

# Mark Gomelsky

## List of Publications by Year in descending order

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89  
papers

8,904  
citations

50170

46  
h-index

51492

86  
g-index

91  
all docs

91  
docs citations

91  
times ranked

6596  
citing authors

#	ARTICLE	IF	CITATIONS
1	Coordinated control of the type IV pili and c-di-GMP-dependent antifungal antibiotic production in <i>Lysobacter</i> by the response regulator PilR. <i>Molecular Plant Pathology</i> , 2021, 22, 602-617.	2.0	14
2	Antifungal weapons of <i>Lysobacter</i> , a mighty biocontrol agent. <i>Environmental Microbiology</i> , 2021, 23, 5704-5715.	1.8	34
3	A YajQ-like, cyclic-di-GMP-dependent system regulating biosynthesis of an antifungal antibiotic in a crop-protecting bacterium, <i>Lysobacter enzymogenes</i> . <i>Molecular Plant Pathology</i> , 2020, 21, 218-229.	2.0	20
4	Cyclic di-GMP-Mediated Regulation of Gene Transfer and Motility in <i>Rhodobacter capsulatus</i> . <i>Journal of Bacteriology</i> , 2020, 202, .	1.0	12
5	Cyclic-di-GMP-Dependent Regulation of Antibiotic Biosynthesis in <i>Lysobacter</i> . , 2020, , 329-336.		1
6	Inducible asymmetric cell division and cell differentiation in a bacterium. <i>Nature Chemical Biology</i> , 2019, 15, 925-931.	3.9	26
7	Engineering Adenylate Cyclase Activated by Near-Infrared Window Light for Mammalian Optogenetic Applications. <i>ACS Synthetic Biology</i> , 2019, 8, 1314-1324.	1.9	20
8	CodY-Mediated c-di-GMP-Dependent Inhibition of Mammalian Cell Invasion in <i>Listeria monocytogenes</i> . <i>Journal of Bacteriology</i> , 2018, 200, .	1.0	11
9	Positive and Negative Regulation of Glycerol Utilization by the c-di-GMP Binding Protein PlzA in <i>Borrelia burgdorferi</i> . <i>Journal of Bacteriology</i> , 2018, 200, .	1.0	16
10	Signaling specificity in the c-di-GMP-dependent network regulating antibiotic synthesis in <i>Lysobacter</i> . <i>Nucleic Acids Research</i> , 2018, 46, 9276-9288.	6.5	55
11	<i>Lysobacter</i> PilR, the Regulator of Type IV Pilus Synthesis, Controls Antifungal Antibiotic Production via a Cyclic di-GMP Pathway. <i>Applied and Environmental Microbiology</i> , 2017, 83, .	1.4	39
12	Optogenetic Manipulation of Cyclic Di-GMP (c-di-GMP) Levels Reveals the Role of c-di-GMP in Regulating Aerotaxis Receptor Activity in <i>Azospirillum brasilense</i> . <i>Journal of Bacteriology</i> , 2017, 199, .	1.0	30
13	Photoactivated cells link diagnosis and therapy. <i>Science Translational Medicine</i> , 2017, 9, .	5.8	8
14	Optogenetic Module for Dichromatic Control of c-di-GMP Signaling. <i>Journal of Bacteriology</i> , 2017, 199, .	1.0	29
15	Using Light-Activated Enzymes for Modulating Intracellular c-di-GMP Levels in Bacteria. <i>Methods in Molecular Biology</i> , 2017, 1657, 169-186.	0.4	7
16	Systematic Nomenclature for GGDEF and EAL Domain-Containing Cyclic Di-GMP Turnover Proteins of <i>Escherichia coli</i> . <i>Journal of Bacteriology</i> , 2016, 198, 7-11.	1.0	96
17	<i>Listeria monocytogenes</i> exopolysaccharide: origin, structure, biosynthetic machinery and c-di-GMP-dependent regulation. <i>Molecular Microbiology</i> , 2015, 96, 728-743.	1.2	80
18	Identification of bacterial guanylate cyclases. <i>Proteins: Structure, Function and Bioinformatics</i> , 2015, 83, 799-804.	1.5	17

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19	Fifty Ways To Inhibit Motility via Cyclic Di-GMP: the Emerging <i>Pseudomonas aeruginosa</i> Swarming Story. <i>Journal of Bacteriology</i> , 2015, 197, 406-409.	1.0	15
20	Cyclic di-GMP-dependent Signaling Pathways in the Pathogenic Firmicute <i>Listeria monocytogenes</i> . <i>PLoS Pathogens</i> , 2014, 10, e1004301.	2.1	80
21	Special Issue on Synthetic Photobiology. <i>ACS Synthetic Biology</i> , 2014, 3, 780-781.	1.9	2
22	Altered residues in key proteins influence the expression and activity of the nitrogenase complex in an adaptive CO <sub>2</sub> fixation-deficient mutant strain of <i>Rhodobacter sphaeroides</i> . <i>Microbiology (United Kingdom)</i> , 2014, 150, 1075-1084.	10.7	50
23	Metabolic engineering of <i>Rhodobacter sphaeroides</i> for improved hydrogen production. <i>International Journal of Hydrogen Energy</i> , 2014, 39, 6384-6390.	3.8	44
24	cGIL, a new c-di-GMP-binding protein domain involved in regulation of cellulose synthesis in enterobacteria. <i>Molecular Microbiology</i> , 2014, 93, 439-452.	1.2	118
25	Engineering adenylate cyclases regulated by near-infrared window light. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014, 111, 10167-10172.	3.3	104
26	DhhP, a Cyclic di-AMP Phosphodiesterase of <i>Borrelia burgdorferi</i> , Is Essential for Cell Growth and Virulence. <i>Infection and Immunity</i> , 2014, 82, 1840-1849.	1.0	82
27	Near-infrared Light Responsive Synthetic c-di-GMP Module for Optogenetic Applications. <i>ACS Synthetic Biology</i> , 2014, 3, 802-810.	1.9	113
28	Bacterial second messengers, cGMP and c-di-GMP, in a quest for regulatory dominance. <i>EMBO Journal</i> , 2013, 32, 2421-2423.	3.5	24
29	A Zinc Lock on GGDEF Domain Dimerization Inhibits <i>E. coli</i> Biofilms. <i>Structure</i> , 2013, 21, 1067-1068.	1.6	1
30	The c-di-GMP phosphodiesterase VmpA absent in <i>Escherichia coli</i> K12 strains affects motility and biofilm formation in the enterohemorrhagic O157:H7 serotype. <i>Veterinary Immunology and Immunopathology</i> , 2013, 152, 132-140.	0.5	18
31	c-di-GMP signaling regulates <i>E. coli</i> O157:H7 adhesion to colonic epithelium. <i>Veterinary Microbiology</i> , 2013, 164, 344-351.	0.8	26
32	Cyclic di-GMP: the First 25 Years of a Universal Bacterial Second Messenger. <i>Microbiology and Molecular Biology Reviews</i> , 2013, 77, 1-52.	2.9	1,479
33	Integration of the Second Messenger c-di-GMP into the Chemotactic Signaling Pathway. <i>MBio</i> , 2013, 4, e00001-13.	1.8	59
34	The Living Genome of a Purple Nonsulfur Photosynthetic Bacterium. <i>Advances in Botanical Research</i> , 2013, , 179-203.	0.5	3
35	Discrete Cyclic di-GMP-Dependent Control of Bacterial Predation versus Axenic Growth in <i>Bdellovibrio bacteriovorus</i> . <i>PLoS Pathogens</i> , 2012, 8, e1002493.	2.1	80
36	Cyclic Dimeric GMP-Mediated Decisions in Surface-Grown <i>Vibrio parahaemolyticus</i> : a Different Kind of Motile-to-Sessile Transition. <i>Journal of Bacteriology</i> , 2012, 194, 911-913.	1.0	7

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37	Cyclic Di-GMP Phosphodiesterases RmdA and RmdB Are Involved in Regulating Colony Morphology and Development in <i>Streptomyces coelicolor</i> . <i>Journal of Bacteriology</i> , 2012, 194, 4642-4651.	1.0	39
38	Light helps bacteria make important lifestyle decisions. <i>Trends in Microbiology</i> , 2011, 19, 441-448.	3.5	140
39	Cyclic di-GMP is Essential for the Survival of the Lyme Disease Spirochete in Ticks. <i>PLoS Pathogens</i> , 2011, 7, e1002133.	2.1	120
40	Systematic analysis of cyclic di-GMP signalling enzymes and their role in biofilm formation and virulence in <i>Yersinia pestis</i> . <i>Molecular Microbiology</i> , 2011, 79, 533-551.	1.2	152
41	cAMP, c-di-GMP, c-di-AMP and now cGMP: bacteria use them all!. <i>Molecular Microbiology</i> , 2011, 79, 562-565.	1.2	146
42	Rhobase, a meta-analytical tool for reconstructing gene regulatory networks in a model photosynthetic bacterium. <i>BioSystems</i> , 2011, 103, 125-131.	0.9	5
43	Regulation of Biofilm Components in <i>Salmonella enterica</i> Serovar Typhimurium by Lytic Transglycosylases Involved in Cell Wall Turnover. <i>Journal of Bacteriology</i> , 2011, 193, 6443-6451.	1.0	40
44	Salt Stress-Induced Changes in the Transcriptome, Compatible Solutes, and Membrane Lipids in the Facultatively Phototrophic Bacterium <i>Rhodobacter sphaeroides</i> . <i>Applied and Environmental Microbiology</i> , 2011, 77, 7551-7559.	1.4	63
45	Biology and Data-Intensive Scientific Discovery in the Beginning of the 21st Century. <i>OMICS A Journal of Integrative Biology</i> , 2011, 15, 209-212.	1.0	16
46	Mathematical modeling of bacterial metabolism. <i>Moscow University Physics Bulletin (English)</i> Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 382 0,1	0.1	0
47	Flux balance analysis of photoheterotrophic growth of purple nonsulfur bacteria relevant to biohydrogen production. <i>International Journal of Hydrogen Energy</i> , 2010, 35, 12751-12760.	3.8	64
48	A post-translational, c-di-GMP-dependent mechanism regulating flagellar motility. <i>Molecular Microbiology</i> , 2010, 76, 1295-1305.	1.2	206
49	The PpaA/AerR Regulators of Photosynthesis Gene Expression from Anoxygenic Phototrophic Proteobacteria Contain Heme-Binding SCHIC Domains. <i>Journal of Bacteriology</i> , 2010, 192, 5253-5256.	1.0	17
50	Natural and Engineered Photoactivated Nucleotidyl Cyclases for Optogenetic Applications. <i>Journal of Biological Chemistry</i> , 2010, 285, 41501-41508.	1.6	194
51	Cyclic-di-GMP-Binding CRP-Like Protein: a Spectacular New Role for a Veteran Signal Transduction Actor. <i>Journal of Bacteriology</i> , 2009, 191, 6785-6787.	1.0	9
52	Structure and mechanism of a bacterial light-regulated cyclic nucleotide phosphodiesterase. <i>Nature</i> , 2009, 459, 1015-1018.	13.7	249
53	Photodynamics of blue-light-regulated phosphodiesterase BlrP1 protein from <i>Klebsiella pneumoniae</i> and its photoreceptor BLUF domain. <i>Chemical Physics</i> , 2008, 354, 130-141.	0.9	26
54	A Staphylococcal GGDEF Domain Protein Regulates Biofilm Formation Independently of Cyclic Dimeric GMP. <i>Journal of Bacteriology</i> , 2008, 190, 5178-5189.	1.0	95

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55	Hierarchical Regulation of Photosynthesis Gene Expression by the Oxygen-Responsive PrrBA and AppA-PpsR Systems of <i>Rhodobacter sphaeroides</i> . <i>Journal of Bacteriology</i> , 2008, 190, 8106-8114.	1.0	20
56	Novel Heme-based Oxygen Sensor with a Revealing Evolutionary History. <i>Journal of Biological Chemistry</i> , 2007, 282, 28740-28748.	1.6	58
57	Regulation of Hydrogen Peroxide-Dependent Gene Expression in <i>Rhodobacter sphaeroides</i> : Regulatory Functions of OxyR. <i>Journal of Bacteriology</i> , 2007, 189, 3784-3792.	1.0	31
58	The Flagellar Sigma Factor FliA Regulates Adhesion and Invasion of Crohn Disease-associated <i>Escherichia coli</i> via a Cyclic Dimeric GMP-dependent Pathway. <i>Journal of Biological Chemistry</i> , 2007, 282, 33275-33283.	1.6	92
59	Earliest changes in the left ventricular transcriptome post-myocardial infarction. <i>Mammalian Genome</i> , 2006, 17, 701-715.	1.0	64
60	An Unorthodox Bacteriophytochrome from <i>Rhodobacter sphaeroides</i> Involved in Turnover of the Second Messenger c-di-GMP. <i>Journal of Biological Chemistry</i> , 2006, 281, 34751-34758.	1.6	148
61	The PilZ Domain Is a Receptor for the Second Messenger c-di-GMP. <i>Journal of Biological Chemistry</i> , 2006, 281, 30310-30314.	1.6	443
62	C-di-GMP: the dawning of a novel bacterial signalling system. <i>Molecular Microbiology</i> , 2005, 57, 629-639.	1.2	593
63	Transcriptome Analysis of the <i>Rhodobacter sphaeroides</i> PpsR Regulon: PpsR as a Master Regulator of Photosystem Development. <i>Journal of Bacteriology</i> , 2005, 187, 2148-2156.	1.0	66
64	The Ubiquitous Protein Domain EAL Is a Cyclic Diguanylate-Specific Phosphodiesterase: Enzymatically Active and Inactive EAL Domains. <i>Journal of Bacteriology</i> , 2005, 187, 4774-4781.	1.0	515
65	Transcriptome and Physiological Responses to Hydrogen Peroxide of the Facultatively Phototrophic Bacterium <i>Rhodobacter sphaeroides</i> . <i>Journal of Bacteriology</i> , 2005, 187, 7232-7242.	1.0	59
66	Structure of a bacterial BLUF photoreceptor: Insights into blue light-mediated signal transduction. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2005, 102, 12350-12355.	3.3	155
67	Cyclic Diguanylate Is a Ubiquitous Signaling Molecule in Bacteria: Insights into Biochemistry of the GGDEF Protein Domain. <i>Journal of Bacteriology</i> , 2005, 187, 1792-1798.	1.0	509
68	Responses of the <i>Rhodobacter sphaeroides</i> Transcriptome to Blue Light under Semiaerobic Conditions. <i>Journal of Bacteriology</i> , 2004, 186, 7726-7735.	1.0	62
69	Overexpression of Aldehyde Dehydrogenase-2 (ALDH2) Transgene Prevents Acetaldehyde-induced Cell Injury in Human Umbilical Vein Endothelial Cells. <i>Journal of Biological Chemistry</i> , 2004, 279, 11244-11252.	1.6	108
70	Construction and Validation of the <i>Rhodobacter sphaeroides</i> 2.4.1 DNA Microarray: Transcriptome Flexibility at Diverse Growth Modes. <i>Journal of Bacteriology</i> , 2004, 186, 4748-4758.	1.0	75
71	Identification and in vivo characterization of PpaA, a regulator of photosystem formation in <i>Rhodobacter sphaeroides</i> . <i>Microbiology (United Kingdom)</i> , 2003, 149, 377-388.	0.7	49
72	BLUF: a novel FAD-binding domain involved in sensory transduction in microorganisms. <i>Trends in Biochemical Sciences</i> , 2002, 27, 497-500.	3.7	380

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73	A single flavoprotein, AppA, integrates both redox and light signals in <i>Rhodobacter sphaeroides</i> . <i>Molecular Microbiology</i> , 2002, 45, 827-836.	1.2	164
74	Domain Structure, Oligomeric State, and Mutational Analysis of PpsR, the <i>Rhodobacter sphaeroides</i> Repressor of Photosystem Gene Expression. <i>Journal of Bacteriology</i> , 2000, 182, 2253-2261.	1.0	50
75	Analysis of two formaldehyde oxidation pathways in <i>Methylobacillus flagellatus</i> KT, a ribulose monophosphate cycle methylotroph The GenBank accession numbers for the sequences of 2502Ånt containing <i>gndA</i> and part of <i>zwf</i> , and of 2685Ånt containing <i>mch</i> , are AF167580 and AF139592, respectively. <i>Microbiology (United Kingdom)</i> . 2000. 146. 233-238.	0.7	51
76	Mutation Analysis and Regulation of PpsR. , 1999, , 131-138.		2
77	Refined genetic map of the obligate methylotroph <i>Methylobacillus flagellatum</i> . <i>Molecular Genetics and Genomics</i> , 1998, 258, 133-138.	2.4	0
78	AppA, a Redox Regulator of Photosystem Formation in <i>Rhodobacter sphaeroides</i> 2.4.1, Is a Flavoprotein. <i>Journal of Biological Chemistry</i> , 1998, 273, 35319-35325.	1.6	115
79	[10] Transcriptional regulation of photosynthesis operons in <i>Rhodobacter sphaeroides</i> 2.4.1. <i>Methods in Enzymology</i> , 1998, 297, 151-166.	0.4	18
80	Control of Photosystem Formation in <i>Rhodobacter sphaeroides</i> . <i>Journal of Bacteriology</i> , 1998, 180, 2801-2809.	1.0	114
81	Molecular genetic analysis suggesting interactions between AppA and PpsR in regulation of photosynthesis gene expression in <i>Rhodobacter sphaeroides</i> 2.4.1. <i>Journal of Bacteriology</i> , 1997, 179, 128-134.	1.0	123
82	Identification and molecular genetic analysis of multiple loci contributing to high-level tellurite resistance in <i>Rhodobacter sphaeroides</i> 2.4.1. <i>Applied and Environmental Microbiology</i> , 1997, 63, 4713-4720.	1.4	69
83	The <i>Rhodobacter sphaeroides</i> 2.4.1 <i>rho</i> gene: expression and genetic analysis of structure and function. <i>Journal of Bacteriology</i> , 1996, 178, 1946-1954.	1.0	28
84	Identification and characterization of the <i>pqqDGC</i> gene cluster involved in pyrroloquinoline quinone production in an obligate methylotroph <i>Methylobacillus flagellatum</i> . <i>FEMS Microbiology Letters</i> , 1996, 141, 169-176.	0.7	15
85	<i>appA</i> , a novel gene encoding a trans-acting factor involved in the regulation of photosynthesis gene expression in <i>Rhodobacter sphaeroides</i> 2.4.1. <i>Journal of Bacteriology</i> , 1995, 177, 4609-4618.	1.0	110
86	Genetic evidence that PpsR from <i>Rhodobacter sphaeroides</i> 2.4.1 functions as a repressor of <i>puc</i> and <i>bchF</i> expression. <i>Journal of Bacteriology</i> , 1995, 177, 1634-1637.	1.0	111
87	Isolation of regulatory mutants in photosynthesis gene expression in <i>Rhodobacter sphaeroides</i> 2.4.1 and partial complementation of a <i>PrrB</i> mutant by the <i>HupT</i> histidine-kinase. <i>Microbiology (United Kingdom)</i> 146: 1073-1081, 2002.	0.78	14
88	Cloning, sequence and expression in <i>Escherichia coli</i> of the <i>Methylobacillus flagellatum</i> <i>recA</i> gene. <i>Gene</i> , 1990, 94, 69-75.	1.0	11
89	The Core Pathway: Diguanylate Cyclases, Cyclic Di-GMP-Specific Phosphodiesterases, and Cyclic Di-GMP-Binding Proteins. , 0, , 37-56.		2