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**Current Positions:** **Full Professor of General and Inorganic Chemistry**, Department of Chemical Science, University of Padova (since October 2017).  
**Coordinator** of the Master Degree “Sustainable Chemistry and Technologies for Circular Economy”, University of Padova (since 2020)  
**Project Technical Advisor (PTA) of the European Cluster on Catalysis** for the European Commission (since 2014)  
**DFG Mercator Fellow (Visiting Professor)** at Karlsruher Institut für Technologie (KIT) (Jan 2021-Dec 2024)  
**Visiting Professor Justus-Liebig-Universität Giessen**, Germany (since 2013, two months each year 2022).

**Previous Positions:** **TUM Global Visiting Professor** at Lehrstuhl für Anorganische und Metallorganische Chemie, Fakultät für Chemie, Technische Universität München (2021)  
**DFG Mercator Fellow (Visiting Professor)** at Justus Liebig Universität Gießen (two months/year from 2016 to 2020)  
**Visiting Professor** at Justus Liebig Universität Gießen (two months/year from 2012 to 2015)  
**Senior Research Scientist (Primo Ricercatore)** of the Italian National Research Council (CNR), Italy at ICMATE-CNR, Padova (2010-September 2017)  
**Research Scientist (Ricercatore)** of the National Research Council (CNR), Italy at ISTM-CNR (2001–2010)  
**FWF Lise Meitner Post-doc fellow**, TU Wien, Vienna, (Jan 2001-July 2002)

#### **Education and scientific background, academic records**

2013 **Italian Scientific Habilitation** (for full professorship) in Inorganic Chemistry  
2013 **Italian Scientific Habilitation** (for full professorship) in Technical Chemistry  
Jan1998 - Dec 2000 University of Padua, Italy, **Ph.D. in Inorganic Chemistry** (Scienze Chimiche)  
1997 University of Padua, Italy, **Professional Habilitation in Chemistry (State Certification Exam)**  
1996 **Degree “summa cum laude”** in Chemistry (Laurea Quinquennale in Chimica, 110/110 e lode) University of Padova, Italy

**Visiting professorships and staying abroad**

2021 - 2022	<b>Visiting Professor</b> Justus-Liebig Universität Giessen (Germany, 2 months/year)
2021 until 2024	DFG <b>Mercator Visiting Professor</b> Karlsruher Institut für Technologie (Germany, 1 month/year)
2021	<b>TUM Global Visiting Professor</b> Technische Universität München (3 weeks)
2016 until 2020	<b>DFG Mercator Fellow</b> in the Graduiertenkolleg "Substitutionsmaterialien für nachhaltige Energietechnologien" of the Justus-Liebig Universität Giessen.
2013 until 2015	<b>Visiting Professor</b> Justus-Liebig Universität Giessen (Germany, 2 months/year)
2013 and 2014	<b>Visiting Professor</b> Paris Lodron Universität Salzburg (Austria, 2 weeks/year)
2007 and 2008	<b>Visiting scientist</b> University of Versailles (France, 2 months every year)
2004 and 2005	<b>Visiting scientist</b> University of Stuttgart (Germany, 1 month every year)
2001-2002	<b>Lise Meitner Post-Doc Fellowship</b> (FWF Austria), Institut für Materialchemie, Technische Universität Wien, Vienna, Austria (18 months)
1999	Research fellowship, Technische Universität Wien, Vienna, Austria (3 months)
1995	Erasmus Fellowship, Georg-August Universität Göttingen, Germany (3 months)

**Former and present academic appointments (selection)**

2022-present	Member of the Workgroup on Sustainability of the University of Padova
2021-present	Member of the "800 Anni" Committee of the University of Padova
2021-present	Member of Managing Board (Consiglio Direttivo) of the Inorganic Division- Italian Chemical Society
2021-present	Member of Managing Board (Consiglio Direttivo) of EnerChem - Italian Chemical Society
2020-present	<b>Coordinator</b> of the Master Degree Programme "Sustainable Chemistry and Technologies for Circular Economy", University of Padova, starting in 2021-2022
2019-2021	Member of the Board "Internazionalizzazione" of the School of Science, University of Padova
2018-present	Co-cordinator of the Board "Terza Missione" (relationships with companies and outreach) of the Department of Chemical Sciences, University of Padova
2017-present	Member of the Managing Board (Consiglio Direttivo) of the PhD Course in Molecular Science, University of Padova
2014-present	Italian Delegate in ESUO Board (terms 2014-2016, 2017-2020, 2021-2023)
2014-present	Member of the Board of SILS, Società Italiana di Luce di Sincrotrone (terms 2014-2016, 2017-2020)
2013-2021	Member of the "Erasmus Board" of the Department of Chemical Sciences, University of Padova
2013-present	Member of "Collegio dei Docenti" of PhD Course in Molecular Science, University of Padova
2013-2017	Co-supervisor of two PhD students of the Max Planck Institut für Polymerforschung, Mainz (Germany) (supervisor Prof. Dr. K. Landfester)
2004-present	<b>Group leader of a small research group</b> (November 2021: 12 people: 5 PhD students, 3 Master students, 1 post-docs, 3 fellows) and coordinator of the "Wet chemistry & colloids" inorganic synthesis lab at the Department of Chemical Sciences, University of Padova
2002-present	<b>Supervisor</b> of 13 PhD students, ~ 80 Master students (Chemistry, Technical Chemistry, Pharmacy, Materials Sciences), ~25 Bachelor students, 14 German and 2 French guests or Erasmus students at the University of Padova, Italy

2004- present	<b>Lecturer</b> at the University of Padova (General Chemistry and Inorganic Chemistry (2010/11-2011/12), Advanced Inorganic Chemistry (Chimica Inorganica III) (since 2012/2013) Chemistry of Nanosystems (2004/05-2007/08), Environmental Toxicology (2014/15-2018/2019), Biomaterials (since 2020-2021), Colloid Chemistry (since 2014/15), Communication of Chemistry (since 2007/08), Organic-Inorganic Hybrid Materials (course for PhD students 2007/08-2014/15), X-ray for Chemistry (course for PhD students, 2017/2018 and 2019/2020).
2003-present	Coordinator of 21 Erasmus Exchange Programs with EU Universities (DE, AT, FR, NL, SLO, HR, HU, E)

**Awards and fellowships**

2021	TUM Global Visiting professorship at TUM (DE)
2021-2024	DFG Mercator Fellow (visiting professor) at KIT Karlsruhe (DE)
2021	DAAD Forschungsstipendium for research in DE (2M, Giessen)
2016-2020	DFG Mercator Fellow (visiting professor) at U. Giessen (DE)
2007, 2015	CNR Short Term Mobility Program
2013	Award SABIC Innovation Challenge
2005	DAAD Forschungsstipendium for research in DE (1 M, Stuttgart)
2002	Premio Regionale Innovazione (best PhD Thesis)
1999	Aldo Gini Fellowship (U. Padova)

**Evaluation activities, editorial activities, conference organisation and further appointments (selection)**

2021-present	Member of Panel of ERC Consolidator Grants (PE05)
2020	Convener of session Theme B at EuChems 2020 (postponed to 2022)
2019	Guest Editor of a Special Issue on "Low-temperature solution approaches to oxide functional nanoscale materials" in Chemistry- A European Journal
2008-present	<b>Member of the expert evaluators panels for FET-RIA Projects, MSCA-IF, NMBP projects of the European Commission (FP6, FP7, Horizon 2020, ERC)</b>
2014-present	<b>Project Technical Advisor (PTA) for the European Commission of the European Cluster on Catalysis</b>
2018-present	Member of the Editorial Board of "Journal of Physics D-Condensed Matter" (IOP, UK)
2014-present	Member of the Editorial Board of "Materials" and of "Coatings" (MDPI, Switzerland)
2014	Convener of session F4 at EuChems 2014 conference
2013	Guest Editor of a Special Issue on "Advances in Functional Hybrid Materials" in Materials
2007- present	Member of the organizing or Scientific Committee of <b>15 national conferences and 6 International conferences</b>
2007- present	Organization of events for popularization of chemistry for children (3-18 yrs)
2007-present	Member of PhD Examination boards or evaluator of PhD Theses at Max-Planck Institut für Kolloid- und Grenzflächenforschung (Golm, DE), University of Gießen (DE), University Milano Bicocca (IT), Saint-Gobain (France).
2007- present	<b>Evaluator</b> of proposals for the DFG, COST, Swiss National Science Foundation (SNF), Austrian Science Foundation (FWF), Slovenian Research Agency (ARRS), Polish Research Agency, Czech Science Foundation, Research Grant

2002-present	Council (RGC) of Hong Kong, Ministero dell'Istruzione (MIUR), Flander Research Foundation (FWO). PI of about 80 <b>R&amp;D projects with different national and multinational companies</b>
2002-present 2004-present	PI of four <b>scientific and bilateral projects</b> (with UK, Germany, Austria, Slovenia) P.I. and coordinator of about 60 projects (XAS, XPS, SAXS) at <b>European Synchrotron facilities</b> (DESY, ANKA, ESRF, Soleil, Elettra, PSI, Diamond)
2001-present	Referee for several scientific journals (Angew. Chemie, Inorg. Chem., Adv. Funct. Mater, Adv. Mater, Adv. Mater. Interf., Nanoscale, Chem. Mater., J. Mater. Chem, Chem. Comm., PCCP, Nanoletters, Dalton Trans., J. Phys. Chem. etc.)

**Project coordination (only PI role, not included participation to other projects)**

2021-2022	PI of the University of Padova Unit of the project "Digichem" funded by the European Commission
2022-2024	Coordinator of the project "Clocks- Closing the loop" number 21211 funded by the KIC Raw Materials, European Commission
2019-2021	PI of <b>Levi-Cases project</b> on "AMONRA- All oxide solar cells" at Interdepartmental Center "Levi-Cases", University of Padova
2018	PI of a <b>P-DISC project</b> on "Space matters- Crystallisation in confined space" at Department of Chemical Science, University of Padova
2018-2019	Scientific coordinator, FSE Project, Veneto Region
2018-2021	Coordinator of a research unit in Progetto di Eccellenza 2017 Fondazione Cariparo "InnoGel-Innovative hydrogels for conservation agriculture"
2016-2018	Italian PI of a bilateral project Italy-UK funded by Royal Society of Chemistry (International Exchanges Scheme - 2016/R1) "Sustainable hydrothermal synthesis routes for nanocrystalline ferrites"
2004-now	PI of about 70 industrial projects in cooperation with Italian and European companies
2007-now	PI of about 50 projects on beamtimes at EU synchrotron radiation sources
2005-2007	Italian P.I. of a bilateral project "Progetto bilaterale di Grande Rilevanza Italia-Slovenia (B2) funded by Ministero degli Affari Esteri (Italia) and Slovenian ARRS

**Invited talks at universities, research institutions or companies**

4.8.2022	Karlsruher Institut für Technologie
06.06.2021	Lehrstuhl für Anorganische und Metallorganische Chemie, Fakultät für Chemie, Technische Universität München (Germany)
25.02.2021	Department of Chemistry, University of Ljubljana (Slovenia) (on line)
10.09.2020	Safimet SpA, Arezzo (Italy)
04.08.2020	Heraeus GmbH, Hanau (Germany)
06.06.2020	Umicore AG KG & Co, Hanau (Germany)
18.02.2020	Department of Chemistry, University of Ljubljana (Slovenia)
23.04.2019	Department of Chemistry, University of Warwick (UK)
15.11.2018	Saint Gobain ed Università di Montpellier, Cavailon (France)
15.08.2018	Umicore AG KG & Co, Hanau (Germany)
11.12.2017	Physikalisch-Chemisches Institut, Justus-Liebig-Universität Giessen (Germany)
28.07.2017	Institut für Technische Chemie und Polymerchemie (ITCP), Karlsruher Institut für Technologie (KIT), Karlsruhe (Germany)

03.08.2016	Institut für Anorganische Chemie, Justus-Liebig-Universität Giessen (Germany)
19.10.2015	Institut für Anorganische Chemie, Universität Hamburg, Hamburg, (Germany)
27.11.2014	FB 08, Paris-Lodron Universität Salzburg (Austria)
29.07.2014	Institut für Anorganische Chemie, Justus-Liebig-Universität Giessen (Germany)
18.12.2014	FB 08, Paris-Lodron Universität Salzburg (Austria)
22.08.2013	Physikalisch-Chemisches Institut, Justus-Liebig-Universität Giessen (Germany)
19.08.2013	Institut für Organische Chemie, Universität Hamburg, Hamburg, (Germany)
25.07.2013	Max-Planck Institut für Polymerforschung, Mainz, (Germany)
20.06.2013	Dipartimento di Dipartimento di Chimica e Chimica Industriale, Università di Pisa (Italy)
28.06.2012	Dipartimento di Scienza dei Materiali, Università di Milano Bicocca, Milano (Italy)
15.05.2012	Institut für Anorganische Chemie, Universität Saarbrücken, Saarbrücken, (Germany)
18.12.2009	Physikalisch-Chemisches Institut, Justus-Liebig-Universität Giessen (Germany)
17.04.2009	Institut für Anorganische Chemie, Universität Bochum, Bochum, (Germany)
19.12.2008	Institut für Anorganische Chemie, Universität Paderborn, Paderborn, (Germany)
17.11.2008	Institut für Anorganische Chemie, Georg-August-Universität Göttingen, (Germany)
14.11.2008	Exzellenzcluster Engineering of Advanced Materials (EAM), Erlangen (Germany)
15.07.2008	Institut Lavoisier, Università Saint-Quentin Versailles, Versailles (France)
04.04.2008	Institut für Anorganische Chemie, Technische Universität Berlin, Berlino (Germany)
07.01.2008	Institut für Anorganische Chemie, Universität Erlangen-Nürnberg, Erlangen (Germany)
26.11.2007	Institut für Anorganische Chemie, Technische Universität Clausthal, Clausthal (Germany)
18.06.2007	Institut Lavoisier, Università Saint-Quentin Versailles, Versailles (France)
21.05.2007	Institut für Anorganische Chemie, Julius-Maximilians-Universität Würzburg, Würzburg (Germany)
19.04.2007	Institut für Anorganische Chemie, Johann W. Goethe Universität, Frankfurt am Main (Germany)
02.02.2007	Università degli Studi di Trento, Trento (Italy)
12.10.2006	University of Nova Gorica, Nova Gorica (Slovenia)
07.01.2005	ETH-Eidgenössische Technische Hochschule, Zurich (Switzerland)
17.11.2004	Institut für Materialchemie-Technische Universität Wien, Vienna (Austria)
11.08.2004	Max Planck Institut für Kolloid- und Grenzflächenforschung, Golm, Berlino (Germany)
04.08.2004	EMPA- Eidgenössische Materialprüfungs- und Forschungsanstalt, Dübendorf (Switzerland)
15.07.2004	Fraunhofer Institut Grenzflächen-und Bioverfahrenstechnik, IGB, Stoccarda (Germany)
20.01.2004	Institut für Anorganische Chemie, Universität Tübingen, Tübingen (Germany)
01.10.2003	National Institute of Chemistry, Ljubljana (Slovenia)
24.06.2003	Institut für Physikalische Chemie-Universität Stuttgart, Stoccarda (Germany)
05.04.2002	Biomedical Engineering Center- Ohio State University, Columbus (Ohio, US)
06.03.2002	Institut für Materialchemie-Technische Universität Wien, Vienna (Austria)
22.06.2001	Institut für Physikalische Chemie- Technische Universität Clausthal, Clausthal (Germany)
07.05.2001	Institut für Anorganische Chemie-Technische Universität Wien, Vienna (Austria)

**Invited talks at national and international conferences**

12.07.2021	<i>Key-note invited lecture</i> at Inn4Mech (on-line)
03.06.2021	<i>Invited webinar</i> on sustainable chemistry (MDPI)
11.03.2021	<i>Key-note invited lecture</i> at 3 <sup>rd</sup> Innovation Catalysis Forum (on line)
04.06.2020	<i>Key-note invited lecture</i> at 2 <sup>nd</sup> Innovation Catalysis Forum, Frankfurt (Germany)
26.11.2019	<i>Plenary lecture</i> at Merck Young Chemists' Symposium 2019, Rimini (Italy)
25.09.2019	<i>Key-note invited lecture</i> at the Innovation Catalysis Forum, Frankfurt (Germany)
02.09.2019	<i>Key-note invited lecture</i> at the European Conference on Solid State Chemistry, ECSSC 17, Lille (France)
28.8.2019	<i>Invited lecture</i> at GrK International Workshop, Castle of Rauschholzhausen, Giessen (Germany)
19.06.2018	<i>Invited lecture</i> Symposium I: Solution processing and properties of oxide thin films and nanostructures, EMRS 2018, Strasburgo (France)
28.09.2017	<i>Invited Key-Note nel simposio</i> Advanced nanomaterials and technologies for energy exploitation at the Nanoinnovation 2017, Rome (Italy)
10.09.2015	<i>Key-note invited lecture</i> at Congresso Nazionale di Chimica Inorganica
30.07.2015	<i>Invited lecture</i> at CeO <sub>2</sub> -based materials in catalysis and electrochemistry Symposium, Castle of Rauschholzhausen, Giessen (Germany)
10.05.2015	<i>Invited lecture</i> Symposium A CO <sub>2</sub> conversion, EMRS 2015, Lille (France)
17.04.2015	<i>Invited lecture</i> at Workshop Raman, Salzburg (Austria)
17.06.2014	<i>Invited lecture</i> at SOLMAT Conference Vipava (Slovenia)
25.05.2014	<i>Invited lecture</i> Symposium I: Solution processing and properties of oxide thin films and nanostructures, EMRS 2014, Strasburg (France)
15.05.2012	<i>Invited lecture</i> Symposium Q Hybrid Materials, EMRS 2012, Strasburg (France)
14.05.2008	<i>Invited lecture</i> at CERC3, TU Wien, Vienna (Austria)
18.01.2007	<i>Invited lecture</i> at Nanoweeek 2006, 18 gennaio 2007, Verona (Italy)
26.09.2006	<i>Invited lecture</i> at International Conference "Le cerebrolesioni", Cassino (Italy)
27.05.2006	<i>Invited lecture</i> at Finmeccanica Conference, Politecnico di Milano, Milano (Italy)
29.09.2005	<i>Invited lecture</i> at International Conference La malattia di Parkinson, Sirmione (Italy)
12.04.2005	<i>Invited lecture</i> at 14 <sup>th</sup> International Symposium Spectroscopy, Nova Gorica (Slovenia)
22.10.2004	<i>Invited lecture</i> at SloNano 2004, Ljubljana (Slovenia)
22.09.2000	<i>Invited lecture</i> at 10 <sup>th</sup> Int. Symposium on Fine Chemistry and Functional Polymers, Jinan (Cina)

**Memberships and affiliations**

Member of the Gesellschaft Deutscher Chemiker (German Chem. Soc. (GdCh)  
Member of the German Kolloid-Gesellschaft EV (2019)  
Member of the DECHEMA  
Member of the Società Chimica Italiana (Italian Chemical Society (SCI), Divisione Chimica Inorganica  
**Italian Delegate in the European Synchrotron User Organization** ([www.esuo.org](http://www.esuo.org))  
Member of the Società Italiana di Luce di Sincrotrone (SILS)  
Member of Consorzio Interuniversitario Scienza e Tecnologia dei Materiali (INSTM)

**Language skills**

Italian	mother tongue
German	proficient, written and spoken
English	good, written and spoken
French	basic

**Bibliographic records, invited lectures and talks**

180	papers in international peer-reviewed ISI journals (11 as reviews, highlights or feature articles)
36	h-index (source: Scopus, July 2022)
49	invited lectures at foreign Universities and Institutions or companies
25	invited lectures and key notes at international and national conferences and symposia
~50	oral contributions at international and national conferences and symposia
2	books in preparation edited by Cambridge University Press and Materials Research Society and RSC
5	chapters in book
6	papers in reviewed non ISI technical database (Surface Science Spectra)
17	papers in conference proceedings (4 peer reviewed)

**Five relevant recent publications (2015-2021)**

1. T. Gatti, F. Lamberti, R. Mazzaro, I. Kriegel, D. Schlettwein, F. Enrichi, N. Lago, E. Di Maria, G. Meneghesso, A. Vomiero and S. Gross  
*Opportunities from doping of non-critical metal oxides in last generation light-conversion devices*  
Advanced Energy Materials, 2021, 2101041  
DOI:[10.1002/aenm.202101041](https://doi.org/10.1002/aenm.202101041)
2. G. Salviulo, M. C. Lavagnolo, M. Dabalà, E. Bernardo, A. Polimeno, M. Sambì, F. Bonollo and S. Gross  
*Enabling circular economy: the overlooked role of inorganic materials chemistry*  
Chemistry-A European Journal, 2021, 27, 1-21  
DOI:[10.1002/chem.202002844](https://doi.org/10.1002/chem.202002844)
3. S. Diodati, R. Walton, S. Mascotto and S. Gross  
*Low-temperature wet chemistry synthetic approaches towards ferrites*  
Inorganic Chemistry Frontiers, 2020, 7, 3282-3314  
DOI:[10.1039/D0QI00294A](https://doi.org/10.1039/D0QI00294A)
4. I. Bretos, S. Diodati, R. Jimenez, F. Tajoli, J. Ricote, G. Bragaggia, M. Franca, M. L. Calzada and S. Gross  
*Low-temperature solution crystallization of nanostructured oxides and thin films*  
Chemistry-A European Journal, 2020, 26, 42, 9157-9179  
DOI:[10.1002/chem.202000448](https://doi.org/10.1002/chem.202000448)
5. S. Diodati, P. Dolcet, M. Casarin and S. Gross  
*Pursuing the Crystallization of Mono- and Polymetallic Nanosized Crystalline Inorganic Compounds by Low-Temperature Wet-Chemistry and Colloidal Routes*  
Chemical Reviews, 2015, 115, 11449–11502  
DOI: [10.1021/acs.chemrev.5b00275](https://doi.org/10.1021/acs.chemrev.5b00275)

**Curriculum Vitae Prof. Dr. Silvia Gross**

**2022**

Padova, November 28<sup>th</sup>, 2021

Prof. Dr. Silvia Gross

A handwritten signature in black ink, appearing to read "Silvia Gross". The signature is written in a cursive style with a large initial 'S' and 'G'.