# Robert F Schleif

## List of Publications by Year in Descending Order



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| 107 papers | 4,748 citations | 37 h-index | 67 g-index |
| 110 ext. papers | 5,067 ext. citations | 8.4 avg, IF | 5.57 L-index |

| # | Paper | IF | Citations |
|---|---|---|---|
| 107 | Where to From Here?. *Frontiers in Molecular Biosciences*, **2022**, 9, 848444 | 5.6 | 0 |
| 106 | Helical Behavior of the Interdomain Linker of the Escherichia coli AraC Protein. *Biochemistry*, **2019**, 58, 2867-2874 | 3.2 | 2 |
| 105 | Arabinose Alters Both Local and Distal H-D Exchange Rates in the Escherichia coli AraC Transcriptional Regulator. *Biochemistry*, **2019**, 58, 2875-2882 | 3.2 | 2 |
| 104 | A genetic and physical study of the interdomain linker of E. Coli AraC protein--a trans-subunit communication pathway. *Proteins: Structure, Function and Bioinformatics*, **2016**, 84, 448-60 | 4.2 | 5 |
| 103 | Computational and experimental investigation of constitutive behavior in AraC. *Proteins: Structure, Function and Bioinformatics*, **2014**, 82, 3385-96 | 4.2 | 1 |
| 102 | Modulation of DNA binding by gene-specific transcription factors. *Biochemistry*, **2013**, 52, 6755-65 | 3.2 | 12 |
| 101 | Understanding the basis of a class of paradoxical mutations in AraC through simulations. *Proteins: Structure, Function and Bioinformatics*, **2013**, 81, 490-8 | 4.2 | 2 |
| 100 | Heterodimers reveal that two arabinose molecules are required for the normal arabinose response of AraC. *Biochemistry*, **2012**, 51, 8085-91 | 3.2 | 3 |
| 99 | A new and unexpected domain-domain interaction in the AraC protein. *Proteins: Structure, Function and Bioinformatics*, **2012**, 80, 1465-75 | 4.2 | 3 |
| 98 | Mutations in LOXHD1, a recessive-deafness locus, cause dominant late-onset Fuchs corneal dystrophy. *American Journal of Human Genetics*, **2012**, 90, 533-9 | 11 | 115 |
| 97 | Active role of the interdomain linker of AraC. *Journal of Bacteriology*, **2011**, 193, 5737-46 | 3.5 | 17 |
| 96 | AraC protein, regulation of the l-arabinose operon in Escherichia coli, and the light switch mechanism of AraC action. *FEMS Microbiology Reviews*, **2010**, 34, 779-96 | 15.1 | 167 |
| 95 | Computational predictions of the mutant behavior of AraC. *Journal of Molecular Biology*, **2010**, 398, 462-70 | 6.3 | 5 |
| 94 | Constitutive mutations in the Escherichia coli AraC protein. *Journal of Bacteriology*, **2009**, 191, 2668-74 | 3.5 | 17 |
| 93 | Functional modes of the regulatory arm of AraC. *Proteins: Structure, Function and Bioinformatics*, **2009**, 74, 81-91 | 4.2 | 17 |
| 92 | Solution structure of the DNA binding domain of AraC protein. *Proteins: Structure, Function and Bioinformatics*, **2009**, 77, 202-8 | 4.2 | 27 |
| 91 | Opposite allosteric mechanisms in TetR and CAP. *Protein Science*, **2009**, 18, 775-81 | 6.3 | 3 |

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| 90 | A DNA-assisted binding assay for weak protein-protein interactions. *Journal of Molecular Biology*, **2009**, 394, 805-14 | 6.5 | 6 |
| 89 | The salt dependence of the interferon regulatory factor 1 DNA binding domain binding to DNA reveals ions are localized around protein and DNA. *Biochemistry*, **2008**, 47, 4119-28 | 3.2 | 5 |
| 88 | DNA tape measurements of AraC. *Nucleic Acids Research*, **2008**, 36, 404-10 | 20.1 | 7 |
| 87 | Structure and properties of a truely apo form of AraC dimerization domain. *Proteins: Structure, Function and Bioinformatics*, **2007**, 66, 646-54 | 4.2 | 25 |
| 86 | Specific interactions by the N-terminal arm inhibit self-association of the AraC dimerization domain. *Protein Science*, **2006**, 15, 2828-35 | 6.3 | 7 |
| 85 | Arm-domain interactions can provide high binding cooperativity. *Protein Science*, **2004**, 13, 2829-31 | 6.3 | 6 |
| 84 | ara Operon **2004**, 116-119 | | |
| 83 | Modeling and studying proteins with molecular dynamics. *Methods in Enzymology*, **2004**, 383, 28-47 | 1.7 | 5 |
| 82 | Building family traditions. *Molecular Microbiology*, **2004**, 53, 355-6 | 4.1 | 1 |
| 81 | A portable allosteric mechanism. *Proteins: Structure, Function and Bioinformatics*, **2004**, 57, 9-11 | 4.2 | 9 |
| 80 | Biochemical and physiological properties of the DNA binding domain of AraC protein. *Journal of Molecular Biology*, **2004**, 340, 731-8 | 6.5 | 27 |
| 79 | AraC protein: a love-hate relationship. *BioEssays*, **2003**, 25, 274-82 | 4.1 | 88 |
| 78 | Mutational analysis of residue roles in AraC function. *Journal of Molecular Biology*, **2003**, 328, 85-93 | 6.5 | 25 |
| 77 | Stabilizing C-terminal tails on AraC. *Proteins: Structure, Function and Bioinformatics*, **2001**, 42, 177-81 | 4.2 | 4 |
| 76 | Biophysical evidence of arm-domain interactions in AraC. *Analytical Biochemistry*, **2001**, 295, 107-12 | 3.1 | 15 |
| 75 | Identification of oligomerizing peptides. *Journal of Biological Chemistry*, **2001**, 276, 20017-21 | 5.4 | 1 |
| 74 | Strengthened arm-dimerization domain interactions in AraC. *Journal of Biological Chemistry*, **2001**, 276, 2562-4 | 5.4 | 21 |
| 73 | The role of rigidity in DNA looping-unlooping by AraC. *Proceedings of the National Academy of Sciences of the United States of America*, **2001**, 98, 427-31 | 11.5 | 47 |

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|---|---|---|---|
| 72 | The C-terminal end of AraC tightly binds to the rest of its domain. *Journal of Biological Chemistry*, **2001**, 276, 4886-8 | 5.4 | 5 |
| 71 | Mapping arm-DNA-binding domain interactions in AraC. *Journal of Molecular Biology*, **2001**, 307, 1001-9 | 6.5 | 35 |
| 70 | Regulation of the L-arabinose operon of Escherichia coli. *Trends in Genetics*, **2000**, 16, 559-65 | 8.5 | 189 |
| 69 | Recognition of overlapping nucleotides by AraC and the sigma subunit of RNA polymerase. *Journal of Bacteriology*, **2000**, 182, 5076-81 | 3.5 | 15 |
| 68 | Cooperative action of the catabolite activator protein and AraC in vitro at the araFGH promoter. *Journal of Bacteriology*, **2000**, 182, 1995-2000 | 3.5 | 12 |
| 67 | Hemiplegic mutations in AraC protein. *Journal of Molecular Biology*, **1999**, 294, 417-25 | 6.5 | 31 |
| 66 | Arm-domain interactions in AraC. *Journal of Molecular Biology*, **1998**, 278, 539-48 | 6.5 | 65 |
| 65 | Apo-AraC actively seeks to loop. *Journal of Molecular Biology*, **1998**, 278, 529-38 | 6.5 | 47 |
| 64 | Isolation and physical characterization of random insertions in Staphylococcal nuclease. *Journal of Molecular Biology*, **1998**, 282, 751-9 | 6.5 | 11 |
| 63 | DNA bending by AraC: a negative mutant. *Journal of Bacteriology*, **1998**, 180, 4227-32 | 3.5 | 14 |
| 62 | Catabolite gene activator protein mutations affecting activity of the araBAD promoter. *Journal of Bacteriology*, **1998**, 180, 195-200 | 3.5 | 37 |
| 61 | The 1.6 A crystal structure of the AraC sugar-binding and dimerization domain complexed with D-fucose. *Journal of Molecular Biology*, **1997**, 273, 226-37 | 6.5 | 53 |
| 60 | Structural basis for ligand-regulated oligomerization of AraC. *Science*, **1997**, 276, 421-5 | 33.3 | 174 |
| 59 | Transcription activation parameters at ara pBAD. *Journal of Molecular Biology*, **1996**, 258, 14-24 | 6.5 | 51 |
| 58 | In vivo association of protein fragments giving active AraC. *Proteins: Structure, Function and Bioinformatics*, **1996**, 25, 501-505 | 4.2 | 1 |
| 57 | In vivo association of protein fragments giving active AraC. *Proteins: Structure, Function and Bioinformatics*, **1996**, 25, 501-5 | 4.2 | 7 |
| 56 | Reaching out. Locating and lengthening the interdomain linker in AraC protein. *Journal of Molecular Biology*, **1994**, 242, 330-8 | 6.5 | 22 |
| 55 | DNA-dependent renaturation of an insoluble DNA binding protein. Identification of the RhaS binding site at rhaBAD. *Journal of Molecular Biology*, **1994**, 243, 821-9 | 6.5 | 55 |

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|---|---|---|---|
| 54 | AraC protein can activate transcription from only one position and when pointed in only one direction. *Journal of Molecular Biology*, **1993**, 231, 205-18 | 6.5 | 48 |
| 53 | A regulatory cascade in the induction of rhaBAD. *Journal of Molecular Biology*, **1993**, 234, 87-98 | 6.5 | 87 |
| 52 | Formation of AraC-DNA sandwiches. *Nucleic Acids Research*, **1993**, 21, 435-8 | 20.1 | 6 |
| 51 | Repression of the araBAD promoter from araO1. *Journal of Molecular Biology*, **1992**, 224, 335-41 | 6.5 | 2 |
| 50 | DNA looping. *Annual Review of Biochemistry*, **1992**, 61, 199-223 | 29.1 | 421 |
| 49 | AraC-DNA looping: orientation and distance-dependent loop breaking by the cyclic AMP receptor protein. *Journal of Molecular Biology*, **1991**, 218, 45-54 | 6.5 | 75 |
| 48 | Characterization of the Escherichia coli araFGH and araJ promoters. *Journal of Molecular Biology*, **1990**, 215, 497-510 | 6.5 | 29 |
| 47 | Transcription from the rha operon psr promoter. *Journal of Molecular Biology*, **1990**, 211, 1-4 | 6.5 | 33 |
| 46 | Purification and properties of RhaR, the positive regulator of the L-rhamnose operons of Escherichia coli. *Journal of Molecular Biology*, **1990**, 211, 75-89 | 6.5 | 51 |
| 45 | Determining residue-base interactions between AraC protein and araI DNA. *Journal of Molecular Biology*, **1989**, 209, 607-22 | 6.5 | 80 |
| 44 | Equilibrium DNA-binding of AraC protein. Compensation for displaced ions. *Journal of Molecular Biology*, **1987**, 195, 741-4 | 6.5 | 20 |
| 43 | Positive regulation of the Escherichia coli L-rhamnose operon is mediated by the products of tandemly repeated regulatory genes. *Journal of Molecular Biology*, **1987**, 196, 789-99 | 6.5 | 80 |
| 42 | Transcription of Escherichia coli ara in vitro. The cyclic AMP receptor protein requirement for PBAD induction that depends on the presence and orientation of the araO2 site. *Journal of Molecular Biology*, **1986**, 188, 355-67 | 6.5 | 64 |
| 41 | Altered DNA contacts made by a mutant AraC protein. *Nucleic Acids Research*, **1985**, 13, 5019-26 | 20.1 | 18 |
| 40 | Regulation of the Escherichia coli L-arabinose operon studied by gel electrophoresis DNA binding assay. *Journal of Molecular Biology*, **1984**, 178, 611-28 | 6.5 | 139 |
| 39 | Upstream repression and CRP stimulation of the Escherichia coli L-arabinose operon. *Journal of Molecular Biology*, **1984**, 180, 61-72 | 6.5 | 71 |
| 38 | Deletion analysis of the Escherichia coli ara PC and PBAD promoters. *Journal of Molecular Biology*, **1984**, 180, 201-4 | 6.5 | 32 |
| 37 | Transcription start site and induction kinetics of the araC regulatory gene in Escherichia coli K-12. *Journal of Molecular Biology*, **1983**, 170, 1049-53 | 6.5 | 8 |

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| 36 | The araE low affinity L-arabinose transport promoter. Cloning, sequence, transcription start site and DNA binding sites of regulatory proteins. *Journal of Molecular Biology*, **1983**, 171, 369-81 | 6.5 | 41 |
| 35 | Spacing mutations between the Escherichia coli pBAD RNA polymerase binding site and the araC (I) induction site. *Nucleic Acids Research*, **1983**, 11, 1873-80 | 20.1 | 7 |
| 34 | Is the amino acid but not the nucleotide sequence of the Escherichia coli araC gene conserved?. *Journal of Molecular Biology*, **1982**, 154, 649-52 | 6.5 | 24 |
| 33 | Arabinose-inducible promoter from Escherichia coli. Its cloning from chromosomal DNA, identification as the araFG promoter and sequence. *Journal of Molecular Biology*, **1982**, 156, 53-66 | 6.5 | 26 |
| 32 | Identification of araC protein and two-dimensional gels, its in vivo instability and normal level. *Journal of Molecular Biology*, **1981**, 149, 133-9 | 6.5 | 20 |
| 31 | Regulation of the L-arabinose transport operons in Escherichia coli. *Journal of Molecular Biology*, **1981**, 151, 215-27 | 6.5 | 45 |
| 30 | Practical Methods in Molecular Biology **1981**, | | 258 |
| 29 | Electron microscopy of proteins bound to DNA. *Methods in Enzymology*, **1980**, 65, 885-96 | 1.7 | 2 |
| 28 | The Escherichia coli L-arabinose operon: binding sites of the regulatory proteins and a mechanism of positive and negative regulation. *Proceedings of the National Academy of Sciences of the United States of America*, **1980**, 77, 3346-50 | 11.5 | 167 |
| 27 | Assaying of organisms for the presence of restriction endonucleases. *Methods in Enzymology*, **1980**, 65, 19-23 | 1.7 | 17 |
| 26 | The araC promoter: transcription, mapping and interaction with the araBAD promoter. *Cell*, **1977**, 11, 545-50 | 56.2 | 42 |
| 25 | Overproducing araC protein with lambda-arabinose transducing phage. *Molecular Genetics and Genomics*, **1977**, 157, 333-9 | | 30 |
| 24 | In vitro construction of plasmids which result in overproduction of the protein product of the araC gene of Escherichia coli. *Molecular Genetics and Genomics*, **1977**, 157, 341-4 | | 7 |
| 23 | High resolution electron microscopic studies of genetic regulation. *Journal of Molecular Biology*, **1976**, 108, 471-90 | 6.5 | 54 |
| 22 | Electron microscopy of gene regulation: the L-arabinose operon. *Proceedings of the National Academy of Sciences of the United States of America*, **1976**, 73, 1518-22 | 11.5 | 16 |
| 21 | Paucity of sites mutable to constitutivity in the araC activator gene of the L-arabinose operon of Escherichia coli. *Journal of Molecular Biology*, **1975**, 96, 185-99 | 6.5 | 11 |
| 20 | The isolation and characterization of plaque-forming arabinose transducing bacteriophage lambda. *Journal of Molecular Biology*, **1975**, 95, 395-407 | 6.5 | 21 |
| 19 | The regulatory region of the L-arabinose operon: its isolation on a 1000 base-pair fragment from DNA heteroduplexes. *Journal of Molecular Biology*, **1975**, 95, 409-16 | 6.5 | 23 |

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| 18 | The regulatory region of the L-arabinose operon: a physical, genetic and physiological study. *Journal of Molecular Biology*, **1975**, 95, 417-31 | 6.5 | 22 |
| 17 | Size fractionation of double-stranded DNA by precipitation with polyethylene glycol. *Nucleic Acids Research*, **1975**, 2, 383-9 | 20.1 | 171 |
| 16 | The arabinose C gene product of Escherichia coli B-r is hyperlabile in a cell free protein synthesis system. *Molecular Genetics and Genomics*, **1974**, 128, 93-4 | | |
| 15 | Different cyclic AMP requirements for induction of the arabinose and lactose operons of Escherichia coli. *Journal of Molecular Biology*, **1973**, 79, 149-62 | 6.5 | 67 |
| 14 | In vivo experiments on the mechanism of action of L-arabinose C gene activator and lactose repressor. *Journal of Molecular Biology*, **1973**, 80, 433-44 | 6.5 | 29 |
| 13 | Induction kinetics of the L-arabinose operon of Escherichia coli. *Journal of Bacteriology*, **1973**, 115, 9-14 | 3.5 | 87 |
| 12 | Novel mutation to dominant fucose resistance in the L-arabinose operon of Escherichia coli. *Journal of Bacteriology*, **1973**, 115, 711-3 | 3.5 | 3 |
| 11 | The specificity of lamboid phage late gene induction (lamboid phage late gene specificity). *Virology*, **1972**, 50, 610-2 | 3.6 | 15 |
| 10 | Dual control of arabinose genes on transducing phage lambda-dara. *Journal of Molecular Biology*, **1971**, 59, 127-50 | 6.5 | 39 |
| 9 | L-arabinose operon messenger of Escherichia coli. Its inducibility and translation efficiency relative to lactose operon messenger. *Journal of Molecular Biology*, **1971**, 61, 275-9 | 6.5 | 4 |
| 8 | Lambda lysozyme synthesis in the absence of N protein. *Virology*, **1971**, 45, 532-3 | 3.6 | 2 |
| 7 | Arabinose C protein: regulation of the arabinose operon in vitro. *Nature: New Biology*, **1971**, 233, 166-70 | | 128 |
| 6 | Factor necessary for ribosomal RNA synthesis. *Nature*, **1970**, 228, 748-51 | 50.4 | 140 |
| 5 | Isolation and characterization of streptolydigin resistant RNA polymerase. *Nature*, **1969**, 223, 1068-9 | 50.4 | 97 |
| 4 | An L-arabinose binding protein and arabinose permeation in Escherichia coli. *Journal of Molecular Biology*, **1969**, 46, 185-96 | 6.5 | 113 |
| 3 | Induction of the L-arabinose operon. *Journal of Molecular Biology*, **1969**, 46, 197-9 | 6.5 | 12 |
| 2 | Control of production of ribosomal protein. *Journal of Molecular Biology*, **1967**, 27, 41-55 | 6.5 | 153 |
| 1 | The metabolic stability of ribosomal protein. *Molecular Genetics and Genomics*, **1967**, 100, 252-5 | | 6 |