Mark Goulian

List of Publications by Year
in descending order

66 papers	5,042 citations	117625 34 h-index	102487 66 g-index
71 all docs	71 docs citations	71 times ranked	6562 citing authors

#	Article	IF	Citations
1	A commensal-encoded genotoxin drives restriction of Vibrio cholerae colonization and host gut microbiome remodeling. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, e2121180119.	7.1	20
2	The phosphohistidine phosphatase SixA dephosphorylates the phosphocarrier NPr. Journal of Biological Chemistry, 2021, 296, 100090.	3.4	2
3	Effects of Regulatory Network Organization and Environment on PmrD Connector Activity and Polymyxin Resistance in Klebsiella pneumoniae and Escherichia coli. Antimicrobial Agents and Chemotherapy, 2021, 65, .	3.2	9
4	Thiol-based functional mimicry of phosphorylation of the two-component system response regulator ArcA promotes pathogenesis in enteric pathogens. Cell Reports, 2021, 37, 110147.	6.4	11
5	Deciphering the Role of Colicins during Colonization of the Mammalian Gut by Commensal E. coli. Microorganisms, 2020, 8, 664.	3.6	6
6	Functional Determinants of a Small Protein Controlling a Broadly Conserved Bacterial Sensor Kinase. Journal of Bacteriology, 2020, 202, .	2.2	26
7	Bacterial colonization reprograms the neonatal gut metabolome. Nature Microbiology, 2020, 5, 838-847.	13.3	70
8	A bacterial signaling system regulates noise to enable bet hedging. Current Genetics, 2019, 65, 65-70.	1.7	9
9	Bacterial Killing Activity of Polymorphonuclear Myeloid-Derived Suppressor Cells Isolated From Tumor-Bearing Dogs. Frontiers in Immunology, 2019, 10, 2371.	4.8	3
10	tRNA Methylation Is a Global Determinant of Bacterial Multi-drug Resistance. Cell Systems, 2019, 8, 302-314.e8.	6.2	41
11	Encoding biological recognition in a bicomponent cell-membrane mimic. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 5376-5382.	7.1	51
12	Colistin Resistance-Mediated Bacterial Surface Modification Sensitizes Phage Infection. Antimicrobial Agents and Chemotherapy, 2019, 63, .	3.2	19
13	Bioactive cell-like hybrids from dendrimersomes with a human cell membrane and its components. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 744-752.	7.1	49
14	The SOS Response Mediates Sustained Colonization of the Mammalian Gut. Infection and Immunity, 2019, 87, .	2.2	17
15	Phage integration alters the respiratory strategy of its host. ELife, 2019, 8, .	6.0	24
16	A network of regulators promotes dehydration tolerance in Escherichia coli. Environmental Microbiology, 2018, 20, 1283-1295.	3.8	16
17	Regulated Stochasticity in a Bacterial Signaling Network Permits Tolerance to a Rapid Environmental Change. Cell, 2018, 173, 196-207.e14.	28.9	61
18	Microbes vs. chemistry in the origin of the anaerobic gut lumen. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 4170-4175.	7.1	176

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19	The Phosphohistidine Phosphatase SixA Targets a Phosphotransferase System. MBio, 2018, 9, .	4.1	8
20	Non-equilibrium repressor binding kinetics link DNA damage dose to transcriptional timing within the SOS gene network. PLoS Genetics, 2018, 14, e1007405.	3.5	37
21	tRNA Methylation Controls Bacterial Multiâ€Drug Resistance. FASEB Journal, 2018, 32, 105.1.	0.5	0
22	Self-interrupted synthesis of sterically hindered aliphatic polyamide dendrimers. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, E2275-E2284.	7.1	25
23	A Small-Molecule Inducible Synthetic Circuit for Control of the SOS Gene Network without DNA Damage. ACS Synthetic Biology, 2017, 6, 2067-2076.	3.8	4
24	A role for bacterial urease in gut dysbiosis and Crohnâ€™s disease. Science Translational Medicine, 2017, 9, .	12.4	171
25	Films of Bacteria at Interfaces (FBI): Remodeling of Fluid Interfaces by Pseudomonas aeruginosa. Scientific Reports, 2017, 7, 17864.	3.3	26
26	Natural variation of a sensor kinase controlling a conserved stress response pathway in Escherichia coli. PLoS Genetics, 2017, 13, e1007101.	3.5	23
27	Microbial Nanoculture as an Artificial Microniche. Scientific Reports, 2016, 6, 30578.	3.3	30
28	Self-Sorting and Coassembly of Fluorinated, Hydrogenated, and Hybrid Janus Dendrimers into Dendrimersomes. Journal of the American Chemical Society, 2016, 138, 12655-12663.	13.7	83
29	Systematically Altering Bacterial SOS Activity under Stress Reveals Therapeutic Strategies for Potentiating Antibiotics. MSphere, 2016, 1, .	2.9	74
30	Antimicrobial peptides trigger a division block in Escherichia coli through stimulation of a signalling system. Nature Communications, 2016, 7, 12340.	12.8	52
31	Differential Thiol-Based Switches Jump-Start Vibrio cholerae Pathogenesis. Cell Reports, 2016, 14, 347-354.	6.4	36
32	Bioactive cell-like hybrids coassembled from (glyco)dendrimersomes with bacterial membranes. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, E1134-41.	7.1	69
33	Biofilm-associated bacterial amyloids dampen inflammation in the gut: oral treatment with curli fibres reduces the severity of hapten-induced colitis in mice. Npj Biofilms and Microbiomes, 2015, 1, .	6.4	42
34	Signal Transduction in Histidine Kinases: Insights from New Structures. Structure, 2015, 23, 981-994.	3.3	213
35	Amyloid-DNA Composites of Bacterial Biofilms Stimulate Autoimmunity. Immunity, 2015, 42, 1171-1184.	14.3	181
36	Chromosome-Membrane Interactions in Bacteria. Annual Review of Genetics, 2015, 49, 115-129.	7.6	40

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37	Oxygen-Dependent Cell-to-Cell Variability in the Output of the Escherichia coli Tor Phosphorelay. Journal of Bacteriology, 2015, 197, 1976-1987.	2.2	23
38	Escherichia coli Isolate for Studying Colonization of the Mouse Intestine and Its Application to Two-Component Signaling Knockouts. Journal of Bacteriology, 2014, 196, 1723-1732.	2.2	66
39	Bacterial spore detection and analysis using hyperpolarized ¹²⁹Xe chemical exchange saturation transfer (Hyper-CEST) NMR. Chemical Science, 2014, 5, 3197-3203.	7.4	42
40	Cys-Scanning Disulfide Crosslinking and Bayesian Modeling Probe the Transmembrane Signaling Mechanism of the Histidine Kinase, PhoQ. Structure, 2014, 22, 1239-1251.	3.3	103
41	The Architecture of a Prototypical Bacterial Signaling Circuit Enables a Single Point Mutation to Confer Novel Network Properties. PLoS Genetics, 2013, 9, e1003706.	3.5	15
42	Perturbation of the Oxidizing Environment of the Periplasm Stimulates the PhoQ/PhoP System in Escherichia coli. Journal of Bacteriology, 2012, 194, 1457-1463.	2.2	47
43	Membrane protein expression triggers chromosomal locus repositioning in bacteria. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 7445-7450.	7.1	78
44	Superresolution imaging of ribosomes and RNA polymerase in live Escherichia coli cells. Molecular Microbiology, 2012, 85, 21-38.	2.5	413
45	Fluorescence Correlation Spectroscopy Measurements of the Membrane Protein TetA in Escherichia coli Suggest Rapid Diffusion at Short Length Scales. PLoS ONE, 2012, 7, e48600.	2.5	12
46	Imaging OmpR Binding to Native Chromosomal Loci in Escherichia coli. Journal of Bacteriology, 2010, 192, 4045-4053.	2.2	9
47	Evolving a robust signal transduction pathway from weak crossâ€talk. Molecular Systems Biology, 2010, 6, 452.	7.2	41
48	Transmembrane polar interactions are required for signaling in the Escherichia coli sensor kinase PhoQ. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 8141-8146.	7.1	41
49	Characterizing Cross-Talk In Vivo. Methods in Enzymology, 2010, 471, 1-16.	1.0	16
50	Two-component signaling circuit structure and properties. Current Opinion in Microbiology, 2010, 13, 184-189.	5.1	143
51	Engineered singleâ€and multiâ€cell chemotaxis pathways in E. coli. Molecular Systems Biology, 2009, 5, 283.	7.2	21
52	Feedback Inhibition in the PhoQ/PhoP Signaling System by a Membrane Peptide. PLoS Genetics, 2009, 5, e1000788.	3.5	194
53	Crossâ€talk suppression between the CpxAâ€“CpxR and EnvZâ€“OmpR twoâ€component systems in E.â€ƒcoli. Molecular Microbiology, 2008, 70, 494-506.	2.5	128
54	Rewiring the Specificity of Two-Component Signal Transduction Systems. Cell, 2008, 133, 1043-1054.	28.9	418

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55	Mucosal penetration primes Vibrio cholerae for host colonization by repressing quorum sensing. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 9769-9774.	7.1	161
56	High stimulus unmasks positive feedback in an autoregulated bacterial signaling circuit. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 17457-17462.	7.1	72
57	Stimulus-dependent differential regulation in the Escherichia coli PhoQâ€“PhoP system. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 16305-16310.	7.1	46
58	Singleâ€Cell Analysis of Gene Expression by Fluorescence Microscopy. Methods in Enzymology, 2007, 423, 458-475.	1.0	27
59	Specificity in Two-Component Signal Transduction Pathways. Annual Review of Genetics, 2007, 41, 121-145.	7.6	629
60	A simple system for converting lacZ to gfp reporter fusions in diverse bacteria. Gene, 2006, 372, 219-226.	2.2	10
61	Changing the Specificity of a Bacterial Chemoreceptor. Journal of Molecular Biology, 2006, 355, 923-932.	4.2	59
62	Imaging OmpR localization in Escherichia coli. Molecular Microbiology, 2006, 59, 1767-1778.	2.5	40
63	The Escherichia coli CpxA-CpxR Envelope Stress Response System Regulates Expression of the Porins OmpF and OmpC. Journal of Bacteriology, 2005, 187, 5723-5731.	2.2	151
64	Continuous Control in Bacterial Regulatory Circuits. Journal of Bacteriology, 2004, 186, 7618-7625.	2.2	39
65	Robust control in bacterial regulatory circuits. Current Opinion in Microbiology, 2004, 7, 198-202.	5.1	36
66	Robustness and the cycle of phosphorylation and dephosphorylation in a two-component regulatory system. Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 691-696.	7.1	220