

Subject Index of Volume 628

- Acetonitrile
Synthesis and reactions of the dichloro bis(3-hexyne) complex [WCl₂(CO)(NCMe)(η²-EtC₂Et)₂], 91
- Alkaline metals
Alkalimetalldisubersilylsilanide MSiXR₂^{*} (R^{*} = Si*t*Bu₃; X = H, Me, Ph, Hal): Synthesen, Charakterisierung, Strukturen, Reaktionen, 46
- Alkene
Insertion reactions of alkenes with diterpenoid chromium aminocarbenes, 155
- Alkyne
Synthesis and reactions of the dichloro bis(3-hexyne) complex [WCl₂(CO)(NCMe)(η²-EtC₂Et)₂], 91
- Alkynes
Reactions of titanocene-bis(trimethylsilyl)ethyne complexes with diethynylsilane derivatives, 30
- Aluminum
Monomeric Group 13 compounds with bidentate (N,O) ligands, 71
- Amides
Iodo bis bistrimethylsilylamido lanthanides, 271
- α-Amino acids
Syntheses of racemic and non-racemic silicon- and germanium-containing α-amino acids of the formula type H₂NCH(CH₂EiR₃)COOH (Ei = Si, Ge; R = organyl) and incorporation of D-H₂NCH(CH₂SiMe₃)COOH and D-H₂NCH(CH₂GeMe₃)COOH into biologically active decapeptides: a study on C/Si/Ge bioisosterism, 183
- Aminocarbene
Insertion reactions of alkenes with diterpenoid chromium aminocarbenes, 155
- ansa* Half-sandwich complexes
Amido functionalized *ansa* half-sandwich dichloride complexes of titanium, zirconium and hafnium with alkyl and ω-alkenyl substituents as homogeneous and self-immobilizing catalyst precursors for ethylene polymerization, 169
ω-Phenylalkyl substituted amido functionalized *ansa* half-sandwich complexes of titanium and zirconium and metallocycles thereof as catalyst precursors for homogeneous ethylene polymerization, 211
- Arsenic
Cyclopentadienylcobalt complexes containing sulfosalts units: synthesis and structure of [(C₅Me₄Et)₃Co₃AsS₃]I and [(C₅Me₄Et)₃Co₃AsSe₃][Cr(CO)₅]I, 39
- Aryl ketone
Insertion reactions of alkenes with diterpenoid chromium aminocarbenes, 155
- Asymmetric induction
Stereoselectivity of formation of polycyclic ferrocenyl-4,5-dihydropyrazoles based on *E*- and *Z*-*s-cis*-α,β-enones, 107
- Base-stabilized metal-silylenes
Reaction chemistry, NMR spectroscopy, and X-ray crystallography of [Fe₂(μ-SiMe₂)₂(CO)₄] and [Fe₂(μ-SiMeCl)₂(CO)₄],
Electronic structure and bonding in Fe₂E₂ rings of [Fe₂(μ-ER₂)₂(CO)₄] binuclear complexes (E = C, Si, Ge, Sn, Pb), 241
- Benzhydroxamic acid
Structure of monosilylated benzhydroxamic acids in crystals and solutions, 81
- Benzhydroxamic acid
Structure of monosilylated benzhydroxamic acids in crystals and solutions, 81
- Bis(phosphines)
Transition metal chemistry of phosphorus based ligands: synthesis and transition metal chemistry of *N,N'*-dimethyl,-bis(diphenylphosphino)ethylenediamine. The crystal and molecular structure of [ReBr(CO)₃{Ph₂PN(Me)CH₂-CH₂(Me)NPPH₂}], 76
- σ-Bond metathesis
Reactions of Cp(NAr)NbMe₂ with H₂ and HSiMe₂Cl. Molecular structure of [CpNb(μ-NAr)Me]₂ (Ar = 2,6-C₆H₃Pr₂), 25
- Carbene complexes
Stereoselective insertion of GeCl₂ into tungsten–chlorine bonds of aminomethylene and aminocarbyne complexes, 11
- Carbonyl
Protonation of metal–metal bonds: X-ray crystal structures of the complex salts [Ru₂(CO)₄(μ-H)(μ-Cl)(μ-P^tBu₂)(μ-Ph₂PCH₂-PPh₂)] [BF₄] and [M₂(CO)₄(μ-H)₂(μ-P^tBu₂)(μ-Ph₂PCH₂-PPh₂)] [BF₄] (M = Fe, Ru), 144
Synthesis and reactions of the dichloro bis(3-hexyne) complex [WCl₂(CO)(NCMe)(η²-EtC₂Et)₂], 91
- Carbosilanes
Synthesis and reactivity of novel oligosilanes bearing functional carbosilane side chains, 262
- Carbyne complexes
Stereoselective insertion of GeCl₂ into tungsten–chlorine bonds of aminomethylene and aminocarbyne complexes, 11
- Catalysis
Reaction mechanism of the reductive elimination in the catalytic carbonylation of methanol. A density functional study, 222
- Chelate
Monomeric Group 13 compounds with bidentate (N,O) ligands, 71
- Chelate complexes
Transition metal chemistry of phosphorus based ligands: synthesis and transition metal chemistry of *N,N'*-dimethyl,-bis(diphenylphosphino)ethylenediamine. The crystal and molecular structure of [ReBr(CO)₃{Ph₂PN(Me)CH₂-CH₂(Me)NPPH₂}], 76
- Chemical shifts
Structure of monosilylated benzhydroxamic acids in crystals and solutions, 81
- Chemoselectivity
Synthesis and reactivity of novel oligosilanes bearing functional carbosilane side chains, 262

Chiral

Synthesis, characterization and reactions of cluster complexes containing SeRuCoM (M = Mo or W) core and a functionally substituted cyclopentadienyl ligand, 123

Chromium

Insertion reactions of alkenes with diterpenoid chromium aminocarbenes, 155

Cluster complex

Synthesis, characterization and reactions of cluster complexes containing SeRuCoM (M = Mo or W) core and a functionally substituted cyclopentadienyl ligand, 123

¹³C-NMR

Structure of monosilylated benzhydroxamic acids in crystals and solutions, 81

Cobalt

Cyclopentadienylcobalt complexes containing sulfosalt units: synthesis and structure of [(C₅Me₄Et)₃Co₃AsS₃]I and [(C₅Me₄Et)₃Co₃AsSe₃][Cr(CO)₅I], 39

15-Crown-5

Self-decomposition of K⁻, K⁺ (15-crown-5)₂ tetrahydrofuran solution via organometallic intermediates, 65

Crystal structure

Protonation of metal–metal bonds: X-ray crystal structures of the complex salts [Ru₂(CO)₄(μ-H)(μ-Cl)(μ-P^tBu₂)(μ-Ph₂PCH₂-PPh₂)] [BF₄]⁻ and [M₂(CO)₄(μ-H)₂(μ-P^tBu₂)(μ-Ph₂PCH₂-PPh₂)] [BF₄]⁻ (M = Fe, Ru), 144

Structure of monosilylated benzhydroxamic acids in crystals and solutions, 81

Synthesis, characterization and reactions of cluster complexes containing SeRuCoM (M = Mo or W) core and a functionally substituted cyclopentadienyl ligand, 123

Crystal structures

Partially cyclopentadienyl-substituted tetranuclear lanthanide Schiff base complexes, 99

C/Si/Ge bioisosterism

Syntheses of racemic and non-racemic silicon- and germanium-containing α-amino acids of the formula type H₂NCH-(CH₂EIR₃)COOH (E = Si, Ge; R = organyl) and incorporation of D-H₂NCH(CH₂SiMe₃)COOH and D-H₂NCH-(CH₂GeMe₃)COOH into biologically active decapeptides: a study on C/Si/Ge bioisosterism, 183

Cyclopentadienyl

Reactions of Cp(NAr)NbMe₂ with H₂ and HSiMe₂Cl. Molecular structure of [CpNb(μ-NAr)Me]₂ (Ar = 2,6-C₆H₃Pr₂), 25

Synthesis and X-ray structures of RuCpCIL [L = (η¹-PPh₂py)₂ and η²-triphos] and [RuCp{η³-(PPh₂)₃CH}][PF₆]. The first η³-(PPh₂)₃CH complex of Ru(II), 1

Cyclopentadienyl lanthanide complex

Partially cyclopentadienyl-substituted tetranuclear lanthanide Schiff base complexes, 99

Cyclosilanes

Silylene R^{*}XSi (R^{*} = Si^tBu₃; X = H, Me, Ph, Hal, R^{*}): Bildung und Reaktionen, 57

Dehydropolymerization

Synthesis and reactivity of novel oligosilanes bearing functional carbosilane side chains, 262

Density functional theory

Reaction mechanism of the reductive elimination in the catalytic carbonylation of methanol. A density functional study, 222

DFT calculations

Reaction chemistry, NMR spectroscopy, and X-ray crystallography of [Fe₂(μ-SiMe₂)₂(CO)₄] and [Fe₂(μ-SiMeCl)₂(CO)₄]. Electronic structure and bonding in Fe₂E₂ rings of [Fe₂(μ-ER)₂(CO)₄] binuclear complexes (E = C, Si, Ge, Sn, Pb), 241

Diastereoisomers

Synthesis, characterization and reactions of cluster complexes containing SeRuCoM (M = Mo or W) core and a functionally substituted cyclopentadienyl ligand, 123

Dihydropyrazol

Stereoselectivity of formation of polycyclic ferrocenyl-4,5-dihydropyrazoles based on *E*- and *Z*-*s-cis*-α,β-enones, 107

Dimethyl iron complexes

Preparation of methyl hydride and dimethyl complexes of osmium and iron: reaction of M(CO)₂(PMe₃)₂CH₃I and [M(CO)₃(PMe₃)₂CH₃]⁺BPh₄⁻ (M = Os, Fe) with borohydrides and lithium methyl, 255

Dimethyl osmium complexes

Preparation of methyl hydride and dimethyl complexes of osmium and iron: reaction of M(CO)₂(PMe₃)₂CH₃I and [M(CO)₃(PMe₃)₂CH₃]⁺BPh₄⁻ (M = Os, Fe) with borohydrides and lithium methyl, 255

Diphenyl-2-phosphinopyridyl

Synthesis and X-ray structures of RuCpCIL [L = (η¹-PPh₂py)₂ and η²-triphos] and [RuCp{η³-(PPh₂)₃CH}][PF₆]. The first η³-(PPh₂)₃CH complex of Ru(II), 1

Diphosphine

Chiral aminophosphonite-phosphite ligands: synthesis and use in platinum- and rhodium-based enantioselective hydroformylation of styrene. Crystal structure of [(*S*)-*N*-(2,2'-biphenoxyphosphino)-2-(2,2'-biphenoxyphosphinoxy-methyl)pyrrolidine]dichloroplatinum(II), 114

Disilenes

Silylene R^{*}XSi (R^{*} = Si^tBu₃; X = H, Me, Ph, Hal, R^{*}): Bildung und Reaktionen, 57

Diterpenoid

Insertion reactions of alkenes with diterpenoid chromium aminocarbenes, 155

Donors

Alkalimetalldisupersilylsilanide MSiXR₂^{*} (R^{*} = Si^tBu₃; X = H, Me, Ph, Hal): Synthesen, Charakterisierung, Strukturen, Reaktionen, 46

Elimination

Reaction mechanism of the reductive elimination in the catalytic carbonylation of methanol. A density functional study, 222

Enantiomeric separation

Synthesis, characterization and reactions of cluster complexes containing SeRuCoM (M = Mo or W) core and a functionally substituted cyclopentadienyl ligand, 123

Ethylenediamine derivatives

Transition metal chemistry of phosphorus based ligands: synthesis and transition metal chemistry of *N,N'*-dimethyl-bis(diphenylphosphino)ethylenediamine. The crystal and molecular structure of [ReBr(CO)₃{Ph₂PN(Me)CH₂-CH₂(Me)NPPH₂}], 76

Ethylene polymerization

Amido functionalized *ansa* half-sandwich dichloride complexes of titanium, zirconium and hafnium with alkyl and ω-alkenyl substituents as homogeneous and self-immobilizing catalyst precursors for ethylene polymerization, 169

ω-Phenylalkyl substituted amido functionalized *ansa* half-sandwich complexes of titanium and zirconium and metallocycles thereof as catalyst precursors for homogeneous ethylene polymerization, 211

Face-sharing defect cubic Ln₄O₈ core

Partially cyclopentadienyl-substituted tetranuclear lanthanide Schiff base complexes, 99

Ferrocene

Stereoselectivity of formation of polycyclic ferrocenyl-4,5-dihydropyrazoles based on *E*- and *Z*-*s-cis*-α,β-enones, 107

Four-membered rings

Reaction chemistry, NMR spectroscopy, and X-ray crystallography of $[\text{Fe}_2(\mu\text{-SiMe}_2)_2(\text{CO})_4]$ and $[\text{Fe}_2(\mu\text{-SiMeCl})_2(\text{CO})_4]$. Electronic structure and bonding in Fe_2E_2 rings of $[\text{Fe}_2(\mu\text{-ER}_2)_2(\text{CO})_4]$ binuclear complexes (E = C, Si, Ge, Sn, Pb), 241

Gallium

Monomeric Group 13 compounds with bidentate (N,O) ligands, 71

Germanium

Syntheses of racemic and non-racemic silicon- and germanium-containing α -amino acids of the formula type $\text{H}_2\text{NCH}(\text{CH}_2\text{EIR}_3)\text{COOH}$ (E = Si, Ge; R = organyl) and incorporation of $\text{D-H}_2\text{NCH}(\text{CH}_2\text{SiMe}_3)\text{COOH}$ and $\text{D-H}_2\text{NCH}(\text{CH}_2\text{GeMe}_3)\text{COOH}$ into biologically active decapeptides: a study on C/Si/Ge bioisosterism, 183

Germynes

Stereoselective insertion of GeCl_2 into tungsten–chlorine bonds of aminomethylene and aminocarbyne complexes, 11

GnRH antagonists

Syntheses of racemic and non-racemic silicon- and germanium-containing α -amino acids of the formula type $\text{H}_2\text{NCH}(\text{CH}_2\text{EIR}_3)\text{COOH}$ (E = Si, Ge; R = organyl) and incorporation of $\text{D-H}_2\text{NCH}(\text{CH}_2\text{SiMe}_3)\text{COOH}$ and $\text{D-H}_2\text{NCH}(\text{CH}_2\text{GeMe}_3)\text{COOH}$ into biologically active decapeptides: a study on C/Si/Ge bioisosterism, 183

Group 4 metals

Amido functionalized *ansa* half-sandwich dichloride complexes of titanium, zirconium and hafnium with alkyl and ω -alkenyl substituents as homogeneous and self-immobilizing catalyst precursors for ethylene polymerization, 169

ω -Phenylalkyl substituted amido functionalized *ansa* half-sandwich complexes of titanium and zirconium and metallacycles thereof as catalyst precursors for homogeneous ethylene polymerization, 211

 $^1\text{H-NMR}$

Structure of monosilylated benzhydroxamic acids in crystals and solutions, 81

Homogeneous polymerization

ω -Phenylalkyl substituted amido functionalized *ansa* half-sandwich complexes of titanium and zirconium and metallacycles thereof as catalyst precursors for homogeneous ethylene polymerization, 211

Hydroformylation

Chiral aminophosphonite-phosphite ligands: synthesis and use in platinum- and rhodium-based enantioselective hydroformylation of styrene. Crystal structure of [(*S*)-*N*-(2,2'-biphenoxyphosphino) - 2 - (2,2'-biphenoxyphosphinoxy-methyl)pyrrolidine]dichloroplatinum(II), 114

Hydrosilylation

Synthesis and reactivity of novel oligosilanes bearing functional carbosilane side chains, 262

Insertion

Stereoselective insertion of GeCl_2 into tungsten–chlorine bonds of aminomethylene and aminocarbyne complexes, 11

Iridium

Reaction mechanism of the reductive elimination in the catalytic carbonylation of methanol. A density functional study, 222

Iron

Protonation of metal–metal bonds: X-ray crystal structures of the complex salts $[\text{Ru}_2(\text{CO})_4(\mu\text{-H})(\mu\text{-Cl})(\mu\text{-P}^t\text{Bu}_2)(\mu\text{-Ph}_2\text{PCH}_2\text{-PPh}_2)][\text{BF}_4]$ and $[\text{M}_2(\text{CO})_4(\mu\text{-H})_2(\mu\text{-P}^t\text{Bu}_2)(\mu\text{-Ph}_2\text{PCH}_2\text{-PPh}_2)][\text{BF}_4]$ (M = Fe, Ru), 144

Iron-silicon

Reaction chemistry, NMR spectroscopy, and X-ray crystallography of $[\text{Fe}_2(\mu\text{-SiMe}_2)_2(\text{CO})_4]$ and $[\text{Fe}_2(\mu\text{-SiMeCl})_2(\text{CO})_4]$. Electronic structure and bonding in Fe_2E_2 rings of $[\text{Fe}_2(\mu\text{-ER}_2)_2(\text{CO})_4]$ binuclear complexes (E = C, Si, Ge, Sn, Pb), 241

 β -Ketoiminato complexes

$^{31}\text{P-NMR}$ and X-ray studies of new rhodium(I) β -ketoiminato complexes $\text{Rh}(\text{R}_1\text{C}(\text{O})\text{CHC}(\text{NH})\text{R}_2)(\text{CO})(\text{PZ}_3)$ where $\text{PZ}_3 = \text{PPh}_3, \text{PCy}_3, \text{P}(\text{OPh})_3$ or $\text{P}(\text{NC}_4\text{H}_4)_3$, 195

Lanthanides

Iodo bis bistrimethylsilylamido lanthanides, 271

MAS-NMR

Structure of monosilylated benzhydroxamic acids in crystals and solutions, 81

Mechanism

Comparative regiochemistry of protonation of $(\eta^6\text{-C}_6\text{H}_5\text{R})\text{-}(1,1',1''\text{-tris}(2\text{-diphenylphosphinomethyl)ethane})\text{Mo}(0)$ (R = H, Me and SiMe_3), 275

Metallacycles

ω -Phenylalkyl substituted amido functionalized *ansa* half-sandwich complexes of titanium and zirconium and metallacycles thereof as catalyst precursors for homogeneous ethylene polymerization, 211

Metal–metal bond

Reactions of $\text{Cp}(\text{NAr})\text{NbMe}_2$ with H_2 and HSiMe_2Cl . Molecular structure of $[\text{CpNb}(\mu\text{-NAr})\text{Me}]_2$ (Ar = 2,6- $\text{C}_6\text{H}_3\text{Pr}_2$), 25

Methylhydride osmium complexes

Preparation of methyl hydride and dimethyl complexes of osmium and iron: reaction of $\text{M}(\text{CO})_2(\text{PMe}_3)_2\text{CH}_3\text{I}$ and $[\text{M}(\text{CO})_3(\text{PMe}_3)_2\text{CH}_3]^+\text{BPh}_4^-$ (M = Os, Fe) with borohydrides and lithium methyl, 255

Mixed ligands

Cyclopentadienylcobalt complexes containing sulfosalts units: synthesis and structure of $[(\text{C}_5\text{Me}_4\text{Et})_3\text{Co}_3\text{AsS}_5]\text{I}$ and $[(\text{C}_5\text{Me}_4\text{Et})_3\text{Co}_3\text{AsSe}_5][\text{Cr}(\text{CO})_5\text{I}]$, 39

Molybdenum

Comparative regiochemistry of protonation of $(\eta^6\text{-C}_6\text{H}_5\text{R})\text{-}(1,1',1''\text{-tris}(2\text{-diphenylphosphinomethyl)ethane})\text{Mo}(0)$ (R = H, Me and SiMe_3), 275

Mononuclear

Transition metal chemistry of phosphorus based ligands: synthesis and transition metal chemistry of *N,N'*-dimethyl,-bis-(diphenylphosphino)ethylenediamine. The crystal and molecular structure of $[\text{ReBr}(\text{CO})_3\{\text{Ph}_2\text{PN}(\text{Me})\text{-CH}_2\text{CH}_2(\text{Me})\text{NPPH}_2\}]$, 76

Nd- and Pr-complexes

Partially cyclopentadienyl-substituted tetranuclear lanthanide Schiff base complexes, 99

Niobium

Reactions of $\text{Cp}(\text{NAr})\text{NbMe}_2$ with H_2 and HSiMe_2Cl . Molecular structure of $[\text{CpNb}(\mu\text{-NAr})\text{Me}]_2$ (Ar = 2,6- $\text{C}_6\text{H}_3\text{Pr}_2$), 25

NMR spectroscopy

Concentration dependence of the ^1H - and ^{29}Si -NMR chemical shifts of tetramethyldisiloxanediol in deuterated chloroform, 233

Noradamantane

New chalcogen derivatives of silicon possessing adamantane and noradamantane structures, 133

Organosilicon chemistry

Concentration dependence of the ^1H - and ^{29}Si -NMR chemical shifts of tetramethyldisiloxanediol in deuterated chloroform, 233

Oxidative addition

Reactions of titanocene-bis(trimethylsilyl)ethyne complexes with diethynylsilane derivatives, 30

Peptides

Syntheses of racemic and non-racemic silicon- and germanium-containing α -amino acids of the formula type $H_2NCH(CH_2EIR_3)COOH$ (E1 = Si, Ge; R = organyl) and incorporation of $D-H_2NCH(CH_2SiMe_3)COOH$ and $D-H_2NCH(CH_2GeMe_3)COOH$ into biologically active decapeptides: a study on C/Si/Ge bioisosterism, 183

Phosphido-bridged

Protonation of metal–metal bonds: X-ray crystal structures of the complex salts $[Ru_2(CO)_4(\mu-H)(\mu-Cl)(\mu-P^tBu_2)(\mu-Ph_2PCH_2-PPh_2)][BF_4]$ and $[M_2(CO)_4(\mu-H)_2(\mu-P^tBu_2)(\mu-Ph_2PCH_2-PPh_2)][BF_4]$ (M = Fe, Ru), 144

Phosphine

Comparative regiochemistry of protonation of $(\eta^6-C_6H_5R)-(1,1',1'' - tris(2 - diphenylphosphinomethyl)ethane)Mo(0)$ (R = H, Me and SiMe₃), 275

Phosphonite–phosphite

Chiral aminophosphonite-phosphite ligands: synthesis and use in platinum- and rhodium-based enantioselective hydroformylation of styrene. Crystal structure of $[(S)-N-(2,2'biphenoxyphosphino) - 2 - (2,2'biphenoxyphosphinoxy-methyl)pyrrolidine]dichloroplatinum(II)$, 114

Platinum

Chiral aminophosphonite-phosphite ligands: synthesis and use in platinum- and rhodium-based enantioselective hydroformylation of styrene. Crystal structure of $[(S)-N-(2,2'biphenoxyphosphino) - 2 - (2,2'biphenoxyphosphinoxy-methyl)pyrrolidine]dichloroplatinum(II)$, 114

Potassium alkali

Self-decomposition of $K^-, K^+(15-crown-5)_2$ tetrahydrofuran solution via organometallic intermediates, 65

Potassium anion

Self-decomposition of $K^-, K^+(15-crown-5)_2$ tetrahydrofuran solution via organometallic intermediates, 65

Protonation

Comparative regiochemistry of protonation of $(\eta^6-C_6H_5R)-(1,1',1'' - tris(2 - diphenylphosphinomethyl)ethane)Mo(0)$ (R = H, Me and SiMe₃), 275

Reduction

Preparation of methyl hydride and dimethyl complexes of osmium and iron: reaction of $M(CO)_2(PMe_3)_2CH_3I$ and $[M(CO)_3-(PMe_3)_2CH_3]^+ BPh_4^-$ (M = Os, Fe) with borohydrides and lithium methyl, 255

Reductive elimination

Preparation of methyl hydride and dimethyl complexes of osmium and iron: reaction of $M(CO)_2(PMe_3)_2CH_3I$ and $[M(CO)_3-(PMe_3)_2CH_3]^+ BPh_4^-$ (M = Os, Fe) with borohydrides and lithium methyl, 255

Regioselectivity

Comparative regiochemistry of protonation of $(\eta^6-C_6H_5R)-(1,1',1'' - tris(2 - diphenylphosphinomethyl)ethane)Mo(0)$ (R = H, Me and SiMe₃), 275

Rhodium

Chiral aminophosphonite-phosphite ligands: synthesis and use in platinum- and rhodium-based enantioselective hydroformylation of styrene. Crystal structure of $[(S)-N-(2,2'biphenoxyphosphino) - 2 - (2,2'biphenoxyphosphinoxy-methyl)pyrrolidine]dichloroplatinum(II)$, 114

Reaction mechanism of the reductive elimination in the catalytic carbonylation of methanol. A density functional study, 222

Rhodium(I)

Supported organometallic complexes: Part XXIII. A general syn-

thetic route for the synthesis of mono-T-silyl functionalized aromatic phosphines as ligands for chemistry in interphases, 151

Rhodium(I) complexes

³¹P-NMR and X-ray studies of new rhodium(I) β -ketoiminato complexes $Rh(R_1C(O)CHC(NH)R_2)(CO)(PZ_3)$ where $PZ_3 = PPh_3, PCy_3, P(OPh)_3$ or $P(NC_4H_9)_3$, 195

Rotamers

Structure of monosilylated benzhydroxamic acids in crystals and solutions, 81

Ruthenium

Protonation of metal–metal bonds: X-ray crystal structures of the complex salts $[Ru_2(CO)_4(\mu-H)(\mu-Cl)(\mu-P^tBu_2)(\mu-Ph_2PCH_2-PPh_2)][BF_4]$ and $[M_2(CO)_4(\mu-H)_2(\mu-P^tBu_2)(\mu-Ph_2PCH_2-PPh_2)][BF_4]$ (M = Fe, Ru), 144

Synthesis and X-ray structures of $RuCpCIL$ [L = $(\eta^1-PPh_2py)_2$ and η^2 -triphos] and $[RuCp\{\eta^3-(PPh_2)_3CH\}][PF_6]$. The first $\eta^3-(PPh_2)_3CH$ complex of Ru(II), 1

Schiff base

Partially cyclopentadienyl-substituted tetranuclear lanthanide Schiff base complexes, 99

Selenium

Cyclopentadienylcobalt complexes containing sulfosal units: synthesis and structure of $[(C_5Me_4Et)_3Co_3AsS_5]I$ and $[(C_5Me_4Et)_3Co_3AsSe_5][Cr(CO)_5]I$, 39

New chalcogen derivatives of silicon possessing adamantane and noradamantane structures, 133

Self-immobilization

Amido functionalized *ansa* half-sandwich dichloride complexes of titanium, zirconium and hafnium with alkyl and ω -alkenyl substituents as homogeneous and self-immobilizing catalyst precursors for ethylene polymerization, 169

Silanes

Reactions of titanocene-bis(trimethylsilyl)ethyne complexes with diethynylsilane derivatives, 30

Silanides

Alkalimetalldisupersilylsilanide $MSiXR_2^*$ (R* = Si^tBu₃; X = H, Me, Ph, Hal): Synthesen, Charakterisierung, Strukturen, Reaktionen, 46

Silylene R*XS_i (R* = Si^tBu₃; X = H, Me, Ph, Hal, R*): Bildung und Reaktionen, 57

Silanol

Concentration dependence of the ¹H- and ²⁹Si-NMR chemical shifts of tetramethyldisiloxanediol in deuterated chloroform, 233

Silicon

Alkalimetalldisupersilylsilanide $MSiXR_2^*$ (R* = Si^tBu₃; X = H, Me, Ph, Hal): Synthesen, Charakterisierung, Strukturen, Reaktionen, 46

Silylene R*XS_i (R* = Si^tBu₃; X = H, Me, Ph, Hal, R*): Bildung und Reaktionen, 57

Syntheses of racemic and non-racemic silicon- and germanium-containing α -amino acids of the formula type $H_2NCH(CH_2EIR_3)COOH$ (E1 = Si, Ge; R = organyl) and incorporation of $D-H_2NCH(CH_2SiMe_3)COOH$ and $D-H_2NCH(CH_2GeMe_3)COOH$ into biologically active decapeptides: a study on C/Si/Ge bioisosterism, 183

Silthianes

New chalcogen derivatives of silicon possessing adamantane and noradamantane structures, 133

Silylenes

Silylene R*XS_i (R* = Si^tBu₃; X = H, Me, Ph, Hal, R*): Bildung und Reaktionen, 57

²⁹Si-NMR

Structure of monosilylated benzhydroxamic acids in crystals and solutions, 81

- Solvent effects
Structure of monosilylated benzhydroxamic acids in crystals and solutions, 81
- Stereospecificity
Stereoselectivity of formation of polycyclic ferrocenyl-4,5-dihydropyrazoles based on *E*- and *Z*-*s-cis*- α,β -enones, 107
- Substitution reaction
³¹P-NMR and X-ray studies of new rhodium(I) β -ketoiminato complexes $\text{Rh}(\text{R}_1\text{C}(\text{O})\text{CHC}(\text{NH})\text{R}_2)(\text{CO})(\text{PZ}_3)$ where $\text{PZ}_3 = \text{PPh}_3, \text{PCy}_3, \text{P}(\text{OPh})_3$ or $\text{P}(\text{NC}_4\text{H}_4)_3$, 195
- Sulfur
Cyclopentadienylcobalt complexes containing sulfosalt units: synthesis and structure of $[(\text{C}_5\text{Me}_4\text{Et})_3\text{Co}_3\text{AsS}_5]\text{I}$ and $[(\text{C}_5\text{Me}_4\text{Et})_3\text{Co}_3\text{AsSe}_3][\text{Cr}(\text{CO})_5\text{I}]$, 39
New chalcogen derivatives of silicon possessing adamantane and noradamantane structures, 133
- Supersilyl
Alkalimetalldisupersilylsilanide MSiXR_2^* ($\text{R}^* = \text{Si}^i\text{Bu}_3; \text{X} = \text{H}, \text{Me}, \text{Ph}, \text{Hal}$): Synthesen, Charakterisierung, Strukturen, Reaktionen, 46
Silylene R^*XSi ($\text{R}^* = \text{Si}^i\text{Bu}_3; \text{X} = \text{H}, \text{Me}, \text{Ph}, \text{Hal}, \text{R}^*$): Bildung und Reaktionen, 57
- Supported complexes
Supported organometallic complexes: Part XXIII. A general synthetic route for the synthesis of mono-T-silyl functionalized aromatic phosphines as ligands for chemistry in interphases, 151
- Tautomers
Structure of monosilylated benzhydroxamic acids in crystals and solutions, 81
- t*-Butyldimethylsilyl derivatives
Structure of monosilylated benzhydroxamic acids in crystals and solutions, 81
- t*-Butyldiphenylsilyl derivatives
Structure of monosilylated benzhydroxamic acids in crystals and solutions, 81
- Tellurium
New chalcogen derivatives of silicon possessing adamantane and noradamantane structures, 133
- Tertiaryphosphine
Synthesis and reactions of the dichloro bis(3-hexyne) complex $[\text{WCl}_2(\text{CO})(\text{NCMe})(\eta^2\text{-EtC}_2\text{Et})_2]$, 91
- Tetranuclear lanthanide cluster complex
Partially cyclopentadienyl-substituted tetranuclear lanthanide Schiff base complexes, 99
- Titanium
Reactions of titanocene-bis(trimethylsilyl)ethyne complexes with diethynylsilane derivatives, 30
- Titanocenes
Reactions of titanocene-bis(trimethylsilyl)ethyne complexes with diethynylsilane derivatives, 30
- Transition metal
Synthesis, characterization and reactions of cluster complexes containing SeRuCoM ($\text{M} = \text{Mo}$ or W) core and a functionally substituted cyclopentadienyl ligand, 123
- Transition metal complexes
Transition metal chemistry of phosphorus based ligands: synthesis and transition metal chemistry of *N,N'*-dimethyl-bis(diphenylphosphino)ethylenediamine. The crystal and molecular structure of $[\text{ReBr}(\text{CO})_3\{\text{Ph}_2\text{PN}(\text{Me})\text{CH}_2\text{CH}_2(\text{Me})\text{NPPH}_2\}]$, 76
- Triphos phosphines
Synthesis and X-ray structures of RuCpCIL [$\text{L} = (\eta^1\text{-PPh}_2\text{py})_2$ and η^2 -triphos] and $[\text{RuCp}\{\eta^3\text{-(PPh}_2)_3\text{CH}\}][\text{PF}_6]$. The first $\eta^3\text{-(PPh}_2)_3\text{CH}$ complex of Ru(II), 1
- Tripod phosphines
Synthesis and X-ray structures of RuCpCIL [$\text{L} = (\eta^1\text{-PPh}_2\text{py})_2$ and η^2 -triphos] and $[\text{RuCp}\{\eta^3\text{-(PPh}_2)_3\text{CH}\}][\text{PF}_6]$. The first $\eta^3\text{-(PPh}_2)_3\text{CH}$ complex of Ru(II), 1
- T-Silyl functionalized phosphines
Supported organometallic complexes: Part XXIII. A general synthetic route for the synthesis of mono-T-silyl functionalized aromatic phosphines as ligands for chemistry in interphases, 151
- Tungsten
Stereoselective insertion of GeCl_2 into tungsten–chlorine bonds of aminomethylene and aminocarbene complexes, 11
Synthesis and reactions of the dichloro bis(3-hexyne) complex $[\text{WCl}_2(\text{CO})(\text{NCMe})(\eta^2\text{-EtC}_2\text{Et})_2]$, 91
- Weak hydrogen bonds
Reaction chemistry, NMR spectroscopy, and X-ray crystallography of $[\text{Fe}_2(\mu\text{-SiMe}_2)_2(\text{CO})_4]$ and $[\text{Fe}_2(\mu\text{-SiMeCl})_2(\text{CO})_4]$. Electronic structure and bonding in Fe_2E_2 rings of $[\text{Fe}_2(\mu\text{-ER}_2)_2(\text{CO})_4]$ binuclear complexes ($\text{E} = \text{C}, \text{Si}, \text{Ge}, \text{Sn}, \text{Pb}$), 241
- X-ray
³¹P-NMR and X-ray studies of new rhodium(I) β -ketoiminato complexes $\text{Rh}(\text{R}_1\text{C}(\text{O})\text{CHC}(\text{NH})\text{R}_2)(\text{CO})(\text{PZ}_3)$ where $\text{PZ}_3 = \text{PPh}_3, \text{PCy}_3, \text{P}(\text{OPh})_3$ or $\text{P}(\text{NC}_4\text{H}_4)_3$, 195
- X-ray crystallography
Reactions of titanocene-bis(trimethylsilyl)ethyne complexes with diethynylsilane derivatives, 30
- X-ray diffraction
Reactions of $\text{Cp}(\text{NAr})\text{NbMe}_2$ with H_2 and HSiMe_2Cl . Molecular structure of $[\text{CpNb}(\mu\text{-NAr})\text{Me}]_2$ ($\text{Ar} = 2,6\text{-C}_6\text{H}_3\text{Pr}_2$), 25
- X-ray structural analysis
Stereoselectivity of formation of polycyclic ferrocenyl-4,5-dihydropyrazoles based on *E*- and *Z*-*s-cis*- α,β -enones, 107