

## Nathalie STEUNOU

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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 18<sup>th</sup> December 1997.

### ✕ RESPONSABILITIES

- Since 2012** Elected member of the administration council of the Foundation 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).

→ **17 national projects (2013-19):** (i) Coordinator of 10 research projects (Labex/DIM/FSP), (ii) Coordinator of 2 equipment projects; (ii) member of 5 Projects (Labex, FSP).

## ✕ PUBLICATIONS & CONFERENCES

**81 Publications** in peer reviewed Journals (ORCID iD 0000-0002-7049-7388, Web of Science ResearcherID : AAD-2778-2019, h index = 28) ; **3 book chapters**, **3 patents**. **19 invited communications in international conferences & seminars**, **22 oral communications in international conferences**.

[Publons](#) ; [Google scholar](#)

## ✕ LIST OF PUBLICATIONS

- 1- "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](#)
- 2- "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](#)
- 3- "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) 1–11.[link](#)
- 4- "Influence of Filler Pore Structure and Polymer on the Performance of MOF-Based Mixed-Matrix Membranes for CO<sub>2</sub> 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](#)
- 5- "A phase transformable ultrastable titanium-carboxylate framework for photoconduction." S. Wang, T. Kitao, N. Guillou, M. Wahiduzzaman, C. Martineau-Corcoc, 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](#)
- 6- "Fabrication of ultrathin MIL-96(Al) films and study of CO<sub>2</sub> 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](#)
- 7- "A promising metal–organic framework (MOF), MIL-96 (Al), for CO<sub>2</sub> 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](#)
- 8- "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](#)
- 9- "Enzyme Encapsulation in Mesoporous Metal–Organic Frameworks for Selective Biodegradation of Harmful Dye Molecules." E. Gkaniatsou, C. Sicard, R. Ricoux, L. Benahmed, F. Bourdreux, Q. Zhang, C. Serre, J.-P. Mahy, N. Steunou. *Angewandte Chemie International Edition*, 57, (2018), 16141-16146.[link](#)
- 10- "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](#)
- 11- "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](#)

- 12- “A new composite sorbent based on SrBr<sub>2</sub> 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](#)
- 13- “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](#)
- 14- “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. Billefont, G. De Weireld, N. Steunou, M. Frère, C. Serre. **Journal of Materials Chemistry A**, Hot Paper, 5, (2017), 12889-12898.[link](#)
- 15- “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](#)
- 16- “Further improvement of the synthesis of silica gel and CaCl<sub>2</sub> 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](#)
- 17- “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](#)
- 18- “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 CO<sub>2</sub> 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](#)
- 19- “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](#)
- 20- “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](#)
- 21- “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](#)
- 22- “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](#)
- 23- “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](#)
- 24- 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](#)
- 25- “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](#)

- 26- "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](#)
- 27- "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](#)
- 28- "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](#)
- 29- "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](#)
- 30- "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 Matter**, 8, (2012), 2930-2944
- 31- "Nanostructured MV<sub>3</sub>O<sub>8</sub> and M<sub>2</sub>V<sub>6</sub>O<sub>16</sub> 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-Jégat, J. Vigneron, A. Etcheberry, C. Bonhomme, J. Livage, T. Coradin, **Journal of Materials Chemistry**, 22, (2012), 15291-15302.
- 32- "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.
- 33- "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.
- 34- "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.
- 35- "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.
- 36- "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.
- 37- "DFT-NMR Crystallography and <sup>51</sup>V 3QMAS Experiments for Probing Surface OH Ligands and Hydrogen Bond Network in a Polyoxovanadate Cluster: the Study Case of Cs<sub>4</sub>[H<sub>2</sub>V<sub>10</sub>O<sub>28</sub>]. 4H<sub>2</sub>O" L. Truflandier, F. Boucher, C. Payen, R. Hajjar, Y. Millot, C. Bonhomme, N. Steunou, **Journal of American Chemical Society**, 132, (2010), 4653-4668.
- 38- "In situ growth of gold colloids within alginate films" V. Jaouen, R. Brayner, D. Lantiat, N. Steunou, T. Coradin, **Nanotechnology**, 21, (2010), 85605-85605.
- 39- "Room temperature sol-gel synthesis of crystalline Cs[V<sub>3</sub>O<sub>8</sub>]. Probing the hydration level of the interlamellar space by <sup>51</sup>V and <sup>133</sup>Cs MAS NMR spectroscopy." O. Durupthy, J. Maquet, C. Bonhomme, T. Coradin, J. Livage, N. Steunou, **Journal of Materials Chemistry** 18 (2008) 3702-3712

- 40- "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.
- 41- "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.
- 42- "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.
- 43- "Designing nanotextured 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.
- 44- "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).
- 45- "Room temperature sol-gel synthesis of crystalline Cs[V<sub>3</sub>O<sub>8</sub>]. Probing the hydration level of the interlamellar space by <sup>51</sup>V and <sup>133</sup>Cs MAS NMR spectroscopy." O. Durupthy, J. Maquet, N. Steunou, C. Bonhomme, T. Coradin, J. Livage, *Materials Research Society Symposium Proceedings*, 984E (2007).
- 46- "Synthesis of Li<sub>1+x</sub>V<sub>3</sub>O<sub>8</sub> 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.
- 47- "Intercalation of dipeptides during V<sub>2</sub>O<sub>5</sub>.nH<sub>2</sub>O xerogel condensation" O. Durupthy, N. Steunou, T. Coradin, J. Livage, *Journal of Physics and Chemistry of Solids*, 67(5-6) (2006) 944-949.
- 48- **Review article** "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.
- 49- "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.
- 50- "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.
- 51- "Tailor-Made macroporous Vanadium Oxide Foams" F. Carn, N. Steunou, J. Livage, A. Colin, R. Backov, *Chemistry of Materials*, 17 (2005) 644-649.
- 52- "Influence of pH and ionic strength on vanadium (V) oxides formation. From V<sub>2</sub>O<sub>5</sub>.nH<sub>2</sub>O gels to crystalline NaV<sub>3</sub>O<sub>8</sub>.1.5H<sub>2</sub>O" O. Durupthy, N. Steunou, T. Coradin, J. Maquet, C. Bonhomme, J. Livage, *Journal of Materials Chemistry*, 15 (2005) 1090-1098.
- 53- "Sol Gel synthesis of Li<sub>1+x</sub>V<sub>3</sub>O<sub>8</sub> 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.
- 54- "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.
- 55- "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.
- 56- "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.

- 57- "Room temperature conversion of  $X_{0.3}V_2O_5 \cdot nH_2O$  phase into  $X_2V_6O_{16} \cdot nH_2O$  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.
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- 61- "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.
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- 63- "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.
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- 67- "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.
- 68- "Synthesis of nanostructured polymer-titanium oxide composites through the assembly of titanium oxo-clusters and amphiphilic block copolymers micelles" N. Steunou, S. Förster, P. Florian, C. Sanchez, M. Antonietti, **Journal of Materials Chemistry**, 12 (2002), 3426-3430.
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- 70- "Chemically controlled hydrothermal syntheses of vanadium oxides." N. Steunou, L. Bouhedja, S. Castro-Garcia, J. Livage, **High Pressure Research**, 20 (2001) 55-62.
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