Regine Hengge

List of Publications by Year
in descending order

73 papers	7,880 citations	71102 41 h-index	82547 72 g-index
81 all docs	81 docs citations	81 times ranked	7064 citing authors

#	Article	IF	Citations
1	Principles of c-di-GMP signalling in bacteria. Nature Reviews Microbiology, 2009, 7, 263-273.	28.6	1,320
2	Genome-Wide Analysis of the General Stress Response Network in<i>Escherichia coli</i>: Ïƒ^S-Dependent Genes, Promoters, and Sigma Factor Selectivity. Journal of Bacteriology, 2005, 187, 1591-1603.	2.2	743
3	Inverse regulatory coordination of motility and curli-mediated adhesion in <i>Escherichia coli</i>. Genes and Development, 2008, 22, 2434-2446.	5.9	299
4	Cellulose as an Architectural Element in Spatially Structured Escherichia coli Biofilms. Journal of Bacteriology, 2013, 195, 5540-5554.	2.2	291
5	Microanatomy at Cellular Resolution and Spatial Order of Physiological Differentiation in a Bacterial Biofilm. MBio, 2013, 4, e00103-13.	4.1	286
6	Cyclic-di-GMP-mediated signalling within the ?Snetwork of Escherichia coli. Molecular Microbiology, 2006, 62, 1014-1034.	2.5	250
7	The enemy within us: lessons from the 2011 European <i>Escherichia coli</i> O104:H4 outbreak. EMBO Molecular Medicine, 2012, 4, 841-848.	6.9	215
8	Phosphoethanolamine cellulose: A naturally produced chemically modified cellulose. Science, 2018, 359, 334-338.	12.6	208
9	A two-component phosphotransfer network involving ArcB, ArcA, and RssB coordinates synthesis and proteolysis of Ïƒ^S (RpoS) in <i>E. coli</i>. Genes and Development, 2005, 19, 2770-2781.	5.9	169
10	The BLUF-EAL protein YcgF acts as a direct anti-repressor in a blue-light response of <i>Escherichia coli</i>. Genes and Development, 2009, 23, 522-534.	5.9	165
11	Bacterial nucleotide-based second messengers. Current Opinion in Microbiology, 2009, 12, 170-176.	5.1	158
12	Proteolysis of ÏƒS (RpoS) and the general stress response in Escherichia coli. Research in Microbiology, 2009, 160, 667-676.	2.1	157
13	The EAL domain protein YciR acts as a trigger enzyme in a c-di-GMP signalling cascade in E. coli biofilm control. EMBO Journal, 2013, 32, 2001-2014.	7.8	157
14	Stress responses go three dimensional â€“ the spatial order of physiological differentiation in bacterial macrocolony biofilms. Environmental Microbiology, 2014, 16, 1455-1471.	3.8	153
15	Gene expression patterns and differential input into curli fimbriae regulation of all GGDEF/EAL domain proteins in Escherichia coli. Microbiology (United Kingdom), 2009, 155, 1318-1331.	1.8	150
16	The molecular basis of selective promoter activation by the ?Ssubunit of RNA polymerase. Molecular Microbiology, 2007, 63, 1296-1306.	2.5	147
17	Small RNAs in the control of RpoS, CsgD, and biofilm architecture of<i>Escherichia coli</i>. RNA Biology, 2014, 11, 494-507.	3.1	146
18	Small Regulatory RNAs in the Control of Motility and Biofilm Formation in E. coli and Salmonella. International Journal of Molecular Sciences, 2013, 14, 4560-4579.	4.1	142

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19	More than Enzymes That Make or Break Cyclic Di-GMPâ€"Local Signaling in the Interactome of GGDEF/EAL Domain Proteins of <i>Escherichia coli</i>. MBio, 2017, 8, .	4.1	136
20	Bacterial Signal Transduction by Cyclic Di-GMP and Other Nucleotide Second Messengers. Journal of Bacteriology, 2016, 198, 15-26.	2.2	127
21	Targeting of <i>csgD</i> by the small regulatory RNA RprA links stationary phase, biofilm formation and cell envelope stress in <i>Escherichia coli</i>. Molecular Microbiology, 2012, 84, 51-65.	2.5	111
22	Stationary phase reorganisation of the Escherichia coli transcription machinery by Crl protein, a fine-tuner of Ïƒs activity and levels. EMBO Journal, 2007, 26, 1569-1578.	7.8	107
23	The green tea polyphenol EGCG inhibits <scp><i>E</i></scp><i>. coli</i> biofilm formation by impairing amyloid curli fibre assembly and downregulating the biofilm regulator CsgD via the Ïƒ^Eâ€dependent sRNA RybB. Molecular Microbiology, 2016, 101, 136-151.	2.5	107
24	Systematic Nomenclature for GGDEF and EAL Domain-Containing Cyclic Di-GMP Turnover Proteins of Escherichia coli. Journal of Bacteriology, 2016, 198, 7-11.	2.2	96
25	â€˜Life-styleâ€™ control networks in Escherichia coli: Signaling by the second messenger c-di-GMP. Journal of Biotechnology, 2012, 160, 10-16.	3.8	94
26	Sequential recognition of two distinct sites in ÂS by the proteolytic targeting factor RssB and ClpX. EMBO Journal, 2003, 22, 4111-4120.	7.8	91
27	Cellular levels and activity of the flagellar sigma factor FliA ofEscherichia coliare controlled by FlgM-modulated proteolysis. Molecular Microbiology, 2007, 65, 76-89.	2.5	75
28	High-specificity local and global c-di-GMP signaling. Trends in Microbiology, 2021, 29, 993-1003.	7.7	74
29	Role of the spacer between the -35 and -10 regions in sigmas promoter selectivity in Escherichia coli. Molecular Microbiology, 2006, 59, 1037-1051.	2.5	73
30	Trigger phosphodiesterases as a novel class of c-di-GMP effector proteins. Philosophical Transactions of the Royal Society B: Biological Sciences, 2016, 371, 20150498.	4.0	71
31	Dynamic control of Dps protein levels by ClpXP and ClpAP proteases in Escherichia coli. Molecular Microbiology, 2003, 49, 1605-1614.	2.5	70
32	The ÏƒS subunit of RNA polymerase as a signal integrator and network master regulator in the general stress response in Escherichia coli. Science Progress, 2007, 90, 103-127.	1.9	65
33	Multiple stress signal integration in the regulation of the complex ÏƒS-dependent csiD-ygaF-gabDTP operon in Escherichia coli. Molecular Microbiology, 2003, 51, 799-811.	2.5	62
34	Spatial organization of different sigma factor activities and c-di-GMP signalling within the three-dimensional landscape of a bacterial biofilm. Open Biology, 2018, 8, .	3.6	61
35	Cyclicâ€diâ€<scp>GMP</scp> signalling and biofilmâ€related properties of the Shiga toxinâ€producing 2011 German outbreak <i><scp>E</scp>scherichia coli</i> O104:H4. EMBO Molecular Medicine, 2014, 6, 1622-1637.	6.9	60
36	Targeting Bacterial Biofilms by the Green Tea Polyphenol EGCG. Molecules, 2019, 24, 2403.	3.8	60

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37	Genome-Based Comparison of Cyclic Di-GMP Signaling in Pathogenic and Commensal Escherichia coli Strains. Journal of Bacteriology, 2016, 198, 111-126.	2.2	59
38	Non-lethal exposure to H2O2 boosts bacterial survival and evolvability against oxidative stress. PLoS Genetics, 2020, 16, e1008649.	3.5	59
39	Linking bacterial growth, survival, and multicellularity â€" small signaling molecules as triggers and drivers. Current Opinion in Microbiology, 2020, 55, 57-66.	5.1	59
40	Escherichia coli Ïƒ 70 senses sequence and conformation of the promoter spacer region. Nucleic Acids Research, 2011, 39, 5109-5118.	14.5	58
41	Local c-di-GMP Signaling in the Control of Synthesis of the E. coli Biofilm Exopolysaccharide pEtN-Cellulose. Journal of Molecular Biology, 2020, 432, 4576-4595.	4.2	53
42	Stationary-Phase Gene Regulation in <i>Escherichia coli</i> Â§. EcoSal Plus, 2011, 4, .	5.4	48
43	Molecular function and potential evolution of the biofilmâ€modulating blue lightâ€signalling pathway of <i>Escherichia coli</i>. Molecular Microbiology, 2012, 85, 893-906.	2.5	46
44	Vertical stratification of matrix production is essential for physical integrity and architecture of macrocolony biofilms of <scp><i>E</i></scp><i>scherichia coli</i>. Environmental Microbiology, 2015, 17, 5073-5088.	3.8	44
45	The General Stress Response in Gram-Negative Bacteria. , 0, , 251-289.		41
46	The Intestinal Roundworm Ascaris suum Releases Antimicrobial Factors Which Interfere With Bacterial Growth and Biofilm Formation. Frontiers in Cellular and Infection Microbiology, 2018, 8, 271.	3.9	41
47	Recent Advances and Current Trends in Nucleotide Second Messenger Signaling in Bacteria. Journal of Molecular Biology, 2019, 431, 908-927.	4.2	41
48	A c-di-GMP-Based Switch Controls Local Heterogeneity of Extracellular Matrix Synthesis which Is Crucial for Integrity and Morphogenesis of Escherichia coli Macrocolony Biofilms. Journal of Molecular Biology, 2019, 431, 4775-4793.	4.2	41
49	The global repressor FliZ antagonizes gene expression by Ïƒ S -containing RNA polymerase due to overlapping DNA binding specificity. Nucleic Acids Research, 2012, 40, 4783-4793.	14.5	38
50	Differential ability of Ïƒs and Ïƒ70 of Escherichia coli to utilize promoters containing half or full UP-element sites. Molecular Microbiology, 2004, 55, 250-260.	2.5	37
51	Transmembrane redox control and proteolysis of PdeC, a novel type of câ€diâ€<scp>GMP</scp> phosphodiesterase. EMBO Journal, 2018, 37, .	7.8	37
52	Bacterial Multicellularity: The Biology of <i>Escherichia coli</i> Building Large-Scale Biofilm Communities. Annual Review of Microbiology, 2021, 75, 269-290.	7.3	36
53	A role for Lon protease in the control of the acid resistance genes of <i>Escherichia coli</i>. Molecular Microbiology, 2008, 69, 534-547.	2.5	35
54	Cyclic-di-GMP Reaches Out into the Bacterial RNA World. Science Signaling, 2010, 3, pe44.	3.6	35

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55	The influence of Hfq and ribonucleases on the stability of the small non-coding RNA OxyS and its target<i>rpoS</i>in<i>E. coli</i>is growth phase dependent. RNA Biology, 2009, 6, 584-594.	3.1	34
56	The ?35 sequence location and the Fis?sigma factor interface determine ?Sselectivity of the proP (P2) promoter in Escherichia coli. Molecular Microbiology, 2007, 63, 780-96.	2.5	28
57	Genetic dissection of Escherichia coli's master diguanylate cyclase DgcE: Role of the N-terminal MASE1 domain and direct signal input from a GTPase partner system. PLoS Genetics, 2019, 15, e1008059.	3.5	28
58	Common plant flavonoids prevent the assembly of amyloid curli fibres and can interfere with bacterial biofilm formation. Environmental Microbiology, 2020, 22, 5280-5299.	3.8	28
59	Rare codons play a positive role in the expression of the stationary phase sigma factor RpoS (ÏƒS) in<i>Escherichia coli</i>. RNA Biology, 2011, 8, 913-921.	3.1	25
60	Poly(A)â€polymerase I links transcription with mRNA degradation via Ïƒ S proteolysis. Molecular Microbiology, 2006, 60, 177-188.	2.5	24
61	General Stress Response in<i>Bacillus subtilis</i>and Related Gram-Positive Bacteria. , 0, , 301-318.		23
62	Experimental Detection and Visualization of the Extracellular Matrix in Macrocolony Biofilms. Methods in Molecular Biology, 2017, 1657, 133-145.	0.9	19
63	Cellulose in Bacterial Biofilms. Biologically-inspired Systems, 2019, , 355-392.	0.2	17
64	The <i>Escherichia coli</i> MarA protein regulates the <i>ycgZ</i>â€‹<i>ymgABC</i> operon to inhibit biofilm formation. Molecular Microbiology, 2019, 112, 1609-1625.	2.5	17
65	Adaptation of <i>Escherichia coli</i> Biofilm Growth, Morphology, and Mechanical Properties to Substrate Water Content. ACS Biomaterials Science and Engineering, 2021, 7, 5315-5325.	5.2	14
66	A Novel Locally c-di-GMP-Controlled Exopolysaccharide Synthase Required for Bacteriophage N4 Infection of <i>Escherichia coli</i>. MBio, 2021, 12, e0324921.	4.1	14
67	Logical-continuous modelling of post-translationally regulated bistability of curli fiber expression in Escherichia coli. BMC Systems Biology, 2015, 9, 39.	3.0	11
68	Novel tricks played by the second messenger c-di-GMP in bacterial biofilm formation. EMBO Journal, 2013, 32, 322-323.	7.8	10
69	Role of Cyclic Di-GMP in the Regulatory Networks of <i>Escherichia coli</i>. , 0, , 230-252.		9
70	Proteolysis in prokaryotes â€“ from molecular machines to a systems perspective. Research in Microbiology, 2009, 160, 615-617.	2.1	4
71	Crosstalking second messengers. Nature Microbiology, 2021, 6, 9-10.	13.3	3
72	Reply to â€œPrecedence for the Structural Role of Flagella in Biofilmsâ€. MBio, 2013, 4, e00245-13.	4.1	1

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73	Discovery of Phosphoethanolamine Cellulose and the Genetic Basis for its Biosynthesis in E. coli Biofilms. Biophysical Journal, 2018, 114, 158a.	0.5	0