

Charles O O Rock

List of Publications by Year in descending order

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176
papers

15,229
citations

13068

68
h-index

19136

118
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179
all docs

179
docs citations

179
times ranked

11207
citing authors

#	ARTICLE	IF	CITATIONS
1	Membrane lipid homeostasis in bacteria. <i>Nature Reviews Microbiology</i> , 2008, 6, 222-233.	13.6	1,070
2	THE STRUCTURAL BIOLOGY OF TYPE II FATTY ACID BIOSYNTHESIS. <i>Annual Review of Biochemistry</i> , 2005, 74, 791-831.	5.0	704
3	Coenzyme A: Back in action. <i>Progress in Lipid Research</i> , 2005, 44, 125-153.	5.3	488
4	Mechanism of Triclosan Inhibition of Bacterial Fatty Acid Synthesis. <i>Journal of Biological Chemistry</i> , 1999, 274, 11110-11114.	1.6	451
5	Bacterial lipids: Metabolism and membrane homeostasis. <i>Progress in Lipid Research</i> , 2013, 52, 249-276.	5.3	377
6	Enoyl-Acyl Carrier Protein Reductase (fabI) Plays a Determinant Role in Completing Cycles of Fatty Acid Elongation in <i>Escherichia coli</i> . <i>Journal of Biological Chemistry</i> , 1995, 270, 26538-26542.	1.6	317
7	Broad Spectrum Antimicrobial Biocides Target the FabI Component of Fatty Acid Synthesis. <i>Journal of Biological Chemistry</i> , 1998, 273, 30316-30320.	1.6	309
8	Inhibition of $\hat{\text{I}}^2$ -Ketoacyl-Acyl Carrier Protein Synthases by Thiolactomycin and Cerulenin. <i>Journal of Biological Chemistry</i> , 2001, 276, 6551-6559.	1.6	296
9	<i>Escherichia coli</i> as a model for the regulation of dissociable (type II) fatty acid biosynthesis. <i>Lipids and Lipid Metabolism</i> , 1996, 1302, 1-16.	2.6	292
10	Lipid biosynthesis as a target for antibacterial agents. <i>Progress in Lipid Research</i> , 2001, 40, 467-497.	5.3	290
11	Roles of the FabA and FabZ $\hat{\text{I}}^2$ -Hydroxyacyl-Acyl Carrier Protein Dehydratases in <i>Escherichia coli</i> Fatty Acid Biosynthesis. <i>Journal of Biological Chemistry</i> , 1996, 271, 27795-27801.	1.6	268
12	A triclosan-resistant bacterial enzyme. <i>Nature</i> , 2000, 406, 145-146.	13.7	254
13	$\hat{\text{I}}^2$ -Ketoacyl-Acyl Carrier Protein Synthase III (FabH) Is a Determining Factor in Branched-Chain Fatty Acid Biosynthesis. <i>Journal of Bacteriology</i> , 2000, 182, 365-370.	1.0	239
14	The Claisen condensation in biology. <i>Natural Product Reports</i> , 2002, 19, 581-596.	5.2	224
15	Inhibiting Bacterial Fatty Acid Synthesis. <i>Journal of Biological Chemistry</i> , 2006, 281, 17541-17544.	1.6	223
16	Inhibition of the <i>Staphylococcus aureus</i> NADPH-dependent Enoyl-Acyl Carrier Protein Reductase by Triclosan and Hexachlorophene. <i>Journal of Biological Chemistry</i> , 2000, 275, 4654-4659.	1.6	221
17	The 1.8 Å... crystal structure and active-site architecture of $\hat{\text{I}}^2$ -ketoacyl-acyl carrier protein synthase III (FabH) from <i>Escherichia coli</i> . <i>Structure</i> , 2000, 8, 185-195.	1.6	212
18	Inhibition of $\hat{\text{I}}^2$ -Ketoacyl-Acyl Carrier Protein Synthase III (FabH) by Acyl-Acyl Carrier Protein in <i>Escherichia coli</i> . <i>Journal of Biological Chemistry</i> , 1996, 271, 10996-11000.	1.6	198

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19	Forty Years of Bacterial Fatty Acid Synthesis. <i>Biochemical and Biophysical Research Communications</i> , 2002, 292, 1155-1166.	1.0	191
20	Regulation of Fatty Acid Elongation and Initiation by Acyl-Acyl Carrier Protein in <i>Escherichia coli</i> . <i>Journal of Biological Chemistry</i> , 1996, 271, 1833-1836.	1.6	187
21	Evaluation of Epigallocatechin Gallate and Related Plant Polyphenols as Inhibitors of the FabG and FabI Reductases of Bacterial Type II Fatty-acid Synthase. <i>Journal of Biological Chemistry</i> , 2004, 279, 30994-31001.	1.6	183
22	Metabolic basis for the differential susceptibility of Gram-positive pathogens to fatty acid synthesis inhibitors. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2011, 108, 15378-15383.	3.3	178
23	Pantothenate Kinase Regulation of the Intracellular Concentration of Coenzyme A. <i>Journal of Biological Chemistry</i> , 2000, 275, 1377-1383.	1.6	173
24	Identification and Substrate Specificity of $\hat{1}^2$ -Ketoacyl (Acyl Carrier Protein) Synthase III (mtFabH) from <i>Mycobacterium tuberculosis</i> . <i>Journal of Biological Chemistry</i> , 2000, 275, 28201-28207.	1.6	165
25	The Enoyl-[acyl-carrier-protein] Reductases FabI and FabL from <i>Bacillus subtilis</i> . <i>Journal of Biological Chemistry</i> , 2000, 275, 40128-40133.	1.6	160
26	RhIA Converts $\hat{1}^2$ -Hydroxyacyl-Acyl Carrier Protein Intermediates in Fatty Acid Synthesis to the $\hat{1}^2$ -Hydroxydecanoyl- $\hat{1}^2$ -Hydroxydecanoate Component of Rhamnolipids in <i>Pseudomonas aeruginosa</i> . <i>Journal of Bacteriology</i> , 2008, 190, 3147-3154.	1.0	158
27	Is bacterial fatty acid synthesis a valid target for antibacterial drug discovery?. <i>Current Opinion in Microbiology</i> , 2011, 14, 544-549.	2.3	158
28	Phosphatidic acid synthesis in bacteria. <i>Biochimica Et Biophysica Acta - Molecular and Cell Biology of Lipids</i> , 2013, 1831, 495-502.	1.2	154
29	Membrane Disruption by Antimicrobial Fatty Acids Releases Low-Molecular-Weight Proteins from <i>Staphylococcus aureus</i> . <i>Journal of Bacteriology</i> , 2012, 194, 5294-5304.	1.0	151
30	Identification and Analysis of the Acyl Carrier Protein (ACP) Docking Site on $\hat{1}^2$ -Ketoacyl-ACP Synthase III. <i>Journal of Biological Chemistry</i> , 2001, 276, 8231-8238.	1.6	150
31	Acyl-Phosphates Initiate Membrane Phospholipid Synthesis in Gram-Positive Pathogens. <i>Molecular Cell</i> , 2006, 23, 765-772.	4.5	147
32	Identification of a two-component fatty acid kinase responsible for host fatty acid incorporation by <i>Staphylococcus aureus</i> . <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014, 111, 10532-10537.	3.3	141
33	A Conserved Histidine Is Essential for Glycerolipid Acyltransferase Catalysis. <i>Journal of Bacteriology</i> , 1998, 180, 1425-1430.	1.0	139
34	Structure of $\hat{1}^2$ -Ketoacyl-[acyl carrier protein] Reductase from <i>Escherichia coli</i> : Negative Cooperativity and Its Structural Basis. <i>Biochemistry</i> , 2001, 40, 12772-12781.	1.2	138
35	Cofactor-Induced Conformational Rearrangements Establish a Catalytically Competent Active Site and a Proton Relay Conduit in FabG. <i>Structure</i> , 2004, 12, 417-428.	1.6	136
36	Key Residues Responsible for Acyl Carrier Protein and $\hat{1}^2$ -Ketoacyl-Acyl Carrier Protein Reductase (FabG) Interaction. <i>Journal of Biological Chemistry</i> , 2003, 278, 52935-52943.	1.6	135

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37	Product diversity and regulation of type II fatty acid synthases. <i>Biochemistry and Cell Biology</i> , 2004, 82, 145-155.	0.9	133
38	The Structure of (3R)-Hydroxyacyl-Acyl Carrier Protein Dehydratase (FabZ) from <i>Pseudomonas aeruginosa</i> . <i>Journal of Biological Chemistry</i> , 2004, 279, 52593-52602.	1.6	121
39	Thematic Review Series: Glycerolipids. Acyltransferases in bacterial glycerophospholipid synthesis. <i>Journal of Lipid Research</i> , 2008, 49, 1867-1874.	2.0	115
40	Transcriptional regulation of fatty acid biosynthesis in <i>Streptococcus pneumoniae</i> . <i>Molecular Microbiology</i> , 2006, 59, 551-566.	1.2	114
41	[41] Acyl carrier protein from <i>Escherichia coli</i> . <i>Methods in Enzymology</i> , 1981, 71 Pt C, 341-351.	0.4	113
42	The FadR-DNA Complex. <i>Journal of Biological Chemistry</i> , 2001, 276, 17373-17379.	1.6	113
43	The Solution Structure of Acyl Carrier Protein from <i>Mycobacterium tuberculosis</i> . <i>Journal of Biological Chemistry</i> , 2002, 277, 15874-15880.	1.6	111
44	Two aerobic pathways for the formation of unsaturated fatty acids in <i>Pseudomonas aeruginosa</i> . <i>Molecular Microbiology</i> , 2006, 60, 260-273.	1.2	110
45	A New Mechanism for Anaerobic Unsaturated Fatty Acid Formation in <i>Streptococcus pneumoniae</i> . <i>Journal of Biological Chemistry</i> , 2002, 277, 44809-44816.	1.6	108
46	Exogenous fatty acid metabolism in bacteria. <i>Biochimie</i> , 2017, 141, 30-39.	1.3	106
47	Chemical Knockout of Pantothenate Kinase Reveals the Metabolic and Genetic Program Responsible for Hepatic Coenzyme A Homeostasis. <i>Chemistry and Biology</i> , 2007, 14, 291-302.	6.2	105
48	The FabR (YijC) Transcription Factor Regulates Unsaturated Fatty Acid Biosynthesis in <i>Escherichia coli</i> . <i>Journal of Biological Chemistry</i> , 2002, 277, 15558-15565.	1.6	104
49	Characterization of <i>Streptococcus pneumoniae</i> enoyl-(acyl-carrier protein) reductase (FabK). <i>Biochemical Journal</i> , 2003, 370, 1055-1062.	1.7	100
50	How Bacterial Pathogens Eat Host Lipids: Implications for the Development of Fatty Acid Synthesis Therapeutics. <i>Journal of Biological Chemistry</i> , 2015, 290, 5940-5946.	1.6	99
51	The application of computational methods to explore the diversity and structure of bacterial fatty acid synthase. <i>Journal of Lipid Research</i> , 2003, 44, 1-10.	2.0	94
52	Pyruvate Oxidase as a Critical Link between Metabolism and Capsule Biosynthesis in <i>Streptococcus pneumoniae</i> . <i>PLoS Pathogens</i> , 2016, 12, e1005951.	2.1	93
53	Coupling of Fatty Acid and Phospholipid Synthesis in <i>Bacillus subtilis</i> . <i>Journal of Bacteriology</i> , 2007, 189, 5816-5824.	1.0	91
54	Incorporation of extracellular fatty acids by a fatty acid kinase-dependent pathway in <i>Staphylococcus aureus</i> . <i>Molecular Microbiology</i> , 2014, 92, 234-245.	1.2	90

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55	A Pantothenate Kinase from <i>Staphylococcus aureus</i> Refractory to Feedback Regulation by Coenzyme A. <i>Journal of Biological Chemistry</i> , 2005, 280, 3314-3322.	1.6	85
56	Pantothenate Kinase 1 Is Required to Support the Metabolic Transition from the Fed to the Fasted State. <i>PLoS ONE</i> , 2010, 5, e11107.	1.1	82
57	Transcriptional regulation in bacterial membrane lipid synthesis. <i>Journal of Lipid Research</i> , 2009, 50, S115-S119.	2.0	81
58	Regulation of Malonyl-CoA Metabolism by Acyl-Acyl Carrier Protein and β -Ketoacyl-Acyl Carrier Protein Synthases in <i>Escherichia coli</i> . <i>Journal of Biological Chemistry</i> , 1995, 270, 15531-15538.	1.6	79
59	Structure-Activity Relationships at the 5-Position of Thiolactomycin: An Intact (5R)-Isoprene Unit Is Required for Activity against the Condensing Enzymes from <i>Mycobacterium tuberculosis</i> and <i>Escherichia coli</i> . <i>Journal of Medicinal Chemistry</i> , 2006, 49, 159-171.	2.9	79
60	Structural basis for the transcriptional regulation of membrane lipid homeostasis. <i>Nature Structural and Molecular Biology</i> , 2010, 17, 971-975.	3.6	79
61	Crystal Structures of Human Pantothenate Kinases. <i>Journal of Biological Chemistry</i> , 2007, 282, 27984-27993.	1.6	77
62	PqsD Is Responsible for the Synthesis of 2,4-Dihydroxyquinoline, an Extracellular Metabolite Produced by <i>Pseudomonas aeruginosa</i> . <i>Journal of Biological Chemistry</i> , 2008, 283, 28788-28794.	1.6	77
63	Acyl Carrier Protein Is a Cellular Target for the Antibacterial Action of the Pantothenamide Class of Pantothenate Antimetabolites. <i>Journal of Biological Chemistry</i> , 2004, 279, 50969-50975.	1.6	76
64	Biochemical Properties of Human Pantothenate Kinase 2 Isoforms and Mutations Linked to Pantothenate Kinase-associated Neurodegeneration. <i>Journal of Biological Chemistry</i> , 2006, 281, 107-114.	1.6	76
65	Response of <i>Bacillus subtilis</i> to Cerulenin and Acquisition of Resistance. <i>Journal of Bacteriology</i> , 2001, 183, 3032-3040.	1.0	75
66	Role of Feedback Regulation of Pantothenate Kinase (CoaA) in Control of Coenzyme A Levels in <i>Escherichia coli</i> . <i>Journal of Bacteriology</i> , 2003, 185, 3410-3415.	1.0	75
67	Activation of human mitochondrial pantothenate kinase 2 by palmitoylcarnitine. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2007, 104, 1494-1499.	3.3	75
68	Feedback Regulation of Murine Pantothenate Kinase 3 by Coenzyme A and Coenzyme A Thioesters. <i>Journal of Biological Chemistry</i> , 2005, 280, 32594-32601.	1.6	74
69	Transcriptional Regulation of Membrane Lipid Homeostasis in <i>Escherichia coli</i> . <i>Journal of Biological Chemistry</i> , 2009, 284, 34880-34888.	1.6	72
70	The murine pantothenate kinase (Pank1) gene encodes two differentially regulated pantothenate kinase isozymes. <i>Gene</i> , 2002, 291, 35-43.	1.0	71
71	Bacterial fatty acid metabolism in modern antibiotic discovery. <i>Biochimica Et Biophysica Acta - Molecular and Cell Biology of Lipids</i> , 2017, 1862, 1300-1309.	1.2	70
72	Acyl-Acyl Carrier Protein Regulates Transcription of Fatty Acid Biosynthetic Genes via the FabT Repressor in <i>Streptococcus pneumoniae</i> . <i>Journal of Biological Chemistry</i> , 2009, 284, 15364-15368.	1.6	69

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73	The reductase steps of the type II fatty acid synthase as antimicrobial targets. <i>Lipids</i> , 2004, 39, 1055-1060.	0.7	68
74	Roles of the Active Site Water, Histidine 303, and Phenylalanine 396 in the Catalytic Mechanism of the Elongation Condensing Enzyme of <i>Streptococcus pneumoniae</i> . <i>Journal of Biological Chemistry</i> , 2006, 281, 17390-17399.	1.6	65
75	FabH selectivity for anteiso branched-chain fatty acid precursors in low-temperature adaptation in <i>Listeria monocytogenes</i> . <i>FEMS Microbiology Letters</i> , 2009, 301, 188-192.	0.7	65
76	A therapeutic approach to pantothenate kinase associated neurodegeneration. <i>Nature Communications</i> , 2018, 9, 4399.	5.8	65
77	Fatty acid biosynthesis as a target for novel antibacterials. <i>Current Opinion in Investigational Drugs</i> , 2004, 5, 146-53.	2.3	65
78	A σ^W -dependent stress response in <i>Bacillus subtilis</i> that reduces membrane fluidity. <i>Molecular Microbiology</i> , 2011, 81, 69-79.	1.2	64
79	A two-helix motif positions the lysophosphatidic acid acyltransferase active site for catalysis within the membrane bilayer. <i>Nature Structural and Molecular Biology</i> , 2017, 24, 666-671.	3.6	64
80	Structure-activity relationships and enzyme inhibition of pantothenamide-type pantothenate kinase inhibitors. <i>Bioorganic and Medicinal Chemistry</i> , 2006, 14, 1007-1020.	1.4	61
81	Identification of a Soluble Diacylglycerol Kinase Required for Lipoteichoic Acid Production in <i>Bacillus subtilis</i> . <i>Journal of Biological Chemistry</i> , 2007, 282, 21738-21745.	1.6	60
82	Localization and regulation of mouse pantothenate kinase 2. <i>FEBS Letters</i> , 2007, 581, 4639-4644.	1.3	59
83	Lysophospholipid Flipping across the <i>Escherichia coli</i> Inner Membrane Catalyzed by a Transporter (LpT) Belonging to the Major Facilitator Superfamily. <i>Journal of Biological Chemistry</i> , 2005, 280, 12028-12034.	1.6	58
84	The Structural and Functional Basis for Recurring Sulfa Drug Resistance Mutations in <i>Staphylococcus aureus</i> Dihydropteroate Synthase. <i>Frontiers in Microbiology</i> , 2018, 9, 1369.	1.5	58
85	A <i>Pseudomonas aeruginosa</i> transcription factor that senses fatty acid structure. <i>Molecular Microbiology</i> , 2007, 66, 622-632.	1.2	56
86	Analysis of the <i>Staphylococcus aureus</i> DgkB Structure Reveals a Common Catalytic Mechanism for the Soluble Diacylglycerol Kinases. <i>Structure</i> , 2008, 16, 1036-1046.	1.6	53
87	Prokaryotic Type II and Type III Pantothenate Kinases: The Same Monomer Fold Creates Dimers with Distinct Catalytic Properties. <i>Structure</i> , 2006, 14, 1251-1261.	1.6	51
88	Biosynthesis of Membrane Lipids. <i>EcoSal Plus</i> , 2008, 3, .	2.1	48
89	The 1.3-Angstrom-Resolution Crystal Structure of β^2 -Ketoacyl-Acyl Carrier Protein Synthase II from <i>Streptococcus pneumoniae</i> . <i>Journal of Bacteriology</i> , 2003, 185, 4136-4143.	1.0	47
90	Modulation of Pantothenate Kinase 3 Activity by Small Molecules that Interact with the Substrate/Allosteric Regulatory Domain. <i>Chemistry and Biology</i> , 2010, 17, 892-902.	6.2	47

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91	[27] Preparative enzymatic synthesis of acyl-acyl carrier protein. <i>Methods in Enzymology</i> , 1981, 72, 397-403.	0.4	44
92	Type II Fatty Acid Synthesis Is Essential for the Replication of <i>Chlamydia trachomatis</i> . <i>Journal of Biological Chemistry</i> , 2014, 289, 22365-22376.	1.6	43
93	A Pathogen-Selective Antibiotic Minimizes Disturbance to the Microbiome. <i>Antimicrobial Agents and Chemotherapy</i> , 2016, 60, 4264-4273.	1.4	42
94	Novel Acyl Phosphate Mimics that Target PlsY, an Essential Acyltransferase in Gram-Positive Bacteria. <i>ChemMedChem</i> , 2008, 3, 1936-1945.	1.6	40
95	Resistance to AFN-1252 Arises from Missense Mutations in <i>Staphylococcus aureus</i> Enoyl-acyl Carrier Protein Reductase (FabI). <i>Journal of Biological Chemistry</i> , 2013, 288, 36261-36271.	1.6	40
96	<i>Chlamydia trachomatis</i> Relies on Autonomous Phospholipid Synthesis for Membrane Biogenesis. <i>Journal of Biological Chemistry</i> , 2015, 290, 18874-18888.	1.6	40
97	<i>Chlamydia trachomatis</i> Scavenges Host Fatty Acids for Phospholipid Synthesis via an Acyl-Acyl Carrier Protein Synthetase. <i>Journal of Biological Chemistry</i> , 2015, 290, 22163-22173.	1.6	39
98	Fatty acid activation and utilization by <i>Alistipes finegoldii</i> , a representative Bacteroidetes resident of the human gut microbiome. <i>Molecular Microbiology</i> , 2020, 113, 807-825.	1.2	39
99	<i>Staphylococcus aureus</i> Fatty Acid Auxotrophs Do Not Proliferate in Mice. <i>Antimicrobial Agents and Chemotherapy</i> , 2013, 57, 5729-5732.	1.4	38
100	Topology and Active Site of PlsY. <i>Journal of Biological Chemistry</i> , 2007, 282, 11339-11346.	1.6	34
101	Maternal bile acid transporter deficiency promotes neonatal demise. <i>Nature Communications</i> , 2015, 6, 8186.	5.8	34
102	A Missense Mutation in the <i>fabB</i> (β^2 -Ketoacyl-Acyl Carrier Protein Synthase I) Gene Confers Thiolactomycin Resistance to <i>Escherichia coli</i> . <i>Antimicrobial Agents and Chemotherapy</i> , 2002, 46, 1246-1252.	1.4	33
103	Oleate hydratase from <i>Staphylococcus aureus</i> protects against palmitoleic acid, the major antimicrobial fatty acid produced by mammalian skin. <i>Journal of Biological Chemistry</i> , 2019, 294, 9285-9294.	1.6	33
104	A fatty acid-binding protein of <i>Streptococcus pneumoniae</i> facilitates the acquisition of host polyunsaturated fatty acids. <i>Journal of Biological Chemistry</i> , 2019, 294, 16416-16428.	1.6	32
105	Resistance Mechanisms and the Future of Bacterial Enoyl-Acyl Carrier Protein Reductase (FabI) Antibiotics. <i>Cold Spring Harbor Perspectives in Medicine</i> , 2016, 6, a027045.	2.9	31
106	Role of Fatty Acid Kinase in Cellular Lipid Homeostasis and SaeRS-Dependent Virulence Factor Expression in <i>Staphylococcus aureus</i> . <i>MBio</i> , 2017, 8, .	1.8	31
107	Domain Swapping between <i>Enterococcus faecalis</i> FabN and FabZ Proteins Localizes the Structural Determinants for Isomerase Activity. <i>Journal of Biological Chemistry</i> , 2005, 280, 30342-30348.	1.6	30
108	Perturbation of <i>Staphylococcus aureus</i> Gene Expression by the Enoyl-Acyl Carrier Protein Reductase Inhibitor AFN-1252. <i>Antimicrobial Agents and Chemotherapy</i> , 2013, 57, 2182-2190.	1.4	29

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109	Pank1 deletion in leptin-deficient mice reduces hyperglycaemia and hyperinsulinaemia and modifies global metabolism without affecting insulin resistance. <i>Diabetologia</i> , 2014, 57, 1466-1475.	2.9	29
110	Allosteric Regulation of Mammalian Pantothenate Kinase. <i>Journal of Biological Chemistry</i> , 2016, 291, 22302-22314.	1.6	29
111	Human pantothenate kinase 4 is a pseudo-pantothenate kinase. <i>Protein Science</i> , 2019, 28, 1031-1047.	3.1	29
112	Structural modification of acyl carrier protein by butyryl group. <i>Protein Science</i> , 2009, 18, 240-246.	3.1	28
113	DesT Coordinates the Expression of Anaerobic and Aerobic Pathways for Unsaturated Fatty Acid Biosynthesis in <i>Pseudomonas aeruginosa</i> . <i>Journal of Bacteriology</i> , 2010, 192, 280-285.	1.0	28
114	Correction of a genetic deficiency in pantothenate kinase 1 using phosphopantothenate replacement therapy. <i>Molecular Genetics and Metabolism</i> , 2015, 116, 281-288.	0.5	28
115	A High-Throughput Screen Reveals New Small-Molecule Activators and Inhibitors of Pantothenate Kinases. <i>Journal of Medicinal Chemistry</i> , 2015, 58, 1563-1568.	2.9	28
116	A Missense Mutation Accounts for the Defect in the Glycerol-3-Phosphate Acyltransferase Expressed in the <i>plsB26</i> Mutant. <i>Journal of Bacteriology</i> , 1999, 181, 1944-1946.	1.0	28
117	Chapter 3 Fatty acid and phospholipid metabolism in prokaryotes. <i>New Comprehensive Biochemistry</i> , 2002, 36, 55-92.	0.1	27
118	Fatty acid and phospholipid metabolism in prokaryotes. , 2008, , 59-96.		26
119	Sonic Hedgehog Activates Phospholipase A2 to Enhance Smoothed Ciliary Translocation. <i>Cell Reports</i> , 2017, 19, 2074-2087.	2.9	26
120	Host Fatty Acid Utilization by <i>Staphylococcus aureus</i> at the Infection Site. <i>MBio</i> , 2020, 11, .	1.8	26
121	A thioesterase bypasses the requirement for exogenous fatty acids in the <i>plsX</i> deletion of <i>Streptococcus pneumoniae</i> . <i>Molecular Microbiology</i> , 2015, 96, 28-41.	1.2	25
122	Acyl-chain selectivity and physiological roles of <i>Staphylococcus aureus</i> fatty acid-binding proteins. <i>Journal of Biological Chemistry</i> , 2019, 294, 38-49.	1.6	25
123	A pantothenate kinase-deficient mouse model reveals a gene expression program associated with brain coenzyme a reduction. <i>Biochimica Et Biophysica Acta - Molecular Basis of Disease</i> , 2020, 1866, 165663.	1.8	25
124	Role of the pyruvate metabolic network on carbohydrate metabolism and virulence in <i>Streptococcus pneumoniae</i> . <i>Molecular Microbiology</i> , 2020, 114, 536-552.	1.2	24
125	Branched-chain amino acid metabolism controls membrane phospholipid structure in <i>Staphylococcus aureus</i> . <i>Journal of Biological Chemistry</i> , 2021, 297, 101255.	1.6	23
126	Biochemical Roles for Conserved Residues in the Bacterial Fatty Acid-binding Protein Family. <i>Journal of Biological Chemistry</i> , 2016, 291, 6292-6303.	1.6	22

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127	Enoyl-Acyl Carrier Protein Reductase I (FabI) Is Essential for the Intracellular Growth of <i>Listeria monocytogenes</i> . <i>Infection and Immunity</i> , 2016, 84, 3597-3607.	1.0	21
128	Activation of Exogenous Fatty Acids to Acyl-Acyl Carrier Protein Cannot Bypass FabI Inhibition in <i>Neisseria</i> . <i>Journal of Biological Chemistry</i> , 2016, 291, 171-181.	1.6	21
129	Acyl-sulfamates target the essential glycerol-phosphate acyltransferase (PlsY) in Gram-positive bacteria. <i>Bioorganic and Medicinal Chemistry</i> , 2012, 20, 4985-4994.	1.4	17
130	FabH Mutations Confer Resistance to FabF-Directed Antibiotics in <i>Staphylococcus aureus</i> . <i>Antimicrobial Agents and Chemotherapy</i> , 2015, 59, 849-858.	1.4	17
131	Disruption of Glycolysis by Nutritional Immunity Activates a Two-Component System That Coordinates a Metabolic and Antihost Response by <i>Staphylococcus aureus</i> . <i>MBio</i> , 2019, 10, .	1.8	17
132	Structure and mechanism of <i>Staphylococcus aureus</i> oleate hydratase (OhyA). <i>Journal of Biological Chemistry</i> , 2021, 296, 100252.	1.6	17
133	Chemical Exchanges between Multilateral Symbionts. <i>Organic Letters</i> , 2021, 23, 1648-1652.	2.4	16
134	Malonyl-acyl carrier protein decarboxylase activity promotes fatty acid and cell envelope biosynthesis in Proteobacteria. <i>Journal of Biological Chemistry</i> , 2021, 297, 101434.	1.6	15
135	The identification, analysis and structure-based development of novel inhibitors of 6-hydroxymethyl-7,8-dihydropterin pyrophosphokinase. <i>Bioorganic and Medicinal Chemistry</i> , 2014, 22, 2157-2165.	1.4	14
136	Fatty Acid and Phospholipid Biosynthesis in Prokaryotes. , 2016, , 73-112.		14
137	Opening a New Path to Lipoic Acid. <i>Journal of Bacteriology</i> , 2009, 191, 6782-6784.	1.0	13
138	Phosphatidylglycerol homeostasis in glycerol-phosphate auxotrophs of <i>Staphylococcus aureus</i> . <i>BMC Microbiology</i> , 2013, 13, 260.	1.3	13
139	Discovery of Bacterial Fatty Acid Synthase Type II Inhibitors Using a Novel Cellular Bioluminescent Reporter Assay. <i>Antimicrobial Agents and Chemotherapy</i> , 2015, 59, 5775-5787.	1.4	13
140	Phosphatidylcholine signaling in response to CSF-1. <i>Molecular Reproduction and Development</i> , 1997, 46, 24-30.	1.0	12
141	Excess coenzyme A reduces skeletal muscle performance and strength in mice overexpressing human PANK2. <i>Molecular Genetics and Metabolism</i> , 2017, 120, 350-362.	0.5	12
142	Pantothenate kinase activation relieves coenzyme A sequestration and improves mitochondrial function in mice with propionic acidemia. <i>Science Translational Medicine</i> , 2021, 13, eabf5965.	5.8	12
143	A genome-wide atlas of antibiotic susceptibility targets and pathways to tolerance. <i>Nature Communications</i> , 2022, 13, .	5.8	12
144	[13] 2-Acylglycerophosphoethanolamine acyltransferase/ acyl-[acyl-carrier-protein] synthetase from <i>Escherichia coli</i> . <i>Methods in Enzymology</i> , 1992, 209, 111-117.	0.4	10

#	ARTICLE	IF	CITATIONS
145	Molecular Determinants for Interfacial Binding and Conformational Change in a Soluble Diacylglycerol Kinase. <i>Journal of Biological Chemistry</i> , 2009, 284, 7246-7254.	1.6	9
146	Discovery of novel bacterial elongation condensing enzyme inhibitors by virtual screening. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2014, 24, 2585-2588.	1.0	9
147	Mining Fatty Acid Biosynthesis for New Antimicrobials. <i>Annual Review of Microbiology</i> , 2022, 76, 281-304.	2.9	9
148	Competence-Associated Peptide BriC Alters Fatty Acid Biosynthesis in <i>Streptococcus pneumoniae</i> . <i>MSphere</i> , 2021, 6, e0014521.	1.3	8
149	A rainbow coalition of lipid transcriptional regulators. <i>Molecular Microbiology</i> , 2010, 78, 5-8.	1.2	8
150	Oleate Hydratase (OhyA) Is a Virulence Determinant in <i>Staphylococcus aureus</i> . <i>Microbiology Spectrum</i> , 2021, 9, e0154621.	1.2	8
151	Quantification of Coenzyme A in Cells and Tissues. <i>Journal of Visualized Experiments</i> , 2019, , .	0.2	7
152	The genome of a Bacteroidetes inhabitant of the human gut encodes a structurally distinct enoyl-acyl carrier protein reductase (FabI). <i>Journal of Biological Chemistry</i> , 2020, 295, 7635-7652.	1.6	7
153	Identification of Structural transitions in bacterial fatty acid binding proteins that permit ligand entry and exit at membranes. <i>Journal of Biological Chemistry</i> , 2022, , 101676.	1.6	7
154	Transformation by the v-fms oncogene product: An analog of the CSF-1 receptor. <i>Journal of Cellular Biochemistry</i> , 1987, 33, 109-115.	1.2	6
155	Domain architecture and catalysis of the <i>Staphylococcus aureus</i> fatty acid kinase. <i>Journal of Biological Chemistry</i> , 2022, 298, 101993.	1.6	6
156	Therapeutic Targets in Chlamydial Fatty Acid and Phospholipid Synthesis. <i>Frontiers in Microbiology</i> , 2018, 9, 2291.	1.5	5
157	A rainbow coalition of lipid transcriptional regulators. <i>Molecular Microbiology</i> , 2010, 78, 5-8.	1.2	4
158	Biochemical characterization of the first step in sulfonolipid biosynthesis in <i>Alistipes finegoldii</i> . <i>Journal of Biological Chemistry</i> , 2022, 298, 102195.	1.6	4
159	LipE guided discovery of isopropylphenyl pyridazines as pantothenate kinase modulators. <i>Bioorganic and Medicinal Chemistry</i> , 2021, 52, 116504.	1.4	3
160	Proton magnetic resonance spectroscopy detects cerebral metabolic derangement in a mouse model of brain coenzyme a deficiency. <i>Journal of Translational Medicine</i> , 2022, 20, 103.	1.8	3
161	Membrane Formation and Regulation. , 2019, , 763-773.		1
162	Membrane Formation and Regulation. , 2016, , 1-11.		1

#	ARTICLE	IF	CITATIONS
163	Structure and mechanism of <i>Staphylococcus aureus</i> oleate hydratase (OhyA). FASEB Journal, 2021, 35, .	0.2	0
164	Initiation of Fatty Acid Synthesis by a Malonyl-CoA Decarboxylase. FASEB Journal, 2021, 35, .	0.2	0
165	Fatty acid and phospholipid biosynthesis in prokaryotes. , 2021, , 85-120.		0
166	Inhibition of Bacterial Fatty Acid Synthesis via the Inactivation of Acyl Carrier Protein. FASEB Journal, 2006, 20, A849.	0.2	0
167	Discovery of Aerobic Mechanisms for the Formation of Unsaturated Fatty Acids in <i>Pseudomonas aeruginosa</i> . FASEB Journal, 2006, 20, A947.	0.2	0
168	Regulation of fatty acid composition of <i>Escherichia coli</i> membrane by FabA and FabZ. FASEB Journal, 2006, 20, A946.	0.2	0
169	A transcription factor that senses fatty acid structure. FASEB Journal, 2008, 22, 803.4.	0.2	0
170	RhlA diverts fatty acid biosynthetic intermediates to rhamnolipid formation. FASEB Journal, 2008, 22, 643.6.	0.2	0
171	<i>Pseudomonas aeruginosa</i> motility requires condensing enzyme FabF1. FASEB Journal, 2009, 23, 520.3.	0.2	0
172	Pank1 plays an important role in coenzyme A homeostasis during fasting. FASEB Journal, 2009, 23, 520.2.	0.2	0
173	Lipogenesis by reductive carboxylation is regulated by Bcr signaling. FASEB Journal, 2012, 26, 786.1.	0.2	0
174	Alternate fatty acid synthesis initiation in <i>Escherichia coli</i> . FASEB Journal, 2020, 34, 1-1.	0.2	0
175	Structure of cysteate acyltransferase, the condensation enzyme that initiates sulfonolipid biosynthesis by inhabitants of the gut microbiome. FASEB Journal, 2022, 36, .	0.2	0
176	Amino Acid Metabolism Controls Fatty Acid Structure in <i>Staphylococcus aureus</i> . FASEB Journal, 2022, 36, .	0.2	0