

## List of Publications

1. "Synthesis and Characterization of Methylphosphinediacetic Acid."  
J.Podlahová and F.Hartl *Coll.Czech.Chem.Commun.* **49** (1984) 586.
2. "Oxidative Addition of Quinones to Planar Cobalt(II) Dithiolato, Dithioacetylacetonato and Schiff-base Complexes."  
F.Hartl and A.Vlček,Jr. *Inorg.Chim.Acta* **118** (1986) 57.
3. "Nickel(II) Complexes of Methylphosphinediacetic Acid."  
J.Podlahová, F.Hartl, J.Podlaha and F.Knoch *Polyhedron* **6** (1987) 1407.
4. "Re-examination of the Photochemical Oxidative Decarbonylation of  $\text{Cr}(\text{CO})_6$  by *ortho*-Quinones: Low-Temperature Photolysis of  $\text{Cr}(\text{CO})_6$  with *para*- and *ortho*- Quinone Isomers."  
R.R.Andréa, D.J.Stufkens, F.Hartl and A.Vlček,Jr. *J.Organometal.Chem.* **359** (1989) 49.
5. "Oxidative Substitution of  $\text{Mn}(\text{CO})_5^-$  by 3,5-di-tert.Butyl-1,2-benzoquinone. Synthesis and Characterization of the Unsaturated  $\text{Mn}(\text{CO})_3(\text{DBCat})^-$  Anion."  
F.Hartl, A.Vlček,Jr., L.A.de Learie and C.G.Pierpont *Inorg.Chem.* **29** (1990) 1073.
6. "Redox properties of  $[\text{Mn}(\text{CO})_3(3,5\text{-di-tert.butyl-catecholate})]^-$ : Formation and Characterization of a Four-Membered Redox Series."  
F.Hartl and A.Vlček,Jr. *Inorg.Chem.* **30** (1991) 3048.
7. "Simple Construction of an Infrared Optically Transparent Thin-Layer Electrochemical (OTTLE) Cell: Applications to Redox Reactions of Ferrocene,  $\text{Mn}_2(\text{CO})_{10}$  and  $\text{Mn}(\text{CO})_3(3,5\text{-di-tert.butyl-catecholate})^-$ ."  
M.Krejčík, M.Daněk and F.Hartl\* *J.Electroanal.Chem.* **317** (1991) 179.
8. "Bonding Properties of 3,5-di-tert.Butyl-2,2-benzosemiquinone Radical-Anionic Ligand: Resonance Raman Spectra of  $\text{Re}(\text{CO})_4(\text{DBSQ})$  and  $\text{Re}(\text{CO})_3(\text{PPh}_3)(\text{DBSQ})$  Complexes."  
F.Hartl, D.J.Stufkens and A.Vlček,Jr. *Inorg.Chim.Acta*, **192** (1992) 25.

9. "Nature of the Mn(I)-Dioxolene Bonding as a Function of the Ligand Oxidation State: UV-Vis, IR and Resonance Raman Study of  $[\text{Mn}(\text{CO})_3\text{L}_n(\text{Diox})]^z$ ,  $n=0,1$ ;  $z=-2, -1, 0, +1$ , and  $[\text{Mn}(\text{CO})_2\{(\text{P}(\text{OEt})_3)_m(\text{Diox})\}]^z$ ,  $m=1,2$ ;  $z= -1, 0, +1$ , Complexes." F.Hartl, D.J.Stufkens and A.Vlček,Jr. *Inorg.Chem.*, **31** (1992) 1687.
  
10. "Rhenium(I) Carbonyl Complexes: Electrochemical and Spectroelectrochemical (Resonance Raman, UV-Vis, IR) Study of  $[\text{Re}(\text{CO})_3\text{L}(\text{Diox})]^z$  and  $[\text{Re}(\text{CO})_2(\text{PPh}_3)_2(\text{Diox})]^z$  ( $\text{L} = \text{CO}, \text{PPh}_3, \text{P-dppe}, \text{THF}, \text{Ph}_3\text{PO}, \text{Me}_2\text{CO}, \text{py}$ ;  $z = -1, 0, +1$ ) Redox Series." F.Hartl and A.Vlček,Jr. *Inorg.Chem.*, **31** (1992) 2869.
  
11. "Wavelength-Dependent Photosubstitution and Excited-State Dynamics of  $[\text{Cr}(\text{CO})_4(2,2'\text{-bipyridine})]$ : A Quantum Yield and Picosecond Absorption Study." J.Víchová, F.Hartl and A.Vlček,Jr. *J.Am.Chem.Soc.*, **114** (1992) 10903.
  
12. "Bond Activation by MLCT Excitation of Organometallic Compounds: Prompt CO-Photodissociation from  $[\text{Cr}(\text{CO})_4(\text{bpy})]$ ." A.Vlček,Jr., J.Víchová and F.Hartl *Coord.Chem.Revs.* **132** (1994) 167.
  
13. "Unusually Stable Radical Anionic Complexes  $[(\text{CO})_5\text{MnRe}(\text{CO})_3(\text{BPM})]^-$ ,  $[(\text{CO})_5\text{MnRe}(\text{CO})_3(\text{BPM})\text{Re}(\text{CO})_3\text{Br}]^-$ ,  $[\text{Os}_3(\text{CO})_{10}(\text{BPM})]^-$ , and  $[\text{Os}_3(\text{CO})_{10}(\text{BPM})\text{Re}(\text{CO})_3\text{Br}]^-$  ( $\text{BPM} = 2,2'\text{-Bipyrimidine}$ ) Studied with Cyclic Voltammetry and IR Spectroelectrochemistry at Variable Temperatures." J.W.M.van Outersterp, F.Hartl\* and D.J.Stufkens *Inorg.Chem.*, **33** (1994) 2711.
  
14. "A Versatile Cryostated Optically Transparent Thin-Layer Electrochemical (OTTLE) Cell for Variable-Temperature UV-Vis/IR Spectroelectrochemical Studies." F.Hartl\*, H.Luyten, H.A.Nieuwenhuis and G.C.Schoemaker *Appl.Spectr.*, **48** (1994) 1522.
  
15. "Spectroelectrochemical (IR, UV-Vis) Determination of the Reduction Pathways for a Series of  $[\text{Re}(\text{CO})_3(\alpha\text{-diimine})\text{L}']^{0/+}$  ( $\text{L}' = \text{Halide}, \text{Otf}, \text{THF}, \text{MeCN}, \text{n-PrCN}, \text{PPh}_3, \text{P}(\text{OMe})_3$ ) Complexes."

G.J.Stor, F.Hartl\*, J.W.M.van Outersterp and D.J.Stufkens *Organometallics*, **14** (1995) 1115.

16. “Variable-Temperature IR Spectroelectrochemical Investigation of the Stability of the Metal-Metal Bonded Radical Anions  $[(\text{CO})_5\text{MnRe}(\text{CO})_3(\text{L})]^-$  (L = 2,2'-Bipyridine (BPY), 2,2' -Bipyrimidine (BPM), 2,3-Bis-(2-Pyridyl)Pyrazine) (DPP)) and  $[(\text{CO})_5\text{MnRe}(\text{CO})_3(\text{L})\text{Re}(\text{Br})(\text{CO})_3]^-$  (L = BPM, DPP) Controlled by the Lowest  $\pi^*$  ( $\alpha$ -diimine) Orbital Energy.  
J.W.M.van Outersterp, F.Hartl\* and D.J.Stufkens *Organometallics*, **14** (1995) 3303.
17. “Spectroscopic Characterization of Some Unstable *ortho*- Semiquinone and *ortho*-Quinone Complexes of Mn(I) by Variable-Temperature Thin-Layer Spectroelectrochemistry at Optically Transparent Electrodes.”  
F.Hartl *Inorg.Chim.Acta*, **232** (1995) 99.
18. “Photochemistry of the Clusters  $\text{Os}_3(\text{CO})_{10}(\text{L})$  (L = 2,2'-Bipyridine, 2,2'-Bipyrimidine, 2,3-Dipyrid-2-ylpyrazine, 2,3-Dipyrid-2-ylbenzoquinoxaline). Reversible Opening of an Os-Os Bond with Formation of a Zwitterion.”  
J.W.M.van Outersterp, M.T.Garriga Oostenbrink, H.A.Nieuwenhuis, D.J.Stufkens and F.Hartl *Inorg.Chem.*, **34** (1995) 6312.
19. “Resonance Raman Spectroelectrochemical Study of  $(\mu\text{-}3,3',4,4'\text{-Tetraimino-}3,3',4,4'\text{-tetrahydrobiphenyl})\text{bis}[\text{bis}(\text{bipyridine})\text{ruthenium}(\text{II})]_2^{4+}$  and Its One-, Two- and Four-Electron-Reduction Products.”  
F.Hartl\*, T.L.Snoeck, D.J.Stufkens and A.B.P.Lever *Inorg.Chem.*, **34** (1995) 3887.
20. “Proton-Coupled Electron-Transfer Reactions in  $[\text{Mn}^{\text{IV}}_2(\mu\text{-O})_3\text{L}'_2]^{2+}$  (L' = 1,4,7-trimethyl-1,4,7-triazacyclononane).”  
R.Hage, B.Krijnen, J.B.Warnaar, F.Hartl, D.J.Stufkens and T.L.Snoeck *Inorg.Chem.*, **34** (1995) 4973.
21. “Subtle Balance between Various Phenanthroline Ligands and Anions in the Palladium-Catalyzed Reductive Carbonylation of Nitrobenzene.”

P. Wehman, V.E. Kaasjager, W.G.J. de Lange, F. Hartl, P.C.J. Kamer and P.W.N.M. van Leeuwen *Organometallics* **14** (1995) 3751.

22. “Role of an Electron-Transfer Chain Reaction in the Unusual Photochemical Formation of Five-Coordinated Anions  $[\text{Mn}(\text{CO})_3(\alpha\text{-diimine})]^-$  from *fac*- $[\text{Mn}(\text{X})(\text{CO})_3(\alpha\text{-diimine})]$  (X = halide) at Low Temperatures.”

F. Hartl\*, B.D. Rossenaar, G.J. Stor and D.J. Stufkens *Rec.Trav.Chim.Pays-Bas* **114** (1995) 565.

23. “Bonding Properties of the 1,2-Semiquinone Radical-Anionic Ligand in the  $[\text{M}(\text{CO})_{4-n}(\text{L})_n(\text{DBSQ})]$  Complexes (M = Re, Mn; DBSQ = 3,5-di-*tert*-butyl-1,2-benzosemiquinone;  $n = 0,1,2$ ). A Comprehensive Spectroscopic (UV-Vis and IR Absorption, Resonance Raman, EPR) and Electrochemical Study.”

F. Hartl\* and A. Vlcek,Jr. *Inorg. Chem.* **35** (1996) 1257.

24. “Electrocatalytic Reduction of  $\text{CO}_2$  using the Complexes  $[\text{Re}(\text{bpy})(\text{CO})_3\text{L}]^n$  ( $n = +1$ , L =  $\text{P}(\text{OEt})_3$ ,  $\text{CH}_3\text{CN}$ ;  $n = 0$ , L =  $\text{Cl}^-$ ,  $\text{Otf}^-$ ; bpy = 2,2'-bipyridine;  $\text{Otf}^- = \text{CF}_3\text{SO}_3^-$ ) as Catalyst Precursors: An Infrared Spectroelectrochemical Investigation.”

F.P.A. Johnson, M.W. George, F. Hartl\* and J.J. Turner *Organometallics* **15** (1996) 3374.

25. “Long-Lived Triplet State Charge Separation in Novel Piperidine-Bridged Donor-Acceptor Systems.”

S.I. van Dijk, C.P. Groen, F. Hartl, A.M. Brouwer and J.W. Verhoeven *J.Am.Chem.Soc.* **118** (1996) 8425.

26. “Bonding Properties of a Novel Inorganometallic Complex  $\text{Ru}(\text{SnPh}_3)_2(\text{CO})_2(\text{iPr-DAB})$  (iPr-DAB = *N,N'*-diisopropyl-1,4-diaza-1,3-butadiene) and its Stable Radical-Anion, Studied by UV-vis, IR, and ESR Spectroscopy, (Spectro)Electrochemistry, and by Density Functional Calculations.”

M.P. Aarnts, F. Hartl\*, K. Peelen, D.J. Stufkens, J. Fraanje, K. Goubitz, M.P. Wilms, E.J. Baerends and A. Vlcek,Jr. *Inorg. Chem.* **35** (1996) 5468.

27. "Reduction of  $[\text{Re}(\text{X})(\text{CO})_3(\text{R}'\text{-DAB})]$  ( $\text{X} = \text{Otf}^-, \text{Br}^-$ ; DAB = diazabutadiene;  $\text{R}' = \text{iPr}$ , pTol, pAn) and  $[\text{Re}(\text{R})(\text{CO})_3(\text{iPr-DAB})]$  ( $\text{R} = \text{Me}, \text{Et}, \text{Bz}$ ) Complexes: A (Spectro)electrochemical Study at Variable Temperatures."  
B.D. Rossenaar, F. Hartl\* and D.J. Stufkens *Inorg. Chem.* **35** (1996) 6194.
28. "Infrared Spectroelectrochemical Investigation of Carbon Dioxide Reduction Mediated by the Anion  $[\text{Ru}(\text{SnPh}_3)(\text{CO})_2(\text{iPr-DAB})]^-$  (iPr-DAB = *N,N'*-diisopropyl-1,4-diaza-1,3-butadiene)."  
F. Hartl\*, M.P. Aarnts and K. Peelen *Coll. Czech Chem. Commun.* **61** (1996) 1342.
29. "Valence Localization in  $[\text{M}(\text{triphos})(3,5\text{-di-tert-butylcatecholate})]^+$  Ions,  $\text{M} = \text{Co}, \text{Rh}$ , or Ir, Probed by Resonance Raman Spectroscopy."  
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30. "Synthesis and Redox Properties of  $[\{\text{Cp}(\text{Ru}(\text{L}_2))\}_2(\mu\text{-fumarionitrile})]\{\text{OTf}\}_2$  and  $[\text{CpRu}(\text{L}_2)(\sigma\text{-N-fumarionitrile})][\text{OTf}]$  with  $\text{L}_2 = \text{N,N}'\text{-diisopropyl-1,4-diaza-1,3-butadiene}$  (iPr-DAB) or  $\text{L} = \text{PPh}_3$ ."  
B. de Klerk-Engels, F. Hartl\*, K. Vrieze *Inorg. Chim. Acta* **254** (1997) 239.
31. "Real-Time FT-IR Spectroscopy in Organometallic Chemistry: Mechanistic Aspects of the *fac-* to *mer-* Photoisomerization of *fac*- $[\text{Mn}(\text{Br})(\text{CO})_3(\text{R-DAB})]$ ."  
C.J. Kleverlaan, F. Hartl and D.J. Stufkens *J. Photochem. Photobiol.* **103** (1997) 231.
32. "Redox Properties of Zerovalent Palladium Complexes Containing  $\alpha$ -Diimine and *p*-Quinone Ligands."  
R.A. Klein, C.J. Elsevier and F. Hartl\* *Organometallics* **16** (1997) 1284.
33. "Electrochemical and IR/UV-vis Spectroelectrochemical Studies of *fac*- $[\text{Mn}(\text{X})(\text{CO})_3(\text{iPr-DAB})]^n$  ( $n = 0, \text{X} = \text{Br}, \text{Me}, \text{Bz}$ ;  $n = +1, \text{X} = \text{THF}, \text{MeCN}, \text{nPrCN}, \text{P}(\text{OMe})_3$ ; iPr-DAB = 1,4-Diisopropyl-1,4-diaza-1,3-butadiene) at Variable Temperatures: Relation between Electrochemical and Photochemical Generation of  $[\text{Mn}(\text{CO})_3(\alpha\text{-diimine})]^-$ ."

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34. "Spectro-Electrochemical (UV-vis, IR, NMR, and EPR) Study of the Inorganometallic Complexes  $\text{Ru}(\text{E})(\text{E}')(\text{CO})_2(\text{iPr-DAB})$  ( $\text{E} = \text{Cl}$ ,  $\text{E}' = \text{SnPh}_3$ ,  $\text{PbPh}_3$ ;  $\text{E} = \text{Me}$ ,  $\text{SnPh}_3$ ,  $\text{GePh}_3$ ,  $\text{E}' = \text{SnPh}_3$ ;  $\text{E} = \text{E}' = \text{PbPh}_3$ ;  $\text{iPr-DAB} = 1,4\text{-Diisopropyl-1,4-diaza-1,3-butadiene}$ )."
- M.P. Aarnts, F. Hartl\*, K. Peelen, D.J. Stufkens, C. Amatore and J.-N. Verpeaux *Organometallics* **16** (1997) 4686.
35. "Nucleophilic Attack at the Five-Coordinate Anion  $[\text{Mn}(\text{CO})_3(3,5\text{-di-tert-butylcatecholate})]^-$  Controlled by Electronic and Steric Effects."
- F. Hartl *Inorg. Chim. Acta* **268** (1998) 1.
36. "Electron Distribution in the  $[\text{Cr}(\text{CO})_4(\text{bpy})]^-$  Radical Anion as Revealed by ESR Spectroscopy and IR Spectroelectrochemistry of  $^{13}\text{CO}$ -enriched Species."
- F. Bauman, F.-W. Grevels, W. Kaim, F. Hartl and A. Vlcek, Jr. *J. Chem. Soc., Dalton Trans.* (1998) 215.
37. "Photochemistry of the Triangular Clusters  $\text{Os}_3(\text{CO})_{10}(\alpha\text{-diimine})$ : Homolysis of an Os-Os Bond and Solvent Dependent Formation of Biradicals and Zwitterions."
- J. Nijhoff, M.J. Bakker, F. Hartl, D.J. Stufkens, W.-F. Fu and R. van Eldik *Inorg. Chem.*, **37** (1998) 661.
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- G.C. Dol, P.C.J. Kamer, F. Hartl, P.W.N.M. van Leeuwen and R.J.M. Nolte *J. Chem. Soc., Dalton Trans.*, (1998) 2083.
39. "Mechanistic Aspects of the Thermal *mer*-to-*fac* Isomerization of *mer*- $[\text{Mn}(\text{X})(\text{CO})_3(\alpha\text{-diimine})]$  ( $\text{X} = \text{Cl}$ ,  $\text{Br}$ ,  $\text{I}$ )."
- C.J. Kleverlaan, F. Hartl\* and D.J. Stufkens *J. Organomet. Chem.*, **561** (1998) 57.

40. "Spectroscopic (UV-vis, Resonance Raman) and Spectro-Electrochemical Study of Pt(II) Complexes with 2,2'-Bipyridine and Aromatic Thiolate Ligands."  
J.A. Weinstein, N.N. Zheligovskaya, M.Ya. Mel'nikov and F. Hartl\* *J. Chem. Soc., Dalton Trans.* (1998) 2459.
41. "Syntheses, Crystal Structures and (Spectro)electrochemical Studies of Novel Clusters  $\text{Ru}_4(\mu\text{-H})_4(\text{CO})_{10}(\text{L})$  (L = 2,2'-bipyrimidine (bpym), 2,3-dipyrid-2-ylpyrazine (dpp) and 2,2'-bipyridine (bpy))."  
J. Nijhoff, M.J. Bakker, F. Hartl\*, G. Freeman, S.L. Ingham and B.F.G. Johnson *J. Chem. Soc., Dalton Trans.* (1998) 2625.
42. "Comparison of Electrochemically and Photochemically Induced Electron-Transfer Processes of a Series of Copper(II)-Schiff Base Complexes with Thiolate Coordination."  
S. Knoblauch, F. Hartl\*, H. Hennig and D.J. Stufkens *Eur.J.Inorg.Chem.*, (1999) 303.
43. "Mechanistic Study of the Photoisomerization of  $\text{Os}_3(\text{CO})_{10}(\text{L})$  in which L (L = 1,4-di-R-1,4-diazabutadiene (R-DAB) or pyridine-2-carbaldehyde *N*-R-imine (R-PyCa)) Changes its Coordination from  $\sigma, \sigma\text{-N, N}'$  into  $\sigma\text{-N}, \mu_2\text{-N}'$ ,  $\eta^2\text{-C=N}'$ ."  
J. Nijhoff, M.A. Bakker, F. Hartl and D.J. Stufkens *J. Organomet. Chem.*, **572** (1999) 271.
44. "Remarkably Stable Radical Anions Derived from Clusters  $[\text{HOs}_3(\text{CO})_9(\text{L})]$ , L = *ortho*-Metallated  $\alpha$ -Diimine: A Spectro-Electrochemical Study and Theoretical Rationalization."  
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45. "Charge Separation in a Triosmium Cluster Zwitterion Revealed by Time-Resolved Microwave Conductivity: First Application of TRMC in Organometallic Chemistry."  
J. Nijhoff, F. Hartl, D.J. Stufkens, J.J. Piet and J.M. Warman *J. Chem. Soc., Chem. Commun.* (1999) 991.
46. "Light-Induced Insertion of a CO Ligand into an Os-N bond of the Clusters  $[\text{Os}_3(\text{CO})_{10}(\text{L})]$ , where L Represents a Potentially Terdentate *N, N'*-Chelating  $\alpha$ -Diimine."  
J. Nijhoff, F. Hartl\*, D.J. Stufkens and J. Fraanje *Organometallics*, **18** (1999) 4380.

47. "Unprecedented Coordination of 4,4',5,5'-tetramethyl-2,2'-Biphosphinine Doubly Bridging over an Open Triosmium Core."  
M.J. Bakker, F.W. Vergeer, F.Hartl\*, K. Goubitz, J. Fraanje, P. Rosa and P. Le Floch *Eur. J. Inorg. Chem.*, (2000) 843.
48. "Temperature-Dependent Photophysical and Redox Properties of Novel Complexes [Ru(L<sup>1</sup>)(L<sup>2</sup>)(CO)<sub>2</sub>(iPr-DAB)] (L<sup>1</sup> = RuCp(CO)<sub>2</sub>; L<sup>2</sup> = RuCp(CO)<sub>2</sub> or SnPh<sub>3</sub>; iPr-DAB = N,N'-diisopropyl-1,4-diaza-1,3-butadiene)."  
J. van Slageren, F. Hartl\* and D.J. Stufkens *Eur. J. Inorg. Chem.* (2000) 847.
49. "Mechanistic Study of the Photofragmentation of the Clusters [Os<sub>3</sub>(CO)<sub>10</sub>(diene)] (diene = cis-1,3-butadiene, 1,3-cyclohexadiene): Direct Observation of the Open-Triangle Primary Photoproduct with Nanosecond Time-Resolved Infrared and UV-visible Spectroscopy."  
M.J. Bakker, F.W. Vergeer, F. Hartl\*, O. Jina, X.Z. Sun and M.W. George *Inorg. Chim. Acta*, **300-302**, (2000), 597.
50. "Stepwise versus Direct Long-Range Charge Separation in Molecular Triads."  
R.J. Willemse, J.J.Piet, J.M. Warman, F. Hartl, J.W. Verhoeven and A.M. Brouwer, *J. Am. Chem. Soc.*, **122** (2000), 3721.
51. "Changes in Excited-State Character of [M(L<sub>1</sub>)(L<sub>2</sub>)(CO)<sub>2</sub>(α-diimine)] (M = Ru, Os) Induced by Variation of L<sub>1</sub> and L<sub>2</sub>."  
J. van Slageren, F. Hartl, D.J. Stufkens, D.M. Martino and H. van Willigen *Coord. Chem. Rev.*, **208** (2000) 309.
52. "Alkene-Stabilized Biradicals and Zwitterions Produced Photochemically from the Clusters [Os<sub>3</sub>(CO)<sub>10</sub>(α-diimine)]: Reaction Mechanism and Bonding Properties Studied by Nanosecond UV-Vis and Infrared Spectroscopies."  
M.J. Bakker, F. Hartl\*, D.J. Stufkens, O.S. Jina, X.-Z. Sun and M.W. George *Organometallics*, **19** (2000) 4310..



53. "The Spectroscopic, Electrochemical and Photophysical Effects of the  $b_{1/a_2} \pi^*$  Lowest Unoccupied Molecular Orbital Switching in  $[M(CO)_4(N,N)]$ ;  $M = Cr, W$ ;  $N,N = 1,10$ -phenanthroline or 3,4,7,8-tetramethyl-1,10-phenanthroline. An Experimental and DFT Computational Study."  
I.R. Farrell, F. Hartl, S. Zális, T. Mahabiersing and A. Vlcek, Jr. *J.Chem.Soc. Dalton Trans.* (2000) 4323.
54. "A Study of the Reduction of Substituted Fulvenes Using Spectro-Electrochemistry and *Ab Initio* Theory."  
M Tacke, S. Fox, L. Cuffe, J.P. Dunne, F. Hartl and T. Mahabiersing *J. Mol. Structure* **559** (2001) 339.
55. "Theoretical Studies of  $[Os_3(CO)_{10}(\alpha\text{-diimine})]$ : Structures, Frontier Orbitals and Bonding."  
M.J. Calhorda, E. Hunstock, L.F. Veiros and F. Hartl *Eur. J. Inorg. Chem.*, (2001) 223.
56. "A Novel Organometallic Polymer of Osmium(0). Its Electrosynthesis and Electrocatalytic Properties Towards  $CO_2$  Reduction."  
S. Chardon-Noblat, A. Deronzier, F. Hartl\*, T. Mahabiersing and J. van Slageren *Eur. J. Inorg. Chem.*, (2001) 609.
57. "Air-tight Three-electrode Design of Coaxial Electrochemical-EPR Cell for Redox Studies at Low Temperatures."  
F. Hartl\*, R.P. Groenestein and T. Mahabiersing *Coll. Czech. Chem. Commun.*, **66** (2001) 52. *Special Memorial Issue (Prof. A.A. Vlcek)*
58. "Electrochemical Oxidation of  $[Cr(CO)_4(tmp)]$  to the Low-spin Cr(I) Species  $[Cr(CO)_4(tmp)]^+$  ( $tmp = 3,4,7,8$ -tetramethyl-1,10-phenanthroline): an IR, UV-Vis, and EPR Spectroelectrochemical and DFT Computational Study of the Accompanying Changes in Molecular and Electronic Structure."  
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59. "Influence of Metal Core Composition on Redox Properties and Photoreactivity of the Clusters  $[H_{4-x}Ru_{4-x}Rh_x(CO)_{12}]$  ( $x = 0, 2, 3, 4$ )."  
M.J. Bakker, T.A. Pakkanen and F. Hartl\*, *Coll. Czech. Chem. Commun.*, **66** (2001) 1062.  
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60. "On the Structure, Carbonyl-Stretching Frequencies and Relative Stability of *trans*- and *cis*- $[W(CO)_4(\eta^2\text{-alkene})_2]^{0/+}$ : A Theoretical and IR Spectroelectrochemical Study."  
J. Handzlik, F. Hartl\* and T. Szymanska-Buzar *New J. Chem.*, **61** (2002) 145-152.
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95. “New Insight into Electronic Transitions and Structure of 3,6-Diphenyl-1,2-dithiin Radical Cation. A Spectroelectrochemical and Quantumchemical Study.”  
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96. “Heterosite Photoreactivity of the Triangular Mixed-Metal Cluster [Os<sub>2</sub>Rh(CO)<sub>9</sub>(η<sup>5</sup>-C<sub>5</sub>Me<sub>5</sub>)]. An Experimental and Theoretical Study.”  
F.W. Vergeer, P.J. Costa, M.J. Calhorda, A. Vlček, Jr., P. Matousek, M. Towrie and F. Hartl\*, *Chem. Eur. J.*, submitted for publication.

97. "Sub-picosecond Charge Separation in a Photo-Reactive Rhenium-Appended Porphyrin Assembly Monitored by Picosecond Transient Infrared Spectroscopy."  
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98. "Electronic and Redox Properties and Interactions with H<sub>2</sub>O<sub>2</sub> of a pH Sensitive 1,2,4-Triazole-phenolate Based Oxo-Vanadium(V) Complexes"  
W. R. Browne, A. G. J. Ligtenbarg, J. W. de Boer, T. van den Berg, F. Hartl, T. Mahabiersing, M. Lutz, A. L. Spek, R. Hage and B. L. Feringa, *Eur. J. Inorg. Chem.*, submitted for publication.
99. "Palladium-Coated Nickel Nanoclusters: New Hiyama Cross-Coupling Catalysts"  
L. Durán Pachón, M. B. Thathagar, F. Hartl and G. Rothenberg, *PCCP*, submitted for publication.
100. "Electrochemical Reduction Path of Clusters [Os<sub>3</sub>(CO)<sub>10</sub>( $\alpha$ -diimine)] Controlled by Electronic Properties of the Diimine Ligand."  
F.Hartl\* and J.W.M.van Outersterp *Collect. Czech. Chem. Commun.*, submitted for publication. *Special Issue (Prof. J. Podlaha)*.
101. "A Novel Heteroditopic Terpyridine-Pincer Ligand as Building Block for Mono- and Heterometallic Pd(II) and Ru(II) Complexes."  
M. Gagliardo, G. Rodríguez, H.H. Dam, M. Lutz, A.L. Spek, R.W.A. Havenith, P. Coppo, L. De Cola, F. Hartl, G.P.M. van Klink and G. van Koten, *Inorg. Chem.*, submitted for publication.
102. Photophysical and Redox Properties of Novel Photochromic Nitrospiropyrans Monosubstituted with [M(bpy)<sub>3</sub>]<sup>2+</sup> (M = Ru, Os) Chromophores."  
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