

EUROPEAN CURRICULUM VITAE FORMAT



PERSONAL INFORMATION

Name	BRAGLIA LUCA
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Nationality	Italian
Date of birth	30/06/1990

RESEARCH ACTIVITIES

I am in charge of the experiments in the catalytic and chemical field at APE-HE beamline (Elettra). Moreover I am developing a device for near-edge X-ray absorption fine structure spectroscopy (NEXAFS) at ambient pressure to follow the kinetic of catalysts in operando conditions. My research activity is focusing on the characterization of heterogeneous catalysts to shed of light on the catalytic mechanism. In particular I have studied many types of metal organic framework (MOFs) modified during or the synthesis either during the pretreatment for enhancing their catalytic properties. I am also studying other catalysts based on $\text{Cr}^{\text{VI}}/\text{SiO}_2$, CeO_2 and porous materials as zeolites. The catalytic reactions under investigation are: CO_2 conversion to hydrocarbons, olefin epoxidation, CO oxidation, hydrogenation of hydrocarbons and direct methane to methanol reaction. The technique used for this purpose is mainly X-ray absorption spectroscopy supported by theoretical approach with DFT simulations. However I use also XPS, FTIR and XRD techniques. My experience with synchrotron radiation covers more than 40 experiments (some of them as **main proposer**) at different facilities as ESRF (BM23, ID11, ID20, BM01), Max Lab II (I1011 and I811beamline), PSI (SuperXAS beamline) and Elettra (APE and XAFS beamline).

BIBLIOMETRIC DATA

Google Scholar: 360 citations, h-index 9 ; Scopus: 298 citations, h-index 9
ORCID ID: 0000-0003-0796-3670 ; **Scopus Author ID:** 57188922375 ; **Researcher ID:** M-1492-2017

WORK EXPERIENCE

• 01/01/2018-present

Post-Doc fellow for **CNR-IOM** at TASC Laboratory on APE-HE beamline at **Elettra Synchrotron** (Trieste). In charge of **chemistry and catalysis** on APE-HE beamline for NEXAFS experiments at ambient pressure.

EDUCATION AND TRAINING

- 03/11/2017 **PhD cum laude in Chemistry and Material Science** at the University of Turin (**Unito**) in cotutela with the Physics Department at the **Southern Federal University** (Rostov on Don, Russia).
Thesis title: "MOFs functionalized with catalytic active sites investigated by X-ray absorption spectroscopy"
Supervisors: Prof. Carlo Lamberti and Prof. Alexander V. Soldatov
Period: from November 2014 to November 2017

- 22/07/2014 **Master degree in Material Science Exploiting Large Scale Facilities (MaMaSELF programme <http://www.mamaself.eu>)**, winner of grant. Spending 1st year in **Munich** at the Technische Universität München (**TUM**), 3rd semester in Torino University and last at the Southern Federal University (Rostov on Don, **Russia**) as **internship** under the supervision of Montpellier University (**Um2**).
Title thesis: "Oxygen capacity in CeO₂/Pt system: XAS and DFT studies".
During these two years the partner institution released me:
Master in **Material Science** at University of Turin with score: **108/110**. Master in **Applied and Engineering Physics** at TUM with score: **Passed with merit (1.7)**.
Master in **Chemistry of Materials and processes for Energy and Sustainable Development** at the University of Montpellier 2.
Supervisors: Prof. Carlo Lamberti and Prof. Alexander V. Soldatov
Period: from October 2012 to July 2014

- 13/07/2012 Bachelor degree in Material Science at the **University of Turin**.
Title thesis: "Photoinduced charge separation on Au/TiO₂ and Pt/TiO₂ system".
Supervisors: Prof. Elio Giamello
Period: from October 2009 to July 2012

- 13/07/2009 Scientific Diploma at the Liceo Scientifico Statale E. Majorana in Turin.
Period: from September 2004 to July 2009

SCHOOLS ATTENDED

- 07/01/2019 - 11/01/2019 INNOVATIVE CATALYSIS AND SUSTAINABILITY Scientific and Socio-Economic Aspects, Bardonecchia, Italy.
- 27/06/2016 - 1/07/2016 Vibrational spectroscopy school, Spectrocat, Caen, France.
- 25/08/2013 - 02/09/2013 MaMaSELF Summer School in Montpellier University 2 (France), Introduction into the use of "Large Scale Facilities".

TEACHING

- 2016-2017 Bando Art. 76, Tutoring for the "**Laboratory of inorganic chemistry**" course at the University of Turin, 40h.
- 2015-2016 Bando Art. 76, Tutoring for Master in Material science exploiting large scale facilities (MaMaSELF) courses in "**Quantum mechanics**" and "**Advanced Crystallography**" at the University of Turin, 24h.

VISITING PERIOD

- June 2018 Visiting researcher at the Utrecht University (Netherlands) in the Prof. Frank De Groot's group for acquiring skills in the charge transfer multiplet calculations with CTM4XAS software.

PUBLICATIONS

*= *Corresponding author*

= *Both authors contributed equally*

- 1) Shi, Y. Wang, L. Wang, Z. Vinai, G. **Braglia, L.** Torelli, P. Traversa, E. Liu, W. Yang, N. (2020) Defect Engineering for Tuning the Photoresponse of Ceria-Based Solid Oxide Photoelectrochemical Cells. *ACS Appl. Mater. Interfaces*. <https://doi.org/10.1021/acsami.0c17921>.
- 2) Simonne, D. H. Martini, A. Signorile, M. Piovano, A. **Braglia, L.** Torelli, P. Borfecchia, E. Ricchiardi, G. (2020) THORONDOR : A Software for Fast Treatment and Analysis of Low-Energy XAS Data. *J. Synchrotron Radiat.* 27 (6). <https://doi.org/10.1107/S1600577520011388>.
- 3) Signorile, M. # **Braglia, L.** # Crocellà, V. Torelli, P. Groppo, E. Ricchiardi, G. Bordiga, S. Bonino, F. (2020) Titanium Defective Sites in TS-1: Structural Insights by Combining Spectroscopy and Simulation. *Angew. Chemie Int. Ed.* 59 (41), 18145–18150. <https://doi.org/10.1002/anie.202005841>.
- 4) **Braglia, L.** Fracchia, M. Ghigna, P. Minguzzi, A. Meroni, D. Edla, R. Vandichel, M. Ahlberg, E. Cerrato, G. Torelli, P. (2020) Understanding Solid-Gas Reaction Mechanisms by Operando Soft X-Ray Absorption Spectroscopy at Ambient Pressure. *J. Phys. Chem. C* 124 (26), 14202–14212. <https://doi.org/10.1021/acs.jpcc.0c02546>.
- 5) Fracchia, M. Ghigna, P. Pozzi, T. Anselmi Tamburini, U. Colombo, V. **Braglia, L.** Torelli, P. (2020) Stabilization by Configurational Entropy of the Cu(II) Active Site during CO Oxidation on Mg_{0.2}Co_{0.2}Ni_{0.2}Cu_{0.2}Zn_{0.2}O. *J. Phys. Chem. Lett.* 11 (9), 3589–3593. <https://doi.org/10.1021/acs.jpcclett.0c00602>.
- 6) Edla, R. **Braglia, L.** Bonanni, V. Miotello, A. Rossi, G. Torelli, P. (2019) Study of Gaseous Interactions on Co₃O₄ Thin Film Coatings by Ambient Pressure Soft X-ray Absorption Spectroscopy. *The Journal of Physical Chemistry C* 123 (40), 24511–24519. <https://doi.org/10.1021/acs.jpcc.9b05433>
- 7) Amati, M. Bonanni, V. Genuzio, F. **Braglia, L.** Gregoratti, L. Locatelli, A. Kolmakov, A. Magnano, E. Matruggio, A. Mentis, T. O. Nappini, S. Torelli, T. Zeller, P. (2019). Operando photoelectron emission spectroscopy and microscopy at Elettra soft X-ray beamlines: from model to real functional systems. *Journal of Electron Spectroscopy and Related Phenomena* (2019). <https://doi.org/10.1016/j.elspec.2019.146902>
- 8) Korzyński, M. D., **Braglia, L.**, Borfecchia, E., Lomachenko, K. A., Baldansuren, A., Hendon, C. H., Lamberti, C. Dincă, M. (2019). *Quo vadis niobium?* Divergent coordination behavior of early transition metals towards MOF-5. *Chemical Science*. <https://doi.org/10.1039/C9SC01553A>
- 9) Bugaev, A. L., Skorynina, A. A., **Braglia, L.**, Lomachenko, K. A., Guda, A., Lazzarini, A., Bordiga, S. Olsbye, U. Lillerud, K. P. Lamberti, C. (2019). Evolution of Pt and Pd species in functionalized UiO-67 metal-organic frameworks. *Catalysis Today*. <https://doi.org/10.1016/J.CATTOD.2019.03.054>
- 10) Korzyński, M. D., **Braglia, L.**, Borfecchia, E., Lamberti, C., & Dincă, M. (2018). Molecular Niobium Precursors in Various Oxidation States: An XAS Case Study. *Inorganic Chemistry*, 57(21). doi:10.1021/acs.inorgchem.8b02616
- 11) Guda, A. A., Guda, S. A., Lomachenko, K. A., Soldatov, M. A., Pankin, I. A., Soldatov, A. V., **Braglia, L.**, Bugaev, A. L., Martini, A., Signorile, M., Groppo, E., Piovano, A., Borfecchia, E., Lamberti, C. (2018). Quantitative structural determination of active sites from in situ and operando XANES spectra: from standard ab initio simulations to chemometric and machine learning approaches. *Catalysis Today*. doi:S0920586118307703
- 12) Stubbs, A. W., **Braglia, L.**, Borfecchia, E., Meyer, R. J., Román-Leshkov, Y., Lamberti, C., & Dincă, M. (2018). Selective Catalytic Olefin Epoxidation with Mn^{II}-Exchanged MOF-5. *ACS Catalysis*, 8(1). doi:10.1021/acscatal.7b02946
- 13) Bugaev, A. L., Guda, A. A., Lomachenko, K. A., Kamysheva, E. G., Soldatov, M. A., Kaur, G., Øien-Ødegaard, S., **Braglia, L.**, Lazzarini, A., Manzoli, M., Bordiga, S., Olsbye, U., Lillerud, K.P., Soldatov, A.V. Lamberti, C. (2018). Operando study of palladium nanoparticles inside UiO-67 MOF for catalytic hydrogenation of hydrocarbons. *Faraday Discussions*, 208(0) 287-306. doi:10.1039/c7fd00224f

- 14) Guda, A. A., Bugaev, A. L., Kopelent, R., **Braglia, L.**, Soldatov, A. V., Nachtegaal, M., Safonova, O. V., Smolentsev, G. (2018). Fluorescence-detected XAS with sub-second time resolution reveals new details about the redox activity of Pt/CeO₂ catalyst. *Journal of Synchrotron Radiation*, 25(4), 989–997. doi:10.1107/S1600577518005325
- 15) **Braglia, L.***, Borfecchia, E., Martini, A., Bugaev, A. L., Soldatov, A. V., Øien-Ødegaard, S., Lønstad-Bleken, B. T., Olsbye, U., Lillerud, K. P., Lomachenko, K. A., Agostini, G., Manzoli, M., Lamberti, C. (2017). The duality of UiO-67-Pt MOFs: connecting treatment conditions and encapsulated Pt species by operando XAS. *Physical Chemistry Chemical Physics*, 19(40), 27489–27507. doi:10.1039/C7CP05185A
- 16) **Braglia, L.**, Borfecchia, E., Maddalena, L., Øien, S., Lomachenko, K. A., Bugaev, A. L., Bordiga, S., Soldatov, A. V., Lillerud, K. P., Lamberti, C. (2017). Exploring structure and reactivity of Cu sites in functionalized UiO-67 MOFs. *Catalysis Today*, 283, 89–103. doi:10.1016/J.CATTOD.2016.02.039
- 17) Barzan, C., Piovano, A., **Braglia, L.**, Martino, G. A., Lamberti, C., Bordiga, S., & Groppo, E. (2017). Ligands Make the Difference! Molecular Insights into Cr^{VI}/SiO₂ Phillips Catalyst during Ethylene Polymerization. *Journal of the American Chemical Society*, 139(47) 17064-17073. doi:10.1021/jacs.7b07437
- 18) Gutterød, E. S., Øien-Ødegaard, S., Bossers, K., Nieuwelink, A.-E., Manzoli, M., **Braglia, L.**, Lazzarini, A., Borfecchia, E., Ahmadigoltapeh, S., Bouchevreau, B., Bleken, B.T.L., Henry, R., Lamberti, C., Bordiga, S., Weckhuysen, B.M., Lillerud, K.P., Olsbye, U. (2017). CO₂ Hydrogenation over Pt-Containing UiO-67 Zr-MOFs - The Base Case. *Industrial and Engineering Chemistry Research*, 56(45). doi:10.1021/acs.iecr.7b01457
- 19) **Braglia, L.**, Borfecchia, E., Lomachenko, K. A., Bugaev, A. L., Guda, A. A., Soldatov, A. V., Bleken, B.T.L., Øien-Ødegaard, S., Olsbye, U., Lillerud, K.P., Bordiga, S., Agostini, G., Manzoli, M., Lamberti, C. (2017). Tuning Pt and Cu sites population inside functionalized UiO-67 MOF by controlling activation conditions. *Faraday Discussions*, 201. doi:10.1039/c7fd00024c
- 20) Botavina, M., Barzan, C., Piovano, A., **Braglia, L.**, Agostini, G., Martra, G., & Groppo, E. (2017). Insights into Cr/SiO₂ catalysts during dehydrogenation of propane: An operando XAS investigation. *Catalysis Science and Technology*, 7(8) 1690-1700. doi:10.1039/c7cy00142h
- 21) **Braglia, L.***, Bugaev, A. L., Lomachenko, K. A., Soldatov, A. V., Lamberti, C., & Guda, A. A. (2016). Investigation of oxygen vacancies in CeO₂/Pt system with synchrotron light techniques. *Journal of Physics: Conference Series*, 712(1) Art. n. 012064. doi:10.1088/1742-6596/712/1/012064
- 22) Borfecchia, E., Øien, S., Svelle, S., Mino, L., **Braglia, L.**, Agostini, G., Gallo, E., Lomachenko, K. A., Bordiga, S., Guda, A. A., Soldatov, M. A., Soldatov, A. V., Olsbye, U., Lillerud, K. P., Lamberti, C. (2016). A XAFS study of the local environment and reactivity of Pt- sites in functionalized UiO-67 MOFs. *Journal of Physics: Conference Series*, 712(1) Art. n. 12125. doi:10.1088/1742-6596/712/1/012125
- 23) **Braglia, L.***, Borfecchia, E., Lomachenko, K. A., Øien, S., Lillerud, K. P., & Lamberti, C. (2016). XAS on Rh and Ir metal sites in post synthetically functionalized UiO-67 Zirconium MOFs. *Journal of Physics: Conference Series*, 712(1) Art. n. 012053. doi:10.1088/1742-6596/712/1/012053

PUBLISHED BOOK CHAPTER

- 1) E. Borfecchia, **L. Braglia**, F. Bonino, S. Bordiga, S. Øien, U. Olsbye, K.P. Lillerud, J.A. van Bokhoven, K.A. Lomachenko, A.A. Guda, M.A. Soldatov, C. Lamberti, in: Y. Iwasawa, K. Asakura, M. Tada (Eds.), *XAFS Techniques for Catalysts, Nanomaterials, and Surfaces*, Springer International Publishing, Cham, 2017, p. 397.

REFEREE JOURNAL

ACS Omega, Waste Management (Elsevier), Journal of physics conference series

CONFERENCES AND CONTRIBUTIONS

I = international
N = National
O = oral contribution
P = Poster

- 1-5/09/2019 **[I*,O]** Luca Braglia, Matteo Signorile, Ilya A. Pankin, Francesca Bonino, Silvia Bordiga, Piero Torelli "New ambient pressure cell for near edge X-ray absorption spectroscopy for catalytic experiments", Presented at *EUROMAT 2019, Stockholm (Sweden)*
- 1-4/07/2019 **[N*,O]** Luca Braglia, , Matteo Signorile, Francesca Bonino, Silvia Bordiga, Piero Torelli "New ambient pressure cell for near edge X-ray absorption spectroscopy for catalytic experiments", Presented at *XLVII Congresso Nazionale di Chimica Fisica, Rome (Italy)*
- 8-12/07/2018 **[I*,O]** Luca Braglia, Matteo Signorile, Alessandro Damin , Francesca Bonino, Valentina Crocellà, Silvia Bordiga, Elena Groppo, Piero Torelli, Carlo Lamberti, "EXAFS and XANES techniques for studying the type of defects in Ti-zeolites and their role in catalysis", Presented at the *Junior EUROMAT 2018, Budapest (Hungary)*
- 11-14/06/2018 **[I*,O]** Luca Braglia, Matteo Signorile, Alessandro Damin , Francesca Bonino, Valentina Crocellà, Silvia Bordiga, Elena Groppo, Piero Torelli, Carlo Lamberti, "XAS for studying the type of defects in Ti-zeolites and their role in catalysis", Presented at the *TAILOR 2018, Ystad (Sweden)*
- 2-6/10/2017 **[N*,O]** Luca Braglia, Amanda W. Stubbs, Maciej D. Korzynski , Randall J. Meyer, Elisa Borfecchia, Carlo Lamberti, Mircea Dincă, "Insertion of Mn(II) and Nb(IV) atoms in the cornerstone of MOF-5: XANES and EXAFS studies", Presented at the *SILS conference 2017, Trieste (Italy)*
- 2-6/10/2017 **[N*,P]** Matteo Signorile, Luca Braglia, Ilya Pankin, Elena Groppo, Silvia Bordiga, Piero Torelli, and Carlo Lamberti, "Testing the potentiality of the new NEXAFS setup at APE-HE beamline for catalytic studies on Ti-Zeolites", Presented at the *SILS conference 2017, Trieste (Italy)*
- 17-22/09/2017 **[I*,O]** Luca Braglia, Elisa Borfecchia, Kirill A. Lomachenko, Alexander V. Soldatov, Bjørn-Tore Lønstad-Bleken, Sigurd Øien-Ødegaard, Unni Olsbye, Karl Petter Lillerud, Silvia Bordiga, Giovanni Agostini, Maela Manzoli, Carlo Lamberti, "The effect of the activation conditions for tuning the Pt active sites in functionalized UiO-67 MOF", Presented at the *European congress and exhibition on advanced materials and processes (EUROMAT2017) Thessaloniki (Greece)*.
- 17-22/09/2017 **[I*,P]** Matteo Signorile, Luca Braglia, Ilya Pankin, Elena Groppo, Silvia Bordiga, Piero Torelli, and Carlo Lamberti, "Testing the potentiality of the new NEXAFS setup at APE-HE beamline for catalytic studies on Ti-Zeolites", Presented at the *European congress and exhibition on advanced materials and processes (EUROMAT2017) Thessaloniki (Greece)*.
- 21-23/09/2016 **[N*,O]** Luca Braglia , Elisa Borfecchia , Giovanni Agostini, Kirill A. Lomachenko, Bjørn Tore Lønstad Bleken, Sigurd Øien-Ødegaard, Silvia Bordiga, Karl Petter Lillerud, Unni Olsbye, Carlo Lamberti, "The duality of UiO-67 Pt MOFs: connecting treatment conditions and encapsulated Pt species by operando XAS", Presented at the *SILS conference 2016, Bari (Italy)*.
- 21-23/09/2016 **[N*,P]** Luca Braglia , Elisa Borfecchia , Kirill A. Lomachenko, Bjørn Tore Lønstad Bleken, Sigurd Øien-Ødegaard, Silvia Bordiga, Karl Petter Lillerud, Unni Olsbye, Carlo Lamberti, "In situ/operando XAS and FTIR investigation of Cu sites in Cu-functionalized UiO-67 MOFs", Presented at the *SILS conference 2016, Bari (Italy)*.
- 5/10/2015 **[N*,O]** Luca Braglia, "Investigation of a new class of porous material" at 6th Fest of Science in Rostov on Don (Russia). (<http://sfedu.ru/international/?p=8261>)
- 27-30/07/2015 **[I*,P]** Luca Braglia, Elisa Borfecchia, Kirill Lomachenko, SigurdØien, Karl P. Lillerud, Carlo Lamberti, "XAS on Rh, Ir, Pt and Au metal sites in UiO-67 Zirconium Metal-organic Frameworks", Presented at the *International Joint School "Smart Nanomaterials and X-ray Optics 2015 Modelling, Synthesis and Diagnostics" Rostov on Don (Russia), (Winner Best Poster Award)*.
- 8-10/07/2015 **[N*,P]** Luca Braglia, Aram Bugaev, Kirill Lomachenko, Alexander V. Soldatov, Carlo Lamberti, Olga V. Sofonova, Alexander Guda, "Oxygen migration in CeO₂/Pt systems", Presented at the *XXIII SILS Meeting, Trento (Italy)*.
- 23-28/08/2015 **[I*,P]** Luca Braglia, Elisa Borfecchia, Kirill Lomachenko, Sigurd Øien, Karl P. Lillerud, Carlo Lamberti, "XAS on Rh, Ir, Pt and Au metal sites in UiO-67 Zirconium Metal-organic Frameworks", Presented at the *16th International Conference on X-ray Absorption Fine Structure XAFS16 Karlsruhe (Germany)*.
- 23-28/08/2015 **[I*,P]** Luca Braglia, Aram Bugaev, Kirill Lomachenko, Alexander V. Soldatov, Carlo Lamberti, Olga V. Sofonova, Alexander Guda, "Investigation of oxygen storage in CeO₂/Pt", Presented at the *16th International Conference on X-ray Absorption Fine Structure XAFS16 Karlsruhe*

<ul style="list-style-type: none"> • 13-18/07/2014 • 21-24/05/2014 	<p>(Germany).</p> <p>[*,P] L. Braglia, A. Guda, M. Soldatov, K. Lomachenko, A. Bugaev, A. V. Soldatov, C. Lamberti, O. V. Safonova, "Oxygen storage capacity of ceria nanoparticles: soft XAS and theoretical studies", Presented at the <i>XII International Conference on Nanostructured Materials (Nano 2014)</i>, Moscow (Russia).</p> <p>[*,O] L. Braglia, A. Guda, M. Soldatov, K. Lomachenko, A. Bugaev, A. V. Soldatov, C. Lamberti, O. V. Safonova, "Oxygen storage capacity of ceria nanoparticles: soft XAS and theoretical studies", Presented at the 6th MaMaSELF status meeting in Rigi Kulm (Switzerland).</p>
<p style="text-align: center;">AWARDS</p> <ul style="list-style-type: none"> • 27-30/07/2015 	<p>Best poster Award at the conference <i>International Joint School "Smart Nanomaterials and X-ray Optics 2015 Modelling, Synthesis and Diagnostics" Rostov on Don (Russia)</i>,</p>
<p>MOTHER TONGUE</p>	<p>ITALIAN</p>
<p>OTHER LANGUAGES</p>	<p>English: Understanding (C1), speaking (C1) and writing (B2), Owner of PET certificate. Russian: Understanding (A1), speaking (A1) and writing (A1). German: Understanding (A1), speaking (A1) and writing (A1), Owner of A1 certificate.</p>
<p style="text-align: center;">SOCIAL SKILLS AND COMPETENCES</p>	<p>Excellent ability to perform the work on time, according to the deadlines. Good ability to work in team. A lot of curiosity in the investigation in the field of material science.</p>
<p>DIGITAL COMPETENCE</p>	<p>Very good competence in the use of the following software: Microsoft Office, Origin, Vasp, Vesta, Diamond, Moldraw, IFEFFIT pack, FDMNES, CTM4XAS. Very good competence with internet navigation, scientific database (Scopus, Scifinder, and Web of knowledge). Basic knowledge in MatLab and Phyton.</p>
<p>CHARACTERIZATION METHODS</p>	<ul style="list-style-type: none"> • X-ray absorption spectroscopy near edge structures (XANES) • Extended X-ray absorption fine structure spectroscopy (EXAFS) • Infrared spectroscopy (FTIR and DRIFTS) • Density functional theory • Electronic paramagnetic resonance (EPR) spectroscopy
<p>FIELD OF INTERESTS</p>	<ul style="list-style-type: none"> • Catalytic materials • Metal organic frameworks (MOFs) • Environmental safety materials • Spectroscopic techniques • X-ray absorption spectroscopy techniques
<p>OTHER INTERESTS</p>	<ul style="list-style-type: none"> • Climbing • Hiking • Scuba diving • Snowboarding • Book • Travelling • Books
<p>DRIVING LICENCE</p>	<p>B-type</p>
<p>OTHERS LICENCES</p>	<ul style="list-style-type: none"> - Scuba Diving up to 18m, PADI Open Water - Climbing and alpinism, AL1 and AR1, CAI Italian association

In compliance with the Italian legislative Decree no. 196 dated 30/06/2003, I hereby authorize you to use and process my personal details contained in this document.

Luca Braglia