C Dale Poulter

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/1284367/publications.pdf

Version: 2024-02-01

211 papers

9,006 citations

41344 49 h-index 82 g-index

216 all docs

216 docs citations

216 times ranked

5410 citing authors

| # | Article | IF | CITATIONS |
|----|--|------|-----------|
| 1 | Crystal Structure of Cucumene Synthase, a Terpenoid Cyclase That Generates a Linear Triquinane Sesquiterpene. Biochemistry, 2018, 57, 6326-6335. | 2.5 | 14 |
| 2 | Mechanistic Studies of the Protonation–Deprotonation Reactions for Type 1 and Type 2 Isopentenyl Diphosphate:Dimethylallyl Diphosphate Isomerase. Journal of the American Chemical Society, 2018, 140, 12900-12908. | 13.7 | 13 |
| 3 | Structure–Function Studies of <i>Artemisia tridentata</i> Farnesyl Diphosphate Synthase and Chrysanthemyl Diphosphate Synthase by Site-Directed Mutagenesis and Morphogenesis. Journal of the American Chemical Society, 2017, 139, 14556-14567. | 13.7 | 16 |
| 4 | 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. ChemBioChem, 2017, 18, 2137-2144. | 2.6 | 4 |
| 5 | Construction of Functional Monomeric Type 2 Isopentenyl Diphosphate:Dimethylallyl Diphosphate Isomerase. Biochemistry, 2016, 55, 4229-4238. | 2.5 | 3 |
| 6 | Fifteen Years with JOC. Journal of Organic Chemistry, 2016, 81, 12073-12074. | 3.2 | 0 |
| 7 | Kinetic and Binding Studies of <i>Streptococcus pneumoniae</i> Type 2 Isopentenyl Diphosphate:Dimethylallyl Diphosphate Isomerase. Biochemistry, 2016, 55, 2260-2268. | 2.5 | 4 |
| 8 | Site-Selective Synthesis of ¹⁵ N- and ¹³ C-Enriched Flavin Mononucleotide Coenzyme Isotopologues. Journal of Organic Chemistry, 2016, 81, 5087-5092. | 3.2 | 6 |
| 9 | Synthesis and Enzymatic Studies of Isoprenoid Thiolo Bisubstrate Analogues. Journal of Organic Chemistry, 2016, 81, 5093-5100. | 3.2 | 2 |
| 10 | Absolute Configuration of Hydroxysqualene. An Intermediate in Bacterial Hopanoid Biosynthesis. Organic Letters, 2016, 18, 512-515. | 4.6 | 10 |
| 11 | Defining the Product Chemical Space of Monoterpenoid Synthases. PLoS Computational Biology, 2016, 12, e1005053. | 3.2 | 26 |
| 12 | Isoprenoid Biosynthesis in Pathogenic Bacteria: Nuclear Resonance Vibrational Spectroscopy Provides Insight into the Unusual [4Feâ€4S] Cluster of the ⟨i⟩E.â€coli⟨/i⟩ LytB/IspH Protein. Angewandte Chemie - International Edition, 2015, 54, 12584-12587. | 13.8 | 12 |
| 13 | Biosynthesis of Squalene from Farnesyl Diphosphate in Bacteria: Three Steps Catalyzed by Three Enzymes. ACS Central Science, 2015, 1, 77-82. | 11.3 | 69 |
| 14 | Linking the Biological and Synthetic Worlds. Bioconjugate Chemistry, 2015, 26, 1158-1158. | 3.6 | 1 |
| 15 | Computational-guided discovery and characterization of a sesquiterpene synthase from <i>Streptomyces clavuligerus</i> . Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 5661-5666. | 7.1 | 42 |
| 16 | Synthesis and Enzymatic Studies of Bisubstrate Analogues for Farnesyl Diphosphate Synthase. Journal of Organic Chemistry, 2015, 80, 3902-3913. | 3.2 | 3 |
| 17 | Tetartohedral twinning in IDI-2 from <i>Thermus thermophilus</i> : crystallization under anaerobic conditions. Acta Crystallographica Section F, Structural Biology Communications, 2014, 70, 347-349. | 0.8 | 3 |
| 18 | Editorial for the Special Issue on Mechanisms in Metal-Based Organic Chemistry. Journal of Organic Chemistry, 2014, 79, 11829-11829. | 3.2 | 1 |

| # | Article | IF | CITATIONS |
|----|---|--------------|-----------|
| 19 | Predicting the Functions and Specificity of Triterpenoid Synthases: A Mechanism-Based Multi-intermediate Docking Approach. PLoS Computational Biology, 2014, 10, e1003874. | 3.2 | 23 |
| 20 | Determination of Kinetics and the Crystal Structure of a Novel Type 2 Isopentenyl Diphosphate: Dimethylallyl Diphosphate Isomerase from <i>Streptococcus pneumoniae</i> . ChemBioChem, 2014, 15, 1452-1458. | 2.6 | 9 |
| 21 | Regio- and Chemoselective Immobilization of Proteins on Gold Surfaces. Bioconjugate Chemistry, 2014, 25, 269-275. | 3.6 | 12 |
| 22 | Synthesis of Methylerythritol Phosphate Analogues and Their Evaluation as Alternate Substrates for IspDF and IspE from <i>Agrobacterium tumefaciens</i>). Journal of Organic Chemistry, 2014, 79, 9170-9178. | 3.2 | 6 |
| 23 | Sandwich Antibody Arrays Using Recombinant Antibody-Binding Protein L. Langmuir, 2014, 30, 6629-6635. | 3.5 | 6 |
| 24 | Î-Deuterium Isotope Effects as Probes for Transition-State Structures of Isoprenoid Substrates. Journal of Organic Chemistry, 2014, 79, 3572-3580. | 3.2 | 11 |
| 25 | The Journal of Organic Chemistry Outstanding Author Award. Journal of Organic Chemistry, 2013, 78, 211-211. | 3.2 | 1 |
| 26 | Inhibition of IspH, a [4Fe–4S]2+ Enzyme Involved in the Biosynthesis of Isoprenoids via the Methylerythritol Phosphate Pathway. Journal of the American Chemical Society, 2013, 135, 1816-1822. | 13.7 | 36 |
| 27 | Howard Elliott Zimmerman. Journal of Organic Chemistry, 2013, 78, 1707-1708. | 3.2 | 1 |
| 28 | Regioselective Covalent Immobilization of Catalytically Active Glutathione S-Transferase on Glass Slides. Bioconjugate Chemistry, 2013, 24, 571-577. | 3.6 | 16 |
| 29 | Regioselective Covalent Immobilization of Recombinant Antibody-Binding Proteins A, G, and L for Construction of Antibody Arrays. Journal of the American Chemical Society, 2013, 135, 8973-8980. | 13.7 | 50 |
| 30 | Novel route to chaetomellic acid A and analogues: Serendipitous discovery of a more competent FTase inhibitor. Bioorganic and Medicinal Chemistry, 2013, 21, 348-358. | 3.0 | 8 |
| 31 | Tyrosine <i>O</i> -Prenyltransferase SirD Catalyzes <i>S</i> -, <i>C</i> -, and <i>N</i> -Prenylations on Tyrosine and Tryptophan Derivatives. ACS Chemical Biology, 2013, 8, 2707-2714. | 3.4 | 37 |
| 32 | Multisite Prenylation of 4-Substituted Tryptophans by Dimethylallyltryptophan Synthase. Journal of the American Chemical Society, 2013, 135, 1895-1902. | 13.7 | 39 |
| 33 | Prediction of function for the polyprenyl transferase subgroup in the isoprenoid synthase superfamily. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, E1196-202. | 7.1 | 75 |
| 34 | Mutagenesis of Isopentenyl Phosphate Kinase To Enhance Geranyl Phosphate Kinase Activity. ACS Chemical Biology, 2012, 7, 1241-1246. | 3 . 4 | 7 |
| 35 | <i>The Journal of Organic Chemistry</i> Implements Brief Communications. Journal of Organic Chemistry, 2011, 76, 3615-3615. | 3 . 2 | 1 |
| 36 | JOCSynopses. Journal of Organic Chemistry, 2011, 76, 2385-2385. | 3.2 | 0 |

3

| # | Article | IF | Citations |
|----|---|------|-----------|
| 37 | The Enzyme Function Initiative. Biochemistry, 2011, 50, 9950-9962. | 2.5 | 169 |
| 38 | <i>The Journal of Organic Chemistry</i> Implements Brief Communications. Organic Letters, 2011, 13, 2515-2515. | 4.6 | 0 |
| 39 | Type-2 Isopentenyl Diphosphate Isomerase: Evidence for a Stepwise Mechanism. Journal of the American Chemical Society, 2011, 133, 19017-19019. | 13.7 | 13 |
| 40 | Synthesis and Evaluation of Chlorinated Substrate Analogues for Farnesyl Diphosphate Synthase. Journal of Organic Chemistry, 2011, 76, 1838-1843. | 3.2 | 17 |
| 41 | Covalent modification of reduced flavin mononucleotide in type-2 isopentenyl diphosphate isomerase by active-site-directed inhibitors. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 20461-20466. | 7.1 | 25 |
| 42 | Characterization of Thermophilic Archaeal Isopentenyl Phosphate Kinases. Biochemistry, 2010, 49, 207-217. | 2.5 | 57 |
| 43 | Type II Isopentenyl Diphosphate Isomerase: Probing the Mechanism with Alkyne/Allene Diphosphate Substrate Analogues. Biochemistry, 2010, 49, 6228-6233. | 2.5 | 21 |
| 44 | The Journal of Organic Chemistry Celebrates 75 Years of Publication. Journal of Organic Chemistry, 2010, 75, 1-1. | 3.2 | 13 |
| 45 | Enantioselective Inhibition of Squalene Synthase by Aziridine Analogues of Presqualene Diphosphate. Journal of Organic Chemistry, 2010, 75, 4769-4777. | 3.2 | 22 |
| 46 | X-ray Structures of Isopentenyl Phosphate Kinase. ACS Chemical Biology, 2010, 5, 517-527. | 3.4 | 28 |
| 47 | Reporting Analytical Data. Journal of Organic Chemistry, 2009, 74, 6415-6415. | 3.2 | 4 |
| 48 | Recombinant Squalene Synthase. Synthesis of Cyclopentyl Non-Head-to-Tail Triterpenes. Journal of Organic Chemistry, 2009, 74, 7562-7565. | 3.2 | 8 |
| 49 | Bioorganic Chemistry. A Natural Reunion of the Physical and Life Sciences. Journal of Organic Chemistry, 2009, 74, 2631-2645. | 3.2 | 17 |
| 50 | A Common Mechanism for Branching, Cyclopropanation, and Cyclobutanation Reactions in the Isoprenoid Biosynthetic Pathway. Journal of the American Chemical Society, 2008, 130, 1966-1971. | 13.7 | 40 |
| 51 | Synthesis and Evaluation of Substrate Analogues as Mechanism-Based Inhibitors of Type II Isopentenyl Diphosphate Isomerase. Journal of Organic Chemistry, 2008, 73, 726-729. | 3.2 | 20 |
| 52 | Type II Isopentenyl Diphosphate Isomerase:  Irreversible Inactivation by Covalent Modification of Flavin. Journal of the American Chemical Society, 2008, 130, 4906-4913. | 13.7 | 36 |
| 53 | Cloning, Solubilization, and Characterization of Squalene Synthase from <i>Thermosynechococcus elongatus</i> BP-1. Journal of Bacteriology, 2008, 190, 3808-3816. | 2.2 | 56 |
| 54 | Kinetic and Spectroscopic Characterization of Type II Isopentenyl Diphosphate Isomerase from Thermus thermophilus:  Evidence for Formation of Substrate-Induced Flavin Species. Biochemistry, 2007, 46, 5437-5445. | 2.5 | 44 |

| # | Article | IF | Citations |
|----|--|------|-----------|
| 55 | Type-2 Isopentenyl Diphosphate Isomerase. Mechanistic Studies with Cyclopropyl and Epoxy Analogues. Journal of the American Chemical Society, 2007, 129, 7740-7741. | 13.7 | 28 |
| 56 | Farnesyl Diphosphate Analogues with ï‰-Bioorthogonal Azide and Alkyne Functional Groups for Protein Farnesyl Transferase-Catalyzed Ligation Reactions. Journal of Organic Chemistry, 2007, 72, 9291-9297. | 3.2 | 51 |
| 57 | Chimeras of Two Isoprenoid Synthases Catalyze All Four Coupling Reactions in Isoprenoid Biosynthesis. Science, 2007, 316, 73-76. | 12.6 | 160 |
| 58 | Synthesis of Deuterium-Labeled Derivatives of Dimethylallyl Diphosphate. Journal of Organic Chemistry, 2006, 71, 1739-1741. | 3.2 | 34 |
| 59 | Regio- and Chemoselective Covalent Immobilization of Proteins through Unnatural Amino Acids. Journal of the American Chemical Society, 2006, 128, 9274-9275. | 13.7 | 141 |
| 60 | Farnesyl Diphosphate Synthase:Â The Art of Compromise between Substrate Selectivity and Stereoselectivity. Journal of the American Chemical Society, 2006, 128, 15819-15823. | 13.7 | 88 |
| 61 | Escherichia coliType I Isopentenyl Diphosphate Isomerase:Â Structural and Catalytic Roles for Divalent Metals. Journal of the American Chemical Society, 2006, 128, 11545-11550. | 13.7 | 41 |
| 62 | Farnesyl Diphosphate Synthase. A Paradigm for Understanding Structure and Function Relationships in E-polyprenyl Diphosphate Synthases. Phytochemistry Reviews, 2006, 5, 17-26. | 6.5 | 52 |
| 63 | Lethal Mutations in the Isoprenoid Pathway of Salmonella enterica. Journal of Bacteriology, 2006, 188, 1444-1450. | 2.2 | 12 |
| 64 | Synthesis and Evaluation of 1-Deoxy-d-xylulose 5-Phosphoric Acid Analogues as Alternate Substrates for Methylerythritol Phosphate Synthase. Journal of Organic Chemistry, 2005, 70, 1978-1985. | 3.2 | 47 |
| 65 | Synthesis and Evaluation of 1-Deoxy-d-xylulose 5-Phosphate Analogues as Chelation-Based Inhibitors of Methylerythritol Phosphate Synthase. Journal of Organic Chemistry, 2005, 70, 9955-9959. | 3.2 | 15 |
| 66 | Structure of Thermus thermophilus type 2 isopentenyl diphosphate isomerase inferred from crystallography and molecular dynamics. Biochemical and Biophysical Research Communications, 2005, 338, 1515-1518. | 2.1 | 26 |
| 67 | Isopentenyl Diphosphate Isomerase. Mechanism-Based Inhibition by Diene Analogues of Isopentenyl Diphosphate and Dimethylallyl Diphosphate. Journal of the American Chemical Society, 2005, 127, 17433-17438. | 13.7 | 16 |
| 68 | Identification of an Archaeal Type II Isopentenyl Diphosphate Isomerase in Methanothermobacter thermautotrophicus. Journal of Bacteriology, 2004, 186, 1811-1817. | 2.2 | 41 |
| 69 | The Sorbitol Phosphotransferase System Is Responsible for Transport of 2- C -Methyl- d -Erythritol into Salmonella enterica Serovar Typhimurium. Journal of Bacteriology, 2004, 186, 473-480. | 2.2 | 17 |
| 70 | Type II Isopentenyl Diphosphate Isomerase from Synechocystis sp. Strain PCC 6803. Journal of Bacteriology, 2004, 186, 8156-8158. | 2.2 | 35 |
| 71 | Synthesis and biological activity of isopentenyl diphosphate analogues. Bioorganic and Medicinal Chemistry, 2004, 12, 763-770. | 3.0 | 22 |
| 72 | Monitoring the three enzymatic activities involved in posttranslational modifications of Ras proteins. Analytica Chimica Acta, 2004, 521, 1-7. | 5.4 | 9 |

| # | Article | IF | Citations |
|----|---|------|-----------|
| 73 | Unintended Consequences?. Journal of Organic Chemistry, 2004, 69, 1761-1761. | 3.2 | O |
| 74 | Proton Exchange in Type II Isopentenyl Diphosphate Isomerase. Organic Letters, 2004, 6, 5019-5021. | 4.6 | 17 |
| 75 | Zinc Is an Essential Cofactor for Type I Isopentenyl Diphosphate:Dimethylallyl Diphosphate Isomerase. Journal of the American Chemical Society, 2003, 125, 9008-9009. | 13.7 | 37 |
| 76 | Bacterial Phytoene Synthase: Molecular Cloning, Expression, and Characterization ofErwinia herbicolaPhytoene Synthaseâ€. Biochemistry, 2003, 42, 3359-3365. | 2.5 | 24 |
| 77 | Chrysanthemyl Diphosphate Synthase. The Relationship among Chain Elongation, Branching, and Cyclopropanation Reactions in the Isoprenoid Biosynthetic Pathway. Journal of the American Chemical Society, 2003, 125, 6886-6888. | 13.7 | 22 |
| 78 | Enzymes Encoded by the Farnesyl Diphosphate Synthase Gene Family in the Big Sagebrush Artemisia tridentata ssp. spiciformis. Journal of Biological Chemistry, 2003, 278, 32132-32140. | 3.4 | 87 |
| 79 | Catalytic Mechanism of Escherichia coli 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. Journal of Biological Chemistry, 2003, 278, 11903-11908. | 3.4 | 72 |
| 80 | Synthesis of 4-Diphosphocytidyl-2-C-methyl-d-erythritol and 2-C-Methyl-d-erythritol-4-phosphate. Journal of Organic Chemistry, 2002, 67, 5416-5418. | 3.2 | 16 |
| 81 | Recombinant Squalene Synthase. Synthesis of Non-Head-to-Tail Isoprenoids in the Absence of NADPH. Journal of the American Chemical Society, 2002, 124, 8834-8845. | 13.7 | 52 |
| 82 | Synthesis of (E)-4-Hydroxydimethylallyl Diphosphate. An Intermediate in the Methyl Erythritol Phosphate Branch of the Isoprenoid Pathway. Journal of Organic Chemistry, 2002, 67, 5009-5010. | 3.2 | 21 |
| 83 | Recombinant Squalene Synthase. A Mechanism for the Rearrangement of Presqualene Diphosphate to Squalene. Journal of the American Chemical Society, 2002, 124, 8846-8853. | 13.7 | 64 |
| 84 | Measuring the activity of farnesyltransferase by capillary electrophoresis with laser-induced fluorescence detection. Electrophoresis, 2002, 23, 3398-3403. | 2.4 | 27 |
| 85 | Coupling of Isoprenoid Triflates with Organoboron Nucleophiles: Synthesis and Biological Evaluation of Geranylgeranyl Diphosphate Analogues. Bioorganic and Medicinal Chemistry, 2002, 10, 1207-1219. | 3.0 | 26 |
| 86 | 1-Deoxy- d -Xylulose 5-Phosphate Synthase, the Gene Product of Open Reading Frame (ORF) 2816 and ORF 2895 in Rhodobacter capsulatus. Journal of Bacteriology, 2001, 183, 1-11. | 2.2 | 91 |
| 87 | Escherichia coliDimethylallyl Diphosphate:tRNA Dimethylallyltransferase: Site-Directed Mutagenesis of Highly Conserved Residuesâ€. Biochemistry, 2001, 40, 1734-1740. | 2.5 | 30 |
| 88 | Synthesis of (S)-Isoprenoid Thiodiphosphates as Substrates and Inhibitors. Journal of Organic Chemistry, 2001, 66, 6705-6710. | 3.2 | 29 |
| 89 | Geranylgeranylglyceryl Phosphate Synthase. Characterization of the Recombinant Enzyme fromMethanobacterium thermoautotrophicumâ€. Biochemistry, 2001, 40, 14847-14854. | 2.5 | 33 |
| 90 | Solid-Phase Synthesis of a Radiolabeled, Biotinylated, and Farnesylated Ca1a2X Peptide Substrate for Ras- and a-Mating Factor Converting Enzyme. Bioconjugate Chemistry, 2001, 12, 35-43. | 3.6 | 19 |

| # | Article | IF | CITATIONS |
|-----|---|------|-----------|
| 91 | Recent studies of the mechanism of protein prenylation (1992 to 1998). Natural Product Reports, 2000, 17, 137-144. | 10.3 | 27 |
| 92 | The CaaX Proteases, Afc1p and Rce1p, Have Overlapping but Distinct Substrate Specificities. Molecular and Cellular Biology, 2000, 20, 4381-4392. | 2.3 | 93 |
| 93 | Solid-Phase Synthesis of a Farnesylated CaaX Peptide Library: Inhibitors of the Ras CaaX Endoproteaseâ€. ACS Combinatorial Science, 2000, 2, 522-536. | 3.3 | 24 |
| 94 | Synthesis of 2-C-Methyl-d-erythritol 4-Phosphate:  The First Pathway-Specific Intermediate in the Methylerythritol Phosphate Route to Isoprenoids. Organic Letters, 2000, 2, 215-217. | 4.6 | 35 |
| 95 | Squalene Synthase: Steady-State, Pre-Steady-State, and Isotope-Trapping Studiesâ€. Biochemistry, 2000, 39, 1748-1760. | 2.5 | 36 |
| 96 | Synthesis of Geranyl S-Thiolodiphosphate. A New Alternative Substrate/Inhibitor for Prenyltransferases. Organic Letters, 2000, 2, 2287-2289. | 4.6 | 9 |
| 97 | Escherichia coliDimethylallyl Diphosphate:tRNA Dimethylallyltransferase: Essential Elements for Recognition of tRNA Substrates Within the Anticodon Stemâ°'Loopâ€. Biochemistry, 2000, 39, 6546-6553. | 2.5 | 46 |
| 98 | Farnesyl Diphosphate Synthase. Altering the Catalytic Site To Select for Geranyl Diphosphate Activityâ€. Biochemistry, 2000, 39, 15316-15321. | 2.5 | 70 |
| 99 | Synthesis of 1-Deoxy-d-xylulose and 1-Deoxy-d-xylulose-5-phosphate. Journal of Organic Chemistry, 1999, 64, 1508-1511. | 3.2 | 31 |
| 100 | Yeast Protein Farnesyltransferase. pKas of Peptide Substrates Bound as Zinc Thiolatesâ€. Biochemistry, 1999, 38, 13138-13146. | 2.5 | 39 |
| 101 | Yeast Protein Farnesyltransferase. Binding ofS-Alkyl Peptides and Related Analogues. Organic Letters, 1999, 1, 815-817. | 4.6 | 6 |
| 102 | Biosynthesis of Isoprenoids in Escherichia coli: Â Stereochemistry of the Reaction Catalyzed by Farnesyl Diphosphate Synthase. Organic Letters, 1999, 1, 1071-1073. | 4.6 | 20 |
| 103 | Synthesis of (R)-[2-2H]Isopentenyl Diphosphate and Determination of Its Enantiopurity by2H NMR Spectroscopy in a Lyotropic Medium. Organic Letters, 1999, 1, 1067-1070. | 4.6 | 12 |
| 104 | Farnesyl Protein Transferase: Identification of K164α and Y300β as Catalytic Residues by Mutagenesis and Kinetic Studiesâ€. Biochemistry, 1999, 38, 11239-11249. | 2.5 | 37 |
| 105 | <i>Escherichia coli</i> Open Reading Frame 696 Is <i>idi</i> , a Nonessential Gene Encoding Isopentenyl Diphosphate Isomerase. Journal of Bacteriology, 1999, 181, 4499-4504. | 2.2 | 168 |
| 106 | Analysis of the isopentenyl diphosphate isomerase gene family from Arabidopsis thaliana. Plant Molecular Biology, 1998, 36, 323-328. | 3.9 | 60 |
| 107 | Yeast Protein Geranylgeranyltransferase Type-I: Steady-State Kinetics and Substrate Bindingâ€. Biochemistry, 1997, 36, 4552-4557. | 2.5 | 29 |
| 108 | Escherichia coli Dimethylallyl Diphosphate:tRNA Dimethylallyltransferase:  A Binding Mechanism for Recombinant Enzyme. Biochemistry, 1997, 36, 604-614. | 2.5 | 44 |

| # | Article | IF | Citations |
|-----|--|------|-----------|
| 109 | Yeast Protein Farnesyltransferase: A Pre-Steady-State Kinetic Analysisâ€. Biochemistry, 1997, 36, 6367-6376. | 2.5 | 42 |
| 110 | Yeast Protein Farnesyltransferase. Site-Directed Mutagenesis of Conserved Residues in the \hat{l}^2 -Subunit. Biochemistry, 1997, 36, 9246-9252. | 2.5 | 34 |
| 111 | BIOCHEMISTRY: Creating Isoprenoid Diversity. Science, 1997, 277, 1788-1789. | 12.6 | 504 |
| 112 | Chain elongation in the isoprenoid biosynthetic pathway. Current Opinion in Chemical Biology, 1997, 1, 570-578. | 6.1 | 196 |
| 113 | Cuprate-Mediated Synthesis and Biological Evaluation of Cyclopropyl- andtert-Butylfarnesyl Diphosphate Analogs. Journal of Organic Chemistry, 1996, 61, 8010-8015. | 3.2 | 45 |
| 114 | Transition State Analogs for Protein Farnesyltransferase. Journal of the American Chemical Society, 1996, 118, 8761-8762. | 13.7 | 28 |
| 115 | Yeast Geranylgeranyltransferase Type-II: Steady State Kinetic Studies of the Recombinant Enzymeâ€. Biochemistry, 1996, 35, 10454-10463. | 2.5 | 28 |
| 116 | Biosynthesis of Squalene. Evidence for a Tertiary Cyclopropylcarbinyl Cationic Intermediate in the Rearrangement of Presqualene Diphosphate to Squalene. Journal of the American Chemical Society, 1996, 118, 13089-13090. | 13.7 | 38 |
| 117 | Synthesis of Protein Farnesyltransferase and Protein Geranylgeranyltransferase Inhibitors:  Rapid Access to Chaetomellic Acid A and Its Analogues. Journal of Organic Chemistry, 1996, 61, 6296-6301. | 3.2 | 39 |
| 118 | Synthesis of analogs of farnesyl diphosphate. Tetrahedron, 1996, 52, 119-130. | 1.9 | 34 |
| 119 | Mechanistic Studies of the Prenyl Transfer Reaction with Fluorinated Substrate Analogs. ACS Symposium Series, 1996, , 158-168. | 0.5 | 5 |
| 120 | Isolation of Schizosaccharomyces pombe Isopentenyl Diphosphate Isomerase cDNA Clones by Complementation and Synthesis of the Enzyme in Escherichia coli. Journal of Biological Chemistry, 1995, 270, 11298-11303. | 3.4 | 36 |
| 121 | BTS1 Encodes a Geranylgeranyl Diphosphate Synthase in Saccharomyces cerevisiae. Journal of Biological Chemistry, 1995, 270, 21793-21799. | 3.4 | 87 |
| 122 | [4] Continuous fluorescence assay for protein prenyltransferases. Methods in Enzymology, 1995, 250, 30-43. | 1.0 | 75 |
| 123 | Biosynthesis of Non-Head-to-Tail Isoprenoids. Synthesis of 1'-1 and 1'-3 Structures by Recombinant Yeast Squalene Synthase. Journal of the American Chemical Society, 1995, 117, 1641-1642. | 13.7 | 32 |
| 124 | Allylic and Homoallylic CD Exciton Chirality: A Sensitive Method for Determining the Absolute Stereochemistry of Natural Products. Journal of Organic Chemistry, 1995, 60, 3539-3542. | 3.2 | 26 |
| 125 | A Stereoselective Palladium/Copper-Catalyzed Route to Isoprenoids: Synthesis and Biological Evaluation of 13-Methylidenefarnesyl Diphosphate. Journal of Organic Chemistry, 1995, 60, 7821-7829. | 3.2 | 65 |
| 126 | Macrocyclic Lactones from Dirhodium(II)-Catalyzed Intramolecular Cyclopropanation and Carbon-Hydrogen Insertion. Journal of the American Chemical Society, 1995, 117, 7281-7282. | 13.7 | 72 |

| # | Article | IF | Citations |
|-----|---|------|-----------|
| 127 | Enantioselective Synthesis of (+)-Presqualene Diphosphate. Journal of Organic Chemistry, 1995, 60, 941-945. | 3.2 | 49 |
| 128 | MPSA abstracts. The Protein Journal, 1994, 13, 515-543. | 1.1 | 0 |
| 129 | Isoprenyl diphosphate synthases: Protein sequence comparisons, a phylogenetic tree, and predictions of secondary structure. Protein Science, 1994, 3, 600-607. | 7.6 | 205 |
| 130 | Crystal Structure of Recombinant Farnesyl Diphosphate Synthase at 2.6ANG. Resolution. Biochemistry, 1994, 33, 10871-10877. | 2.5 | 415 |
| 131 | Biosynthesis of archaebacterial ether lipids. Formation of ether linkages by prenyltransferases. Journal of the American Chemical Society, 1993, 115, 1270-1277. | 13.7 | 82 |
| 132 | Farnesyl-diphosphate synthase. Catalysis of an intramolecular prenyl transfer with bisubstrate analogs. Journal of the American Chemical Society, 1993, 115, 1235-1245. | 13.7 | 40 |
| 133 | Biosynthesis of Archaebacterial lipids in Halobacterium halobium and Methanobacterium thermoautotrophicum. Journal of Organic Chemistry, 1993, 58, 3919-3922. | 3.2 | 38 |
| 134 | Farnesyl-diphosphate synthase. Interplay between substrate topology, stereochemistry, and regiochemistry in electrophilic alkylations Journal of the American Chemical Society, 1993, 115, 1245-1260. | 13.7 | 33 |
| 135 | Protein farnesyltransferase: production in Escherichia coli and immmoaffinity purification of the heterodimer from Saccharomyces cerevisiae. Gene, 1993, 132, 41-47. | 2.2 | 48 |
| 136 | Dimethylallyltryptophan synthase. An enzyme-catalyzed electrophilic aromatic substitution. Journal of the American Chemical Society, 1992, 114, 7354-7360. | 13.7 | 77 |
| 137 | Disruption and mapping ofIDI1, the gene for isopentenyl diphosphate isomerase inSaccharomyces cerevisiae. Yeast, 1992, 8, 743-748. | 1.7 | 35 |
| 138 | Solvolysis of allylic isoprene phosphorothioate esters. A mechanistic study of the thiono .fwdarw. thiolo rearrangement. Journal of the American Chemical Society, 1991, 113, 4895-4903. | 13.7 | 21 |
| 139 | Prenylated proteins. A convenient synthesis of farnesyl cysteinyl thioethers. Journal of the American Chemical Society, 1991, 113, 3176-3177. | 13.7 | 72 |
| 140 | Proton-nitrogen-15 NMR studies of Escherichia coli tRNAPhe from HisT mutants: a structural role for pseudouridine. Biochemistry, 1991, 30, 4223-4231. | 2.5 | 91 |
| 141 | Biosynthesis of non-head-to-tail terpenes. Formation of 1'-1 and 1'-3 linkages. Accounts of Chemical Research, 1990, 23, 70-77. | 15.6 | 115 |
| 142 | Hydrogen exchange during the enzyme-catalyzed isomerization of isopentenyl diphosphate and dimethylallyl diphosphate. Journal of the American Chemical Society, 1990, 112, 8577-8578. | 13.7 | 42 |
| 143 | Biosynthesis of archaebacterial membranes. Formation of isoprene ethers by a prenyl transfer reaction. Journal of the American Chemical Society, 1990, 112, 1264-1265. | 13.7 | 40 |
| 144 | Tetramethylsqualene, a triterpene from Botryococcus braunii var. showa. Phytochemistry, 1989, 28, 1467-1470. | 2.9 | 72 |

| # | Article | IF | CITATIONS |
|-----|--|------|-----------|
| 145 | Stereochemical studies of botryococcene biosynthesis: analogies between 1'-1 and 1'-3 condensations in the isoprenoid pathway. Journal of the American Chemical Society, 1989, 111, 2713-2715. | 13.7 | 32 |
| 146 | Isopentenyl diphosphate isomerase. Mechanism of active-site-directed irreversible inhibition by 3-(fluoromethyl)-3-butenyl diphosphate. Journal of the American Chemical Society, 1989, 111, 3740-3742. | 13.7 | 23 |
| 147 | Squalene synthetase, inhibition by ammonium analogs of carbocationic intermediates in the conversion of presqualene diphosphate to squalene. Journal of the American Chemical Society, 1989, 111, 3734-3739. | 13.7 | 68 |
| 148 | Isobraunicene, wolficene, and isowolficene. New cyclic 1'-3 fused isoprenoids from Botryococcus braunii. Journal of Organic Chemistry, 1988, 53, 5390-5392. | 3.2 | 10 |
| 149 | Braunicene. A novel cyclic C32 isoprenoid from Botryococcus braunii. Journal of the American Chemical Society, 1988, 110, 3959-3964. | 13.7 | 37 |
| 150 | NMR studies of nucleic acids. Deuterium isotope effects on carbon-13 chemical shifts in hydrogen-bonded complexes of pyrimidines and purines. Journal of the American Chemical Society, 1988, 110, 7640-7647. | 13.7 | 33 |
| 151 | Isopentenyl-diphosphate isomerase: inactivation of the enzyme with active-site-directed irreversible inhibitors and transition state analogs. Biochemistry, 1988, 27, 7315-7328. | 2.5 | 100 |
| 152 | Synthesis of ammonium analogs of carbocationic intermediates in the conversion of presqualene diphosphate to squalene. Journal of Organic Chemistry, 1988, 53, 5903-5908. | 3.2 | 18 |
| 153 | An efficient synthesis of [8-13C]adenine. Journal of Organic Chemistry, 1988, 53, 1322-1323. | 3.2 | 6 |
| 154 | Regioselective opening of simple epoxides with diisopropylamine trihydrofluoride. Journal of Organic Chemistry, 1988, 53, 1026-1030. | 3.2 | 69 |
| 155 | Braunicene. Absolute stereochemistry of the cyclohexane ring. Journal of Organic Chemistry, 1988, 53, 4089-4094. | 3.2 | 13 |
| 156 | Biosynthesis of isoprenoid membranes in the methanogenic archaebacterium Methanospirillum hungatei. Journal of the American Chemical Society, 1988, 110, 2620-2624. | 13.7 | 36 |
| 157 | Methane- and difluoromethanediphosphonate analogs of geranyl diphosphate: hydrolysis-inert alternate substrates. Journal of the American Chemical Society, 1987, 109, 5542-5544. | 13.7 | 47 |
| 158 | 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. Journal of the American Chemical Society, 1987, 109, 5544-5545. | 13.7 | 30 |
| 159 | Synthesis of nucleotide 5'-diphosphates from 5'-O-tosyl nucleosides. Journal of Organic Chemistry, 1987, 52, 1794-1801. | 3.2 | 129 |
| 160 | Phosphorylation of isoprenoid alcohols. Journal of Organic Chemistry, 1986, 51, 4768-4779. | 3.2 | 315 |
| 161 | [20] Purification of farnesylpyrophosphate synthetase by affinity chromatography. Methods in Enzymology, 1985, 110, 171-184. | 1.0 | 16 |
| 162 | [11] Reversed-phase high-performance liquid chromatography of C5 to C20 isoprenoid benzoates and naphthoates. Methods in Enzymology, 1985, 111, 252-263. | 1.0 | 1 |

| # | Article | IF | CITATIONS |
|-----|--|------|-----------|
| 163 | [15] Synthesis of allylic and homoallylic isoprenoid pyrophosphates. Methods in Enzymology, 1985, 110, 130-144. | 1.0 | 193 |
| 164 | Farnesylpyrophosphate synthetase. A case for common electrophilic mechanisms for prenyltransferases and terpene cyclases. Journal of the American Chemical Society, 1985, 107, 5277-5279. | 13.7 | 17 |
| 165 | Archaebacterial isoprenoids. Synthesis of 2,3-di-O-phytanyl-sn-glycerol and its 1,2-isomer. Journal of Organic Chemistry, 1985, 50, 5634-5636. | 3.2 | 19 |
| 166 | Isopentenyl diphosphate:dimethylallyl diphosphate isomerase. Irreversible inhibition of the enzyme by active-site-directed covalent attachment. Journal of the American Chemical Society, 1985, 107, 8307-8308. | 13.7 | 33 |
| 167 | Proton NMR studies of nitrogen-15-labeled Escherichia coli tRNAfMet. Assignments of imino resonances for uridine-related bases by proton-nitrogen-15 heteronuclear double resonance difference spectroscopy. Journal of the American Chemical Society, 1983, 105, 143-145. | 13.7 | 32 |
| 168 | Efficient syntheses of [3-15N]uracil and [3-15N]thymine. Nucleic Acids Research, 1983, 11, 6497-6504. | 14.5 | 13 |
| 169 | Squalene synthetase. Inhibition by an ammonium analogue of a carbocationic intermediate in the conversion of presqualene pyrophosphate to squalene. Journal of the American Chemical Society, 1982, 104, 7376-7378. | 13.7 | 52 |
| 170 | Model studies of terpene biosynthesis. A stepwise mechanism for cyclization of nerol to .alphaterpineol. Journal of the American Chemical Society, 1982, 104, 1422-1424. | 13.7 | 39 |
| 171 | Proton NMR studies of 15N-labeled Escherichia coli tRNAfMet. An unambiguous assignment for the G-U pair and detection of a uridine resonance at 11.4 ppm. Journal of the American Chemical Society, 1982, 104, 5811-5813. | 13.7 | 25 |
| 172 | Model studies of terpene biosynthesis. Intermolecular 1'-2 electrophilic condensation of 3-methyl-2-butenyl acetate. Journal of the American Chemical Society, 1982, 104, 1413-1420. | 13.7 | 7 |
| 173 | Proton NMR studies of 15N-labeled Escherichia coli tRNAfMet. Use of 1J1H-15N couplings to identify imino resonances of uridine-related bases. Journal of the American Chemical Society, 1982, 104, 5810-5811. | 13.7 | 21 |
| 174 | Model studies of terpene biosynthesis. Stereospecific cyclization of N-methyl-(S)-4-([1'-2H]neryloxy)pyridinium methyl sulfate to .alphaterpineol. Journal of the American Chemical Society, 1982, 104, 1420-1422. | 13.7 | 28 |
| 175 | Farnesylpyrophosphate synthetase. A stepwise mechanism for the 1'-4 condensation reaction. Journal of the American Chemical Society, 1981, 103, 3926-3927. | 13.7 | 91 |
| 176 | Farnesylpyrophosphate synthetase. Evidence for a rigid geranyl cation-pyrophosphate anion pair. Journal of the American Chemical Society, 1981, 103, 3927-3929. | 13.7 | 33 |
| 177 | Tris(tetrabutylammonium) hydrogen pyrophosphate. A new reagent for the preparation of allylic pyrophosphate esters. Journal of Organic Chemistry, 1981, 46, 1967-1969. | 3.2 | 47 |
| 178 | Synthesis of fluorinated analogs of geraniol. Journal of Organic Chemistry, 1981, 46, 1532-1538. | 3.2 | 52 |
| 179 | Prenyltransferase: determination of the binding mechanism and individual kinetic constants for farnesylpyrophosphate synthetase by rapid quench and isotope partitioning experiments. Biochemistry, 1981, 20, 1893-1901. | 2.5 | 58 |
| 180 | Non-head-to-tail monoterpenes. Synthesis of (S)-lyratol and (S)-lyratyl acetate from (1R,3R)-chrysanthemic acid. Journal of Organic Chemistry, 1979, 44, 2441-2444. | 3.2 | 4 |

| # | Article | IF | Citations |
|-----|---|------|-----------|
| 181 | Farnesyl pyrophosphate synthetase. Mechanistic studies of the 1'-4 coupling reaction in the terpene biosynthetic pathway. Journal of the American Chemical Society, 1979, 101, 6761-6763. | 13.7 | 23 |
| 182 | The prenyl transfer reaction. Enzymic and mechanistic studies of the 1'-4 coupling reaction in the terpene biosynthetic pathway. Accounts of Chemical Research, 1978, 11, 307-313. | 15.6 | 176 |
| 183 | 2',3',5'-Tri-O-benzoyl[4-13C]uridine. An efficient, regiospecific synthesis of the pyrimidine ring. Journal of Organic Chemistry, 1978, 43, 1547-1550. | 3.2 | 29 |
| 184 | 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]chrysanthemyloxy]pyridinium iodide. Journal of the American Chemical Society, 1977, 99, 3824-3829. | 13.7 | 12 |
| 185 | Mechanism of the prenyl transfer reaction. Studies with (E)- and (Z)-3-trifluoromethyl-2-buten-1-yl pyrophosphate. Biochemistry, 1977, 16, 5470-5478. | 2.5 | 69 |
| 186 | Model studies of the biosynthesis of non-head-to-tail terpenes. Stereochemistry of the head-to-head rearrangement. Journal of the American Chemical Society, 1977, 99, 3830-3837. | 13.7 | 24 |
| 187 | Prenyltransferase. New evidence for an ionization-condensation-elimination mechanism with 2-fluorogeranyl pyrophosphate. Journal of the American Chemical Society, 1977, 99, 957-959. | 13.7 | 41 |
| 188 | Model studies of the biosynthesis of non-head-to-tail terpenes. Rearrangements of the chrysanthemyl system. Journal of the American Chemical Society, 1977, 99, 3816-3823. | 13.7 | 38 |
| 189 | Addition of Grignard and lithium reagents to Eschenmoser's salt. A convenient synthesis of terminal olefins Tetrahedron Letters, 1977, 18, 1299-1302. | 1.4 | 18 |
| 190 | Addition of eschenmoser's salt to ketone, ester, & lactone enolates. A convenient synthesis of a-methylene carbonyls via mannich intermediates. Tetrahedron Letters, 1977, 18, 1621-1623. | 1.4 | 53 |
| 191 | Prenyltransferase: the mechanism of the reaction. Biochemistry, 1976, 15, 1079-1083. | 2.5 | 76 |
| 192 | Mass spectral data for gas chromatograph-mass spectral identification of some irregular monoterpenes. Journal of Chemical & Data, 1976, 21, 500-502. | 1.9 | 22 |
| 193 | Model studies of terpene biosynthesis. Synthesis of (+)-2-[trans-2'-(2"-methylpropenyl)cyclopropyl]propan-2-ol. Journal of Organic Chemistry, 1975, 40, 139-140. | 3.2 | 5 |
| 194 | Extension of the HA acidity function into oleum mixtures. Journal of the American Chemical Society, 1975, 97, 1797-1801. | 13.7 | 10 |
| 195 | Model studies in terpene biosynthesis. Journal of Agricultural and Food Chemistry, 1974, 22, 167-173. | 5.2 | 12 |
| 196 | Model studies of terpene biosynthesis. Synthesis and absolute configuration of (+)-trans-2,2-dimethyl-3-(2'-methylpropenyl)cyclobutanol. Journal of Organic Chemistry, 1974, 39, 3288-3291. | 3.2 | 7 |
| 197 | (trans-2'-Methylcyclopropyl)methyl system. Stereochemistry of ionization, rearrangement, and solvent capture. Journal of the American Chemical Society, 1974, 96, 7591-7593. | 13.7 | 17 |
| 198 | Model studies of terpene biosynthesis. Stereoselective ionization of N-methyl-4-[(.alpha.S,1R,3R)-chrysanthemyloxy]pyridinum-d1 iodide. Journal of the American Chemical Society, 1972, 94, 5515-5516. | 13.7 | 6 |

| # | Article | lF | CITATIONS |
|-----|--|------|-----------|
| 199 | Model studies of terpene biosynthesis. Cationic rearrangements leading to head-to-head terpenes. Journal of the American Chemical Society, 1972, 94, 5921-5923. | 13.7 | 5 |
| 200 | .alpha.,.alpha.,2,2,3,3-Hexamethylcyclopropylcarbinyl system. Carbonium ion behavior in nucleophilic and superacid solvents. Journal of the American Chemical Society, 1972, 94, 2297-2305. | 13.7 | 12 |
| 201 | Shielding effects of a cyclopropane ring. Journal of the American Chemical Society, 1972, 94, 2291-2296. | 13.7 | 45 |
| 202 | Direct observation of uracil dication and related derivatives. Tetrahedron Letters, 1972, 13, 3823-3826. | 1.4 | 7 |
| 203 | Mechanism of squalene biosynthesis. Presqualene pyrophosphate, stereochemistry, and a mechanism for its conversion to squalene. Journal of the American Chemical Society, 1971, 93, 1783-1785. | 13.7 | 51 |
| 204 | Stereospecific5JHî—,H and 6JHî—,H couplings in 3-methyl-3-azabicyclo[3.1.0.] hexan-2,4-dione1. Tetrahedron Letters, 1971, 12, 2255-2258. | 1.4 | 3 |
| 205 | Photoisomerizations of cis- and trans-3-methylenecyclodecene. Journal of the American Chemical Society, 1970, 92, 7408-7412. | 13.7 | 14 |
| 206 | Stereospecific cationic rearrangements of syn- and antibicyclo [6.1.0] nonane derivatives. Journal of the American Chemical Society, 1970, 92, 4274-4281. | 13.7 | 26 |
| 207 | Stereospecific homoallylic ring expansions and contractions. Journal of the American Chemical Society, 1970, 92, 4282-4288. | 13.7 | 24 |
| 208 | Cyclopropylcarbinyl-allyl rearrangement of a hexamethylcyclopropylcarbinyl system. Journal of the American Chemical Society, 1969, 91, 3649-3650. | 13.7 | 14 |
| 209 | Solvolysis and degenerate cyclopropylcarbinyl-cyclopropylcarbinyl rearrangement of a hexamethylcyclopropylcarbinyl system. Journal of the American Chemical Society, 1969, 91, 3650-3652. | 13.7 | 15 |
| 210 | Stereochemistry of the methylene iodide-zinc-copper couple methylenation of cyclic allylic alcohols. Journal of the American Chemical Society, 1969, 91, 6892-6894. | 13.7 | 72 |
| 211 | Solvolysis of 1-chlorobicyclo[3.3.1]nonane. Journal of Organic Chemistry, 1968, 33, 1237-1239. | 3.2 | 10 |