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RESEARCH INTERESTS

Synthesis of complex hybrid organic-inorganic materials with peculiar emphasis on composites combining Metal Organic Frameworks and organic (polymers, biomacromolecules, graphene oxide) or inorganic (oxides) components for energy and environment-related applications.

PROFESSIONAL CAREER

Since 2016	Professor in the team Molecules, Interactions & Materials, ILV.
2010 -2016	Professor in the team « Porous Solids », ILV.
2007	Habilitation à Diriger des Recherches (HDR). Lab. Chimie de la Matière Condensée de Paris/Sorbonne University, Paris.
1999-2010	Assistant Professor/Maître de conférences, Team « Materials & Biology » Lab. Chimie de la Matière Condensée de Paris, Sorbonne University, Paris.
1999	Post Doc in the group of Pr J. Livage**,** Lab. Chimie de la Matière Condensée de Paris, Sorbonne University, Paris.
1998	Post-Doc in the group of Pr Markus Antonietti, Max Planck Institute of Colloids and Interfaces, Potsdam, Germany.
1994-1997	PhD, Lab. Chimie de la Matière Condensée de Paris, Sorbonne University, Paris. Advisor : Dr Clément Sanchez. Defended on the 18th December 1997.

RESPONSABILITIES

Since 2012	Elected member of the administration council of the Fundation of "Sciences du Patrimoine".
-Since 2012	Nominated member of the steering committee of the Labex "Charmmmat".
-2012-2016	Elected member of the administration council of UVSQ.
-2013-2016	President of the disciplinary council of UVSQ.

GRANT/CONTRACT WORK.

→**4 EU projects:** "Sotherco" (FP7, 2013-2017, member of the steering committee), EU project "M4CO2" (FP7, 2014-2018); EU project "Gramofon" (H2020, 2016-2019); EU project "Nemosine" (H2020 2018-2022, local coordinator).

→**21 national projects (2013-20):** (i) Coordinator of 11 research projects (Labex/DIM/FSP/Paris Saclay), (ii) Coordinator of 2 equipment projects, (iii) coordinator of 2 valorization/premature projects, (iu) member of 6 Projects (Labex, FSP).

PUBLICATIONS & CONFERENCES

84 Publications in peer reviewed Journals (ORCID iD 0000-0002-7049-7388, Web of Science ResearcherID : AAD-2778-2019, h index = 32) ; **4 book chapters**, **5 patents**. **21 invited communications in international conferences & seminars, 22 oral communications in international conferences.**

Publons ; Google scholar

LIST OF PUBLICATIONS

-1- "Design of stable mixed-metal MIL-101 (Cr/Fe) materials with enhanced catalytic activity for the Prins reaction. **"** C. Vallés-García, E. Gkaniatsou, A. Santiago-Portillo, M. Giménez-Marqués, M. Álvaro, J.-M. Greneche, N. Steunou, C. Sicard, S. Navalón, C . Serre, H. García**.** ***Journal of Materials Chemistry A***, 8, (2020), 17002-17011.link

-2- "Encapsulation of Microperoxidase-8 in MIL-101 (Cr)-X Nanoparticles: Influence of Metal–Organic Framework Functionalization on Enzymatic Immobilization and Catalytic Activity.**"** E. Gkaniatsou, R. Ricoux, K. Kariyawasam, I. Stenger, B. Fan, N. Ayoub, S. Salas, G. Patriarche, C. Serre, J.-P. Mahy, N. Steunou, C. Sicard. ***ACS Applied Nano Materials,*** 3, 4, (2020), 3233–3243.link

-3- "Formation of Single Crystal Aluminum-based MOF Nanowire with Graphene Oxide Nanoscrolls as Structure-Directing Agents" M. Muschi, A. Lalitha, S. Sene, D. Aureau, M. Fregnaux, I. Esteve, L.Rivier, N. Ramsahye, S. Devautour-Vinot, C. Sicard, N. Menguy, C. Serre, G. Maurin, N. Steunou. ***Angewandte Chemie International Edition,*** 59, (2020), 10353-10358.link

-4- "Covalent and Selective Grafting of Polyethylene Glycol Brushes at the Surface of ZIF-8 for the Processing of Membranes for Pervaporation.**"** M. Benzaqui, R. Semino, F. Carn, S. Rodrigues Tavares, N. Menguy, M. Giménez-Marqués, E. Bellido, P. Horcajada, T. Berthelot, A. I. Kuzminova, M. E. Dmitrenko, A. V. Penkova, D. Roizard, C. Serre, G. Maurin, and N. Steunou, ***ACS Sustainable Chemistry Engineering***, 7, (2019), 7, 6629−6639.link

-5- "A new strontium bromide MOF composite with improved performance for solar energy storage application" P. D'Ans, E. Courbon, A. Permyakova, F. Nouar, C. Simonnet-Jégat, F. Bourdreux, L. Malet, C. Serre, M. Frère, N. Steunou, ***Journal of Energy Storage*** 25 (2019) 100881.link

- 6- " Enhancing microperoxidase activity and selectivity: immobilization in metal-organic frameworks. **"** Effrosyni Gkaniatsou, C. Serre, J.-P. Mahy, N. Steunou, R. Ricoux**,** C. Sicard, ***Journal of Porphyrins and Phthalocyanines*** 23, (2019) 1–11link

-7- *"Influence of Filler Pore Structure and Polymer on the Performance of MOF-Based Mixed-Matrix Membranes for CO2 Capture."* A. Sabetghadam, X. Liu, M. Benzaqui, E. Gkaniatsou, Angelica Orsi, M. M. Lozinska, C. Sicard, T. Johnson, N. Steunou, P. A. Wright, C. Serre, J. Gascon, F. Kapteijn. ***Chemistry A European Journal*** 24, (2018), 7949 - 7956.link

-8- "*A phase transformable ultrastable titanium-carboxylate framework for photoconduction."* S. Wang, T. Kitao, N. Guillou, M. Wahiduzzaman, C. Martineau-Corcos, F. Nouar, A. Tissot, L. Binet, N. Ramsahye, S. Devautour-Vinot, S. Kitagawa, S. Seki, Y. Tsutsui, V. Briois, N. Steunou, G. Maurin, T. Uemura, C. Serre. ***Nature Communications***, 9, (2018), 1660.link

-9- *"Fabrication of ultrathin MIL-96(Al) films and study of CO_2 adsorption/desorption processes using quartz crystal microbalance."* M. A. Andrés, M. Benzaqui, C. Serre, N. Steunou, I. Gascón, ***Journal of Colloid and Interface Science***, 519 (2018) 88–96.link

-10- *"A promising metal–organic framework (MOF), MIL-96 (Al), for CO_2 separation under humid conditions. "* V. Benoit, N. Chanut, R. S. Pillai, M. Benzaqui,I. Beurroies, S. Devautour-Vinot, C. Serre, N. Steunou, G. Maurin, P. L. Llewellyn. ***Journal of Materials Chemistry A***, 6, (2018), 2081-2090.link

-11-*"Metal-Organic Frameworks for Cultural Heritage preservation: the case of acetic acid removal."* K. Dedecker, R. S. Pillai, F. Nouar, J. Pires, N. Steunou, E. Dumas, G. Maurin, C. Serre, M. L. Pinto, ***ACS Applied Materials & Interfaces***, 10, (2018), 13886-13894.link

-12-*"Enzyme Encapsulation in Mesoporous Metal–Organic Frameworks for Selective Biodegradation of Harmful Dye Molecules."* E. Gkaniatsou , C. Sicard, R. Ricoux, L. Benahmed, F. Boudreux, Q. Zhang, C. Serre, J.-P. Mahy, N. Steunou. ***Angewandte Chemie International Edition***, 57, (2018), 16141-16146.link

-13-*"Metal–organic frameworks: a novel host platform for enzymatic catalysis and detection."* E. Gkaniatsou, C. Sicard, R. Ricoux, J.-P. Mahy, N. Steunou, C. Serre, ***Materials Horizon***, 4 (2017), 55-63.link

-14-"*Synthesis optimization, shaping and heat reallocation evaluation of the hydrophilic Metal Organic Framework MIL-160(Al).*" A. Permyakova, O. Skrylnyk, E. Courbon, M. Affram, S. Wang, U-H. Lee, A. H. Valekar, F. Nouar, G. Mouchaham, T. Devic, G. De Weireld, J.-S. Chang, N. Steunou, M. Frère, C. Serre. ***ChemSusChem***, 10, (2017), 1419-1426. link

-15- "*A new composite sorbent based on $SrBr_2$ and silica gel for solar energy storage application with high energy storage density and stability.*" E. Courbon, P. D'Ans, A. Permyakova, O. Skrylnyk, N. Steunou, M. Degrez, M. Frère. ***Applied Energy***, 190, (2017), 1184-1194.link

-16- "*Titanium coordination compounds: from discrete metal complexes to metal–organic frameworks.*"H. Assi, G. Mouchaham, N. Steunou, T. Devic, C. Serre, ***Chemical Society Reviews***, 46, (2017), 3431-3452.link

-17- "*Design of salt–metal organic framework composites for seasonal heat storage applications.*" A. Permyakova, S. Wang, E. Courbon, F. Nouar, N. Heymans, P. D'Ans, N. Barrier, P. Billemont, G. De Weireld, N. Steunou, M. Frère, C. Serre. ***Journal of Materials Chemistry A***, Hot Paper, 5, (2017), 12889-12898.link

-18- "*Maghemite-nanoMIL-100(Fe) bimodal nanovector as a new platform for image-guided therapy.*" S. Sene, M. T. Marcos-Almaraz, N. Menguy, J. Scola, J. Volatron, R. Rouland, J.-M. Grenèche, S. Miraux, C. Menet, N. Guillou, F. Gazeau, C. Serre, P. Horcajada, N. Steunou. **Chem**, 3, (2017), 303-322. link

-19- "*Further improvement of the synthesis of silica gel and $CaCl_2$ composites: Enhancement of energy storage density and stability over cycles for solar heat storage coupled with space heating applications."* E. Courbon, P. D'Ans, A. Permyakova, O. Skrylnyk, N. Steunou, M. Degrez, M. Frère. ***Solar Energy***, 157, (2017), 532–541.link

-20-*"Highly Efficient Proton Conduction in a Three-Dimensional Titanium Hydrogen Phosphate."* P. G. M. Mileo, T. Kundu, R. Semino, V. Benoit, N. Steunou, P. L. Llewellyn, C. Serre, G. Maurin, S. Devautour-Vinot. ***Chemistry of Materials*** 29, (2017), 7263−7271.link

-21- "*Revisiting the Case of the Microporous Aluminum Trimesate-based MOF (MIL-96): from Structure Determination and Synthesis of Nanoparticles to the Processing of Mixed Matrix Membranes for CO2 Capture."* M. Benzaqui, R. S Pillai, A. Sabetghadam, V. Benoit, P. Normand, J. Marrot, N. Menguy, D. Montero, W. Shepard, A. Tissot, C. Martineau-Corcos, C. Sicard, M. Mihaylov, F. Carn, I. Beurroies, P. L. Llewellyn, G. De Weireld, K. Hadjiivanov, J. Gascon, F. Kapteijn, G. Maurin, N. Steunou, C. Serre. ***Chemistry of Materials***, 29, (2017), 10326-10338.link

-22- *" Toward an Understanding of the Microstructure and Interfacial Properties of PIMs/ZIF-8 Mixed Matrix Membranes"* M. Benzaqui, R. Semino, N. Menguy, F. Carn, T. Kundu, J. M. Guigner, N. B. McKeown, K. J. Msayib, M. Carta, E. Malpass-Evans, C. LeGuillouzer, G. Clet, N. A. Ramsahye, C. Serre, G. Maurin, N. Steunou. ***ACS Applied Materials Interfaces***, 8, (2016), 27311-27321.link

-23- *"Synthesis of the biocompatible and highly stable MIL-127(Fe): from large scale synthesis to particle size control."* H. Chevreau, A. Permyakova, F. Nouar, P. Fabry, C. Livage, F. Ragon, A. Garcia-Marquez, T. Devic, N. Steunou, C. Serre, P. Horcajada. ***CrystEngComm***, 18, (2016), 4094-4101.link

-24- "*Investigations into the Immobilization of a Single-Molecule Magnet Polyoxometalate in Metal Organic Framework and Biopolymer Matrices."* W. Salomon, Y. Lan, E. Rivière, S. Yang, C. Roch-Marchal, P. Mialane, C. Simonnet-Jégat, N. Steunou, N. Leclerc-Laronze, L. Ruhlmann, T. Mallah, W. Wernsdorfer, A. Dolbecq. ***Chemistry a European Journal*****,** 22 , (2016), 6564-6574.link

-25- "*Design of Laccase-Metal Organic Framework-Based Bioelectrodes for Biocatalytic Oxygen Reduction Reaction*." S. Patra, S. Sene, C. Mousty, C. Serre, A. Chaussé, L. Legrand, N. Steunou. ***ACS Applied Materials Interfaces***, 8, (2016), 20012-20022.link

-26- *"Supramolecular Assembly of Gelatin and Inorganic Polyanions: Fine-Tuning the Mechanical Properties of Nanocomposites by Varying Their Composition and Microstructure."* I. Baroudi, C. Simonnet-Jégat, C. Roch-Marchal, N. Leclerc-Laronze, C. Livage, C. Martineau, C. Gervais, E. Cadot, F. Carn, B. Fayolle, N. Steunou. ***Chemistry of Materials***, 27, (2015), 1452−1464.link

-27- Review article. *"Rational design of one-dimensional vanadium(V) oxide nanocrystals: an insight into the physicochemical parameters controlling the crystal structure, morphology and size of particles."* N. Steunou, J. Livage. ***CrystEngComm,*** 17, (2015), 6780-6795. link

-28-*"Design of metal organic framework–enzyme based bioelectrodes as a novel and highly sensitive biosensing platform."* S. Patra, T. Hidalgo Crespo, A. Permyakova, C. Sicard, C. Serre, A. Chaussé, N. Steunou, L. Legrand. ***Journal of Materials Chemistry B***, 3, (2015) ,8983-8992.link

-29-"*Interfacing a heteropolytungstate complex and gelatin through a coacervation process: design of bionanocomposite films as novel electrocatalysts.*" B. Khadro, I. Baroudi, A.-M. Goncalves, B. Berini, B. Pegot, F. Nouar, H. Ngoc, F. Ribot, C. Gervais, F. Carn, E. Cadot, C. Mousty, C. Simonnet-Jégat, N. Steunou. ***Journal of Materials Chemistry A***, 2, (2014),9208-9220. link

-30-"*Quantitative Analysis of the Proximities of OH Ligands and Vanadium Sites in a Polyoxovanadate Cluster Using Frequency-Selective H-1-V-51 Solid-State NMR Spectroscopy."* F. Pourpoint, J. Trébosc, C. Bonhomme, O. Durupthy, N. Steunou, O. Lafon, J.-P. Amoureux. ***Journal of Physical Chemistry C***, 118, (2014), 18580–18588.link

-31- *"A biocompatible calcium bisphosphonate coordination polymer: towards a metal-linker synergistic therapeutic effect?"* E. Alvarez, A. Garcia Marquez, T. Devic, N. Steunou, C. Serre, C. Bonhomme, C. Gervais, I. Izquierdo-Barba, M. Vallet-Regi, D. Laurencin, F. Mauri, P. Horcajada. ***CrystEngComm***, 15, (2013), 9899-9905. link

-32- "*A rare example of a porous Ca-MOF for the controlled release of biologically active NO."* S. R. Miller, E. Alvarez, L.Fradcourt, T. Devic, S. Wuttke, P. S. Wheatley, N. Steunou, C. Bonhomme, C. Gervais, D. Laurencin, R. E. Morris, A.Vimont, M. Daturi, P. Horcajada, C. Serre. **Chemical Communications**, 49, (2013), 7773-7775. link

-33- "Biopolymer folding driven nanoparticle reorganization in bio-nanocomposites" F. Carn, F. Boué, M. Djabourov, N. Steunou, T. Coradin, J. Livage, S. Floquet, E. Cadot, E. Buhler, ***Soft Matte***r, 8, (2012), 2930-2944

-34- "Nanostructured MV_3O_8 and $M_2V_6O_{16}$ materials join the family of sol-gel host matrices for enzyme encapsulation. Controlled sol-gel synthesis and biosensing properties." N. Steunou, C. Mousty, O. Durupthy, C. Roux, G. Laurent, C. Simonnet-Jegat, J. Vigneron, A. Etcheberry, C. Bonhomme, J. Livage, T. Coradin, ***Journal of Materials Chemistry*****,** 22, (2012), 15291-15302.

-35- "Elaboration, Stability and Enzymatic Degradation of Hydroxypropylcellulose/Polysiloxane Biocomposite Membranes" N. Etteyeb, V. Jaouen, N. Steunou, N. Gharbi, T. Coradin, ***Silicon***, 4, (2012), 79-84.

-36- **"**Design and properties of biopolymer-silica hybrid materials: The example of pectin-based biodegradable hydrogels**"** N. Agoudjil, C. Sicard, V. Jaouen, C. Garnier, E. Bonnin, N. Steunou, T. Coradin, **Pure and applied Chemistry**, 84, (2012), 2521-2529.

-37- "Ex Situ X-ray Diffraction, X-ray Absorption Near Edge Structure, Electron Spin Resonance, and Transmission Electron Microscopy Study of the Hydrothermal Crystallization of Vanadium Oxide Nanotubes: An Insight into the Mechanism of Formation" M. Jaber, F. Ribot, L. Binet, V. Briois, S. Cassaignon, K. J. Rao, J. Livage, N. Steunou, ***Journal of Physical chemistry C***, 116, (2012), 25126-25136.

-38- **"**Assembling Vanadium (V) Oxide and Gelatin into Novel Bionanocomposites with Unexpected Rubber-like Properties" F. Carn, O. Durupthy, B. Fayolle, T. Coradin, J. Maquet, J. Livage , N. Steunou ***Chemistry of Materials***, 22 (2010) 398-408.

-39- "Bacteria encapsulation in colloidal inorganic matrices: is-it a general method?" M. Amoura, C. Roux, S. Masse, N. Steunou, T. Coradin ***Comptes Rendus Chimie***, 13 (2010), 52-57.

-40- "DFT-NMR Crystallography and ^{51}V 3QMAS Experiments for Probing Surface OH Ligands and Hydrogen Bond Network in a Polyoxovanadate Cluster: the Study Case of $Cs_4[H_2V_{10}O_{28}]$. $4H_2O$" L. Truflandier, F. Boucher,

C. Payen, R. Hajjar, Y. Millot, C. Bonhomme, N. Steunou, ***Journal of American Chemical Society,*** 132, (2010), 4653-4668.

-41-"In situ growth of gold colloids within alginate films" V. Jaouen, R. Brayner, D. Lantiat, N. Steunou, T. Coradin, ***Nanotechnology***, 21, (2010), 85605-85605.

-42- "Room temperature sol-gel synthesis of crystalline $Cs[V_3O_8]$. Probing the hydration level of the interlamellar space by ^{51}V and ^{133}Cs MAS NMR spectroscopy." O.Durupthy, J. Maquet, C. Bonhomme, T. Coradin, J. Livage, N.Steunou, ***Journal of Materials Chemistry*** 18 (2008) 3702-3712

-43- "Vanadium oxide-PANI Nanocomposite-based Macroscopic Fibers: Alcohol Sensors Bearing Enhanced Toughness" J. Dexmer, C. M. Leroy, L. Binet, V. Heresanu, P. Launois, N. Steunou, C. Coulon, J. Maquet, N. Brun, J. Livage, R. Backov, ***Chemistry of Materials*** 20 (2008) 5541-5549.

-44- "First Example of Biopolymer-Polyoxometalate Complex Coacervation in Gelatin-Decavanadates Mixtures." F. Carn, N. Steunou, M. Djabourov, T. Coradin, F. Ribot, J. Livage, ***Soft Matter***, 4 (2008) 735-738.

-45- "Influence of Decavanadate Clusters on the Rheological Properties of Gelatin" F. Carn, M. Djabourov, T. Coradin, J. Livage, N. Steunou ***Journal* of *Physical Chemistry B***, 112, (2008), 12596-12605.

-46- "Designing nanotexturated vanadium oxide based macroscopic fibers: applications as alcoholic sensors." C.M. Leroy, M.F. Achard, O. Babot, N. Steunou, P. Massé, L. Binet, N. Brun, J. Livage, R. Backov, ***Chemistry of Materials,*** 19 (2007) 3988-3999.

-47- "Assembly of decavanadate polyanions by collagen helices: synthesis of an hybrid inorganic-bioorganic material."A. Marchal, N. Steunou, G. Mosser, T. Coradin, J. Maquet, J. Livage, ***Materials Research Society Symposium Proceedings****, 972 & 988E* (2007).

-48- "Room temperature sol-gel synthesis of crystalline $Cs[V_3O_8]$. Probing the hydration level of the interlamellar space by ^{51}V and ^{133}Cs MAS NMR spectroscopy." O.Durupthy, J. Maquet, N.Steunou, C. Bonhomme, T. Coradin, J. Livage, ***Materials Research Society Symposium Proceedings****, 984E* (2007).

-49- "Synthesis of $Li_{1+x}V_3O_8$ via a Gel Precursor: Part II, from Xerogel to the Anhydrous Material." M. Dubarry, J. Gaubicher, D. Guyomard, N. Steunou, J. Livage, N. Dupre, C. P. Grey, ***Chemistry of Materials,*** 18(3) (2006) 629-636.

-50- "Intercalation of dipeptides during $V_2O_5.nH_2O$ xerogel condensation" O. Durupthy, N. Steunou, T. Coradin, J. Livage, ***Journal of Physics and Chemistry of Solids****,* 67(5-6) (2006) *944-949.*

-51- **<u>Review article</u>** "Titanium-Oxo Clusters, Versatile Nanobuilding Blocks for the Design of Advanced Hybrid Materials" L. Rozes, N. Steunou, G. Fornasieri, C. Sanchez, ***Monatshefte für Chemie***, 137 (5) (2006) 501-528.

-52- "Designing the Width and Texture of Vanadium Oxide Macroscopic Fibers: Towards Tuning Mechanical Properties and Alcohol-Sensing Performance" H. Serier, M.-F. Achard, O. Babot, N. Steunou, J. Maquet, J. Livage, C. M. Leroy, R. Backov, ***Advanced Functional Materials***, 16(13) (2006) 1745-1753.

-53- "Combining sol-gel chemistry and extrusion process toward generating first vanadium oxide fibers." L. Biette, H. Serier, F. Carn, M. Maugey, M.-F. Achard, N. Steunou, J. Livage , R. Backov, ***Materials Research Society Symposium Proceedings***, *900E* (2006) O05.08.1-O05.08.6.

-54- "Tailor-Made macroporous Vanadium Oxide Foams" F. Carn, N. Steunou, J. Livage, A. Colin, R. Backov, ***Chemistry of Materials***, 17 (2005) 644-649.

-55- "Influence of pH and ionic strength on vanadium (V) oxides formation. From $V_2O_5.nH_2O$ gels to crystalline $NaV_3O_8.1.5H_2O$" O. Durupthy, N. Steunou, T. Coradin, J. Maquet, C. Bonhomme, J. Livage, ***Journal of Materials Chemistry,*** 15 (2005) 1090-1098.

-56- "Sol Gel synthesis of $Li_{1+x}V_3O_8$ Gel. From Precursors to Xerogel" M. Dubarry, J. Gaubicher, D. Guyomard, O. Durupthy, N. Steunou, J. Livage, N. Dupre, C. Grey, ***Chemistry of Materials,*** 17 (2005) 2276-2283.

-57- "Vanadium oxide foams: An insight into the structure of the vanadium oxide walls" O. Durupthy, M. Jaber, N. Steunou, J. Maquet, G. T. Chandrappa, J. Livage, ***Chemistry of Materials***, 17 (2005) 6395-6402.

-58- "Macroscopic Fibers of Oriented Vanadium oxide Ribbons and their application as highly sensitive alcohol Microsensors." L. Biette, F. Carn, M. Maugey, M-F Achard, J. Maquet, N. Steunou, J. Livage, H. Serier, R. Backov, ***Advanced Materials,*** 17 (2005) 2970-2974.

-59- "Vanadium Oxide Nanotubes: New Synthesis Route and Mechanism of Formation." M. Jaber, N. Steunou, T. Azaïs, J. Livage, ***Materials Research Society Symposium Proceedings,*** 847 (2005) 563-569.

-60- "Room temperature conversion of $X_{0.3}V_2O_5$. nH_2O phase into $X_2V_6O_{16}$. nH_2O phase Influence of the nature of the cation $X^{+"}$ O. Durupthy, S. Es-salhi, N. Steunou, T. Coradin, J. Livage, ***Materials Research Society Symposium Proceedings***, 848 (2005) 19-24.

-61- "Rational design of macrocellular TiO_2 and V_2O_5 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 (2005) 189-194.

-62- "Spectroscopic investigation of interactions between dipeptides and vanadate (V) in solution" O. Durupthy, A. Coupé, L. Tache, M-N Rager, J. Maquet, T. Coradin, N. Steunou, J. Livage, ***Inorganic Chemistry,*** 43 (2004) 2021-2030.

-63- "$Li_{1+\alpha}V_3O_8$ Gel and Xerogel : a new insight" M. Dubarry, J. Gaubicher, D. Guyomard, N. Steunou, J. Livage, ***Chemistry of Materials***, 16 (2004) 4867-4869.

-64- "Solid State NMR characterization of Encapsulated Molecules in Mesoporous Silica" F. Babonneau, L. Yeung, N. Steunou, C. Gervais, B. Munoz, A. Ramila, M Vallet-Régi, ***Journal of Sol-Gel Science and Technology***, 31 (2004) 219-223.

-65- "Hydrothermal synthesis of vanadium oxide nanotubes from V_2O_5 gels" G. T. Chandrappa, N. Steunou , S. Cassaignon, C. Bauvais, J. Livage, ***Catalysis Today***, 78/1-4 (2003) 85-89.

-66- "Vanadium Oxide From Gels To Nanotubes"G. T. Chandrappa, N. Steunou, S. Cassaignon, C. Bauvais, P. K. Biswas, J. Livage, ***Journal of Sol-Gel Science and Technology***, 26 (2003) 593-596.

-67- "Hydrothermal synthesis of $(H_3N(CH_2)_3NH_3)[V_4O_{10}]$" F. Sediri, N. Etteyeb, N. Gharbi, N. Steunou, J. Livage, ***Annales de Chimie-Science des Matériaux,*** 28 (2003) 129-134.

-68- "Encapsulation of ibuprofen in mesoporous silica: solid state NMR characterization" F. Babonneau, L. Camus, N. Steunou, A. Ramila, M. Vallet-Regi, ***Materials Research Society Symposium Proceedings***, 775 (2003) 77-82.

-69- "Ultra-light macroporous crystalline vanadium oxide foams" G.T. Chandrappa, N. Steunou, J. Livage, ***Nature***, 416 (2002) 702.

-70- "Hydrothermal synthesis and Characterization of $(H_3N(CH_2)_4NH_3)[V_6O_{14}]$" F. Sediri, N. Etteyeb, N. Steunou, C. Guyard-Duhayon, J. Maquet, N. Gharbi, J. Livage, ***Journal of Solid State Chemistry,*** 167 (2002) 407-411.

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