# Richard L Gourse

List of Publications by Year
in descending order



| | | | |
|---|---|---|---|
| 61 papers | 5,359 citations | 117625 34 h-index | 144013 57 g-index |
| 100 all docs | 100 docs citations | 100 times ranked | 3540 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | DksA. Cell, 2004, 118, 311-322. | 28.9 | 444 |
| 2 | Transcription Regulation by Initiating NTP Concentration: rRNA Synthesis in Bacteria. Science, 1997, 278, 2092-2097. | 12.6 | 377 |
| 3 | Mechanism of regulation of transcription initiation by ppGpp. I. Effects of ppGpp on transcription initiation in vivo and in vitro. Journal of Molecular Biology, 2001, 305, 673-688. | 4.2 | 315 |
| 4 | rRNA Transcription inEscherichia coli. Annual Review of Genetics, 2004, 38, 749-770. | 7.6 | 310 |
| 5 | DksA potentiates direct activation of amino acid promoters by ppGpp. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 7823-7828. | 7.1 | 296 |
| 6 | Advances in bacterial promoter recognition and its control by factors that do not bind DNA. Nature Reviews Microbiology, 2008, 6, 507-519. | 28.6 | 264 |
| 7 | rRNA TRANSCRIPTION AND GROWTH RATEâ€“DEPENDENT REGULATION OF RIBOSOME SYNTHESIS INESCHERICHIA COLI. Annual Review of Microbiology, 1996, 50, 645-677. | 7.3 | 253 |
| 8 | The Magic Spot: A ppGpp Binding Site on E.Âcoli RNA Polymerase Responsible for Regulation of Transcription Initiation. Molecular Cell, 2013, 50, 420-429. | 9.7 | 239 |
| 9 | ppGpp Binding to a Site at the RNAP-DksA Interface Accounts for Its Dramatic Effects on Transcription Initiation during the Stringent Response. Molecular Cell, 2016, 62, 811-823. | 9.7 | 231 |
| 10 | Genome-wide effects on <i>Escherichia coli</i> transcription from ppGpp binding to its two sites on RNA polymerase. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 8310-8319. | 7.1 | 189 |
| 11 | Control of rRNA Expression by Small Molecules Is Dynamic and Nonredundant. Molecular Cell, 2003, 12, 125-134. | 9.7 | 185 |
| 12 | Transcriptional Responses to ppGpp and DksA. Annual Review of Microbiology, 2018, 72, 163-184. | 7.3 | 175 |
| 13 | Relationship between Growth Rate and ATP Concentration in Escherichia coli. Journal of Biological Chemistry, 2004, 279, 8262-8268. | 3.4 | 163 |
| 14 | Promoter recognition and discrimination by EsigmaS RNA polymerase. Molecular Microbiology, 2001, 42, 939-954. | 2.5 | 160 |
| 15 | Direct regulation of <i>Escherichia coli</i> ribosomal protein promoters by the transcription factors ppGpp and DksA. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 5712-5717. | 7.1 | 133 |
| 16 | Allosteric control of <i>Escherichia coli</i> rRNA promoter complexes by DksA. Genes and Development, 2009, 23, 236-248. | 5.9 | 129 |
| 17 | ppGpp and DksA likely regulate the activity of the extracytoplasmic stress factor Ïƒ<sup>E</sup> in <i>Escherichia coli</i> by both direct and indirect mechanisms. Molecular Microbiology, 2008, 67, 619-632. | 2.5 | 116 |
| 18 | Effects of DksA, GreA, and GreB on Transcription Initiation: Insights into the Mechanisms of Factors that Bind in the Secondary Channel of RNA Polymerase. Journal of Molecular Biology, 2007, 366, 1243-1257. | 4.2 | 112 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | Stepwise Promoter Melting by Bacterial RNA Polymerase. Molecular Cell, 2020, 78, 275-288.e6. | 9.7 | 88 |
| 20 | Structures of the RNA polymerase-Ïƒ <sup>54</sup> reveal new and conserved regulatory strategies. Science, 2015, 349, 882-885. | 12.6 | 77 |
| 21 | Direct interactions between the coiled-coil tip of DksA and the trigger loop of RNA polymerase mediate transcriptional regulation. Genes and Development, 2012, 26, 2634-2646. | 5.9 | 74 |
| 22 | Multiplexed protein-DNA cross-linking: Scrunching in transcription start site selection. Science, 2016, 351, 1090-1093. | 12.6 | 62 |
| 23 | Analysis of RNA polymerase-promoter complex formation. Methods, 2009, 47, 13-24. | 3.8 | 57 |
| 24 | E. coli TraR allosterically regulates transcription initiation by altering RNA polymerase conformation. ELife, 2019, 8, . | 6.0 | 55 |
| 25 | Crosslink Mapping at Amino Acid-Base Resolution Reveals the Path of Scrunched DNA in Initial Transcribing Complexes. Molecular Cell, 2015, 59, 768-780. | 9.7 | 51 |
| 26 | Colocalization of distant chromosomal loci in space in <i>E. coli</i>: a bacterial nucleolus. Genes and Development, 2016, 30, 2272-2285. | 5.9 | 51 |
| 27 | Open complex scrunching before nucleotide addition accounts for the unusual transcription start site of <i>E. coli</i> ribosomal RNA promoters. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, E1787-95. | 7.1 | 49 |
| 28 | DksA and ppGpp Regulate the Ïƒ <sup>S</sup> Stress Response by Activating Promoters for the Small RNA DsrA and the Anti-Adapter Protein IraP. Journal of Bacteriology, 2018, 200, . | 2.2 | 49 |
| 29 | General Pathway for Turning on Promoters Transcribed by RNA Polymerases Containing Alternative Ïƒ Factors. Journal of Bacteriology, 2006, 188, 4589-4591. | 2.2 | 47 |
| 30 | Crl Facilitates RNA Polymerase Holoenzyme Formation. Journal of Bacteriology, 2006, 188, 7966-7970. | 2.2 | 45 |
| 31 | Role of the Coiled-Coil Tip of Escherichia coli DksA in Promoter Control. Journal of Molecular Biology, 2012, 416, 503-517. | 4.2 | 44 |
| 32 | Roles of Transcriptional and Translational Control Mechanisms in Regulation of Ribosomal Protein Synthesis in Escherichia coli. Journal of Bacteriology, 2017, 199, . | 2.2 | 44 |
| 33 | Dissection of the molecular circuitry controlling virulence in <i>Francisella tularensis</i>. Genes and Development, 2017, 31, 1549-1560. | 5.9 | 39 |
| 34 | Super DksAs: substitutions in DksA enhancing its effects on transcription initiation. EMBO Journal, 2009, 28, 1720-1731. | 7.8 | 38 |
| 35 | Mutational Analysis of the <i>Chlamydia trachomatis</i> rRNA P1 Promoter Defines Four Regions Important for Transcription In Vitro. Journal of Bacteriology, 1998, 180, 2359-2366. | 2.2 | 37 |
| 36 | Key features of Ïƒ <sup>S</sup> required for specific recognition by Crl, a transcription factor promoting assembly of RNA polymerase holoenzyme. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 15955-15960. | 7.1 | 34 |

| # | Article | IF | Citations |
|---|---|---|---|
| 37 | Crystal Structure of Escherichia coli Rnk, a New RNA Polymerase-Interacting Protein. Journal of Molecular Biology, 2008, 383, 367-379. | 4.2 | 33 |
| 38 | TraR directly regulates transcription initiation by mimicking the combined effects of the global regulators DksA and ppGpp. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, E5539-E5548. | 7.1 | 33 |
| 39 | Strategies from UW-Madison for rescuing biomedical research in the US. ELife, 2015, 4, e09305. | 6.0 | 30 |
| 40 | Unique roles of the rrn P2 rRNA promoters in Escherichia coli. Molecular Microbiology, 2004, 52, 1375-1387. | 2.5 | 29 |
| 41 | Escherichia coli DksA Binds to Free RNA Polymerase with Higher Affinity than to RNA Polymerase in an Open Complex. Journal of Bacteriology, 2009, 191, 5854-5858. | 2.2 | 29 |
| 42 | Reverse engineering of fatty acid-tolerant Escherichia coli identifies design strategies for robust microbial cell factories. Metabolic Engineering, 2020, 61, 120-130. | 7.0 | 23 |
| 43 | Structural basis for transcription activation by Crl through tethering of Ïƒ <sup>S</sup> and RNA polymerase. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 18923-18927. | 7.1 | 21 |
| 44 | Open complex DNA scrunching: A key to transcription start site selection and promoter escape. BioEssays, 2017, 39, 1600193. | 2.5 | 18 |
| 45 | A Rhodobacter sphaeroides Protein Mechanistically Similar to Escherichia coli DksA Regulates Photosynthetic Growth. MBio, 2014, 5, e01105-14. | 4.1 | 16 |
| 46 | Structure of the RNA Polymerase Assembly Factor Crl and Identification of Its Interaction Surface with Sigma S. Journal of Bacteriology, 2014, 196, 3279-3288. | 2.2 | 14 |
| 47 | Activation of the Ïƒ <sup>E</sup> -Dependent Stress Pathway by Conjugative TraR May Anticipate Conjugational Stress. Journal of Bacteriology, 2015, 197, 924-931. | 2.2 | 14 |
| 48 | A majority of <i>Rhodobacter sphaeroides</i> promoters lack a crucial RNA polymerase recognition feature, enabling coordinated transcription activation. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 29658-29668. | 7.1 | 14 |
| 49 | Magic Spots Cast a Spell on DNA Primase. Cell, 2007, 128, 823-824. | 28.9 | 12 |
| 50 | CoSMoS Unravels Mysteries of Transcription Initiation. Cell, 2012, 148, 635-637. | 28.9 | 9 |
| 51 | Guanosine Tetraphosphate Has a Similar Affinity for Each of Its Two Binding Sites on Escherichia coli RNA Polymerase. Frontiers in Microbiology, 2020, 11, 587098. | 3.5 | 8 |
| 52 | In vitroevidence that RNA Polymerase acetylation and acetyl phosphate-dependent CpxR phosphorylation affectcpxPtranscription regulation. FEMS Microbiology Letters, 2016, 363, fnw011. | 1.8 | 7 |
| 53 | Rhodobacter sphaeroides CarD Negatively Regulates Its Own Promoter. Journal of Bacteriology, 2021, 203, e0021021. | 2.2 | 6 |
| 54 | Coexpression of Escherichia coli obgE, Encoding the Evolutionarily Conserved Obg GTPase, with Ribosomal Proteins L21 and L27. Journal of Bacteriology, 2016, 198, 1857-1867. | 2.2 | 5 |

| # | Article | IF | Citations |
|---|---|---|---|
| 55 | Homologs of the Escherichia coli F Element Protein TraR, Including Phage Lambda Orf73, Directly Reprogram Host Transcription. MBio, 2022, 13, e0095222. | 4.1 | 4 |
| 56 | Classic Spotlight: the Heat Shock Response and the Discovery of Alternative Sigma Factors in Escherichia coli. Journal of Bacteriology, 2016, 198, 2550-2550. | 2.2 | 1 |
| 57 | Deciphering the RNA capping process in bacteria. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 4445-4446. | 7.1 | 1 |
| 58 | Classic Spotlight: Visualization of Bacterial Genes in Action. Journal of Bacteriology, 2016, 198, 1554-1554. | 2.2 | 0 |
| 59 | Classic Spotlight: Studies of the Stringent Response. Journal of Bacteriology, 2016, 198, 1710-1710. | 2.2 | 0 |
| 60 | Classic Spotlight: Selected Highlights from the First 100 Years of the <i>Journal of Bacteriology</i>. Journal of Bacteriology, 2017, 199, . | 2.2 | 0 |
| 61 | Linking glucose metabolism to the stringent response through the PTS. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 7454-7455. | 7.1 | 0 |