



WRITTEN PRODUCTIONS

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MAI 2022



Publications as Journal articles :

2020-2022

558. Odziomek M. et al.

557. Vinavadini R. et al

556. Ortiz N et al

555. From waste incineration by-products to functional materials: a “Chimie douce” route to VOCs mineral adsorbents, A. Corbin, L. Guichaoua, H. Baradari, F. Guenneau, X. Chaucherie, B. Gilardin, T. Gosset, C. Boissière, L. Nicole, C. Sanchez, *Journal of Sol-Gel Science and Technology*, **2022**, 2-18, 1-12.

554. Investigating Nineteenth Century Gel Mediums: From Historical Recipes to Model Systems, H Pasco, L Carlyle, M Faustini, H Glanville, C Sanchez, P Walter, L. De Viguerie, *Studies in Conservation*, **2022**, 1-8

553. B Ma, W Baaziz, L Mazerolles, O Ersen, B Sahut, C Sanchez, S Delalande, D. Portehault, Liquid Processing of Bismuth–Silica Nanoparticle/Aluminum Matrix Nanocomposites for Heat Storage Applications, *ACS Applied Nano Materials*, **2022**, 5, 2, 1917–1924

552. L Lermusiaux, A Mazel, A Carretero-Genevri, C Sanchez, GL Drisko, Metal-Induced Crystallization in Metal Oxides, *Acc. Chem. Res.* **2022**, 55, 2, 171–185

551. A Confinement-Driven Nucleation Mechanism of Metal Oxide Nanoparticles Obtained via Thermal Decomposition in Organic Media, G. Cotin, B. Heinrich, F. Pertont, C. Kiefer, G. Francius, D. Mertz, B. Freis, B. Pichon, J.M. Strub, S. Cianféran, N. Ortiz Peña, D. Ihiwakrim, D. Portehault, O. Ersen, A. Khammari, M. Picher, F. Banhart, C. Sanchez, S. Begin-Colin, *Small*, **2022**, 2200414.

550. Ultrasound-Assisted Liquid-Phase Synthesis and Mechanical Properties of Aluminum Matrix Nanocomposites Incorporating Boride Nanocrystals, B Ma, I Gómez-Recio, L Mazerolles, P Mazeran, C Sanchez, S Delalande, D Portehault, *Small*, **2022**, 18 (4), 2104091

549. Shedding light on functional hybrid nanocomposites 19th century paint medium, H Pasco, L de Viguerie, M Faustini, C Coelho-Diogo, O Ersen, C Gervais, F Gobeaux, D Ihiwakrim, M Jaber, P Walter, C Sanchez, *Advanced Functional Materials*, **2022** 32 (4), 2106346

548. Exceptional Low-Temperature CO Oxidation over Noble-Metal-Free Iron-Doped Hollandites: An In-Depth Analysis of the Influence of the Defect Structure on Catalytic Performance, I Gómez-Recio, H Pan, A Azor-Lafarga, ML Ruiz-González, M Hernando, M Parras, M Teresa Fernández-Díaz, J J Delgado, X Chen, D Goma Jiménez, D Portehault, C Sanchez, M Cabero, A Martínez-Arias, JM González-Calbet, J J Calvino, *ACS catalysis*, **2021** 11 (24), 15026-15039

547. New Insights into the Growth Mechanism of WO₃ Gels by In-situ Liquid-Phase TEM and Time-Resolved DLS, C Sidhoum, M Odziomek, D Ihiwakrim, D Constantin, F Schossler, C Sanchez, O Ersen, *Microscopy and Microanalysis* **2021**, 27 (S2), 101-102

546. Hybrid material and method for the production thereof, R Backov, C Sanchez, H Deleuze, S Ungureanu, *US Patent App.* **2021**, 12/527,161

545. Membrane d échange protonique hybride, C Vacquier, N Rovira, C Baverel, C Laberty-Robert, L Coustan, C Sanchez *US Patent App.* **2021**, 17/154,771

544. The origin of the high electrochemical activity of pseudo-amorphous iridium oxides, M Elmaalouf, M Odziomek, S Duran, M Gayraud, M Bahri, C Tard, A Zitolo, B Lassalle-Kaiser, J Piquemal, O Ersen, C Boissière, C Sanchez, M Giraud, M Faustini, J Peron, *Nature Communications*, **2021**, 12 (1), 1-10

543. Interlayer Silylation of Layered Octosilicate with Organoalkoxysilanes: Effects of Tetrabutylammonium Fluoride as a Catalyst and the Functional Groups of Silanes M Yatomi, M Koike, N Rey, Y Murakami, S Saito, H Wada, A Shimojima, D Portehault, S Carencó, C Sanchez, C Carcel, M Wong Chi Man, K Kuroda, *European Journal of Inorganic Chemistry*, **2021** (19), 1836-1845

542. Liquid-Phase Synthesis, Sintering, and Transport Properties of Nanoparticle-Based Boron-Rich Composites, G Gouget, D Bregiroux, R Grosjean, D Montero, S Maier, F Gascoïn, C Sanchez, D Portehault, *Chemistry of Materials*, **2021**, 33 (6), 2099-2109

541. Early transition metal nano-carbides and nano-hydrides from solid-state metathesis initiated at room temperature, RF André, F d'Accriscio, AP Freitas, G Crochet, C Bouillet, M Bahri, O Ersen, C Sanchez, S Carencó, *Green Chemistry*, **2021**, 23 (17), 6431-6448

540. Hydroxyapatites as Versatile Inorganic Hosts of Unusual Pentavalent Manganese Cations, A Varela, I Gómez-Recio, L Serrador, M Hernando, E Matesanz, A Torres-Pardo, M Teresa Fernández-Díaz, J L

Martinez, F Gonell, G Rouse, C Sanchez, C Laberty-Robert, D Portehault, J M Gonzalez-Calbet, M Parras, *Chemistry of Materials*, **2020**, 32 (24), 10584-10593

539. Hierarchy: enhancing performances beyond limits, C Sanchez, *National Science Review*, **2020**, 7 (11), 1624-1625

538. Correlative Microscopy Insight on Electrodeposited Ultrathin Graphite Oxide Films, NO Peña, D Ihiawakrim, V Ball, S Stanescu, M Rastei, C Sanchez, D. Portehault, O. Ersen, *The Journal of Physical Chemistry Letters*, **2020** 11 (21), 9117-9122

537. Evidence of the Superparamagnetic State in the Zero-Field Microwave Susceptibility Spectra of Ferrimagnetic Nanoparticles, M Darcheville, AL Adenot-Engelvin, C Boscher, N Vukadinovic, C Lefèvre, A. Thiaville, C. Sanchez, *IEEE Magnetics Letters*, **2020** 11, 1-5

536. Nanostructured amorphous boron material, C Sanchez, CG STARY, D Portehault, G Gouget US Patent **2020**, 10,730,035

535. A Single Molecular Stoichiometric P-Source for Phase-Selective Synthesis of Crystalline and Amorphous Iron Phosphide Nanocatalysts, F D'Accriscio, E Schrader, C Sassoye, M Selmane, RF André, S Lamaison, D Wakerley, M Fontecave, V Mougél, G Le Corre, H Grützmacher, C Sanchez, S Carencó, *ChemNanoMat*, **2020**, 6 (8), 1208-1219

534. Origin of transparency in scattering biomimetic collagen materials, C Salameh, F Salviat, E Bessot, M Lama, JM Chassot, E Moulongui, Y. Wang, M Robin, A Bardouil, M Selmane, F Artzner, A Marcellan, C Sanchez, M Giraud-Guille, M Faustini, R Carminati, N Nassif, *Proceedings of the National Academy of Sciences*, **2020**, 117 (22), 11947-11953

533. Fluoropolymer film, R Séverine, C Laberty-Robert, C Sanchez, JA Abusleme, US Patent 10, **2020**, 662,307

532. Process for manufacturing a material with a high specific surface area, C Sanchez, C Boissiere, L Nicole, H Baradari, X Chaucherie, B Gilardin, US Patent App. **2020**, 16/492,885

531. Following in situ the degradation of mesoporous silica in biorelevant conditions: at last, a good comprehension of the structure influence, E Bindini, Z Chehadi, M Faustini, PA Albouy, D Grosso, A Cattoni, C. Chanéac, O. Azzaroni, C. Sanchez, C. Boissiere, *ACS applied materials & interfaces*, **2020**, 12 (12), 13598-13612

530. A heterogeneous recyclable Rhodium-based catalyst for the reduction of pyridine dinucleotides and flavins, Y Deng, M Odziomek, C Sanchez, O Back, V Mougél, M Fontecave, *ChemCatChem* 12 (4), **2020**, 1236-1243

529. Unraveling the Role of Alkali Cations in the Growth Mechanism of Gd₂O₃ Nanoparticles C Larquet, D Carriere, AM Nguyen, TKC Le, X Frogneux-Plé, I Génois, P. Le Griel, A. Gauzzi, C. Sanchez, S. Carencó, *Chemistry of Materials* **2020**, 32 (3), 1131-1139

528. R. Kumar, M. Bahri, Y. Song, F. Gonell, C. Thomas, O. Ersen, C. Sanchez, C. Laberty-Robert, D. Portehault, Phase selective synthesis of nickel silicide nanocrystals in molten salts for electrocatalysis of the oxygen evolution reaction, *Nanoscale*, DOI: [10.1039/D0NR04284F](https://doi.org/10.1039/D0NR04284F)

527. I Gómez-Recio, A Azor-Lafarga, ML Ruiz-González, M Hernando, M. Parras, J. J. Calvino, M. T. Fernández-Díaz, D. Portehault, Clement Sanchez, J. M. González-Calbet, Unambiguous localization of titanium and iron cations in doped manganese hollandite nanowires, *Chemical Communications* 56 (35), 4812-4815

526 F. D'Accriscio, E. Schrader, C. Sassoye, M. Selmane, R. F. André, S. Lamaison, D. Wakerley, M. Fontecave, V. Mougél, G. Le Corre, H. Grützmacher, C. Sanchez, S. Carencó, *ChemNanoMat* **2020**, cnma.202000198. **2020**, doi:10.1002/cnma.202000198

525. C. Salameh, F. Salviat, E. Bessot, M. Lama, J.M. Chassot, E. Moulongui, Y. Wang, M. Robin, A. Bardouil, F. Artzner, A. Marcellan, C. Sanchez, M.M Giraud-Guille, M. Faustini, R. Carminati, N. Nassif, Origin of transparency in scattering biomimetic collagen materials. *PNAS*, **2020**.

524. E. Bindini, Z. Chehadi, M. Faustini, P. A. Albouy, D. Grosso, A. Cattoni, C. Chanéac, O. Azzaroni, C. Sanchez, C. Boissière, Following In Situ the Degradation of Mesoporous Silica in Bio-relevant Conditions: at Last, a Good Comprehension of the Structure Influence. *ACS Applied Materials & Interfaces* **2020**.

523. M. Odziomek, M. Bahri, C. Boissiere, C. Sanchez, B. Lassalle-Kaiser, A. Zitolo, O. Ersen, S. Novak, C. Tard, M. Giraud, M. Faustini, J. Peron, Aerosol synthesis of thermally stable porous noble metals and alloys by using bi-functional templates. *Materials Horizons*, **2020**, *7*, 541-550.
522. M. Lama, F. M. Fernandes, A. Marcellan, J. Peltzer, M. Trouillas, S. Banzet, M. Grosbot, C. Sanchez, M. M. Giraud-Guille, J. J. Lataillade, B. Coulomb, C. Boissière, N. Nassif, Injectable Anisotropic Materials: Self-Assembled Collagen Microparticles by Aerosol as a Versatile Platform for Injectable Anisotropic Materials. *Small*, **2020**, *16* (4), 2070020.
521. C. Larquet, D. Carriere, A. M. Nguyen, T. K. C. Le, X. Frogneux-Plé, I. Génois, P. Le Griel, A. Gauzzi, C. Sanchez, S. Carencó, Unraveling the Role of Alkali Cations in the Growth Mechanism of Gd₂O₃ Nanoparticles. *Chemistry of Materials* **2020**, DOI: 10.1021/acs.chemmater.9b04059.
520. Yi. Deng, M. Odziomek, C. Sanchez, O. Back, V. Mougel, M. Fontecave, A heterogeneous recyclable Rhodium-based catalyst for the reduction of pyridine dinucleotides and flavins, *ChemCatChem*, **2020**, *12* (4), 1236-1243.
519. V. Smeets, W. Baaziz, O. Ersen, E. M. Gaigneaux, C. Boissière, C. Sanchez, D. P. Debecker. Hollow zeolite microspheres as a nest for enzymes: a new route to hybrid heterogeneous catalysts for chemo-enzymatic cascade reactions. *Chemical Sciences*, **2020**, *11*, 954-961.

Publications 2019

518. N. Ortiz Peña, D. Ihiawakrim, M. Han, B. Lassalle-Kaiser, S. Carencó, C. Sanchez, C. Laberty-Robert, D. Portehault, O. Ersen, Morphological and Structural Evolution of Co₃O₄ Nanoparticles Revealed by *in Situ* Electrochemical Transmission Electron Microscopy during Electrocatalytic water Oxidation. *ACS nano*, **2019**, *13* (10), 11372-11381.
517. V. Smeets, C. Boissière, C. Sanchez, E. M. Gaigneaux, E. Peeters, B. F. Sels, M. Dusselier, D. P. Debecker Aerosol route to TiO₂-SiO₂ catalysts with tailored pore architecture and high epoxidation activity. *Chemistry of Materials*, **2019**, *31* (5), 1610-1619.
516. N. Rey, S. Carencó, C. Carcel, A. Ouali, D. Portehault, M. Wong Chi Man, C. Sanchez. Dumbbell-Shaped T8-POSS with Functional Organic Linkers European. *Journal of Inorganic Chemistry*, **2019**, *27*, 3148-3156.
515. C. Larquet, A. M. Nguyen, E. Glais, L. Paulatto, C. Sassoie, M. Selmane, P. Lecante, C. Maheu, C. Geantet, L. Cardenas, C. Chanéac, A. Gauzzi, C. Sanchez, S. Carencó, Band Gap Engineering from Cation Balance: The Case of Lanthanide Oxysulfide Nanoparticles. *Chemistry of Materials*, **2019**, *31* (14), 5014-5023
514. X. Frogneux, L. Hippolyte, D. Mercier, D. Portehault, C. Chanéac, C. Sanchez, P. Marcus, F. Ribot, L. Fensterbank, S. Carencó. Direct Synthesis of N-Heterocyclic Carbene-Stabilized Copper Nanoparticles from a N-Heterocyclic Carbene-Borane. *Chemistry—A European Journal*, **2019**, *25* (49), 11481-11485.
513. E. Baktash, J. Capitolis, L. Tinat, C. Larquet, T. H. C. C. Chang, J. J. Gallet, F. Bournel, C. Sanchez, S. Carencó, D. Portehault, Differential reactivity of rutile and anatase TiO₂ nanoparticles: synthesis and surface states of nanoparticles of mixed valence Magnéli oxides. *Chemistry—A European Journal*, **2019**, *25* (49), 11114-11120.
512. S. Wang, K. V. Kravchyk, S. Pigeot-Rémy, W. Tang, F. Krumeich, M. Wörle, M. Wörle, M. I. Bodnarchuk, S. Cassaignon, O. Durupthy, S. Zhao, C. Sanchez, M. V. Kovalenko, Anatase TiO₂ Nanorods as Cathode Materials for Aluminum-Ion Batteries. *ACS Applied Nano Materials*, **2019**, *2* (10), 6428-6435.
511. P. Gorbovyi, A. P. Diaz-Gomez, M. Traore, L. Museur, L. Rozes, F. Ribot, C. Sanchez, A. I. Kuznetsov, B. N. Chichkov, A. Kanaev. Alkoxysilane effect in hybrid material: A comparison of pHEMA-TiO₂ and pMAPTMS-TiO₂ nanoparticulate hybrids. *Materials Research Bulletin*, **2019**, *114*, 130-137.
510. J. Perez-Carvajal, P. Aranda, C. Boissière, C. Sanchez, E. Ruiz-Hitzky. An inter-diffusive surfactant procedure for the preparation of nanoarchitected porous films: application to the growth of titania thin films on silicon substrates. *Langmuir*, **2019**, *35*, 7169-7174.
509. S. Moldovan, O. Ersen, C. Sanchez, R. Campostrini, G. D. Sorarù, Shedding light onto the nano- and micro-structures of B-containing SiOC glasses using high resolution TEM 3D imaging, *Journal of the European Ceramic Society*, **2019**, *39* (10), 3042-3050.

508. C. Larquet, Y. Klein, D. Hrabovsky, A. Gauzzi, C. Sanchez, S. Carencó, Tunable Magnetic Properties of (Gd,Ce)2O2S Oxysulfide Nanoparticles. *European Journal of Inorganic Chemistry*, **2019** (6), 740-740
507. N. O. Peña, D. Ihiwakrim, D. Portehault, C. Laberty-Robert, S. Carencó, C. Sanchez, O. Ersen, Studying Electrocatalysts in Operando Conditions: Correlating TEM Imaging and X-Ray Spectroscopies, *Microscopy and Microanalysis*, **2019**, 25 (S1), 37-38.
506. A. Kim, C Sanchez, B. Haye, C. Boissière, C. Sassoie, D. P. Debecker, Mesoporous TiO2 Support Materials for Ru-Based CO2 Methanation Catalysts. *ACS Applied Nano Materials*, **2019**, 2, 3220-3230
505. P. Belleville, F. Benoit, K. Vallé, B. Bertussi, L. Kocon, E. Dieudonné, C. Sanchez, Colloidal coatings for laser optics, *Journal of Sol-Gel Science and Technology*, **2019**, 1-7.
504. Besnardiere J., Ma B., Torres-Pardo A., Wallez G., Kabbour Houria, González-Calbet J. M., Von Bardeleben H. J., Fleury B., Buissette V., Sanchez C., Le Mercier T., Cassaignon S., Portehault D., Structure and electrochromism of two-dimensional octahedral molecular sieve h'-WO3. *Nature Communications*, **2019**, 10, 327.
503. C. Larquet, D. Hourlier, A. M. Nguyen, A. Torres-Pardo, A. Gauzzi, C. Sanchez, S. Carencó, Thermal Stability of Oleate-Stabilized Gd2O2S Nanoplates in Inert and Oxidizing Atmospheres, *ChemNanoMat*, **2019**, 5 (4), 539-546.
502. M. Faustini, M. Giraud, D. Jones, J. Rozière, M. Dupont, T. R. Porter, S. Nowak, C. Sanchez, J. Peron. Hierarchically Structured Ultraporous Iridium-Based Materials: A Novel Catalyst Architecture for Proton Exchange Membrane Water Electrolyzers. *Advanced Energy Materials*, **2019**, 9 (4), 1802136.

501 Publications from 1980 and 2018

2010-2018

1. Thomas B., Raj M.C., Athira K. B, Rubiyah M. H, Jithin J., Moores A., Glenna L. Drisko G.L., Sanchez C. Nanocellulose a Versatile Green Platform: From Biosources to Materials and their Applications. *Chemical Review*, **2018**, 118 (24), 11575-11625
2. Marco, F.; Lionel, N.; Eduardo, R. H.; Clément, S., History of Organic-Inorganic Hybrid Materials: Prehistory, Art, Science, and Advanced Applications. *Advanced Functional Materials* **2018**, 0 (0), 1704158.
3. Kim, A.; Debecker, D. P.; Devred, F.; Dubois, V.; Sanchez, C.; Sassoie, C., CO2 methanation on Ru/TiO2 catalysts: On the effect of mixing anatase and rutile TiO2 supports. *Applied Catalysis B-Environmental* **2018**, 220, 615-625.
4. Gonzalez-Jimenez, I. N.; Torres-Pardo, A.; Rano, S.; Laberty-Robert, C.; Hernandez-Garrido, J. C.; Lopez-Haro, M.; Calvino, J. J.; Varela, A.; Sanchez, C.; Parras, M.; Gonzalez-Calbet, J. M.; Portehault, D., Multicationic Sr4Mn3O10 mesostructures: molten salt synthesis, analytical electron microscopy study and reactivity. *Materials Horizons* **2018**.
5. Gomez, G. E.; D'Vries, R. F.; Lionello, D. F.; Aguirre-Diaz, L. M.; Spinosa, M.; Costa, C. S.; Fuertes, M. C.; Pizarro, R. A.; Kaczmarek, A. M.; Ellena, J.; Rozes, L.; Iglesias, M.; Van Deun, R.; Sanchez, C.; Monge, M. A.; Soler-Illia, G. J. A. A., Exploring physical and chemical properties in new multifunctional indium-, bismuth-, and zinc-based 1D and 2D coordination polymers. *Dalton Transactions* **2018**, 47 (6), 1808-1818.
6. Debecker, D. P.; Le Bras, S.; Boissière, C.; Chaumonnot, A.; Sanchez, C., Aerosol processing: a wind of innovation in the field of advanced heterogeneous catalysts. *Chemical Society Reviews* **2018**.
7. Azor-Lafarga, A.; Ruiz-González, L.; Parras, M.; Portehault, D.; Sanchez, C.; González-Calbet, J., Modified Synthesis Strategies for the Stabilization of low n TinO2n-1 Magnéli Phases. *The Chemical Record* **2018**. DOI: 10.1002/tcr.201700083
8. Yang, X. Y.; Chen, L. H.; Li, Y.; Rooke, J. C.; Sanchez, C.; Su, B. L., Hierarchically porous materials: synthesis strategies and structure design. *Chemical Society Reviews* **2017**, 46 (2), 481-558.
9. Nguyen, O.; Courtin, E.; Sauvage, F.; Krins, N.; Sanchez, C.; Laberty-Robert, C., Shedding light on the light-driven lithium ion deinsertion reaction: towards the design of a photorechargeable battery. *Journal of Materials Chemistry A* **2017**, 5 (12), 5927-5933.

10. N'Goc, H. L. T.; Mouafo, L. D. N.; Etrillard, C.; Torres-Pardo, A.; Dayen, J. F.; Rano, S.; Rouse, G.; Laberty-Robert, C.; Calbet, J. G.; Drillon, M.; Sanchez, C.; Doudin, B.; Portehault, D., Surface-Driven Magnetotransport in Perovskite Nanocrystals. *Advanced Materials* **2017**, *29* (9), 10.
11. Nassoko, D.; Seydou, M.; Goldmann, C.; Chaneac, C.; Sanchez, C.; Portehault, D.; Tielens, F., Rationalizing the formation of binary mixed thiol self-assembled monolayers. *Materials Today Chemistry* **2017**, *5*, 34-42.
12. Meena, S. K.; Goldmann, C.; Nassoko, D.; Seydou, M.; Marchandier, T.; Moldovan, S.; Ersen, O.; Ribot, F.; Chanéac, C.; Sanchez, C.; Portehault, D.; Tielens, F.; Sulpizi, M., Nanophase Segregation of Self-Assembled Monolayers on Gold Nanoparticles. *ACS Nano* **2017**, *11* (7), 7371-7381.
13. Larquet, C.; Nguyen, A.-M.; Ávila-Gutiérrez, M.; Tinat, L.; Lassalle-Kaiser, B.; Gallet, J.-J.; Bournel, F.; Gauzzi, A.; Sanchez, C.; Carenco, S., Synthesis of Ce₂O₂S and Gd₂(1-y)Ce_{2y}O₂S Nanoparticles and Reactivity from in Situ X-ray Absorption Spectroscopy and X-ray Photoelectron Spectroscopy. *Inorganic Chemistry* **2017**, *56* (22), 14227-14236.
14. Granja, L. P.; Martinez, E. D.; Troiani, H.; Sanchez, C.; Illia, G., Magnetic Gold Confined in Ordered Mesoporous Titania Thin Films: A Noble Approach for Magnetic Devices. *ACS Applied Materials & Interfaces* **2017**, *9* (1), 965-971.
15. Gouget, G.; Debecker, D. P.; Kim, A.; Olivieri, G.; Gallet, J. J.; Bournel, F.; Thomas, C.; Ersen, O.; Moldovan, S.; Sanchez, C.; Carenco, S.; Portehault, D., In Situ Solid-Gas Reactivity of Nanoscaled Metal Borides from Molten Salt Synthesis. *Inorganic Chemistry* **2017**, *56* (15), 9225-9234.
16. Gomez, G. E.; Brusau, E. V.; Kaczmarek, A. M.; Mellot-Draznieks, C.; Sacanell, J.; Rouse, G.; Van Deun, R.; Sanchez, C.; Narda, G. E.; Illia, G., Flexible Ligand-Based Lanthanide Three-Dimensional Metal-Organic Frameworks with Tunable Solid-State Photoluminescence and OH-Solvent-Sensing Properties. *European Journal of Inorganic Chemistry* **2017**, (17), 2321-2331.
17. de Viguerie, L.; Jaber, M.; Pasco, H.; Lalevee, J.; Morlet-Savary, F.; Ducouret, G.; Rigaud, B.; Pouget, T.; Sanchez, C.; Walter, P., A 19th Century "Ideal" Oil Paint Medium: A Complex Hybrid Organic-Inorganic Gel. *Angewandte Chemie-International Edition* **2017**, *56* (6), 1619-1623.
18. Claire, G.; François, R.; F., P. L.; Paola, Q.; Frederik, T.; Clément, S.; Corinne, C.; David, P., Quantified Binding Scale of Competing Ligands at the Surface of Gold Nanoparticles: The Role of Entropy and Intermolecular Forces. *Small* **2017**, *13* (20), 1604028.
19. Chambers, M. B.; Wang, X.; Ellezam, L.; Ersen, O.; Fontecave, M.; Sanchez, C.; Rozes, L.; Mellot-Draznieks, C., Maximizing the Photocatalytic Activity of Metal-Organic Frameworks with Aminated-Functionalized Linkers: Substoichiometric Effects in MIL-125-NH₂. *Journal of the American Chemical Society* **2017**, *139* (24), 8222-8228.
20. Ressnig, D.; Moldovan, S.; Ersen, O.; Beaunier, P.; Portehault, D.; Sanchez, C.; Carenco, S., An expeditious synthesis of early transition metal carbide nanoparticles on graphitic carbons. *Chemical Communications* **2016**, *52* (61), 9546-9549.
21. Parola, S.; Julian-Lopez, B.; Carlos, L. D.; Sanchez, C., Optical Properties of Hybrid Organic-Inorganic Materials and their Applications. *Advanced Functional Materials* **2016**, *26* (36), 6506-6544.
22. Marquez, A. G.; Hidalgo, T.; Lana, H.; Cunha, D.; Blanco-Prieto, M. J.; Alvarez-Lorenzo, C.; Boissiere, C.; Sanchez, C.; Serre, C.; Horcajada, P., Biocompatible polymer-metal-organic framework composite patches for cutaneous administration of cosmetic molecules. *Journal of Materials Chemistry B* **2016**, *4* (43), 7031-7040.
23. Kim, A.; Sanchez, C.; Patriarche, G.; Ersen, O.; Moldovan, S.; Wisnet, A.; Sassoie, C.; Debecker, D. P., Selective CO₂ methanation on Ru/TiO₂ catalysts: unravelling the decisive role of the TiO₂ support crystal structure. *Catalysis Science & Technology* **2016**, *6* (22), 8117-8128.
24. Gouget, G.; Beaunier, P.; Portehault, D.; Sanchez, C., New route toward nanosized crystalline metal borides with tuneable stoichiometry and variable morphologies. *Faraday Discussions* **2016**, *191*, 511-525.
25. Gonell, F.; Portehault, D.; Julian-Lopez, B.; Valle, K.; Sanchez, C.; Corma, A., One step microwave-assisted synthesis of nano-crystalline WO_x-ZrO₂ acid catalysts. *Catalysis Science & Technology* **2016**, *6* (23), 8257-8267.

26. Fontecave, T.; Bourbousson, M.; Chaneac, C.; Wilhelm, C.; Espinosa, A.; Fortin, M. A.; Sanchez, C.; Boissiere, C., Multifunctional core-shell hybrid nano-composites made using Pickering emulsions: a new design for therapeutic vectors. *New Journal of Chemistry* **2016**, *40* (5), 4436-4446.
27. Depardieu, M.; Viaud, M.; Buguin, A.; Livage, J.; Sanchez, C.; Backov, R., A multiscale study of bacterial proliferation modes within novel E-coli@Si(HIPE) hybrid macrocellular living foams. *Journal of Materials Chemistry B* **2016**, *4* (13), 2290-2303.
28. Depardieu, M.; Demir-Cakan, R.; Sanchez, C.; Birot, M.; Deleuze, H.; Morcrette, M.; Backov, R., On the effect of gold nanoparticles loading within carbonaceous macro-mesocellular foams toward lithium-sulfur battery performances. *Solid State Sciences* **2016**, *55*, 112-120.
29. Compoin, F.; Fall, D.; Piombini, H.; Belleville, P.; Montouillout, Y.; Duquennoy, M.; Ouaftouh, M.; Jenot, F.; Piwakowski, B.; Sanchez, C., Sol-gel-processed hybrid silica-PDMS layers for the optics of high-power laser flux systems. *Journal of Materials Science* **2016**, *51* (11), 5031-5045.
30. Bertussi B., Benoit F., Valle K., Belleville P., Mallejac N., Dieudonne E., Sanchez C. Development of photonic crystals using sol-gel process for high power laser applications *Optical Interference Coatings*, FB. 6, 2016
31. Carencu, S.; Moldovan, S.; Roiban, L.; Florea, I.; Portehault, D.; Valle, K.; Belleville, P.; Boissiere, C.; Rozes, L.; Mezailles, N.; Drillon, M.; Sanchez, C.; Ersen, O., The core contribution of transmission electron microscopy to functional nanomaterials engineering. *Nanoscale* **2016**, *8* (3), 1260-1279.
32. Ambard, C.; Duee, N.; Pereira, F.; Portehault, D.; Methivier, C.; Pradier, C. M.; Sanchez, C., Improvements in photostability and sensing properties of EuVO₄ nanoparticles by microwave-assisted sol-gel route for detection of H₂O₂ vapors. *Journal of Sol-Gel Science and Technology* **2016**, *79* (2), 381-388.
33. Renault, C.; Nicole, L.; Sanchez, C.; Costentin, C.; Balland, V.; Limoges, B., Unraveling the charge transfer/electron transport in mesoporous semiconductive TiO₂ films by voltabsorptometry. *Physical Chemistry Chemical Physics* **2015**, *17* (16), 10592-10607.
34. Hembury, M.; Chiappini, C.; Bertazzo, S.; Kalber, T. L.; Drisko, G. L.; Ogunlade, O.; Walker-Samuel, S.; Krishna, K. S.; Jumeaux, C.; Beard, P.; Kumar, C.; Porter, A. E.; Lythgoe, M. F.; Boissiere, C.; Sanchez, C.; Stevens, M. M., Gold-silica quantum rattles for multimodal imaging and therapy. *Proceedings of the National Academy of Sciences of the United States of America* **2015**, *112* (7), 1959-1964.
35. Goldmann, C.; Lazzari, R.; Paquez, X.; Boissière, C.; Ribot, F.; Sanchez, C.; Chanéac, C.; Portehault, D., Charge Transfer at Hybrid Interfaces: Plasmonics of Aromatic Thiol-Capped Gold Nanoparticles. *ACS Nano* **2015**, *9* (7), 7572-7582.
36. Fernandez, C.; Sassoie, C.; Flores, N.; Escalona, N.; Gaigneaux, E. M.; Sanchez, C.; Ruiz, P., Insights in the mechanism of deposition and growth of RuO₂ colloidal nanoparticles over alumina. Implications on the activity for ammonia synthesis. *Applied Catalysis a-General* **2015**, *502*, 48-56.
37. Duee, N.; Ambard, C.; Pereira, F.; Portehault, D.; Viana, B.; Valle, K.; Autissier, D.; Sanchez, C., New Synthesis Strategies for Luminescent YVO₄:Eu and EuVO₄ Nanoparticles with H₂O₂ Selective Sensing Properties. *Chemistry of Materials* **2015**, *27* (15), 5198-5205.
38. Drisko, G. L.; Carretero-Genevri, A.; Perrot, A.; Gich, M.; Gazquez, J.; Rodriguez-Carvajal, J.; Favre, L.; Grosso, D.; Boissiere, C.; Sanchez, C., Crystallization of hollow mesoporous silica nanoparticles. *Chemical Communications* **2015**, *51* (20), 4164-4167.
39. Debecker, D. P.; Boissiere, C.; Laurent, G.; Huet, S.; Eliaers, P.; Sanchez, C.; Backov, R., First acidic macro-mesocellular aluminosilicate monolithic foams "SiAl(HIPE)" and their catalytic properties. *Chemical Communications* **2015**, *51* (74), 14018-14021.
40. Carretero-Genevri, A.; Gich, M.; Picas, L.; Sanchez, C.; Rodriguez-Carvajal, J., Chiral habit selection on nanostructured epitaxial quartz films. *Faraday Discussions* **2015**, *179*, 227-233.
41. Zhu, R. L.; Sanchez, C.; Bergaya, F., Special Issue Advances in Applied Clay Science Intercalated nanomaterials: From functional clays to advanced hybrid lamellar compounds Preface. *Applied Clay Science* **2014**, *100*, 1-1.
42. Sanchez, C.; Boissiere, C.; Cassaignon, S.; Chaneac, C.; Durupthy, O.; Faustini, M.; Grosso, D.; Laberty-Robert, C.; Nicole, L.; Portehault, D.; Ribot, F.; Rozes, L.; Sassoie, C., Molecular Engineering of Functional Inorganic and Hybrid Materials. *Chemistry of Materials* **2014**, *26* (1), 221-238.

43. Potier, F.; Guinault, A.; Delalande, S.; Sanchez, C.; Ribot, F.; Rozes, L., Nano-building block based-hybrid organic-inorganic copolymers with self-healing properties. *Polymer Chemistry* **2014**, *5* (15), 4474-4479.
44. Perineau, F.; Rosticher, C.; Rozes, L.; Chaneac, C.; Sanchez, C.; Constantin, D.; Dozov, I.; Davidson, P.; Rochas, C., Hybrid Nanocomposites with Tunable Alignment of the Magnetic Nanorod Filler. *Acs Applied Materials & Interfaces* **2014**, *6* (3), 1583-1588.
45. Nicole, L.; Laberty-Robert, C.; Rozes, L.; Sanchez, C., Hybrid materials science: a promised land for the integrative design of multifunctional materials. *Nanoscale* **2014**, *6* (12), 6267-6292.
46. Mosa, J.; Aparicio, M.; Duran, A.; Laberty-Robert, C.; Sanchez, C., Nanocrystalline mesoporous LiFePO₄ thin-films as cathodes for Li-ion microbatteries. *Journal of Materials Chemistry A* **2014**, *2* (9), 3038-3046.
47. Martinez, E. D.; Boissiere, C.; Grosso, D.; Sanchez, C.; Troiani, H.; Soler-Illia, G., Confinement-Induced Growth of Au Nanoparticles Entrapped in Mesoporous TiO₂ Thin Films Evidenced by in Situ ThermoEllipsometry. *Journal of Physical Chemistry C* **2014**, *118* (24), 13137-13151.
48. Maneeratana, V.; Portehault, D.; Chaste, J.; Maily, D.; Antonietti, M.; Sanchez, C., Original Electrospun Core Shell Nanostructured Magneli Titanium Oxide Fibers and their Electrical Properties. *Advanced Materials* **2014**, *26* (17), 2654-2658.
49. Fernandez, C.; Sassoie, C.; Debecker, D. P.; Sanchez, C.; Ruiz, P., Effect of the size and distribution of supported Ru nanoparticles on their activity in ammonia synthesis under mild reaction conditions. *Applied Catalysis a-General* **2014**, *474*, 194-202.
50. Fernandes, F. M.; Baradari, H.; Sanchez, C., Integrative strategies to hybrid lamellar compounds: an integration challenge. *Applied Clay Science* **2014**, *100*, 2-21.
51. Faustini, M.; Grosso, D.; Boissiere, C.; Backov, R.; Sanchez, C., "Integrative sol-gel chemistry": a nanofactory for materials science. *Journal of Sol-Gel Science and Technology* **2014**, *70* (2), 216-226.
52. Drisko, G. L.; Carretero-Genevri, A.; Gich, M.; Gazquez, J.; Ferrah, D.; Grosso, D.; Boissiere, C.; Rodriguez-Carvajal, J.; Sanchez, C., Water-Induced Phase Separation Forming Macrostructured Epitaxial Quartz Films on Silicon. *Advanced Functional Materials* **2014**, *24* (35), 5494-5502.
53. Depardieu, M.; Janot, R.; Sanchez, C.; Deleuze, H.; Gervais, C.; Birot, M.; Morcrette, M.; Backov, R., Nano-spots induced break of the chemical inertness of boron: a new route toward reversible hydrogen storage applications. *Journal of Materials Chemistry A* **2014**, *2* (21), 7694-7701.
54. Depardieu, M.; Janot, R.; Sanchez, C.; Bentaleb, A.; Gervais, C.; Birot, M.; Demir-Cakan, R.; Backov, R.; Morcrette, M., Carbonaceous multiscale-cellular foams as novel electrodes for stable, efficient lithium-sulfur batteries. *Rsc Advances* **2014**, *4* (46), 23971-23976.
55. Depardieu, M.; Janot, R.; Sanchez, C.; Bentaleb, A.; Demir-Cakan, R.; Gervais, C.; Birot, M.; Morcrette, M.; Backov, R., Novel Au/Pd@carbon macrocellular foams as electrodes for lithium-sulfur batteries. *Journal of Materials Chemistry A* **2014**, *2* (42), 18047-18057.
56. Debecker, D. P.; Stoyanova, M.; Rodemerck, U.; Colbeau-Justin, F.; Boissere, C.; Chaumonnot, A.; Bonduelle, A.; Sanchez, C., Aerosol route to nanostructured WO₃-SiO₂-Al₂O₃ metathesis catalysts: Toward higher propene yield. *Applied Catalysis a-General* **2014**, *470*, 458-466.
57. Debecker, D. P.; Farin, B.; Gaigneaux, E. M.; Sanchez, C.; Sassoie, C., Total oxidation of propane with a nano-RuO₂/TiO₂ catalyst. *Applied Catalysis a-General* **2014**, *481*, 11-18.
58. D'Arras, L.; Sassoie, C.; Rozes, L.; Sanchez, C.; Marrot, J.; Marree, S.; Aymonier, C., Fast and continuous processing of a new sub-micronic lanthanide-based metal-organic framework. *New Journal of Chemistry* **2014**, *38* (4), 1477-1483.
59. Courtin, E.; Baldinozzi, G.; Sougrati, M. T.; Stievano, L.; Sanchez, C.; Laberty-Robert, C., New Fe₂TiO₅-based nanoheterostructured mesoporous photoanodes with improved visible light photoresponses. *Journal of Materials Chemistry A* **2014**, *2* (18), 6567-6577.
60. Colbeau-Justin, F.; Boissiere, C.; Chaumonnot, A.; Bonduelle, A.; Sanchez, C., Aerosol Route to Highly Efficient (Co)Mo/SiO₂ Mesoporous Catalysts. *Advanced Functional Materials* **2014**, *24* (2), 233-239.
61. Carretero-Genevri, A.; Oro-Sole, J.; Gazquez, J.; Magen, C.; Miranda, L.; Puig, T.; Obradors, X.; Ferain, E.; Sanchez, C.; Rodriguez-Carvajal, J.; Mestres, N., Direct Monolithic Integration of Vertical Single

Crystalline Octahedral Molecular Sieve Nanowires on Silicon. *Chemistry of Materials* **2014**, *26* (2), 1019-1028.

62. Carretero-Genevri er, A.; Drisko, G. L.; Grosso, D.; Boissiere, C.; Sanchez, C., Mesoscopically structured nanocrystalline metal oxide thin films. *Nanoscale* **2014**, *6* (23), 14025-14043.

63. Carenco, S.; Portehault, D.; Boissiere, C.; Mezailles, N.; Sanchez, C., 25th Anniversary Article: Exploring Nanoscaled Matter from Speciation to Phase Diagrams: Metal Phosphide Nanoparticles as a Case of Study. *Advanced Materials* **2014**, *26* (3), 371-389.

64. Muller, G.; Vannier, R. N.; Ringuede, A.; Laberty-Robert, C.; Sanchez, C., Nanocrystalline, mesoporous NiO/Ce_{0.9}Gd_{0.1}O₂-delta thin films with tuned microstructures and electrical properties: in situ characterization of electrical responses during the reduction of NiO. *Journal of Materials Chemistry A* **2013**, *1* (36), 10753-10761.

65. Mosa, J.; Carretero-Genevri er, A.; Grosso, D.; Laberty-Robert, C.; Sanchez, C., Pt||ZrO₂ nanoelectrode array synthesized through the sol-gel process: evaluation of their sensing capability. *Journal of Solid State Electrochemistry* **2013**, *17* (4), 1099-1107.

66. Marquez, A. G.; Horcajada, P.; Grosso, D.; Ferey, G.; Serre, C.; Sanchez, C.; Boissiere, C., Green scalable aerosol synthesis of porous metal-organic frameworks. *Chemical Communications* **2013**, *49* (37), 3848-3850.

67. Maneeratana, V.; Bass, J. D.; Azais, T.; Patissier, A.; Valle, K.; Marechal, M.; Gebel, G.; Laberty-Robert, C.; Sanchez, C., Fractal Inorganic-Organic Interfaces in Hybrid Membranes for Efficient Proton Transport. *Advanced Functional Materials* **2013**, *23* (22), 2872-2880.

68. Leroy, C. M.; Cardinal, T.; Jubera, V.; Aymonier, C.; Treguer-Delapierre, M.; Boissiere, C.; Grosso, D.; Sanchez, C.; Viana, B.; Pelle, F., Luminescence properties of ZrO₂ mesoporous thin films doped with Eu³⁺ and Ag-n. *Microporous and Mesoporous Materials* **2013**, *170*, 123-130.

69. Hierso, J.; Boy, P.; Valle, K.; Vulliet, J.; Blein, F.; Laberty-Robert, C.; Sanchez, C., Nanostructured ceria based thin films (<= 1 mu m) As cathode/electrolyte interfaces. *Journal of Solid State Chemistry* **2013**, *197*, 113-119.

70. Hendon, C. H.; Tiana, D.; Fontecave, M.; Sanchez, C.; D'Arras, L.; Sasso e, C.; Rozes, L.; Mellot-Draznieks, C.; Walsh, A., Engineering the Optical Response of the Titanium-MIL-125 Metal-Organic Framework through Ligand Functionalization. *Journal of the American Chemical Society* **2013**, *135* (30), 10942-10945.

71. Hamd, W.; Chavarot-Kerlidou, M.; Fize, J.; Muller, G.; Leyris, A.; Matheron, M.; Courtin, E.; Fontecave, M.; Sanchez, C.; Artero, V.; Laberty-Robert, C., Dye-sensitized nanostructured crystalline mesoporous tin-doped indium oxide films with tunable thickness for photoelectrochemical applications. *Journal of Materials Chemistry A* **2013**, *1* (28), 8217-8225.

72. Frot, T.; Marrot, J.; Sanchez, C.; Rozes, L.; Sasso e, C., Ti₈O₁₀(OOCR)₍₁₂₎ R = CH(CH₃)₍₂₎ and CCl₃ Carboxylate Titanium Oxo-Clusters: Potential SBUs for the Synthesis of Metal-Organic Frameworks. *Zeitschrift Fur Anorganische Und Allgemeine Chemie* **2013**, *639* (12-13), 2181-2185.

73. Fontecave, T.; Boissiere, C.; Baccile, N.; Plou, F. J.; Sanchez, C., Using Evaporation-Induced Self-Assembly for the Direct Drug Templating of Therapeutic Vectors with High Loading Fractions, Tunable Drug Release, and Controlled Degradation. *Chemistry of Materials* **2013**, *25* (23), 4671-4678.

74. Carretero-Genevri er, A.; Gich, M.; Picas, L.; Gazquez, J.; Drisko, G. L.; Boissiere, C.; Grosso, D.; Rodriguez-Carvajal, J.; Sanchez, C., Soft-Chemistry-Based Routes to Epitaxial alpha-Quartz Thin Films with Tunable Textures. *Science* **2013**, *340* (6134), 827-831.

75. Carenco, S.; Portehault, D.; Boissiere, C.; Mezailles, N.; Sanchez, C., Nanoscaled Metal Borides and Phosphides: Recent Developments and Perspectives. *Chemical Reviews* **2013**, *113* (10), 7981-8065.

76. Carenco, S.; Hu, Y.; Florea, I.; Ersen, O.; Boissiere, C.; Sanchez, C.; Mezailles, N., Structural transitions at the nanoscale: the example of palladium phosphides synthesized from white phosphorus. *Dalton Transactions* **2013**, *42* (35), 12667-12674.

77. Carenco, S.; Florea, I.; Ersen, O.; Boissiere, C.; Mezailles, N.; Sanchez, C., Towards nanoscaled gold phosphides: surface passivation and growth of composite nanostructures. *New Journal of Chemistry* **2013**, *37* (4), 1231-1237.

78. Buchtova, N.; Rethore, G.; Boyer, C.; Guicheux, J.; Rambaud, F.; Valle, K.; Belleville, P.; Sanchez, C.; Chauvet, O.; Weiss, P.; Le Bideau, J., Nanocomposite hydrogels for cartilage tissue engineering: mesoporous silica nanofibers interlinked with siloxane derived polysaccharide. *Journal of Materials Science-Materials in Medicine* **2013**, *24* (8), 1875-1884.
79. Brun, N.; Hesemann, P.; Laurent, G.; Sanchez, C.; Birot, M.; Deleuze, H.; Backov, R., Macrocellular Pd@ionic liquid@organo-Si(HIPE) heterogeneous catalysts and their use for Heck coupling reactions. *New Journal of Chemistry* **2013**, *37* (1), 157-168.
80. Aguilhon, J.; Thomazeau, C.; Boissiere, C.; Durupthy, O.; Sanchez, C., A Soft Chemistry Route to Selective Nickel-Based Nanocatalysts with Faceted Morphologies. *Particle & Particle Systems Characterization* **2013**, *30* (6), 532-541.
81. Thomazeau, C.; Cseri, T.; Bisson, L.; Aguilhon, J.; Minh, D. P.; Boissiere, C.; Durupthy, O.; Sanchez, C., Nano Design of Alumina Supported Monometallic Catalysts: A Promising Way to Improve the Selective Hydrogenation of Poly-Unsaturated Hydrocarbons. *Topics in Catalysis* **2012**, *55* (11-13), 690-699.
82. Museur, L.; Gorbovyi, P.; Traore, M.; Kanaev, A.; Rozes, L.; Sanchez, C., Luminescence properties of pHEMA-TiO₂ gels based hybrids materials. *Journal of Luminescence* **2012**, *132* (5), 1192-1199.
83. Muller, G.; Boissiere, C.; Grosso, D.; Ringuede, A.; Laberty-Robert, C.; Sanchez, C., Understanding crystallization processes of NiO/Ce_{0.9}Gd_{0.1}O_{2-delta} sol-gel processed thin films for the design of efficient electrodes: an in situ thermal ellipsometry analysis. *Journal of Materials Chemistry* **2012**, *22* (18), 9368-9373.
84. Marquez, A. G.; Demessence, A.; Platero-Prats, A. E.; Heurtaux, D.; Horcajada, P.; Serre, C.; Chang, J. S.; Ferey, G.; de la Pena-O'Shea, V. A.; Boissiere, C.; Grosso, D.; Sanchez, C., Green Microwave Synthesis of MIL-100(Al, Cr, Fe) Nanoparticles for Thin-Film Elaboration. *European Journal of Inorganic Chemistry* **2012**, (32), 5165-5174.
85. Jorge, A. B.; Sakatani, Y.; Boissiere, C.; Laberty-Robert, C.; Sauthier, G.; Fraxedas, J.; Sanchez, C.; Fuertes, A., Nanocrystalline N-doped ceria porous thin films as efficient visible-active photocatalysts. *Journal of Materials Chemistry* **2012**, *22* (7), 3220-3226.
86. Hamd, W.; Cobo, S.; Fize, J.; Baldinozzi, G.; Schwartz, W.; Reymermier, M.; Pereira, A.; Fontecave, M.; Artero, V.; Laberty-Robert, C.; Sanchez, C., Mesoporous γ -Fe₂O₃ thin films synthesized via the sol-gel process for light-driven water oxidation. *Physical Chemistry Chemical Physics* **2012**, *14* (38), 13224-13232.
87. Fontecave, T.; Sanchez, C.; Azais, T.; Boissiere, C., Chemical Modification As a Versatile Tool for Tuning Stability of Silica Based Mesoporous Carriers in Biologically Relevant Conditions. *Chemistry of Materials* **2012**, *24* (22), 4326-4336.
88. Fontaine, O.; Laberty-Robert, C.; Sanchez, C., Sol-Gel Route to Zirconia-Pt-Nanoelectrode Arrays 8 nm in Radius: Their Geometrical Impact in Mass Transport. *Langmuir* **2012**, *28* (7), 3650-3657.
89. Ferreira, P.; Hou, R. Z.; Wu, A. Y.; Willinger, M. G.; Vilarinho, P. M.; Mosa, J.; Laberty-Robert, C.; Boissiere, C.; Grosso, D.; Sanchez, C., Nanoporous Piezo- and Ferroelectric Thin Films. *Langmuir* **2012**, *28* (5), 2944-2949.
90. Ferreira, P.; Castro, A.; Vilarinho, P. M.; Willinger, M. G.; Mosa, J.; Laberty, C.; Sanchez, C., Electron Microscopy Study of Porous and Co Functionalized BaTiO₃ Thin Films. *Microscopy and Microanalysis* **2012**, *18*, 115-116.
91. Drisko, G. L.; Sanchez, C., Hybridization in Materials Science - Evolution, Current State, and Future Aspirations. *European Journal of Inorganic Chemistry* **2012**, (32), 5097-5105.
92. Debecker, D. P.; Stoyanova, M.; Colbeau-Justin, F.; Rodemerck, U.; Boissière, C.; Gaigneaux, E. M.; Sanchez, C., One-Pot Aerosol Route to MoO₃-SiO₂-Al₂O₃ Catalysts with Ordered Super Microporosity and High Olefin Metathesis Activity. *Angewandte Chemie-International Edition* **2012**, *51* (9), 2129-2131.
93. De Los Cobos, O.; Fousseret, B.; Lejeune, M.; Rossignol, F.; Dutreilh-Colas, M.; Carrion, C.; Boissiere, C.; Ribot, F.; Sanchez, C.; Cattoen, X.; Man, M. W. C.; Durand, J. O., Tunable Multifunctional Mesoporous Silica Microdots Arrays by Combination of Inkjet Printing, EISA, and Click Chemistry. *Chemistry of Materials* **2012**, *24* (22), 4337-4342.

94. Courtin, E.; Boy, P.; Rouhet, C.; Bianchi, L.; Bruneton, E.; Poirot, N.; Laberty-Robert, C.; Sanchez, C., Optimized Sol-Gel Routes to Synthesize Yttria-Stabilized Zirconia Thin Films as Solid Electrolytes for Solid Oxide Fuel Cells. *Chemistry of Materials* **2012**, *24* (23), 4540-4548.
95. Chemin, N.; Rozes, L.; Chaneac, C.; Cassaignon, S.; Le Bourhis, E.; Jolivet, J. P.; Barthel, E.; Sanchez, C., Influence of Structure and Organic-Inorganic Phase Interactions on Coating Mechanical Properties in the Ternary Goethite:Poly(HEMA):Silica System. *European Journal of Inorganic Chemistry* **2012**, (16), 2675-2683.
96. Carenco, S.; Surcin, C.; Morcrette, M.; Larcher, D.; Mezailles, N.; Boissiere, C.; Sanchez, C., Improving the Li-Electrochemical Properties of Monodisperse Ni₂P Nanoparticles by Self-Generated Carbon Coating. *Chemistry of Materials* **2012**, *24* (4), 688-697.
97. Carenco, S.; Leyva-Perez, A.; Concepcion, P.; Boissiere, C.; Mezailles, N.; Sanchez, C.; Corma, A., Nickel phosphide nanocatalysts for the chemoselective hydrogenation of alkynes. *Nano Today* **2012**, *7* (1), 21-28.
98. Carenco, S.; Labouille, S.; Bouchonnet, S.; Boissière, C.; Le Goff, X.-F.; Sanchez, C.; Mézailles, N., Revisiting the Molecular Roots of a Ubiquitously Successful Synthesis: Nickel(0) Nanoparticles by Reduction of [Ni(acetylacetonate)₂]. *Chemistry - A European Journal* **2012**, *In press*, DOI : 10.1002/chem.201201071.
99. Carenco, S.; Boissiere, C.; Mezailles, N.; Sanchez, C., Metal phosphides: a revival at the nanoscale. *Actualite Chimique* **2012**, (362), 22-28.
100. Baldinozzi, G.; Muller, G.; Laberty-Robert, C.; Gosset, D.; Simeone, D.; Sanchez, C., Probing properties, stability and performances of hierarchical mesoporous materials with nanoscale interfaces. *Journal of Physical Chemistry C* **2012**, *116* (14), 7658-7663.
101. Sel, O.; Azais, T.; Marechal, M.; Gebel, G.; Laberty-Robert, C.; Sanchez, C., Sulfonic and Phosphonic Acid and Bifunctional Organic-Inorganic Hybrid Membranes and Their Proton Conduction Properties. *Chemistry-an Asian Journal* **2011**, *6* (11), 2992-3000.
102. Sassoie, C.; Muller, G.; Debecker, D. P.; Karelovic, A.; Cassaignon, S.; Pizarro, C.; Ruiz, P.; Sanchez, C., A sustainable aqueous route to highly stable suspensions of monodispersed nano ruthenia. *Green Chemistry* **2011**, *13* (11), 3230-3237.
103. Sanchez, C.; Shea, K. J.; Kitagawa, S., Recent progress in hybrid materials science. *Chemical Society Reviews* **2011**, *40* (2), 471-472.
104. Sanchez, C.; Belleville, P.; Popall, M.; Nicole, L., Applications of advanced hybrid organic-inorganic nanomaterials: from laboratory to market. *Chemical Society Reviews* **2011**, *40* (2), 696-753.
105. Rozes, L.; Sanchez, C., Titanium oxo-clusters: precursors for a Lego-like construction of nanostructured hybrid materials. *Chemical Society Reviews* **2011**, *40* (2), 1006-1030.
106. Portehault, D.; Maneeratana, V.; Candolfi, C.; Deschler, N.; Veremchuk, I.; Grin, Y.; Sanchez, C.; Antonietti, M., Facile General Route toward Tunable Magneli Nanostructures and Their Use As Thermoelectric Metal Oxide/Carbon Nanocomposites. *ACS Nano* **2011**, *5* (11), 9052-9061.
107. Portehault, D.; Devi, S.; Beaunier, P.; Gervais, C.; Giordano, C.; Sanchez, C.; Antonietti, M., A General Solution Route toward Metal Boride Nanocrystals. *Angewandte Chemie-International Edition* **2011**, *50* (14), 3262-3265.
108. Perineau, F.; Pensec, S.; Sassoie, C.; Ribot, F.; van Lokeren, L.; Willem, R.; Bouteiller, L.; Sanchez, C.; Rozes, L., New hybrid core-shell star-like architectures made of poly(n-butyl acrylate) grown from well-defined titanium oxo-clusters. *Journal of Materials Chemistry* **2011**, *21* (12), 4470-4475.
109. Perineau, F.; Pensec, S.; Sanchez, C.; Creton, C.; Rozes, L.; Bouteiller, L., Supramolecular design for polymer/titanium oxo-cluster hybrids: an open door to new organic-inorganic dynamers. *Polymer Chemistry* **2011**, *2* (12), 2785-2788.
110. Perineau, F.; Hu, G. J.; Rozes, L.; Ribot, F.; Sanchez, C.; Creton, C.; Bouteiller, L.; Pensec, S., Synthesis, Characterization, and Rheological Properties of Hybrid Titanium Star-Shaped Poly(n-butyl acrylate). *Journal of Polymer Science Part a-Polymer Chemistry* **2011**, *49* (12), 2636-2644.
111. Pereira, F.; Chan, A.; Valle, K.; Palmas, P.; Bigarre, J.; Belleville, P.; Sanchez, C., Design of Interpenetrated Networks of Mesostructured Hybrid Silica and Nonconductive Poly(vinylidene fluoride)-

Cohexafluoropropylene (PVdF-HFP) Polymer for Proton Exchange Membrane Fuel Cell Applications. *Chemistry-an Asian Journal* **2011**, 6 (5), 1217-1224.

112. Mosa, J.; Fontaine, O.; Ferreira, P.; Borges, R. P.; Vivier, V.; Grosso, D.; Laberty-Robert, C.; Sanchez, C., Synthesis of poly(phenylene oxide)-based fluoro-tin-oxide/ZrO₂ nanoelectrode arrays by hybrid organic/inorganic approach. *Electrochimica Acta* **2011**, 56 (20), 7155-7162.

113. Martinez-Ferrero, E.; Forneli, A.; Boissiere, C.; Grosso, D.; Sanchez, C.; Palomares, E., Tailored 3D Interface for Efficiency Improvement in Encapsulation-Free Hybrid Light-Emitting Diodes. *ACS Applied Materials & Interfaces* **2011**, 3 (9), 3248-3251.

114. Letailleux, A.; Ribot, F.; Boissiere, C.; Teisseire, J.; Barthel, E.; Desmazieres, B.; Chemin, N.; Sanchez, C., Sol-Gel Derived Hybrid Thin Films: The Chemistry behind Processing. *Chemistry of Materials* **2011**, 23 (22), 5082-5089.

115. Leroy, C. M.; Wang, H. F.; Fargues, A.; Cardinal, T.; Jubera, V.; Treguer-Delapierre, M.; Boissiere, C.; Grosso, D.; Sanchez, C.; Viana, B.; Pelle, F., Emission-photoactivity cross-processing of mesoporous interfacial charge transfer in Eu(3+) doped titania. *Physical Chemistry Chemical Physics* **2011**, 13 (25), 11878-11884.

116. Laberty-Robert, C.; Valle, K.; Pereira, F.; Sanchez, C., Design and properties of functional hybrid organic-inorganic membranes for fuel cells. *Chemical Society Reviews* **2011**, 40 (2), 961-1005.

117. Krins, N.; Bass, J. D.; Julian-Lopez, B.; Evrar, P.; Boissiere, C.; Nicole, L.; Sanchez, C.; Amenitsch, H.; Grosso, D., Mesoporous SiO₂ thin films containing photoluminescent ZnO nanoparticles and simultaneous SAXS/WAXS/ellipsometry experiments. *Journal of Materials Chemistry* **2011**, 21 (4), 1139-1146.

118. Krins, N.; Bass, J. D.; Grosso, D.; Henrist, C.; Delaigle, R.; Gaigneaux, E. M.; Cloots, R.; Vertruyen, B.; Sanchez, C., NbVO₅ Mesoporous Thin Films by Evaporation Induced Micelles Packing: Pore Size Dependence of the Mechanical Stability upon Thermal Treatment and Li Insertion/Extraction. *Chemistry of Materials* **2011**, 23 (18), 4124-4131.

119. Grosso, D.; Ribot, F.; Boissiere, C.; Sanchez, C., Molecular and supramolecular dynamics of hybrid organic-inorganic interfaces for the rational construction of advanced hybrid nanomaterials. *Chemical Society Reviews* **2011**, 40 (2), 829-848.

120. Carencu, S.; Le Goff, X. F.; Shi, J.; Roiban, L.; Ersen, O.; Boissiere, C.; Sanchez, C.; Mezailles, N., Magnetic Core-Shell Nanoparticles from Nanoscale-Induced Phase Segregation. *Chemistry of Materials* **2011**, 23 (8), 2270-2277.

121. Brun, N.; Babeau-Garcia, A.; Achard, M. F.; Sanchez, C.; Durand, F.; Laurent, G.; Birot, M.; Deleuze, H.; Backov, R., Enzyme-based biohybrid foams designed for continuous flow heterogeneous catalysis and biodiesel production. *Energy & Environmental Science* **2011**, 4 (8), 2840-2844.

122. Boissiere, C.; Grosso, D.; Chaumonnot, A.; Nicole, L.; Sanchez, C., Aerosol Route to Functional Nanostructured Inorganic and Hybrid Porous Materials. *Advanced Materials* **2011**, 23 (5), 599-623.

123. Blas, H.; Save, M.; Boissiere, C.; Sanchez, C.; Charleux, B., Surface-Initiated Nitroxide-Mediated Polymerization from Ordered Mesoporous Silica. *Macromolecules* **2011**, 44 (8), 2577-2588.

124. Alauzun, J. G.; Ungureanu, S.; Brun, N.; Bernard, S.; Miele, P.; Backov, R.; Sanchez, C., Novel monolith-type boron nitride hierarchical foams obtained through integrative chemistry. *Journal of Materials Chemistry* **2011**, 21 (36), 14025-14030.

125. Ungureanu, S.; Laurent, G.; Deleuze, H.; Babot, O.; Achard, M. F.; Popa, M. I.; Sanchez, C.; Backov, R., Syntheses and Characterization of New Organically Grafted Silica Foams. *Colloids and Surfaces a-Physicochemical and Engineering Aspects* **2010**, 360 (1-3), 85-93.

126. Ungureanu, S.; Deleuze, H.; Babot, O.; Achard, M. F.; Sanchez, C.; Popa, M. I.; Backov, R., Palladium Nanoparticles Heterogeneous Nucleation within Organically Grafted Silica Foams and their Use as Catalyst Supports toward the Suzuki-Miyaura and Mizoroki-Heck Coupling Reactions. *Applied Catalysis A: General* **2010**, 390 (1-2), 51-58.

127. Sel, O.; Soules, A.; Ameduri, B.; Boutevin, B.; Laberty-Robert, C.; Gebel, G.; Sanchez, C., Original Fuel-Cell Membranes from Crosslinked Terpolymers via a "Sol-Gel" Strategy. *Advanced Functional Materials* **2010**, 20 (7), 1090-1098.

128. Sel, O.; Kim, L. T. T.; Debiemme-Chouvy, C.; Gabrielli, C.; Laberty-Robert, C.; Perrot, H.; Sanchez, C., Proton Insertion Properties in a Hybrid Membrane/Conducting Polymer Bilayer Investigated by AC Electrogravimetry. *Journal of the Electrochemical Society* **2010**, *157* (7), F69-F76.
129. Sanchez, C.; Rozes, L.; Ribot, F.; Laberty-Robert, C.; Grosso, D.; Sassoie, C.; Boissiere, C.; Nicole, L., "Chimie douce": a Land of Opportunities for the Designed Construction of Functional Inorganic and Hybrid Organic-Inorganic Nanomaterials. *Comptes Rendus Chimie* **2010**, *13* (1-2), 3-39.
130. Sanchez, C., Advanced nanomaterials: A domain where chemistry, physics and biology meet. *Comptes Rendus Chimie* **2010**, *13* (1-2), 1-2.
131. Portehault, D.; Giordano, C.; Sanchez, C.; Antonietti, M., A Non-aqueous Route toward a Nanostructured Hybrid Titanate. *Chemistry of Materials* **2010**, *22* (6), 2125-2131.
132. Portehault, D.; Giordano, C.; Gervais, C.; Senkowska, I.; Kaskel, S.; Sanchez, C.; Antonietti, M., High-Surface-Area Nanoporous Boron Carbon Nitrides for Hydrogen Storage. *Advanced Functional Materials* **2010**, *20* (11), 1827-1833.
133. Petit, P. O.; Goldner, P.; Boissiere, C.; Sanchez, C.; Viana, B., New silicate bonding technique for composite laser materials. *Optical Materials* **2010**, *32* (10), 1368-1371.
134. Parvole, J.; Ahrens, L.; Blas, H.; Vinas, J.; Boissiere, C.; Sanchez, C.; Save, M.; Charleux, B., 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. *Journal of Polymer Science Part A-Polymer Chemistry* **2010**, *48* (1), 173-185.
135. Nicole, L.; Rozes, L.; Sanchez, C., Integrative Approaches to Hybrid Multifunctional Materials: From Multidisciplinary Research to Applied Technologies. *Advanced Materials* **2010**, *22* (29), 3208-3214.
136. Lepoutre, S.; Julian-Lopez, B.; Sanchez, C.; Amenitsch, H.; Linden, M.; Grosso, D., Nanocasted Mesoporous Nanocrystalline ZnO Thin Films. *Journal of Materials Chemistry* **2010**, *20* (3), 537-542.
137. Lepoutre, S.; Grosso, D.; Sanchez, C.; Fornasieri, G.; Riviere, E.; Bleuzen, A., Tailor-made Nanometer-scale Patterns of Photo-switchable Prussian Blue Analogues. *Advanced Materials* **2010**, *22* (36), 3992-3996.
138. Lantiat, D.; Vivier, V.; Laberty-Robert, C.; Grosso, D.; Sanchez, C., Gold Nanoelectrode Arrays and their Evaluation by Impedance Spectroscopy and Cyclic Voltammetry. *ChemPhysChem* **2010**, *11* (9), 1971-1977.
139. Kim, L. T. T.; Sel, O.; Debiemme-Chouvy, C.; Gabrielli, C.; Laberty-Robert, C.; Perrot, H.; Sanchez, C., Proton transport properties in hybrid membranes investigated by ac-electrogravimetry. *Electrochemistry Communications* **2010**, *12* (8), 1136-1139.
140. Frot, T.; Cochet, S.; Laurent, G.; Sassoie, C.; Popall, M.; Sanchez, C.; Rozes, L., $\text{Ti}_8\text{O}_8(\text{OOCR})_{16}$ a new Family of Titanium-Oxo-Clusters: Potential NBUs for Reticular Chemistry. *European Journal of Inorganic Chemistry* **2010**, (36), 5650-5659.
141. Fousseret, B.; Mougnot, M.; Rossignol, F.; Baumard, J. F.; Soulestin, B.; Boissiere, C.; Ribot, F.; Jalabert, D.; Carrion, C.; Sanchez, C.; Lejeune, M., Inkjet-Printing-Engineered Functional Microdot Arrays Made of Mesoporous Hybrid Organosilicas. *Chemistry of Materials* **2010**, *22* (13), 3875-3883.
142. Faustini, M.; Nicole, L.; Boissiere, C.; Innocenzi, P.; Sanchez, C.; Grosso, D., Hydrophobic, Antireflective, Self-Cleaning, and Antifogging Sol-Gel Coatings: An Example of Multifunctional Nanostructured Materials for Photovoltaic Cells. *Chemistry of Materials* **2010**, *22* (15), 4406-4413.
143. Demessence, A.; Boissiere, C.; Grosso, D.; Horcajada, P.; Serre, C.; Ferey, G.; Soler-Illia, G.; Sanchez, C., Adsorption properties in high optical quality nanoZIF-8 thin films with tunable thickness. *Journal of Materials Chemistry* **2010**, *20* (36), 7676-7681.
144. Colilla, M.; Manzano, M.; Izquierdo-Barba, I.; Vallet-Regi, M.; Boissiere, C.; Sanchez, C., Advanced Drug Delivery Vectors with Tailored Surface Properties Made of Mesoporous Binary Oxides Submicronic Spheres. *Chemistry of Materials* **2010**, *22* (5), 1821-1830.
145. Carenco, S.; Demange, M.; Shi, J.; Boissiere, C.; Sanchez, C.; Le Floch, P.; Mezailles, N., White Phosphorus and Metal Nanoparticles: a Versatile Route to Metal Phosphide Nanoparticles. *Chemical Communications* **2010**, *46* (30), 5578-5580.
146. Carenco, S.; Boissiere, C.; Nicole, L.; Sanchez, C.; Le Floch, P.; Mezailles, N., Controlled Design of Size-Tunable Monodisperse Nickel Nanoparticles. *Chemistry of Materials* **2010**, *22* (4), 1340-1349.

147. Brun, N.; Janot, R.; Sanchez, C.; Deleuze, H.; Gervais, C.; Morcrette, M.; Backov, R., Preparation of LiBH₄@carbon micro-macrocellular foams: tuning hydrogen release through varying microporosity. *Energy & Environmental Science* **2010**, *3* (6), 824-830.
148. Brun, N.; Garcia, A. B.; Deleuze, H.; Achard, M. F.; Sanchez, C.; Durand, F.; Oestreicher, V.; Backov, R., Enzyme-Based Hybrid Macroporous Foams as Highly Efficient Biocatalysts Obtained through Integrative Chemistry. *Chemistry of Materials* **2010**, *22* (16), 4555-4562.
149. Bass, J. D.; Belamie, E.; Grosso, D.; Boissiere, C.; Coradin, T.; Sanchez, C., Nanostructuring of Titania Films Prepared by Self-Assembly to Affect Cell Adhesion. *Journal of Biomedical Materials Research Part A* **2010**, *93A* (1), 96-106.
150. Allouche, J.; Lantiat, D.; Kuemmel, M.; Faustini, M.; Laberty, C.; Chaneac, C.; Tronc, E.; Boissiere, C.; Nicole, L.; Sanchez, C.; Grosso, D., Direct Electrogenation of FePt Nanoparticles into Highly Ordered Inorganic NanoPattern Stabilising Membranes. *Journal of Sol-Gel Science and Technology* **2010**, *53* (3), 551-554.

2000-2009

151. Tortissier, G.; Blanc, L.; Tetelin, A.; Zimmermann, C.; Lachaud, J. L.; Boissiere, C.; Sanchez, C.; Dejous, C.; Rebiere, D., Mesoporous Coated Films on Love Wave Acoustic Devices for Gas Detection. *Sensor Letters* **2009**, *7* (5), 984-988.
152. Sel, O.; Laberty-Robert, C.; Azais, T.; Sanchez, C., Designing Meso- and Macropore Architectures in Hybrid Organic-Inorganic Membranes by Combining Surfactant and Breath Figure Templating (BFT). *Physical Chemistry Chemical Physics* **2009**, *11* (19), 3733-3741.
153. Sassoie, C.; Laberty, C.; Le Khanh, H.; Cassaignon, S.; Boissiere, C.; Antonietti, M.; Sanchez, C., Block-Copolymer-Templated Synthesis of Electroactive RuO₂-Based Mesoporous Thin Films. *Advanced Functional Materials* **2009**, *19* (12), 1922-1929.
154. Saint-Cricq, P.; Pigot, T.; Nicole, L.; Sanchez, C.; Lacombe, S., Hybrid Functional Mesostructured Thin Films with Photo-oxidative Properties in the Visible Range. *Chemical Communications* **2009**, 5281-5283.
155. Renault, C.; Baland, V.; Martinez-Ferrero, E.; Nicole, L.; Sanchez, C.; Limoges, B., Highly Ordered Transparent Mesoporous TiO₂ Thin Films: an Attractive Matrix for Efficient Immobilization and Spectroelectrochemical Characterization of Cytochrome c. *Chemical Communications* **2009**, 7494-7496.
156. Rambaud, F.; Valle, K.; Thibaud, S.; Julian-Lopez, B.; Sanchez, C., One-Pot Synthesis of Functional Helicoidal Hybrid Organic-Inorganic Nanofibers with Periodically Organized Mesoporosity. *Advanced Functional Materials* **2009**, *19* (18), 2896-2905.
157. Pega, S.; Boissiere, C.; Grosso, D.; Azais, T.; Chaumonnot, A.; Sanchez, C., Direct Aerosol Synthesis of Large-Pore Amorphous Mesostructured Aluminosilicates with Superior Acid-Catalytic Properties. *Angewandte Chemie-International Edition* **2009**, *48* (15), 2784-2787.
158. Pasetto, P.; Blas, H.; Audouin, F.; Boissiere, C.; Sanchez, C.; Save, M.; Charleux, B., Mechanistic Insight into Surface-Initiated Polymerization of Methyl Methacrylate and Styrene via ATRP from Ordered Mesoporous Silica Particles. *Macromolecules* **2009**, *42* (16), 5983-5995.
159. Leroy, C.; Cardinal, T.; Jubera, V.; Treguer-Delapierre, M.; Backov, R.; Boissiere, C.; Grosso, D.; Sanchez, C.; Viana, B.; Pelle, F., Sol-gel technique for the generation of europium-doped mesoporous and dense thin films: A luminescent study. *Journal of Luminescence* **2009**, *129* (12), 1641-1645.
160. Kuznetsov, A. I.; Kameneva, O.; Bityurin, N.; Rozes, L.; Sanchez, C.; Kanaev, A., Laser-induced Photopatterning of Organic-Inorganic TiO₂-based Hybrid Materials with Tunable Interfacial Electron Transfer. *Physical Chemistry Chemical Physics* **2009**, *11* (8), 1248-1257.
161. Kuemmel, M.; Smatt, J. H.; Boissiere, C.; Nicole, L.; Sanchez, C.; Linden, M.; Grosso, D., Hierarchical Inorganic Nanopatterning (INP) through Direct Easy Block-copolymer Templating. *Journal of Materials Chemistry* **2009**, *19* (22), 3638-3642.
162. Horcajada, P.; Serre, C.; Grosso, D.; Boissiere, C.; Perruchas, S.; Sanchez, C.; Ferey, G., Colloidal Route for Preparing Optical Thin Films of Nanoporous Metal-Organic Frameworks. *Advanced Materials* **2009**, *21* (19), 1931-1935.

163. Hierso, J.; Sel, O.; Ringuede, A.; Laberty-Robert, C.; Bianchi, L.; Grosso, D.; Sanchez, C., Design, Synthesis, Structural and Textural Characterization, and Electrical Properties of Mesoporous Thin Films Made of Rare Earth Oxide Binaries. *Chemistry of Materials* **2009**, *21* (11), 2184-2192.
164. Demessence, A.; Horcajada, P.; Serre, C.; Boissiere, C.; Grosso, D.; Sanchez, C.; Férey, G., Elaboration and properties of hierarchically structured optical thin films of MIL-101(Cr). *Chemical Communications* **2009**, 7149-7151.
165. Dan-Hardi, M.; Serre, C.; Frot, T.; Rozes, L.; Maurin, G.; Sanchez, C.; Férey, G., A New Photoactive Crystalline Highly Porous Titanium(IV) Dicarboxylate. *Journal of the American Chemical Society* **2009**, *131* (31), 10857-+.
166. Chaumonnot, A.; Tihay, F.; Coupe, A.; Pega, S.; Boissiere, C.; Grosso, D.; Sanchez, C., New Aluminosilicate Materials with Hierarchical Porosity Generated by Aerosol Process. *Oil & Gas Science and Technology-Revue De L Institut Francais Du Petrole* **2009**, *64* (6), 681-696.
167. Brun, N.; Prabaharan, S. R. S.; Morcrette, M.; Sanchez, C.; Pécastaings, G.; Derre, A.; Soum, A.; Deleuze, H.; Birot, M.; Backov, R., Hard Macrocellular Silica Si(HIPE) Foams Templating Micro/Macroporous Carbonaceous Monoliths: Applications as Lithium Ion Battery Negative Electrodes and Electrochemical Capacitors. *Advanced Functional Materials* **2009**, *19* (19), 3136-3145.
168. Bisson, L.; Boissiere, C.; Nicole, L.; Grosso, D.; Jolivet, J.-P.; Thomazeau, C.; Uzio, D.; Berhault, G.; Sanchez, C., Formation of Palladium Nanostructures in a Seed-Mediated Synthesis through an Oriented-Attachment-Directed Aggregation. *Chemistry of Materials* **2009**, *21* (13), 2668-2678.
169. Ungureanu, S.; Deleuze, H.; Sanchez, C.; Popa, M. I.; Backov, R., First Pd@Organo-Si(HIPE) Open-Cell Hybrid Monoliths Generation Offering Cycling Heck Catalysis Reactions. *Chemistry of Materials* **2008**, *20* (20), 6494-6500.
170. Sanchez, C.; Boissiere, C.; Grosso, D.; Laberty, C.; Nicole, L., Design, Synthesis, and Properties of Inorganic and Hybrid Thin Films having Periodically Organized Nanoporosity. *Chemistry of Materials* **2008**, *20* (3), 682-737.
171. Sanchez, C., Matériaux hybrides multifonctionnels : du champ d'investigation pluridisciplinaire aux applications. *La lettre de l'Académie des sciences* **2008**, *23*, 10-19.
172. Sakatani, Y.; Boissiere, C.; Grosso, D.; Nicole, L.; Soler-Illia, G.; Sanchez, C., Coupling Nanobuilding Block and Breath Figures Approaches for the Designed Construction of Hierarchically Templated Porous Materials and Membranes. *Chemistry of Materials* **2008**, *20* (3), 1049-1056.
173. Prouzet, E.; Ravaine, S.; Sanchez, C.; Backov, R., Bio-inspired Synthetic Pathways and Beyond: Integrative Chemistry. *New Journal of Chemistry* **2008**, *32* (8), 1284-1299.
174. Poulos, A. S.; Constantin, D.; Davidson, P.; Imperor, M.; Pansu, B.; Panine, P.; Nicole, L.; Sanchez, C., Photochromic Hybrid Organic-Inorganic Liquid-crystalline Materials built from Nonionic Surfactants and Polyoxometalates: Elaboration and Structural Study. *Langmuir* **2008**, *24* (12), 6285-6291.
175. Planelles-Arago, J.; Julian-Lopez, B.; Cordoncillo, E.; Escribano, P.; Pelle, F.; Viana, B.; Sanchez, C., Lanthanide doped ZnS Quantum Dots Dispersed in Silica Glasses: an Easy One Pot Sol-Gel Synthesis for obtaining Novel Photonic Materials. *Journal of Materials Chemistry* **2008**, *18* (43), 5193-5199.
176. Pereira, F.; Valle, K.; Belleville, P.; Morin, A.; Lambert, S.; Sanchez, C., Advanced Mesostructured Hybrid Silica-Nafion Membranes for High-performance PEM Fuel Cell. *Chemistry of Materials* **2008**, *20* (5), 1710-1718.
177. Martinez-Ferrero, E.; Franc, G.; Mazeres, S.; Turrin, U. O.; Boissiere, U.; Caminade, A. M.; Majoral, J. P.; Sanchez, C., Optical Properties of Hybrid Dendritic-mesoporous Titania Nanocomposite Films. *Chemistry - A European Journal* **2008**, *14* (25), 7658-7669.
178. Llusar, M.; Sanchez, C., Inorganic and Hybrid Nanofibrous Materials Templated with Organogelators. *Chemistry of Materials* **2008**, *20* (3), 782-820.
179. Leroy, C. M.; Cardinal, T.; Jubera, V.; Treguer-Delapierre, M.; Majimel, J.; Manaud, J. P.; Backov, R.; Boissiere, C.; Grosso, D.; Sanchez, C.; Viana, B.; Pelle, F., Europium-doped Mesoporous Titania Thin Films: Rare-earth Locations and Emission Fluctuations under Illumination. *ChemPhysChem* **2008**, *9* (14), 2077-2084.
180. Lancelle-Beltran, E.; Prene, P.; Boscher, C.; Belleville, P.; Buvat, P.; Lambert, S.; Guillet, F.; Marcel, C.; Sanchez, C., Solid-state Organic/Inorganic Hybrid Solar Cells based on Poly(octylthiophene) and Dye-

sensitized Nanobrookite and Nanoanatase TiO₂ Electrodes. *European Journal of Inorganic Chemistry* **2008**, (6), 903-910.

181. Laberty-Robert, C.; Kuemmel, M.; Allouche, J.; Boissiere, C.; Nicole, L.; Grosso, D.; Sanchez, C., Sol-gel route to Advanced Nanoelectrode Arrays (NEA) based on Titania Gold Nanocomposites. *Journal of Materials Chemistry* **2008**, *18* (11), 1216-1221.

182. Kuemmel, M.; Boissiere, C.; Nicole, L.; Laberty-Robert, C.; Sanchez, C.; Grosso, D., Highly Ordered Metal Oxide Nanopatterns Prepared by Template-assisted Chemical Solution Deposition. *Journal of Sol-Gel Science and Technology* **2008**, *48* (1-2), 102-112.

183. Fuertes, M. C.; Colodrero, S.; Lozano, G.; Gonzalez-Elipe, A. R.; Grosso, D.; Boissiere, C.; Sanchez, C.; Soler-Illia, G.; Miguez, H., Sorption Properties of Mesoporous Multilayer Thin Films. *Journal of Physical Chemistry C* **2008**, *112* (9), 3157-3163.

184. Escribano, P.; Julian-Lopez, B.; Planelles-Arago, J.; Cordocillo, E.; Viana, B.; Sanchez, C., Photonic and Nanobiophotonic Properties of Luminescent Lanthanide-doped Hybrid Organic-Inorganic Materials. *Journal of Materials Chemistry* **2008**, *18* (1), 23-40.

185. Chemin, N.; Rozes, L.; Chaneac, C.; Cassaignon, S.; Le Bourhis, E.; Jolivet, J. P.; Spalla, O.; Barthel, E.; Sanchez, C., Structure and Mechanical Properties of Mesostructured Functional Hybrid Coatings Based on Anisotropic Nanoparticles Dispersed in Poly(hydroxyethyl methacrylate). *Chemistry of Materials* **2008**, *20* (14), 4602-4611.

186. Brun, N.; Julian-Lopez, B.; Hesemann, P.; Laurent, G.; Deleuze, H.; Sanchez, C.; Achard, M. F.; Backov, R., Eu³⁺ @Organo-Si(HIPE) Macro-Mesocellular Hybrid Foams Generation: Syntheses, Characterizations, and Photonic Properties. *Chemistry of Materials* **2008**, *20* (22), 7117-7129.

187. Blas, H.; Save, M.; Pasetto, P.; Boissiere, C.; Sanchez, C.; Charleux, B., Elaboration of Monodisperse Spherical Hollow Particles with Ordered Mesoporous Silica Shells via Dual Latex/Surfactant Templating: Radial Orientation of Mesopore Channels. *Langmuir* **2008**, *24* (22), 13132-13137.

188. Bass, J. D.; Grosso, D.; Boissiere, C.; Sanchez, C., Pyrolysis, Crystallization, and Sintering of Mesostructured Titania Thin Films Assessed by In Situ Thermal Ellipsometry. *Journal of the American Chemical Society* **2008**, *130* (25), 7882-7897.

189. Bass, J. D.; Boissiere, C.; Nicole, L.; Grosso, D.; Sanchez, C., Thermally Induced Porosity in CSD MgF₂-Based Optical Coatings: an Easy Method to Tune the Refractive Index. *Chemistry of Materials* **2008**, *20* (17), 5550-5556.

190. Banet, P.; Legagneux, L.; Hesemann, P.; Moreau, J. J. E.; Nicole, L.; Quach, A.; Sanchez, C.; Tran-Thi, T. H., Hybrid Mesostructured Thin Films Functionalized with DBM as New Selective Sensors of BF₃. *Sensors and Actuators B-Chemical* **2008**, *130* (1), 1-8.

191. Baccile, N.; Fischer, A.; Julian-Lopez, B.; Grosso, D.; Sanchez, C., Core-shell Effects of Functionalized Oxide Nanoparticles Inside Long-range Meso-ordered Spray-dried Silica Spheres. *Journal of Sol-Gel Science and Technology* **2008**, *47* (2), 119-123.

192. Audouin, F.; Blas, H.; Pasetto, P.; Beaunier, P.; Boissiere, C.; Sanchez, C.; Save, M.; Charleux, B., Structured Hybrid Nanoparticles via Surface-initiated ATRP of Methyl Methacrylate from Ordered Mesoporous Silica. *Macromolecular Rapid Communications* **2008**, *29* (11), 914-921.

193. Vilain, C.; Goettmann, F.; Moores, A.; Le Floch, P.; Sanchez, C., Study of Metal Nanoparticles Stabilised by Mixed Ligand Shell: a Striking Blue Shift of the Surface-Plasmon Band Evidencing the Formation of Janus Nanoparticles. *Journal of Materials Chemistry* **2007**, *17* (33), 3509-3514.

194. Van Lokeren, L.; Maheut, G.; Ribot, F.; Escax, V.; Verbruggen, I.; Sanchez, C.; Martins, J. C.; Biesemans, M.; Willem, R., Characterization of Titanium Dioxide Nanoparticles Dispersed in Organic Ligand Solutions by Using a Diffusion-Ordered Spectroscopy-Based Strategy. *Chemistry - A European Journal* **2007**, *13* (24), 6957-6966.

195. Ungureanu, S.; Birot, M.; Laurent, G.; Deleuze, H.; Babot, O.; Julian-Lopez, B.; Achard, M. F.; Popa, M. I.; Sanchez, C.; Backov, R., One-pot Syntheses of the First Series of Emulsion Based Hierarchical Hybrid Organic-Inorganic Open-Cell Monoliths Possessing Tunable Functionality (Organo-Si(HIPE) series). *Chemistry of Materials* **2007**, *19* (23), 5786-5796.

196. Quach, A.; Escax, V.; Nicole, L.; Goldner, P.; Guillot-Noel, O.; Aschehoug, P.; Hesemann, P.; Moreau, J.; Gourier, D.; Sanchez, C., Rare Earth Doped Mesoporous Hybrid Thin Films with Tunable Optical Responses. *Journal of Materials Chemistry* **2007**, *17* (24), 2552-2560.
197. Martinez-Ferrero, E.; Sakatani, Y.; Boissière, C.; Grosso, D.; Fuertes, A.; Fraxedas, J.; Sanchez, C., Nanostructured Titanium Oxynitride Porous Thin Films as Efficient Visible-Active Photocatalysts. *Advanced Functional Materials* **2007**, *17* (16), 3348-3354.
198. Kuemmel, M.; Allouche, J.; Nicole, L.; Boissiere, C.; Laberty, C.; Amenitsch, H.; Sanchez, C.; Grosso, D., A Chemical Solution Deposition Route To Nanopatterned Inorganic Material Surfaces *Chemistry of Materials* **2007**, *19* (15), 3717-3725.
199. Julian-Lopez, B.; Boissiere, C.; Chaneac, C.; Grosso, D.; Vasseur, S.; Miraux, S.; Duguet, E.; Sanchez, C., Mesoporous Maghemite-Organosilica Microspheres: a Promising Route Towards Multifunctional Platforms for Smart Diagnosis and Therapy. *Journal of Materials Chemistry* **2007**, *17* (16), 1563-1569.
200. Grosso, D.; Boissiere, C.; Sanchez, C., Ultralow-Dielectric-Constant Optical Thin Films Built from Magnesium Oxyfluoride Vesicle-Like Hollow Nanoparticles. *Nature Materials* **2007**, *6* (8), 572-575.
201. Goettmann, F.; Sanchez, C., How Does Confinement Affect the Catalytic Activity of Mesoporous Materials? *Journal of Materials Chemistry* **2007**, *17* (1), 24-30.
202. Etienne, M.; Quach, A.; Grosso, D.; Nicole, L.; Sanchez, C.; Walcarius, A., Molecular Transport into Mesostructured Silica Thin Films: Electrochemical Monitoring and Comparison Between $p6m$, $P6_3/mmc$, and $Pm3n$ Structures. *Chemistry of Materials* **2007**, *19* (4), 844-856.
203. Cortial, G.; Goettmann, F.; Mercier, F.; Le Floch, P.; Sanchez, C., Bioinspired Enantioselective Catalysis: Racemic or Achiral Metal Complexes Grafted on Mesoporous Material Functionalized with Chiral Molecules. *Catalysis Communications* **2007**, *8* (3), 215-219.
204. Cochet, S.; Rozes, L.; Popall, M.; Sanchez, C., Titanium Oxo-Clusters as Nanobuilding Blocks for Microsystems Technology. *Materials Science and Engineering: C* **2007**, *27* (5-8), 1401-1405.
205. Castro, Y.; Julian-Lopez, B.; Boissiere, C.; Viana, B.; Grosso, D.; Sanchez, C., Preparation, Structural and Optical Characterization of Rare Earth Doped Mesoporous Y_2O_3 Thin Films by EISA Method. *Microporous and Mesoporous Materials* **2007**, *103* (1-3), 273-279.
206. Castro, Y.; Julian, B.; Boissiere, C.; Viana, B.; Amenitsch, H.; Grosso, D.; Sanchez, C., Synthesis, Characterization and Optical Properties of Eu_2O_3 Mesoporous Thin Films. *Nanotechnology* **2007**, *18* (5), 055705.
207. Bass, J. D.; Grosso, D.; Boissiere, C.; Belamie, E.; Coradin, T.; Sanchez, C., Stability of Mesoporous Oxide and Mixed Metal Oxide Materials under Biologically Relevant Conditions. *Chemistry of Materials* **2007**, *19* (17), 4349-4356.
208. Valle, K.; Belleville, P.; Pereira, F.; Sanchez, C., Hierarchically Structured Transparent Hybrid Membranes by In-Situ Growth of Mesostructured Organosilica in Host Polymer. *Nature Materials* **2006**, *5* (2), 107-111.
209. Trabelsi, S.; Fornasieri, G.; Rozes, L.; Janke, A.; Mensch, A.; Sanchez, C.; Stamm, M., Tailoring the Structure of Hybrid Organic-Inorganic Nanomaterials Built on Tetra- and Polyfunctional Alco-Oxo-Titanium Clusters in Polystyrene. *Journal of Applied Crystallography* **2006**, *39*, 656-660.
210. Save, M.; Granvorka, G.; Bernard, J.; Charleux, B.; Boissiere, C.; Grosso, D.; Sanchez, C., Atom Transfer Radical Polymerization of Styrene and Methyl Methacrylate from Mesoporous Ordered Silica Particles. *Macromolecular Rapid Communications* **2006**, *27* (6), 393-398.
211. Sakatani, Y.; Grosso, D.; Nicole, L.; Boissiere, C.; Soler-Illia, G. J. A. A.; Sanchez, C., Optimised Photocatalytic Activity of Grid-Like Mesoporous TiO_2 Films: Effect of Crystallinity, Pore Size Distribution and Pore Accessibility. *Journal of Materials Chemistry* **2006**, *16* (1), 77-82.
212. Rozes, L.; Steunou, N.; Fornasieri, G.; Sanchez, C., Titanium-Oxo Clusters, Versatile Nanobuilding Blocks for the Design of Advanced Hybrid Materials. *Monatshefte Fur Chemie* **2006**, *137* (5), 501-528.
213. Roy, G.; Miravet, J. F.; Escuder, B.; Sanchez, C.; Llusar, M., Morphology Templating of Nanofibrous Silica through pH-Sensitive Gels: "In Situ" and "Post-Diffusion" Strategies. *Journal of Materials Chemistry* **2006**, *16* (19), 1817-1824.

214. Mougnot, M.; Lejeune, M.; Baumard, J. F.; Boissiere, C.; Ribot, F.; Grosso, D.; Sanchez, C.; Noguera, R., Ink Jet Printing of Microdot Arrays of Mesostructured Silica. *Journal of the American Ceramic Society* **2006**, *89* (6), 1876-1882.
215. Martinez-Ferrero, E.; Grosso, D.; Boissiere, C.; Sanchez, C.; Oms, O.; Leclercq, D.; Vioux, A.; Miomandre, F.; Audebert, P., Electrochemical Investigations into Ferrocenylphosphonic Acid Functionalized Mesostructured Porous Nanocrystalline Titanium Oxide Films. *Journal of Materials Chemistry* **2006**, *16* (38), 3762-3767.
216. Mammeri, F.; Rozes, L.; Le Bourhis, E.; Sanchez, C., Elaboration and Mechanical Characterization of Nanocomposites Thin Films - Part II. Correlation between Structure and Mechanical Properties of SiO₂-PMMA Hybrid Materials. *Journal of the European Ceramic Society* **2006**, *26* (3), 267-272.
217. Mammeri, F.; Le Bourhis, E.; Rozes, L.; Sanchez, C., 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). *Journal of the European Ceramic Society* **2006**, *26* (3), 259-266.
218. Lancelle-Beltran, E.; Prene, P.; Boscher, C.; Belleville, P.; Buvat, P.; Sanchez, C., All Solid State Dye-Sensitized Nanoporous TiO₂ Hybrid Solar Cells with High Energy-Conversion Efficiency. *Advanced Materials* **2006**, *18* (19), 2579-+.
219. Lancelle-Beltran, E.; Prene, P.; Boscher, C.; Belleville, P.; Buvat, P.; Lambert, S.; Guillet, F.; Boissiere, C.; Grosso, D.; Sanchez, C., Nanostructured Hybrid Solar Cells Based on Self-Assembled Mesoporous Titania Thin Films. *Chemistry of Materials* **2006**, *18* (26), 6152-6156.
220. Kuznetsov, A. I.; Kameneva, O.; Rozes, L.; Sanchez, C.; Bityurin, N.; Kanaev, A., Extinction of Photo-Induced Ti³⁺ Centres in Titanium Oxide Gels and Gel-Based Oxo-PHEMA Hybrids. *Chemical Physics Letters* **2006**, *429* (4-6), 523-527.
221. Kameneva, O. V.; Kuznetsov, A. I.; Smirnova, L. A.; Rosez, L.; Sanchez, C.; Kanaev, A.; Alexandrov, A. P.; Bityurin, N. M., New Hybrid Organic-Inorganic Materials Based on a Poly(Titanium Oxide) Gel with Efficient UV-Induced Separation of Charges. *Doklady Physics* **2006**, *51* (3), 103-105.
222. Julian, B.; Planelles, J.; Cordocillo, E.; Escribano, P.; Aschehoug, P.; Sanchez, C.; Viana, B.; Pelle, F., Eu³⁺-Doped CdS Nanocrystals in SiO₂ Matrices: One-pot Sol-Gel Synthesis and Optical Characterization. *Journal of Materials Chemistry* **2006**, *16* (47), 4612-4618.
223. Grosso, D.; Boissiere, C.; Nicole, L.; Sanchez, C., Preparation, Treatment and Characterisation of Nanocrystalline Mesoporous Ordered Layers. *Journal of Sol-Gel Science and Technology* **2006**, *40* (2-3), 141-154.
224. Goettmann, F.; Moores, A.; Boissiere, C.; Le Floch, P.; Sanchez, C., Periodically Organized Mesoporous Silica Thin Layers as Host for Phosphinines-Stabilized Gold Nanoparticles: UV-visible Sensing of Small Thiols and Phosphines. *Thin Solid Films* **2006**, *495* (1-2), 280-285.
225. Goettmann, F.; Le Floch, P.; Sanchez, C., Hybrid Bidentate Ligand for Functional Recognition: an Application to Regioselective C=C Double Bond Hydrogenation. *Chemical Communications* **2006**, (19), 2036-2038.
226. Goettmann, F.; Le Floch, P.; Sanchez, C., Highly Regioselective Terminal Alkynes Hydroformylation and Pauson-Khand Reaction Catalysed by Mesoporous Organised Zirconium Oxide Based Powders. *Chemical Communications* **2006**, (2), 180-182.
227. Fisher, A.; Kummel, M.; Jarn, M.; Linden, M.; Boissiere, C.; Nicole, L.; Sanchez, C.; Grosso, D., Surface Nanopatterning by Organic-Inorganic Self-Local Assembly and Selective Local Functionalization. *Small* **2006**, *2* (4), 569-574.
228. Fadeeva, E.; Koch, J.; Chichkov, B.; Kuznetsov, A.; Kameneva, O.; Bityurin, N.; Sanchez, C.; Kanaev, A., Laser Imprinting of 3D Structures in Gel-Based Titanium Oxide Organic-Inorganic Hybrids. *Applied Physics a-Materials Science & Processing* **2006**, *84* (1-2), 27-30.
229. Dros, A. B.; Grosso, D.; Boissiere, C.; Soler-Illia, G. J. A. A.; Albouy, P. A.; Amenitsch, H.; Sanchez, C., Niobia-Stabilised Anatase TiO₂ Highly Porous Mesostructured Thin Films. *Microporous and Mesoporous Materials* **2006**, *94* (1-3), 208-213.

230. de Monredon, S.; Pottier, A.; Maquet, J.; Babonneau, F.; Sanchez, C., Characterisation of the Grafting of (3-Aminoethyl)aminopropyltrimethoxysilane on Precipitated Silica. *New Journal of Chemistry* **2006**, *30* (5), 797-802.
231. Cortial, G.; Siutkowski, M.; Goettmann, F.; Moores, A.; Boissiere, C.; Grosso, D.; Le Floch, P.; Sanchez, C., Metallic Nanoparticles Hosted in Mesoporous Oxide Thin Films for Catalytic Applications. *Small* **2006**, *2* (8-9), 1042-1045.
232. Carn, F.; Saadaoui, H.; Masse, P.; Ravaine, S.; Julian-Lopez, B.; Sanchez, C.; Deleuze, H.; Talham, D. R.; Backov, R., Three-Dimensional Opal-Like Silica Foams. *Langmuir* **2006**, *22* (12), 5469-5475.
233. Brezesinski, T.; Fischer, A.; Limura, K.; Sanchez, C.; Grosso, D.; Antonietti, M.; Smarsly, B. M., Generation of Self-Assembled 3D Mesostructured SnO₂ Thin Films with Highly Crystalline Frameworks. *Advanced Functional Materials* **2006**, *16* (11), 1433-1440.
234. Boissiere, C.; Nicole, L.; Gervais, C.; Babonneau, F.; Antonietti, M.; Amenitsch, H.; Sanchez, C.; Grosso, D., Nanocrystalline Mesoporous γ -Alumina Powders "UPMC1 Material" Gathers Thermal and Chemical Stability with High Surface Area. *Chemistry of Materials* **2006**, *18* (22), 5238-5243.
235. Bel Hadj Miled, O.; Boissiere, C.; Sanchez, C.; Livage, J., Spectro-Ellipsometric Studies of Activated Sol-Gel Thin Films to Detect Cu²⁺ Ions in Aqueous Solutions. *Journal of Physics and Chemistry of Solids* **2006**, *67* (8), 1775-1780.
236. Trabelsi, S.; Janke, A.; Hassler, R.; Zafeiropoulos, N. E.; Fornasieri, G.; Bocchini, S.; Rozes, L.; Stamm, M.; Gerard, J. F.; Sanchez, C., Novel Organo-Functional Titanium-Oxo-Cluster-Based Hybrid Materials with Enhanced Thermomechanical and Thermal Properties. *Macromolecules* **2005**, *38* (14), 6068-6078.
237. Sanchez, C.; Julian, B.; Belleville, P.; Popall, M., Applications of Hybrid Organic-Inorganic Nanocomposites. *Journal of Materials Chemistry* **2005**, *15* (35-36), 3559-3592.
238. Sanchez, C.; Arribart, H.; Guille, M. M. G., Biomimetism and Bioinspiration as Tools for the Design of Innovative Materials and Systems. *Nature Materials* **2005**, *4* (4), 277-288.
239. Sanchez, C., Advanced Functional Nanomaterials - From Nanoscale Objects to Nanostructured Inorganic and Hybrid Materials. *Progress in Solid State Chemistry* **2005**, *33* (2-4), 57-57.
240. Sanchez, C., State of the Art Developments in Functional Hybrid Materials. *Journal of Materials Chemistry* **2005**, *15* (35-36), 3557-3558.
241. Rozes, L.; Fornasieri, G.; Trabelsi, S.; Creton, C.; Zafeiropoulos, N. E.; Stamm, M.; Sanchez, C., Reinforcement of Polystyrene by Covalently Bonded Oxo-Titanium Clusters. *Progress in Solid State Chemistry* **2005**, *33* (2-4), 127-135.
242. Ribot, F.; Escax, V.; Roiland, C.; Sanchez, C.; Martins, J. C.; Biesemans, M.; Verbruggen, I.; Willem, R., In Situ Evaluation of Interfacial Affinity in CeO₂-Based Hybrid Nanoparticles by Pulsed Field Gradient NMR. *Chemical Communications* **2005**, (8), 1019-1021.
243. Ponton, A.; Barboux-Doeuff, S.; Sanchez, C., Physico-Chemical Control of Sol-Gel Transition of Titanium Alkoxide-Based Materials Studied by Rheology. *Journal of Non-Crystalline Solids* **2005**, *351* (1), 45-53.
244. Nicole, L.; Boissiere, C.; Grosso, D.; Quach, A.; Sanchez, C., Mesostructured Hybrid Organic-Inorganic Thin Films. *Journal of Materials Chemistry* **2005**, *15* (35-36), 3598-3627.
245. Martinez-Ferrero, E.; Ribot, F.; Rozes, L.; Sanchez, C.; Matejka, L., Functionalized Alkoxy Tin Clusters as Nanobuilding Blocks for Hybrid Materials. *Progress in Solid State Chemistry* **2005**, *33* (2-4), 89-97.
246. Mammeri, F.; Le Bourhis, E.; Rozes, L.; Sanchez, C., Mechanical Properties of Hybrid Organic-Inorganic Materials. *Journal of Materials Chemistry* **2005**, *15* (35-36), 3787-3811.
247. Llusar, M.; Monros, G.; Pozzo, J. L.; Roux, U.; Sanchez, C., Grafting of Gold Nanoparticles onto Organogelator-Templated Fibrous Mercaptosilica. *Zeitschrift Fur Anorganische Und Allgemeine Chemie* **2005**, *631* (11), 2215-2220.
248. Kuznetsov, A. I.; Kameneva, O.; Alexandrov, A.; Bityurin, N.; Marteau, P.; Chhor, K.; Sanchez, C.; Kanaev, A., Light-Induced Charge Separation and Storage in Titanium Oxide Gels. *Physical Review E* **2005**, *71* (2), 021403.

249. Kuemmel, M.; Grosso, D.; Boissiere, U.; Smarsly, B.; Brezesinski, T.; Albouy, P. A.; Amenitsch, H.; Sanchez, C., Thermally Stable Nanocrystalline γ -Alumina Layers with Highly Ordered 3D Mesoporosity. *Angewandte Chemie-International Edition* **2005**, *44* (29), 4589-4592.
250. Kameneva, O.; Kuznestov, A. I.; Smirnova, L. A.; Rozes, L.; Sanchez, C.; Alexandrov, A.; Biturin, N.; Chhor, K.; Kanaev, A., New Photoactive Hybrid Organic-Inorganic Materials Based on Titanium-Oxo-PHEMA Nanocomposites Exhibiting Mixed Valence Properties. *Journal of Materials Chemistry* **2005**, *15* (33), 3380-3383.
251. Julian, B.; Corberan, R.; Cordoncillo, E.; Escribano, P.; Viana, B.; Sanchez, C., One-pot Synthesis and Optical Properties of Eu³⁺-Doped Nanocrystalline TiO₂ and ZrO₂. *Nanotechnology* **2005**, *16* (11), 2707-2713.
252. In, M.; Sanchez, C., Growth versus Cyclization in the Early Stages of the Polycondensation of Metal Alkoxides. *Journal of Physical Chemistry B* **2005**, *109* (50), 23870-23878.
253. Gomez-Romero, P.; Sanchez, C., Hybrid Materials. Functional Properties. From Maya Blue to 21st Century Materials. *New Journal of Chemistry* **2005**, *29* (1), 57-58.
254. Goettmann, F.; Moores, A.; Boissiere, C.; Le Floch, P.; Sanchez, C., A Selective Chemical Sensor Based on the Plasmonic Response of Phosphinine-Stabilized Gold Nanoparticles Hosted on Periodically Organized Mesoporous Silica Thin Layers. *Small* **2005**, *1* (6), 636-639.
255. Goettmann, F.; Boissiere, C.; Grosso, D.; Mercier, F.; Le Floch, P.; Sanchez, C., New Hybrid Bidentate Ligands as Precursors for Smart Catalysts. *Chemistry - A European Journal* **2005**, *11* (24), 7416-7426.
256. Fornasieri, G.; Rozes, L.; Le Calve, S.; Alonso, B.; Massiot, D.; Rager, M. N.; Evain, M.; Boubekur, K.; Sanchez, C., Reactivity of Titanium Oxo Ethoxo Cluster Ti₁₆O₁₆(OEt)₃₂. Versatile Precursor of NanoBuilding Block-Based Hybrid Materials. *Journal of the American Chemical Society* **2005**, *127* (13), 4869-4878.
257. Etienne, M.; Grosso, D.; Boissiere, C.; Sanchez, C.; Walcarius, A., Electrochemical Evidences of Morphological Transformation in Ordered Mesoporous Titanium Oxide Thin Films. *Chemical Communications* **2005**, (36), 4566-4568.
258. de Zarate, D. O.; Boissiere, C.; Grosso, D.; Albouy, P. A.; Amenitsch, H.; Amoros, P.; Sanchez, C., Preparation of Multi-Nanocrystalline Transition Metal Oxide (TiO₂-NiTiO₃) Mesoporous Thin Films. *New Journal of Chemistry* **2005**, *29* (1), 141-144.
259. Carn, F.; Colin, A.; Achard, M. F.; Deleuze, H.; Sanchez, C.; Backov, R., Anatase and Rutile TiO₂ Macrocellular Foams: Air-Liquid Foaming Sol-Gel Process towards Controlling Cell Sizes, Morphologies, and Topologies. *Advanced Materials* **2005**, *17* (1), 62-+.
260. Brezesinski, T.; Smarsly, B.; Iimura, K.; Grosso, D.; Boissiere, C.; Amenitsch, H.; Antonietti, M.; Sanchez, C., Self-Assembly and Crystallization Behavior of Mesoporous, Crystalline HfO₂ Thin Films: A Model System for the Generation of Mesostructured Transition-Metal Oxides. *Small* **2005**, *1* (8-9), 889-898.
261. Boissiere, C.; Grosso, D.; Lepoutre, S.; Nicole, L.; Bruneau, A. B.; Sanchez, C., Porosity and Mechanical Properties of Mesoporous Thin Films Assessed by Environmental Ellipsometric Porosimetry. *Langmuir* **2005**, *21* (26), 12362-12371.
262. Bocchini, S.; Fornasieri, G.; Rozes, L.; Trabelsi, S.; Galy, J.; Zafeiropoulos, N. E.; Stamm, M.; Gerard, J. F.; Sanchez, C., New Hybrid Organic-Inorganic Nanocomposites Based on Functional Ti₁₆O₁₆(OEt)₂₄(OEMA)₈ Nano-Fillers. *Chemical Communications* **2005**, (20), 2600-2602.
263. Bel Hadj Miled, O.; Sanchez, C.; Livage, J., Spectroscopic Studies and Evanescent Optical Fibre Wave Sensing of Cu²⁺ Based on Activated Mesostructured Silica Matrix. *Journal of Materials Science* **2005**, *40* (17), 4523-4530.
264. Angelome, P. C.; Aldabe-Bilmes, S.; Calvo, M. E.; Crepaldi, E. L.; Grosso, D.; Sanchez, C.; Soler-Illia, G. J. A. A., Hybrid Non Silica Mesoporous Thin Films. *New Journal of Chemistry* **2005**, *29* (1), 59-63.
265. Soler-Illia, G. J. A. A.; Crepaldi, E. L.; Grosso, D.; Sanchez, C., Designed Synthesis of Large Pore Mesoporous Silica-Zirconia Thin Films with High Mixing Degree and Tunable Cubic or 2D-Hexagonal Mesostructure. *Journal of Materials Chemistry* **2004**, *14* (12), 1879-1886.

266. Smarsly, B.; Grosso, D.; Brezesinski, T.; Pinna, N.; Boissiere, C.; Antonietti, M.; Sanchez, C., Highly Crystalline Cubic Mesoporous TiO₂ with 10 nm Pore Diameter Made with a New Block Copolymer Template. *Chemistry of Materials* **2004**, *16* (15), 2948-2952.
267. Sanchez, C., NJC at the Heart of Modern Chemistry. *New Journal of Chemistry* **2004**, *28* (1), E1-E1.
268. Perez, M. D.; Otal, E.; Bilmes, S. A.; Soler-Illia, G. J. A. A.; Crepaldi, E. L.; Grosso, D.; Sanchez, C., Growth of Gold Nanoparticle Arrays in TiO₂ Mesoporous Matrixes. *Langmuir* **2004**, *20* (16), 6879-6886.
269. Nicole, L.; Boissière, C.; Grosso, D.; Hesemann, P.; Moreau, J.; Sanchez, C., Advanced Selective Optical Sensors Based on Periodically Organized Mesoporous Hybrid Silica Thin Films. *Chemical Communications* **2004**, 2312-2313.
270. Moores, A.; Goettmann, F.; Sanchez, C.; Le Floch, P., Phosphinine Stabilised Gold Nanoparticles: Synthesis and Immobilisation on Mesoporous Materials. *Chemical Communications* **2004**, (24), 2842-2843.
271. Minet, J.; Abramson, S.; Bresson, B.; Sanchez, C.; Montouillout, V.; Lequeux, N., New Layered Calcium Organosilicate Hybrids with Covalently Linked Organic Functionalities. *Chemistry of Materials* **2004**, *16* (20), 3955-3962.
272. Mammeri, F.; Le Bourhis, E.; Rozes, L.; Sanchez, C.; Huignard, A.; Lefevre, D., Time Dependence of the Indentation Behavior of Hybrid Coatings. *Journal of Non-Crystalline Solids* **2004**, *345-46*, 610-614.
273. Lebeau, B.; Patarin, J.; Sanchez, C., Design and Properties of Hierarchically Organized Hybrid Organic-Inorganic Nanocomposites. *Advances in Technology of Materials and Materials Processing* **2004**, *6* (2), 298-307.
274. Le Calvé, S.; Alonso, B.; Rozes, L.; Sanchez, C.; Rager, M. N.; Massiot, D., Structure and Surface Reactivity of Transition-Metal-Oxo-Organo Clusters: Contribution of Liquid and Solid State NMR to the Characterization of the Cluster Ti₁₆O₁₆(OEt)₃₂. *Comptes Rendus Chimie* **2004**, *7* (3-4), 241-248.
275. Julian, B.; Gervais, C.; Rager, M. N.; Maquet, J.; Cordoncillo, E.; Escribano, P.; Babonneau, F.; Sanchez, C., Solid State ¹⁷O NMR Characterization of PDMS-M_xO_y (M = Ge(IV), Ti(IV), Zr(IV), Nb(V), and Ta(V)) Organic-Inorganic Nanocomposites. *Chemistry of Materials* **2004**, *16* (3), 521-529.
276. Julian, B.; Corberan, R.; Cordoncillo, E.; Escribano, P.; Viana, B.; Sanchez, C., Synthesis and Optical Properties of Eu³⁺-Doped Inorganic-Organic Hybrid Materials Based on Siloxane Networks. *Journal of Materials Chemistry* **2004**, *14* (22), 3337-3343.
277. Innocenzi, P.; Falcaro, P.; Schergna, S.; Maggini, M.; Menna, E.; Amenitsch, H.; Soler-Illia, G. J. A. A.; Grosso, D.; Sanchez, C., One-pot Self-Assembly of Mesostructured Silica Films and Membranes Functionalised with Fullerene Derivatives. *Journal of Materials Chemistry* **2004**, *14* (12), 1838-1842.
278. Grosso, D.; Cagnol, F.; Soler-Illia, G. J. A. A.; Crepaldi, E. L.; Amenitsch, H.; Brunet-Bruneau, A.; Bourgeois, A.; Sanchez, C., Fundamentals of Mesostructuring through Evaporation-Induced Self-Assembly. *Advanced Functional Materials* **2004**, *14* (4), 309-322.
279. Grosso, D.; Boissiere, C.; Smarsly, B.; Brezesinski, T.; Pinna, N.; Albouy, P. A.; Amenitsch, H.; Antonietti, M.; Sanchez, C., Periodically Ordered Nanoscale Islands and Mesoporous Films Composed of Nanocrystalline Multimetallic Oxides. *Nature Materials* **2004**, *3* (11), 787-792.
280. Goettmann, F.; Grosso, D.; Mercier, F.; Mathey, F.; Sanchez, C., New P^ΛO Ligand Grafted on Periodically Organised Mesoporous Silicas for One-pot Bifunctional Catalysis: Coupling of Base Catalysed Knoevenagel Condensation with In Situ Rh Catalysed Hydrogenation. *Chemical Communications* **2004**, (10), 1240-1241.
281. Gervais, C.; Veautier, D.; Smith, M. E.; Babonneau, F.; Belleville, P.; Sanchez, C., Solid State ^{47,49}Ti, ⁸⁷Sr and ¹³⁷Ba NMR Characterisation of Mixed Barium/Strontium Titanate Perovskites. *Solid State Nuclear Magnetic Resonance* **2004**, *26* (3-4), 147-152.
282. Cagnol, F.; Grosso, D.; Sanchez, C., A General One-pot Process Leading to Highly Functionalised Ordered Mesoporous Silica Films. *Chemical Communications* **2004**, (15), 1742-1743.
283. Brunet-Bruneau, A.; Bourgeois, A.; Cagnol, F.; Grosso, D.; Sanchez, C.; Rivory, J., An In-Situ Study of Mesostructured CTAB-Silica Film Formation using Infrared Ellipsometry: Evolution of Water Content. *Thin Solid Films* **2004**, *455-56*, 656-660.

284. Bourgeois, A.; Bruneau, A. B.; Fisson, S.; Demarets, B.; Grosso, D.; Cagnol, F.; Sanchez, C.; Rivory, J., Determination of Pore Size Distribution in Thin Organized Mesoporous Silica Films by Spectroscopic Ellipsometry in the Visible and Infrared Range. *Thin Solid Films* **2004**, *447*, 46-50.
285. Bouchara, A.; Mosser, G.; Siker-Illia, G.; Chane-Ching, J. Y.; Sanchez, C., Texturation of Nanocrystalline CeO₂-Based Materials in the Presence of Poly- γ -Benzyl-L-Glutamate. *Journal of Materials Chemistry* **2004**, *14* (14), 2347-2354.
286. Bel Hadj Miled, O.; Grosso, D.; Sanchez, C.; Livage, J., An Optical Fibre pH Sensor Based on Dye Doped Mesostructured Silica. *Journal of Physics and Chemistry of Solids* **2004**, *65* (10), 1751-1755.
287. Areva, S.; Boissiere, C.; Grosso, D.; Asakawa, T.; Sanchez, C.; Linden, M., One-pot Aerosol Synthesis of Ordered Hierarchical Mesoporous Core-Shell Silica Nanoparticles. *Chemical Communications* **2004**, (14), 1630-1631.
288. Znaidi, L.; Illia, G.; Le Guennic, R.; Sanchez, C.; Kanaev, A., Elaboration of ZnO Thin Films with Preferential Orientation by a Soft Chemistry Route. *Journal of Sol-Gel Science and Technology* **2003**, *26* (1-3), 817-821.
289. Znaidi, L.; Illia, G.; Benyahia, S.; Sanchez, C.; Kanaev, A. V., Oriented ZnO Thin Films Synthesis by Sol-Gel Process for Laser Application. *Thin Solid Films* **2003**, *428* (1-2), 257-262.
290. Willemain, S.; Arrachart, G.; Lecren, L.; Larionova, J.; Coradin, T.; Clerac, R.; Mallah, T.; Guerin, C.; Sanchez, M., Immobilisation of Single Molecule Magnets in Mesoporous Silica Hosts. *New Journal of Chemistry* **2003**, *27* (10), 1533-1539.
291. Soler-Illia, G. J. A. A.; Crepaldi, E. L.; Grosso, D.; Sanchez, C., Block Copolymer-Templated Mesoporous Oxides. *Current Opinion in Colloid & Interface Science* **2003**, *8* (1), 109-126.
292. Sanchez, C.; Soler-Illia, G. J. A. A.; Ribot, F.; Grosso, D., Design of Functional Nanostructured Materials through the Use of Controlled Hybrid Organic-Inorganic Interfaces. *Comptes Rendus Chimie* **2003**, *6* (8-10), 1131-1151.
293. Sanchez, C.; Lebeau, B.; Chaput, F.; Boilot, J. P., Optical Properties of Functional Hybrid Organic-Inorganic Nanocomposites. *Advanced Materials* **2003**, *15* (23), 1969-1994.
294. Roux, S.; Soler-Illia, G. J. A. A.; Demoustier-Champagne, S.; Audebert, P.; Sanchez, C., Titania-Polypyrrole Hybrid Nanocomposites Built from In-Situ Generated Organically Functionalized Nanoanatase Building Blocks. *Advanced Materials* **2003**, *15* (3), 217-+.
295. Mammeri, F.; Rozes, L.; Sanchez, C.; Le Bourhis, E., Mechanical Properties of SiO₂-PMMA Based Hybrid Organic-Inorganic Thin Films. *Journal of Sol-Gel Science and Technology* **2003**, *26* (1-3), 413-417.
296. Llusar, M.; Roux, C.; Pozzo, J. L.; Sanchez, C., Design of Organically Functionalised Hybrid Silica Fibres through the Use of Anthracenic Organogelators. *Journal of Materials Chemistry* **2003**, *13* (3), 442-444.
297. Llusar, M.; Monros, G.; Roux, C.; Pozzo, J. L.; Sanchez, C., One-pot synthesis of Phenyl- and Amine-Functionalized Silica Fibers through the Use of Anthracenic and Phenazinic Organogelators. *Journal of Materials Chemistry* **2003**, *13* (10), 2505-2514.
298. Lebeau, B.; Marichal, C.; Mirjol, A.; Soler-Illia, G. J. A. A.; Buestrich, R.; Popall, M.; Mazerolles, L.; Sanchez, C., Synthesis of Highly Ordered Mesoporous Hybrid Silica from Aromatic Fluorinated Organosilane Precursors. *New Journal of Chemistry* **2003**, *27* (1), 166-171.
299. Lafuma, A.; Fayon, F.; Massiot, D.; Chodorowski-Kimmes, S.; Sanchez, C., Solid State NMR Characterization of Oxygen Sites in Organically Modified Aluminosilicate Xerogels. *Magnetic Resonance in Chemistry* **2003**, *41* (11), 944-948.
300. Lafuma, A.; Chodorowski-Kimmes, S.; Quinn, F. X.; Sanchez, C., 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. *European Journal of Inorganic Chemistry* **2003**, (2), 331-338.
301. Julian, B.; Gervais, C.; Cordoncillo, E.; Escribano, P.; Babonneau, F.; Sanchez, C., Synthesis and Characterization of Transparent PDMS-Metal-Oxo Based Organic-Inorganic Nanocomposites. *Chemistry of Materials* **2003**, *15* (15), 3026-3034.

302. Julian, B.; Beltran, H.; Cordoncillo, E.; Escribano, P.; Viana, B.; Sanchez, C., Influence of the Matrix in the Optical Response of Organic-Inorganic Hybrid Materials Doped with Europium(III). *Journal of Sol-Gel Science and Technology* **2003**, *26* (1-3), 977-980.
303. Grosso, D.; Soler-Illia, G. J. A. A.; Crepaldi, E. L.; Cagnol, F.; Sinturel, C.; Bourgeois, A.; Brunet-Bruneau, A.; Amenitsch, H.; Albouy, P. A.; Sanchez, C., Highly Porous TiO₂ Anatase Optical Thin Films with Cubic Mesostructure Stabilized at 700°C. *Chemistry of Materials* **2003**, *15* (24), 4562-4570.
304. Grosso, D.; Illia, G.; Crepaldi, E. L.; Charleux, B.; Sanchez, C., Nanocrystalline Transition-Metal Oxide Spheres with Controlled Multi-Scale Porosity. *Advanced Functional Materials* **2003**, *13* (1), 37-42.
305. Grosso, D.; Babonneau, F.; Sanchez, C.; Soler-Illia, G. J. A. A.; Crepaldi, E. L.; Albouy, P. A.; Amenitsch, H.; Balkenende, A. R.; Brunet-Bruneau, A., A First Insight in the Mechanisms Involved in the Self-Assembly of 2D-Hexagonal Templated SiO₂ and TiO₂ Mesostructured Films During Dip-Coating. *Journal of Sol-Gel Science and Technology* **2003**, *26* (1-3), 561-565.
306. Gibaud, A.; Grosso, D.; Smarsly, B.; Baptiste, A.; Bardeau, J. F.; Babonneau, F.; Doshi, D. A.; Chen, Z.; Brinker, C. J.; Sanchez, C., Evaporation-Controlled Self-Assembly of Silica Surfactant Mesophases. *Journal of Physical Chemistry B* **2003**, *107* (25), 6114-6118.
307. Crepaldi, E. L.; Soler-Illia, G. J. A. A.; Grosso, D.; Sanchez, M., Nanocrystallised Titania and Zirconia Mesoporous Thin Films Exhibiting Enhanced Thermal Stability. *New Journal of Chemistry* **2003**, *27* (1), 9-13.
308. Crepaldi, E. L.; Soler-Illia, G. J. A. A.; Grosso, D.; Cagnol, F.; Ribot, F.; Sanchez, C., Controlled Formation of Highly Organized Mesoporous Titania Thin Films: From Mesostructured Hybrids to Mesoporous Nanoanatase TiO₂. *Journal of the American Chemical Society* **2003**, *125* (32), 9770-9786.
309. Crepaldi, E. L.; Soler-Illia, G. J. A. A.; Bouchara, A.; Grosso, D.; Durand, D.; Sanchez, C., Controlled Formation of Highly Ordered Cubic and Hexagonal Mesoporous Nanocrystalline Ytria-Zirconia and Ceria-Zirconia Thin Films Exhibiting High Thermal Stability. *Angewandte Chemie-International Edition* **2003**, *42* (3), 347-+.
310. Cagnol, F.; Grosso, D.; Soler-Illia, G. J. A. A.; Crepaldi, E. L.; Babonneau, F.; Amenitsch, H.; Sanchez, C., Humidity-Controlled Mesostructuration in CTAB-Templated Silica Thin Film Processing. The Existence of a Modulable Steady State. *Journal of Materials Chemistry* **2003**, *13* (1), 61-66.
311. Bouchara, A.; Rozes, L.; Soler-Illia, G. J. A. A.; Sanchez, C.; Turrin, C. O.; Caminade, A. M.; Majoral, J. P., Use of Functional Dendritic Macromolecules for the Design of Metal Oxo Based Hybrid Materials. *Journal of Sol-Gel Science and Technology* **2003**, *26* (1-3), 629-633.
312. Boissiere, C.; Grosso, D.; Amenitsch, H.; Gibaud, A.; Coupe, A.; Baccile, N.; Sanchez, C., First In-Situ SAXS Studies of the Mesostructuration of Spherical Silica and Titania Particles During Spray-Drying Process. *Chemical Communications* **2003**, (22), 2798-2799.
313. Baccile, N.; Grosso, D.; Sanchez, C., Aerosol Generated Mesoporous Silica Particles. *Journal of Materials Chemistry* **2003**, *13* (12), 3011-3016.
314. Vivas-Reyes, R.; De Proft, F.; Geerlings, P.; Biesemans, M.; Willem, R.; Ribot, F.; Sanchez, C., A DFT and HF Quantum Chemical Study of the Tin Nanocluster [(RSn)₁₂O₁₄(OH)₆]²⁺ and its Interactions with Anions and Neutral Nucleophiles: Confrontation with Experimental Data. *New Journal of Chemistry* **2002**, *26* (9), 1108-1117.
315. Steunou, N.; Forster, S.; Florian, P.; Sanchez, C.; Antonietti, M., Synthesis of Nanostructured Polymer-Titanium Oxide Composites through the Assembly of Titanium-Oxo Clusters and Amphiphilic Block Copolymers Micelles. *Journal of Materials Chemistry* **2002**, *12* (12), 3426-3430.
316. Soler-Illia, G. J. A. A.; Sanchez, C.; Lebeau, B.; Patarin, J., Chemical Strategies to Design Textured Materials: From Microporous and Mesoporous Oxides to Nanonetworks and Hierarchical Structures. *Chemical Reviews* **2002**, *102* (11), 4093-4138.
317. Soler-Illia, G. J. A. A.; Louis, A.; Sanchez, C., Synthesis and Characterization of Mesostructured Titania-Based Materials through Evaporation-Induced Self-Assembly. *Chemistry of Materials* **2002**, *14* (2), 750-759.
318. Soler-Illia, G. J. A. A.; Crepaldi, E. L.; Grosso, D.; Durand, D.; Sanchez, C., Structural Control in Self-Standing Mesostructured Silica Oriented Membranes and Xerogels. *Chemical Communications* **2002**, (20), 2298-2299.

319. Ribot, F.; Lafuma, A.; Eychenne-Baron, C.; Sanchez, C., New Photochromic Hybrid Organic-Inorganic Materials Built from Well-Defined Nanobuilding Blocks. *Advanced Materials* **2002**, *14* (20), 1496-+.
320. Pídol, L.; Grosso, D.; Soler-Illia, G. J. A. A.; Crepaldi, E. L.; Sanchez, C.; Albouy, P. A.; Amenitsch, H.; Euzen, P., Hexagonally Organised Mesoporous Aluminium-Oxo-Hydroxide Thin Films Prepared by the Template Approach. In-Situ Study of the Structural Formation. *Journal of Materials Chemistry* **2002**, *12* (3), 557-564.
321. Nossou, A.; Haddad, E.; Guenneau, F.; Mignon, C.; Gedeon, A.; Grosso, D.; Babonneau, F.; Bonhomme, C.; Sanchez, C., The First Direct Probing of Porosity on Supported Mesoporous Silica Thin Films through Hyperpolarised ^{129}Xe NMR. *Chemical Communications* **2002**, (21), 2476-2477.
322. Llusar, M.; Pídol, L.; Roux, C.; Pozzo, J. L.; Sanchez, C., Templated Growth of Alumina-Based Fibers through the Use of Anthracenic Organogelators. *Chemistry of Materials* **2002**, *14* (12), 5124-5133.
323. de Monredon, S.; Cellot, A.; Ribot, F.; Sanchez, C.; Armelao, L.; Gueneau, L.; Delattre, L., Synthesis and Characterization of Crystalline Tin Oxide Nanoparticles. *Journal of Materials Chemistry* **2002**, *12* (8), 2396-2400.
324. Crepaldi, E. L.; Grosso, D.; Soler-Illia, G. J. A. A.; Albouy, P. A.; Amenitseh, H.; Sanchez, C., Formation and Stabilization of Mesostructured Vanadium-Oxo-Based Hybrid Thin Films. *Chemistry of Materials* **2002**, *14* (8), 3316-3325.
325. Cordoncillo, E.; Escribano, P.; Guaita, F. J.; Philippe, C.; Viana, B.; Sanchez, C., Optical Properties of Lanthanide Doped Hybrid Organic-Inorganic Materials. *Journal of Sol-Gel Science and Technology* **2002**, *24* (2), 155-165.
326. Coradin, T.; Larionova, J.; Smith, A. A.; Rogez, G.; Clerac, R.; Guerin, C.; Blondin, G.; Winpenny, R. E. P.; Sanchez, C.; Mallah, T., Magnetic Nanocomposites Built by Controlled Incorporation of Magnetic Clusters into Mesoporous Silicates. *Advanced Materials* **2002**, *14* (12), 896-898.
327. Bouchara, A.; Soler-Illia, G. J. A. A.; Chane-Ching, J. Y.; Sanchez, C., Nanotectonic Approach of the Texturation of CeO_2 Based Nanomaterials. *Chemical Communications* **2002**, (11), 1234-1235.
328. Bensaude-Vincent, B.; Arribart, H.; Bouligand, Y.; Sanchez, C. M., Chemists and the School of Nature. *New Journal of Chemistry* **2002**, *26* (1), 1-5.
329. Backov, R.; Morgan, A. N.; Lane, S.; Perez-Cordero, E. E.; Williams, K.; Meisel, M. W.; Sanchez, C.; Talham, D. R., Lyotropic Phase from Hybrid Organic-Inorganic Layered Copper Hydroxides. *Molecular Crystals and Liquid Crystals* **2002**, *376*, 127-134.
330. Steunou, N.; Portal, R.; Sanchez, C., Carboxylic Acids as an Oxolation Source for the Synthesis of Titanium Oxo-Organic Clusters. *High Pressure Research* **2001**, *20* (1-6), 63-70.
331. Soloviev, A.; Tufeu, R.; Sanchez, C.; Kanaev, A. V., Nucleation Stage in the $\text{Ti}(\text{O}^i\text{Pr})_4$ Sol-Gel Process. *Journal of Physical Chemistry B* **2001**, *105* (19), 4175-4180.
332. Soler-Illia, G. J. A. A.; Scolan, E.; Louis, A.; Albouy, P. A.; Sanchez, C., Design of Meso-Structured Titanium-Oxo Based Hybrid Organic-Inorganic Networks. *New Journal of Chemistry* **2001**, *25* (1), 156-165.
333. Sanchez, C.; Soler-Illia, G. J. A. A.; Ribot, F.; Lalot, T.; Mayer, C. R.; Cabuil, V., Designed Hybrid Organic-Inorganic Nanocomposites from Functional Nanobuilding Blocks. *Chemistry of Materials* **2001**, *13* (10), 3061-3083.
334. Sanchez, C.; Lebeau, B., Design and Properties of Hybrid Organic-Inorganic Nanocomposites for Photonics. *MRS Bulletin* **2001**, *26* (5), 377-387.
335. Ribot, F.; Sanchez, C.; Biesemans, M.; Mercier, F. A. G.; Martins, J. C.; Gielen, M.; Willem, R., Di-nButyltin Methyl and Phenylphosphonates. *Organometallics* **2001**, *20* (12), 2593-2603.
336. Ponton, A.; Griesmar, P.; Barboux-Doeuff, S.; Sanchez, C., Rheological Investigation of the Sol-Gel Transition: Effect of Hydrolysis Variation in Silicon Oxide and Titanium Oxide Based Matrices. *Journal of Materials Chemistry* **2001**, *11* (12), 3125-3129.
337. Judeinstein, P.; Rault, J.; Alonso, B.; Sanchez, C., Macroscopic-Microscopic Mechanical Relaxation Behavior of Hybrid Organic-Inorganic Materials. *Journal of Polymer Science Part B-Polymer Physics* **2001**, *39* (6), 645-650.

338. Grosso, D.; Soler-Illia, G. J. A. A.; Babonneau, F.; Sanchez, C.; Albouy, P. A.; Brunet-Bruneau, A.; Balkenende, A. R., Highly Organized Mesoporous Titania Thin Films Showing Mono-Oriented 2D Hexagonal Channels. *Advanced Materials* **2001**, *13* (14), 1085-+.
339. Crepaldi, E. L.; Soler-Illia, G. J. A. A.; Grosso, D.; Albouy, P. A.; Sanchez, C., Design and Post-Functionalisation of Ordered Mesoporous Zirconia Thin Films. *Chemical Communications* **2001**, (17), 1582-1583.
340. Cordoncillo, E.; Guaita, F. J.; Escribano, P.; Philippe, C.; Viana, B.; Sanchez, C., Blue Emitting Hybrid Organic-Inorganic Materials. *Optical Materials* **2001**, *18* (3), 309-320.
341. Soler-Illia, G. J. A. A.; Sanchez, C., Interactions between Poly(ethylene oxide)-Based Surfactants and Transition Metal Alkoxides: Their Role in the Templated Construction of Mesostructured Hybrid Organic-Inorganic Composites. *New Journal of Chemistry* **2000**, *24* (7), 493-499.
342. Soler-Illia, G. J. A. A.; Rozes, L.; Boggiano, M. K.; Sanchez, C.; Turrin, C. O.; Caminade, A. M.; Majoral, J. P., New Mesotextured Hybrid Materials Made from Assemblies of Dendrimers and Titanium(IV)-Oxo-Organo Clusters. *Angewandte Chemie-International Edition* **2000**, *39* (23), 4250-+.
343. Sanchez, C.; Ribot, F.; Rozes, L.; Alonso, B., Design of Hybrid Organic-Inorganic Nanocomposites Synthesized via Sol-Gel Chemistry. *Molecular Crystals and Liquid Crystals* **2000**, *354*, 731-746.
344. Sanchez, C.; Lebeau, B.; Ribot, F.; In, M., Molecular Design of Sol-Gel Derived Hybrid Organic-Inorganic Nanocomposites. *Journal of Sol-Gel Science and Technology* **2000**, *19* (1-3), 31-38.
345. Ponton, A.; Barboux-Doeuff, S.; Sanchez, C., Rheology of Titanium Oxide Based Gels: Determination of Gelation Time versus Temperature. *Colloids and Surfaces a-Physicochemical and Engineering Aspects* **2000**, *162* (1-3), 177-192.
346. Monticone, S.; Tufeu, R.; Kanaev, A. V.; Scolan, E.; Sanchez, C., Quantum Size Effect in TiO₂ Nanoparticles: Does It Exist? *Applied Surface Science* **2000**, *162*, 565-570.
347. Lebeau, B.; Fowler, C. E.; Mann, S.; Farcet, C.; Charleux, B.; Sanchez, C., Synthesis of Hierarchically Ordered Dye-Functionalised Mesoporous Silica with Macroporous Architecture by Dual Templating. *Journal of Materials Chemistry* **2000**, *10* (9), 2105-2108.
348. Eychenne-Baron, C.; Ribot, F.; Steunou, N.; Sanchez, C.; Fayon, F.; Biesemans, M.; Martins, J. C.; Willem, R., Reaction of Butyltin Hydroxide Oxide with p-Toluenesulfonic Acid: Synthesis, X-ray Crystal Analysis and Multinuclear NMR Characterization of {(BuSn)₁₂O₁₄(OH)₆}(4-CH₃C₆H₄SO₃)₂. *Organometallics* **2000**, *19* (10), 1940-1949.
349. Cordoncillo, E.; Carda, J.; Beltran, H.; Guaita, F. J.; Barrio, A.; Escribano, P.; Viana, B.; Sanchez, C., Optical Response of Ce(III) and Eu(II) Doped Hybrid Materials Synthesised by Sol-Gel Processing. *Boletin De La Sociedad Espanola De Ceramica Y Vidrio* **2000**, *39* (1), 95-103.
350. Clavier, G. M.; Pozzo, J. L.; Bouas-Laurent, H.; Liere, C.; Roux, C.; Sanchez, C., Organogelators for Making Porous Sol-Gel Derived Silica at Two Different Length Scales. *Journal of Materials Chemistry* **2000**, *10* (7), 1725-1730.
351. Blanchard, J.; Ribot, F.; Sanchez, C.; Bellot, P. V.; Trokiner, A., Structural Characterization of Titanium-Oxo-Polymers Synthesized in the Presence of Protons or Complexing Ligands as Inhibitors. *Journal of Non-Crystalline Solids* **2000**, *265* (1-2), 83-97.
352. Alonso, B.; Sanchez, C., Structural Investigation of Polydimethylsiloxane-Vanadate Hybrid Materials. *Journal of Materials Chemistry* **2000**, *10* (2), 377-386.
353. Alonso, B.; Maquet, J.; Sanchez, C., Glass Transition of Polydimethylsiloxane-Vanadate Hybrid Materials Studied through ¹⁷O and ⁵¹V NMR. *Journal of Non-Crystalline Solids* **2000**, *277* (1), 58-62.

1990-1999 :

354. Steunou, N.; Ribot, F.; Boubekour, K.; Maquet, J.; Sanchez, C., Ketones as an Oxolation Source for the Synthesis of Titanium-Oxo-Organo Clusters. *New Journal of Chemistry* **1999**, *23* (11), 1079-1086.
355. Steunou, N.; Kickelbick, G.; Boubekour, K.; Sanchez, C. M., A New Polyoxo-Alkoxo Titanium Cluster of the Keggin Family: Synthesis and Characterization by X-ray Diffraction and NMR Spectroscopy. *Journal of the Chemical Society-Dalton Transactions* **1999**, (21), 3653-3655.

356. Scolan, E.; Magnenet, C.; Massiot, D.; Sanchez, C., Surface and Bulk Characterisation of Titanium-Oxo Clusters and Nanosized Titania Particles through ^{17}O Solid State NMR. *Journal of Materials Chemistry* **1999**, *9* (10), 2467-2474.
357. Sanchez, C.; Ribot, F.; Lebeau, B., Molecular Design of Hybrid Organic-Inorganic Nanocomposites Synthesized via Sol-Gel Chemistry. *Journal of Materials Chemistry* **1999**, *9* (1), 35-44.
358. Ribot, F. O.; Eychenne-Baron, C.; Sanchez, C., Monoorganotin Oxo-Clusters: Versatile Nanobuilding Blocks for Hybrid Organic-Inorganic Materials. *Phosphorus Sulfur and Silicon and the Related Elements* **1999**, *151*, 41-58.
359. Ribot, F.; Sanchez, C., Organically Functionalized Metallic Oxo-Clusters: Structurally well-Defined Nanobuilding Blocks for the Design of Hybrid Organic-Inorganic Materials. *Comments on Inorganic Chemistry* **1999**, *20* (4-6), 327-371.
360. Livage, J.; Sanchez, C., Optical Properties of Sol-Gel Films. *Nonlinear Optics* **1999**, *21*, 125.
361. Lebeau, B.; Sanchez, C., Sol-Gel Derived Hybrid Inorganic-Organic Nanocomposites for Optics. *Current Opinion in Solid State & Materials Science* **1999**, *4* (1), 11-23.
362. Guermeur, C.; Lambard, J.; Gerard, J. F.; Sanchez, C., Hybrid Polydimethylsiloxane-Zirconium-Oxo Nanocomposites. Part 1: Characterization of the Matrix and the Siloxane-Zirconium Oxo Interface. *Journal of Materials Chemistry* **1999**, *9* (3), 769-778.
363. Steunou, N.; Robert, F.; Boubekeur, K.; Ribot, F.; Sanchez, C., Synthesis through an In-Situ Esterification Process and Characterization of Oxo-Isopropoxo Titanium Clusters. *Inorganica Chimica Acta* **1998**, *279* (2), 144-151.
364. Steunou, N.; Bonhomme, C.; Sanchez, C.; Vaissermann, J.; Hubert-Pfalzgraf, L. G., A Tetranuclear Niobium Oxoacetate Complex. Synthesis, X-ray Crystal Structure and Characterization by Solid State and Liquid State NMR Spectroscopy. *Inorganic Chemistry* **1998**, *37* (5), 901-910.
365. Scolan, E.; Sanchez, C., Synthesis and Characterization of Surface Protected Nanocrystalline Titania Particles. *Chemistry of Materials* **1998**, *10* (10), 3217-3223.
366. Ribot, F.; Sanchez, C.; Willem, R.; Martins, J. C.; Biesemans, M., Solution and Solid State Multinuclear NMR Investigation of the Structure of $\{(\text{BuSn})_{12}\text{O}_{14}(\text{OH})_6\}(\text{O}_2\text{PPh}_2)_2$. *Inorganic Chemistry* **1998**, *37* (5), 911-917.
367. Ribot, F.; Sanchez, C.; Meddour, A.; Gielen, M.; Tiekink, E. R. T.; Biesemans, M.; Willem, R., On the Assignment of ^{119}Sn Resonances of Bisdicarboxylatotetraorgano-distannoxanes in Solution and Solid State ^{119}Sn NMR Spectra. *Journal of Organometallic Chemistry* **1998**, *552* (1-2), 177-186.
368. Ponton, A.; Barboux-Doeuff, S.; Sanchez, C.; Flaud, P., Etude Rhéologique de Gels d'Oxyde de Titane. Rhéologie des Matériaux du Vivant / Rheological Study of Titanium Oxide Gels. *Les Cahiers de Rhéologie* **1998**, *16* (3), 158-165.
369. Livage, J.; Sanchez, C.; Babonneau, F., Molecular Precursors Routes to Inorganic Solids. *Chemistry of Advanced Materials* **1998**, 389-447.
370. Jaumier, P.; Jouscaume, B.; Lahcini, M.; Ribot, F.; Sanchez, C., New Route to Monoorganotin Oxides and Alkoxides from Trialkynylorganotins. *Chemical Communications* **1998**, (3), 369-370.
371. Eychenne-Baron, C.; Ribot, F.; Sanchez, C., New Synthesis of the Nanobuilding Block $\{(\text{BuSn})_{12}\text{O}_{14}(\text{OH})_6\}^{2+}$ and exchange properties of $\{(\text{BuSn})_{12}\text{O}_{14}(\text{OH})_6\}(\text{O}_3\text{SC}_6\text{H}_4\text{CH}_3)_2$. *Journal of Organometallic Chemistry* **1998**, *567* (1-2), 137-142.
372. Cordoncillo, E.; Viana, B.; Escribano, P.; Sanchez, C., Room Temperature Synthesis of Hybrid Organic-Inorganic Nanocomposites Containing Eu^{2+} . *Journal of Materials Chemistry* **1998**, *8* (3), 507-509.
373. Cattey, H.; Audebert, P.; Sanchez, C.; Hapiot, P., Electrochemical Investigations on Liquid State Polymerizing Systems: Case of Sol-Gel Polymerization of Transition Metal Alkoxides. *Journal of Physical Chemistry B* **1998**, *102* (7), 1193-1202.
374. Blanchard, J.; In, M.; Schaudel, B.; Sanchez, C., Hydrolysis and Condensation Reactions of Transition Metal Alkoxides: Calorimetric Study and Evaluation of the Extent of Reaction. *European Journal of Inorganic Chemistry* **1998**, (8), 1115-1127.
375. Blanchard, J.; Bonhomme, C.; Maquet, J.; Sanchez, C., Characterisation of Sol-Gel Derived Titanium Oxopolymers: First Evidence of Ti-OH Groups through ^1H - ^{17}O CP NMR Experiments. *Journal of Materials Chemistry* **1998**, *8* (4), 985-989.

376. Blanc, D.; Peyrot, P.; Sanchez, C.; Gonnet, C., Nonlinear Hybrid Materials: a Potential for Integrated Light Sources. *Optical Engineering* **1998**, *37* (4), 1203-1207.
377. Alonso, B.; Maquet, J.; Viana, B.; Sanchez, C., Hybrid Organic-Inorganic Polydimethylsiloxane-Vanadium-Oxo Materials Crosslinked at the Molecular Level. *New Journal of Chemistry* **1998**, *22* (9), 935-939.
378. Willem, R.; Bouhdid, A.; Meddour, A.; Camacho-Camacho, C.; Mercier, F.; Gielen, M.; Biesemans, M.; Ribot, F.; Sanchez, C.; Tiekink, E. R. T., X-ray Diffraction and 2D Gradient Assisted ^1H - ^{119}Sn HMQC NMR Studies of Structures Obtained from Nucleophilic Substitutions on Dimethyltin(IV) Salicylaloximates. *Organometallics* **1997**, *16* (20), 4377-4385.
379. Schaudel, B.; Guermeur, C.; Sanchez, C.; Nakatani, K.; Delaire, J. A., Spirooxazine and Spiropyran Doped Hybrid Organic-Inorganic Matrices with very Fast Photochromic Responses. *Journal of Materials Chemistry* **1997**, *7* (1), 61-65.
380. Ribot, F.; Banse, F.; Sanchez, C.; Lahcini, M.; Jousseume, B., Hybrid Organic-Inorganic Copolymers Based on Oxo-Hydroxo Organotin Nanobuilding Blocks. *Journal of Sol-Gel Science and Technology* **1997**, *8* (1-3), 529-533.
381. Lebeau, B.; Maquet, J.; Sanchez, C.; Beaume, F.; Laupretre, F., Structural and Dynamical Studies of Hybrid Siloxane-Silica Materials. *Journal of Materials Chemistry* **1997**, *7* (6), 989-995.
382. Lebeau, B.; Brasselet, S.; Zyss, J.; Sanchez, C., Design, Characterization, and Processing of Hybrid Organic-Inorganic Coatings with very High Second Order Optical Non Linearities. *Chemistry of Materials* **1997**, *9* (4), 1012-1020.
383. Davidson, P.; Batail, P.; Gabriel, J. C. P.; Livage, J.; Sanchez, C.; Bourgaux, C., Mineral Liquid Crystalline Polymers. *Progress in Polymer Science* **1997**, *22* (5), 913-936.
384. Cattet, H.; Audebert, P.; Sanchez, C.; Hapiot, P., Electrochemical Investigations on the Sol-Gel Polymerization of Transition Metal Alkoxides. *Journal of Materials Chemistry* **1997**, *7* (8), 1461-1466.
385. Angiolini, L.; Caretti, D.; De Vito, R.; Niesel, F. T.; Salatelli, E.; Carlini, C.; Ribot, F.; Sanchez, C., Hybrid Organic-Inorganic Copolymers from Oxo-Hydroxo Organotin Dimethacrylate and Methyl Methacrylate. *Journal of Inorganic and Organometallic Polymers* **1997**, *7* (3), 151-162.
386. Sanchez, C.; Lebeau, B., Hybrid Organic-Inorganic Materials with Second Order Optical Nonlinearities Synthesized via Sol-Gel Chemistry. *Pure and Applied Optics* **1996**, *5* (5), 689-699.
387. Lebeau, B.; Sanchez, C.; Brasselet, S.; Zyss, J.; Froc, G.; Dumont, M., Large Second Order Optical Nonlinearities in Azo Dyes Grafted Hybrid Sol-Gel Coatings. *New Journal of Chemistry* **1996**, *20* (1), 13-18.
388. Judeinstein, P.; Sanchez, C., Hybrid Organic-Inorganic Materials: A Land of Multi-Disciplinarity. *Journal of Materials Chemistry* **1996**, *6* (4), 511-525.
389. Gabriel, J. C. P.; Sanchez, C.; Davidson, P., Observation of Nematic Liquid-Crystal Textures in Aqueous Gels of Smectite Clays. *Journal of Physical Chemistry* **1996**, *100* (26), 11139-11143.
390. Cattet, H.; Audebert, P.; Sanchez, C., Modified Electrodes from Organic-Inorganic Gels Issued from the Polycondensation of Functionalized Zirconium Alkoxides. *New Journal of Chemistry* **1996**, *20* (10), 1023-1030.
391. Viana, B.; Koslova, N.; Aschehoug, P.; Sanchez, C., Optical Properties of Neodymium and Dysprosium Doped Hybrid Siloxane-Oxide Coatings. *Journal of Materials Chemistry* **1995**, *5* (5), 719-724.
392. Ribot, F.; Banse, F.; Diter, F.; Sanchez, C., Hybrid Organic-Inorganic Supramolecular Assemblies Made from Butyltin Oxo-Hydroxo Nanobuilding Blocks and Dicarboxylates. *New Journal of Chemistry* **1995**, *19* (11), 1145-1153.
393. Jousseume, B.; Lahcini, M.; Rasclé, M.-C.; Ribot, F.; Sanchez, C., General Routes to Functional Organotin Trichlorides and Trialkoxides Involving the Tricyclohexylstannyl Group. *Organometallics* **1995**, *14* (2), 685-689.
394. In, M.; Gerardin, C.; Lambard, J.; Sanchez, C., Transition Metal Based Hybrid Organic-Inorganic Copolymers. *Journal of Sol-Gel Science and Technology* **1995**, *5* (2), 101-114.
395. Blanchard, J.; Barbouxdoeuff, S.; Maquet, J.; Sanchez, C., Investigation on Hydrolysis-Condensation Reactions of Titanium(IV) Butoxide. *New Journal of Chemistry* **1995**, *19* (8-9), 929-941.

396. Banse, F.; Ribot, F.; Toledano, P.; Maquet, J.; Sanchez, C., Hydrolysis of Monobutyltin Trialkoxides: Synthesis and Characterizations of $\{(BuSn)_{12}O_{14}(OH)_6\}(OH)_2$. *Inorganic Chemistry* **1995**, *34* (25), 6371-6379.
397. Sanchez, C.; Ribot, F., Design of Hybrid Organic-Inorganic Materials Synthesized Via Sol-Gel Chemistry. *New Journal of Chemistry* **1994**, *18* (10), 1007-1047.
398. Sanchez, C.; Alonso, B.; Chapusot, F.; Ribot, F.; Audebert, P., Molecular Design of Hybrid Organic-Inorganic Materials with Electronic Properties. *Journal of Sol-Gel Science and Technology* **1994**, *2* (1), 161-166.
399. Lebeau, B.; Maquet, J.; Sanchez, C.; Toussaere, E.; Hierle, R.; Zyss, J., Relaxation Behavior of NLO Chromophores Grafted in Hybrid Sol-Gel Matrices. *Journal of Materials Chemistry* **1994**, *4* (12), 1855-1860.
400. Fournier, T.; Salabert, I.; Tran-Thi, T. H.; Ali, H.; Van-Lier, J.; Sanchez, C., Charge Transfer Dynamics of Donor-Acceptor Systems in Solutions and Sol-Gel Matrices. *Journal of Sol-Gel Science and Technology* **1994**, *2* (1), 737-740.
401. Chatry, M.; Henry, M.; In, M.; Sanchez, C., The Role of Complexing Ligands in the Formation of Non-Aggregated Nanoparticles of Zirconia. *Journal of Sol-Gel Science and Technology* **1994**, *1* (3), 233-240.
402. Bleuzen, A.; Barboux-Doeuff, S.; Flaud, P.; Sanchez, C., Rheological Study of Titanium Oxide Based Gels. *Materials Research Bulletin* **1994**, *29* (12), 1223-1232.
403. Barboux-Doeuff, S.; Sanchez, C., Synthesis and Characterization of Titanium Oxide Based Gels Synthesized from Acetate Modified Titanium Butoxide Precursors. *Materials Research Bulletin* **1994**, *29* (1), 1-13.
404. Audebert, P.; Sanchez, C., Modified Electrodes from Hydrophobic Alkoxide Silica Gels: Insertion of Electroactive Compounds and Glucose Oxidase. *Journal of Sol-Gel Science and Technology* **1994**, *2* (1), 809-812.
405. Sanchez, C.; Ribot, F., Molecular Design of Hybrid Organic-Inorganic Materials. *Journal De Physique IV* **1993**, *3* (C7), 1349-1355.
406. Sanchez, C.; Griesmar, P.; Puccetti, G.; Ledoux, I.; Toussaere, E.; Zyss, J., Nonlinear Optical Properties of Organically Doped Metal Oxide Based Gels. *Nonlinear Optics, Principles, Materials, Phenomena and Devices* **1993**, *4* (3-4), 245-51.
407. Poumellec, B.; Cortes, R.; Sanchez, C.; Berthon, J.; Fretigny, C., 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. *Journal of Physics and Chemistry of Solids* **1993**, *54* (6), 751-763.
408. Monros, G.; Carda, J.; Tena, M. A.; Escribano, P.; Ribot, F.; Sanchez, C., Vanadium Clusters in Doped ZrO_2-SiO_2 Toughened Ceramic Composites Obtained from Alkoxides. *Solid State Ionics* **1993**, *63-65*, 218-225.
409. Lebeau, B.; Herlet, N.; Livage, J.; Sanchez, C., Optical Properties of a Near Infrared Dye Laser Incorporated inside Sol-Gel Matrices. *Chemical Physics Letters* **1993**, *206* (1-4), 15-20.
410. Koslova, N. I.; Viana, B.; Sanchez, C., Rare Earth Doped Hybrid Siloxane Oxide Coatings with Luminescent Properties. *Journal of Materials Chemistry* **1993**, *3* (1), 111-112.
411. Kallala, M.; Sanchez, C.; Cabane, B., Structures of Inorganic Polymers in Sol-Gel Processes Based on Titanium Oxide. *Physical Review E* **1993**, *48* (5), 3692-3704.
412. Fournier, T.; Tran Thi, T. H.; Herlet, N.; Sanchez, C., Charge Transfer Dynamics of Porphyrin Phthalocyanine Heterodimers in Hybrid Sol-Gel Films. *Chemical Physics Letters* **1993**, *208* (1-2), 101-105.
413. Audebert, P.; Demaille, C.; Sanchez, C., Electrochemical Probing of the Activity of Glucose Oxidase Embedded Sol-Gel Matrices. *Chemistry of Materials* **1993**, *5* (7), 911-913.
414. Sanchez, C.; In, M., Molecular Design of Alkoxide Precursors for the Synthesis of Hybrid Organic Inorganic Gels. *Journal of Non-Crystalline Solids* **1992**, *147*, 1-12.
415. Sanchez, C., Matériaux pour l'Optique Elaborés par le Procédé Sol-Gel. III : Propriétés Electrochromes / Optical Materials Produced via Sol-Gel Process. III: Electrochromic Properties. *Boletin De La Sociedad Espanola De Ceramica Y Vidrio* **1992**, *31* (3), 191-199.

416. Sanchez, C., Matériaux pour l'Optique Elaborés par le Procédé Sol-Gel. II : Absorption et Luminescence / Optical Materials Produced via Sol-Gel. II : Absorption and Luminescence. *Boletin De La Sociedad Espanola De Ceramica Y Vidrio* **1992**, 31 (2), 89-97.
417. Sanchez, C., 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. *Boletin De La Sociedad Espanola De Ceramica Y Vidrio* **1992**, 31 (1), 5-10.
418. Sanchez, C., Propriétés Optiques de Monolithes à Base de Silice / Optical Properties of Silica-based Monoliths. *Boletin De La Sociedad Espanola De Ceramica Y Vidrio* **1992**, 31 (2), 135-136.
419. Livage, J.; Sanchez, C., Sol-Gel Chemistry. *Journal of Non-Crystalline Solids* **1992**, 145 (1-3), 11-19.
420. Kallala, M.; Sanchez, C.; Cabane, B., SAXS Study of Gelation and Precipitation in Titanium Based Systems. *Journal of Non-Crystalline Solids* **1992**, 147, 189-193.
421. Judeinstein, P.; Chemseddine, A.; Sanchez, C., Photoelectrochemical Properties of Tungsten Oxide Gels. *Journal de Chimie Physique et de Physico-Chimie Biologique* **1992**, 89 (6), 1469-1476.
422. Dire, S.; Babonneau, F.; Sanchez, C.; Livage, J., Sol-Gel Synthesis of Siloxane Oxide Hybrid Coatings (Si(CH₃)₂O-MO_x: M = Si, Ti, Zr, Al) with Luminescent Properties. *Journal of Materials Chemistry* **1992**, 2 (2), 239-244.
423. Audebert, P.; Griesmar, P.; Hapiot, P.; Sanchez, C., Sol-Gel-Xerogel Evolution Investigated by Electroactive Probes in Silica and Transition Metal Oxide Based Gels. *Journal of Materials Chemistry* **1992**, 2 (12), 1293-1300.
424. Toussaere, E.; Zyss, J.; Griesmar, P.; Sanchez, C., Second Harmonic Generation from Poled Organic Molecules Incorporated into Sol-Gel Matrices. *Nonlinear Optics, Principles, Materials, Phenomena and Devices* **1991**, 1 (4), 349-54.
425. Toledano, P.; In, M.; Sanchez, C., Synthesis and Structure of the Compound Ti₁₈(μ₅-O)₂(μ₄-O)₂(μ₃-O)₁₀(μ₂-O)₆(μ₂-OⁿBu)₁₄(OⁿBu)₁₂(acac)₂. *Comptes Rendus De L' Academie Des Sciences Serie II* **1991**, 313 (11), 1247-1253.
426. Ribot, F.; Toledano, P.; Sanchez, C., X-Ray and Spectroscopic Investigations of the Structure of Yttrium Acetate Tetrahydrate. *Inorganica Chimica Acta* **1991**, 185 (2), 239-245.
427. Ribot, F.; Toledano, P.; Sanchez, C., Hydrolysis-Condensation Process of μ₂-diketonates Modified Cerium(IV) Isopropoxide. *Chemistry of Materials* **1991**, 3 (4), 759-764.
428. Nabavi, M.; Sanchez, C.; Livage, J., Sol-Gel Synthesis of Vanadium Oxide from Alkoxides. *European Journal of Solid State and Inorganic Chemistry* **1991**, 28 (5), 1173-1192.
429. Nabavi, M.; Sanchez, C.; Livage, J., Structure and Properties of Amorphous V₂O₅. *Philosophical Magazine B-Physics of Condensed Matter Statistical Mechanics Electronic Optical and Magnetic Properties* **1991**, 63 (4), 941-953.
430. Mendez-Vivar, J.; Lopez, T.; Campero, A.; Sanchez, C., pH Effect in Molybdenum(VI) Oxide Tetrachloride Polymerization via the Sol-Gel Method. *Langmuir* **1991**, 7 (4), 704-708.
431. Lecomte, M.; Viana, B.; Sanchez, C., Optical Properties of Some Organic (Rhodamine 6G, Coumarin 4) and Inorganic (Eu(III), Nd(III)) Probes inside Transition Metal Oxide Based Gels. *Journal de Chimie Physique et de Physico-Chimie Biologique* **1991**, 88 (1), 39-53.
432. Griesmar, P.; Sanchez, C.; Puccetti, G.; Ledoux, I.; Zyss, J., Second-Harmonic Generation from Organic Molecules Incorporated in Sol-Gel Matrices. *Molecular Engineering* **1991**, 1 (3), 205-220.
433. Griesmar, P.; Papin, G.; Sanchez, C.; Livage, J., Sol-Gel Route to Niobium Pentoxide. *Chemistry of Materials* **1991**, 3 (2), 335-339.
434. Audebert, P.; Griesmar, P.; Sanchez, C., Electrochemical Probing of the Sol-Gel Xerogel Evolution. *Journal of Materials Chemistry* **1991**, 1 (4), 699-700.
435. Toledano, P.; Ribot, F.; Sanchez, C., Synthesis and Structure of the Compound Ce₆(μ₃-O)₄(μ₃-OH)₄(acac)₁₂. *Comptes Rendus De L' Academie Des Sciences Serie II* **1990**, 311 (11), 1315-1320.
436. Toledano, P.; Ribot, F.; Sanchez, C., Structure of Bis(2-Propanol)-Bis-μ₂-(2-Propanolato)-Hexakis(2-Propanolato)DiCerium(IV). *Acta Crystallographica Section C-Crystal Structure Communications* **1990**, 46, 1419-1422.

437. Toledano, P.; In, M.; Sanchez, C., Synthesis and Structural Study of the Compound $Zr_4(\text{O})_6(\text{O}^n\text{Pr})_6(\text{O}^n\text{Pr})_4(\text{acac})_4$. *Comptes Rendus De L' Academie Des Sciences Serie II* **1990**, 311 (10), 1161-1166.
438. Sanchez, C.; Livage, J., Sol-Gel Chemistry from Metal Alkoxide Precursors. *New Journal of Chemistry* **1990**, 14 (6-7), 513-521.
439. Nabavi, M.; Taulelle, F.; Sanchez, C.; Verdaguer, M., XANES and ^{51}V NMR Study of Vanadium Oxygen Compounds. *Journal of Physics and Chemistry of Solids* **1990**, 51 (12), 1375-1382.
440. Nabavi, M.; Sanchez, C., ESR Study of Some Photoreduced Vanadium Oxo-Alkoxides $\text{VO}(\text{OR})_3$. *Comptes Rendus De L' Academie Des Sciences Serie II* **1990**, 310 (2), 117-121.
441. Nabavi, M.; Doeuff, S.; Sanchez, C.; Livage, J., Chemical Modification of Metal Alkoxides by Solvents: a Way to Control Sol-Gel Chemistry. *Journal of Non-Crystalline Solids* **1990**, 121 (1-3), 31-34.
442. Murawski, L.; Sanchez, C.; Livage, J.; Audiere, J. P., Small Polaron Transport in Amorphous V_2O_5 Films. *Journal of Non-Crystalline Solids* **1990**, 124 (1), 71-75.
443. Mendez-Vivar, J.; Campero, A.; Livage, J.; Sanchez, C., The Sol-Gel Route to Molybdenum Oxides. *Journal of Non-Crystalline Solids* **1990**, 121 (1-3), 26-30.
444. Livage, J.; Henry, M.; Jolivet, J.-P.; Sanchez, C., Chemical Synthesis of Fine Powders. *MRS Bulletin* **1990**, 15 (1), 18-25.
445. Griesmar, P.; Papin, G.; Sanchez, C.; Livage, J., Sol-Gel Synthesis of PFN Ceramics ($\text{PbFe}_{1/2}\text{NB}_{1/2}\text{O}_3$). *Journal of Materials Science Letters* **1990**, 9 (11), 1288-1289.
446. Fitremann, J.; Doeuff, S.; Sanchez, C., Optical Properties of TiO_2 , ZrO_2 , Al_2O_3 and SiO_2 Based Gels Doped with Rhodamine 640. *Annales De Chimie-Science Des Materiaux* **1990**, 15 (7-8), 421-432.
447. Doeuff, S.; Henry, M.; Sanchez, C., Sol-Gel Synthesis and Characterization of Titanium Oxo-Acetate Polymers. *Materials Research Bulletin* **1990**, 25 (12), 1519-1529.
448. Bennour, J.; Gharbi, N.; Zarrouk, H.; Sanchez, C.; Henry, M., An ESR Study of Cr(III) in Zirconia Prepared by the Sol-Gel Process. *Annales De Chimie-Science Des Materiaux* **1990**, 15 (1), 19-31.

1980-1989 :

449. Sanchez, C.; Nabavi, M.; Judeinstein, P.; Doeuff, S., Some Illustrations of the Use of Synchrotron Radiation to Characterize the Sol-Gel Process. *Journal de Chimie Physique* **1989**, 86 (7-8), 1593-1606.
450. Nabavi, M.; Doeuff, S.; Sanchez, C.; Livage, J., Sol-Gel Synthesis of Electrochromic Films. *Materials Science and Engineering B* **1989**, 3 (1-2), 203-207.
451. Livage, J.; Sanchez, C.; Henry, M.; Doeuff, S., The Chemistry of the Sol-Gel Process. *Solid State Ionics* **1989**, 32-3, 633-638.
452. Doeuff, S.; Sanchez, C., Photoelectrochemical Properties of TiO_2 Anatase Films Synthesized via the Sol-Gel Process. *Comptes Rendus De L' Academie Des Sciences Serie II* **1989**, 309 (11), 1137-1142.
453. Doeuff, S.; Sanchez, C., Electrochromic Properties of Anatase TiO_2 Films Prepared by the Sol-Gel Process. *Comptes Rendus De L' Academie Des Sciences Serie II* **1989**, 309 (6), 531-534.
454. Doeuff, S.; Dromzee, Y.; Taulelle, F.; Sanchez, C., Synthesis and Solid- and Liquid-State Characterization of a Hexameric Cluster of Titanium(IV): $\text{Ti}_6(\text{O})_2(\text{O})_2(\text{O})_2(\text{OC}_4\text{H}_9)_2(\text{OC}_4\text{H}_9)_6(\text{OCOCH}_3)_8$. *Inorganic Chemistry* **1989**, 28 (25), 4439-4445.
455. Doeuff, S.; Dromzee, Y.; Sanchez, C., Synthesis and Structural Study of the Titanium Acetate Isopropoxide Oxide $[\text{Ti}_6(\text{O})_2(\text{O})_2(\text{O})_2(\text{OAc})_4(\text{O}^i\text{Pr})_6(\text{O}^i\text{Pr})_6]$, a Reference Compound for the Sol-Gel Process. *Comptes Rendus De L' Academie Des Sciences Serie II* **1989**, 308 (16), 1409-1412.
456. Taulelle, F.; Sanchez, C.; Livage, J.; Lachgar, A.; Piffard, Y., High Resolution Solid State ^{31}P NMR in Some Antimony Phosphates. *Journal of Physics and Chemistry of Solids* **1988**, 49 (3), 299-305.
457. Sanchez, C.; Sieber, K. D.; Somorjai, G. A., The Photoelectrochemistry of Nb-Doped Fe_2O_3 . *Journal of Electroanalytical Chemistry* **1988**, 252 (2), 269-290.
458. Sanchez, C.; Livage, J.; Henry, M.; Babonneau, F., Chemical Modification of Alkoxide Precursors. *Journal of Non-Crystalline Solids* **1988**, 100 (1-3), 65-76.
459. Nabavi, M.; Sanchez, C.; Taulelle, F.; Livage, J.; Deguibert, A., Electrochemical Properties of Amorphous V_2O_5 . *Solid State Ionics* **1988**, 28, 1183-1186.

460. Livage, J.; Henry, M.; Sanchez, C., Sol-Gel Chemistry of Transition Metal Oxides. *Progress in Solid State Chemistry* **1988**, *18* (4), 259-341.
461. Babonneau, F.; Sanchez, C.; Livage, J., Spectroscopic Characterization of Sol-Gel Processing. *Journal of Non-Crystalline Solids* **1988**, *106* (1-3), 170-173.
462. Babonneau, F.; Doeuff, S.; Leautic, A.; Sanchez, C.; Cartier, C.; Verdaguer, M., XANES and EXAFS Study of Titanium Alkoxides. *Inorganic Chemistry* **1988**, *27* (18), 3166-3172.
463. Murawski, L.; Gledel, C.; Sanchez, C.; Livage, J.; Audieres, J. P., Electrical Conductivity of V_2O_5 and $Li_xV_2O_5$ Amorphous Thin Films. *Journal of Non-Crystalline Solids* **1987**, *89* (1-2), 98-106.
464. Fritsch, E.; Babonneau, F.; Sanchez, C.; Calas, G., Vanadium Incorporation in Silica Glasses. *Journal of Non-Crystalline Solids* **1987**, *92* (2-3), 282-294.
465. Doeuff, S.; Henry, M.; Sanchez, C.; Livage, J., The Gel Route to Cr^{3+} -Doped TiO_2 , an Electron Spin Resonance Study. *Journal of Non-Crystalline Solids* **1987**, *89* (1-2), 84-97.
466. Doeuff, S.; Henry, M.; Sanchez, C.; Livage, J., Hydrolysis of Titanium Alkoxides: Modification of the Molecular Precursor by Acetic Acid. *Journal of Non-Crystalline Solids* **1987**, *89* (1-2), 206-216.
467. Sanchez, C.; Hendewerk, M.; Sieber, K. D.; Somorjai, G. A., Synthesis, Bulk, and Surface Characterization of Nb-Doped Fe_2O_3 Single Crystals. *Journal of Solid State Chemistry* **1986**, *61* (1), 47-55.
468. Nakanishi, H.; Sanchez, C.; Hendewerk, M.; Somorjai, G. A., Photochemical Hydrogen Production from a Water-Methanol Mixture with Small Particles of Iron Oxide Suspensions. *Materials Research Bulletin* **1986**, *21* (2), 137-148.
469. Gourier, D.; Doppelt, P.; Sanchez, C., ENDOR Study of a One-Electron 2:18 Reduced Fluoropolytungstate. *Inorganic Chemistry* **1986**, *25* (25), 4462-4464.
470. Vandendorre, M. T.; Sanchez, C.; Politi, A., Structure and Properties of Reduced Amorphous Vanadium Oxide V_2O_5 . *New Journal of Chemistry* **1985**, *9* (7), 511-518.
471. Sieber, K. D.; Sanchez, C.; Turner, J. E.; Somorjai, G. A., Preparation, Characterization and Photoelectronic Properties of Ge-Substituted Fe_2O_3 Single Crystals. *Journal of the Chemical Society-Faraday Transactions 1* **1985**, *81*, 1263-1274.
472. Sieber, K. D.; Sanchez, C.; Turner, J. E.; Somorjai, G. A., Preparation, Electrical and Photoelectrochemical Properties of Mg-Doped Iron Oxide Sintered Disks. *Materials Research Bulletin* **1985**, *20* (2), 153-162.
473. Henry, M.; Sanchez, C.; Rkha, C.; Livage, J., Small Polarons in V_2O_5 Single Crystal Doped with WO_3 . *Journal of Physics C-Solid State Physics* **1985**, *18* (36), 6589-6601.
474. Gharbi, N.; Sanchez, C.; Livage, J., Electron Spin Resonance Study of Brownian Motion in V_2O_5 Gels. *Journal de Chimie Physique et de Physico-Chimie Biologique* **1985**, *82* (7-8), 755-759.
475. Sanchez, C.; Livage, J.; Audiere, J. P.; Madi, A., Influence of the Quenching Rate on the Properties of Amorphous V_2O_5 Thin Films. *Journal of Non-Crystalline Solids* **1984**, *65* (2-3), 285-300.
476. Sanchez, C.; Henry, M.; Morineau, R.; Leroy, M. C., Small Polaron Mobility in \square - $Li_xV_2O_5$. *Physica Status Solidi B-Basic Research* **1984**, *122* (1), 175-182.
477. Gouteron, J.; Jeannin, S.; Jeannin, Y.; Livage, J.; Sanchez, C., X-Ray, Electron Spin Resonance, and Optical Absorption Studies of Tetrakis(Cyclohexylamine)Copper(II) Nitrate: an Example of a Flattened Tetrahedral Copper(II) Complex. *Inorganic Chemistry* **1984**, *23* (21), 3387-3393.
478. Chemseddine, A.; Sanchez, C.; Livage, J.; Launay, J. P.; Fournier, M., Electrochemical and Photochemical Reduction of Decatungstate: a Reinvestigation. *Inorganic Chemistry* **1984**, *23* (17), 2609-2613.
479. Vandendorre, M. T.; Sanchez, C.; Livage, J., Reactivity of Hydrated Amorphous Vanadium Oxide. *Revue De Chimie Minerale* **1983**, *20* (6), 850-862.
480. Sanchez, C.; Morineau, R.; Livage, J., Electrical Conductivity of Amorphous V_2O_5 . *Physica Status Solidi a-Applied Research* **1983**, *76* (2), 661-666.
481. Sanchez, C.; Livage, J.; Launay, J. P.; Fournier, M., Electron Delocalization in Mixed Valence Tungsten Polyanions. *Journal of the American Chemical Society* **1983**, *105* (23), 6817-6823.
482. Sanchez, C.; Babonneau, F.; Morineau, R.; Livage, J.; Bullot, J., Semiconducting Properties of V_2O_5 Gels. *Philosophical Magazine B-Physics of Condensed Matter Statistical Mechanics Electronic Optical and Magnetic Properties* **1983**, *47* (3), 279-290.

483. Lefebvre, F.; Leyrie, M.; Herve, G.; Sanchez, C.; Livage, J., Square Pyramidal Complexes of Divalent-Cations of the 1st Transition Row with the 20-Tungsto-2-Arsenate(III) - Synthesis, Visible and Electron Spin Resonance Spectra. *Inorganica Chimica Acta* **1983**, *73* (2), 173-178.
484. Gaillard, B.; Blanchard, C.; Deville, A.; Sanchez, C., Low Frequency Transition between Vibronic Levels of (V²⁺)⁹⁺ in Crystalline V₂O₅ from Electron Spin Lattice. Relaxation Measurements. *Journal De Physique* **1983**, *44* (6), 691-698.
485. Sanchez, C.; Livage, J.; Lucazeau, G., Infrared and Raman Study of Amorphous V₂O₅. *Journal of Raman Spectroscopy* **1982**, *12* (1), 68-72.
486. Sanchez, C.; Livage, J.; Launay, J. P.; Fournier, M.; Jeannin, Y., Electron Delocalization in Mixed Valence Molybdenum Polyanions. *Journal of the American Chemical Society* **1982**, *104* (11), 3194-3202.
487. Sanchez, C.; Livage, J.; Doppelt, P.; Chauveau, F.; Lefebvre, J., Mixed Valence Fluoropolytungstates. *Journal of the Chemical Society-Dalton Transactions* **1982**, (12), 2439-2443.
488. Sanchez, C.; Henry, M.; Grenet, J. C.; Livage, J., Free and Bound Polarons in Vanadium Pentoxide. *Journal of Physics C-Solid State Physics* **1982**, *15* (35), 7133-7141.
489. Mulliez, E.; Soulie, J.; Chottard, J. C.; Sanchez, C.; Guilhem, J., Nucleophilic Additions to Cyclo-Octa-1,5-Diene Coordinated to Platinum(II) .Part 1. Attempts at Syn-Addition of Bifunctional Nucleophiles. *Journal of Chemical Research-S* **1982**, (2), 38-&.
490. Gharbi, N.; Sanchez, C.; Livage, J.; Lemerle, J.; Nejem, L.; Lefebvre, J., Mixed Valence Polyvanadic Acid Gels. *Inorganic Chemistry* **1982**, *21* (7), 2758-2765.
491. Babonneau, F.; Sanchez, C.; Livage, J.; Launay, J. P.; Daoudi, M.; Jeannin, Y., Spectroscopic Study of Mixed Valence Complexes between V(IV) and V(V). *New Journal of Chemistry* **1982**, *6* (7-8), 353-357.
492. Tougne, P.; Legrand, A. P.; Sanchez, C.; Livage, J., V⁴⁺ Brownian Motion in Splat Cooled Amorphous V₂O₅ after Water Vapor Adsorption. *Journal of Physics and Chemistry of Solids* **1981**, *42* (2), 101-107.
493. Sanchez, C.; Vivien, D.; Livage, J.; Salapala, J.; Viard, B.; Guerchais, J. E., Niobium Organometallic Chemistry. Part 6. Electron-Spin Resonance Study of Bonding in Pseudo-Tetrahedral Bis(Cyclopentadienyl)Niobium-(IV) Complexes. *Journal of the Chemical Society-Dalton Transactions* **1981**, (1), 64-68.
494. Sanchez, C.; Michaud, M.; Livage, J.; Herve, G., Electron Spin Resonance of Undeca Tungstovanado(IV) Silicates Isomers. *Journal of Inorganic & Nuclear Chemistry* **1981**, *43* (11), 2795-2799.
495. Henry, M.; Sanchez, C.; Rkha, C.; Livage, J., Random Glass Structure and Electron Localization in Amorphous V₂O₅. *Journal of Physics C-Solid State Physics* **1981**, *14* (6), 829-837.
496. Ballutaud, D.; Rkha, C.; Sanchez, C.; Livage, J., Electron Spin Resonance of P₂O₅-Doped V₂O₅ Single Crystals. *Physica Status Solidi a-Applied Research* **1981**, *66* (1), 271-276.
497. Viard, B.; Salapala, J.; Amaudrut, J.; Guerchais, J. E.; Sanchez, C.; Livage, J., 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. *Inorganica Chimica Acta* **1980**, *39* (1), 99-104.
498. Pasturel, A.; Sanchez, C.; Livage, J., Electron Spin Resonance Study of V₂O₅ Reduction in Butyllithium. *Physica Status Solidi a-Applied Research* **1980**, *59* (2), K167-K169.
499. Livage, J.; Pasturel, A.; Sanchez, C.; Vedel, J., ESR Study of Lithium Incorporation by V₂O₅ Single Crystals. *Solid State Ionics* **1980**, *1* (5-6), 491-500.
500. Launay, J. P.; Fournier, M.; Sanchez, C.; Livage, J.; Pope, M. T., Electron Spin Resonance of Reduced 12-Molybdophosphate Anion and Ground State Delocalization in Mixed Valence Heteropolyanions. *Inorganic & Nuclear Chemistry Letters* **1980**, *16* (5), 257-261.
501. Jeannin, Y.; Launay, J. P.; Sanchez, C.; Livage, J.; Fournier, M., Mixed Valence in Small and Large Polynuclear Species with Metal-Oxygen-Metal Bridges. *New Journal of Chemistry* **1980**, *4* (10), 587-592.

BREVETS : PATENTS

1990-1999 :

1. Zyss, J.; Ledoux, I.; Puccetti, G.; Griesmar, P.; Sanchez, C.; Livage, J. Matériaux Sol-Gel Inorganiques ayant une Susceptibilité du Second Ordre / Transparent Sol-Gel materials with Second Order Susceptibility. **FR2675509; DE69213808; JP5224255; US5449733; EP0511080 1992** France Telecom; Centre National de la Recherche Scientifique - CNRS
2. Chatry, M.; Henry, M.; In, M.; Sanchez, C. 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. **FR2681534; EP0627960; WO/1993/005875 1993** Rhône-Poulenc Chimie
3. In, M.; Sanchez, C.; Daniel, J.-C. Polymères Mixtes Organiques-Inorganiques, leur Procédé de Préparation et leur Utilisation comme Matériaux Polymères Chargés. **FR2681603 1993** Rhône-Poulenc Chimie
4. In, M.; Sanchez, C.; Daniel, J.-C. Sols ou Gels de Polymères Mixtes Organiques et Inorganiques, leur Procédé de Préparation et leur Application comme Matériaux Polymères Chargés. **FR2681602 1993** Rhône-Poulenc Chimie
5. Mondet, J.; Quinn, F. X.; Sanchez, C. 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. **EP0971685; WO/1998/044906 1998** L'Oréal

2000-2009 :

6. Quinn, F. X.; Giustiniani, P.; Sanchez, C. 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. **FR2790664; EP1158951; WO/2000/053153 2000** L'Oréal
7. Sahut, B.; Marcel, R.; Sanchez, C. Matériaux Photochromes à Réponse très Rapide / Photochromic Materials with Rapid Response Time. **FR2795085 2000** Produits pour les Techniques Avancées - Protavic Sarl
8. Samain, H.; Rollat, I.; Jeanne Rose, V.; Sanchez, C. 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. **FR2783165 2000** L'Oréal
9. Samain, H.; Rollat, I.; Jeanne Rose, V.; Sanchez, C. 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. **FR2783167; EP1216022; WO/2001/022931 2000** L'Oréal
10. Samain, H.; Rollat, I.; Jeanne Rose, V.; Sanchez, C. 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. **FR2783164; EP1216018; WO/2001/022925 2000** L'Oréal
11. Chane-Ching, J. Y.; Sanchez, C.; Damidot, D. 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. **FR2796061; WO/2001/002294 2001** Rhodia Chimie; Bouygues Travaux Publics; Lafarge
12. Chodorowski, S.; Quinn, F. X.; Sanchez, C. 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. **FR2799120; EP1235552; WO/2001/024768 2001** L'Oréal
13. Chodorowski, S.; Quinn, F. X.; Sanchez, C. 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. **FR2799119; EP1135101; WO/2001/024762 2001** L'Oréal

14. Samain, H.; Rollat, I.; Jeanne Rose, V.; Sanchez, C. Cosmetic composition based on organic silicon compounds comprising at least a function with cosmetic effect. . **EP1216023; WO/2001/022932 2001** L'Oréal
15. Samain, H.; Rollat, I.; Jeanne Rose, V.; Sanchez, C. Cosmetic compositions based on organic silicon compounds comprising at least a non basic solubilising function. **EP1216022; WO0122931 2001** L'Oréal
16. Samain, H.; Rollat, I.; Jeanne Rose, V.; Sanchez, C. Hair cosmetic compositions based on partly neutralized organic silicon compounds. . **EP1216018; WO2001022925 2001** L'Oréal
17. Chodorowski Kimmes, S.; Lafuma, A.; Quinn, F. X.; Sanchez, C. Composition Comprenant des Photochromes et son Utilisation en Cosmétique. **FR2838960 2003** L'Oréal
18. Valle, K.; Belleville, P.; Sanchez, C. 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. **FR2850301; EP1585783; WO/2004/067611 2004** Commissariat à l'Energie Atomique - CEA
19. Valle, K.; Belleville, P.; Sanchez, C. 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. **FR2850300; EP1587876; WO/2004/067640 2004** Commissariat à l'Energie Atomique - CEA
20. Belleville, P.; Sanchez, C.; Buvat, P.; Prene, P. 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 **FR2862429; EP1704607; WO/2005/050752; 2005** Commissariat à l'Energie Atomique - CEA
21. Chaumonnot, A.; Coupe, A.; Sanchez, C.; Euzen, P.; Boissiere, C.; Grosso, D. Matériau Aluminosilicate Mésostructuré / Mesostructured Aluminosilicate Material. **FR2872151; JP2006008509; US20060292054; EP1627852 2005** Institut Français du Pétrole - IFP
22. Chaumonnot, A.; Coupe, A.; Sanchez, C.; Euzen, P.; Boissiere, C.; Grosso, D. Matériau à Porosité Hiérarchisée Comprenant du Silicium / Material with a Hierarchical Porosity Comprising Silicon **FR2872152; JP2006008510; US20060030477; EP1627853 2005** Institut Français du Pétrole - IFP
23. Goettmann, F.; Lefevre, D.; Sanchez, C.; Mathey, F.; Le Floch, P.; Jacquiod, C. 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. **FR2865664; WO/2005/075074 2005** Saint-Gobain Recherche
24. Tran-Thi, T. H.; Sanchez, C.; Nicole, L.; Hesemann, P. 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. **FR2869036; EP1745055; WO/2005/100371 2005** Commissariat à l'Energie Atomique - CEA; Centre National de la Recherche Scientifique - CNRS; Université Pierre et Marie Curie - UPMC
25. Chaumonnot, A.; Coupe, A.; Sanchez, C.; Boissiere, C.; Grosso, D. Matériau Inorganique Présentant des Nanoparticules Métalliques Piégées dans une Matrice Mésostructurée / Inorganic Material Comprising Metal Nanoparticles Trapped in a Mesostructured Matrix. **FR2886636; EP1893531; WO/2006/128988 2006** Institut Français du Pétrole - IFP
26. Chaumonnot, A.; Coupe, A.; Sanchez, C.; Euzen, P.; Boissiere, C.; Grosso, D. Matériau Mésostructuré à Forte Teneur en Aluminium / Mesostructured Material with High Aluminum Content. **FR2886637; EP1910226; WO/2006/128989 2006** Institut Français du Pétrole - IFP
27. Campazzi, E.; Goletto, V.; Sanchez, C. Utilisation d'un Matériau Nanostructuré comme Revêtement Protecteur de Surfaces Métalliques / Use of a Nanostructured Material as a Protective Coating of Metal Surfaces. **FR2899906; WO/2007/119023 2007** European Aeronautic Defense and

Space Company - EADS France; Université Pierre et Marie Curie - UPMC; Centre National de la Recherche Scientifique - CNRS

28. Chaumonnot, A.; Pega, S.; Sanchez, C.; Boissiere, C.; Grosso, D. Matériau Hybride Organique-Inorganique Mésostructuré / Mesostructured Organic-Inorganic Hybrid Material. **FR2894580; EP1963341; WO/2007/065982 2007** Institut Français du Pétrole - IFP

29. Grosso, D.; Boissiere, C.; Sanchez, C. Oxyfluorure Poreux Nanostructuré / Oxyfluoride in the Form of a Film and Preparation Method. **FR2893320; WO/2007/057551 2007** Université Pierre et Marie Curie - UPMC; Centre National de la Recherche Scientifique - CNRS

30. Backov, R.; Sanchez, C.; Deleuze, H.; Ungureanu, S. Matériau Alvéolaire Hybride, Procédé pour sa Préparation / Hybrid Material, and Method for the Production Thereof. **FR2912400; WO/2008/129151 2008** Université Pierre et Marie Curie - UPMC

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

32. Campazzi, E.; Lancelle-Beltran, E.; Sanchez, C. Matériau Nanostructuré Particulier, comme Revêtement Protecteur de Surfaces Métalliques. **FR2914631; EP1978055 2008** European Aeronautic Defense and Space Company - EADS France; Université Pierre et Marie Curie - UPMC; Centre National de la Recherche Scientifique - CNRS

33. Campazzi, E.; Lancelle-Beltran, E.; Sanchez, C. Revêtements Mésostructurés pour Application en Aéronautique et Aérospatiale / Mesostructured Skins for Application in the Aeronautics and Aerospace Industries. **FR2906539; WO/2008/040895 2008** European Aeronautic Defense and Space Company - EADS France; Université Pierre et Marie Curie - UPMC; Centre National de la Recherche Scientifique - CNRS

34. Chaumonnot, A.; Coupe, A.; Sanchez, C.; Boissiere, C. Matériau Amorphe à Porosité Hiérarchisée et Comprenant du Silicium / Amorphous Materials Having a Hierarchised Porosity and Comprising Silicon **FR2920755; WO/2009/056710 2009** Institut Français du Pétrole - IFP

35. Chaumonnot, A.; Coupe, A.; Sanchez, C.; Boissiere, C. Matériau Cristallisé à Porosité Hiérarchisée et Comprenant du Silicium / Crystallised Materials with Hierarchised Porosity and Containing Silicon. **FR2920758; WO/2009/060143 2009** Institut Français du Pétrole - IFP

36. Chaumonnot, A.; Coupe, A.; Sanchez, C.; Boissiere, C.; Martin, M. 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. **FR2929264; WO/2009/130401 2009** Institut Français du Pétrole - IFP

37. Chaumonnot, A.; Coupe, A.; Sanchez, C.; Boissiere, C.; Martin, M. 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. **FR2929266; WO/2009/122023 2009** Institut Français du Pétrole - IFP

38. Chaumonnot, A.; Coupe, A.; Sanchez, C.; Boissiere, C.; Martin, M. Matériau Aluminosilicate Mésostructuré formé de Particules Sphériques de Taille Spécifique / Mesostructured Aluminosilicate Material formed from Spherical Particles of Specific Size. **FR2929265; WO/2009/122022 2009** Institut Français du Pétrole - IFP

39. Chaumonnot, A.; Pega, S.; Sanchez, C.; Boissiere, C. Matériau Amorphe Comprenant du Silicium à Porosité Hiérarchisée et Organisée / Amorphous Materials Comprising Silicon and Having an Organised and Hierarchised Porosity. **FR2920756; WO/2009/056711 2009** Institut Français du Pétrole - IFP

40. Chaumonnot, A.; Pega, S.; Sanchez, C.; Boissiere, C. Matériau Cristallisé Comprenant du Silicium à Porosité Hiérarchisée et Organisée / Crystallised Materials Containing Silicon with Hierarchised and Organised Porosity. **FR2920757; WO/2009/060144 2009** Institut Français du Pétrole - IFP

41. Monredon Senani, S.; Campazzi, E.; Sanchez, C.; Nicole, L.; Ribot, F. Revêtements Mésostructurés Comprenant un Agent Texturant Particulier, pour Application en Aéronautique et Aérospatiale / Mesostructured Coatings comprising a Specific Texture Agent for Application in Aeronautics and

Aerospace. **FR29229622**; ; **WO/2009/136044 2009** European Aeronautic Defense and Space Company - EADS France; Université Pierre et Marie Curie - UPMC; Centre National de la Recherche Scientifique – CNRS

2010-2019 :

42. Backov, R.; Brun, N.; Sanchez, C. 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. **FR2937970**; **WO/2010/049650 2010** Université Pierre et Marie Curie - UPMC
43. Backov, R.; Sanchez, C.; Janot, R.; Brun, N. 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. **FR2937964**; **WO/2010/049649 2010** Université Pierre et Marie Curie - UPMC
44. Ferey, G.; Sanchez, C.; Rozes, L.; Dan, M.; Serre, C.; Frot, T. 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 **FR2942229**; **WO/2010/094889 2010** Université Pierre et Marie Curie - UPMC
45. Grosso, D.; Linden, M.; Sanchez, C. 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. **FR2946269**; **WO/2010/142700 2010** Université Pierre et Marie Curie - UPMC
46. Brun, N.; Babeau Garcia, A.; Sanchez, C.; Backov, R. Catalyseur Enzymatique Hétérogène, Procédé de Préparation et Utilisation / Heterogenous Enzymatic Catalyst, Preparation method, and Use. **FR2947564**; **WO/2011/004111 2011** Université Pierre et Marie Curie - UPMC
47. Valle, K.; Belleville, P.; Pereira, F.; Laberty-Robert, C.; Sanchez, C.; Bass, J. D. Nanofibres hybrides organiques-inorganiques à phase inorganique mésoporeuse, leur préparation par extrusion électroassistée, membrane, électrode, et pile à combustible / Organic-inorganic Hybrid Nanofibres Having a Mesoporous Inorganic Phase, Preparation Thereof by Electrically Assisted Extrusion, Membrane, Electrode And Fuel Cell. **FR2958184**; **WO/2011/124622 2011** Commissariat à l'Energie Atomique - CEA; Université Pierre et Marie Curie - UPMC; Centre National de la Recherche Scientifique - CNRS
48. Backov, R.; Sanchez, C.; Brun, N.; Deleuze, H. Catalyseur Enzymatique Hétérogène, Procédé de Préparation et Utilisation pour la Catalyse Enzymatique en Flux Continu / Heterogenous Enzymatic Catalyst, Process for Preparing Same and use for Continuous Flow Enzymatic Catalysis. **FR2963021**; **WO/2012/022882 2012** Université Pierre et Marie Curie - UPMC; Centre National de la Recherche Scientifique - CNRS
49. Chaumonnot, A.; Sanchez, C.; Boissiere, C.; Colbeau-Justin, F.; Bonduelle, A. Procédé de Préparation d'un Matériau Sphérique à Porosité Hiérarchisée comprenant des Nanoparticules Métalliques piégées dans une Matrice à base de Silicium / Method for Preparing a Spherical Material having Hierarchised Porosity and Including Metal Particles trapped in a Silicon Matrix. **FR2969514**; **WO/2012/085358 2012** IFP Energies Nouvelles - IFP EN; Université Pierre et Marie Curie - UPMC; Centre National de la Recherche Scientifique - CNRS
50. Chaumonnot, A.; Sanchez, C.; Boissiere, C.; Colbeau-Justin, F.; Bonduelle, A. Matériau Sphérique comprenant des Nanoparticules Métalliques piégées dans une Matrice Oxyde Mésoporeuse et son Utilisation comme Catalyseurs dans les Procédés du Raffinage / Spherical Material Comprising Metallic Nanoparticles Trapped in a Mesostructured Oxide Matrix and use thereof as Catalyst in Hydrocarbon Refining Processes. **FR2969511**; **WO/2012/085354 2012** IFP Energies Nouvelles - IFP EN; Université Pierre et Marie Curie - UPMC; Centre National de la Recherche Scientifique - CNRS
51. Chaumonnot, A.; Sanchez, C.; Boissiere, C.; Colbeau-Justin, F.; Bonduelle, A. Procédé de Préparation d'un Matériau Sphérique à Porosité Hiérarchisée comprenant des Particules Métalliques piégées dans une Matrice Mésoporeuse / Process for Preparing a Spherical Material having Hierarchical Porosity comprising Metallic Particles trapped in a Mesostructured Matrix. **FR2969513**;

WO/2012/085356 2012 IFP Energies Nouvelles - IFP EN; Université Pierre et Marie Curie - UPMC; Centre National de la Recherche Scientifique - CNRS

52. Chaumonnot, A.; Sanchez, C.; Boissiere, C.; Colbeau-Justin, F.; Marchand, K.; Devers, E.; Bonduelle, A.; Uzio, D.; Daudin, A.; Guichard, B. Matériau Sphérique à base d'Hétéropolyanions Piégés dans une Matrice Oxyde Mésostructurée et son Utilisation comme Catalyseurs dans les Procédés du Raffinage / Spherical Material based on Heteropolyanions trapped in a Mesostructured Oxide Matrix and Use thereof as Catalyst in Hydrocarbons Refining Processes. **FR2969509; WO/2012/085355 2012** IFP Energies Nouvelles - IFP EN; Université Pierre et Marie Curie - UPMC; Centre National de la Recherche Scientifique - CNRS

53. Grosso, D.; Boissiere, C.; Sanchez, C.; Albouy, P. A. Procédé de Dépôt d'une Couche à la Surface d'un Substrat / Method for Depositing a Layer on the Surface of a Substrate. **FR2962666; WO/2012/007459 2012** Université Pierre et Marie Curie - UPMC; Centre National de la Recherche Scientifique - CNRS; Université Paris-Sud 11

54. Debecker, D.; Colbeau-Justin, F.; Sanchez, C.; Chaumonnot, A.; Berthod, M. Procédé de métathèse des oléfines utilisant un catalyseur à base d'un matériau sphérique comprenant des particules métalliques oxydes piégées dans une matrice mésostructurée. **FR2977890; EP2739594; WO/2013/011209 2013** Institut Français du Pétrole - IFP

55. Boissiere, C.; Carretero-Genevri, A.; Gich, M.; Grosso, D.; Sanchez, C. Process for preparing an epitaxial alpha-quartz layer on a solid substrate, material obtained and uses. **FR2993580; WO2014016506 2014** Université Pierre et Marie Curie - Paris 6 (UPMC); Centre National de la Recherche Scientifique (CNRS); Consejo Superior de Investigaciones Cientificas (CSIC)

56. Boissiere, C.; Debecker, D.; Sanchez, C.; Backov, R. Process for preparation of macroporous aluminosilicate monoliths, the macroporous aluminosilicate monoliths obtained according to this process, and their use as acid catalysts. . **FR2993874 2014** Université Pierre et Marie Curie - Paris 6 (UPMC); Centre National de la Recherche Scientifique (CNRS)

57. Debecker, D.; Colbeau-Justin, F.; Sanchez, C.; Chaumonnot, A. Method for olefin metathesis using a catalyst made from a spherical material having a hierarchical porosity comprising metal oxide particles trapped in a matrix comprising silicon oxide. . **FR3007029; WO2014202888 2014** Institut Français du Pétrole - Energies Nouvelles (IFP-EN); Université Pierre et Marie Curie - Paris 6 (UPMC); Centre National de la Recherche Scientifique (CNRS); Université Catholique de Louvain

58. Thomazeau, C.; Aguilhon, J.; Durupthy, O.; Boissiere, C.; Sanchez, C. New catalyst comprising a carrier, bromine and nickel metal nanoparticles, useful for a selective hydrogenation of 2C polyunsaturated hydrocarbon charge **FR2994661 2014** IFP ENERGIES NOUVELLES

59. Backov, R.; Gervais, C.; Janot, R.; Sanchez, C.; Depardieu, M. Solid cellular composite material comprising metal nanoparticles, process for preparation and uses for reversible storage of hydrogen. . **FR3011547; WO2015049464 2015** Centre National de la Recherche Scientifique (CNRS); Université Pierre et Marie Curie - Paris 6 (UPMC)

60. C. Barré, A. Quet, L. Bianchi, C. Sanchez, C. Zeppa, Matériau ultra-réfractaire poreux, pièces en ce matériau ou comprenant une couche de ce matériau, et procédés de préparation de ces pièces. ; Brevet Français **FR15 58713** (date de dépôt : 16 septembre 2015).

61. Ambard, C.; Duee, N.; Valle, K.; Portehault, D.; Sanchez, C. Method of preparation of a colloidal solution of nanoparticles of mixed oxides of europium and vanadium or of vanadium, europium, and yttrium, and uses of the aforesaid solution. **FR3028428; WO2016079069 2016** Commissariat à l'énergie atomique et aux énergies alternatives (CEA-EA); Centre National de la Recherche Scientifique (CNRS)

62. Chaumonnot, A.; Boualleg, M.; Bazer-Bachi, D.; Sanchez, C.; Boissiere, C.; Bounor-Legare, V.; Cassagnau, P.; Melis, F. Method for preparing shaped porous inorganic materials, by reactive extrusion in the presence of at least one surfactant. . **FR3022801; WO2016001244 2016** Institut Français du Pétrole - Energies Nouvelles (IFP-EN)

63. Delalande, S.; Hoffman, C.; Sanchez, C.; Rozes, L.; Nicole, L. Elaboration de Polymères Nanocomposites par des Précurseurs Sol-Gel en voie Non Hydrolytique assistée par Micro-Ondes. **FR3029927; WO2016097521 2016** Peugeot Citroën Automobiles SA; Université Pierre et Marie Curie - UPMC; Centre National de la Recherche Scientifique - CNRS; Collège de France

64. Nassif, N.; Moreira Martins Fernandes, F. M.; Boissiere, C.; Sanchez, C.; Giraud Guille, M. M. Injectable collagen suspensions, the preparation method thereof, and the uses thereof, particularly for forming dense collagen matrices. **FR3033697; WO2016146954 2016** Université Pierre et Marie Curie - Paris 6 (UPMC); Centre National de la Recherche Scientifique (CNRS)
65. Portehault, D.; Gouget, G.; Gervais Sary, C.; Sanchez, C. Nanostructured amorphous boron material. **FR3037944; WO2016207558 2016** Centre National de la Recherche Scientifique (CNRS); Collège de France; Université Pierre et Marie Curie - Paris 6 (UPMC)
66. Rose, S.; Laberty-Robert, C.; Sanchez, C.; Abusleme, J. A. Fluoropolymer film comprising at least one fluoropolymer hybrid organic/inorganic composite, process for the manufacture of fluoropolymer film, and use of fluoropolymer film in electrochemical applications. **WO2016102397 2016** Solvay SA; Collège de France
67. Stevens, P.; Toussaint, G.; Lancel, G.; Laberty-Robert, C.; Bregiroux, D.; Sanchez, C. Method for producing a waterproof and ion-conducting flexible membrane. **FR3030891; WO2016097571 2016** Electricité de France
68. Astorg, A.; Crozes, X.; Nicole, L.; Sanchez, C. Procédé sol-gel de fabrication d'un revêtement anticorrosion sur substrat métallique. **N° de dépôt : FR 1663250 2016** Electricité de France - EDF; Université Pierre et Marie Curie - UPMC; Centre National de la Recherche Scientifique - CNRS; Collège de France, [Sol-gel method for producing an anti-corrosion coating on a metal substrate](#), A Astorg, X Crozes, L Nicole, C Sanchez, **US Patent App. 16/471,966**
69. Sanchez, C.; Boissiere, C.; Nicole, L.; Baradari, H.; Chaucherie, X.; Gilardin, B. Procédé de fabrication d'un matériau à haute surface spécifique. **N° de dépôt : FR 1751993 2017** SARP Industries; Collège de France, [Process for manufacturing a material with a high specific surface area](#), C Sanchez, C Boissiere, L Nicole, H Baradari, X Chaucherie, B Gilardin, **US Patent App. 16/492,885**
70. Sanchez, C.; Boissiere, C.; Nicole, L.; Baradari, H.; Chaucherie, X.; Gilardin, B. Procédé de fabrication d'un matériau poreux à partir de mâchefers d'incinération. **N° de dépôt : FR 1758839 2017** SARP Industries; Collège de France,
71. C. Sanchez et al. with L'oréal 1 (Sustainable new pigments) under déposition
- 72 Belleville P., Dieraert A., Pintault B., Sanchez C.,
Composition and method for making parts consisting of oxide ceramics or hybrid parts by a stereolithographic technique, US Patent App. 17/424,635, 2022
73. Odziomek M., Faustini M. , Boissiere C., Sanchez C. Ink composition for the production of micropatterns, PCT/EP2020/087736, 2021-07-01, Publication of WO2021130292A1

BOOK EDITION and EDITOR of SPECIAL ISSUES

- 1- " Matériaux Hybrides" Arago 17, Mai 1996, Ed Masson – C. Sanchez Scientific coordinator
- 2- "Biomimétisme et Matériaux " Arago 25 , 2001, Ed Tech et Doc. C. Sanchez Scientific coordinator
- 3- Proceedings of the 1st European Workshop on Hybrid Organic-Inorganic Materials 1993.
- 4- "Better Ceramics Through Chemistry VI", Materials Research Society Symposium Proceedings, vol 346,1994.
- 5- Numéro special du New Journal of Chemistry, Hybrid Organic-Inorganic Materials, Oct 1994 (Guest Editor)
- 6- "Better Ceramics Through Chemistry VII" Hybrid O-I Materials, Materials Research Society Symposium Proceedings, vol 435,1996
- 7 - Numéro spécial du Journal of Sol-gel Science and Technology, Organic-Inorganic Hybrid Materials. 1995.
- 8- Hybrid O-I Materials, Materials Research Society Symposium Proceedings, vol 539, 1998.
- 9- "Hybrid Organic-Inorganic Materials", Materials Research Society Symposium Proceedings, vol 528, 2000.
- 10- "Hybrid Organic-Inorganic Materials", Materials Research Society Symposium Proceedings, vol 726 , 2002.

- 11- "Functional Hybrid Organic-Inorganic Materials", Wiley VCH , vol XVII, 2003, ISBN 3-527-304843 2002.
- 12- "Hybrid Organic-Inorganic Materials", Materials Research Society Symposium Proceedings, vol 847 , 2004.
- 13- Themed Issue on "Functional Hybrid Materials", J. Mater. Chem., 215, vol 35-36, 2005.
- 14- Special Issue of the Symposium "Functional Hybrid Materials: Nanoscale Objects to Nanostructured Inorganic and Hybrid Materials", in Progress in Solid State Chemistry (33), 2005.
- 15- "Organic-Inorganic Hybrid Materials", Materials Research Society Symposium Proceedings, VI.1007, 2007.
- 16- Special Issue on " *Recent progress made in Hybrid Materials Science* ", Chem. Soc. Rev., 2011.
- 17- "Electronic Organic and Inorganic Hybrid Nanomaterials", MRS Symposium Proceedings, vol. 1359, 2011.
- 18- "Hierarchically Structured Porous Materials", Wiley-VCH, Weinheim, ISBN-13: 978-3-527-32788-1, 2012.

CHAPITRES DE LIVRES- 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)

13. *Insights into Hierarchically Structured Porous Materials: From Nanosciences to Catalysis, Separation, Optics, Energy and Life Science*, : B.L. Su, C. Sanchez, X.Y. Yang, in **Hierarchically Structured Porous Materials** Editors : B.L. Su, C. Sanchez, X.Y. Yang, Wiley VCH, 2012, p3-p28

14. *Hierarchically Structured Porous Coatings and Membranes*, C. Boissière, E. Prouzet, D. Grosso, C. Sanchez, in **Hierarchically Structured Porous Materials** Editors : B.L. Su, C. Sanchez, X.Y. Yang, Wiley VCH, 2012, p335-p358

15. *Concluding remarks*, B.L. Su, C. Sanchez, X.Y. Yang, in **Hierarchically Structured Porous Materials** Editors : B.L. Su, C. Sanchez, X.Y. Yang, Wiley VCH, 2012, p635-p639.

16. *Optical properties of hybrid organic-inorganic materials and their applications – Part I: Luminescence and Photochromism* S. Parola, B. Julián-López, L. D. Carlos, C. Sanchez, **Handbook of Solid State Chemistry** Vol. 4, Ed. R. Dronskowski, S. Kikkawa, A. Stein, Wiley VCH 2017. ISBN: 978-3-527-32587-0, pp 275-316

17. *Optical properties of hybrid organic-inorganic materials and their applications – Part II : Plasmonics and nonlinear optics* S. Parola, B. Julián-López, L. D. Carlos, C. Sanchez,; **Handbook of Solid State Chemistry**, Vol. 4, Ed. R. Dronskowski, S. Kikkawa, A. Stein, Wiley VCH 2017. ISBN: 978-3-527-32587-0, pp 317-355

REVIEWED PROCEEDINGS : PUBLICATIONS AVEC COMITE DE LECTURE PUBLIEES DANS DES ACTES DE CONGRES

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. $\{(BuSn)_2O_2(OH)_6\}^{2+}(AAMPS)_2$ (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 SiO₂-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 ¹²⁹Xe NMR

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

49. From Hybrid Films to Meso-organized Multi Metal-Oxide Nanocrystalline Films (M₃NF): 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. Escribano, 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 CeO₂ 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 TiO₂ and V₂O₅ 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 BF₃*

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. Mougnot, 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)

63. *Spray plasma processed ZrB₂-based coatings for oxidation protection*,

C. Barré, A. Quet, L. Bianchi, C. Sanchez, A. Sauveroche, , **ITSC 2014 proceedings, DVS-Berichte** 302, p. 541-545

64. *Tests de micro-indentation et de rayures de couches minces élastiques sol-gel*

H. Piombini - F. Compont, C. Ambard, K. Vallé, Ph. Belleville et C. Sanchez **Proceeding CMOI, 2015**

65. *Development of 3D photonic crystals using sol-gel process for high power laser applications*, F.

Benoit, E. Dieudonné, B. Bertussi, K. Vallé, P. Belleville, N. Mallejac, S. Enoch, C. Sanchez' **SPIE Proceedings**, San Diego, August 2015 Vol 9556, 95560A-1 Doi 10.1117/12.218701767.

66. *Indentation hardness and scratch tests for thin layers manufactured by sol-gel process*

H Piombini, C Ambard, F Compont, K Valle, P Belleville, C Sanchez, **CLEO: Applications and Technology, AF1J**. 3, 2015

67.H. Piombini, P. Belleville, C. Sanchez, **Optical Interference Coatings**, ThD. 9, 2019

