John E Cronan

List of Publications by Year
in descending order

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196 papers	12,700 citations	17440 63 h-index	30922 102 g-index
199 all docs	199 docs citations	199 times ranked	9213 citing authors

#	Article	IF	Citations
1	Advances in the Structural Biology, Mechanism, and Physiology of Cyclopropane Fatty Acid Modifications of Bacterial Membranes. Microbiology and Molecular Biology Reviews, 2022, 86, e0001322.	6.6	8
2	The Enterococcus faecalis FabT Transcription Factor Regulates Fatty Acid Biosynthesis in Response to Exogeneous Fatty Acids. Frontiers in Microbiology, 2022, 13, 877582.	3.5	14
3	Loss of Î²-Ketoacyl Acyl Carrier Protein Synthase III Activity Restores Multidrug-Resistant Escherichia coli Sensitivity to Previously Ineffective Antibiotics. MSphere, 2022, 7, e0011722.	2.9	7
4	The Escherichia coli FadR transcription factor: Too much of a good thing?. Molecular Microbiology, 2021, 115, 1080-1085.	2.5	11
5	Temperature regulation of membrane composition in the Firmicute, <scp>Enterococcus faecalis</scp>, parallels that of <scp>Escherichia coli</scp>. Environmental Microbiology, 2021, 23, 2683-2691.	3.8	8
6	A division of labor between two biotin protein ligase homologs. Molecular Microbiology, 2021, 116, 648-662.	2.5	4
7	The Classical, Yet Controversial, First Enzyme of Lipid Synthesis: Escherichia coli Acetyl-CoA Carboxylase. Microbiology and Molecular Biology Reviews, 2021, 85, e0003221.	6.6	9
8	A cryptic long-chain 3-ketoacyl-ACP synthase in the Pseudomonas putida F1 unsaturated fatty acid synthesis pathway. Journal of Biological Chemistry, 2021, 297, 100920.	3.4	9
9	A Conserved and Seemingly Redundant Escherichia coli Biotin Biosynthesis Gene Expressed Only During Anaerobic Growth. Molecular Microbiology, 2021, 116, 1315-1327.	2.5	0
10	Escherichia coli FabG 3-ketoacyl-ACP reductase proteins lacking the assigned catalytic triad residues are active enzymes. Journal of Biological Chemistry, 2021, 296, 100365.	3.4	3
11	Biotin, a universal and essential cofactor: synthesis, ligation and regulation. FEMS Microbiology Reviews, 2021, 45, .	8.6	28
12	Helicobacter pylori FabX contains a [4Fe-4S] cluster essential for unsaturated fatty acid synthesis. Nature Communications, 2021, 12, 6932.	12.8	6
13	Î±-proteobacteria synthesize biotin precursor pimeloyl-ACP using BioZ 3-ketoacyl-ACP synthase and lysine catabolism. Nature Communications, 2020, 11, 5598.	12.8	14
14	The primary step of biotin synthesis in mycobacteria. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 23794-23801.	7.1	9
15	Progress in the Enzymology of the Mitochondrial Diseases of Lipoic Acid Requiring Enzymes. Frontiers in Genetics, 2020, 11, 510.	2.3	25
16	A novel synthesis of trans-unsaturated fatty acids by the Gram-positive commensal bacterium Enterococcus faecalis FA2-2. Chemistry and Physics of Lipids, 2019, 222, 23-35.	3.2	9
17	Enterococcus faecalis Encodes an Atypical Auxiliary Acyl Carrier Protein Required for Efficient Regulation of Fatty Acid Synthesis by Exogenous Fatty Acids. MBio, 2019, 10, .	4.1	21
18	Escherichia coli vectors having stringently repressible replication origins allow a streamlining of Crispr/Cas9 gene editing. Plasmid, 2019, 103, 53-62.	1.4	7

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19	Coping with inadvertent lysis of Escherichia coli cultures: Strains resistant to lysogeny and infection by the stealthy lysogenic phage Î¦80. Biotechnology and Bioengineering, 2019, 116, 1820-1826.	3.3	0
20	Transcriptional regulation of fatty acidcisâ€“transisomerization in the solventâ€tolerant soil bacterium,Pseudomonas putidaF1. Environmental Microbiology, 2019, 21, 1659-1676.	3.8	7
21	Development and retention of a primordial moonlighting pathway of protein modification in the absence of selection presents a puzzle. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 647-655.	7.1	20
22	A Canonical Biotin Synthesis Enzyme, 8-Amino-7-Oxononanoate Synthase (BioF), Utilizes Different Acyl Chain Donors in Bacillus subtilis and Escherichia coli. Applied and Environmental Microbiology, 2018, 84, .	3.1	17
23	Advances in synthesis of biotin and assembly of lipoic acid. Current Opinion in Chemical Biology, 2018, 47, 60-66.	6.1	31
24	Protein moonlighting elucidates the essential human pathway catalyzing lipoic acid assembly on its cognate enzymes. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, E7063-E7072.	7.1	33
25	Lipoate-binding proteins and specific lipoate-protein ligases in microbial sulfur oxidation reveal an atpyical role for an old cofactor. ELife, 2018, 7, .	6.0	38
26	Novel Xanthomonas campestris Long-Chain-Specific 3-Oxoacyl-Acyl Carrier Protein Reductase Involved in Diffusible Signal Factor Synthesis. MBio, 2018, 9, .	4.1	18
27	An Eight-Residue Deletion in Escherichia coli FabG Causes Temperature-Sensitive Growth and Lipid Synthesis Plus Resistance to the Calmodulin Inhibitor Trifluoperazine. Journal of Bacteriology, 2017, 199, .	2.2	13
28	Pimelic acid, the first precursor of the <scp>B</scp>acillus subtilis biotin synthesis pathway, exists as the free acid and is assembled by fatty acid synthesis. Molecular Microbiology, 2017, 104, 595-607.	2.5	44
29	The pimeloyl-CoA synthetase BioW defines a new fold for adenylate-forming enzymes. Nature Chemical Biology, 2017, 13, 668-674.	8.0	30
30	Expression and Activity of the BioH Esterase of Biotin Synthesis is Independent of Genome Context. Scientific Reports, 2017, 7, 2141.	3.3	9
31	A Biotin Biosynthesis Gene Restricted to Helicobacter. Scientific Reports, 2016, 6, 21162.	3.3	36
32	Assembly of Lipoic Acid on Its Cognate Enzymes: an Extraordinary and Essential Biosynthetic Pathway. Microbiology and Molecular Biology Reviews, 2016, 80, 429-450.	6.6	111
33	Unsaturated Fatty Acid Synthesis in the Gastric Pathogen Helicobacter pylori Proceeds via a Backtracking Mechanism. Cell Chemical Biology, 2016, 23, 1480-1489.	5.2	18
34	The Staphylococcus aureus group II biotin protein ligase BirA is an effective regulator of biotin operon transcription and requires the DNA binding domain for full enzymatic activity. Molecular Microbiology, 2016, 102, 417-429.	2.5	17
35	An Atypical Î±/Î²-Hydrolase Fold Revealed in the Crystal Structure of Pimeloyl-Acyl Carrier Protein Methyl Esterase BioG from Haemophilus influenzae. Biochemistry, 2016, 55, 6705-6717.	2.5	19
36	pBR322 vectors having tetracycline-dependent replication. Plasmid, 2016, 84-85, 20-26.	1.4	3

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37	Biosynthesis of Squalene from Farnesyl Diphosphate in Bacteria: Three Steps Catalyzed by Three Enzymes. ACS Central Science, 2015, 1, 77-82.	11.3	69
38	A series of medium and high copy number arabinose-inducible Escherichia coli expression vectors compatible with pBR322 and pACYC184. Plasmid, 2015, 81, 21-26.	1.4	14
39	The Atypical Occurrence of Two Biotin Protein Ligases in Francisella novicida Is Due to Distinct Roles in Virulence and Biotin Metabolism. MBio, 2015, 6, e00591.	4.1	25
40	The Conserved Modular Elements of the Acyl Carrier Proteins of Lipid Synthesis Are Only Partially Interchangeable. Journal of Biological Chemistry, 2015, 290, 13791-13799.	3.4	16
41	The Streptomyces coelicolor Lipoate-protein Ligase Is a Circularly Permuted Version of the Escherichia coli Enzyme Composed of Discrete Interacting Domains. Journal of Biological Chemistry, 2015, 290, 7280-7290.	3.4	14
42	Successful Conversion of the Bacillus subtilis BirA Group II Biotin Protein Ligase into a Group I Ligase. PLoS ONE, 2014, 9, e96757.	2.5	26
43	The structure of lipoyl synthase, a remarkable enzyme that performs the last step of an extraordinary biosynthetic pathway. Biochemical Journal, 2014, 464, e1-e3.	3.7	5
44	A <scp>F</scp>rancisella virulence factor catalyses an essential reaction of biotin synthesis. Molecular Microbiology, 2014, 91, 300-314.	2.5	55
45	Evidence against Translational Repression by the Carboxyltransferase Component of Escherichia coli Acetyl Coenzyme A Carboxylase. Journal of Bacteriology, 2014, 196, 3768-3775.	2.2	9
46	An <scp>NAD</scp> synthetic reaction bypasses the lipoate requirement for aerobic growth of <scp>E</scp>scherichia coli strains blocked in succinate catabolism. Molecular Microbiology, 2014, 94, 1134-1145.	2.5	3
47	PdhR, the pyruvate dehydrogenase repressor, does not regulate lipoic acid synthesis. Research in Microbiology, 2014, 165, 429-438.	2.1	8
48	The chain-flipping mechanism of ACP (acyl carrier protein)-dependent enzymes appears universal. Biochemical Journal, 2014, 460, 157-163.	3.7	88
49	Inefficient Translation Renders the Enterococcus faecalis fabK Enoyl-Acyl Carrier Protein Reductase Phenotypically Cryptic. Journal of Bacteriology, 2014, 196, 170-179.	2.2	13
50	<scp>X</scp>anthomonas campestrisâ€¦<scp>RpfB</scp> is a fatty <scp>Acyl</scp>â€<scp>CoA</scp> ligase required to counteract the thioesterase activity of the <scp>RpfF</scp> diffusible signal factor (<scp>DSF</scp>) synthase. Molecular Microbiology, 2014, 93, 262-275.	2.5	55
51	A new pathway of exogenous fatty acid incorporation proceeds by a classical phosphoryl transfer reaction. Molecular Microbiology, 2014, 92, 217-221.	2.5	14
52	Biotin and Lipoic Acid: Synthesis, Attachment, and Regulation. EcoSal Plus, 2014, 6, .	5.4	54
53	The role of the Saccharomyces cerevisiae lipoate protein ligase homologue, Lip3, in lipoic acid synthesis. Yeast, 2013, 30, 415-427.	1.7	34
54	The Wing of a Winged Helix-Turn-Helix Transcription Factor Organizes the Active Site of BirA, a Bifunctional Repressor/Ligase. Journal of Biological Chemistry, 2013, 288, 36029-36039.	3.4	20

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55	Proofreading of Noncognate Acyl Adenylates by an Acyl-Coenzyme A Ligase. Chemistry and Biology, 2013, 20, 1441-1446.	6.0	15
56	Discovery of a cAMP Deaminase That Quenches Cyclic AMP-Dependent Regulation. ACS Chemical Biology, 2013, 8, 2622-2629.	3.4	13
57	FabQ, a Dual-Function Dehydratase/Isomerase, Circumvents the Last Step of the Classical Fatty Acid Synthesis Cycle. Chemistry and Biology, 2013, 20, 1157-1167.	6.0	18
58	Improved plasmid-based system for fully regulated off-to-on gene expression in Escherichia coli: Application to production of toxic proteins. Plasmid, 2013, 69, 81-89.	1.4	10
59	Profligate biotin synthesis in Î±â€proteobacteria â€“ a developing or degenerating regulatory system?. Molecular Microbiology, 2013, 88, 77-92.	2.5	36
60	The Two Functional Enoyl-Acyl Carrier Protein Reductases of Enterococcus faecalis Do Not Mediate Triclosan Resistance. MBio, 2013, 4, e00613-13.	4.1	56
61	Dimerization of the Bacterial Biotin Carboxylase Subunit Is Required for Acetyl Coenzyme A Carboxylase Activity In Vivo. Journal of Bacteriology, 2012, 194, 72-78.	2.2	11
62	Evolution of a new function in an esterase: simple amino acid substitutions enable the activity present in the larger paralog, BioH. Protein Engineering, Design and Selection, 2012, 25, 387-395.	2.1	9
63	The BioC O-Methyltransferase Catalyzes Methyl Esterification of Malonyl-Acyl Carrier Protein, an Essential Step in Biotin Synthesis. Journal of Biological Chemistry, 2012, 287, 37010-37020.	3.4	54
64	Only One of the Five Ralstonia solanacearum Long-Chain 3-Ketoacyl-Acyl Carrier Protein Synthase Homologues Functions in Fatty Acid Synthesis. Applied and Environmental Microbiology, 2012, 78, 1563-1573.	3.1	16
65	Altered Regulation of Escherichia coli Biotin Biosynthesis in BirA Superrepressor Mutant Strains. Journal of Bacteriology, 2012, 194, 1113-1126.	2.2	40
66	Structure of the enzyme-acyl carrier protein (ACP) substrate gatekeeper complex required for biotin synthesis. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 17406-17411.	7.1	87
67	Crosstalk of Escherichia coli FadR with Global Regulators in Expression of Fatty Acid Transport Genes. PLoS ONE, 2012, 7, e46275.	2.5	51
68	Remarkable Diversity in the Enzymes Catalyzing the Last Step in Synthesis of the Pimelate Moiety of Biotin. PLoS ONE, 2012, 7, e49440.	2.5	34
69	The Burkholderia cenocepacia BDSF quorum sensing fatty acid is synthesized by a bifunctional crotonase homologue having both dehydratase and thioesterase activities. Molecular Microbiology, 2012, 83, 840-855.	2.5	76
70	Closing in on complete pathways of biotin biosynthesis. Molecular BioSystems, 2011, 7, 1811.	2.9	123
71	Complex binding of the FabR repressor of bacterial unsaturated fatty acid biosynthesis to its cognate promoters. Molecular Microbiology, 2011, 80, 195-218.	2.5	92
72	A novel twoâ€gene requirement for the octanoyltransfer reaction of Bacillus subtilis lipoic acid biosynthesis. Molecular Microbiology, 2011, 80, 335-349.	2.5	46

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73	A novel amidotransferase required for lipoic acid cofactor assembly in Bacillus subtilis. Molecular Microbiology, 2011, 80, 350-363.	2.5	51
74	The Vibrio cholerae fatty acid regulatory protein, FadR, represses transcription of plsB, the gene encoding the first enzyme of membrane phospholipid biosynthesis. Molecular Microbiology, 2011, 81, 1020-1033.	2.5	40
75	Synthesis of the Î±,Ï‰-dicarboxylic acid precursor of biotin by the canonical fatty acid biosynthetic pathway. Current Opinion in Chemical Biology, 2011, 15, 407-413.	6.1	38
76	A Complex Lipoate Utilization Pathway in Listeria monocytogenes. Journal of Biological Chemistry, 2011, 286, 31447-31456.	3.4	32
77	Protein-Protein Interactions in Assembly of Lipoic Acid on the 2-Oxoacid Dehydrogenases of Aerobic Metabolism. Journal of Biological Chemistry, 2011, 286, 8263-8276.	3.4	24
78	The Switch Regulating Transcription of the Escherichia coli Biotin Operon Does Not Require Extensive Protein-Protein Interactions. Chemistry and Biology, 2010, 17, 11-17.	6.0	15
79	Biotin synthesis begins by hijacking the fatty acid synthetic pathway. Nature Chemical Biology, 2010, 6, 682-688.	8.0	170
80	Antibacterial Activity of N -Pentylpantothenamide Is Due to Inhibition of Coenzyme A Synthesis. Antimicrobial Agents and Chemotherapy, 2010, 54, 1374-1377.	3.2	29
81	Transcriptional patterns in both host and bacterium underlie a daily rhythm of anatomical and metabolic change in a beneficial symbiosis. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 2259-2264.	7.1	149
82	Overlapping Repressor Binding Sites Result in Additive Regulation ofEscherichia coliFadH by FadR and ArcA. Journal of Bacteriology, 2010, 192, 4289-4299.	2.2	53
83	Intein-mediated Cyclization of Bacterial Acyl Carrier Protein Stabilizes Its Folded Conformation but Does Not Abolish Function. Journal of Biological Chemistry, 2010, 285, 8605-8614.	3.4	21
84	Triclosan Resistance of Pseudomonas aeruginosa PAO1 Is Due to FabV, a Triclosan-Resistant Enoyl-Acyl Carrier Protein Reductase. Antimicrobial Agents and Chemotherapy, 2010, 54, 689-698.	3.2	170
85	Expression of Vibrio harveyi Acyl-ACP Synthetase Allows Efficient Entry of Exogenous Fatty Acids into the Escherichia coli Fatty Acid and Lipid A Synthetic Pathways. Biochemistry, 2010, 49, 718-726.	2.5	38
86	Lipoic Acid Synthesis: A New Family of Octanoyltransferases Generally Annotated as Lipoate Protein Ligases. Biochemistry, 2010, 49, 10024-10036.	2.5	44
87	Scavenging of Cytosolic Octanoic Acid by Mutant LplA Lipoate Ligases Allows Growth of Escherichia coli Strains Lacking the LipB Octanoyltransferase of Lipoic Acid Synthesis. Journal of Bacteriology, 2009, 191, 6796-6803.	2.2	30
88	Escherichia coli Unsaturated Fatty Acid Synthesis. Journal of Biological Chemistry, 2009, 284, 29526-29535.	3.4	181
89	A New Member of the Escherichia coli fad Regulon: Transcriptional Regulation of fadM () Tj ETQq1 1 0.784314 rgBT /Ov	2.2	42
90	Functions of the Clostridium acetobutylicium FabF and FabZ proteins in unsaturated fatty acid biosynthesis. BMC Microbiology, 2009, 9, 119.	3.3	38

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91	Chapter 17 Bacterial Fatty Acid Synthesis and its Relationships with Polyketide Synthetic Pathways. Methods in Enzymology, 2009, 459, 395-433.	1.0	241
92	The Thermoplasma acidophilum LplA-LplB Complex Defines a New Class of Bipartite Lipoate-protein Ligases. Journal of Biological Chemistry, 2009, 284, 21317-21326.	3.4	31
93	The Lactococcus lactis FabF fatty acid synthetic enzyme can functionally replace both the FabB and FabF proteins of Escherichia coli and the FabH protein of Lactococcus lactis. Archives of Microbiology, 2008, 190, 427-437.	2.2	35
94	Promiscuous protein biotinylation by Escherichia coli biotin protein ligase. Protein Science, 2008, 13, 3043-3050.	7.6	213
95	Vibrio cholerae FabV Defines a New Class of Enoyl-Acyl Carrier Protein Reductase. Journal of Biological Chemistry, 2008, 283, 1308-1316.	3.4	102
96	Genetic Interaction Between the Escherichia coli AcpT Phosphopantetheinyl Transferase and the YejM Inner Membrane Protein. Genetics, 2008, 178, 1327-1337.	2.9	41
97	Biosynthesis of Membrane Lipids. EcoSal Plus, 2008, 3, .	5.4	48
98	Biotin and Lipoic Acid: Synthesis, Attachment, and Regulation. EcoSal Plus, 2008, 3, .	5.4	20
99	Coordinate Expression of the Acetyl Coenzyme A Carboxylase Genes, accB and accC , Is Necessary for Normal Regulation of Biotin Synthesis in Escherichia coli. Journal of Bacteriology, 2007, 189, 369-376.	2.2	36
100	In Vivo Functional Analyses of the Type II Acyl Carrier Proteins of Fatty Acid Biosynthesis*. Journal of Biological Chemistry, 2007, 282, 20319-20328.	3.4	70
101	In Vivo Resolution of Conflicting In Vitro Results: Synthesis of Biotin from Dethiobiotin Does Not Require Pyridoxal Phosphate. Chemistry and Biology, 2007, 14, 1215-1220.	6.0	7
102	Dephospho-CoA kinase provides a rapid and sensitive radiochemical assay for coenzyme A and its thioesters. Analytical Biochemistry, 2007, 368, 17-23.	2.4	17
103	The Soluble Acyl-Acyl Carrier Protein Synthetase ofVibrio harveyiB392 Is a Member of the Medium Chain Acyl-CoA Synthetase Familyâ€. Biochemistry, 2006, 45, 10008-10019.	2.5	84
104	Avant Garde Fatty Acid Synthesis by Trypanosomes. Cell, 2006, 126, 641-643.	28.9	8
105	A bacterium that has three pathways to regulate membrane lipid fluidity. Molecular Microbiology, 2006, 60, 256-259.	2.5	26
106	A genome rearrangement has orphaned theEscherichia coliK-12 AcpT phosphopantetheinyl transferase from its cognateEscherichia coliO157:H7 substrates. Molecular Microbiology, 2006, 61, 232-242.	2.5	20
107	Remarkable structural variation within fatty acid megasynthases. , 2006, 2, 232-234.		14
108	A family of arabinose-inducible Escherichia coli expression vectors having pBR322 copy control. Plasmid, 2006, 55, 152-157.	1.4	82

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109	The Î²-Oxidation Systems of Escherichia coli and Salmonella enterica Are Not Functionally Equivalent. Journal of Bacteriology, 2006, 188, 599-608.	2.2	80
110	The Mycobacterium tuberculosis LipB enzyme functions as a cysteine/lysine dyad acyltransferase. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 8662-8667.	7.1	68
111	Gene-Specific Random Mutagenesis of Escherichia coli In Vivo: Isolation of Temperature-Sensitive Mutations in the Acyl Carrier Protein of Fatty Acid Synthesis. Journal of Bacteriology, 2006, 188, 287-296.	2.2	32
112	Tricarboxylic Acid Cycle and Glyoxylate Bypass. EcoSal Plus, 2005, 1, .	5.4	81
113	Two-Carbon Compounds and Fatty Acids as Carbon Sources. EcoSal Plus, 2005, 1, .	5.4	50
114	Targeted and proximity-dependent promiscuous protein biotinylation by a mutant Escherichia coli biotin protein ligase. Journal of Nutritional Biochemistry, 2005, 16, 416-418.	4.2	64
115	Biotin Synthase Is Catalytic In Vivo, but Catalysis Engenders Destruction of the Protein. Chemistry and Biology, 2005, 12, 461-468.	6.0	61
116	A Nucleosidase Required for In Vivo Function of the S-Adenosyl-L-Methionine Radical Enzyme, Biotin Synthase. Chemistry and Biology, 2005, 12, 589-593.	6.0	71
117	Unexpected Functional Diversity among FadR Fatty Acid Transcriptional Regulatory Proteins. Journal of Biological Chemistry, 2005, 280, 32148-32156.	3.4	55
118	The Enigmatic Acyl Carrier Protein Phosphodiesterase of Escherichia coli. Journal of Biological Chemistry, 2005, 280, 34675-34683.	3.4	53
119	Function, Attachment and Synthesis of Lipoic Acid in Escherichia coli. Advances in Microbial Physiology, 2005, 50, 103-146.	2.4	118
120	The Reaction of LipB, the Octanoyl-[Acyl Carrier Protein]:ProteinN-Octanoyltransferase of Lipoic Acid Synthesis, Proceeds through an Acyl-Enzyme Intermediateâ€. Biochemistry, 2005, 44, 16737-16746.	2.5	61
121	Mammalian mitochondria contain a soluble acyl carrier protein. FEBS Letters, 2005, 579, 4892-4896.	2.8	70
122	Isolation and Characterization of Î²-Ketoacyl-Acyl Carrier Protein Reductase (fabG) Mutants of Escherichia coli and Salmonella enterica Serovar Typhimurium. Journal of Bacteriology, 2004, 186, 1869-1878.	2.2	84
123	Expression of Two Escherichia coli Acetyl-CoA Carboxylase Subunits Is Autoregulated. Journal of Biological Chemistry, 2004, 279, 2520-2527.	3.4	49
124	Functional Replacement of the FabA and FabB Proteins of Escherichia coli Fatty Acid Synthesis by Enterococcus faecalis FabZ and FabF Homologues. Journal of Biological Chemistry, 2004, 279, 34489-34495.	3.4	88
125	The Escherichia coli fadK (ydiD) Gene Encodes an Anerobically Regulated Short Chain Acyl-CoA Synthetase. Journal of Biological Chemistry, 2004, 279, 37324-37333.	3.4	56
126	The Structure of Mammalian Fatty Acid Synthase Turned Back to Front. Chemistry and Biology, 2004, 11, 1601-1602.	6.0	9

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127	Only One of the Two AnnotatedLactococcus lactis fabGGenes Encodes a Functional Î²-Ketoacylâ^'Acyl Carrier Protein Reductaseâ€. Biochemistry, 2004, 43, 11782-11789.	2.5	28
128	The Biotin Repressor: Modulation of Allostery by Corepressor Analogs. Journal of Molecular Biology, 2004, 337, 857-869.	4.2	54
129	Bacterial Membrane Lipids: Where Do We Stand?. Annual Review of Microbiology, 2003, 57, 203-224.	7.3	310
130	Assembly of the Covalent Linkage between Lipoic Acid and Its Cognate Enzymes. Chemistry and Biology, 2003, 10, 1293-1302.	6.0	137
131	A new Escherichia coli metabolic competency: growth on fatty acids by a novel anaerobic Î²-oxidation pathway. Molecular Microbiology, 2003, 47, 793-805.	2.5	186
132	Haemophilus influenzae Rd Lacks a Stringently Conserved Fatty Acid Biosynthetic Enzyme and Thermal Control of Membrane Lipid Composition. Journal of Bacteriology, 2003, 185, 4930-4937.	2.2	20
133	Cosmid-Based System for Transient Expression and Absolute Off-to-On Transcriptional Control of Escherichia coli Genes. Journal of Bacteriology, 2003, 185, 6522-6529.	2.2	17
134	Î²-Ketoacyl-Acyl Carrier Protein Synthase III (FabH) Is Essential for Bacterial Fatty Acid Synthesis. Journal of Biological Chemistry, 2003, 278, 51494-51503.	3.4	150
135	The Biotin Carboxylase-Biotin Carboxyl Carrier Protein Complex of Escherichia coli Acetyl-CoA Carboxylase. Journal of Biological Chemistry, 2003, 278, 30806-30812.	3.4	84
136	The Escherichia coli lipB Gene Encodes Lipoyl (Octanoyl)-Acyl Carrier Protein:Protein Transferase. Journal of Bacteriology, 2003, 185, 1582-1589.	2.2	85
137	Stabilization of the Biotinoyl Domain of Escherichia coli Acetyl-CoA Carboxylase by Interactions between the Attached Biotin and the Protruding â€œThumbâ€•Structure. Journal of Biological Chemistry, 2002, 277, 21604-21609.	3.4	18
138	The Enigmatic Escherichia coli fadE Gene Is yafH. Journal of Bacteriology, 2002, 184, 3759-3764.	2.2	83
139	Chromosomal Amplification of the Escherichia coli lipB Region Confers High-Level Resistance to Selenolipoic Acid. Journal of Bacteriology, 2002, 184, 5495-5501.	2.2	10
140	Interchangeable Enzyme Modules. Journal of Biological Chemistry, 2002, 277, 22520-22527.	3.4	22
141	Phospholipid modifications in bacteria. Current Opinion in Microbiology, 2002, 5, 202-205.	5.1	133
142	Multi-subunit acetyl-CoA carboxylases. Progress in Lipid Research, 2002, 41, 407-435.	11.6	363
143	Bacterial Fatty Acid Biosynthesis: Targets for Antibacterial Drug Discovery. Annual Review of Microbiology, 2001, 55, 305-332.	7.3	425
144	Function of Escherichia coli Biotin Carboxylase Requires Catalytic Activity of Both Subunits of the Homodimer. Journal of Biological Chemistry, 2001, 276, 29864-29870.	3.4	58

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145	Inhibition of Escherichia coli Acetyl Coenzyme A Carboxylase by Acyl-Acyl Carrier Protein. Journal of Bacteriology, 2001, 183, 1499-1503.	2.2	159
146	Mutational Analysis of Protein Substrate Presentation in the Post-translational Attachment of Biotin to Biotin Domains. Journal of Biological Chemistry, 2001, 276, 3037-3045.	3.4	35
147	Escherichia coli FadR Positively Regulates Transcription of the fabB Fatty Acid Biosynthetic Gene. Journal of Bacteriology, 2001, 183, 5982-5990.	2.2	117
148	The Biotinyl Domain of Escherichia coli Acetyl-CoA Carboxylase. Journal of Biological Chemistry, 2001, 276, 37355-37364.	3.4	61
149	The Câ€terminal domain of biotin protein ligase from E. coli is required for catalytic activity. Protein Science, 2001, 10, 2608-2617.	7.6	29
150	Metabolic Instability of Escherichia coli Cyclopropane Fatty Acid Synthase Is Due to RpoH-Dependent Proteolysis. Journal of Bacteriology, 2000, 182, 4288-4294.	2.2	40
151	Holo-(Acyl Carrier Protein) Synthase and Phosphopantetheinyl Transfer in Escherichia coli. Journal of Biological Chemistry, 2000, 275, 959-968.	3.4	125
152	[27] Biotinylation of proteins in vivo: A useful posttranslational modification for protein analysis. Methods in Enzymology, 2000, 326, 440-458.	1.0	52
153	Escherichia coli LipA Is a Lipoyl Synthase:â€‰ In Vitro Biosynthesis of Lipoylated Pyruvate Dehydrogenase Complex from Octanoyl-Acyl Carrier Protein. Biochemistry, 2000, 39, 15166-15178.	2.5	199
154	Overproduction of Acetyl-CoA Carboxylase Activity Increases the Rate of Fatty Acid Biosynthesis in Escherichia coli. Journal of Biological Chemistry, 2000, 275, 28593-28598.	3.4	395
155	Conversion of Escherichia coli pyruvate oxidase to an â€˜Î±-ketobutyrate oxidaseâ€™. Biochemical Journal, 2000, 352, 717-724.	3.7	9
156	Molecular Recognition in a Post-translational Modification of Exceptional Specificity. Journal of Biological Chemistry, 1999, 274, 1449-1457.	3.4	63
157	Membrane cyclopropane fatty acid content is a major factor in acid resistance of Escherichia coli. Molecular Microbiology, 1999, 33, 249-259.	2.5	373
158	The enzymatic biotinylation of proteins: a post-translational modification of exceptional specificity. Trends in Biochemical Sciences, 1999, 24, 359-363.	7.5	224
159	Solution Structures of Apo and Holo Biotinyl Domains from Acetyl Coenzyme A Carboxylase of Escherichia coli Determined by Triple-Resonance Nuclear Magnetic Resonance Spectroscopy. Biochemistry, 1999, 38, 5045-5053.	2.5	75
160	Acylhomoserine Lactone Synthase Activity of the Vibrio fischeri AinS Protein. Journal of Bacteriology, 1999, 181, 5766-5770.	2.2	99
161	In Vivo Evidence that S -Adenosylmethionine and Fatty Acid Synthesis Intermediates Are the Substrates for the LuxI Family of Autoinducer Synthases. Journal of Bacteriology, 1998, 180, 2644-2651.	2.2	118
162	Overproduction of a Functional Fatty Acid Biosynthetic Enzyme Blocks Fatty Acid Synthesis in Escherichia coli. Journal of Bacteriology, 1998, 180, 4596-4602.	2.2	78

#	Article	IF	Citations
163	A Bacillus subtilis Gene Induced by Cold Shock Encodes a Membrane Phospholipid Desaturase. Journal of Bacteriology, 1998, 180, 2194-2200.	2.2	222
164	Covalent Modification of an Exposed Surface Turn Alters the Global Conformation of the Biotin Carrier Domain of Escherichia coli Acetyl-CoA Carboxylase. Journal of Biological Chemistry, 1997, 272, 26017-26022.	3.4	25
165	A New Metabolic Link. Journal of Biological Chemistry, 1997, 272, 17903-17906.	3.4	137
166	Sulfhydryl Chemistry Detects Three Conformations of the Lipid Binding Region ofEscherichia coliPyruvate Oxidaseâ€. Biochemistry, 1997, 36, 11564-11573.	2.5	18
167	[19] Biosynthesis of lipoic acid and posttranslational modification with lipoic acid in Escherichia coli. Methods in Enzymology, 1997, 279, 176-183.	1.0	33
168	An Isoleucine to Valine Substitution in Acyl Carrier Protein Results in a Functional Protein of Decreased Molecular Radius at Elevated pH. Journal of Biological Chemistry, 1996, 271, 15905-15910.	3.4	20
169	Defective Export of a Periplasmic Enzyme Disrupts Regulation of Fatty Acid Synthesis. Journal of Biological Chemistry, 1995, 270, 4216-4219.	3.4	149
170	The Unmodified (Apo) Form of Escherichia coli Acyl Carrier Protein Is a Potent Inhibitor of Cell Growth. Journal of Biological Chemistry, 1995, 270, 22229-22235.	3.4	94
171	The growth phase-dependent synthesis of cyclopropane fatty acids in Escherichia coli is the result of an RpoS(KatF)-dependent promoter plus enzyme instability. Molecular Microbiology, 1994, 11, 1009-1017.	2.5	148
172	Expression of Escherichia coli pyruvate oxidase (PoxB) depends on the sigma factor encoded by the rpoS(katF) gene. Molecular Microbiology, 1994, 11, 1019-1028.	2.5	121
173	Cyclopropane fatty acid synthase of Escherichia coli: Deduced amino acid sequence, purification, and studies of the enzyme active site. Biochemistry, 1992, 31, 11020-11028.	2.5	97
174	Cloning and nucleotide sequence of thefabDgene encoding malonyl coenzyme A-acyl carrier protein transacylase ofEscherichia coli. FEBS Letters, 1992, 299, 262-266.	2.8	55
175	Putative zinc finger protein encoded by a conserved chloroplast gene is very likely a subunit of a biotin-dependent carboxylase. Plant Molecular Biology, 1992, 20, 759-761.	3.9	31
176	Escherichia coli transcription factor that both activates fatty acid synthesis and represses fatty acid degradation. Journal of Molecular Biology, 1991, 222, 843-849.	4.2	112
177	The E. coli bio operon: Transcriptional repression by an essential protein modification enzyme. Cell, 1989, 58, 427-429.	28.9	175
178	Insertional restoration of Î²-galactosidase Î±-complementation (white-to-blue colony screening) facilitates assembly of synthetic genes. Gene, 1988, 70, 161-170.	2.2	18
179	Genetic characterization of the Escherichia coli cyclopropane fatty acid (cfa) locus and neighboring loci. Molecular Genetics and Genomics, 1984, 196, 367-372.	2.4	18
180	Thermal regulation of membrane lipid fluidity in bacteria. Trends in Biochemical Sciences, 1983, 8, 49-52.	7.5	169

#	Article	IF	Citations
181	.beta.-Hydroxydecanoyl thioester dehydrase does not catalyze a rate-limiting step in Escherichia coli unsaturated fatty acid synthesis. Biochemistry, 1983, 22, 5897-5902.	2.5	72
182	Genetic and Biochemical Analyses ofEscherichia coliMutants Altered in the Temperature-Dependent Regulation of Membrane Lipid Composition. Journal of Bacteriology, 1983, 154, 221-230.	2.2	69
183	[27] Preparative enzymatic synthesis of acyl-acyl carrier protein. Methods in Enzymology, 1981, 72, 397-403.	1.0	44
184	[41] Acyl carrier protein from Escherichia coli. Methods in Enzymology, 1981, 71 Pt C, 341-351.	1.0	113
185	Enzymatic synthesis of Î²-[U-14C]alanine and d-[1,2,3-14C]pantothenate of high specific radioactivity. Analytical Biochemistry, 1980, 103, 377-380.	2.4	5
186	Enzymatic synthesis of acyl-acyl carrier protein and assay of acyl carrier protein. FEBS Letters, 1979, 101, 253-256.	2.8	11
187	Cyclopropane fatty acid synthase of Escherichia coli. Stabilization, purification, and interaction with phospholipid vesicles. Biochemistry, 1979, 18, 3292-3300.	2.5	68
188	Mutants of Escherichia coli Defective in Membrane Phospholipid Synthesis: Mapping of the Structural Gene for l -Glycerol 3-Phosphate Dehydrogenase. Journal of Bacteriology, 1974, 118, 598-605.	2.2	80
189	Mutants of Escherichia coli Defective in Membrane Phospholipid Synthesis: Mapping of sn -Glycerol 3-Phosphate Acyltransferase K _m Mutants. Journal of Bacteriology, 1974, 120, 227-233.	2.2	69
190	Occurrence of cis-7-tetradecenoic acid in the envelope phospholipids of Escherichiacoli K12. Biochemical and Biophysical Research Communications, 1973, 52, 1374-1380.	2.1	10
191	An Estimate of the Minimum Amount of Unsaturated Fatty Acid Required for Growth of Escherichia coli. Journal of Biological Chemistry, 1973, 248, 1188-1195.	3.4	92
192	Mapping of the fabA Locus for Unsaturated Fatty Acid Biosynthesis in Escherichia coli. Journal of Bacteriology, 1972, 112, 206-211.	2.2	86
193	Mutant of Escherichia coli Deficient in the Synthesis of cis -Vaccenic Acid. Journal of Bacteriology, 1972, 112, 381-387.	2.2	102
194	Evidence for Two Genes Specifically Involved in Unsaturated Fatty Acid Biosynthesis in Escherichia coli. Journal of Bacteriology, 1969, 100, 601-604.	2.2	133
195	Phospholipid Alterations During Growth of Escherichia coli. Journal of Bacteriology, 1968, 95, 2054-2061.	2.2	258
196	Biosynthesis and Function of Membrane Lipids. , 0, , 411-421.		37