

C Dale Poulter

List of Publications by Year in descending order

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9,006
citations

41258

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58464

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216
all docs

216
docs citations

216
times ranked

5410
citing authors

#	ARTICLE	IF	CITATIONS
1	BIOCHEMISTRY: Creating Isoprenoid Diversity. <i>Science</i> , 1997, 277, 1788-1789.	6.0	504
2	Crystal Structure of Recombinant Farnesyl Diphosphate Synthase at 2.6-Å Resolution. <i>Biochemistry</i> , 1994, 33, 10871-10877.	1.2	415
3	Phosphorylation of isoprenoid alcohols. <i>Journal of Organic Chemistry</i> , 1986, 51, 4768-4779.	1.7	315
4	Isoprenyl diphosphate synthases: Protein sequence comparisons, a phylogenetic tree, and predictions of secondary structure. <i>Protein Science</i> , 1994, 3, 600-607.	3.1	205
5	Chain elongation in the isoprenoid biosynthetic pathway. <i>Current Opinion in Chemical Biology</i> , 1997, 1, 570-578.	2.8	196
6	[15] Synthesis of allylic and homoallylic isoprenoid pyrophosphates. <i>Methods in Enzymology</i> , 1985, 110, 130-144.	0.4	193
7	The prenyl transfer reaction. Enzymic and mechanistic studies of the 1'-4 coupling reaction in the terpene biosynthetic pathway. <i>Accounts of Chemical Research</i> , 1978, 11, 307-313.	7.6	176
8	The Enzyme Function Initiative. <i>Biochemistry</i> , 2011, 50, 9950-9962.	1.2	169
9	<i>Escherichia coli</i> Open Reading Frame 696 Is <i>idi</i>, a Nonessential Gene Encoding Isopentenyl Diphosphate Isomerase. <i>Journal of Bacteriology</i> , 1999, 181, 4499-4504.	1.0	168
10	Chimeras of Two Isoprenoid Synthases Catalyze All Four Coupling Reactions in Isoprenoid Biosynthesis. <i>Science</i> , 2007, 316, 73-76.	6.0	160
11	Regio- and Chemoselective Covalent Immobilization of Proteins through Unnatural Amino Acids. <i>Journal of the American Chemical Society</i> , 2006, 128, 9274-9275.	6.6	141
12	Synthesis of nucleotide 5'-diphosphates from 5'-O-tosyl nucleosides. <i>Journal of Organic Chemistry</i> , 1987, 52, 1794-1801.	1.7	129
13	Biosynthesis of non-head-to-tail terpenes. Formation of 1'-1 and 1'-3 linkages. <i>Accounts of Chemical Research</i> , 1990, 23, 70-77.	7.6	115
14	Isopentenyl-diphosphate isomerase: inactivation of the enzyme with active-site-directed irreversible inhibitors and transition state analogs. <i>Biochemistry</i> , 1988, 27, 7315-7328.	1.2	100
15	The CaaX Proteases, Afc1p and Rce1p, Have Overlapping but Distinct Substrate Specificities. <i>Molecular and Cellular Biology</i> , 2000, 20, 4381-4392.	1.1	93
16	Farnesylpyrophosphate synthetase. A stepwise mechanism for the 1'-4 condensation reaction. <i>Journal of the American Chemical Society</i> , 1981, 103, 3926-3927.	6.6	91
17	Proton-nitrogen-15 NMR studies of <i>Escherichia coli</i> tRNAPhe from HisT mutants: a structural role for pseudouridine. <i>Biochemistry</i> , 1991, 30, 4223-4231.	1.2	91
18	1-Deoxy- d -Xylulose 5-Phosphate Synthase, the Gene Product of Open Reading Frame (ORF) 2816 and ORF 2895 in <i>Rhodobacter capsulatus</i> . <i>Journal of Bacteriology</i> , 2001, 183, 1-11.	1.0	91

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19	Farnesyl Diphosphate Synthase: The Art of Compromise between Substrate Selectivity and Stereoselectivity. <i>Journal of the American Chemical Society</i> , 2006, 128, 15819-15823.	6.6	88
20	BTS1 Encodes a Geranylgeranyl Diphosphate Synthase in <i>Saccharomyces cerevisiae</i> . <i>Journal of Biological Chemistry</i> , 1995, 270, 21793-21799.	1.6	87
21	Enzymes Encoded by the Farnesyl Diphosphate Synthase Gene Family in the Big Sagebrush <i>Artemisia tridentata</i> ssp. <i>spiciformis</i> . <i>Journal of Biological Chemistry</i> , 2003, 278, 32132-32140.	1.6	87
22	Biosynthesis of archaeobacterial ether lipids. Formation of ether linkages by prenyltransferases. <i>Journal of the American Chemical Society</i> , 1993, 115, 1270-1277.	6.6	82
23	Dimethylallyltryptophan synthase. An enzyme-catalyzed electrophilic aromatic substitution. <i>Journal of the American Chemical Society</i> , 1992, 114, 7354-7360.	6.6	77
24	Prenyltransferase: the mechanism of the reaction. <i>Biochemistry</i> , 1976, 15, 1079-1083.	1.2	76
25	[4] Continuous fluorescence assay for protein prenyltransferases. <i>Methods in Enzymology</i> , 1995, 250, 30-43.	0.4	75
26	Prediction of function for the polyprenyl transferase subgroup in the isoprenoid synthase superfamily. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013, 110, E1196-202.	3.3	75
27	Stereochemistry of the methylene iodide-zinc-copper couple methylenation of cyclic allylic alcohols. <i>Journal of the American Chemical Society</i> , 1969, 91, 6892-6894.	6.6	72
28	Tetramethylsqualene, a triterpene from <i>Botryococcus braunii</i> var. <i>showa</i> . <i>Phytochemistry</i> , 1989, 28, 1467-1470.	1.4	72
29	Prenylated proteins. A convenient synthesis of farnesyl cysteinyl thioethers. <i>Journal of the American Chemical Society</i> , 1991, 113, 3176-3177.	6.6	72
30	Macrocyclic Lactones from Dirhodium(II)-Catalyzed Intramolecular Cyclopropanation and Carbon-Hydrogen Insertion. <i>Journal of the American Chemical Society</i> , 1995, 117, 7281-7282.	6.6	72
31	Catalytic Mechanism of <i>Escherichia coli</i> Isopentenyl Diphosphate Isomerase Involves Cys-67, Glu-116, and Tyr-104 as Suggested by Crystal Structures of Complexes with Transition State Analogues and Irreversible Inhibitors. <i>Journal of Biological Chemistry</i> , 2003, 278, 11903-11908.	1.6	72
32	Farnesyl Diphosphate Synthase. Altering the Catalytic Site To Select for Geranyl Diphosphate Activity. <i>Biochemistry</i> , 2000, 39, 15316-15321.	1.2	70
33	Mechanism of the prenyl transfer reaction. Studies with (E)- and (Z)-3-trifluoromethyl-2-buten-1-yl pyrophosphate. <i>Biochemistry</i> , 1977, 16, 5470-5478.	1.2	69
34	Regioselective opening of simple epoxides with diisopropylamine trihydrofluoride. <i>Journal of Organic Chemistry</i> , 1988, 53, 1026-1030.	1.7	69
35	Biosynthesis of Squalene from Farnesyl Diphosphate in Bacteria: Three Steps Catalyzed by Three Enzymes. <i>ACS Central Science</i> , 2015, 1, 77-82.	5.3	69
36	Squalene synthetase, inhibition by ammonium analogs of carbocationic intermediates in the conversion of presqualene diphosphate to squalene. <i>Journal of the American Chemical Society</i> , 1989, 111, 3734-3739.	6.6	68

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37	A Stereoselective Palladium/Copper-Catalyzed Route to Isoprenoids: Synthesis and Biological Evaluation of 13-Methylidene-farnesyl Diphosphate. <i>Journal of Organic Chemistry</i> , 1995, 60, 7821-7829.	1.7	65
38	Recombinant Squalene Synthase. A Mechanism for the Rearrangement of Presqualene Diphosphate to Squalene. <i>Journal of the American Chemical Society</i> , 2002, 124, 8846-8853.	6.6	64
39	Analysis of the isopentenyl diphosphate isomerase gene family from <i>Arabidopsis thaliana</i> . <i>Plant Molecular Biology</i> , 1998, 36, 323-328.	2.0	60
40	Prenyltransferase: determination of the binding mechanism and individual kinetic constants for farnesylpyrophosphate synthetase by rapid quench and isotope partitioning experiments. <i>Biochemistry</i> , 1981, 20, 1893-1901.	1.2	58
41	Characterization of Thermophilic Archaeal Isopentenyl Phosphate Kinases. <i>Biochemistry</i> , 2010, 49, 207-217.	1.2	57
42	Cloning, Solubilization, and Characterization of Squalene Synthase from <i>Thermosynechococcus elongatus</i> BP-1. <i>Journal of Bacteriology</i> , 2008, 190, 3808-3816.	1.0	56
43	Addition of eschenmoser's salt to ketone, ester, & lactone enolates. A convenient synthesis of α -methylene carbonyls via mannich intermediates. <i>Tetrahedron Letters</i> , 1977, 18, 1621-1623.	0.7	53
44	Synthesis of fluorinated analogs of geraniol. <i>Journal of Organic Chemistry</i> , 1981, 46, 1532-1538.	1.7	52
45	Squalene synthetase. Inhibition by an ammonium analogue of a carbocationic intermediate in the conversion of presqualene pyrophosphate to squalene. <i>Journal of the American Chemical Society</i> , 1982, 104, 7376-7378.	6.6	52
46	Recombinant Squalene Synthase. Synthesis of Non-Head-to-Tail Isoprenoids in the Absence of NADPH. <i>Journal of the American Chemical Society</i> , 2002, 124, 8834-8845.	6.6	52
47	Farnesyl Diphosphate Synthase. A Paradigm for Understanding Structure and Function Relationships in E-polyprenyl Diphosphate Synthases. <i>Phytochemistry Reviews</i> , 2006, 5, 17-26.	3.1	52
48	Mechanism of squalene biosynthesis. Presqualene pyrophosphate, stereochemistry, and a mechanism for its conversion to squalene. <i>Journal of the American Chemical Society</i> , 1971, 93, 1783-1785.	6.6	51
49	Farnesyl Diphosphate Analogues with β -Bioorthogonal Azide and Alkyne Functional Groups for Protein Farnesyl Transferase-Catalyzed Ligation Reactions. <i>Journal of Organic Chemistry</i> , 2007, 72, 9291-9297.	1.7	51
50	Regioselective Covalent Immobilization of Recombinant Antibody-Binding Proteins A, G, and L for Construction of Antibody Arrays. <i>Journal of the American Chemical Society</i> , 2013, 135, 8973-8980.	6.6	50
51	Enantioselective Synthesis of (+)-Presqualene Diphosphate. <i>Journal of Organic Chemistry</i> , 1995, 60, 941-945.	1.7	49
52	Protein farnesyltransferase: production in <i>Escherichia coli</i> and immunoaffinity purification of the heterodimer from <i>Saccharomyces cerevisiae</i> . <i>Gene</i> , 1993, 132, 41-47.	1.0	48
53	Tris(tetrabutylammonium) hydrogen pyrophosphate. A new reagent for the preparation of allylic pyrophosphate esters. <i>Journal of Organic Chemistry</i> , 1981, 46, 1967-1969.	1.7	47
54	Methane- and difluoromethanediphosphonate analogs of geranyl diphosphate: hydrolysis-inert alternate substrates. <i>Journal of the American Chemical Society</i> , 1987, 109, 5542-5544.	6.6	47

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55	Synthesis and Evaluation of 1-Deoxy-d-xylulose 5-Phosphoric Acid Analogues as Alternate Substrates for Methylerythritol Phosphate Synthase. <i>Journal of Organic Chemistry</i> , 2005, 70, 1978-1985.	1.7	47
56	<i>Escherichia coli</i> Dimethylallyl Diphosphate:tRNA Dimethylallyltransferase: Essential Elements for Recognition of tRNA Substrates Within the Anticodon Stem-Loop. <i>Biochemistry</i> , 2000, 39, 6546-6553.	1.2	46
57	Shielding effects of a cyclopropane ring. <i>Journal of the American Chemical Society</i> , 1972, 94, 2291-2296.	6.6	45
58	Cuprate-Mediated Synthesis and Biological Evaluation of Cyclopropyl- and tert-Butylfarnesyl Diphosphate Analogs. <i>Journal of Organic Chemistry</i> , 1996, 61, 8010-8015.	1.7	45
59	<i>Escherichia coli</i> Dimethylallyl Diphosphate:tRNA Dimethylallyltransferase: A Binding Mechanism for Recombinant Enzyme. <i>Biochemistry</i> , 1997, 36, 604-614.	1.2	44
60	Kinetic and Spectroscopic Characterization of Type II Isopentenyl Diphosphate Isomerase from <i>Thermus thermophilus</i> : Evidence for Formation of Substrate-Induced Flavin Species. <i>Biochemistry</i> , 2007, 46, 5437-5445.	1.2	44
61	Hydrogen exchange during the enzyme-catalyzed isomerization of isopentenyl diphosphate and dimethylallyl diphosphate. <i>Journal of the American Chemical Society</i> , 1990, 112, 8577-8578.	6.6	42
62	Yeast Protein Farnesyltransferase: A Pre-Steady-State Kinetic Analysis. <i>Biochemistry</i> , 1997, 36, 6367-6376.	1.2	42
63	Computational-guided discovery and characterization of a sesquiterpene synthase from <i>Streptomyces clavuligerus</i> . <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, 5661-5666.	3.3	42
64	Prenyltransferase. New evidence for an ionization-condensation-elimination mechanism with 2-fluorogeranyl pyrophosphate. <i>Journal of the American Chemical Society</i> , 1977, 99, 957-959.	6.6	41
65	Identification of an Archaeal Type II Isopentenyl Diphosphate Isomerase in <i>Methanothermobacter thermoautotrophicus</i> . <i>Journal of Bacteriology</i> , 2004, 186, 1811-1817.	1.0	41
66	<i>Escherichia coli</i> Type I Isopentenyl Diphosphate Isomerase: Structural and Catalytic Roles for Divalent Metals. <i>Journal of the American Chemical Society</i> , 2006, 128, 11545-11550.	6.6	41
67	Biosynthesis of archaeobacterial membranes. Formation of isoprene ethers by a prenyl transfer reaction. <i>Journal of the American Chemical Society</i> , 1990, 112, 1264-1265.	6.6	40
68	Farnesyl-diphosphate synthase. Catalysis of an intramolecular prenyl transfer with bisubstrate analogs. <i>Journal of the American Chemical Society</i> , 1993, 115, 1235-1245.	6.6	40
69	A Common Mechanism for Branching, Cyclopropanation, and Cyclobutanation Reactions in the Isoprenoid Biosynthetic Pathway. <i>Journal of the American Chemical Society</i> , 2008, 130, 1966-1971.	6.6	40
70	Model studies of terpene biosynthesis. A stepwise mechanism for cyclization of nerol to α -terpineol. <i>Journal of the American Chemical Society</i> , 1982, 104, 1422-1424.	6.6	39
71	Synthesis of Protein Farnesyltransferase and Protein Geranylgeranyltransferase Inhibitors: Rapid Access to Chaetomelic Acid A and Its Analogues. <i>Journal of Organic Chemistry</i> , 1996, 61, 6296-6301.	1.7	39
72	Yeast Protein Farnesyltransferase. pKas of Peptide Substrates Bound as Zinc Thiolates. <i>Biochemistry</i> , 1999, 38, 13138-13146.	1.2	39

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73	Multisite Prenylation of 4-Substituted Tryptophans by Dimethylallyltryptophan Synthase. <i>Journal of the American Chemical Society</i> , 2013, 135, 1895-1902.	6.6	39
74	Model studies of the biosynthesis of non-head-to-tail terpenes. Rearrangements of the chrysanthemyl system. <i>Journal of the American Chemical Society</i> , 1977, 99, 3816-3823.	6.6	38
75	Biosynthesis of Archaeobacterial lipids in <i>Halobacterium halobium</i> and <i>Methanobacterium thermoautotrophicum</i> . <i>Journal of Organic Chemistry</i> , 1993, 58, 3919-3922.	1.7	38
76	Biosynthesis of Squalene. Evidence for a Tertiary Cyclopropylcarbanyl Cationic Intermediate in the Rearrangement of Presqualene Diphosphate to Squalene. <i>Journal of the American Chemical Society</i> , 1996, 118, 13089-13090.	6.6	38
77	Braunicene. A novel cyclic C32 isoprenoid from <i>Botryococcus braunii</i> . <i>Journal of the American Chemical Society</i> , 1988, 110, 3959-3964.	6.6	37
78	Farnesyl Protein Transferase: Identification of K164 [±] and Y300 [±] as Catalytic Residues by Mutagenesis and Kinetic Studies. <i>Biochemistry</i> , 1999, 38, 11239-11249.	1.2	37
79	Zinc Is an Essential Cofactor for Type I Isopentenyl Diphosphate:Dimethylallyl Diphosphate Isomerase. <i>Journal of the American Chemical Society</i> , 2003, 125, 9008-9009.	6.6	37
80	Tyrosine <i>O</i> -Prenyltransferase SirD Catalyzes <i>S</i> -, <i>C</i> -, and <i>N</i> -Prenylations on Tyrosine and Tryptophan Derivatives. <i>ACS Chemical Biology</i> , 2013, 8, 2707-2714.	1.6	37
81	Biosynthesis of isoprenoid membranes in the methanogenic archaeobacterium <i>Methanospirillum hungatei</i> . <i>Journal of the American Chemical Society</i> , 1988, 110, 2620-2624.	6.6	36
82	Isolation of <i>Schizosaccharomyces pombe</i> Isopentenyl Diphosphate Isomerase cDNA Clones by Complementation and Synthesis of the Enzyme in <i>Escherichia coli</i> . <i>Journal of Biological Chemistry</i> , 1995, 270, 11298-11303.	1.6	36
83	Squalene Synthase: Steady-State, Pre-Steady-State, and Isotope-Trapping Studies. <i>Biochemistry</i> , 2000, 39, 1748-1760.	1.2	36
84	Type II Isopentenyl Diphosphate Isomerase: Irreversible Inactivation by Covalent Modification of Flavin. <i>Journal of the American Chemical Society</i> , 2008, 130, 4906-4913.	6.6	36
85	Inhibition of IspH, a [4Fe-4S] ²⁺ Enzyme Involved in the Biosynthesis of Isoprenoids via the Methylerythritol Phosphate Pathway. <i>Journal of the American Chemical Society</i> , 2013, 135, 1816-1822.	6.6	36
86	Disruption and mapping of IDI1, the gene for isopentenyl diphosphate isomerase in <i>Saccharomyces cerevisiae</i> . <i>Yeast</i> , 1992, 8, 743-748.	0.8	35
87	Synthesis of 2-C-Methyl-d-erythritol 4-Phosphate: The First Pathway-Specific Intermediate in the Methylerythritol Phosphate Route to Isoprenoids. <i>Organic Letters</i> , 2000, 2, 215-217.	2.4	35
88	Type II Isopentenyl Diphosphate Isomerase from <i>Synechocystis</i> sp. Strain PCC 6803. <i>Journal of Bacteriology</i> , 2004, 186, 8156-8158.	1.0	35
89	Synthesis of analogs of farnesyl diphosphate. <i>Tetrahedron</i> , 1996, 52, 119-130.	1.0	34
90	Yeast Protein Farnesyltransferase. Site-Directed Mutagenesis of Conserved Residues in the β^2 -Subunit. <i>Biochemistry</i> , 1997, 36, 9246-9252.	1.2	34

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91	Synthesis of Deuterium-Labeled Derivatives of Dimethylallyl Diphosphate. <i>Journal of Organic Chemistry</i> , 2006, 71, 1739-1741.	1.7	34
92	Farnesylpyrophosphate synthetase. Evidence for a rigid geranyl cation-pyrophosphate anion pair. <i>Journal of the American Chemical Society</i> , 1981, 103, 3927-3929.	6.6	33
93	Isopentenyl diphosphate:dimethylallyl diphosphate isomerase. Irreversible inhibition of the enzyme by active-site-directed covalent attachment. <i>Journal of the American Chemical Society</i> , 1985, 107, 8307-8308.	6.6	33
94	NMR studies of nucleic acids. Deuterium isotope effects on carbon-13 chemical shifts in hydrogen-bonded complexes of pyrimidines and purines. <i>Journal of the American Chemical Society</i> , 1988, 110, 7640-7647.	6.6	33
95	Farnesyl-diphosphate synthase. Interplay between substrate topology, stereochemistry, and regiochemistry in electrophilic alkylations. <i>Journal of the American Chemical Society</i> , 1993, 115, 1245-1260.	6.6	33
96	Geranylgeranylgeranyl Phosphate Synthase. Characterization of the Recombinant Enzyme from <i>Methanobacterium thermoautotrophicum</i> . <i>Biochemistry</i> , 2001, 40, 14847-14854.	1.2	33
97	Proton NMR studies of nitrogen-15-labeled <i>Escherichia coli</i> tRNA ^{fMet} . Assignments of imino resonances for uridine-related bases by proton-nitrogen-15 heteronuclear double resonance difference spectroscopy. <i>Journal of the American Chemical Society</i> , 1983, 105, 143-145.	6.6	32
98	Stereochemical studies of botryococcene biosynthesis: analogies between 1'-1 and 1'-3 condensations in the isoprenoid pathway. <i>Journal of the American Chemical Society</i> , 1989, 111, 2713-2715.	6.6	32
99	Biosynthesis of Non-Head-to-Tail Isoprenoids. Synthesis of 1'-1 and 1'-3 Structures by Recombinant Yeast Squalene Synthase. <i>Journal of the American Chemical Society</i> , 1995, 117, 1641-1642.	6.6	32
100	Synthesis of 1-Deoxy-d-xylulose and 1-Deoxy-d-xylulose-5-phosphate. <i>Journal of Organic Chemistry</i> , 1999, 64, 1508-1511.	1.7	31
101	Novel phosphonylphosphinyl (P-C-P-C-) analogs of biochemically interesting diphosphates. Syntheses and properties of P-C-P-C-, analogs of isopentenyl diphosphate and dimethylallyl diphosphate. <i>Journal of the American Chemical Society</i> , 1987, 109, 5544-5545.	6.6	30
102	<i>Escherichia coli</i> Dimethylallyl Diphosphate:tRNA Dimethylallyltransferase: Site-Directed Mutagenesis of Highly Conserved Residues. <i>Biochemistry</i> , 2001, 40, 1734-1740.	1.2	30
103	2',3',5'-Tri-O-benzoyl[4-13C]uridine. An efficient, regiospecific synthesis of the pyrimidine ring. <i>Journal of Organic Chemistry</i> , 1978, 43, 1547-1550.	1.7	29
104	Yeast Protein Geranylgeranyltransferase Type-I: Steady-State Kinetics and Substrate Binding. <i>Biochemistry</i> , 1997, 36, 4552-4557.	1.2	29
105	Synthesis of (S)-Isoprenoid Thiodiphosphates as Substrates and Inhibitors. <i>Journal of Organic Chemistry</i> , 2001, 66, 6705-6710.	1.7	29
106	Model studies of terpene biosynthesis. Stereospecific cyclization of N-methyl-(S)-4-([1'-2H]neryloxy)pyridinium methyl sulfate to .alpha.-terpineol. <i>Journal of the American Chemical Society</i> , 1982, 104, 1420-1422.	6.6	28
107	Transition State Analogs for Protein Farnesyltransferase. <i>Journal of the American Chemical Society</i> , 1996, 118, 8761-8762.	6.6	28
108	Yeast Geranylgeranyltransferase Type-II: Steady State Kinetic Studies of the Recombinant Enzyme. <i>Biochemistry</i> , 1996, 35, 10454-10463.	1.2	28

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109	Type-2 Isopentenyl Diphosphate Isomerase. Mechanistic Studies with Cyclopropyl and Epoxy Analogues. <i>Journal of the American Chemical Society</i> , 2007, 129, 7740-7741.	6.6	28
110	X-ray Structures of Isopentenyl Phosphate Kinase. <i>ACS Chemical Biology</i> , 2010, 5, 517-527.	1.6	28
111	Recent studies of the mechanism of protein prenylation (1992 to 1998). <i>Natural Product Reports</i> , 2000, 17, 137-144.	5.2	27
112	Measuring the activity of farnesyltransferase by capillary electrophoresis with laser-induced fluorescence detection. <i>Electrophoresis</i> , 2002, 23, 3398-3403.	1.3	27
113	Stereospecific cationic rearrangements of syn- and antibicyclo[6.1.0]nonane derivatives. <i>Journal of the American Chemical Society</i> , 1970, 92, 4274-4281.	6.6	26
114	Allylic and Homoallylic CD Exciton Chirality: A Sensitive Method for Determining the Absolute Stereochemistry of Natural Products. <i>Journal of Organic Chemistry</i> , 1995, 60, 3539-3542.	1.7	26
115	Coupling of Isoprenoid Triflates with Organoboron Nucleophiles: Synthesis and Biological Evaluation of Geranylgeranyl Diphosphate Analogues. <i>Bioorganic and Medicinal Chemistry</i> , 2002, 10, 1207-1219.	1.4	26
116	Structure of <i>Thermus thermophilus</i> type 2 isopentenyl diphosphate isomerase inferred from crystallography and molecular dynamics. <i>Biochemical and Biophysical Research Communications</i> , 2005, 338, 1515-1518.	1.0	26
117	Defining the Product Chemical Space of Monoterpenoid Synthases. <i>PLoS Computational Biology</i> , 2016, 12, e1005053.	1.5	26
118	Proton NMR studies of ¹⁵ N-labeled <i>Escherichia coli</i> tRNA ^{fMet} . An unambiguous assignment for the G-U pair and detection of a uridine resonance at 11.4 ppm. <i>Journal of the American Chemical Society</i> , 1982, 104, 5811-5813.	6.6	25
119	Covalent modification of reduced flavin mononucleotide in type-2 isopentenyl diphosphate isomerase by active-site-directed inhibitors. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2011, 108, 20461-20466.	3.3	25
120	Stereospecific homoallylic ring expansions and contractions. <i>Journal of the American Chemical Society</i> , 1970, 92, 4282-4288.	6.6	24
121	Model studies of the biosynthesis of non-head-to-tail terpenes. Stereochemistry of the head-to-head rearrangement. <i>Journal of the American Chemical Society</i> , 1977, 99, 3830-3837.	6.6	24
122	Solid-Phase Synthesis of a Farnesylated CaaX Peptide Library: Inhibitors of the Ras CaaX Endoprotease. <i>ACS Combinatorial Science</i> , 2000, 2, 522-536.	3.3	24
123	Bacterial Phytoene Synthase: Molecular Cloning, Expression, and Characterization of <i>Erwinia herbicola</i> Phytoene Synthase. <i>Biochemistry</i> , 2003, 42, 3359-3365.	1.2	24
124	Farnesyl pyrophosphate synthetase. Mechanistic studies of the 1'-4 coupling reaction in the terpene biosynthetic pathway. <i>Journal of the American Chemical Society</i> , 1979, 101, 6761-6763.	6.6	23
125	Isopentenyl diphosphate isomerase. Mechanism of active-site-directed irreversible inhibition by 3-(fluoromethyl)-3-butenyl diphosphate. <i>Journal of the American Chemical Society</i> , 1989, 111, 3740-3742.	6.6	23
126	Predicting the Functions and Specificity of Triterpenoid Synthases: A Mechanism-Based Multi-intermediate Docking Approach. <i>PLoS Computational Biology</i> , 2014, 10, e1003874.	1.5	23

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127	Mass spectral data for gas chromatograph-mass spectral identification of some irregular monoterpenes. <i>Journal of Chemical & Engineering Data</i> , 1976, 21, 500-502.	1.0	22
128	Chrysanthemyl Diphosphate Synthase. The Relationship among Chain Elongation, Branching, and Cyclopropanation Reactions in the Isoprenoid Biosynthetic Pathway. <i>Journal of the American Chemical Society</i> , 2003, 125, 6886-6888.	6.6	22
129	Synthesis and biological activity of isopentenyl diphosphate analogues. <i>Bioorganic and Medicinal Chemistry</i> , 2004, 12, 763-770.	1.4	22
130	Enantioselective Inhibition of Squalene Synthase by Aziridine Analogues of Presqualene Diphosphate. <i>Journal of Organic Chemistry</i> , 2010, 75, 4769-4777.	1.7	22
131	Proton NMR studies of ¹⁵ N-labeled <i>Escherichia coli</i> tRNA ^{fMet} . Use of ¹ J ¹ H- ¹⁵ N couplings to identify imino resonances of uridine-related bases. <i>Journal of the American Chemical Society</i> , 1982, 104, 5810-5811.	6.6	21
132	Solvolysis of allylic isoprene phosphorothioate esters. A mechanistic study of the thiono-thiolo rearrangement. <i>Journal of the American Chemical Society</i> , 1991, 113, 4895-4903.	6.6	21
133	Synthesis of (E)-4-Hydroxydimethylallyl Diphosphate. An Intermediate in the Methyl Erythritol Phosphate Branch of the Isoprenoid Pathway. <i>Journal of Organic Chemistry</i> , 2002, 67, 5009-5010.	1.7	21
134	Type II Isopentenyl Diphosphate Isomerase: Probing the Mechanism with Alkyne/Allene Diphosphate Substrate Analogues. <i>Biochemistry</i> , 2010, 49, 6228-6233.	1.2	21
135	Biosynthesis of Isoprenoids in <i>Escherichia coli</i> : Stereochemistry of the Reaction Catalyzed by Farnesyl Diphosphate Synthase. <i>Organic Letters</i> , 1999, 1, 1071-1073.	2.4	20
136	Synthesis and Evaluation of Substrate Analogues as Mechanism-Based Inhibitors of Type II Isopentenyl Diphosphate Isomerase. <i>Journal of Organic Chemistry</i> , 2008, 73, 726-729.	1.7	20
137	Archaeobacterial isoprenoids. Synthesis of 2,3-di-O-phytanyl-sn-glycerol and its 1,2-isomer. <i>Journal of Organic Chemistry</i> , 1985, 50, 5634-5636.	1.7	19
138	Solid-Phase Synthesis of a Radiolabeled, Biotinylated, and Farnesylated Ca1a2X Peptide Substrate for Ras- and Mating Factor Converting Enzyme. <i>Bioconjugate Chemistry</i> , 2001, 12, 35-43.	1.8	19
139	Addition of Grignard and lithium reagents to Eschenmoser's salt. A convenient synthesis of terminal olefins. <i>Tetrahedron Letters</i> , 1977, 18, 1299-1302.	0.7	18
140	Synthesis of ammonium analogs of carbocationic intermediates in the conversion of presqualene diphosphate to squalene. <i>Journal of Organic Chemistry</i> , 1988, 53, 5903-5908.	1.7	18
141	(trans-2'-Methylcyclopropyl)methyl system. Stereochemistry of ionization, rearrangement, and solvent capture. <i>Journal of the American Chemical Society</i> , 1974, 96, 7591-7593.	6.6	17
142	Farnesylpyrophosphate synthetase. A case for common electrophilic mechanisms for prenyltransferases and terpene cyclases. <i>Journal of the American Chemical Society</i> , 1985, 107, 5277-5279.	6.6	17
143	The Sorbitol Phosphotransferase System Is Responsible for Transport of 2-C-Methyl-d-Erythritol into <i>Salmonella enterica</i> Serovar Typhimurium. <i>Journal of Bacteriology</i> , 2004, 186, 473-480.	1.0	17
144	Proton Exchange in Type II Isopentenyl Diphosphate Isomerase. <i>Organic Letters</i> , 2004, 6, 5019-5021.	2.4	17

#	ARTICLE	IF	CITATIONS
145	Bioorganic Chemistry. A Natural Reunion of the Physical and Life Sciences. <i>Journal of Organic Chemistry</i> , 2009, 74, 2631-2645.	1.7	17
146	Synthesis and Evaluation of Chlorinated Substrate Analogues for Farnesyl Diphosphate Synthase. <i>Journal of Organic Chemistry</i> , 2011, 76, 1838-1843.	1.7	17
147	[20] Purification of farnesylpyrophosphate synthetase by affinity chromatography. <i>Methods in Enzymology</i> , 1985, 110, 171-184.	0.4	16
148	Synthesis of 4-Diphosphocytidyl-2-C-methyl-d-erythritol and 2-C-Methyl-d-erythritol-4-phosphate. <i>Journal of Organic Chemistry</i> , 2002, 67, 5416-5418.	1.7	16
149	Isopentenyl Diphosphate Isomerase. Mechanism-Based Inhibition by Diene Analogues of Isopentenyl Diphosphate and Dimethylallyl Diphosphate. <i>Journal of the American Chemical Society</i> , 2005, 127, 17433-17438.	6.6	16
150	Regioselective Covalent Immobilization of Catalytically Active Glutathione S-Transferase on Glass Slides. <i>Bioconjugate Chemistry</i> , 2013, 24, 571-577.	1.8	16
151	Structure-Function Studies of <i>Artemisia tridentata</i> Farnesyl Diphosphate Synthase and Chrysanthemyl Diphosphate Synthase by Site-Directed Mutagenesis and Morphogenesis. <i>Journal of the American Chemical Society</i> , 2017, 139, 14556-14567.	6.6	16
152	Solvolysis and degenerate cyclopropylcarbinyl-cyclopropylcarbinyl rearrangement of a hexamethylcyclopropylcarbinyl system. <i>Journal of the American Chemical Society</i> , 1969, 91, 3650-3652.	6.6	15
153	Synthesis and Evaluation of 1-Deoxy-d-xylulose 5-Phosphate Analogues as Chelation-Based Inhibitors of Methylerythritol Phosphate Synthase. <i>Journal of Organic Chemistry</i> , 2005, 70, 9955-9959.	1.7	15
154	Cyclopropylcarbinyl-allyl rearrangement of a hexamethylcyclopropylcarbinyl system. <i>Journal of the American Chemical Society</i> , 1969, 91, 3649-3650.	6.6	14
155	Photoisomerizations of cis- and trans-3-methylenecyclodecene. <i>Journal of the American Chemical Society</i> , 1970, 92, 7408-7412.	6.6	14
156	Crystal Structure of Cucumene Synthase, a Terpenoid Cyclase That Generates a Linear Triquinane Sesquiterpene. <i>Biochemistry</i> , 2018, 57, 6326-6335.	1.2	14
157	Efficient syntheses of [3- ¹⁵ N]uracil and [3- ¹⁵ N]thymine. <i>Nucleic Acids Research</i> , 1983, 11, 6497-6504.	6.5	13
158	Braunicene. Absolute stereochemistry of the cyclohexane ring. <i>Journal of Organic Chemistry</i> , 1988, 53, 4089-4094.	1.7	13
159	The <i>Journal of Organic Chemistry</i> Celebrates 75 Years of Publication. <i>Journal of Organic Chemistry</i> , 2010, 75, 1-1.	1.7	13
160	Type-2 Isopentenyl Diphosphate Isomerase: Evidence for a Stepwise Mechanism. <i>Journal of the American Chemical Society</i> , 2011, 133, 19017-19019.	6.6	13
161	Mechanistic Studies of the Protonation-Deprotonation Reactions for Type 1 and Type 2 Isopentenyl Diphosphate:Dimethylallyl Diphosphate Isomerase. <i>Journal of the American Chemical Society</i> , 2018, 140, 12900-12908.	6.6	13
162	.alpha.,.alpha.,2,2,3,3-Hexamethylcyclopropylcarbinyl system. Carbonium ion behavior in nucleophilic and superacid solvents. <i>Journal of the American Chemical Society</i> , 1972, 94, 2297-2305.	6.6	12

#	ARTICLE	IF	CITATIONS
163	Model studies in terpene biosynthesis. <i>Journal of Agricultural and Food Chemistry</i> , 1974, 22, 167-173.	2.4	12
164	Model studies of the biosynthesis of non-head-to-tail terpenes. Stereochemistry of ionization for N-methyl-4-[(1S,1'R,3'R)-[1-2H]chrysanthemyl)pyridinium iodide. <i>Journal of the American Chemical Society</i> , 1977, 99, 3824-3829.	6.6	12
165	Synthesis of (R)-[2-2H]isopentenyl Diphosphate and Determination of Its Enantiopurity by 2H NMR Spectroscopy in a Lyotropic Medium. <i>Organic Letters</i> , 1999, 1, 1067-1070.	2.4	12
166	Lethal Mutations in the Isoprenoid Pathway of <i>Salmonella enterica</i> . <i>Journal of Bacteriology</i> , 2006, 188, 1444-1450.	1.0	12
167	Regio- and Chemoselective Immobilization of Proteins on Gold Surfaces. <i>Bioconjugate Chemistry</i> , 2014, 25, 269-275.	1.8	12
168	Isoprenoid Biosynthesis in Pathogenic Bacteria: Nuclear Resonance Vibrational Spectroscopy Provides Insight into the Unusual [4Fe-4S] Cluster of the <i>E. coli</i> LytB/IspH Protein. <i>Angewandte Chemie - International Edition</i> , 2015, 54, 12584-12587.	7.2	12
169	² H-Deuterium Isotope Effects as Probes for Transition-State Structures of Isoprenoid Substrates. <i>Journal of Organic Chemistry</i> , 2014, 79, 3572-3580.	1.7	11
170	Solvolysis of 1-chlorobicyclo[3.3.1]nonane. <i>Journal of Organic Chemistry</i> , 1968, 33, 1237-1239.	1.7	10
171	Extension of the HA acidity function into oleum mixtures. <i>Journal of the American Chemical Society</i> , 1975, 97, 1797-1801.	6.6	10
172	Isobraunicene, wolficene, and isowolficene. New cyclic 1'-3 fused isoprenoids from <i>Botryococcus braunii</i> . <i>Journal of Organic Chemistry</i> , 1988, 53, 5390-5392.	1.7	10
173	Absolute Configuration of Hydroxysqualene. An Intermediate in Bacterial Hopanoid Biosynthesis. <i>Organic Letters</i> , 2016, 18, 512-515.	2.4	10
174	Synthesis of Geranyl S-Thiolodiphosphate. A New Alternative Substrate/Inhibitor for Prenyltransferases. <i>Organic Letters</i> , 2000, 2, 2287-2289.	2.4	9
175	Monitoring the three enzymatic activities involved in posttranslational modifications of Ras proteins. <i>Analytica Chimica Acta</i> , 2004, 521, 1-7.	2.6	9
176	Determination of Kinetics and the Crystal Structure of a Novel Type 2 Isopentenyl Diphosphate: Dimethylallyl Diphosphate Isomerase from <i>Streptococcus pneumoniae</i> . <i>ChemBioChem</i> , 2014, 15, 1452-1458.	1.3	9
177	Recombinant Squalene Synthase. Synthesis of Cyclopentyl Non-Head-to-Tail Triterpenes. <i>Journal of Organic Chemistry</i> , 2009, 74, 7562-7565.	1.7	8
178	Novel route to chaetomelic acid A and analogues: Serendipitous discovery of a more competent FTase inhibitor. <i>Bioorganic and Medicinal Chemistry</i> , 2013, 21, 348-358.	1.4	8
179	Direct observation of uracil dication and related derivatives. <i>Tetrahedron Letters</i> , 1972, 13, 3823-3826.	0.7	7
180	Model studies of terpene biosynthesis. Synthesis and absolute configuration of (+)-trans-2,2-dimethyl-3-(2'-methylpropenyl)cyclobutanol. <i>Journal of Organic Chemistry</i> , 1974, 39, 3288-3291.	1.7	7

#	ARTICLE	IF	CITATIONS
181	Model studies of terpene biosynthesis. Intermolecular 1'-2 electrophilic condensation of 3-methyl-2-butenyl acetate. <i>Journal of the American Chemical Society</i> , 1982, 104, 1413-1420.	6.6	7
182	Mutagenesis of Isopentenyl Phosphate Kinase To Enhance Geranyl Phosphate Kinase Activity. <i>ACS Chemical Biology</i> , 2012, 7, 1241-1246.	1.6	7
183	Model studies of terpene biosynthesis. Stereoselective ionization of N-methyl-4-[(α ,S,1R,3R)-chrysanthemyl]pyridinium-d1 iodide. <i>Journal of the American Chemical Society</i> , 1972, 94, 5515-5516.	6.6	6
184	An efficient synthesis of [8- 13 C]adenine. <i>Journal of Organic Chemistry</i> , 1988, 53, 1322-1323.	1.7	6
185	Yeast Protein Farnesyltransferase. Binding of S-Alkyl Peptides and Related Analogues. <i>Organic Letters</i> , 1999, 1, 815-817.	2.4	6
186	Synthesis of Methylerythritol Phosphate Analogues and Their Evaluation as Alternate Substrates for IspDF and IspE from <i>Agrobacterium tumefaciens</i> . <i>Journal of Organic Chemistry</i> , 2014, 79, 9170-9178.	1.7	6
187	Sandwich Antibody Arrays Using Recombinant Antibody-Binding Protein L. <i>Langmuir</i> , 2014, 30, 6629-6635.	1.6	6
188	Site-Selective Synthesis of 15 N- and 13 C-Enriched Flavin Mononucleotide Coenzyme Isotopologues. <i>Journal of Organic Chemistry</i> , 2016, 81, 5087-5092.	1.7	6
189	Model studies of terpene biosynthesis. Cationic rearrangements leading to head-to-head terpenes. <i>Journal of the American Chemical Society</i> , 1972, 94, 5921-5923.	6.6	5
190	Model studies of terpene biosynthesis. Synthesis of (+)-2-[trans-2'-(2''-methylpropenyl)cyclopropyl]propan-2-ol. <i>Journal of Organic Chemistry</i> , 1975, 40, 139-140.	1.7	5
191	Mechanistic Studies of the Prenyl Transfer Reaction with Fluorinated Substrate Analogs. <i>ACS Symposium Series</i> , 1996, , 158-168.	0.5	5
192	Non-head-to-tail monoterpenes. Synthesis of (S)-lyratol and (S)-lyratyl acetate from (1R,3R)-chrysanthemic acid. <i>Journal of Organic Chemistry</i> , 1979, 44, 2441-2444.	1.7	4
193	Reporting Analytical Data. <i>Journal of Organic Chemistry</i> , 2009, 74, 6415-6415.	1.7	4
194	Kinetic and Binding Studies of <i>Streptococcus pneumoniae</i> Type 2 Isopentenyl Diphosphate:Dimethylallyl Diphosphate Isomerase. <i>Biochemistry</i> , 2016, 55, 2260-2268.	1.2	4
195	Further Insight into Crystal Structures of <i>Escherichia coli</i> IspH/LytB in Complex with Two Potent Inhibitors of the MEP Pathway: A Starting Point for Rational Design of New Antimicrobials. <i>ChemBioChem</i> , 2017, 18, 2137-2144.	1.3	4
196	Stereospecific $^5\text{JHf-H}$ and $^6\text{JHf-H}$ couplings in 3-methyl-3-azabicyclo[3.1.0.]hexan-2,4-dione. <i>Tetrahedron Letters</i> , 1971, 12, 2255-2258.	0.7	3
197	Tetartohedral twinning in IDI-2 from <i>Thermus thermophilus</i> : crystallization under anaerobic conditions. <i>Acta Crystallographica Section F, Structural Biology Communications</i> , 2014, 70, 347-349.	0.4	3
198	Synthesis and Enzymatic Studies of Bisubstrate Analogues for Farnesyl Diphosphate Synthase. <i>Journal of Organic Chemistry</i> , 2015, 80, 3902-3913.	1.7	3

#	ARTICLE	IF	CITATIONS
199	Construction of Functional Monomeric Type 2 Isopentenyl Diphosphate:Dimethylallyl Diphosphate Isomerase. <i>Biochemistry</i> , 2016, 55, 4229-4238.	1.2	3
200	Synthesis and Enzymatic Studies of Isoprenoid Thiolo Bisubstrate Analogues. <i>Journal of Organic Chemistry</i> , 2016, 81, 5093-5100.	1.7	2
201	[11] Reversed-phase high-performance liquid chromatography of C5 to C20 isoprenoid benzoates and naphthoates. <i>Methods in Enzymology</i> , 1985, 111, 252-263.	0.4	1
202	<i>The Journal of Organic Chemistry</i> Implements Brief Communications. <i>Journal of Organic Chemistry</i> , 2011, 76, 3615-3615.	1.7	1
203	The Journal of Organic Chemistry Outstanding Author Award. <i>Journal of Organic Chemistry</i> , 2013, 78, 211-211.	1.7	1
204	Howard Elliott Zimmerman. <i>Journal of Organic Chemistry</i> , 2013, 78, 1707-1708.	1.7	1
205	Editorial for the Special Issue on Mechanisms in Metal-Based Organic Chemistry. <i>Journal of Organic Chemistry</i> , 2014, 79, 11829-11829.	1.7	1
206	Linking the Biological and Synthetic Worlds. <i>Bioconjugate Chemistry</i> , 2015, 26, 1158-1158.	1.8	1
207	MPSA abstracts. <i>The Protein Journal</i> , 1994, 13, 515-543.	1.1	0
208	Unintended Consequences?. <i>Journal of Organic Chemistry</i> , 2004, 69, 1761-1761.	1.7	0
209	JOCynopses. <i>Journal of Organic Chemistry</i> , 2011, 76, 2385-2385.	1.7	0
210	<i>The Journal of Organic Chemistry</i> Implements Brief Communications. <i>Organic Letters</i> , 2011, 13, 2515-2515.	2.4	0
211	Fifteen Years with JOC. <i>Journal of Organic Chemistry</i> , 2016, 81, 12073-12074.	1.7	0