

JOURNAL OF ORGANOMETALLIC CHEMISTRY, VOL. 412 (1991)**SUBJECT INDEX****Antimony**

Allylstibonium bromide, stereoselective addition to aldehydes (Y.-Z. Huang, L.-J. Zhang, C. Chen, G.-Z. Guo), (412) 47

Arsenic

(+)-*cis*-[Dicarbonyl- μ -chloro- μ -{5 β -methyl-2 α -(1-methylethyl)cyclohexanethiolato}]bis[tris(1,1-dimethylethyl)arsine]dirhodium, synthesis, structure determination and catalytic activity of (H. Schumann, B. Gorella, M. Eisen, J. Blum), (412) 251

Boron

1-Azaadamantane, synthesis from 1-boraadamantane by a new method (Yu. N. Bubnov, M.E. Gursky, D.G. Pershin), (412) 1

1-Boraadamantane derivatives with functional groups in the side chain (Yu.N. Bubnov, T.V. Potapova, M.E. Gursky), (412) 311

Chromium

Indenyl anions, mechanism of migration of the Cr(CO)₃ unit from the six- to the five-membered ring (A. Ceccon, A. Gambaro, F. Gottardi, S. Santi), (412) 85

(η^5 -Pentadienyl)Cr^{II} complexes, preparation and reactions of; crystal structure of (η^5 -2,4-Me₂C₅H₅)(η^3 -C₃H₅)CrPMe₃ (P.W. Jolly, C. Krüger, U. Zakrzewski), (412) 371

Cobalt

Aldol and retroaldol reactions, catalysis by cobalt compounds (Y. Tencer, M. Michman, I. Goldenfeld), (412) 203

σ -Bonded alkynylcobalt(III) complexes of 1,3-bis(diacetylmonoximeimino)propane, synthesis and crystal structure of (B. Giese, M. Zehnder, M. Neuburger, F. Trach), (412) 415

Erbium

Organolanthanide hydrides, [O(CH₂CH₂C₅H₄)₂LnH]₂ (Ln = Gd, Er, Yb, Lu, Y); synthesis and reactivity towards alkenes, alkynes and organic halides (Z. Xie, C. Qian, Y. Huang), (412) 61

Gadolinium

Organolanthanide hydrides, [O(CH₂CH₂C₅H₄)₂LnH]₂ (Ln = Gd, Er, Yb, Lu, Y); synthesis and reactivity towards alkenes, alkynes and organic halides (Z. Xie, C. Qian, Y. Huang), (412) 61

Germanium

PhMe₂E-E'Me₃ (E, E' = Si and Ge), aryl-substituted catenates of group 4B elements; photochemical reactions, formation of a radical pair (K. Mochida, H. Kikkawa, Y. Nakadaira), (412) 9

Hafnium

Bis(trimethylsilylcyclopentadienyl) complexes of hafnium, synthesis of (J.B. Hoke, E.W. Stern), (412) 77

Iridium

$[M_6(CO)_{15}]^{2-}$ anionic clusters ($M = Co$ and Ir), electrochemistry of; preparation and chemical characterisation of $[Ir_6(CO)_{14}(NCO)]^-$ and of the radical anion $[Ir_6(CO)_{15}]^-$; proposed mechanism of formation of the hexanuclear substituted cluster $[Ir_6(CO)_{15}Cl]^-$ (A. Cinquantini, P. Zanello, R. Della Pergola, L. Garlaschelli, S. Martinengo), (412) 215

Iron

Bis[dicarbonyl(pentamethylcyclopentadienyl)iron], electron transfer reactions with 2,3-dichloro-5,6-dicyanobenzoquinone (F. Pradella, M. Scoconi, S. Sostero), (412) 137

$(C_5H_5)Fe(CO)(SiHPh_2)_2H$, a catalytically active intermediate in the hydrosilylation of acetophenone by diphenylsilane; synthesis of (H. Brunner, K. Fisch), (412) C11

$CpFe(CO)(L)X$ complexes ($Cp = \eta^5-C_5H_5$; $L = CO, PPh_3$; $X = Br, I$), photochemical halide exchange in; tandem photosubstitution of X^- and CO (J. Zakrzewski), (412) C23

$[(Cp(OC)_2Fe(olefin)]^+$ and $(1,5\text{-hexadiene})PtCl_2$, addition of α -amino acids to coordinated olefins of (I. Zahn, K. Polborn, W. Beck), (412) 397

Decaethylferrocene, reaction with 2,3,5,6-tetrafluoro-7,7',8,8'-tetracyano-*p*-chinodimethane gives a charge-transfer complex (D. Stein, H. Sitzmann, R. Boese, E. Dormann, H. Winter), (412) 143

Ditertiary phosphine and diphosphazane ligand-bridged derivatives of di-iron and diruthenium non-acarbonyl, electrochemical behaviour of (J.S. Field, A.M.A. Francis, R.J. Haines, S.F. Woollam), (412) 383

Ferrocene-1,1'-dicarbaldehyde, improved synthesis of (G.G.A. Balavoine, G. Doisneau, T. Fillebeen-Khan), (412) 381

"Flyover-bridged" complex $[Fe_2(CO)_5(P\text{-}dppm)(C_2Et_2(CO)C_2Et_2)]$, unexpected formation by reaction of a "ferrole" derivative with $Ph_2PCH_2PPh_2$ (dppm) and Me_3NO ; crystal structure of (R. Giordano, E. Sappa, D. Cauzzi, G. Predieri, A. Tiripicchio, M. Tiripicchio Camellini), (412) C14

Lithium

cis-Bis(tetrahydrothiophene)bis(η^2 -biphenyl-2,2'-diyl)platinum(IV) complexes, synthesis of (H.-A. Brune, H. Roth, G. Schmidtberg), (412) 237

sym-Disubstituted pyrazines, lithiation of (A. Turck, D. Trohay, L. Mojovic, N. Plé, G. Quéguiner), (412) 301

Lutetium

Organolanthanide hydrides, $[O(CH_2CH_2C_5H_4)_2LnH]_2$ ($Ln = Gd, Er, Yb, Lu, Y$); synthesis and reactivity towards alkenes, alkynes and organic halides (Z. Xie, C. Qian, Y. Huang), (412) 61

Manganese

$(CO)_n(L)Mn^I$ complexes ($L = S_2CPCy_3$ or diphosphine), ring opening and closing in complexes containing the $Mn(\mu-L)AuC_6F_5$ entity (D. Miguel, V. Riera, J.A. Miguel), (412) 127

Metalloenes

Bis(trimethylsilylcyclopentadienyl) complexes of hafnium, synthesis of (J.B. Hoke, E.W. Stern), (412) 77

Decaethylferrocene, reaction with 2,3,5,6-tetrafluoro-7,7',8,8'-tetracyano-*p*-chinodimethane gives a charge-transfer complex (D. Stein, H. Sitzmann, R. Boese, E. Dormann, H. Winter), (412) 143

Ferrocene-1,1'-dicarbaldehyde, improved synthesis of (G.G.A. Balavoine, G. Doisneau, T. Fillebeen-Khan), (412) 381

Molybdenum

Binuclear oxo complexes of molybdenum and tungsten with chalcogenes (O, S, Se, Te) as bridging ligands; synthesis and characterisation of (M. Gorzelli, H. Bock, L. Gang, B. Nuber, M.L. Ziegler), (412) 95

$Cp_2MM'(Cp)(CO)_3$ ($M = Nb, Ta$; $M' = Mo, W$), heteronuclear complexes with bridging and semi-bridging carbonyl groups; synthesis and dynamic behaviour (D. Perrey, J.C. Leblanc, C. Moise, J. Martin-Gil), (412) 363

Nickel

Ni⁰ induced CC-coupling between phenylisocyanate and five-membered cyclic alkenes, catalytic formation of β,γ -unsaturated carboxylic acid anilides (H. Hoberg, M. Nohlen), (412) 225

Niobium

Bis-silylated cyclopentadienyl niobium trihydride, electrochemical behaviour of; ESR spectroscopic characterisation of the dimeric hydride niobium(IV) complex $[\text{Nb}(\eta^5\text{-Me}_3\text{SiC}_5\text{H}_4)_2\text{H}]_2(\mu\text{-H})_2$ (L. Roullier, D. Lucas, Y. Mugnier, A. Antiñolo, M. Fajardo, A. Otero), (412) 353

Cp₂MM'(Cp)(CO)₃ (M = Nb, Ta; M' = Mo, W), heteronuclear complexes with bridging and semi-bridging carbonyl groups; synthesis and dynamic behaviour (D. Perrey, J.C. Leblanc, C. Moise, J. Martin-Gil), (412) 363

Osmium

Bis(pentafluorophenyl)dioxobis(pyridine)osmium(VI), (C₆F₅)₂OsO₂·(py)₂, synthesis, structure and properties of (W.A. Herrmann, S.J. Eder, P. Kiprof), (412) 407

[HOs₃(CO)₁₁]⁻, reactions with disubstituted acetylenes; synthesis and structural characterisation of the pentanuclear species $[\text{H}_2\text{Os}_5(\text{CO})_{13}(\text{Ph}_2\text{C}_2)(\text{PhC}_2(\text{H})(\text{C}_6\text{H}_4))]$ (B.F.G. Johnson, J. Lewis, J. Lunniss, D. Braga, F. Grepioni), (412) 195

[Os₃($\mu\text{-H}(\mu\text{-X})(\text{CO})_{10}$)] clusters (X = furyl, thienyl, pyrrolyl, or indolyl), comparison of *monohapto* versus *dihapto* and *exo* versus *endo* coordination (A.J. Arce, J. Manzur, M. Marquez, Y. De Sanctis), (412) 177

Palladium

Di- μ -hydroxo-bis[bis(pentachlorophenyl)palladate(II)] ion, synthesis and reactivity of (G. López, J. Ruiz, G. García, J.M. Martí, G. Sánchez, J. García), (412) 435

Phosphorus

Ni⁰ induced CC-coupling between phenylisocyanate and five-membered cyclic alkenes, catalytic formation of β,γ -unsaturated carboxylic acid anilides (H. Hoberg, M. Nohlen), (412) 225

Platinum

cis-Bis(tetrahydrothiophene)bis(η^2 -[4,4'-bis(trifluoromethyl)biphenyl-2,2'-diyl])platinum(IV), crystal and molecular structure of (T. Debaerdemaeker, H. Roth, H.-A. Brune), (412) 243

cis-Bis(tetrahydrothiophene)bis(η^2 -biphenyl-2,2'-diyl)platinum(IV) complexes, synthesis of (H.-A. Brune, H. Roth, G. Schmidtberg), (412) 237

[(Cp(OC)₂Fe(olefin))⁺ and (1,5-hexadiene)PtCl₂, addition of α -amino acids to coordinated olefins of (I. Zahn, K. Polborn, W. Beck), (412) 397

Five-coordinate platinum(II) hydride complexes, synthesis and NMR spectroscopy of (A. Handler, P. Peringer, E.P. Müller), (412) 451

Platina(IV)cyclopentane complex, synthesis and characterisation of (S. Tangestaninejad, M. Rashidi, R.J. Puddephatt), (412) 445

Rhenium

[($\eta^5\text{-C}_5\text{H}_5$)Re(NO)(PPh₃)(O=CRR')⁺X⁻, π/σ equilibria in rhenium ketone complexes; a marked electronic effect upon the binding model (D.P. Klein, D.M. Dalton, N. Quirós Méndez, A.M. Arif, J.A. Gladysz), (412) C7

Hydrido-carbonyl rhenium cluster, transformation of a coordinated carbon monoxide into a oxyethyl bridging group; synthesis and crystal structure of the anion $[\text{Re}_3(\mu\text{-H})_3(\text{CO})_9\{\mu_3\text{-}\eta^2\text{-C}(\text{H})(\text{Me})\text{O}\}]^{2-}$ (T. Beringhelli, G. D'Alfonso, M. Freni, G. Ciani, M. Moret, A. Sironi), (412) C4

Rhodium

- Chiral cyclopentadienyl hydrogenation catalysts; crystal structures of $[\text{Rh}(\text{C}_5\text{R}_4\text{R}^*)\text{Cl}_2]_2$ ($\text{R} = \text{H}$, $\text{R}^* =$ neomenthyl; $\text{R} = \text{Me}$, $\text{R}^* =$ menthyl) (P.A. Schofield, H. Adams, N.A. Bailey, E. Cesarotti, C. White), (412) 273
- (+)-*cis*-[Dicarbonyl- μ -chloro- μ -[5 β -methyl-2 α -(1-methylethyl)cyclohexanethiolato]]bis[tris(1,1-dimethylethyl)arsine]dirhodium, synthesis, structure determination and catalytic activity of (H. Schumann, B. Gorella, M. Eisen, J. Blum), (412) 251
- μ -Propylidene(2)-bis[carbonyl(η^5 -pentamethylcyclopentadienyl)rhodium(Rh-Rh), (μ -C(CH₃)₂)[(η^5 -C₅(CH₃)₅)Rh(CO)]₂, neutron diffraction study at 20 K (R.C. Stevens, J.S. Ricci, T.F. Koetzle, W.A. Herrmann), (412) 425
- Rhodium carbonyl catalyst modified with phosphines, cross-hydrocarbonylation of 1-alkyne and ethylene (P. Hong, T. Mise, H. Yamazaki), (412) 291
- Rhodium(I) complexes with the polydentate ligand 3,5-bis(4-methylpyrazol-1-yl)-4-methylpyrazole (R.M. Claramunt, C. Lopez, D. Sanz, J. Elguero, D. Carmona, M. Esteban, L.A. Oro, M. Begtrup), (412) 259

Ruthenium

- Bis(tetraphenylcyclopentadienyl)ruthenium(II), synthesis, molecular structure, and ¹H NMR analysis of (R.J. Hoobler, J.V. Adams, M.A. Hutton, T.W. Francisco, B.S. Haggerty, A.L. Rheingold, M.P. Castellani), (412) 157
- $[(\eta^6\text{-C}_6\text{Me}_6)\text{Ru}(\eta^6\text{-[2.2]paracyclophane})][\text{BF}_4]_2$, reactions with nucleophiles (J.W. Steed, D.A. Tocher), (412) C37
- Ditertiary phosphine and diphosphazane ligand-bridged derivatives of di-iron and diruthenium non-acarbonyl, electrochemical behaviour of (J.S. Field, A.M.A. Francis, R.J. Haines, S.F. Woollam), (412) 383
- Hydridoruthenium raft clusters $\text{H}_2\text{Ru}_6(\text{CO})_{15}(\text{L})(\text{C}_6\text{H}_4\text{O})$ ($\text{L} = \text{CO}$, $\text{P}(\text{OMe})_3$), solution and crystal structures of (S. Bhaduri, K. Sharma, H. Khwaja, P.G. Jones), (412) 169
- Pyrazine bridged bis-allyl ruthenium(IV) complex, synthesis and characterisation of; crystal structure of $[(\eta^3\text{-}\eta^3\text{-C}_{10}\text{H}_{16})\text{RuCl}_2]_2(\mu\text{-C}_4\text{H}_4\text{N}_2) \cdot 2\text{CHCl}_3$ (J.W. Steed, D.A. Tocher), (412) C34

Silicon

- $(\text{C}_5\text{H}_5)_2\text{Fe}(\text{CO})(\text{SiHPh}_2)_2\text{H}$, a catalytically active intermediate in the hydrosilylation of acetophenone by diphenylsilane; synthesis of (H. Brunner, K. Fisch), (412) C11
- Iminosilanes, facile synthesis of; crystal structure of $(\text{Me}_3\text{C})_2(\text{THF})\text{Si}=\text{N}-\text{SiMe}(\text{CMe}_3)_2$ (S. Walter, U. Klingebiel, D. Schmidt-Bäse), (412) 319
- $\text{PhMe}_2\text{E}-\text{E}'\text{Me}_3$ (E , $\text{E}' = \text{Si}$ and Ge), aryl-substituted catenates of group 4B elements; photochemical reactions, formation of a radical pair (K. Mochida, H. Kikkawa, Y. Nakadaira), (412) 9
- 1,2,5,6-Tetrasilacycloocta-3,7-diyne, thermal polymerisation of (M. Ishikawa, T. Hatano, T. Horio, A. Kunai), (412) C31
- Vinylphenyl-substituted silanes, metathesis of (B. Marciniak, C. Pietraszuk), (412) C1

Tantalum

- $\text{Cp}_2\text{MM}'(\text{Cp})(\text{CO})_3$ ($\text{M} = \text{Nb}$, Ta ; $\text{M}' = \text{Mo}$, W), heteronuclear complexes with bridging and semi-bridging carbonyl groups; synthesis and dynamic behaviour (D. Perrey, J.C. Leblanc, C. Moïse, J. Martin-Gil), (412) 363

Tin

- Monochloroacetyl-L-phenylalanine, diorganotin(IV) complexes of; crystal structure of $[\text{Bu}_2\text{Sn}(\text{O}_2\text{C}(\text{CH}_2\text{Ph})\text{C}(\text{H})\text{N}(\text{H})\text{C}(\text{O})\text{CH}_2\text{Cl})_2]$ (G.K. Sandhu, R. Hundal, E.R.T. Tiekink), (412) 31
- Tetrabutylbis(3-benzoylpropionato)distannoxane dimer, $[(\text{C}_4\text{H}_9)_2\text{SnO}_2\text{CCH}_2\text{CH}_2\text{C}(\text{O})\text{C}_6\text{H}_5]_2\text{O}$, crystal structure of (S.W. Ng, C. Wei, V.G. Kumar Das), (412) 39
- 3-Ureidopropionic acid, organotin esters of; crystal structure of triphenyltin(IV) 3-ureidopropionate, $(\text{C}_6\text{H}_5)_3\text{SnOCO}(\text{CH}_2)_2\text{NHCONH}_2$ (K.-M. Lo, V.G. Kumar Das, W.-H. Yip, T.C.W. Mak), (412) 21

Titanium

Titanium(IV) complexes containing highly phenylated π -cyclopentadienyl ligands; structure of (π -C₅H₅)(π -C₅Ph₅)TiCl₂ (U. Thewalt, G. Schmid), (412) 343

Tungsten

Binuclear oxo complexes of molybdenum and tungsten with chalcogenes (O, S, Se, Te) as bridging ligands; synthesis and characterisation of (M. Gorzelli, H. Bock, L. Gang, B. Nuber, M.L. Ziegler), (412) 95

Cp₂MM'(Cp)(CO)₃ (M = Nb, Ta; M' = Mo, W), heteronuclear complexes with bridging and semi-bridging carbonyl groups; synthesis and dynamic behaviour (D. Perrey, J.C. Leblanc, C. Moïse, J. Martin-Gil), (412) 363

Mechanism of the W(CO)₆-mediated C-S bond cleavage reaction (C.-T. Ng, T.-Y. Luh), (412) 121

Uranium

Stable biscyclopentadienyl uranium(IV) dichloride containing two C₅H₄-rings interlinked by a metal-coordinated 2,6-bis(methylene)pyridyl unit; synthesis, spectroscopy, and crystal structure of (G. Paolucci, R.D. Fischer, F. Benetollo, R. Seraglia, G. Bombieri), (412) 327

Ytterbium

(η^5 -C₅H₅)₂Yb·DME, synthesis and structure of (J. Jin, S. Jin, W. Chen), (412) 71

Organolanthanide hydrides, [O(CH₂CH₂C₅H₄)₂LnH]₂ (Ln = Gd, Er, Yb, Lu, Y); synthesis and reactivity towards alkenes, alkynes and organic halides (Z. Xie, C. Qian, Y. Huang), (412) 61

Yttrium

Dicyclopentadienylyttrium chloride, reaction with acyl chlorides in tetrahydrofuran; acylative cleavage of the Cp-Y π -bond and tetrahydrofuran ring (C. Qian, A. Qiu, Y. Huang, W. Chen), (412) 53

Organolanthanide hydrides, [O(CH₂CH₂C₅H₄)₂LnH]₂ (Ln = Gd, Er, Yb, Lu, Y); synthesis and reactivity towards alkenes, alkynes and organic halides (Z. Xie, C. Qian, Y. Huang), (412) 61

Book reviews

Dictionary of chemistry and chemical technology: English-German, edited by H. Gross (J.D. Smith), (412) C27