31	Mass spectrometry-based assay for the rapid detection of thiol-containing natural products. Chemical Communications, 2016, 52, 13229-13232.	4.1	21
32	Sharing and community curation of mass spectrometry data with Global Natural Products Social Molecular Networking. Nature Biotechnology, 2016, 34, 828-837.	17.5	2,802
33	Progress and prospects for small-molecule probes of bacterial imaging. Nature Chemical Biology, 2016, 12, 472-478.	8.0	89
34	Thiol-ene-Enabled Detection of Thiophosphorylation as a Labeling Strategy for Phosphoproteins. Methods in Molecular Biology, 2016, 1355, 3-15.	0.9	1
35	Biological Responses to Engineered Nanomaterials: Needs for the Next Decade. ACS Central Science, 2015, 1, 117-123.	11.3	121
36	Inactivation of Multiple Bacterial Histidine Kinases by Targeting the ATP-Binding Domain. ACS Chemical Biology, 2015, 10, 328-335.	3.4	53

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37	A reinvigorated era of bacterial secondary metabolite discovery. Current Opinion in Chemical Biology, 2015, 24, 104-111.	6.1	10
38	Collision-Induced Dissociation Mass Spectrometry: A Powerful Tool for Natural Product Structure Elucidation. Analytical Chemistry, 2015, 87, 10668-10678.	6.5	83
39	Profiling of Î²-Lactam Selectivity for Penicillin-Binding Proteins in Escherichia coli Strain DC2. Antimicrobial Agents and Chemotherapy, 2015, 59, 2785-2790.	3.2	144
40	Profiling of Î²-Lactam Selectivity for Penicillin-Binding Proteins in Streptococcus pneumoniae D39. Antimicrobial Agents and Chemotherapy, 2015, 59, 3548-3555.	3.2	87
41	Chemoselective enrichment as a tool to increase access to bioactive natural products: Case study borrelidin. Bioorganic and Medicinal Chemistry Letters, 2015, 25, 4767-4769.	2.2	6
42	Accurate Mass MS/MS/MS Analysis of Siderophores Ferrioxamine B and E1 by Collision-Induced Dissociation Electrospray Mass Spectrometry. Journal of the American Society for Mass Spectrometry, 2015, 26, 1899-1902.	2.8	8
43	<scp>Pbp2x</scp> localizes separately from <scp>Pbp2b</scp> and other peptidoglycan synthesis proteins during later stages of cell division of <scp>S</scp>treptococcus pneumoniaeâ€...<scp>D</scp>39. Molecular Microbiology, 2014, 94, 21-40.	2.5	88
44	Negatively-charged helices in the gas phase. Chemical Communications, 2014, 50, 8849.	4.1	6
45	Toward the development of solid-supported reagents for separation of alcohol-containing compounds by steric environment. Tetrahedron, 2014, 70, 4191-4196.	1.9	4
46	Taming of a Superbase for Selective Phenol Desilylation and Natural Product Isolation. Journal of Organic Chemistry, 2013, 78, 7349-7355.	3.2	15
47	Requirement of essential <scp>P</scp>bp2x and <scp>GpsB</scp> for septal ring closure in <scp>S</scp>treptococcus pneumoniaeâ€...<scp>D</scp>39. Molecular Microbiology, 2013, 90, 939-955.	2.5	103
48	Mechanistic insight into inhibition of two-component system signaling. MedChemComm, 2013, 4, 269-277.	3.4	14
49	PROFILE: Early Excellence in Physical Organic Chemistry. Journal of Physical Organic Chemistry, 2013, 26, 1-1.	1.9	0
50	Plant Pigment Identification: A Classroom and Outreach Activity. Journal of Chemical Education, 2013, 90, 755-759.	2.3	19
51	Thiol-ene Enabled Detection of Thiophosphorylated Kinase Substrates. ACS Chemical Biology, 2013, 8, 1671-1676.	3.4	22
52	Integrated Metabolomics Approach Facilitates Discovery of an Unpredicted Natural Product Suite from Streptomyces coelicolor M145. ACS Chemical Biology, 2013, 8, 2009-2016.	3.4	62
53	All Signals Lost. Science Translational Medicine, 2013, 5, 203ps12.	12.4	16
54	Penicillinâ€Binding Protein Imaging Probes. Current Protocols in Chemical Biology, 2013, 5, 239-250.	1.7	28

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55	Chemoselective hydroxyl group transformation: an elusive target. Molecular BioSystems, 2012, 8, 2484.	2.9	40
56	Activity-Based Probe for Histidine Kinase Signaling. Journal of the American Chemical Society, 2012, 134, 9150-9153.	13.7	47
57	Selective Penicillin-Binding Protein Imaging Probes Reveal Substructure in Bacterial Cell Division. ACS Chemical Biology, 2012, 7, 1746-1753.	3.4	82
58	Activityâ€Based Probes for Penicillinâ€Binding Protein Imaging. FASEB Journal, 2012, 26, 1000.1.	0.5	2
59	Siloxyl Ether Functionalized Resins for Chemoselective Enrichment of Carboxylic Acids. Organic Letters, 2011, 13, 5652-5655.	4.6	24
60	Chemoselective enrichment for natural products discovery. Chemical Science, 2011, 2, 760.	7.4	36
61	Natural Products as Chemical Probes. ACS Chemical Biology, 2010, 5, 639-653.	3.4	189
62	A general glycomimetic strategy yields non-carbohydrate inhibitors of DC-SIGN. Chemical Communications, 2010, 46, 6747.	4.1	58
63	Enrichment Tags for Enhanced-Resolution Profiling of the Polar Metabolome. Journal of the American Chemical Society, 2007, 129, 15780-15782.	13.7	53
64	Chemoselective probes for metabolite enrichment and profiling. Nature Methods, 2007, 4, 429-435.	19.0	88
65	Chemical Probes of UDP-Galactopyranose Mutase. Chemistry and Biology, 2006, 13, 825-837.	6.0	119
66	Novel Heterocyclic Trans Olefin Analogues of N-{4-[4-(2,3-Dichlorophenyl)piperazin-1-yl]butyl}arylcarboxamides as Selective Probes with High Affinity for the Dopamine D3 Receptor. Journal of Medicinal Chemistry, 2005, 48, 839-848.	6.4	119
67	A unique catalytic mechanism for UDP-galactopyranose mutase. Nature Structural and Molecular Biology, 2004, 11, 539-543.	8.2	125
68	Identification of Inhibitors for UDP-Galactopyranose Mutase. Journal of the American Chemical Society, 2004, 126, 10532-10533.	13.7	93
69	Improved Chemical Syntheses of 1- and 5-Deazariboflavin. Journal of Organic Chemistry, 2004, 69, 2614-2617.	3.2	15