



## Publications, Proceedings and Patents

**Clément SANCHEZ**



**Laboratoire Chimie de la Matière Condensée de Paris**

**UMR 7574**

**CNRS**

**Université Pierre et Marie Curie**

**Collège de France**

**January 2011**



**COLLÈGE  
DE FRANCE**  
— 1530 —



## PUBLICATIONS

### 1980

**1. Mixed Valence in Small and Large Polynuclear Species with Metal-Oxygen-Metal Bridges**

Y. Jeannin, J. P. Launay, C. Sanchez, J. Livage and M. Fournier, *Nouveau Journal De Chimie-New Journal of Chemistry*, 4, 587, (1980)

**2. Electron Spin Resonance of Reduced 12-Molybdophosphate Anion and Ground State Delocalization in Mixed Valence Heteropolyanions**

J. P. Launay, M. Fournier, C. Sanchez, J. Livage and M. T. Pope, *Inorganic & Nuclear Chemistry Letters*, 16, 257, (1980)

**3. ESR Study of Lithium Incorporation by  $V_2O_5$  Single Crystals**

J. Livage, A. Pasturel, C. Sanchez and J. Vedel, *Solid State Ionics*, 1, 491, (1980)

**4. Electron Spin Resonance Study of  $V_2O_5$  Reduction in Butyllithium**

A. Pasturel, C. Sanchez and J. Livage, *Physica Status Solidi a-Applied Research*, 59, K167, (1980)

**5. Niobium Organometallic Chemistry. Part 3. Reaction of Bis-(Cyclopentadienyl)Niobium Dichloride with Tetraphosphorus Decasulphide - Electron Spin Resonance and NMR Studies of Some Niobium(IV) and Niobium(V) O,O'-Dialkyldithiophosphates**

B. Viard, J. Salapala, J. Amaudrut, J. E. Guerschais, C. Sanchez and J. Livage, *Inorganica Chimica Acta*, 39, 99, (1980)

### 1981

**6. Electron Spin Resonance of  $P_2O_5$ -Doped  $V_2O_5$  Single Crystals**

D. Ballutaud, C. Rkha, C. Sanchez and J. Livage, *Physica Status Solidi a-Applied Research*, 66, 271, (1981)

**7. Random Glass Structure and Electron Localization in Amorphous  $V_2O_5$**

M. Henry, C. Sanchez, C. Rkha and J. Livage, *Journal of Physics C-Solid State Physics*, 14, 829, (1981)

**8. Electron Spin Resonance of Undeca Tungstovanado(IV) Silicates Isomers**

C. Sanchez, M. Michaud, J. Livage and G. Herve, *Journal of Inorganic & Nuclear Chemistry*, 43, 2795, (1981)

**9. Niobium Organometallic Chemistry. Part 6. Electron-Spin Resonance Study of Bonding in Pseudo-Tetrahedral Bis(Cyclopentadienyl)Niobium-(IV) Complexes**

C. Sanchez, D. Vivien, J. Livage, J. Salapala, B. Viard and J. E. Guerschais, *Journal of the Chemical Society-Dalton Transactions*, 64, (1981)

**10.  $V^{4+}$  Brownian Motion in Splat Cooled Amorphous  $V_2O_5$  after Water Vapor Adsorption**

P. Tougne, A. P. Legrand, C. Sanchez and J. Livage, *Journal of Physics and Chemistry of Solids*, 42, 101, (1981)

### 1982

**11. Spectroscopic Study of Mixed Valence Complexes between V(IV) and V(V)**

F. Babonneau, C. Sanchez, J. Livage, J. P. Launay, M. Daoudi and Y. Jeannin, *Nouveau Journal De Chimie-New Journal of Chemistry*, 6, 353, (1982)

**12. Mixed Valence Polyvanadic Acid Gels**

N. Gharbi, C. Sanchez, J. Livage, J. Lemerle, L. Nejem and J. Lefebvre, *Inorganic Chemistry*, 21, 2758, (1982)

**13. Nucleophilic Additions to Cyclo-Octa-1,5-Diene Coordinated to Platinum(II) .Part 1. Attempts at Syn-Addition of Bifunctional Nucleophiles**

E. Mulliez, J. Soulie, J. C. Chottard, C. Sanchez and J. Guilhem, *Journal of Chemical Research-S*, 38, (1982)

**14. Free and Bound Polarons in Vanadium Pentoxide**

C. Sanchez, M. Henry, J. C. Grenet and J. Livage, *Journal of Physics C-Solid State Physics*, 15, 7133, (1982)

**15. Mixed Valence Fluoropolytungstates**

C. Sanchez, J. Livage, P. Doppelt, F. Chauveau and J. Lefebvre, *Journal of the Chemical Society-Dalton Transactions*, 2439, (1982)

**16. Electron Delocalization in Mixed Valence Molybdenum Polyanions**

C. Sanchez, J. Livage, J. P. Launay, M. Fournier and Y. Jeannin, *Journal of the American Chemical Society*, 104, 3194, (1982)

**17. Infrared and Raman Study of Amorphous  $V_2O_5$**

C. Sanchez, J. Livage and G. Lucazeau, *Journal of Raman Spectroscopy*, 12, 68, (1982)

## 1983

**18. Low Frequency Transition between Vibronic Levels of  $(V^{2+})^{9+}$  in Crystalline  $V_2O_5$  from Electron Spin Lattice. Relaxation Measurements**

B. Gaillard, C. Blanchard, A. Deville and C. Sanchez, *Journal De Physique*, 44, 691, (1983)

**19. Square Pyramidal Complexes of Divalent-Cations of the 1<sup>st</sup> Transition Row with the 20-Tungsto-2-Arsenate(III) - Synthesis, Visible and Electron Spin Resonance Spectra**

F. Lefebvre, M. Leyrie, G. Herve, C. Sanchez and J. Livage, *Inorganica Chimica Acta*, 73, 173, (1983)

**20. Semiconducting Properties of  $V_2O_5$  Gels**

C. Sanchez, F. Babonneau, R. Morineau, J. Livage and J. Bullo, *Philosophical Magazine B-Physics of Condensed Matter Statistical Mechanics Electronic Optical and Magnetic Properties*, 47, 279, (1983)

**21. Electron Delocalization in Mixed Valence Tungsten Polyanions**

C. Sanchez, J. Livage, J. P. Launay and M. Fournier, *Journal of the American Chemical Society*, 105, 6817, (1983)

**22. Electrical Conductivity of Amorphous  $V_2O_5$**

C. Sanchez, R. Morineau and J. Livage, *Physica Status Solidi a-Applied Research*, 76, 661, (1983)

**23. Reactivity of Hydrated Amorphous Vanadium Oxide**

M. T. Vandenberg, C. Sanchez and J. Livage, *Revue De Chimie Minerale*, 20, 850, (1983)

## 1984

**24. Electrochemical and Photochemical Reduction of Decatungstate: a Reinvestigation**

A. Chemseddine, C. Sanchez, J. Livage, J. P. Launay and M. Fournier, *Inorganic Chemistry*, 23, 2609, (1984)

**25. X-Ray, Electron Spin Resonance, and Optical Absorption Studies of Tetrakis(Cyclohexylamine)Copper(II) Nitrate: an Example of a Flattened Tetrahedral Copper(II) Complex**

J. Gouteron, S. Jeannin, Y. Jeannin, J. Livage and C. Sanchez, *Inorganic Chemistry*, 23, 3387, (1984)

**26. Small Polaron Mobility in  $\gamma-Li_xV_2O_5$**

C. Sanchez, M. Henry, R. Morineau and M. C. Leroy, *Physica Status Solidi B-Basic Research*, 122, 175, (1984)

**27. Influence of the Quenching Rate on the Properties of Amorphous  $V_2O_5$  Thin Films**

C. Sanchez, J. Livage, J. P. Audiere and A. Madi, *Journal of Non-Crystalline Solids*, 65, 285, (1984)

## 1985

- 28. *Electron Spin Resonance Study of Brownian Motion in  $V_2O_5$  Gels***  
N. Gharbi, C. Sanchez and J. Livage, *Journal de Chimie Physique et de Physico-Chimie Biologique*, 82, 755, (1985)
- 29. *Small Polarons in  $V_2O_5$  Single Crystal Doped with  $WO_3$***   
M. Henry, C. Sanchez, C. Rkha and J. Livage, *Journal of Physics C-Solid State Physics*, 18, 6589, (1985)
- 30. *Preparation, Electrical and Photoelectrochemical Properties of Mg-Doped Iron Oxide Sintered Disks***  
K. D. Sieber, C. Sanchez, J. E. Turner and G. A. Somorjai, *Materials Research Bulletin*, 20, 153, (1985)
- 31. *Preparation, Characterization and Photoelectronic Properties of Ge-Substituted  $Fe_2O_3$  Single Crystals***  
K. D. Sieber, C. Sanchez, J. E. Turner and G. A. Somorjai, *Journal of the Chemical Society-Faraday Transactions 1*, 81, 1263, (1985)
- 32. *Structure and Properties of Reduced Amorphous Vanadium Oxide  $V_2O_5$***   
M. T. Vandenborre, C. Sanchez and A. Politi, *Nouveau Journal De Chimie-New Journal of Chemistry*, 9, 511, (1985)

## 1986

- 33. *ENDOR Study of a One-Electron 2:18 Reduced Fluoropolytungstate***  
D. Gourier, P. Doppelt and C. Sanchez, *Inorganic Chemistry*, 25, 4462, (1986)
- 34. *Photochemical Hydrogen Production from a Water-Methanol Mixture with Small Particles of Iron Oxide Suspensions***  
H. Nakanishi, C. Sanchez, M. Hendewerk and G. A. Somorjai, *Materials Research Bulletin*, 21, 137, (1986)
- 35. *Synthesis, Bulk, and Surface Characterization of Nb-Doped  $Fe_2O_3$  Single Crystals***  
C. Sanchez, M. Hendewerk, K. D. Sieber and G. A. Somorjai, *Journal of Solid State Chemistry*, 61, 47, (1986)

## 1987

- 36. *Hydrolysis of Titanium Alkoxides: Modification of the Molecular Precursor by Acetic Acid***  
S. Doeuff, M. Henry, C. Sanchez and J. Livage, *Journal of Non-Crystalline Solids*, 89, 206, (1987)
- 37. *The Gel Route to  $Cr^{3+}$ -Doped  $TiO_2$ , an Electron Spin Resonance Study***  
S. Doeuff, M. Henry, C. Sanchez and J. Livage, *Journal of Non-Crystalline Solids*, 89, 84, (1987)
- 38. *Vanadium Incorporation in Silica Glasses***  
E. Fritsch, F. Babonneau, C. Sanchez and G. Calas, *Journal of Non-Crystalline Solids*, 92, 282, (1987)
- 39. *Electrical Conductivity of  $V_2O_5$  and  $Li_xV_2O_5$  Amorphous Thin Films***  
L. Murawski, C. Gledel, C. Sanchez, J. Livage and J. P. Audieres, *Journal of Non-Crystalline Solids*, 89, 98, (1987)

## 1988

- 40. *XANES and EXAFS Study of Titanium Alkoxides***  
F. Babonneau, S. Doeuff, A. Leautic, C. Sanchez, C. Cartier and M. Verdagner, *Inorganic Chemistry*, 27, 3166, (1988)
- 41. *Spectroscopic Characterization of Sol-Gel Processing***  
F. Babonneau, C. Sanchez and J. Livage, *Journal of Non-Crystalline Solids*, 106, 170, (1988)

**42. Sol-Gel Chemistry of Transition Metal Oxides**

J. Livage, M. Henry and C. Sanchez, *Progress in Solid State Chemistry*, 18, 259, (1988)

**43. Electrochemical Properties of Amorphous  $V_2O_5$**

M. Nabavi, C. Sanchez, F. Taulelle, J. Livage and A. Deguibert, *Solid State Ionics*, 28, 1183, (1988)

**44. Chemical Modification of Alkoxide Precursors**

C. Sanchez, J. Livage, M. Henry and F. Babonneau, *Journal of Non-Crystalline Solids*, 100, 65, (1988)

**45. The Photoelectrochemistry of Nb-Doped  $\alpha$ - $Fe_2O_3$**

C. Sanchez, K. D. Sieber and G. A. Somorjai, *Journal of Electroanalytical Chemistry*, 252, 269, (1988)

**46. High Resolution Solid State  $^{31}P$  NMR in Some Antimony Phosphates**

F. Taulelle, C. Sanchez, J. Livage, A. Lachgar and Y. Piffard, *Journal of Physics and Chemistry of Solids*, 49, 299, (1988)

**1989**

**47. Synthesis and Structural Study of the Titanium Acetate Isopropoxide Oxide  $[Ti_6(\mu_3-O)_2(\mu_2-O)_2(\mu_2-OAc)_4(\mu_2-O^iPr)_6(O^iPr)_6]$ , a Reference Compound for the Sol-Gel Process**

S. Doeuff, Y. Dromzee and C. Sanchez, *Comptes Rendus De L' Academie Des Sciences Serie II*, 308, 1409, (1989)

**48. Synthesis and Solid- and Liquid-State Characterization of a Hexameric Cluster of Titanium(IV):  $Ti_6(\mu_2-O)_2(\mu_3-O)_2(\mu_2-OC_4H_9)_2(OC_4H_9)_6(OCOCH_3)_8$**

S. Doeuff, Y. Dromzee, F. Taulelle and C. Sanchez, *Inorganic Chemistry*, 28, 4439, (1989)

**49. Electrochromic Properties of Anatase  $TiO_2$  Films Prepared by the Sol-Gel Process**

S. Doeuff and C. Sanchez, *Comptes Rendus De L' Academie Des Sciences Serie II*, 309, 531, (1989)

**50. Photoelectrochemical Properties of  $TiO_2$  Anatase Films Synthesized via the Sol-Gel Process**

S. Doeuff and C. Sanchez, *Comptes Rendus De L' Academie Des Sciences Serie II*, 309, 1137, (1989)

**51. The Chemistry of the Sol-Gel Process**

J. Livage, C. Sanchez, M. Henry and S. Doeuff, *Solid State Ionics*, 32-3, 633, (1989)

**52. Sol-Gel Synthesis of Electrochromic Films**

M. Nabavi, S. Doeuff, C. Sanchez and J. Livage, *Materials Science and Engineering B*, 3, 203, (1989)

**53. Some Illustrations of the Use of Synchrotron Radiation to Characterize the Sol-Gel Process**

C. Sanchez, M. Nabavi, P. Judeinstein and S. Doeuff, *Journal de Chimie Physique et de Physico-Chimie Biologique*, 86, 1593, (1989)

**1990**

**54. An ESR Study of Cr(III) in Zirconia Prepared by the Sol-Gel Process**

J. Bennour, N. Gharbi, H. Zarrouk, C. Sanchez and M. Henry, *Annales De Chimie-Science Des Materiaux*, 15, 19, (1990)

**55. Sol-Gel Synthesis and Characterization of Titanium Oxo-Acetate Polymers**

S. Doeuff, M. Henry and C. Sanchez, *Materials Research Bulletin*, 25, 1519, (1990)

**56. Optical Properties of  $TiO_2$ ,  $ZrO_2$ ,  $Al_2O_3$  and  $SiO_2$  Based Gels Doped with Rhodamine 640**

J. Fitremann, S. Doeuff and C. Sanchez, *Annales De Chimie-Science Des Materiaux*, 15, 421, (1990)

**57. Sol-Gel Synthesis of PFN Ceramics ( $PbFe_{1/2}NB_{1/2}O_3$ )**

P. Griesmar, G. Papin, C. Sanchez and J. Livage, *Journal of Materials Science Letters*, 9, 1288, (1990)

**58. Chemical Synthesis of Fine Powders**

J. Livage, M. Henry, J.-P. Jolivet and C. Sanchez, *MRS Bulletin*, 15, 18, (1990)

**59. The Sol-Gel Route to Molybdenum Oxides**

J. Mendez-Vivar, A. Campero, J. Livage and C. Sanchez, *Journal of Non-Crystalline Solids*, 121, 26, (1990)

**60. Small Polaron Transport in Amorphous  $V_2O_5$  Films**

L. Murawski, C. Sanchez, J. Livage and J. P. Audiere, *Journal of Non-Crystalline Solids*, 124, 71, (1990)

**61. Chemical Modification of Metal Alkoxides by Solvents: a Way to Control Sol-Gel Chemistry**

M. Nabavi, S. Doeuff, C. Sanchez and J. Livage, *Journal of Non-Crystalline Solids*, 121, 31, (1990)

**62. ESR Study of Some Photoreduced Vanadium Oxo-Alkoxides  $VO(OR)_3$**

M. Nabavi and C. Sanchez, *Comptes Rendus De L' Academie Des Sciences Serie II*, 310, 117, (1990)

**63. XANES and  $^{51}V$  NMR Study of Vanadium Oxygen Compounds**

M. Nabavi, F. Taulelle, C. Sanchez and M. Verdagner, *Journal of Physics and Chemistry of Solids*, 51, 1375, (1990)

**64. Sol-Gel Chemistry from Metal Alkoxide Precursors**

C. Sanchez and J. Livage, *New Journal of Chemistry*, 14, 513, (1990)

**65. Synthesis and Structural Study of the Compound  $Zr_4(\mu_4-O)(\mu_2-O^i Pr)_6(O^i Pr)_4(acac)_4$**

P. Toledano, M. In and C. Sanchez, *Comptes Rendus De L' Academie Des Sciences Serie II*, 311, 1161, (1990)

**66. Structure of Bis(2-Propanol)-Bis- $\mu$ -(2-Propanolato)-Hexakis(2-Propanolato)DiCerium(IV)**

P. Toledano, F. Ribot and C. Sanchez, *Acta Crystallographica Section C-Crystal Structure Communications*, 46, 1419, (1990)

**67. Synthesis and Structure of the Compound  $Ce_6(\mu_3-O)_4(\mu_3-OH)_4(acac)_{12}$**

P. Toledano, F. Ribot and C. Sanchez, *Comptes Rendus De L' Academie Des Sciences Serie II*, 311, 1315, (1990)

## 1991

**68. Electrochemical Probing of the Sol-Gel Xerogel Evolution**

P. Audebert, P. Griesmar and C. Sanchez, *Journal of Materials Chemistry*, 1, 699, (1991)

**69. Sol-Gel Route to Niobium Pentoxide**

P. Griesmar, G. Papin, C. Sanchez and J. Livage, *Chemistry of Materials*, 3, 335, (1991)

**70. Second-Harmonic Generation from Organic Molecules Incorporated in Sol-Gel Matrices**

P. Griesmar, C. Sanchez, G. Puccetti, I. Ledoux and J. Zyss, *Molecular Engineering*, 1, 205, (1991)

**71. Optical Properties of Some Organic (Rhodamine 6G, Coumarin 4) and Inorganic (Eu(III), Nd(III)) Probes inside Transition Metal Oxide Based Gels**

M. Lecomte, B. Viana and C. Sanchez, *Journal de Chimie Physique et de Physico-Chimie Biologique*, 88, 39, (1991)

**72. pH Effect in Molybdenum(VI) Oxide Tetrachloride Polymerization via the Sol-Gel Method**

J. Mendez-Vivar, T. Lopez, A. Campero and C. Sanchez, *Langmuir*, 7, 704, (1991)

**73. Structure and Properties of Amorphous  $V_2O_5$**

M. Nabavi, C. Sanchez and J. Livage, *Philosophical Magazine B-Physics of Condensed Matter Statistical Mechanics Electronic Optical and Magnetic Properties*, 63, 941, (1991)

**74. Sol-Gel Synthesis of Vanadium Oxide from Alkoxides**

M. Nabavi, C. Sanchez and J. Livage, *European Journal of Solid State and Inorganic Chemistry*, 28, 1173, (1991)

**75. Hydrolysis-Condensation Process of  $\beta$ -diketonates Modified Cerium(IV) Isopropoxide**

F. Ribot, P. Toledano and C. Sanchez, *Chemistry of Materials*, 3, 759, (1991)

**76. X-Ray and Spectroscopic Investigations of the Structure of Yttrium Acetate Tetrahydrate**

F. Ribot, P. Toledano and C. Sanchez, *Inorganica Chimica Acta*, 185, 239, (1991)

**77. Synthesis and Structure of the Compound  $Ti_{18}(\mu_5-O)_2(\mu_4-O)_2(\mu_3-O)_{10}(\mu_2-O)_4(\mu_2-O^i Bu)_{14}(O^i Bu)_{12}(acac)_2$**

P. Toledano, M. In and C. Sanchez, *Comptes Rendus De L' Academie Des Sciences Serie II*, 313, 1247, (1991)

**78. Second Harmonic Generation from Poled Organic Molecules Incorporated into Sol-Gel Matrices**

E. Toussaere, J. Zyss, P. Griesmar and C. Sanchez, *Nonlinear Optics, Principles, Materials, Phenomena and Devices* | *Nonlinear Optics, Principles, Materials, Phenomena and Devices*, 1, 349, (1991)

## 1992

**79. Sol-Gel-Xerogel Evolution Investigated by Electroactive Probes in Silica and Transition Metal Oxide Based Gels**

P. Audebert, P. Griesmar, P. Hapiot and C. Sanchez, *Journal of Materials Chemistry*, 2, 1293, (1992)

**80. Sol-Gel Synthesis of Siloxane Oxide Hybrid Coatings ( $Si(CH_3)_2O-MO_x$ ;  $M = Si, Ti, Zr, Al$ ) with Luminescent Properties**

S. Dire, F. Babonneau, C. Sanchez and J. Livage, *Journal of Materials Chemistry*, 2, 239, (1992)

**81. Photoelectrochemical Properties of Tungsten Oxide Gels**

P. Judeinstein, A. Chemseddine and C. Sanchez, *Journal de Chimie Physique et de Physico-Chimie Biologique*, 89, 1469, (1992)

**82. SAXS Study of Gelation and Precipitation in Titanium Based Systems**

M. Kallala, C. Sanchez and B. Cabane, *Journal of Non-Crystalline Solids*, 147, 189, (1992)

**83. Sol-Gel Chemistry**

J. Livage and C. Sanchez, *Journal of Non-Crystalline Solids*, 145, 11, (1992)

**84. Propriétés Optiques de Monolithes à Base de Silice / Optical Properties of Silica-based Monoliths**

C. Sanchez, *Boletin De La Sociedad Espanola De Ceramica Y Vidrio*, 31, 135, (1992)

**85. Matériaux pour l'Optique Elaborés par le Procédé Sol-Gel. I : Systemes Optiques Basés sur une Variation d'Indice de Refraction / Optical Materials Produced via Sol-Gel. I : Systems Based on the Refractive Index Variation**

C. Sanchez, *Boletin De La Sociedad Espanola De Ceramica Y Vidrio*, 31, 5, (1992)

**86. Matériaux pour l'Optique Elaborés par le Procédé Sol-Gel. II : Absorption et Luminescence / Optical Materials Produced via Sol-Gel. II : Absorption and Luminescence**

C. Sanchez, *Boletin De La Sociedad Espanola De Ceramica Y Vidrio*, 31, 89, (1992)

**87. Matériaux pour l'Optique Elaborés par le Procédé Sol-Gel. III : Propriétés Electrochromes / Optical Materials Produced via Sol-Gel Process. III: Electrochromic Properties**

C. Sanchez, *Boletin De La Sociedad Espanola De Ceramica Y Vidrio*, 31, 191, (1992)

**88. Molecular Design of Alkoxide Precursors for the Synthesis of Hybrid Organic Inorganic Gels**

C. Sanchez and M. In, *Journal of Non-Crystalline Solids*, 147, 1, (1992)

## 1993

**89. Electrochemical Probing of the Activity of Glucose Oxidase Embedded Sol-Gel Matrices**

P. Audebert, C. Demaille and C. Sanchez, *Chemistry of Materials*, 5, 911, (1993)

**90. Charge Transfer Dynamics of Porphyrin Phthalocyanine Heterodimers in Hybrid Sol-Gel Films**

T. Fournier, T. H. Tran Thi, N. Herlet and C. Sanchez, *Chemical Physics Letters*, 208, 101, (1993)

**91. Structures of Inorganic Polymers in Sol-Gel Processes Based on Titanium Oxide**

M. Kallala, C. Sanchez and B. Cabane, *Physical Review E*, 48, 3692, (1993)

**92. Rare Earth Doped Hybrid Siloxane Oxide Coatings with Luminescent Properties**

N. I. Koslova, B. Viana and C. Sanchez, *Journal of Materials Chemistry*, 3, 111, (1993)

**93. Optical Properties of a Near Infrared Dye Laser Incorporated inside Sol-Gel Matrices**

B. Lebeau, N. Herlet, J. Livage and C. Sanchez, *Chemical Physics Letters*, 206, 15, (1993)

**94. Vanadium Clusters in Doped  $ZrO_2$ - $SiO_2$  Toughened Ceramic Composites Obtained from Alkoxides**

G. Monros, J. Carda, M. A. Tena, P. Escribano, F. Ribot and C. Sanchez, *Solid State Ionics*, 63-65, 218, (1993)

**95. Polarized XANES and EXAFS at the V K-Edge of  $VOPO_4 \cdot 2H_2O$  Gel, Comparison with the V K-Edge in  $V_2O_5$  Xerogel**

B. Pommellec, R. Cortes, C. Sanchez, J. Berthon and C. Fretigny, *Journal of Physics and Chemistry of Solids*, 54, 751, (1993)

**96. Nonlinear Optical Properties of Organically Doped Metal Oxide Based Gels**

C. Sanchez, P. Griesmar, G. Puccetti, I. Ledoux, E. Toussaere and J. Zyss, *Nonlinear Optics, Principles, Materials, Phenomena and Devices*, 4, 245, (1993)

**97. Molecular Design of Hybrid Organic-Inorganic Materials**

C. Sanchez and F. Ribot, *Journal De Physique IV*, 3, 1349, (1993)

## 1994

**98. Modified Electrodes from Hydrophobic Alkoxide Silica Gels: Insertion of Electroactive Compounds and Glucose Oxidase**

P. Audebert and C. Sanchez, *Journal of Sol-Gel Science and Technology*, 2, 809, (1994)

**99. Synthesis and Characterization of Titanium Oxide Based Gels Synthesized from Acetate Modified Titanium Butoxide Precursors**

S. Barboux-Doeuff and C. Sanchez, *Materials Research Bulletin*, 29, 1, (1994)

**100. Rheological Study of Titanium Oxide Based Gels**

A. Bleuzen, S. Barboux-Doeuff, P. Flaud and C. Sanchez, *Materials Research Bulletin*, 29, 1223, (1994)

**101. The Role of Complexing Ligands in the Formation of Non-Aggregated Nanoparticles of Zirconia**

M. Chatry, M. Henry, M. In and C. Sanchez, *Journal of Sol-Gel Science and Technology*, 1, 233, (1994)

**102. Charge Transfer Dynamics of Donor-Acceptor Systems in Solutions and Sol-Gel Matrices**

T. Fournier, I. Salabert, T. H. Tran-Thi, H. Ali, J. Van-Lier and C. Sanchez, *Journal of Sol-Gel Science and Technology*, 2, 737, (1994)

**103. Relaxation Behavior of NLO Chromophores Grafted in Hybrid Sol-Gel Matrices**

B. Lebeau, J. Maquet, C. Sanchez, E. Toussaere, R. Hierle and J. Zyss, *Journal of Materials Chemistry*, 4, 1855, (1994)

**104. Molecular Design of Hybrid Organic-Inorganic Materials with Electronic Properties**

C. Sanchez, B. Alonso, F. Chapusot, F. Ribot and P. Audebert, *Journal of Sol-Gel Science and Technology*, 2, 161, (1994)

**105. Design of Hybrid Organic-Inorganic Materials Synthesized Via Sol-Gel Chemistry**

C. Sanchez and F. Ribot, *New Journal of Chemistry*, 18, 1007, (1994)



## 1995

- 106. Hydrolysis of Monobutyltin Trialkoxides: Synthesis and Characterizations of  $\{(BuSn)_2O_2(OH)_6\}_n(OH)_2$**   
F. Banse, F. Ribot, P. Toledano, J. Maquet and C. Sanchez, *Inorganic Chemistry*, 34, 6371, (1995)
- 107. Investigation on Hydrolysis-Condensation Reactions of Titanium(IV) Butoxide**  
J. Blanchard, S. Barbouxdoeff, J. Maquet and C. Sanchez, *New Journal of Chemistry*, 19, 929, (1995)
- 108. Transition Metal Based Hybrid Organic-Inorganic Copolymers**  
M. In, C. Gerardin, J. Lambard and C. Sanchez, *Journal of Sol-Gel Science and Technology*, 5, 101, (1995)
- 109. General Routes to Functional Organotin Trichlorides and Trialkoxides Involving the Tricyclohexylstannyl Group**  
B. Jousseau, M. Lahcini, M.-C. Rascle, F. Ribot and C. Sanchez, *Organometallics*, 14, 685, (1995)
- 110. Hybrid Organic-Inorganic Supramolecular Assemblies Made from Butyltin Oxo-Hydroxo Nanobuilding Blocks and Dicarboxylates**  
F. Ribot, F. Banse, F. Diter and C. Sanchez, *New Journal of Chemistry*, 19, 1145, (1995)
- 111. Optical Properties of Neodymium and Dysprosium Doped Hybrid Siloxane-Oxide Coatings**  
B. Viana, N. Koslova, P. Aschehoug and C. Sanchez, *Journal of Materials Chemistry*, 5, 719, (1995)

## 1996

- 112. Modified Electrodes from Organic-Inorganic Gels Issued from the Polycondensation of Functionalized Zirconium Alkoxides**  
H. Cattey, P. Audebert and C. Sanchez, *New Journal of Chemistry*, 20, 1023, (1996)
- 113. Observation of Nematic Liquid-Crystal Textures in Aqueous Gels of Smectite Clays**  
J. C. P. Gabriel, C. Sanchez and P. Davidson, *Journal of Physical Chemistry*, 100, 11139, (1996)
- 114. Hybrid Organic-Inorganic Materials: A Land of Multi-Disciplinarity**  
P. Judeinstein and C. Sanchez, *Journal of Materials Chemistry*, 6, 511, (1996)
- 115. Large Second Order Optical Nonlinearities in Azo Dyes Grafted Hybrid Sol-Gel Coatings**  
B. Lebeau, C. Sanchez, S. Brasselet, J. Zyss, G. Froc and M. Dumont, *New Journal of Chemistry*, 20, 13, (1996)
- 116. Hybrid Organic-Inorganic Materials with Second Order Optical Nonlinearities Synthesized via Sol-Gel Chemistry**  
C. Sanchez and B. Lebeau, *Pure and Applied Optics*, 5, 689, (1996)

## 1997

- 117. Hybrid Organic-Inorganic Copolymers from Oxo-Hydroxo Organotin Dimethacrylate and Methyl Methacrylate**  
L. Angiolini, D. Caretti, R. De Vito, F. T. Niesel, E. Salatelli, C. Carlini, F. Ribot and C. Sanchez, *Journal of Inorganic and Organometallic Polymers*, 7, 151, (1997)
- 118. Electrochemical Investigations on the Sol-Gel Polymerization of Transition Metal Alkoxides**  
H. Cattey, P. Audebert, C. Sanchez and P. Hapiot, *Journal of Materials Chemistry*, 7, 1461, (1997)
- 119. Mineral Liquid Crystalline Polymers**  
P. Davidson, P. Batail, J. C. P. Gabriel, J. Livage, C. Sanchez and C. Bourgaux, *Progress in Polymer Science*, 22, 913, (1997)
- 120. Design, Characterization, and Processing of Hybrid Organic-Inorganic Coatings with very High Second Order Optical Non Linearities**  
B. Lebeau, S. Brasselet, J. Zyss and C. Sanchez, *Chemistry of Materials*, 9, 1012, (1997)

**121. Structural and Dynamical Studies of Hybrid Siloxane-Silica Materials**

B. Lebeau, J. Maquet, C. Sanchez, F. Beaume and F. Laupretre, *Journal of Materials Chemistry*, 7, 989, (1997)

**122. Hybrid Organic-Inorganic Copolymers Based on Oxo-Hydroxo Organotin Nanobuilding Blocks**

F. Ribot, F. Banse, C. Sanchez, M. Lahcini and B. Jousseume, *Journal of Sol-Gel Science and Technology*, 8, 529, (1997)

**123. Spirooxazine and Spiropyran Doped Hybrid Organic-Inorganic Matrices with very Fast Photochromic Responses**

B. Schaudel, C. Guermeur, C. Sanchez, K. Nakatani and J. A. Delaire, *Journal of Materials Chemistry*, 7, 61, (1997)

**124. X-ray Diffraction and 2D Gradient Assisted  $^1\text{H}$ - $^{119}\text{Sn}$  HMQC NMR Studies of Structures Obtained from Nucleophilic Substitutions on Dimethyltin(IV) Salicylaldoximates**

R. Willem, A. Bouhdid, A. Meddour, C. Camacho-Camacho, F. Mercier, M. Gielen, M. Biesemans, F. Ribot, C. Sanchez and E. R. T. Tiekink, *Organometallics*, 16, 4377, (1997)

**1998**

**125. Hybrid Organic-Inorganic Polydimethylsiloxane-Vanadium-Oxo Materials Crosslinked at the Molecular Level**

B. Alonso, J. Maquet, B. Viana and C. Sanchez, *New Journal of Chemistry*, 22, 935, (1998)

**126. Nonlinear Hybrid Materials: a Potential for Integrated Light Sources**

D. Blanc, P. Peyrot, C. Sanchez and C. Gonnet, *Optical Engineering*, 37, 1203, (1998)

**127. Characterisation of Sol-Gel Derived Titanium Oxopolymers: First Evidence of Ti-OH Groups through  $^1\text{H}$ - $^{17}\text{O}$  CP NMR Experiments**

J. Blanchard, C. Bonhomme, J. Maquet and C. Sanchez, *Journal of Materials Chemistry*, 8, 985, (1998)

**128. Hydrolysis and Condensation Reactions of Transition Metal Alkoxides: Calorimetric Study and Evaluation of the Extent of Reaction**

J. Blanchard, M. In, B. Schaudel and C. Sanchez, *European Journal of Inorganic Chemistry*, 1115, (1998)

**129. Electrochemical Investigations on Liquid State Polymerizing Systems: Case of Sol-Gel Polymerization of Transition Metal Alkoxides**

H. Cattet, P. Audebert, C. Sanchez and P. Hapiot, *Journal of Physical Chemistry B*, 102, 1193, (1998)

**130. Room Temperature Synthesis of Hybrid Organic-Inorganic Nanocomposites Containing  $\text{Eu}^{2+}$**

E. Cordoncillo, B. Viana, P. Escribano and C. Sanchez, *Journal of Materials Chemistry*, 8, 507, (1998)

**131. New Synthesis of the Nanobuilding Block  $\{(\text{BuSn})_{12}\text{O}_{14}(\text{OH})_6\}^{2+}$  and exchange properties of  $\{(\text{BuSn})_{12}\text{O}_{14}(\text{OH})_6\}(\text{O}_3\text{SC}_6\text{H}_4\text{CH}_3)_2$**

C. Eychenne-Baron, F. Ribot and C. Sanchez, *Journal of Organometallic Chemistry*, 567, 137, (1998)

**132. New Route to Monoorganotin Oxides and Alkoxides from Trialkynylorganotins**

P. Jaumier, B. Jousseume, M. Lahcini, F. Ribot and C. Sanchez, *Chemical Communications*, 369, (1998)

**133. Molecular Precursors Routes to Inorganic Solids**

J. Livage, C. Sanchez and F. Babonneau, *Chemistry of Advanced Materials*, 389, (1998)

**134. Etude Rhéologique de Gels d'Oxyde de Titane. Rhéologie des Matériaux du Vivant / Rheological Study of Titanium Oxide Gels**

A. Ponton, S. Barboux-Doeuff, C. Sanchez and P. Flaud, *Les Cahiers de Rhéologie*, 16, 158, (1998)

**135. On the Assignment of  $^{119}\text{Sn}$  Resonances of Bisdicarboxylatotetraorgano-distannoxanes in Solution and Solid State  $^{119}\text{Sn}$  NMR Spectra**  
F. Ribot, C. Sanchez, A. Meddour, M. Gielen, E. R. T. Tiekink, M. Biesemans and R. Willem, **Journal of Organometallic Chemistry**, 552, 177, (1998)

**136. Solution and Solid State Multinuclear NMR Investigation of the Structure of  $\{(BuSn)_2O_2(OH)_6(O_2PPh_2)_2\}$**   
F. Ribot, C. Sanchez, R. Willem, J. C. Martins and M. Biesemans, **Inorganic Chemistry**, 37, 911, (1998)

**137. Synthesis and Characterization of Surface Protected Nanocrystalline Titania Particles**  
E. Scolan and C. Sanchez, **Chemistry of Materials**, 10, 3217, (1998)

**138. A Tetranuclear Niobium Oxoacetate Complex. Synthesis, X-ray Crystal Structure and Characterization by Solid State and Liquid State NMR Spectroscopy**  
N. Steunou, C. Bonhomme, C. Sanchez, J. Vaissermann and L. G. Hubert-Pfalzgraf, **Inorganic Chemistry**, 37, 901, (1998)

**139. Synthesis through an In-Situ Esterification Process and Characterization of Oxo-Isopropoxo Titanium Clusters**  
N. Steunou, F. Robert, K. Boubekour, F. Ribot and C. Sanchez, **Inorganica Chimica Acta**, 279, 144, (1998)

## 1999

**140. Hybrid Polydimethylsiloxane-Zirconium-Oxo Nanocomposites. Part 1: Characterization of the Matrix and the Siloxane-Zirconium Oxo Interface**  
C. Guermeur, J. Lambard, J. F. Gerard and C. Sanchez, **Journal of Materials Chemistry**, 9, 769, (1999)

**141. Sol-Gel Derived Hybrid Inorganic-Organic Nanocomposites for Optics**  
B. Lebeau and C. Sanchez, **Current Opinion in Solid State & Materials Science**, 4, 11, (1999)

**142. Optical Properties of Sol-Gel Films**  
J. Livage and C. Sanchez, **Nonlinear Optics**, 21, 125, (1999)

**143. Organically Functionalized Metallic Oxo-Clusters: Structurally well-Defined Nanobuilding Blocks for the Design of Hybrid Organic-Inorganic Materials**  
F. Ribot and C. Sanchez, **Comments on Inorganic Chemistry**, 20, 327, (1999)

**144. Monoorganotin Oxo-Clusters: Versatile Nanobuilding Blocks for Hybrid Organic-Inorganic Materials**  
F. O. Ribot, C. Eychenne-Baron and C. Sanchez, **Phosphorus Sulfur and Silicon and the Related Elements**, 151, 41, (1999)

**145. Molecular Design of Hybrid Organic-Inorganic Nanocomposites Synthesized via Sol-Gel Chemistry**  
C. Sanchez, F. Ribot and B. Lebeau, **Journal of Materials Chemistry**, 9, 35, (1999)

**146. Surface and Bulk Characterisation of Titanium-Oxo Clusters and Nanosized Titania Particles through  $^{17}\text{O}$  Solid State NMR**  
E. Scolan, C. Magnenet, D. Massiot and C. Sanchez, **Journal of Materials Chemistry**, 9, 2467, (1999)

**147. A New Polyoxo-Alkoxo Titanium Cluster of the Keggin Family: Synthesis and Characterization by X-ray Diffraction and NMR Spectroscopy**  
N. Steunou, G. Kickelbick, K. Boubekour and C. M. Sanchez, **Journal of the Chemical Society-Dalton Transactions**, 3653, (1999)

**148. Ketones as an Oxolation Source for the Synthesis of Titanium-Oxo-Organic Clusters**  
N. Steunou, F. Ribot, K. Boubekour, J. Maquet and C. Sanchez, **New Journal of Chemistry**, 23, 1079, (1999)

## 2000

- 149. Glass Transition of Polydimethylsiloxane-Vanadate Hybrid Materials Studied through  $^{17}\text{O}$  and  $^{51}\text{V}$  NMR**  
B. Alonso, J. Maquet and C. Sanchez, *Journal of Non-Crystalline Solids*, 277, 58, (2000)
- 150. Structural Investigation of Polydimethylsiloxane-Vanadate Hybrid Materials**  
B. Alonso and C. Sanchez, *Journal of Materials Chemistry*, 10, 377, (2000)
- 151. Structural Characterization of Titanium-Oxo-Polymers Synthesized in the Presence of Protons or Complexing Ligands as Inhibitors**  
J. Blanchard, F. Ribot, C. Sanchez, P. V. Bellot and A. Trokiner, *Journal of Non-Crystalline Solids*, 265, 83, (2000)
- 152. Organogelators for Making Porous Sol-Gel Derived Silica at Two Different Length Scales**  
G. M. Clavier, J. L. Pozzo, H. Bouas-Laurent, C. Liere, C. Roux and C. Sanchez, *Journal of Materials Chemistry*, 10, 1725, (2000)
- 153. Optical Response of Ce(III) and Eu(II) Doped Hybrid Materials Synthesised by Sol-Gel Processing**  
E. Cordoncillo, J. Carda, H. Beltran, F. J. Guaita, A. Barrio, P. Escribano, B. Viana and C. Sanchez, *Boletin De La Sociedad Espanola De Ceramica Y Vidrio*, 39, 95, (2000)
- 154. Reaction of Butyltin Hydroxide Oxide with *p*-Toluenesulfonic Acid: Synthesis, X-ray Crystal Analysis and Multinuclear NMR Characterization of  $\{(\text{BuSn})_{12}\text{O}_{14}(\text{OH})_6\}(4\text{-CH}_3\text{C}_6\text{H}_4\text{SO}_3)_2$**   
C. Eychenne-Baron, F. Ribot, N. Steunou, C. Sanchez, F. Fayon, M. Biesemans, J. C. Martins and R. Willem, *Organometallics*, 19, 1940, (2000)
- 155. Synthesis of Hierarchically Ordered Dye-Functionalised Mesoporous Silica with Macroporous Architecture by Dual Templating**  
B. Lebeau, C. E. Fowler, S. Mann, C. Farcet, B. Charleux and C. Sanchez, *Journal of Materials Chemistry*, 10, 2105, (2000)
- 156. Quantum Size Effect in  $\text{TiO}_2$  Nanoparticles: Does It Exist?**  
S. Monticone, R. Tufeu, A. V. Kanaev, E. Scolan and C. Sanchez, *Applied Surface Science*, 162, 565, (2000)
- 157. Rheology of Titanium Oxide Based Gels: Determination of Gelation Time versus Temperature**  
A. Ponton, S. Barboux-Doeuff and C. Sanchez, *Colloids and Surfaces a-Physicochemical and Engineering Aspects*, 162, 177, (2000)
- 158. Molecular Design of Sol-Gel Derived Hybrid Organic-Inorganic Nanocomposites**  
C. Sanchez, B. Lebeau, F. Ribot and M. In, *Journal of Sol-Gel Science and Technology*, 19, 31, (2000)
- 159. Design of Hybrid Organic-Inorganic Nanocomposites Synthesized via Sol-Gel Chemistry**  
C. Sanchez, F. Ribot, L. Rozes and B. Alonso, *Molecular Crystals and Liquid Crystals*, 354, 731, (2000)
- 160. New Mesotextured Hybrid Materials Made from Assemblies of Dendrimers and Titanium(IV)-Oxo-Organo Clusters**  
G. J. A. A. Soler-Illia, L. Rozes, M. K. Boggiano, C. Sanchez, C. O. Turrin, A. M. Caminade and J. P. Majoral, *Angewandte Chemie-International Edition*, 39, 4250, (2000)
- 161. Interactions between Poly(ethylene oxide)-Based Surfactants and Transition Metal Alkoxides: Their Role in the Templated Construction of Mesostuctured Hybrid Organic-Inorganic Composites**  
G. J. A. A. Soler-Illia and C. Sanchez, *New Journal of Chemistry*, 24, 493, (2000)

## 2001

- 162. Blue Emitting Hybrid Organic-Inorganic Materials**  
E. Cordoncillo, F. J. Guaita, P. Escribano, C. Philippe, B. Viana and C. Sanchez, *Optical Materials*, 18, 309, (2001)

**163. Design and Post-Functionalisation of Ordered Mesoporous Zirconia Thin Films**

E. L. Crepaldi, G. J. A. A. Soler-Illia, D. Grosso, P. A. Albouy and C. Sanchez, **Chemical Communications**, 1582, (2001)

**164. Highly Organized Mesoporous Titania Thin Films Showing Mono-Oriented 2D Hexagonal Channels**

D. Grosso, G. J. A. A. Soler-Illia, F. Babonneau, C. Sanchez, P. A. Albouy, A. Brunet-Bruneau and A. R. Balkenende, **Advanced Materials**, 13, 1085, (2001)

**165. Macroscopic-Microscopic Mechanical Relaxation Behavior of Hybrid Organic-Inorganic Materials**

P. Judeinstein, J. Rault, B. Alonso and C. Sanchez, **Journal of Polymer Science Part B-Polymer Physics**, 39, 645, (2001)

**166. Rheological Investigation of the Sol-Gel Transition: Effect of Hydrolysis Variation in Silicon Oxide and Titanium Oxide Based Matrices**

A. Ponton, P. Griesmar, S. Barboux-Doeuff and C. Sanchez, **Journal of Materials Chemistry**, 11, 3125, (2001)

**167. Di-nButyltin Methyl and Phenylphosphonates**

F. Ribot, C. Sanchez, M. Biesemans, F. A. G. Mercier, J. C. Martins, M. Gielen and R. Willem, **Organometallics**, 20, 2593, (2001)

**168. Design and Properties of Hybrid Organic-Inorganic Nanocomposites for Photonics**

C. Sanchez and B. Lebeau, **MRS Bulletin**, 26, 377, (2001)

**169. Designed Hybrid Organic-Inorganic Nanocomposites from Functional Nanobuilding Blocks**

C. Sanchez, G. J. A. A. Soler-Illia, F. Ribot, T. Lalot, C. R. Mayer and V. Cabuil, **Chemistry of Materials**, 13, 3061, (2001)

**170. Design of Meso-Structured Titanium-Oxo Based Hybrid Organic-Inorganic Networks**

G. J. A. A. Soler-Illia, E. Scolan, A. Louis, P. A. Albouy and C. Sanchez, **New Journal of Chemistry**, 25, 156, (2001)

**171. Nucleation Stage in the  $Ti(O^iPr)_4$  Sol-Gel Process**

A. Soloviev, R. Tufeu, C. Sanchez and A. V. Kanaev, **Journal of Physical Chemistry B**, 105, 4175, (2001)

**172. Carboxylic Acids as an Oxolation Source for the Synthesis of Titanium Oxo-Organic Clusters**

N. Steunou, R. Portal and C. Sanchez, **High Pressure Research**, 20, 63, (2001)

## 2002

**173. Lyotropic Phase from Hybrid Organic-Inorganic Layered Copper Hydroxides**

R. Backov, A. N. Morgan, S. Lane, E. E. Perez-Cordero, K. Williams, M. W. Meisel, C. Sanchez and D. R. Talham, **Molecular Crystals and Liquid Crystals**, 376, 127, (2002)

**174. Chemists and the School of Nature**

B. Bensaude-Vincent, H. Arribart, Y. Bouligand and C. M. Sanchez, **New Journal of Chemistry**, 26, 1, (2002)

**175. Nanotectonic Approach of the Texturation of  $CeO_2$  Based Nanomaterials**

A. Bouchara, G. J. A. A. Soler-Illia, J. Y. Chane-Ching and C. Sanchez, **Chemical Communications**, 1234, (2002)

**176. Magnetic Nanocomposites Built by Controlled Incorporation of Magnetic Clusters into Mesoporous Silicates**

T. Coradin, J. Larionova, A. A. Smith, G. Rogez, R. Clerac, C. Guerin, G. Blondin, R. E. P. Winpenney, C. Sanchez and T. Mallah, **Advanced Materials**, 14, 896, (2002)

**177. *Optical Properties of Lanthanide Doped Hybrid Organic-Inorganic Materials***

E. Cordoncillo, P. Escribano, F. J. Guaita, C. Philippe, B. Viana and C. Sanchez, *Journal of Sol-Gel Science and Technology*, 24, 155, (2002)

**178. *Formation and Stabilization of Mesostructured Vanadium-Oxo-Based Hybrid Thin Films***

E. L. Crepaldi, D. Grosso, G. J. A. A. Soler-Illia, P. A. Albouy, H. Amenitseh and C. Sanchez, *Chemistry of Materials*, 14, 3316, (2002)

**179. *Synthesis and Characterization of Crystalline Tin Oxide Nanoparticles***

S. de Monredon, A. Cellot, F. Ribot, C. Sanchez, L. Armelao, L. Gueneau and L. Delattre, *Journal of Materials Chemistry*, 12, 2396, (2002)

**180. *Templated Growth of Alumina-Based Fibers through the Use of Anthracenic Organogelators***

M. Llusar, L. Pidol, C. Roux, J. L. Pozzo and C. Sanchez, *Chemistry of Materials*, 14, 5124, (2002)

**181. *The First Direct Probing of Porosity on Supported Mesoporous Silica Thin Films through Hyperpolarised  $^{129}\text{Xe}$  NMR***

A. Nossov, E. Haddad, F. Guenneau, C. Mignon, A. Gedeon, D. Grosso, F. Babonneau, C. Bonhomme and C. Sanchez, *Chemical Communications*, 2476, (2002)

**182. *Hexagonally Organised Mesoporous Aluminium-Oxo-Hydroxide Thin Films Prepared by the Template Approach. In-Situ Study of the Structural Formation***

L. Pidol, D. Grosso, G. J. A. A. Soler-Illia, E. L. Crepaldi, C. Sanchez, P. A. Albouy, H. Amenitsch and P. Euzen, *Journal of Materials Chemistry*, 12, 557, (2002)

**183. *New Photochromic Hybrid Organic-Inorganic Materials Built from Well-Defined Nanobuilding Blocks***

F. Ribot, A. Lafuma, C. Eychenne-Baron and C. Sanchez, *Advanced Materials*, 14, 1496, (2002)

**184. *Structural Control in Self-Standing Mesostructured Silica Oriented Membranes and Xerogels***

G. J. A. A. Soler-Illia, E. L. Crepaldi, D. Grosso, D. Durand and C. Sanchez, *Chemical Communications*, 2298, (2002)

**185. *Synthesis and Characterization of Mesostructured Titania-Based Materials through Evaporation-Induced Self-Assembly***

G. J. A. A. Soler-Illia, A. Louis and C. Sanchez, *Chemistry of Materials*, 14, 750, (2002)

**186. *Chemical Strategies to Design Textured Materials: From Microporous and Mesoporous Oxides to Nanonetworks and Hierarchical Structures***

G. J. A. A. Soler-Illia, C. Sanchez, B. Lebeau and J. Patarin, *Chemical Reviews*, 102, 4093, (2002)

**187. *Synthesis of Nanostructured Polymer-Titanium Oxide Composites through the Assembly of Titanium-Oxo Clusters and Amphiphilic Block Copolymers Micelles***

N. Steunou, S. Forster, P. Florian, C. Sanchez and M. Antonietti, *Journal of Materials Chemistry*, 12, 3426, (2002)

**188. *A DFT and HF Quantum Chemical Study of the Tin Nanocluster  $[(\text{R}\text{Sn})_{12}\text{O}_{14}(\text{OH})_6]^{2+}$  and its Interactions with Anions and Neutral Nucleophiles: Confrontation with Experimental Data***

R. Vivas-Reyes, F. De Proft, P. Geerlings, M. Biesemans, R. Willem, F. Ribot and C. Sanchez, *New Journal of Chemistry*, 26, 1108, (2002)

## 2003

**189. *Aerosol Generated Mesoporous Silica Particles***

N. Baccile, D. Grosso and C. Sanchez, *Journal of Materials Chemistry*, 13, 3011, (2003)

**190. *First In-Situ SAXS Studies of the Mesostructuration of Spherical Silica and Titania Particles During Spray-Drying Process***

C. Boissiere, D. Grosso, H. Amenitsch, A. Gibaud, A. Coupe, N. Baccile and C. Sanchez, *Chemical Communications*, 2798, (2003)

- 191. Use of Functional Dendritic Macromolecules for the Design of Metal Oxo Based Hybrid Materials**  
A. Bouchara, L. Rozes, G. J. A. A. Soler-Illia, C. Sanchez, C. O. Turrin, A. M. Caminade and J. P. Majoral, *Journal of Sol-Gel Science and Technology*, 26, 629, (2003)
- 192. Humidity-Controlled Mesostructuration in CTAB-Templated Silica Thin Film Processing. The Existence of a Modulable Steady State**  
F. Cagnol, D. Grosso, G. J. A. A. Soler-Illia, E. L. Crepaldi, F. Babonneau, H. Amenitsch and C. Sanchez, *Journal of Materials Chemistry*, 13, 61, (2003)
- 193. Controlled Formation of Highly Ordered Cubic and Hexagonal Mesoporous Nanocrystalline Yttria-Zirconia and Ceria-Zirconia Thin Films Exhibiting High Thermal Stability**  
E. L. Crepaldi, G. J. A. A. Soler-Illia, A. Bouchara, D. Grosso, D. Durand and C. Sanchez, *Angewandte Chemie-International Edition*, 42, 347, (2003)
- 194. Controlled Formation of Highly Organized Mesoporous Titania Thin Films: From Mesostructured Hybrids to Mesoporous Nanoanatase TiO<sub>2</sub>**  
E. L. Crepaldi, G. J. A. A. Soler-Illia, D. Grosso, F. Cagnol, F. Ribot and C. Sanchez, *Journal of the American Chemical Society*, 125, 9770, (2003)
- 195. Nanocrystallised Titania and Zirconia Mesoporous Thin Films Exhibiting Enhanced Thermal Stability**  
E. L. Crepaldi, G. J. A. A. Soler-Illia, D. Grosso and M. Sanchez, *New Journal of Chemistry*, 27, 9, (2003)
- 196. Evaporation-Controlled Self-Assembly of Silica Surfactant Mesophases**  
A. Gibaud, D. Grosso, B. Smarsly, A. Baptiste, J. F. Bardeau, F. Babonneau, D. A. Doshi, Z. Chen, C. J. Brinker and C. Sanchez, *Journal of Physical Chemistry B*, 107, 6114, (2003)
- 197. A First Insight in the Mechanisms Involved in the Self-Assembly of 2D-Hexagonal Templated SiO<sub>2</sub> and TiO<sub>2</sub> Mesostructured Films During Dip-Coating**  
D. Grosso, F. Babonneau, C. Sanchez, G. J. A. A. Soler-Illia, E. L. Crepaldi, P. A. Albouy, H. Amenitsch, A. R. Balkenende and A. Brunet-Bruneau, *Journal of Sol-Gel Science and Technology*, 26, 561, (2003)
- 198. Nanocrystalline Transition-Metal Oxide Spheres with Controlled Multi-Scale Porosity**  
D. Grosso, G. Illia, E. L. Crepaldi, B. Charleux and C. Sanchez, *Advanced Functional Materials*, 13, 37, (2003)
- 199. Highly Porous TiO<sub>2</sub> Anatase Optical Thin Films with Cubic Mesostructure Stabilized at 700°C**  
D. Grosso, G. J. A. A. Soler-Illia, E. L. Crepaldi, F. Cagnol, C. Sinturel, A. Bourgeois, A. Brunet-Bruneau, H. Amenitsch, P. A. Albouy and C. Sanchez, *Chemistry of Materials*, 15, 4562, (2003)
- 200. Influence of the Matrix in the Optical Response of Organic-Inorganic Hybrid Materials Doped with Europium(III)**  
B. Julian, H. Beltran, E. Cordoncillo, P. Escribano, B. Viana and C. Sanchez, *Journal of Sol-Gel Science and Technology*, 26, 977, (2003)
- 201. Synthesis and Characterization of Transparent PDMS-Metal-Oxo Based Organic-Inorganic Nanocomposites**  
B. Julian, C. Gervais, E. Cordoncillo, P. Escribano, F. Babonneau and C. Sanchez, *Chemistry of Materials*, 15, 3026, (2003)
- 202. Photochromic Properties of a Spirooxazine and a Spiropyran in Alcoholic Solutions of Zirconium and Aluminium Alkoxides: Influence of the Ethyl Acetoacetate Chelating Agent on the Optical Properties**  
A. Lafuma, S. Chodorowski-Kimmes, F. X. Quinn and C. Sanchez, *European Journal of Inorganic Chemistry*, 331, (2003)
- 203. Solid State NMR Characterization of Oxygen Sites in Organically Modified Aluminosilicate Xerogels**  
A. Lafuma, F. Fayon, D. Massiot, S. Chodorowski-Kimmes and C. Sanchez, *Magnetic Resonance in Chemistry*, 41, 944, (2003)

**204. *Synthesis of Highly Ordered Mesoporous Hybrid Silica from Aromatic Fluorinated Organosilane Precursors***

B. Lebeau, C. Marichal, A. Mirjol, G. J. A. A. Soler-Illia, R. Buestrich, M. Popall, L. Mazerolles and C. Sanchez, *New Journal of Chemistry*, 27, 166, (2003)

**205. *One-pot synthesis of Phenyl- and Amine-Functionalized Silica Fibers through the Use of Anthracenic and Phenazinic Organogelators***

M. Llusar, G. Monros, C. Roux, J. L. Pozzo and C. Sanchez, *Journal of Materials Chemistry*, 13, 2505, (2003)

**206. *Design of Organically Functionalised Hybrid Silica Fibres through the Use of Anthracenic Organogelators***

M. Llusar, C. Roux, J. L. Pozzo and C. Sanchez, *Journal of Materials Chemistry*, 13, 442, (2003)

**207. *Mechanical Properties of SiO<sub>2</sub>-PMMA Based Hybrid Organic-Inorganic Thin Films***

F. Mammeri, L. Rozes, C. Sanchez and E. Le Bourhis, *Journal of Sol-Gel Science and Technology*, 26, 413, (2003)

**208. *Titania-Polypyrrole Hybrid Nanocomposites Built from In-Situ Generated Organically Functionalized Nanoanatase Building Blocks***

S. Roux, G. J. A. A. Soler-Illia, S. Demoustier-Champagne, P. Audebert and C. Sanchez, *Advanced Materials*, 15, 217, (2003)

**209. *Optical Properties of Functional Hybrid Organic-Inorganic Nanocomposites***

C. Sanchez, B. Lebeau, F. Chaput and J. P. Boilot, *Advanced Materials*, 15, 1969, (2003)

**210. *Design of Functional Nanostructured Materials through the Use of Controlled Hybrid Organic-Inorganic Interfaces***

C. Sanchez, G. J. A. A. Soler-Illia, F. Ribot and D. Grosso, *Comptes Rendus Chimie*, 6, 1131, (2003)

**211. *Block Copolymer-Templated Mesoporous Oxides***

G. J. A. A. Soler-Illia, E. L. Crepaldi, D. Grosso and C. Sanchez, *Current Opinion in Colloid & Interface Science*, 8, 109, (2003)

**212. *Immobilisation of Single Molecule Magnets in Mesoporous Silica Hosts***

S. Willemin, G. Arrachart, L. Lecren, J. Larionova, T. Coradin, R. Clerac, T. Mallah, C. Guerin and M. Sanchez, *New Journal of Chemistry*, 27, 1533, (2003)

**213. *Oriented ZnO Thin Films Synthesis by Sol-Gel Process for Laser Application***

L. Znaidi, G. Illia, S. Benyahia, C. Sanchez and A. V. Kanaev, *Thin Solid Films*, 428, 257, (2003)

**214. *Elaboration of ZnO Thin Films with Preferential Orientation by a Soft Chemistry Route***

L. Znaidi, G. Illia, R. Le Guennic, C. Sanchez and A. Kanaev, *Journal of Sol-Gel Science and Technology*, 26, 817, (2003)

## 2004

**215. *One-pot Aerosol Synthesis of Ordered Hierarchical Mesoporous Core-Shell Silica Nanoparticles***

S. Areva, C. Boissiere, D. Grosso, T. Asakawa, C. Sanchez and M. Linden, *Chemical Communications*, 1630, (2004)

**216. *An Optical Fibre pH Sensor Based on Dye Doped Mesostructured Silica***

O. Bel Hadj Miled, D. Grosso, C. Sanchez and J. Livage, *Journal of Physics and Chemistry of Solids*, 65, 1751, (2004)

**217. *Texturation of Nanocrystalline CeO<sub>2</sub>-Based Materials in the Presence of Poly- $\gamma$ -Benzyl-L-Glutamate***

A. Bouchara, G. Mosser, G. Siker-Illia, J. Y. Chane-Ching and C. Sanchez, *Journal of Materials Chemistry*, 14, 2347, (2004)



**218. Determination of Pore Size Distribution in Thin Organized Mesoporous Silica Films by Spectroscopic Ellipsometry in the Visible and Infrared Range**

A. Bourgeois, A. B. Bruneau, S. Fisson, B. Demarets, D. Grosso, F. Cagnol, C. Sanchez and J. Rivory, *Thin Solid Films*, 447, 46, (2004)

**219. An In-Situ Study of Mesostructured CTAB-Silica Film Formation using Infrared Ellipsometry: Evolution of Water Content**

A. Brunet-Bruneau, A. Bourgeois, F. Cagnol, D. Grosso, C. Sanchez and J. Rivory, *Thin Solid Films*, 455-56, 656, (2004)

**220. A General One-pot Process Leading to Highly Functionalised Ordered Mesoporous Silica Films**

F. Cagnol, D. Grosso and C. Sanchez, *Chemical Communications*, 1742, (2004)

**221. Solid State  $^{47,49}\text{Ti}$ ,  $^{87}\text{Sr}$  and  $^{137}\text{Ba}$  NMR Characterisation of Mixed Barium/Strontium Titanate Perovskites**

C. Gervais, D. Veautier, M. E. Smith, F. Babonneau, P. Belleville and C. Sanchez, *Solid State Nuclear Magnetic Resonance*, 26, 147, (2004)

**222. New P<sup>+</sup>O Ligand Grafted on Periodically Organised Mesoporous Silicas for One-pot Bifunctional Catalysis: Coupling of Base Catalysed Knoevenagel Condensation with In Situ Rh Catalysed Hydrogenation**

F. Goettmann, D. Grosso, F. Mercier, F. Mathey and C. Sanchez, *Chemical Communications*, 1240, (2004)

**223. Periodically Ordered Nanoscale Islands and Mesoporous Films Composed of Nanocrystalline Multimetallic Oxides**

D. Grosso, C. Boissiere, B. Smarsly, T. Brezesinski, N. Pinna, P. A. Albouy, H. Amenitsch, M. Antonietti and C. Sanchez, *Nature Materials*, 3, 787, (2004)

**224. Fundamentals of Mesostructuring through Evaporation-Induced Self-Assembly**

D. Grosso, F. Cagnol, G. J. A. A. Soler-Illia, E. L. Crepaldi, H. Amenitsch, A. Brunet-Bruneau, A. Bourgeois and C. Sanchez, *Advanced Functional Materials*, 14, 309, (2004)

**225. One-pot Self-Assembly of Mesostructured Silica Films and Membranes Functionalised with Fullerene Derivatives**

P. Innocenzi, P. Falcaro, S. Schergna, M. Maggini, E. Menna, H. Amenitsch, G. J. A. A. Soler-Illia, D. Grosso and C. Sanchez, *Journal of Materials Chemistry*, 14, 1838, (2004)

**226. Synthesis and Optical Properties of Eu<sup>3+</sup>-Doped Inorganic-Organic Hybrid Materials Based on Siloxane Networks**

B. Julian, R. Corberan, E. Cordoncillo, P. Escribano, B. Viana and C. Sanchez, *Journal of Materials Chemistry*, 14, 3337, (2004)

**227. Solid State  $^{17}\text{O}$  NMR Characterization of PDMS- $\text{M}_x\text{O}_y$  ( $\text{M} = \text{Ge(IV)}$ ,  $\text{Ti(IV)}$ ,  $\text{Zr(IV)}$ ,  $\text{Nb(V)}$ , and  $\text{Ta(V)}$ ) Organic-Inorganic Nanocomposites**

B. Julian, C. Gervais, M. N. Rager, J. Maquet, E. Cordoncillo, P. Escribano, F. Babonneau and C. Sanchez, *Chemistry of Materials*, 16, 521, (2004)

**228. Structure and Surface Reactivity of Transition-Metal-Oxo-Organic Clusters: Contribution of Liquid and Solid State NMR to the Characterization of the Cluster  $\text{Ti}_{16}\text{O}_{16}(\text{OEt})_{32}$**

S. Le Calvé, B. Alonso, L. Rozes, C. Sanchez, M. N. Rager and D. Massiot, *Comptes Rendus Chimie*, 7, 241, (2004)

**229. Design and Properties of Hierarchically Organized Hybrid Organic-Inorganic Nanocomposites**

B. Lebeau, J. Patarin and C. Sanchez, *Advances in Technology of Materials and Materials Processing*, 6, 298, (2004)

**230. Time Dependence of the Indentation Behavior of Hybrid Coatings**

F. Mammeri, E. Le Bourhis, L. Rozes, C. Sanchez, A. Huignard and D. Lefevre, *Journal of Non-Crystalline Solids*, 345-46, 610, (2004)

**231. *New Layered Calcium Organosilicate Hybrids with Covalently Linked Organic Functionalities***  
J. Minet, S. Abramson, B. Bresson, C. Sanchez, V. Montouillout and N. Lequeux, **Chemistry of Materials**, 16, 3955, (2004)

**232. *Phosphinine Stabilised Gold Nanoparticles: Synthesis and Immobilisation on Mesoporous Materials***  
A. Moores, F. Goettmann, C. Sanchez and P. Le Floch, **Chemical Communications**, 2842, (2004)

**233. *Advanced Selective Optical Sensors Based on Periodically Organized Mesoporous Hybrid Silica Thin Films***

L. Nicole, C. Boissière, D. Grosso, P. Hesemann, J. Moreau and C. Sanchez, **Chemical Communications**, 2312, (2004)

**234. *Growth of Gold Nanoparticle Arrays in TiO<sub>2</sub> Mesoporous Matrixes***

M. D. Perez, E. Otal, S. A. Bilmes, G. J. A. A. Soler-Illia, E. L. Crepaldi, D. Grosso and C. Sanchez, **Langmuir**, 20, 6879, (2004)

**235. *NJC at the Heart of Modern Chemistry***

C. Sanchez, **New Journal of Chemistry**, 28, E1, (2004)

**236. *Highly Crystalline Cubic Mesoporous TiO<sub>2</sub> with 10 nm Pore Diameter Made with a New Block Copolymer Template***

B. Smarsly, D. Grosso, T. Brezesinski, N. Pinna, C. Boissiere, M. Antonietti and C. Sanchez, **Chemistry of Materials**, 16, 2948, (2004)

**237. *Designed Synthesis of Large Pore Mesoporous Silica-Zirconia Thin Films with High Mixing Degree and Tunable Cubic or 2D-Hexagonal Mesostructure***

G. J. A. A. Soler-Illia, E. L. Crepaldi, D. Grosso and C. Sanchez, **Journal of Materials Chemistry**, 14, 1879, (2004)

## 2005

**238. *Hybrid Non Silica Mesoporous Thin Films***

P. C. Angelome, S. Aldabe-Bilmes, M. E. Calvo, E. L. Crepaldi, D. Grosso, C. Sanchez and G. J. A. A. Soler-Illia, **New Journal of Chemistry**, 29, 59, (2005)

**239. *Spectroscopic Studies and Evanescent Optical Fibre Wave Sensing of Cu<sup>2+</sup> Based on Activated Mesostructured Silica Matrix***

O. Bel Hadj Miled, C. Sanchez and J. Livage, **Journal of Materials Science**, 40, 4523, (2005)

**240. *New Hybrid Organic-Inorganic Nanocomposites Based on Functional Ti<sub>16</sub>O<sub>16</sub>(OEt)<sub>24</sub>(OEMA)<sub>8</sub> Nano-Fillers***

S. Bocchini, G. Fornasieri, L. Rozes, S. Trabelsi, J. Galy, N. E. Zafeiropoulos, M. Stamm, J. F. Gerard and C. Sanchez, **Chemical Communications**, 2600, (2005)

**241. *Porosity and Mechanical Properties of Mesoporous Thin Films Assessed by Environmental Ellipsometric Porosimetry***

C. Boissiere, D. Grosso, S. Lepoutre, L. Nicole, A. B. Bruneau and C. Sanchez, **Langmuir**, 21, 12362, (2005)

**242. *Self-Assembly and Crystallization Behavior of Mesoporous, Crystalline HfO<sub>2</sub> Thin Films: A Model System for the Generation of Mesostructured Transition-Metal Oxides***

T. Brezesinski, B. Smarsly, K. Imura, D. Grosso, C. Boissiere, H. Amenitsch, M. Antonietti and C. Sanchez, **Small**, 1, 889, (2005)

**243. *Anatase and Rutile TiO<sub>2</sub> Macrocellular Foams: Air-Liquid Foaming Sol-Gel Process towards Controlling Cell Sizes, Morphologies, and Topologies***

F. Carn, A. Colin, M. F. Achard, H. Deleuze, C. Sanchez and R. Backov, **Advanced Materials**, 17, 62, (2005)

- 244. Preparation of Multi-Nanocrystalline Transition Metal Oxide ( $\text{TiO}_2\text{-NiTiO}_3$ ) Mesoporous Thin Films**  
D. O. de Zarate, C. Boissiere, D. Grosso, P. A. Albouy, H. Amenitsch, P. Amoros and C. Sanchez, *New Journal of Chemistry*, 29, 141, (2005)
- 245. Electrochemical Evidences of Morphological Transformation in Ordered Mesoporous Titanium Oxide Thin Films**  
M. Etienne, D. Grosso, C. Boissiere, C. Sanchez and A. Walcarius, *Chemical Communications*, 4566, (2005)
- 246. Reactivity of Titanium Oxo Ethoxo Cluster  $\text{Ti}_{16}\text{O}_{16}(\text{OEt})_{32}$ . Versatile Precursor of NanoBuilding Block-Based Hybrid Materials**  
G. Fornasieri, L. Rozes, S. Le Calve, B. Alonso, D. Massiot, M. N. Rager, M. Evain, K. Boubekeur and C. Sanchez, *Journal of the American Chemical Society*, 127, 4869, (2005)
- 247. New Hybrid Bidentate Ligands as Precursors for Smart Catalysts**  
F. Goettmann, C. Boissiere, D. Grosso, F. Mercier, P. Le Floch and C. Sanchez, *Chemistry - A European Journal*, 11, 7416, (2005)
- 248. A Selective Chemical Sensor Based on the Plasmonic Response of Phosphinine-Stabilized Gold Nanoparticles Hosted on Periodically Organized Mesoporous Silica Thin Layers**  
F. Goettmann, A. Moores, C. Boissiere, P. Le Floch and C. Sanchez, *Small*, 1, 636, (2005)
- 249. Hybrid Materials. Functional Properties. From Maya Blue to 21st Century Materials**  
P. Gomez-Romero and C. Sanchez, *New Journal of Chemistry*, 29, 57, (2005)
- 250. Growth versus Cyclization in the Early Stages of the Polycondensation of Metal Alkoxides**  
M. In and C. Sanchez, *Journal of Physical Chemistry B*, 109, 23870, (2005)
- 251. One-pot Synthesis and Optical Properties of  $\text{Eu}^{3+}$ -Doped Nanocrystalline  $\text{TiO}_2$  and  $\text{ZrO}_2$**   
B. Julian, R. Corberan, E. Cordoncillo, P. Escribano, B. Viana and C. Sanchez, *Nanotechnology*, 16, 2707, (2005)
- 252. New Photoactive Hybrid Organic-Inorganic Materials Based on Titanium-Oxo-PHEMA Nanocomposites Exhibiting Mixed Valence Properties**  
O. Kameneva, A. I. Kuznestov, L. A. Smirnova, L. Rozes, C. Sanchez, A. Alexandrov, N. Bityurin, K. Chhor and A. Kanaev, *Journal of Materials Chemistry*, 15, 3380, (2005)
- 253. Thermally Stable Nanocrystalline  $\gamma$ -Alumina Layers with Highly Ordered 3D Mesoporosity**  
M. Kuemmel, D. Grosso, U. Boissiere, B. Smarsly, T. Brezesinski, P. A. Albouy, H. Amenitsch and C. Sanchez, *Angewandte Chemie-International Edition*, 44, 4589, (2005)
- 254. Light-Induced Charge Separation and Storage in Titanium Oxide Gels**  
A. I. Kuznetsov, O. Kameneva, A. Alexandrov, N. Bityurin, P. Marteau, K. Chhor, C. Sanchez and A. Kanaev, *Physical Review E*, 71, (2005)
- 255. Grafting of Gold Nanoparticles onto Organogelator-Templated Fibrous Mercaptosilica**  
M. Llusar, G. Monros, J. L. Pozzo, U. Roux and C. Sanchez, *Zeitschrift Fur Anorganische Und Allgemeine Chemie*, 631, 2215, (2005)
- 256. Mechanical Properties of Hybrid Organic-Inorganic Materials**  
F. Mammeri, E. Le Bourhis, L. Rozes and C. Sanchez, *Journal of Materials Chemistry*, 15, 3787, (2005)
- 257. Functionalized Alkoxy Tin Clusters as Nanobuilding Blocks for Hybrid Materials**  
E. Martinez-Ferrero, F. Ribot, L. Rozes, C. Sanchez and L. Matejka, *Progress in Solid State Chemistry*, 33, 89, (2005)

**258. Mesostructured Hybrid Organic-Inorganic Thin Films**

L. Nicole, C. Boissiere, D. Grosso, A. Quach and C. Sanchez, *Journal of Materials Chemistry*, 15, 3598, (2005)

**259. Physico-Chemical Control of Sol-Gel Transition of Titanium Alkoxide-Based Materials Studied by Rheology**

A. Ponton, S. Barboux-Doeuff and C. Sanchez, *Journal of Non-Crystalline Solids*, 351, 45, (2005)

**260. In Situ Evaluation of Interfacial Affinity in CeO<sub>2</sub>-Based Hybrid Nanoparticles by Pulsed Field Gradient NMR**

F. Ribot, V. Escax, C. Roiland, C. Sanchez, J. C. Martins, M. Biesemans, I. Verbruggen and R. Willem, *Chemical Communications*, 1019, (2005)

**261. Reinforcement of Polystyrene by Covalently Bonded Oxo-Titanium Clusters**

L. Rozes, G. Fornasieri, S. Trabelsi, C. Creton, N. E. Zafeiropoulos, M. Stamm and C. Sanchez, *Progress in Solid State Chemistry*, 33, 127, (2005)

**262. State of the Art Developments in Functional Hybrid Materials**

C. Sanchez, *Journal of Materials Chemistry*, 15, 3557, (2005)

**263. Advanced Functional Nanomaterials - From Nanoscale Objects to Nanostructured Inorganic and Hybrid Materials**

C. Sanchez, *Progress in Solid State Chemistry*, 33, 57, (2005)

**264. Biomimetic and Bioinspiration as Tools for the Design of Innovative Materials and Systems**

C. Sanchez, H. Arribart and M. M. G. Guille, *Nature Materials*, 4, 277, (2005)

**265. Applications of Hybrid Organic-Inorganic Nanocomposites**

C. Sanchez, B. Julian, P. Belleville and M. Popall, *Journal of Materials Chemistry*, 15, 3559, (2005)

**266. Novel Organo-Functional Titanium-Oxo-Cluster-Based Hybrid Materials with Enhanced Thermomechanical and Thermal Properties**

S. Trabelsi, A. Janke, R. Hassler, N. E. Zafeiropoulos, G. Fornasieri, S. Bocchini, L. Rozes, M. Stamm, J. F. Gerard and C. Sanchez, *Macromolecules*, 38, 6068, (2005)

## 2006

**267. Spectro-Ellipsometric Studies of Activated Sol-Gel Thin Films to Detect Cu<sup>2+</sup> Ions in Aqueous Solutions**

O. Bel Hadj Miled, C. Boissiere, C. Sanchez and J. Livage, *Journal of Physics and Chemistry of Solids*, 67, 1775, (2006)

**268. Nanocrystalline Mesoporous  $\gamma$ -Alumina Powders "UPMC1 Material" Gathers Thermal and Chemical Stability with High Surface Area**

C. Boissiere, L. Nicole, C. Gervais, F. Babonneau, M. Antonietti, H. Amenitsch, C. Sanchez and D. Grosso, *Chemistry of Materials*, 18, 5238, (2006)

**269. Generation of Self-Assembled 3D Mesostructured SnO<sub>2</sub> Thin Films with Highly Crystalline Frameworks**

T. Brezesinski, A. Fischer, K. Limura, C. Sanchez, D. Grosso, M. Antonietti and B. M. Smarsly, *Advanced Functional Materials*, 16, 1433, (2006)

**270. Three-Dimensional Opal-Like Silica Foams**

F. Carn, H. Saadaoui, P. Masse, S. Ravaine, B. Julian-Lopez, C. Sanchez, H. Deleuze, D. R. Talham and R. Backov, *Langmuir*, 22, 5469, (2006)

**271. Metallic Nanoparticles Hosted in Mesoporous Oxide Thin Films for Catalytic Applications**

G. Cortial, M. Siutkowski, F. Goettmann, A. Moores, C. Boissiere, D. Grosso, P. Le Floch and C. Sanchez, *Small*, 2, 1042, (2006)

**272. Characterisation of the Grafting of (3-Aminoethyl)aminopropyltrimethoxysilane on Precipitated Silica**

S. de Monredon, A. Pottier, J. Maquet, F. Babonneau and C. Sanchez, *New Journal of Chemistry*, 30, 797, (2006)

- 273. Niobia-Stabilised Anatase TiO<sub>2</sub> Highly Porous Mesostructured Thin Films**  
A. B. Dros, D. Grosso, C. Boissiere, G. J. A. A. Soler-Illia, P. A. Albouy, H. Amenitsch and C. Sanchez, *Microporous and Mesoporous Materials*, 94, 208, (2006)
- 274. Laser Imprinting of 3D Structures in Gel-Based Titanium Oxide Organic-Inorganic Hybrids**  
E. Fadeeva, J. Koch, B. Chichkov, A. Kuznetsov, O. Kameneva, N. Bityurin, C. Sanchez and A. Kanaev, *Applied Physics a-Materials Science & Processing*, 84, 27, (2006)
- 275. Surface Nanopatterning by Organic-Inorganic Self-Local Assembly and Selective Local Functionalization**  
A. Fisher, M. Kuemmel, M. Jarn, M. Linden, C. Boissiere, L. Nicole, C. Sanchez and D. Grosso, *Small*, 2, 569, (2006)
- 276. Highly Regioselective Terminal Alkynes Hydroformylation and Pauson-Khand Reaction Catalysed by Mesoporous Organised Zirconium Oxide Based Powders**  
F. Goettmann, P. Le Floch and C. Sanchez, *Chemical Communications*, 180, (2006)
- 277. Hybrid Bidentate Ligand for Functional Recognition: an Application to Regioselective C=C Double Bond Hydrogenation**  
F. Goettmann, P. Le Floch and C. Sanchez, *Chemical Communications*, 2036, (2006)
- 278. Periodically Organized Mesoporous Silica Thin Layers as Host for Phosphinines-Stabilized Gold Nanoparticles: UV-visible Sensing of Small Thiols and Phosphines**  
F. Goettmann, A. Moores, C. Boissiere, P. Le Floch and C. Sanchez, *Thin Solid Films*, 495, 280, (2006)
- 279. Preparation, Treatment and Characterisation of Nanocrystalline Mesoporous Ordered Layers**  
D. Grosso, C. Boissiere, L. Nicole and C. Sanchez, *Journal of Sol-Gel Science and Technology*, 40, 141, (2006)
- 280. Eu<sup>3+</sup>-Doped CdS Nanocrystals in SiO<sub>2</sub> Matrices: One-pot Sol-Gel Synthesis and Optical Characterization**  
B. Julian, J. Planelles, E. Cordoncillo, P. Escribano, P. Aschehoug, C. Sanchez, B. Viana and F. Pelle, *Journal of Materials Chemistry*, 16, 4612, (2006)
- 281. New Hybrid Organic-Inorganic Materials Based on a Poly(Titanium Oxide) Gel with Efficient UV-Induced Separation of Charges**  
O. V. Kameneva, A. I. Kuznetsov, L. A. Smirnova, L. Rosez, C. Sanchez, A. Kanaev, A. P. Alexandrov and N. M. Bityurin, *Doklady Physics*, 51, 103, (2006)
- 282. Extinction of Photo-Induced Ti<sup>3+</sup> Centres in Titanium Oxide Gels and Gel-Based Oxo-PHEMA Hybrids**  
A. I. Kuznetsov, O. Kameneva, L. Rozes, C. Sanchez, N. Bityurin and A. Kanaev, *Chemical Physics Letters*, 429, 523, (2006)
- 283. Nanostructured Hybrid Solar Cells Based on Self-Assembled Mesoporous Titania Thin Films**  
E. Lancelle-Beltran, P. Prene, C. Boscher, P. Belleville, P. Buvat, S. Lambert, F. Guillet, C. Boissiere, D. Grosso and C. Sanchez, *Chemistry of Materials*, 18, 6152, (2006)
- 284. All Solid State Dye-Sensitized Nanoporous TiO<sub>2</sub> Hybrid Solar Cells with High Energy-Conversion Efficiency**  
E. Lancelle-Beltran, P. Prene, C. Boscher, P. Belleville, P. Buvat and C. Sanchez, *Advanced Materials*, 18, 2579, (2006)
- 285. Elaboration and Mechanical Characterization of Nanocomposites Thin Films - Part I: Determination of the Mechanical Properties of Thin Films Prepared by In Situ Polymerisation of Tetraethoxysilane in Poly(methyl methacrylate)**  
F. Mammeri, E. Le Bourhis, L. Rozes and C. Sanchez, *Journal of the European Ceramic Society*, 26, 259, (2006)

**286. Elaboration and Mechanical Characterization of Nanocomposites Thin Films - Part II. Correlation between Structure and Mechanical Properties of SiO<sub>2</sub>-PMMA Hybrid Materials**  
F. Mammeri, L. Rozes, E. Le Bourhis and C. Sanchez, *Journal of the European Ceramic Society*, 26, 267, (2006)

**287. Electrochemical Investigations into Ferrocenylphosphonic Acid Functionalized Mesostructured Porous Nanocrystalline Titanium Oxide Films**  
E. Martinez-Ferrero, D. Grosso, C. Boissiere, C. Sanchez, O. Oms, D. Leclercq, A. Vioux, F. Miomandre and P. Audebert, *Journal of Materials Chemistry*, 16, 3762, (2006)

**288. Ink Jet Printing of Microdot Arrays of Mesostructured Silica**  
M. Mougenot, M. Lejeune, J. F. Baumard, C. Boissiere, F. Ribot, D. Grosso, C. Sanchez and R. Noguera, *Journal of the American Ceramic Society*, 89, 1876, (2006)

**289. Morphology Templating of Nanofibrous Silica through pH-Sensitive Gels: "In Situ" and "Post-Diffusion" Strategies**  
G. Roy, J. F. Miravet, B. Escuder, C. Sanchez and M. Llusar, *Journal of Materials Chemistry*, 16, 1817, (2006)

**290. Titanium-Oxo Clusters, Versatile Nanobuilding Blocks for the Design of Advanced Hybrid Materials**  
L. Rozes, N. Steunou, G. Fornasieri and C. Sanchez, *Monatshefte Fur Chemie*, 137, 501, (2006)

**291. Optimised Photocatalytic Activity of Grid-Like Mesoporous TiO<sub>2</sub> Films: Effect of Crystallinity, Pore Size Distribution and Pore Accessibility**  
Y. Sakatani, D. Grosso, L. Nicole, C. Boissiere, G. J. A. A. Soler-Illia and C. Sanchez, *Journal of Materials Chemistry*, 16, 77, (2006)

**292. Atom Transfer Radical Polymerization of Styrene and Methyl Methacrylate from Mesoporous Ordered Silica Particles**  
M. Save, G. Granvorka, J. Bernard, B. Charleux, C. Boissiere, D. Grosso and C. Sanchez, *Macromolecular Rapid Communications*, 27, 393, (2006)

**293. Tailoring the Structure of Hybrid Organic-Inorganic Nanomaterials Built on Tetra- and Polyfunctional Alco-Oxo-Titanium Clusters in Polystyrene**  
S. Trabelsi, G. Fornasieri, L. Rozes, A. Janke, A. Mensch, C. Sanchez and M. Stamm, *Journal of Applied Crystallography*, 39, 656, (2006)

**294. Hierarchically Structured Transparent Hybrid Membranes by In-Situ Growth of Mesostructured Organosilica in Host Polymer**  
K. Valle, P. Belleville, F. Pereira and C. Sanchez, *Nature Materials*, 5, 107, (2006)

## 2007

**295. Stability of Mesoporous Oxide and Mixed Metal Oxide Materials under Biologically Relevant Conditions**  
J. D. Bass, D. Grosso, C. Boissiere, E. Belamie, T. Coradin and C. Sanchez, *Chemistry of Materials*, 19, 4349, (2007)

**296. Synthesis, Characterization and Optical Properties of Eu<sub>2</sub>O<sub>3</sub> Mesoporous Thin Films**  
Y. Castro, B. Julian, C. Boissiere, B. Viana, H. Amenitsch, D. Grosso and C. Sanchez, *Nanotechnology*, 18, 055705, (2007)

**297. Preparation, Structural and Optical Characterization of Rare Earth Doped Mesoporous Y<sub>2</sub>O<sub>3</sub> Thin Films by EISA Method**  
Y. Castro, B. Julian-Lopez, C. Boissiere, B. Viana, D. Grosso and C. Sanchez, *Microporous and Mesoporous Materials*, 103, 273, (2007)

**298. Titanium Oxo-Clusters as Nanobuilding Blocks for Microsystems Technology**  
S. Cochet, L. Rozes, M. Popall and C. Sanchez, *Materials Science and Engineering C* 27, 1401, (2007)

**299. Bioinspired Enantioselective Catalysis: Racemic or Achiral Metal Complexes Grafted on Mesoporous Material Functionalized with Chiral Molecules**  
G. Cortial, F. Goettmann, F. Mercier, P. Le Floch and C. Sanchez, *Catalysis Communications*, 8, 215, (2007)

**300. Molecular Transport into Mesostructured Silica Thin Films: Electrochemical Monitoring and Comparison Between  $p6m$ ,  $P6_3/mmc$ , and  $Pm3n$  Structures**  
M. Etienne, A. Quach, D. Grosso, L. Nicole, C. Sanchez and A. Walcarius, *Chemistry of Materials*, 19, 844, (2007)

**301. How Does Confinement Affect the Catalytic Activity of Mesoporous Materials?**  
F. Goettmann and C. Sanchez, *Journal of Materials Chemistry*, 17, 24, (2007)

**302. Ultralow-Dielectric-Constant Optical Thin Films Built from Magnesium Oxyfluoride Vesicle-Like Hollow Nanoparticles**  
D. Grosso, C. Boissiere and C. Sanchez, *Nature Materials*, 6, 572, (2007)

**303. Mesoporous Maghemite-Organosilica Microspheres: a Promising Route Towards Multifunctional Platforms for Smart Diagnosis and Therapy**  
B. Julian-Lopez, C. Boissiere, C. Chaneac, D. Grosso, S. Vasseur, S. Miraux, E. Duguet and C. Sanchez, *Journal of Materials Chemistry*, 17, 1563, (2007)

**304. A Chemical Solution Deposition Route To Nanopatterned Inorganic Material Surfaces**  
M. Kuemmel, J. Allouche, L. Nicole, C. Boissiere, C. Laberty, H. Amenitsch, C. Sanchez and D. Grosso, *Chemistry of Materials*, 19, 3717, (2007)

**305. Nanostructured Titanium Oxynitride Porous Thin Films as Efficient Visible-Active Photocatalysts**  
E. Martinez-Ferrero, Y. Sakatani, C. Boissière, D. Grosso, A. Fuertes, J. Fraxedas and C. Sanchez, *Advanced Functional Materials*, 17, 3348, (2007)

**306. Rare Earth Doped Mesoporous Hybrid Thin Films with Tunable Optical Responses**  
A. Quach, V. Escax, L. Nicole, P. Goldner, O. Guillot-Noel, P. Aschehoug, P. Hesemann, J. Moreau, D. Gourier and C. Sanchez, *Journal of Materials Chemistry*, 17, 2552, (2007)

**307. One-pot Syntheses of the First Series of Emulsion Based Hierarchical Hybrid Organic-Inorganic Open-Cell Monoliths Possessing Tunable Functionality (Organo-Si(HIPE) series)**  
S. Ungureanu, M. Birot, G. Laurent, H. Deleuze, O. Babot, B. Julian-Lopez, M. F. Achard, M. I. Popa, C. Sanchez and R. Backov, *Chemistry of Materials*, 19, 5786, (2007)

**308. Characterization of Titanium Dioxide Nanoparticles Dispersed in Organic Ligand Solutions by Using a Diffusion-Ordered Spectroscopy-Based Strategy**  
L. Van Lokeren, G. Maheut, F. Ribot, V. Escax, I. Verbruggen, C. Sanchez, J. C. Martins, M. Biesemans and R. Willem, *Chemistry - A European Journal*, 13, 6957, (2007)

**309. Study of Metal Nanoparticles Stabilised by Mixed Ligand Shell: a Striking Blue Shift of the Surface-Plasmon Band Evidencing the Formation of Janus Nanoparticles**  
C. Vilain, F. Goettmann, A. Moores, P. Le Floch and C. Sanchez, *Journal of Materials Chemistry*, 17, 3509, (2007)

## 2008

**310. Structured Hybrid Nanoparticles via Surface-initiated ATRP of Methyl Methacrylate from Ordered Mesoporous Silica**  
F. Audouin, H. Blas, P. Pasetto, P. Beaunier, C. Boissiere, C. Sanchez, M. Save and B. Charleux, *Macromolecular Rapid Communications*, 29, 914, (2008)

**311. Core-shell Effects of Functionalized Oxide Nanoparticles Inside Long-range Meso-ordered Spray-dried Silica Spheres**  
N. Baccile, A. Fischer, B. Julian-Lopez, D. Grosso and C. Sanchez, *Journal of Sol-Gel Science and Technology*, 47, 119, (2008)

- 312. Hybrid Mesostructured Thin Films Functionalized with DBM as New Selective Sensors of  $BF_3$**   
P. Banet, L. Legagneux, P. Hesemann, J. J. E. Moreau, L. Nicole, A. Quach, C. Sanchez and T. H. Tran-Thi, *Sensors and Actuators B-Chemical*, 130, 1, (2008)
- 313. Thermally Induced Porosity in CSD  $MgF_2$ -Based Optical Coatings: an Easy Method to Tune the Refractive Index**  
J. D. Bass, C. Boissiere, L. Nicole, D. Grosso and C. Sanchez, *Chemistry of Materials*, 20, 5550, (2008)
- 314. Pyrolysis, Crystallization, and Sintering of Mesostructured Titania Thin Films Assessed by In Situ Thermal Ellipsometry**  
J. D. Bass, D. Grosso, C. Boissiere and C. Sanchez, *Journal of the American Chemical Society*, 130, 7882, (2008)
- 315. Elaboration of Monodisperse Spherical Hollow Particles with Ordered Mesoporous Silica Shells via Dual Latex/Surfactant Templating: Radial Orientation of Mesopore Channels**  
H. Blas, M. Save, P. Pasetto, C. Boissiere, C. Sanchez and B. Charleux, *Langmuir*, 24, 13132, (2008)
- 316.  $Eu^{3+}$  @Organo-Si(HIPE) Macro-Mesocellular Hybrid Foams Generation: Syntheses, Characterizations, and Photonic Properties**  
N. Brun, B. Julian-Lopez, P. Hesemann, G. Laurent, H. Deleuze, C. Sanchez, M. F. Achard and R. Backov, *Chemistry of Materials*, 20, 7117, (2008)
- 317. Structure and Mechanical Properties of Mesostructured Functional Hybrid Coatings Based on Anisotropic Nanoparticles Dispersed in Poly(hydroxylethyl methacrylate)**  
N. Chemin, L. Rozes, C. Chaneac, S. Cassaignon, E. Le Bourhis, J. P. Jolivet, O. Spalla, E. Barthel and C. Sanchez, *Chemistry of Materials*, 20, 4602, (2008)
- 318. Photonic and Nanobiophotonic Properties of Luminescent Lanthanide-doped Hybrid Organic-Inorganic Materials**  
P. Escribano, B. Julian-Lopez, J. Planelles-Arago, E. Cordoncillo, B. Viana and C. Sanchez, *Journal of Materials Chemistry*, 18, 23, (2008)
- 319. Sorption Properties of Mesoporous Multilayer Thin Films**  
M. C. Fuertes, S. Colodrero, G. Lozano, A. R. Gonzalez-Elipse, D. Grosso, C. Boissiere, C. Sanchez, G. Soler-Illia and H. Miguez, *Journal of Physical Chemistry C*, 112, 3157, (2008)
- 320. Highly Ordered Metal Oxide Nanopatterns Prepared by Template-assisted Chemical Solution Deposition**  
M. Kuemmel, C. Boissiere, L. Nicole, C. Laberty-Robert, C. Sanchez and D. Grosso, *Journal of Sol-Gel Science and Technology*, 48, 102, (2008)
- 321. Sol-gel route to Advanced Nanoelectrode Arrays (NEA) based on Titania Gold Nanocomposites**  
C. Laberty-Robert, M. Kuemmel, J. Allouche, C. Boissiere, L. Nicole, D. Grosso and C. Sanchez, *Journal of Materials Chemistry*, 18, 1216, (2008)
- 322. Solid-state Organic/Inorganic Hybrid Solar Cells based on Poly(octylthiophene) and Dye-sensitized Nanobrookite and Nanoanatase  $TiO_2$  Electrodes**  
E. Lancelle-Beltran, P. Prene, C. Boscher, P. Belleville, P. Buvat, S. Lambert, F. Guillet, C. Marcel and C. Sanchez, *European Journal of Inorganic Chemistry*, 903, (2008)
- 323. Europium-doped Mesoporous Titania Thin Films: Rare-earth Locations and Emission Fluctuations under Illumination**  
C. M. Leroy, T. Cardinal, V. Jubera, M. Treguer-Delapierre, J. Majimel, J. P. Manaud, R. Backov, C. Boissiere, D. Grosso, C. Sanchez, B. Viana and F. Pelle, *ChemPhysChem*, 9, 2077, (2008)
- 324. Inorganic and Hybrid Nanofibrous Materials Templated with Organogelators**  
M. Llusar and C. Sanchez, *Chemistry of Materials*, 20, 782, (2008)
- 325. Optical Properties of Hybrid Dendritic-mesoporous Titania Nanocomposite Films**  
E. Martinez-Ferrero, G. Franc, S. Mazeres, U. O. Turrin, U. Boissiere, A. M. Caminade, J. P. Majoral and C. Sanchez, *Chemistry-a European Journal*, 14, 7658, (2008)



**326. *Advanced Mesoporous Hybrid Silica-Nafion Membranes for High-performance PEM Fuel Cell***  
F. Pereira, K. Valle, P. Belleville, A. Morin, S. Lambert and C. Sanchez, *Chemistry of Materials*, 20, 1710, (2008)

**327. *Lanthanide doped ZnS Quantum Dots Dispersed in Silica Glasses: an Easy One Pot Sol-Gel Synthesis for obtaining Novel Photonic Materials***  
J. Planelles-Arago, B. Julian-Lopez, E. Cordoncillo, P. Escribano, F. Pelle, B. Viana and C. Sanchez, *Journal of Materials Chemistry*, 18, 5193, (2008)

**328. *Photochromic Hybrid Organic-Inorganic Liquid-crystalline Materials built from Nonionic Surfactants and Polyoxometalates: Elaboration and Structural Study***  
A. S. Poulos, D. Constantin, P. Davidson, M. Imperor, B. Pansu, P. Panine, L. Nicole and C. Sanchez, *Langmuir*, 24, 6285, (2008)

**329. *Bio-inspired Synthetic Pathways and Beyond: Integrative Chemistry***  
E. Prouzet, S. Ravaine, C. Sanchez and R. Backov, *New Journal of Chemistry*, 32, 1284, (2008)

**330. *Coupling Nanobuilding Block and Breath Figures Approaches for the Designed Construction of Hierarchically Templated Porous Materials and Membranes***  
Y. Sakatani, C. Boissiere, D. Grosso, L. Nicole, G. Soler-Illia and C. Sanchez, *Chemistry of Materials*, 20, 1049, (2008)

**331. *Design, Synthesis, and Properties of Inorganic and Hybrid Thin Films having Periodically Organized Nanoporosity***  
C. Sanchez, C. Boissiere, D. Grosso, C. Laberty and L. Nicole, *Chemistry of Materials*, 20, 682, (2008)

**332. *First Pd@Organo-Si(HIPE) Open-Cell Hybrid Monoliths Generation Offering Cycling Heck Catalysis Reactions***  
S. Ungureanu, H. Deleuze, C. Sanchez, M. I. Popa and R. Backov, *Chemistry of Materials*, 20, 6494, (2008)

## 2009

**333. *Formation of Palladium Nanostructures in a Seed-Mediated Synthesis through an Oriented-Attachment-Directed Aggregation***  
L. Bisson, C. Boissiere, L. Nicole, D. Grosso, J.-P. Jolivet, C. Thomazeau, D. Uzio, G. Berhault and C. Sanchez, *Chemistry of Materials*, 21, 2668, (2009)

**334. *Hard Macrocellular Silica Si(HIPE) Foams Templating Micro/Macroporous Carbonaceous Monoliths: Applications as Lithium Ion Battery Negative Electrodes and Electrochemical Capacitors***  
N. Brun, S. R. S. Prabaharan, M. Morcrette, C. Sanchez, G. Pécastaings, A. Derre, A. Soum, H. Deleuze, M. Birot and R. Backov, *Advanced Functional Materials*, 19, 3136, (2009)

**335. *New Aluminosilicate Materials with Hierarchical Porosity Generated by Aerosol Process***  
A. Chaumonnot, F. Tihay, A. Coupe, S. Pega, C. Boissiere, D. Grosso and C. Sanchez, *Oil & Gas Science and Technology-Revue De L Institut Francais Du Petrole*, 64, 681, (2009)

**336. *A New Photoactive Crystalline Highly Porous Titanium(IV) Dicarboxylate***  
M. Dan-Hardi, C. Serre, T. Frot, L. Rozes, G. Maurin, C. Sanchez and G. Férey, *Journal of the American Chemical Society*, 131, 10857, (2009)

**337. *Elaboration and properties of hierarchically structured optical thin films of MIL-101(Cr)***  
A. Demessence, P. Horcajada, C. Serre, C. Boissiere, D. Grosso, C. Sanchez and G. Férey, *Chemical Communications*, 7149, (2009)

**338. *Design, Synthesis, Structural and Textural Characterization, and Electrical Properties of Mesoporous Thin Films Made of Rare Earth Oxide Binaries***  
J. Hierso, O. Sel, A. Ringuede, C. Laberty-Robert, L. Bianchi, D. Grosso and C. Sanchez, *Chemistry of Materials*, 21, 2184, (2009)

- 339. Colloidal Route for Preparing Optical Thin Films of Nanoporous Metal-Organic Frameworks**  
P. Horcajada, C. Serre, D. Grosso, C. Boissiere, S. Perruchas, C. Sanchez and G. Ferey, *Advanced Materials*, 21, 1931, (2009)
- 340. Hierarchical Inorganic Nanopatterning (INP) through Direct Easy Block-copolymer Templating**  
M. Kuemmel, J. H. Smatt, C. Boissiere, L. Nicole, C. Sanchez, M. Linden and D. Grosso, *Journal of Materials Chemistry*, 19, 3638, (2009)
- 341. Laser-induced Photopatterning of Organic-Inorganic TiO<sub>2</sub>-based Hybrid Materials with Tunable Interfacial Electron Transfer**  
A. I. Kuznetsov, O. Kameneva, N. Bityurin, L. Rozes, C. Sanchez and A. Kanaev, *Physical Chemistry Chemical Physics*, 11, 1248, (2009)
- 342. Sol-gel technique for the generation of europium-doped mesoporous and dense thin films: A luminescent study**  
C. Leroy, T. Cardinal, V. Jubera, M. Treguer-Delapierre, R. Backov, C. Boissiere, D. Grosso, C. Sanchez, B. Viana and F. Pelle, *Journal of Luminescence*, 129, 1641, (2009)
- 343. Mechanistic Insight into Surface-Initiated Polymerization of Methyl Methacrylate and Styrene via ATRP from Ordered Mesoporous Silica Particles**  
P. Pasetto, H. Blas, F. Audouin, C. Boissiere, C. Sanchez, M. Save and B. Charleux, *Macromolecules*, 42, 5983, (2009)
- 344. Direct Aerosol Synthesis of Large-Pore Amorphous Mesostructured Aluminosilicates with Superior Acid-Catalytic Properties**  
S. Pega, C. Boissiere, D. Grosso, T. Azais, A. Chaumonnot and C. Sanchez, *Angewandte Chemie-International Edition*, 48, 2784, (2009)
- 345. One-Pot Synthesis of Functional Helicoidal Hybrid Organic-Inorganic Nanofibers with Periodically Organized Mesoporosity (p NA)**  
F. Rambaud, K. Valle, S. Thibaud, B. Julian-Lopez and C. Sanchez, *Advanced Functional Materials*, 19, 2896, (2009)
- 346. Highly Ordered Transparent Mesoporous TiO<sub>2</sub> Thin Films: an Attractive Matrix for Efficient Immobilization and Spectroelectrochemical Characterization of Cytochrome c**  
C. Renault, V. Balland, E. Martinez-Ferrero, L. Nicole, C. Sanchez and B. Limoges, *Chemical Communications*, 7494, (2009)
- 347. Hybrid Functional Mesostructured Thin Films with Photo-oxidative Properties in the Visible Range**  
P. Saint-Cricq, T. Pigot, L. Nicole, C. Sanchez and S. Lacombe, *Chemical Communications*, 5281, (2009)
- 348. Block-Copolymer-Templated Synthesis of Electroactive RuO<sub>2</sub>-Based Mesoporous Thin Films**  
C. Sassoie, C. Laberty, H. Le Khanh, S. Cassaignon, C. Boissiere, M. Antonietti and C. Sanchez, *Advanced Functional Materials*, 19, 1922, (2009)
- 349. Designing Meso- and Macropore Architectures in Hybrid Organic-Inorganic Membranes by Combining Surfactant and Breath Figure Templating (BFT)**  
O. Sel, C. Laberty-Robert, T. Azais and C. Sanchez, *Physical Chemistry Chemical Physics*, 11, 3733, (2009)
- 350. Mesoporous Coated Films on Love Wave Acoustic Devices for Gas Detection**  
G. Tortissier, L. Blanc, A. Tetelin, C. Zimmermann, J. L. Lachaud, C. Boissiere, C. Sanchez, C. Dejos and D. Rebiere, *Sensor Letters*, 7, 984, (2009)

## 2010

**351. Direct Electrogeneration of FePt Nanoparticles into Highly Ordered Inorganic NanoPattern Stabilising Membranes**

J. Allouche, D. Lantiat, M. Kuemmel, M. Faustini, C. Laberty, C. Chaneac, E. Tronc, C. Boissiere, L. Nicole, C. Sanchez and D. Grosso, *Journal of Sol-Gel Science and Technology*, 53, 551, (2010)

**352. Nanostructuring of Titania Films Prepared by Self-Assembly to Affect Cell Adhesion**

J. D. Bass, E. Belamie, D. Grosso, C. Boissiere, T. Coradin and C. Sanchez, *Journal of Biomedical Materials Research Part A*, 93A, 96, (2010)

**353. Enzyme-Based Hybrid Macroporous Foams as Highly Efficient Biocatalysts Obtained through Integrative Chemistry**

N. Brun, A. B. Garcia, H. Deleuze, M. F. Achard, C. Sanchez, F. Durand, V. Oestreicher and R. Backov, *Chemistry of Materials*, 22, 4555, (2010)

**354. Preparation of LiBH<sub>4</sub>@carbon micro-macrocellular foams: tuning hydrogen release through varying microporosity**

N. Brun, R. Janot, C. Sanchez, H. Deleuze, C. Gervais, M. Morcrette and R. Backov, *Energy & Environmental Science*, 3, 824, (2010)

**355. Controlled Design of Size-Tunable Monodisperse Nickel Nanoparticles**

S. Carencio, C. Boissiere, L. Nicole, C. Sanchez, P. Le Floch and N. Mezailles, *Chemistry of Materials*, 22, 1340, (2010)

**356. White Phosphorus and Metal Nanoparticles: a Versatile Route to Metal Phosphide Nanoparticles**

S. Carencio, M. Demange, J. Shi, C. Boissiere, C. Sanchez, P. Le Floch and N. Mezailles, *Chemical Communications*, 46, 5578, (2010)

**357. Advanced Drug Delivery Vectors with Tailored Surface Properties Made of Mesoporous Binary Oxides Submicronic Spheres**

M. Colilla, M. Manzano, I. Izquierdo-Barba, M. Vallet-Regi, C. Boissiere and C. Sanchez, *Chemistry of Materials*, 22, 1821, (2010)

**358. Adsorption properties in high optical quality nanoZIF-8 thin films with tunable thickness**

A. Demessence, C. Boissiere, D. Grosso, P. Horcajada, C. Serre, G. Ferey, G. Soler-Illia and C. Sanchez, *Journal of Materials Chemistry*, 20, 7676, (2010)

**359. Hydrophobic, Antireflective, Self-Cleaning, and Antifogging Sol-Gel Coatings: An Example of Multifunctional Nanostructured Materials for Photovoltaic Cells**

M. Faustini, L. Nicole, C. Boissiere, P. Innocenzi, C. Sanchez and D. Grosso, *Chemistry of Materials*, 22, 4406, (2010)

**360. Inkjet-Printing-Engineered Functional Microdot Arrays Made of Mesoporous Hybrid Organosilicas**

B. Fousseret, M. Mougnot, F. Rossignol, J. F. Baumard, B. Soulestin, C. Boissiere, F. Ribot, D. Jalabert, C. Carrion, C. Sanchez and M. Lejeune, *Chemistry of Materials*, 22, 3875, (2010)

**361. Ti<sub>8</sub>O<sub>8</sub>(OOCR)<sub>16</sub> a new Family of Titanium-Oxo-Clusters: Potential NBUs for Reticular Chemistry**

T. Frot, S. Cochet, G. Laurent, C. Sassoie, M. Popall, C. Sanchez and L. Rozes, *European Journal of Inorganic Chemistry*, 5650, (2010)

**362. Proton transport properties in hybrid membranes investigated by ac-electrogravimetry**

L. T. T. Kim, O. Sel, C. Debiemme-Chouvy, C. Gabrielli, C. Laberty-Robert, H. Perrot and C. Sanchez, *Electrochemistry Communications*, 12, 1136, (2010)

- 363. *Gold Nanoelectrode Arrays and their Evaluation by Impedance Spectroscopy and Cyclic Voltammetry***  
D. Lantiat, V. Vivier, C. Laberty-Robert, D. Grosso and C. Sanchez, *ChemPhysChem*, 11, 1971, (2010)
- 364. *Tailor-made Nanometer-scale Patterns of Photo-switchable Prussian Blue Analogues***  
S. Lepoutre, D. Grosso, C. Sanchez, G. Fornasieri, E. Riviere and A. Bleuzen, *Advanced Materials*, 22, 3992, (2010)
- 365. *Nanocasted Mesoporous Nanocrystalline ZnO Thin Films***  
S. Lepoutre, B. Julian-Lopez, C. Sanchez, H. Amenitsch, M. Linden and D. Grosso, *Journal of Materials Chemistry*, 20, 537, (2010)
- 366. *Integrative Approaches to Hybrid Multifunctional Materials: From Multidisciplinary Research to Applied Technologies***  
L. Nicole, L. Rozes and C. Sanchez, *Advanced Materials*, 22, 3208, (2010)
- 367. *Grafting Polymer Chains Bearing an N-Succinimidyl Activated Ester End-Group onto Primary Amine-Coated Silica Particles and Application of a Simple, One-Step Approach via Nitroxide-Mediated Controlled/Living Free-Radical Polymerization***  
J. Parvole, L. Ahrens, H. Blas, J. Vinas, C. Boissiere, C. Sanchez, M. Save and B. Charleux, *Journal of Polymer Science Part a-Polymer Chemistry*, 48, 173, (2010)
- 368. *New silicate bonding technique for composite laser materials***  
P. O. Petit, P. Goldner, C. Boissiere, C. Sanchez and B. Viana, *Optical Materials*, 32, 1368, (2010)
- 369. *High-Surface-Area Nanoporous Boron Carbon Nitrides for Hydrogen Storage***  
D. Portehault, C. Giordano, C. Gervais, I. Senkovska, S. Kaskel, C. Sanchez and M. Antonietti, *Advanced Functional Materials*, 20, 1827, (2010)
- 370. *Nonaqueous Route toward a Nanostructured Hybrid Titanate***  
D. Portehault, C. Giordano, C. Sanchez and M. Antonietti, *Chemistry of Materials*, 22, 2125, (2010)
- 371. *"Chimie douce": a Land of Opportunities for the Designed Construction of Functional Inorganic and Hybrid Organic-Inorganic Nanomaterials***  
C. Sanchez, L. Rozes, F. Ribot, C. Laberty-Robert, D. Grosso, C. Sassoie, C. Boissiere and L. Nicole, *Comptes Rendus Chimie*, 13, 3, (2010)
- 372. *Proton Insertion Properties in a Hybrid Membrane/Conducting Polymer Bilayer Investigated by AC Electrogravimetry***  
O. Sel, L. T. T. Kim, C. Debiemme-Chouvy, C. Gabrielli, C. Laberty-Robert, H. Perrot and C. Sanchez, *Journal of the Electrochemical Society*, 157, F69, (2010)
- 373. *Original Fuel-Cell Membranes from Crosslinked Terpolymers via a "Sol-Gel" Strategy***  
O. Sel, A. Soules, B. Ameduri, B. Boutevin, C. Laberty-Robert, G. Gebel and C. Sanchez, *Advanced Functional Materials*, 20, 1090, (2010)
- 374. *Palladium Nanoparticles Heterogeneous Nucleation within Organically Grafted Silica Foams and their Use as Catalyst Supports toward the Suzuki-Miyaura and Mizoroki-Heck Coupling Reactions***  
S. Ungureanu, H. Deleuze, O. Babot, M. F. Achard, C. Sanchez, M. I. Popa and R. Backov, *Applied Catalysis A: General*, 390, 51, (2010)
- 375. *Syntheses and Characterization of New Organically Grafted Silica Foams***  
S. Ungureanu, G. Laurent, H. Deleuze, O. Babot, M. F. Achard, M. I. Popa, C. Sanchez and R. Backov, *Colloids and Surfaces a-Physicochemical and Engineering Aspects*, 360, 85, (2010)

## 2011

**376. *Aerosol Route to Functional Nanostructured Inorganic and Hybrid Porous Materials***

C. Boissiere, D. Grosso, A. Chaumonnot, L. Nicole and C. Sanchez, *Advanced Materials*, In press, DOI: 10.1002/adma.201001410, (2011)

**377. *Molecular and Supramolecular Dynamics of Hybrid Organic-Inorganic Interfaces for the Rational Construction of Advanced Hybrid Nanomaterials***

D. Grosso, F. Ribot, C. Boissiere and C. Sanchez, *Chemical Society Reviews*, In press, DOI: 10.1039/C0CS00039F, (2011)

**378. *Mesoporous SiO<sub>2</sub> Thin Films containing Photoluminescent ZnO Nanoparticles and Simultaneous SAXS/WAXS/ellipsometry Experiments***

N. Krins, J. D. Bass, B. Julian-Lopez, P. Evrar, C. Boissiere, L. Nicole, C. Sanchez, H. Amenitsch and D. Grosso, *Journal of Materials Chemistry*, In press, DOI: 10.1039/C0JM02823A, (2011)

**379. *Titanium Oxo-Clusters: Precursors for a Legolike Construction of Nanostructured Hybrids Materials***

L. Rozes and C. Sanchez, *Chemical Society Reviews*, In press, DOI: 10.1039/C0CS00137F (2011)

**380. *Applications of Advanced Hybrid Organic-Inorganic Nanomaterials: from Laboratory to Market***

C. Sanchez, P. Belleville, M. Popall and L. Nicole, *Chemical Society Reviews*, In press, DOI: 10.1039/c0cs00136h, (2011)

**381. *Design and Properties of Functional Hybrid Membranes for Fuel Cells***

C. Sanchez, K. Valle, F. Perreira and C. Laberty-Robert, *Chemical Society Reviews*, In press, DOI:10.1039/C0CS00144A, (2011)

## Popular Scientific Articles

**1. *Le Procédé Sol-Gel: Modification Chimique des Alcoxydes / Sol-gel Process: Chemical Modification of Alkoxides***

C. Sanchez, *L'Industrie Céramique*, 831, 711, (1988)

**2. *Synthese Sol-Gel d'un Supraconducteur YBa<sub>2</sub>Cu<sub>3</sub>O<sub>7-x</sub> par Polymerisation Mixte Organique-Inorganique / Sol-Gel Synthesis of a YBa<sub>2</sub>Cu<sub>3</sub>O<sub>7-x</sub> Superconductor by Mixed Organic-Inorganic Polymerization***

I. Valente, C. Sanchez, M. Henry and J. Livage, *L'Industrie Céramique*, 836, 193, (1989)

**3. *Towards a Soft and Biomimetic Nanochemistry***

J. Livage and C. Sanchez, *L'Actualité Chimique*, 72, (2005)

**4. *Matériaux Hybrides Multifonctionnels : du Champ d'Investigation Pluridisciplinaire aux Applications***

C. Sanchez, *Lettre de l'Académie des sciences*, 23, 10, (2008).

## Book Chapters

### **1. *Some Aspects of the Chemistry of Transition Metal Oxide Gels***

J. Livage, F. Babonneau, C. Sanchez, **Inorganic and Organometallic Oligomers and Polymers**, J. F. Harrod and R. M. Laine (Eds), Kluwer Academic Publishers, 217, (1991)

### **2. *Transition Metal Oxo Polymers Synthesized via Sol-Gel Chemistry***

C. Sanchez, F. Ribot, S. Doeuff, **Organometallic Polymers with Special Properties**, R. M. Laine (Ed.), Kluwer Academic Publisher, 267, (1992)

### **3. *Sol-Gel Chemistry for Optical Materials***

J. Livage, F. Babonneau, C. Sanchez, in **Sol-Gel Optics, Processing and Applications**, L. C. Klein (Ed.), Kluwer Academic Publisher, 371, (1993)

### **4. *Matériaux Hybrides Organiques-Inorganiques pour l'Opto-électronique***

C. Sanchez, **Optoelectronique Moléculaire**, Arago 13, OFTA, Ed Masson, Paris, (1993)

### **5. *Les Matériaux Hybrides : Définition et Classification***

C. Sanchez, dans **Matériaux Hybrides**, Arago 17, OFTA, Ed Masson, Paris, (1996)

### **6. *Chimie des Matériaux Hybrides élaborés par la Méthode Sol-Gel***

C. Sanchez, F. Babonneau, dans **Matériaux Hybrides**, Arago 17, OFTA, Ed Masson, Paris, (1996)

### **7. *Matériaux Hybrides Organominéraux pour l'Optique Nonlinéaire Quadratique***

B. Lebeau, C. Sanchez, F. Chaput, J.P. Boilot, dans **Matériaux Hybrides**, Arago 17, OFTA, Ed Masson, Paris, (1996)

### **8. *Matériaux Bio-inspirés : Structures à Base Inorganique***

C. Sanchez, B. Lebeau, J. Patarin, dans **Biomimétisme et Matériaux**, Arago 25, OFTA, Ed Tec et Doc, Paris, (2001)

### **9. *Des Chimistes à l'Ecole du Vivant***

B. Bensaude-Vincent, H. Arribart, Y. Bouligand et C. Sanchez, dans **Biomimétisme et Matériaux**, Arago 25, OFTA, Ed Tec et Doc, Paris, (2001)

### **10. *Optical Properties of Functional Hybrid Organic-Inorganic Nanocomposites***

C. Sanchez, B. Lebeau, F. Chaput and J.-P. Boilot, **Functional Hybrid Inorganic-Organic Materials**, P. Gomez-Romero and C. Sanchez (Eds), Wiley-VCH, (2004)

### **11. *Introduction to Functional Hybrid Materials***

P. Gomez-Romero and C. Sanchez, **Functional Hybrid Inorganic-Organic Materials**, P. Gomez-Romero and C. Sanchez (Eds), Wiley-VCH, (2004)

### **12. *Hybrid Materials (Organic-Inorganic)***

C. Sanchez and G. J. A. A. Soler-Illia, **Encyclopedia of Chemical Processing (ECHP)**, Dekker Encyclopedia, (2005)

## PATENTS

**1. Matériaux Sol-Gel Inorganiques ayant une Susceptibilité du Second Ordre / Transparent Sol-Gel materials with Second Order Susceptibility**

J. Zyss, I. Ledoux, G. Puccetti, P. Griesmar, C. Sanchez and J. Livage, *France Telecom; Centre National de la Recherche Scientifique - CNRS*, FR2675509; DE69213808; JP5224255; US5449733; EP0511080, (1992)

**2. Solutions Colloïdales Concentrées de Particules Monocristallines non Agrégées d'Oxydes de Métaux, leur Procédé de Préparation et leur Application à l'Obtention de Films / Concentrated Colloidal Solutions of Monocrystalline non Aggregated Particles of Metal Oxides, Method for their Preparation and Application to the Production of Films**

M. Chatry, M. Henry, M. In and C. Sanchez, *Rhône-Poulenc Chimie*, FR2681534; EP0627960; WO/1993/005875, (1993)

**3. Sols ou Gels de Polymères Mixtes Organiques et Inorganiques, leur Procédé de Préparation et leur Application comme Matériaux Polymères Chargés**

M. In, C. Sanchez and J.-C. Daniel, *Rhône-Poulenc Chimie*, FR2681602, (1993)

**4. Polymères Mixtes Organiques-Inorganiques, leur Procédé de Préparation et leur Utilisation comme Matériaux Polymères Chargés**

M. In, C. Sanchez and J.-C. Daniel, *Rhône-Poulenc Chimie*, FR2681603, (1993)

**5. Composition Cosmétique ou Dermatologique formant, sur un Substrat Kératinique, un Revêtement en un Matériau Hybride Réticulé / Cosmetic or Dermatological Composition forming, on Keratin Substrate, a Film in Cross-Linked Hybrid Material**

J. Mondet, F. X. Quinn and C. Sanchez, *L'Oréal*, EP0971685; WO/1998/044906, (1998)

**6. Agent Cosmétique pour le Démaquillage d'un Revêtement Filmogène en Matériau Hybride Réticulé / Cosmetic Agent for Removal of a Film formed by Cross-linked Hybrid Material**

F. X. Quinn, P. Giustiniani and C. Sanchez, *L'Oréal*, FR2790664; EP1158951; WO/2000/053153, (2000)

**7. Matériaux Photochromes à Réponse très Rapide / Photochromic Materials with Rapid Response Time**

B. Sahut, R. Marcel and C. Sanchez, *Produits pour les Techniques Avancées - Protavic Sarl*, FR2795085, (2000)

**8. Composition Cosmétique à Base de Composés Organiques du Silicium, peu ou pas Polymérisés, Solubles dans l'Eau, et Partiellement Neutralisés / Cosmetic Compositions Based on Partly Neutralised Organic Silicon Compounds**

H. Samain, I. Rollat, V. Jeanne Rose and C. Sanchez, *L'Oréal*, FR2783164; EP1216018; WO/2001/022925, (2000)

**9. Composition Cosmétique à Base de Composés Organiques du Silicium, peu ou pas Polymérisés, Solubles dans l'Eau, et Comportant au moins une Fonction Solubilisante Non-Basique / Cosmetic Compositions Based on Organic Silicon Compounds Comprising at least a Non-basic Solubilising Function**

H. Samain, I. Rollat, V. Jeanne Rose and C. Sanchez, *L'Oréal*, FR2783167; EP1216022; WO/2001/022931, (2000)

**10. Composition Cosmétique à Base de Composés Organiques du Silicium, peu ou pas Polymérisés, Solubles dans l'Eau, et Comportant Deux Fonctions Non-Hydrolysables dont Une au Moins a un Effet Cosmétique**

H. Samain, I. Rollat, V. Jeanne Rose and C. Sanchez, *L'Oréal*, FR2783165, (2000)

**11. Nouvelles Compositions Minérales utilisables en tant que Précurseurs d'Hydroxyapatite - Application au Renforcement des Bétons / Novel Mineral Compositions for use as Hydroxyapatite Precursors - Use for Reinforcing Concrete**

J. Y. Chane-Ching, C. Sanchez and D. Damidot, *Rhodia Chimie; Bouygues Travaux Publics; Lafarge*, FR2796061; WO/2001/002294, (2001)

**12. Procédé pour Améliorer la Stabilité, vis à vis du rayonnement UV, de Filtres Solaires Photosensibles / Method for Improving UV Radiation Stability of Photosensitive Sunscreen Filters**

S. Chodorowski, F. X. Quinn and C. Sanchez, *L'Oréal*, FR2799119; EP1135101; WO/2001/024762, (2001)

**13. Matériau Comprenant un Filtre UV-A Organique et Procédé de Déplacement de la Longueur d'Onde d'Absorption Maximale / Material Comprising an Organic UV-A Filter and Method for Displacing the Maximum Absorption Wavelength**

S. Chodorowski, F. X. Quinn and C. Sanchez, *L'Oréal*, FR2799120; EP1235552; WO/2001/024768, (2001)

**14. Composition Cosmétique à Base de Composés Organiques du Silicium Comportant au Moins Une Fonction à Effet Cosmétique / Cosmetic Composition Base on Organic Silicon Compounds Comprising at Least a Function with Cosmetic Effect**

H. Samain, I. Rollat, V. Jeanne Rose and C. Sanchez, *L'Oréal*, EP1216023; WO/2001/022932, (2001)

**15. Composition Comprenant des Photochromes et son Utilisation en Cosmétique**

S. Chodorowski Kimmes, A. Lafuma, F. X. Quinn and C. Sanchez, *L'Oréal*, FR2838960, (2003)

**16. Matériau Hybride Organique-Inorganique Conducteur Comprenant une Phase Mésoporeuse, Membrane, Electrode et Pile à Combustible / Conductive Organic-Inorganic Hybrid Material Comprising a Mesoporous Phase, Membrane, Electrode and Fuel Cell**

K. Valle, P. Belleville and C. Sanchez, *Commissariat à l'Energie Atomique - CEA*, FR2850300; EP1587876; WO/2004/067640, (2004)

**17. Matériau Hybride Organique-Inorganique Comprenant une Phase Minérale Mésoporeuse et une Phase Organique, Membrane et Pile à Combustible / Organic-Inorganic Hybrid Material Containing a Mineral Mesoporous Phase and an Organic Phase, a Membrane and Fuel Cell**

K. Valle, P. Belleville and C. Sanchez, *Commissariat à l'Energie Atomique - CEA*, FR2850301; EP1585783; WO/2004/067611, (2004)

**18. Matériau Hybride Inorganique-Organique Semi-Conducteur p-n, son Procédé de Fabrication et Cellule Photovoltaïque Comprenant ledit Matériau / p-n Semiconductor Inorganic-Organic Hybrid Material, its Method of Production and Photovoltaic Cell Comprising Said Material**

P. Belleville, C. Sanchez, P. Buvat and P. Prene, *Commissariat à l'Energie Atomique - CEA*, FR2862429; EP1704607; WO/2005/050752; , (2005)

**19. Matériau à Porosité Hiérarchisée Comprenant du Silicium / Material with a Hierarchical Porosity Comprising Silicon**

A. Chaumonnot, A. Coupe, C. Sanchez, P. Euzen, C. Boissiere and D. Grosso, *Institut Français du Pétrole - IFP*, FR2872152; JP2006008510; US20060030477; EP1627853, (2005)

**20. Matériau Aluminosilicate Mésosstructuré / Mesostructured Aluminosilicate Material**



A. Chaumonnot, A. Coupe, C. Sanchez, P. Euzen, C. Boissiere and D. Grosso, *Institut Français du Pétrole - IFP*, FR2872151; JP2006008509; US20060292054; EP1627852, (2005)

**21. Solides Inorganiques, notamment Poreux, en particulier Mesoporeux, Modifiés par des Molécules Organiques Chélatant des Métaux de Transition, leur Préparation et leur Utilisation comme Catalyseurs / Inorganic Solids, such as Porous and particularly Mesoporous Inorganic Solids, which are Modified by Transition Metal-Chelating Organic Molecules, Preparation Method thereof and Use of same as Catalysts**

F. Goettmann, D. Lefevre, C. Sanchez, F. Mathey, P. Le Floch and C. Jacquiod, *Saint-Gobain Recherche*, FR2865664; WO/2005/075074, (2005)

**22. Composés, Matériaux Poreux Hybrides Organique-Inorganiques Mésostructurés et Capteurs utiles pour la Détection ou le Dosage de Composés Gazeux Halogénés / Porous Hybrid Organic-Inorganic Materials for the Detection of Halogens**

T. H. Tran-Thi, C. Sanchez, L. Nicole and P. Hesemann, *Commissariat à l'Energie Atomique - CEA; Centre National de la Recherche Scientifique - CNRS; Université Pierre et Marie Curie - UPMC*, FR2869036; EP1745055; WO/2005/100371, (2005)

**23. Matériau Inorganique Présentant des Nanoparticules Métalliques Piégées dans une Matrice Mésostructurée / Inorganic Material Comprising Metal Nanoparticles Trapped in a Mesostructured Matrix**

A. Chaumonnot, A. Coupe, C. Sanchez, C. Boissiere and D. Grosso, *Institut Français du Pétrole - IFP*, FR2886636; EP1893531; WO/2006/128988, (2006)

**24. Matériau Mésostructuré à Forte Teneur en Aluminium / Mesostructured Material with High Aluminum Content**

A. Chaumonnot, A. Coupe, C. Sanchez, P. Euzen, C. Boissiere and D. Grosso, *Institut Français du Pétrole - IFP*, FR2886637; EP1910226; WO/2006/128989, (2006)

**25. Utilisation d'un Matériau Nanostructuré comme Revêtement Protecteur de Surfaces Métalliques / Use of a Nanostructured Material as a Protective Coating of Metal Surfaces**

E. Campazzi, V. Goletto and C. Sanchez, *European Aeronautic Defense and Space Company - EADS France; Université Pierre et Marie Curie - UPMC; Centre National de la Recherche Scientifique - CNRS*, FR2899906; WO/2007/119023, (2007)

**26. Matériau Hybride Organique-Inorganique Mésostructuré / Mesostructured Organic-Inorganic Hybrid Material**

A. Chaumonnot, S. Pega, C. Sanchez, C. Boissiere and D. Grosso, *Institut Français du Pétrole - IFP*, FR2894580; EP1963341; WO/2007/065982, (2007)

**27. Oxyfluorure Poreux Nanostructuré / Oxyfluoride in the Form of a Film and Preparation Method**

D. Grosso, C. Boissiere and C. Sanchez, *Université Pierre et Marie Curie - UPMC; Centre National de la Recherche Scientifique - CNRS*, FR2893320; WO/2007/057551, (2007)

**28. Matériau Alvéolaire Hybride, Procédé pour sa Préparation / Hybrid Material, and Method for the Production Thereof**

R. Backov, C. Sanchez, H. Deleuze and S. Ungureanu, *Université Pierre et Marie Curie - UPMC*, FR2912400; WO/2008/129151, (2008)

**29. Procédé de Synthèse de Nanoparticules Métalliques Cubiques en Présence de Deux Réducteurs / Method for the Synthesis of Cubic Metal Nanoparticles in the Presence of Two Reducers**

L. Bisson, C. Thomazeau, C. Sanchez and C. Boissiere, *Institut Français du Pétrole - IFP*, FR2914200; WO/2008/132314, (2008)

- 30. Revêtements Mésostructurés pour Application en Aéronautique et Aérospatiale / Mesostructured Skins for Application in the Aeronautics and Aerospace Industries**  
E. Campazzi, E. Lancelle-Beltran and C. Sanchez, *European Aeronautic Defense and Space Company - EADS France; Université Pierre et Marie Curie - UPMC; Centre National de la Recherche Scientifique - CNRS, FR2906539; WO/2008/040895, (2008)*
- 31. Matériau Nanostructuré Particulier, comme Revêtement Protecteur de Surfaces Métalliques**  
E. Campazzi, E. Lancelle-Beltran and C. Sanchez, *European Aeronautic Defense and Space Company - EADS France; Université Pierre et Marie Curie - UPMC; Centre National de la Recherche Scientifique - CNRS, FR2914631; EP1978055, (2008)*
- 32. Matériau Cristallisé à Porosité Hiérarchisée et Comprenant du Silicium / Crystallised Materials with Hierarchised Porosity and Containing Silicon**  
A. Chaumonnot, A. Coupe, C. Sanchez and C. Boissiere, *Institut Français du Pétrole - IFP, FR2920758; WO/2009/060143, (2009)*
- 33. Matériau Amorphe à Porosité Hiérarchisée et Comprenant du Silicium / Amorphous Materials Having a Hierarchised Porosity and Comprising Silicon**  
A. Chaumonnot, A. Coupe, C. Sanchez and C. Boissiere, *Institut Français du Pétrole - IFP, FR2920755; WO/2009/056710, (2009)*
- 34. Matériau Cristallisé Comprenant du Silicium à Porosité Hiérarchisée et Organisée / Crystallised Materials Containing Silicon with Hierarchised and Organised Porosity**  
A. Chaumonnot, S. Pega, C. Sanchez and C. Boissiere, *Institut Français du Pétrole - IFP, FR2920757; WO/2009/060144, (2009)*
- 35. Matériau Amorphe Comprenant du Silicium à Porosité Hiérarchisée et Organisée / Amorphous Materials Comprising Silicon and Having an Organised and Hierarchised Porosity**  
A. Chaumonnot, S. Pega, C. Sanchez and C. Boissiere, *Institut Français du Pétrole - IFP, FR2920756; WO/2009/056711, (2009)*
- 36. Matériau Aluminosilicate Mésostructuré formé de Particules Sphériques de Taille Spécifique / Mesostructured Aluminosilicate Material formed from Spherical Particles of Specific Size**  
A. Chaumonnot, A. Coupe, C. Sanchez, C. Boissiere and M. Martin, *Institut Français du Pétrole - IFP, FR2929265; WO/2009/122022, (2009)*
- 37. Matériau Mésostructuré à Forte Teneur en Aluminium et Constitué de Particules Sphériques de Taille Spécifique / Mesostructured Materials having a High Aluminium Content and composed of Spherical Particles of Specific Size**  
A. Chaumonnot, M. Martin, A. Coupe, C. Sanchez and C. Boissiere, *Institut Français du Pétrole - IFP, FR2929266; WO/2009/122023 (2009)*
- 38. Matériau Inorganique Formé de Particules Sphériques de Taille Spécifique et Présentant des Nanoparticules Métalliques Piégées dans une Matrice Mésostructurée / Inorganic Material formed from Spherical Particles of Specific Size and having Metallic Nanoparticles trapped in a Mesostructured Matrix**  
A. Chaumonnot, M. Martin, A. Coupe, C. Sanchez and C. Boissiere, *Institut Français du Pétrole - IFP, FR2929264; WO/2009/130401 (2009)*

**39. Moyens de Texturation de Couches Mésostructurées pour la Protection de Structures Aéronautiques / Mesostructured Coatings comprising a Specific Texture Agent for Application in Aeronautics and Aerospace**  
S. de Monredon, E. Campazzi, C. Sanchez, L. Nicole and F. Ribot, *European Aeronautic Defense and Space Company - EADS France; Université Pierre et Marie Curie - UPMC; Centre National de la Recherche Scientifique - CNRS*, FR29229622; WO/2009/136044, (2009)

**40. Procédé de Préparation d'un Monolithe de Carbone ou de Céramiques Alvéolaires comportant un Réseau Poreux Hiérarchisé / Method for Preparing a Cellular Carbon Monolith comprising a Hierarchised Porous Network**  
R. Backov, N. Brun and C. Sanchez, *Université Pierre et Marie Curie - UPMC*, FR2937970; WO/2010/049650, (2010)

**41. Procédé de Stockage de l'Hydrogène dans un Matériau Monolithique Poreux, Matériau Composite obtenu et Applications / Method for Storing Hydrogen in a Porous Monolithic Materials, Composite Materials obtained and Applications**  
R. Backov, C. Sanchez, R. Janot and N. Brun, *Université Pierre et Marie Curie - UPMC*, FR2937964; WO/2010/049649, (2010)

**42. Matériau Solide Hybride Inorganique-Organique à base de Titane, son Procédé de Préparation et Utilisations / Titanium-based Inorganic-Organic Hybrid Solid Material, Method for preparing same and Uses thereof**  
G. Ferey, C. Sanchez, L. Rozes, M. Dan, C. Serre and T. Frot, *Université Pierre et Marie Curie - UPMC*, FR2942229; WO/2010/094889, (2010)

**43. Dispositif Micro-Fluidique pour Convoyer un Produit par Diffusion dans un Substrat Poreux / Microfluidic Device for transporting a Product by Diffusion in a Porous Substrate**  
D. Grosso, M. Linden and C. Sanchez, *Université Pierre et Marie Curie - UPMC*, FR2946269; WO/2010/142700, (2010)

**44. Nanofibres hybrides organiques-inorganiques à phase inorganique mésoporeuse, leur préparation par extrusion électroassistée, membrane, électrode, et pile à combustible**  
J. D. Bass, C. Laberty-Robert, C. Sanchez, F. Pereira, K. Valle and P. Belleville, *Commissariat à l'Energie Atomique - CEA, National registration number - N° d'enregistrement national: FR 10-52577*, (Filing date - Date de dépôt: 06/04/2010)

**45. Catalyseur Enzymatique Hétérogène, Procédé de Préparation et Utilisation pour la Catalyse Enzymatique en Flux Continu**  
N. Brun, H. Deleuze, C. Sanchez and R. Backov, *Université Pierre et Marie Curie - UPMC, National registration number - N° d'enregistrement national: FR 10-56099*, (Filing date - Date de dépôt: 26/07/2010)

**46. Procédé de Préparation d'un Matériau Sphérique à Porosité Hiérarchisée comprenant des Particules Métalliques piégées dans une Matrice Mésostructurée**  
A. Chaumonnot, F. Colbeau-Justin, C. Boissiere, A. Bonduelle and C. Sanchez, *Institut Français du Pétrole - IFP, National registration number - N° d'enregistrement national: FR 10/05.031*, (Filing date - Date de dépôt: xx/12/2010)

**47. Matériau Sphérique comprenant des Nanoparticules Métalliques piégées dans une Matrice Oxyde Mésostructurée et son Utilisation comme Catalyseurs dans les Procédés du Raffinage**  
A. Chaumonnot, F. Colbeau-Justin, C. Boissiere, A. Bonduelle and C. Sanchez, *Institut Français du Pétrole - IFP, National registration number - N° d'enregistrement national: FR 10/05.029*, (Filing date - Date de dépôt: xx/12/2010)

**48. Procédé de Préparation d'un Matériau Sphérique à Porosité Hiérarchisée comprenant des Nanoparticules Métalliques piégées dans une Matrice à base de Silicium**

A. Chaumonnot, F. Colbeau-Justin, C. Boissiere, A. Bonduelle and C. Sanchez, *Institut Français du Pétrole - IFP*, National registration number - N° d'enregistrement national: FR 10/05.033, (Filing date - Date de dépôt: xx/12/2010)

**49. Matériau Sphérique à base d'Hétéropolyanions Piégés dans une Matrice Oxyde Mésostructurée et son Utilisation comme Catalyseurs dans les Procédés du Raffinage**

A. Chaumonnot, F. Colbeau-Justin, C. Boissiere, C. Sanchez, A. Daudin, A. Bonduelle, B. Guichard, K. Marchand, E. Devers and D. Uzio, *Institut Français du Pétrole - IFP*, National registration number - N° d'enregistrement national: FR 10/05.030, (Filing date - Date de dépôt: xx/12/2010)

**50. Catalyseurs supportés enzymatiques hybrides macrocellulaires et applications**

N. Brun, A. Babeau-Garcia, C. Sanchez and R. Backov, *Université Pierre et Marie Curie - UPMC*, National registration number - N° d'enregistrement national: FR 09-54634, (Filing date - Date de dépôt: xx/xx/2009)

**51. Modifications de carbones monolithiques alvéolaires par nucléation hétérogène de  $\text{LiBH}_4$  et applications**

N. Brun, R. Janot, C. Sanchez and R. Backov, *Université Pierre et Marie Curie - UPMC*, (Filing date - Date de dépôt: xx/xx/2009)

## PROCEEDINGS

**1. ESR Analysis of Brownian Motion in  $V_2O_5$  Xerogels after Adsorption of Water**

C. Sanchez, J. Livage, P. Tougne, A. P. Legrand, **Magnetic Resonance in Colloid and Interface Science**, J. Fraissard et H. Resing - D. Reidel (Eds), 559, (1980)

**2. The Gel Route to  $TiO_2$  Photoanodes**

S. Doeuff, M. Henry, C. Sanchez, **Materials Research Society Symposium Proceedings**, 73, 653, (1986)

**3. Chemical Modification of TEOS with Acetic Acid**

A. Campero, R. Arroyo, C. Sanchez, J. Livage, **Ultrastructure Processing of Advanced Ceramics**, 327, (1988)

**4. Synthesis and Characterization of Vanadium Oxide Gels from Alkoxy-Vanadates Precursors**

C. Sanchez, M. Nabavi, F. Taulelle, **Materials Research Society Symposium Proceedings**, 121, 93, (1988)

**5. Optical Properties of Transition Metal Oxide Gels**

C. Sanchez, **Sol-Gel Optics**, SPIE, 1328, 40 (1990)

**6. Molecular Structure of Metal Alkoxide Precursors**

C. Sanchez, P. Tolédano, F. Ribot, **Materials Research Society Symposium Proceedings**, 180, 47, (1990)

**7. Orientation of Organic Molecules in Sol-Gel Matrices: for Quadratic Nonlinear Optics**

G. Puccetti, E. Toussaere, I. Ledoux, J. Zyss, P. Griesmar, C. Sanchez, **Polymer Preprints**, 32, 61, (1991)

**8. Tailoring of Ce(IV) alkoxide precursors**

F. Ribot, C. Sanchez, J. Livage, **Chemical Processing of Advanced Materials**, 25, 267, (1992)

**9. Tailoring of Transition Metal Alkoxides via Complexation for the Synthesis of Hybrid Organic-Inorganic Sol-Gels**

C. Sanchez, M. In, P. Tolédano, P. Griesmar, **Materials Research Society Symposium Proceedings**, 271, 69 (1992)

**10. Hydrolysis-Condensation of Alkyltin-Trialkoxides**

F. Ribot, F. Banse, C. Sanchez, **Materials Research Society Symposium Proceedings**, 271, 45 (1992)

**11. Sol-gel Synthesis of Metal Oxide Clusters and Colloids**

J. Livage, C. Sanchez, P. Tolédano, **Materials Research Society Symposium Proceedings**, 272, 3, (1992)

**12. Optical Coatings Based on Transition Metal Oxide gels**

C. Sanchez, J. Livage, **Progress in Research and Development of Processes and Products from Sols and Gels - Eurogel 91**, S. Vilminot, R. Nass, H. Schmidt (Eds), 131, (1992)

**13. Energy Transfer Between  $Eu^{2+}$ ,  $Eu^{3+}$  and Rh6G in Silica, Zirconia and Alumina gels**

W. Nie, B. Dunn, C. Sanchez, P. Griesmar, **Materials Research Society Symposium Proceedings**, 271, 639, (1992)

**14. Sol-Gel Chemistry for Non Linear Optics**

J. Livage, C. Schmutz, P. Griesmar, P. Barboux, C. Sanchez, **Sol-Gel Optics II**, SPIE, 1758, 274, (1992)

**15. Chemical Design of Hybrid Organic-Inorganic Materials Synthesized via Sol-Gel Chemistry**

C. Sanchez, F. Ribot, **Proceedings of the First European Workshop on Hybrid Organic-Inorganic Materials**, Bierville, France, (1993)

- 16. Molecular Design of Hybrid Organic-Inorganic Materials Synthesized via Sol-Gel Chemistry**  
C. Sanchez, F. Banse, F. Babonneau, S. Doeuff, M. In, F. Ribot, **Proceedings of the First International Meeting on Soft Chemistry**, Materials Science Forum, Trans Tech Publications, J. Rouxel, M. Tournoux R. Brec (Eds.) 152-153, 313, (1994)
- 17. NLO and Luminescent Properties of Hybrid Siloxane-Oxide Coatings**  
C. Sanchez, B. Lebeau, B. Viana, **Sol-Gel Optics III**, SPIE, 2288, 227, (1994)
- 18. Sol-Gel Synthesis of Hybrid Organic-Inorganic Tin Oxide Based Materials**  
F. Ribot, F. Banse, C. Sanchez, **Materials Research Society Symposium Proceedings**, 346, 121, (1994)
- 19. Synthesis of Hybrid Organic-Inorganic Sol-Gel Coatings for Optics**  
B. Lebeau, C. Guermeur, C. Sanchez, **Materials Research Society Symposium Proceedings**, 346, 315, (1994)
- 20. Optical Properties of Hybrid Siloxane Oxide Coatings**  
C. Sanchez, B. Viana, B. Lebeau, P. Aschehoug, **Sol-Gel Optics III**, SPIE, 2288, (1994)
- 21. Synthesis and Characterization of Titanium Oxo-Alkoxides Obtained through Solvothermal Process**  
N. Steunou, Y. Dromzee, F. Roberts, C. Sanchez, **Materials Research Society Symposium Proceedings**, 435, 487, (1996)
- 22. Effect of Processing Parameters on Second Order Nonlinearities of Azodye Grafted Hybrid Sol-Gel Coatings**  
B. Lebeau, C. Sanchez, S. Brasselet, J. Zyss, **Materials Research Society Symposium Proceedings**, 435, 395, (1996)
- 23. Hybrid Organic-Inorganic Systems Derived from Organotin Nanobuilding blocks**  
F. Ribot, C. Eychenne-Baron, F. Banse, C. Sanchez, **Materials Research Society Symposium Proceedings**, 435, 43, (1996)
- 24. Vanadium-Oxo Based Hybrid Organic-Inorganic Copolymers**  
A. Campero, A. Soto, J. Maquet, C. Sanchez, **Materials Research Society Symposium Proceedings**, 435, 527, (1996)
- 25. Hydrolysis-Condensation Behavior of Acetylacetone Modified Tin(IV) Tetratert-amyloxide**  
L. Armelao, F. Ribot, C. Sanchez, **Materials Research Society Symposium Proceedings**, 435, 387, (1996)
- 26. Investigation of Dye-Matrix Interactions in Sol Gel Derived Hybrid Organic-Inorganic Nanocomposites**  
C. Guermeur, C. Sanchez, B. Schaudel, K. Nakatani, J. A. Delaire, F. Del Monte, D. Levy, **Sol-Gel Optics IV**, SPIE, 2288, (1997)
- 27. Hybrid Materials Made by Polymerization of Nanobuilding-Blocks.  $\{(BuSn)_2O_2(OH)_2\}^{2+}(AAMPS)_2$  (AAMPS = 2-acrylamido-2-methyl-1-propanesulfonate)**  
F. Ribot, C. Eychenne-Baron, C. Sanchez, **Materials Research Society Symposium Proceedings**, 519, 29, (1998)
- 28. Synthesis and Characterization of Surface Protected Nanocrystalline Particles of Titania**  
E. Scolan, C. Sanchez, **Materials Research Society Symposium Proceedings**, 519, 329, (1998)
- 29. Synthesis and Characterization of Hybrid Materials Obtained through Hydrolysis of AlkoxySilanes and Vanadium Alkoxides**  
B. Alonso, J. Maquet, B. Viana, C. Sanchez, **Materials Research Society Symposium Proceedings**, 519, 337, (1998)

**30. *Molecular Design of Hybrid Organic-Inorganic Nanocomposites with Emission and Photochromic Properties***

C. Sanchez, A. Lafuma, L. Rozes, K. Nakatani, J. A. Delaire, E. Cordoncillo, B. Viana, P. Escribano *Sol-Gel Optics*, SPIE Optical Materials, 3469, 192, (1998)

**31. *An Organo-Tin Oxo Carboxylate Cluster Functionnalized by Triethoxysilyl Groups***

F. Ribot, D. Minoux, C. Sanchez, *Materials Research Society Symposium Proceedings*, 628, CC2.2.1, (2000)

**32. *Hybrid Nanostructured Materials from Titanium-oxo Nanobuilding Blocks***

C. Sanchez, G. J. A. A. Soler-Illia, L. Rozes, A.-M. Caminade, C. O. Turrin; J.-P. Majoral, *Materials Research Society Symposium Proceedings*, 628, CC6.2.1, (2000)

**33. *Lanthanide Doped Hybrid Organic-Inorganic Nanocomposites***

B. Viana, E. Cordoncillo, C. Philippe, C. Sanchez, F.J. Guaita, P. Escribano, *Sol-Gel Optics V*, SPIE, 3943, 128, (2000)

**34. *Construction of Hybrid Nanostructured Materials by Legochemistry***

C. Sanchez, G. J. A. A. Soler-Illia, L. Rozes, F. Ribot, J.-P. Majoral, *PRA Proceedings on Organic-Inorganic Hybrids*, 33, (2000)

**35. *Titanium Oxo-organo Clusters: Precursors for the Preparation of Nanostructured Titanium Oxide Based Materials***

N. Steunou, C. Sanchez, P. Florian, S. Förster, C. Göltner, M. Antonietti, *Sol Gel Commercialization and Applications*, X. Feng, L. C. Klein, E. J. A. Pope, S. Komarneni (EDS), 23, 49, (2000)

**36. *Sol-Gel Chemistry: The Lego Approach***

C. Sanchez, G. J. A. A. Soler-Illia, F. Ribot, *XIX International Congress on Glass Symposium Proceedings*, (2001)

**37. *Construction of Hybrid Nanostructured Materials by Legochemistry: The use of Metal-Oxo Nanobuilding Blocks***

C. Sanchez, G. J. A. A. Soler-Illia, L. Rozes, F. Ribot, J.-P. Majoral, *Surface Coatings International Part II*, Advances in the Science and Technology of Coatings and Ink, (2000)

**38. *Antistatic Coatings from Tin Oxide Nanoparticles: Synthesis and Deposition***

A. Cellot, S. de Monredon, L. Delattre, L. Guéneau, F. Ribot, C. Sanchez, *Proceedings of "Nanostructured Materials Made from Self-Assembled Molecules and Particles"*, (2001)

**39. *Investigation of Interactions Between a NLO Dye and Metal Alkoxide Precursors of Hybrid Materials***

B. Lebeau, C. Sanchez, *Materials Research Society Symposium Proceedings*, 726, 12, (2002)

**40. *Design of Transition Metal Oxide Mesoporous Thin films***

E. L. Crepaldi, G. J. A. A. Soler-Illia, D. Grosso, P.-A. Albouy, H. Amenitsch, C. Sanchez, *Studies in Surface Science and Catalysis, Nanoporous Materials III*, A. Sayari, M. Jaroniec (Eds), Elsevier, 235, (2002)

**41. *A Novel Route to Collagen-Silica Biohybrids***

T. Coradin, M.M. Giraud-Guille, C. Helary, J. Livage, C. Sanchez, *Materials Research Society Symposium Proceedings*, 726, 79, (2002)

**42. *Design of Transition Metal Oxide and Hybrid Mesoporous Materials***

C. Sanchez, D. Grosso, E. L. Crepaldi, G. J. A. A. Soler-Illia, *Materials Research Society Symposium Proceedings*, 724, 212, (2002)

**43. *Controlled Design of Mesostructured Titania based Materials***

G. Soler, D. Grosso, E. Crepaldi, F. Cagnol, A. Bouchara, C. Sanchez, **Materials Research Society Symposium Proceedings**, 726, 243, (2002)

**44. *Designed Construction of Nanostructured Hybrid Materials***

C. Sanchez, E. L. Crepaldi, A. Bouchara, F. Cagnol, D. Grosso, G. J. A. A. Soler-Illia, **CIMTEC Proceedings**, (2002)

**45. *Propriétés Mécaniques de Films Minces Hybrides Organiques-Inorganiques SiO<sub>2</sub>-PMMA***

F. Mammeri, L. Rozes, E. Le Bourhis, C. Sanchez, **Proceedings du Colloque Matériaux Tours**, (2002)

**46. *Phase Transformations Involved During Silica, Modified Silica, and Non-Silica Mesoporous Organized Thin Films Deposition. The Role of Evaporation***

D. Grosso, E. L. Crepaldi, G. J. A. A. Soler-Illia, F. Cagnol, N. Baccile, F. Babonneau, P.-A. Albouy, H. Amenitsch, C. Sanchez, **Studies in Surface Science and Catalysis, Proceedings of IMMS**, (2002)

**47. *Amorphous and Crystalline Mesoporous Materials Prepared via Evaporation***

D. Grosso, F. Cagnol, A. Coupé, N. Baccile, C. Boissière, G. J. A. A. Soler-Illia, E. L. Crepaldi, C. Sanchez, **Materials Research Society Symposium Proceedings**, 775, 91, (2003)

**48. *Exploring the Internal Structure of Mesoporous Powders and Thin Films by Continuous Flow Laser-Enhanced <sup>129</sup>Xe NMR***

E. Haddad, A. Nossov, F. Gueneau, A. Gédéon, D. Grosso, C. Sanchez, **Studies in Surface Science and Catalysis**, 1464, (2004)

**49. *From Hybrid Films to Meso-organized Multi Metal-Oxide Nanocrystalline Films (M<sub>3</sub>NF) : Preparation and Characterization***

C. Boissière, D. Grosso, B. Smarsly, T. Brezesinski, S. Lepoutre, L. Nicole, J.C. Valle, M. Antonietti, C. Sanchez, **Materials Research Society Symposium Proceedings**, 847, 135, (2005)

**50. *The Use of Multinuclear Solid State NMR for the Characterization of Sol-Gel Derived Hybrid Nanocomposites***

C. Gervais, B. Julian, E. Cordoncillo, P. Escibano, M. E. Smith, C. Sanchez, **Materials Research Society Symposium Proceedings**, 847, 483, (2005)

**51. *Design of Functional Nanostructured Inorganic and Hybrid Materials***

C. Sanchez, C. Boissière, A. Coupé, F. Goettmann, D. Grosso, B. Julián, M. Llusar, L. Nicole, **Studies in Surface Science and Catalysis, Nanoporous Materials IV**, 156, 19, (2005)

**52. *The Generation of Mesoporous CeO<sub>2</sub> with Crystalline Pore Walls using Novel Block Copolymer Templates***

T. Brezesinski, B. Smarsly, M. Groenewolt, M. Antonietti, D. Grosso, C. Boissière, C. Sanchez, **Studies in Surface Science and Catalysis, Nanoporous Materials IV**, 156, 243, (2005)

**53. *Rational Design of Macrocellular TiO<sub>2</sub> and V<sub>2</sub>O<sub>5</sub> Monoliths Obtained Through Soft Chemistry and Air-liquid Foams***

F. Carn, N. Steunou, A. Colin, J. Livage, C. Sanchez, R. Backov, **Materials Research Society Symposium Proceedings**, 847, 189, (2005)

**54. *Hybrid Nanostructured Films Doped with DBM as New Selective Sensors of BF<sub>3</sub>***

P. Banet, L. Legagneux, T.-H. Tran-Thi, P. Hesemann, J. Moreau, L. Nicole, A. Quach, C. Sanchez, **Proceedings of the Meeting on Chemical Sensors**, (2006)

**55. *Low Wave Sensors Coated with Mesoporous Materials***

F. Razan, D. Rebière, C. Dejous, B. Pavageau, M. Destarac, C. Boissière, D. Grosso, C. Sanchez, **Proceeding of the Symposium "Acoustic Wave Based Sensors and Sensor Systems"**, 208th Meeting of The Electrochemical Society, (2005)



**56. *Designed Construction of Functional Mesostructured Porous Materials***

C. Sanchez, L. Nicole, C. Boissière, D. Grosso, *Advances in Science and Technology*, 45, 803, (2006)

**57. *Design of Nanohybrids from Well Defined Nanobuilding Blocks***

L. Rozes, G. Fornasieri, C. Sanchez, *Advances in Science and Technology*, 45, 752, (2006)

**58. *New Palladium Nanomaterials for Catalysis: Mechanisms Controlling Formation and Evolution of Nanostructures in a Seed-mediated Synthesis***

L. Bisson, C. Boissière, C. Sanchez, C. Thomazeau, D. Uzio, *Materials Research Society Symposium Proceedings*, 1017, DD16-26, (2007)

**59. *Spray Drying: A Versatile Route for the Preparation of New Acidic Mesostructured Powders***

S. Pega, A. Coupé, C. Boissière, T. Azais, D. Grosso, C. Sanchez, J. Blanchard, A. Chaumonnot, *Studies in Surface Science and Catalysis, Nanoporous Materials V*, 457, (2008)

**60. *Sol gel Technique for the Generation of Europium Doped Mesoporous and Dense Thin Films: a Luminescent Study***

C. Leroy, T. Cardinal, V. Jubera, M. Treguer-Delapierre, R. Backov, C. Boissière, C. Sanchez, B. Viana, F. Pellé, *Proceedings of the 15th International Conference on Luminescence and Optical Spectroscopy of Condensed Matter*, (2008)

**61. *Ink-jet Printing Processed Mesoporous Silica Microdot Arrays : New Possible Platforms for the Design of Multifunctional Sensors***

B. Fousseret, M. Mougenot, M. Lejeune, F. Rossignol, J.-F. Baumard, B. Soulestin, C. Boissière, C. Sanchez, D. Jalabert, D. Massiot, *Proceedings of CICMT 2008, IMAPS/ACerS 4th International Conference and Exhibition on Ceramic Interconnect and Ceramic Microsystems Technologies*, (2008)

**62. *Tuning pore size and acidity of mesostructured aluminosilicates made by spray-drying: design of new catalysts***

S. Pega, C. Boissière, A. Chaumonnot, C. Sanchez, *Studies in Surface Science and Catalysis – Proceedings of the 4th International FEZA Conference*, 174, 471, (2008)