Wolfgang Eisenreich

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/7100847/publications.pdf

Version: 2024-02-01

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	Quantifying the effects of hydrogen on carbon assimilation in a seafloor microbial community associated with ultramafic rocks. ISME Journal, 2022, 16, 257-271.	9.8	12
2	In vitro interaction network of a synthetic gut bacterial community. ISME Journal, 2022, 16, 1095-1109.	9.8	66
3	Algae and Their Metabolites as Potential Bio-Pesticides. Microorganisms, 2022, 10, 307.	3.6	35
4	Probiotics, Prebiotics, and Phytogenic Substances for Optimizing Gut Health in Poultry. Microorganisms, 2022, 10, 395.	3.6	80
5	Tracking the Reversed Oxidative Tricarboxylic Acid Cycle in Bacteria. Bio-protocol, 2022, 12, e4364.	0.4	2
6	Metabolic plasticity of Francisella tularensis subsp. holarctica (wild type), Francisella novicida and Francisella sp. strain W12-1067. German Journal of Microbiology, 2022, 2, 19-29.	0.7	0
7	Status and Prospects of Botanical Biopesticides in Europe and Mediterranean Countries. Biomolecules, 2022, 12, 311.	4.0	40
8	Biotechnological potential and initial characterization of two novel sesquiterpene synthases from Basidiomycota Coniophora puteana for heterologous production of Î´-cadinol. Microbial Cell Factories, 2022, 21, 64.	4.0	9
9	Efficient Green Light Acclimation of the Green Algae Picochlorum sp. Triggering Geranylgeranylated Chlorophylls. Frontiers in Bioengineering and Biotechnology, 2022, 10, 885977.	4.1	4
10	Isotopologue Profiling of Infectious Disease. , 2021, , .		0
11	Formation of Thiophene under Simulated Volcanic Hydrothermal Conditions on Earthâ€"Implications for Early Life on Extraterrestrial Planets?. Life, 2021, 11, 149.	2.4	3
12	Fast Identification of Food Thickeners by Nontargeted NMR-Spectroscopy. Journal of Agricultural and Food Chemistry, 2021, 69, 3761-3775.	5.2	6
13	Diverse metabolic response of cancer cells treated with a 213Bi-anti-EGFR-immunoconjugate. Scientific Reports, 2021, 11, 6227.	3.3	4
14	High CO2 levels drive the TCA cycle backwards towards autotrophy. Nature, 2021, 592, 784-788.	27.8	75
15	Metabolic adaption of Legionella pneumophila during intracellular growth in Acanthamoeba castellanii. International Journal of Medical Microbiology, 2021, 311, 151504.	3.6	3
16	Metabolic Response of Pancreatic Carcinoma Cells under Treatment with Dichloroacetate. Metabolites, 2021, 11, 350.	2.9	2
17	Substrate usage determines carbon flux via the citrate cycle in Helicobacter pylori. Molecular Microbiology, 2021, 116, 841-860.	2.5	8
18	The Abiotic Formation of Pyrrole under Volcanic, Hydrothermal Conditionsâ€"An Initial Step towards Lifeâ€™s First Breath?. Life, 2021, 11, 980.	2.4	3

#	Article	IF	Citations
19	Biosynthesis of Î±-solanine and Î±-chaconine in potato leaves (Solanum tuberosum L.) â€“ A 13CO2 study. Food Chemistry, 2021, 365, 130461.	8.2	9
20	Mitochondrial respiration restricts Listeria monocytogenes infection by slowing down host cell receptor recycling. Cell Reports, 2021, 37, 109989.	6.4	12
21	Towards a sustainable generation of pseudopterosin-type bioactives. Green Chemistry, 2020, 22, 6033-6046.	9.0	9
22	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
23	Characterization of Sunflower Oil Extracts from the Lichen Usnea barbata. Metabolites, 2020, 10, 353.	2.9	15
24	Substrate-dependent CO2 fixation in heterotrophic bacteria revealed by stable isotope labelling. FEMS Microbiology Ecology, 2020, 96, .	2.7	14
25	Where Is Bacosine in Commercially Available Bacopa monnieri?. Planta Medica, 2020, 86, 565-570.	1.3	5
26	A Possible Primordial Acetyleno/Carboxydotrophic Core Metabolism. Life, 2020, 10, 35.	2.4	12
27	Persistence of Intracellular Bacterial Pathogensâ€"With a Focus on the Metabolic Perspective. Frontiers in Cellular and Infection Microbiology, 2020, 10, 615450.	3.9	26
28	Myo-Inositol as a carbon substrate in Francisella and insights into the metabolism of Francisella sp. strain W12-1067. International Journal of Medical Microbiology, 2020, 310, 151426.	3.6	2
29	Evolutionary Steps in the Analytics of Primordial Metabolic Evolution. Life, 2019, 9, 50.	2.4	8
30	Isospecific Group-Transfer Polymerization of Diethyl Vinylphosphonate and Multidimensional NMR Analysis of the Polymer Microstructure. Macromolecules, 2019, 52, 7073-7080.	4.8	11
31	Screen for fitness and virulence factors of Francisella sp. strain W12-1067 using amoebae. International Journal of Medical Microbiology, 2019, 309, 151341.	3.6	7
32	Diverse Roads Taken by 13C-Glucose-Derived Metabolites in Breast Cancer Cells Exposed to Limiting Glucose and Glutamine Conditions. Cells, 2019, 8, 1113.	4.1	16
33	A facile in vivo procedure to analyze metabolic pathways in intact lichens. New Phytologist, 2019, 224, 1657-1667.	7.3	8
34	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
35	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
36	The Pathometabolism of Legionella Studied by Isotopologue Profiling. Methods in Molecular Biology, 2019, 1921, 21-44.	0.9	3

#	Article	IF	Citations
37	Reversibility of citrate synthase allows autotrophic growth of a thermophilic bacterium. Science, 2018, 359, 563-567.	12.6	136
38	From microbial upcycling to biology-oriented synthesis: combining whole-cell production and chemo-enzymatic functionalization for sustainable taxanoid delivery. Green Chemistry, 2018, 20, 5374-5384.	9.0	11
39	Tracking Lipid Transfer by Fatty Acid Isotopolog Profiling from Host Plants to Arbuscular Mycorrhiza Fungi. Bio-protocol, 2018, 8, e2786.	0.4	3
40	Overcoming the Rate-Limiting Reaction during Photoreforming of Sugar Aldoses for H₂-Generation. ACS Catalysis, 2017, 7, 3236-3244.	11.2	34
41	Metabolic adaptation of Chlamydia trachomatis to mammalian host cells. Molecular Microbiology, 2017, 103, 1004-1019.	2.5	46
42	Lactate oxidation facilitates growth of Mycobacterium tuberculosis in human macrophages. Scientific Reports, 2017, 7, 6484.	3.3	83
43	Legionella pneumophilaCsrA regulates a metabolic switch from amino acid to glycerolipid metabolism. Open Biology, 2017, 7, 170149.	3.6	46
44	Dynamics of Monoterpene Formation in Spike Lavender Plants. Metabolites, 2017, 7, 65.	2.9	13
45	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
46	Multiple Substrate Usage of Coxiella burnetii to Feed a Bipartite Metabolic Network. Frontiers in Cellular and Infection Microbiology, 2017, 7, 285.	3.9	21
47	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
48	Lipid transfer from plants to arbuscular mycorrhiza fungi. ELife, 2017, 6, .	6.0	329
49	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
50	FlpS, the FNR-Like Protein of Streptococcus suis Is an Essential, Oxygen-Sensing Activator of the Arginine Deiminase System. Pathogens, 2016, 5, 51.	2.8	15
51	Sexual Dimorphism in the Response of Mercurialis annua to Stress. Metabolites, 2016, 6, 13.	2.9	8
52	Decoding Biosynthetic Pathways in Plants by Pulse-Chase Strategies Using 13CO2 as a Universal Tracer. Metabolites, 2016, 6, 21.	2.9	16
53	Isotopologue profiling of the listerial <scp>N</scp>â€metabolism. Molecular Microbiology, 2016, 100, 315-327.	2.5	13
54	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

#	Article	IF	Citations
55	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
56	Identification, characterization and molecular adaptation of class I redox systems for the production of hydroxylated diterpenoids. Microbial Cell Factories, 2016, 15, 86.	4.0	9
57	The life stageâ€specific pathometabolism of Legionella pneumophila. FEBS Letters, 2016, 590, 3868-3886.	2.8	56
58	Growth-related Metabolism of the Carbon Storage Poly-3-hydroxybutyrate in Legionella pneumophila. Journal of Biological Chemistry, 2016, 291, 6471-6482.	3.4	30
59	Pathogenâ€“nematode interaction: Nitrogen supply of Listeria monocytogenes during growth in Caenorhabditis elegans. Environmental Microbiology Reports, 2016, 8, 20-29.	2.4	6
60	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
61	Metabolic Adaptations of Intracellullar Bacterial Pathogens and their Mammalian Host Cells during Infection (â€œPathometabolismâ€). Microbiology Spectrum, 2015, 3, .	3.0	52
62	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
63	Metabolic Profiling of Alpine and Ecuadorian Lichens. Molecules, 2015, 20, 18047-18065.	3.8	20
64	Mycobacterium tuberculosis Is a Natural Ornithine Aminotransferase (rocD) Mutant and Depends on Rv2323c for Growth on Arginine. PLoS ONE, 2015, 10, e0136914.	2.5	9
65	Characterization of the Pivotal Carbon Metabolism of Streptococcus suis Serotype 2 under ex Vivo and Chemically Defined in Vitro Conditions by Isotopologue Profiling. Journal of Biological Chemistry, 2015, 290, 5840-5854.	3.4	17
66	Strategy for Enhancement of ¹³C-Photo-CIDNP NMR Spectra by Exploiting Fractional ¹³C-Labeling of Tryptophan. Journal of Physical Chemistry B, 2015, 119, 13934-13943.	2.6	8
67	Preparation of Flavocoenzyme Isotopologues by Biotransformation of Purines. Journal of Organic Chemistry, 2015, 80, 2539-2544.	3.2	4
68	Metabolic cross-talk between pathways of terpenoid backbone biosynthesis in spike lavender. Plant Physiology and Biochemistry, 2015, 95, 113-120.	5.8	63
69	The complex isotopologue space of glucose as a framework for the study of human intermediary metabolism. Isotopes in Environmental and Health Studies, 2015, 51, 11-23.	1.0	2
70	A rubber transferase activator is necessary for natural rubber biosynthesis in dandelion. Nature Plants, 2015, 1, .	9.3	81
71	The arginine-ornithine antiporter ArcD contributes to biological fitness of Streptococcus suis. Frontiers in Cellular and Infection Microbiology, 2014, 4, 107.	3.9	40
72	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

#	Article	IF	Citations
73	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
74	Amino Acid Uptake and Metabolism of Legionella pneumophila Hosted by Acanthamoeba castellanii. Journal of Biological Chemistry, 2014, 289, 21040-21054.	3.4	49
75	'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
76	Biosynthesis of Nudicaulins: A ¹³CO₂â€Pulse/Chase Labeling Study with Papaver nudicaule. ChemBioChem, 2014, 15, 1645-1650.	2.6	10
77	Establishment of an ex vivo laticifer cell suspension culture from Taraxacum brevicorniculatum as a production system for cis-isoprene. Journal of Molecular Catalysis B: Enzymatic, 2014, 103, 85-93.	1.8	8
78	Pseudilins: Halogenated, Allosteric Inhibitors of the Nonâ€Mevalonate Pathway Enzyme IspD. Angewandte Chemie - International Edition, 2014, 53, 2235-2239.	13.8	53
79	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
80	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
81	Isotopologue Profiling of Triterpene Formation under Physiological Conditions. Biosynthesis of Lupeol-3-(3â€²-R-hydroxy)-stearate in Pentalinon andrieuxii. Journal of Organic Chemistry, 2014, 79, 2864-2873.	3.2	14
82	A Roadmap to the Isotopolog Space of Flavocoenzymes. Methods in Molecular Biology, 2014, 1146, 65-78.	0.9	3
83	Legionella oakridgensis ATCC 33761 genome sequence and phenotypic characterization reveals its replication capacity in amoebae. International Journal of Medical Microbiology, 2013, 303, 514-528.	3.6	19
84	Chloroplast-localized 6-phosphogluconate dehydrogenase is critical for maize endosperm starch accumulation. Journal of Experimental Botany, 2013, 64, 2231-2242.	4.8	38
85	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
86	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
87	Biosynthesis of Panaxynol and Panaxydol in Panax ginseng. Molecules, 2013, 18, 7686-7698.	3.8	17
88	Metabolic host responses to infection by intracellular bacterial pathogens. Frontiers in Cellular and Infection Microbiology, 2013, 3, 24.	3.9	169
89	The Intracellular Metabolism of Legionella by Isotopologue Profiling. Methods in Molecular Biology, 2013, 954, 163-181.	0.9	13
90	Characterization of Central Carbon Metabolism of Streptococcus pneumoniae by Isotopologue Profiling. Journal of Biological Chemistry, 2012, 287, 4260-4274.	3.4	75

#	Article	IF	Citations
91	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
92	Discovery of acetylene hydratase activity of the ironâ€“sulphur protein IspH. Nature Communications, 2012, 3, 1042.	12.8	34
93	Metabolic Responses of Primary and Transformed Cells to Intracellular Listeria monocytogenes. PLoS ONE, 2012, 7, e52378.	2.5	43
94	Toward a Systemic Understanding of Listeria monocytogenes Metabolism during Infection. Frontiers in Microbiology, 2012, 3, 23.	3.5	45
95	Metabolic adaptation of human pathogenic and related nonpathogenic bacteria to extra- and intracellular habitats. FEMS Microbiology Reviews, 2012, 36, 435-462.	8.6	98
96	Elements of Metabolic Evolution. Chemistry - A European Journal, 2012, 18, 2063-2080.	3.3	43
97	NMR-Based Isotopologue Profiling of Microbial Carotenoids. Methods in Molecular Biology, 2012, 892, 315-333.	0.9	1
98	Assessment of Enzymatic Methods in the Î´¹⁸O Value Determination of the <scp>l</scp>-Tyrosine p-Hydroxy Group for Proof of Illegal Meat and Bone Meal Feeding to Cattle. Journal of Agricultural and Food Chemistry, 2011, 59, 9475-9483.	5.2	5
99	Reverse Fosmidomycin Derivatives against the Antimalarial Drug Target IspC (Dxr). Journal of Medicinal Chemistry, 2011, 54, 6796-6802.	6.4	55
100	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
101	Advanced methods for the study of the chemistry and the metabolism of lichens. Phytochemistry Reviews, 2011, 10, 445-456.	6.5	40
102	Genome-enabled determination of amino acid biosynthesis in Xanthomonas campestris pv. campestris and identification of biosynthetic pathways for alanine, glycine, and isoleucine by 13C-isotopologue profiling. Molecular Genetics and Genomics, 2011, 286, 247-59.	2.1	19
103	Biochemistry of the non-mevalonate isoprenoid pathway. Cellular and Molecular Life Sciences, 2011, 68, 3797-3814.	5.4	77
104	Artemisinin biosynthesis in growing plants of Artemisia annua. A 13CO2 study. Phytochemistry, 2010, 71, 179-187.	2.9	137
105	Thiazolopyrimidine Inhibitors of 2â€Methylerythritol 2,4â€Cyclodiphosphate Synthase (IspF) from Mycobacterium tuberculosis and Plasmodium falciparum. ChemMedChem, 2010, 5, 1092-1101.	3.2	66
106	Synthesis and Antiplasmodial Activity of Highly Active Reverse Analogues of the Antimalarial Drug Candidate Fosmidomycin. ChemMedChem, 2010, 5, 1673-1676.	3.2	21
107	Biosynthesis of hermidin from Mercurialis annua: A retrobiosynthetic study. Phytochemistry Letters, 2010, 3, 33-37.	1.2	3
108	Carbon Metabolism of Enterobacterial Human Pathogens Growing in Epithelial Colorectal Adenocarcinoma (Caco-2) Cells. PLoS ONE, 2010, 5, e10586.	2.5	64

#	Article	IF	Citations
109	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
110	Isotopologue Profiling of Legionella pneumophila. Journal of Biological Chemistry, 2010, 285, 22232-22243.	3.4	95
111	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
112	Biosynthesis of Isoprenoids: Crystal Structure of the [4Feâ€“4S] Cluster Protein IspG. Journal of Molecular Biology, 2010, 404, 600-610.	4.2	65
113	Carbon metabolism of intracellular bacterial pathogens and possible links to virulence. Nature Reviews Microbiology, 2010, 8, 401-412.	28.6	338
114	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
115	Metabolic Studies Using the Retrobiosynthesis Concept â€“ Theory, Technology, and Examples. , 2010, , 675-694.		0
116	Cross-talk between Type Three Secretion System and Metabolism in Yersinia. Journal of Biological Chemistry, 2009, 284, 12165-12177.	3.4	17
117	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
118	Tryptophan 13C nuclear-spin polarization generated by intraprotein electron transfer in a LOV2 domain of the blue-light receptor phototropin. Biochemical Society Transactions, 2009, 37, 382-386.	3.4	20
119	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
120	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
121	Biosynthesis of isoprenoids â€“ studies on the mechanism of 2Câ€methylâ€<scp>d</scp>â€erythritolâ€4â€phosphate synthase. FEBS Journal, 2008, 275, 4060-4073.	4.7	18
122	Carbon metabolism of Listeria monocytogenes growing inside macrophages. Molecular Microbiology, 2008, 69, 1008-1017.	2.5	123
123	Inhibitors of the kinase IspE: structureâ€“activity relationships and co-crystal structure analysis. Organic and Biomolecular Chemistry, 2008, 6, 2719.	2.8	39
124	Nanoarchaeum equitansandIgnicoccus hospitalis: New Insights into a Unique, Intimate Association of Two Archaea. Journal of Bacteriology, 2008, 190, 1743-1750.	2.2	111
125	Biosynthetic Origin of BE-10988 in Streptomyces sp. BA10988. Journal of Organic Chemistry, 2008, 73, 5279-5286.	3.2	8
126	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

#	Article	IF	Citations
127	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
128	Pathogenomics of Listeria spp.. International Journal of Medical Microbiology, 2007, 297, 541-557.	3.6	84
129	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
130	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
131	13CO2 as a universal metabolic tracer in isotopologue perturbation experiments. Phytochemistry, 2007, 68, 2273-2289.	2.9	46
132	Advances of high-resolution NMR techniques in the structural and metabolic analysis of plant biochemistry. Phytochemistry, 2007, 68, 2799-2815.	2.9	103
133	¹³Câ€ƒIsotopologue editing of FMN bound to phototropin domains. FEBS Journal, 2007, 274, 5876-5890.	4.7	13
134	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
135	Biosynthesis of the chromogen hermidin from Mercurialis annua L.. Phytochemistry, 2007, 68, 2816-2824.	2.9	14
136	Metabolic flux analysis: Recent advances in carbon metabolism in plants. , 2007, 97, 213-243.		13
137	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
138	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
139	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
140	Robustness of central carbohydrate metabolism in developing maize kernels. Phytochemistry, 2006, 67, 1460-1475.	2.9	60
141	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
142	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
143	Isoprenoid biosynthetic pathways as anti-infective drug targets. Biochemical Society Transactions, 2005, 33, 785-791.	3.4	105
144	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

#	Article	IF	Citations
145	Changes in flux pattern of the central carbohydrate metabolism during kernel development in maize. Phytochemistry, 2005, 66, 2632-2642.	2.9	32
146	Metabolic flux analysis in complex isotopolog space. Recycling of glucose in tobacco plants. Phytochemistry, 2005, 66, 323-335.	2.9	28
147	Studies of the intermediary metabolism in cultured cells of the insect Spodoptera frugiperda using 13C- or 15N-labelled tracers. BMC Biochemistry, 2005, 6, 24.	4.4	3
148	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
149	Biosynthesis of Isoprenoids. Purification and Properties of IspG Protein fromEscherichia coli. Journal of Organic Chemistry, 2005, 70, 9168-9174.	3.2	52
150	Random Isotopolog Libraries for Protein Perturbation Studies.13C NMR Studies on Lumazine Protein ofPhotobacterium leiognathi. Journal of Organic Chemistry, 2005, 70, 9947-9954.	3.2	3
151	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
152	13C-, 15N- and 31P-NMR studies of oxidized and reduced low molecular mass thioredoxin reductase and some mutant proteins. FEBS Journal, 2004, 271, 1437-1452.	0.2	14
153	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
154	Biosynthesis of isoprenoids. FEBS Journal, 2004, 271, 3028-3035.	0.2	43
155	Biosynthesis of gallic acid in Rhus typhina: discrimination between alternative pathways from natural oxygen isotope abundance. Phytochemistry, 2004, 65, 2809-2813.	2.9	75
156	Biosynthesis of isoprenoids via the non-mevalonate pathway. Cellular and Molecular Life Sciences, 2004, 61, 1401-26.	5.4	539
157	Stereochemical Studies on the Making and Unmaking of Isopentenyl Diphosphate in Different Biological Systems. Chemistry and Biodiversity, 2004, 1, 1367-1376.	2.1	35
158	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
159	Biosynthetic experiments with tall plants under field conditions. 18O2 incorporation into humulone from Humulus lupulus. Phytochemistry, 2004, 65, 1057-1060.	2.9	14
160	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
161	Rapid Preparation of Isotopolog Libraries by in Vivo Transformation of13C-Glucose. Studies on 6,7-Dimethyl-8-ribityllumazine, a Biosynthetic Precursor of Vitamin B2. Journal of Organic Chemistry, 2004, 69, 5588-5594.	3.2	14
162	Quantitative assessment of crosstalk between the two isoprenoid biosynthesis pathways in plants by NMR spectroscopy. Phytochemistry Reviews, 2003, 2, 3-16.	6.5	155

#	Article	IF	Citations
163	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
164	Phenylalanine-independent biosynthesis of 1,3,5,8-tetrahydroxyxanthone. FEBS Journal, 2003, 270, 2950-2958.	0.2	22
165	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
166	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
167	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
168	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
169	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
170	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
171	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
172	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
173	Biosynthesis of Zeaxanthin via Mevalonate inParacoccusSpecies Strain PTA-3335. A Product-Based Retrobiosynthetic Studyâ€. Journal of Organic Chemistry, 2002, 67, 871-875.	3.2	15
174	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
175	Biosynthesis of Hyperforin inHypericumperforatum. Journal of Medicinal Chemistry, 2002, 45, 4786-4793.	6.4	129
176	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
177	Rapid One-Pot Synthesis of Riboflavin Isotopomers. Journal of Organic Chemistry, 2002, 67, 8890-8894.	3.2	25
178	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
179	Deoxyxylulose phosphate pathway to terpenoids. Trends in Plant Science, 2001, 6, 78-84.	8.8	457
180	Enzyme-Assisted Preparation of Isotope-Labeled 1-Deoxy-d-xylulose 5-Phosphate. Journal of Organic Chemistry, 2001, 66, 3948-3952.	3.2	36

#	Article	IF	Citations
181	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
182	Phosphorylation of 1-deoxy-D-xylulose by D-xylulokinase of Escherichia coli. FEBS Journal, 2001, 268, 310-316.	0.2	41
183	Biosynthesis of cannabinoids. FEBS Journal, 2001, 268, 1596-1604.	0.2	149
184	Biosynthesis of terpenoids. FEBS Journal, 2001, 268, 3190-3197.	0.2	60
185	Biosynthesis of thiophenes in Tagetes patula. Phytochemistry, 2001, 58, 875-881.	2.9	33
186	Tracer studies with 13C-labeled carbohydrates in cultured plant cells. Retrobiosynthetic analysis of chelidonic acid biosynthesis. Phytochemistry, 2001, 57, 33-42.	2.9	15
187	The non-mevalonate pathway of isoprenoids: genes, enzymes and intermediates. Current Opinion in Chemical Biology, 2001, 5, 535-540.	6.1	211
188	Unexpected Biosynthetic Precursors of Amarogentin â^' A Retrobiosynthetic13C NMR Study. European Journal of Organic Chemistry, 2001, 2001, 1459-1465.	2.4	29
189	Studies on the Non-Mevalonate Pathway â^' Preparation and Properties of Isotope-Labeled 2C-Methyl-D-erythritol 2,4-Cyclodiphosphate. European Journal of Organic Chemistry, 2001, 2001, 3221.	2.4	17
190	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
191	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
192	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
193	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
194	Auxin Biosynthesis in Maize Kernels1. Plant Physiology, 2000, 123, 1109-1120.	4.8	64
195	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
196	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
197	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
198	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

#	Article	IF	Citations
199	Biosynthesis of Isoprenoids. A Rapid Method for the Preparation of Isotope-Labeled 4-Diphosphocytidyl-2C-methyl-d-erythritol. Journal of the American Chemical Society, 2000, 122, 9571-9574.	13.7	18
200	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
201	Elucidation of Biosynthetic Pathways by Retrodictive/Predictive Comparison of Isotopomer Patterns Determined by NMR Spectroscopy. , 2000, 22, 121-153.		21
202	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
203	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
204	Biosynthesis of a Neo-epi-verrucosane Diterpene in the Liverwort Fossombronia alaskana. Journal of Biological Chemistry, 1999, 274, 36312-36320.	3.4	25
205	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
206	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
207	Elucidation of novel biosynthetic pathways and metabolite flux patterns by retrobiosynthetic NMR analysis. FEMS Microbiology Reviews, 1998, 22, 567-598.	8.6	77
208	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
209	31P-NMR spectroscopy of human and Paracoccus denitrificans electron transfer flavoproteins, and 13C- and 15N-NMR spectroscopy of human electron transfer flavoprotein in the oxidised and reduced states. FEBS Journal, 1998, 255, 125-132.	0.2	17
210	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
211	The deoxyxylulose phosphate pathway of terpenoid biosynthesis in plants and microorganisms. Chemistry and Biology, 1998, 5, R221-R233.	6.0	388
212	Differential incorporation of 1-deoxy-D-xylulose into monoterpenes and carotenoids in higher plants. Chemical Communications, 1998, , 221-222.	4.1	23
213	Biosynthesis of Riboflavin. Stereochemistry of the 3,4-Dihydroxy-2-butanone 4-Phosphate Synthase Reaction. Journal of Organic Chemistry, 1998, 63, 6456-6457.	3.2	15
214	Biosynthesis of the Diterpene Verrucosan-2Î²-ol in the Phototrophic Eubacterium Chloroflexus aurantiacus. Journal of Biological Chemistry, 1998, 273, 18099-18108.	3.4	37
215	Tracer Studies with Crude U-13C-Lipid Mixtures. Journal of Biological Chemistry, 1997, 272, 867-874.	3.4	29
216	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

#	Article	IF	Citations
217	Retrobiosynthetic NMR Studies with 13C-Labeled Glucose. Journal of Biological Chemistry, 1997, 272, 25474-25482.	3.4	94
218	Monoterpenoid essential oils are not of mevalonoid origin. Tetrahedron Letters, 1997, 38, 3889-3892.	1.4	148
219	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
220	Retrobiosynthetic analysis of carbon fixation in the phototrophic eubacterium Chloroflexus aurantiacus. FEBS Journal, 1993, 215, 619-632.	0.2	76
221	Biosynthesis of nucleotides, flavins, and deazaflavins in Methanobacterium thermoautotrophicum. Journal of Biological Chemistry, 1991, 266, 9622-9631.	3.4	56
222	Biosynthesis of nucleotides, flavins, and deazaflavins in Methanobacterium thermoautotrophicum. Journal of Biological Chemistry, 1991, 266, 9622-31.	3.4	51
223	Metabolic Adaptations of Intracellullar Bacterial Pathogens and their Mammalian Host Cells during Infection (â€œPathometabolismâ€). , 0, , 27-58.		38
224	NMR-based identification of thickeners in membrane-filtered food premixtures. European Food Research and Technology, 0, , .	3.3	0