Mijoon Lee

List of Publications by Year
in descending order

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112 papers	4,130 citations	101384 36 h-index	143772 57 g-index
119 all docs	119 docs citations	119 times ranked	4537 citing authors

#	Article	IF	Citations
1	Effects of Inactivation of <scp>d</scp> , <scp>d</scp> -Transpeptidases of Acinetobacter baumannii on Bacterial Growth and Susceptibility to Î²-Lactam Antibiotics. Antimicrobial Agents and Chemotherapy, 2022, 66, AAC0172921.	1.4	9
2	Prophylactic Activation of Shh Signaling Attenuates TBI-Induced Seizures in Zebrafish by Modulating Glutamate Excitotoxicity through Eaat2a. Biomedicines, 2022, 10, 32.	1.4	3
3	C6 Hydroxymethyl-Substituted Carbapenem MA-1-206 Inhibits the Major Acinetobacter baumannii Carbapenemase OXA-23 by Impeding Deacylation. MBio, 2022, 13, e0036722.	1.8	7
4	Selective MMP-9 Inhibitor (R)-ND-336 Alone or in Combination with Linezolid Accelerates Wound Healing in Infected Diabetic Mice. ACS Pharmacology and Translational Science, 2021, 4, 107-117.	2.5	17
5	Inhibition of the Clostridioides difficile Class D Î²-Lactamase CDD-1 by Avibactam. ACS Infectious Diseases, 2021, 7, 1164-1176.	1.8	2
6	Turnover Chemistry and Structural Characterization of the Cj0843c Lytic Transglycosylase of Campylobacter jejuni. Biochemistry, 2021, 60, 1133-1144.	1.2	3
7	Turnover chemistry and structural characterization of the Cj0843c lytic transglycosylase of Campylobacter jejuni. FASEB Journal, 2021, 35, .	0.2	0
8	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.	1.9	2
9	Synergistic and additive interactions between receptor signaling networks drive the regulatory T cell versus T helper 17 cell fate choice. Journal of Biological Chemistry, 2021, 297, 101330.	1.6	9
10	Horizontal-Acquisition of a Promiscuous Peptidoglycan-Recycling Enzyme Enables Aphids To Influence Symbiont Cell Wall Metabolism. MBio, 2021, 12, e0263621.	1.8	6
11	Catalytic Cycle of Glycoside Hydrolase BglX from Pseudomonas aeruginosa and Its Implications for Biofilm Formation. ACS Chemical Biology, 2020, 15, 189-196.	1.6	11
12	Hyperbaric oxygen therapy accelerates wound healing in diabetic mice by decreasing active matrix metalloproteinaseâ€9. Wound Repair and Regeneration, 2020, 28, 194-201.	1.5	15
13	Transforming growth factor Î² (TGF-Î²) receptor signaling regulates kinase networks and phosphatidylinositol metabolism during T-cell activation. Journal of Biological Chemistry, 2020, 295, 8236-8251.	1.6	11
14	Peptidoglycan reshaping by a noncanonical peptidase for helical cell shape in Campylobacter jejuni. Nature Communications, 2020, 11, 458.	5.8	14
15	The Streptococcal Protease SpeB Antagonizes the Biofilms of the Human PathogenStaphylococcus aureusUSA300 through Cleavage of the Staphylococcal SdrC Protein. Journal of Bacteriology, 2020, 202, .	1.0	16
16	A type VI secretion system delivers a cell wall amidase to target bacterial competitors. Molecular Microbiology, 2020, 114, 308-321.	1.2	25
17	Structural basis of denuded glycan recognition by SPOR domains in bacterial cell division. Nature Communications, 2019, 10, 5567.	5.8	29
18	Exolytic and endolytic turnover of peptidoglycan by lytic transglycosylase Slt of Pseudomonas aeruginosa. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 4393-4398.	3.3	31

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19	Potentiation of the activity of Î²-lactam antibiotics by farnesol and its derivatives. Bioorganic and Medicinal Chemistry Letters, 2018, 28, 642-645.	1.0	18
20	Allostery, Recognition of Nascent Peptidoglycan, and Cross-linking of the Cell Wall by the Essential Penicillin-Binding Protein 2x of Streptococcus pneumoniae. ACS Chemical Biology, 2018, 13, 694-702.	1.6	29
21	A Structural Dissection of the Active Site of the Lytic Transglycosylase MltE from Escherichia coli. Biochemistry, 2018, 57, 6090-6098.	1.2	2
22	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.	2.9	82
23	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.	1.7	11
24	Transferase Versus Hydrolase: The Role of Conformational Flexibility in Reaction Specificity. Structure, 2017, 25, 295-304.	1.6	23
25	Muropeptide Binding and the X-ray Structure of the Effector Domain of the Transcriptional Regulator AmpR of Pseudomonas aeruginosa. Journal of the American Chemical Society, 2017, 139, 1448-1451.	6.6	42
26	From Genome to Proteome to Elucidation of Reactions for All Eleven Known Lytic Transglycosylases from Pseudomonas aeruginosa. Angewandte Chemie, 2017, 129, 2779-2783.	1.6	5
27	From Genome to Proteome to Elucidation of Reactions for All Eleven Known Lytic Transglycosylases from Pseudomonas aeruginosa. Angewandte Chemie - International Edition, 2017, 56, 2735-2739.	7.2	50
28	Catalytic Cycle of the N-Acetylglucosaminidase NagZ from Pseudomonas aeruginosa. Journal of the American Chemical Society, 2017, 139, 6795-6798.	6.6	28
29	Deciphering the Nature of Enzymatic Modifications of Bacterial Cell Walls. ChemBioChem, 2017, 18, 1696-1702.	1.3	12
30	Synthesis and shift-reagent-assisted full NMR assignment of bacterial (Z8,E2,Ï‰)-undecaprenol. Chemical Communications, 2017, 53, 12774-12777.	2.2	5
31	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.	1.2	14
32	Muropeptides in Pseudomonas aeruginosa and their Role as Elicitors of Î²â€Lactamâ€Antibiotic Resistance. Angewandte Chemie, 2016, 128, 6996-7000.	1.6	3
33	Muropeptides in Pseudomonas aeruginosa and their Role as Elicitors of Î²â€Lactamâ€Antibiotic Resistance. Angewandte Chemie - International Edition, 2016, 55, 6882-6886.	7.2	43
34	Orthologous and Paralogous AmpD Peptidoglycan Amidases from Gram-Negative Bacteria. Microbial Drug Resistance, 2016, 22, 470-476.	0.9	23
35	Turnover of Bacterial Cell Wall by SltB3, a Multidomain Lytic Transglycosylase of Pseudomonas aeruginosa. ACS Chemical Biology, 2016, 11, 1525-1531.	1.6	16
36	The Natural Product Essramycin and Three of Its Isomers Are Devoid of Antibacterial Activity. Journal of Natural Products, 2016, 79, 1219-1222.	1.5	9

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37	Lytic transglycosylases LtgA and LtgD perform distinct roles in remodeling, recycling and releasing peptidoglycan in Neisseria gonorrhoeae. Molecular Microbiology, 2016, 102, 865-881.	1.2	38
38	Activation by Allostery in Cell-Wall Remodeling by a Modular Membrane-Bound Lytic Transglycosylase from Pseudomonas aeruginosa. Structure, 2016, 24, 1729-1741.	1.6	27
39	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.	1.6	26
40	Ensemble of Pinanones from the Permanganate Oxidation of Myrtenal. Journal of Organic Chemistry, 2016, 81, 5705-5709.	1.7	1
41	Three-dimensional QSAR analysis and design of new 1,2,4-oxadiazole antibacterials. Bioorganic and Medicinal Chemistry Letters, 2016, 26, 1011-1015.	1.0	48
42	Structural Basis of the Heterodimer Formation between Cell Shape-Determining Proteins Csd1 and Csd2 from Helicobacter pylori. PLoS ONE, 2016, 11, e0164243.	1.1	17
43	Substrate recognition and catalysis by LytB, a pneumococcal peptidoglycan hydrolase involved in virulence. Scientific Reports, 2015, 5, 16198.	1.6	30
44	The external PASTA domain of the essential serine/threonine protein kinase PknB regulates mycobacterial growth. Open Biology, 2015, 5, 150025.	1.5	22
45	Structural basis of the peptidoglycan binding to LytA, the major pneumococcal autolysin. Acta Crystallographica Section A: Foundations and Advances, 2015, 71, s225-s225.	0.0	0
46	Structure of Csd3 fromHelicobacter pylori, a cell shape-determining metallopeptidase. Acta Crystallographica Section D: Biological Crystallography, 2015, 71, 675-686.	2.5	21
47	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.	1.6	34
48	Catalytic Spectrum of the Penicillin-Binding Protein 4 of Pseudomonas aeruginosa, a Nexus for the Induction of Î²-Lactam Antibiotic Resistance. Journal of the American Chemical Society, 2015, 137, 190-200.	6.6	32
49	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.	1.7	18
50	Synthesis and Evaluation of 1,2,4-Triazolo[1,5-a]pyrimidines as Antibacterial Agents Against Enterococcus faecium. Journal of Medicinal Chemistry, 2015, 58, 4194-4203.	2.9	113
51	Water-Soluble MMP-9 Inhibitor Reduces Lesion Volume after Severe Traumatic Brain Injury. ACS Chemical Neuroscience, 2015, 6, 1658-1664.	1.7	20
52	Structural and Functional Insights into Peptidoglycan Access for the Lytic Amidase LytA of Streptococcus pneumoniae. MBio, 2014, 5, e01120-13.	1.8	48
53	Structural basis for the recognition of muramyltripeptide byHelicobacter pyloriCsd4, 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
54	Enantiomers of a selective gelatinase inhibitor: (R)- and (S)-2-[(4-phenoxyphenyl)sulfonylmethyl]thiirane. Acta Crystallographica Section C, Structural Chemistry, 2014, 70, 1003-1006.	0.2	1

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55	A Chemical Biological Strategy to Facilitate Diabetic Wound Healing. ACS Chemical Biology, 2014, 9, 105-110.	1.6	75
56	Structure and Cell Wall Cleavage by Modular Lytic Transglycosylase MltC of Escherichia coli. ACS Chemical Biology, 2014, 9, 2058-2066.	1.6	41
57	Use of Silver Carbonate in the Wittig Reaction. Journal of Organic Chemistry, 2013, 78, 12224-12228.	1.7	19
58	Cell-Wall Remodeling by the Zinc-Protease AmpDh3 from Pseudomonas aeruginosa. Journal of the American Chemical Society, 2013, 135, 12604-12607.	6.6	41
59	Water-Soluble MMP-9 Inhibitor Prodrug Generates Active Metabolites That Cross the Bloodâ€“Brain Barrier. ACS Chemical Neuroscience, 2013, 4, 1168-1173.	1.7	9
60	Reactions of the Three AmpD Enzymes of Pseudomonas aeruginosa. Journal of the American Chemical Society, 2013, 135, 4950-4953.	6.6	50
61	Reactions of All Escherichia coli Lytic Transglycosylases with Bacterial Cell Wall. Journal of the American Chemical Society, 2013, 135, 3311-3314.	6.6	111
62	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.	6.6	38
63	Structural Analysis of the Role of Pseudomonas aeruginosa Penicillin-Binding Protein 5 in Î²-Lactam Resistance. Antimicrobial Agents and Chemotherapy, 2013, 57, 3137-3146.	1.4	40
64	How allosteric control of Staphylococcus aureus 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.	3.3	235
65	Mechanism of anchoring of OmpA protein to the cell wall peptidoglycan of the gramâ€negative bacterial outer membrane. FASEB Journal, 2012, 26, 219-228.	0.2	164
66	Structureâ€“Activity Relationship for Thiirane-Based Gelatinase Inhibitors. ACS Medicinal Chemistry Letters, 2012, 3, 490-495.	1.3	34
67	Synthesis and NMR Characterization of (Z,Z,Z,Z,E,E,Ï‰)-Heptaprenol. Journal of the American Chemical Society, 2012, 134, 13881-13888.	6.6	12
68	Inhibition of MMP-9 by a selective gelatinase inhibitor protects neurovasculature from embolic focal cerebral ischemia. Molecular Neurodegeneration, 2012, 7, 21.	4.4	93
69	Inhibitors for Bacterial Cell-Wall Recycling. ACS Medicinal Chemistry Letters, 2012, 3, 238-242.	1.3	36
70	Selective Water-Soluble Gelatinase Inhibitor Prodrugs. Journal of Medicinal Chemistry, 2011, 54, 6676-6690.	2.9	44
71	Sulfonate-Containing Thiiranes as Selective Gelatinase Inhibitors. ACS Medicinal Chemistry Letters, 2011, 2, 177-181.	1.3	36
72	Recognition of peptidoglycan and Î²-lactam antibiotics by the extracellular domain of the Ser/Thr protein kinase StkP fromStreptococcus pneumoniae. FEBS Letters, 2011, 585, 357-363.	1.3	72

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73	Crystal Structures of Bacterial Peptidoglycan Amidase AmpD and an Unprecedented Activation Mechanism. Journal of Biological Chemistry, 2011, 286, 31714-31722.	1.6	49
74	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.	1.6	25
75	Synthetic Peptidoglycan Motifs for Germination of Bacterial Spores. ChemBioChem, 2010, 11, 2525-2529.	1.3	54
76	Sulfonylation-Induced N- to O-Acetyl Migration in 2-Acetamidoethanol Derivatives. Journal of Organic Chemistry, 2010, 75, 3515-3517.	1.7	12
77	Regiospecific Syntheses of 6Î±-(1R-Hydroxyoctyl)penicillanic Acid and 6Î²-(1R-Hydroxyoctyl)penicillanic Acid as Mechanistic Probes of Class D Î²-Lactamases. Organic Letters, 2009, 11, 2515-2518.	2.4	15
78	A Potent Gelatinase Inhibitor with Antiâ€Tumorâ€Invasive Activity and its Metabolic Disposition. Chemical Biology and Drug Design, 2009, 73, 189-202.	1.5	33
79	Active Site Ringâ€Opening of a Thiirane Moiety and Picomolar Inhibition of Gelatinases. Chemical Biology and Drug Design, 2009, 74, 527-534.	1.5	46
80	Synthesis, Kinetic Characterization and Metabolism of Diastereomeric 2â€(1â€(4â€Phenoxyphenylsulfonyl)ethyl)thiiranes as Potent Gelatinase and MT1â€MMP Inhibitors. Chemical Biology and Drug Design, 2009, 74, 535-546.	1.5	13
81	Key side products due to reactivity of dimethylmaleoyl moiety as amine protective group. Chemical Papers, 2009, 63, 592-597.	1.0	2
82	Bacterial AmpD at the Crossroads of Peptidoglycan Recycling and Manifestation of Antibiotic Resistance. Journal of the American Chemical Society, 2009, 131, 8742-8743.	6.6	52
83	Crystal Structures of Penicillin-Binding Protein 6 from Escherichia coli. Journal of the American Chemical Society, 2009, 131, 14345-14354.	6.6	60
84	Total Synthesis of N-Acetylglucosamine-1,6-anhydro-N-acetylmuramylpentapeptide and Evaluation of Its Turnover by AmpD from Escherichia coli. Journal of the American Chemical Society, 2009, 131, 5187-5193.	6.6	61
85	Complications from Dual Roles of Sodium Hydride as a Base and as a Reducing Agent. Journal of Organic Chemistry, 2009, 74, 2567-2570.	1.7	37
86	Conformational analyses of thiirane-based gelatinase inhibitors. Bioorganic and Medicinal Chemistry Letters, 2008, 18, 3064-3067.	1.0	8
87	Metabolism of (4â€Phenoxyphenylsulfonyl)methylthiirane, a Selective Gelatinase Inhibitor. Chemical Biology and Drug Design, 2008, 71, 187-196.	1.5	23
88	Synthetic Efforts in Preparations of Components of the Bacterial Cell Wall. ACS Symposium Series, 2008, , 54-78.	0.5	5
89	Lytic Transglycosylase MltB of Escherichia coli and Its Role in Recycling of Peptidoglycan Strands of Bacterial Cell Wall. Journal of the American Chemical Society, 2008, 130, 11878-11879.	6.6	41
90	Co-opting the Cell Wall in Fighting Methicillin-Resistant Staphylococcus aureus: Potent Inhibition of PBP 2a by Two Anti-MRSA Î²-Lactam Antibiotics. Journal of the American Chemical Society, 2008, 130, 9212-9213.	6.6	111

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91	Facile Preparation of a Highly Functionalized Tetrahydropyran by Catalytic Hydrogenation of an Oxazoline. Journal of Organic Chemistry, 2008, 73, 7349-7352.	1.7	5
92	Metabolism of (4-Phenoxyphenylsulfonyl)methylthiirane, a Selective Gelatinase Inhibitor. Chemical Biology and Drug Design, 2008, .	1.5	0
93	Elucidation of the Molecular Recognition of Bacterial Cell Wall by Modular Pneumococcal Phage Endolysin CPL-1. Journal of Biological Chemistry, 2007, 282, 24990-24999.	1.6	61
94	Structural insights into the bactericidal mechanism of human peptidoglycan recognition proteins. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 8761-8766.	3.3	87
95	Shared Functional Attributes between the mecA Gene Product of Staphylococcus sciuri and Penicillin-Binding Protein 2a of Methicillin-Resistant Staphylococcus aureus. Biochemistry, 2007, 46, 8050-8057.	1.2	22
96	Metabolism of a Highly Selective Gelatinase Inhibitor Generates Active Metabolite. Chemical Biology and Drug Design, 2007, 70, 371-382.	1.5	40
97	Three-dimensional structure of the bacterial cell wall peptidoglycan. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 4404-4409.	3.3	371
98	Thermodynamics of Interactions of Vancomycin and Synthetic Surrogates of Bacterial Cell Wall. Journal of the American Chemical Society, 2006, 128, 7736-7737.	6.6	32
99	Mechanistic Basis for the Action of New Cephalosporin Antibiotics Effective against Methicillin- and Vancomycin-resistant Staphylococcus aureus. Journal of Biological Chemistry, 2006, 281, 10035-10041.	1.6	35
100	Extracellular Proteases as Targets for Treatment of Cancer Metatases. ChemInform, 2005, 36, no.	0.1	0
101	Activation for Catalysis of Penicillin-Binding Protein 2a from Methicillin-ResistantStaphylococcusaureusby Bacterial Cell Wall. Journal of the American Chemical Society, 2005, 127, 2056-2057.	6.6	89
102	A Practical Synthesis of Nitrocefin. Journal of Organic Chemistry, 2005, 70, 367-369.	1.7	30
103	Synthesis of Chiral 2-(4-Phenoxyphenylsulfonylmethyl)thiiranes as Selective Gelatinase Inhibitors. Organic Letters, 2005, 7, 4463-4465.	2.4	59
104	Synthesis of a Fragment of Bacterial Cell Wall. Journal of Organic Chemistry, 2004, 69, 2137-2146.	1.7	52
105	Synthetic Peptidoglycan Substrates for Penicillin-Binding Protein 5 of Gram-Negative Bacteria. Journal of Organic Chemistry, 2004, 69, 778-784.	1.7	56
106	Extracellular proteases as targets for treatment of cancer metastases. Chemical Society Reviews, 2004, 33, 401.	18.7	81
107	Strategy in Inhibition of Cathepsin B, A Target in Tumor Invasion and Metastasis. Journal of the American Chemical Society, 2004, 126, 10271-10277.	6.6	37
108	A Mechanism-Based Inhibitor Targeting thedd-Transpeptidase Activity of Bacterial Penicillin-Binding Proteins. Journal of the American Chemical Society, 2003, 125, 16322-16326.	6.6	52

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109	Syntheses and Kinetic Evaluation of Racemic and Optically Active 2-Benzyl-2-methyl-3,4-epoxybutanoic Acids as Irreversible Inactivators for Carboxypeptidase A. Bioorganic and Medicinal Chemistry, 2002, 10, 913-922.	1.4	26
110	Hippuryl-Î±-methylphenylalanine and hippuryl-Î±-methylphenyllactic acid as substrates for carboxypeptidase A. Syntheses, kinetic evaluation and mechanistic implication. Bioorganic and Medicinal Chemistry, 2000, 8, 815-823.	1.4	16
111	2-Benzyl-2-methylsuccinic acid as inhibitor for carboxypeptidase A. synthesis and evaluation. Bioorganic and Medicinal Chemistry, 1999, 7, 1755-1760.	1.4	17
112	A new type of carboxypeptidase a inhibitors designed using an imidazole as a zinc coordinating ligand. Bioorganic and Medicinal Chemistry, 1997, 5, 1989-1998.	1.4	16