Christopher M Waters

List of Publications by Year
in descending order

97 papers	7,149 citations	160783 30 h-index	60996 81 g-index
179 all docs	179 docs citations	179 times ranked	7947 citing authors

#	Article	IF	Citations
1	QUORUM SENSING: Cell-to-Cell Communication in Bacteria. Annual Review of Cell and Developmental Biology, 2005, 21, 319-346.	9.6	3,198
2	Quorum Sensing Controls Biofilm Formation in Vibrio cholerae through Modulation of Cyclic Di-GMP Levels and Repression of vpsT. Journal of Bacteriology, 2008, 190, 2527-2536.	2.3	378
3	The Vibrio harveyi quorum-sensing system uses shared regulatory components to discriminate between multiple autoinducers. Genes and Development, 2006, 20, 2754-2767.	6.0	204
4	STING-Dependent Recognition of Cyclic di-AMP Mediates Type I Interferon Responses during Chlamydia trachomatis Infection. MBio, 2013, 4, e00018-13.	4.2	201
5	Systematic analysis of cyclic diâ€GMP signalling enzymes and their role in biofilm formation and virulence in Yersinia pestis. Molecular Microbiology, 2011, 79, 533-551.	2.5	152
6	Integration of Cyclic di-GMP and Quorum Sensing in the Control of vpsT and aphA in Vibrio cholerae. Journal of Bacteriology, 2011, 193, 6331-6341.	2.3	139
7	Quantification of high-specificity cyclic diguanylate signaling. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 12746-12751.	7.3	136
8	A Tangled Web: Regulatory Connections between Quorum Sensing and Cyclic Di-GMP. Journal of Bacteriology, 2012, 194, 4485-4493.	2.3	130
9	Identification of Small Molecules That Antagonize Diguanylate Cyclase Enzymes To Inhibit Biofilm Formation. Antimicrobial Agents and Chemotherapy, 2012, 56, 5202-5211.	3.3	129
10	Cyclic diâ€<scp>GMP</scp> inhibits <scp>V</scp>ibrio cholerae motility by repressing induction of transcription and inducing extracellular polysaccharide production. Molecular Microbiology, 2013, 90, 1262-1276.	2.5	119
11	Oligoribonuclease is the primary degradative enzyme for pGpG in Pseudomonas aeruginosa that is required for cyclic-di-GMP turnover. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, E5048-57.	7.3	117
12	Direct activation of a phospholipase by cyclic GMP-AMP in El Tor Vibrio cholerae. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, E6048-E6055.	7.3	105
13	Identification of small molecules inhibiting diguanylate cyclases to control bacterial biofilm development. Biofouling, 2014, 30, 17-28.	2.2	104
14	Long-Term Evolution of Burkholderia multivorans during a Chronic Cystic Fibrosis Infection Reveals Shifting Forces of Selection. MSystems, 2016, 1, .	3.9	93
15	Identification of a Novel Benzimidazole That Inhibits Bacterial Biofilm Formation in a Broad-Spectrum Manner. Antimicrobial Agents and Chemotherapy, 2011, 55, 4369-4378.	3.3	92
16	Cyclic Di-GMP Modulates the Disease Progression of Erwinia amylovora. Journal of Bacteriology, 2013, 195, 2155-2165.	2.3	77
17	Evolution of Ecological Diversity in Biofilms of Pseudomonas aeruginosa by Altered Cyclic Diguanylate Signaling. Journal of Bacteriology, 2016, 198, 2608-2618.	2.3	74
18	Bile Acids and Bicarbonate Inversely Regulate Intracellular Cyclic di-GMP in Vibrio cholerae. Infection and Immunity, 2014, 82, 3002-3014.	2.3	72

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19	Correlation between In Vivo Biofilm Formation and Virulence Gene Expression in Escherichia coli O104:H4. PLoS ONE, 2012, 7, e41628.	2.5	64
20	Cyclic di-AMP Released from Staphylococcus aureus Biofilm Induces a Macrophage Type I Interferon Response. Infection and Immunity, 2016, 84, 3564-3574.	2.3	59
21	<scp>H</scp>fqâ€dependent, coâ€ordinate control of cyclic diguanylate synthesis and catabolism in the plague pathogen <scp>Y</scp>ersinia pestis. Molecular Microbiology, 2012, 86, 661-674.	2.5	56
22	Regulation of biofilm formation and cellular buoyancy through modulating intracellular cyclic diâ€GMP levels in engineered cyanobacteria. Biotechnology and Bioengineering, 2016, 113, 311-319.	3.4	54
23	Control of the Type 3 Secretion System in Vibrio harveyi by Quorum Sensing through Repression of ExsA. Applied and Environmental Microbiology, 2010, 76, 4996-5004.	3.1	50
24	A Pterin-Dependent Signaling Pathway Regulates a Dual-Function Diguanylate Cyclase-Phosphodiesterase Controlling Surface Attachment in Agrobacterium tumefaciens. MBio, 2015, 6, e00156.	4.2	48
25	VpsR and cyclic di-GMP together drive transcription initiation to activate biofilm formation in Vibrio cholerae. Nucleic Acids Research, 2018, 46, 8876-8887.	14.8	48
26	Inkjet-Printed Carbon Nanotube Electrodes for Measuring Pyocyanin and Uric Acid in a Wound Fluid Simulant and Culture Media. Analytical Chemistry, 2019, 91, 8835-8844.	6.6	46
27	Phage defence by deaminase-mediated depletion of deoxynucleotides in bacteria. Nature Microbiology, 2022, 7, 1210-1220.	13.6	46
28	Triclosan Is an Aminoglycoside Adjuvant for Eradication of Pseudomonas aeruginosa Biofilms. Antimicrobial Agents and Chemotherapy, 2018, 62, .	3.3	41
29	The Vibrio cholerae diguanylate cyclase VCA0965 has an AGDEF active site and synthesizes cyclic di-GMP. BMC Microbiology, 2014, 14, 22.	3.3	40
30	Occurrence of Cyclic di-GMP-Modulating Output Domains in Cyanobacteria: an Illuminating Perspective. MBio, 2013, 4, .	4.2	39
31	A feedâ€forward signalling circuit controls bacterial virulence through linking cyclic diâ€GMP and two mechanistically distinct sRNAs, ArcZ and RsmB. Environmental Microbiology, 2019, 21, 2755-2771.	3.8	36
32	The ever-expanding world of bacterial cyclic oligonucleotide second messengers. Current Opinion in Microbiology, 2021, 60, 96-103.	5.2	36
33	Crossâ€talk between a regulatory small <scp>RNA</scp>, cyclicâ€diâ€<scp>GMP</scp> signalling and flagellar regulator <scp>FlhDC</scp> for virulence and bacterial behaviours. Environmental Microbiology, 2015, 17, 4745-4763.	3.8	34
34	Spermine inhibits Vibrio cholerae biofilm formation through the NspSâ€“MbaA polyamine signaling system. Journal of Biological Chemistry, 2017, 292, 17025-17036.	3.5	34
35	Sharing the sandbox: Evolutionary mechanisms that maintain bacterial cooperation. F1000Research, 2015, 4, 1504.	1.6	34
36	Enhancing multiplex genome editing by natural transformation (MuGENT) via inactivation of ssDNA exonucleases. Nucleic Acids Research, 2017, 45, 7527-7537.	14.8	33

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37	Cyclic di-GMP Regulates TfoY in Vibrio cholerae To Control Motility by both Transcriptional and Posttranscriptional Mechanisms. Journal of Bacteriology, 2018, 200, .	2.3	33
38	Feedback regulation of Caulobacter crescentus holdfast synthesis by flagellum assembly via the holdfast inhibitor HfiA. Molecular Microbiology, 2018, 110, 219-238.	2.5	32
39	Bacterial Quorum Sensing Stabilizes Cooperation by Optimizing Growth Strategies. Applied and Environmental Microbiology, 2016, 82, 6498-6506.	3.1	31
40	Pseudomonas aeruginosa in cystic fibrosis: A chronic cheater. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 6525-6527.	7.3	30
41	Exploring Environmental Control of Cyclic di-GMP Signaling in Vibrio cholerae by Using theEx VivoLysate Cyclic di-GMP Assay (TELCA). Applied and Environmental Microbiology, 2013, 79, 5233-5241.	3.1	27
42	Spermidine Inversely Influences Surface Interactions and Planktonic Growth in Agrobacterium tumefaciens. Journal of Bacteriology, 2016, 198, 2682-2691.	2.3	25
43	A Subset of Exoribonucleases Serve as Degradative Enzymes for pGpG in c-di-GMP Signaling. Journal of Bacteriology, 2018, 200, .	2.3	24
44	Vibrio cholerae. Trends in Microbiology, 2019, 27, 806-807.	7.9	23
45	Structural basis of DSF recognition by its receptor RpfR and its regulatory interaction with the DSF synthase RpfF. PLoS Biology, 2019, 17, e3000123.	5.8	23
46	Surface sensing stimulates cellular differentiation in Caulobacter crescentus. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 17984-17991.	7.3	23
47	Cyclic Di-GMP and VpsR Induce the Expression of Type II Secretion in Vibrio cholerae. Journal of Bacteriology, 2017, 199, .	2.3	22
48	Hydrogels Embedded With Melittin and Tobramycin Are Effective Against Pseudomonas aeruginosa Biofilms in an Animal Wound Model. Frontiers in Microbiology, 2019, 10, 1348.	3.5	22
49	Phosphodiesterase Genes Regulate Amylovoran Production, Biofilm Formation, and Virulence in Erwinia amylovora. Applied and Environmental Microbiology, 2019, 85, .	3.1	22
50	Intracellular Concentrations of Borrelia burgdorferi Cyclic Di-AMP Are Not Changed by Altered Expression of the CdaA Synthase. PLoS ONE, 2015, 10, e0125440.	2.5	22
51	Homeostasis of Second Messenger Cyclic-di-AMP Is Critical for Cyanobacterial Fitness and Acclimation to Abiotic Stress. Frontiers in Microbiology, 2018, 9, 1121.	3.5	21
52	Vibrio cholerae adapts to sessile and motile lifestyles by cyclic di-GMP regulation of cell shape. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 29046-29054.	7.3	21
53	Host-emitted amino acid cues regulate bacterial chemokinesis to enhance colonization. Cell Host and Microbe, 2021, 29, 1221-1234.e8.	11.2	21
54	Polysorbates prevent biofilm formation and pathogenesis of Escherichia coli O104:H4. Biofouling, 2016, 32, 1131-1140.	2.2	20

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55	Cyclic di-GMP Positively Regulates DNA Repair in Vibrio cholerae. Journal of Bacteriology, 2018, 200, .	2.3	20
56	Maximizing Growth Yield and Dispersal via Quorum Sensing Promotes Cooperation in Vibrio Bacteria. Applied and Environmental Microbiology, 2018, 84, .	3.1	20
57	Under Elevated c-di-GMP in Escherichia coli, YcgR Alters Flagellar Motor Bias and Speed Sequentially, with Additional Negative Control of the Flagellar Regulon via the Adaptor Protein RssB. Journal of Bacteriology, 2019, 202, .	2.3	20
58	Combating Cholera. F1000Research, 2019, 8, 589.	1.6	20
59	Cyclic di-GMP Increases Catalase Production and Hydrogen Peroxide Tolerance in Vibrio cholerae. Applied and Environmental Microbiology, 2019, 85, .	3.1	19
60	One gene, multiple ecological strategies: A biofilm regulator is a capacitor for sustainable diversity. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 21647-21657.	7.3	18
61	Quorum sensing provides a molecular mechanism for evolution to tune and maintain investment in cooperation. ISME Journal, 2021, 15, 1236-1247.	10.0	18
62	The ionophore oxyclozanide enhances tobramycin killing of Pseudomonas aeruginosa biofilms by permeabilizing cells and depolarizing the membrane potential. Journal of Antimicrobial Chemotherapy, 2019, 74, 894-906.	3.1	17
63	Intestinal GPS: bile and bicarbonate control cyclic di-GMP to provideVibrio choleraespatial cues within the small intestine. Gut Microbes, 2014, 5, 775-780.	9.9	16
64	The diguanylate cyclase GcpA inhibits the production of pectate lyases via the Hâ€NS protein and RsmB regulatory RNA in Dickeya dadantii. Molecular Plant Pathology, 2018, 19, 1873-1886.	4.4	14
65	The Vc2 Cyclic di-GMP-Dependent Riboswitch of Vibrio cholerae Regulates Expression of an Upstream Putative Small RNA by Controlling RNA Stability. Journal of Bacteriology, 2019, 201, .	2.3	14
66	In Vivo Synthesis of Cyclic-di-GMP Using a Recombinant Adenovirus Preferentially Improves Adaptive Immune Responses against Extracellular Antigens. Journal of Immunology, 2016, 196, 1741-1752.	0.8	13
67	Stimulation of Innate Immunity byIn VivoCyclic di-GMP Synthesis Using Adenovirus. Vaccine Journal, 2014, 21, 1550-1559.	3.2	12
68	The Proline Variant of the W[F/L/M][T/S]R Cyclic Di-GMP Binding Motif Suppresses Dependence on Signal Association for Regulator Function. Journal of Bacteriology, 2017, 199, .	2.3	12
69	VpsR Directly Activates Transcription of Multiple Biofilm Genes in Vibrio cholerae. Journal of Bacteriology, 2020, 202, .	2.3	11
70	The Agrobacterium tumefaciens CheY-like protein ClaR regulates biofilm formation. Microbiology (United Kingdom), 2017, 163, 1680-1691.	1.8	11
71	Triclosan depletes the membrane potential in Pseudomonas aeruginosa biofilms inhibiting aminoglycoside induced adaptive resistance. PLoS Pathogens, 2020, 16, e1008529.	4.8	11
72	The Vibrio cholerae master regulator for the activation of biofilm biogenesis genes, VpsR, senses both cyclic di-GMP and phosphate. Nucleic Acids Research, 2022, 50, 4484-4499.	14.8	11

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73	Contextual organismality: Beyond pattern to process in the emergence of organisms. Evolution; International Journal of Organic Evolution, 2016, 70, 2669-2677.	2.4	10
74	Increased c-di-GMP Levels Lead to the Production of Alginates of High Molecular Mass in Azotobacter vinelandii. Journal of Bacteriology, 2020, 202, .	2.3	10
75	Tricarboxylic Acid (TCA) Cycle Enzymes and Intermediates Modulate Intracellular Cyclic di-GMP Levels and the Production of Plant Cell Wallâ€“Degrading Enzymes in Soft Rot Pathogen Dickeya dadantii. Molecular Plant-Microbe Interactions, 2020, 33, 296-307.	2.7	9
76	CsrA Enhances Cyclic-di-GMP Biosynthesis and Yersinia pestis Biofilm Blockage of the Flea Foregut by Alleviating Hfq-Dependent Repression of the hmsT mRNA. MBio, 2021, 12, e0135821.	4.2	9
77	Come to the Light Side: In Vivo Monitoring of Pseudomonas aeruginosa Biofilm Infections in Chronic Wounds in a Diabetic Hairless Murine Model. Journal of Visualized Experiments, 2017, , .	0.3	8
78	Cyclic di-GMP-Mediated Regulation of Extracellular Mannuronan C-5 Epimerases Is Essential for Cyst Formation in Azotobacter vinelandii. Journal of Bacteriology, 2020, 202, .	2.3	7
79	NrnA Is a Linear Dinucleotide Phosphodiesterase with Limited Function in Cyclic Dinucleotide Metabolism in Listeria monocytogenes. Journal of Bacteriology, 2022, 204, JB0020621.	2.3	7
80	Bacterial Wheel Locks: Extracellular Polysaccharide Inhibits Flagellar Rotation. Journal of Bacteriology, 2013, 195, 409-410.	2.3	6
81	Spectrophotometric and Mass Spectroscopic Methods for the Quantification and Kinetic Evaluation of In Vitro c-di-GMP Synthesis. Methods in Molecular Biology, 2017, 1657, 71-84.	0.9	5
82	Pyrimidines and Cyclic Trinucleotides Join the Second Messenger Symphony. Cell Host and Microbe, 2019, 25, 471-473.	11.2	5
83	Cyclic di-GMP Regulation of Gene Expression. , 2020, , 379-394.		4
84	Analyzing Diguanylate Cyclase Activity In Vivo using a Heterologous Escherichia coli Host. Current Protocols in Microbiology, 2019, 52, e74.	6.5	3
85	Shining the Light on Cyclic di-GMP Dark Matter. Journal of Bacteriology, 2018, 200, .	2.3	2
86	Chemiluminescent sensors for quantitation of the bacterial second messenger cyclic di-GMP. Methods in Enzymology, 2020, 640, 83-104.	1.0	2
87	A Filter Binding Assay to Quantify the Association of Cyclic di-GMP to Proteins. Bio-protocol, 2015, 5, .	0.4	2
88	Quorum-Sensing Master Regulator VfmE Is a c-di-GMP Effector That Controls Pectate Lyase Production in the Phytopathogen Dickeya dadantii. Microbiology Spectrum, 2022, 10, e0180521.	3.0	2
89	Au naturale: use of biologically derived cyclic di-nucleotides for cancer immunotherapy. Open Biology, 2021, 11, 210277.	3.7	2
90	The Meteoric Rise of the Signaling Molecule Cyclic di-GMP. Microbe Magazine, 2012, 7, 353-359.	0.4	1

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91	Cyclic Di-GMP Modulates the Disease Progression of Erwinia amylovora. Journal of Bacteriology, 2013, 195, 4778-4778.	2.3	0
92	Methods for Cyclic Di-GMP Detection. , 0, , 68-75.		0
93	Title is missing!. , 2020, 16, e1008529.		0
94	Title is missing!. , 2020, 16, e1008529.		0
95	Title is missing!. , 2020, 16, e1008529.		0
96	Title is missing!. , 2020, 16, e1008529.		0
97	The 27th Annual Midwest Microbial Pathogenesis Conference in the Age of COVID. Journal of Bacteriology, 2022, , e0013622.	2.3	0