Subject Index

Ab initio calculations

Structure Investigation of Bridgehead Aziridine: Synthesis, Theoretical, and Crystallographic Study of 2,4,6-Triphenyl-1,3-diazabicyclo[3.1.0]hex-3-ene, 190

Abietanes

Two New Diterpenoids from Callicarpa pedunculata, 1017

Acceptor ligands

Synthesis and Characterization of Polypiridine-Based Rhenium(I) Complexes with Pyrazino[2,3-f][1,10]phen-anthroline, 1220

Acetalization

A Simple Synthesis of a Model of the Tetracyclic Bisketal Lactone Mainframe of Saudin, 2732

Acetyl chloride

Regio- and Stereocontrolled Synthesis of $(2R^*,3R^*,4R^*)$ -3,4-Dichloro-1,2,3,4,5,8-hexahydronaphthalen-2-yl Acetate *via* Tandem S_N2' Reactions, 1246

Acetylcholin mimetics

3-Fluoro-2,4-dioxa-7-aza-3-phosphadecalin 3-Oxides as Rigid Acetylcholine Mimetics: Conformational Analysis and Direct Evidence of the Anomeric Effect, 1351

Acetylenedicarboxylates

One-Step Synthesis of Dialkyl 2-[(4-Methylphenyl)sulfonyl]-1*H*-pyrrole-3,4-dicarboxylates by Reaction of Acetylenedicarboxylates with 'Tosylmethyl Isocyanide' (TsMIC) and Triphenylphosphine, 923

New, Diastereoselective One-Pot Synthesis of Tetrasubstituted Hydantoins, 1187

Efficient Synthesis of Dialkyl (2Z)-2-[(E)-1-Aryl-2-(3-arylquinoxalin-2-yl)ethenyl]but-2-enedioates, 2825

Acetylenes

Facile One-Pot Three-Component Synthesis of Functionalized Pyridylfuran-2-amines, 299

One-Pot Synthesis of Pentaalkyl 7-[(Alkylamino)carbonyl]-2-oxa-1-azabicyclo[3.2.0]hept-3-ene-3,4,5,6,7-pentacarboxylate, 1942

Synthesis of Benzo[g]isochromenes through Photo-Dehydro-Diels-Alder Reaction, 2694

One-Pot Synthesis of Tetraalkyl Benzene-1,2,3,5-tetracarboxylates from a Four-Component Reaction of Alkyl Propiolates and Alkyl 2-Nitroethanoates Promoted by Ph₃P, 2918

Acetylenic esters

One-Pot Three-Component Synthesis of Highly Functionalized 2,3-Dihydro-1,3-dioxo-1H,5H-pyrazolo[1,2-a][1,2,4]triazoles, 1176

Aconitilearine

Norditerpenoid Alkaloids from the Aerial Parts of Aconitum cochleare Woroschin, 210

Aconitum cochelare

Norditerpenoid Alkaloids from the Aerial Parts of Aconitum cochleare Woroschin, 210

Aconitum toxicum

C₁₉ and C₂₀ Diterpene Alkaloids from Aconitum toxicum RCHB., 2981

Acotoxinine

C₁₉ and C₂₀ Diterpene Alkaloids from Aconitum toxicum RCHB., 2981

Acridine conjugates

Synthetic dsDNA-Binding Peptides Using Natural Compounds as Model, 1194

Activating transcriptional factor (ATF)

Investigation of the Interactions of β -Peptides with DNA Duplexes by Circular Dichroism Spectroscopy, 3087 **Acyl radicals**

Homolytic Substitution at the Sulfur Atom as a Tool for Organic Synthesis, 2167

Trifluoromethyl-Radical-Mediated Carbonylation of Alkanes Leading to Ethynyl Ketones, 2483

Agallochaols G-J

Further New Secoatisane Diterpenoids from the Chinese Mangrove Excoecaria agallocha L., 1367

Ageraphorone

Cadinene Derivatives from Eupatorium adenophorum, 3104

Aggregates

Hydrophilic Carotenoids: Surface Properties and Aggregation of Crocin as a Biosurfactant, 45

Akuammiline

New Indole Alkaloids from Rauvolfia yunnanensis, 1344

Alcohol adduct

DPPH (= 2,2-Diphenyl-1-picrylhydrazyl = 2,2-Diphenyl-1-(2,4,6-trinitrophenyl)hydrazyl) Radical-Scavenging Reaction of Protocatechuic Acid Esters (= 3,4-Dihydroxybenzoates) in Alcohols: Formation of Bisalcohol Adduct, 821

Aldehydes

Synthesis of Optically Active, Cyclic α-Hydroxy Ketones and 1,2-Diketones from Verbenone Epoxide, 507

Aldimines

Practical Stereo- and Regioselective, Copper(I)-Promoted *Strecker* Synthesis of Sugar-Modified $\alpha\beta$ -Unsaturated Imines. 520

Aldol condensation

Formation of Dimers of Some 2-Substituted Indan-1-one Derivatives during Base-Mediated Cross-Aldol Condensation, 258

Alkaloids

Regioselective Synthesis of Ellipticine, 111

Synthesis of Tangutorine, 122

A Concise Route to Racemic Anatoxin a from Cycloocta-1,5-diene, 134

Lycodine-Type Alkaloids from Lycopodium casuarinoides, 138

Norditerpenoid Alkaloids from the Aerial Parts of Aconitum cochleare WOROSCHIN, 210

Enaminone-Based Synthesis of Dipodazine Derivatives, 240

Formal Synthesis of Vallesamidine, 249

Three New Indole Alkaloids from the Leaves of Kopsia officinalis, 515

Enantioselective Synthesis of (-)-(19R)-Ibogamin-19-ol, 542

New Stephaoxocane Alkaloids from Stephania longa, 1105

New Indole Alkaloids from Rauvolfia yunnanensis, 1344

New Alkaloids from Daphniphyllum longeracemosum Rosenth., 1457

Alkaloids from Aristolochia manshuriensis (Aristolochiaceae), 2665

Alkaloids from Daphniphyllum longeracemosum, 2783

C₁₉ and C₂₀ Diterpene Alkaloids from Aconitum toxicum RCHB., 2981

Alkenes

Palladium-Promoted Carbon Monoxide/Ethylene/Styrene Terpolymerization Reaction: Throwing Light on the Different Reactivity of the Two Alkenes, 1752

Absolute Rate Constants for the Addition of the 1-(tert-Butoxy)carbonylethyl Radical onto Cyclic Alkenes in Solution, 2327

Alkylation

Diastereoselective Alkylation of a Proline-Derived Bicyclic Lactim Ether, 1894

O-Alkyloximes

Radical 4-exo Cyclizations onto O-Alkyloxime Acceptors: Towards the Synthesis of Penicillin-Containing Antibiotics, 2133

Alkynes

Incorporation of an Allene Unit into α -Pinene $via\ \beta$ -Elimination, 1449

Synthesis of 3-Acyl-4-alkenylpyrrolidines by Platinum-Catalyzed Hydrative Cyclization of Allenynes, 1672 Oligonucleotide Analogues with Integrated Bases and Backbone. Part 13. Synthesis and Association of Ethynylene-Linked Self-Complementary Dimers, 2861

Allenes

Incorporation of an Allene Unit into α -Pinene via β -Elimination, 1449

Synthesis of 3-Acyl-4-alkenylpyrrolidines by Platinum-Catalyzed Hydrative Cyclization of Allenynes, 1672

Allyl bromide

A Rapid and Efficient Stereoselective Synthesis of (Z)- and (E)-Allyl Bromides from Baylis-Hillman Adducts Using Bromo(dimethyl)sulfonium Bromide, 1417

Allylation

Radical-Mediated Three-Component Coupling of Alkenes, 2450

Aloe emodin

New Phenolic Constituents from the Stems of Spatholobus suberectus, 1241

Ambergris

Internal Nucleophilic Termination in Acid-Mediated Polyene Cyclizations. Part 5. Synthetic Access to Didehydro Analogues of (\pm) -Ambrox $^{\otimes}$ and Diastereoisomers, 3071

Amberlyst-15

Facile One-Pot Multicomponent Synthesis of β -Acetamido Ketones with *Amberlyst-15* as Heterogeneous Catalyst, 3109

Ambrox[®]

Internal Nucleophilic Termination in Acid-Mediated Polyene Cyclizations. Part 5. Synthetic Access to Didehydro Analogues of (\pm) -Ambrox® and Diastereoisomers, 3071

Amides

A Practical, Water-Soluble, Ionic Scavenger for the Solution-Phase Syntheses of Amides, 532

Amines

Transformation of Amino Acids into Nonracemic 1-(Heteroaryl)ethanamines by the Enamino Ketone Methodology, 30

Quenching of Singlet Oxygen by Tertiary Aliphatic Amines. Structural Effects on Rates and Products, 2273 Alkoxyamines of Stable Aromatic Nitroxides: N-O vs. C-O Bond Homolysis, 2312

Re-formation Reaction of Cyclic Nitroxide-Based Alkoxyamines: Steric and Polar/Stabilization Effects, 2330 2,5-Dihydro-1*H*-imidazole-Based Nitroxides as Prospective Mediators in Living Radical Polymerization, 2341 Nuclear-Spin Polarization in Electron-Transfer Reactions of Amines, 2847

Amino acids

Transformation of Amino Acids into Nonracemic 1-(Heteroaryl)ethanamines by the Enamino Ketone Methodology, 30

 β -Peptidic Secondary Structures Fortified and Enforced by Zn²⁺ Complexation – On the Way to β -Peptidic Zinc Fingers?, 361

Practical Stereo- and Regioselective, Copper(I)-Promoted *Strecker* Synthesis of Sugar-Modified $\alpha\beta$ -Unsaturated Imines, 520

Synthesis of β^3 -Homophenylalanine-Derived Amino Acids and Peptides by *Suzuki* Coupling in Solution and on Solid Support, 1427

Rearrangements in Model Peptide-Type Radicals via Intramolecular Hydrogen-Atom Transfer, 2254

Effective Methods for the Synthesis of N-Methyl β -Amino Acids from All Twenty Common α -Amino Acids Using 1,3-Oxazolidin-5-ones and 1,3-Oxazonan-6-ones, 2611

α-Aminoisobutyric acid

Novel N-(2,2-Dimethyl-2H-azirin-3-yl)-L-prolinates as Aib-Pro Synthons, 1841

Ammine complexes

Syntheses and Crystal Structures of Ammoniates with the Phenyl-Substituted Polytin Anions $Sn_2Ph_4^{2-}$, $cyclo-Sn_4Ph_4^{4-}$, and $Sn_6Ph_{12}^{2-}$, 1158

Ammoniates

Syntheses and Crystal Structures of Ammoniates with the Phenyl-Substituted Polytin Anions $Sn_2Ph_4^{2-}$, cyclo- $Sn_4Ph_4^{4-}$, and $Sn_6Ph_{17}^{2-}$, 1158

Anatoxin a

A Concise Route to Racemic Anatoxin a from Cycloocta-1,5-diene, 134

Andrographis paniculata

Nine New ent-Labdane Diterpenoids from the Aerial Parts of Andrographis paniculata, 2654

Anilines

Intramolecular Hetero-*Diels-Alder* Reactions Catalyzed by BiCl₃: Stereoselective Synthesis of Benzo-Annelated Decahydrofuro[3,2-h][1,6]naphthyridine Derivatives, 2728

Anomeric effect

3-Fluoro-2,4-dioxa-7-aza-3-phosphadecalin 3-Oxides as Rigid Acetylcholine Mimetics: Conformational Analysis and Direct Evidence of the Anomeric Effect. 1351

Anthracene

Hierarchic Supramolecular Interactions within Assemblies in Solution and in the Crystal of 2,3,6,7-Tetrasubstituted 5,5'-(Anthracene-9,10-diyl)bis[pyrimidin-2-amines], 333

Anthracene-9-carbonitrile

Olefin Isomerization via Radical-Ion Pairs in Triplet States Studied by Chemically Induced Dynamic Nuclear Polarization (CIDNP), 2183

Anthraquinone templates

Oligosaccharide Analogues of Polysaccharides. Part 26. Mimics of Cellulose I and Cellulose II: Di- and Monoalkynyl C-Cellosides of 1,8-Disubstituted Anthraquinones, 675

Anthrax

Studies towards a Conjugate Vaccine for Anthrax: Synthesis of the Tetrasaccharide Side Chain of the *Bacillus anthracis* Exosporium, 1075

Anthrose

Studies towards a Conjugate Vaccine for Anthrax: Synthesis of the Tetrasaccharide Side Chain of the *Bacillus* anthracis Exosporium, 1075

Antibiotics

Radical 4-exo Cyclizations onto O-Alkyloxime Acceptors: Towards the Synthesis of Penicillin-Containing Antibiotics, 2133

Anticancer acticity

Palladium(II) Complexes of the Thiosemicarbazone and N-Ethylthiosemicarbazone of 3-Hydroxypyridine-2-carbaldehyde: Synthesis, Properties, and X-Ray Crystal Structure, 1959

Antimanic activity

Three New Indole Alkaloids from the Leaves of Kopsia officinalis, 515

Antioxidants

DPPH (= 2,2-Diphenyl-1-picrylhydrazyl = 2,2-Diphenyl-1-(2,4,6-trinitrophenyl)hydrazyl) Radical-Scavenging Reaction of Protocatechuic Acid Esters (= 3,4-Dihydroxybenzoates) in Alcohols: Formation of Bisalcohol Adduct. 821

DPPH (= 2,2-Diphenyl-1-picrylhydrazyl) Radical-Scavenging Reaction of Protocatechuic Acid (= 3,4-Dihydroxybenzoic Acid): Difference in Reactivity between Acids and Their Esters, 1395

Antioxidant and Antiradical Activity of Hydroxy-Substituted 4-Thiaflavanes, 2462

Antiradical activity

Antioxidant and Antiradical Activity of Hydroxy-Substituted 4-Thiaflavanes, 2462

Antitumor activity

Terpenoids from the Roots of Ligularia muliensis, 915

Arachidonic acid

Epoxidation of Polyunsaturated Fatty Acid Double Bonds by Dioxirane Reagent: Regioselectivity and Lipid Supramolecular Organization, 2243

Aristolochia manshuriensis

Alkaloids from Aristolochia manshuriensis (Aristolochiaceae), 2665

Arndt-Eistert homologation

Effective Methods for the Synthesis of N-Methyl β -Amino Acids from All Twenty Common α -Amino Acids Using 1,3-Oxazolidin-5-ones and 1,3-Oxazones, 2611

Artocarpus petelotii

Novel 2-Arylbenzofuran Derivatives from Artocarpus petelotii, 1000

Artopetelins D-G

Novel 2-Arylbenzofuran Derivatives from Artocarpus petelotii, 1000

η^2 -Aryl coordination

Chloro(η^6 -p-cymene)(phosphoramidite)ruthenium(II), a 16-Electron Fragment Stabilized by an η^2 -Aryl-Metal Interaction, and Its Use in Asymmetric Cyclopropanation, 1696

4-Arylurazoles

One-Pot Three-Component Synthesis of Highly Functionalized 2,3-Dihydro-1,3-dioxo-1*H*,5*H*-pyrazolo[1,2-*a*][1,2,4]triazoles, 1176

Ascomycete

Concentricolide, an Anti-HIV Agent from the Ascomycete Daldinia concentrica, 127

Two New Compounds from the Ascomycete Daldinia concentrica, 450

Asymmetric catalysis

Giambattista Consiglio's Passion for Homogeneous Catalysis, C-C Bond Formation, and Stereochemistry, 1475

Chiral Phosphino- and (Phosphinooxy)-Substituted N-Heterocyclic Carbene Ligands and Their Application in Iridium-Catalyzed Asymmetric Hydrogenation, 1559

Asymmetric hydrogenation

Chiral Phosphino- and (Phosphinooxy)-Substituted N-Heterocyclic Carbene Ligands and Their Application in Iridium-Catalyzed Asymmetric Hydrogenation, 1559

Preparation of C₂-Symmetric Bis[2-(diphenylphosphino)ferrocen-1-yl]methane and Its Use in Rhodium- and Ruthenium-Catalyzed Hydrogenation, 1772

Asymmetric polymerization

Copolymerization of 7-Methylenebicyclo[4.1.0]heptane with Carbon Monoxide Initiated by Optically Active Palladium Complexes, 1574

Asymmetric reduction

Effect of the Secondary Reduction on the Enantioselectivity and Function of Additives in the Chiral Oxazaborolidine-Catalyzed Asymmetric Borane Reduction of Ketones, 1067

Atactic polypropylene

Methylene-Bridged Metallocenes with 2,2'-Methylenebis[1H-inden-1-yl] Ligands: Synthesis, Characterization, and Polymerization Catalysis of a Synthetically Simple Class of C_2 - and C_{2v} -Symmetric ansa-Metallocenes, 1497

Atropisomeric diphosphines

Copolymerization of Ethene and Carbon Monoxide with (Diphosphine)nickel Catalysts, 2720

Atropisomeric ligands

Statistical Approach for the Determination of the Stereoregularity of Optically Active Propylene-CO Copolymers, 1740

1-Azabicyclo[1.1.0]butanes

The First Ring-Enlargement of a 1-Azabicyclo[1.1.0] butane to a 1-Azabicyclo[2.1.1] hexane, 442

1-Azabicvclo[2.1.1]hexanes

The First Ring-Enlargement of a 1-Azabicyclo[1.1.0] butane to a 1-Azabicyclo[2.1.1] hexane, 442

2-Azabicyclo[3.2.2]nonane

Synthesis of 2-Azabicyclo[3.2.2]nonane-Derived Monosaccharide Mimics and Their Evaluation as Glycosidase Inhibitors, 416

Aza-Wittig reaction

Synthesis of Derivatives of Pyrido[4,3-d]pyrimidin-4(3H)-one via an Iminophosphorane, 1337

Aziridines, bridgehead

Structure Investigation of Bridgehead Aziridine: Synthesis, Theoretical, and Crystallographic Study of 2,4,6-Triphenyl-1,3-diazabicyclo[3.1.0]hex-3-ene, 190

2H-Azirin-3-amines

The 'Azirine/Oxazolone Method' on Solid Phase: Introduction of Various α , α -Disubstituted α -Amino Acids,

Reaction of γ -Hydroxy-N-[1-(dimethylcarbamoyl)ethyl]butanamides under the 'Direct Amide Cyclization' Conditions, 153

Transformation of 5-Hydroxy- to (5-Chloropentanoyl)amino Derivatives under 'Direct Amide Cyclization' Conditions, 352

Synthesis of Enniatin-like Cyclic Depsipeptides via 'Direct Amide Cyclization', 731

Azirine/oxazolone method

The 'Azirine/Oxazolone Method' on Solid Phase: Introduction of Various α , α -Disubstituted α -Amino Acids,

Reaction of γ -Hydroxy-N-[1-(dimethylcarbamoyl)ethyl]butanamides under the 'Direct Amide Cyclization' Conditions, 153

Synthesis of Enniatin-like Cyclic Depsipeptides via 'Direct Amide Cyclization', 731

Novel N-(2,2-Dimethyl-2H-azirin-3-yl)-L-prolinates as Aib-Pro Synthons, 1841

Azirines

Novel N-(2,2-Dimethyl-2H-azirin-3-yl)-L-prolinates as Aib-Pro Synthons, 1841

Azoalkane photolysis

Initial Radical Separation after Photolysis of 2,2'-Azobis(isobutyronitrile) (AIBN) in Solution: Modeling the Primary Cage Effect for Polar Radicals, 2533

2,2'-Azobis(isobutyronitrile) (AIBN)

Initial Radical Separation after Photolysis of 2,2'-Azobis(isobutyronitrile) (AIBN) in Solution: Modeling the Primary Cage Effect for Polar Radicals, 2533

A zulene

Two New Pigments from the Fruiting Bodies of the Basidiomycete Lactarius deliciosus, 988

Two New Azulene Pigments from the Fruiting Bodies of the Basidiomycete Lactarius hatsudake, 1463

Bacillus anthracis

Studies towards a Conjugate Vaccine for Anthrax: Synthesis of the Tetrasaccharide Side Chain of the *Bacillus* anthracis Exosporium, 1075

Baeyer-Villiger oxidation

A Simple Synthesis of a Model of the Tetracyclic Bisketal Lactone Mainframe of Saudin, 2732

Bakers' yeast reduction

The Absolute Configuration of (+)-Ethyl *cis*-1-Benzyl-3-hydroxypiperidine-4-carboxylate and (+)-4-Ethyl 1-Methyl *cis*-3-Hydroxypiperidine-1,4-dicarboxylate; a Revision, 3023

Barton decarboxylation

Formal Synthesis of Vallesamidine, 249

Base pairing

Oligonucleotides Containing 7-Deaza-2'-deoxyxanthosine: Synthesis, Base Protection, and Base-Pair Stability, 2794

Oligonucleotide Analogues with Integrated Bases and Backbone. Part 13. Synthesis and Association of Ethynylene-Linked Self-Complementary Dimers, 2861

Base stacking

Oligonucleotide Analogues with Integrated Bases and Backbone. Part 13. Synthesis and Association of Ethynylene-Linked Self-Complementary Dimers, 2861

Basidiomycete

Two New Pigments from the Fruiting Bodies of the Basidiomycete Lactarius deliciosus, 988

Two New Azulene Pigments from the Fruiting Bodies of the Basidiomycete Lactarius hatsudake, 1463

Bathophenanthroline complex

A New Robust and Highly Sensitive FRET Donor-Acceptor Pair: Synthesis, Characterization, and Application in a Thrombin Assay, 3056

Baylis-Hillman reaction

Synthetic Applications of the *Baylis–Hillman* Reaction: Simple and Convenient Synthesis of Five Important Insect Pheromones, 876

A Rapid and Efficient Stereoselective Synthesis of (Z)- and (E)-Allyl Bromides from Baylis-Hillman Adducts Using Bromo(dimethyl)sulfonium Bromide, 1417

Beckmann rearrangement

Synthesis of 2-Azabicyclo[3.2.2]nonane-Derived Monosaccharide Mimics and Their Evaluation as Glycosidase Inhibitors, 416

A New Sterically Highly Hindered 7-Membered Cyclic Nitroxide for the Controlled Living Radical Polymerization, 2200

Beer

Preparation and Recognition Properties of Vanillin-Imprinted Polymers, 3032

Benzaldimines

Cobalt-Catalyzed Carbonylation of *N*-Alkylbenzaldimines to '*N*-Alkylphthalimidines' (= 2,3-Dihydro-1*H*-isoindol-1-ones) *via* Tandem C-H Activation and Cyclocarbonylation, 1687

Benzamides

A Practical, Water-Soluble, Ionic Scavenger for the Solution-Phase Syntheses of Amides, 532

Benzene-1,2-diamine

Efficient Synthesis of Dialkyl (2Z)-2-[(E)-1-Aryl-2-(3-arylquinoxalin-2-yl)ethenyl]but-2-enedioates, 2825

Benzenetetracarboxylates

One-Pot Synthesis of Tetraalkyl Benzene-1,2,3,5-tetracarboxylates from a Four-Component Reaction of Alkyl Propiolates and Alkyl 2-Nitroethanoates Promoted by Ph₃P, 2918

Benzoates, 3,4-dihydroxy

DPPH (= 2,2-Diphenyl-1-picrylhydrazyl = 2,2-Diphenyl-1-(2,4,6-trinitrophenyl)hydrazyl) Radical-Scavenging Reaction of Protocatechuic Acid Esters (= 3,4-Dihydroxybenzoates) in Alcohols: Formation of Bisalcohol Adduct. 821

Benzofuran derivatives, 2-aryl-

Novel 2-Arylbenzofuran Derivatives from Artocarpus petelotii, 1000

Benzofuran lactone

Concentricolide, an Anti-HIV Agent from the Ascomycete Daldinia concentrica, 127

1H-Benzo[g]isochromenes

Synthesis of Benzo[g]isochromenes through Photo-Dehydro-Diels-Alder Reaction, 2694

1H-Benzo [de] is oquinoline-1,3(2H)-dione

Intercalating Nucleic Acids Containing Insertions of Naphthalimide, 1826

2H-1-Benzopyrans

Isoprenylated Flavonoids from the Roots and Rhizomes of Sophora tonkinensis, 103

Benzoxazoles, 2-phenyl-

Synthesis and Properties of 2-Phenylbenzoxazole-Based Luminophores for *in situ* Photopolymerized Liquid-Crystal Films, 304

Bergapten-8-yl sulfate

Lindleyanin and Bergapten-8-yl Sulfate from Pleurospermum lindleyanum, 117

Beta vulgaris

First 13C-NMR Assignments of Betaxanthins, 1008

Betaxanthin

First ¹³C-NMR Assignments of Betaxanthins, 1008

Bicyclo[4.1.0]heptane, 7-methylene-

Copolymerization of 7-Methylenebicyclo[4.1.0]heptane with Carbon Monoxide Initiated by Optically Active Palladium Complexes, 1574

Bicyclo[2.2.2]octane

Synthesis of 2-Azabicyclo[3.2.2]nonane-Derived Monosaccharide Mimics and Their Evaluation as Glycosidase Inhibitors, 416

Bicyclo[4.2.0]octan-2-ones

Photocycloaddition of Cyclohex-2-enones to Penta-1,2,4-triene, 854

Biocatalysis

Enzymatic Approach to and Odor Description of the Twelve Enantiomerically Pure Isomers of *Pelargene*®, 177

Biogenesis

 $Uncommon \ Sesquiter penoids \ and \ New \ Triter penoids \ from \ \textit{Jatropha neopauciflora} \ (Euphorbia ceae), 16$

Biosurfactants

 $Hydrophilic\ Carotenoids: Surface\ Properties\ and\ Aggregation\ of\ Crocin\ as\ a\ Biosurfactant,\ 45$

Biosynthesis

Paranolin: a New Xanthene-Based Metabolite from Paraphaeosphaeria nolinae, 502

[1,1'-Biphenyl]-2,2'-diamine

Synthesis, Characterization, and X-Ray Crystal Structures of Bis[N-(3,3-diphenylallylidene)quinolin-8-amine- $\kappa N, \kappa N^8$]copper(1 +) Tetraphenylborate(1 -) ([Cu(dpa-qa)_2]BPh_4) and Bis[N, N'-bis(3,3-diphenylallylidene)-[1,1'-biphenyl]-2,2'-diamine- $\kappa N, \kappa N'$]copper(1 +) Perchlorate ([Cu(bdpa-bda)_2]ClO₄ · 3 H₂O), 274

4,4'-Bipyridine

(4,4'-Bipyridine)mercury(II) Coordination Polymers, Syntheses, and Structures, 81

Biradicals

Photocycloaddition of Cyclohex-2-enones to Penta-1,2,4-triene, 854

Bismuth catalysts

Intramolecular Hetero-*Diels–Alder* Reactions Catalyzed by BiCl₃: Stereoselective Synthesis of Benzo-Annelated Decahydrofuro[3,2-h][1,6]naphthyridine Derivatives, 2728

Bis(phosphino)ferrocenes

Systematic Study of the Asymmetric Methoxycarbonylation of Styrene Catalyzed by Palladium Systems Containing Chiral Ferrocenyl Diphosphine Ligands, 1610

Bisubstrate inhibition

Synthesis and Biological Evaluation of Potent Bisubstrate Inhibitors of the Enzyme Catechol *O*-Methyltransferase (COMT) Lacking a Nitro Group, 1856

Block copolymers

Ab initio Emulsion Polymerization by RAFT (Reversible Addition-Fragmentation Chain Transfer) through the Addition of Cyclodextrins, 1641

Blood-brain-barrier passive permeation

The Lipophilicity Behavior of Three Catechol-O-methyltransferase (COMT) Inhibitors and Simple Analogues, 144

Bolaamphiphile

Hydrophilic Carotenoids: Surface Properties and Aggregation of Crocin as a Biosurfactant, 45

Bond activation

A Minimalist Approach to C-H Activation by Copper, 841

Cobalt-Catalyzed Carbonylation of *N*-Alkylbenzaldimines to '*N*-Alkylphthalimidines' (= 2,3-Dihydro-1*H*-isoindol-1-ones) *via* Tandem C–H Activation and Cyclocarbonylation, 1687

Bond dissociation energy

Reactions of Alkyl Radicals with Substituted Toluenes and the Effect of Substituents on Dissociation Energies of Benzyl C-H Bonds, 2226

Bond homolysis

Alkoxyamines of Stable Aromatic Nitroxides: N-O vs. C-O Bond Homolysis, 2312

Boran

Effect of the Secondary Reduction on the Enantioselectivity and Function of Additives in the Chiral Oxazaborolidine-Catalyzed Asymmetric Borane Reduction of Ketones, 1067

Boronates, 1H-indol-1-yl

Convenient Synthesis of 1*H*-Indol-1-yl Boronates *via* Palladium(0)-Catalyzed Borylation of Bromo-1*H*-indoles with 'Pinacolborane', 936

Borylation

Convenient Synthesis of 1*H*-Indol-1-yl Boronates *via* Palladium(0)-Catalyzed Borylation of Bromo-1*H*-indoles with 'Pinacolborane', 936

Bovine liver β -glucuronidase

Synthesis of Glucuronic, Mannuronic, and Galacturonic Acid-Derived Imidazoles as Inhibitors of Bovine Liver β -Glucuronidase, 1373

Bredt's rule

Enantioselective Synthesis of (-)-(19R)-Ibogamin-19-ol, 542

Bromination

Synthesis and Electronic Spectroscopy of Bromocarbazoles. Direct Bromination of *N*- and *C*-Substituted Carbazoles by *N*-Bromosuccinimide or a *N*-Bromosuccinimide/Silica Gel System, 1123

Bromo(dimethyl)sulfonium bromide

A Rapid and Efficient Stereoselective Synthesis of (Z)- and (E)-Allyl Bromides from Baylis-Hillman Adducts Using Bromo(dimethyl)sulfonium Bromide, 1417

Buergerinins B-E

C9-Iridoids from Scrophularia buergeriana, 2789

Butadivne

Oligosaccharide Analogues of Polysaccharides. Part 26. Mimics of Cellulose I and Cellulose II: Di- and Monoalkynyl C-Cellosides of 1,8-Disubstituted Anthraquinones, 675

(2E)-But-2-enedinitrile

Olefin Isomerization via Radical-Ion Pairs in Triplet States Studied by Chemically Induced Dynamic Nuclear Polarization (CIDNP), 2183

But-2-enedioates

Efficient Synthesis of Dialkyl (2Z)-2-[(E)-1-Aryl-2-(3-arylquinoxalin-2-yl)ethenyl]but-2-enedioates, 2825

Cadinene derivatives

Cadinene Derivatives from Eupatorium adenophorum, 3104

Caesalpinia crista

Cassane-Type Diterpenes from the Seeds of Caesalpinia crista, 1062

Cage effect

Initial Radical Separation after Photolysis of 2,2'-Azobis(isobutyronitrile) (AIBN) in Solution: Modeling the Primary Cage Effect for Polar Radicals, 2533

Callicarpa furfuraceae

Lignanoids and Diterpenoids from Callicarpa furfuraceae, 64

Callicarpa pedunculata

Two New Diterpenoids from Callicarpa pedunculata, 1017

Camarin

Triterpenoidal Secondary Metabolites from Lantana Camara Linn., 1932

Camarinin

Triterpenoidal Secondary Metabolites from Lantana Camara Linn., 1932

α-Campholenal

Analogues of α -Campholenal (= (1R)-2,2,3-Trimethylcyclopent-3-ene-1-acetaldehyde) as Building Blocks for (+)- β -Necrodol (= (1S,3S)-2,2,3-Trimethyl-4-methylenecyclopentanemethanol) and Sandalwood-like Alcohols, 2638

Caralluma species

Novel Steroidal Glycosides from two Indian Caralluma species, C. stalagmifera and C. indica, 201

9H-Carbazoles, bromo-

Synthesis and Electronic Spectroscopy of Bromocarbazoles. Direct Bromination of N- and C-Substituted Carbazoles by N-Bromosuccinimide or a N-Bromosuccinimide/Silica Gel System, 1123

9H-Carbazol-2-yl sulfonates

Photo-Fries Rearrangement of Carbazol-2-yl Sulfonates: Efficient Tool for the Introduction of Sulfonyl Groups into Polycyclic Aromatic Compounds, 1147

Carbenes

Synthesis of Highly Functionalized γ -Lactones via 1,5-Electrocyclic Ring Closure, 1231

Incorporation of an Allene Unit into α -Pinene via β -Elimination, 1449

Carbodiimide

Synthesis of Derivatives of Pyrido[4,3-d]pyrimidin-4(3H)-one via an Iminophosphorane, 1337

Carbodithioatoantimony

Synthesis, Structures, and Some Reactions of [(Thioacyl)thio]- and (Acylseleno)antimony and -bismuth Derivatives ((RCSS) $_x$ MR $_{3-x}^1$ and (RCOSe) $_x$ MR $_{3-x}^1$ with M = Sb, Bi and x = 1–3), 747

γ-Carbolines

 $\label{lem:conditions} Transformations of Methyl 2-[(E)-2-(Dimethylamino)-1-(methoxycarbonyl) ethenyl]-1-methyl-1$H-indole-3-carboxylate, 2774$

Carbon monoxide

Copolymerization of 7-Methylenebicyclo[4.1.0]heptane with Carbon Monoxide Initiated by Optically Active Palladium Complexes, 1574

Palladium-Promoted Carbon Monoxide/Ethylene/Styrene Terpolymerization Reaction: Throwing Light on the Different Reactivity of the Two Alkenes. 1752

Trifluoromethyl-Radical-Mediated Carbonylation of Alkanes Leading to Ethynyl Ketones, 2483

Copolymerization of Ethene and Carbon Monoxide with (Diphosphine)nickel Catalysts, 2720

Carbonylation

Giambattista Consiglio's Passion for Homogeneous Catalysis, C-C Bond Formation, and Stereochemistry, 1475

Asymmetric Hydroformylation of Vinylfurans Catalyzed by $\{(11bS)-4-\{[(1R)-2'-Phosphino[1,1'-binaphthalen]-2-yl]oxy\}$ dinaphtho[2,1-d:1',2'-f][1,3,2]dioxaphosphepin $\{rhodium(I) [Rh^{I}\{(R,S)-binaphos\}] Derivatives, 1681$

Cobalt-Catalyzed Carbonylation of N-Alkylbenzaldimines to 'N-Alkylphthalimidines' (= 2,3-Dihydro-1H-isoindol-1-ones) via Tandem C-H Activation and Cyclocarbonylation, 1687

The Methoxycarbonylation of Vinyl Acetate Catalyzed by Palladium Complexes of [1,2-Phenylenebis(methylene)]bis[di(tert-butyl)phosphine], 1783

Trifluoromethyl-Radical-Mediated Carbonylation of Alkanes Leading to Ethynyl Ketones, 2483

Carboselenoatoantimony

Synthesis, Structures, and Some Reactions of [(Thioacyl)thio]- and (Acylseleno)antimony and -bismuth Derivatives ((RCSS)_xMR $^1_{3-x}$ and (RCOSe)_xMR $^1_{3-x}$ with M = Sb, Bi and x = 1–3), 747

Carboselenoatobismuth

Synthesis, Structures, and Some Reactions of [(Thioacyl)thio]- and (Acylseleno)antimony and -bismuth Derivatives ((RCSS)_xMR $^1_{3-x}$ and (RCOSe)_xMR $^1_{3-x}$ with M = Sb, Bi and x = 1–3), 747

Carbothioamides

Reactions of α,β-Unsaturated Thioamides with Diazo Compounds, 2815

Carboxamide rotamers

Enantioselective Synthesis of (-)-(19R)-Ibogamin-19-ol, 542

Carotenoids

Hydrophilic Carotenoids: Surface Properties and Aggregation of Crocin as a Biosurfactant, 45 Preparation and Spectroscopic Characterization of (9Z,9'Z)-Lutein (Neolutein C), 667

Cassanes

Cassane-Type Diterpenes from the Seeds of Caesalpinia crista, 1062

Catalysis

Practical Stereo- and Regioselective, Copper(I)-Promoted *Strecker* Synthesis of Sugar-Modified $\alpha.\beta$ Unsaturated Imines, 520

Application of a *Grubbs-Hoveyda* Metathesis Catalyst Noncovalently Immobilized by Fluorous–Fluorous Interactions, 1030

Effect of the Secondary Reduction on the Enantioselectivity and Function of Additives in the Chiral Oxazaborolidine-Catalyzed Asymmetric Borane Reduction of Ketones, 1067

Novel Synthesis of Mafenide and Other Amino Sulfonamides by Electrochemical Reduction of Cyano Sulfonamides, 1254

Giambattista Consiglio's Passion for Homogeneous Catalysis, C-C Bond Formation, and Stereochemistry, 1475

Methylene-Bridged Metallocenes with 2,2'-Methylenebis[1H-inden-1-yl] Ligands: Synthesis, Characterization, and Polymerization Catalysis of a Synthetically Simple Class of C_{2^-} and $C_{2\nu}$ -Symmetric ansa-Metallocenes, 1497

Chiral (Diphosphonite) platinum Complexes in Asymmetric Hydroformylation, 1547

Chiral Phosphino- and (Phosphinooxy)-Substituted N-Heterocyclic Carbene Ligands and Their Application in Iridium-Catalyzed Asymmetric Hydrogenation, 1559

Synthesis, Structure, and Polymerization Activity of a Titanium Complex with a Chelating [(Hydroxy- κO)amino- κN]phenolato(2-)- κO Ligand, 1589

Systematic Study of the Asymmetric Methoxycarbonylation of Styrene Catalyzed by Palladium Systems Containing Chiral Ferrocenyl Diphosphine Ligands, 1610

Preparation of Partially Hydrogenated 4,6-Dimethyldibenzothiophenes, 1623

Synthesis of 3-Acyl-4-alkenylpyrrolidines by Platinum-Catalyzed Hydrative Cyclization of Allenynes, 1672 Cobalt-Catalyzed Carbonylation of *N*-Alkylbenzaldimines to '*N*-Alkylphthalimidines' (= 2,3-Dihydro-1*H*-isoindol-1-ones) *via* Tandem C–H Activation and Cyclocarbonylation, 1687

Preparation of C₂-Symmetric Bis[2-(diphenylphosphino)ferrocen-1-yl]methane and Its Use in Rhodium- and Ruthenium-Catalyzed Hydrogenation, 1772

Polarity-Reversal-Catalyzed Hydrostannylation Reactions: Benzeneselenol-Mediated Homolytic Hydrostannylation of Electron-Rich Olefins, 2306

Copolymerization of Ethene and Carbon Monoxide with (Diphosphine)nickel Catalysts, 2720

Facile One-Pot Multicomponent Synthesis of β -Acetamido Ketones with *Amberlyst-15* as Heterogeneous Catalyst, 3109

Catechol O-methyltransferase (COMT)

Synthesis and Biological Evaluation of Potent Bisubstrate Inhibitors of the Enzyme Catechol *O*-Methyltransferase (COMT) Lacking a Nitro Group, 1856

Catecholborane

Radical-Mediated Three-Component Coupling of Alkenes, 2450

Cavitands

Tetrathiafulvalene (TTF)-Bridged Resorcin[4]arene Cavitands: Towards New Electrochemical Molecular Switches. 2040

CD Spectroscopy

Uncommon Sesquiterpenoids and New Triterpenoids from *Jatropha neopauciflora* (Euphorbiaceae), 16 Synthesis, and Helix or Hairpin-Turn Secondary Structures of 'Mixed' α/β-Peptides Consisting of Residues with Proteinogenic Side Chains and of 2-Amino-2-methylpropanoic Acid (Aib), 1801

Investigation of the Interactions of β-Peptides with DNA Duplexes by Circular Dichroism Spectroscopy, 3087

Cellulose I,

Oligosaccharide Analogues of Polysaccharides. Part 26. Mimics of Cellulose I and Cellulose II: Di- and Monoalkynyl C-Cellosides of 1,8-Disubstituted Anthraquinones, 675

Cellulose II

Oligosaccharide Analogues of Polysaccharides. Part 26. Mimics of Cellulose I and Cellulose II: Di- and Monoalkynyl *C*-Cellosides of 1,8-Disubstituted Anthraquinones, 675

Cellulose mimics

Oligosaccharide Analogues of Polysaccharides. Part 26. Mimics of Cellulose I and Cellulose II: Di- and Monoalkynyl C-Cellosides of 1,8-Disubstituted Anthraquinones, 675

Cellulose triacetates

Oligosaccharide Analogues of Polysaccharides. Part 26. Mimics of Cellulose I and Cellulose II: Di- and Monoalkynyl C-Cellosides of 1,8-Disubstituted Anthraquinones, 675

Cembranoid diterpenes

A New Cembranoid Diterpene and Other Related Metabolites from the South-China-Sea Soft Coral *Lobophytum crassum*, 567

Cementation

Temperature Influence on the Morphology and Roughness of Silver Deposit Formed by Cementation, 427 Surface-Roughness Evolution During the Cementation of Silver Ions on Solid Copper in Aqueous Sulfuric Acid Solution, 902

Morphology and Roughness of Silver Deposit Formed by Cementation at Various Temperatures in Pure Sulfuric Acid, 2764

Chain end control

Statistical Approach for the Determination of the Stereoregularity of Optically Active Propylene-CO Copolymers, 1740

Chalcogenocarboxylate

Synthesis, Structures, and Some Reactions of [(Thioacyl)thio]- and (Acylseleno)antimony and -bismuth Derivatives ((RCSS)_x MR_{3-x}^1 and (RCOSe)_x MR_{3-x}^1 with M=Sb, Bi and x=1-3), 747

Charge-transfer complex

Hierarchic Supramolecular Interactions within Assemblies in Solution and in the Crystal of 2,3,6,7-Tetrasubstituted 5,5'-(Anthracene-9,10-diyl)bis[pyrimidin-2-amines], 333

Charge-transfer states

Synthesis and Characterization of Polypiridine-Based Rhenium (I) Complexes with Pyrazino [2,3-f][1,10] phenanthroline, 1220

Chemically induced dynamic electron polarization (CIDEP)

The Discovery of Chemically Induced Dynamic Polarization (CIDNP), 2082

Initial Radical Separation after Photolysis of 2,2'-Azobis(isobutyronitrile) (AIBN) in Solution: Modeling the Primary Cage Effect for Polar Radicals, 2533

Photochemical Reactions and Photoinduced Electron-Transfer Processes in Liquids, Frozen Solutions, and Proteins as Studied by Multifrequency Time-Resolved EPR Spectroscopy, 2544

Chemically induced dynamic nuclear polarization (CIDNP)

Hanns Fischer: Radical Pioneer, 2061

The Discovery of Chemically Induced Dynamic Polarization (CIDNP), 2082

¹⁵N Chemically Induced Dynamic Nuclear Polarization (¹⁵N-CIDNP) Investigations of the Peroxynitrite Decay and Nitration of N-Acetyl-L-tyrosine, 2144

Olefin Isomerization via Radical-Ion Pairs in Triplet States Studied by Chemically Induced Dynamic Nuclear Polarization (CIDNP), 2183

Photophysical Investigations on Photoinitiators with Covalently Linked Thioxanthone Sensitizer Moieties, 2211

2,5-Dihydro-1*H*-imidazole-Based Nitroxides as Prospective Mediators in Living Radical Polymerization, 2341 The Reaction of Peroxynitrite with Morpholine (Secondary Amines) Revisited: The Overlooked Hydroxylamine Formation, 2399

Photo-CIDNP Studies of Hydroxy Ketones and Higher-Molecular-Weight Systems, 2522

Nuclear-Spin Polarization in Electron-Transfer Reactions of Amines, 2847

Chemoselective hydrogenation

Solid-Supported Green Synthesis of Substituted Hydrocinnamic Esters by Focused Microwave Irradiation, 483

Chiral auxiliaries

Practical Stereo- and Regioselective, Copper(I)-Promoted *Strecker* Synthesis of Sugar-Modified $\alpha\beta$ -Unsaturated Imines, 520

Chiral ligands

Chiral Phosphino- and (Phosphinooxy)-Substituted N-Heterocyclic Carbene Ligands and Their Application in Iridium-Catalyzed Asymmetric Hydrogenation, 1559

1,4-Chirality transfer

Enantioselective Synthesis of (-)-(19R)-Ibogamin-19-ol, 542

Chiroptical correlation

The Absolute Configuration of (+)-Ethyl *cis*-1-Benzyl-3-hydroxypiperidine-4-carboxylate and (+)-4-Ethyl 1-Methyl *cis*-3-Hydroxypiperidine-1,4-dicarboxylate; a Revision, 3023

Chlorination

Regio- and Stereocontrolled Synthesis of $(2R^*,3R^*,4R^*)$ -3,4-Dichloro-1,2,3,4,5,8-hexahydronaphthalen-2-yl Acetate *via* Tandem S_N2' Reactions, 1246

Chloroprene

An Expeditious Synthesis of Methyl Jasmonate, 1258

Chlorosulfonic acid

Molybdate Sulfuric Acid/NaNO₂: A Novel Heterogeneous System for the *N*-Nitrosation of Secondary Amines under Mild Conditions, 2922

Chromophores

Synthesis, Structure, and Optical Properties of Terminally Sulfur-Functionalized Core-Substituted Naphthalene-Bisimide Dyes, 1986

Cistanche tubulosa

Arylethyl (= Phenylethanoid) Glycosides and Oligosaccharide from the Stem of Cistanche tubulosa, 927

Cladiella krempfi

Krempenes A – D: A Series of Unprecedented Pregnane-Type Steroids from the Marine Soft Coral *Cladiella krempfi*, 2020

Cladosporium tenuissimum

Three New Polyketide Metabolites from the Endophytic Fungal Strain *Cladosporium tenuissimum* LR463 of *Maytenus hookeri*, 527

Clausena lenis

Dimeric Coumarin and Phenylpropanoids from Clausena lenis, 2836

Clay

Synthesis of Optically Active, Cyclic α-Hydroxy Ketones and 1,2-Diketones from Verbenone Epoxide, 507

Cleistanthane diterpene

A Rare New Cleistanthane Diterpene from the Pericarp of Trewia nudiflora, 2841

Clemahexapetoside A and B

Macrocyclic Glycosides from Clematis hexapetala, 3002

Clematis hexapetala

Macrocyclic Glycosides from Clematis hexapetala, 3002

Clematis mandshurica RUPR.

New Phenolic Glycosides from Clematis mandshurica, 1023

Clemomandshuricosides A-C

New Phenolic Glycosides from Clematis mandshurica, 1023

CO Insertion

Synthesis, Interionic Structure, and Reactivity toward CO and *p*-Methylstyrene of Palladacyclic Compounds Bearing α-Diimine Ligands, 1524

Cobalt complexes

Cobalt-Catalyzed Carbonylation of N-Alkylbenzaldimines to 'N-Alkylphthalimidines' (= 2,3-Dihydro-1H-isoindol-1-ones) via Tandem C-H Activation and Cyclocarbonylation, 1687

Codeine

Palladium-Catalyzed 2-Phenylethenylation of Codeine: 8-[(1E)-2-Phenylethenyl]codeinone Dimethyl Ketal as the Unexpected 'Masked' Diene for the Preparation of 19-Substituted *Diels-Alder* Adducts of Thebaine, 861

Coenzyme Q₁₀

Synthetic Studies on Coenzyme Q_{10} . Part 2. An Efficient and Improved Synthesis of Coenzyme Q_{10} via the C_5 + C_{45} Approach, 1317

Colorimetric sensor

pH-Dependent Assembly of DNA-Gold Nanoparticles Based on the i-Motif: A Switchable Device with the Potential of a Nanomachine, 1978

Comb polymers

On the Synthesis and Selective Deprotection of Low-Generation Dendrons with Orthogonally Protected Peripheral Amine Groups and a Possible Impact of the Deprotection Conditions on the Stability of Dendronized Polymers' Skeletons, 2745

Combinatorial chemistry

A Practical, Water-Soluble, Ionic Scavenger for the Solution-Phase Syntheses of Amides, 532

COMT Inhibitors

The Lipophilicity Behavior of Three Catechol-O-methyltransferase (COMT) Inhibitors and Simple Analogues, 144

Concentricolide

Concentricolide, an Anti-HIV Agent from the Ascomycete Daldinia concentrica, 127

Conformational analysis

3-Fluoro-2,4-dioxa-7-aza-3-phosphadecalin 3-Oxides as Rigid Acetylcholine Mimetics: Conformational Analysis and Direct Evidence of the Anomeric Effect, 1351

Oligonucleotide Analogues with Integrated Bases and Backbone. Part 13. Synthesis and Association of Ethynylene-Linked Self-Complementary Dimers, 2861

Conformational flexibility

Probing the Interaction of the Hydroxy Group at C(4) of Lactone-Type Inhibitors with β -Glucosidases and β -Galactosidases, 2006

Conjugate addition

Radical-Mediated Three-Component Coupling of Alkenes, 2450

Consiglio, Giambattista

Giambattista Consiglio's Passion for Homogeneous Catalysis, C-C Bond Formation, and Stereochemistry, 1475

My Scientific Collaboration and Fraternal Friendship with Giambattista Consiglio, 1482

Controlled living radical polymerization

A New Sterically Highly Hindered 7-Membered Cyclic Nitroxide for the Controlled Living Radical Polymerization, 2200

Coordination polymers

(4,4'-Bipyridine)mercury(II) Coordination Polymers, Syntheses, and Structures, 81

A One-Dimensional Thallium(I) Coordination Polymer Involving Polyhapto-Aromatic Interactions, 265

Copolymerization

Synthesis, Interionic Structure, and Reactivity toward CO and *p*-Methylstyrene of Palladacyclic Compounds Bearing α-Diimine Ligands, 1524

Copolymerization of 7-Methylenebicyclo[4.1.0]heptane with Carbon Monoxide Initiated by Optically Active Palladium Complexes, 1574

Copolymerization of Ethene and Carbon Monoxide with (Diphosphine)nickel Catalysts, 2720

Copper

Surface-Roughness Evolution During the Cementation of Silver Ions on Solid Copper in Aqueous Sulfuric Acid Solution. 902

Morphology and Roughness of Silver Deposit Formed by Cementation at Various Temperatures in Pure Sulfuric Acid, 2764

Copper catalyst

Practical Stereo- and Regioselective, Copper(I)-Promoted *Strecker* Synthesis of Sugar-Modified α,β-Unsaturated Imines, 520

Copper complexes

Synthesis, Characterization, and X-Ray Crystal Structures of Bis[N-(3,3-diphenylallylidene)quinolin-8-amine- $\kappa N, \kappa N^8$]copper(1+) Tetraphenylborate(1-) ([Cu(dpa-qa)_2]BPh_4) and Bis[N,N'-bis(3,3-diphenylallylidene)-[1,1'-biphenyl]-2,2'-diamine- $\kappa N, \kappa N'$]copper(1+) Perchlorate ([Cu(bdpa-bda)_2]ClO₄ · 3 H₂O), 274

A Minimalist Approach to C-H Activation by Copper, 841

Copper surface

Temperature Influence on the Morphology and Roughness of Silver Deposit Formed by Cementation, 427

Corals

Two New Polyhydroxylated Steroids from the Hainan Soft Coral Sinularia sp., 1330

Corey cyclization

Total Synthesis of (+)- β -Himachalene, 231

Coumarins

Dimeric Coumarin and Phenylpropanoids from Clausena lenis, 2836

Coupling rate constants

2,5-Dihydro-1*H*-imidazole-Based Nitroxides as Prospective Mediators in Living Radical Polymerization, 2341

Crocin

Hydrophilic Carotenoids: Surface Properties and Aggregation of Crocin as a Biosurfactant, 45

Cross-aldol condensation

Formation of Dimers of Some 2-Substituted Indan-1-one Derivatives during Base-Mediated Cross-Aldol Condensation, 258

Cross-coupling

Giambattista Consiglio's Passion for Homogeneous Catalysis, C-C Bond Formation, and Stereochemistry, 1475

Cross-metathesis

A New Route to Vitamin E Key-Intermediates by Olefin Cross-Metathesis, 797

Croton kongensis

Three New, 1-Oxygenated ent-8,9-Secokaurane Diterpenes from Croton kongensis, 537

Crystal engineering

Hierarchic Supramolecular Interactions within Assemblies in Solution and in the Crystal of 2,3,6,7-Tetrasubstituted 5,5'-(Anthracene-9,10-diyl)bis[pyrimidin-2-amines], 333

Cyclic phosphates

Synthesis of a Phosphorylated Disaccharide Fragment of the O-Specific Polysaccharide of *Vibrio cholerae* O139, Functionalized for Conjugation, 320

Cyclic-AMP response element (CRE)

Investigation of the Interactions of β -Peptides with DNA Duplexes by Circular Dichroism Spectroscopy, 3087

Cyclization reactions

Transformation of Amino Acids into Nonracemic 1-(Heteroaryl)ethanamines by the Enamino Ketone Methodology, 30

Reaction of γ -Hydroxy-N-[1-(dimethylcarbamoyl)ethyl]butanamides under the 'Direct Amide Cyclization' Conditions, 153

Transformation of 5-Hydroxy- to (5-Chloropentanoyl)amino Derivatives under 'Direct Amide Cyclization' Conditions, 352

Selenium-Containing Heterocycles from Isoselenocyanates: Use of Hydrazine for the Synthesis of 1,3,4-Selenadiazine Derivatives, 1322

Synthesis of 3-Acyl-4-alkenylpyrrolidines by Platinum-Catalyzed Hydrative Cyclization of Allenynes, 1672

Radical 4-exo Cyclizations onto O-Alkyloxime Acceptors: Towards the Synthesis of Penicillin-Containing

Targeting of Single-Stranded Oligonucleotides through Metal-Induced Cyclization of Short Complementary Strands, 2958

Internal Nucleophilic Termination in Acid-Mediated Polyene Cyclizations. Part 5. Synthetic Access to Didehydro Analogues of (\pm) -Ambrox® and Diastereoisomers, 3071

The First Ring-Enlargement of a 1-Azabicyclo[1.1.0]butane to a 1-Azabicyclo[2.1.1]hexane, 442

Enantioselective Synthesis of (-)-(19R)-Ibogamin-19-ol, 542

Photocycloaddition of Cyclohex-2-enones to Penta-1,2,4-triene, 854

A New Synthesis of Pteridines, 1140

An Expeditious Synthesis of Methyl Jasmonate, 1258

 $Reactions \ of \ 2-Unsubstituted \ 1 \\ H-Imidazole \ 3-Oxides \ with \ 2, 2-Bis (trifluoromethyl) ethene-1, 1-dicarbonitrile: \\ 1 \\ H-Imidazole \ 3-Oxides \ with \ 2, 2-Bis (trifluoromethyl) ethene-1, 1-dicarbonitrile: \\ 1 \\ H-Imidazole \ 3-Oxides \ with \ 2, 2-Bis (trifluoromethyl) ethene-1, 1-dicarbonitrile: \\ 1 \\ H-Imidazole \ 3-Oxides \ with \ 2, 2-Bis (trifluoromethyl) ethene-1, 1-dicarbonitrile: \\ 1 \\ H-Imidazole \ 3-Oxides \ with \ 2, 2-Bis (trifluoromethyl) ethene-1, 1-dicarbonitrile: \\ 1 \\ H-Imidazole \ 3-Oxides \ with \ 2, 2-Bis (trifluoromethyl) ethene-1, 1-dicarbonitrile: \\ 1 \\ H-Imidazole \ 3-Oxides \ with \ 2, 2-Bis (trifluoromethyl) ethene-1, 1-dicarbonitrile: \\ 1 \\ H-Imidazole \ 3-Oxides \ with \ 2, 2-Bis (trifluoromethyl) ethene-1, 1-dicarbonitrile: \\ 1 \\ H-Imidazole \ 3-Oxides \ with \ 2, 2-Bis (trifluoromethyl) ethene-1, 1-dicarbonitrile: \\ 1 \\ H-Imidazole \ 3-Oxides \ with \ 2, 2-Bis (trifluoromethyl) ethene-1, 1-dicarbonitrile: \\ 1 \\ H-Imidazole \ 3-Oxides \ with \ 2, 2-Bis (trifluoromethyl) ethene-1, 1-dicarbonitrile: \\ 1 \\ H-Imidazole \ 3-Oxides \ with \ 2, 2-Bis (trifluoromethyl) ethene-1, 1-dicarbonitrile: \\ 1 \\ H-Imidazole \ 3-Oxides \ with \ 2, 2-Bis (trifluoromethyl) ethene-1, 1-dicarbonitrile: \\ 1 \\ H-Imidazole \ 3-Oxides \ with \ 2, 2-Bis (trifluoromethyl) ethene-1, 1-dicarbonitrile: \\ 1 \\ H-Imidazole \ 3-Oxides \ with \ 3-Oxi$ A Stepwise 1,3-Dipolar Cycloaddition, 1304

1,5-Dipolar Electrocyclizations in Reactions of a-Thioxo Ketones and a-Thioxo Thioamides with Diazo Compounds, 1910

Synthesis of Benzo[g]isochromenes through Photo-Dehydro-Diels-Alder Reaction, 2694

Reactions of α,β-Unsaturated Thioamides with Diazo Compounds, 2815

Reactions of Thioketones Possessing a Conjugated C=C Bond with Diazo Compounds, 3041

Cyclobutanone derivatives

Reactions of Chlorosulfanyl Derivatives of Cyclobutanones with Different Nucleophiles, 1042

Cyclodepsipeptides

Reaction of γ-Hydroxy-N-[1-(dimethylcarbamoyl)ethyl]butanamides under the 'Direct Amide Cyclization' Conditions, 153

Synthesis of Enniatin-like Cyclic Depsipeptides via 'Direct Amide Cyclization', 731

Cyclodextrins

Ab initio Emulsion Polymerization by RAFT (Reversible Addition-Fragmentation Chain Transfer) through the Addition of Cyclodextrins, 1641

Cyclohexene derivatives, polyoxygenated

Polyoxygenated Cyclohexene Derivatives from Uvaria rufa, 1408

Cyclolanostane triterpenoids

Three New Cyclolanostane Triterpenoids from the Ethanol Extract of the Stems of Kadsura heteroclita, 1888

Cycloocta-1,5-diene

A Concise Route to Racemic Anatoxin a from Cycloocta-1,5-diene, 134

Chloro(η^6 -p-cymene)(phosphoramidite)ruthenium(II), a 16-Electron Fragment Stabilized by an η^2 -Aryl-Metal Interaction, and Its Use in Asymmetric Cyclopropanation, 1696

Reaction of Elemol with Acetic Acid/Perchloric Acid: Characterization of a Novel Oxide and (+)-β-Cyperone, 496

Cytidine analogues

Synthesis of 1,2-Disubstituted Carbocyclic Nucleoside Analogues of Cytidine, 954

Cytochalasin derivatives

Two New Compounds from the Ascomycete Daldinia concentrica, 450

Cytochrome P450 3A4

Synthesis and Photophysical Properties of a Deazaflavin-Bridged Porphyrinatoiron(III) That Mimics the Interaction of a Deazaflavin Inhibitor with the Heme-Thiolate Cofactor of Cytochrome P450 3A4, 2987

Cytotoxic activity

Terpenoids from Eupatorium fortunei Turcz, 558

New Polyoxygenated Triterpenoids from Stachyurus himalaicus var. himalaicus, 2830

Daldinia concentrica

Concentricolide, an Anti-HIV Agent from the Ascomycete Daldinia concentrica, 127

Two New Compounds from the Ascomycete Daldinia concentrica, 450

Dammaranes

New Dammarane Monodesmosides from the Acidic Deglycosylation of Notoginseng-Leaf Saponins, 1442

Daphnigracine, 11-hydroxy-

New Alkaloids from Daphniphyllum longeracemosum Rosenth., 1457

Daphnilongeridine

Alkaloids from Daphniphyllum longeracemosum, 2783

Daphnilongertone

New Alkaloids from Daphniphyllum longeracemosum Rosenth., 1457

Daphniphyllum angustifolium

Study on the Chemical Constituents of Daphniphyllum angustifolium, 884

Daphniphyllum longeracemosum

New Alkaloids from Daphniphyllum longeracemosum Rosenth., 1457

Alkaloids from Daphniphyllum longeracemosum, 2783

Deacetyltetraneurin A

Pseudoguaianolides from the Flowers of Parthenium hysterophorus, 285

7-Deaza-2'-deoxyxanthosine

Oligonucleotides Containing 7-Deaza-2'-deoxyxanthosine: Synthesis, Base Protection, and Base-Pair Stability, 2794

Deazaflavin

Synthesis and Photophysical Properties of a Deazaflavin-Bridged Porphyrinatoiron(III) That Mimics the Interaction of a Deazaflavin Inhibitor with the Heme-Thiolate Cofactor of Cytochrome P450 3A4, 2987

Debenzylation

Synthetic Studies on Coenzyme Q_{10} . Part 2. An Efficient and Improved Synthesis of Coenzyme Q_{10} via the C_5 + C_{45} Approach, 1317

Debilosides A-C

Debilosides A-C: Three New Megastigmane Glucosides from Equisetum debile, 1422

Deglycosylation

New Dammarane Monodesmosides from the Acidic Deglycosylation of Notoginseng-Leaf Saponins, 1442

Dehydration

Reaction of Elemol with Acetic Acid/Perchloric Acid: Characterization of a Novel Oxide and (+)-β-Cyperone, 496

Dendronization

On the Synthesis and Selective Deprotection of Low-Generation Dendrons with Orthogonally Protected Peripheral Amine Groups and a Possible Impact of the Deprotection Conditions on the Stability of Dendronized Polymers' Skeletons, 2745

Density-functional theory (DFT)

Structure Investigation of Bridgehead Aziridine: Synthesis, Theoretical, and Crystallographic Study of 2,4,6-Triphenyl-1,3-diazabicyclo[3,1,0]hex-3-ene, 190

Solid-State and Solution Structural Studies of 4-[[C(E)]-1H-Azol-1-ylimino)methyl]pyridin-3-ols, 1290 Incorporation of an Allene Unit into α -Pinene via β -Elimination, 1449

An ESR Approach to the Estimation of the Rate Constants of the Addition and Fragmentation Processes Involved in the RAFT Polymerization of Styrene, 2103

Multiple Pentafluorophenylation of 2,2,3,3,5,6,6-Heptafluoro-3,6-dihydro-2*H*-1,4-oxazine with an Organosilicon Reagent: NMR and DFT Structural Analysis of Oligo(perfluoroaryl) Compounds, 2671

Deoxysugars

Probing the Interaction of the Hydroxy Group at C(4) of Lactone-Type Inhibitors with β -Glucosidases and β -Galactosidases, 2006

2'-Deoxyxanthosine

Oligonucleotides Containing 7-Deaza-2'-deoxyxanthosine: Synthesis, Base Protection, and Base-Pair Stability, 2794

Deposit morphology

Morphology and Roughness of Silver Deposit Formed by Cementation at Various Temperatures in Pure Sulfuric Acid, 2764

Desulfurization

Synthetic Studies on Coenzyme Q_{10} . Part 2. An Efficient and Improved Synthesis of Coenzyme Q_{10} via the C_5 + C_{45} Approach, 1317

Diastereoselective alkylation

Diastereoselective Alkylation of a Proline-Derived Bicyclic Lactim Ether, 1894

1,3-Diazabicyclo[3.1.0]hex-3-ene, 2,4,6-triphenyl-

Structure Investigation of Bridgehead Aziridine: Synthesis, Theoretical, and Crystallographic Study of 2,4,6-Triphenyl-1,3-diazabicyclo[3.1.0]hex-3-ene, 190

Diazo compounds

Synthesis of Highly Functionalized γ-Lactones via 1,5-Electrocyclic Ring Closure, 1231

1,5-Dipolar Electrocyclizations in Reactions of α -Thioxo Ketones and α -Thioxo Thioamides with Diazo Compounds, 1910

Reactions of α,β-Unsaturated Thioamides with Diazo Compounds, 2815

Reactions of Thioketones Possessing a Conjugated C=C Bond with Diazo Compounds, 3041

Dibenzocyclooctane lignans

Kadsutherins A-C: Three New Dibenzocyclooctane Lignans from the Stems of Kadsura Species, 895

Dibenzothiophenes, 4,6-dimethyl-

Preparation of Partially Hydrogenated 4,6-Dimethyldibenzothiophenes, 1623

Diels-Alder reactions

Synthesis of 2-Azabicyclo[3.2.2]nonane-Derived Monosaccharide Mimics and Their Evaluation as Glycosidase Inhibitors, 416

Palladium-Catalyzed 2-Phenylethenylation of Codeine: 8-[(1E)-2-Phenylethenyl]codeinone Dimethyl Ketal as the Unexpected 'Masked' Diene for the Preparation of 19-Substituted *Diels-Alder* Adducts of Thebaine, 861

A New Synthesis of Pteridines, 1140

An Expeditious Synthesis of Methyl Jasmonate, 1258

Synthesis of Benzo[g]isochromenes through Photo-Dehydro-Diels-Alder Reaction, 2694

Intramolecular Hetero-*Diels-Alder* Reactions Catalyzed by BiCl₃: Stereoselective Synthesis of Benzo-Annelated Decahydrofuro[3,2-h][1,6]naphthyridine Derivatives, 2728

2,4-Dienoic acid derivatives

A New Synthesis of Pteridines, 1140

Differential scanning calorimetry (DSC)

Effect of Structure of Functionalizing Molecules on the Inter-Macromolecular Reactions and Blending of Poly(ethylene-co-propylene) (EPM) with Poly(6-aminohexanoic Acid) (PA6), 1596

Diimine ligands

Insertion Reactions of 1,2-Disubstituted Olefins with an α-Diimine Palladium(II) Complex, 1660

Dinucleotide analogues

Oligonucleotide Analogues with Integrated Bases and Backbone. Part 13. Synthesis and Association of Ethynylene-Linked Self-Complementary Dimers, 2861

${\bf 2,} \textbf{4-Dioxa-7-aza-3-phosphade calins}$

3-Fluoro-2,4-dioxa-7-aza-3-phosphadecalin 3-Oxides as Rigid Acetylcholine Mimetics: Conformational Analysis and Direct Evidence of the Anomeric Effect, 1351

Dioxirane, dimethyl-

Epoxidation of Polyunsaturated Fatty Acid Double Bonds by Dioxirane Reagent: Regioselectivity and Lipid Supramolecular Organization, 2243

Dioxygen complexes

Ligand-Controlled Formation of a Low-Valent Pincer Rhodium(I)–Dioxygen Adduct Bearing a Very Short O-O Bond, 1730

Diphenylacetic acid

A One-Dimensional Thallium(I) Coordination Polymer Involving Polyhapto-Aromatic Interactions, 265

2,2-Diphenyl-1-picrylhydrazyl (DPPH) radical

DPPH (= 2,2-Diphenyl-1-picrylhydrazyl = 2,2-Diphenyl-1-(2,4,6-trinitrophenyl)hydrazyl) Radical-Scavenging Reaction of Protocatechuic Acid Esters (= 3,4-Dihydroxybenzoates) in Alcohols: Formation of Bisalcohol Adduct, 821

DPPH (= 2,2-Diphenyl-1-picrylhydrazyl) Radical-Scavenging Reaction of Protocatechuic Acid (= 3,4-Dihydroxybenzoic Acid): Difference in Reactivity between Acids and Their Esters, 1395

Diphosphanes

Preparation of C₂-Symmetric Bis[2-(diphenylphosphino)ferrocen-1-yl]methane and Its Use in Rhodium- and Ruthenium-Catalyzed Hydrogenation, 1772

(Diphosphine)nickel catalysts

Copolymerization of Ethene and Carbon Monoxide with (Diphosphine)nickel Catalysts, 2720

Diphosphines

The Methoxycarbonylation of Vinyl Acetate Catalyzed by Palladium Complexes of [1,2-Phenylenebis(methylene)]bis[di(*tert*-butyl)phosphine], 1783

Diphosphonite ligand, chiral

Chiral (Diphosphonite) platinum Complexes in Asymmetric Hydroformylation, 1547

Dipodazines

Enaminone-Based Synthesis of Dipodazine Derivatives, 240

'Direct amide cyclization'

Transformation of 5-Hydroxy- to (5-Chloropentanoyl)amino Derivatives under 'Direct Amide Cyclization'
Conditions, 352

Synthesis of Enniatin-like Cyclic Depsipeptides via 'Direct Amide Cyclization', 731

Diselenide, diphenyl

Polarity-Reversal-Catalyzed Hydrostannylation Reactions: Benzeneselenol-Mediated Homolytic Hydrostannylation of Electron-Rich Olefins, 2306

Diterpene alkaloids

C₁₉ and C₂₀ Diterpene Alkaloids from Aconitum toxicum RCHB., 2981

Diterpenes

Three New, 1-Oxygenated ent-8,9-Secokaurane Diterpenes from Croton kongensis, 537

A New Cembranoid Diterpene and Other Related Metabolites from the South-China-Sea Soft Coral *Lobophytum crassum*, 567

Cassane-Type Diterpenes from the Seeds of Caesalpinia crista, 1062

A Rare New Cleistanthane Diterpene from the Pericarp of Trewia nudiflora, 2841

Diterpenoids

Lignanoids and Diterpenoids from Callicarpa furfuraceae, 64

Two New Diterpenoids from Callicarpa pedunculata, 1017

Structure Elucidation of Two New Diterpenoids from Isodon phyllostachys: Phyllostacins A and B, 1181 Further New Secoatisane Diterpenoids from the Chinese Mangrove Excoecaria agallocha L., 1367

Nine New ent-Labdane Diterpenoids from the Aerial Parts of Andrographis paniculata, 2654

1,3-Dithioles

1,5-Dipolar Electrocyclizations in Reactions of α -Thioxo Ketones and α -Thioxo Thioamides with Diazo Compounds, 1910

DNA

pH-Independent Recognition of the dG \cdot dC Base Pair in Triplex DNA: 9-Deazaguanine N^7 -(2'-Deoxyribonucleoside) and Halogenated Derivatives Replacing Protonated dC, 598

Synthetic dsDNA-Binding Peptides Using Natural Compounds as Model, 1194

Intercalating Nucleic Acids Containing Insertions of Naphthalimide, 1826

pH-Dependent Assembly of DNA-Gold Nanoparticles Based on the i-Motif: A Switchable Device with the Potential of a Nanomachine, 1978

Modification of Guanine with Photolabile N-Hydroxypyridine-2(1H)-thione: Monomer Synthesis, Oligonucleotide Elaboration, and Photochemical Studies, 2371

Targeting of Single-Stranded Oligonucleotides through Metal-Induced Cyclization of Short Complementary Strands. 2958

Investigation of the Interactions of β -Peptides with DNA Duplexes by Circular Dichroism Spectroscopy, 3087

Dopamin

An Alternative Synthesis of the Dopaminergic Drug 2-Amino-1,2,3,4-tetrahydronaphthalene-5,6-diol (5,6-ADTN), 270

Dopaminergic drug

An Alternative Synthesis of the Dopaminergic Drug 2-Amino-1,2,3,4-tetrahydronaphthalene-5,6-diol (5,6-ADTN), 270

Double electron-electron resonance (DEER)

Pulse EPR Methods for Studying Chemical and Biological Samples Containing Transition Metals, 2495

Dracocephalum forrestii

Three New Triterpenoids from Dracocephalum forrestii, 3018

Duplexes

Oligonucleotides Containing 7-Deaza-2'-deoxyxanthosine: Synthesis, Base Protection, and Base-Pair Stability, 2794

Dyes

Synthesis, Structure, and Optical Properties of Terminally Sulfur-Functionalized Core-Substituted Naphthalene-Bisimide Dyes, 1986

Dynamic nuclear polarization (DNP)

The Discovery of Chemically Induced Dynamic Polarization (CIDNP), 2082

Electrochemical hydrogenation

Novel Synthesis of Mafenide and Other Amino Sulfonamides by Electrochemical Reduction of Cyano Sulfonamides, 1254

Electrochemistry

Tetrathiafulvalene (TTF)-Bridged Resorcin[4]arene Cavitands: Towards New Electrochemical Molecular Switches, 2040

1,5-Electrocyclic ring closure

Synthesis of Highly Functionalized γ -Lactones via 1,5-Electrocyclic Ring Closure, 1231

Electrocyclizations

1,5-Dipolar Electrocyclizations in Reactions of α -Thioxo Ketones and α -Thioxo Thioamides with Diazo Compounds, 1910

Reactions of Thioketones Possessing a Conjugated C=C Bond with Diazo Compounds, 3041

Electron nuclear double-resonance (ENDOR)

Pulse EPR Methods for Studying Chemical and Biological Samples Containing Transition Metals, 2495

Electron transfer

Photophysical Investigations on Photoinitiators with Covalently Linked Thioxanthone Sensitizer Moieties, 2211

Proton-Coupled Electron Transfer of Unsaturated Fatty Acids and Mechanistic Insight into Lipoxygenase, 2425

Photochemical Reactions and Photoinduced Electron-Transfer Processes in Liquids, Frozen Solutions, and Proteins as Studied by Multifrequency Time-Resolved EPR Spectroscopy, 2544

Electron transfer photochemistry

Nuclear-Spin Polarization in Electron-Transfer Reactions of Amines, 2847

Electronic spectroscopy

Synthesis and Electronic Spectroscopy of Bromocarbazoles. Direct Bromination of N- and C-Substituted Carbazoles by N-Bromosuccinimide or a N-Bromosuccinimide/Silica Gel System, 1123

Electron-spin-echo envelope modulation (ESEEM)

Pulse EPR Methods for Studying Chemical and Biological Samples Containing Transition Metals, 2495

Electroprotic mechanism

Mechanistic Studies on the Oxidation of Glyoxylic and Pyruvic Acid by a [Mn₄O₆]⁴⁺ Core in Aqueous Media: Kinetics of Oxo-Bridge Protonation, 1947

Elemenes

Reaction of Elemol with Acetic Acid/Perchloric Acid: Characterization of a Novel Oxide and (+)-β-Cyperone, 496

Elemol

Reaction of Elemol with Acetic Acid/Perchloric Acid: Characterization of a Novel Oxide and (+)- β -Cyperone, 496

Elemoxide

Reaction of Elemol with Acetic Acid/Perchloric Acid: Characterization of a Novel Oxide and (+)-β-Cyperone, 496

Elimination voltammetry with linear scan

A Study of Nickel Electrodeposition on Paraffin-Impregnated Graphite Electrode, 622

Ellipticine

Regioselective Synthesis of Ellipticine, 111

Emulsion polymerization

Ab initio Emulsion Polymerization by RAFT (Reversible Addition–Fragmentation Chain Transfer) through the Addition of Cyclodextrins, 1641

Enaminones

Enaminone-Based Synthesis of Dipodazine Derivatives, 240

 $\label{thm:continuous} Transformations of Methyl 2-[(E)-2-(Dimethylamino)-1-(methoxycarbonyl) ethenyl]-1-methyl-1$H-indole-3-carboxylate, 2774$

Enantiomeric resolution

Synthesis, Olfactory Evaluation, and Determination of the Absolute Configuration of the 3,4-Didehydroionone Stereoisomers, 1110

Enantiomorphic site control

Statistical Approach for the Determination of the Stereoregularity of Optically Active Propylene-CO Copolymers, 1740

Enantioselective catalysis

Systematic Study of the Asymmetric Methoxycarbonylation of Styrene Catalyzed by Palladium Systems Containing Chiral Ferrocenyl Diphosphine Ligands, 1610

Enantioselectivity

Chiral (Diphosphonite) platinum Complexes in Asymmetric Hydroformylation, 1547

Endoperoxides

Regio- and Stereocontrolled Synthesis of (2R*,3R*,4R*)-3,4-Dichloro-1,2,3,4,5,8-hexahydronaphthalen-2-yl Acetate via Tandem S_N2' Reactions, 1246

Endophytic fungus

Paranolin: a New Xanthene-Based Metabolite from Paraphaeosphaeria nolinae, 502

Three New Polyketide Metabolites from the Endophytic Fungal Strain *Cladosporium tenuissimum* LR463 of *Maytenus hookeri*, 527

Energy transfer

Photophysical Investigations on Photoinitiators with Covalently Linked Thioxanthone Sensitizer Moieties, 2211

Enniatin

Synthesis of Enniatin-like Cyclic Depsipeptides via 'Direct Amide Cyclization', 731

Enols

Photo-CIDNP Studies of Hydroxy Ketones and Higher-Molecular-Weight Systems, 2522

Enone photocyclodimerization

The Photocyclodimers of 2,3-Dihydro-2,2-dimethyl-4*H*-pyran-4-one, 1927

Enzymatic resolution

Synthesis, Olfactory Evaluation, and Determination of the Absolute Configuration of the 3,4-Didehydroionone Stereoisomers, 1110

Enzyme inhibition kinetics

Synthesis, Biological Evaluation, and Crystallographic Studies of Extended Guanine-Based (*lin*-Benzoguanine) Inhibitors for tRNA-Guanine Transglycosylase (TGT), 573

Enzyme inhibitors

Synthesis, Biological Evaluation, and Crystallographic Studies of Extended Guanine-Based (*lin*-Benzoguanine) Inhibitors for tRNA-Guanine Transglycosylase (TGT), 573

Enzymes

Enzymatic Approach to and Odor Description of the Twelve Enantiomerically Pure Isomers of *Pelargene®*, 177

New Monofunctionalized Fluorescein Derivatives for the Efficient High-Throughput Screening of Lipases and Esterases in Aqueous Media, 404

Synthesis and Biological Evaluation of Potent Bisubstrate Inhibitors of the Enzyme Catechol *O*-Methyltransferase (COMT) Lacking a Nitro Group, 1856

Epoxidation

Epoxidation of Polyunsaturated Fatty Acid Double Bonds by Dioxirane Reagent: Regioselectivity and Lipid Supramolecular Organization, 2243

Epoxides

Analogues of α -Campholenal (= (1R)-2,2,3-Trimethylcyclopent-3-ene-1-acetaldehyde) as Building Blocks for (+)- β -Necrodol (= (1S,3S)-2,2,3-Trimethyl-4-methylenecyclopentanemethanol) and Sandalwood-like Alcohols, 2638

Epoxyicosatrienoic acid

Epoxidation of Polyunsaturated Fatty Acid Double Bonds by Dioxirane Reagent: Regioselectivity and Lipid Supramolecular Organization, 2243

(1R,2S)-1,2-Epoxyneomajucin

Secoprezizaane Sesquiterpene Lactones from Illicium micranthum, 983

Epoxysilanes

Titanocene-Mediated Homolytic Opening of Epoxysilanes, 2297

EPR Spectroscopy

Intramolecular Hydrogen Bonding: The Case of β-Phosphorylated Nitroxide (= Aminoxyl) Radical, 2119 Radical 4-exo Cyclizations onto O-Alkyloxime Acceptors: Towards the Synthesis of Penicillin-Containing Antibiotics, 2133

Absolute Rate Constants for the Addition of the 1-(*tert*-Butoxy)carbonylethyl Radical onto Cyclic Alkenes in Solution, 2327

2,5-Dihydro-1*H*-imidazole-Based Nitroxides as Prospective Mediators in Living Radical Polymerization, 2341 Oxidative and Photochemical Stability of Ionomers for Fuel-Cell Membranes, 2354

The Reaction of Peroxynitrite with Morpholine (Secondary Amines) Revisited: The Overlooked Hydroxylamine Formation, 2399

Proton-Coupled Electron Transfer of Unsaturated Fatty Acids and Mechanistic Insight into Lipoxygenase, 2425

Interaction between Molecular Oxygen and Nitroxide Radicals: A Search for a Reversible Complex, 2441 Pulse EPR Methods for Studying Chemical and Biological Samples Containing Transition Metals, 2495

Photochemical Reactions and Photoinduced Electron-Transfer Processes in Liquids, Frozen Solutions, and Proteins as Studied by Multifrequency Time-Resolved EPR Spectroscopy, 2544

Equisetum debile

Debilosides A-C: Three New Megastigmane Glucosides from Equisetum debile, 1422

Eremophilane

Terpenoids from the Roots of Ligularia muliensis, 915

ESR Spectroscopy

Hanns Fischer: Radical Pioneer, 2061

An ESR Approach to the Estimation of the Rate Constants of the Addition and Fragmentation Processes Involved in the RAFT Polymerization of Styrene, 2103

Interaction between Molecular Oxygen and Nitroxide Radicals: A Search for a Reversible Complex, 2441

Esterases

New Monofunctionalized Fluorescein Derivatives for the Efficient High-Throughput Screening of Lipases and Esterases in Aqueous Media, 404

Esters, thiol-derived

Homolytic Substitution at the Sulfur Atom as a Tool for Organic Synthesis, 2167

Ethanamine

Transformation of Amino Acids into Nonracemic 1-(Heteroaryl)ethanamines by the Enamino Ketone Methodology 30

Ethanoates, alkyl 2-nitro-

One-Pot Synthesis of Pentaalkyl 7-[(Alkylamino)carbonyl]-2-oxa-1-azabicyclo[3.2.0]hept-3-ene-3,4,5,6,7-pentacarboxylate, 1942

One-Pot Synthesis of Tetraalkyl Benzene-1,2,3,5-tetracarboxylates from a Four-Component Reaction of Alkyl Propiolates and Alkyl 2-Nitroethanoates Promoted by Ph₃P, 2918

Ethene

Copolymerization of Ethene and Carbon Monoxide with (Diphosphine)nickel Catalysts, 2720

Ethidium bromide

Synthetic dsDNA-Binding Peptides Using Natural Compounds as Model, 1194

Ethynyl ketone

Trifluoromethyl-Radical-Mediated Carbonylation of Alkanes Leading to Ethynyl Ketones, 2483

Eudesmanolides

Sesquiterpenoids and Phenylpropane Derivatives from Sonchus uliginosus, 2927

Eupatorium adenophorum

Cadinene Derivatives from Eupatorium adenophorum, 3104

Eupatorium fortunei

Terpenoids from Eupatorium fortunei Turcz, 558

Eupatorone

Cadinene Derivatives from Eupatorium adenophorum, 3104

Excoecaria agallocha

Further New Secoatisane Diterpenoids from the Chinese Mangrove Excoecaria agallocha L., 1367

Fatty acids

Epoxidation of Polyunsaturated Fatty Acid Double Bonds by Dioxirane Reagent: Regioselectivity and Lipid Supramolecular Organization, 2243

Proton-Coupled Electron Transfer of Unsaturated Fatty Acids and Mechanistic Insight into Lipoxygenase, 2425

Femtosecond pump-probe spectroscopy

Synthesis and Photophysical Properties of a Deazaflavin-Bridged Porphyrinatoiron(III) That Mimics the Interaction of a Deazaflavin Inhibitor with the Heme-Thiolate Cofactor of Cytochrome P450 3A4, 2987

Ferrocenes

Systematic Study of the Asymmetric Methoxycarbonylation of Styrene Catalyzed by Palladium Systems Containing Chiral Ferrocenyl Diphosphine Ligands, 1610

Statistical Approach for the Determination of the Stereoregularity of Optically Active Propylene-CO Copolymers, 1740

Preparation of C₂-Symmetric Bis[2-(diphenylphosphino)ferrocen-1-yl]methane and Its Use in Rhodium- and Ruthenium-Catalyzed Hydrogenation, 1772

Fischer, Hanns

Hanns Fischer: Radical Pioneer, 2061

Five-component reaction

One-Pot Synthesis of Tetraalkyl Benzene-1,2,3,5-tetracarboxylates from a Four-Component Reaction of Alkyl Propiolates and Alkyl 2-Nitroethanoates Promoted by Ph₃P, 2918

Flash photolysis

2,5-Dihydro-1H-imidazole-Based Nitroxides as Prospective Mediators in Living Radical Polymerization, 2341

Flash vacuum thermolysis

Studies on the Flash Vacuum Thermolysis of Thiones of Selected N-, O-, and S-Heterocycles, 991

Flavonoids

Isoprenylated Flavonoids from the Roots and Rhizomes of Sophora tonkinensis, 103

Fluorescein derivatives

New Monofunctionalized Fluorescein Derivatives for the Efficient High-Throughput Screening of Lipases and Esterases in Aqueous Media, 404

Fluorescence

Photo-Fries Rearrangement of Carbazol-2-yl Sulfonates: Efficient Tool for the Introduction of Sulfonyl Groups into Polycyclic Aromatic Compounds, 1147

Synthesis, Structure, and Optical Properties of Terminally Sulfur-Functionalized Core-Substituted Naphthalene-Bisimide Dyes, 1986

Synthesis and Properties of a pH-Insensitive Fluorescent Nitric Oxide Cheletropic Trap (FNOCT), 2281 Synthesis and Photophysical Properties of a Deazaflavin-Bridged Porphyrinatoiron(III) That Mimics the Interaction of a Deazaflavin Inhibitor with the Heme-Thiolate Cofactor of Cytochrome P450 3A4, 2987

A New Robust and Highly Sensitive FRET Donor-Acceptor Pair: Synthesis, Characterization, and Application in a Thrombin Assay, 3056

Fluorescence resonance energy transfer (FRET)

A New Robust and Highly Sensitive FRET Donor-Acceptor Pair: Synthesis, Characterization, and Application in a Thrombin Assay, 3056

Fluorescent nitric oxide cheletropic trap (FNOCT)

Synthesis and Properties of a pH-Insensitive Fluorescent Nitric Oxide Cheletropic Trap (FNOCT), 2281

Fluorous-fluorous interactions

Application of a *Grubbs–Hoveyda* Metathesis Catalyst Noncovalently Immobilized by Fluorous–Fluorous Interactions, 1030

Fornicatin C

A New $18(13 \rightarrow 12\beta)$ -abeo-Lanostadiene Triterpenoid from Ganoderma fornicatum, 1038

Four-component reaction

One-Pot Synthesis of Pentaalkyl 7-[(Alkylamino)carbonyl]-2-oxa-1-azabicyclo[3.2.0]hept-3-ene-3,4,5,6,7-pentacarboxylate, 1942

Fragrances

Enzymatic Approach to and Odor Description of the Twelve Enantiomerically Pure Isomers of *Pelargene®*, 177

Free radicals

The Discovery of Chemically Induced Dynamic Polarization (CIDNP), 2082

Antioxidant and Antiradical Activity of Hydroxy-Substituted 4-Thiaflavanes, 2462

Fuel cell membranes

Oxidative and Photochemical Stability of Ionomers for Fuel-Cell Membranes, 2354

Functionalization

Effect of Structure of Functionalizing Molecules on the Inter-Macromolecular Reactions and Blending of Poly(ethylene-co-propylene) (EPM) with Poly(6-aminohexanoic Acid) (PA6), 1596

Fungi

Concentricolide, an Anti-HIV Agent from the Ascomycete Daldinia concentrica, 127

Furans, vinvl-

Asymmetric Hydroformylation of Vinylfurans Catalyzed by {(11bS)-4-{[(1R)-2'-Phosphino[1,1'-binaphtha-len]-2-yl]oxy}dinaphtho[2,1-d:1',2'-f][1,3,2]dioxaphosphepin}rhodium(I) [Rhl{(R,S)-binaphos}] Derivatives, 1681

Furocoumarins

Lindleyanin and Bergapten-8-yl Sulfate from Pleurospermum lindleyanum, 117

Furo[3,2-h][1,6]naphthyridines

Intramolecular Hetero-*Diels–Alder* Reactions Catalyzed by BiCl₃: Stereoselective Synthesis of Benzo-Annelated Decahydrofuro[3,2-h][1,6]naphthyridine Derivatives, 2728

Galactosidase inhibitors

Probing the Interaction of the Hydroxy Group at C(4) of Lactone-Type Inhibitors with β -Glucosidases and β -Glacosidases, 2006

Galacturonidases

Synthesis of Glucuronic, Mannuronic, and Galacturonic Acid-Derived Imidazoles as Inhibitors of Bovine Liver β-Glucuronidase. 1373

Ganoderma fornicatum

A New 18(13 \rightarrow 12 β)-abeo-Lanostadiene Triterpenoid from Ganoderma fornicatum, 1038

Ginsenosides

New Dammarane Monodesmosides from the Acidic Deglycosylation of Notoginseng-Leaf Saponins, 1442 β -Glucopyranosides

Norbornane Mimics of Distorted β -D-Glucopyranosides – Inhibitors of β -D-Glucopyranosidases?, 614

Glucosidase inhibitors

Norbornane Mimics of Distorted β -D-Glucopyranosides – Inhibitors of β -D-Glucopyranosidases?, 614

Glucoside mimic

Norbornane Mimics of Distorted β -D-Glucopyranosides – Inhibitors of β -D-Glucopyranosidases?, 614

Glucosides

Study on the Chemical Constituents of Daphniphyllum angustifolium, 884

Debilosides A-C: Three New Megastigmane Glucosides from Equisetum debile, 1422

Glucuronidase

Synthesis of Glycaro-1,5-lactams and Tetrahydrotetrazolopyridine-5-carboxylates: Inhibitors of β -D-Glucuronidase and α -L-Iduronidase, 635

Synthesis of Glucuronic, Mannuronic, and Galacturonic Acid-Derived Imidazoles as Inhibitors of Bovine Liver β -Glucuronidase, 1373

Glycaro-1,5-lactams

Synthesis of Glycaro-1,5-lactams and Tetrahydrotetrazolopyridine-5-carboxylates: Inhibitors of β -D-Glucuronidase and α -L-Iduronidase, 635

Glycine

Voltammetry as Virtual Potentiometric Sensor in Modelling of a Metal/Ligand System and Refinement of Stability Constants. Part 5. Complexation Studies of Hydrolysis-Prone Lead(II) with Glycine and Sarcosine by Sampled-Direct-Current Polarography Involving Virtual Potential, 2934

Glycoconjugates

Synthesis of a Phosphorylated Disaccharide Fragment of the O-Specific Polysaccharide of *Vibrio cholerae* O139, Functionalized for Conjugation, 320

Glyconolactams

Synthesis of Glycaro-1,5-lactams and Tetrahydrotetrazolopyridine-5-carboxylates: Inhibitors of β -D-Glucuronidase and α -L-Iduronidase. 635

Probing the Interaction of the Hydroxy Group at C(4) of Lactone-Type Inhibitors with β -Glucosidases and β -Glacosidases, 2006

Glycosidase inhibitors

Synthesis of Glycaro-1,5-lactams and Tetrahydrotetrazolopyridine-5-carboxylates: Inhibitors of β -D-Glucuronidase and α -L-Iduronidase, 635

Synthesis of Glucuronic, Mannuronic, and Galacturonic Acid-Derived Imidazoles as Inhibitors of Bovine Liver β -Glucuronidase, 1373

Probing the Interaction of the Hydroxy Group at C(4) of Lactone-Type Inhibitors with β -Glucosidases and β -Galactosidases, 2006

Glycosidation

Oligosaccharide Analogues of Polysaccharides. Part 26. Mimics of Cellulose I and Cellulose II: Di- and Monoalkynyl C-Cellosides of 1,8-Disubstituted Anthraquinones, 675

Glycosides

Philinopsides A and B, Two New Sulfated Triterpene Glycosides from the Sea Cucumber *Pentacta quadrangularis*, 54

Secoiridoid Glycosides from Swertia mileensis, 94

Novel Steroidal Glycosides from two Indian Caralluma species, C. stalagmifera and C. indica, 201

A New Lignan and Four New Lignan Glycosides from Mananthes patentiflora, 291

Oligosaccharide Analogues of Polysaccharides. Part 26. Mimics of Cellulose I and Cellulose II: Di- and Monoalkynyl C-Cellosides of 1,8-Disubstituted Anthraquinones, 675

Arylethyl (= Phenylethanoid) Glycosides and Oligosaccharide from the Stem of *Cistanche tubulosa*, 927 New Phenolic Glycosides from *Clematis mandshurica*, 1023

Studies towards a Conjugate Vaccine for Anthrax: Synthesis of the Tetrasaccharide Side Chain of the *Bacillus* anthracis Exosporium, 1075

New Phenolic Constituents from the Stems of Spatholobus suberectus, 1241

Four New Pregnane Glycosides from the Stems of Marsdenia tenacissima, 2738

Macrocyclic Glycosides from Clematis hexapetala, 3002

Glycosylation

Synthesis of a Phosphorylated Disaccharide Fragment of the O-Specific Polysaccharide of *Vibrio cholerae* O139, Functionalized for Conjugation, 320

Glycuronidases

Synthesis of Glycaro-1,5-lactams and Tetrahydrotetrazolopyridine-5-carboxylates: Inhibitors of β -D-Glucuronidase and α -1-Iduronidase. 635

Glyoxylic acid

Mechanistic Studies on the Oxidation of Glyoxylic and Pyruvic Acid by a $[Mn_4O_6]^{4+}$ Core in Aqueous Media: Kinetics of Oxo-Bridge Protonation, 1947

Glyphosate

Direct Sensitive Spectrophotometric Determination of Glyphosate by Using Ninhydrin as a Chromogenic Reagent in Formulations and Environmental Water Samples, 2686

Gold complexes

pH-Dependent Assembly of DNA-Gold Nanoparticles Based on the i-Motif: A Switchable Device with the Potential of a Nanomachine. 1978

Gorgonian

Three New Polyoxygenated Steroids from Two Species of the South China Sea Gorgonian Muricella flexuosa and Menella verrucosa Brundin, 813

Green chemistry

Solid-Supported Green Synthesis of Substituted Hydrocinnamic Esters by Focused Microwave Irradiation, 483

GROMOS

Numerical Simulation of the Pressure Denaturation of a Helical β -Peptide Heptamer Solvated in Methanol, 475

Grubbs-Hoveyda metathesis

Application of a *Grubbs–Hoveyda* Metathesis Catalyst Noncovalently Immobilized by Fluorous–Fluorous Interactions, 1030

erythro-Guaiacylglycerol-β-O-4'-sinapyl ether

Lignans from Wikstroemia hainanensis, 73

Guanine, 9-deaza-

pH-Independent Recognition of the dG \cdot dC Base Pair in Triplex DNA: 9-Deazaguanine N^7 -(2'-Deoxyribonucleoside) and Halogenated Derivatives Replacing Protonated dC, 598

Guanine modification

Modification of Guanine with Photolabile N-Hydroxypyridine-2(1H)-thione: Monomer Synthesis, Oligonucleotide Elaboration, and Photochemical Studies, 2371

Gypsophila oldhamiana

A Pair of New Nortriterpene Saponin Epimers from the Roots of Gypsophila oldhamiana, 947

Hairpin structures

β-Peptidic Secondary Structures Fortified and Enforced by Zn²⁺ Complexation – On the Way to β-Peptidic Zinc Fingers?, 361

Synthesis, and Helix or Hairpin-Turn Secondary Structures of 'Mixed' α/β-Peptides Consisting of Residues with Proteinogenic Side Chains and of 2-Amino-2-methylpropanoic Acid (Aib), 1801

Half-sandwich complexes

Chloro(η^6 -p-cymene)(phosphoramidite)ruthenium(II), a 16-Electron Fragment Stabilized by an η^2 -Aryl-Metal Interaction, and Its Use in Asymmetric Cyclopropanation, 1696

Helical structures

Synthesis, and Helix or Hairpin-Turn Secondary Structures of 'Mixed' α/β-Peptides Consisting of Residues with Proteinogenic Side Chains and of 2-Amino-2-methylpropanoic Acid (Aib), 1801

Heme-thiolate proteins

Synthesis and Photophysical Properties of a Deazaflavin-Bridged Porphyrinatoiron(III) That Mimics the Interaction of a Deazaflavin Inhibitor with the Heme-Thiolate Cofactor of Cytochrome P450 3A4, 2987

Heparan sulfate

Synthesis of a Potential 10E4 Tetrasaccharide Antigen Involved in Scrapie Pathogenesis, 2591

Heterochiral pairing

The 5-Methylisocytosine β -D-Ribopyranosyl (4' \rightarrow 2')-Oligonucleotide, 218

Heterocumulenes

Studies on the Flash Vacuum Thermolysis of Thiones of Selected N-, O-, and S-Heterocycles, 991

Heterogeneous chemical systems

Molybdate Sulfuric Acid/NaNO₂: A Novel Heterogeneous System for the N-Nitrosation of Secondary Amines under Mild Conditions. 2922

Hexadecanedioic acid

The Binary System Tetradecanedioic Acid-Hexadecanedioic Acid: Polymorphism of the Components and Experimental Phase Diagram, 2027

High-throughput screening

New Monofunctionalized Fluorescein Derivatives for the Efficient High-Throughput Screening of Lipases and Esterases in Aqueous Media, 404

(+)-β-Himachalene

Total Synthesis of (+)- β -Himachalene, 231

HIV

Concentricolide, an Anti-HIV Agent from the Ascomycete Daldinia concentrica, 127

Homolysis

A New Sterically Highly Hindered 7-Membered Cyclic Nitroxide for the Controlled Living Radical Polymerization, 2200

Homolysis rate constants

2,5-Dihydro-1*H*-imidazole-Based Nitroxides as Prospective Mediators in Living Radical Polymerization, 2341

Homolytic substitution

Homolytic Substitution at the Sulfur Atom as a Tool for Organic Synthesis, 2167

Huperzinine, 8,15-dihydro-

Lycodine-Type Alkaloids from Lycopodium casuarinoides, 138

Huperzinine N-oxide

Lycodine-Type Alkaloids from Lycopodium casuarinoides, 138

Hydantoin

New, Diastereoselective One-Pot Synthesis of Tetrasubstituted Hydantoins, 1187

Hydrazine

Selenium-Containing Heterocycles from Isoselenocyanates: Use of Hydrazine for the Synthesis of 1,3,4-Selenadiazine Derivatives, 1322

Hydrocinnamic esters

Solid-Supported Green Synthesis of Substituted Hydrocinnamic Esters by Focused Microwave Irradiation, 483

Hydrodesulfurization

Preparation of Partially Hydrogenated 4,6-Dimethyldibenzothiophenes, 1623

Hydroformylation

Giambattista Consiglio's Passion for Homogeneous Catalysis, C-C Bond Formation, and Stereochemistry, 1475

Chiral (Diphosphonite) platinum Complexes in Asymmetric Hydroformylation, 1547

Asymmetric Hydroformylation of Vinylfurans Catalyzed by {(11bS)-4-{[(1R)-2'-Phosphino[1,1'-binaphtha-len]-2-yl]oxy}dinaphtho[2,1-d:1',2'-f][1,3,2]dioxaphosphepin}rhodium(I) [Rhl{(R,S)-binaphos}] Derivatives, 1681

Hydrogen bonds

Hierarchic Supramolecular Interactions within Assemblies in Solution and in the Crystal of 2,3,6,7-Tetrasubstituted 5,5'-(Anthracene-9,10-diyl)bis[pyrimidin-2-amines], 333

Solid-State and Solution Structural Studies of $4-\{[C(E)]-1H-Azol-1-ylimino)$ methyl $\}$ pyridin-3-ols, 1290

Intramolecular Hydrogen Bonding: The Case of β -Phosphorylated Nitroxide (= Aminoxyl) Radical, 2119 Oligonucleotide Analogues with Integrated Bases and Backbone. Part 13. Synthesis and Association of Ethynylene-Linked Self-Complementary Dimers, 2861

Hydrogen evolution

A Study of Nickel Electrodeposition on Paraffin-Impregnated Graphite Electrode, 622

Hydrogen transfer

Expanding the Scope of Atropisomeric Monodentate P-Donor Ligands in Asymmetric Catalysis: Hydrogen-Transfer Reduction of α,β -Unsaturated Acid Derivatives by Rhodium/Ph-binepine Catalysts, 1716

Hydrogenation

Chiral Phosphino- and (Phosphinooxy)-Substituted N-Heterocyclic Carbene Ligands and Their Application in Iridium-Catalyzed Asymmetric Hydrogenation, 1559

Preparation of Partially Hydrogenated 4,6-Dimethyldibenzothiophenes, 1623

Preparation of C₂-Symmetric Bis[2-(diphenylphosphino)ferrocen-1-yl]methane and Its Use in Rhodium- and Ruthenium-Catalyzed Hydrogenation, 1772

The Absolute Configuration of (+)-Ethyl cis-1-Benzyl-3-hydroxypiperidine-4-carboxylate and (+)-4-Ethyl 1-Methyl cis-3-Hydroxypiperidine-1,4-dicarboxylate; a Revision, 3023

Hydrostannylation

Polarity-Reversal-Catalyzed Hydrostannylation Reactions: Benzeneselenol-Mediated Homolytic Hydrostannylation of Electron-Rich Olefins, 2306

5-Hydroxyjusticidin A

A New Lignan and Four New Lignan Glycosides from Mananthes patentiflora, 291

Hydroxyl radical

The Reaction of Peroxynitrite with Morpholine (Secondary Amines) Revisited: The Overlooked Hydroxylamine Formation, 2399

Hydroxylamine formation

The Reaction of Peroxynitrite with Morpholine (Secondary Amines) Revisited: The Overlooked Hydroxylamine Formation, 2399

Hydroxylation

A Minimalist Approach to C-H Activation by Copper, 841

Hysterone E

Pseudoguaianolides from the Flowers of Parthenium hysterophorus, 285

(-)-(19R)-Ibogamin-19-ol

Enantioselective Synthesis of (-)-(19R)-Ibogamin-19-ol, 542

Icosatrienoic acid

Epoxidation of Polyunsaturated Fatty Acid Double Bonds by Dioxirane Reagent: Regioselectivity and Lipid Supramolecular Organization, 2243

Iduronidases

Synthesis of Glycaro-1,5-lactams and Tetrahydrotetrazolopyridine-5-carboxylates: Inhibitors of β -D-Glucuronidase and α -L-Iduronidase, 635

Illicium micranthum

Secoprezizaane Sesquiterpene Lactones from Illicium micranthum, 983

1H-Imidazole 3-oxides

Reactions of 2-Unsubstituted 1*H*-Imidazole 3-Oxides with 2,2-Bis(trifluoromethyl)ethene-1,1-dicarbonitrile: A Stepwise 1,3-Dipolar Cycloaddition, 1304

Imidazoles

Synthesis of Glucuronic, Mannuronic, and Galacturonic Acid-Derived Imidazoles as Inhibitors of Bovine Liver β -Glucuronidase, 1373

2,5-Dihydro-1*H*-imidazole-Based Nitroxides as Prospective Mediators in Living Radical Polymerization, 2341

1H-Imidazol-2(3H)-ones

Reactions of 2-Unsubstituted 1*H*-Imidazole 3-Oxides with 2,2-Bis(trifluoromethyl)ethene-1,1-dicarbonitrile: A Stepwise 1,3-Dipolar Cycloaddition, 1304

Imides

Functionalized Imides by Regioselective Ozonation, 971

Iminophosphorane

Synthesis of Derivatives of Pyrido[4,3-d]pyrimidin-4(3H)-one via an Iminophosphorane, 1337

Immobilized catalysts

Application of a *Grubbs–Hoveyda* Metathesis Catalyst Noncovalently Immobilized by Fluorous–Fluorous Interactions, 1030

i-Motif

pH-Dependent Assembly of DNA-Gold Nanoparticles Based on the i-Motif: A Switchable Device with the Potential of a Nanomachine, 1978

Indan-1-one derivatives

Formation of Dimers of Some 2-Substituted Indan-1-one Derivatives during Base-Mediated Cross-Aldol Condensation, 258

Indicaxanthin

First ¹³C-NMR Assignments of Betaxanthins, 1008

Indole alkaloids

Enaminone-Based Synthesis of Dipodazine Derivatives, 240

Formal Synthesis of Vallesamidine, 249

Three New Indole Alkaloids from the Leaves of Kopsia officinalis, 515

Enantioselective Synthesis of (-)-(19R)-Ibogamin-19-ol, 542

New Indole Alkaloids from Rauvolfia yunnanensis, 1344

1H-Indole-2-carboxylates, 2-heteroaryl-substituted

Transformations of Methyl 2-[(E)-2-(Dimethylamino)-1-(methoxycarbonyl)ethenyl]-1-methyl-1H-indole-3-carboxylate, 2774

Indol-1-oxyls

Alkoxyamines of Stable Aromatic Nitroxides: N-O vs. C-O Bond Homolysis, 2312

Inhibitions

Synthesis and Photophysical Properties of a Deazaflavin-Bridged Porphyrinatoiron(III) That Mimics the Interaction of a Deazaflavin Inhibitor with the Heme-Thiolate Cofactor of Cytochrome P450 3A4, 2987

Inhibitors

The Lipophilicity Behavior of Three Catechol-O-methyltransferase (COMT) Inhibitors and Simple Analogues, 144

Synthesis of 2-Azabicyclo[3.2.2]nonane-Derived Monosaccharide Mimics and Their Evaluation as Glycosidase Inhibitors, 416

Synthesis, Biological Evaluation, and Crystallographic Studies of Extended Guanine-Based (*lin*-Benzoguanine) Inhibitors for tRNA-Guanine Transglycosylase (TGT), 573

Norbornane Mimics of Distorted β -D-Glucopyranosides – Inhibitors of β -D-Glucopyranosidases?, 614

Synthesis of Glycaro-1,5-lactams and Tetrahydrotetrazolopyridine-5-carboxylates: Inhibitors of β -D-Glucuronidase and α -L-Iduronidase, 635

Synthesis of Glucuronic, Mannuronic, and Galacturonic Acid-Derived Imidazoles as Inhibitors of Bovine Liver β -Glucuronidase, 1373

Synthesis and Biological Evaluation of Potent Bisubstrate Inhibitors of the Enzyme Catechol *O*-Methyltransferase (COMT) Lacking a Nitro Group, 1856

Probing the Interaction of the Hydroxy Group at C(4) of Lactone-Type Inhibitors with β -Glucosidases and β -Galactosidases, 2006

Insect pheromones

Synthetic Applications of the *Baylis–Hillman* Reaction: Simple and Convenient Synthesis of Five Important Insect Pheromones, 876

Insertion reactions

Insertion Reactions of 1,2-Disubstituted Olefins with an α -Diimine Palladium(II) Complex, 1660

Integrins

Radio-Analytical Determination of the Coating Efficiency of Cyclic RGD Peptides, 833

Intercalating nucleic acids (INA)

Intercalating Nucleic Acids Containing Insertions of Naphthalimide, 1826

Intercalators

Intercalating Nucleic Acids Containing Insertions of Naphthalimide, 1826

Intramolecular hetero-Diels-Alder (IMHDA) reaction

Intramolecular Hetero-*Diels-Alder* Reactions Catalyzed by BiCl₃: Stereoselective Synthesis of Benzo-Annelated Decahydrofuro[3,2-h][1,6]naphthyridine Derivatives, 2728

Ionomers

Oxidative and Photochemical Stability of Ionomers for Fuel-Cell Membranes, 2354

α-Ionone

Synthesis, Olfactory Evaluation, and Determination of the Absolute Configuration of the 3,4-Didehydroionone Stereoisomers, 1110

γ-Ionone

Synthesis, Olfactory Evaluation, and Determination of the Absolute Configuration of the 3,4-Didehydro-ionone Stereoisomers, 1110

Ireland-Claisen rearrangement

Total Synthesis of (+)- β -Himachalene, 231

Enantioselective Synthesis of (-)-(19R)-Ibogamin-19-ol, 542

Iridium complexes

Chiral Phosphino- and (Phosphinooxy)-Substituted N-Heterocyclic Carbene Ligands and Their Application in Iridium-Catalyzed Asymmetric Hydrogenation, 1559

Iridoid glucosides

Study on the Chemical Constituents of Daphniphyllum angustifolium, 884

Iridoids

C₉-Iridoids from Scrophularia buergeriana, 2789

Iron complexes

Solution NMR and X-Ray Structural Studies on Phthalocyaninatoiron Complexes, 1485

Isocyanates, arylsulfonyl

New, Diastereoselective One-Pot Synthesis of Tetrasubstituted Hydantoins, 1187

Isocyanides

Facile One-Pot Three-Component Synthesis of Functionalized Pyridylfuran-2-amines, 299

One-Pot Three-Component Synthesis of Highly Functionalized 2,3-Dihydro-1,3-dioxo-1*H*,5*H*-pyrazolo[1,2-*a*][1,2,4|triazoles, 1176

One-Pot Synthesis of Pentaalkyl 7-[(Alkylamino)carbonyl]-2-oxa-1-azabicyclo[3.2.0]hept-3-ene-3,4,5,6,7-pentacarboxylate, 1942

Isocvtosine

The 5-Methylisocytosine β -D-Ribopyranosyl (4' \rightarrow 2')-Oligonucleotide, 218

Isodon phyllostachys

Structure Elucidation of Two New Diterpenoids from *Isodon phyllostachys*: Phyllostacins A and B, 1181 **Isoprenoids**

A New Route to Vitamin E Key-Intermediates by Olefin Cross-Metathesis, 797

Isopropyl radicals

Reactions of Alkyl Radicals with Substituted Toluenes and the Effect of Substituents on Dissociation Energies of Benzyl C-H Bonds, 2226

Isoselenocvanates

Selenium-Containing Heterocycles from Isoselenocyanates: Use of Hydrazine for the Synthesis of 1,3,4-Selenadiazine Derivatives, 1322

Isositsirikine

New Indole Alkaloids from Rauvolfia yunnanensis, 1344

Itaconic acid

Expanding the Scope of Atropisomeric Monodentate P-Donor Ligands in Asymmetric Catalysis: Hydrogen-Transfer Reduction of α,β -Unsaturated Acid Derivatives by Rhodium/Ph-binepine Catalysts, 1716

Japonicumins A-D

Japonicumins A-D: Four New Compounds from Lycopodium japonicum, 1467

Jasmonate, methyl

An Expeditious Synthesis of Methyl Jasmonate, 1258

Jathropha neopauciflora

Uncommon Sesquiterpenoids and New Triterpenoids from Jatropha neopauciflora (Euphorbiaceae), 16

Jones oxidation

A Simple Synthesis of a Model of the Tetracyclic Bisketal Lactone Mainframe of Saudin, 2732

Kadsura heteroclita

Three New Cyclolanostane Triterpenoids from the Ethanol Extract of the Stems of *Kadsura heteroclita*, 1888 *Kadsura* sp.

Kadsutherins A - C: Three New Dibenzocyclooctane Lignans from the Stems of *Kadsura* Species, 895

Kadsutherins A-C

Kadsutherins A-C: Three New Dibenzocyclooctane Lignans from the Stems of *Kadsura* Species, 895 *Kalidium foliatum*

Triterpenoids from the Aerial Parts of Kalidium foliatum, 962

Kalidiumin

Triterpenoids from the Aerial Parts of Kalidium foliatum, 962

Kalidiumosides A and B

Triterpenoids from the Aerial Parts of Kalidium foliatum, 962

ent-Kauranoid

Structure Elucidation of Two New Diterpenoids from *Isodon phyllostachys*: Phyllostacins A and B, 1181 **Ketones**

Transformation of Amino Acids into Nonracemic 1-(Heteroaryl)ethanamines by the Enamino Ketone Methodology, 30

Effect of the Secondary Reduction on the Enantioselectivity and Function of Additives in the Chiral Oxazaborolidine-Catalyzed Asymmetric Borane Reduction of Ketones, 1067

Photo-CIDNP Studies of Hydroxy Ketones and Higher-Molecular-Weight Systems, 2522

Facile One-Pot Multicomponent Synthesis of β -Acetamido Ketones with *Amberlyst-15* as Heterogeneous Catalyst, 3109

Kinetics

Mechanistic Studies on the Oxidation of Glyoxylic and Pyruvic Acid by a $[Mn_4O_6]^{4+}$ Core in Aqueous Media: Kinetics of Oxo-Bridge Protonation, 1947

A New Sterically Highly Hindered 7-Membered Cyclic Nitroxide for the Controlled Living Radical Polymerization, 2200

The Tris(trimethylsilyl)silane/Thiol Reducing System: A Tool for Measuring Rate Constants for Reactions of Carbon-Centered Radicals with Thiols, 2387

The Persistent Radical Effect: From Mechanistic Curiosity to Synthetic Tool, 2473

Kongensin derivatives

Three New, 1-Oxygenated ent-8,9-Secokaurane Diterpenes from Croton kongensis, 537

Kopsia officinalis

Three New Indole Alkaloids from the Leaves of Kopsia officinalis, 515

Krempenes A-D

Krempenes A-D: A Series of Unprecedented Pregnane-Type Steroids from the Marine Soft Coral *Cladiella krempfi*, 2020

Labdanes

Nine New ent-Labdane Diterpenoids from the Aerial Parts of Andrographis paniculata, 2654

Lactarius deliciosus

Two New Pigments from the Fruiting Bodies of the Basidiomycete Lactarius deliciosus, 988

Lactarius hatsudake

Two New Azulene Pigments from the Fruiting Bodies of the Basidiomycete Lactarius hatsudake, 1463

Lactate esters

The Methoxycarbonylation of Vinyl Acetate Catalyzed by Palladium Complexes of [1,2-Phenylenebis(methylene)]bis[di(*tert*-butyl)phosphine], 1783

Lactim ethers

Diastereoselective Alkylation of a Proline-Derived Bicyclic Lactim Ether, 1894

Lactones

Synthesis of Highly Functionalized γ-Lactones via 1,5-Electrocyclic Ring Closure, 1231

A Simple Synthesis of a Model of the Tetracyclic Bisketal Lactone Mainframe of Saudin, 2732

Lantacin

Triterpenoidal Secondary Metabolites from Lantana Camara Linn., 1932

Lantana camara

Triterpenoidal Secondary Metabolites from Lantana Camara Linn., 1932

Laser-flash photolysis (LFP)

Photophysical Investigations on Photoinitiators with Covalently Linked Thioxanthone Sensitizer Moieties, 2211

Lead

Voltammetry as Virtual Potentiometric Sensor in Modelling of a Metal/Ligand System and Refinement of Stability Constants. Part 5. Complexation Studies of Hydrolysis-Prone Lead(II) with Glycine and Sarcosine by Sampled-Direct-Current Polarography Involving Virtual Potential, 2934

Lenisins A-C

Dimeric Coumarin and Phenylpropanoids from Clausena lenis, 2836

Ligand effects

Ligand-Controlled Formation of a Low-Valent Pincer Rhodium(I)-Dioxygen Adduct Bearing a Very Short O-O Bond. 1730

Lignan glycosides

A New Lignan and Four New Lignan Glycosides from Mananthes patentiflora, 291

Lignanoids

Lignanoids and Diterpenoids from Callicarpa furfuraceae, 64

Lignans

Lindleyanin and Bergapten-8-yl Sulfate from Pleurospermum lindleyanum, 117

Sesquiterpenoids and Lignans from Ligularia virgaurea spp. oligocephala, 870

Kadsutherins A-C: Three New Dibenzocyclooctane Lignans from the Stems of Kadsura Species, 895

Ligularia muliensis

Terpenoids from the Roots of Ligularia muliensis, 915

Ligularia narynensis

New Oplopane-Type Sesquiterpenes from Ligularia narynensis, 1387

Ligularia virgaurea spp. oligocephala

Sesquiterpenoids and Lignans from Ligularia virgaurea spp. oligocephala, 870

Lindleyanin

Lindleyanin and Bergapten-8-yl Sulfate from Pleurospermum lindleyanum, 117

Linearly polarized emission

Synthesis and Properties of 2-Phenylbenzoxazole-Based Luminophores for *in situ* Photopolymerized Liquid-Crystal Films, 304

Lipases

Enzymatic Approach to and Odor Description of the Twelve Enantiomerically Pure Isomers of *Pelargene*®, 177

New Monofunctionalized Fluorescein Derivatives for the Efficient High-Throughput Screening of Lipases and Esterases in Aqueous Media, 404

Synthesis, Olfactory Evaluation, and Determination of the Absolute Configuration of the 3,4-Didehydroionone Stereoisomers, 1110

Lipophilicity

The Lipophilicity Behavior of Three Catechol-O-methyltransferase (COMT) Inhibitors and Simple Analogues, 144

Lipoxygenase

Proton-Coupled Electron Transfer of Unsaturated Fatty Acids and Mechanistic Insight into Lipoxygenase, 2425

Liquid crystals

Synthesis and Properties of 2-Phenylbenzoxazole-Based Luminophores for *in situ* Photopolymerized Liquid-Crystal Films, 304

Living radical polymerization

Ab initio Emulsion Polymerization by RAFT (Reversible Addition–Fragmentation Chain Transfer) through the Addition of Cyclodextrins, 1641

2,5-Dihydro-1*H*-imidazole-Based Nitroxides as Prospective Mediators in Living Radical Polymerization, 2341 The Persistent Radical Effect: From Mechanistic Curiosity to Synthetic Tool, 2473

Lobophytum orassum

A New Cembranoid Diterpene and Other Related Metabolites from the South-China-Sea Soft Coral Lobophytum crassum, 567

Luminescence

Synthesis and Properties of 2-Phenylbenzoxazole-Based Luminophores for *in situ* Photopolymerized Liquid-Crystal Films, 304

Photoinduced Formation of Reactive Oxygen Species from the Acid Form of 6-(Hydroxymethyl)pterin in Aqueous Solution, 1090

Lutein

Preparation and Spectroscopic Characterization of (9Z,9'Z)-Lutein (Neolutein C), 667

Lycodine

Lycodine-Type Alkaloids from Lycopodium casuarinoides, 138

Lycopodium casuarinoides

Lycodine-Type Alkaloids from Lycopodium casuarinoides, 138

Lycopodium japonicum

Japonicumins A-D: Four New Compounds from Lycopodium japonicum, 1467

Macrocyclic glycosides

Macrocyclic Glycosides from Clematis hexapetala, 3002

Macromolecular surface engineering

On the Synthesis and Selective Deprotection of Low-Generation Dendrons with Orthogonally Protected Peripheral Amine Groups and a Possible Impact of the Deprotection Conditions on the Stability of Dendronized Polymers' Skeletons, 2745

Mad cow disease

Synthesis of a Potential 10E4 Tetrasaccharide Antigen Involved in Scrapie Pathogenesis, 2591

Mafenide

Novel Synthesis of Mafenide and Other Amino Sulfonamides by Electrochemical Reduction of Cyano Sulfonamides, 1254

Majucin, (2R)-2-hydroxy-

Secoprezizaane Sesquiterpene Lactones from Illicium micranthum, 983

Malononitriles, 2-(1H-imidazol-2-ylidene)-

Reactions of 2-Unsubstituted 1*H*-Imidazole 3-Oxides with 2,2-Bis(trifluoromethyl)ethene-1,1-dicarbonitrile: A Stepwise 1,3-Dipolar Cycloaddition, 1304

Mananthes patentiflora

A New Lignan and Four New Lignan Glycosides from Mananthes patentiflora, 291

Mananthosides C-F

A New Lignan and Four New Lignan Glycosides from Mananthes patentiflora, 291

Manganese complexes

Mechanistic Studies on the Oxidation of Glyoxylic and Pyruvic Acid by a $[Mn_4O_6]^{4+}$ Core in Aqueous Media: Kinetics of Oxo-Bridge Protonation, 1947

Mangrove

Further New Secoatisane Diterpenoids from the Chinese Mangrove Excoecaria agallocha L., 1367

Mannosidase inhibitors

Synthesis of 2-Azabicyclo[3.2.2]nonane-Derived Monosaccharide Mimics and Their Evaluation as Glycosidase Inhibitors, 416

Norbornane Mimics of Distorted β -D-Glucopyranosides – Inhibitors of β -D-Glucopyranosidases?, 614

Mannuronic acid analogues

Synthesis of Glucuronic, Mannuronic, and Galacturonic Acid-Derived Imidazoles as Inhibitors of Bovine Liver β -Glucuronidase, 1373

Manshurienine A and B

Alkaloids from Aristolochia manshuriensis (Aristolochiaceae), 2665

Marine natural products

A New Approach to Sesquiterpene Arenes of the 9,11-Drimenyl Type (= [(1*E*,2*RS*,4a*RS*,8a*RS*)-Octahydro-2,5,5,8a-tetramethylnaphthalen-1(2*H*)-ylidene] methyl Type), 784

Krempenes A – D: A Series of Unprecedented Pregnane-Type Steroids from the Marine Soft Coral *Cladiella krempfi*, 2020

Marsdenia tenacissima

Four New Pregnane Glycosides from the Stems of Marsdenia tenacissima, 2738

Mass spectrometry

Secoiridoid Glycosides from Swertia mileensis, 94

Synthetic dsDNA-Binding Peptides Using Natural Compounds as Model, 1194

Nine New ent-Labdane Diterpenoids from the Aerial Parts of Andrographis paniculata, 2654

Mass spectroscopy

Investigation of the Interactions of β -Peptides with DNA Duplexes by Circular Dichroism Spectroscopy, 3087 *Maytenus hookeri*

Three New Polyketide Metabolites from the Endophytic Fungal Strain *Cladosporium tenuissimum* LR463 of *Maytenus hookeri*, 527

Megastigmane glucoside

Debilosides A-C: Three New Megastigmane Glucosides from Equisetum debile, 1422

Menella verrucosa

Three New Polyoxygenated Steroids from Two Species of the South China Sea Gorgonian Muricella flexuosa and Menella verrucosa Brundin, 813

Menellsteroids A and B

Three New Polyoxygenated Steroids from Two Species of the South China Sea Gorgonian Muricella flexuosa and Menella verrucosa Brundin, 813

Mercury complexes

(4,4'-Bipyridine)mercury(II) Coordination Polymers, Syntheses, and Structures, 81

Metabolites

Three New Polyketide Metabolites from the Endophytic Fungal Strain *Cladosporium tenuissimum* LR463 of *Maytenus hookeri*, 527

Triterpenoidal Secondary Metabolites from Lantana Camara Linn., 1932

Metallocenes

Methylene-Bridged Metallocenes with 2,2'-Methylenebis[1*H*-inden-1-yl] Ligands: Synthesis, Characterization, and Polymerization Catalysis of a Synthetically Simple Class of C₂- and C_{2v}-Symmetric ansa-Metallocenes, 1497

Metal-templated cyclization

Targeting of Single-Stranded Oligonucleotides through Metal-Induced Cyclization of Short Complementary Strands 2958

Metathesis

A New Route to Vitamin E Key-Intermediates by Olefin Cross-Metathesis, 797

Application of a *Grubbs–Hoveyda* Metathesis Catalyst Noncovalently Immobilized by Fluorous–Fluorous Interactions, 1030

Methoxycarbonylation

Systematic Study of the Asymmetric Methoxycarbonylation of Styrene Catalyzed by Palladium Systems Containing Chiral Ferrocenyl Diphosphine Ligands, 1610

The Methoxycarbonylation of Vinyl Acetate Catalyzed by Palladium Complexes of [1,2-Phenylenebis(methylene)]bis[di(tert-butyl)phosphine], 1783

Methyllycaconitine, N-deethyl-

Norditerpenoid Alkaloids from the Aerial Parts of Aconitum cochleare Wordschin, 210

Micelles

Epoxidation of Polyunsaturated Fatty Acid Double Bonds by Dioxirane Reagent: Regioselectivity and Lipid Supramolecular Organization, 2243

Microwave irradiation

Solid-Supported Green Synthesis of Substituted Hydrocinnamic Esters by Focused Microwave Irradiation, 483

Miraxanthin V

First 13C-NMR Assignments of Betaxanthins, 1008

Miscibility

The Binary System Tetradecanedioic Acid-Hexadecanedioic Acid: Polymorphism of the Components and Experimental Phase Diagram, 2027

Molecular diversity

Synthesis of β^3 -Homophenylalanine-Derived Amino Acids and Peptides by *Suzuki* Coupling in Solution and on Solid Support, 1427

Molecular electronics

Synthesis, Structure, and Optical Properties of Terminally Sulfur-Functionalized Core-Substituted Naphthalene-Bisimide Dyes, 1986

Molecular modeling

Synthesis, Biological Evaluation, and Crystallographic Studies of Extended Guanine-Based (*lin*-Benzoguanine) Inhibitors for tRNA-Guanine Transglycosylase (TGT), 573

Molecular objects

On the Synthesis and Selective Deprotection of Low-Generation Dendrons with Orthogonally Protected Peripheral Amine Groups and a Possible Impact of the Deprotection Conditions on the Stability of Dendronized Polymers' Skeletons, 2745

Molecular rods

Synthesis, Structure, and Optical Properties of Terminally Sulfur-Functionalized Core-Substituted Naphthalene-Bisimide Dyes, 1986

Molecular switches

Tetrathiafulvalene (TTF)-Bridged Resorcin[4]arene Cavitands: Towards New Electrochemical Molecular Switches. 2040

Molecular-dynamics (MD) calculations

Numerical Simulation of the Pressure Denaturation of a Helical β -Peptide Heptamer Solvated in Methanol, 475

Molecularly imprinted polymers (MIPs)

Preparation and Recognition Properties of Vanillin-Imprinted Polymers, 3032

Molybdate sulfuric acid (MSA)

Molybdate Sulfuric Acid/NaNO₂: A Novel Heterogeneous System for the *N*-Nitrosation of Secondary Amines under Mild Conditions, 2922

Molybdenum

Direct Sensitive Spectrophotometric Determination of Glyphosate by Using Ninhydrin as a Chromogenic Reagent in Formulations and Environmental Water Samples, 2686

Monoterpenes

Terpenoids from the Roots of $Ligularia\ muliensis$, 915

Morphinans

Palladium-Catalyzed 2-Phenylethenylation of Codeine: 8-[(1E)-2-Phenylethenyl]codeinone Dimethyl Ketal as the Unexpected 'Masked' Diene for the Preparation of 19-Substituted *Diels-Alder* Adducts of Thebaine, 861

Morpholin-N-oxyl

The Reaction of Peroxynitrite with Morpholine (Secondary Amines) Revisited: The Overlooked Hydroxylamine Formation, 2399

Morphology

Temperature Influence on the Morphology and Roughness of Silver Deposit Formed by Cementation, 427 Surface-Roughness Evolution During the Cementation of Silver Ions on Solid Copper in Aqueous Sulfuric Acid Solution, 902

Mosher ester

The Absolute Configuration of (+)-Ethyl *cis*-1-Benzyl-3-hydroxypiperidine-4-carboxylate and (+)-4-Ethyl 1-Methyl *cis*-3-Hydroxypiperidine-1,4-dicarboxylate; a Revision, 3023

Multicomponent reactions

Structure Investigation of Bridgehead Aziridine: Synthesis, Theoretical, and Crystallographic Study of 2,4,6-Triphenyl-1,3-diazabicyclo[3.1.0]hex-3-ene, 190

New, Diastereoselective One-Pot Synthesis of Tetrasubstituted Hydantoins, 1187

Radical-Mediated Three-Component Coupling of Alkenes, 2450

Facile One-Pot Multicomponent Synthesis of β -Acetamido Ketones with *Amberlyst-15* as Heterogeneous Catalyst, 3109

Multifrequency time-resolved EPR spectroscopy

Photochemical Reactions and Photoinduced Electron-Transfer Processes in Liquids, Frozen Solutions, and Proteins as Studied by Multifrequency Time-Resolved EPR Spectroscopy, 2544

Muon spin rotation (µSR)

Hanns Fischer: Radical Pioneer, 2061

Muricella flexuosa

Three New Polyoxygenated Steroids from Two Species of the South China Sea Gorgonian Muricella flexuosa and Menella verrucosa Brundin, 813

Muricesteroid

Three New Polyoxygenated Steroids from Two Species of the South China Sea Gorgonian Muricella flexuosa and Menella verrucosa Brundin, 813

Nanomachines

pH-Dependent Assembly of DNA-Gold Nanoparticles Based on the i-Motif: A Switchable Device with the Potential of a Nanomachine, 1978

Nanoparticle

pH-Dependent Assembly of DNA-Gold Nanoparticles Based on the i-Motif: A Switchable Device with the Potential of a Nanomachine, 1978

Naphthalene, 1-isopropyl-2,7-dimethyl-

Two New Compounds from the Ascomycete Daldinia concentrica, 450

Naphthalene-bisimide dves

Synthesis, Structure, and Optical Properties of Terminally Sulfur-Functionalized Core-Substituted Naphthalene-Bisimide Dves, 1986

Naphthalene-2-carboxylic acid, 5,6-dimethoxy-

An Alternative Synthesis of the Dopaminergic Drug 2-Amino-1,2,3,4-tetrahydronaphthalene-5,6-diol (5,6-ADTN), 270

Naphthalene-5,6-diol, 2-amino-1,2,3,4-tetrahydro- (5,6-ADTN)

An Alternative Synthesis of the Dopaminergic Drug 2-Amino-1,2,3,4-tetrahydronaphthalene-5,6-diol (5,6-ADTN), 270

Naphthalenes

Synthesis of Benzo[g]isochromenes through Photo-Dehydro-Diels-Alder Reaction, 2694

Naphthalen-2-vl acetate

Regio- and Stereocontrolled Synthesis of (2R*,3R*,4R*)-3,4-Dichloro-1,2,3,4,5,8-hexahydronaphthalen-2-yl Acetate via Tandem S_N2' Reactions, 1246

Naphthalimides

Intercalating Nucleic Acids Containing Insertions of Naphthalimide, 1826

[1,6] Naphthyridines

Intramolecular Hetero-*Diels-Alder* Reactions Catalyzed by BiCl₃: Stereoselective Synthesis of Benzo-Annelated Decahydrofuro[3,2-h][1,6]naphthyridine Derivatives, 2728

(+)-β-Necrodol

Analogues of α -Campholenal (= (1R)-2,2,3-Trimethylcyclopent-3-ene-1-acetaldehyde) as Building Blocks for (+)- β -Necrodol (= (1S,3S)-2,2,3-Trimethyl-4-methylenecyclopentanemethanol) and Sandalwood-like Alcohols, 2638

Neolutein C

Preparation and Spectroscopic Characterization of (9Z,9'Z)-Lutein (Neolutein C), 667

Neomajucin, (2R)-2-hydroxy-

Secoprezizaane Sesquiterpene Lactones from Illicium micranthum, 983

Nickel catalysts

Copolymerization of Ethene and Carbon Monoxide with (Diphosphine)nickel Catalysts, 2720

Nickel electrodeposition mechanism

A Study of Nickel Electrodeposition on Paraffin-Impregnated Graphite Electrode, 622

Ninhydrin

Direct Sensitive Spectrophotometric Determination of Glyphosate by Using Ninhydrin as a Chromogenic Reagent in Formulations and Environmental Water Samples, 2686

Nitramine formation

The Reaction of Peroxynitrite with Morpholine (Secondary Amines) Revisited: The Overlooked Hydroxylamine Formation, 2399

Nitraria tangutorum

Synthesis of Tangutorine, 122

Nitric oxide

Synthesis and Properties of a pH-Insensitive Fluorescent Nitric Oxide Cheletropic Trap (FNOCT), 2281

Nitrogen dioxide

¹⁵N Chemically Induced Dynamic Nuclear Polarization (¹⁵N-CIDNP) Investigations of the Peroxynitrite Decay and Nitration of N-Acetyl-L-tyrosine, 2144

Nitrogen oxide

¹⁵N Chemically Induced Dynamic Nuclear Polarization (¹⁵N-CIDNP) Investigations of the Peroxynitrite Decay and Nitration of N-Acetyl-L-tyrosine, 2144

2-(4-Nitrophenyl)ethyl (npe) protection

Oligonucleotides Containing 7-Deaza-2'-deoxyxanthosine: Synthesis, Base Protection, and Base-Pair Stability. 2794

Nitrosamine formation

The Reaction of Peroxynitrite with Morpholine (Secondary Amines) Revisited: The Overlooked Hydroxylamine Formation, 2399

Nitrosation

Molybdate Sulfuric Acid/NaNO₂: A Novel Heterogeneous System for the N-Nitrosation of Secondary Amines under Mild Conditions, 2922

Nitroso compounds

A New Synthesis of Pteridines, 1140

Nitrotyrosine

¹⁵N Chemically Induced Dynamic Nuclear Polarization (¹⁵N-CIDNP) Investigations of the Peroxynitrite Decay and Nitration of N-Acetyl-L-tyrosine, 2144

Nitroxide ligand

Synthesis, Structure, and Polymerization Activity of a Titanium Complex with a Chelating [(Hydroxy- κO)amino- κN]phenolato(2-)- κO Ligand, 1589

Nitroxide radical

Synthesis and Properties of a pH-Insensitive Fluorescent Nitric Oxide Cheletropic Trap (FNOCT), 2281 Interaction between Molecular Oxygen and Nitroxide Radicals: A Search for a Reversible Complex, 2441

Nitroxide-copper-nitroxide clusters

Pulse EPR Methods for Studying Chemical and Biological Samples Containing Transition Metals, 2495

Nitroxide-mediated polymerization (NMP)

Alkoxyamines of Stable Aromatic Nitroxides: N-O vs. C-O Bond Homolysis, 2312

Re-formation Reaction of Cyclic Nitroxide-Based Alkoxyamines: Steric and Polar/Stabilization Effects, 2330 2,5-Dihydro-1*H*-imidazole-Based Nitroxides as Prospective Mediators in Living Radical Polymerization, 2341

Nitroxides

Intramolecular Hydrogen Bonding: The Case of β-Phosphorylated Nitroxide (= Aminoxyl) Radical, 2119 A New Sterically Highly Hindered 7-Membered Cyclic Nitroxide for the Controlled Living Radical Polymerization, 2200

Re-formation Reaction of Cyclic Nitroxide-Based Alkoxyamines: Steric and Polar/Stabilization Effects, 2330

NMR Spectroscopy

Novel Steroidal Glycosides from two Indian Caralluma species, C. stalagmifera and C. indica, 201

Oligosaccharide Analogues of Polysaccharides. Part 26. Mimics of Cellulose I and Cellulose II: Di- and Monoalkynyl C-Cellosides of 1,8-Disubstituted Anthraquinones, 675

First ¹³C-NMR Assignments of Betaxanthins, 1008

Three Novel Terpenoids from Schisandra pubescens var. pubinervis, 1169

Structure Elucidation of Two New Diterpenoids from *Isodon phyllostachys*: Phyllostacins A and B, 1181 Regio- and Stereocontrolled Synthesis of (2*R**,3*R**,4*R**)-3,4-Dichloro-1,2,3,4,5,8-hexahydronaphthalen-2-yl Acetate *via* Tandem *S*_N2′ Reactions, 1246

Solid-State and Solution Structural Studies of $4-\{[C(E)]-1H-Azol-1-ylimino)$ methyl}pyridin-3-ols, 1290

Solution NMR and X-Ray Structural Studies on Phthalocyaninatoiron Complexes, 1485

Synthesis, Interionic Structure, and Reactivity toward CO and p-Methylstyrene of Palladacyclic Compounds Bearing α -Diimine Ligands, 1524

Statistical Approach for the Determination of the Stereoregularity of Optically Active Propylene-CO Copolymers, 1740

Synthesis, and Helix or Hairpin-Turn Secondary Structures of 'Mixed' α/β-Peptides Consisting of Residues with Proteinogenic Side Chains and of 2-Amino-2-methylpropanoic Acid (Aib), 1801

The Discovery of Chemically Induced Dynamic Polarization (CIDNP), 2082

Photo-CIDNP Studies of Hydroxy Ketones and Higher-Molecular-Weight Systems, 2522

Nine New ent-Labdane Diterpenoids from the Aerial Parts of Andrographis paniculata, 2654

Multiple Pentafluorophenylation of 2,2,3,3,5,6,6-Heptafluoro-3,6-dihydro-2*H*-1,4-oxazine with an Organosilicon Reagent: NMR and DFT Structural Analysis of Oligo(perfluoroaryl) Compounds, 2671

Alkaloids from Daphniphyllum longeracemosum, 2783

Noncanonical pairing

The 5-Methylisocytosine β -D-Ribopyranosyl (4' \rightarrow 2')-Oligonucleotide, 218

Norbornanes

Norbornane Mimics of Distorted β -D-Glucopyranosides – Inhibitors of β -D-Glucopyranosidases?, 614

Norditerpene alkaloids

C₁₉ and C₂₀ Diterpene Alkaloids from Aconitum toxicum RCHB., 2981

Norditerpenoid alkaloids

Norditerpenoid Alkaloids from the Aerial Parts of Aconitum cochleare Woroschin, 210

24-Noroleanane triterpenoids

Three New 24-Noroleanane Triterpenoids from Quercus aliena var. acuteserrata, 1971

Norsesquiterpene

Cadinene Derivatives from Eupatorium adenophorum, 3104

Nortriterpene saponins

A Pair of New Nortriterpene Saponin Epimers from the Roots of Gypsophila oldhamiana, 947

Notoginseng

New Dammarane Monodesmosides from the Acidic Deglycosylation of Notoginseng-Leaf Saponins, 1442 **Nuclear spin polarization**

Nuclear-Spin Polarization in Electron-Transfer Reactions of Amines, 2847

Nucleic acids

Intercalating Nucleic Acids Containing Insertions of Naphthalimide, 1826

Nucleophilic addition

Formation of Dimers of Some 2-Substituted Indan-1-one Derivatives during Base-Mediated Cross-Aldol Condensation, 258

Nucleophilic substitutions

Synthesis of 1,2-Disubstituted Carbocyclic Nucleoside Analogues of Cytidine, 954

Reactions of Chlorosulfanyl Derivatives of Cyclobutanones with Different Nucleophiles, 1042

Multiple Pentafluorophenylation of 2,2,3,3,5,6,6-Heptafluoro-3,6-dihydro-2*H*-1,4-oxazine with an Organosilicon Reagent: NMR and DFT Structural Analysis of Oligo(perfluoroaryl) Compounds, 2671

Nucleosides

pH-Independent Recognition of the dG·dC Base Pair in Triplex DNA: 9-Deazaguanine N⁷-(2'-Deoxyribonucleoside) and Halogenated Derivatives Replacing Protonated dC, 598

Synthesis of 1,2-Disubstituted Carbocyclic Nucleoside Analogues of Cytidine, 954

Oligonucleotide Analogues with Integrated Bases and Backbone. Part 13. Synthesis and Association of Ethynylene-Linked Self-Complementary Dimers, 2861

Odor description

Enzymatic Approach to and Odor Description of the Twelve Enantiomerically Pure Isomers of *Pelargene*®, 177

Olean-12-ene-23,28-dioic acids

Triterpenoids from the Aerial Parts of Kalidium foliatum, 962

Olefin insertion

Synthesis, Interionic Structure, and Reactivity toward CO and *p*-Methylstyrene of Palladacyclic Compounds Bearing α-Diimine Ligands, 1524

Olefin isomerization

Olefin Isomerization via Radical-Ion Pairs in Triplet States Studied by Chemically Induced Dynamic Nuclear Polarization (CIDNP), 2183

Olefin polymerization

Synthesis, Structure, and Polymerization Activity of a Titanium Complex with a Chelating [(Hydroxy- κO)amino- κN]phenolato(2-)- κO Ligand, 1589

Olefins

Synthetic Applications of the *Baylis–Hillman* Reaction: Simple and Convenient Synthesis of Five Important Insect Pheromones, 876

Insertion Reactions of 1,2-Disubstituted Olefins with an α-Diimine Palladium(II) Complex, 1660

Olfactory evaluation

Synthesis, Olfactory Evaluation, and Determination of the Absolute Configuration of the 3,4-Didehydroionone Stereoisomers, 1110

Oligonucleotide

The 5-Methylisocytosine β -D-Ribopyranosyl (4' \rightarrow 2')-Oligonucleotide, 218

pH-Independent Recognition of the dG \cdot dC Base Pair in Triplex DNA: 9-Deazaguanine N^7 -(2'-Deoxyribonucleoside) and Halogenated Derivatives Replacing Protonated dC, 598

Intercalating Nucleic Acids Containing Insertions of Naphthalimide, 1826

pH-Dependent Assembly of DNA-Gold Nanoparticles Based on the i-Motif: A Switchable Device with the Potential of a Nanomachine, 1978

Modification of Guanine with Photolabile N-Hydroxypyridine-2(1H)-thione: Monomer Synthesis, Oligonucleotide Elaboration, and Photochemical Studies, 2371

Oligonucleotides Containing 7-Deaza-2'-deoxyxanthosine: Synthesis, Base Protection, and Base-Pair Stability, 2794

Targeting of Single-Stranded Oligonucleotides through Metal-Induced Cyclization of Short Complementary Strands, 2958

Oligosaccharides

Arylethyl (= Phenylethanoid) Glycosides and Oligosaccharide from the Stem of *Cistanche tubulosa*, 927 Studies towards a Conjugate Vaccine for Anthrax: Synthesis of the Tetrasaccharide Side Chain of the *Bacillus anthracis* Exosporium, 1075

Synthesis of a Potential 10E4 Tetrasaccharide Antigen Involved in Scrapie Pathogenesis, 2591

One-pot multicomponent synthesis

Facile One-Pot Multicomponent Synthesis of β -Acetamido Ketones with *Amberlyst-15* as Heterogeneous Catalyst, 3109

Oplopane

New Oplopane-Type Sesquiterpenes from Ligularia narynensis, 1387

Optical activity

Synthesis of Optically Active, Cyclic α -Hydroxy Ketones and 1,2-Diketones from Verbenone Epoxide, 507 *Opuntia ficus-indica*

First 13C-NMR Assignments of Betaxanthins, 1008

Organoboron compounds

Convenient Synthesis of 1*H*-Indol-1-yl Boronates *via* Palladium(0)-Catalyzed Borylation of Bromo-1*H*-indoles with 'Pinacolborane', 936

Radical-Mediated Three-Component Coupling of Alkenes, 2450

Organosilicon reagents

Multiple Pentafluorophenylation of 2,2,3,3,5,6,6-Heptafluoro-3,6-dihydro-2*H*-1,4-oxazine with an Organosilicon Reagent: NMR and DFT Structural Analysis of Oligo(perfluoroaryl) Compounds, 2671

1,3-Oxathiazoles

1,5-Dipolar Electrocyclizations in Reactions of α -Thioxo Ketones and α -Thioxo Thioamides with Diazo Compounds, 1910

1,3-Oxathiolanes

Regio- and Stereoselectivity in the *Lewis* Acid- and NaH-Induced Reactions of Thiocamphor with (R)-2-Vinyloxirane, 456

Oxazaborolidine

Effect of the Secondary Reduction on the Enantioselectivity and Function of Additives in the Chiral Oxazaborolidine-Catalyzed Asymmetric Borane Reduction of Ketones, 1067

1,3-Oxazinan-6-ones

Effective Methods for the Synthesis of N-Methyl β -Amino Acids from All Twenty Common α -Amino Acids Using 1,3-Oxazolidin-5-ones and 1,3-Oxazones, 2611

2H-1,4-Oxazines

Multiple Pentafluorophenylation of 2,2,3,3,5,6,6-Heptafluoro-3,6-dihydro-2*H*-1,4-oxazine with an Organosilicon Reagent: NMR and DFT Structural Analysis of Oligo(perfluoroaryl) Compounds, 2671

1,3-Oxazolidin-5-ones

Effective Methods for the Synthesis of N-Methyl β -Amino Acids from All Twenty Common α -Amino Acids Using 1,3-Oxazolidin-5-ones and 1,3-Oxazonan-6-ones, 2611

1.3-Oxazolones

Reaction of γ -Hydroxy-N-[1-(dimethylcarbamoyl)ethyl]butanamides under the 'Direct Amide Cyclization' Conditions. 153

Transformation of 5-Hydroxy- to (5-Chloropentanoyl)amino Derivatives under 'Direct Amide Cyclization' Conditions, 352

Oxidation

Synthetic Studies on Coenzyme Q₁₀. Part 2. An Efficient and Improved Synthesis of Coenzyme Q₁₀ via the C₅ + C₄₅ Approach, 1317

Quenching of Singlet Oxygen by Tertiary Aliphatic Amines. Structural Effects on Rates and Products, 2273 **Oxidative degradation**

Oxidative and Photochemical Stability of Ionomers for Fuel-Cell Membranes, 2354

Oximetry

Interaction between Molecular Oxygen and Nitroxide Radicals: A Search for a Reversible Complex, 2441

Regio- and Stereoselectivity in the Lewis Acid- and NaH-Induced Reactions of Thiocamphor with (R)-2-Vinyloxirane, 456

Titanocene-Mediated Homolytic Opening of Epoxysilanes, 2297

Oxygen transfer

 $\label{ligand-Controlled Formation of a Low-Valent Pincer Rhodium (I)-Dioxygen Adduct Bearing a Very Short O-O Bond, 1730$

Ozonation

Functionalized Imides by Regioselective Ozonation, 971

Ozonolysis

An Expeditious Synthesis of Methyl Jasmonate, 1258

Pagicerine

New Indole Alkaloids from Rauvolfia yunnanensis, 1344

Palladacycles

Synthesis, Interionic Structure, and Reactivity toward CO and *p*-Methylstyrene of Palladacyclic Compounds Bearing α-Diimine Ligands, 1524

Insertion Reactions of 1,2-Disubstituted Olefins with an α-Diimine Palladium(II) Complex, 1660

Palladium catalysis

Palladium-Catalyzed 2-Phenylethenylation of Codeine: 8-[(1E)-2-Phenylethenyl]codeinone Dimethyl Ketal as the Unexpected 'Masked' Diene for the Preparation of 19-Substituted *Diels-Alder* Adducts of Thebaine, 861

Convenient Synthesis of 1*H*-Indol-1-yl Boronates *via* Palladium(0)-Catalyzed Borylation of Bromo-1*H*-indoles with 'Pinacolborane', 936

Palladium complexes

Copolymerization of 7-Methylenebicyclo[4.1.0]heptane with Carbon Monoxide Initiated by Optically Active Palladium Complexes, 1574

Systematic Study of the Asymmetric Methoxycarbonylation of Styrene Catalyzed by Palladium Systems Containing Chiral Ferrocenyl Diphosphine Ligands, 1610

Insertion Reactions of 1,2-Disubstituted Olefins with an α-Diimine Palladium(II) Complex, 1660

Palladium-Promoted Carbon Monoxide/Ethylene/Styrene Terpolymerization Reaction: Throwing Light on the Different Reactivity of the Two Alkenes. 1752

Preparation of C₂-Symmetric Bis[2-(diphenylphosphino)ferrocen-1-yl]methane and Its Use in Rhodium- and Ruthenium-Catalyzed Hydrogenation, 1772

The Methoxycarbonylation of Vinyl Acetate Catalyzed by Palladium Complexes of [1,2-Phenylenebis(methylene)]bis[di(tert-butyl)phosphine], 1783

Palladium(II) Complexes of the Thiosemicarbazone and N-Ethylthiosemicarbazone of 3-Hydroxypyridine-2-carbaldehyde: Synthesis, Properties, and X-Ray Crystal Structure, 1959

Panax notoginseng

New Dammarane Monodesmosides from the Acidic Deglycosylation of Notoginseng-Leaf Saponins, 1442 Paraffin impregnated graphite electrode

A Study of Nickel Electrodeposition on Paraffin-Impregnated Graphite Electrode, 622

Paranolin

Paranolin: a New Xanthene-Based Metabolite from Paraphaeosphaeria nolinae, 502

Paraphaeosphaeria nolinae

Paranolin: a New Xanthene-Based Metabolite from Paraphaeosphaeria nolinae, 502

Parkinson's disease

The Lipophilicity Behavior of Three Catechol-O-methyltransferase (COMT) Inhibitors and Simple Analogues, 144

Synthesis and Biological Evaluation of Potent Bisubstrate Inhibitors of the Enzyme Catechol *O*-Methyltransferase (COMT) Lacking a Nitro Group, 1856

Parthenium hysterophorus

Pseudoguaianolides from the Flowers of Parthenium hysterophorus, 285

P-C Cleavage

Versatile and Efficient Synthesis of a New Class of Aza-Based Phosphinic Amide Ligands via Unusual P-C Cleavage, 3007

Pedunculatic acids A and B

Two New Diterpenoids from Callicarpa pedunculata, 1017

Pelargene®

Enzymatic Approach to and Odor Description of the Twelve Enantiomerically Pure Isomers of *Pelargene*®, 177

Penicillin

Radical 4-exo Cyclizations onto O-Alkyloxime Acceptors: Towards the Synthesis of Penicillin-Containing Antibiotics, 2133

Pentacta quadrangularis

Philinopsides A and B, Two New Sulfated Triterpene Glycosides from the Sea Cucumber *Pentacta quadrangularis*, 54

Pentafluorophenylation

Multiple Pentafluorophenylation of 2,2,3,3,5,6,6-Heptafluoro-3,6-dihydro-2*H*-1,4-oxazine with an Organosilicon Reagent: NMR and DFT Structural Analysis of Oligo(perfluoroaryl) Compounds, 2671

Pent-4-enenitriles

Thioglucosides from the Seeds of Raphanus sativus L., 2953

Peptides

The 'Azirine/Oxazolone Method' on Solid Phase: Introduction of Various α , α -Disubstituted α -Amino Acids,

Reaction of γ -Hydroxy-N-[1-(dimethylcarbamoyl)ethyl]butanamides under the 'Direct Amide Cyclization' Conditions. 153

 β -Peptidic Secondary Structures Fortified and Enforced by Zn²⁺ Complexation – On the Way to β -Peptidic Zinc Fingers? 361

Numerical Simulation of the Pressure Denaturation of a Helical β -Peptide Heptamer Solvated in Methanol, 475

Synthesis of Enniatin-like Cyclic Depsipeptides via 'Direct Amide Cyclization', 731

Radio-Analytical Determination of the Coating Efficiency of Cyclic RGD Peptides, 833

Synthetic dsDNA-Binding Peptides Using Natural Compounds as Model, 1194

Synthesis of β^3 -Homophenylalanine-Derived Amino Acids and Peptides by *Suzuki* Coupling in Solution and on Solid Support, 1427

Synthesis, and Helix or Hairpin-Turn Secondary Structures of 'Mixed' α/β-Peptides Consisting of Residues with Proteinogenic Side Chains and of 2-Amino-2-methylpropanoic Acid (Aib), 1801

Novel N-(2,2-Dimethyl-2H-azirin-3-yl)-L-prolinates as Aib-Pro Synthons, 1841

Rearrangements in Model Peptide-Type Radicals *via* Intramolecular Hydrogen-Atom Transfer, 2254

Investigation of the Interactions of β -Peptides with DNA Duplexes by Circular Dichroism Spectroscopy, 3087

Perchloric acid

Reaction of Elemol with Acetic Acid/Perchloric Acid: Characterization of a Novel Oxide and (+)- β -Cyperone, 496

Perfluoroarenes

Multiple Pentafluorophenylation of 2,2,3,3,5,6,6-Heptafluoro-3,6-dihydro-2*H*-1,4-oxazine with an Organosilicon Reagent: NMR and DFT Structural Analysis of Oligo(perfluoroaryl) Compounds, 2671

Peroxides

A Minimalist Approach to C-H Activation by Copper, 841

Peroxynitrite

¹⁵N Chemically Induced Dynamic Nuclear Polarization (¹⁵N-CIDNP) Investigations of the Peroxynitrite Decay and Nitration of N-Acetyl-L-tyrosine, 2144

The Reaction of Peroxynitrite with Morpholine (Secondary Amines) Revisited: The Overlooked Hydroxylamine Formation, 2399

Peroxynitrous acid

The Reaction of Peroxynitrite with Morpholine (Secondary Amines) Revisited: The Overlooked Hydroxylamine Formation, 2399

Peroxysarcophine, 2-hydroxy-

A New Cembranoid Diterpene and Other Related Metabolites from the South-China-Sea Soft Coral Lobophytum crassum, 567

Persistent radical effect

The Persistent Radical Effect: From Mechanistic Curiosity to Synthetic Tool, 2473

Pharmacokinetic profiling

The Lipophilicity Behavior of Three Catechol-O-methyltransferase (COMT) Inhibitors and Simple Analogues, 144

Phase diagrams

The Binary System Tetradecanedioic Acid-Hexadecanedioic Acid: Polymorphism of the Components and Experimental Phase Diagram, 2027

Phenanthrene, 2-methoxy-

Synthesis and Properties of a pH-Insensitive Fluorescent Nitric Oxide Cheletropic Trap (FNOCT), 2281

Phenylethanoid glycosides

Arylethyl (= Phenylethanoid) Glycosides and Oligosaccharide from the Stem of Cistanche tubulosa, 927

2-Phenylethenylation of codeine

Palladium-Catalyzed 2-Phenylethenylation of Codeine: 8-[(1E)-2-Phenylethenyl]codeinone Dimethyl Ketal as the Unexpected 'Masked' Diene for the Preparation of 19-Substituted *Diels-Alder* Adducts of Thebaine, 861

Phenylpropanoids

Dimeric Coumarin and Phenylpropanoids from Clausena lenis, 2836

Pheromones

Synthetic Applications of the *Baylis–Hillman* Reaction: Simple and Convenient Synthesis of Five Important Insect Pheromones, 876

Philinopsides \boldsymbol{A} and \boldsymbol{B}

Philinopsides A and B, Two New Sulfated Triterpene Glycosides from the Sea Cucumber *Pentacta quadrangularis*, 54

Phlegmariurus squarrosus

Three New Serratane Triterpenoids from Phlegmariurus squarrosus, 2975

Phosphates

Synthesis of a Phosphorylated Disaccharide Fragment of the O-Specific Polysaccharide of *Vibrio cholerae* O139, Functionalized for Conjugation, 320

Phosphepine ligands

Expanding the Scope of Atropisomeric Monodentate P-Donor Ligands in Asymmetric Catalysis: Hydrogen-Transfer Reduction of $\alpha.\beta$ -Unsaturated Acid Derivatives by Rhodium/Ph-binepine Catalysts, 1716

Phosphinic amides

Versatile and Efficient Synthesis of a New Class of Aza-Based Phosphinic Amide Ligands via Unusual P-C Cleavage, 3007

Phosphite, dialkyl trialkylsilyl

New, Diastereoselective One-Pot Synthesis of Tetrasubstituted Hydantoins, 1187

Phosphoramidite ligands

Chloro(η^6 -p-cymene)(phosphoramidite)ruthenium(II), a 16-Electron Fragment Stabilized by an η^2 -Aryl-Metal Interaction, and Its Use in Asymmetric Cyclopropanation, 1696

Phosphoramidites

Oligonucleotides Containing 7-Deaza-2'-deoxyxanthosine: Synthesis, Base Protection, and Base-Pair Stability. 2794

Phosphoranes, imino-

Versatile and Efficient Synthesis of a New Class of Aza-Based Phosphinic Amide Ligands *via* Unusual P-C Cleavage, 3007

Phosphorescence

Photo-Fries Rearrangement of Carbazol-2-yl Sulfonates: Efficient Tool for the Introduction of Sulfonyl Groups into Polycyclic Aromatic Compounds, 1147

Photochemical stability

Oxidative and Photochemical Stability of Ionomers for Fuel-Cell Membranes, 2354

Photochemistry

Photo-Fries Rearrangement of Carbazol-2-yl Sulfonates: Efficient Tool for the Introduction of Sulfonyl Groups into Polycyclic Aromatic Compounds, 1147

Photocycloaddition

Photocycloaddition of Cyclohex-2-enones to Penta-1,2,4-triene, 854

Photocyclodimerization

The Photocyclodimers of 2,3-Dihydro-2,2-dimethyl-4*H*-pyran-4-one, 1927

Photo-Dehydro-Diels-Alder reaction

Synthesis of Benzo[g]isochromenes through Photo-Dehydro-Diels-Alder Reaction, 2694

Photo-Fries rearrangements

Photo-Fries Rearrangement of Carbazol-2-yl Sulfonates: Efficient Tool for the Introduction of Sulfonyl Groups into Polycyclic Aromatic Compounds, 1147

Photoinduced electron transfer (PET)

Olefin Isomerization via Radical-Ion Pairs in Triplet States Studied by Chemically Induced Dynamic Nuclear Polarization (CIDNP), 2183

Photoinduced reactions

Photoinduced Formation of Reactive Oxygen Species from the Acid Form of 6-(Hydroxymethyl)pterin in Aqueous Solution, 1090

Photoinitiators

Photophysical Investigations on Photoinitiators with Covalently Linked Thioxanthone Sensitizer Moieties, 2211

Photoisomerization

Preparation and Spectroscopic Characterization of (9Z,9'Z)-Lutein (Neolutein C), 667

Photolysis

Modification of Guanine with Photolabile N-Hydroxypyridine-2(1H)-thione: Monomer Synthesis, Oligonucleotide Elaboration, and Photochemical Studies, 2371

Photophysics

Photo-Fries Rearrangement of Carbazol-2-yl Sulfonates: Efficient Tool for the Introduction of Sulfonyl Groups into Polycyclic Aromatic Compounds, 1147

Photostability

Synthesis and Properties of 2-Phenylbenzoxazole-Based Luminophores for *in situ* Photopolymerized Liquid-Crystal Films, 304

Phthalimidines

Cobalt-Catalyzed Carbonylation of N-Alkylbenzaldimines to 'N-Alkylphthalimidines' (= 2,3-Dihydro-1H-isoindol-1-ones) via Tandem C-H Activation and Cyclocarbonylation, 1687

Phthalocyaninatoiron complexes

Solution NMR and X-Ray Structural Studies on Phthalocyaninatoiron Complexes, 1485

Phyllocladane

Lignanoids and Diterpenoids from Callicarpa furfuraceae, 64

Phyllostacins A and B

Structure Elucidation of Two New Diterpenoids from Isodon phyllostachys: Phyllostacins A and B, 1181

Pictet-Spengler reaction

Formal Synthesis of Vallesamidine, 249

Pigments

Two New Pigments from the Fruiting Bodies of the Basidiomycete Lactarius deliciosus, 988

Two New Azulene Pigments from the Fruiting Bodies of the Basidiomycete Lactarius hatsudake, 1463

Synthesis, Structure, and Optical Properties of Terminally Sulfur-Functionalized Core-Substituted Naphthalene-Bisimide Dyes, 1986

'Pinacolborane'

Convenient Synthesis of 1*H*-Indol-1-yl Boronates *via* Palladium(0)-Catalyzed Borylation of Bromo-1*H*-indoles with 'Pinacolborane', 936

Pincer

Ligand-Controlled Formation of a Low-Valent Pincer Rhodium(I)-Dioxygen Adduct Bearing a Very Short O-O Bond. 1730

α-Pinene

Incorporation of an Allene Unit into α -Pinene via β -Elimination, 1449

Piperazines, diketo-

Diastereoselective Alkylation of a Proline-Derived Bicyclic Lactim Ether, 1894

Piperidines

Quenching of Singlet Oxygen by Tertiary Aliphatic Amines. Structural Effects on Rates and Products, 2273 The Absolute Configuration of (+)-Ethyl *cis*-1-Benzyl-3-hydroxypiperidine-4-carboxylate and (+)-4-Ethyl 1-Methyl *cis*-3-Hydroxypiperidine-1,4-dicarboxylate; a Revision, 3023

Piperidin-1-yloxy

Interaction between Molecular Oxygen and Nitroxide Radicals: A Search for a Reversible Complex, 2441

Platinum complexes

Chiral (Diphosphonite) platinum Complexes in Asymmetric Hydroformylation, 1547

Synthesis of 3-Acyl-4-alkenylpyrrolidines by Platinum-Catalyzed Hydrative Cyclization of Allenynes, 1672

Pleurospermum lindleyanum

Lindleyanin and Bergapten-8-yl Sulfate from Pleurospermum lindleyanum, 117

Polar radicals

Initial Radical Separation after Photolysis of 2,2'-Azobis(isobutyronitrile) (AIBN) in Solution: Modeling the Primary Cage Effect for Polar Radicals, 2533

Polarity-reversal catalysis

Polarity-Reversal-Catalyzed Hydrostannylation Reactions: Benzeneselenol-Mediated Homolytic Hydrostannylation of Electron-Rich Olefins, 2306

Polarography

Voltammetry as Virtual Potentiometric Sensor in Modelling of a Metal/Ligand System and Refinement of Stability Constants. Part 5. Complexation Studies of Hydrolysis-Prone Lead(II) with Glycine and Sarcosine by Sampled-Direct-Current Polarography Involving Virtual Potential, 2934

Polyamides

Effect of Structure of Functionalizing Molecules on the Inter-Macromolecular Reactions and Blending of Poly(ethylene-co-propylene) (EPM) with Poly(6-aminohexanoic Acid) (PA6), 1596

Polyene cyclizations

Internal Nucleophilic Termination in Acid-Mediated Polyene Cyclizations. Part 5. Synthetic Access to Didehydro Analogues of (\pm) -Ambrox $^{\otimes}$ and Diastereoisomers, 3071

Polyethylene

Methylene-Bridged Metallocenes with 2,2'-Methylenebis[1*H*-inden-1-yl] Ligands: Synthesis, Characterization, and Polymerization Catalysis of a Synthetically Simple Class of C_2 - and C_{2v} -Symmetric ansa-Metallocenes, 1497

Poly(ethylene-co-propylene)

Effect of Structure of Functionalizing Molecules on the Inter-Macromolecular Reactions and Blending of Poly(ethylene-co-propylene) (EPM) with Poly(6-aminohexanoic Acid) (PA6), 1596

Polyhapto interaction

A One-Dimensional Thallium(I) Coordination Polymer Involving Polyhapto-Aromatic Interactions, 265

Polyketides

Three New Polyketide Metabolites from the Endophytic Fungal Strain Cladosporium tenuissimum LR463 of Maytenus hookeri. 527

Polyketones

Giambattista Consiglio's Passion for Homogeneous Catalysis, C-C Bond Formation, and Stereochemistry, 1475

Palladium-Promoted Carbon Monoxide/Ethylene/Styrene Terpolymerization Reaction: Throwing Light on the Different Reactivity of the Two Alkenes, 1752

Polymer blending

Effect of Structure of Functionalizing Molecules on the Inter-Macromolecular Reactions and Blending of Poly(ethylene-co-propylene) (EPM) with Poly(6-aminohexanoic Acid) (PA6), 1596

Polymer reaction

Copolymerization of 7-Methylenebicyclo[4.1.0]heptane with Carbon Monoxide Initiated by Optically Active Palladium Complexes, 1574

Polymer-electrolyte fuel cell (PEFC)

Oxidative and Photochemical Stability of Ionomers for Fuel-Cell Membranes, 2354

Polymerization

Synthesis, Interionic Structure, and Reactivity toward CO and p-Methylstyrene of Palladacyclic Compounds Bearing α -Diimine Ligands, 1524

Synthesis, Structure, and Polymerization Activity of a Titanium Complex with a Chelating [(Hydroxy- κO)amino- κN]phenolato(2-)- κO Ligand, 1589

Ab initio Emulsion Polymerization by RAFT (Reversible Addition–Fragmentation Chain Transfer) through the Addition of Cyclodextrins, 1641

Palladium-Promoted Carbon Monoxide/Ethylene/Styrene Terpolymerization Reaction: Throwing Light on the Different Reactivity of the Two Alkenes, 1752

Intramolecular Hydrogen Bonding: The Case of β-Phosphorylated Nitroxide (= Aminoxyl) Radical, 2119 Alkoxyamines of Stable Aromatic Nitroxides: N-O vs. C-O Bond Homolysis, 2312

Re-formation Reaction of Cyclic Nitroxide-Based Alkoxyamines: Steric and Polar/Stabilization Effects, 2330 The Persistent Radical Effect: From Mechanistic Curiosity to Synthetic Tool, 2473

Polymerization catalysis

Methylene-Bridged Metallocenes with 2,2'-Methylenebis[1*H*-inden-1-yl] Ligands: Synthesis, Characterization, and Polymerization Catalysis of a Synthetically Simple Class of C₂- and C_{2v}-Symmetric ansa-Metallocenes, 1497

Polymers

On the Synthesis and Selective Deprotection of Low-Generation Dendrons with Orthogonally Protected Peripheral Amine Groups and a Possible Impact of the Deprotection Conditions on the Stability of Dendronized Polymers' Skeletons, 2745

Preparation and Recognition Properties of Vanillin-Imprinted Polymers, 3032

Polymorphism

The Binary System Tetradecanedioic Acid-Hexadecanedioic Acid: Polymorphism of the Components and Experimental Phase Diagram, 2027

Polyolefin

Effect of Structure of Functionalizing Molecules on the Inter-Macromolecular Reactions and Blending of Poly(ethylene-co-propylene) (EPM) with Poly(6-aminohexanoic Acid) (PA6), 1596

Polypropylene

Methylene-Bridged Metallocenes with 2,2'-Methylenebis[1*H*-inden-1-yl] Ligands: Synthesis, Characterization, and Polymerization Catalysis of a Synthetically Simple Class of *C*₂- and *C*_{2v}-Symmetric *ansa*-Metallocenes, 1497

Polypyridines

Synthesis and Characterization of Polypiridine-Based Rhenium(I) Complexes with Pyrazino[2,3-f][1,10]phen-anthroline, 1220

Polysaccharides

Oligosaccharide Analogues of Polysaccharides. Part 26. Mimics of Cellulose I and Cellulose II: Di- and Monoalkynyl C-Cellosides of 1,8-Disubstituted Anthraquinones, 675

Polytin anions

Syntheses and Crystal Structures of Ammoniates with the Phenyl-Substituted Polytin Anions $Sn_2Ph_4^{2-}$, $cyclo-Sn_4Ph_4^{4-}$, and $Sn_6Ph_{12}^{2-}$, 1158

Porphyrinoids

Hierarchic Supramolecular Interactions within Assemblies in Solution and in the Crystal of 2,3,6,7-Tetrasubstituted 5,5'-(Anthracene-9,10-diyl)bis[pyrimidin-2-amines], 333

Porphyrin-quinone (PQ) systems

Photochemical Reactions and Photoinduced Electron-Transfer Processes in Liquids, Frozen Solutions, and Proteins as Studied by Multifrequency Time-Resolved EPR Spectroscopy, 2544

Porphyrins

Synthesis and Photophysical Properties of a Deazaflavin-Bridged Porphyrinatoiron(III) That Mimics the Interaction of a Deazaflavin Inhibitor with the Heme-Thiolate Cofactor of Cytochrome P450 3A4, 2987

Pre-fluorescent probes

The Persistent Radical Effect: From Mechanistic Curiosity to Synthetic Tool, 2473

Pregnane glycosides

Four New Pregnane Glycosides from the Stems of Marsdenia tenacissima, 2738

Pregnane-type steroids

Krempenes A – D: A Series of Unprecedented Pregnane-Type Steroids from the Marine Soft Coral *Cladiella krempfi*, 2020

Prelog, Vladimir

VLADIMIR PRELOG, 1267

Pressure denaturation

Numerical Simulation of the Pressure Denaturation of a Helical β -Peptide Heptamer Solvated in Methanol, 475

Prezizaane

Secoprezizaane Sesquiterpene Lactones from Illicium micranthum, 983

Prins reaction

Methylene-Bridged Metallocenes with 2,2'-Methylenebis[1H-inden-1-yl] Ligands: Synthesis, Characterization, and Polymerization Catalysis of a Synthetically Simple Class of C_{2^-} and $C_{2\nu}$ -Symmetric ansa-Metallocenes, 1497

L-Prolinates, N-(2,2-dimethyl-2H-azirin-3-yl)-

Novel N-(2,2-Dimethyl-2H-azirin-3-yl)-L-prolinates as Aib-Pro Synthons, 1841

Propane derivatives

Sesquiterpenoids and Phenylpropane Derivatives from Sonchus uliginosus, 2927

Prop-2-enal, 3,3-diphenyl-

Synthesis, Characterization, and X-Ray Crystal Structures of Bis[N-(3,3-diphenylallylidene)quinolin-8-amine- $\kappa N, \kappa N^8$]copper(1+) Tetraphenylborate(1-) ([Cu(dpa-qa)_2]BPh_4) and Bis[N, N'-bis(3,3-diphenylallylidene)-[1,1'-biphenyl]-2,2'-diamine- $\kappa N, \kappa N'$]copper(1+) Perchlorate ([Cu(bdpa-bda)_2]ClO₄ · 3 H₂O), 274

Prop-2-enoates, alkyl 3-(dimethylamino)-

 $\label{thm:conditions} Transformations of Methyl 2-[(E)-2-(Dimethylamino)-1-(methoxycarbonyl) ethenyl]-1-methyl-1$H-indole-3-carboxylate, 2774$

Propylene-CO copolymers

Statistical Approach for the Determination of the Stereoregularity of Optically Active Propylene-CO Copolymers, 1740

Protecting groups

Oligonucleotides Containing 7-Deaza-2'-deoxyxanthosine: Synthesis, Base Protection, and Base-Pair Stability, 2794

Proteins

Photochemical Reactions and Photoinduced Electron-Transfer Processes in Liquids, Frozen Solutions, and Proteins as Studied by Multifrequency Time-Resolved EPR Spectroscopy, 2544

Synthesis and Photophysical Properties of a Deazaflavin-Bridged Porphyrinatoiron(III) That Mimics the Interaction of a Deazaflavin Inhibitor with the Heme-Thiolate Cofactor of Cytochrome P450 3A4, 2987

Protocatechuic acid

DPPH (= 2,2-Diphenyl-1-picrylhydrazyl = 2,2-Diphenyl-1-(2,4,6-trinitrophenyl)hydrazyl) Radical-Scavenging Reaction of Protocatechuic Acid Esters (= 3,4-Dihydroxybenzoates) in Alcohols: Formation of Bisalcohol Adduct, 821

DPPH (= 2,2-Diphenyl-1-picrylhydrazyl) Radical-Scavenging Reaction of Protocatechuic Acid (= 3,4-Dihydroxybenzoic Acid): Difference in Reactivity between Acids and Their Esters, 1395

Proton-coupled electron transfer (PCET)

Proton-Coupled Electron Transfer of Unsaturated Fatty Acids and Mechanistic Insight into Lipoxygenase, 2425

Pseudoguaianolide

Pseudoguaianolides from the Flowers of Parthenium hysterophorus, 285

Pteridines

A New Synthesis of Pteridines, 1140

Pterine, 6-(hydroxymethyl)-

Photoinduced Formation of Reactive Oxygen Species from the Acid Form of 6-(Hydroxymethyl)pterin in Aqueous Solution, 1090

Pubinernoids A-C

Three Novel Terpenoids from Schisandra pubescens var. pubinervis, 1169

Pulse EPR spectroscopy

Pulse EPR Methods for Studying Chemical and Biological Samples Containing Transition Metals, 2495

Pulsed gradient spin-echo (PGSE) NMR

Solution NMR and X-Ray Structural Studies on Phthalocyaninatoiron Complexes, 1485

4H-Pyran-4-one, 2,3-dihydro-2,2-dimethyl-

The Photocyclodimers of 2,3-Dihydro-2,2-dimethyl-4H-pyran-4-one, 1927

Pyrazino[2,3-f][1,10]phenanthroline (ppl)

Synthesis and Characterization of Polypiridine-Based Rhenium(I) Complexes with Pyrazino[2,3-f][1,10]phen-anthroline, 1220

Pyrazoles

Reactions of α,β -Unsaturated Thioamides with Diazo Compounds, 2815

1*H*,5*H*-Pyrazolo[1,2-*a*][1,2,4]triazoles

One-Pot Three-Component Synthesis of Highly Functionalized 2,3-Dihydro-1,3-dioxo-1*H*,5*H*-pyrazolo[1,2-*a*][1,2,4]triazoles, 1176

Pyridine-2-carbaldehyde, 3-hydroxy-

Palladium(II) Complexes of the Thiosemicarbazone and N-Ethylthiosemicarbazone of 3-Hydroxypyridine-2-carbaldehyde: Synthesis, Properties, and X-Ray Crystal Structure, 1959

Pyridine-2(1H)-thione, N-hydroxy-

Modification of Guanine with Photolabile N-Hydroxypyridine-2(1H)-thione: Monomer Synthesis, Oligonucleotide Elaboration, and Photochemical Studies, 2371

Pyridin-3-ols

Solid-State and Solution Structural Studies of $4-\{[C(E)]-1H-Azol-1-ylimino)$ methyl $\}$ pyridin-3-ols, 1290

Pyridocarbazole alkaloid

Regioselective Synthesis of Ellipticine, 111

Pvridoimidazoles, tetrahvdro-

Probing the Interaction of the Hydroxy Group at C(4) of Lactone-Type Inhibitors with β -Glucosidases and β -Galactosidases, 2006

Pyrido[4,3-d]pyrimidin-4(3H)-ones

Synthesis of Derivatives of Pyrido[4,3-d]pyrimidin-4(3H)-one via an Iminophosphorane, 1337

Pyridylfuran-2-amines

Facile One-Pot Three-Component Synthesis of Functionalized Pyridylfuran-2-amines, 299

Pyrimidine, 4-amino-5-nitroso-

A New Synthesis of Pteridines, 1140

Pyrolysis

Synthesis, Structures, and Some Reactions of [(Thioacyl)thio]- and (Acylseleno)antimony and -bismuth Derivatives $((RCSS)_xMR_{3-x}^1 \text{ and } (RCOSe)_xMR_{3-x}^1 \text{ with } M = Sb, Bi \text{ and } x = 1-3), 747$

1H-Pyrroles

One-Step Synthesis of Dialkyl 2-[(4-Methylphenyl)sulfonyl]-1*H*-pyrrole-3,4-dicarboxylates by Reaction of Acetylenedicarboxylates with 'Tosylmethyl Isocyanide' (TsMIC) and Triphenylphosphine, 923

Pyrrolidines, 3-acyl-4-alkenyl-

Synthesis of 3-Acyl-4-alkenylpyrrolidines by Platinum-Catalyzed Hydrative Cyclization of Allenynes, 1672

2H-Pyrrol-2-ones, 1,5-dihydro-

Functionalized Imides by Regioselective Ozonation, 971

Pyrrolo[3,2-d]pyrimidines

pH-Independent Recognition of the dG·dC Base Pair in Triplex DNA: 9-Deazaguanine N⁷-(2'-Deoxyribonucleoside) and Halogenated Derivatives Replacing Protonated dC, 598

Pyruvic acid

Mechanistic Studies on the Oxidation of Glyoxylic and Pyruvic Acid by a [Mn₄O₆]⁴⁺ Core in Aqueous Media: Kinetics of Oxo-Bridge Protonation, 1947

Ouantum-chemical calculations

Rearrangements in Model Peptide-Type Radicals *via* Intramolecular Hydrogen-Atom Transfer, 2254 *Quercus aliena* var. *acuteserrata*

Three New 24-Noroleanane Triterpenoids from Quercus aliena var. acuteserrata, 1971

Quinolin-8-amine

Synthesis, Characterization, and X-Ray Crystal Structures of Bis[N-(3,3-diphenylallylidene)quinolin-8-amine- $\kappa N, \kappa N^8$]copper(1+) Tetraphenylborate(1-) ([Cu(dpa-qa)_2]BPh_4) and Bis[N,N'-bis(3,3-diphenylallylidene)-[1,1'-biphenyl]-2,2'-diamine- $\kappa N, \kappa N'$]copper(1+) Perchlorate ([Cu(bdpa-bda)_2]ClO₄ · 3 H₂O), 274

Radical addition reactions

Hanns Fischer: Radical Pioneer, 2061

Absolute Rate Constants for the Addition of the 1-(tert-Butoxy)carbonylethyl Radical onto Cyclic Alkenes in Solution, 2327

Radical carbonylation

Trifluoromethyl-Radical-Mediated Carbonylation of Alkanes Leading to Ethynyl Ketones, 2483

Radical kinetics

Hanns Fischer: Radical Pioneer, 2061

Radical pair mechanism

The Discovery of Chemically Induced Dynamic Polarization (CIDNP), 2082

Radical polymerization

Photophysical Investigations on Photoinitiators with Covalently Linked Thioxanthone Sensitizer Moieties, 2211

Re-formation Reaction of Cyclic Nitroxide-Based Alkoxyamines: Steric and Polar/Stabilization Effects, 2330 The Persistent Radical Effect: From Mechanistic Curiosity to Synthetic Tool, 2473

Radical reactions

The Tris(trimethylsilyl)silane/Thiol Reducing System: A Tool for Measuring Rate Constants for Reactions of Carbon-Centered Radicals with Thiols, 2387

The Reaction of Peroxynitrite with Morpholine (Secondary Amines) Revisited: The Overlooked Hydroxylamine Formation, 2399

Photochemical Reactions and Photoinduced Electron-Transfer Processes in Liquids, Frozen Solutions, and Proteins as Studied by Multifrequency Time-Resolved EPR Spectroscopy, 2544

Radical/radical self-reactions

Hanns Fischer: Radical Pioneer, 2061

Radicals

Radical 4-exo Cyclizations onto O-Alkyloxime Acceptors: Towards the Synthesis of Penicillin-Containing Antibiotics, 2133

¹⁵N Chemically Induced Dynamic Nuclear Polarization (¹⁵N-CIDNP) Investigations of the Peroxynitrite Decay and Nitration of N-Acetyl-L-tyrosine, 2144

Reactions of Alkyl Radicals with Substituted Toluenes and the Effect of Substituents on Dissociation Energies of Benzyl C-H Bonds, 2226

Rearrangements in Model Peptide-Type Radicals via Intramolecular Hydrogen-Atom Transfer, 2254

Titanocene-Mediated Homolytic Opening of Epoxysilanes, 2297

Radical-Mediated Three-Component Coupling of Alkenes, 2450

Radical-scavenging mechanism

DPPH (= 2,2-Diphenyl-1-picrylhydrazyl = 2,2-Diphenyl-1-(2,4,6-trinitrophenyl)hydrazyl) Radical-Scavenging Reaction of Protocatechuic Acid Esters (= 3,4-Dihydroxybenzoates) in Alcohols: Formation of Bisalcohol Adduct, 821

DPPH (= 2,2-Diphenyl-1-picrylhydrazyl) Radical-Scavenging Reaction of Protocatechuic Acid (= 3,4-Dihydroxybenzoic Acid): Difference in Reactivity between Acids and Their Esters, 1395

Radio labeling

Radio-Analytical Determination of the Coating Efficiency of Cyclic RGD Peptides, 833

Radish

Thioglucosides from the Seeds of Raphanus sativus L., 2953

RAFT Polymerization

An ESR Approach to the Estimation of the Rate Constants of the Addition and Fragmentation Processes Involved in the RAFT Polymerization of Styrene, 2103

A New Sterically Highly Hindered 7-Membered Cyclic Nitroxide for the Controlled Living Radical Polymerization, 2200

Raphanus sativus L

Thioglucosides from the Seeds of Raphanus sativus L., 2953

Rate constants

Absolute Rate Constants for the Addition of the 1-(tert-Butoxy)carbonylethyl Radical onto Cyclic Alkenes in Solution, 2327

The Tris(trimethylsilyl)silane/Thiol Reducing System: A Tool for Measuring Rate Constants for Reactions of Carbon-Centered Radicals with Thiols, 2387

Rauvolfia yunnanensis

New Indole Alkaloids from Rauvolfia yunnanensis, 1344

Reactive blending

Effect of Structure of Functionalizing Molecules on the Inter-Macromolecular Reactions and Blending of Poly(ethylene-co-propylene) (EPM) with Poly(6-aminohexanoic Acid) (PA6), 1596

Reactive nitrogen species (RNS)

¹⁵N Chemically Induced Dynamic Nuclear Polarization (¹⁵N-CIDNP) Investigations of the Peroxynitrite Decay and Nitration of N-Acetyl-L-tyrosine, 2144

Reactive oxygen species

Photoinduced Formation of Reactive Oxygen Species from the Acid Form of 6-(Hydroxymethyl)pterin in Aqueous Solution, 1090

Rearrangements

Reactions of Chlorosulfanyl Derivatives of Cyclobutanones with Different Nucleophiles, 1042

Recombination rate constants

Re-formation Reaction of Cyclic Nitroxide-Based Alkoxyamines: Steric and Polar/Stabilization Effects, 2330

Resorcin[4]arene

Tetrathiafulvalene (TTF)-Bridged Resorcin[4]arene Cavitands: Towards New Electrochemical Molecular Switches 2040

Reversible addition fragmentation chain transfer (RAFT)

Ab initio Emulsion Polymerization by RAFT (Reversible Addition–Fragmentation Chain Transfer) through the Addition of Cyclodextrins, 1641

An ESR Approach to the Estimation of the Rate Constants of the Addition and Fragmentation Processes Involved in the RAFT Polymerization of Styrene, 2103

RGD Peptides

Radio-Analytical Determination of the Coating Efficiency of Cyclic RGD Peptides, 833

β -Rhamnopyranoside

Studies towards a Conjugate Vaccine for Anthrax: Synthesis of the Tetrasaccharide Side Chain of the *Bacillus anthracis* Exosporium, 1075

Rhenium complexes

Synthesis and Characterization of Polypiridine-Based Rhenium(I) Complexes with Pyrazino[2,3-f][1,10]phen-anthroline. 1220

Rhodium complexes

Asymmetric Hydroformylation of Vinylfurans Catalyzed by {(11bS)-4-{[(1R)-2'-Phosphino[1,1'-binaphtha-len]-2-yl]oxy}dinaphtho[2,1-d:1',2'-f][1,3,2]dioxaphosphepin}rhodium(I) [Rh^I{(R,S)-binaphos}] Derivatives 1681

Expanding the Scope of Atropisomeric Monodentate P-Donor Ligands in Asymmetric Catalysis: Hydrogen-Transfer Reduction of α,β -Unsaturated Acid Derivatives by Rhodium/Ph-binepine Catalysts, 1716

Ligand-Controlled Formation of a Low-Valent Pincer Rhodium(I)–Dioxygen Adduct Bearing a Very Short O-O Bond. 1730

D-Ribono-γ-lactones

New Phenolic Glycosides from Clematis mandshurica, 1023

Ribopyranosyl oligonucleotides

The 5-Methylisocytosine β -D-Ribopyranosyl (4' \rightarrow 2')-Oligonucleotide, 218

Ring closure

Synthesis of Highly Functionalized γ-Lactones via 1,5-Electrocyclic Ring Closure, 1231

Radical 4-exo Cyclizations onto O-Alkyloxime Acceptors: Towards the Synthesis of Penicillin-Containing Antibiotics, 2133

Ring-closing metathesis

Application of a *Grubbs–Hoveyda* Metathesis Catalyst Noncovalently Immobilized by Fluorous–Fluorous Interactions, 1030

Ring-enlargement reactions

Total Synthesis of (+)- β -Himachalene, 231

The First Ring-Enlargement of a 1-Azabicyclo[1.1.0]butane to a 1-Azabicyclo[2.1.1]hexane, 442

Regio- and Stereoselectivity in the *Lewis* Acid- and NaH-Induced Reactions of Thiocamphor with (R)-2-Vinyloxirane, 456

RNA

Targeting of Single-Stranded Oligonucleotides through Metal-Induced Cyclization of Short Complementary Strands, 2958

Ruhemann's purple

Direct Sensitive Spectrophotometric Determination of Glyphosate by Using Ninhydrin as a Chromogenic Reagent in Formulations and Environmental Water Samples, 2686

Ruthenium catalysis

A New Route to Vitamin E Key-Intermediates by Olefin Cross-Metathesis, 797

Ruthenium complexes

Chloro(η^6 -p-cymene)(phosphoramidite)ruthenium(II), a 16-Electron Fragment Stabilized by an η^2 -Aryl-Metal Interaction, and Its Use in Asymmetric Cyclopropanation, 1696

A New Robust and Highly Sensitive FRET Donor-Acceptor Pair: Synthesis, Characterization, and Application in a Thrombin Assay, 3056

Sandalwood

Analogues of α -Campholenal (= (1R)-2,2,3-Trimethylcyclopent-3-ene-1-acetaldehyde) as Building Blocks for (+)- β -Necrodol (= (1S,3S)-2,2,3-Trimethyl-4-methylenecyclopentanemethanol) and Sandalwood-like Alcohols, 2638

Sanonine

Novel Steroidal Glycosides from two Indian Caralluma species, C. stalagmifera and C. indica, 201 Triterpenoid Saponins from Schefflera arboricola. 468

A Pair of New Nortriterpene Saponin Epimers from the Roots of *Gypsophila oldhamiana*, 947

New Dammarane Monodesmosides from the Acidic Deglycosylation of Notoginseng-Leaf Saponins, 1442

Sarcosine

Voltammetry as Virtual Potentiometric Sensor in Modelling of a Metal/Ligand System and Refinement of Stability Constants. Part 5. Complexation Studies of Hydrolysis-Prone Lead(II) with Glycine and Sarcosine by Sampled-Direct-Current Polarography Involving Virtual Potential, 2934

Saudin

A Simple Synthesis of a Model of the Tetracyclic Bisketal Lactone Mainframe of Saudin, 2732

Scanning electron microscopy (SEM)

A Study of Nickel Electrodeposition on Paraffin-Impregnated Graphite Electrode, 622

Effect of Structure of Functionalizing Molecules on the Inter-Macromolecular Reactions and Blending of Poly(ethylene-co-propylene) (EPM) with Poly(6-aminohexanoic Acid) (PA6), 1596

Scavenger

A Practical, Water-Soluble, Ionic Scavenger for the Solution-Phase Syntheses of Amides, 532

Scheffarbosides

Triterpenoid Saponins from Schefflera arboricola, 468

Schefflera arboricola

Triterpenoid Saponins from Schefflera arboricola, 468

Schiff bases

Solid-State and Solution Structural Studies of $4-\{[C(E)]-1H-Azol-1-ylimino\}$ methyl $\}$ pyridin-3-ols, 1290

Schisandra pubescens var. pubinervis

Three Novel Terpenoids from Schisandra pubescens var. pubinervis, 1169

Schisanlactone E

 $Three \ New \ Cyclolanostane \ Triterpenoids \ from \ the \ Ethanol \ Extract \ of \ the \ Stems \ of \ \textit{Kadsura heteroclita}, 1888 \ the \ New \ Cyclolanostane \ Triterpenoids \ from \ the \ Ethanol \ Extract \ of \ the \ Stems \ of \ \textit{Kadsura heteroclita}, 1888 \ the \ New \ Cyclolanostane \ Triterpenoids \ from \ the \ Ethanol \ Extract \ of \ the \ Stems \ of \ \textit{Kadsura heteroclita}, 1888 \ the \ New \ Cyclolanostane \ Triterpenoids \ from \ the \ Ethanol \ Extract \ of \ the \ Stems \ of \ \textit{Kadsura heteroclita}, 1888 \ the \ New \ Cyclolanostane \ Triterpenoids \ from \ the \ Stems \ of \ \textit{Kadsura heteroclita}, 1888 \ the \ New \ Cyclolanostane \ Triterpenoids \ from \ the \ New \ Triterpenoids \ from \ the \ Triterpenoids \ from \ Triterpenoids \ from \ the \ Triterpenoids$

Scrapie pathogenesis

Synthesis of a Potential 10E4 Tetrasaccharide Antigen Involved in Scrapie Pathogenesis, 2591

Scrophularia buergeriana

C₉-Iridoids from Scrophularia buergeriana, 2789

Sea cucumber

Philinopsides A and B, Two New Sulfated Triterpene Glycosides from the Sea Cucumber *Pentacta quadrangularis*, 54

Secoatisane diterpenoids

Further New Secoatisane Diterpenoids from the Chinese Mangrove Excoecaria agallocha L., 1367

Secoiridoid glycosides

Secoiridoid Glycosides from Swertia mileensis, 94

8,9-Secokaurane diterpenes

Three New, 1-Oxygenated ent-8,9-Secokaurane Diterpenes from Croton kongensis, 537

Secondary structures

 β -Peptidic Secondary Structures Fortified and Enforced by Zn²⁺ Complexation – On the Way to β -Peptidic Zinc Fingers?, 361

Synthesis, and Helix or Hairpin-Turn Secondary Structures of 'Mixed' α/β-Peptides Consisting of Residues with Proteinogenic Side Chains and of 2-Amino-2-methylpropanoic Acid (Aib), 1801

Secoprezizaane

Secoprezizaane Sesquiterpene Lactones from Illicium micranthum, 983

Selenadiazines

Selenium-Containing Heterocycles from Isoselenocyanates: Use of Hydrazine for the Synthesis of 1,3,4-Selenadiazine Derivatives, 1322

Semi-empirical calculations

Synthesis and Electronic Spectroscopy of Bromocarbazoles. Direct Bromination of N- and C-Substituted Carbazoles by N-Bromosuccinimide or a N-Bromosuccinimide/Silica Gel System, 1123

Semiquinone-type radicals

Oxidative and Photochemical Stability of Ionomers for Fuel-Cell Membranes, 2354

Serratane-type triterpenoids

Japonicumins A-D: Four New Compounds from Lycopodium japonicum, 1467

Three New Serratane Triterpenoids from Phlegmariurus squarrosus, 2975

Sesquiterpene lactones

Secoprezizaane Sesquiterpene Lactones from *Illicium micranthum*, 983

Sesquiterpenes

Uncommon Sesquiterpenoids and New Triterpenoids from *Jatropha neopauciflora* (Euphorbiaceae), 16 Total Synthesis of (+)-β-Himachalene, 231

Pseudoguaianolides from the Flowers of Parthenium hysterophorus, 285

A New Approach to Sesquiterpene Arenes of the 9,11-Drimenyl Type (= [(1E,2RS,4aRS,8aRS)-Octahydro-2,5,5,8a-tetramethylnaphthalen-1(2H)-ylidene] methyl Type), 784

Terpenoids from the Roots of Ligularia muliensis, 915

New Oplopane-Type Sesquiterpenes from Ligularia narynensis, 1387

Sesquiterpenoids and Phenylpropane Derivatives from Sonchus uliginosus, 2927

Sesquiterpenoids

Sesquiterpenoids and Lignans from Ligularia virgaurea spp. oligocephala, 870

Three Novel Terpenoids from Schisandra pubescens var. pubinervis, 1169

Shigellosis

Synthesis, Biological Evaluation, and Crystallographic Studies of Extended Guanine-Based (*lin*-Benzoguanine) Inhibitors for tRNA-Guanine Transglycosylase (TGT), 573

Sigmatropic rearrangements

Regio- and Stereoselectivity in the *Lewis* Acid- and NaH-Induced Reactions of Thiocamphor with (R)-2-Vinyloxirane, 456

Silane, tris(trimethylsilyl)-

The Tris(trimethylsilyl)silane/Thiol Reducing System: A Tool for Measuring Rate Constants for Reactions of Carbon-Centered Radicals with Thiols. 2387

Silver deposits

Temperature Influence on the Morphology and Roughness of Silver Deposit Formed by Cementation, 427 Morphology and Roughness of Silver Deposit Formed by Cementation at Various Temperatures in Pure Sulfuric Acid, 2764

Silver ions

Surface-Roughness Evolution During the Cementation of Silver Ions on Solid Copper in Aqueous Sulfuric Acid Solution. 902

Silvl radicals

Titanocene-Mediated Homolytic Opening of Epoxysilanes, 2297

Singlet oxygen

Quenching of Singlet Oxygen by Tertiary Aliphatic Amines. Structural Effects on Rates and Products, 2273

Sinularia species

Two New Polyhydroxylated Steroids from the Hainan Soft Coral Sinularia sp., 1330

Siphonodictyal B

A New Approach to Sesquiterpene Arenes of the 9,11-Drimenyl Type (= [(1E,2RS,4aRS,8aRS)-Octahydro-2,5,5,8a-tetramethylnaphthalen-1(2H)-ylidene] methyl Type), 784

Sodium molybdate

Direct Sensitive Spectrophotometric Determination of Glyphosate by Using Ninhydrin as a Chromogenic Reagent in Formulations and Environmental Water Samples, 2686

Soft coral

Two New Polyhydroxylated Steroids from the Hainan Soft Coral Sinularia sp., 1330

Krempenes A – D: A Series of Unprecedented Pregnane-Type Steroids from the Marine Soft Coral *Cladiella krempfi*, 2020

Solid support

Solid-Supported Green Synthesis of Substituted Hydrocinnamic Esters by Focused Microwave Irradiation, 483

Solid-phase synthesis

The 'Azirine/Oxazolone Method' on Solid Phase: Introduction of Various α , α -Disubstituted α -Amino Acids, 1

Synthesis of β^3 -Homophenylalanine-Derived Amino Acids and Peptides by *Suzuki* Coupling in Solution and on Solid Support, 1427

Oligonucleotides Containing 7-Deaza-2'-deoxyxanthosine: Synthesis, Base Protection, and Base-Pair Stability, 2794

Solution-phase synthesis

A Practical, Water-Soluble, Ionic Scavenger for the Solution-Phase Syntheses of Amides, 532

Sonchus uliginosus

Sesquiterpenoids and Phenylpropane Derivatives from Sonchus uliginosus, 2927

Sonogashira coupling

Oligosaccharide Analogues of Polysaccharides. Part 26. Mimics of Cellulose I and Cellulose II: Di- and Monoalkynyl C-Cellosides of 1,8-Disubstituted Anthraquinones, 675

Oligonucleotide Analogues with Integrated Bases and Backbone. Part 13. Synthesis and Association of Ethynylene-Linked Self-Complementary Dimers, 2861

Sophora tonkinensis

Isoprenylated Flavonoids from the Roots and Rhizomes of Sophora tonkinensis, 103

Spatholobus suberectus

New Phenolic Constituents from the Stems of Spatholobus suberectus, 1241

Spectrophotometry

Direct Sensitive Spectrophotometric Determination of Glyphosate by Using Ninhydrin as a Chromogenic Reagent in Formulations and Environmental Water Samples, 2686

Spin chemistry

The Discovery of Chemically Induced Dynamic Polarization (CIDNP), 2082

Spin trapping

Alkoxyamines of Stable Aromatic Nitroxides: N-O vs. C-O Bond Homolysis, 2312

Stability constants

Voltammetry as Virtual Potentiometric Sensor in Modelling of a Metal/Ligand System and Refinement of Stability Constants. Part 5. Complexation Studies of Hydrolysis-Prone Lead(II) with Glycine and Sarcosine by Sampled-Direct-Current Polarography Involving Virtual Potential, 2934

Stachlic acids A and B

New Polyoxygenated Triterpenoids from Stachyurus himalaicus var. himalaicus, 2830

Stachyurus himalaicus

New Polyoxygenated Triterpenoids from Stachyurus himalaicus var. himalaicus, 2830

Staudinger reaction

Versatile and Efficient Synthesis of a New Class of Aza-Based Phosphinic Amide Ligands via Unusual P-C Cleavage, 3007

Stephalonganine

New Stephaoxocane Alkaloids from Stephania longa, 1105

Stephania longa

New Stephaoxocane Alkaloids from Stephania longa, 1105

Stephaoxocane alkaloids

New Stephaoxocane Alkaloids from Stephania longa, 1105

Stereoregularity

Statistical Approach for the Determination of the Stereoregularity of Optically Active Propylene-CO Copolymers, 1740

Stereoselective synthesis

Synthetic Applications of the *Baylis–Hillman* Reaction: Simple and Convenient Synthesis of Five Important Insect Pheromones, 876

Steroids

Novel Steroidal Glycosides from two Indian Caralluma species, C. stalagmifera and C. indica, 201

Three New Polyoxygenated Steroids from Two Species of the South China Sea Gorgonian Muricella flexuosa and Menella verrucosa Brundin, 813

Two New Polyhydroxylated Steroids from the Hainan Soft Coral Sinularia sp., 1330

Krempenes A – D: A Series of Unprecedented Pregnane-Type Steroids from the Marine Soft Coral *Cladiella krempfi*, 2020

Sterols

A Rare New Cleistanthane Diterpene from the Pericarp of Trewia nudiflora, 2841

Strecker reaction

Practical Stereo- and Regioselective, Copper(I)-Promoted *Strecker* Synthesis of Sugar-Modified $\alpha\beta$ -Unsaturated Imines, 520

Structure-activity relationships (SAR)

Isoprenylated Flavonoids from the Roots and Rhizomes of Sophora tonkinensis, 103

Synthesis and Biological Evaluation of Potent Bisubstrate Inhibitors of the Enzyme Catechol *O*-Methyltransferase (COMT) Lacking a Nitro Group, 1856

Structure-based design

Synthesis, Biological Evaluation, and Crystallographic Studies of Extended Guanine-Based (*lin*-Benzoguanine) Inhibitors for tRNA-Guanine Transglycosylase (TGT), 573

Styrene

Synthesis, Interionic Structure, and Reactivity toward CO and p-Methylstyrene of Palladacyclic Compounds Bearing a-Diimine Ligands, 1524

Systematic Study of the Asymmetric Methoxycarbonylation of Styrene Catalyzed by Palladium Systems Containing Chiral Ferrocenyl Diphosphine Ligands, 1610

Palladium-Promoted Carbon Monoxide/Ethylene/Styrene Terpolymerization Reaction: Throwing Light on the Different Reactivity of the Two Alkenes, 1752

'Sulfa medicines'

Novel Synthesis of Mafenide and Other Amino Sulfonamides by Electrochemical Reduction of Cyano Sulfonamides, 1254

Sulfanyl chlorides

Reactions of Chlorosulfanyl Derivatives of Cyclobutanones with Different Nucleophiles, 1042

Sulfonamides

A Practical, Water-Soluble, Ionic Scavenger for the Solution-Phase Syntheses of Amides, 532

Novel Synthesis of Mafenide and Other Amino Sulfonamides by Electrochemical Reduction of Cyano Sulfonamides, 1254

Sulfones

Homolytic Substitution at the Sulfur Atom as a Tool for Organic Synthesis, 2167

Radical-Mediated Three-Component Coupling of Alkenes, 2450

Sulfones, 9H-carbazol-2-yl

Photo-Fries Rearrangement of Carbazol-2-yl Sulfonates: Efficient Tool for the Introduction of Sulfonyl Groups into Polycyclic Aromatic Compounds, 1147

Sulfoxides

Homolytic Substitution at the Sulfur Atom as a Tool for Organic Synthesis, 2167

Sulfur-transfer reactions

Reactions of Chlorosulfanyl Derivatives of Cyclobutanones with Different Nucleophiles, 1042

Sultams

Functionalized Imides by Regioselective Ozonation, 971

Supramolecular chemistry

Hierarchic Supramolecular Interactions within Assemblies in Solution and in the Crystal of 2,3,6,7-Tetrasubstituted 5,5'-(Anthracene-9,10-diyl)bis[pyrimidin-2-amines], 333

Surface coating

Radio-Analytical Determination of the Coating Efficiency of Cyclic RGD Peptides, 833

Surface roughness

Surface-Roughness Evolution During the Cementation of Silver Ions on Solid Copper in Aqueous Sulfuric Acid Solution, 902

Morphology and Roughness of Silver Deposit Formed by Cementation at Various Temperatures in Pure Sulfuric Acid, 2764

Surfactants

 $Hydrophilic\ Carotenoids: Surface\ Properties\ and\ Aggregation\ of\ Crocin\ as\ a\ Biosurfactant,\ 45$

Suzuki coupling

Regioselective Synthesis of Ellipticine, 111

Suzuki-Miyaura coupling

Synthesis of β^3 -Homophenylalanine-Derived Amino Acids and Peptides by *Suzuki* Coupling in Solution and on Solid Support, 1427

Sweriamarin derivatives

Secoiridoid Glycosides from Swertia mileensis, 94

Swertia mileensis

Secoiridoid Glycosides from Swertia mileensis, 94

Taepeenins J-L

Cassane-Type Diterpenes from the Seeds of Caesalpinia crista, 1062

Tandem S_N2' reaction

Regio- and Stereocontrolled Synthesis of $(2R^*,3R^*,4R^*)$ -3,4-Dichloro-1,2,3,4,5,8-hexahydronaphthalen-2-yl Acetate *via* Tandem S_N2' Reactions, 1246

Tangutorine

Synthesis of Tangutorine, 122

Tenacigenosides A-D

Four New Pregnane Glycosides from the Stems of Marsdenia tenacissima, 2738

Terpenes

Triterpenoid Saponins from Schefflera arboricola, 468

Terpenoids

Terpenoids from Eupatorium fortunei Turcz, 558

Terpenoids from the Roots of Ligularia muliensis, 915

Triterpenoids from the Aerial Parts of Kalidium foliatum, 962

Two New Diterpenoids from Callicarpa pedunculata, 1017

Three Novel Terpenoids from Schisandra pubescens var. pubinervis, 1169

Terpolymerization

Palladium-Promoted Carbon Monoxide/Ethylene/Styrene Terpolymerization Reaction: Throwing Light on the Different Reactivity of the Two Alkenes, 1752

Terpyridines

Targeting of Single-Stranded Oligonucleotides through Metal-Induced Cyclization of Short Complementary Strands, 2958

Tetradecanedioic acid

The Binary System Tetradecanedioic Acid-Hexadecanedioic Acid: Polymorphism of the Components and Experimental Phase Diagram, 2027

Tetrasaccharides

Synthesis of a Potential 10E4 Tetrasaccharide Antigen Involved in Scrapie Pathogenesis, 2591

Tetrathiafulvalenes

Tetrathiafulvalene (TTF)-Bridged Resorcin[4]arene Cavitands: Towards New Electrochemical Molecular Switches, 2040

Tetrazoles

Synthesis of Glycaro-1,5-lactams and Tetrahydrotetrazolopyridine-5-carboxylates: Inhibitors of β -D-Glucuronidase and α -L-Iduronidase. 635

Tetrazolopyridine-5-carboxylates

Synthesis of Glycaro-1,5-lactams and Tetrahydrotetrazolopyridine-5-carboxylates: Inhibitors of β -D-Glucuronidase and α -L-Iduronidase, 635

Thallium

A One-Dimensional Thallium(I) Coordination Polymer Involving Polyhapto-Aromatic Interactions, 265

Thebaine

Palladium-Catalyzed 2-Phenylethenylation of Codeine: 8-[(1E)-2-Phenylethenyl]codeinone Dimethyl Ketal as the Unexpected 'Masked' Diene for the Preparation of 19-Substituted *Diels-Alder* Adducts of Thebaine, 861

Therapeutic index

Concentricolide, an Anti-HIV Agent from the Ascomycete Daldinia concentrica, 127

Thermal decomposition

Alkoxyamines of Stable Aromatic Nitroxides: N-O vs. C-O Bond Homolysis, 2312

Thermolysis

Studies on the Flash Vacuum Thermolysis of Thiones of Selected N-, O-, and S-Heterocycles, 991

4-Thiaflavanes

Antioxidant and Antiradical Activity of Hydroxy-Substituted 4-Thiaflavanes, 2462

Thioamides

Reactions of α,β -Unsaturated Thioamides with Diazo Compounds, 2815

Thiocarbonyl ylides

1,5-Dipolar Electrocyclizations in Reactions of α -Thioxo Ketones and α -Thioxo Thioamides with Diazo Compounds, 1910

Reactions of Thioketones Possessing a Conjugated C=C Bond with Diazo Compounds, 3041

Thioglucosides

Thioglucosides from the Seeds of Raphanus sativus L., 2953

Thioglycoside

Studies towards a Conjugate Vaccine for Anthrax: Synthesis of the Tetrasaccharide Side Chain of the *Bacillus* anthracis Exosporium, 1075

Thicketone

Regio- and Stereoselectivity in the *Lewis* Acid- and NaH-Induced Reactions of Thiocamphor with (R)-2-Vinyloxirane, 456

1,5-Dipolar Electrocyclizations in Reactions of α -Thioxo Ketones and α -Thioxo Thioamides with Diazo Compounds, 1910

Reactions of Thioketones Possessing a Conjugated C=C Bond with Diazo Compounds, 3041

Thiols

The Tris(trimethylsilyl)silane/Thiol Reducing System: A Tool for Measuring Rate Constants for Reactions of Carbon-Centered Radicals with Thiols, 2387

Thiones

Studies on the Flash Vacuum Thermolysis of Thiones of Selected N-, O-, and S-Heterocycles, 991

Thiopeptides

Novel N-(2,2-Dimethyl-2H-azirin-3-yl)-L-prolinates as Aib-Pro Synthons, 1841

Thiosemicarbazones

Palladium(II) Complexes of the Thiosemicarbazone and N-Ethylthiosemicarbazone of 3-Hydroxypyridine-2-carbaldehyde: Synthesis, Properties, and X-Ray Crystal Structure, 1959

Three-component reactions

One-Pot Three-Component Synthesis of Highly Functionalized 2,3-Dihydro-1,3-dioxo-1*H*,5*H*-pyrazolo[1,2-*a*][1,2,4]triazoles, 1176

Trifluoromethyl-Radical-Mediated Carbonylation of Alkanes Leading to Ethynyl Ketones, 2483

Efficient Synthesis of Dialkyl (2Z)-2-[(E)-1-Aryl-2-(3-arylquinoxalin-2-yl)ethenyl]but-2-enedioates, 2825

Three-component synthesis

Facile One-Pot Three-Component Synthesis of Functionalized Pyridylfuran-2-amines, 299

Thrombin assay

A New Robust and Highly Sensitive FRET Donor-Acceptor Pair: Synthesis, Characterization, and Application in a Thrombin Assay, 3056

Titanium complexes

Synthesis, Structure, and Polymerization Activity of a Titanium Complex with a Chelating [(Hydroxy- κO)amino- κN]phenolato(2-)- κO Ligand, 1589

Titanocenes

Titanocene-Mediated Homolytic Opening of Epoxysilanes, 2297

Tocopherols

A New Route to Vitamin E Key-Intermediates by Olefin Cross-Metathesis, 797

Toluenes

Reactions of Alkyl Radicals with Substituted Toluenes and the Effect of Substituents on Dissociation Energies of Benzyl C-H Bonds, 2226

Tonkinochromanes A-C

Isoprenylated Flavonoids from the Roots and Rhizomes of Sophora tonkinensis, 103

'Tosylmethyl isocyanide'

One-Step Synthesis of Dialkyl 2-[(4-Methylphenyl)sulfonyl]-1*H*-pyrrole-3,4-dicarboxylates by Reaction of Acetylenedicarboxylates with 'Tosylmethyl Isocyanide' (TsMIC) and Triphenylphosphine, 923

Totaranes

Two New Diterpenoids from Callicarpa pedunculata, 1017

Transient spectroscopy

Modification of Guanine with Photolabile N-Hydroxypyridine-2(1H)-thione: Monomer Synthesis, Oligonucleotide Elaboration, and Photochemical Studies, 2371

Trewia nudiflora

A Rare New Cleistanthane Diterpene from the Pericarp of Trewia nudiflora, 2841

Tricyclo[6.4.0.0^{2,7}]dodecanediones

The Photocyclodimers of 2,3-Dihydro-2,2-dimethyl-4H-pyran-4-one, 1927

Trifluoromethyl radical

Trifluoromethyl-Radical-Mediated Carbonylation of Alkanes Leading to Ethynyl Ketones, 2483

Triphenylamine

Olefin Isomerization via Radical-Ion Pairs in Triplet States Studied by Chemically Induced Dynamic Nuclear Polarization (CIDNP), 2183

Triphenylphosphine

One-Step Synthesis of Dialkyl 2-[(4-Methylphenyl)sulfonyl]-1*H*-pyrrole-3,4-dicarboxylates by Reaction of Acetylenedicarboxylates with 'Tosylmethyl Isocyanide' (TsMIC) and Triphenylphosphine, 923

Efficient Synthesis of Dialkyl (2Z)-2-[(E)-1-Aryl-2-(3-arylquinoxalin-2-yl)ethenyl]but-2-enedioates, 2825

One-Pot Synthesis of Tetraalkyl Benzene-1,2,3,5-tetracarboxylates from a Four-Component Reaction of Alkyl Propiolates and Alkyl 2-Nitroethanoates Promoted by Ph₃P, 2918

Triterpenes

Uncommon Sesquiterpenoids and New Triterpenoids from *Jatropha neopauciflora* (Euphorbiaceae), 16 Philinopsides A and B, Two New Sulfated Triterpene Glycosides from the Sea Cucumber *Pentacta quadrangularis*, 54

Japonicumins A-D: Four New Compounds from Lycopodium japonicum, 1467

Triterpenoid saponins

Triterpenoid Saponins from Schefflera arboricola, 468

Triterpenoids

Triterpenoids from the Aerial Parts of Kalidium foliatum, 962

A New $18(13 \rightarrow 12\beta)$ -abeo-Lanostadiene Triterpenoid from Ganoderma fornicatum, 1038

New Dammarane Monodesmosides from the Acidic Deglycosylation of Notoginseng-Leaf Saponins, 1442 Three New Cyclolanostane Triterpenoids from the Ethanol Extract of the Stems of *Kadsura heteroclita*, 1888

Triterpenoidal Secondary Metabolites from Lantana Camara Linn., 1932

Three New 24-Noroleanane Triterpenoids from *Quercus aliena* var. *acuteserrata*, 1971 New Polyoxygenated Triterpenoids from *Stachyurus himalaicus* var. *himalaicus*, 2830

Three New Serratane Triterpenoids from Phlegmariurus squarrosus, 2975

Three New Triterpenoids from Dracocephalum forrestii, 3018

Tryptamine

Synthesis of Tangutorine, 122

Undecyl radicals

Reactions of Alkyl Radicals with Substituted Toluenes and the Effect of Substituents on Dissociation Energies of Benzyl C-H Bonds, 2226

'Unfolded' state

Numerical Simulation of the Pressure Denaturation of a Helical β -Peptide Heptamer Solvated in Methanol, 475

Uracil

Synthesis of 1,2-Disubstituted Carbocyclic Nucleoside Analogues of Cytidine, 954

Ursane derivatives

Three New Triterpenoids from Dracocephalum forrestii, 3018

Uvaria rufa

Polyoxygenated Cyclohexene Derivatives from Uvaria rufa, 1408

Uvarirufols A-C

Polyoxygenated Cyclohexene Derivatives from Uvaria rufa, 1408

Uvarirufone A

Polyoxygenated Cyclohexene Derivatives from Uvaria rufa, 1408

Vaccines

Synthesis of a Phosphorylated Disaccharide Fragment of the O-Specific Polysaccharide of *Vibrio cholerae* O139, Functionalized for Conjugation, 320

Studies towards a Conjugate Vaccine for Anthrax: Synthesis of the Tetrasaccharide Side Chain of the *Bacillus anthracis* Exosporium, 1075

Vallesamidine

Formal Synthesis of Vallesamidine, 249

Vanilla fragrans

Preparation and Recognition Properties of Vanillin-Imprinted Polymers, 3032

Vanillin

Preparation and Recognition Properties of Vanillin-Imprinted Polymers, 3032

Verbenone epoxide

Synthesis of Optically Active, Cyclic a-Hydroxy Ketones and 1,2-Diketones from Verbenone Epoxide, 507

Vilsmeier-Haack reaction

Synthesis of Tangutorine, 122

Vinyl acetate

The Methoxycarbonylation of Vinyl Acetate Catalyzed by Palladium Complexes of [1,2-Phenylenebis(methylene)]bis[di(tert-butyl)phosphine], 1783

Vinylallene cycloaddition

Photocycloaddition of Cyclohex-2-enones to Penta-1,2,4-triene, 854

Virtual potential

Voltammetry as Virtual Potentiometric Sensor in Modelling of a Metal/Ligand System and Refinement of Stability Constants. Part 5. Complexation Studies of Hydrolysis-Prone Lead(II) with Glycine and Sarcosine by Sampled-Direct-Current Polarography Involving Virtual Potential, 2934

Vitamin F

A New Route to Vitamin E Key-Intermediates by Olefin Cross-Metathesis, 797

Voltammetry

A Study of Nickel Electrodeposition on Paraffin-Impregnated Graphite Electrode, 622

Voltammetry as Virtual Potentiometric Sensor in Modelling of a Metal/Ligand System and Refinement of Stability Constants. Part 5. Complexation Studies of Hydrolysis-Prone Lead(II) with Glycine and Sarcosine by Sampled-Direct-Current Polarography Involving Virtual Potential, 2934

Vouacapane

Cassane-Type Diterpenes from the Seeds of Caesalpinia crista, 1062

Weinreb amide

A Concise Route to Racemic Anatoxin a from Cycloocta-1,5-diene, 134

Wiedendiol B

A New Approach to Sesquiterpene Arenes of the 9,11-Drimenyl Type (= [(1*E*,2*RS*,4a*RS*,8a*RS*)-Octahydro-2,5,5,8a-tetramethylnaphthalen-1(2*H*)-ylidene] methyl Type), 784

Wikstroemia hainanensis

Lignans from Wikstroemia hainanensis, 73

Wikstroemol

Lignans from Wikstroemia hainanensis, 73

Wikstroemone

Lignans from Wikstroemia hainanensis, 73

Wikstrone

Lignans from Wikstroemia hainanensis, 73

Xanthene

Paranolin: a New Xanthene-Based Metabolite from Paraphaeosphaeria nolinae, 502

X-Ray crystallography

(4,4'-Bipyridine)mercury(II) Coordination Polymers, Syntheses, and Structures, 81

Structure Investigation of Bridgehead Aziridine: Synthesis, Theoretical, and Crystallographic Study of 2,4,6-Triphenyl-1,3-diazabicyclo[3.1.0]hex-3-ene, 190

Formation of Dimers of Some 2-Substituted Indan-1-one Derivatives during Base-Mediated Cross-Aldol Condensation, 258

A One-Dimensional Thallium(I) Coordination Polymer Involving Polyhapto-Aromatic Interactions, 265

Synthesis, Characterization, and X-Ray Crystal Structures of Bis[N-(3,3-diphenylallylidene)quinolin-8-amine- $\kappa N, \kappa N^8$]copper(1+) Tetraphenylborate(1-) ([Cu(dpa-qa)₂]BPh₄) and Bis[N, N'-bis(3,3-diphenylallylidene)-[1,1'-biphenyl]-2,2'-diamine- $\kappa N, \kappa N'$]copper(1+) Perchlorate ([Cu(bdpa-bda)₂]ClO₄ · 3 H₂O), 274

Hierarchic Supramolecular Interactions within Assemblies in Solution and in the Crystal of 2,3,6,7-Tetrasubstituted 5,5'-(Anthracene-9,10-diyl)bis[pyrimidin-2-amines], 333 Transformation of 5-Hydroxy- to (5-Chloropentanoyl)amino Derivatives under 'Direct Amide Cyclization' Conditions, 352

Synthesis, Biological Evaluation, and Crystallographic Studies of Extended Guanine-Based (*lin*-Benzoguanine) Inhibitors for tRNA-Guanine Transglycosylase (TGT), 573

Synthesis of Enniatin-like Cyclic Depsipeptides via 'Direct Amide Cyclization', 731

A Minimalist Approach to C-H Activation by Copper, 841

Reactions of Chlorosulfanyl Derivatives of Cyclobutanones with Different Nucleophiles, 1042

Syntheses and Crystal Structures of Ammoniates with the Phenyl-Substituted Polytin Anions $Sn_2Ph_4^{2-}$, cyclo- $Sn_4Ph_4^{4-}$, and $Sn_6Ph_{17}^{2-}$, 1158

Regio- and Stereocontrolled Synthesis of $(2R^*,3R^*,4R^*)$ -3,4-Dichloro-1,2,3,4,5,8-hexahydronaphthalen-2-yl Acetate via Tandem S_N2' Reactions, 1246

Solid-State and Solution Structural Studies of $4-\{[C(E)]-1H-Azol-1-ylimino)$ methyl $\}$ pyridin-3-ols, 1290

Reactions of 2-Unsubstituted 1*H*-Imidazole 3-Oxides with 2,2-Bis(trifluoromethyl)ethene-1,1-dicarbonitrile: A Stepwise 1,3-Dipolar Cycloaddition, 1304

Selenium-Containing Heterocycles from Isoselenocyanates: Use of Hydrazine for the Synthesis of 1,3,4-Selenadiazine Derivatives, 1322

Solution NMR and X-Ray Structural Studies on Phthalocyaninatoiron Complexes, 1485

Synthesis, Interionic Structure, and Reactivity toward CO and *p*-Methylstyrene of Palladacyclic Compounds Bearing α -Diimine Ligands, 1524

1,5-Dipolar Electrocyclizations in Reactions of α -Thioxo Ketones and α -Thioxo Thioamides with Diazo Compounds, 1910

Palladium(II) Complexes of the Thiosemicarbazone and N-Ethylthiosemicarbazone of 3-Hydroxypyridine-2-carbaldehyde: Synthesis, Properties, and X-Ray Crystal Structure, 1959

Intramolecular Hydrogen Bonding: The Case of β -Phosphorylated Nitroxide (= Aminoxyl) Radical, 2119 Reactions of α,β -Unsaturated Thioamides with Diazo Compounds, 2815

Ylides

Synthesis of Highly Functionalized γ -Lactones via 1,5-Electrocyclic Ring Closure, 1231 Reactions of Thioketones Possessing a Conjugated C=C Bond with Diazo Compounds, 3041

Zinc ions

 β -Peptidic Secondary Structures Fortified and Enforced by Zn²⁺ Complexation – On the Way to β -Peptidic Zinc Fingers?, 361

Zintl anions

Syntheses and Crystal Structures of Ammoniates with the Phenyl-Substituted Polytin Anions $Sn_2Ph_4^{2-}$, $cyclo-Sn_4Ph_4^{4-}$, and $Sn_6Ph_{12}^{2-}$, 1158

Zwitterions

Facile One-Pot Three-Component Synthesis of Functionalized Pyridylfuran-2-amines, 299

One-Pot Three-Component Synthesis of Highly Functionalized 2,3-Dihydro-1,3-dioxo-1*H*,5*H*-pyrazolo[1,2-*a*][1,2,4]triazoles, 1176