

# Romas J Kazlauskas

## List of Publications by Year in descending order

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126  
papers

10,351  
citations

41344

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h-index

34986

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177  
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177  
docs citations

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times ranked

7382  
citing authors

| #  | ARTICLE   | IF   | CITATIONS |
|----|---|------|-----------|
| 1  | Enzymatic Enantioselective anti-Markovnikov Hydration of Aryl Alkenes. <i>Angewandte Chemie</i> , 2022, 134, .  | 2.0  | 3         |
| 2  | Plasmid hypermutation using a targeted artificial DNA replisome. <i>Science Advances</i> , 2021, 7, .   | 10.3 | 10        |
| 3  | High-Level Production of Lysine in the Yeast <i>Saccharomyces cerevisiae</i> by Rational Design of Homocitrate Synthase. <i>Applied and Environmental Microbiology</i> , 2021, 87, e0060021.                                | 3.1  | 8         |
| 4  | Larger active site in an ancestral hydroxynitrile lyase increases catalytically promiscuous esterase activity. <i>PLoS ONE</i> , 2020, 15, e0235341.  | 2.5  | 13        |
| 5  | Evolutionary innovation using EDGE, a system for localized elevated mutagenesis. <i>PLoS ONE</i> , 2020, 15, e0232330.  | 2.5  | 3         |
| 6  | Consensus Finder web tool to predict stabilizing substitutions in proteins. <i>Methods in Enzymology</i> , 2020, 643, 129-148.  | 1.0  | 33        |
| 7  | Enzymes working in reverse. <i>Nature Catalysis</i> , 2018, 1, 172-173.   | 34.4 | 0         |
| 8  | Engineering more stable proteins. <i>Chemical Society Reviews</i> , 2018, 47, 9026-9045.  | 38.1 | 113       |
| 9  | Identical Active Sites in Hydroxynitrile Lyases Show Opposite Enantioselectivity and Reveal Possible Ancestral Mechanism. <i>ACS Catalysis</i> , 2017, 7, 4221-4229.  | 11.2 | 9         |
| 10 | Comparison of Five Protein Engineering Strategies for Stabilizing an $\hat{\alpha}/\hat{\beta}$ -Hydrolase. <i>Biochemistry</i> , 2017, 56, 6521-6532.  | 2.5  | 56        |
| 11 | Improving <i>Pseudomonas fluorescens</i> esterase for hydrolysis of lactones. <i>Catalysis Science and Technology</i> , 2017, 7, 4756-4765.   | 4.1  | 3         |
| 12 | Mild pretreatment of yellow poplar biomass using sequential dilute acid and enzymatically-generated peracetic acid to enhance cellulase accessibility. <i>Biotechnology and Bioprocess Engineering</i> , 2017, 22, 405-412. | 2.6  | 14        |
| 13 | One-step pretreatment of yellow poplar biomass using peracetic acid to enhance enzymatic digestibility. <i>Scientific Reports</i> , 2017, 7, 12216.   | 3.3  | 25        |
| 14 | Improved pretreatment of yellow poplar biomass using hot compressed water and enzymatically-generated peracetic acid. <i>Biomass and Bioenergy</i> , 2017, 105, 190-196.  | 5.7  | 15        |
| 15 | Developmental evolution facilitates rapid adaptation. <i>Scientific Reports</i> , 2017, 7, 15891.   | 3.3  | 4         |
| 16 | Biosynthesis of ( $\hat{\alpha}$ )-5-Hydroxy-equol and 5-Hydroxy-dehydroequol from Soy Isoflavone, Genistein Using Microbial Whole Cell Bioconversion. <i>ACS Chemical Biology</i> , 2017, 12, 2883-2890.                   | 3.4  | 31        |
| 17 | Hydrolysis and Formation of Carboxylic Acid and Alcohol Derivatives. , 2016, , 127-148.   |      | 2         |
| 18 | The Fungus <i>Trichoderma</i> Regulates Submerged Conidiation Using the Steroid Pregnenolone. <i>ACS Chemical Biology</i> , 2016, 11, 2568-2575.  | 3.4  | 3         |

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|----|--|------|-----------|
| 19 | Production of <i>p</i> -hydroxybenzoic acid from <i>p</i> -coumaric acid by <i>Burkholderia glumae</i> BGR1. <i>Biotechnology and Bioengineering</i> , 2016, 113, 1493-1503.   | 3.3  | 38        |
| 20 | Catalytic Promiscuity of Ancestral Esterases and Hydroxynitrile Lyases. <i>Journal of the American Chemical Society</i> , 2016, 138, 1046-1056.  | 13.7 | 91        |
| 21 | Evolution of a Catalytic Mechanism. <i>Molecular Biology and Evolution</i> , 2016, 33, 971-979.  | 8.9  | 19        |
| 22 | Experimental Evolution of <i>Trichoderma citrinoviride</i> for Faster Deconstruction of Cellulose. <i>PLoS ONE</i> , 2016, 11, e0147024.   | 2.5  | 3         |
| 23 | Stabilization of an $\alpha$ -Hydrolase by Introducing Proline Residues: Salicylic Acid Binding Protein 2 from Tobacco. <i>Biochemistry</i> , 2015, 54, 4330-4341.   | 2.5  | 17        |
| 24 | How the Same Core Catalytic Machinery Catalyzes 17 Different Reactions: the Serine-Histidine-Aspartate Catalytic Triad of $\alpha$ -Hydrolase Fold Enzymes. <i>ACS Catalysis</i> , 2015, 5, 6153-6176.   | 11.2 | 216       |
| 25 | The road to L. <i>Nature Chemistry</i> , 2015, 7, 11-12.   | 13.6 | 4         |
| 26 | Increasing the Reaction Rate of Hydroxynitrile Lyase from <i>Hevea brasiliensis</i> toward Mandelonitrile by Copying Active Site Residues from an Esterase that Accepts Aromatic Esters. <i>ChemBioChem</i> , 2014, 15, 1931-1938.                         | 2.6  | 14        |
| 27 | Molecular Basis for the Enantio- and Diastereoselectivity of <i>Burkholderia cepacia</i> Lipase toward $\beta$ -Butyrolactone Primary Alcohols. <i>Advanced Synthesis and Catalysis</i> , 2014, 356, 3585-3599.  | 4.3  | 2         |
| 28 | Uncovering divergent evolution of $\alpha$ -hydrolases: a surprising residue substitution needed to convert <i>Hevea brasiliensis</i> hydroxynitrile lyase into an esterase. <i>Chemical Science</i> , 2014, 5, 4265-4277.                                 | 7.4  | 16        |
| 29 | Bioconversion of <i>p</i> -coumaric acid to <i>p</i> -hydroxystyrene using phenolic acid decarboxylase from <i>B. amyloliquefaciens</i> in biphasic reaction system. <i>Applied Microbiology and Biotechnology</i> , 2013, 97, 1501-1511.                  | 3.6  | 62        |
| 30 | New Structural Motif for Carboxylic Acid Perhydrolases. <i>Chemistry - A European Journal</i> , 2013, 19, 3037-3046.   | 3.3  | 5         |
| 31 | Revised Molecular Basis of the Promiscuous Carboxylic Acid Perhydrolase Activity in Serine Hydrolases. <i>Chemistry - A European Journal</i> , 2012, 18, 8130-8139.  | 3.3  | 20        |
| 32 | Biology Evolves to Fight Chemistry. <i>Chemistry and Biology</i> , 2012, 19, 435-437.  | 6.0  | 1         |
| 33 | Survey of Protein Engineering Strategies. <i>Current Protocols in Protein Science</i> , 2011, 66, Unit26.7.  | 2.8  | 17        |
| 34 | Molecular Basis of Chiral Acid Recognition by <i>Candida rugosa</i> Lipase: X-Ray Structure of Transition State Analog and Modeling of the Hydrolysis of Methyl 2-methoxy-2-phenylacetate. <i>Advanced Synthesis and Catalysis</i> , 2011, 353, 2529-2544. | 4.3  | 23        |
| 35 | Different Active-Site Loop Orientation in Serine Hydrolases versus Acyltransferases. <i>ChemBioChem</i> , 2011, 12, 768-776.   | 2.6  | 42        |
| 36 | Protein Engineering of $\alpha$ -Hydrolase Fold Enzymes. <i>ChemBioChem</i> , 2011, 12, 1508-1517.   | 2.6  | 92        |

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|----|---|------|-----------|
| 37 | Inside Cover: Different Active-Site Loop Orientation in Serine Hydrolases versus Acyltransferases (ChemBioChem 5/2011). ChemBioChem, 2011, 12, 654-654.   | 2.6  | 0         |
| 38 | Improved pretreatment of lignocellulosic biomass using enzymatically-generated peracetic acid. Bioresource Technology, 2011, 102, 5183-5192.  | 9.6  | 47        |
| 39 | Regioselective Hydroformylation of Styrene Using Rhodium-Substituted Carbonic Anhydrase. ChemCatChem, 2010, 2, 953-957.   | 3.7  | 81        |
| 40 | Deep Eutectic Solvents for <i>Candida antarctica</i> Lipase B-Catalyzed Reactions. ACS Symposium Series, 2010, , 169-180.   | 0.5  | 29        |
| 41 | Toward advanced ionic liquids. Polar, enzyme-friendly solvents for biocatalysis. Biotechnology and Bioprocess Engineering, 2010, 15, 40-53.   | 2.6  | 245       |
| 42 | Increased Saccharification Yields from Aspen Biomass Upon Treatment with Enzymatically Generated Peracetic Acid. Applied Biochemistry and Biotechnology, 2010, 160, 1637-1652.  | 2.9  | 30        |
| 43 | Switching from an Esterase to a Hydroxynitrile Lyase Mechanism Requires Only Two Amino Acid Substitutions. Chemistry and Biology, 2010, 17, 863-871.  | 6.0  | 48        |
| 44 | Switching Catalysis from Hydrolysis to Perhydrolysis in <i>Pseudomonas fluorescens</i> Esterase <sup>sup</sup> . Biochemistry, 2010, 49, 1931-1942.   | 2.5  | 54        |
| 45 | Stereoselective Hydrogenation of Olefins Using Rhodium-Substituted Carbonic Anhydrase” A New Reductase. Chemistry - A European Journal, 2009, 15, 1370-1376.  | 3.3  | 93        |
| 46 | Molecular Basis for the Stereoselective Ammoniolysis of <i>N</i> -Alkyl Aziridine-2-Carboxylates Catalyzed by <i>Candida antarctica</i> Lipase B. ChemBioChem, 2009, 10, 2213-2222.                                     | 2.6  | 18        |
| 47 | Inside Cover: Molecular Basis for the Stereoselective Ammoniolysis of <i>N</i> -Alkyl Aziridine-2-Carboxylates Catalyzed by <i>Candida antarctica</i> Lipase B (ChemBioChem 13/2009). ChemBioChem, 2009, 10, 2122-2122. | 2.6  | 0         |
| 48 | Converting an Esterase into an Epoxide Hydrolase. Angewandte Chemie - International Edition, 2009, 48, 3532-3535.   | 13.8 | 67        |
| 49 | Finding better protein engineering strategies. Nature Chemical Biology, 2009, 5, 526-529.   | 8.0  | 202       |
| 50 | Manganese-Substituted $\hat{\pm}$ -Carbonic Anhydrase as an Enantioselective Peroxidase. Topics in Organometallic Chemistry, 2009, , 45-61.   | 0.7  | 10        |
| 51 | Determination of absolute configuration of secondary alcohols using lipase-catalyzed kinetic resolutions. Chirality, 2008, 20, 724-735.   | 2.6  | 59        |
| 52 | Enantiocomplementary Enzymes: Classification, Molecular Basis for Their Enantioference, and Prospects for Mirror-Image Biotransformations. Angewandte Chemie - International Edition, 2008, 47, 8782-8793.              | 13.8 | 101       |
| 53 | Hydrolase-catalyzed biotransformations in deep eutectic solvents. Chemical Communications, 2008, , 1235.  | 4.1  | 435       |
| 54 | Enzymatic synthesis of poly(hydroxyalkanoates) in ionic liquids. Journal of Biotechnology, 2007, 132, 306-313.  | 3.8  | 70        |

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|----|--|------|-----------|
| 55 | Ten years of green chemistry at the Gordon Research Conferences: frontiers of science. <i>Green Chemistry</i> , 2006, 8, 677.  | 9.0  | 6         |
| 56 | Quantitative Assay of Hydrolases for Activity and Selectivity Using Color Changes. , 2006, , 15-39.  |      | 7         |
| 57 | Manganese-Substituted Carbonic Anhydrase as a New Peroxidase. <i>Chemistry - A European Journal</i> , 2006, 12, 1587-1596.   | 3.3  | 160       |
| 58 | Remote Interactions Explain the Unusual Regioselectivity of Lipase from <i>Pseudomonas cepacia</i> toward the Secondary Hydroxyl of 2'-Deoxynucleosides. <i>ChemBioChem</i> , 2006, 7, 693-698.              | 2.6  | 32        |
| 59 | The 3-(3-Pyridine)propionyl Anchor Group for Protease-Catalyzed Resolutions:p-Toluenesulfinamide and Sterically Hindered Secondary Alcohols. <i>Advanced Synthesis and Catalysis</i> , 2006, 348, 1183-1192. | 4.3  | 10        |
| 60 | Enhancing catalytic promiscuity for biocatalysis. <i>Current Opinion in Chemical Biology</i> , 2005, 9, 195-201.   | 6.1  | 242       |
| 61 | Focusing Mutations into the <i>P. fluorescens</i> Esterase Binding Site Increases Enantioselectivity More Effectively than Distant Mutations. <i>Chemistry and Biology</i> , 2005, 12, 45-54.                | 6.0  | 115       |
| 62 | Mirror-Image Packing in Enantiomer Discrimination. <i>Chemistry and Biology</i> , 2005, 12, 427-437.   | 6.0  | 62        |
| 63 | Improving enzyme properties: when are closer mutations better?. <i>Trends in Biotechnology</i> , 2005, 23, 231-237.  | 9.3  | 392       |
| 64 | Molecular Basis of Perhydrolase Activity in Serine Hydrolases. <i>Angewandte Chemie - International Edition</i> , 2005, 44, 2742-2746.   | 13.8 | 67        |
| 65 | An Inverse Substrate Orientation for the Regioselective Acylation of 3',5'-Diaminonucleosides Catalyzed by <i>Candida antarctica</i> lipase B?. <i>ChemBioChem</i> , 2005, 6, 1381-1390.                     | 2.6  | 52        |
| 66 | Receptor-Assisted Combinatorial Chemistry: Thermodynamics and Kinetics in Drug Discovery. <i>Chemistry - A European Journal</i> , 2005, 11, 1708-1716.   | 3.3  | 82        |
| 67 | Catalytic Promiscuity in Biocatalysis: Using Old Enzymes to Form New Bonds and Follow New Pathways. <i>ChemInform</i> , 2005, 36, no.  | 0.0  | 0         |
| 68 | Subtilisin-Catalyzed Resolution of N-Acyl Arylsulfinamides. <i>Journal of the American Chemical Society</i> , 2005, 127, 2104-2113.  | 13.7 | 45        |
| 69 | How Substrate Solvation Contributes to the Enantioselectivity of Subtilisin toward Secondary Alcohols. <i>Journal of the American Chemical Society</i> , 2005, 127, 12228-12229.                             | 13.7 | 44        |
| 70 | Structure of an aryl esterase from <i>Pseudomonas fluorescens</i> . <i>Acta Crystallographica Section D: Biological Crystallography</i> , 2004, 60, 1237-1243.   | 2.5  | 63        |
| 71 | Pseudodynamic Combinatorial Libraries: A Receptor-Assisted Approach for Drug Discovery. <i>Angewandte Chemie - International Edition</i> , 2004, 43, 2432-2436.  | 13.8 | 30        |
| 72 | Catalytic Promiscuity in Biocatalysis: Using Old Enzymes to Form New Bonds and Follow New Pathways. <i>Angewandte Chemie - International Edition</i> , 2004, 43, 6032-6040.                                  | 13.8 | 525       |

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|----|---|------|-----------|
| 73 | Enantiocomplementary Enzymatic Resolution of the Chiral Auxiliary: cis,cis-6-(2,2-Dimethylpropanamido)spiro[4.4]nonan-1-ol and the Molecular Basis for the High Enantioselectivity of Subtilisin Carlsberg. <i>ChemBioChem</i> , 2004, 5, 980-987.  | 2.6  | 13        |
| 74 | Mapping the substrate selectivity and enantioselectivity of esterases from thermophiles. <i>Tetrahedron: Asymmetry</i> , 2004, 15, 2991-3004.   | 1.8  | 20        |
| 75 | Parallel synthesis of an ester library for substrate mapping of esterases and lipases. <i>Tetrahedron: Asymmetry</i> , 2004, 15, 3005-3009.   | 1.8  | 7         |
| 76 | Ionic Liquids Create New Opportunities for Nonaqueous Biocatalysis with Polar Substrates: Acylation of Glucose and Ascorbic Acid. <i>ACS Symposium Series</i> , 2003, , 225-238.  | 0.5  | 19        |
| 77 | Mutations in Distant Residues Moderately Increase the Enantioselectivity of <i>Pseudomonas fluorescens</i> Esterase towards Methyl 3Bromo-2-methylpropanoate and Ethyl 3Phenylbutyrate. <i>Chemistry - A European Journal</i> , 2003, 9, 1933-1939.   | 3.3  | 96        |
| 78 | Highly enantioselective kinetic resolution of primary alcohols of the type Ph-X-CH(CH <sub>3</sub> )-CH <sub>2</sub> OH by <i>Pseudomonas cepacia</i> lipase: effect of acyl chain length and solvent. <i>Tetrahedron: Asymmetry</i> , 2003, 14, 3917-3924.   | 1.8  | 39        |
| 79 | Biocatalysis in ionic liquids "advantages beyond green technology. <i>Current Opinion in Biotechnology</i> , 2003, 14, 432-437.   | 6.6  | 625       |
| 80 | Vacuum-driven lipase-catalysed direct condensation of l-ascorbic acid and fatty acids in ionic liquids: synthesis of a natural surface active antioxidant. <i>Green Chemistry</i> , 2003, 5, 715.   | 9.0  | 52        |
| 81 | Amplification of Screening Sensitivity through Selective Destruction: A Theory and Screening of a Library of Carbonic Anhydrase Inhibitors. <i>Journal of the American Chemical Society</i> , 2002, 124, 5692-5701.   | 13.7 | 47        |
| 82 | Improved Preparation and Use of Room-Temperature Ionic Liquids in Lipase-Catalyzed Enantio- and Regioselective Acylations. <i>Journal of Organic Chemistry</i> , 2001, 66, 8395-8401.   | 3.2  | 568       |
| 83 | Molecular Basis for Enantioselectivity of Lipase from <i>Chromobacterium viscosum</i> toward the Diesters of 2,3-Dihydro-3-(4-hydroxyphenyl)-1,1,3-trimethyl-1H-inden-5-ol. <i>Journal of Organic Chemistry</i> , 2001, 66, 3041-3048.  | 3.2  | 18        |
| 84 | Choosing Hydrolases for Enantioselective Reactions Involving Alcohols Using Empirical Rules. , 2001, , 243-259.   |      | 1         |
| 85 | Mapping the substrate selectivity of new hydrolases using colorimetric screening: lipases from <i>Bacillus thermocatenulatus</i> and <i>Ophiostoma piliferum</i> , esterases from <i>Pseudomonas fluorescens</i> and <i>Streptomyces diastatochromogenes</i> . <i>Tetrahedron: Asymmetry</i> , 2001, 12, 545-556. | 1.8  | 85        |
| 86 | Molecular Basis for Empirical Rules that Predict the Stereoselectivity of Hydrolases. <i>NATO Science Series Partnership Sub-series 1, Disarmament Technologies</i> , 2000, , 43-69.  | 0.1  | 0         |
| 87 | 'Watching' lipase-catalyzed acylations using <sup>1</sup> H NMR: competing hydrolysis of vinyl acetate in dry organic solvents. <i>Tetrahedron: Asymmetry</i> , 1999, 10, 2635-2638.  | 1.8  | 50        |
| 88 | Molecular Basis for Enantioselectivity of Lipase from <i>Pseudomonas cepacia</i> toward Primary Alcohols. Modeling, Kinetics, and Chemical Modification of Tyr29 to Increase or Decrease Enantioselectivity. <i>Journal of Organic Chemistry</i> , 1999, 64, 2638-2647.   | 3.2  | 102       |
| 89 | First Preparation of Enantiopure Indane Monomer, (S)-(âˆ“)- and (R)-(+)-2,3-dihydro-3-(4-hydroxyphenyl)-1,1,3-trimethyl-1H-inden-5-ol, via a Unique Enantio- and Regioselective Enzymatic Kinetic Resolution. <i>Journal of Organic Chemistry</i> , 1999, 64, 7498-7503.  | 3.2  | 16        |
| 90 | Protease-Mediated Separation of Cis and Trans Diastereomers of 2(R,S)-benzyloxymethyl-4(S)-carboxylic Acid 1,3-Dioxolane Methyl Ester: Intermediates for the Synthesis of Dioxolane Nucleosides. <i>Journal of Organic Chemistry</i> , 1999, 64, 9019-9029.   | 3.2  | 28        |

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|-----|--|------|-----------|
| 91  | Quantitative Screening of Hydrolase Libraries Using pH Indicators: Identifying Active and Enantioselective Hydrolases. <i>Chemistry - A European Journal</i> , 1998, 4, 2324-2331.                                     | 3.3  | 191       |
| 92  | Improving hydrolases for organic synthesis. <i>Current Opinion in Chemical Biology</i> , 1998, 2, 121-126.   | 6.1  | 24        |
| 93  | Quick E. A Fast Spectrophotometric Method To Measure the Enantioselectivity of Hydrolases. <i>Journal of Organic Chemistry</i> , 1997, 62, 4560-4561.  | 3.2  | 150       |
| 94  | A structure-based rationalization of the enantiopreference of subtilisin toward secondary alcohols and isosteric primary amines. <i>Journal of Molecular Catalysis B: Enzymatic</i> , 1997, 3, 65-72.                  | 1.8  | 72        |
| 95  | Empirical rules for the enantiopreference of lipase from <i>Aspergillus niger</i> toward secondary alcohols and carboxylic acids, especially $\beta$ -amino acids. <i>Tetrahedron: Asymmetry</i> , 1997, 8, 3719-3733. | 1.8  | 30        |
| 96  | Lipase-Catalyzed Ring-Opening Polymerization of Lactones: A Novel Route to Poly(hydroxyalkanoate)s. <i>Macromolecules</i> , 1996, 29, 4829-4833.   | 4.8  | 149       |
| 97  | Enantiopreference of Lipase from <i>Pseudomonas cepacia</i> toward Primary Alcohols. <i>Journal of Organic Chemistry</i> , 1995, 60, 6959-6969.  | 3.2  | 172       |
| 98  | A 2-Propanol Treatment Increases the Enantioselectivity of <i>Candida rugosa</i> Lipase toward Esters of Chiral Carboxylic Acids. <i>Journal of Organic Chemistry</i> , 1995, 60, 212-217.                             | 3.2  | 173       |
| 99  | Kinetic resolution of sulfoxides with pendant acetoxy groups using cholesterol esterase: substrate mapping and an empirical rule for chiral phenols. <i>Canadian Journal of Chemistry</i> , 1995, 73, 1357-1367.       | 1.1  | 21        |
| 100 | Kinetic resolutions concentrate the minor enantiomer and aid measurement of high enantiomeric purity. <i>Tetrahedron: Asymmetry</i> , 1994, 5, 83-92.  | 1.8  | 18        |
| 101 | Isolation of racemic 2,4-pentanediol and 2,5-hexanediol from commercial mixtures of racemic and meso isomers by way of cyclic sulfites. <i>Tetrahedron: Asymmetry</i> , 1994, 5, 657-664.                              | 1.8  | 24        |
| 102 | Elucidating structure-mechanism relationships in lipases: Prospects for predicting and engineering catalytic properties. <i>Trends in Biotechnology</i> , 1994, 12, 464-472.   | 9.3  | 137       |
| 103 | Enantioselectivity of <i>Candida Rugosa</i> Lipase Toward Carboxylic Acids: A Predictive Rule from Substrate Mapping and X-Ray Crystallography. <i>Biocatalysis</i> , 1994, 9, 209-225.                                | 0.9  | 77        |
| 104 | Analogues of Reaction Intermediates Identify a Unique Substrate Binding Site in <i>Candida rugosa</i> Lipase. <i>Biochemistry</i> , 1994, 33, 3494-3500.   | 2.5  | 262       |
| 105 | A Structural Basis for the Chiral Preferences of Lipases. <i>Journal of the American Chemical Society</i> , 1994, 116, 3180-3186.  | 13.7 | 328       |
| 106 | Kinetic Resolution of Pipecolic Acid Using Partially-Purified Lipase from <i>Aspergillus niger</i> . <i>Journal of Organic Chemistry</i> , 1994, 59, 2075-2081.  | 3.2  | 51        |
| 107 | Kinetic Resolution of Phosphines and Phosphine Oxides with Phosphorus Stereocenters by Hydrolases. <i>Journal of Organic Chemistry</i> , 1994, 59, 7609-7615.  | 3.2  | 38        |
| 108 | Dicarboxylic Acids Link Proton Transfer Across a Liquid Membrane to the Synthesis of Acyl Phosphates. A Model for P-Type H <sup>+</sup> -ATPases. <i>Journal of Organic Chemistry</i> , 1994, 59, 3626-3635.           | 3.2  | 1         |

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|-----|--|------|-----------|
| 109 | Substrate modification to increase the enantioselectivity of hydrolases. A route to optically-active cyclic allylic alcohols.. Tetrahedron: Asymmetry, 1993, 4, 879-888.   | 1.8  | 53        |
| 110 | Sequential kinetic resolution of ( $\Delta$ )-2,3-butanediol in organic solvent using lipase from <i>Pseudomonas cepacia</i> .. Tetrahedron: Asymmetry, 1993, 4, 1995-2000.  | 1.8  | 38        |
| 111 | Synthesis of an acylphosphate driven by a proton gradient. A model for H <sup>+</sup> -ATPase. Journal of Organic Chemistry, 1992, 57, 7005-7006.  | 3.2  | 1         |
| 112 | Calibration plots to aid determination of high enantiomeric purity using chiral lanthanide shift reagents.. Tetrahedron: Asymmetry, 1992, 3, 243-246.  | 1.8  | 8         |
| 113 | An optimized sequential kinetic resolution of trans-1,2-cyclohexanediol. Journal of Organic Chemistry, 1991, 56, 7251-7256.  | 3.2  | 37        |
| 114 | A rule to predict which enantiomer of a secondary alcohol reacts faster in reactions catalyzed by cholesterol esterase, lipase from <i>Pseudomonas cepacia</i> , and lipase from <i>Candida rugosa</i> . Journal of Organic Chemistry, 1991, 56, 2656-2665.                                | 3.2  | 920       |
| 115 | Resolution of Binaphthols and Spirobiindanols Using Pancreas Extracts. , 1990, , 195-216.  |      | 0         |
| 116 | Resolution of binaphthols and spirobiindanols using cholesterol esterase. Journal of the American Chemical Society, 1989, 111, 4953-4959.  | 13.7 | 149       |
| 117 | Changing coenzymes improves oxidations catalyzed by alcohol dehydrogenase. Journal of Organic Chemistry, 1988, 53, 4633-4635.  | 3.2  | 18        |
| 118 | [25] Enzymatic regeneration of adenosine 5'-triphosphate: Acetyl phosphate, phosphoenolpyruvate, methoxycarbonyl phosphate, dihydroxyacetone phosphate, 5-phospho- $\beta$ -D-ribose pyrophosphate, uridine-5'-diphosphoglucose. Methods in Enzymology, 1987, 136, 263-280.                | 1.0  | 52        |
| 119 | Synthesis of methoxycarbonyl phosphate, new reagent having high phosphoryl donor potential for use in ATP cofactor regeneration. Journal of Organic Chemistry, 1985, 50, 1069-1076.  | 3.2  | 32        |
| 120 | Magnetic separations in biotechnology. Trends in Biotechnology, 1983, 1, 144-148.  | 9.3  | 105       |
| 121 | Photochemistry of alkyl dicarbonyl( $\eta$ -5-cyclopentadienyl)iron and -ruthenium. Ligand substitution and alkene elimination via photogenerated sixteen-valence-electron intermediates. Organometallics, 1982, 1, 602-611.   | 2.3  | 47        |
| 122 | Application of rapid-scan Fourier transform infrared spectroscopy to characterize the monodentate intermediate in the photochemical formation of tetracarbonyl(4,4'-dialkyl-2,2'-bipyridine)metal from hexacarbonylmetal. Journal of the American Chemical Society, 1982, 104, 5784-5786.  | 13.7 | 27        |
| 123 | Photochemistry of metal carbonyl alkyls. Study of thermal $\beta$ -hydrogen transfer in photogenerated, 16-valence-electron alkyl dicarbonylcyclopentadienylmolybdenum and -tungsten complexes. Journal of the American Chemical Society, 1982, 104, 6005-6015.                            | 13.7 | 56        |
| 124 | Photochemistry of solution and surface-confined alkyl- and benzyltricarbonylcyclopentadienyltungsten complexes. Organometallics, 1982, 1, 1338-1350.   | 2.3  | 24        |
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