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Volume 689, issue 26, 20 December 2004
Journal of Organometallic Chemistry
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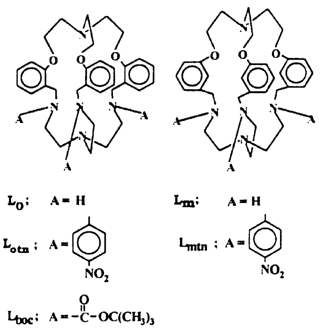
Regular papers

Pritam Mukhopadhyay,
Parimal K. Bharadwaj, Anu Krishnan,
Pushpendu K. Das

J. Organomet. Chem. 689 (2004) 4877

Modulation of SHG responses via supramolecular association/dissociation between two complementary cryptands

Two sets of complementary cryptands are investigated for supramolecular nitro–amino H-bonding interactions in solutions. The D-π-A cryptand and the unsubstituted cryptand forms 1:1 H-bonded structure.

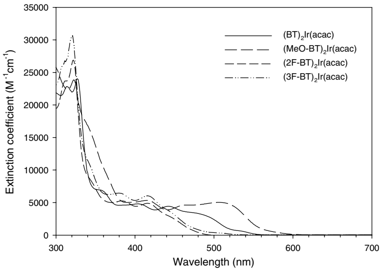


Wei-Chieh Chang, Andrew Teh Hu,
Jiun-Pey Duan, Dinesh Kumar Rayabarapu,
Chien-Hong Cheng

J. Organomet. Chem. 689 (2004) 4882

Color tunable phosphorescent light-emitting diodes based on iridium complexes with substituted 2-phenylbenzothiozoles as the cyclometalated ligands

Several iridium complexes {iridium(III)bis[2-(3-methoxyphenyl)-1,3-benzothiozolato-N,$C^{2'}$] acetylacetonate $(MeO-BT)_2Ir(acac)$, iridium(III)bis[2-(2,4-difluorophenyl)-1,3-benzothiozolato-N,$C^{2'}$] acetylacetonate $(2F-BT)_2$-Ir(acac), and iridium(III)bis[2-(2,4-difluorophenyl)-6-fluoro-1,3-benzothiozolato-N,$C^{2'}$] acetylacetonate $(3F-BT)_2Ir(acac)$} having different substituents on 2-phenylbenzothiazole have been synthesized.

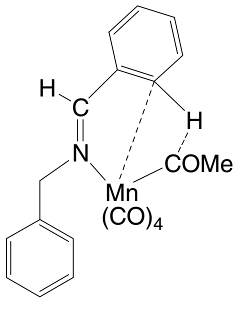


Joan Albert, J. Magali Cadena,
Jaume Granell, Xavier Solans,
Mercè Font-Bardia

J. Organomet. Chem. 689 (2004) 4889

Regioselective cyclomanganation of Schiff bases. An unexpected effect of chloro substituents

The synthesis of new metallacycles of benzylbenzylidene-amines by using $[MnMe(CO)_5]$ as metallating agent is reported. The results described suggest that cyclomanganation takes place by the formation of a four-centered transition state, involving the C–H and Mn–C_{acetyl} bonds, in the acetyl coordination complex formed in the first step of the reaction.



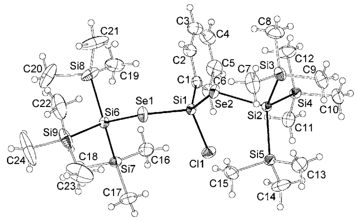
Elsevier B.V.
doi:10.1016/S0022-328X(04)00930-1

Heike Lange, Uwe Herzog, Horst Borrmann, Bernhard Walfort

J. Organomet. Chem. 689 (2004) 4897

Organosilicon hypersilylchalcogenolates and related compounds

Reaction of potassium hypersilylchalcogenolates $(\mathrm{Me_3Si})_3\mathrm{SiEK}$ (E = S, Se, Te) with organochlorosilanes $\mathrm{R}_{4-x}\mathrm{SiCl}_x$ (R = Me, Ph; x = 1–4) and methylchlorodisilanes ($\mathrm{Si_2Me_5Cl}$, 1,2-$\mathrm{Si_2Me_4Cl_2}$) yields organosilicon hypersilylchalcogenolates $[(\mathrm{Me_3Si})_3\mathrm{SiE}]_x\mathrm{SiR}_{4-x}$ (x = 1–4) and $[(\mathrm{Me_3Si})_3\mathrm{SiE}]_x\mathrm{Si_2Me}_{6-x}$ (x = 1, 2). A partial substitution product, $[(\mathrm{Me_3Si})_3\mathrm{SiSe}]_2\mathrm{SiPhCl}$ (**2**) has been obtained by reaction of $\mathrm{PhSiCl_3}$ with 1.5 equivalents $(\mathrm{Me_3Si})_3\mathrm{SiSeK}$. Besides characterization by ^{1}H, ^{13}C, ^{29}Si, ^{77}Se and ^{125}Te NMR spectroscopy the compounds $[(\mathrm{Me_3Si})_3\mathrm{SiTe}]_2\mathrm{SiPh_2}$ (**1**), $[(\mathrm{Me_3Si})_3\mathrm{SiSe}]_2\mathrm{SiPhCl}$ (**2**) and $[(\mathrm{Me_3Si})_3\mathrm{SiSe}]_2\mathrm{Si_2Me_4}$ (**3**) have also been analyzed by crystal structure analyses.

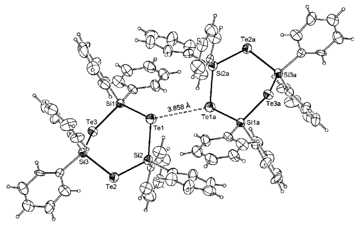


Uwe Herzog, Heike Lange, Horst Borrmann, Bernhard Walfort, Heinrich Lang

J. Organomet. Chem. 689 (2004) 4909

Dimeric and trimeric diorganosilicon chalcogenides $(\mathrm{PhRSiE})_{2,3}$ (E = S, Se, Te; R = Ph, Me)

$\mathrm{Ph_2SiCl_2}$ and $\mathrm{PhMeSiCl_2}$ react with $\mathrm{Li_2E}$ (E = S, Se, Te) under formation of trimeric diorganosilicon chalcogenides $(\mathrm{PhRSiE})_3$ (R = Ph: **1a**–**3a**, R = Me: *cis*/*trans*-**4a** (E = S), *cis*/*trans*-**5a** (E = Se)). In case of E = S, Se dimeric four-membered ring compounds $(\mathrm{PhRSiE})_2$ (R = Ph: **1b**–**2b**, R = Me: *cis*/*trans*-**4b** (E = S), *cis*/*trans*-**5b** (E = Se)) have been observed as by-products. **1a**–**5b** have been characterized by multinuclear NMR spectroscopy (^{1}H, ^{13}C, ^{29}Si, ^{77}Se, ^{125}Te). Four- and six-membered ring compounds differ significantly in ^{29}Si and ^{77}Se chemical shifts as well as in the value of $^{1}J_{\mathrm{SiSe}}$.



Note

Ulrich Herber, Kerstin Ilg, Helmut Werner

J. Organomet. Chem. 689 (2004) 4917

Preparation and molecular structure of a dinuclear rhodium complex having an unbalanced (15+17)-electron count

On stepwise reaction of $[\mathrm{Rh_2(acac)_2}\{\mu\text{-C}(p\text{-tol})_2\}_2(\mu\text{-Sb}^i\mathrm{Pr_3})]$ (**1**) with $\mathrm{PMe_3}$ and CO the unsymmetrical dinuclear complex $[\mathrm{Rh_2(acac)_2(PMe_3)}\{\mu\text{-C}(p\text{-tol})_2\}_2(\mu\text{-CO})]$ (**3**) is formed, which owing to the X-ray crystal structure contains the CO in a bridging and the phosphine ligand in a terminal position.