Wolfgang Eisenreich

List of Publications by Year
in descending order

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224 papers	13,647 citations	19657 61 h-index	28297 105 g-index
241 all docs	241 docs citations	241 times ranked	10876 citing authors

#	Article	IF	Citations
1	Biosynthesis of isoprenoids via the non-mevalonate pathway. Cellular and Molecular Life Sciences, 2004, 61, 1401-26.	5.4	539
2	Deoxyxylulose phosphate pathway to terpenoids. Trends in Plant Science, 2001, 6, 78-84.	8.8	457
3	The deoxyxylulose phosphate pathway of terpenoid biosynthesis in plants and microorganisms. Chemistry and Biology, 1998, 5, R221-R233.	6.0	388
4	Terpenoid biosynthesis from 1-deoxy-D-xylulose in higher plants by intramolecular skeletal rearrangement. Proceedings of the National Academy of Sciences of the United States of America, 1997, 94, 10600-10605.	7.1	361
5	Carbon metabolism of intracellular bacterial pathogens and possible links to virulence. Nature Reviews Microbiology, 2010, 8, 401-412.	28.6	338
6	Lipid transfer from plants to arbuscular mycorrhiza fungi. ELife, 2017, 6, .	6.0	329
7	Studies on the nonmevalonate terpene biosynthetic pathway: Metabolic role of IspH (LytB) protein. Proceedings of the National Academy of Sciences of the United States of America, 2002, 99, 1158-1163.	7.1	319
8	Studies on the biosynthesis of taxol: the taxane carbon skeleton is not of mevalonoid origin.. Proceedings of the National Academy of Sciences of the United States of America, 1996, 93, 6431-6436.	7.1	264
9	A dicarboxylate/4-hydroxybutyrate autotrophic carbon assimilation cycle in the hyperthermophilic Archaeum Ignicoccus hospitalis. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 7851-7856.	7.1	263
10	Cytidine 5'-triphosphate-dependent biosynthesis of isoprenoids: YgbP protein of Escherichia coli catalyzes the formation of 4-diphosphocytidyl-2-C-methylerythritol. Proceedings of the National Academy of Sciences of the United States of America, 1999, 96, 11758-11763.	7.1	250
11	Biosynthesis of terpenoids: YgbB protein converts 4-diphosphocytidyl-2C-methyl-D-erythritol 2-phosphate to 2C-methyl-D-erythritol 2,4-cyclodiphosphate. Proceedings of the National Academy of Sciences of the United States of America, 2000, 97, 2486-2490.	7.1	240
12	An optomechanical transducer in the blue light receptor phototropin from Avena sativa. Proceedings of the National Academy of Sciences of the United States of America, 2001, 98, 12357-12361.	7.1	222
13	The deoxyxylulose phosphate pathway of isoprenoid biosynthesis: Studies on the mechanisms of the reactions catalyzed by IspG and IspH protein. Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 1586-1591.	7.1	214
14	The non-mevalonate pathway of isoprenoids: genes, enzymes and intermediates. Current Opinion in Chemical Biology, 2001, 5, 535-540.	6.1	211
15	Biosynthesis of terpenoids: YchB protein of Escherichia coli phosphorylates the 2-hydroxy group of 4-diphosphocytidyl-2C-methyl-D-erythritol. Proceedings of the National Academy of Sciences of the United States of America, 2000, 97, 1062-1067.	7.1	208
16	Studies on the nonmevalonate pathway to terpenes: The role of the GcpE (IspG) protein. Proceedings of the National Academy of Sciences of the United States of America, 2001, 98, 14837-14842.	7.1	197
17	Systematics of 2H patterns in natural compounds and its importance for the elucidation of biosynthetic pathways. Phytochemistry Reviews, 2003, 2, 61-85.	6.5	177
18	Metabolic host responses to infection by intracellular bacterial pathogens. Frontiers in Cellular and Infection Microbiology, 2013, 3, 24.	3.9	169

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19	Biosynthesis of terpenes: Studies on 1-hydroxy-2-methyl-2-(E)-butenyl 4-diphosphate reductase. Proceedings of the National Academy of Sciences of the United States of America, 2002, 99, 12108-12113.	7.1	157
20	Quantitative assessment of crosstalk between the two isoprenoid biosynthesis pathways in plants by NMR spectroscopy. Phytochemistry Reviews, 2003, 2, 3-16.	6.5	155
21	Structural Basis of Fosmidomycin Action Revealed by the Complex with 2-C-Methyl-d-erythritol 4-phosphate Synthase (IspC). Journal of Biological Chemistry, 2003, 278, 18401-18407.	3.4	150
22	Biosynthesis of cannabinoids. FEBS Journal, 2001, 268, 1596-1604.	0.2	149
23	How Viral and Intracellular Bacterial Pathogens Reprogram the Metabolism of Host Cells to Allow Their Intracellular Replication. Frontiers in Cellular and Infection Microbiology, 2019, 9, 42.	3.9	149
24	Monoterpenoid essential oils are not of mevalonoid origin. Tetrahedron Letters, 1997, 38, 3889-3892.	1.4	148
25	Artemisinin biosynthesis in growing plants of Artemisia annua. A 13CO2 study. Phytochemistry, 2010, 71, 179-187.	2.9	137
26	Reversibility of citrate synthase allows autotrophic growth of a thermophilic bacterium. Science, 2018, 359, 563-567.	12.6	136
27	Biosynthesis of Hyperforin inHypericumperforatum. Journal of Medicinal Chemistry, 2002, 45, 4786-4793.	6.4	129
28	Carbon metabolism of Listeria monocytogenes growing inside macrophages. Molecular Microbiology, 2008, 69, 1008-1017.	2.5	123
29	IspH Protein ofEscherichiacoli:Â Studies on Ironâ^'Sulfur Cluster Implementation and Catalysis. Journal of the American Chemical Society, 2004, 126, 12847-12855.	13.7	116
30	Nanoarchaeum equitansandIgnicoccus hospitalis: New Insights into a Unique, Intimate Association of Two Archaea. Journal of Bacteriology, 2008, 190, 1743-1750.	2.2	111
31	Biosynthesis of terpenoids: 4-Diphosphocytidyl-2C-methyl-D-erythritol synthase of Arabidopsis thaliana. Proceedings of the National Academy of Sciences of the United States of America, 2000, 97, 6451-6456.	7.1	108
32	Isoprenoid biosynthetic pathways as anti-infective drug targets. Biochemical Society Transactions, 2005, 33, 785-791.	3.4	105
33	Advances of high-resolution NMR techniques in the structural and metabolic analysis of plant biochemistry. Phytochemistry, 2007, 68, 2799-2815.	2.9	103
34	Probing the reaction mechanism of IspH protein by x-ray structure analysis. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 1077-1081.	7.1	103
35	Biosynthesis of terpenoids: 4-Diphosphocytidyl-2-C-methyl-D-erythritol kinase from tomato. Proceedings of the National Academy of Sciences of the United States of America, 2000, 97, 8251-8256.	7.1	101
36	Metabolic adaptation of human pathogenic and related nonpathogenic bacteria to extra- and intracellular habitats. FEMS Microbiology Reviews, 2012, 36, 435-462.	8.6	98

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37	Biosynthesis of isoprenoids: Crystal structure of 4-diphosphocytidyl-2C-methyl-D-erythritol kinase. Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 9173-9178.	7.1	96
38	Isotopologue Profiling of Legionella pneumophila. Journal of Biological Chemistry, 2010, 285, 22232-22243.	3.4	95
39	Retrobiosynthetic NMR Studies with 13C-Labeled Glucose. Journal of Biological Chemistry, 1997, 272, 25474-25482.	3.4	94
40	13C isotopologue perturbation studies ofListeria monocytogenescarbon metabolism and its modulation by the virulence regulator PrfA. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 2040-2045.	7.1	89
41	Structure of 2C-methyl-d-erythritol-2,4-cyclodiphosphate synthase involved in mevalonate-independent biosynthesis of isoprenoids. Journal of Molecular Biology, 2002, 316, 79-88.	4.2	84
42	Pathogenomics of Listeria spp.. International Journal of Medical Microbiology, 2007, 297, 541-557.	3.6	84
43	Lactate oxidation facilitates growth of Mycobacterium tuberculosis in human macrophages. Scientific Reports, 2017, 7, 6484.	3.3	83
44	A rubber transferase activator is necessary for natural rubber biosynthesis in dandelion. Nature Plants, 2015, 1, .	9.3	81
45	Probiotics, Prebiotics, and Phytogenic Substances for Optimizing Gut Health in Poultry. Microorganisms, 2022, 10, 395.	3.6	80
46	Elucidation of novel biosynthetic pathways and metabolite flux patterns by retrobiosynthetic NMR analysis. FEMS Microbiology Reviews, 1998, 22, 567-598.	8.6	77
47	Biochemistry of the non-mevalonate isoprenoid pathway. Cellular and Molecular Life Sciences, 2011, 68, 3797-3814.	5.4	77
48	Retrobiosynthetic analysis of carbon fixation in the phototrophic eubacterium Chloroflexus aurantiacus. FEBS Journal, 1993, 215, 619-632.	0.2	76
49	Biosynthesis of gallic acid in Rhus typhina: discrimination between alternative pathways from natural oxygen isotope abundance. Phytochemistry, 2004, 65, 2809-2813.	2.9	75
50	Characterization of Central Carbon Metabolism of Streptococcus pneumoniae by Isotopologue Profiling. Journal of Biological Chemistry, 2012, 287, 4260-4274.	3.4	75
51	High CO2 levels drive the TCA cycle backwards towards autotrophy. Nature, 2021, 592, 784-788.	27.8	75
52	Structure of Active IspH Enzyme from Escherichia coli Provides Mechanistic Insights into Substrate Reduction. Angewandte Chemie - International Edition, 2009, 48, 5756-5759.	13.8	74
53	Dimethylallyl pyrophosphate is not the committed precursor of isopentenyl pyrophosphate during terpenoid biosynthesis from 1-deoxyxylulose in higher plants. Proceedings of the National Academy of Sciences of the United States of America, 1999, 96, 1309-1314.	7.1	73
54	Rearrangement reactions in the biosynthesis of molybdopterin. An NMR study with multiply 13C/15N labelled precursors. FEBS Journal, 1998, 255, 24-36.	0.2	70

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55	Perspectives in anti-infective drug design. The late steps in the biosynthesis of the universal terpenoid precursors, isopentenyl diphosphate and dimethylallyl diphosphate. Bioorganic Chemistry, 2004, 32, 292-308.	4.1	66
56	Thiazolopyrimidine Inhibitors of 2â€Methylerythritol 2,4â€Cyclodiphosphate Synthase (IspF) from Mycobacterium tuberculosis and Plasmodium falciparum. ChemMedChem, 2010, 5, 1092-1101.	3.2	66
57	Pyruvate Carboxylase Plays a Crucial Role in Carbon Metabolism of Extra- and Intracellularly ReplicatingListeria monocytogenes. Journal of Bacteriology, 2010, 192, 1774-1784.	2.2	66
58	In vitro interaction network of a synthetic gut bacterial community. ISME Journal, 2022, 16, 1095-1109.	9.8	66
59	Biosynthesis of Isoprenoids: Crystal Structure of the [4Feâ€“4S] Cluster Protein IspG. Journal of Molecular Biology, 2010, 404, 600-610.	4.2	65
60	Staphylococcus aureus small colony variants show common metabolic features in central metabolism irrespective of the underlying auxotrophism. Frontiers in Cellular and Infection Microbiology, 2014, 4, 141.	3.9	65
61	Analysis of carbon substrates used by Listeria monocytogenes during growth in J774A.1 macrophages suggests a bipartite intracellular metabolism. Frontiers in Cellular and Infection Microbiology, 2014, 4, 156.	3.9	65
62	Biosynthesis of bitter acids in hops. A 13C-NMR and 2H-NMR study on the building blocks of humulone. FEBS Journal, 1999, 263, 447-454.	0.2	64
63	Auxin Biosynthesis in Maize Kernels1. Plant Physiology, 2000, 123, 1109-1120.	4.8	64
64	Biochemical characterization of Bacillus subtilis type II isopentenyl diphosphate isomerase, and phylogenetic distribution of isoprenoid biosynthesis pathways. FEBS Journal, 2004, 271, 2658-2669.	0.2	64
65	Carbon Metabolism of Enterobacterial Human Pathogens Growing in Epithelial Colorectal Adenocarcinoma (Caco-2) Cells. PLoS ONE, 2010, 5, e10586.	2.5	64
66	Metabolic cross-talk between pathways of terpenoid backbone biosynthesis in spike lavender. Plant Physiology and Biochemistry, 2015, 95, 113-120.	5.8	63
67	Biosynthesis of terpenoids. FEBS Journal, 2001, 268, 3190-3197.	0.2	60
68	Robustness of central carbohydrate metabolism in developing maize kernels. Phytochemistry, 2006, 67, 1460-1475.	2.9	60
69	Metabolic and fitness determinants for in vitro growth and intestinal colonization of the bacterial pathogen Campylobacter jejuni. PLoS Biology, 2017, 15, e2001390.	5.6	58
70	Identification of amino acid networks governing catalysis in the closed complex of class I terpene synthases. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, E958-67.	7.1	57
71	The life stageâ€specific pathometabolism of Legionella pneumophila. FEBS Letters, 2016, 590, 3868-3886.	2.8	56
72	Biosynthesis of nucleotides, flavins, and deazaflavins in Methanobacterium thermoautotrophicum. Journal of Biological Chemistry, 1991, 266, 9622-9631.	3.4	56

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73	The deoxyxylulose phosphate pathway of isoprenoid biosynthesis. Discovery and function of the ispDEFGH genes and their cognate enzymes. Pure and Applied Chemistry, 2003, 75, 393-405.	1.9	55
74	Mechanistic Insights on Riboflavin Synthase Inspired by Selective Binding of the 6,7-Dimethyl-8-ribityllumazine Exomethylene Anion. Journal of the American Chemical Society, 2010, 132, 2983-2990.	13.7	55
75	Reverse Fosmidomycin Derivatives against the Antimalarial Drug Target IspC (Dxr). Journal of Medicinal Chemistry, 2011, 54, 6796-6802.	6.4	55
76	Nonmevalonate Terpene Biosynthesis Enzymes as Antiinfective Drug Targets:Â Substrate Synthesis and High-Throughput Screening Methods. Journal of Organic Chemistry, 2006, 71, 8824-8834.	3.2	54
77	Pseudilins: Halogenated, Allosteric Inhibitors of the Nonâ€Mevalonate Pathway Enzyme IspD. Angewandte Chemie - International Edition, 2014, 53, 2235-2239.	13.8	53
78	Biosynthesis of Isoprenoids. Purification and Properties of IspG Protein fromEscherichia coli. Journal of Organic Chemistry, 2005, 70, 9168-9174.	3.2	52
79	Metabolic Adaptations of Intracellullar Bacterial Pathogens and their Mammalian Host Cells during Infection (â€œPathometabolismâ€). Microbiology Spectrum, 2015, 3, .	3.0	52
80	Starch Biosynthesis and Intermediary Metabolism in Maize Kernels. Quantitative Analysis of Metabolite Flux by Nuclear Magnetic Resonance. Plant Physiology, 2002, 130, 1717-1727.	4.8	51
81	Pathway analysis using ¹³Câ€glycerol and other carbon tracers reveals a bipartite metabolism of Legionella pneumophila. Molecular Microbiology, 2016, 100, 229-246.	2.5	51
82	Biosynthesis of nucleotides, flavins, and deazaflavins in Methanobacterium thermoautotrophicum. Journal of Biological Chemistry, 1991, 266, 9622-31.	3.4	51
83	Crystal Structure of the Type II Isopentenyl Diphosphate:Dimethylallyl Diphosphate Isomerase from Bacillus subtilis. Journal of Molecular Biology, 2003, 329, 973-982.	4.2	50
84	Amino Acid Uptake and Metabolism of Legionella pneumophila Hosted by Acanthamoeba castellanii. Journal of Biological Chemistry, 2014, 289, 21040-21054.	3.4	49
85	Photochemically Induced Dynamic Nuclear Polarization in a C450A Mutant of the LOV2 Domain of theAvenasativaBlue-Light Receptor Phototropin. Journal of the American Chemical Society, 2005, 127, 17245-17252.	13.7	48
86	Retrobiosynthetic Nuclear Magnetic Resonance Analysis of Amino Acid Biosynthesis and Intermediary Metabolism. Metabolic Flux in Developing Maize Kernels. Plant Physiology, 2001, 125, 1178-1186.	4.8	47
87	Biosynthesis of 2-C-methyl-D-erythritol in plants by rearrangement of the terpenoid precursor, 1-deoxy-D-xylulose 5-phosphate. Tetrahedron Letters, 1998, 39, 2091-2094.	1.4	46
88	Biosynthesis of terpenoids: 1-deoxy-D -xylulose-5-phosphate reductoisomerase from Escherichia coli is a class B dehydrogenase. FEBS Letters, 2000, 465, 157-160.	2.8	46
89	13CO2 as a universal metabolic tracer in isotopologue perturbation experiments. Phytochemistry, 2007, 68, 2273-2289.	2.9	46
90	Metabolic adaptation of Chlamydia trachomatis to mammalian host cells. Molecular Microbiology, 2017, 103, 1004-1019.	2.5	46

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91	Legionella pneumophilaCsrA regulates a metabolic switch from amino acid to glycerolipid metabolism. Open Biology, 2017, 7, 170149.	3.6	46
92	Toward a Systemic Understanding of Listeria monocytogenes Metabolism during Infection. Frontiers in Microbiology, 2012, 3, 23.	3.5	45
93	To Eat and to Be Eaten: Mutual Metabolic Adaptations of Immune Cells and Intracellular Bacterial Pathogens upon Infection. Frontiers in Cellular and Infection Microbiology, 2017, 7, 316.	3.9	45
94	Biosynthesis of isoprenoids. FEBS Journal, 2004, 271, 3028-3035.	0.2	43
95	Nonphosphate Inhibitors of IspE Protein, a Kinase in the Non-Mevalonate Pathway for Isoprenoid Biosynthesis and a Potential Target for Antimalarial Therapy. ChemMedChem, 2007, 2, 806-810.	3.2	43
96	Metabolic Responses of Primary and Transformed Cells to Intracellular Listeria monocytogenes. PLoS ONE, 2012, 7, e52378.	2.5	43
97	Elements of Metabolic Evolution. Chemistry - A European Journal, 2012, 18, 2063-2080.	3.3	43
98	Isoprenoid biosynthesis in plants ? 2C-methyl-d-erythritol-4-phosphate synthase (IspC protein) of Arabidopsis thaliana. FEBS Journal, 2006, 273, 4446-4458.	4.7	42
99	Phosphorylation of 1-deoxy-D-xylulose by D-xylulokinase of Escherichia coli. FEBS Journal, 2001, 268, 310-316.	0.2	41
100	Quantitative Assessment of Metabolic Flux by 13C NMR Analysis. Biosynthesis of Anthraquinones in Rubia tinctorum. Journal of the American Chemical Society, 1999, 121, 7469-7475.	13.7	40
101	Advanced methods for the study of the chemistry and the metabolism of lichens. Phytochemistry Reviews, 2011, 10, 445-456.	6.5	40
102	Crystal Structures of Mutant IspH Proteins Reveal a Rotation of the Substrate's Hydroxymethyl Group during Catalysis. Journal of Molecular Biology, 2012, 416, 1-9.	4.2	40
103	The arginine-ornithine antiporter ArcD contributes to biological fitness of Streptococcus suis. Frontiers in Cellular and Infection Microbiology, 2014, 4, 107.	3.9	40
104	Status and Prospects of Botanical Biopesticides in Europe and Mediterranean Countries. Biomolecules, 2022, 12, 311.	4.0	40
105	Fluorescent Inhibitors for IspF, an Enzyme in the Non-Mevalonate Pathway for Isoprenoid Biosynthesis and a Potential Target for Antimalarial Therapy. Angewandte Chemie - International Edition, 2006, 45, 1069-1074.	13.8	39
106	Inhibitors of the kinase IspE: structureâ€“activity relationships and co-crystal structure analysis. Organic and Biomolecular Chemistry, 2008, 6, 2719.	2.8	39
107	Chloroplast-localized 6-phosphogluconate dehydrogenase is critical for maize endosperm starch accumulation. Journal of Experimental Botany, 2013, 64, 2231-2242.	4.8	38
108	Metabolic Adaptations of Intracellullar Bacterial Pathogens and their Mammalian Host Cells during Infection (â€œPathometabolismâ€). , 0, , 27-58.		38

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109	Biosynthesis of the Diterpene Verrucosan-2Î²-ol in the Phototrophic Eubacterium Chloroflexus aurantiacus. Journal of Biological Chemistry, 1998, 273, 18099-18108.	3.4	37
110	Enzyme-Assisted Preparation of Isotope-Labeled 1-Deoxy-d-xylulose 5-Phosphate. Journal of Organic Chemistry, 2001, 66, 3948-3952.	3.2	36
111	GamA is a eukaryotic-like glucoamylase responsible for glycogen- and starch-degrading activity of Legionella pneumophila. International Journal of Medical Microbiology, 2011, 301, 133-139.	3.6	36
112	An Efficient Preparation of 2-C-Methyl-d-Erythritol 4-Phosphoric Acid and Its Derivatives. Journal of Organic Chemistry, 2000, 65, 587-592.	3.2	35
113	Biosynthesis of Terpenes. Preparation of (E)-1-Hydroxy-2-methyl-but-2-enyl 4-Diphosphate, an Intermediate of the Deoxyxylulose Phosphate Pathway. Journal of Organic Chemistry, 2002, 67, 4590-4594.	3.2	35
114	Stereochemical Studies on the Making and Unmaking of Isopentenyl Diphosphate in Different Biological Systems. Chemistry and Biodiversity, 2004, 1, 1367-1376.	2.1	35
115	Algae and Their Metabolites as Potential Bio-Pesticides. Microorganisms, 2022, 10, 307.	3.6	35
116	Discovery of acetylene hydratase activity of the ironâ€“sulphur protein IspH. Nature Communications, 2012, 3, 1042.	12.8	34
117	Overcoming the Rate-Limiting Reaction during Photoreforming of Sugar Aldoses for H₂-Generation. ACS Catalysis, 2017, 7, 3236-3244.	11.2	34
118	Biosynthesis of thiophenes in Tagetes patula. Phytochemistry, 2001, 58, 875-881.	2.9	33
119	Characterization of Aquifex aeolicus 4â€diphosphocytidylâ€2Câ€methylâ€<scp>d</scp>â€erythritol kinase â€“ ligand recognition in a template for antimicrobial drug discovery. FEBS Journal, 2008, 275, 2779-2794.	4.7	33
120	Biosynthesis of Terpenoids:Â Efficient Multistep Biotransformation Procedures Affording Isotope-Labeled 2C-Methyl-d-erythritol 4-Phosphate Using Recombinant 2C-Methyl-d-erythritol 4-Phosphate Synthase. Journal of Organic Chemistry, 2001, 66, 7770-7775.	3.2	32
121	Studies on the non-mevalonate isoprenoid biosynthetic pathway. Simple methods for preparation of isotope-labeled (E)-1-hydroxy-2-methylbut-2-enyl 4-diphosphate. Tetrahedron Letters, 2002, 43, 8929-8933.	1.4	32
122	Changes in flux pattern of the central carbohydrate metabolism during kernel development in maize. Phytochemistry, 2005, 66, 2632-2642.	2.9	32
123	Targeted Engineering of Cyclooctatâ€9â€enâ€7â€ol Synthase: A Stereospecific Access to Two New Nonâ€natural Fusicoccaneâ€Type Diterpenes. ChemCatChem, 2013, 5, 3289-3298.	3.7	30
124	Growth-related Metabolism of the Carbon Storage Poly-3-hydroxybutyrate in Legionella pneumophila. Journal of Biological Chemistry, 2016, 291, 6471-6482.	3.4	30
125	Tracer Studies with Crude U-13C-Lipid Mixtures. Journal of Biological Chemistry, 1997, 272, 867-874.	3.4	29
126	Unexpected Biosynthetic Precursors of Amarogentin â˜’ A Retrobiosynthetic13C NMR Study. European Journal of Organic Chemistry, 2001, 2001, 1459-1465.	2.4	29

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127	Reprogramming of host glutamine metabolism during Chlamydia trachomatis infection and its key role in peptidoglycan synthesis. Nature Microbiology, 2020, 5, 1390-1402.	13.3	29
128	Biosynthesis of benzofuran derivatives in root cultures of Tagetes patula via phenylalanine and 1-deoxy-d-xylulose 5-phosphate. Phytochemistry, 2005, 66, 887-899.	2.9	28
129	Metabolic flux analysis in complex isotopolog space. Recycling of glucose in tobacco plants. Phytochemistry, 2005, 66, 323-335.	2.9	28
130	The crystal structure of a plant 2C-methyl-D-erythritol 4-phosphate cytidylyltransferase exhibits a distinct quaternary structure compared to bacterial homologues and a possible role in feedback regulation for cytidine monophosphate. FEBS Journal, 2006, 273, 1065-1073.	4.7	28
131	Metabolic flux pattern of glucose utilization by Xanthomonas campestris pv. campestris: prevalent role of the Entnerâ€“Doudoroff pathway and minor fluxes through the pentose phosphate pathway and glycolysis. Molecular BioSystems, 2014, 10, 2663-2676.	2.9	28
132	Isotopolog perturbation techniques for metabolic networks: Metabolic recycling of nutritional glucose in Drosophila melanogaster. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 6764-6769.	7.1	27
133	Synthesis and Characterization of Cytidine Derivatives that Inhibit the Kinase IspE of the Nonâ€Mevalonate Pathway for Isoprenoid Biosynthesis. ChemMedChem, 2008, 3, 91-101.	3.2	27
134	Differential Substrate Usage and Metabolic Fluxes in Francisella tularensis Subspecies holarctica and Francisella novicida. Frontiers in Cellular and Infection Microbiology, 2017, 7, 275.	3.9	27
135	Growth Media Simulating Ileal and Colonic Environments Affect the Intracellular Proteome and Carbon Fluxes of Enterohemorrhagic Escherichia coli O157:H7 Strain EDL933. Applied and Environmental Microbiology, 2013, 79, 3703-3715.	3.1	26
136	A transferable plasticity region in <scp>C</scp>ampylobacter coli allows isolates of an otherwise nonâ€glycolytic foodâ€borne pathogen to catabolize glucose. Molecular Microbiology, 2015, 98, 809-830.	2.5	26
137	Persistence of Intracellular Bacterial Pathogensâ€”With a Focus on the Metabolic Perspective. Frontiers in Cellular and Infection Microbiology, 2020, 10, 615450.	3.9	26
138	Biosynthesis of a Neo-epi-verrucosane Diterpene in the Liverwort Fossombronia alaskana. Journal of Biological Chemistry, 1999, 274, 36312-36320.	3.4	25
139	Rapid One-Pot Synthesis of Riboflavin Isotopomers. Journal of Organic Chemistry, 2002, 67, 8890-8894.	3.2	25
140	Natural Abundance Solution ¹³C NMR Studies of a Phototropin with Photoinduced Polarization. Journal of the American Chemical Society, 2008, 130, 13544-13545.	13.7	25
141	Structure-Based Design and Synthesis of the First Weak Non-Phosphate Inhibitors for IspF, an Enzyme in the Non-Mevalonate Pathway of Isoprenoid Biosynthesis. Helvetica Chimica Acta, 2007, 90, 1043-1068.	1.6	24
142	'Isotopo' a database application for facile analysis and management of mass isotopomer data. Database: the Journal of Biological Databases and Curation, 2014, 2014, bau077-bau077.	3.0	24
143	The enzymes OSC1 and CYP716A263 produce a high variety of triterpenoids in the latex of Taraxacum koksaghyz. Scientific Reports, 2019, 9, 5942.	3.3	24
144	Differential incorporation of 1-deoxy-D-xylulose into monoterpenes and carotenoids in higher plants. Chemical Communications, 1998, , 221-222.	4.1	23

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145	Unsaturated C3,5,7,9-Monocarboxylic Acids by Aqueous, One-Pot Carbon Fixation: Possible Relevance for the Origin of Life. Scientific Reports, 2016, 6, 27595.	3.3	23
146	Phenylalanine-independent biosynthesis of 1,3,5,8-tetrahydroxyxanthone. FEBS Journal, 2003, 270, 2950-2958.	0.2	22
147	Anti-malarial drug targets: Screening for inhibitors of 2C-methyl-d-erythritol 4-phosphate synthase (IspC protein) in Mediterranean plants. Phytomedicine, 2007, 14, 242-249.	5.3	22
148	Synthesis and Antiplasmodial Activity of Highly Active Reverse Analogues of the Antimalarial Drug Candidate Fosmidomycin. ChemMedChem, 2010, 5, 1673-1676.	3.2	21
149	Detecting a New Source for Photochemically Induced Dynamic Nuclear Polarization in the LOV2 Domain of Phototropin by Magnetic-Field Dependent ¹³C NMR Spectroscopy. Journal of Physical Chemistry B, 2014, 118, 11622-11632.	2.6	21
150	Multiple Substrate Usage of Coxiella burnetii to Feed a Bipartite Metabolic Network. Frontiers in Cellular and Infection Microbiology, 2017, 7, 285.	3.9	21
151	Elucidation of Biosynthetic Pathways by Retrodictive/Predictive Comparison of Isotopomer Patterns Determined by NMR Spectroscopy. , 2000, 22, 121-153.		21
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