Volume 695, Issues 15-16, 1-15 July 2010

Contents lists available at ScienceDirect

Journal of Organometallic Chemistry

journal homepage: www.elsevier.com/locate/jorganchem

Contents

COMMUNICATIONS

SEVIER

Jan Turek, Zdeňka Padělková, Mikhail S. Nechaev, Aleš Růžička

J. Organomet. Chem. 695 (2010) 1843

The reactivity of a C,N-chelated diorganotin (IV) dichlorides with various reducing agents has been studied.



Jinling Li, Ziwei Gao, Li Han, Lingxiang Gao, Guofang Zhang, Wayne Tikkanen

J. Organomet. Chem. 695 (2010) 1848

The cage half-sandwich cyclopentadienylzirconium compound, $[(CpZr)_6(\mu-O_2C-C_6H_2 Cl_2-2-O)_9 (OH_2)_3] \cdot H_2O$ (1), was synthesized and characterized. The X-ray diffraction analysis shows that a dianionic, substituted salicylate ligand adopts a bridging chelate μ_2 -(O, O', O'') coordination mode and the twisted tripyramidal prism cage structure with one water molecule in the cage's cavity.



REGULAR ARTICLES

K. Kiss, A. Csámpai, P. Sohár

J. Organomet. Chem. 695 (2010) 1852

Novel ferrocenyl-2-thioxo-dihydropyrimidines, and condensed heterocycles were formed in the Biginelli reactions of formylferrocene, 1,3-dioxo-components and thiourea catalyzed by boric acid and ytterbium triflate, respectively. The interpretation of reactions were supported by B3LYP/ 6-31 G(d) modelling studies. The structures of the new compounds were established by IR and NMR spectroscopy.





Shinobu Sato, Masato Tsueda, Shigeori Takenaka

J. Organomet. Chem. 695 (2010) 1858

Synthesized naphthalene diimide derivative, F4ND, carrying four ferrocene moieties could bind to double stranded DNA with threading intercalation mode and be used for electrochemical discrimination between methylated and unmethylated PCR product of the bisulfate-treated CDH4 gene coupled with methylation specific DNA probe-immobilized electrode.



Yujuan Niu, Xiaoyu Ren, Bin Yin, Danjun Wang, Ganglin Xue, Huaiming Hu, Feng Fu, Jiwu Wang

J. Organomet. Chem. 695 (2010) 1863

Two new hybrid materials based on 1-(1-ferrocenylethyl)-pyridinium donor and Lindqvist-type polyoxometalate acceptors were synthesized in high yields and their UV–vis diffuse reflectance spectra indicate the presence of a broad charge-transfer band between 500 and 850 nm.



Yoon-Seo Uh, Alaina Boyd, Vanessa R. Little, Philip G. Jessop, Kevin D. Hesp, Judy Cipot-Wechsler, Mark Stradiotto, Robert McDonald

J. Organomet. Chem. 695 (2010) 1869

We report herein the use of rhodium phosphino-enolate complexes as effective

pre-catalysts for the hydroformylation of styrene substrates, exhibiting high branched-to-linear selectivity under relatively mild conditions.



Tingting Zheng, Hongjian Sun, Jun Ding, Yanfeng Zhang, Xiaoyan Li

J. Organomet. Chem. 695 (2010) 1873

The C–F or C–H bond of difluorobenzophenone can not be activated by Co (PMe₃)₄, while the C–F or C–H bond of the difluorobenzophenone can be activated by CoMe(PMe₃)₄. Both Co(PMe₃)₄ and CoMe $(PMe_3)_4$ can activate the C–F or C–H bond with the better anchoring group (C=NH) instead of the ketone group. The Co-methyl group is beneficial for the C–H activation because of the thermodynamic contribution of evolution of methane. Increasing the subsituted fluoroatoms in phenyl ring is advantageous to the C–F bond activation. The proposed mechanisms were discussed.

$$\underbrace{ \left(\begin{array}{c} \prod_{i=1}^{N} \left(-\frac{1}{2} - \frac{1}{2} + \frac{1}{2$$



Hidetake Seino, Hiroyuki Mori, Aya Shinozaki, Yasushi Mizobe

J. Organomet. Chem. 695 (2010) 1878

Two	cubane-type	FeIr	$_3S_4$		clust	ers
[(Cp*Ir)	$_{3}(FeCl)(\mu_{3}-S)_{4}]^{n+}$	(<i>n</i>	=	1	and	0;



Goran N. Kaluđerović, Reinhard Paschke, Sanjiv Prashar, Santiago Gómez-Ruiz

J. Organomet. Chem. 695 (2010) 1883

The cytotoxic activities against human cancer cells of new 1-D polymeric triphenyltin(IV) with the xylylthioacetato and mesitylthioacetato ligands have been tested. In addition, the binding behaviour of the organotin(IV) compounds to DNA helix has been studied by absorption spectral titrations.



Peter C. Kunz, Corinna Wetzel, Melanie Bongartz, Anna Louisa Noffke, Bernhard Spingler

J. Organomet. Chem. 695 (2010) 1891

Seven novel imidazole and thiazole derivatives of diphos-type ligands are presented. They are of the general structure $R_2P(CH_2)_2PR_2$, where R is imidazol-2-yl (1), 1-methylimidazol-2-yl (2), 1-methylbenzimidazol-2-yl (3), 1-methylimidazol5-yl (**4**), 2-isopropylimidazol-4(5)-yl (**5**), thiazol-2-yl (**6**), benzothiazol-2-yl (**7**), thiazol-4-yl (**8**) or thiazol-5-yl (**9**).



Axel Klein, Anna Lüning, Ingo Ott, Laura Hamel, Michael Neugebauer, Katharina Butsch, Verena Lingen, Frank Heinrich, Said Elmas

J. Organomet. Chem. 695 (2010) 1898

Organo-palladium(II) and -platinum(II) complexes containing alkyl or alkynyl coligands and COD (1,5-cyclooctadiene) as chelating ligand were synthesised and thoroughly characterised by multinuclear NMR spectroscopy and XRD. Selected samples, namely the mixed alkyl alkynyl complexes, exhibit striking IC_{50} values when tested against HT-29 and MCF-7 tumour cells.



Michael I. Bruce, Martyn Jevric, Brian W. Skelton, Allan H. White, Natasha N. Zaitseva

J. Organomet. Chem. 695 (2010) 1906

The novel cluster complex $Au_4\{(CC)_2Fc'\}_2(PPh_3)_2$ **3** has been obtained by desilylation of Fc'(C=CSiMe_3)_2 [Fc' = Fe $(\eta$ -C₅H₄⁻)₂] with LiMe or KOH/MeOH, followed by addition of AuCl(PR₃) in the presence of Cul.



Ewa Białecka-Florjańczyk, Joanna T. Sołtysiak

J. Organomet. Chem. 695 (2010) 1911

Liquid crystalline siloxane oligomers containing methoxyphenylbenzoate mesogens were carried out by a hydrosilylation of cyclo[octa(methylhydrosiloxane) and octakis(dimethylsiloxy)silsesquioxane. The set of oligomers with the same type of mesogenic groups but with different structure siloxane cores gave a unique opportunity to study LC properties and structure relationships.



Safaa Eldin H. Etaiw, Tarek A. Fayed, Safaa N. Abdou

J. Organomet. Chem. 695 (2010) 1918

The reaction of $K_3[Cu(CN)_4]$, Ph_3SnCl and 4-methylpyrimidine (mpym) affords, at $[(Ph_3Sn)_3Cu(CN)_4.mpym \cdot H_2O]$, **II**, and $[(Ph_3Sn)_2Cu(CN)_3]$, **I**. The copper site in **I** assumes trigonal bipyramidal configuration. The network structure of **I** is constructed via 3D-puckered layers

constructed of infinite parallel [CuCN- $(\mu$ -Ph₃Sn)-CN] chains forming waves.



Rakesh Kumar Gupta, Ashish Kumar Singh, Mahendra Yadav, Prashant Kumar, Sanjay Kumar Singh, Peizhou Li, Qiang Xu, Daya Shankar Pandey

J. Organomet. Chem. 695 (2010) 1924

Complexes of the general formulations $[(\eta^3;\eta^3-C_{10}H_{16})RuCl_2(L)]$ (L = CPI, **1**; NOPI, **2**; FPI, **3**; HPI, **4**) and $[(\eta^4-C_8H_{12})RhCl(L)]$ (L = CPI, **5**; NOPI, **6**; FPI, **7**; HPI, **8**) have been synthesized from the reactions of $[\{(\eta^3;\eta^3-C_{10}H_{16})Ru(\mu-Cl)Cl\}_2]$ and $[\{(\eta^4-C_1)Cl\}_2]$

C₈H₁₂)RhCl₂] with 1-(4-cyanophenyl) imidazole (CPI), 1-(4-nitrophenyl)imidazole (NOPI), 1-(4-formylphenyl)imidazole (FPI) and 1-(4-hydroxy-phenyl)imidazole (HPI). Resulting complexes have been fully characterized and structures of $[(\eta^3;\eta^3-C_{10}H_{16})RuCl_2(NOPI)]$ (**2**), $[(\eta^4-C_8H_{12})RhCl$ (CPI)] (**5**) and $[(\eta^4-C_8H_{12})RhCl(NOPI)]$ (**6**) determined crystallographically. Crystal structures of **2**, **5** and **6** revealed the presence of extensive inter- and intra-molecular C–H···X (X=O and Cl) and C–H··· π interactions.



Ashish Kumar Singh, Mahendra Yadav, Rampal Pandey, Prashant Kumar, Daya Shankar Pandey

J. Organomet. Chem. 695 (2010) 1932

Compounds derived from the reactions of dimeric arene ruthenium [{(η^6 -arene)Ru (μ -Cl)Cl}₂] (arene = benzene and *p*-cymene) and structurally analogous rhodium and iridium complexes [{(η^5 -C₅Me₅)M(μ -Cl)Cl}₂] (M = Rh or Ir) with 2-chloro-4,6-



Andrey F. Asachenko, Dmitry S. Kononovich, Andrey N. Zharov, Abbas Razavi, Alexander Z. Voskoboynikov

J. Organomet. Chem. 695 (2010) 1940

Tetrahydroindenes including spiro-cyclopentyl and -cyclohexyl fragments were successfully synthesized either via basecatalyzed cyclization of the respective γ -diketone or via acid-catalyzed Nazarov cyclization of the corresponding divinylketones. These substituted cyclopentadienes were metallated with ⁿBuLi. The following reaction of the lithium salts with Cp*ZrCl₃ gave three novel zirconocenes bearing spiro-cycloalkane fragments.



NOTES

I.A. Tikhonova, D.A. Gribanyov, K.I. Tugashov, F.M. Dolgushin, A.S. Peregudov, D.Yu. Antonov, V.I. Rosenberg, V.B. Shur

J. Organomet. Chem. 695 (2010) 1949

The paper reports the synthesis of a sandwich complex of the mercury anticrown $(o-C_6F_4Hg)_3$ (1) with [2.2]paracyclophane (PCP). The bonding of PCP to the molecules of 1 in this sandwich, {[(o $C_6F_4Hg)_3]_2(PCP)$, is accomplished due to π -interactions of the benzene rings of the PCP ligand with the Hg centres of the anticrown species.





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