

## **Publications LCC 1999**

Planar tetracoordination of carbon in groups 4 and 5 organometallic chemistry

CHOUKROUN R., CASSOUX P.

*Acc. Chem. Res.*, 1999, **32**, pp. 494-502 (LCC-5221).

A new copper(II)-iron(II) complex  $[\text{Cu}(\text{acac})(\text{bpy})(\text{py})]_2 [\text{Fe}(\text{CN})_5(\text{NO})]$  based on nitroprusside : synthesis, structure and spectroscopic studies

KOU H.-Z., GAO E.-Q., LIAO D.-Z., CHENG P., JIANG Z.-H., YAN S.-P., WANG G.-L., YAO X.-K., WANG H.-G., TUCHAGUES J.-P.

*Acta Chem. Scand.*, 1999, **53**, pp. 542-546 (LCC-5401).

[(2S, 4S)-4-hydroxymethyl-1,3-dioxan-2-yl]-ferrocene

CHIFFRE J., MANOURY E., DARAN J.-C., BALAVOINE G.G.A.

*Acta Crystallogr., Sect. C*, 1999, **C55**, pp. 2045-2047 (LCC-5468).

Précurseurs "métalloorganiques" et dépôt chimique à partir d'une phase gazeuse

VALADE L., TEYSSANDIER F.

*Actual. Chim.*, 1999, pp. 14-21 (LCC-5222).

A novel mechanism for the synthesis of tin/tin oxide nanoparticles of low size dispersion and of nanostructured  $\text{SnO}_2$  for the sensitive layers of gas sensors

NAYRAL C., OULD ELY T., MAISONNAT A., CHAUDRET B., FAU P., LESCOUZERES L., PEYRE-LAVIGNE A.

*Adv. Mater.*, 1999, **11**, pp. 61-63 (LCC-5284).

Coexistence of antiferromagnetic ordered  $\text{Fe}^{3+}$  spins and metal p-electrons in 1-BETS<sub>2</sub>FeCl<sub>4</sub> [BETS = bis(ethylenedithio)tetraselenafulvalene]

SATO A., OJIMA E., KOBAYASHI H., HOSOKOSHI Y., INOUE K., CASSOUX P.

*Adv. Mater.*, 1999, **11**, pp. 1192-1194 (LCC-5402).

Illustrating atropisomerism in the porphyrin series using NMR spectroscopy

SONG R., ROBERT A., BERNADOU J., MEUNIER B.

*Analisis*, 1999, **27**, pp. 464-467 (LCC-5254).

$[\{\text{Mn}(\text{salen})\text{CN}\}_n]$  : the first one-dimensional chain with alternating high-spin and low-spin  $\text{Mn}^{\text{III}}$  centers exhibits metamagnetism

MATSUMOTO N., SUNATSUKI Y., MIYASAKA H., HASHIMOTO M., LUNEAU D., TUCHAGUES J.-P.

*Angew. Chem. (Int. Ed. Engl.)*, 1999, **38**, pp. 171-173 (LCC-5223).

Reactions of a transient carbonyl(chloro)(hydrido)ruthenium(II) complex with ethylene, alkynes, and CO ; chemistry of the new anion  $[\text{Ru}_2(\text{CO})_4\text{Cl}_5]^-$

FAURE M., MAURETTE L., DONNADIEU B., LAVIGNE G.

*Angew. Chem. (Int. Ed. Engl.)*, 1999, **38**, pp. 518-522 (LCC-5224).

Novel polymeric carbonylhaloruthenium(I) polyanions : rational design and self-reorganization in the presence of  $\text{CO}_2$  and  $\text{H}_2\text{O}$

MAURETTE L., DONNADIEU B., LAVIGNE G.

*Angew. Chem. (Int. Ed. Engl.)*, 1999, **38**, pp. 3707-3710 (LCC-5403).

Novel, spongelike ruthenium particles of controllable size stabilized only by organic solvents

VIDONI O., PHILIPPOT K., AMIENS C., CHAUDRET B., BALMES O., MALM J.-O., BOVIN J.-O., SENOCQ F., CASANOVE M.-J.

*Angew. Chem. (Int. Ed. Engl.)*, 1999, **38**, pp. 3736-3738 (LCC-5432).

Potential of artemisinin activity against chloroquine-resistant Plasmodium falciparum strains by using heme models

BENOIT-VICAL F., ROBERT A., MEUNIER B.

*Antimicrob. Agents Chemother.*, 1999, **43**, pp. 2555-2558 (LCC-5307).

Characterization of dendrimers by X-ray photoelectron spectroscopy

DEMATHIEU C., CHEHIMI M.M., LIPSKIER J.-F., CAMINADE A.-M., MAJORAL J.-P.

*Appl. Spectrosc.*, 1999, **53**, pp. 1277-1281 (LCC-5349).

In-situ formation and NMR characterization of the iridium(III) dihydride (PEt<sub>3</sub>)<sub>3</sub>IrH<sub>2</sub>Cl from the iridium(I) dinuclear complex [(C<sub>8</sub>H<sub>14</sub>)<sub>2</sub>IrCl]<sub>2</sub> and PEt<sub>3</sub>

BRUNET J.-J., DIALLO O.S., NEIBECKER D., ROQUE K.

*C. R. Acad. Sci., Paris, Sér.II c*, 1999, **2**, pp. 215-219 (LCC-5302).

A practical and efficient synthetic route to stable zirconocene-ate zwitterionic complexes

CADIERNO V., ZABLOCKA M., IGAU A., MAJORAL J.-P., SKOWRONSKA A.

*C. R. Acad. Sci., Paris, Sér.II c*, 1999, **2**, pp. 229-233 (LCC-5513).

Oxidation of 2,4,6-trichlorophenol catalyzed by iron phthalocyanines covalently bound to silica

SANCHEZ M., HADASCH A., RABION A., MEUNIER B.

*C. R. Acad. Sci., Paris, Sér.II c*, 1999, **2**, pp. 241-250 (LCC-5495).

Ruthenium(II) complexes of optically active P, N donor ligands. Synthesis and evaluation in the catalytic hydrogenation of acetophenone

YANG H., LUGAN N., MATHIEU R.

*C. R. Acad. Sci., Paris, Sér.II c*, 1999, **2**, pp. 251-257 (LCC-5225).

From a spin-crossover molecule to the bulk electronic behaviour of a material : the paramount role of hydrogen bonds in molecular electronics

SALMON L., DONNADIEU B., BOUSSEKSOU A., TUCHAGUES J.-P.

*C. R. Acad. Sci., Paris, Sér.II c*, 1999, **2**, pp. 305-309 (LCC-5436).

Ni(dmit)<sub>2</sub> salts with chiral stilbazolium- and ferrocenyl-based chromophores as countercations

ANDREU R., MALFANT I., LACROIX P.G., CASSOUX P., ROQUE K., MANOURY E., DARAN J.-C., BALAVOINE G.G.A.

*C. R. Acad. Sci., Paris, Sér.II c*, 1999, **2**, pp. 329-340 (LCC-5255).

Fast <sup>1</sup>H NMR relaxation in some ruthenium hydrides

CASTELLANOS A., AYLLON J.A., SABO-ETIENNE S., DONNADIEU B., CHAUDRET B., YAO W., KAVALLIERATOS K., CRABTREE R.H.

*C. R. Acad. Sci., Paris, Sér.II c*, 1999, **2**, pp. 359-368 (LCC-5285).

Kinetics and mechanism of low-temperature ozone decomposition by Co-ions adsorbed on silica

RAKITSKAYA T.L., ENNAN A.A., GRANATYUK I.V., BANDURKO A.YU., BALAVOINE G.G.A., GELETII Y.V., PAINA V.YA.

*Catal. Today*, 1999, **53**, pp. 715-723 (LCC-5462).

Control of proton transfer by hydrogen bonding in the protonated forms of the binucleophilic complex [h<sup>5</sup>-C<sub>5</sub>H<sub>4</sub>CH(CH<sub>2</sub>)<sub>4</sub>NMe}Ir(PPh<sub>3</sub>)<sub>2</sub>]

MAR ABAD M., ATHEAUX I., MAISONNAT A., CHAUDRET B.

*Chem. Commun.*, 1999, pp. 381-382 (LCC-5226).

A homobimetallic vanadium d<sup>2</sup>-d<sup>2</sup> complex (Cp<sub>2</sub>V)<sub>2</sub>(3n-Me<sub>3</sub>SiC=C-C=C-C=CCSiMe<sub>3</sub>): structure and magnetism

CHOUKROUN R., LORBER C., DONNADIEU B., HENNER B.J.L., FRANTZ R., GUERIN CH.

*Chem. Commun.*, 1999, pp. 1099-1100 (LCC-5400).

X-ray structure and theoretical studies of  $\text{RuH}_2(\text{h}^2\text{-H}_2)(\text{h}^2\text{-H-SiPh}_3)(\text{PCy}_3)_2$ , a complex with two different  $\text{h}^2$ -coordinated  $\sigma$  bonds

HUSSEIN K., MARSDEN C.J., BARTHELAT J.-C., RODRIGUEZ V., CONEJERO S., SABO-ETIENNE S., DONNADIEU B., CHAUDRET B.

*Chem. Commun.*, 1999, pp. 1315-1316 (LCC-5286).

Preparation and crystal structures of manganese, iron, and cobalt complexes of the bis[di(2-pyridyl)methyl]amine (bdpma) ligand and its oxidative degradation product 1,3,3-tris(2-pyridyl)-3H-imidazo[1,5-a]-pyridin-4-ium (tpip); origin of the bdpma fragility

HEMMERT C., RENZ M., GORNITZKA H., SOULET F., MEUNIER B.

*Chem. Eur. J.*, 1999, **5**, pp. 1766-1774 (LCC-5496).

Preparation of water-soluble cationic phosphorus-containing dendrimers as DNA transfecting agents

LOUP C., ZANTA M.-A., CAMINADE A.-M., MAJORAL J.-P., MEUNIER B.

*Chem. Eur. J.*, 1999, **5**, pp. 3644-3650 (LCC-5321).

Synthesis of nickel nanoparticles. Influence of aggregation induced by modification of poly(vinylpyrrolidone) chain length on their magnetic properties

OULD ELY T., AMIENS C., CHAUDRET B., SNOECK E., VERELST M., RESPAUD M., BROTO J.-M.

*Chem. Mater.*, 1999, **11**, pp. 526-529 (LCC-5287).

Chiral stilbazolium chromophores : an approach toward multiproperty materials combining conductivity and second-order optical nonlinearities

ANDREU R., MALFANT I., LACROIX P.G., GORNITZKA H., NAKATANI K.

*Chem. Mater.*, 1999, **11**, pp. 840-848 (LCC-5245).

Synthesis, crystal structure, and second-order nonlinear optical properties of a new bis(salicylaldiminato) nickel(II) metal complex

AVERSENG F., LACROIX P.G., MALFANT I., LENOBLE G., CASSOUX P., NAKATANI K., MALTEY-FANTON I., DELAIRE J., AUKAULOO A.

*Chem. Mater.*, 1999, **11**, pp. 995-1002 (LCC-5246).

Synthesis and characterization of  $\text{CoO}$ ,  $\text{Co}_3\text{O}_4$ , and mixed  $\text{Co/CoO}$  nanoparticles

VERELST M., OULD ELY T., AMIENS C., SNOECK E., LECANTE P., MOSSET A., RESPAUD M., BROTO J.-M., CHAUDRET B.

*Chem. Mater.*, 1999, **11**, pp. 2702-2708 (LCC-5308).

Dynamic spin-crossover in  $[\text{Fe}^{\text{II}}(\text{TRIM})_2]\text{Br}_2$  and  $[\text{Fe}^{\text{II}}(\text{TRIM})_2](\text{HCO}_2)_2$  investigated by Mössbauer spectroscopy and magnetic measurements

THIEL A., BOUSSEKSOU A., VERELST M., VARRET F., TUCHAGUES J.-P.

*Chem. Phys. Lett.*, 1999, **302**, pp. 549-554 (LCC-5227).

Dendrimers containing heteroatoms (Si, P, B, Ge, or Bi)

MAJORAL J.-P., CAMINADE A.-M.

*Chem. Rev.*, 1999, **99**, pp. 845-880 (LCC-5228).

MOCVD-processed Ni films from nickelocene. Part II: carbon content of the deposits

BRISSONNEAU L., DE CARO D., BOURSIER D., MADAR R., VAHLAS C.

*Chem. Vap. Deposit.*, 1999, **5**, pp. 143-149 (LCC-5256).

Tailored modification of quartz surfaces by covalent immobilization of small molecules ( $\gamma$ -aminopropyltriethoxysilane), monodisperse macromolecules (dendrimers), and poly(styrene/acrolein/divinylbenzene) microspheres with narrow diameter distribution

MIKSA B., SLOMSKOWSKI S., CHEHIMI M.M., DELAMAR M., MAJORAL J.-P., CAMINADE A.-M.

*Colloid Polym. Sci.*, 1999, **277**, pp. 58-65 (LCC-5229).

Molecular (super)conductors derived from bis-dithiolate metal complexes  
CASSOUX P.

*Coord. Chem. Rev.*, 1999, **185-186**, pp. 213-232 (LCC-5230).

Chemistry in the internal voids of dendrimers

MAJORAL J.-P., LARRE C., LAURENT R., CAMINADE A.-M.

*Coord. Chem. Rev.*, 1999, **190-192**, pp. 3-18 (LCC-5320).

A novel superconductor with insulating magnetic ground state

KOBAYASHI H., SATO A., TANAKA H., KOBAYASHI A., CASSOUX P.

*Coord. Chem. Rev.*, 1999, **190-192**, pp. 921-932 (LCC-5404).

Synthesis and investigation of chalcogen atom substituted dinitriles and porphyrazines

PULLEN A.E., FAULMANN C., CASSOUX P.

*Eur. J. Inorg. Chem.*, 1999, pp. 269-276 (LCC-5405).

Synthesis of two acridine conjugates of the bis(phenanthroline) ligand "clip-phen" and evaluation of the nuclease activity of the corresponding copper complexes

ROSS S.A., PITIE M., MEUNIER B.

*Eur. J. Inorg. Chem.*, 1999, pp. 557-563 (LCC-5232).

*N*-thiophosphorylated and *N*-phosphorylated iminophosphoranes [R<sub>3</sub>P=N-P(X)R'<sub>2</sub>; X=O, S] as models for dendrimers : synthesis, reactivity and crystal structures

LARRE C., DONNADIEU B., CAMINADE A.-M., MAJORAL J.-P.

*Eur. J. Inorg. Chem.*, 1999, pp. 601-611 (LCC-5233).

Catalytic transfer hydrogenation of ketones with KHCr(CO)<sub>5</sub>/HCO<sub>2</sub>H/Et<sub>3</sub>N systems

BRUNET J.-J., CHAUVIN R., LEGLAYE P.

*Eur. J. Inorg. Chem.*, 1999, pp. 713-716 (LCC-5303).

Synthesis and hydrolysis of [alkenyl(alkoxy)carbene]manganese complexes : evidence for a transient allylic intermediate on the way to  $\alpha$ ,  $\beta$ -unsaturated aldehydes

MONGIN C., ORTIN Y., LUGAN N., MATHIEU R.

*Eur. J. Inorg. Chem.*, 1999, pp. 739-742 (LCC-5324).

Effects of halides and related ligands on reactions of carbonylruthenium complexes (Ru<sup>0</sup>-Ru<sup>II</sup>)

LAVIGNE G.

*Eur. J. Inorg. Chem.*, 1999, pp. 917-930 (LCC-5234).

Catalytic formation of carbon-carbon bonds by activation of carbon-hydrogen bonds

GUARI Y., SABO-ETIENNE S., CHAUDRÉ B.

*Eur. J. Inorg. Chem.*, 1999, pp. 1047-1055 (LCC-5235).

Mechanism of the catalytic oxidation of tertiary alcohols by the water-soluble Mn-TMPyP/KHSO<sub>5</sub> system:  $\beta$ -fragmentation versus *O*-neophyl rearrangement

WIETZERBIN K., BERNADOU J., MEUNIER B.

*Eur. J. Inorg. Chem.*, 1999, pp. 1467-1477 (LCC-5257).

Mono- and 1,1'-disubstituted aza ferrocenyl compounds : evidence for an original electroactive fluorescent species

DELAVAUX-NICOT B., FERY-FORGUES S.

*Eur. J. Inorg. Chem.*, 1999, pp. 1821-1825 (LCC-5280).

Synthesis and characterisation of a dioxo- $\mu$ -oxo molybdenum dimer : an unusual case of a  $\mu$ oxo conformational equilibrium

ARZOUMANIAN H., BAKHTCHADJIAN R., AGRIFOGLIO G., KRENTZIEN H., DARAN J.-C.

*Eur. J. Inorg. Chem.*, 1999, pp. 2255-2259 (LCC-5463).

Oxidation of dichloroanilines and related anilides catalyzed by iron(III) tetrasulfonatophthalocyanine

HADASCH A., MEUNIER B.

*Eur. J. Inorg. Chem.*, 1999, pp. 2319-2325 (LCC-5317).

100 years of Baeyer-Villiger oxidations

RENZ M., MEUNIER B.

*Eur. J. Org. Chem.*, 1999, pp. 737-750 (LCC-5236).

Grafting of tetraazamacrocycles on the surface of phosphorus-containing dendrimers

PREVOTE D., DONNADIEU B., MORENO-MANAS M., CAMINADE A.-M., MAJORAL J.-P.

*Eur. J. Org. Chem.*, 1999, pp. 1701-1708 (LCC-5258).

Structure-activity relationships of synthetic tricyclic trioxanes related to artemisinin: the unexpected alkylative property of a 3-(methoxymethyl) analog

PROVOT O., CAMUZAT-DEDENIS B., HAMZAOU M., MOSKOWITZ H., MAYRARGUE J., ROBERT A., CAZELLES J., MEUNIER B., ZOUHIRI F., DESMAELE D., D'ANGELO J., MAHUTEAU J., GAY F., CICERON L.

*Eur. J. Org. Chem.*, 1999, pp. 1935-1938 (LCC-5259).

Synthesis of highly soluble annelated polypyridines

BEJAN E., FONTENAS C., AIT-HADDOU H., DARAN J.-C., BALAVOINE G.G.A.

*Eur. J. Org. Chem.*, 1999, pp. 2485-2490 (LCC-5312).

Dynamical properties of non-interacting Co nanoparticles

RESPAUD M., GOIRAN M., BROTO J.-M., LIONTI F., THOMAS L., BARBARA B., OULD ELY T., AMIENS C., CHAUDRET B.

*Europhys. Lett.*, 1999, **47**, pp. 122-127 (LCC-5288).

Structures of Fe(II) complexes with *N,N,N'*-tris(2-pyridylmethyl)ethane-1,2-diamine type ligands. Bleomycin-like DNA cleavage and enhancement by an alkylammonium substituent on the N' atom of the ligand

MIALANE P., NIVOROJKINE A., PRATVIEL G., AZEMA L., SLANY M., GODDE F., SIMAAN A., BANSE F., KARGAR-GRISEL T., BOUCHOUX G., SAINTON J., HORNER O., GUILHEM J., TCHERTANOVA L., MEUNIER B., GIRERD J.-J.

*Inorg. Chem.*, 1999, **38**, pp. 1085-1092 (LCC-5237).

pH-dependent monomer-oligomer interconversion of copper(II) complexes with *N*-(2-*R*-imidazol-4-ylmethylidene)-2-aminoethylpyridine (*R* = methyl, phenyl)

MATSUMOTO N., MOTODA Y., MATSUO T., NAKASHIMA T., RE N., DAHAN F., TUCHAGUES J.-P.

*Inorg. Chem.*, 1999, **38**, pp. 1165-1173 (LCC-5238).

Solvent-assisted reversible proton transfer within an intermolecular dihydrogen bond and characterization of an unstable dihydrogen complex

GRUNDEMANN S., ULRICH S., LIMBACH H.-H., GOLUBEV N.S., DENISOV G.S., EPSTEIN L.M., SABO-ETIENNE S., CHAUDRET B.

*Inorg. Chem.*, 1999, **38**, pp. 2550-2551 (LCC-5289).

Spectroscopic determination of magnetic exchange parameters and structural geometry for trinuclear compounds : (CuL)<sub>2</sub>Mn.xB (L=N-(4-methyl-6-oxo-3-azahept-4-enyl)oxamato and B= (CH<sub>3</sub>)<sub>2</sub>SO (x=2) or H<sub>2</sub>O (x=5))

CADOR O., MATHONIERE C., KAHN O., COSTES J.-P., VERELST M., LECANTE P.

*Inorg. Chem.*, 1999, **38**, pp. 2643-2648 (LCC-5323).

Deprotonation-induced enantioselective aggregation and deprotonation-induced ligand rearrangement of copper(II) complexes yield 1D homochiral and heterochiral chains and a cyclic tetramer, respectively

SHII Y., MOTODA Y., MATSUO T., KAI F., NAKASHIMA T., TUCHAGUES J.-P., MATSUMOTO N.

*Inorg. Chem.*, 1999, **38**, pp. 3513-3522 (LCC-5442).

Hydroxylation, epoxidation, and DNA cleavage reactions mediated by the biomimetic Mn-TMPyP/O<sub>2</sub>/sulfite oxidation system

WIETZERBIN K., MULLER J.G., JAMETON R.A., PRATVIEL G., BERNADOU J., MEUNIER B., BURROWS C.J.

*Inorg. Chem.*, 1999, **38**, pp. 4123-4127 (LCC-5260).

Two-step spin conversion for the three-dimensional compound tris(4,4'-bis-1,2,4-triazole)iron(II) diperchlorate

GARCIA Y., KAHN O., RABARDEL L., CHANSOU B., SALMON L., TUCHAGUES J.-P.

*Inorg. Chem.*, 1999, **38**, pp. 4663-4670 (LCC-5406).

Mononuclear lanthanide complexes of tripodal ligands : synthesis and spectroscopic studies

COSTES J.-P., DUPUIS A., COMMENGES G., LAGRAVE S., LAURENT J.-P.

*Inorg. Chim. Acta*, 1999, **285**, pp. 49-54 (LCC-5239).

Aminophosphanes derived from chiral  $\beta$ -aminoalcohols and carbonyliron complexes thereof

BRUNET J.-J., CHAUVIN R., CHIFFRE J., DONNADIEU B., HUGUET S., LEGLAYE P., MOTHES E.

*Inorg. Chim. Acta*, 1999, **291**, pp. 300-310 (LCC-5296).

An alternating copper(II) chain with bridging oxamidato and nitrito ligands : crystal structure and magnetic properties of  $[\text{Cu}(\text{NO}_2)_2\text{CuL}]_n$  (L=N,N'-bis(2-methyl-2-aminopropyl)oxamide)

COSTES J.-P., DAHAN F., LAURENT J.-P., DRILLON M.

*Inorg. Chim. Acta*, 1999, **294**, pp. 8-13 (LCC-5309).

Antiferromagnetic organic metal exhibiting superconducting transition,  $k\text{-(BETS)}_2\text{FeBr}_4$  [BETS=bis(ethylenedithio)tetraselenafulvalene]

OJIMA E., FUJIWARA H., KATO K., KOBAYASHI H., TANAKA H., KOBAYASHI A., TOKUMOTO M., CASSOUX P.

*J. Am. Chem. Soc.*, 1999, **121**, pp. 5581-5582 (LCC-5261).

Ruthenium complexes containing two Ru-( $\eta^2$ -Si-H) bonds : synthesis, spectroscopic properties, structural data, theoretical calculations, and reactivity studies

DELPECH F., SABO-ETIENNE S., DARAN J.-C., CHAUDRET B., HUSSEIN K., MARSDEN C.J., BARTHELAT J.-C.

*J. Am. Chem. Soc.*, 1999, **121**, pp. 6668-6682 (LCC-5290).

An x-ray spectroscopic investigation of bis(dithiolene)molybdenum(IV,V,VI) and -tungsten(IV,V,VI) complexes: symmetrized structural representations of the active sites of molybdoenzymes in the DMSO reductase family and of tungstoenzymes in the AOR and F(M)DH families

MUSGRAVE K.B., DONAHUE J.P., LORBER C., HOLM R.H., HEDMAN B., HODGSON K.O.

*J. Am. Chem. Soc.*, 1999, **121**, pp. 10297-10307 (LCC-5408).

Reductive elimination of  $\alpha$ -phosphinozirconocene iminoacyl complexes : first evidence of neutral  $\eta^1$ -imine zirconocene. Synthesis of bi- or tricyclic  $\beta$ -phosphino imines

CADIERNO V., ZABLOCKA M., DONNADIEU B., IGAU A., MAJORAL J.-P., SKOWRONSKA A.

*J. Am. Chem. Soc.*, 1999, **121**, pp. 11086-11092 (LCC-5515).

Pressure-induced superconducting transition of  $1\text{-(BETS)}_2\text{FeCl}_4$  with p-d coupled antiferromagnetic insulating ground state at ambient pressure [BETS - bis(ethylenedithio)tetraselenefulvalene]

TANAKA H., ADACHI T., OJIMA E., FUJIWARA H., KATO K., KOBAYASHI H., KOBAYASHI A., CASSOUX P.

*J. Am. Chem. Soc.*, 1999, **121**, pp. 11243-11244 (LCC-5409).

An unprecedented  $k^2N,H$  bonding mode for a hydridotris(pyrazolyl)-borato ligand

MALBOSC F., KALCK PH., DARAN J.-C., ETIENNE M.

*J. Chem. Soc., Dalton Trans.*, 1999, pp. 271-272 (LCC-5240).

Complexes of new chiral terpyridyl ligands. Synthesis and characterization of their ruthenium(II) and rhodium(III) complexes

ZIEGLER M., MONNEY V., STOECKLI-EVANS H., VON ZELEWSKY A., SASAKI I., DUPIC G., DARAN J.-C., BALAVOINE G.G.A.

*J. Chem. Soc., Dalton Trans.*, 1999, pp. 667-675 (LCC-5313).

Structural and complexation properties of diselenacrown ethers. Synthesis and crystal structure of a novel cationic palladium tetraselena complex

BORNET C., AMARDEIL R., MEUNIER P., DARAN J.-C.  
*J. Chem. Soc., Dalton Trans.*, 1999, pp. 1039-1040 (LCC-5465).

Syntheses and single-crystal structures of novel soluble phosphonato- and phosphinato-bridged titanium oxo alkoxides

GUERRERO G., MEHRING M., MUTIN P.H., DAHAN F., VIOUX A.  
*J. Chem. Soc., Dalton Trans.*, 1999, pp. 1537-1538 (LCC-5410).

New ruthenium(II) heteroleptic complexes containing the 4-(2-pyridyl)pyrimidine ligand with amine and amino acid substituents

AIT-HADDOU H., BEJAN E., DARAN J.-C., BALAVOINE G.G.A., BERRUYER-PENAUD F., BONAZZOLA L., SMAOUI-CHAABOUNI H., AMOUYAL E.  
*J. Chem. Soc., Dalton Trans.*, 1999, pp. 3095-3101 (LCC-5314).

Synthesis, characterization and crystal structures of copper(II) complexes containing multidentate pyridine ligands

HEMMERT C., RENZ M., GORNITZKA H., MEUNIER B.  
*J. Chem. Soc., Dalton Trans.*, 1999, pp. 3989-3994 (LCC-5411).

Obtention of two anomers of imidazolone during the type I photosensitized oxidation of 2'-deoxyguanosine

VIALAS C., PRATVIEL G., MEYER A., RAYNER B., MEUNIER B.  
*J. Chem. Soc., Perkin Trans.1*, 1999, pp. 1201-1205 (LCC-5326).

Copper(II) complexes of a nonsteroidal anti-inflammatory drug niflumic acid. Synthesis, crystal structure of tetrakis- $\mu$ -(2-[3-(trifluoromethyl)phenyl]aminonicotinato)bis(dimethylsulfoxide)-dicopper(II) complex at 190K. Anti-inflammatory properties

GREENAWAY F.T., RIVIERE E., GIRERD J.-J., LABOUZE X., MORGANT G., VIOSSAT B., DARAN J.-C., ARVEILLER M.R., DUNG N.-H.  
*J. Inorg. Biochem.*, 1999, **76**, pp. 19-27 (LCC-5464).

Oxidative degradation of chlorinated phenols catalyzed by a non-heme iron(III) complex

HEMMERT C., RENZ M., MEUNIER B.  
*J. Mol. Catal. A*, 1999, **137**, pp. 205-212 (LCC-5241).

Characterization of the main radical and products resulting from a reductive activation of the antimalarial arteflene (Ro 42-1611)

CAZELLES J., ROBERT A., MEUNIER B.  
*J. Org. Chem.*, 1999, **64**, pp. 6776-6781 (LCC-5262).

Novel rhodium(I) complexes with (2-hydroxyphenyl)diphenylphosphine ligand: catalytic properties and X-ray structures of  $\text{Rh}(\text{OC}_6\text{H}_4\text{PPh}_2)(\text{CO})(\text{PPh}_3)$  and  $\text{Rh}(\text{OC}_6\text{H}_4\text{PPh}_2)\{\text{P}(\text{O}^i\text{Pr})_3\}_2 \cdot 0.5\text{C}_6\text{H}_6$

TRZECIAK A.M., ZIOLKOWSKI J.J., LIS T., CHOUKROUN R.  
*J. Organomet. Chem.*, 1999, **575**, pp. 87-97 (LCC-5263).

Synthesis and reactivity of acylphosphine tetracarbonyl-iron complexes

BRUNET J.-J., CHAUVIN R., DONNADIEU B., THEPAUT E.  
*J. Organomet. Chem.*, 1999, **579**, pp. 198-205 (LCC-5344).

Cyclic voltammetry of methyl- and trimethylsilyl-substituted zirconocene dichlorides

LANGMAIER J., SAMEC Z., VARGA V., HORACEK M., CHOUKROUN R., MACH K.  
*J. Organomet. Chem.*, 1999, **584**, pp. 323-328 (LCC-5264).

Synthesis and reactivity of  $[(\text{R}^1\text{R}^2\text{N})_2\text{PH}]\text{Fe}(\text{CO})_4$  complexes. X-ray crystal structure of  $[(\text{Ph}_2\text{N})_2\text{PH}]\text{Fe}(\text{CO})_4$

BRUNET J.-J., CHAUVIN R., DIALLO O.S., DONNADIEU B., JAFFART J., NEIBECKER D.  
*J. Organomet. Chem.*, 1999, **584**, pp. 390-395 (LCC-5328).

Distance and scalar HH-coupling correlations in transition metal dihydrides and dihydrogen complexes  
GRUNDEMANN S., LIMBACH H.-H., BUNTKOWSKI G., SABO-ETIENNE S., CHAUDRET B.  
*J. Phys. Chem. A*, 1999, **103**, pp. 4752-4754 (LCC-5310).

Distance and scalar HH-coupling correlations in transition metal dihydrides and dihydrogen complexes  
GRUNDEMANN S., LIMBACH H.-H., BUNTKOWSKI G., SABO-ETIENNE S., CHAUDRET B.  
*J. Phys. Chem. A*, 1999, **103**, pp. 4752-4754 (LCC-5291).

A new synthetic method toward bimetallic ruthenium platinum nanoparticles: composition induced structural changes  
PAN C., DASSENOY F., CASANOVE M.-J., PHILIPPOT K., AMIENS C., LECANTE P., MOSSET A., CHAUDRET B.  
*J. Phys. Chem. B*, 1999, **103**, pp. 10098-10101 (LCC-5421).

Composition and magnetic properties of MOCVD processed thin films from nickelocene  
DE CARO D., BRISSONNEAU L., BOURSIER D., MADAR R., VAHLAS C.  
*J. Phys. IV*, 1999, **9**, pp. 1099-1106 (LCC-5265).

Polymer-induced selectivity enhancement in the hydrogenation of 2-hexyne catalyzed by poly(vinylpyrrolidone)-stabilized platinum colloids in an amorphous mixed metal oxide support  
LANGE C., DE CARO D., GAMEZ A., STORCK S., BRADLEY J.S., MAIER J.  
*Langmuir*, 1999, **15**, pp. 5333-5338 (LCC-5483).

Complexes inorganiques et non-linéarités optiques de second ordre : l'exemple des complexes de métal-salen  
LACROIX P.G.  
*Lett. Sci. Chim.*, 1999, **68**, pp. 35-37 (LCC-5248).

Simultaneous reflectivity and magnetic measurements on photomagnetic solids : spin-crossover solids and a prussian blue analogue  
CODJOVI E., MORSCHEIDT W., JEFTIC J., LINARES J., NOGUES M., GOUJON A., ROUBEAU O., CONSTANT-MACHADO H., DESAIX A., BOUSSEKSOU A., VERDAGUER M., VARRET F.  
*Mol. Cryst. Liq. Cryst.*, 1999, **335**, pp. 583-592 (LCC-5437).

Influence of the anion of Fe<sup>III</sup> salts on the product distribution in the oxidative degradation of a tetrapyrrolyl ligand  
RENZ M., HEMMERT C., GORNITZKA H., MEUNIER B.  
*New J. Chem.*, 1999, **23**, pp. 773-776 (LCC-5329).

The structure of 3,5-bis(trifluoromethyl)pyrazole in the gas phase and in the solid state  
ALKORTA I., ELGUERO J., DONNADIEU B., ETIENNE M., JAFFART J., SCHAGEN D., LIMBACH H.-H.  
*New J. Chem.*, 1999, **23**, pp. 1231-1237 (LCC-5412).

Peroxynitrite scavenging by different antioxidants. Part I : convenient assay  
BALAVOINE G.G.A., GELETII Y.V.  
*Nitric Oxide*, 1999, **3**, pp. 40-54 (LCC-5315).

Selective oxidation of 2'-deoxyguanosine to imidazolone by the chemical nuclease MnTMPyP associated to KHSO<sub>5</sub> or sulfite/O<sub>2</sub>  
VIALAS C., PRATVIEL G., BERNADOU J., MEUNIER B.  
*Nucleosides Nucleotides*, 1999, **18**, pp. 1061-1063 (LCC-5266).

Synthesis, crystal structures, and second-order nonlinear optical properties of new chiral ferrocenyl materials  
BALAVOINE G.G.A., DARAN J.-C., IFTIME G., LACROIX P.G., MANOURY E., DELAIRE J., MALTEY-FANTON I., NAKATANI K., DI BELLA S.  
*Organometallics*, 1999, **18**, pp. 21-29 (LCC-5249).



- Cluster-mediated conversion of diphenylacetylene into  $\alpha$ -phenylcinnamaldehyde. Construction of a catalytic hydroformylation cycle based on isolated intermediates  
NOMBEL P., LUGAN N., DONNADIEU B., LAVIGNE G.  
*Organometallics*, 1999, **18**, pp. 187-196 (LCC-5242).
- Inclusion properties of 1,4-(triorganostannyl and -silyl)buta-1,3-diyne : thermal, structural, and NMR spectroscopic aspects  
CARRE F., DUTREMEZ S.G., GUERIN CH., HENNER B.J.L., JOLIVET A., TOMBERLI V., DAHAN F.  
*Organometallics*, 1999, **18**, pp. 770-781 (LCC-5243).
- Dendrimers containing Zwitterionic [phosphonium anionic zirconocene(IV)] complexes  
CADIerno V., IGAU A., DONNADIEU B., CAMINADE A.-M., MAJORAL J.-P.  
*Organometallics*, 1999, **18**, pp. 1580-1582 (LCC-5244).
- Vanadacyclopentene phosphane  $Cp_2V(\eta^2-PhC=C)P(C=CPh)Ar$   
CHOUKROUN R., MIQUEL Y., DONNADIEU B., IGAU A., BLANDY C., MAJORAL J.-P.  
*Organometallics*, 1999, **18**, pp. 1795-1797 (LCC-5507).
- Zwitterionic 18-electron  $d^0$ -anionic metallocene complexes  
CADIerno V., ZABLOCKA M., DONNADIEU B., IGAU A., MAJORAL J.-P.  
*Organometallics*, 1999, **18**, pp. 1882-1886 (LCC-5518).
- Structure and reactivity of  $n^2(3e)$ -alkyne complexes of niobium  
ETIENNE M., CARFAGNA C., LORENTE PH., MATHIEU R., DE MONTAUZON D.  
*Organometallics*, 1999, **18**, pp. 3075-3086 (LCC-5267).
- Intramolecular cyclization of dinitriles via zirconocene(IV) - phosphorus exchange reactions : synthesis of  $\sigma^3$ ,  $1^3$ -1-phospha- and  $\sigma^3$ ,  $1^3$ -1,4-diphospha-2,6-diazines  
MARAVAL A., DONNADIEU B., IGAU A., MAJORAL J.-P.  
*Organometallics*, 1999, **18**, pp. 3138-3141 (LCC-5517).
- Proton transfer in aminocyclopentadienyl ruthenium hydride complexes  
AYLLON J.A., SAYERS S.F., SABO-ETIENNE S., DONNADIEU B., CHAUDRET B., CLOT E.  
*Organometallics*, 1999, **18**, pp. 3981-3990 (LCC-5311).
- Asymmetric palladium-catalyzed allylic alkylation using bis(oxazolin) ligands : phenomenal reversal of enantioselectivity with a single chiral backbone  
HOARAU O., AIT-HADDOU H., DARAN J.-C., CRAMAILERE D., BALAVOINE G.G.A.  
*Organometallics*, 1999, **18**, pp. 4718-4723 (LCC-5466).
- Synthesis of new hemilabile amphiphilic phosphines. Complexing properties toward ruthenium(II) and catalytic activity for hydrogenation of prenal  
VALLS E., SUADES J., MATHIEU R.  
*Organometallics*, 1999, **18**, pp. 5475-5483 (LCC-5413).
- Phosphorus-containing dendrimers  
MAJORAL J.-P., CAMINADE A.-M., LAURENT R.  
*Phosph. Res. Bull.*, 1999, **10**, pp. 679-684 (LCC-5268).
- Multidendritic systems incorporating phosphazene units  
MARAVAL V., LAURENT R., CAMINADE A.-M., MAJORAL J.-P.  
*Phosph. Res. Bull.*, 1999, **10**, pp. 742-747 (LCC-5269).
- Strategies for the synthesis of linear, hyperbranched polymers and dendrimers incorporating P=N bonds  
MERINO S., BRAUGE L., CAMINADE A.-M., MAJORAL J.-P., TATON D., GNANOU Y.  
*Phosph. Res. Bull.*, 1999, **10**, pp. 748-751 (LCC-5271).
- Chemistry within the cascade structure of dendrimers incorporating P=N bonds  
TURRIN C.O., LARRE C., CAMINADE A.-M., MAJORAL J.-P.  
*Phosph. Res. Bull.*, 1999, **10**, pp. 777-781 (LCC-5270).

Phosphorus compounds for the formation of unprecedented anionic zirconium complexes

IGAU A., MIQUEL Y., CADIerno V., MAJORAL J.-P.

*Phosph. Sulf. Silicon*, 1999, **144-146**, pp. 585-588 (LCC-5512).

Phosphorus compounds as cyclization promoted reagents : preparation of 1,4- $\text{o}^3$ , 1<sup>3</sup>-diphospha-2,6-diazines

IGAU A., MARAVAL A., MAJORAL J.-P.

*Phosph. Sulf. Silicon*, 1999, **147**, 125 p. (LCC-5516).

High-frequency ferromagnetic resonance on ultrafine cobalt particles

RESPAUD M., GOIRAN M., BROTO J.-M., YANG F.H., OULD ELY T., AMIENS C., CHAUDRET B.

*Phys. Rev. B-Cond. Matt.*, 1999, **59**, pp. 1-4 (LCC-5292).

Zirconium species as tools in phosphorous chemistry

ZABLOCKA M., SKOWRONSKA A., IGAU A., MAJORAL J.-P.

*Pol. J. Chem.*, 1999, **73**, pp. 1437-1450 (LCC-5514).

Inorganic-organic systems with tailored properties controlled on molecular, macromolecular and microscopic level

SLOMSKOWSKI S., MIKSA B., CHEHIMI M.M., DELAMAR M., CABET-DELIRY E., MAJORAL J.-P., CAMINADE A.-M.

*React. Funct. Polym.*, 1999, **41**, pp. 45-57 (LCC-5272).

Tetrathiafulvalene systems for second-order optical nonlinearity

ANDREU R., MALFANT I., LACROIX P.G., CASSOUX P.

*Synth. Met.*, 1999, **102**, pp. 1575-1576 (LCC-5418).

BEDT-TTF derivatives with one and two dioxane rings and their conductive salts

KOTOV A.I., BURAVOV L.I., KONOVALIKHIN S.V., DYACHENKO O.A., YAGUBSKII E.B., MALFANT I., COURCET T., CASSOUX P., AKIMOTO J., HONDA Y.

*Synth. Met.*, 1999, **102**, pp. 1630-1631 (LCC-5293).

Radical cation salts and charge transfer complexes based on functionalized TTF derivatives

LEGROS J.-P., DAHAN F., BINET L., FABRE P.-L.

*Synth. Met.*, 1999, **102**, pp. 1632-1633 (LCC-5273).

On the low-temperature states of highly correlated BETS conductors

KOBAYASHI H., AKUTSU H., TANAKA H., KOBAYASHI A., TOKUMOTO M., BROSSARD L., CASSOUX P.

*Synth. Met.*, 1999, **102**, pp. 1654-1657 (LCC-5294).

Preparation, X-ray crystal structure, electrical and optical properties of a new BETS charge transfer salt:  $\text{k}^-(\text{BETS})_4\text{Cu}_2\text{Cl}_6$

COURCET T., MALFANT I., GORNITZKA H., CASSOUX P., KOBAYASHI H.

*Synth. Met.*, 1999, **102**, pp. 1761-1762 (LCC-5274).

Superconductor-to-insulator transition of  $1-\text{BETS}_2\text{Fe}_x\text{Ga}_{1-x}\text{Cl}_4$

KOBAYASHI H., AKUTSU H., OJIMA E., SATO A., TANAKA H., KOBAYASHI A., CASSOUX P.

*Synth. Met.*, 1999, **103**, pp. 1837-1838 (LCC-5275).

Torque anisotropy in  $1-(\text{BEDT-TSF})_2\text{FeCl}_4$

OH J.I., NAUGHTON M., COURCET T., MALFANT I., CASSOUX P., TOKUMOTO M., AKUTSU H., KOBAYASHI H., KOBAYASHI A.

*Synth. Met.*, 1999, **103**, pp. 1861-1864 (LCC-5231).

Fermi surface determination of  $(\text{BEDO-TTF})_2\text{ReO}_4\text{H}_2\text{O}$

PROUST C., HONOLD M., LAUKHIN V.N., NAM M.-S., AUDOUARD A., BROSSARD L., CANADELL E., SINGLETON J., LEGROS J.-P., KUSHCH N.D.

*Synth. Met.*, 1999, **103**, pp. 1938-1939 (LCC-5480).

Infrared and raman properties of  $[M(\text{dmit})_2]$  ( $M=\text{Ni}, \text{Pd}$ ) based compounds  
POKHODNYA K.I., FAULMANN C., MALFANT I., ANDREU R., CASSOUX P., MLAYAH A.,  
SMIRNOV D., LEOTIN J.  
*Synth. Met.*, 1999, **103**, pp. 2016-2019 (LCC-5276).

Multi-property materials combining conductivity and second-order optical nonlinearity  
LACROIX P.G., MALFANT I., ANDREU R., CASSOUX P.  
*Synth. Met.*, 1999, **103**, pp. 2168-2171 (LCC-5319).

Optical excitations in a quarter-filled  $\text{Ni}(\text{dmit})_2$  based compound described by a dimerized octamer  
model  
POKHODNYA K.I., CASSOUX P., FELTRE L., MENEGETTI M.  
*Synth. Met.*, 1999, **103**, pp. 2187 (LCC-5278).

$[M(\text{dmit})_2]$  salts with paramagnetic cations: synthesis and magnetic properties  
FAULMANN C., PULLEN A.E., RIVIERE E., JOURNAUX Y., RETAILLEAU L.  
*Synth. Met.*, 1999, **103**, pp. 2296-2297 (LCC-5277).

Structural and magnetic properties of the ferrocene based salts  $[\text{FeCH}_2\text{NMe}_3][M(\text{mnt})_2]$  ( $M=\text{Ni}, \text{Pt}$ )  
PULLEN A.E., POKHODNYA K.I., FAULMANN C., TOKUMOTO M., CASSOUX P.  
*Synth. Met.*, 1999, **103**, pp. 2310-2311 (LCC-5279).

An effective route to polysubstituted symmetric terpyridines  
SASAKI I., DARAN J.-C., BALAVOINE G.G.A.  
*Synthesis*, 1999, pp. 815-820 (LCC-5316).

Diastereoselective cyclocarbonylation of isopulegol by palladium(II) complexes containing no chiral  
ligands  
LENOBLE G., CHENAL T., URRUTIGOITY M., DARAN J.-C., KALCK PH.  
*Tetrahedron Asymmetry*, 1999, **10**, pp. 929-936 (LCC-5467).

Structural characterization of a 39-residue peptide corresponding to the two zinc finger domains of HIV-2  
nucleocapsid protein by NMR  
LAUSSAC J.-P., ARNAUD P., MAZARGUIL H., ERARD M., CUNG M.T.  
*Trends Inorg. Chem.*, 1999, **6**, pp. 93-104 (LCC-5525).