Shahriar Mobashery

List of Publications by Year
in descending order

352 papers	20,754 citations	11651 70 h-index	17105 122 g-index
373 all docs	373 docs citations	373 times ranked	18642 citing authors

#	Article	IF	Citations
1	Structure-based inhibitor design for reshaping bacterial morphology. Communications Biology, 2022, 5, 395.	4.4	1
2	An Atypical ABC Transporter Is Involved in Antifungal Resistance and Host Interactions in the Pathogenic Fungus Cryptococcus neoformans. MBio, 2022, 13, .	4.1	16
3	Proteomics Identification of Targets for Intervention in Pressure Ulcers. ACS Chemical Biology, 2022, 17, 1357-1363.	3.4	2
4	Selective MMP-9 Inhibitor (<i>R</i>)-ND-336 Alone or in Combination with Linezolid Accelerates Wound Healing in Infected Diabetic Mice. ACS Pharmacology and Translational Science, 2021, 4, 107-117.	4.9	17
5	Unconventional Antibacterials and Adjuvants. Accounts of Chemical Research, 2021, 54, 917-929.	15.6	20
6	Turnover Chemistry and Structural Characterization of the Cj0843c Lytic Transglycosylase of <i>Campylobacter jejuni</i>. Biochemistry, 2021, 60, 1133-1144.	2.5	3
7	Bacterial Cell Wall: Morphology and Biochemistry. , 2021, , 167-204.		5
8	Metabolism of the Selective Matrix Metalloproteinase-9 Inhibitor (<i>R</i>)-ND-336. ACS Pharmacology and Translational Science, 2021, 4, 1204-1213.	4.9	4
9	Structureâ€“Activity Relationship for the Picolinamide Antibacterials that Selectively Target Clostridioides difficile. ACS Medicinal Chemistry Letters, 2021, 12, 991-995.	2.8	0
10	Turnover chemistry and structural characterization of the Cj0843c lytic transglycosylase of Campylobacter jejuni. FASEB Journal, 2021, 35, .	0.5	0
11	Production of Proteins of the SARS-CoV-2 Proteome for Drug Discovery. ACS Omega, 2021, 6, 19983-19994.	3.5	6
12	Integrative structural biology of the penicillin-binding protein-1 from Staphylococcus aureus, an essential component of the divisome machinery. Computational and Structural Biotechnology Journal, 2021, 19, 5392-5405.	4.1	2
13	Î²-Lactams against the Fortress of the Gram-Positive <i>Staphylococcus aureus</i> Bacterium. Chemical Reviews, 2021, 121, 3412-3463.	47.7	52
14	Horizontal-Acquisition of a Promiscuous Peptidoglycan-Recycling Enzyme Enables Aphids To Influence Symbiont Cell Wall Metabolism. MBio, 2021, 12, e0263621.	4.1	6
15	Structureâ€“Activity Relationship for the Oxadiazole Class of Antibacterials. ACS Medicinal Chemistry Letters, 2020, 11, 322-326.	2.8	18
16	Constructing and deconstructing the bacterial cell wall. Protein Science, 2020, 29, 629-646.	7.6	41
17	Catalytic Cycle of Glycoside Hydrolase BglX from <i>Pseudomonas aeruginosa</i> and Its Implications for Biofilm Formation. ACS Chemical Biology, 2020, 15, 189-196.	3.4	11
18	Hyperbaric oxygen therapy accelerates wound healing in diabetic mice by decreasing active matrix metalloproteinaseâ€9. Wound Repair and Regeneration, 2020, 28, 194-201.	3.0	15

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19	Discovery of a Potent Picolinamide Antibacterial Active against <i>Clostridioides difficile</i>. ACS Infectious Diseases, 2020, 6, 2362-2368.	3.8	8
20	Peptidoglycan reshaping by a noncanonical peptidase for helical cell shape in Campylobacter jejuni. Nature Communications, 2020, 11, 458.	12.8	14
21	Fluorescence Assessment of the AmpR-Signaling Network of <i>Pseudomonas aeruginosa</i> to Exposure to Î²-Lactam Antibiotics. ACS Chemical Biology, 2020, 15, 1184-1194.	3.4	7
22	Exploration of the Structural Space in 4(3<i>H</i>)-Quinazolinone Antibacterials. Journal of Medicinal Chemistry, 2020, 63, 5287-5296.	6.4	28
23	A type VI secretion system delivers a cell wall amidase to target bacterial competitors. Molecular Microbiology, 2020, 114, 308-321.	2.5	25
24	Cinnamonitrile Adjuvants Restore Susceptibility to Î²-Lactams against Methicillin-Resistant Staphylococcus aureus. ACS Medicinal Chemistry Letters, 2019, 10, 1148-1153.	2.8	10
25	Susceptibility of Methicillin-Resistant Staphylococcus aureus to Five Quinazolinone Antibacterials. Antimicrobial Agents and Chemotherapy, 2019, 64, .	3.2	2
26	The Quinazolinone Allosteric Inhibitor of PBP 2a Synergizes with Piperacillin and Tazobactam against Methicillin-Resistant Staphylococcus aureus. Antimicrobial Agents and Chemotherapy, 2019, 63, .	3.2	40
27	Structural basis of denuded glycan recognition by SPOR domains in bacterial cell division. Nature Communications, 2019, 10, 5567.	12.8	29
28	Slt, MltD, and MltG of <i>Pseudomonas aeruginosa</i> as Targets of Bulgecin A in Potentiation of Î²-Lactam Antibiotics. ACS Chemical Biology, 2019, 14, 296-303.	3.4	28
29	Exolytic and endolytic turnover of peptidoglycan by lytic transglycosylase Slt of <i>Pseudomonas aeruginosa</i>. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 4393-4398.	7.1	31
30	Potentiation of the activity of Î²-lactam antibiotics by farnesol and its derivatives. Bioorganic and Medicinal Chemistry Letters, 2018, 28, 642-645.	2.2	18
31	Allostery, Recognition of Nascent Peptidoglycan, and Cross-linking of the Cell Wall by the Essential Penicillin-Binding Protein 2x of <i>Streptococcus pneumoniae</i>. ACS Chemical Biology, 2018, 13, 694-702.	3.4	29
32	Total Syntheses of Bulgecins A, B, and C and Their Bactericidal Potentiation of the Î²-Lactam Antibiotics. ACS Infectious Diseases, 2018, 4, 860-867.	3.8	27
33	Mechanism of the Escherichia coli MltE lytic transglycosylase, the cell-wall-penetrating enzyme for Type VI secretion system assembly. Scientific Reports, 2018, 8, 4110.	3.3	27
34	Structureâ€“activity relationship of the cinnamamide family of antibiotic potentiators for methicillin-resistant <i>Staphylococcus aureus</i> (MRSA). MedChemComm, 2018, 9, 2008-2016.	3.4	5
35	MMP-9 inhibitors impair learning in spontaneously hypertensive rats. PLoS ONE, 2018, 13, e0208357.	2.5	10
36	A Structural Dissection of the Active Site of the Lytic Transglycosylase MltE from <i>Escherichia coli</i>. Biochemistry, 2018, 57, 6090-6098.	2.5	2

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37	A positive positive to negative. Nature Chemistry, 2018, 10, 998-1000.	13.6	2
38	Validation of Matrix Metalloproteinase-9 (MMP-9) as a Novel Target for Treatment of Diabetic Foot Ulcers in Humans and Discovery of a Potent and Selective Small-Molecule MMP-9 Inhibitor That Accelerates Healing. Journal of Medicinal Chemistry, 2018, 61, 8825-8837.	6.4	82
39	Cell-Wall Recycling of the Gram-Negative Bacteria and the Nexus to Antibiotic Resistance. Chemical Reviews, 2018, 118, 5952-5984.	47.7	154
40	Expression of active matrix metalloproteinase-9 as a likely contributor to the clinical failure of aclerastide in treatment of diabetic foot ulcers. European Journal of Pharmacology, 2018, 834, 77-83.	3.5	11
41	Activities of Oxadiazole Antibacterials against Staphylococcus aureus and Other Gram-Positive Bacteria. Antimicrobial Agents and Chemotherapy, 2018, 62, .	3.2	11
42	In Search of Selectivity in Inhibition of ADAM10. ACS Medicinal Chemistry Letters, 2018, 9, 708-713.	2.8	5
43	Early Abrogation of Gelatinase Activity Extends the Time Window for tPA Thrombolysis after Embolic Focal Cerebral Ischemia in Mice. ENeuro, 2018, 5, ENEURO.0391-17.2018.	1.9	16
44	Transferase Versus Hydrolase: The Role of Conformational Flexibility in Reaction Specificity. Structure, 2017, 25, 295-304.	3.3	23
45	Conformational Dynamics in Penicillin-Binding Protein 2a of Methicillin-Resistant <i>Staphylococcus aureus</i>, Allosteric Communication Network and Enablement of Catalysis. Journal of the American Chemical Society, 2017, 139, 2102-2110.	13.7	65
46	Muropeptide Binding and the X-ray Structure of the Effector Domain of the Transcriptional Regulator AmpR of <i>Pseudomonas aeruginosa</i>. Journal of the American Chemical Society, 2017, 139, 1448-1451.	13.7	42
47	From Genome to Proteome to Elucidation of Reactions for All Eleven Known Lytic Transglycosylases from <i>Pseudomonas aeruginosa</i>. Angewandte Chemie, 2017, 129, 2779-2783.	2.0	5
48	From Genome to Proteome to Elucidation of Reactions for All Eleven Known Lytic Transglycosylases from <i>Pseudomonas aeruginosa</i>. Angewandte Chemie - International Edition, 2017, 56, 2735-2739.	13.8	50
49	Catalytic Cycle of the <i>N</i>-Acetylglucosaminidase NagZ from <i>Pseudomonas aeruginosa</i>. Journal of the American Chemical Society, 2017, 139, 6795-6798.	13.7	28
50	Exploitation of Conformational Dynamics in Imparting Selective Inhibition for Related Matrix Metalloproteinases. ACS Medicinal Chemistry Letters, 2017, 8, 654-659.	2.8	6
51	Deciphering the Nature of Enzymatic Modifications of Bacterial Cell Walls. ChemBioChem, 2017, 18, 1696-1702.	2.6	12
52	Allosteric Inhibition of Bacterial Targets: An Opportunity for Discovery of Novel Antibacterial Classes. Topics in Medicinal Chemistry, 2017, , 119-147.	0.8	7
53	Whole-Genome Shotgun Sequencing of Two Î²-Proteobacterial Species in Search of the Bulgecin Biosynthetic Cluster. ACS Chemical Biology, 2017, 12, 2552-2557.	3.4	28
54	Discovery of Mechanism-Based Inactivators for Human Pancreatic Carboxypeptidase A from a Focused Synthetic Library. ACS Medicinal Chemistry Letters, 2017, 8, 1122-1127.	2.8	8

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55	X-ray Structure of Catenated Lytic Transglycosylase SltB1. Biochemistry, 2017, 56, 6317-6320.	2.5	9
56	Synthesis and shift-reagent-assisted full NMR assignment of bacterial (Z8,E2,Ï‰)-undecaprenol. Chemical Communications, 2017, 53, 12774-12777.	4.1	5
57	Lytic transglycosylases: concinnity in concision of the bacterial cell wall. Critical Reviews in Biochemistry and Molecular Biology, 2017, 52, 503-542.	5.2	120
58	The crystal structure of the major pneumococcal autolysin LytA in complex with a large peptidoglycan fragment reveals the pivotal role of glycans for lytic activity. Molecular Microbiology, 2016, 101, 954-967.	2.5	14
59	<i>In Vitro</i> and <i>In Vivo</i> Synergy of the Oxadiazole Class of Antibacterials with Î²-Lactams. Antimicrobial Agents and Chemotherapy, 2016, 60, 5581-5588.	3.2	29
60	Muropeptides in Pseudomonas aeruginosa and their Role as Elicitors of Î²â€Lactamâ€Antibiotic Resistance. Angewandte Chemie, 2016, 128, 6996-7000.	2.0	3
61	Muropeptides in <i>Pseudomonas aeruginosa</i> and their Role as Elicitors of Î²â€Lactamâ€Antibiotic Resistance. Angewandte Chemie - International Edition, 2016, 55, 6882-6886.	13.8	43
62	Orthologous and Paralogous AmpD Peptidoglycan Amidases from Gram-Negative Bacteria. Microbial Drug Resistance, 2016, 22, 470-476.	2.0	23
63	Turnover of Bacterial Cell Wall by SltB3, a Multidomain Lytic Transglycosylase of <i>Pseudomonas aeruginosa</i>. ACS Chemical Biology, 2016, 11, 1525-1531.	3.4	16
64	The Natural Product Essramycin and Three of Its Isomers Are Devoid of Antibacterial Activity. Journal of Natural Products, 2016, 79, 1219-1222.	3.0	9
65	Structureâ€“Activity Relationship for the 4(3<i>H</i>)-Quinazolinone Antibacterials. Journal of Medicinal Chemistry, 2016, 59, 5011-5021.	6.4	111
66	Î²-Lactam Resistance Mechanisms: Gram-Positive Bacteria and<i>Mycobacterium tuberculosis</i>. Cold Spring Harbor Perspectives in Medicine, 2016, 6, a025221.	6.2	56
67	Lytic transglycosylases LtgA and LtgD perform distinct roles in remodeling, recycling and releasing peptidoglycan in <i>Neisseria gonorrhoeae</i>. Molecular Microbiology, 2016, 102, 865-881.	2.5	38
68	Selective Inhibition of MMP-2 Does Not Alter Neurological Recovery after Spinal Cord Injury. ACS Chemical Neuroscience, 2016, 7, 1482-1487.	3.5	12
69	Activation by Allostery in Cell-Wall Remodeling by a Modular Membrane-Bound Lytic Transglycosylase from Pseudomonas aeruginosa. Structure, 2016, 24, 1729-1741.	3.3	27
70	The oxadiazole antibacterials. Current Opinion in Microbiology, 2016, 33, 13-17.	5.1	40
71	Amidase Activity of AmiC Controls Cell Separation and Stem Peptide Release and Is Enhanced by NlpD in Neisseria gonorrhoeae. Journal of Biological Chemistry, 2016, 291, 10916-10933.	3.4	26
72	Three-dimensional QSAR analysis and design of new 1,2,4-oxadiazole antibacterials. Bioorganic and Medicinal Chemistry Letters, 2016, 26, 1011-1015.	2.2	48

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73	Endless resistance. Endless antibiotics?. MedChemComm, 2016, 7, 37-49.	3.4	39
74	Structural Basis of the Heterodimer Formation between Cell Shape-Determining Proteins Csd1 and Csd2 from Helicobacter pylori. PLoS ONE, 2016, 11, e0164243.	2.5	17
75	Substrate recognition and catalysis by LytB, a pneumococcal peptidoglycan hydrolase involved in virulence. Scientific Reports, 2015, 5, 16198.	3.3	30
76	Bacterial Cell Wall: Morphology and Biochemistry. , 2015, , 221-264.		3
77	The external PASTA domain of the essential serine/threonine protein kinase PknB regulates mycobacterial growth. Open Biology, 2015, 5, 150025.	3.6	22
78	Structure of Csd3 from<i>Helicobacter pylori</i>, a cell shape-determining metallopeptidase. Acta Crystallographica Section D: Biological Crystallography, 2015, 71, 675-686.	2.5	21
79	The Cell Shape-determining Csd6 Protein from Helicobacter pylori Constitutes a New Family of l,d-Carboxypeptidase. Journal of Biological Chemistry, 2015, 290, 25103-25117.	3.4	34
80	Investigation of Signal Transduction Routes within the Sensor/Transducer Protein BlaR1 of <i>Staphylococcus aureus</i>. Biochemistry, 2015, 54, 1600-1610.	2.5	25
81	Discovery of Antibiotic (<i>E</i>)-3-(3-Carboxyphenyl)-2-(4-cyanostyryl)quinazolin-4(3<i>H</i>)-one. Journal of the American Chemical Society, 2015, 137, 1738-1741.	13.7	116
82	Structureâ€“Activity Relationship for the Oxadiazole Class of Antibiotics. Journal of Medicinal Chemistry, 2015, 58, 1380-1389.	6.4	100
83	Catalytic Spectrum of the Penicillin-Binding Protein 4 of <i>Pseudomonas aeruginosa</i>, a Nexus for the Induction of Î²-Lactam Antibiotic Resistance. Journal of the American Chemical Society, 2015, 137, 190-200.	13.7	32
84	Exploration of the structureâ€“activity relationship of 1,2,4-oxadiazole antibiotics. Bioorganic and Medicinal Chemistry Letters, 2015, 25, 4854-4857.	2.2	39
85	Regioselective Control of the S_NAr Amination of 5-Substituted-2,4-Dichloropyrimidines Using Tertiary Amine Nucleophiles. Journal of Organic Chemistry, 2015, 80, 7757-7763.	3.2	18
86	The Tipperâ€“Strominger Hypothesis and Triggering of Allostery in Penicillin-Binding Protein 2a of Methicillin-Resistant <i>Staphylococcus aureus</i> (MRSA). Journal of the American Chemical Society, 2015, 137, 6500-6505.	13.7	26
87	Synthesis and Evaluation of 1,2,4-Triazolo[1,5-<i>a</i>]pyrimidines as Antibacterial Agents Against <i>Enterococcus faecium</i>. Journal of Medicinal Chemistry, 2015, 58, 4194-4203.	6.4	113
88	The Allosteric Site for the Nascent Cell Wall in Penicillin-Binding Protein 2a: An Achillesâ€™ Heel of Methicillin-Resistant Staphylococcus aureus. Current Medicinal Chemistry, 2015, 22, 1678-1686.	2.4	32
89	Water-Soluble MMP-9 Inhibitor Reduces Lesion Volume after Severe Traumatic Brain Injury. ACS Chemical Neuroscience, 2015, 6, 1658-1664.	3.5	20
90	AAC(3)-XI, a New Aminoglycoside 3- <i>N</i> -Acetyltransferase from Corynebacterium striatum. Antimicrobial Agents and Chemotherapy, 2015, 59, 5647-5653.	3.2	14

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91	Synergistic, collaterally sensitive Î²-lactam combinations suppress resistance in MRSA. Nature Chemical Biology, 2015, 11, 855-861.	8.0	126
92	Phosphorylation of BlaR1 in Manifestation of Antibiotic Resistance in Methicillin-Resistant <i>Staphylococcus aureus</i> and Its Abrogation by Small Molecules. ACS Infectious Diseases, 2015, 1, 454-459.	3.8	31
93	Acceleration of diabetic wound healing using a novel proteaseâ€“anti-protease combination therapy. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 15226-15231.	7.1	126
94	Chapter 3. The Î²-Lactam (Azetidin-2-one) as a Privileged Ring in Medicinal Chemistry. RSC Drug Discovery Series, 2015, , 64-97.	0.3	4
95	Chapter 10. Thiirane Class of Gelatinase Inhibitors as a Privileged Template that Crosses the Bloodâ€“Brain Barrier. RSC Drug Discovery Series, 2015, , 262-286.	0.3	1
96	Structural and Functional Insights into Peptidoglycan Access for the Lytic Amidase LytA of Streptococcus pneumoniae. MBio, 2014, 5, e01120-13.	4.1	48
97	Penicillinâ€binding protein 2a of methicillinâ€resistant <i>Staphylococcus aureus</i>. IUBMB Life, 2014, 66, 572-577.	3.4	176
98	Protonation states of activeâ€site lysines of penicillinâ€binding protein 6 from <i>Escherichia coli</i> and the mechanistic implications. Proteins: Structure, Function and Bioinformatics, 2014, 82, 1348-1358.	2.6	9
99	Structural basis for the recognition of muramyltripeptide by<i>Helicobacter pylori</i>Csd4, a<scp>D</scp>,<scp>L</scp>-carboxypeptidase controlling the helical cell shape. Acta Crystallographica Section D: Biological Crystallography, 2014, 70, 2800-2812.	2.5	20
100	Enantiomers of a selective gelatinase inhibitor: (R)- and (S)-2-[(4-phenoxyphenyl)sulfonylmethyl]thiirane. Acta Crystallographica Section C, Structural Chemistry, 2014, 70, 1003-1006.	0.5	1
101	A Chemical Biological Strategy to Facilitate Diabetic Wound Healing. ACS Chemical Biology, 2014, 9, 105-110.	3.4	75
102	Discovery of a New Class of Non-Î²-lactam Inhibitors of Penicillin-Binding Proteins with Gram-Positive Antibacterial Activity. Journal of the American Chemical Society, 2014, 136, 3664-3672.	13.7	136
103	Characterization of a selective inhibitor for matrix metalloproteinase-8 (MMP-8). MedChemComm, 2014, 5, 1381-1383.	3.4	10
104	Regulation of the Expression of the Î²-Lactam Antibiotic-Resistance Determinants in Methicillin-Resistant Staphylococcus aureus (MRSA). Biochemistry, 2014, 53, 1548-1550.	2.5	39
105	Glycosylation at Asn211 Regulates the Activation State of the Discoidin Domain Receptor 1 (DDR1). Journal of Biological Chemistry, 2014, 289, 9275-9287.	3.4	33
106	Mutations in <i>mmpL</i> and in the Cell Wall Stress Stimulon Contribute to Resistance to Oxadiazole Antibiotics in Methicillin-Resistant Staphylococcus aureus. Antimicrobial Agents and Chemotherapy, 2014, 58, 5841-5847.	3.2	12
107	Disruption of Allosteric Response as an Unprecedented Mechanism of Resistance to Antibiotics. Journal of the American Chemical Society, 2014, 136, 9814-9817.	13.7	93
108	Structure and Cell Wall Cleavage by Modular Lytic Transglycosylase MltC of <i>Escherichia coli</i>. ACS Chemical Biology, 2014, 9, 2058-2066.	3.4	41

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109	Revealing Cell-Surface Intramolecular Interactions in the BlaR1 Protein of Methicillin-Resistant <i>Staphylococcus aureus</i> by NMR Spectroscopy. Biochemistry, 2014, 53, 10-12.	2.5	13
110	The sentinel role of peptidoglycan recycling in the Î²-lactam resistance of the Gram-negative Enterobacteriaceae and Pseudomonas aeruginosa. Bioorganic Chemistry, 2014, 56, 41-48.	4.1	70
111	<i>O</i>-Phenyl Carbamate and Phenyl Urea Thiiranes as Selective Matrix Metalloproteinase-2 Inhibitors that Cross the Bloodâ€“Brain Barrier. Journal of Medicinal Chemistry, 2013, 56, 8139-8150.	6.4	33
112	Use of Silver Carbonate in the Wittig Reaction. Journal of Organic Chemistry, 2013, 78, 12224-12228.	3.2	19
113	Cell-Wall Remodeling by the Zinc-Protease AmpDh3 from Pseudomonas aeruginosa. Journal of the American Chemical Society, 2013, 135, 12604-12607.	13.7	41
114	Structural Basis for Carbapenemase Activity of the OXA-23 Î²-Lactamase from Acinetobacter baumannii. Chemistry and Biology, 2013, 20, 1107-1115.	6.0	92
115	Discoidin Domain Receptors: Unique Receptor Tyrosine Kinases in Collagen-mediated Signaling. Journal of Biological Chemistry, 2013, 288, 7430-7437.	3.4	182
116	Bacterial cellâ€wall recycling. Annals of the New York Academy of Sciences, 2013, 1277, 54-75.	3.8	246
117	Reactions of the Three AmpD Enzymes of <i>Pseudomonas aeruginosa</i>. Journal of the American Chemical Society, 2013, 135, 4950-4953.	13.7	50
118	Reactions of All <i>Escherichia coli</i> Lytic Transglycosylases with Bacterial Cell Wall. Journal of the American Chemical Society, 2013, 135, 3311-3314.	13.7	111
119	Reaction Products and the X-ray Structure of AmpDh2, a Virulence Determinant of Pseudomonas aeruginosa. Journal of the American Chemical Society, 2013, 135, 10318-10321.	13.7	38
120	Structural Analysis of the Role of Pseudomonas aeruginosa Penicillin-Binding Protein 5 in Î²-Lactam Resistance. Antimicrobial Agents and Chemotherapy, 2013, 57, 3137-3146.	3.2	40
121	Shedding of Discoidin Domain Receptor 1 by Membrane-type Matrix Metalloproteinases. Journal of Biological Chemistry, 2013, 288, 12114-12129.	3.4	69
122	How allosteric control of <i>Staphylococcus aureus</i> penicillin binding protein 2a enables methicillin resistance and physiological function. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 16808-16813.	7.1	235
123	Penicillin-Binding Protein 5 of Escherichia coli. , 2013, , 3474-3480.		0
124	Selective Inhibition of Matrix Metalloproteinase-9 Attenuates Secondary Damage Resulting from Severe Traumatic Brain Injury. PLoS ONE, 2013, 8, e76904.	2.5	95
125	Mechanism of anchoring of OmpA protein to the cell wall peptidoglycan of the gramâ€negative bacterial outer membrane. FASEB Journal, 2012, 26, 219-228.	0.5	164
126	An Amino Acid Position at Crossroads of Evolution of Protein Function. Journal of Biological Chemistry, 2012, 287, 8232-8241.	3.4	14

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127	Pharmacological Stabilization of Intracranial Aneurysms in Mice. Stroke, 2012, 43, 2450-2456.	2.0	81
128	Antibiotics as physiological stress inducers and bacterial response to the challenge. Current Opinion in Microbiology, 2012, 15, 553-554.	5.1	4
129	Structureâ€“Activity Relationship for Thiirane-Based Gelatinase Inhibitors. ACS Medicinal Chemistry Letters, 2012, 3, 490-495.	2.8	34
130	Synthesis and NMR Characterization of (<i>Z</i>,<i>Z</i>,<i>Z</i>,<i>Z</i>,<i>E</i>,<i>E</i>,Ï‰)-Heptaprenol. Journal of the American Chemical Society, 2012, 134, 13881-13888.	13.7	12
131	Messenger Functions of the Bacterial Cell Wall-derived Muropeptides. Biochemistry, 2012, 51, 2974-2990.	2.5	80
132	Dissection of Events in the Resistance to Î²-Lactam Antibiotics Mediated by the Protein BlaR1 fromStaphylococcus aureus. Biochemistry, 2012, 51, 4642-4649.	2.5	47
133	Structural Basis for Progression toward the Carbapenemase Activity in the GES Family of Î²-Lactamases. Journal of the American Chemical Society, 2012, 134, 19512-19515.	13.7	51
134	Selective Gelatinase Inhibitor Neuroprotective Agents Cross the Blood-Brain Barrier. ACS Chemical Neuroscience, 2012, 3, 730-736.	3.5	30
135	Inhibition of MMP-9 by a selective gelatinase inhibitor protects neurovasculature from embolic focal cerebral ischemia. Molecular Neurodegeneration, 2012, 7, 21.	10.8	93
136	Inhibitors for Bacterial Cell-Wall Recycling. ACS Medicinal Chemistry Letters, 2012, 3, 238-242.	2.8	36
137	High-Resolution Crystal Structure of MltE, an Outer Membrane-Anchored Endolytic Peptidoglycan Lytic Transglycosylase from <i>Escherichia coli</i>. Biochemistry, 2011, 50, 2384-2386.	2.5	39
138	Resistance to the Third-Generation Cephalosporin Ceftazidime by a Deacylation-Deficient Mutant of the TEM Î²-Lactamase by the Uncommon Covalent-Trapping Mechanism. Biochemistry, 2011, 50, 6387-6395.	2.5	17
139	Selective Water-Soluble Gelatinase Inhibitor Prodrugs. Journal of Medicinal Chemistry, 2011, 54, 6676-6690.	6.4	44
140	A Computational Evaluation of the Mechanism of Penicillin-Binding Protein-Catalyzed Cross-Linking of the Bacterial Cell Wall. Journal of the American Chemical Society, 2011, 133, 5274-5283.	13.7	27
141	Tackling antibiotic resistance. Nature Reviews Microbiology, 2011, 9, 894-896.	28.6	919
142	Sulfonate-Containing Thiiranes as Selective Gelatinase Inhibitors. ACS Medicinal Chemistry Letters, 2011, 2, 177-181.	2.8	36
143	Recognition of peptidoglycan and Î²-lactam antibiotics by the extracellular domain of the Ser/Thr protein kinase StkP from<i>Streptococcus pneumoniae</i>. FEBS Letters, 2011, 585, 357-363.	2.8	72
144	Identification of Products of Inhibition of GES-2 Î²-Lactamase by Tazobactam by X-ray Crystallography and Spectrometry. Journal of Biological Chemistry, 2011, 286, 14396-14409.	3.4	22

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145	Crystallization and preliminary X-ray diffraction analysis of the lytic transglycosylase MltE from<i>Escherichia coli</i>. Acta Crystallographica Section F: Structural Biology Communications, 2011, 67, 161-163.	0.7	8
146	Exploration of mild copper-mediated coupling of organotrifluoroborates in the synthesis of thiirane-based inhibitors of matrix metalloproteinases. Bioorganic and Medicinal Chemistry Letters, 2011, 21, 2675-2678.	2.2	5
147	Endogenous Matrix Metalloproteinases 2 and 9 Regulate Activation of CD4+and CD8+T cells. American Journal of Respiratory Cell and Molecular Biology, 2011, 44, 700-708.	2.9	36
148	Crystal Structures of Bacterial Peptidoglycan Amidase AmpD and an Unprecedented Activation Mechanism. Journal of Biological Chemistry, 2011, 286, 31714-31722.	3.4	49
149	Characterization of the Dimerization Interface of Membrane Type 4 (MT4)-Matrix Metalloproteinase. Journal of Biological Chemistry, 2011, 286, 33178-33189.	3.4	23
150	Short Alkylated Peptoid Mimics of Antimicrobial Lipopeptides. Antimicrobial Agents and Chemotherapy, 2011, 55, 417-420.	3.2	108
151	Lysine NÎ¶-Decarboxylation Switch and Activation of the Î²-Lactam Sensor Domain of BlaR1 Protein of Methicillin-resistant Staphylococcus aureus*. Journal of Biological Chemistry, 2011, 286, 31466-31472.	3.4	25
152	Activation of BlaR1 Protein of Methicillin-resistant Staphylococcus aureus, Its Proteolytic Processing, and Recovery from Induction of Resistance. Journal of Biological Chemistry, 2011, 286, 38148-38158.	3.4	52
153	Exploring the functional space of thiiranes as gelatinase inhibitors using click chemistry. Arkivoc, 2011, 2011, 221-236.	0.5	7
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