

Luca Capaldo

- CV -



• PERSONAL INFORMATION

Name Luca Capaldo
Date of birth 27/08/1991
Nationality Italian

• CURRENT POSITION

University
of Parma

01/10/2023
– present

Assistant Professor @ University of Parma
Department of Chemistry, Life Sciences and Environmental Sustainability, University of Parma, Italy
Main research interests: photochemistry, flow chemistry, electrochemistry, synthetic methodologies, mechanistic investigation

• PREVIOUS POSITIONS

University of Amsterdam

- 01/04/2023 – **Post-doctoral Fellowship**
30/09/2023 Project: “*Multi Modal Photochemistry*” funded by NWO
Supervisor: Prof. Timothy Noël
Flow Chemistry Group, Van 't Hoff Institute for Molecular Sciences (HIMS), University of Amsterdam, The Netherlands
- 01/04/2021 – **MSCA Individual Fellowship**
31/03/2023 Project: “*Flow Photoelectrocatalysis via Hydrogen-Atom Transfer: net-oxidative C–H to C–C bond conversion*” (HAT-TRICK, Project no. 101023615) funded by European Union's Horizon 2020 research and innovation programme.
Supervisor: Prof. Timothy Noël
Flow Chemistry Group, Van 't Hoff Institute for Molecular Sciences (HIMS), University of Amsterdam, The Netherlands
- 01/01/2021 – **Post-doctoral Fellowship**
31/03/2021 Project: “*Photochemical C–H bond amination*” funded by Lilly Research Award Program
Supervisor: Prof. Timothy Noël
Flow Chemistry Group, Van 't Hoff Institute for Molecular Sciences (HIMS), University of Amsterdam, The Netherlands

University of Pavia

- 01/10/2018 – **Post-doctoral Fellowship**
31/12/2020 *Photocatalytic processes applied to radical substitution reactions*
Supervisor: Prof. Davide Ravelli
PhotoGreen Lab, Department of Chemistry, University of Pavia, Italy
- 01/10/2020 – *Supervisor: Prof. Davide Ravelli*
31/12/2020 *PhotoGreen Lab, Department of Chemistry, University of Pavia, Italy*
- 01/10/2019 – *Synthetic processes mediated by high-energy intermediates*
30/09/2020 Supervisor: Prof. Davide Ravelli
PhotoGreen Lab, Department of Chemistry, University of Pavia, Italy
- 01/10/2018 – *Metallo-oxo complexes as photocatalysts in reactions via Hydrogen Atom Transfer*
30/09/2019 Supervisor: Prof. Davide Ravelli
PhotoGreen Lab, Department of Chemistry, University of Pavia, Italy

• EDUCATION

- 01/10/2015– **Ph.D. in Chemical and Pharmaceutical Sciences**
30/09/2018 Department of Chemistry, University of Pavia, Italy
Defense: 22/02/2019 (final grade: *eccellente*. Comparable to Summa cum Laude)
Advisor: Prof. Maurizio Fagnoni.
Thesis title: *Novel Photocatalytic Approaches for Ecosustainable Synthesis*
Abstract published on *EPA Newsletters* – December 2018, pp. 42-47

- 14/10/2013– **Master's Degree in Chemistry**
 22/07/2015 Department of Chemistry, University of Pavia, Italy
 Degree obtained on 22/07/2015 (110/110 *Magna cum Laude*)
 Advisors: Prof. Luisa de Cola and Prof. Maurizio Fagnoni
 Thesis title: *Organic Chemistry for Bioimaging, LEDs and Superconductors*
- 13/09/2010– **Bachelor's Degree in Chemistry**
 25/07/2013 Department of Chemistry, University of Pavia, Italy
 Degree obtained on 25/07/2013 (110/110 *Magna cum Laude*)
 Advisor: Prof. Angelo Albini
 Thesis title: *HAT & SET: Two Competing Mechanisms for Photocatalyzed Reactions*

• INTERNSHIPS

- 08/01/2018 – **Visiting Ph.D. Student**
 08/06/2018 Project: “[2+2] photocycloadditions mediated by Ir-complexes”
 Department of Chemistry, University of Wisconsin-Madison, United States
 Advisor: Prof. Tehshik P. Yoon
 Publication: *Org. Lett.* **2021**, 23, 3496–3501
- 01/10/2014 – **Visiting M.Sc. Student (Erasmus Traineeship)**
 28/02/2015 Project: “Pt and Zn complexes for applications in bioimaging and OLEDs”
 Institut de Science et d'Ingénierie Supramoléculaires, Strasbourg, France
 Advisor: Prof. Luisa De Cola
 Publication: *Isr. J. Chem.* **2019**, 59, 892–897

• AWARDS

- 03/10/2025 **Franco Scandola GIF Young Investigator Award 2025** by the Gruppo Italiano di Fotochimica
- 18/04/2025 **UNIPR Outstanding Junior Researcher Award** by the University of Parma.
- 28/02/2025 **National Scientific Habilitation (ASN)** in Industrial Chemistry (SC 03/C2)
- 25/04/2024 **“Organic Chemistry in its Methodological Aspects”** Junior Award by the Italian Chemical Society – Division of Organic Chemistry.
- 27/03/2023 **2023 CAS Future Leaders Top 100** by CAS (American Chemical Society).
- 01/06/2022 **National Scientific Habilitation (ASN)** in Organic Chemistry (SC 03/C1)
- 06/10/2020 **“Primo Levi” award** by the Italian Chemical Society.
- 28/02/2020 **“conScienze 2019” Ph.D. thesis award** by the Conferenza Nazionale dei Presidenti e dei Direttori delle Strutture Universitarie di Scienze e Tecnologie.
- 30/09/2019 **“Ugo Mazzucato” Best PhD thesis award** in Photochemistry 2019 (XXXI cycle) by the Italian Group of Photochemistry of the Italian Chemical Society.
- 04/06/2019 **Best Ph.D. Thesis Award** in “Organic Chemistry in its Methodological Aspects” by the Italian Chemical Society – Division of Organic Chemistry.
- 12/09/2017 **Reaxys Sci Young Researcher Award (2nd Place)** by Elsevier and the Italian Chemical Society (Young group).

• GRANTS

- 2025 FIS2 “Fondo Italiano per la Scienza” (**XAT2.0**, ID: FIS-2023-01733). **~1.3 M€**
- 2025 PI in Linea YOURII from MUR (**CORAL**, ID: MSCA2024_0000013). **300 k€**
- 2025 “Azione C” from UNIPR. **30 k€**
- 2024 ERC Starting Grant 2024 “**ico-XAT**”. Step 1: passed. Step 2: B grade.
- 2024-2025 Leader in the High-Performance Computing (HPC) project (**HALOcomp**, HP10CZGH69) granted by CINECA **50.000 h**
- 2021-2023 MSCA Individual Fellowship (**HAT-TRICK**, ID: 101023615) funded by European Union's Horizon 2020 research and innovation programme. **~190 k€**
- 2020-2021 Collaborator in the High-Performance Computing (HPC) project (ID: IsC78_PBsquare) granted by the Italian Consortium CINECA-SCAI.

• ISTITUTIONAL ROLES

- 10/2025 – **Scientific Area Committee member**, Department of Chemistry, Life Sciences and present Environmental Sustainability, University of Parma, Italy.
- 01/2025 – **Joint Student-Teacher Committee member**, Department of Chemistry, Life Sciences and present Environmental Sustainability, University of Parma, Italy.

- 06/2024 – **Junta member**, Department of Chemistry, Life Sciences and Environmental Sustainability, University of Parma, Italy.
- 10/2023 – **Faculty member**, Department of Chemistry, Life Sciences and Environmental Sustainability, University of Parma, Italy.
- 09/2024 – present **Member of Doctoral School in Chemical Science** at the University of Parma. Course: “Modern Carbonylation Methods”, Workload: 8 h of active teaching.

• DIDACTICAL ACTIVITIES

Teaching:

- 2024 - present **Professor** - “Industrial chemical processes and emerging technologies: development and management” @ University of Parma – 24 h
- 2023 - present **Professor** “Polymers Science” @ University of Parma – 30 h.
- 2023 - present **Professor** “Materials chemistry and technology” @ University of Parma – 30 h.
- 02/2023 **Lecturer** “Reactor design” @ University of Amsterdam – 15 hours.
- 2016 – 2020 Supervision of **students in lab and theoretical courses** (more than 150 hours as tutor or giving seminars for the Inorganic Chemistry, Organic Chemistry Laboratory I and II and Organic Chemistry courses for the Bachelor’s Degree in Chemistry and Biotechnology at the University of Pavia).
- 07/2016 & 07/2017 Teaching activity for **high-school students** within the frame of PLS (Piano Lauree Scientifiche), a project meant to make them approach to chemistry. Students were awarded by the PLS committee for their outstanding activity both times.

Mentoring:

- 10/2018 – present **Main supervision. Ph.D. students** (@UNIPR: Luna R., Amy N. C., Giulio G., Ester V.), **M.Sc. students** (@UNIPR: Sofia C., Marzia P., Serena A.), **B.Sc. students** (@UNIPR: Martina V., Irene D., Rocco B.).
- Co-supervision. Postdocs:** (@UNIPR: Valerio M., Ana Maria C., Francesco P., Aleksandr V.), **PhD students** (@UvA: Ting W., Stefano B., Antonio P., Lukasz C., Dimitris I., Jonas D., Morgan R., Clara V.; @UNIPR: Filippo S., Vittoria M., Francesco M., Nikolaos N.), **M.Sc. students** (@UNIPV: Lorenzo Q., Roberto T.; @UvA: Walter V.; Robin M.), **B.Sc. students** (@UNIPV: Nicoletta F.; @UvA: Perry v.d.H., Volkert D.; @UNIPR: Ilham T., Chiara D. B.).

Invited lectures:

- 02/07/2025 “Decarbonylative Photocatalyzed Hydrogen Atom Transfer”, lecture at the University of Cagliari. Invitation from Prof. Andrea Porcheddu.
- 10/09/2024 “XAT2.0: Photoinduced Halogen-Atom Transfer by NHC-ligated Boryl Radicals”, lecture at the University of Bari. Invitation from Prof. Renzo Luisi and Prof. Marco Colella.
- 20/06/2023 “Organic photochemistry in continuous-flow”: the main focus of the course was to introduce Ph.D students at the University of Pavia to flow chemistry. Invitation from Prof. Davide Ravelli.
- 27/03/2023 “Pushing the Boundaries of Photocatalyzed Synthesis: Merging Methodology And Technology”, lecture at the University of Tor Vergata. Invitation from Prof. Massimo Bietti.
- 24/02/2023 & 03/03/2023 “Photochemistry & photocatalysis: how to?”, lecture at the University of L’Aquila Invitation from Prof. Armando Carlone.
- 16/09/2022 “Pushing the Boundaries of Photocatalyzed Synthesis by Merging Methodology And Technology”, lecture at the University of Parma. Invitation from Prof. Giovanni Maestri.
- 03/12/2021 “Synthetic Photoelectrochemistry: the dawn of a new alliance in organic synthesis”, lecture at the University of L’Aquila Invitation from Prof. Armando Carlone.

• REVIEWER & EDITORIAL EXPERIENCE

As an editor:

- Associate Editor for the Journal of Flow Chemistry (Springer and Akademia Kiado).
- Guest editor for the 2023 Special Issue "Emerging Investigators in Flow Chemistry" on *J. Flow. Chem.*

As a reviewer:

- 81 verified reviews - Web of Science ResearcherID: X-3549-2019

• ORGANIZATION OF CONFERENCES

- 18/12/2023 **GdC2023** – XXII Giornata della Chimica dell'Emilia-Romagna 2023. *This is a conference that brought together PhD students in Chemistry from the whole Emilia-Romagna in Italy. Main theme: Chemistry for Health.*
- 24-25/02/2022 **ETOC** – Enabling Technologies for Organic Synthesis. *The first edition of the ETOC Symposium took place on February 24-25, 2022 in a fully digital setting and counted 486 attendees. It brought scientists from all over the world together to share their knowledge in the field of organic chemistry and technology utilization. The program was developed around different crucial topics, such as photoredox catalysis, electrochemistry, machine learning and biocatalysis, among others.*

• CONTRIBUTIONS TO CONFERENCES

As invited speaker:

- 26-30/08/2024 “Rapid and scalable photocatalytic C(sp²)-C(sp³) Suzuki-Miyaura cross-coupling of aryl bromides with alkyl boranes” at **SCI2024 Elements of Future – XXVIII National Congress**, Milano (IT). *I was invited to give this talk as a recipient of the “Organic Chemistry in its Methodological Aspects” Junior Award.*
- 11-14/12/2022 “Photoinduced Halogen-Atom Transfer (XAT) by N-heterocyclic Carbene Boryl Radicals for C-C Bond Formation” at the **11th Singapore International Chemistry Conference (SICC-11)**, Singapore (SG). *I was invited by Prof. Jie Wu to give this talk in the format of a keynote presentation.*
- 23-24/09/2021 “Novel Photocatalytic Approaches for Ecosustainable Synthesis” at **Giornate Italiane di Fotochimica del Gruppo Italiano di Fotochimica**, online symposium. *I was invited to give this talk as a recipient of Premio Ugo Mazzucato for the best Italian PhD Thesis in Photochemistry in 2019/20.*
- 07/10/2020 “Uranyl Cation as a Visible Light Photocatalyst for C-C Bond Formation via HAT” at **SCI Giovani Award Ceremony**, online symposium. *I was invited to give this talk when I was awarded the Primo Levi Award for my work on the photochemistry of the uranyl dication.*
- 08-12/09/2019 “The Triangle of Photocatalysis: Different Approaches for Ecosustainable Synthesis” at **“XXXIX Convegno Nazionale della Divisione di Chimica Organica della Società Chimica Italiana”**, Torino (IT). *I was invited to give this talk when I was awarded the Best Ph.D. thesis Award in Organic Chemistry for its Methodological Aspects. This is the most relevant national meeting of the Organic Chemistry Division of the Italian Chemical Society.*
- 05/07/2019 “Novel Photocatalytic Approaches for Ecosustainable Synthesis” at **“VII Workshop Nazionale Gruppo Interdivisionale Green Chemistry – Chimica Sostenibile, Società Chimica Italiana”**, Padova (IT). *I was invited to give this talk because I was one of the finalists for the Green Chemistry Award 2019.*

As oral presentations:

- 12-15/10/2025 “Decarbonylative Photocatalyzed Hydrogen Atom Transfer” at **JISOC**, Bari (IT).
- 21-25/09/2025 “CO-HAcTive: A Decarbonylative Strategy to Enhance Efficiency and Regioselectivity in Photocatalyzed Hydrogen-Atom Transfer” at **CDCO2025**, Villasimius (IT).
- 07-11/07/2024 “Rapid and scalable photocatalytic C(sp²)-C(sp³) Suzuki-Miyaura cross-coupling of aryl bromides with alkyl boranes” at **9th EuChemS Chemistry Congress**, Dublin (IRL).
- 10-14/09/2023 “Photoinduced Halogen-Atom Transfer (XAT) by N-heterocyclic Carbene Boryl Radicals for C-C Bond Formation” at the **“XLI Convegno Nazionale della Divisione di Chimica Organica della Società Chimica Italiana”**, Roma (IT).
- 26-30/06/2022 “Continuous-flow as an enabling technology for photocatalyzed Hydrogen Atom Transfer” at **“3rd International Conference on Hydrogen Atom Transfer”**, Monteporzio Catone (IT).
- 07-08/12/2021 “Regioselective and scalable C-H functionalization via flow photocatalysis” at **“NWO Chains 2021”**, online conference.
- 22-24/11/2021 “Decatungstate-mediated C(sp³)-H heteroarylation via radical-polar crossover in batch and flow” at **“Merck Young Chemists' Symposium 2021”**, Rimini (IT).

- 03-06/11/2020 “Antimony–Oxo Porphyrins as Photocatalysts for Redox-Neutral C–H to C–C Bond Conversion” at “**ViSYOChem2020**”, online symposium.
- 09-14/06/2019 “Uranyl Cation as Visible-Light Photocatalyst for C-C Bond Formation via Hydrogen Atom Transfer” at “**ISOS2019 - "A. Corbella" International Summer School on Organic Synthesis**”, Gargnano (IT).
I was awarded a travel grant to attend this School and won the Best Oral Presentation by both the Audience and the Scientific Committee. This is one of the most prestigious International Summer Schools on Organic Chemistry held in Italy. I was also the leader of one group (5 persons) in the problem session (>12 groups) that was awarded the third place.
- 19-21/11/2018 “Uranyl Cation as Visible-Light Photocatalyst for C-C Bond Formation via Hydrogen Atom Transfer” at “**Merck & Elsevier Young Chemists Symposium 2018**”, Rimini (IT).
- 14-16/12/2017 “Antimony-oxo Porphyrins as Visible-Light Photocatalysts for Hydrogen Atom Transfer (HAT) Reactions in Organic Synthesis” at “**Italian Photochemistry Meeting 2017**”, Perugia (IT).
- 25-27/10/2016 “Smooth Photocatalyzed Benzylolation of Electrophilic Olefins via Decarboxylation of Arylacetic Acids” at “**Merck Young Chemists Symposium 2016**”, Rimini (IT).

As a chair person:

- 18/12/2023 Emilia-Romagna Chemistry Day, Parma
- 12-13/10/2022 CHAIR winter school on Flow Chemistry, Amsterdam
- 26-30/06/2022 3rd International Conference on Hydrogen Atom Transfer, Rome

• **SCHOOLS & WORKSHOPS**

- 24-25/11/2019 School – “SCI*C - Scuola in Comunicazione della Chimica”, Rimini – *Travel Grant*
- 30/09/2019 Workshop – “Le Giornate di Chimica Organica a Pavia”, Pavia
- 05/07/2019 Workshop – “VII Workshop Nazionale Gruppo Interdivisionale Green Chemistry”, Padova
- 09-14/06/2019 School – ““A. Corbella” International Summer School on Organic Synthesis”, Brescia – *Travel Grant*
- 26/11/2018 Workshop – “Nuovi orientamenti in Chimica Organica”, Milan
- 11/10/2018 Workshop – “Le Giornate di Chimica Organica a Pavia”, Pavia
- 11/10/2017 Workshop – “Le Giornate di Chimica Organica a Pavia”, Pavia
- 02/02/2017 Workshop – “I Giganti della Fotochimica”, Bologna
- 06-10/06/2016 School – “7° Corso Nazionale di Introduzione alla Fotochimica”, Bologna
- 10/05/2016 Workshop – “Tissue repair: from biochemical mechanisms to formulation approaches”, Pavia

• **DISSEMINATION ACTIVITY**

- 26/09/2025 Stand “Nuove tecnologie per creare molecole” @ **European Researchers’ Night 2025** event. Audience: ~180 persons.
- 17/11/2024 Speaker at the roundtable “[CHIMICA VERDE – dialogo tra accademia e industria per un futuro sostenibile](#)” – Festival Mantova Scienza. Audience: ~100 persons.
- 27/09/2024 Held a presentation “[Pillole di Plastica](#)” at the Dept. of Chemistry, Life Science and Environmental Sustainability, University of Parma, Parma (IT) within the **European Researchers’ Night 2024** event. Audience: ~50 persons.
- 01/02/2020 – Involved in the *Alchimica – La chimica degli esplosivi* project at Scientific High School
- 11/02/2020 “Niccolò Copernico” in Pavia (IT). *Alchimica – La chimica degli esplosivi* is a project meant to explain youngsters the nature, classification and chemistry of explosives. This project was the result of individual initiative. Audience: ~250 persons.
- 24/09/2019 Held a presentation at Palazzo del Broletto, Pavia (IT) on the occasion of the International Year of the Periodic Table entitled “La Tavola Periodica: il “trip” di Mendeleev” within the **European Researchers’ Night 2019** event. Audience: ~100 persons.
- 20/02/2019 – Involved in the *Nuova Chimica – Everyday Chemistry* project at Scientific High School
- 06/03/2019 “Galileo Galilei” in Voghera (IT). *Nuova Chimica – Everyday Chemistry* is a project meant to introduce youngsters to everyday chemistry. This project was the result of individual initiative. Audience: ~200 persons.
- 18/02/2019 – Involved in the *Nuova Chimica – La chimica in cucina* project at Scientific High School
- 28/02/2019 “Niccolò Copernico” in Pavia (IT). *Nuova Chimica – La chimica in cucina* is a project

- meant to introduce youngsters to food chemistry. This project was the result of individual initiative. Audience: ~250 persons.
- 26/09/2018 Held a presentation at Palazzo del Broletto, Pavia (IT) entitled “Il gulfatto: come interagiscono gusto e olfatto” within the **European Researchers’ Night 2018** event. Audience: ~60 persons.
- 24/09/2017 – Took part to the Universitiamo (www.universitiamo.eu) **crowdfunding** campaign Light and Chemistry: Partners in the fight against Tumors proposed by PhotoGreen Lab and promoted by the University of Pavia. Role: Member of the research group and co-organizer of fundraising events (Autunno Pavese: 24/09/17; Notte dei ricercatori: 29/09/17; Scienza in Piazza: 21/10/17; Live by *C’esco e i Musicanti di Brahma* for PhotoGreen Lab: 29/10/17; Pavia Lirica: 13/12/17; DAGDA Live Club – Concert by *MotelNoire*: 23/12/17).
- 23/12/2017
- 26/10/2017 – Expo at Museo Luzzati, Genova (IT) presenting experiments designed to explain the importance of light in everyday life to teenagers in the frame of the **Festival della Scienza** event.
- 05/11/2017
- 27/11/2017 – Involved in the Nuova Chimica project at Scientific High School “Niccolò Copernico” in Pavia (IT). **Nuova Chimica** is a project meant to introduce youngsters to non-traditional approaches to chemistry, such as photochemistry. This project was the result of individual initiative. Audience: ~200 persons.
- 11/12/2017


• MEMBERSHIPS OF SCIENTIFIC SOCIETIES

- 2023 – present Member of the Flow Chemistry Society (**Board of Directors** - Publication & Journal Committee)
- 2023 – 2024 Member of the American Chemical Society
- 2016 – present Member of the Italian Society of Chemistry (SCI)
- 2016 – present Member of the “Italian Group of Photochemistry” (GIF)
- 2016 – present Member of the “European Photochemistry Association” (EPA)

In compliance with the Italian Legislative Decree no. 196 dated 30/06/2003, I hereby authorize the recipient of this document to use and process my personal details for the purpose of recruiting and selecting staff and I confirm to be informed of my rights in accordance to art. 7 of the above mentioned decree.

Date
October 25th, 2025

Signature



LIST OF PUBLICATIONS

ORCID ID: 0000-0001-7114-267X Scopus ID: 57190816188 WoS: X-3549-2019

Citations: 3811 H index: 24 (Source: Google Scholar)

● first author ● corresponding author

- 1) L. Raineri, V. Morlacci, A. M. Constantin, A. Voronov, G. Maestri, N. Della Ca', L. Capaldo
"Aliphatic aldehydes as CO surrogates via photocatalyzed hydrogen atom transfer"
Green Chem. **2025**
DOI: [10.1039/D5GC03981A](https://doi.org/10.1039/D5GC03981A)
- 2) J. Djossou, A. Aloia, L. Capaldo, D. D Snabilié, M. Regnier, J. H. A. Schuurmans, A. Monopoli, B. de Bruin, T. Noël
"Rapid Methylation of Aryl Bromides Using Air-Stable DABCO-Bis (Trimethylaluminum) via Nickel Metallaphotoredox Catalysis"
Angew. Chem. Int. Ed. **2025**, 64, e202508710
DOI: [10.1002/anie.202508710](https://doi.org/10.1002/anie.202508710)
- 3) F. Sacchelli, E. Quadri, L. Raineri, A. Jorea, M. Pessina, A. Lo Presti, N. Della Ca', D. Ravelli, L. Capaldo ●
"A Telescoped Strategy for the Preparation of Five-Membered Hetero-and Carbocycles via Hydrogen Atom Transfer Photocatalysis in Flow"
ChemSusChem **2025**, 18, e202501012
DOI: [10.1002/cssc.202501012](https://doi.org/10.1002/cssc.202501012)
- 4) M. Chiminelli, C. Galbardi, R. Maggi, F. Bigi, L. Capaldo, N. Della Ca', R. Viscardi, L. Marchiò, G. Maestri, M. Lanzi
"Light-Mediated Binaphthyl Enhanced [2+ 2] Dearomatization of Heterocycles via an Energy-Transfer Process"
Org. Lett. **2025**, 27, 8909–8914
DOI: [10.1021/acs.orglett.5c02570](https://doi.org/10.1021/acs.orglett.5c02570)
- 5) E. Cassera, V. Martini, V. Morlacci, S. Abrami, N. Della Ca', D. Ravelli, M. Fagnoni, L. Capaldo
"A Decarbonylative Strategy to Enhance Efficiency and Regioselectivity in Photocatalyzed Hydrogen-Atom Transfer"
JACS Au **2025**, 5, 3491–3499
DOI: [10.1021/jacsau.5c00530](https://doi.org/10.1021/jacsau.5c00530)
- 6) A. M. Constantin, F. Mele, M. Lanzi, G. Maestri, R. Maggi, N. Della Ca', L. Capaldo ●
"Mechanochemical Aerobic Activation of Metallic Copper for the Synthesis of 1,4-Alkynes"
ChemSusChem **2025**, 2500211
DOI: [10.1002/cssc.202500211](https://doi.org/10.1002/cssc.202500211)
- 7) F. Mele, A. Aquilini, A. M. Constantin, F. Pancrazzi, L. Righi, A. Porcheddu, R. Maggi, D. A. Cauzzi, G. Maestri, E. Motti, L. Capaldo, N. Della Ca'
"Mechanochemical Activation of NaHCO₃: A Solid CO₂ Surrogate in Carboxylation Reactions"
ChemSusChem **2025**, 2500461
DOI: [10.1002/cssc.202500461](https://doi.org/10.1002/cssc.202500461)
- 8) F. Mele, A. M. Constantin, A. Porcheddu, R. Maggi, G. Maestri, N. Della Ca', L. Capaldo ●
"Photomechanocatalysis: harnessing mechanical forces to enhance photochemical reactions"
Beilstein J. Org. Chem. **2025**, 21, 458–472
DOI: [10.3762/bjoc.21.33](https://doi.org/10.3762/bjoc.21.33)
- 9) D. Schirolli, A. Voronov, F. Pancrazzi, N. Iraci, S. V. Giofrè, B. Macchi, V. Stefanizzi, R. Mancuso, B. Gabriele, P. P. Mazzeo, L. Capaldo, N. Della Ca'
"Direct Access to α,β -Unsaturated γ -Lactams via Palladium-Catalysed Carbonylation of Propargylic Ureas"
Adv. Synth. Cat. **2024**, 367, e202401183
DOI: [10.1002/adsc.202401183](https://doi.org/10.1002/adsc.202401183)
- 10) A. Capucciati, L. Baraglia, E. Cassera, D. Merli, L. Capaldo, D. Ravelli
"Selective Oxidation of Alcohols to Carbonyls under Decatungstate-Mediated Photoelectrochemical Conditions"
Chem. Eur. J. **2024**, e202402986
DOI: [10.1002/chem.202402986](https://doi.org/10.1002/chem.202402986)
- 11) L. Capaldo, ● T. Wan, R. Mulder, J. Djossou, T. Noël
"Visible Light-Induced Halogen-Atom Transfer by N-Heterocyclic Carbene-Ligated Boryl Radicals for Diastereoselective C(sp³)-C(sp²) Bond Formation"
Chem. Sci. **2024**, 15, 14844–14850
DOI: [10.1039/D4SC02962C](https://doi.org/10.1039/D4SC02962C)
- 12) T. Wan, L. Ciszewski, D. Ravelli, L. Capaldo ●
"Photoinduced Intermolecular Radical Hydroalkylation of Olefins via Ligated Boryl Radicals-Mediated Halogen Atom Transfer"
Org. Lett. **2024**, 26, 5839–5843
DOI: [10.1021/acs.orglett.4c02034](https://doi.org/10.1021/acs.orglett.4c02034)
- 13) A. Voronov, A. Casnati, M. Hoch, F. Pancrazzi, P. P. Mazzeo, D. Merli, G. Maestri, P. P. Fehér, A. Stirling, L. Capaldo, ● N. Della Ca'
"Photocatalyzed Aerobic Dearomatization of Naphthylamines under Visible-Light Irradiation"
Adv. Synth. Cat. **2024**, 366, 4187–4193
DOI: [10.1002/adsc.202400281](https://doi.org/10.1002/adsc.202400281)
- 14) T. Wan, L. Capaldo ●, J. Djossou, A. Staffa, F. de Zwart, B. de Bruin, T. Noël
"Rapid and Scalable Photocatalytic C(sp²)-C(sp³) Suzuki–Miyaura Cross-Coupling of Aryl Bromides with Alkyl Boranes"
Nat. Commun. **2024**, 15, 4028
DOI: [10.1038/s41467-024-48212-5](https://doi.org/10.1038/s41467-024-48212-5)
- 15) A. Voronov, L. Capaldo ●
"Merging photoinduced protic HAT and radical-polar crossover for olefin difunctionalization"
Chem Catal. **2023**, 3, 100847
DOI: [10.1016/j.checat.2023.100847](https://doi.org/10.1016/j.checat.2023.100847)
- 16) K. Anwar, L. Capaldo, T. Wan, T. Noël, A. Gómez-Suárez
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