Lee Kroos

List of Publications by Year
in descending order

76 papers	3,408 citations	186265 28 h-index	161849 54 g-index
78 all docs	78 docs citations	78 times ranked	1690 citing authors

#	Article	IF	Citations
1	A global analysis of developmentally regulated genes in Myxococcus xanthus. Developmental Biology, 1986, 117, 252-266.	2.0	321
2	Developmental cheating in the social bacterium Myxococcus xanthus. Nature, 2000, 404, 598-601.	27.8	301
3	A forespore checkpoint for mother cell gene expression during development in B. subtilis. Cell, 1990, 62, 239-250.	28.9	196
4	Intercellular signaling is required for developmental gene expression in Myxococcus xanthus. Developmental Biology, 1986, 117, 267-276.	2.0	167
5	Identification of the promoter for a spore coat protein gene in Bacillus subtilis and studies on the regulation of its induction at a late stage of sporulation. Journal of Molecular Biology, 1988, 200, 461-473.	4.2	134
6	Control of sigma factor activity during Bacillus subtilis sporulation. Molecular Microbiology, 1999, 31, 1285-1294.	2.5	122
7	TheBacillusandMyxococcusDevelopmental Networks and Their Transcriptional Regulators. Annual Review of Genetics, 2007, 41, 13-39.	7.6	122
8	Yapsins Are a Family of Aspartyl Proteases Required for Cell Wall Integrity in Saccharomyces cerevisiae. Eukaryotic Cell, 2005, 4, 1364-1374.	3.4	115
9	Sporulation regulatory protein gerE from Bacillus subtilis binds to and can activate or repress transcription from promoters for mother-cell-specific genes. Journal of Molecular Biology, 1992, 226, 1037-1050.	4.2	114
10	Regulation of dev , an Operon That Includes Genes Essential for Myxococcus xanthus Development and CRISPR-Associated Genes and Repeats. Journal of Bacteriology, 2007, 189, 3738-3750.	2.2	99
11	Sporulation and Enterotoxin (CPE) Synthesis Are Controlled by the Sporulation-Specific Sigma Factors SigE and SigK in<i>Clostridium perfringens</i>. Journal of Bacteriology, 2009, 191, 2728-2742.	2.2	98
12	Myxobacteria, Polarity, and Multicellular Morphogenesis. Cold Spring Harbor Perspectives in Biology, 2010, 2, a000380-a000380.	5.5	79
13	Regulation of the Transcription of a Cluster of Bacillus subtilis Spore Coat Genes. Journal of Molecular Biology, 1994, 240, 405-415.	4.2	71
14	Sporulation Regulatory Protein SpoIIID from Bacillus subtilis Activates and Represses Transcription by Both Mother-cell-specific Forms of RNA Polymerase. Journal of Molecular Biology, 1994, 243, 425-436.	4.2	71
15	Evidence that SpoIVFB Is a Novel Type of Membrane Metalloprotease Governing Intercompartmental Communication duringBacillus subtilis Sporulation. Journal of Bacteriology, 2000, 182, 3305-3309.	2.2	69
16	The Prosequence of Pro-Ï, ^K Promotes Membrane Association and Inhibits RNA Polymerase Core Binding. Journal of Bacteriology, 1998, 180, 2434-2441.	2.2	65
17	Regulation of Ïƒ factor activity during Bacillus subtilis development. Current Opinion in Microbiology, 2000, 3, 553-560.	5.1	63
18	Regulated proteolysis in bacterial development. FEMS Microbiology Reviews, 2014, 38, 493-522.	8.6	60

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19	Highly Signal-Responsive Gene Regulatory Network Governing Myxococcus Development. Trends in Genetics, 2017, 33, 3-15.	6.7	58
20	Biochemical and structural insights into intramembrane metalloprotease mechanisms. Biochimica Et Biophysica Acta - Biomembranes, 2013, 1828, 2873-2885.	2.6	52
21	BofA protein inhibits intramembrane proteolysis of pro-ÂK in an intercompartmental signaling pathway during Bacillus subtilis sporulation. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 6385-6390.	7.1	48
22	Serine proteases from two cell types target different components of a complex that governs regulated intramembrane proteolysis of pro-ÏƒKduringBacillus subtilisdevelopment. Molecular Microbiology, 2005, 58, 835-846.	2.5	43
23	Combinatorial regulation of genes essential for Myxococcus xanthus development involves a response regulator and a LysR-type regulator. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 7969-7974.	7.1	42
24	A combination of unusual transcription factors binds cooperatively to control <i>Myxococcus xanthus</i> developmental gene expression. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 1965-1970.	7.1	42
25	Combinatorial Regulation by a Novel Arrangement of FruA and MrpC2 Transcription Factors during <i>Myxococcus xanthus</i> Development. Journal of Bacteriology, 2009, 191, 2753-2763.	2.2	39
26	Transcription factor MrpC binds to promoter regions of hundreds of developmentally-regulated genes in Myxococcus xanthus. BMC Genomics, 2014, 15, 1123.	2.8	35
27	Forespore Signaling Is Necessary for Pro-Ïƒ K Processing during Bacillus subtilis Sporulation Despite the Loss of SpoIVFA upon Translational Arrest. Journal of Bacteriology, 2002, 184, 5393-5401.	2.2	33
28	Ï, K Can Negatively Regulate sigE Expression by Two Different Mechanisms during Sporulation of Bacillus subtilis. Journal of Bacteriology, 1999, 181, 4081-4088.	2.2	33
29	Negative Regulation by the Bacillus subtilis GerE Protein. Journal of Biological Chemistry, 1999, 274, 8322-8327.	3.4	31
30	Intramembrane proteolytic cleavage of a membrane-tethered transcription factor by a metalloprotease depends on ATP. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 16174-16179.	7.1	31
31	Rescue of Social Motility Lost during Evolution of Myxococcus xanthus in an Asocial Environment. Journal of Bacteriology, 2002, 184, 2719-2727.	2.2	30
32	Combinatorial Regulation of <i>fmgD</i> by MrpC2 and FruA during <i>Myxococcus xanthus</i> Development. Journal of Bacteriology, 2011, 193, 1681-1689.	2.2	30
33	Fate of the SpoIIID switch protein during Bacillus subtilis sporulation depends on the mother-cell sigma factor, ÏƒK. Journal of Molecular Biology, 1992, 228, 840-849.	4.2	29
34	Combined Action of Two Transcription Factors Regulates Genes Encoding Spore Coat Proteins of Bacillus subtilis. Journal of Biological Chemistry, 2000, 275, 13849-13855.	3.4	29
35	Combinatorial Regulation by MrpC2 and FruA Involves Three Sites in the <i>fmgE</i> Promoter Region during Myxococcus xanthus Development. Journal of Bacteriology, 2011, 193, 2756-2766.	2.2	29
36	<i>devI</i>Is an Evolutionarily Young Negative Regulator of Myxococcus xanthus Development. Journal of Bacteriology, 2015, 197, 1249-1262.	2.2	28

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37	Identification of the Î©4400 Regulatory Region, a Developmental Promoter of Myxococcus xanthus. Journal of Bacteriology, 1998, 180, 1995-2004.	2.2	26
38	Regulation of the Myxococcus xanthus C-Signal-Dependent Î©4400 Promoter by the Essential Developmental Protein FruA. Journal of Bacteriology, 2006, 188, 5167-5176.	2.2	23
39	Evidence That the Bacillus subtilis SpoIIGA Protein Is a Novel Type of Signal-transducing Aspartic Protease. Journal of Biological Chemistry, 2008, 283, 15287-15299.	3.4	23
40	Combinatorial Regulation of the<i>dev</i>Operon by MrpC2 and FruA during Myxococcus xanthus Development. Journal of Bacteriology, 2015, 197, 240-251.	2.2	22
41	Nutrient-Regulated Proteolysis of MrpC Halts Expression of Genes Important for Commitment to Sporulation during Myxococcus xanthus Development. Journal of Bacteriology, 2014, 196, 2736-2747.	2.2	21
42	Eukaryotic-like signaling and gene regulation in a prokaryote that undergoes multicellular development. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 2681-2682.	7.1	20
43	Identification of the Î©4499 Regulatory Region Controlling Developmental Expression of a <i>Myxococcus xanthus</i> Cytochrome P-450 System. Journal of Bacteriology, 1999, 181, 5467-5475.	2.2	20
44	In vitro transcription of Myxococcus xanthus genes with RNA polymerase containing Ïƒ A , the major sigma factor in growing cells. Molecular Microbiology, 1997, 25, 463-472.	2.5	19
45	cis Elements Necessary for Developmental Expression of a Myxococcus xanthus Gene That Depends on C Signaling. Journal of Bacteriology, 2003, 185, 1405-1414.	2.2	19
46	Substrate Requirements for Regulated Intramembrane Proteolysis of Bacillus subtilis Pro-Ïƒ K. Journal of Bacteriology, 2005, 187, 961-971.	2.2	19
47	Identification of the Î©4514 Regulatory Region, a Developmental Promoter of Myxococcus xanthus That Is Transcribed In Vitro by the Major Vegetative RNA Polymerase. Journal of Bacteriology, 2002, 184, 3348-3359.	2.2	16
48	Prokaryotic Development: Emerging Insights. Journal of Bacteriology, 2003, 185, 1128-1146.	2.2	16
49	Residues in Conserved Loops of Intramembrane Metalloprotease SpoIVFB Interact with Residues near the Cleavage Site in Pro-Ïƒ ^K. Journal of Bacteriology, 2013, 195, 4936-4946.	2.2	16
50	The <i>dev</i> Operon Regulates the Timing of Sporulation during Myxococcus xanthus Development. Journal of Bacteriology, 2017, 199, .	2.2	16
51	Mutational Analysis of the Myxococcus xanthus Î©4400 Promoter Region Provides Insight into Developmental Gene Regulation by C Signaling. Journal of Bacteriology, 2004, 186, 661-671.	2.2	15
52	Interaction of intramembrane metalloprotease SpoIVFB with substrate Pro-Ïƒ ^K. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, E10677-E10686.	7.1	15
53	Mutational Analysis of the Myxococcus xanthus Î©4499 Promoter Region Reveals Shared and Unique Properties in Comparison with Other C-Signal-Dependent Promoters. Journal of Bacteriology, 2004, 186, 3766-3776.	2.2	14
54	Role of Ïƒ D in Regulating Genes and Signals during Myxococcus xanthus Development. Journal of Bacteriology, 2006, 188, 3246-3256.	2.2	13

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55	Features of Pro-Ïƒ ^K Important for Cleavage by SpoIVFB, an Intramembrane Metalloprotease. Journal of Bacteriology, 2013, 195, 2793-2806.	2.2	13
56	Bacillus subtilis Intramembrane Protease RasP Activity in Escherichia coli and <i>In Vitro</i>. Journal of Bacteriology, 2017, 199, .	2.2	12
57	One Perturbation of the Mother Cell Gene Regulatory Network Suppresses the Effects of Another during Sporulation of Bacillus subtilis. Journal of Bacteriology, 2007, 189, 8467-8473.	2.2	11
58	Mutational Analysis of the fruA Promoter Region Demonstrates that C-Box and 5-Base-Pair Elements Are Important for Expression of an Essential Developmental Gene of Myxococcus xanthus. Journal of Bacteriology, 2004, 186, 5961-5967.	2.2	10
59	Mutational Analysis of the Myxococcus xanthus Î©4406 Promoter Region Reveals an Upstream Negative Regulatory Element That Mediates C-Signal Dependence. Journal of Bacteriology, 2006, 188, 515-524.	2.2	10
60	Substrate specificity of SpoIIGA, a signal-transducing aspartic protease in Bacilli. Journal of Biochemistry, 2011, 149, 665-671.	1.7	9
61	Identification of the Î©4406 Regulatory Region, a Developmental Promoter of Myxococcus xanthus , and a DNA Segment Responsible for Chromosomal Position-Dependent Inhibition of Gene Expression. Journal of Bacteriology, 2005, 187, 4149-4162.	2.2	8
62	Structure of Bacterial Transcription Factor SpoIIID and Evidence for a Novel Mode of DNA Binding. Journal of Bacteriology, 2014, 196, 2131-2142.	2.2	7
63	Ultrasensitive Response of Developing Myxococcus xanthus to the Addition of Nutrient Medium Correlates with the Level of MrpC. Journal of Bacteriology, 2018, 200, .	2.2	7
64	Systematic analysis of the <i>Myxococcus xanthus</i> developmental gene regulatory network supports posttranslational regulation of FruA by Câ€signaling. Molecular Microbiology, 2019, 111, 1732-1752.	2.5	7
65	Cell density, alignment, and orientation correlate with C-signalâ€“dependent gene expression during <i>Myxococcus xanthus</i> development. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	7
66	Maintaining the Transcription Factor SpoIIID Level Late during Sporulation Causes Spore Defects in <i>Bacillus subtilis</i>. Journal of Bacteriology, 2007, 189, 7302-7309.	2.2	6
67	Two Regions of <i>Bacillus subtilis</i> Transcription Factor SpoIIID Allow a Monomer To Bind DNA. Journal of Bacteriology, 2010, 192, 1596-1606.	2.2	6
68	Complex Formed between Intramembrane Metalloprotease SpoIVFB and Its Substrate, Pro-ÏƒK. Journal of Biological Chemistry, 2016, 291, 10347-10362.	3.4	6
69	Transcriptional Regulatory Mechanisms during Myxococcus xanthus Development. , 0, , 149-168.		6
70	Conserved Proline Residues of Bacillus subtilis Intramembrane Metalloprotease SpoIVFB Are Important for Substrate Interaction and Cleavage. Journal of Bacteriology, 2022, 204, JB0038621.	2.2	6
71	Inhibitory proteins block substrate access by occupying the active site cleft of Bacillus subtilis intramembrane protease SpoIVFB. ELife, 2022, 11, .	6.0	5
72	Bacterial Development in the Fast Lane. Journal of Bacteriology, 2008, 190, 4373-4376.	2.2	4

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73	Channels modestly impact compartmentâ€•specific ATP levels duringBacillus subtilissporulation and a rise in the mother cell ATP level is not necessary for Proâ€•ïƒKcleavage. Molecular Microbiology, 2020, 114, 563-581.	2.5	3
74	Who's the Boss? One-Way Conversations between Bacteria. Developmental Cell, 2009, 17, 155-156.	7.0	1
75	<i>Bacillus subtilis</i> Sporulation and Other Multicellular Behaviors. , 0, , 363-383.		1
76	Bacterial Development: Evidence for Very Short Umbilical Cords. Current Biology, 2009, 19, R452-R453.	3.9	0