

Subject Index of Volume 582

- Ab initio quantum-chemical methods
 Geometry and electronic structure of bis(tetrahydrido-*borato*)bis(cyclopentadienyl)zirconium(IV), 267
- Acyl complexes
 Reactivity studies of η^2 -acyl complexes of molybdenum: reactions with strong bases and with bidentate phosphines, 3
- Alkyne
 Synthese, Struktur und Reaktivität zweikerniger Pentamethyl-Cyclopentadien-Nickelkomplexe mit verbrückenden Butadienliganden, 188
 Synthesis and characterisation of linear triphos {PhP(CH₂CH₂PPh₂)₂} bridged tri-, tetra- and pentametallic molybdenum(II) (π -allyl)/tungsten(II) (alkyne) complexes, 259
- Alkynes
 Titanium σ -acetylides as building blocks for heterobimetallic transition metal complexes: synthesis and redox behaviour of π -conjugated organometallic systems, 126
- Allyl
 Synthesis and characterisation of linear triphos {PhP(CH₂CH₂PPh₂)₂} bridged tri-, tetra- and pentametallic molybdenum(II) (π -allyl)/tungsten(II) (alkyne) complexes, 259
- η^3 -Allyl rhodium
 Comparative chemistry of η^3 -oxaallyl and η^3 -allyl rhodium(I) complexes in the hydrosilylation of cyclopropyl ketones: observation of an unprecedented rearrangement, 235
- Aluminum
 Examination of dibenzyl aluminum and gallium azides as potential precursors to AlN and GaN, 103
- Aminoborylphosphanes
 Coordination chemistry of aminoborylphosphanes. Crystal structure determinations of (Pr₂N)₂BP(H)SiPh₃·Cr(CO)₅ and [(Pr₂N)₂BP(H)]₂SiMe₂·W(CO)₄, 25
- Anthracene
 Preparation of mercury–anthracene derivatives: π – π -stacking, Hg···Cl and Hg··· π interactions in the X-ray crystal structure of polymeric 9-chloromercurioanthracene, 40
- Asymmetric catalysis
 Water-soluble metal complexes and catalysts: X. BIPHLOPHOS, a novel axially chiral diphosphine ligand: preparation and application in the asymmetric rhodium-catalyzed hydroformylation of styrene, 204
- Azaphosphatrane
 Synthesis and structural features of new sterically hindered azaphosphatrane systems: ZP(RNCH₂CH₂)₃N, 16
- Azaphosphoranes, P–C bond activation
 Synthesis of nickel phenyl complexes with new chelating κ^2 -P,N ligands derived from α -iminoazatriphenylphosphoranes, 371
- Azide
 Examination of dibenzyl aluminum and gallium azides as potential precursors to AlN and GaN, 103
- Benzyl
 Examination of dibenzyl aluminum and gallium azides as potential precursors to AlN and GaN, 103
- Beryllium
 The first beryllium diorganoarsenide: synthesis and structure of (η^5 -C₅Me₅)BeAs(*t*-Bu)₂, 66
- Biphasic catalysis
 Water-soluble metal complexes and catalysts: X. BIPHLOPHOS, a novel axially chiral diphosphine ligand: preparation and application in the asymmetric rhodium-catalyzed hydroformylation of styrene, 204
- 1,2-Bis{bis(pentafluorophenyl)phosphino}ethane
 Intermediates and anion effects in the activation of carbon–fluorine bonds by η^5 -pentamethylcyclopentadienylrhodium halide complexes; crystal structure of [η^5 -C₅Me₅[CH₂C₆F₄P(C₆F₅)CH₂]₂-1,3]RhBr⁺·Br[–], 163
- Boron
 Some di- and tri-metal complexes derived from the synthon [Ru(CO)₂(THF)(η^5 -7,8-C₂B₉H₁₁)], 90
- Boron clusters
 A simple route to essential tricarbolides. A high-yield synthesis of 7-amine-*nido*-7,8,9-tricarbaundecaboranes(10), 7-*L-nido*-7,8,9-C₃B₈H₁₀ (where L = H₃N, Me₂NH, Me₃N, and Bu⁺H₂N), 282
- Bridging ligand
 Synthesis of nickel phenyl complexes with new chelating κ^2 -P,N ligands derived from α -iminoazatriphenylphosphoranes, 371
- Butadiene
 Synthese, Struktur und Reaktivität zweikerniger Pentamethyl-Cyclopentadien-Nickelkomplexe mit verbrückenden Butadienliganden, 188
- Butenedithiolate
 Butenedithiolate trisium cluster complexes from the reaction of Os₃(CO)₁₀(NCMe)₂ with 3,6-dihydro-1,2-dithiin, 9
- Cage
 Reactions of trialkylgalliums with substituted hydrazines leading to the formation of rings and cages: X-ray structures of (Pr₂GaNHNMe₂)₂ and (MeGaNHN⁺Bu)₄, 108
- Carbaborane
 Some di- and tri-metal complexes derived from the synthon [Ru(CO)₂(THF)(η^5 -7,8-C₂B₉H₁₁)], 90
- Carbene complex
 From a terminal (*cis*-2-butene-1,4-diyl-1,4-diphosphinidene) complex to some new diphosphorus bicycles, 53
- Carbonyl
 Mixed-metal cluster chemistry: Part 14: reaction of [Cp₂W₂Ir₂(CO)₁₀] with trimethylphosphite; X-ray crystal structures of [Cp₂W₂Ir₂(μ -CO)₃(CO)₅{P(OMe)₃}]₂ and two modifications of [CpWIr₃(μ -CO)₃(CO)₇{P(OMe)₃}], 310
- Carboranes
 A simple route to essential tricarbolides. A high-yield synthesis of 7-amine-*nido*-7,8,9-tricarbaundecaboranes(10), 7-*L-nido*-7,8,9-C₃B₈H₁₀ (where L = H₃N, Me₂NH, Me₃N, and Bu⁺H₂N), 282

4-Carboxybenzo-18-crown-6

Synthesis and characterization of triphenyl-, tri-*n*-butyl and di-*n*-butyltin derivatives of 4-carboxybenzo-18-crown-6 and -15-crown-5, 195

4-Carboxybenzo-15-crown-5

Synthesis and characterization of triphenyl-, tri-*n*-butyl and di-*n*-butyltin derivatives of 4-carboxybenzo-18-crown-6 and -15-crown-5, 195

Carboxylic acids

The role of functionalized phosphines in the hydrogenation of carboxylic acids in the presence of phosphine substituted hydrido ruthenium complexes, 218

Catalysis

Synthese und Polymerisationseigenschaften substituierter *ansa*-Bis(fluorenyliden)komplexe des Zirconiums, 328

Catalyst

Synthesis of 1,3-dioxolanes by the addition of ketones to epoxides by using $[\text{Cp}^*\text{Ir}(\text{NCMe})_3]^+$ as catalyst, 358

Catalytic activity

The role of functionalized phosphines in the hydrogenation of carboxylic acids in the presence of phosphine substituted hydrido ruthenium complexes, 218

C–C bond formation

Intermediates and anion effects in the activation of carbon–fluorine bonds by η^5 -pentamethylcyclopentadienylrhodium halide complexes; crystal structure of $[\{\eta^5\text{-C}_5\text{Me}_3[\text{CH}_2\text{C}_6\text{F}_4\text{P}(\text{C}_6\text{F}_5)\text{CH}_2\text{CH}_2\text{-1,3}\}\text{RhBr}]^+ \cdot \text{Br}^-$, 163

Cerium

Organolanthanide chemistry with bis(trimethylsilyl)methyl- and *tert*-butyldimethylsilyl-substituted cyclopentadienyl ligands. Synthesis and characterisation of tris(cyclopentadienyl)lanthanide(III) complexes, including crystal structures of $[\text{Ln}\{\eta^5\text{-C}_5\text{H}_4\text{CH}(\text{SiMe}_3)_2\}_3]$ (Ln = Nd or Tm) and $[\text{Ce}\{\eta^5\text{-C}_5\text{H}_3(\text{SiMe}_2\text{Bu})_2\text{-1,3}\}_3]$, 143

C–F bond activation

Intermediates and anion effects in the activation of carbon–fluorine bonds by η^5 -pentamethylcyclopentadienylrhodium halide complexes; crystal structure of $[\{\eta^5\text{-C}_5\text{Me}_3[\text{CH}_2\text{C}_6\text{F}_4\text{P}(\text{C}_6\text{F}_5)\text{CH}_2\text{CH}_2\text{-1,3}\}\text{RhBr}]^+ \cdot \text{Br}^-$, 163

C–H bond activation

Intermediates and anion effects in the activation of carbon–fluorine bonds by η^5 -pentamethylcyclopentadienylrhodium halide complexes; crystal structure of $[\{\eta^5\text{-C}_5\text{Me}_3[\text{CH}_2\text{C}_6\text{F}_4\text{P}(\text{C}_6\text{F}_5)\text{CH}_2\text{CH}_2\text{-1,3}\}\text{RhBr}]^+ \cdot \text{Br}^-$, 163

Chirality

Synthesis of asymmetric β -hydroxy-cyclopentadienyl ligands and of their bidentate lanthanide complexes, 211

Cleavage

Butenedithiolate triosmium cluster complexes from the reaction of $\text{Os}_3(\text{CO})_{10}(\text{NCMe})_2$ with 3,6-dihydro-1,2-dithiin, 9

Cluster

A facile and selective synthesis of hydridotrirhenium cluster under solvothermal conditions, 160

Mixed-metal cluster chemistry: Part 14: reaction of $[\text{Cp}_2\text{W}_2\text{Ir}_2(\text{CO})_{10}]$ with trimethylphosphite; X-ray crystal structures of $[\text{Cp}_2\text{W}_2\text{Ir}_2(\mu\text{-CO})_3(\text{CO})_5\{\text{P}(\text{OMe})_3\}_2]$ and two modifications of $[\text{CpWIr}_3(\mu\text{-CO})_3(\text{CO})_7\{\text{P}(\text{OMe})_3\}_3]$, 310

Monitoring ECE transformations of metal carbonyls by in situ spectroelectrochemistry; SNIFTIRS of $[\text{Co}_3(\text{CO})_9\text{C}]_2$, 183

Complex

Preparation and organometallic complexes of the new unsymmetrical ligand: $\text{Ph}_2\text{PNHC}_6\text{H}_4\text{PPh}_2$, 83

Conformational isomerism

Ferrocenylpyrazolyl bridging rhodium dimers. Crystal structure of $[\text{Rh}(\mu\text{-pz}^{\text{Fc}})(\text{COD})_2]_2$, 173

Conjugation

Titanium σ -acetylides as building blocks for heterobimetallic transition metal complexes: synthesis and redox behaviour of π -conjugated organometallic systems, 126

Coordination complexes

Coordination chemistry of aminoborylphosphanes. Crystal structure determinations of $(\text{Pr}_2\text{N})_2\text{BP}(\text{H})\text{SiPh}_3 \cdot \text{Cr}(\text{CO})_5$ and $[(\text{Pr}_2\text{N})_2\text{BP}(\text{H})]_2\text{SiMe}_2 \cdot \text{W}(\text{CO})_4$, 25

18-Crown-6

Cyclopentadienyl, indenyl, fluorenyl, and pentamethylcyclopentadienyl complexes of potassium with 18-crown-6, 58

Crystal engineering

Tribenzylidenemethane complexes of ruthenium. Synthesis and effects of the diastereoisomerism on the crystal packing, 338

Crystal structure

Synthesis and characterization of novel organometallic compounds containing linked clusters. The molecular structure of $(\text{CO})_8\text{LCo}_2\text{M}(\mu_3\text{-C})\text{C}(\text{O})\text{OCH}_2(\mu\text{-CCH})\text{Co}_2(\text{CO})_6$ [M = Co, W; L = CO, $\eta^5\text{-C}_5\text{H}_5$], 252

Synthesis and structural characterization of $(\text{THF})_3\text{Na}\{(\text{SnC}_6\text{H}_3\text{-2,6-Trip}_2)_2\}$ (Trip = $\text{C}_6\text{H}_2\text{-2,4,6-}i\text{-Pr}_3$): effects of cation–anion association on Sn–Sn multiple bonding, 100

Synthesis of nickel phenyl complexes with new chelating $\kappa^2\text{-P,N}$ ligands derived from α -iminoazatriphenylphosphoranes, 371

Cyclic voltammetry

Titanium σ -acetylides as building blocks for heterobimetallic transition metal complexes: synthesis and redox behaviour of π -conjugated organometallic systems, 126

Cyclopalladation

Cyclopalladation of phenols in the form of mixed phosphite esters, 246

Cyclopentadienyls

Organolanthanide chemistry with bis(trimethylsilyl)methyl- and *tert*-butyldimethylsilyl-substituted cyclopentadienyl ligands. Synthesis and characterisation of tris(cyclopentadienyl)lanthanide(III) complexes, including crystal structures of $[\text{Ln}\{\eta^5\text{-C}_5\text{H}_4\text{CH}(\text{SiMe}_3)_2\}_3]$ (Ln = Nd or Tm) and $[\text{Ce}\{\eta^5\text{-C}_5\text{H}_3(\text{SiMe}_2\text{Bu})_2\text{-1,3}\}_3]$, 143

Cyclopentadiene

Synthesis of asymmetric β -hydroxy-cyclopentadienyl ligands and of their bidentate lanthanide complexes, 211

Cyclopentadienyl

Cyclopentadienyl, indenyl, fluorenyl, and pentamethylcyclopentadienyl complexes of potassium with 18-crown-6, 58

Cyclopentadienyl ligand

Organometallic Rh(III) complexes with the bifunctional ligand [2-(dimethylamino)ethyl]cyclopentadiene. Crystal structure of the $[\{\eta^5\text{-C}_5\text{H}_4(\text{CH}_2)_2\text{NMe}_2\}\text{Rh}^{\text{III}}\text{Cl}_2]$ complex, 286

Cyclopropyl carbonyl rearrangement

Comparative chemistry of η^3 -oxaallyl and η^3 -allyl rhodium(I) complexes in the hydrosilylation of cyclopropyl ketones: observation of an unprecedented rearrangement, 235

Desilylenation

Hydrosilylation of an hexa-olefin star with organometallic hydrogenosilanes: ferrocenylsilylation and desilylenation, 139

Diastereoisomers

Tribenzylidenemethane complexes of ruthenium. Synthesis and effects of the diastereoisomerism on the crystal packing, 338

Diborane(4)

Synthesis and X-ray structure of a [4]ferrocenophane containing a boron–boron bond, 116

Di-*n*-butyltin derivative

Synthesis and characterization of triphenyl-, tri-*n*-butyl and di-*n*-butyltin derivatives of 4-carboxybenzo-18-crown-6 and -15-crown-5, 195

Diorganoarsenide

The first beryllium diorganoarsenide: synthesis and structure of $(\eta^5\text{-C}_5\text{Me}_5)\text{BeAs}(t\text{-Bu})_2$, 66

- Dioxolane**
 Synthesis of 1,3-dioxolanes by the addition of ketones to epoxides by using $[\text{Cp}^*\text{Ir}(\text{NCMe})_3]^{2+}$ as catalyst, 358
- 1,6-Diphosphabicyclo[4,n,0] compounds**
 From a terminal (*cis*-2-butene-1,4-diyl-1,4-diphosphinidene) complex to some new diphosphorus bicycles, 53
- Diphosphines**
 Reactivity studies of η^2 -acyl complexes of molybdenum: reactions with strong bases and with bidentate phosphines, 3
 Water-soluble metal complexes and catalysts: X. BIPHLOPHOS, a novel axially chiral diphosphine ligand: preparation and application in the asymmetric rhodium-catalyzed hydroformylation of styrene, 204
- Dynamical activity**
 Butenedithiolate triosmium cluster complexes from the reaction of $\text{Os}_3(\text{CO})_{10}(\text{NCMe})_2$ with 3,6-dihydro-1,2-dithiin, 9
- Electrochemistry**
 Electronic coupling of two $[\text{Cp}^*\text{ClM}]^+ / [\text{Cp}^*\text{M}]$ reaction centers via π conjugated bridging ligands: similarities and differences between rhodium and iridium analogues, 153
 Synthesis, characterization and X-ray structural, electrochemical and Mössbauer study of mercury(II) complexes with 1'-(diphenylphosphino)ferrocenecarboxylic acid, 319
- Enolates**
 Reactivity studies of η^2 -acyl complexes of molybdenum: reactions with strong bases and with bidentate phosphines, 3
- Epoxide**
 Synthesis of 1,3-dioxolanes by the addition of ketones to epoxides by using $[\text{Cp}^*\text{Ir}(\text{NCMe})_3]^{2+}$ as catalyst, 358
- EPR**
 Electronic coupling of two $[\text{Cp}^*\text{ClM}]^+ / [\text{Cp}^*\text{M}]$ reaction centers via π conjugated bridging ligands: similarities and differences between rhodium and iridium analogues, 153
- EPR spectra**
 Synthesis of an organogallium(I) compound $[\text{Ga}(\text{CH}_2\text{CMe}_2\text{Ph})_n]$ with EPR spectral evidence for gallium clusters, 32
- Estrone**
 Cyclopalladation of phenols in the form of mixed phosphite esters, 246
- Ethylene**
 Immobilization of zirconium amide on a Cp-modified silica surface and its use as a catalyst for ethylene polymerization, 273
- Ethylene insertion**
 Synthesis of nickel phenyl complexes with new chelating κ^2 -*P,N* ligands derived from α -iminoazatriphenylphosphoranes, 371
- Ethylene polymerization**
 Synthese und Polymerisationseigenschaften substituierter *ansa*-Bis(fluorenyliden)komplexe des Zirconiums, 328
- EXAFS**
 The first early transition metal perfluorovinyl complexes: the synthesis of $\text{Cp}_2\text{M}(\text{CF}=\text{CF}_2)_n\text{X}_{2-n}$ (Cp: η^5 - C_5H_5^- ; M = Ti, Zr; X = Cl or F) and structures of $\text{Cp}_2\text{Ti}(\text{CF}=\text{CF}_2)_n\text{X}_{2-n}$ (X = Cl, F) via Ti K-edge EXAFS studies, 301
- Ferrocene**
 1-Dialkylamino-1-phospha-[1]ferrocenophanes—synthesis and characterisation, 352
 Synthesis, characterization and X-ray structural, electrochemical and Mössbauer study of mercury(II) complexes with 1'-(diphenylphosphino)ferrocenecarboxylic acid, 319
- [1]Ferrocenophane**
 1-Dialkylamino-1-phospha-[1]ferrocenophanes—synthesis and characterisation, 352
- Ferrocenophane**
 Synthesis and X-ray structure of a [4]ferrocenophane containing a boron–boron bond, 116
- Ferrocenylpyrazole**
 Ferrocenylpyrazolyl bridging rhodium dimers. Crystal structure of $[\text{Rh}(\mu\text{-pz}^{\text{Fc}})(\text{COD})]_2$, 173
- Ferrocenylsilane**
 Hydrosilylation of an hexa-olefin star with organometallic hydrogenosilanes: ferrocenylsilylation and desilylation, 139
- Fluorenyl**
 Cyclopentadienyl, indenyl, fluorenyl, and pentamethylcyclopentadienyl complexes of potassium with 18-crown-6, 58
 Synthese und Polymerisationseigenschaften substituierter *ansa*-Bis(fluorenyliden)komplexe des Zirconiums, 328
- Functionalized**
 Organometallic Rh(III) complexes with the bifunctional ligand [2-(dimethylamino)ethyl]cyclopentadiene. Crystal structure of the $\{[\eta^5\text{-}\eta^1\text{-C}_5\text{H}_4(\text{CH}_2)_2\text{NMe}_2]\text{Rh}^{\text{III}}\text{Cl}_2\}$ complex, 286
- Functionalized phosphines**
 The role of functionalized phosphines in the hydrogenation of carboxylic acids in the presence of phosphine substituted hydrido ruthenium complexes, 218
- Gallium**
 Compounds containing gallium–silicon bonding: syntheses and X-ray crystal structures of bis-[2(dimethylaminomethyl)phenyl]-[tris(trimethylsilyl)silyl]gallium, $\text{Ar}_2\text{GaSi}(\text{SiMe}_3)_3$ and diphenyl-[tris(trimethylsilyl)silyl]gallium, $\text{Ph}_2\text{GaSi}(\text{SiMe}_3)_3 \cdot \text{THF}$, 119
 Examination of dibenzyl aluminum and gallium azides as potential precursors to AlN and GaN, 103
- Gallium antimonide**
 Preparation of single-source precursors to nanocrystalline gallium arsenide and gallium antimonide. X-ray crystal structures of $[\text{Et}_2\text{GaAs}(\text{SiMe}_3)_2]_2$, $[\text{Et}_2\text{GaSb}(\text{SiMe}_3)_2]_2$ and $\text{Et}_2 < \text{ovl} \text{ type} = \text{“bar”} > \text{GaAs}(\text{SiMe}_3)_2\text{Ga}(\text{Et})_2\text{Sb}(\text{SiMe}_3)_2$, 45
- Gallium arsenide**
 Preparation of single-source precursors to nanocrystalline gallium arsenide and gallium antimonide. X-ray crystal structures of $[\text{Et}_2\text{GaAs}(\text{SiMe}_3)_2]_2$, $[\text{Et}_2\text{GaSb}(\text{SiMe}_3)_2]_2$ and $\text{Et}_2 < \text{ovl} \text{ type} = \text{“bar”} > \text{GaAs}(\text{SiMe}_3)_2\text{Ga}(\text{Et})_2\text{Sb}(\text{SiMe}_3)_2$, 45
- Gallium arsenide antimonide**
 Preparation of single-source precursors to nanocrystalline gallium arsenide and gallium antimonide. X-ray crystal structures of $[\text{Et}_2\text{GaAs}(\text{SiMe}_3)_2]_2$, $[\text{Et}_2\text{GaSb}(\text{SiMe}_3)_2]_2$ and $\text{Et}_2 < \text{ovl} \text{ type} = \text{“bar”} > \text{GaAs}(\text{SiMe}_3)_2\text{Ga}(\text{Et})_2\text{Sb}(\text{SiMe}_3)_2$, 45
- Gallium clusters**
 Synthesis of an organogallium(I) compound $[\text{Ga}(\text{CH}_2\text{CMe}_2\text{Ph})_n]$ with EPR spectral evidence for gallium clusters, 32
- Gallium radicals**
 Synthesis of an organogallium(I) compound $[\text{Ga}(\text{CH}_2\text{CMe}_2\text{Ph})_n]$ with EPR spectral evidence for gallium clusters, 32
- He(I)/He(II) photoelectron spectroscopy**
 Geometry and electronic structure of bis(tetrahydridoborato)bis(cyclopentadienyl)zirconium(IV), 267
- Heterocycle**
 Preparation and organometallic complexes of the new unsymmetrical ligand: $\text{Ph}_2\text{PNHC}_6\text{H}_4\text{PPh}_2$, 83
- HME**
 Reactions of haloarenes, haloheteroarenes and dihalobenzenes with triphenylstannyl anions in DMSO and acetonitrile, 229
- Homogeneous catalysis**
N-heterocyclic carbenes: novel ruthenium–alkylidene complexes, 362
- Homolytic displacements**
 Homolytic displacements at two reactive centers: organodicobaloximes and organodisulfonyl chloride, 279

Hybrid phosphines

Synthesis, characterization and X-ray structural, electrochemical and Mössbauer study of mercury(II) complexes with 1'-(diphenylphosphino)ferrocenecarboxylic acid, 319

Hydrazine

Reactions of trialkylgalliums with substituted hydrazines leading to the formation of rings and cages: X-ray structures of $(^i\text{Pr}_2\text{GaNHNMe}_2)_2$ and $(\text{MeGaNHN}^i\text{Bu})_4$, 108

Hydroformylation

Water-soluble metal complexes and catalysts: X. BIPHLOPHOS, a novel axially chiral diphosphine ligand: preparation and application in the asymmetric rhodium-catalyzed hydroformylation of styrene, 204

Hydrogenation

The role of functionalized phosphines in the hydrogenation of carboxylic acids in the presence of phosphine substituted hydrido ruthenium complexes, 218

Hydrosilylation

Hydrosilylation of an hexa-olefin star with organometallic hydrogenosilanes: ferrocenylsilylation and desilylation, 139

Organometallic compounds of the lanthanides: Part CIXXX. Synthesis, structure and hydrolysis of 'moderately stable' hydrosilylation catalysts $[(\eta^5\text{-C}_5\text{H}_4\text{SiMe}_3)_2\text{Ln}(\mu\text{-Me})_2]$ and $[(\eta^5\text{-C}_5\text{H}_4\text{SiMe}_2\text{Bu})_2\text{Ln}(\mu\text{-Me})_2]$, 70

Imidazole

Synthesis of nickel phenyl complexes with new chelating $\kappa^2\text{-P,N}$ ligands derived from α -iminoazatriphenylphosphoranes, 371

Indenyl

Cyclopentadienyl, indenyl, fluorenyl, and pentamethylcyclopentadienyl complexes of potassium with 18-crown-6, 58

 π -Interactions

Preparation of mercury-anthracene derivatives: π - π -stacking, $\text{Hg}\cdots\text{Cl}$ and $\text{Hg}\cdots\pi$ interactions in the X-ray crystal structure of polymeric 9-chloromercurioanthracene, 40

Intramolecular coordination

Compounds containing gallium-silicon bonding: syntheses and X-ray crystal structures of bis-[2(dimethylaminomethyl)phenyl]-[tris(trimethylsilyl)silyl]gallium, $\text{Aryl}_2\text{GaSi}(\text{SiMe}_3)_3$ and diphenyl-[tris(trimethylsilyl)silyl]gallium, $\text{Ph}_2\text{GaSi}(\text{SiMe}_3)_3 \cdot \text{THF}$, 119

Iridium

Electronic coupling of two $[\text{Cp}^*\text{ClM}]^+ / [\text{Cp}^*\text{M}]$ reaction centers via π conjugated bridging ligands: similarities and differences between rhodium and iridium analogues, 153

Mixed-metal cluster chemistry: Part 14: reaction of $[\text{Cp}_2\text{W}_2\text{Ir}_2(\text{CO})_{10}]$ with trimethylphosphite; X-ray crystal structures of $[\text{Cp}_2\text{W}_2\text{Ir}_2(\mu\text{-CO})_3(\text{CO})_5\{\text{P}(\text{OMe})_3\}_2]$ and two modifications of $[\text{CpWIr}_3(\mu\text{-CO})_3(\text{CO})_7\{\text{P}(\text{OMe})_3\}_3]$, 310

Synthesis of 1,3-dioxolanes by the addition of ketones to epoxides by using $[\text{Cp}^*\text{Ir}(\text{NCMe})_3]^{2+}$ as catalyst, 358

Iron

Some di- and tri-metal complexes derived from the synthon $[\text{Ru}(\text{CO})_2(\text{THF})(\eta^5\text{-7,8-C}_2\text{B}_9\text{H}_{11})]$, 90

Ketone

Synthesis of 1,3-dioxolanes by the addition of ketones to epoxides by using $[\text{Cp}^*\text{Ir}(\text{NCMe})_3]^{2+}$ as catalyst, 358

Kinetics of hydrosilylation

Comparative chemistry of η^3 -oxaallyl and η^3 -allyl rhodium(I) complexes in the hydrosilylation of cyclopropyl ketones: observation of an unprecedented rearrangement, 235

Lanthanide

Synthesis and X-ray structures of trivalent lanthanide (+)-neomenthylcyclopentadienyl complexes, 292

Lanthanides

Organolanthanide chemistry with bis(trimethylsilyl)methyl- and *tert*-butyldimethylsilyl-substituted cyclopentadienyl ligands. Synthesis and characterisation of tris(cyclopentadienyl)lanthanide(III) complexes, including crystal structures of $[\text{Ln}\{\eta^5\text{-C}_5\text{H}_4\text{CH}(\text{SiMe}_3)_2\}_3]$ (Ln = Nd or Tm) and $[\text{Ce}\{\eta^5\text{-C}_5\text{H}_3(\text{SiMe}_2\text{Bu}^i)_2\text{-1,3}\}_3]$, 143

Lanthanum

Synthesis of asymmetric β -hydroxy-cyclopentadienyl ligands and of their bidentate lanthanide complexes, 211

Ligand

Synthesis of asymmetric β -hydroxy-cyclopentadienyl ligands and of their bidentate lanthanide complexes, 211

Linked clusters

Synthesis and characterization of novel organometallic compounds containing linked clusters. The molecular structure of $(\text{CO})_8\text{LCO}_2\text{M}(\mu_3\text{-C})\text{C}(\text{O})\text{OCH}_2(\mu\text{-CCH})\text{Co}_2(\text{CO})_6$ [M = Co, W; L = CO, $\eta^5\text{-C}_5\text{H}_5$], 252

Mercury

Preparation of mercury-anthracene derivatives: π - π -stacking, $\text{Hg}\cdots\text{Cl}$ and $\text{Hg}\cdots\pi$ interactions in the X-ray crystal structure of polymeric 9-chloromercurioanthracene, 40

Synthesis, characterization and X-ray structural, electrochemical and Mössbauer study of mercury(II) complexes with 1'-(diphenylphosphino)ferrocenecarboxylic acid, 319

Metal amide

Immobilization of zirconium amide on a Cp-modified silica surface and its use as a catalyst for ethylene polymerization, 273

Metal carbonyls

Coordination chemistry of aminoborylphosphanes. Crystal structure determinations of $(^i\text{Pr}_2\text{N})_2\text{BP}(\text{H})\text{SiPh}_3 \cdot \text{Cr}(\text{CO})_5$ and $[(^i\text{Pr}_2\text{N})_2\text{BP}(\text{H})_2\text{SiMe}_2 \cdot \text{W}(\text{CO})_4]$, 25

Monitoring ECE transformations of metal carbonyls by in situ spectroelectrochemistry; SNIFTIRS of $[\text{Co}_3(\text{CO})_9\text{C}]_2$, 183

Metal exchange

Synthesis and characterization of novel organometallic compounds containing linked clusters. The molecular structure of $(\text{CO})_8\text{LCO}_2\text{M}(\mu_3\text{-C})\text{C}(\text{O})\text{OCH}_2(\mu\text{-CCH})\text{Co}_2(\text{CO})_6$ [M = Co, W; L = CO, $\eta^5\text{-C}_5\text{H}_5$], 252

Metalloenes

Organometallic compounds of the lanthanides: Part CIXXX. Synthesis, structure and hydrolysis of 'moderately stable' hydrosilylation catalysts $[(\eta^5\text{-C}_5\text{H}_4\text{SiMe}_3)_2\text{Ln}(\mu\text{-Me})_2]$ and $[(\eta^5\text{-C}_5\text{H}_4\text{SiMe}_2\text{Bu})_2\text{Ln}(\mu\text{-Me})_2]$, 70

Titanium σ -acetylides as building blocks for heterobimetallic transition metal complexes: synthesis and redox behaviour of π -conjugated organometallic systems, 126

Metallostars

Hydrosilylation of an hexa-olefin star with organometallic hydrogenosilanes: ferrocenylsilylation and desilylation, 139

Metal-metal interaction

Titanium σ -acetylides as building blocks for heterobimetallic transition metal complexes: synthesis and redox behaviour of π -conjugated organometallic systems, 126

Meta metallation

Meta and *para* metallation of EPh_4^+ (E = P, As) and $\text{N}(\text{PPh}_3)_2^+$ by the dinuclear acylation $[\text{Re}_2(\mu\text{-H})(\mu\text{-PCy}_2)(\text{CO})_7\text{-ax}(\text{C}(\text{Ph})\text{O})]^-$. Formation of zwitterionic cluster complexes $\text{Re}_2(\mu\text{-H})(\mu\text{-PCy}_2)(\text{CO})_7(x\text{-C}_6\text{H}_4\text{EPh}_3)$ (E = P, As; $x = m, p$) and $\text{Re}_2(\mu\text{-H})(\mu\text{-PCy}_2)(\text{CO})_7(x\text{-C}_6\text{H}_4\text{PPh}_2\text{NPPh}_3)$, 345

Metathetical reactions

Synthesis and X-ray structures of trivalent lanthanide (+)-neomenthylcyclopentadienyl complexes, 292

Molybdenum

Reactivity studies of η^2 -acyl complexes of molybdenum: reactions with strong bases and with bidentate phosphines, 3

- Synthesis and characterisation of linear triphos {PhP(CH₂CH₂PPh₂)₃} bridged tri-, tetra- and pentametallc molybdenum(II) (π -allyl)/tungsten(II) (alkyne) complexes, 259
- Mössbauer spectroscopy
- Synthesis, characterization and X-ray structural, electrochemical and Mössbauer study of mercury(II) complexes with 1'-(diphenylphosphino)ferrocenecarboxylic acid, 319
- Multiple bonding
- Synthesis and structural characterization of (THF)₃Na{(SnC₆H₃-2,6-Trip)₂} (Trip = C₆H₂-2,4,6-*i*-Pr₃): effects of cation-anion association on Sn-Sn multiple bonding, 100
- Nanocrystalline
- Preparation of single-source precursors to nanocrystalline gallium arsenide and gallium antimonide. X-ray crystal structures of [Et₂GaAs(SiMe₃)₂]₂, [Et₂GaSb(SiMe₃)₂]₂ and Et₂<ovl type="bar">GaAs(SiMe₃)₂Ga(Et)₂Sb(SiMe₃)₂, 45
- Neodymium
- Organolanthanide chemistry with bis(trimethylsilyl)methyl- and *tert*-butyldimethylsilyl-substituted cyclopentadienyl ligands. Synthesis and characterisation of tris(cyclopentadienyl)lanthanide(III) complexes, including crystal structures of [Ln{ η^5 -C₅H₄CH(SiMe₃)₂}₃] (Ln = Nd or Tm) and [Ce{ η^5 -C₅H₃(SiMe₂Bu)^{1,3}}₃], 143
- Neomethylcyclopentadienyl
- Synthesis and X-ray structures of trivalent lanthanide (+)-neomethylcyclopentadienyl complexes, 292
- N*-heterocyclic carbenes
- N*-heterocyclic carbenes: novel ruthenium-alkylidene complexes, 362
- Nickel
- Synthese, Struktur und Reaktivität zweikerniger Pentamethyl-Cyclopentadien-Nickelkomplexe mit verbrückenden Butadienliganden, 188
- Nitride
- Examination of dibenzyl aluminum and gallium azides as potential precursors to AlN and GaN, 103
- NMR
- 1-Dialkylamino-1-phospha-[1]ferrocenophanes—synthesis and characterisation, 352
- Olefin metathesis
- N*-heterocyclic carbenes: novel ruthenium-alkylidene complexes, 362
- Organodicobaloximes
- Homolytic displacements at two reactive centers: organodicobaloximes and organodisulfonyl chloride, 279
- Organodisulfonyl chloride
- Homolytic displacements at two reactive centers: organodicobaloximes and organodisulfonyl chloride, 279
- Organogallium compounds
- Synthesis of an organogallium(I) compound [Ga(CH₂CMe₂Ph)]_n with EPR spectral evidence for gallium clusters, 32
- Organolanthanide compounds
- Organometallic compounds of the lanthanides: Part CIXXX. Synthesis, structure and hydrolysis of 'moderately stable' hydrosilylation catalysts [(η^5 -C₅H₄SiMe₃)₂Ln(μ -Me)]₂ and [(η^5 -C₅H₄SiMe₂Bu)₂Ln(μ -Me)]₂, 70
- Organolutetium compounds
- Organometallic compounds of the lanthanides: Part CIXXX. Synthesis, structure and hydrolysis of 'moderately stable' hydrosilylation catalysts [(η^5 -C₅H₄SiMe₃)₂Ln(μ -Me)]₂ and [(η^5 -C₅H₄SiMe₂Bu)₂Ln(μ -Me)]₂, 70
- Organometallic complexes
- Organometallic Rh(III) complexes with the bifunctional ligand [2-(dimethylamino)ethyl]cyclopentadiene. Crystal structure of the [(η^5 : η^1 -C₅H₄(CH₂)₂NMe₂)Rh^{III}Cl₂] complex, 286
- Organosamarium compounds
- Organometallic compounds of the lanthanides: Part CIXXX. Synthesis, structure and hydrolysis of 'moderately stable' hydrosilylation catalysts [(η^5 -C₅H₄SiMe₃)₂Ln(μ -Me)]₂ and [(η^5 -C₅H₄SiMe₂Bu)₂Ln(μ -Me)]₂, 70
- Organoyttrium compounds
- Organometallic compounds of the lanthanides: Part CIXXX. Synthesis, structure and hydrolysis of 'moderately stable' hydrosilylation catalysts [(η^5 -C₅H₄SiMe₃)₂Ln(μ -Me)]₂ and [(η^5 -C₅H₄SiMe₂Bu)₂Ln(μ -Me)]₂, 70
- η^3 -Oxaallyl rhodium
- Comparative chemistry of η^3 -oxaallyl and η^3 -allyl rhodium(I) complexes in the hydrosilylation of cyclopropyl ketones: observation of an unprecedented rearrangement, 235
- Para* metallation
- Meta* and *para* metallation of EPh₄⁺ (E = P, As) and N(PPh₃)₄⁺ by the dinuclear acylanion [Re₂(μ -H)(μ -PCy₂)(CO)₇ax-(C(Ph)O)]⁻. Formation of zwitterionic cluster complexes Re₂(μ -H)(μ -PCy₂)(CO)₇(*x*-C₆H₄EPh₃) (E = P, As; *x* = *m*, *p*) and Re₂(μ -H)(μ -PCy₂)(CO)₇(*x*-C₆H₄PPh₂NPPH₃), 345
- Pentamethylcyclopentadienyl
- Cyclopentadienyl, indenyl, fluorenyl, and pentamethylcyclopentadienyl complexes of potassium with 18-crown-6, 58
- The first beryllium diorganoarsenide: synthesis and structure of (η^5 -C₅Me₅)BeAs(*t*-Bu)₂, 66
- Perfluorovinyl
- The first early transition metal perfluorovinyl complexes: the synthesis of Cp₂M(CF=CF)₂X_{2-n} (Cp: η^5 -C₅H₅⁻; M = Ti, Zr; X = Cl or F) and structures of Cp₂Ti(CF=CF)₂X_{2-n} (X = Cl, F) via Ti K-edge EXAFS studies, 301
- Phenols
- Cyclopalladation of phenols in the form of mixed phosphite esters, 246
- Phosphine
- Preparation and organometallic complexes of the new unsymmetrical ligand: Ph₂PNHC₆H₄PPh₂, 83
- Synthese, Struktur und Reaktivität zweikerniger Pentamethyl-Cyclopentadien-Nickelkomplexe mit verbrückenden Butadienliganden, 188
- Phosphinidene
- From a terminal (*cis*-2-butene-1,4-diyl-1,4-diphosphinidene) complex to some new diphosphorus bicycles, 53
- Phosphite
- Mixed-metal cluster chemistry: Part 14: reaction of [Cp₂W₂Ir₂(CO)₁₀] with trimethylphosphite; X-ray crystal structures of [Cp₂W₂Ir₂(μ -CO)₃(CO)₅{P(OMe)₃}₂] and two modifications of [CpWIr₃(μ -CO)₃(CO)₇{P(OMe)₃}₃], 310
- Phosphites
- Cyclopalladation of phenols in the form of mixed phosphite esters, 246
- Phosphorus
- 1-Dialkylamino-1-phospha-[1]ferrocenophanes—synthesis and characterisation, 352
- Phosphorus ylides
- Synthesis of nickel phenyl complexes with new chelating κ^2 -*P,N* ligands derived from α -iminoazatriphenylphosphoranes, 371
- Photostimulation
- Reactions of haloarenes, haloheteroarenes and dihalobenzenes with triphenylstannyl anions in DMSO and acetonitrile, 229
- Ph₃Sn⁻ ions
- Reactions of haloarenes, haloheteroarenes and dihalobenzenes with triphenylstannyl anions in DMSO and acetonitrile, 229
- P-insertion
- From a terminal (*cis*-2-butene-1,4-diyl-1,4-diphosphinidene) complex to some new diphosphorus bicycles, 53

(P,N)-chelates

Synthesis of nickel phenyl complexes with new chelating κ^2 -*P,N* ligands derived from α -iminoazatriphenylphosphoranes, 371

Polymerization

Immobilization of zirconium amide on a Cp-modified silica surface and its use as a catalyst for ethylene polymerization, 273

Potassium

Cyclopentadienyl, indenyl, fluorenyl, and pentamethylcyclopentadienyl complexes of potassium with 18-crown-6, 58

Precursors

Preparation of single-source precursors to nanocrystalline gallium arsenide and gallium antimonide. X-ray crystal structures of $[\text{Et}_2\text{GaAs}(\text{SiMe}_3)_2]_2$, $[\text{Et}_2\text{GaSb}(\text{SiMe}_3)_2]_2$ and $\text{Et}_2\text{C}^{\text{ovl}}$ type = “bar” $\text{GaAs}(\text{SiMe}_3)_2\text{Ga}(\text{Et})_2\text{Sb}(\text{SiMe}_3)_2$, 45

Reactivity

Reactivity studies of η^2 -acyl complexes of molybdenum: reactions with strong bases and with bidentate phosphines, 3

Rhenium carbonyl

A facile and selective synthesis of hydridotrirhenium cluster under solvothermal conditions, 160

Rhenium carbonyl complex

Meta and *para* metallation of EPh_4^+ ($\text{E} = \text{P}, \text{As}$) and $\text{N}(\text{PPh}_3)_2^+$ by the dinuclear acyl anion $[\text{Re}_2(\mu\text{-H})(\mu\text{-PCy}_2)(\text{CO})_7\text{ax}(\text{C}(\text{Ph})\text{O})^-]$. Formation of zwitterionic cluster complexes $\text{Re}_2(\mu\text{-H})(\mu\text{-PCy}_2)(\text{CO})_7(x\text{-C}_6\text{H}_4\text{EPh}_3)$ ($\text{E} = \text{P}, \text{As}$; $x = m, p$) and $\text{Re}_2(\mu\text{-H})(\mu\text{-PCy}_2)(\text{CO})_7(x\text{-C}_6\text{H}_4\text{PPh}_2\text{NPPH}_3)$, 345

Rhodium

Electronic coupling of two $[\text{Cp}^*\text{Cp}^*\text{M}]^+ / [\text{Cp}^*\text{M}]$ reaction centers via π conjugated bridging ligands: similarities and differences between rhodium and iridium analogues, 153

Intermediates and anion effects in the activation of carbon–fluorine bonds by η^5 -pentamethylcyclopentadienylrhodium halide complexes; crystal structure of $[\{\eta^5\text{-C}_5\text{Me}_3[\text{CH}_2\text{C}_6\text{F}_4\text{P}(\text{C}_6\text{F}_5)\text{CH}_2]_2\text{-1,3}\}\text{RhBr}]^+ \cdot \text{Br}^-$, 163

Some di- and tri-metal complexes derived from the synthon $[\text{Ru}(\text{CO})_2(\text{THF})(\eta^5\text{-7,8-C}_2\text{B}_9\text{H}_{11})]$, 90

Water-soluble metal complexes and catalysts: X. BIPHLOPHOS, a novel axially chiral diphosphine ligand: preparation and application in the asymmetric rhodium-catalyzed hydroformylation of styrene, 204

Rhodium complexes

Organometallic Rh(III) complexes with the bifunctional ligand [2-(dimethylamino)ethyl]cyclopentadiene. Crystal structure of the $[\{\eta^5\text{-C}_5\text{H}_4(\text{CH}_2)_2\text{NMe}_2\}\text{Rh}^{\text{III}}\text{Cl}_2]$ complex, 286

Rhodium–pyrazolate dimers

Ferrocenylpyrazolyl bridging rhodium dimers. Crystal structure of $[\text{Rh}(\mu\text{-pz}^{\text{Fc}})(\text{COD})_2]_2$, 173

Ruthenium

N-heterocyclic carbenes: novel ruthenium–alkylidene complexes, 362

Some di- and tri-metal complexes derived from the synthon $[\text{Ru}(\text{CO})_2(\text{THF})(\eta^5\text{-7,8-C}_2\text{B}_9\text{H}_{11})]$, 90

Samarium

Synthesis of asymmetric β -hydroxy-cyclopentadienyl ligands and of their bidentate lanthanide complexes, 211

Silica

Immobilization of zirconium amide on a Cp-modified silica surface and its use as a catalyst for ethylene polymerization, 273

Silicon

Compounds containing gallium–silicon bonding: syntheses and X-ray crystal structures of bis-[2(dimethylaminomethyl)phenyl]-[tris(trimethylsilyl)silyl]gallium, $\text{Ar}_2\text{GaSi}(\text{SiMe}_3)_3$ and diphenyl-[tris(trimethylsilyl)silyl]gallium, $\text{Ph}_2\text{GaSi}(\text{SiMe}_3)_3 \cdot \text{THF}$, 119

Solvothermal method

A facile and selective synthesis of hydridotrirhenium cluster under solvothermal conditions, 160

Spectroelectrochemistry

Electronic coupling of two $[\text{Cp}^*\text{Cp}^*\text{M}]^+ / [\text{Cp}^*\text{M}]$ reaction centers via π conjugated bridging ligands: similarities and differences between rhodium and iridium analogues, 153

Monitoring ECE transformations of metal carbonyls by in situ spectroelectrochemistry; SNIFTIRS of $[\text{Co}_3(\text{CO})_9\text{C}]_2$, 183

 $\text{S}_{\text{RN}}1$ Reactions

Reactions of haloarenes, haloheteroarenes and dihalobenzenes with triphenylstannyl anions in DMSO and acetonitrile, 229

Steric hindrance

Synthesis and structural features of new sterically hindered azaphosphatane systems: $\text{ZP}(\text{RNCH}_2\text{CH}_2)_3\text{N}$, 16

Structure

Synthesis and X-ray structure of a [4]ferrocenophane containing a boron–boron bond, 116

Syntheses

A simple route to essential tricarbollides. A high-yield synthesis of 7-amine-*nido*-7,8,9-tricarbaundecaboranes(10), 7-*L-nido*-7,8,9- $\text{C}_3\text{B}_8\text{H}_{10}$ (where $\text{L} = \text{H}_3\text{N}, \text{Me}_2\text{NH}, \text{Me}_3\text{N}$, and $\text{Bu}^t\text{H}_2\text{N}$), 282

Synthesis

Synthesis and characterization of novel organometallic compounds containing linked clusters. The molecular structure of $(\text{CO})_8\text{LCo}_2\text{M}(\mu_3\text{-C})\text{C}(\text{O})\text{OCH}_2(\mu\text{-CCH})\text{Co}_2(\text{CO})_6$ [$\text{M} = \text{Co}, \text{W}$; $\text{L} = \text{CO}, \eta^5\text{-C}_5\text{H}_5$], 252

Synthesis and X-ray structure of a [4]ferrocenophane containing a boron–boron bond, 116

The first early transition metal perfluorovinyl complexes: the synthesis of $\text{Cp}_2\text{M}(\text{CF}=\text{CF}_2)_n\text{X}_{2-n}$ ($\text{Cp} = \eta^5\text{-C}_5\text{H}_5^-$; $\text{M} = \text{Ti}, \text{Zr}$; $\text{X} = \text{Cl}$ or F) and structures of $\text{Cp}_2\text{Ti}(\text{CF}=\text{CF}_2)_n\text{X}_{2-n}$ ($\text{X} = \text{Cl}, \text{F}$) via Ti K-edge EXAFS studies, 301

Tetrahydridoborato ligand

Geometry and electronic structure of bis(tetrahydridoborato)bis(cyclopentadienyl)zirconium(IV), 267

Thulium

Organolanthanide chemistry with bis(trimethylsilyl)methyl- and *tert*-butyldimethylsilyl-substituted cyclopentadienyl ligands. Synthesis and characterisation of tris(cyclopentadienyl)lanthanide(III) complexes, including crystal structures of $[\text{Ln}\{\eta^5\text{-C}_5\text{H}_4\text{CH}(\text{SiMe}_3)_2\}_3]$ ($\text{Ln} = \text{Nd}$ or Tm) and $[\text{Ce}\{\eta^5\text{-C}_5\text{H}_3(\text{SiMe}_2\text{Bu}^t)_2\text{-1,3}\}_3]$, 143

Tin

Synthesis and structural characterization of $(\text{THF})_3\text{Na}\{\text{Sn}(\text{C}_6\text{H}_5\text{-2,6-Trip}_2)_2\}$ ($\text{Trip} = \text{C}_6\text{H}_2\text{-2,4,6-}i\text{-Pr}_3$): effects of cation–anion association on Sn–Sn multiple bonding, 100

Titanium

The first early transition metal perfluorovinyl complexes: the synthesis of $\text{Cp}_2\text{M}(\text{CF}=\text{CF}_2)_n\text{X}_{2-n}$ ($\text{Cp} = \eta^5\text{-C}_5\text{H}_5^-$; $\text{M} = \text{Ti}, \text{Zr}$; $\text{X} = \text{Cl}$ or F) and structures of $\text{Cp}_2\text{Ti}(\text{CF}=\text{CF}_2)_n\text{X}_{2-n}$ ($\text{X} = \text{Cl}, \text{F}$) via Ti K-edge EXAFS studies, 301

Transannulation

Synthesis and structural features of new sterically hindered azaphosphatane systems: $\text{ZP}(\text{RNCH}_2\text{CH}_2)_3\text{N}$, 16

Transition metal

Preparation and organometallic complexes of the new unsymmetrical ligand: $\text{Ph}_2\text{PNHC}_6\text{H}_4\text{PPh}_2$, 83

Trialkylgallium

Reactions of trialkylgalliums with substituted hydrazines leading to the formation of rings and cages: X-ray structures of $(^i\text{Pr}_2\text{GaNHNMMe}_2)_2$ and $(\text{MeGaNHNBu}^t)_4$, 108

- Tribenzylidenemethane
Tribenzylidenemethane complexes of ruthenium. Synthesis and effects of the diastereoisomerism on the crystal packing, 338
- Tricarbaboranes
A simple route to essential tricarbollides. A high-yield synthesis of 7-amine-*nido*-7,8,9-tricarbaundecaboranes(10), 7-*L-nido*-7,8,9- $C_3B_8H_{10}$ (where $L = H_3N, Me_2NH, Me_3N,$ and Bu^tH_2N), 282
- Tricarbollides
A simple route to essential tricarbollides. A high-yield synthesis of 7-amine-*nido*-7,8,9-tricarbaundecaboranes(10), 7-*L-nido*-7,8,9- $C_3B_8H_{10}$ (where $L = H_3N, Me_2NH, Me_3N,$ and Bu^tH_2N), 282
- Tri-*n*-butyltin derivative
Synthesis and characterization of triphenyl-, tri-*n*-butyl and di-*n*-butyltin derivatives of 4-carboxybenzo-18-crown-6 and -15-crown-5, 195
- Triosmium clusters
Butenedithiolate triosmium cluster complexes from the reaction of $Os_3(CO)_{10}(NCMe)_2$ with 3,6-dihydro-1,2-dithiin, 9
- Triphenyltin derivative
Synthesis and characterization of triphenyl-, tri-*n*-butyl and di-*n*-butyltin derivatives of 4-carboxybenzo-18-crown-6 and -15-crown-5, 195
- Triphos
Synthesis and characterisation of linear triphos $\{PhP(CH_2CH_2PPh_2)_2\}$ bridged tri-, tetra- and pentametallic molybdenum(II) (π -allyl)/tungsten(II) (alkyne) complexes, 259
- Tungsten
Mixed-metal cluster chemistry: Part 14: reaction of $[Cp_2W_2Ir_2(CO)_{10}]$ with trimethylphosphite; X-ray crystal structures of $[Cp_2W_2Ir_2(\mu-CO)_3(CO)_5\{P(OMe)_3\}_2]$ and two modifications of $[CpWIr_3(\mu-CO)_3(CO)_7\{P(OMe)_3\}]$, 310
- Tyrosine
Cyclopalladation of phenols in the form of mixed phosphite esters, 246
- X-Ray analysis
1-Dialkylamino-1-phospha-[1]ferrocenophanes—synthesis and characterisation, 352
- X-ray diffraction
Geometry and electronic structure of bis(tetrahydridoborato)bis(cyclopentadienyl)zirconium(IV), 267
- X-ray molecular structure
Cyclopalladation of phenols in the form of mixed phosphite esters, 246
- X-rays
Organolanthanide chemistry with bis(trimethylsilyl)methyl- and *tert*-butyldimethylsilyl-substituted cyclopentadienyl ligands. Synthesis and characterisation of tris(cyclopentadienyl)lanthanide(III) complexes, including crystal structures of $[Ln\{\eta^5-C_5H_4CH(SiMe_3)_2\}_3]$ ($Ln = Nd$ or Tm) and $[Ce\{\eta^5-C_5H_3(SiMe_2Bu^t)_2-1,3\}_3]$, 143
- X-ray structure
Compounds containing gallium–silicon bonding: syntheses and X-ray crystal structures of bis-[2(dimethylaminomethyl)phenyl]-[tris(trimethylsilyl)silyl]gallium, $Ary_2GaSi(SiMe_3)_3$ and diphenyl-[tris(trimethylsilyl)silyl]gallium, $Ph_2GaSi(SiMe_3)_3 \cdot THF$, 119
Ferrocenylpyrazolyl bridging rhodium dimers. Crystal structure of $[Rh(\mu-pz^{Fc})(COD)]_2$, 173
Preparation and organometallic complexes of the new unsymmetrical ligand: $Ph_2PNHC_6H_4PPh_2$, 83
Synthesis, characterization and X-ray structural, electrochemical and Mössbauer study of mercury(II) complexes with 1'-(diphenylphosphino)ferrocenecarboxylic acid, 319
The first beryllium diorganoarsenide: synthesis and structure of $(\eta^5-C_5Me_5)BeAs(t-Bu)_2$, 66
- Zirconium
Geometry and electronic structure of bis(tetrahydridoborato)bis(cyclopentadienyl)zirconium(IV), 267
Immobilization of zirconium amide on a Cp-modified silica surface and its use as a catalyst for ethylene polymerization, 273
Synthese und Polymerisationseigenschaften substituierter *ansa*-Bis(flourenyliden)komplexe des Zirconiums, 328
The first early transition metal perfluorovinyl complexes: the synthesis of $Cp_2M(CF=CF_2)_nX_{2-n}$ ($Cp: \eta^5-C_5H_5^-$; $M = Ti, Zr$; $X = Cl$ or F) and structures of $Cp_2Ti(CF=CF_2)_nX_{2-n}$ ($X = Cl, F$) via Ti K-edge EXAFS studies, 301
- Zwitterionic cluster complex
Meta and *para* metallation of EPH_4^+ ($E = P, As$) and $N(PPh_3)_2^+$ by the dinuclear acylanion $[Re_2(\mu-H)(\mu-PCy_2)(CO)_7ax-(C(Ph)O)]^-$. Formation of zwitterionic cluster complexes $Re_2(\mu-H)(\mu-PCy_2)(CO)_7(x-C_6H_4EPH_3)$ ($E = P, As$; $x = m, p$) and $Re_2(\mu-H)(\mu-PCy_2)(CO)_7(x-C_6H_4PPh_2NPPH_3)$, 345