Paul Babitzke

List of Publications by Year
in descending order

106 papers	9,224 citations	34016 52 h-index	42291 92 g-index
110 all docs	110 docs citations	110 times ranked	4327 citing authors

#	Article	IF	Citations
1	CsrA regulation via binding to the baseâ€pairing small RNA Spot 42. Molecular Microbiology, 2022, 117, 32-53.	1.2	17
2	Analysis of mRNA Decay Intermediates in Bacillus subtilis 3â€² Exoribonuclease and RNA Helicase Mutant Strains. MBio, 2022, 13, e0040022.	1.8	3
3	Transcriptome-Wide Effects of NusA on RNA Polymerase Pausing in Bacillus subtilis. Journal of Bacteriology, 2022, 204, e0053421.	1.0	9
4	Expression of <i>Bacillus subtilis</i> ABCF antibiotic resistance factor VmlR is regulated by RNA polymerase pausing, transcription attenuation, translation attenuation and (p)ppGpp. Nucleic Acids Research, 2022, 50, 6174-6189.	6.5	15
5	NusG is an intrinsic transcription termination factor that stimulates motility and coordinates gene expression with NusA. ELife, 2021, 10, .	2.8	27
6	An incoherent feedforward loop formed by SirA/BarA, HilE and HilD is involved in controlling the growth cost of virulence factor expression by Salmonella Typhimurium. PLoS Pathogens, 2021, 17, e1009630.	2.1	12
7	NusG-dependent RNA polymerase pausing is a frequent function of this universally conserved transcription elongation factor. Critical Reviews in Biochemistry and Molecular Biology, 2020, 55, 716-728.	2.3	18
8	Diverse Mechanisms and Circuitry for Global Regulation by the RNA-Binding Protein CsrA. Frontiers in Microbiology, 2020, 11, 601352.	1.5	48
9	CsrA-Mediated Translational Activation of <i>ymdA</i> Expression in Escherichia coli. MBio, 2020, 11, .	1.8	20
10	NusG controls transcription pausing and RNA polymerase translocation throughout the <i>Bacillus subtilis</i> genome. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 21628-21636.	3.3	38
11	Structure-seq2 probing of RNA structure upon amino acid starvation reveals both known and novel RNA switches in <i>Bacillus subtilis</i>. Rna, 2020, 26, 1431-1447.	1.6	15
12	Regulation of Iron Storage by CsrA Supports Exponential Growth of Escherichia coli. MBio, 2019, 10, .	1.8	27
13	Posttranscription Initiation Control of Gene Expression Mediated by Bacterial RNA-Binding Proteins. Annual Review of Microbiology, 2019, 73, 43-67.	2.9	53
14	NusG-Dependent RNA Polymerase Pausing and Tylosin-Dependent Ribosome Stalling Are Required for Tylosin Resistance by Inducing 23S rRNA Methylation in Bacillus subtilis. MBio, 2019, 10, .	1.8	18
15	In vivo RNA structural probing of uracil and guanine base-pairing by 1-ethyl-3-(3-dimethylaminopropyl)carbodiimide (EDC). Rna, 2019, 25, 147-157.	1.6	37
16	Examination of Csr regulatory circuitry using epistasis analysis with RNA-seq (Epi-seq) confirms that CsrD affects gene expression via CsrA, CsrB and CsrC. Scientific Reports, 2018, 8, 5373.	1.6	17
17	Global Regulation by CsrA and Its RNA Antagonists. Microbiology Spectrum, 2018, 6, .	1.2	148
18	Glyoxals as in vivo RNA structural probes of guanine base-pairing. Rna, 2018, 24, 114-124.	1.6	38

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19	Global Regulation by CsrA and Its RNA Antagonists. , 2018, , 339-354.		5
20	Noncanonical Translation Initiation Comes of Age. Journal of Bacteriology, 2017, 199, .	1.0	4
21	Modular Organization of the NusA- and NusG-Stimulated RNA Polymerase Pause Signal That Participates in the Bacillus subtilis trp Operon Attenuation Mechanism. Journal of Bacteriology, 2017, 199, .	1.0	14
22	Translational Repression of the RpoS Antiadapter IraD by CsrA Is Mediated via Translational Coupling to a Short Upstream Open Reading Frame. MBio, 2017, 8, .	1.8	38
23	Circuitry Linking the Global Csr- and Ïƒ ^E -Dependent Cell Envelope Stress Response Systems. Journal of Bacteriology, 2017, 199, .	1.0	27
24	Global role of the bacterial post-transcriptional regulator CsrA revealed by integrated transcriptomics. Nature Communications, 2017, 8, 1596.	5.8	157
25	Regulation of CsrB/C sRNA decay by EIIA^{Glc} of the phosphoenolpyruvate: carbohydrate phosphotransferase system. Molecular Microbiology, 2016, 99, 627-639.	1.2	62
26	Antagonistic control of the turnover pathway for the global regulatory sRNA CsrB by the CsrA and CsrD proteins. Nucleic Acids Research, 2016, 44, 7896-7910.	6.5	54
27	NusA-dependent transcription termination prevents misregulation of global gene expression. Nature Microbiology, 2016, 1, 15007.	5.9	68
28	Circuitry Linking the Catabolite Repression and Csr Global Regulatory Systems of Escherichia coli. Journal of Bacteriology, 2016, 198, 3000-3015.	1.0	45
29	FliW antagonizes CsrA RNA binding by a noncompetitive allosteric mechanism. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 9870-9875.	3.3	41
30	Eliminating blurry bands in gels with a simple cost-effective repair to the gel cassette. Rna, 2016, 22, 1929-1930.	1.6	1
31	Toxin MqsR cleaves singleâ€stranded <scp>mRNA</scp> with various 5' ends. MicrobiologyOpen, 2016, 5, 370-377.	1.2	9
32	NusG Is a Sequence-specific RNA Polymerase Pause Factor That Binds to the Non-template DNA within the Paused Transcription Bubble. Journal of Biological Chemistry, 2016, 291, 5299-5308.	1.6	63
33	Ribosomal protein L10(L12)₄autoregulates expression of the<i>Bacillus subtilis rplJL</i>operon by a transcription attenuation mechanism. Nucleic Acids Research, 2015, 43, 7032-7043.	6.5	20
34	CsrA Participates in a PNPase Autoregulatory Mechanism by Selectively Repressing Translation of <i>pnp</i> Transcripts That Have Been Previously Processed by RNase III and PNPase. Journal of Bacteriology, 2015, 197, 3751-3759.	1.0	30
35	<i>csrR</i> , a Paralog and Direct Target of CsrA, Promotes Legionella pneumophila Resilience in Water. MBio, 2015, 6, e00595.	1.8	32
36	Regulation of Bacterial Virulence by Csr (Rsm) Systems. Microbiology and Molecular Biology Reviews, 2015, 79, 193-224.	2.9	309

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37	Csr (Rsm) System and Its Overlap and Interplay with Cyclic Di-GMP Regulatory Systems. , 2014, , 201-214.		4
38	NusG/Spt5: are there common functions of this ubiquitous transcription elongation factor?. Current Opinion in Microbiology, 2014, 18, 68-71.	2.3	43
39	Global effects of the <scp>DEAD</scp>â€box <scp>RNA</scp> helicase <scp>DeaD</scp> (<scp>CsdA</scp>) on gene expression over a broad range of temperatures. Molecular Microbiology, 2014, 92, 945-958.	1.2	58
40	Postâ€transcriptional regulation on a global scale: form and function of Csr/Rsm systems. Environmental Microbiology, 2013, 15, 313-324.	1.8	264
41	<scp>CsrA</scp> activates <scp><i>flhDC</i></scp> expression by protecting <scp><i>flhDC</i></scp> m<scp>RNA</scp> from <scp>RN</scp>ase <scp>E</scp>â€mediated cleavage. Molecular Microbiology, 2013, 87, 851-866.	1.2	169
42	Dual Posttranscriptional Regulation via a Cofactor-Responsive mRNA Leader. Journal of Molecular Biology, 2013, 425, 3662-3677.	2.0	73
43	FliW and FliS Function Independently To Control Cytoplasmic Flagellin Levels in Bacillus subtilis. Journal of Bacteriology, 2013, 195, 297-306.	1.0	55
44	Translational Repression of NhaR, a Novel Pathway for Multi-Tier Regulation of Biofilm Circuitry by CsrA. Journal of Bacteriology, 2012, 194, 79-89.	1.0	67
45	Gel Mobility Shift Assays to Detect Proteinâ€“RNA Interactions. Methods in Molecular Biology, 2012, 905, 201-211.	0.4	41
46	Circuitry linking the Csr and stringent response global regulatory systems. Molecular Microbiology, 2011, 80, 1561-1580.	1.2	162
47	Integration of a complex regulatory cascade involving the SirA/BarA and Csr global regulatory systems that controls expression of the <i>Salmonella</i> SPIâ€1 and SPIâ€2 virulence regulons through HilD. Molecular Microbiology, 2011, 80, 1637-1656.	1.2	138
48	Complex regulation of the global regulatory gene <i>csrA</i>: CsrAâ€mediated translational repression, transcription from five promoters by EÏƒ⁷⁰ and EÏƒ^S, and indirect transcriptional activation by CsrA. Molecular Microbiology, 2011, 81, 689-704.	1.2	92
49	CsrA-FliW interaction governs flagellin homeostasis and a checkpoint on flagellar morphogenesis in Bacillus subtilis. Molecular Microbiology, 2011, 82, 447-461.	1.2	104
50	CsrA Represses Translation of <i>sdiA</i> , Which Encodes the <i>N</i> -Acylhomoserine- <scp>l</scp> -Lactone Receptor of Escherichia coli, by Binding Exclusively within the Coding Region of <i>sdiA</i> mRNA. Journal of Bacteriology, 2011, 193, 6162-6170.	1.0	47
51	Mechanism of NusG-stimulated pausing, hairpin-dependent pause site selection and intrinsic termination at overlapping pause and termination sites in the Bacillus subtilis trp leader. Molecular Microbiology, 2010, 76, 690-705.	1.2	37
52	Molecular basis of TRAPâ€“5â€²SL RNA interaction in the <i>Bacillus subtilis trp</i> operon transcription attenuation mechanism. Rna, 2009, 15, 55-66.	1.6	9
53	A Genome-Wide Analysis of Small Regulatory RNAs in the Human Pathogen Group A Streptococcus. PLoS ONE, 2009, 4, e7668.	1.1	71
54	Regulation of Translation Initiation by RNA Binding Proteins. Annual Review of Microbiology, 2009, 63, 27-44.	2.9	112

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55	Molecular Geometry of CsrA (RsmA) Binding to RNA and Its Implications for Regulated Expression. Journal of Molecular Biology, 2009, 392, 511-528.	2.0	103
56	Function of the <i>Bacillus subtilis</i> transcription elongation factor NusG in hairpin-dependent RNA polymerase pausing in the <i>trp</i> leader. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 16131-16136.	3.3	58
57	TRAP-5â€² stemâ€“loop interaction increases the efficiency of transcription termination in the <i>Bacillus subtilis trpEDCFBA</i> operon leader region. Rna, 2007, 13, 2020-2033.	1.6	14
58	CsrA Inhibits Translation Initiation of Escherichia coli hfq by Binding to a Single Site Overlapping the Shine-Dalgarno Sequence. Journal of Bacteriology, 2007, 189, 5472-5481.	1.0	124
59	Translation Control of trpG from Transcripts Originating from the Folate Operon Promoter of Bacillus subtilis Is Influenced by Translation-Mediated Displacement of Bound TRAP, While Translation Control of Transcripts Originating from a Newly Identified trpG Promoter Is Not. Journal of Bacteriology, 2007, 189, 872-879.	1.0	12
60	CsrB sRNA family: sequestration of RNA-binding regulatory proteins. Current Opinion in Microbiology, 2007, 10, 156-163.	2.3	387
61	CsrA ofBacillus subtilisregulates translation initiation of the gene encoding the flagellin protein (hag) by blocking ribosome binding. Molecular Microbiology, 2007, 64, 1605-1620.	1.2	92
62	Mechanism of <i>hcnA</i> mRNA recognition in the Gac/Rsm signal transduction pathway of <i>Pseudomonas fluorescens</i>. Molecular Microbiology, 2007, 66, 341-356.	1.2	90
63	RNA Polymerase Pausing Regulates Translation Initiation by Providing Additional Time for TRAP-RNA Interaction. Molecular Cell, 2006, 24, 547-557.	4.5	39
64	The trp RNA-binding attenuation protein (TRAP) of Bacillus subtilis regulates translation initiation of ycbK, a gene encoding a putative efflux protein, by blocking ribosome binding. Molecular Microbiology, 2006, 61, 1252-1266.	1.2	22
65	Identification of a novel regulatory protein (CsrD) that targets the global regulatory RNAs CsrB and CsrC for degradation by RNase E. Genes and Development, 2006, 20, 2605-2617.	2.7	252
66	Comprehensive Alanine-scanning Mutagenesis ofEscherichia coliCsrA Defines Two Subdomains of Critical Functional Importance. Journal of Biological Chemistry, 2006, 281, 31832-31842.	1.6	103
67	Comprehensive Alanine-scanning Mutagenesis of Escherichia coli CsrA Defines Two Subdomains of Critical Functional Importance. Journal of Biological Chemistry, 2006, 281, 31832-31842.	1.6	22
68	CsrA postâ€transcriptionally represses <i>pgaABCD</i>, responsible for synthesis of a biofilm polysaccharide adhesin of <i>Escherichia coli</i>. Molecular Microbiology, 2005, 56, 1648-1663.	1.2	280
69	RNA sequence and secondary structure participate in high-affinity CsrA-RNA interaction. Rna, 2005, 11, 1579-1587.	1.6	253
70	Complexity in Regulation of Tryptophan Biosynthesis inBacillus subtilis. Annual Review of Genetics, 2005, 39, 47-68.	3.2	143
71	Recycling of a regulatory protein by degradation of the RNA to which it binds. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 2747-2751.	3.3	46
72	The trp RNA-Binding Attenuation Protein of Bacillus subtilis Regulates Translation of the Tryptophan Transport Gene trpP (yhaG) by Blocking Ribosome Binding. Journal of Bacteriology, 2004, 186, 278-286.	1.0	59

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73	Gene replacement method for determining conditions in which Bacillus subtilis genes are essential or dispensable for cell viability. Applied Microbiology and Biotechnology, 2004, 64, 382-386.	1.7	14
74	Regulation of transcription attenuation and translation initiation by allosteric control of an RNA-binding protein: the Bacillus subtilis TRAP protein. Current Opinion in Microbiology, 2004, 7, 132-139.	2.3	64
75	A novel sRNA component of the carbon storage regulatory system of Escherichia coli. Molecular Microbiology, 2003, 48, 657-670.	1.2	364
76	A Mg2+-dependent RNA Tertiary Structure Forms in the Bacillus subtilis trp Operon Leader Transcript and Appears to Interfere with trpE Translation Control by Inhibiting TRAP Binding. Journal of Molecular Biology, 2003, 332, 555-574.	2.0	21
77	Role of RNA Structure in Transcription Attenuation in Bacillus subtilis: The trpEDCFBA Operon as a Model System. Methods in Enzymology, 2003, 371, 392-404.	0.4	15
78	CsrA Regulates Translation of the Escherichia coli Carbon Starvation Gene, cstA , by Blocking Ribosome Access to the cstA Transcript. Journal of Bacteriology, 2003, 185, 4450-4460.	1.0	174
79	Phylogenetic conservation of RNA secondary and tertiary structure in the trpEDCFBA operon leader transcript in Bacillus. Rna, 2003, 9, 1502-1515.	1.6	3
80	Regulatory Circuitry of the CsrA/CsrB and BarA/UvrY Systems of Escherichia coli. Journal of Bacteriology, 2002, 184, 5130-5140.	1.0	257
81	NusA-stimulated RNA polymerase pausing and termination participates in the Bacillus subtilis trp operon attenuation mechanism in vitro. Proceedings of the National Academy of Sciences of the United States of America, 2002, 99, 11067-11072.	3.3	88
82	The Anti-trp RNA-binding Attenuation Protein (Anti-TRAP), AT, Recognizes the Tryptophan-activated RNA Binding Domain of the TRAP Regulatory Protein. Journal of Biological Chemistry, 2002, 277, 10608-10613.	1.6	44
83	Transcription attenuation. Biochimica Et Biophysica Acta Gene Regulatory Mechanisms, 2002, 1577, 240-250.	2.4	80
84	CsrA regulates glycogen biosynthesis by preventing translation of glgC in Escherichia coli. Molecular Microbiology, 2002, 44, 1599-1610.	1.2	257
85	Regulatory Interactions of Csr Components: the RNA Binding Protein CsrA Activates csrB Transcription in Escherichia coli. Journal of Bacteriology, 2001, 183, 6017-6027.	1.0	134
86	Positive regulation of motility and flhDC expression by the RNA-binding protein CsrA of Escherichia coli. Molecular Microbiology, 2001, 40, 245-256.	1.2	359
87	Expression of the Bacillus subtilis trpEDCFBA Operon Is Influenced by Translational Coupling and Rho Termination Factor. Journal of Bacteriology, 2001, 183, 5918-5926.	1.0	43
88	Posttranscription Initiation Control of Tryptophan Metabolism in Bacillus subtilis by the trp RNA-Binding Attenuation Protein (TRAP), anti-TRAP, and RNA Structure. Journal of Bacteriology, 2001, 183, 5795-5802.	1.0	77
89	trp RNA-Binding Attenuation Protein-5â€² Stem-Loop RNA Interaction Is Required for Proper Transcription Attenuation Control of the Bacillus subtilis trpEDCFBA Operon. Journal of Bacteriology, 2000, 182, 1819-1827.	1.0	25
90	Effects of Mutations in the l-Tryptophan Binding Pocket of the trp RNA-binding Attenuation Protein ofBacillus subtilis. Journal of Biological Chemistry, 2000, 275, 4519-4524.	1.6	55

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91	A 5â€² RNA Stem-Loop Participates in the Transcription Attenuation Mechanism That Controls Expression of the <i>Bacillus subtilis trpEDCFBA</i> Operon. Journal of Bacteriology, 1999, 181, 5742-5749.	1.0	29
92	trp RNA-binding Attenuation Protein-mediated Long Distance RNA Refolding Regulates Translation of trpE inBacillus subtilis. Journal of Biological Chemistry, 1998, 273, 20494-20503.	1.6	84
93	Myotonic dystrophy: Molecular windows on a complex etiology. Nucleic Acids Research, 1998, 26, 1363-1368.	6.5	59
94	The <i>Escherichia coli mrsC</i> Gene Is Required for Cell Growth and mRNA Decay. Journal of Bacteriology, 1998, 180, 1920-1928.	1.0	32
95	The trp RNA-binding attenuation protein regulates TrpG synthesis by binding to the trpG ribosome binding site of Bacillus subtilis. Journal of Bacteriology, 1997, 179, 2582-2586.	1.0	69
96	Regulation of tryptophan biosynthesis: Trpâ€ing the TRAP or how Bacillus subtilis reinvented the wheel. Molecular Microbiology, 1997, 26, 1-9.	1.2	81
97	Interaction of the trp RNA-Binding attenuation protein (TRAP) of Bacillus subtilis with RNA: effects of the number of GAG repeats, the nucleotides separating adjacent repeats, and RNA secondary structure. Journal of Bacteriology, 1996, 178, 5159-5163.	1.0	56
98	TRAP, the trp RNA-binding attenuation protein of Bacillus subtilis, is a toroid-shaped molecule that binds transcripts containing GAG or UAG repeats separated by two nucleotides.. Proceedings of the National Academy of Sciences of the United States of America, 1995, 92, 7916-7920.	3.3	73
99	trp RNA-binding attenuation protein (TRAP)-trp leader RNA interactions mediate translational as well as transcriptional regulation of the Bacillus subtilis trp operon. Journal of Bacteriology, 1995, 177, 6362-6370.	1.0	99
100	Structural Features of L-Tryptophan Required for Activation of TRAP, the trp RNA-binding Attenuation Protein of Bacillus subtilis. Journal of Biological Chemistry, 1995, 270, 12452-12456.	1.6	37
101	Reconstitution of Bacillus subtilis trp attenuation in vitro with TRAP, the trp RNA-binding attenuation protein.. Proceedings of the National Academy of Sciences of the United States of America, 1993, 90, 133-137.	3.3	134
102	Analysis of mRNA decay and rRNA processing in Escherichia coli multiple mutants carrying a deletion in RNase III. Journal of Bacteriology, 1993, 175, 229-239.	1.0	118
103	The mtrAB operon of Bacillus subtilis encodes GTP cyclohydrolase I (MtrA), an enzyme involved in folic acid biosynthesis, and MtrB, a regulator of tryptophan biosynthesis. Journal of Bacteriology, 1992, 174, 2059-2064.	1.0	63
104	The Ams (altered mRNA stability) protein and ribonuclease E are encoded by the same structural gene of Escherichia coli.. Proceedings of the National Academy of Sciences of the United States of America, 1991, 88, 1-5.	3.3	301
105	New method for generating deletions and gene replacements in Escherichia coli. Journal of Bacteriology, 1989, 171, 4617-4622.	1.0	713
106	Aromatic Amino Acid Metabolism in Bacillus subtilis. , 0, , 233-244.		16