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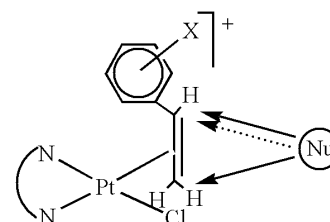
Regular Papers

Carmen R. Barone, Renzo Cini, Eric Clot, Odile Eisenstein, Luciana Maresca, Giovanni Natile, Gabriella Tamasi

J. Organomet. Chem. 693 (2008) 2819

A NMR, X-ray, and DFT combined study on the regio-chemistry of nucleophilic addition to platinum(II) coordinated terminal olefins

The Markovnikov vs. anti-Markovnikov nucleophilic addition to coordinated styrene in the complexes $[\text{PtCl}(\eta^2\text{-CH}_2=\text{CH-C}_6\text{H}_4\text{-X})(\text{tmeda})](\text{ClO}_4)$ has been evaluated. The presence on the phenyl ring of an electron donor group produces a nearly 100% Markovnikov isomer (\rightarrow); an electron withdrawing substituent reduces the selectivity (\rightarrow) without reversing it.

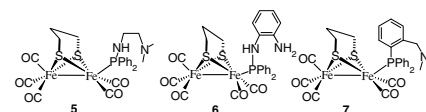


Zhen Wang, Wenfeng Jiang, Jianhui Liu, Weina Jiang, Yu Wang, Björn Åkermark, Licheng Sun

J. Organomet. Chem. 693 (2008) 2828

Pendant bases as proton transfer relays in diiron dithiolate complexes inspired by [Fe-Fe] hydrogenase active site

Three dinuclear iron complexes containing pendant nitrogen bases in phosphine ligands with general formula $(\mu\text{-pdt})[\text{Fe}_2(\text{CO})_5\text{L}]$ (where pdt is $\text{SCH}_2\text{CH}_2\text{CH}_2\text{S}$, $\text{L} = \text{PPh}_2\text{NHC}_2\text{H}_4\text{N}(\text{CH}_3)_2$ (5), $\text{PPh}_2\text{NH}(2\text{-NH}_2\text{C}_6\text{H}_4)$ (6), $\text{PPh}_2[2\text{-CH}_2\text{N}(\text{CH}_3)_2\text{C}_6\text{H}_4]$ (7)), were prepared as the models of the [Fe-Fe] hydrogenase active site. Electrochemical properties of the complexes were studied in the presence of triflic acid by cyclic voltammetry.

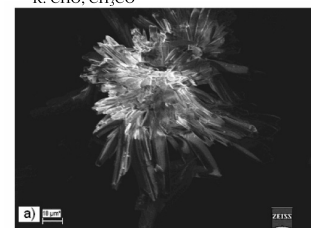
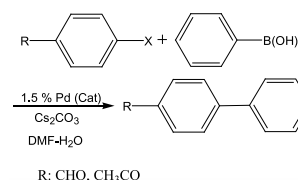


Ahmet Kilic, Feyyaz Durap, Murat Aydemir, Akin Baysal, Esref Tas

J. Organomet. Chem. 693 (2008) 2835

Ru(II) with chelating containing N_4 -type donor quadridentate Pd-oxime metal complexes: Syntheses, spectral characterization, thermal and catalytic properties

Five new metal complexes 1, 2, 3, 4 and 5 have been isolated and characterized by UV-VIS, FT-IR, ^1H NMR, magnetic susceptibility measurements, elemental analysis, molar conductivity, X-ray powder techniques, thermal analyses and their morphology studied by SEM measurements. The catalytic results shown that the 1 complex is more efficient than the other complexes and has the more selectivity for this coupling reaction. Also, the thermal results shown that the most stable complex is 1 compound while the less stable is compound 4.

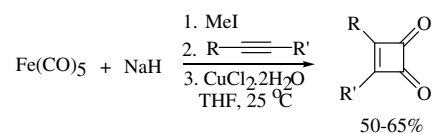


**Mariappan Periasamy, Mallesh Beesu,
D. Shyam Raj**

J. Organomet. Chem. 693 (2008) 2843

A simple and convenient method for the synthesis of cyclobutenediones from alkynes using new Fe(CO)₅/NaH/Mel reagent system

Reactive iron carbonyl species prepared using the readily accessible Fe(CO)₅, NaH and Mel reagent combination upon reaction with alkynes followed by CuCl₂ oxidation gives the corresponding cyclobutenediones in 50–65% yields.

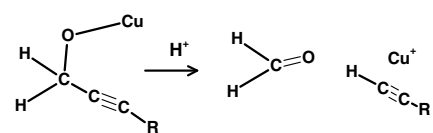


**M.F.N.N. Carvalho, T.A. Fernandes,
A.S.D. Ferreira, L.G. Alves, R. Herrmann**

J. Organomet. Chem. 693 (2008) 2847

Cleavage of acetylenic substituents from camphor-derivatives by copper(I) chloride

CuCl selectively cuts the acetylenic substituents from the camphor skeleton in a reaction that is a formal reversal of the formation of the camphor-derived alkyne compounds. Calculations on model systems show possible intermediates and reaction paths.

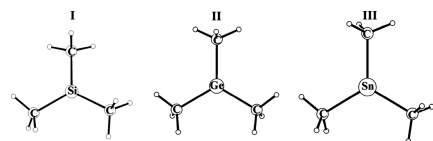


Igor S. Ignatyev, Tom Sundius

J. Organomet. Chem. 693 (2008) 2856

Rearrangement and decomposition of (CH₃)₃M⁺ (M = Si, Ge, Sn) ions: A DFT study

Why do cations I and II decompose mainly by the ethylene elimination, while III decompose by the SnC homolytic cleavage.

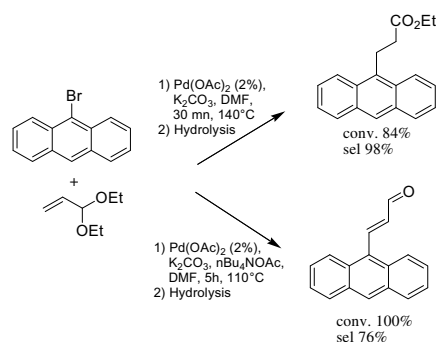


**Ke Pan, Sébastien Noël, Catherine Pinel,
Laurent Djakovitch**

J. Organomet. Chem. 693 (2008) 2863

Heck arylation of acrolein acetals using the 9-bromoanthracene: A case of study

The reaction conditions influence drastically the selectivity of the coupling of 9-bromoanthracene with acrolein acetals. Optimising the reaction conditions allowed the selective synthesis of the saturated esters or, on the other hand, of the unsaturated aldehydes. A global mechanism is proposed to outline the influence of additives.

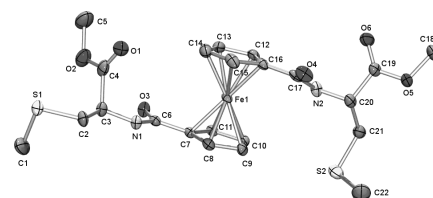


**Conor C.G. Scully, Paul Jensen,
Peter J. Rutledge**

J. Organomet. Chem. 693 (2008) 2869

Mercury binding by ferrocenyl peptides with sulfur-containing side chains: Electrochemical, spectroscopic and structural studies

Ferrocenyl peptides incorporating amino acids derived from L-methionine, L-cysteine or DL-homocysteine interact with mercury more strongly than with other heavy metals. Metal-peptide interactions have been characterised using electrochemistry and NMR, while crystal structures for the ferrocenyl peptides reveal an open conformation in the absence of mercury.

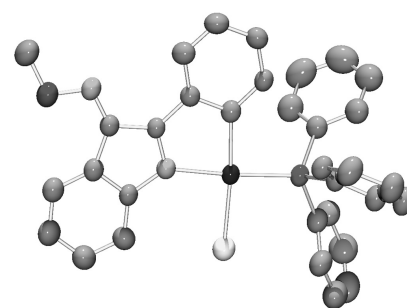


**Concepción López, Asensio González,
Carlos Moya, Ramon Bosque,
Xavier Solans, Mercè Font-Bardía**

J. Organomet. Chem. 693 (2008) 2877

Cyclopalladation of 3-methoxyimino-2-phenyl-3H-indoles

A study of the cyclopalladation of the 3-methoxyimino-2-phenyl-3H-indole compounds: $C_6H_4-4R-1-(C_8H_4N-3'-NOMe)$ {R = Cl (**1a**) or H (**1b**)} is reported. The experimental results reveal that the reaction is regioselective giving five-membered palladacycles where **1a** or **1b** act as bidentate $[C(sp^2, \text{phenyl}), N_{\text{indole}}]^-$ ligands. Theoretical calculations undertaken have allowed us to rationalize the preferential formation of this type of metallacycles.



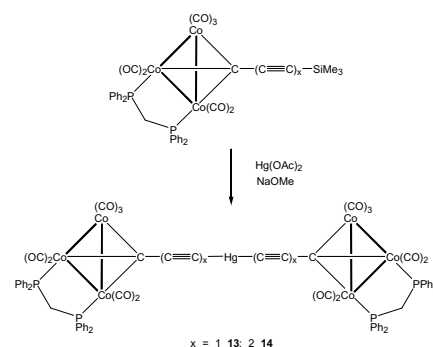
**Michael I. Bruce, Natasha N. Zaitseva,
Brian K. Nicholson, Brian W. Skelton,
Allan H. White**

J. Organomet. Chem. 693 (2008) 2887

Syntheses and molecular structures of some compounds containing many-atom chains end-capped by tricobalt carbonyl clusters

Pd(0)/Cu(I)-catalysed reactions between $\{Co_3\{\mu_3-C(C\equiv C)_2Au(PPh_3)\}(\mu-dppm)(CO)_7\}$ and $I(C\equiv C)_2SiMe_3$ or $FcC\equiv Cl$ gave $\{Co_3\{\mu_3-$

$C(C\equiv C)_xR\}(\mu-dppm)(CO)_7$ [$x = 4$, R = $SiMe_3$; $x = 3$, R = Fc **8**]; treatment of **3** with NaOMe and $AuCl(PPh_3)$ gave **4** [$x = 4$, R = $Au(PPh_3)$]. Related reactions give $Co_3\{\mu_3-C(C\equiv C)_2[Ru(PP)Cp']\}(\mu-dppm)_n(CO)_{9-2n}$ [PP = $(PPh_3)_2$, Cp' = Cp, $n = 1$ **5**; PP = dppe, Cp' = Cp', $n = 1$ **6**, **0** **7**]. Bis-cluster complexes $\{Co_3(\mu-dppm)(CO)_7\}_2(\mu-C_x)$ ($x = 14$, **12**; $x = 16$, **9**; $x = 18$, **11**; $x = 26$, **10**) are the longest cluster-capped C_x chains so far described. The mercury-bridged compounds $Hg\{(C\equiv C)_x[C_3(\mu-dppm)(CO)_7]\}_2$ ($x = 1$, **13**; $x = 2$, **14**) are reported.

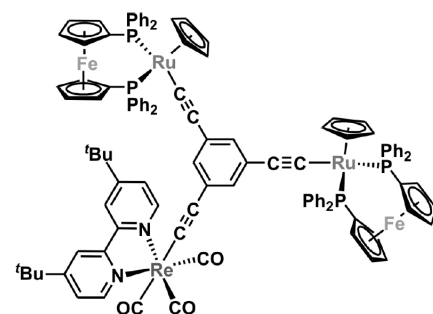


**Rico Packheiser, Manja Lohan,
Björn Bräuer, Frédéric Justaud,
Claude Lapinte, Heinrich Lang**

J. Organomet. Chem. 693 (2008) 2898

Intermetallic communication through a 1,3,5-triethynylbenzene connector

1,3,5-Triethynylbenzene was used as a connecting unit for different transition metal building blocks. Cyclic voltammetric, UV-Vis- and EPR-spectroscopic investigations validate intermetallic communication.

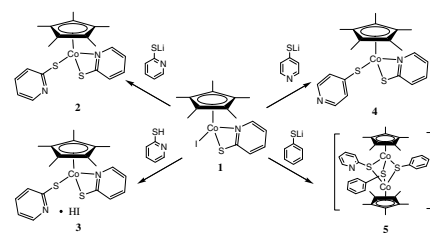


Peng-Cheng Zhang, Hui Wang, Shu Liu, Xu-Qing Guo, Xiu-Feng Hou

J. Organomet. Chem. 693 (2008) 2903

Reactions of 2-pyridinethiolate cobalt(III) complexes with pyridinethiolate or benzenethiolate ligands

Four half-sandwich mononuclear or dinuclear cobalt complexes $\text{Cp}^*\text{Co}(2\text{-PyS})_2$ (**2**), $\text{Cp}^*\text{Co}(2\text{-PyS})_2 \cdot \text{HI}$ (**3**), $\text{Cp}^*\text{Co}(2\text{-PyS})(4\text{-PyS})$ (**4**), $(\text{Cp}^*\text{Co})_2(\mu\text{-PhS})_2(\mu\text{-}2\text{-PyS})\text{I}$ (**5**) were successfully synthesized and characterized structurally by the reactions of $\text{Cp}^*\text{Co}(2\text{-PyS})\text{I}$ (**1**) with 2-pyridinethiolate, 2-pyridinethione, lithium 4-pyridinethiolate and lithium benzenethiolate, respectively.

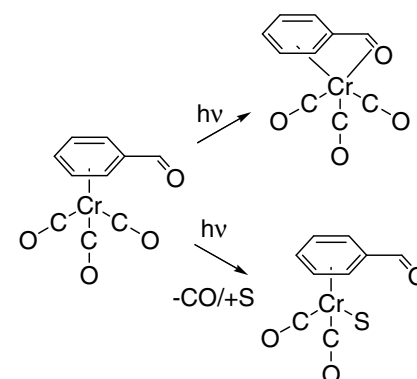


Mohammed A.H. Alamiry, Peter Brennan, Conor Long, Mary T. Pryce

J. Organomet. Chem. 693 (2008) 2907

A laser flash photolysis, matrix isolation, and DFT investigation of $(\eta^6\text{-C}_6\text{H}_5\text{Y})\text{Cr}(\text{CO})_3$ (Y = NH₂, OCH₃, H, CHO, or CO₂CH₃)

Photoinduced CO-loss and arene-loss from $(\eta^6\text{-C}_6\text{H}_5\text{Y})\text{Cr}(\text{CO})_3$ (Y = NH₂, OCH₃, H, CHO or CO₂CH₃) result from discrete photophysical processes whose efficiency depends on the solvent. The quantum yield (ϕ) for arene loss is greater in halocarbon than in hydrocarbon solvents ($\phi = 0.17$ vs. 0.048 for Y = CHO).

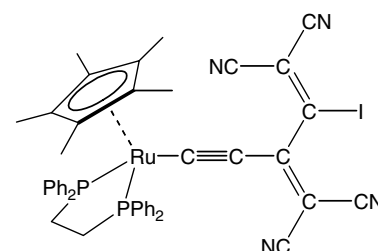


Michael I. Bruce, Martyn Jevric, Christian R. Parker, Wyona Patalinghug, Brian W. Skelton, Allan H. White, Natasha N. Zaitseva

J. Organomet. Chem. 693 (2008) 2915

Iodo-alkynyl- and iodo-butadiynyl-ruthenium complexes

Addition of $[\text{I}(\text{py})_2]\text{BF}_4$ to $\text{Ru}(\text{C}\equiv\text{CH})(\text{dppe})\text{Cp}^*$ gave the iodo-vinylidene $[\text{Ru}(\text{C}=\text{CHI})(\text{dppe})\text{Cp}^*]\text{BF}_4$ **1**, which could be deprotonated to $\text{Ru}(\text{C}\equiv\text{C})(\text{dppe})\text{Cp}^*$ **2**. The attempted preparation of $\text{Ru}(\text{C}\equiv\text{CC}\equiv\text{C})(\text{dppe})\text{Cp}^*$, followed by derivatisation with tcne, gave the dienynyl $\text{Ru}\{\text{C}\equiv\text{CC}[\text{C}(\text{CN})_2]\text{Cl}=\text{C}(\text{CN})_2\}(\text{dppe})\text{Cp}^*$ **3**, which with $\text{Ru}\{\text{C}\equiv\text{CC}\equiv\text{CAu}(\text{PPh}_3)\}(\text{dppe})\text{Cp}^*$ afforded $\text{Ru}\{\text{C}\equiv\text{CC}=\text{C}(\text{CN})_2\text{C}=\text{C}(\text{CN})_2\text{Au}(\text{PPh}_3)\}(\text{dppe})\text{Cp}^*$ **4**.

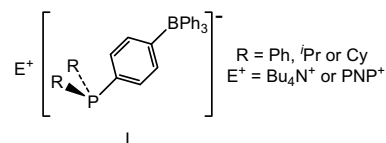


Michael T. Beach, Jesse M. Walker, Timothy G. Larocque, Justin L. Deagle, Ruiyao Wang, Gregory J. Spivak

J. Organomet. Chem. 693 (2008) 2921

The (phosphino)tetraphenylborate ligand in ruthenium-arene chemistry

The chemistry and solution behaviour of anionic ruthenium-arene complexes containing the novel (phosphino)tetraphenylborate ligands $[\text{PR}_2(p\text{-Ph}_3\text{BC}_6\text{H}_4)]^-$ (R = Ph, *i*Pr or Cy) are described.

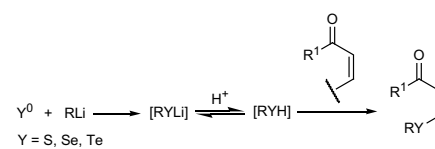


**João V. Comasseto, Rogério A. Gariani,
Jefferson L. Princival,
Alcindo A. Dos Santos, Fabiano K. Zinn**

J. Organomet. Chem. 693 (2008) 2929

Hydrochalcogenation of activated olefines.
Synthesis of functionalized dialkylchalcogenides

Alkanethiols, selenols and tellurols are generated *in situ* by reaction of elemental sulfur, selenium and tellurium with commercial alkylolithiums, followed by reaction with deoxygenated water. The alkanethiols react *in situ* with activated olefins in a Michael-type addition reaction.

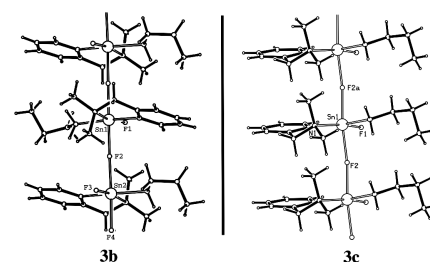


**Petr Švec, Zdeňka Padělková,
Zdeněk Černošek, Frank De Proft,
Aleš Růžička**

J. Organomet. Chem. 693 (2008) 2937

The differences in solid state structures of
C,N-chelated nbutyltin(IV) fluorides

The three different forms of dimeric and/or polymeric $[L^{CN}nBuSnF_2]$ have been studied by X-ray crystallographic methods, DSC and theoretical calculations.

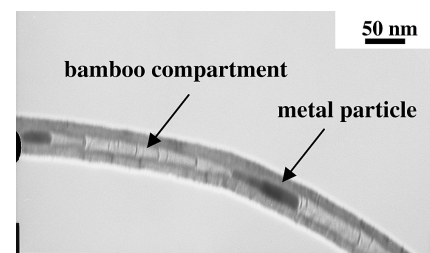


**Edward N. Nxumalo, Vincent O. Nyamori,
Neil J. Coville**

J. Organomet. Chem. 693 (2008) 2942

CVD synthesis of nitrogen doped carbon
nanotubes using ferrocene/aniline
mixtures

Nitrogen doped carbon nanotubes have been synthesized by the chemical vapour deposition floating catalyst method using either 4-ferrocenylaniline or mixtures of varying concentrations of ferrocene/aniline together with toluene as added carbon source.



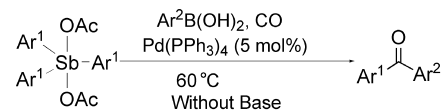
Notes

**Weiwei Qin, Shuji Yasuike,
Naoki Kakusawa, Jyoji Kurita**

J. Organomet. Chem. 693 (2008) 2949

Palladium-catalyzed carbonylative cross-coupling reaction of triarylsantimony dicarboxylates with arylboronic acids: Synthesis of biaryl ketones

The reaction of triarylsantimony diacetate with arylboronic acid under carbon monoxide (1 atm) atmosphere resulted in carbonylative cross-coupling reaction to afford unsymmetrical biaryl ketones in good yields. The reaction proceeds smoothly without any base as an additive and can be applied to a wide range of triarylsantimony diacetates and boronic acids.



**Ming-Zhong Cai, Yue Wang,
Ping-Ping Wang**

J. Organomet. Chem. 693 (2008) 2954

A facile stereoselective synthesis of difunctionalized 1,3-dienes containing tin and halogen via hydrozirconation of (*Z*)-3-(tributylstannyl)alk-3-en-1-yne

(*1E,3Z*)-1-Halo-3-(tributylstannyl)-substituted 1,3-dienes could be synthesized stereoselectively via hydrozirconation of (*Z*)-3-(tributylstannyl)alk-3-en-1-yne, followed by trapping with iodine or NBS.

