

CURRICULUM VITÆ

PELLEGRINO FRANCESCO

Università degli Studi di Torino
Dipartimento di Chimica
Via Pietro Giuria 5
10125 TORINO (Italy)
+39 011 6705218
E-mail: francesco.pellegrino@unito.it
Skype: [francesco.pellegrino1990](https://www.skype.com/people/francesco.pellegrino1990)



Francesco Pellegrino was born in Carmagnola (Italy), on the 30th of September, 1990.

Studies

In 2012 he obtained his Bachelor's degree with full remarks in Chemistry at the University of Turin.

In 2014 he obtained his Master's degree with honours (110/110, *cum laude*) in Environmental Chemistry at the University of Turin, discussing a thesis on "***Influence Of Aggregation on the photocatalytic activity of anatase nanoparticles***", under the supervision of **Prof. V. Maurino**.

Since November 2014 he has started his PhD Program at the University of Turin. He is currently working in the "*Chemistry, Energy and Environment*" (CEA) group, at the Department of Chemistry, under the supervision of Prof. V. Maurino. PhD Project title: "***Tailoring the surface properties of TiO₂: shape controlled nanoparticles for the optimization of functional properties***".

From 05/2016 to 07/2016 he was visiting PhD student at the Technical University of Denmark DTU under the supervision of Prof. Ambat and Prof. Kai Dirscherl (DFM), where he worked on photoelectrochemistry of TiO₂ thin films.

Scientific Activities

Publications:

- F. Pellegrino, L. Pellutiè, F. Sordello, C. Minero, E. Ortel, V.-D. Hodoroaba, V. Maurino; **Influence of Agglomeration and Aggregation on the Photo-catalytic Activity of TiO₂ Nanoparticles**; Appl. Catal. B-Environ. 216 (2017) 80-87
- C.Deiana, E.Fois, G.Martra, S.Narbey, F.Pellegrino and G.Tabacchi; **On the simple complexity of CO on oxide surfaces: facet-specific donation and backdonation effects revealed on TiO₂ anatase nanoparticles**; ChemPhysChem, 2016, DOI: 10.1002/cphc.201600284;
- S.Parisotto, G.Garreffa, C.Canepa, E.Diana, F.Pellegrino, E.Priola, C.Prandi, V.Maurino and A.Deagostino; **Visible Light Photocatalytic Transformation of α,β -Unsaturated-N-Tosylhydrazones: a Novel Route to Allylic Sulfones**; ChemPhotoChem, 2016, DOI: 10.1002/cptc.201600037;
- A. Marucco; F. Pellegrino; S. Oliaro-Bosso; V. Maurino; G. Martra; I. Fenoglio; **Indoor illumination: a possible pitfall in toxicological assessment of nanomaterials**; Submitted to: Journal of Photochemistry and Photobiology A: Chemistry (ELSEVIER);

- V. Lavric, R. Isopescu, V. Maurino, F. Pellegrino, L. Pellutié, E. Ortel, V.-D. Hodoroaba; **A new model for nano-TiO₂ crystals birth and growth in hydrothermal process using oriented attachment approach**; Submitted to: Crystal Growth & Design (ACS);
- L. Mino, F. Pellegrino, S. Rades, V.-D. Hodoroaba, G. Spoto, V. Maurino, G. Martra; **Surface hydration, hydroxylation and Lewis acidity of TiO₂ anatase nanosheets with dominant {001} facets**; Submitted to: The Journal of Physical Chemistry Letters (ACS);

Patents:

- **Maurino V., Minero C., Pellegrino F., Zangirolami M.** – *Brevetto Italiano, Filing Number: 102016000053444 25/05/2016*

Oral Presentations:

- F. Pellegrino, L. Pellutié, F. Sordello, C. Minero, E. Ortel, V.-D. Hodoroaba, V. Maurino; **Influence of Aggregation on the Photocatalytic Activity of Anatase Nanoparticles**; International summer workshop NANOSCIENCE meets METROLOGY: size and shape engineering of nanoparticles towards improved technologies for energy, environment and health – **Speaker: F. Pellegrino**; ERICE, Italy – 27/31 July 2015 – ETTORE MAJORANA FOUNDATION AND CENTRE FOT SCIENTIFIC CULTURE;
- F. Pellegrino, L. Pellutié, F. Sordello, C. Minero, E. Ortel, V.-D. Hodoroaba, V. Maurino; **Influence of Aggregation on the Photocatalytic Activity of Anatase Nanoparticles**; 1ères Journées Franco-Italiennes de Nanosciences/ le Giornate Italo-Francesi di Nanoscienze – **Speaker: F. Pellegrino**; PORQUEROLLES, France - 6-9 September 2015;
- V. Maurino, L. Pellutié, F. Pellegrino, C. Deiana, G. Martra; **Shape Controlled TiO₂ Nanoparticles: Models materials for the comprehension of functional properties**; 1ères Journées Franco-Italiennes de Nanosciences/ le Giornate Italo-Francesi di Nanoscienze – **Speaker: V. Maurino**; PORQUEROLLES, France – 6/9 September 2015;
- C. Deiana, L. Mino, F. Pellegrino, L. Pellutié, G. Spoto, V. Maurino, G. Martra; **Engineered TiO₂ nanoparticles with defined morphology: are the exposed surfaces the expected ones?**; 1ères Journées Franco-Italiennes de Nanosciences/ le Giornate Italo-Francesi di Nanoscienze – **Speaker: C. Deiana**; PORQUEROLLES, France – 6/9 September 2015;
- V. Maurino, L. Pellutié, F. Pellegrino, E. Ortel, V.-D. Hodoroaba, D. Taloi, R. Isopescu; **Experimental Approaches and Paradigms for Shape Controlled Synthesis of TiO₂ Nanoparticles**; International summer workshop NANOSCIENCE meets METROLOGY: size and shape engineering of nanoparticles towards improved technologies for energy, environment and health – **Speaker: V. Maurino**; ERICE, Italy – 27/31 July 2015 – ETTORE MAJORANA FOUNDATION AND CENTRE FOT SCIENTIFIC CULTURE;
- E. Ortel, L. Pellutié, F. Pellegrino, V. Maurino, J. Mielke, B. Powierza, I. Häusler, W. Österle and V.-D. Hodoroaba; **Shape Recognition of Nanoparticles by High-Resolution SEM and T-SEM**; International summer workshop NANOSCIENCE meets METROLOGY: size and shape engineering of nanoparticles towards improved technologies for energy, environment and health – **Speaker: E. Ortel**; ERICE, Italy – 27/31 July 2015 – ETTORE MAJORANA FOUNDATION AND CENTRE FOT SCIENTIFIC CULTURE;
- L. Iannarelli, A. Giovannozzi, L. Mandrile, L. Diomede, F. Morelli, L. Pellutié, F. Pellegrino, V. Maurino, P. Bigini, G. Martra, G. Spoto, E. Ortel, V.-D. Hodoroaba, A. M. Rossi; **Bio-Accumulation of TiO₂ Nanoparticles in Caenorhabditis Elegans: an In-Vivo Model for Toxicity Analysis**; International summer workshop

NANOSCIENCE meets METROLOGY: size and shape engineering of nanoparticles towards improved technologies for energy, environment and health – **Speaker: L. Iannarelli**; ERICE, Italy – 27/31 July 2015 – ETTORE MAJORANA FOUNDATION AND CENTRE FOT SCIENTIFIC CULTURE;

- J. Kolling, C. Albrecht, F. Pellegrino, C. Deiana, R.P.F. Schins; **Nanotoxicological Assessment of Shape-Engineered Titanium Dioxide Nanoparticles**; International summer workshop NANOSCIENCE meets METROLOGY: size and shape engineering of nanoparticles towards improved technologies for energy, environment and health – **Speaker: J. Kolling**; ERICE, Italy – 27/31 July 2015 – ETTORE MAJORANA FOUNDATION AND CENTRE FOT SCIENTIFIC CULTURE;
- A. Marucco, L. Pellutiè, F. Pellegrino, C. Deiana, L. Mino, I. Fenoglio; **The Role of Illumination in the Hazard Assessment of Nano-TiO₂**; International summer workshop NANOSCIENCE meets METROLOGY: size and shape engineering of nanoparticles towards improved technologies for energy, environment and health – **Speaker: A. Marucco**; ERICE, Italy – 27/31 July 2015 – ETTORE MAJORANA FOUNDATION AND CENTRE FOT SCIENTIFIC CULTURE;
- F. Pellegrino, V. Maurino, L. Pellutiè, N. Paccotti, E. Ortel, V.D. Hodoroaba, D. Taloi, R. Isopescu; **Experimental approaches and paradigms for shape controlled synthesis of TiO₂ nanoparticles**; EMEC16 (16th European Meeting of Environmental Chemistry) – **Speaker: F. Pellegrino**; TORINO, Italy – 30 November - 3 December 2015;
- Parisotto S., Garreffa G., Pellegrino F., Maurino V., Canepa C., Priola E., Diana E. and Deagostino A.; **Photoinduced Rearrangement of α,β -Unsaturated N-Tosylhydrazones: an Efficient Synthesis of Allylic Sulfones**; 8èmes Journées Franco-Italiennes de Chimie 80 Giornate Italo-Francesi di Chimica – **Speaker: S. Parisotto**; AVIGNON, France – 25-26 April 2016;
- F. Pellegrino, V. Maurino, L. Pellutiè, V.D. Hodoroaba, R. Isopescu; **Tailoring the surface properties of TiO₂: shape controlled nanoparticles for the optimization of functional properties**; SetNanometro Project School “Nanoscience meet Metrology” – **Speaker: F. Pellegrino**; TORINO, Italy – 05 September - 09 September 2016;
- F. Pellegrino, L. Pellutiè, G. Martra, V.D. Hodoroaba, R. Isopescu, V. Maurino; **Tailoring the surface properties of TiO₂: shape controlled nanoparticles for the optimization of functional properties**; 21st International Conference of Solid State Ionics, Symposium I-10: Multi-functional oxide nanomaterials: from design to advanced applications – **Speaker: F. Pellegrino**; PADOVA, Italy – 18-23 June 2017;

Poster Presentations:

- L. Pellutiè, F. Pellegrino, E. Ortel, W. Österle, I. Häusler, V.D. Hodoroaba, G. Martra and V. Maurino; **HT Synthetic procedures for shape and size controlled anatase NPs**; International summer workshop NANOSCIENCE meets METROLOGY: size and shape engineering of nanoparticles towards improved technologies for energy, environment and health – **Presented by: F. Pellegrino**; ERICE, Italy – 27/31 July 2015 – ETTORE MAJORANA FOUNDATION AND CENTRE FOT SCIENTIFIC CULTURE;
- L. Pellutiè, F. Pellegrino, E. Ortel, W. Österle, I. Häusler, V.-D. Hodoroaba, G. Martra and V. Maurino; **HT Synthetic procedures for shape and size controlled anatase NPs**; 1ères Journées Franco-Italiennes de Nanosciences/ le Giornate Italo-Francesi di Nanoscienze – **Presented by: L. Pellutiè**; PORQUEROLLES, France – 6/9 September 2015;
- L. Iannarelli, L. Mandrile, L. Pellutiè, F. Pellegrino, F. Emmerling, E. Ortel, V.-D. Hodoroaba, G. Martra, V. Maurino, G. Spoto, A. M. Rossi; **A Chemometric Approach for Classification and Quantification of Different Crystalline Phases of TiO₂ Nanoparticles Mixtures Through Raman Spectroscopy**; International summer workshop NANOSCIENCE meets METROLOGY: size and shape engineering of nanoparticles towards improved technologies for energy, environment and health – **Presented by: L. Iannarelli**; ERICE, Italy – 27/31 July 2015 – ETTORE MAJORANA FOUNDATION AND CENTRE FOT SCIENTIFIC CULTURE;

- J. Kolling, C. Albrecht, F. Pellegrino, C. Deiana, R.P.F. Schins; **Nanotoxicological Assessment of Shape-Engineered Titanium Dioxide Nanoparticles**; Deutsche Gesellschaft für Experimentelle und Klinische Pharmakologie und Toxikologie e.V. – **Presented by: J. Kolling**; 81th Annual Meeting March 10/12, 2015 Kiel, Germany, DOI: 10.1007/s00210-015-1087-4;
- E. Ortel, L. Pellutiè, F. Pellegrino, V. Maurino, J. Mielke, B. Powierza, I. Häusler, W. Österle and V.-D. Hodoroaba; **Accurate Shape and Size Determination of Engineered NPs by Electron Microscopy (SEM, T-SEM, TEM, SAED)**; Microscopy Conference 2015 - **Presented by: E. Ortel** - September 6/11, 2015 Gottingen, Germany;
- L. Iannarelli, D. Imbraguglio, L. Pellutiè, F. Pellegrino, E. Alemanno, G. Martra, V. Maurino, G. Spoto, M. Sega, A. M. Rossi; **SETNanoMetro: Shape-Engineered TiO₂ Nanoparticles for Metrology of Functional Properties**; International Conference NANOTECHITALY2014 Cross-Cutting KETs for Responsible Innovation - **Presented by: L. Iannarelli** - 26/28 November 2014, Venezia ITALY;
- F. Pellegrino, V. Maurino, L. Pellutiè, N. Paccotti, E. Ortel, V.D. Hodoroaba, D. Taloi, R. Isopescu; **Experimental approaches and paradigms for shape controlled synthesis of TiO₂ nanoparticles**; 8èmes Journées Franco-Italiennes de Chimie 8o Giornate Italo-Francesi di Chimica; AVIGNON, France – 25-26 April 2016;

Last update: July 2017