

Available online at www.sciencedirect.com





Volume 693, issue 11, 15 May 2008

www.elsevier.com/locate/jorganchem

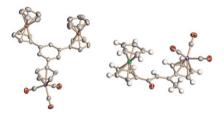
Contents

Regular Papers

Francis O. Ogini, Yanick Ortin, Amir H. Mahmoudkhani, Anthony F. Cozzolino, Michael J. McGlinchey, Ignacio Vargas-Baca

J. Organomet. Chem. 693 (2008) 1957

An investigation of the formation of 1,3,5heterosubstituted benzene rings by cyclocondensation of acetyl-substituted organometallic complexes The condensation reaction of acetylferrocene and acetylcymantrene affords heterometallic 1,3,5-benzenes and (E)-1,3-disubstituted-2-buten-1-ones.

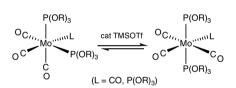


Kozo Fukumoto, Hiroshi Nakazawa

J. Organomet. Chem. 693 (2008) 1968

Geometrical isomerization of *fac/mer*-Mo(CO)₃(phosphite)₃ and *cis/trans*-Mo(CO)₄(phosphite)₂ catalyzed by Me₃SiOSO₂CF₃

Geometrical isomerization of fac-Mo(CO)₃L₃ (L = P(OPh)₃, P(OMe)₃, P(OEt)₃) to the *mer* form and that of *cis*-Mo(CO)₄L₂ (L = P(OPh)₃, P(OMe)₃, PPh₂(OMe)) to the *trans* form were observed in CH₂Cl₂ at room temperature in the presence of a catalytic amount of Me₃SiOSO₂CF₃ (TMSOTf).

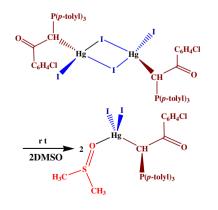


Seyyed Javad Sabounchei, Hassan Nemattalab, Sadegh Salehzadeh, Mehdi Bayat, Hamid Reza Khavasi, Harry Adams

J. Organomet. Chem. 693 (2008) 1975

New mono and binuclear mercury(II) complexes of phosphorus ylides containing DMSO as ligand: Spectral and structural characterization

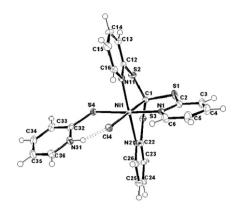
Reaction of some phosphorus ylides with Hg(II) halides in equimolar ratios using methanol as solvent leads to parent binuclear products. The bridge-splitting reaction of one of these binuclear complexes by DMSO yields the new mononuclear complex containing DMSO as ligand. Theoretical studies show that, formation of mononuclear complexes in DMSO solution energetically is more favorable than that of binuclear complexes.

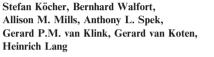


Flaviana T. Vieira, Geraldo M. de Lima, James L. Wardell, Solange M.S.V. Wardell, Klaus Krambrock, Antônio F. de C. Alcântara

J. Organomet. Chem. 693 (2008) 1986

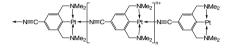
Synthesis and characterization of [chloro-{2(1H)-pyridinethione-*S*} {tris(pyridin-2-ylthiolato)methyl-*C*,*N*,*N'*,*N''*]}nickel(II)], [Ni(TPT-M)(SPyH)Cl] Synthesis and characterization of [chloro- $\{2(1H)$ -pyridinethione- $S\}$ {tris(pyridin-2-ylthio-lato)methyl-C, N, N', N'']}nickel(II)], [Ni(TPTM)-(SPyH)CI] is reported.





J. Organomet. Chem. 693 (2008) 1991

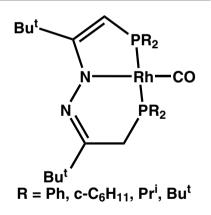
Synthesis and reaction chemistry of 4-nitrilesubstituted NCN-pincer palladium(II) and platinum(II) complexes (NCN = $[N \equiv C-4-C_6H_2(CH_2NMe_2)_2-2,6]^-$) The synthesis, reaction chemistry and properties of mononuclear [MBr($N\equiv C-4-C_6H_2(CH_2NMe_2)_2-2,6$)] (M = Pd, Pt) and polymeric {[Pt($N\equiv C-4-C_6H_2(CH_2NMe_2)_2-2,6$)](ClO₄)}_n is discussed. The solid state structures of the mononuclear systems are reported.



Martin Pošta, Jan Čermák, Jan Sýkora, Pavel Vojtíšek, Ivana Císařová, Radek Fajgar

J. Organomet. Chem. 693 (2008) 1997

Square planar diphosphinoazine rhodium(I) amido carbonyl complexes with an unsymmetrical PNP' pincer-type coordination A series of novel diphosphinoazine rhodium amido carbonyl complexes [$\{R_2PCH=C(Bu')-NN=C(Bu')CH_2PR_2\}Rh(CO)$] ($R = Ph, Pr^i$, c-C₆H₁₁, Bu') was prepared. Measurement of valence vibration frequencies of CO in the complexes allowed to estimate the electron density on the rhodium. An unusual diphosphinoazine bond cleavage was observed. Four X-ray crystal structures are reported.

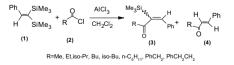


Kazem D. Safa, Soleiman Paymard Samani, Shahin Tofangdarzadeh, Akbar Hassanpour

J. Organomet. Chem. 693 (2008) 2004

Study of the reaction of 1,1-bis(trimethylsilyl)-2-phenylethylene with some acyl chlorides in the presence of $AlCl_3$

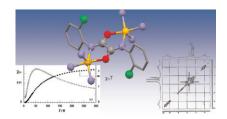
1,1-Bis(trimethylsilyl)-2-phenylethylene (1), reacts with various acyl chlorides (RCOCl, R = Me, Et, *iso*-Pr, *n*-Bu, *iso*-Bu, *iso*-C₅H₁₁, PhCH₂, PhCH₂CH₂) in the presence of AlCl₃ to give α-silyl-α,β-unsaturated enones **3** with high *E* stereoselectivity along with *trans*-α,βunsaturated ketones.



M. Dolores Santana, Gabriel García, Consuelo Vicente-Hernández, Luís García, José Pérez, Teófilo Rojo, Luís Lezama

J. Organomet. Chem. 693 (2008) 2009

N,N'-bis(substituted-phenyl)oxamides and their dinuclear pentacoordinate nickel(II) complexes New N,N'-bis(substituted-phenyl)oxamides have been prepared and their dinuclear nickel(II) complexes {[Ni(N₃-mc)]₂(μ -oxamidate)}(PF₆)₂ characterized by X-ray crystallography and spectroscopic and magnetic studies.

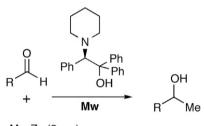


Miroslav Genov, Gorka Salas, Pablo Espinet

J. Organomet. Chem. 693 (2008) 2017

Effect of microwave heating in the asymmetric addition of dimethylzinc to aldehydes

Microwave-heated enantioselective additions of dimethylzinc to various aldehydes are reported. Dramatically reduced reaction times and lower catalyst loadings (5%), can be achieved, with excellent yields and just small loss of enantioselectivity (up to 83% enantioselectivity is achieved) compared to room temperature conditions.

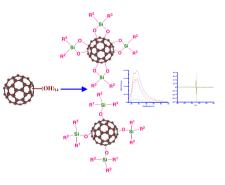


Me₂Zn (2 eq.)

Rachana Singh, Thakohari Goswami

J. Organomet. Chem. 693 (2008) 2021

Synthesis and evaluation of thermal, photophysical and magnetic properties of novel starlike fullerene–organosilane macromolecules Fullerene core starlike organosilane macromolecules have been synthesized and tested for their photophysical and magnetic properties. Two different reaction methods have been utilized (displacement and transesterification reactions) using fullerenol as the substrate and different chloro/alkoxy vinyl silane as reagents for the synthesis. Photophysical and magnetic properties are drastically influenced by the presence of fullerene moiety.

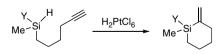


Silvia Díez-González, Luis Blanco

J. Organomet. Chem. 693 (2008) 2033

Synthesis of 2-methylidene-1-silacyclohexanes by intramolecular hydrosilylation

A variety of (hex-5-ynyl)silanes was prepared from readily available materials and converted in the corresponding 2-methylidene-1-silacyclohexanes *via* intramolecular hydrosilylation. Among the catalytic system tested, Speier's catalyst was found to be the most suitable for this transformation.



Contents

Majid Moghadam, Shahram Tangestaninejad, Valiollah Mirkhani, Iraj Mohammadpoor-Baltork, Shahin Chahardahcheric, Ziba Tavakoli

J. Organomet. Chem. 693 (2008) 2041

Rapid and highly efficient trimethylsilylation of alcohols and phenols with hexamethyldisilazane (HMDS) catalyzed by reusable zirconyl triflate, [ZrO(OTf)₂] In this paper, rapid and efficient trimethylsilylation of alcohols and phenols with hexamethyldisilazane catalyzed by $ZrO(OTf)_2$ is reported. Primary, secondary and tertiary alcohols as well as phenols were efficiently converted to their corresponding TMS ethers in short reaction times at room temperature. This method can be used for chemoselective silylation of primary alcohols in the presence of secondary and tertiary alcohols and phenols.

 $2 \text{ R-OH} + \text{Me}_3\text{SiNHSiMe}_3 \xrightarrow{\text{ZrO(OTf)}_2} 2 \text{ R-OSiMe}_3 + \text{NH}_3$

Wan-Fei Li, Hong-Mei Sun, Mu-Zi Chen, Qi Shen, Yong Zhang

J. Organomet. Chem. 693 (2008) 2047

Synthesis and catalytic activity of neutral salicylaldiminato nickel(II) complexes bearing a single *N*-heterocyclic carbene ligand

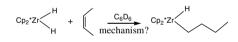
Neutral salicylaldiminato Ni(II) complexes bearing a single *N*-heterocyclic carbene (NHC) ligand (1 and 2) have been synthesized and characterized by X-ray structural analysis. Complex 1 can catalyze the dimerization of ethylene in the presence of MMAO with a moderate activity of 3.05×10^4 g(mol Ni)⁻¹ h⁻¹ atm⁻¹ in a highly selective fashion.



Siwei Bi, Xiaojian Kong, Yanyun Zhao, Xiaoran Zhao, Qingming Xie

J. Organomet. Chem. 693 (2008) 2052

Detailed mechanisms on insertion of *cis*-2butene into the Zr-H bond of Cp₂ZrH₂: A DFT study The mechanisms for both the side-insertion and the central-insertion of *cis*-2-butene into the Zr–H bond of Cp_2ZrH_2 to give $Cp_2Zr(H)(CH_2CH_2CH_2CH_3)$ are theoretically investigated with the aid of DFT calculations.



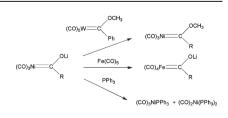
Notes

James R. Hermanson, Timothy M. Figley, Anna L. Seibert, Allan R. Pinhas

J. Organomet. Chem. 693 (2008) 2061

The reactivity of a nucleophilic nickel acylate complex

The reactivity of a nucleophilic nickel acylate complex with a tungsten carbene complex, $Fe(CO)_5$, $Cr(CO)_6$, PPh₃, and CO was investigated. With the tungsten carbene complex, a methyl transfer occurred. With the metal carbonyl complexes, the acylate group on the nickel and a carbonyl on the iron or chromium traded places. With the PPh₃ and CO, the acylate anion was replaced by the phosphine or CO ligand.



Amir Kohner-Kerten, Edit Y. Tshuva

J. Organomet. Chem. 693 (2008) 2065

Preparation and X-ray characterization of two-coordinate Cu(I) complex of aliphatic thiolato ligand: Effect of steric bulk on coordination features Cu(I) complexes of aliphatic thiolato ligands were prepared, where the steric bulk of the ligand impacts the coordination number and nuclearity. Whereas the isopropylthiolato ligand leads mainly to a Cu_4S_6 cluster where all Cu(I) centers are three coordinated, the *tert*-butylthiolato ligand leads under proper conditions to a mononuclear two-coordinate complex.





Full text of this journal is available, on-line from ScienceDirect. Visit www.sciencedirect.com for more information.