

Nucleotide, c-di-GMP, c-di-AMP, cGMP, cAMP, (p)ppGpp  
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Citation Report

#	ARTICLE	IF	CITATIONS
1	Dispersive solid phase extraction combined with ion-pair ultra high-performance liquid chromatography tandem mass spectrometry for quantification of nucleotides in <i>Lactococcus lactis</i> . <i>Analytical Biochemistry</i> , 2013, 440, 166-177.	1.1	23
2	Archaeal Biofilms: The Great Unexplored. <i>Annual Review of Microbiology</i> , 2013, 67, 337-354.	2.9	69
4	Biologically inspired strategies for combating bacterial biofilms. <i>Current Opinion in Pharmacology</i> , 2013, 13, 699-706.	1.7	115
5	Crystal structure of the ligand-binding form of nanoRNase from <i>Bacteroides fragilis</i> , a member of the DHH/DHHA1 phosphoesterase family of proteins. <i>FEBS Letters</i> , 2013, 587, 2669-2674.	1.3	15
6	Highly efficient enzymatic preparation of c-di-AMP using the diadenylate cyclase DisA from <i>Bacillus thuringiensis</i> . <i>Enzyme and Microbial Technology</i> , 2013, 52, 319-324.	1.6	35
7	Selective binding of 2'-F-c-di-GMP to Ct-E88 and Cb-E43, new class I riboswitches from <i>Clostridium tetani</i> and <i>Clostridium botulinum</i> respectively. <i>Molecular BioSystems</i> , 2013, 9, 1535.	2.9	9
8	Identification of Five Structurally Unrelated Quorum-Sensing Inhibitors of <i>Pseudomonas aeruginosa</i> from a Natural-Derivative Database. <i>Antimicrobial Agents and Chemotherapy</i> , 2013, 57, 5629-5641.	1.4	113
9	The <i>Francisella tularensis</i> migR, <i>trmE</i> , and <i>cphA</i> Genes Contribute to <i>F. tularensis</i> Pathogenicity Island Gene Regulation and Intracellular Growth by Modulation of the Stress Alarmone ppGpp. <i>Infection and Immunity</i> , 2013, 81, 2800-2811.	1.0	22
11	Mutation in the C-Di-AMP Cyclase <i>dacA</i> Affects Fitness and Resistance of Methicillin Resistant <i>Staphylococcus aureus</i> . <i>PLoS ONE</i> , 2013, 8, e73512.	1.1	74
12	<i>relA</i> Enhances the Adherence of Enteropathogenic <i>Escherichia coli</i> . <i>PLoS ONE</i> , 2014, 9, e91703.	1.1	12
14	Quorum sensing and biofilm formation in mycobacteria: Role of c-di-GMP and methods to study this second messenger. <i>IUBMB Life</i> , 2014, 66, 823-834.	1.5	53
15	Crystal structure of a c-di-AMP riboswitch reveals an internally pseudo-dimeric RNA. <i>EMBO Journal</i> , 2014, 33, 2692-2703.	3.5	53
16	Finally! The structural secrets of a HD-GYP phosphodiesterase revealed. <i>Molecular Microbiology</i> , 2014, 91, 1-5.	1.2	6
17	Crystallization of the N-terminal regulatory domain of the enhancer-binding protein FleQ from <i>Stenotrophomonas maltophilia</i> . <i>Acta Crystallographica Section F, Structural Biology Communications</i> , 2014, 70, 326-330.	0.4	6
18	Cyclic Di-AMP Impairs Potassium Uptake Mediated by a Cyclic Di-AMP Binding Protein in <i>Streptococcus pneumoniae</i> . <i>Journal of Bacteriology</i> , 2014, 196, 614-623.	1.0	124
19	The Degenerate EAL-GGDEF Domain Protein Filp Functions as a Cyclic di-GMP Receptor and Specifically Interacts with the PilZ-Domain Protein PXO_02715 to Regulate Virulence in <i>Xanthomonas oryzae</i> pv. <i>oryzae</i> . <i>Molecular Plant-Microbe Interactions</i> , 2014, 27, 578-589.	1.4	65
20	Conformational restriction of cyclic dinucleotides with triazole-linked cyclophane analogues. <i>Tetrahedron Letters</i> , 2014, 55, 2659-2661.	0.7	20
21	Environmental responses and phage susceptibility in foodborne pathogens: implications for improving applications in food safety. <i>Current Opinion in Biotechnology</i> , 2014, 26, 45-49.	3.3	42

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22	Signal Transduction: From the Atomic Age to the Post-Genomic Era. Cold Spring Harbor Perspectives in Biology, 2014, 6, a022913-a022913.	2.3	21
23	Bacterial persistence. Science China Chemistry, 2014, 57, 1625-1633.	4.2	2
24	Control of the Diadenylate Cyclase CdaS in Bacillus subtilis. Journal of Biological Chemistry, 2014, 289, 21098-21107.	1.6	58
25	E88, a new cyclic-di-GMP class I riboswitch aptamer from <i>Clostridium tetani</i> , has a similar fold to the prototypical class I riboswitch, Vc2, but differentially binds to c-di-GMP analogs. Molecular BioSystems, 2014, 10, 384-390.	2.9	10
26	Unexpected Complex Formation between Coralyne and Cyclic Diadenosine Monophosphate Providing a Simple Fluorescent Turn-on Assay to Detect This Bacterial Second Messenger. Analytical Chemistry, 2014, 86, 2412-2420.	3.2	32
27	Identification of cytidine 2',3'-cyclic monophosphate and uridine 2',3'-cyclic monophosphate in Pseudomonas fluorescens pfo-1 culture. Bioorganic and Medicinal Chemistry Letters, 2014, 24, 4520-4522.	1.0	19
28	The Cyclic Dinucleotide c-di-AMP Is an Allosteric Regulator of Metabolic Enzyme Function. Cell, 2014, 158, 1389-1401.	13.5	174
29	Genomic analysis of cyclic-di-GMP-related genes in rhizobial type strains and functional analysis in Rhizobium etli. Applied Microbiology and Biotechnology, 2014, 98, 4589-4602.	1.7	23
30	Adjuvants Targeting the DNA Sensing Pathways – Cyclic-di-GMP and other Cyclic-Dinucleotides. , 2014, , 313-340.		0
31	Detection of cyclic di-AMP using a competitive ELISA with a unique pneumococcal cyclic di-AMP binding protein. Journal of Microbiological Methods, 2014, 107, 58-62.	0.7	30
32	DhhP, a Cyclic di-AMP Phosphodiesterase of Borrelia burgdorferi, Is Essential for Cell Growth and Virulence. Infection and Immunity, 2014, 82, 1840-1849.	1.0	82
33	A cyclic dinucleotide containing 2-aminopurine is a general fluorescent sensor for c-di-GMP and 3',3'-cGAMP. Molecular BioSystems, 2014, 10, 1568-1575.	2.9	18
34	Near-infrared Light Responsive Synthetic c-di-GMP Module for Optogenetic Applications. ACS Synthetic Biology, 2014, 3, 802-810.	1.9	113
35	Plug and Play Logic Gates Based on Fluorescence Switching Regulated by Self-Assembly of Nucleotide and Lanthanide Ions. ACS Applied Materials & Interfaces, 2014, 6, 9557-9562.	4.0	33
36	Attachment and biofilm formation by foodborne bacteria in meat processing environments: Causes, implications, role of bacterial interactions and control by alternative novel methods. Meat Science, 2014, 97, 298-309.	2.7	287
37	Oligonucleotides in Sensing and Diagnostic Applications. , 2015, , 137-246.		0
38	Functional analysis of the sporulation-specific diadenylate cyclase CdaS in Bacillus thuringiensis. Frontiers in Microbiology, 2015, 6, 908.	1.5	57
39	Identification of New Genes Contributing to the Extreme Radioresistance of Deinococcus radiodurans Using a Tn5-Based Transposon Mutant Library. PLoS ONE, 2015, 10, e0124358.	1.1	33

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40	Cyclic Dinucleotide and Its Analogues: Synthesis and Function. Yuki Gosei Kagaku Kyokaiishi/Journal of Synthetic Organic Chemistry, 2015, 73, 278-279.	0.0	0
41	Complex Structure and Biochemical Characterization of the Staphylococcus aureus Cyclic Diadenylate Monophosphate (c-di-AMP)-binding Protein PstA, the Founding Member of a New Signal Transduction Protein Family. Journal of Biological Chemistry, 2015, 290, 2888-2901.	1.6	47
42	Microbes: The Most Friendly Beings?. , 2015, , 1-5.		28
43	The Challenging World of Biofilm Physiology. Advances in Microbial Physiology, 2015, 67, 235-292.	1.0	25
44	An HD-domain phosphodiesterase mediates cooperative hydrolysis of c-di-AMP to affect bacterial growth and virulence. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, E747-56.	3.3	171
45	Strategies for combating bacterial biofilm infections. International Journal of Oral Science, 2015, 7, 1-7.	3.6	696
46	The bacterial alarmone (p)ppGpp is required for virulence and controls cell size and survival of <i>Pseudomonas syringae</i> on plants. Environmental Microbiology, 2015, 17, 4253-4270.	1.8	38
47	Structural and Biochemical Analysis of the Essential Diadenylate Cyclase CdaA from <i>Listeria monocytogenes</i> . Journal of Biological Chemistry, 2015, 290, 6596-6606.	1.6	62
48	Role of intragenic binding of cAMP responsive protein (CRP) in regulation of the succinate dehydrogenase genes Rv0249c-Rv0247c in TB complex mycobacteria. Nucleic Acids Research, 2015, 43, 5377-5393.	6.5	29
49	Functional Analysis of a c-di-AMP-specific Phosphodiesterase MsPDE from <i>Mycobacterium smegmatis</i> . International Journal of Biological Sciences, 2015, 11, 813-824.	2.6	70
50	Biofilm formation mechanisms and targets for developing antibiofilm agents. Future Medicinal Chemistry, 2015, 7, 493-512.	1.1	492
51	Enzymatic synthesis of 2-ara and 2-deoxy analogues of c-di-GMP. Nucleosides, Nucleotides and Nucleic Acids, 2015, 34, 416-423.	0.4	5
52	Effect of preorganization on the affinity of synthetic DNA binding motifs for nucleotide ligands. Organic and Biomolecular Chemistry, 2015, 13, 5734-5742.	1.5	5
53	Multiple diguanylate cyclase-coordinated regulation of pyoverdine synthesis in <i>Pseudomonas aeruginosa</i> . Environmental Microbiology Reports, 2015, 7, 498-507.	1.0	47
54	The Bacterial Alarmone (p)ppGpp Activates the Type III Secretion System in <i>Erwinia amylovora</i> . Journal of Bacteriology, 2015, 197, 1433-1443.	1.0	51
55	Novel Functions of (p)ppGpp and Cyclic di-GMP in Mycobacterial Physiology Revealed by Phenotype Microarray Analysis of Wild-Type and Isogenic Strains of <i>Mycobacterium smegmatis</i> . Applied and Environmental Microbiology, 2015, 81, 2571-2578.	1.4	84
56	Structural analysis of an oxygen-regulated diguanylate cyclase. Acta Crystallographica Section D: Biological Crystallography, 2015, 71, 2158-2177.	2.5	40
57	Two nucleotide second messengers regulate the production of the <i>Vibrio cholerae</i> colonization factor GbpA. BMC Microbiology, 2015, 15, 166.	1.3	40

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58	Controllable synthesis of nucleotide complex based on pH control: a small-molecule fluorescent probe as an auxiliary ligand to indicate the pre-organization of the nucleotide complex in solution. Dalton Transactions, 2015, 44, 17810-17818.	1.6	10
59	Comparative genomic analyses reveal a vast, novel network of nucleotide-centric systems in biological conflicts, immunity and signaling. Nucleic Acids Research, 2015, 43, 10633-10654.	6.5	200
60	RelA Inhibits Bacillus subtilis Motility and Chaining. Journal of Bacteriology, 2015, 197, 128-137.	1.0	24
61	Environmental Regulation of Yersinia Pathophysiology. Frontiers in Cellular and Infection Microbiology, 2016, 6, 25.	1.8	46
62	Insights into the Quorum Sensing Regulon of the Acidophilic Acidithiobacillus ferrooxidans Revealed by Transcriptomic in the Presence of an Acyl Homoserine Lactone Superagonist Analog. Frontiers in Microbiology, 2016, 7, 1365.	1.5	38
63	Genes Required for the Anti-fungal Activity of a Bacterial Endophyte Isolated from a Corn Landrace Grown Continuously by Subsistence Farmers Since 1000 BC. Frontiers in Microbiology, 2016, 7, 1548.	1.5	22
64	The Characterization of Escherichia coli CpdB as a Recombinant Protein Reveals that, besides Having the Expected 3'-Nucleotidase and 2',3'-Cyclic Mononucleotide Phosphodiesterase Activities, It Is Also Active as Cyclic Dinucleotide Phosphodiesterase. PLoS ONE, 2016, 11, e0157308.	1.1	11
65	A New Second Messenger: Bacterial c-di-AMP. Critical Reviews in Eukaryotic Gene Expression, 2016, 26, 309-316.	0.4	6
66	Supramolecular polymer formation by cyclic dinucleotides and intercalators affects dinucleotide enzymatic processing. Future Science OA, 2016, 2, FSO93.	0.9	8
67	Cyclic diAMP mediates biofilm formation. Molecular Microbiology, 2016, 99, 945-959.	1.2	126
68	New Insights into the Cyclic Di-adenosine Monophosphate (c-di-AMP) Degradation Pathway and the Requirement of the Cyclic Dinucleotide for Acid Stress Resistance in Staphylococcus aureus. Journal of Biological Chemistry, 2016, 291, 26970-26986.	1.6	87
69	Mass Spectrometric Analysis of Non-canonical Cyclic Nucleotides. Handbook of Experimental Pharmacology, 2016, 238, 293-306.	0.9	2
70	Dcsbis (PA2771) from Pseudomonas aeruginosa is a highly active diguanylate cyclase with unique activity regulation. Scientific Reports, 2016, 6, 29499.	1.6	31
71	DgcA, a diguanylate cyclase from Xanthomonas oryzae pv. oryzae regulates bacterial pathogenicity on rice. Scientific Reports, 2016, 6, 25978.	1.6	25
72	The role of the globin-coupled sensor YddV in a mature E. coli biofilm population. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2016, 1864, 835-839.	1.1	6
73	Antibiofilm Peptides: Potential as Broad-Spectrum Agents. Journal of Bacteriology, 2016, 198, 2572-2578.	1.0	163
74	Replenishing the cyclic-di-AMP pool: regulation of diadenylate cyclase activity in bacteria. Current Genetics, 2016, 62, 731-738.	0.8	31
75	Biofilms and Cyclic di-GMP (c-di-GMP) Signaling: Lessons from Pseudomonas aeruginosa and Other Bacteria. Journal of Biological Chemistry, 2016, 291, 12547-12555.	1.6	476

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76	The Bacterial Second Messenger Cyclic di-GMP Regulates Brucella Pathogenesis and Leads to Altered Host Immune Response. <i>Infection and Immunity</i> , 2016, 84, 3458-3470.	1.0	22
77	Analysis of proton wires in the enzyme active site suggests a mechanism of c-di-GMP hydrolysis by the EAL domain phosphodiesterases. <i>Proteins: Structure, Function and Bioinformatics</i> , 2016, 84, 1670-1680.	1.5	7
78	Quorum sensing signal-response systems in Gram-negative bacteria. <i>Nature Reviews Microbiology</i> , 2016, 14, 576-588.	13.6	1,586
79	The Stringent Response Promotes Antibiotic Resistance Dissemination by Regulating Integron Integrase Expression in Biofilms. <i>MBio</i> , 2016, 7, .	1.8	70
80	Inhibition of cyclic diadenylate cyclase, DisA, by polyphenols. <i>Scientific Reports</i> , 2016, 6, 25445.	1.6	24
81	Computational understanding and experimental characterization of twice-as-smart quadruplex ligands as chemical sensors of bacterial nucleotide second messengers. <i>Scientific Reports</i> , 2016, 6, 33888.	1.6	11
82	Cyclic cAMP synthesis by the diadenylate cyclase CdaA is modulated by the peptidoglycan biosynthesis enzyme GlmM in <i>Listeria monocytogenes</i> . <i>Molecular Microbiology</i> , 2016, 99, 1015-1027.	1.2	61
83	Cyclic dinucleotide (c-di-GMP, c-di-AMP, and cGAMP) signalings have come of age to be inhibited by small molecules. <i>Chemical Communications</i> , 2016, 52, 9327-9342.	2.2	78
84	Recent Trends in Nucleotide Synthesis. <i>Chemical Reviews</i> , 2016, 116, 7854-7897.	23.0	148
85	Inhibition of <i>P. aeruginosa</i> c-di-GMP phosphodiesterase RocR and swarming motility by a benzoisothiazolinone derivative. <i>Chemical Science</i> , 2016, 7, 6238-6244.	3.7	39
86	Combating chronic bacterial infections by manipulating cyclic nucleotide-regulated biofilm formation. <i>Future Medicinal Chemistry</i> , 2016, 8, 949-961.	1.1	6
87	Cyclic diguanylate signaling in Gram-positive bacteria. <i>FEMS Microbiology Reviews</i> , 2016, 40, 753-773.	3.9	78
88	Microbial Biofilms in Pulmonary and Critical Care Diseases. <i>Annals of the American Thoracic Society</i> , 2016, 13, 1615-1623.	1.5	74
89	Nuclease-Resistant c-di-AMP Derivatives That Differentially Recognize RNA and Protein Receptors. <i>Biochemistry</i> , 2016, 55, 837-849.	1.2	16
90	Cyclic (di)nucleotides: the common language shared by microbe and host. <i>Current Opinion in Microbiology</i> , 2016, 30, 79-87.	2.3	25
91	Why don't we have an effective tuberculosis vaccine yet?. <i>Expert Review of Vaccines</i> , 2016, 15, 1009-1013.	2.0	60
92	Regulation of Growth, Cell Shape, Cell Division, and Gene Expression by Second Messengers (p)ppGpp and Cyclic Di-GMP in <i>Mycobacterium smegmatis</i> . <i>Journal of Bacteriology</i> , 2016, 198, 1414-1422.	1.0	46
93	Potent inhibition of cyclic diadenylate monophosphate cyclase by the antiparasitic drug, suramin. <i>Chemical Communications</i> , 2016, 52, 3754-3757.	2.2	19

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94	Crystal structure and chirality of adenosine-5- $\epsilon$ -diphosphate coordination complex. <i>Inorganic Chemistry Communication</i> , 2016, 64, 1-4.	1.8	6
95	Cyclic dinucleotide detection with riboswitch-G-quadruplex hybrid. <i>Molecular BioSystems</i> , 2016, 12, 773-777.	2.9	6
96	Structural and Biochemical Insight into the Mechanism of Rv2837c from <i>Mycobacterium tuberculosis</i> as a c-di-NMP Phosphodiesterase. <i>Journal of Biological Chemistry</i> , 2016, 291, 3668-3681.	1.6	67
97	Characterization of a cAMP responsive transcription factor, Cmr (Rv1675c), in TB complex mycobacteria reveals overlap with the DosR (DevR) dormancy regulon. <i>Nucleic Acids Research</i> , 2016, 44, 134-151.	6.5	25
98	The dual aptamer approach: rational design of a high-affinity FAD aptamer. <i>Organic and Biomolecular Chemistry</i> , 2016, 14, 447-450.	1.5	2
99	Structure-activity relationship studies of c-di-AMP synthase inhibitor, bromophenol-thiohydantoin. <i>Tetrahedron</i> , 2016, 72, 3554-3558.	1.0	7
100	Fluorescent analogs of cyclic and linear dinucleotides as phosphodiesterase and oligoribonuclease activity probes. <i>RSC Advances</i> , 2017, 7, 5421-5426.	1.7	11
101	c-di-AMP modulates <i>Listeria monocytogenes</i> central metabolism to regulate growth, antibiotic resistance and osmoregulation. <i>Molecular Microbiology</i> , 2017, 104, 212-233.	1.2	121
102	A Novel Phosphodiesterase of the GdpP Family Modulates Cyclic di-AMP Levels in Response to Cell Membrane Stress in Daptomycin-Resistant Enterococci. <i>Antimicrobial Agents and Chemotherapy</i> , 2017, 61, .	1.4	24
103	Advanced acuity in microbial biofilm genesis, development, associated clinical infections and control. <i>Journal Des Anti-infectieux</i> , 2017, 19, 20-31.	0.1	3
104	Cyclic di-GMP: second messenger extraordinaire. <i>Nature Reviews Microbiology</i> , 2017, 15, 271-284.	13.6	706
105	Phosphate-Modified Nucleotides for Monitoring Enzyme Activity. <i>Topics in Current Chemistry</i> , 2017, 375, 28.	3.0	13
106	Non-canonical Cyclic Nucleotides. <i>Handbook of Experimental Pharmacology</i> , 2017, , .	0.9	2
107	Drug discovery targeting heme-based sensors and their coupled activities. <i>Journal of Inorganic Biochemistry</i> , 2017, 167, 12-20.	1.5	19
108	Global Transcriptional Response to Organic Hydroperoxide and the Role of OhrR in the Control of Virulence Traits in <i>Chromobacterium violaceum</i> . <i>Infection and Immunity</i> , 2017, 85, .	1.0	21
109	Synthesis and evaluation of c-di-4-thioAMP as an artificial ligand for c-di-AMP riboswitch. <i>Bioorganic and Medicinal Chemistry</i> , 2017, 25, 3883-3889.	1.4	7
110	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.	1.7	4
111	Optogenetic Module for Dichromatic Control of c-di-GMP Signaling. <i>Journal of Bacteriology</i> , 2017, 199, .	1.0	29

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112	Structure based virtual screening for identification of potential quorum sensing inhibitors against LasR master regulator in <i>Pseudomonas aeruginosa</i> . <i>Microbial Pathogenesis</i> , 2017, 107, 136-143.	1.3	34
113	New mechanistic insights into the motile-to-sessile switch in various bacteria with particular emphasis on <i>Bacillus subtilis</i> and <i>Pseudomonas aeruginosa</i> : a review. <i>Biofouling</i> , 2017, 33, 306-326.	0.8	21
114	Sensing of Bacterial Cyclic Dinucleotides by the Oxidoreductase RECON Promotes NF- $\kappa$ B Activation and Shapes a Proinflammatory Antibacterial State. <i>Immunity</i> , 2017, 46, 433-445.	6.6	98
115	Inhibition of innate immune cytosolic surveillance by an <i>M. tuberculosis</i> phosphodiesterase. <i>Nature Chemical Biology</i> , 2017, 13, 210-217.	3.9	96
116	Antibiofilm agents: A new perspective for antimicrobial strategy. <i>Journal of Microbiology</i> , 2017, 55, 753-766.	1.3	127
117	Targeting c-di-GMP Signaling, Biofilm Formation, and Bacterial Motility with Small Molecules. <i>Methods in Molecular Biology</i> , 2017, 1657, 419-430.	0.4	28
118	Fluorescent 2-Aminopurine c-di-GMP and GpG Analogs as PDE Probes. <i>Methods in Molecular Biology</i> , 2017, 1657, 245-261.	0.4	1
119	Identification and Quantification of Cyclic Di-Guanosine Monophosphate and Its Linear Metabolites by Reversed-Phase LC-MS/MS. <i>Methods in Molecular Biology</i> , 2017, 1657, 45-58.	0.4	26
120	Dissecting the link between the enzymatic activity and the SaPI inducing capacity of the phage 801 $\pm$ dUTPase. <i>Scientific Reports</i> , 2017, 7, 11234.	1.6	6
121	Type III CRISPR-Cas systems produce cyclic oligoadenylate second messengers. <i>Nature</i> , 2017, 548, 543-548.	13.7	377
122	Influence of (p)ppGpp on biofilm regulation in <i>Pseudomonas putida</i> KT2440. <i>Microbiological Research</i> , 2017, 204, 1-8.	2.5	44
123	Bacterial Signaling Nucleotides Inhibit Yeast Cell Growth by Impacting Mitochondrial and Other Specifically Eukaryotic Functions. <i>MBio</i> , 2017, 8, .	1.8	10
125	c-di-AMP: An Essential Molecule in the Signaling Pathways that Regulate the Viability and Virulence of Gram-Positive Bacteria. <i>Genes</i> , 2017, 8, 197.	1.0	97
126	The Oxidative Stress Agent Hypochlorite Stimulates c-di-GMP Synthesis and Biofilm Formation in <i>Pseudomonas aeruginosa</i> . <i>Frontiers in Microbiology</i> , 2017, 8, 2311.	1.5	44
127	Stress Suppressor Screening Leads to Detection of Regulation of Cyclic di-AMP Homeostasis by a Trk Family Effector Protein in <i>Streptococcus pneumoniae</i> . <i>Journal of Bacteriology</i> , 2018, 200, .	1.0	34
128	In situ precipitation of hydrous titanium dioxide for dispersive micro solid-phase extraction of nucleosides and their separation. <i>New Journal of Chemistry</i> , 2018, 42, 4909-4914.	1.4	3
129	Identification of drug target candidates of the swine pathogen <i>Actinobacillus pleuropneumoniae</i> by construction of protein-protein interaction network. <i>Genes and Genomics</i> , 2018, 40, 847-856.	0.5	7
130	RNase I regulates <i>Escherichia coli</i> c-di-GMP levels and biofilm formation. <i>Biochemical Journal</i> , 2018, 475, 1491-1506.	1.7	31



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131	Integration of multiple stimuli-sensing systems to regulate HrpS and type III secretion system in <i>Erwinia amylovora</i> . <i>Molecular Genetics and Genomics</i> , 2018, 293, 187-196.	1.0	14
132	Quorum-Sensing Systems as Targets for Antivirulence Therapy. <i>Trends in Microbiology</i> , 2018, 26, 313-328.	3.5	351
133	Proteomic analysis of RAW macrophages treated with cGAMP or c-di-GMP reveals differentially activated cellular pathways. <i>RSC Advances</i> , 2018, 8, 36840-36851.	1.7	15
134	Phosphorylated OmpR Is Required for Type 3 Fimbriae Expression in <i>Klebsiella pneumoniae</i> Under Hypertonic Conditions. <i>Frontiers in Microbiology</i> , 2018, 9, 2405.	1.5	39
135	Exploring the Links between Nucleotide Signaling and Quorum Sensing Pathways in Regulating Bacterial Virulence. <i>ACS Infectious Diseases</i> , 2018, 4, 1645-1655.	1.8	15
136	Structural Insights into Oxygen-Dependent Signal Transduction within Globin Coupled Sensors. <i>Inorganic Chemistry</i> , 2018, 57, 14386-14395.	1.9	17
137	The State of the Union Is Strong: a Review of ASM's 6th Conference on Cell-Cell Communication in Bacteria. <i>Journal of Bacteriology</i> , 2018, 200, .	1.0	0
138	A metabolomic view of how low nitrogen strength favors anammox biomass yield and nitrogen removal capability. <i>Water Research</i> , 2018, 143, 387-398.	5.3	98
139	Managing the Microbial Community of Marine Fish Larvae: A Holistic Perspective for Larviculture. <i>Frontiers in Microbiology</i> , 2018, 9, 1820.	1.5	64
140	The Stringent Response-Regulated sRNA Transcriptome of <i>Borrelia burgdorferi</i> . <i>Frontiers in Cellular and Infection Microbiology</i> , 2018, 8, 231.	1.8	20
141	c-di-GMP Regulates Various Phenotypes and Insecticidal Activity of Gram-Positive <i>Bacillus thuringiensis</i> . <i>Frontiers in Microbiology</i> , 2018, 9, 45.	1.5	39
142	VpsR and cyclic di-GMP together drive transcription initiation to activate biofilm formation in <i>Vibrio cholerae</i> . <i>Nucleic Acids Research</i> , 2018, 46, 8876-8887.	6.5	48
143	Terrein is an inhibitor of quorum sensing and c-di-GMP in <i>Pseudomonas aeruginosa</i> : a connection between quorum sensing and c-di-GMP. <i>Scientific Reports</i> , 2018, 8, 8617.	1.6	59
144	<i>Streptococcus sanguinis</i> biofilm formation & interaction with oral pathogens. <i>Future Microbiology</i> , 2018, 13, 915-932.	1.0	124
145	Regulation of type III secretion system in <i>Pseudomonas syringae</i> . <i>Environmental Microbiology</i> , 2019, 21, 4465-4477.	1.8	41
146	Genetically Encoded Ratiometric RNA-Based Sensors for Quantitative Imaging of Small Molecules in Living Cells. <i>Angewandte Chemie</i> , 2019, 131, 18439-18443.	1.6	4
147	Genetically Encoded Ratiometric RNA-Based Sensors for Quantitative Imaging of Small Molecules in Living Cells. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 18271-18275.	7.2	40
148	Small Molecule Anti-biofilm Agents Developed on the Basis of Mechanistic Understanding of Biofilm Formation. <i>Frontiers in Chemistry</i> , 2019, 7, 742.	1.8	70

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149	The Impact of the Stringent Response on TRAFAC GTPases and Prokaryotic Ribosome Assembly. <i>Cells</i> , 2019, 8, 1313.	1.8	31
150	Effects of exogenous glucose on <i>Pseudomonas aeruginosa</i> biofilm formation and antibiotic resistance. <i>MicrobiologyOpen</i> , 2019, 8, e933.	1.2	46
152	Highly Efficient Preparation of Cyclic Dinucleotides via Engineering of Dinucleotide Cyclases in <i>Escherichia coli</i> . <i>Frontiers in Microbiology</i> , 2019, 10, 2111.	1.5	15
153	Anti-Microbiological, Anti-Hyperglycemic and Anti-Obesity Potency of Natural Antioxidants in Fruit Fractions of Saskatoon Berry. <i>Antioxidants</i> , 2019, 8, 397.	2.2	15
154	Crystal structures of the c-di-AMP synthesizing enzyme CdaA. <i>Journal of Biological Chemistry</i> , 2019, 294, 10463-10470.	1.6	13
155	Small alarmones (p)ppGpp regulate virulence associated traits and pathogenesis of <i>Salmonella enterica</i> serovar Typhi. <i>Cellular Microbiology</i> , 2019, 21, e13034.	1.1	19
156	Cyclic nucleotides in archaea: Cyclic diAMP in the archaeon <i>Haloferax volcanii</i> and its putative role. <i>MicrobiologyOpen</i> , 2019, 8, e00829.	1.2	32
157	The Second Messenger c-di-AMP Regulates Diverse Cellular Pathways Involved in Stress Response, Biofilm Formation, Cell Wall Homeostasis, SpeB Expression, and Virulence in <i>Streptococcus pyogenes</i> . <i>Infection and Immunity</i> , 2019, 87, .	1.0	36
158	Nanobody and aptamer as targeting moiety against bacterial toxins: therapeutic and diagnostic applications. <i>Reviews in Medical Microbiology</i> , 2019, 30, 183-190.	0.4	4
159	Integration Host Factor Is Essential for Biofilm Formation, Extracellular Enzyme, Zeamine Production, and Virulence in <i>Dickeya zeae</i> . <i>Molecular Plant-Microbe Interactions</i> , 2019, 32, 325-335.	1.4	4
160	Regulation of gingival epithelial cytokine response by bacterial cyclic dinucleotides. <i>Journal of Oral Microbiology</i> , 2019, 11, 1538927.	1.2	18
161	Discriminating cyclic from linear nucleotides ~ CRISPR/Cas-related cyclic hexaadenosine monophosphate as a case study. <i>Analytical Biochemistry</i> , 2019, 567, 21-26.	1.1	3
162	Signal transduction schemes in <i>Pseudomonas syringae</i> . <i>Computational and Structural Biotechnology Journal</i> , 2020, 18, 3415-3424.	1.9	4
163	Survival of the Fittest: The Relationship of (p)ppGpp With Bacterial Virulence. <i>Frontiers in Microbiology</i> , 2020, 11, 601417.	1.5	24
164	(p)ppGpp Metabolism and Antimicrobial Resistance in Bacterial Pathogens. <i>Frontiers in Microbiology</i> , 2020, 11, 563944.	1.5	23
165	Identification of Uncharacterized Components of Prokaryotic Immune Systems and Their Diverse Eukaryotic Reformulations. <i>Journal of Bacteriology</i> , 2020, 202, .	1.0	49
166	Integrated mRNA and Small RNA Sequencing Reveals Regulatory Expression of Larval Metamorphosis of the Razor Clam. <i>Marine Biotechnology</i> , 2020, 22, 696-705.	1.1	5
167	(p)ppGpp: Magic Modulators of Bacterial Physiology and Metabolism. <i>Frontiers in Microbiology</i> , 2020, 11, 2072.	1.5	72

#	ARTICLE	IF	CITATIONS
168	Diversity in <i>E. coli</i> (p)ppGpp Levels and Its Consequences. <i>Frontiers in Microbiology</i> , 2020, 11, 1759.	1.5	20
169	Establishment of Optogenetic Modulation of cAMP for Analyzing Growth, Biofilm Formation, and Virulence Pathways of Bacteria Using a Light-Gated Cyclase. <i>Applied Sciences (Switzerland)</i> , 2020, 10, 5535.	1.3	2
170	6S-1 RNA Contributes to Sporulation and Parasporal Crystal Formation in <i>Bacillus thuringiensis</i> . <i>Frontiers in Microbiology</i> , 2020, 11, 604458.	1.5	5
171	<i>Acanthamoeba castellanii</i> as a Screening Tool for <i>Mycobacterium avium</i> Subspecies <i>paratuberculosis</i> Virulence Factors with Relevance in Macrophage Infection. <i>Microorganisms</i> , 2020, 8, 1571.	1.6	5
172	Paper-based fluorogenic RNA aptamer sensors for label-free detection of small molecules. <i>Analytical Methods</i> , 2020, 12, 2674-2681.	1.3	7
173	A decade of research on the second messenger c-di-AMP. <i>FEMS Microbiology Reviews</i> , 2020, 44, 701-724.	3.9	74
174	The Regulation of Bacterial Biofilm Formation by cAMP-CRP: A Mini-Review. <i>Frontiers in Microbiology</i> , 2020, 11, 802.	1.5	50
175	Enzymatic Syntheses and Applications of Fluorescent Cyclic Dinucleotides. <i>Chemistry - A European Journal</i> , 2020, 26, 6076-6084.	1.7	10
176	The Nitrite Transporter Facilitates Biofilm Formation via Suppression of Nitrite Reductase and Is a New Antibiofilm Target in <i>Pseudomonas aeruginosa</i> . <i>MBio</i> , 2020, 11, .	1.8	13
177	Ratiometric Fluorogenic RNA-Based Sensors for Imaging Live-Cell Dynamics of Small Molecules. <i>ACS Applied Bio Materials</i> , 2020, 3, 2633-2642.	2.3	12
178	Tracking the homeostasis of second messenger cyclic-di-GMP in bacteria. <i>Biophysical Reviews</i> , 2020, 12, 719-730.	1.5	17
179	Identification of Key Metabolites in Poly- $\hat{\Gamma}^3$ -Glutamic Acid Production by Tuning $\hat{\Gamma}^3$ -PGA Synthetase Expression. <i>Frontiers in Bioengineering and Biotechnology</i> , 2020, 8, 38.	2.0	13
180	Knockout of Diguanylate Cyclase Genes in <i>Lysobacter enzymogenes</i> to Improve Production of Antifungal Factor and Increase Its Application in Seed Coating. <i>Current Microbiology</i> , 2020, 77, 1006-1015.	1.0	10
181	Comparison of Isomerase and Weimberg Pathway for $\hat{\Gamma}^3$ -PGA Production From Xylose by Engineered <i>Bacillus subtilis</i> . <i>Frontiers in Bioengineering and Biotechnology</i> , 2019, 7, 476.	2.0	21
182	Tlr0485 is a cAMP-activated c-di-GMP phosphodiesterase in a cyanobacterium <i>Thermosynechococcus</i> . <i>Journal of General and Applied Microbiology</i> , 2020, 66, 147-152.	0.4	6
183	Comparative transcriptomic analysis of global gene expression mediated by (p) ppGpp reveals common regulatory networks in <i>Pseudomonas syringae</i> . <i>BMC Genomics</i> , 2020, 21, 296.	1.2	11
184	Deciphering the Metabolic Pathway Difference Between <i>Saccharopolyspora pogona</i> and <i>Saccharopolyspora spinosa</i> by Comparative Proteomics and Metabonomics. <i>Frontiers in Microbiology</i> , 2020, 11, 396.	1.5	14
185	Antimicrobial peptides as a potent therapeutic regimen to quench biofilm-mediated antimicrobial resistance. , 2021, , 531-570.		1

#	ARTICLE	IF	CITATIONS
186	The basics of mitochondrial cAMP signalling: Where, when, why. <i>Cell Calcium</i> , 2021, 93, 102320.	1.1	13
187	Amine skeleton-based c-di-GMP derivatives as biofilm formation inhibitors. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2021, 32, 127713.	1.0	4
188	Identification of a <i>Mycobacterium tuberculosis</i> Cyclic Dinucleotide Phosphodiesterase Inhibitor. <i>ACS Infectious Diseases</i> , 2021, 7, 309-317.	1.8	8
189	Tetradecanoic Acids With Anti-Virulence Properties Increase the Pathogenicity of <i>Pseudomonas aeruginosa</i> in a Murine Cutaneous Infection Model. <i>Frontiers in Cellular and Infection Microbiology</i> , 2020, 10, 597517.	1.8	9
190	ppGpp signaling plays a critical role in virulence of <i>Acinetobacter baumannii</i> . <i>Virulence</i> , 2021, 12, 2122-2132.	1.8	9
191	A STING-based fluorescent polarization assay for monitoring activities of cyclic dinucleotide metabolizing enzymes. <i>RSC Chemical Biology</i> , 2021, 2, 206-214.	2.0	3
192	Structural basis of KdpD histidine kinase binding to the second messenger c-di-AMP. <i>Journal of Biological Chemistry</i> , 2021, 296, 100771.	1.6	13
194	The RsmA RNA-Binding Proteins in <i>Pseudomonas syringae</i> Exhibit Distinct and Overlapping Roles in Modulating Virulence and Survival Under Different Nutritional Conditions. <i>Frontiers in Plant Science</i> , 2021, 12, 637595.	1.7	9
195	Synthetic Biological Approaches for Optogenetics and Tools for Transcriptional Light Control in Bacteria. <i>Advanced Biology</i> , 2021, 5, e2000256.	1.4	48
196	Optogenetic Modification of <i>Pseudomonas aeruginosa</i> Enables Controllable Twitching Motility and Host Infection. <i>ACS Synthetic Biology</i> , 2021, 10, 531-541.	1.9	11
197	c-di-AMP-Regulated K <sup>+</sup> Importer KtrAB Affects Biofilm Formation, Stress Response, and SpeB Expression in <i>Streptococcus pyogenes</i> . <i>Infection and Immunity</i> , 2021, 89, .	1.0	11
199	A Novel Gene vp0610 Negatively Regulates Biofilm Formation in <i>Vibrio parahaemolyticus</i> . <i>Frontiers in Microbiology</i> , 2021, 12, 656380.	1.5	4
200	The Diadenylate Cyclase CdaA Is Critical for <i>Borrelia turicatae</i> Virulence and Physiology. <i>Infection and Immunity</i> , 2021, 89, .	1.0	6
202	Bacterial Cyclic Dinucleotides and the cGAS/cGAMP-STING Pathway: A Role in Periodontitis?. <i>Pathogens</i> , 2021, 10, 675.	1.2	7
203	Alternatives to Conventional Antibiotic Therapy: Potential Therapeutic Strategies of Combating Antimicrobial-Resistance and Biofilm-Related Infections. <i>Molecular Biotechnology</i> , 2021, 63, 1103-1124.	1.3	22
204	Identification of a diguanylate cyclase expressed in the presence of plants and its application for discovering candidate gene products involved in plant colonization by <i>Pantoea</i> sp. YR343. <i>PLoS ONE</i> , 2021, 16, e0248607.	1.1	5
205	Interplay between the cyclic di-GMP network and the cell-cell signalling components coordinates virulence-associated functions in <i>Xanthomonas oryzae</i> pv. <i>oryzae</i> . <i>Environmental Microbiology</i> , 2021, 23, 5433-5462.	1.8	2
206	Expression Dysregulation as a Mediator of Fitness Costs in Antibiotic Resistance. <i>Antimicrobial Agents and Chemotherapy</i> , 2021, 65, e0050421.	1.4	5

#	ARTICLE	IF	CITATIONS
207	c-di-AMP Is Essential for the Virulence of <i>Enterococcus faecalis</i> . <i>Infection and Immunity</i> , 2021, 89, e0036521.	1.0	9
208	Stress adaptation and virulence in <i>Vibrio alginolyticus</i> is mediated by two (p)ppGpp synthetase genes, <i>relA</i> and <i>spoT</i> . <i>Microbiological Research</i> , 2021, 253, 126883.	2.5	14
209	Replacement of oxygen with sulfur on the furanose ring of cyclic dinucleotides enhances the immunostimulatory effect via STING activation. <i>RSC Medicinal Chemistry</i> , 2021, 12, 1519-1524.	1.7	9
210	Targeting Cyclic Dinucleotide Signaling with Small Molecules. , 2020, , 577-591.		2
211	Cell cycle control and environmental response by second messengers in <i>Caulobacter crescentus</i> . <i>BMC Bioinformatics</i> , 2020, 21, 408.	1.2	9
212	Cyclic di-guanosine monophosphate signaling regulates bacterial life cycle and pathogenicity. <i>Journal of Preventive Veterinary Medicine</i> , 2019, 43, 38-46.	0.1	3
213	Intracellular Concentrations of <i>Borrelia burgdorferi</i> Cyclic Di-AMP Are Not Changed by Altered Expression of the <i>CdaA</i> Synthase. <i>PLoS ONE</i> , 2015, 10, e0125440.	1.1	22
214	CRP-Cyclic AMP Regulates the Expression of Type 3 Fimbriae via Cyclic di-GMP in <i>Klebsiella pneumoniae</i> . <i>PLoS ONE</i> , 2016, 11, e0162884.	1.1	38
215	The SiaABC threonine phosphorylation pathway controls biofilm formation in response to carbon availability in <i>Pseudomonas aeruginosa</i> . <i>PLoS ONE</i> , 2020, 15, e0241019.	1.1	6
216	THE STRINGENT RESPONSE AND ITS INVOLVEMENT IN THE REACTIONS OF BACTERIAL CELLS TO STRESS. <i>Postepy Mikrobiologii</i> , 2019, 58, 127-142.	0.1	3
217	The Cyclic AMP Receptor Protein, <i>Crp</i> , Is Required for the Decolorization of Acid Yellow 36 in <i>Shewanella putrefaciens</i> CN32. <i>Frontiers in Microbiology</i> , 2020, 11, 596372.	1.5	6
218	c-di-GMP heterogeneity is generated by the chemotaxis machinery to regulate flagellar motility. <i>ELife</i> , 2013, 2, e01402.	2.8	103
219	Synthesis of a Cyclic Dinucleotide Analogue with Ambiguous Bases, 5-Aminoimidazole-4-carboxamide. <i>Journal of Organic Chemistry</i> , 2021, 86, 15004-15010.	1.7	6
220	Cellular Effects of 2,3-Cyclic Nucleotide Monophosphates in Gram-Negative Bacteria. <i>Journal of Bacteriology</i> , 2022, 204, JB0020821.	1.0	11
221	Bioinformatics Analysis of Diguanylate Cyclases and c-di-GMP-Specific Phosphodiesterases from <i>Xanthomonas</i> Species. <i>Hans Journal of Computational Biology</i> , 2014, 04, 68-82.	0.0	0
224	Drug control of biofilm dispersion due to regulation of the activity of bacterial cyclic guanosine monophosphate (part 1). <i>Zdorovĕ Rebenĕka</i> , 2020, 15, 60-67.	0.0	0
226	Cyclic di-AMP in <i>Mycobacterium tuberculosis</i> . , 2020, , 443-454.		1
227	Cyclic di-GMP and the Regulation of Biofilm Dispersion. , 2020, , 545-560.		2

#	ARTICLE	IF	CITATIONS
228	Cyclic Dinucleotide Signaling in Mycobacteria. , 2020, , 3-25.		3
229	Drug control of biofilm dispersion due to regulation of the activity of bacterial cyclic guanosine monophosphate (part 2). Zdravĕ Rebenka, 2020, 15, 145-154.	0.0	0
231	Phosphorus Concentration in Water Affects the Biofilm Community and the Produced Amount of Extracellular Polymeric Substances in Reverse Osmosis Membrane Systems. Membranes, 2021, 11, 928.	1.4	4
232	2â€²,3â€²â€²Cyclic GMPâ€²AMP Dinucleotides for STINGâ€²Mediated Immune Modulation: Principles, Immunotherapeutic Potential, and Synthesis. ChemMedChem, 2022, 17, .	1.6	5
233	Evolutionary trade-offs between growth and survival: The delicate balance between reproductive success and longevity in bacteria. Advances in Microbial Physiology, 2021, 79, 133-162.	1.0	13
234	The First FRET-Based RNA Aptamer NanoKit for Sensitive and Specifically Detecting c-di-GMP. Nano Letters, 2022, 22, 716-725.	4.5	5
235	Highâ€²Strength and Injectable Supramolecular Hydrogel Selfâ€²Assembled by Monomeric Nucleoside for Toothâ€²Extraction Wound Healing. Advanced Materials, 2022, 34, e2108300.	11.1	58
236	Therapeutic strategies against potential antibiofilm targets of multidrugâ€²resistant <i>Acinetobacter baumannii</i>. Journal of Cellular Physiology, 2022, 237, 2045-2063.	2.0	18
237	Biofilm control by interfering with c-di-GMP metabolism and signaling. Biotechnology Advances, 2022, 56, 107915.	6.0	39
238	Heme-Based Gas Sensors in Nature and Their Chemical and Biotechnological Applications. Biochem, 2022, 2, 43-63.	0.5	7
240	IPA-3: An Inhibitor of Diadenylate Cyclase of Streptococcus suis with Potent Antimicrobial Activity. Antibiotics, 2022, 11, 418.	1.5	2
241	cAMP and c-di-GMP synergistically support biofilm maintenance through the direct interaction of their effectors. Nature Communications, 2022, 13, 1493.	5.8	24
242	Enhanced Immune Responses in Mice Induced by the c-di-GMP Adjuvanted Inactivated Vaccine for Pseudorabies Virus. Frontiers in Immunology, 2022, 13, 845680.	2.2	1
243	ç»†â€²C-di-AMPç%1â¼4,æ€§çƒ.é...ä°CEé...Ē...Œçš,,ç©Œè;â±. Chinese Science Bulletin, 2022, , .	0.4	0
244	cAMP-Dependent Synaptic Plasticity at the Hippocampal Mossy Fiber Terminal. Frontiers in Synaptic Neuroscience, 2022, 14, 861215.	1.3	12
245	Unraveling the complex regulatory networks in biofilm formation in bacteria and relevance of biofilms in environmental remediation. Critical Reviews in Biochemistry and Molecular Biology, 2022, 57, 305-332.	2.3	33
246	What Flips the Switch? Signals and Stress Regulating Extraintestinal Pathogenic Escherichia coli Type 1 Fimbriae (Pili). Microorganisms, 2022, 10, 5.	1.6	8
247	The nucleotide messenger (p)ppGpp is an anti-inducer of the purine synthesis transcription regulator PurR in <i>Bacillus</i>. Nucleic Acids Research, 2022, 50, 847-866.	6.5	19

#	ARTICLE	IF	CITATIONS
264	New Chemotypes for the Inhibition of (p)ppGpp Synthesis in the Quest for New Antimicrobial Compounds. <i>Molecules</i> , 2022, 27, 3097.	1.7	3
265	Identification of Protein Drug Targets of Biofilm Formation and Quorum Sensing in Multidrug Resistant <i>Enterococcus faecalis</i> . <i>Current Protein and Peptide Science</i> , 2022, 23, 248-263.	0.7	2
266	Discovery of isonucleotidic CDNs as potent STING agonists with immunomodulatory potential. <i>Structure</i> , 2022, 30, 1146-1156.e11.	1.6	9
267	Structure-Function Relationship in C-Di-Amp Synthase (Msdisa) from <i>Mycobacterium Smegmatis</i> . <i>SSRN Electronic Journal</i> , 0, , .	0.4	0
268	Effect of SPoT-mediated Stringent Response on Biofilm Formation, Stress Resistance and Quorum Sensing in <i>Pseudomonas protegens</i> SN15-2. <i>Applied Biochemistry and Microbiology</i> , 2022, 58, 406-415.	0.3	0
269	Systematic analysis of the roles of c-di-GMP signaling in <i>Xanthomonas oryzae</i> pv. <i>oryzae</i> virulence. <i>FEMS Microbiology Letters</i> , 2022, 369, .	0.7	4
270	Iron-doped cerium/nucleotide coordination polymer as highly efficient peroxidase mimic for colorimetric detection of fluoride ion. <i>Mikrochimica Acta</i> , 2022, 189, .	2.5	0
271	Cyclic di-AMP as endogenous adjuvant enhanced BCG-induced trained immunity and protection against <i>Mycobacterium tuberculosis</i> in mice. <i>Frontiers in Immunology</i> , 0, 13, .	2.2	4
272	Design and synthesis of novel benzimidazole derivatives as potential <i>Pseudomonas aeruginosa</i> anti-biofilm agents inhibiting LasR: Evidence from comprehensive molecular dynamics simulation and in vitro investigation. <i>European Journal of Medicinal Chemistry</i> , 2022, 241, 114629.	2.6	12
273	Signaling nucleotides in bacteria. , 2023, , 35-48.		0
274	The role of bacterial cyclic di-adenosine monophosphate in the host immune response. <i>Frontiers in Microbiology</i> , 0, 13, .	1.5	3
275	Dissecting Light Sensing and Metabolic Pathways on the Millimeter Scale in High-Altitude Modern Stromatolites. <i>Microbial Ecology</i> , 2023, 86, 914-932.	1.4	2
276	Binding of 2,3-Cyclic Nucleotide Monophosphates to Bacterial Ribosomes Inhibits Translation. <i>ACS Central Science</i> , 2022, 8, 1518-1526.	5.3	8
277	Extracellular c-di-GMP Plays a Role in Biofilm Formation and Dispersion of <i>Campylobacter jejuni</i> . <i>Microorganisms</i> , 2022, 10, 2030.	1.6	7
278	Virulence-related regulatory network of <i>Pseudomonas syringae</i> . <i>Computational and Structural Biotechnology Journal</i> , 2022, 20, 6259-6270.	1.9	4
279	Peptide nanotube loaded with a STING agonist, c-di-GMP, enhance cancer immunotherapy against melanoma. <i>Nano Research</i> , 2023, 16, 5206-5215.	5.8	4
280	An Expanding Role of 2,3-Cyclic Nucleotide Monophosphates in Bacteria. <i>ACS Central Science</i> , 0, , .	5.3	0
281	Coordination Patterns of the Diphosphate in IDP Coordination Complexes: Crystal Structure and Chirality. <i>Inorganic Chemistry</i> , 2022, 61, 19425-19439.	1.9	0

#	ARTICLE	IF	CITATIONS
283	Generation of nucleotide-linked resins for identification of novel binding proteins. <i>Methods in Enzymology</i> , 2023, , 323-330.	0.4	1
284	Stress-Associated and Growth-Dependent Mutagenesis Are Divergently Regulated by c-di-AMP Levels in <i>Bacillus subtilis</i> . <i>International Journal of Molecular Sciences</i> , 2023, 24, 455.	1.8	1
285	Regulatory mechanisms of c-di-AMP synthase from <i>Mycobacterium smegmatis</i> revealed by a structure: Function analysis. <i>Protein Science</i> , 2023, 32, .	3.1	1
286	The Oxidative Stress-Induced Hypothetical Protein PG_0686 in <i>Porphyromonas gingivalis</i> W83 Is a Novel Diguanylate Cyclase. <i>Microbiology Spectrum</i> , 2023, 11, .	1.2	4
287	Increased Levels of (p)ppGpp Correlate with Virulence and Biofilm Formation, but Not with Growth, in Strains of Uropathogenic <i>Escherichia coli</i> . <i>International Journal of Molecular Sciences</i> , 2023, 24, 3315.	1.8	1
288	QSP: An open sequence database for quorum sensing related gene analysis with an automatic annotation pipeline. <i>Water Research</i> , 2023, 235, 119814.	5.3	6
289	Expression Profile of miRNA from High, Middle, and Low Stress-Responding Sheep during Bacterial Endotoxin Challenge. <i>Animals</i> , 2023, 13, 508.	1.0	4
290	Cyclic di-GMP Modulates a Metabolic Flux for Carbon Utilization in <i>Salmonella enterica</i> Serovar Typhimurium. <i>Microbiology Spectrum</i> , 2023, 11, .	1.2	3
291	Mutant structure of metabolic switch protein in complex with monomeric c-di-GMP reveals a potential mechanism of protein-mediated ligand dimerization. <i>Scientific Reports</i> , 2023, 13, .	1.6	1
292	Identification of a broadly conserved family of enzymes that hydrolyze (p)ppApp. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2023, 120, .	3.3	4
304	Influence of Glyphosate Herbicide on the Functional State of the Poultry Intestine Microbiome. <i>Smart Innovation, Systems and Technologies</i> , 2023, , 151-160.	0.5	0