CV Dr. Gianpiero Cera

Personal Informations

Name	Gianpiero Cera
E-mail	gianpiero.cera@unipr.it gianpiero.cera@pec.it gianpiero.cera@gmail.com
Nationality	Italian
Date of Birth	24-12-1985, Bari (Italy)

Working Experiences

07/2019 to present — *Researcher (RTdA)*

Università di Parma – Dipartimento di Scienze Chimiche, della Vita e della Sostenibilità Ambientale

- Teaching Activities for 2019/2020:
  Laboratory of Organic Chemistry I (3CFU)
  Laboratory of Organic Chemistry II (3CFU)

10/2017-06/2019 — *Post-Doctoral Researcher*

Università di Parma – Dipartimento di Scienze Chimiche, della Vita e della Sostenibilità Ambientale (under the supervision of Prof. Giovanni Maestri)

7/2014-6/2017 — *Post-Doctoral Researcher*

Georg-August-Universität Göttingen, Institut für Organische und Biomolekulare Chemie (under the supervision of Prof. Lutz Ackermann).

4/2013-10/2013 — *Visiting PhD Student*

University of California, at Berkeley, United States (under the supervision of Prof. Dean Toste, Marco Polo Fellowship).

Education

1/2011-4/2014 — *Doctorate in Chemistry (PhD degree)*

Alma Mater Studiorum-Università di Bologna, FIRB-futuro in ricerca fellowship
Thesis: "*Au(I)-catalyzed manipulation of propargylic alcohols: a new route towards the Synthesis of Indole Alkaloids*"
(Supervision of Prof. Marco Bandini).

11/2009-7/2010 — *Master in Chemistry*

Alma Mater Studiorum-Università di Bologna, 110/100 cum laude
Thesis: "*Stereoselective Synthesis of Tetracyclic Indolines via Gold-Catalyzed Cascade Cyclization Reaction*"
(Supervision of Prof. Marco Bandini).

10/2005 - 9/2009 *Bachelor in Chemistry*

Università degli Studi di Bari, 110/110
Thesis:"*Palladium-catalyzed Ullmann cross-coupling reactions in ionic liquids*"
(Supervision of Prof. Angelo Nacci).

Academic Qualification

- National Scientific Habilitation to the Professorship in Organic Chemistry (2° Fascia) (2018)

Major Scientific Interests

- *Transition Metals-catalyzed Cascade Reactions*
- *C-H Functionalization Methodologies*
- *Supramolecular Chemistry and Catalysis*

Personal skills and Competences

Mother language:	Italian
Other languages:	English (Verbal skills: C1/C2) (Writing skills: C1/C2) (Reading skills: C1/C2) French (A1/A2) German (A1/A2)

Publications List

1. N. Camedda, A. Serafino, R. Maggi, F. Bigi, G. Cera, G. Maestri, *Synthesis*, **2020**, *52*, 1762-1772. "*Functionalization of Alkenyl C–H Bonds with D_2O via Pd(0)/Carboxylic Acid Catalysis*".
2. M. Lanzi, G. Cera, *Molecules*, **2020**, *25*, 1806. "*Iron-Catalyzed C–H Functionalizations under Triazole-Assistance*".
3. G. Cera, M. Bazzoni, A. Arduini, A. Secchi, *Org. Lett.* **2020**, *22*, 3702-3705. "*Ion-Pair Selective Conformational Rearrangement of Sulfonamide Calix[6]arene-Based Pseudorotaxanes*".
4. M. Bazzoni, F. Terenziani, A. Secchi, G. Cera, I. Jabin, G. De Leener, M. Luhmer, A. Arduini, *Chem. Eur. J.* **2020**, 26, 3022-3025. "*Tuning the fluorescence through reorientation of the axle in calix[6]arene-based pseudorotaxanes*".
5. G. Cera, N. Della Cà, G. Maestri, *Chem. Sci.* **2019**, *10*, 10297-10304. "*Palladium(0)/benzoic acid catalysis merges sequences with D2O-promoted labelling of C–H bonds*"
6. C. Cecchini, G. Cera, M. Lanzi, L. Marchiò, M. Malacria, G. Maestri, *Org. Chem. Front.* **2019**, *6*, 3584-3588. "*Diastereoselective Bicyclization of Enynols via Gold Catalysis*".
7. T. E. Boddie, S. H. Carpenter, T. M. Baker, J. C. DeMuth, G. Cera, W. W. Brennessel, L. Ackermann, M. L. Neidig, *J. Am. Chem. Soc.* **2019**, *141*, 12338-12345. "*Identification and Reactivity of Cyclometalated Iron(II) Intermediates in Triazole-Directed Iron-Catalyzed C–H Activation*".
8. P. Gandeepan, T. Müller, D. Zell, G. Cera, S. Warratz, L. Ackermann, *Chem. Rev.* **2019**, *119,* 42192-2452. "*3d-Transition Metals for C–H activation".*
9. C. Cecchini, M. Lanzi, G. Cera, M. Malacria, G. Maestri, *Synthesis* **2019**, *51*, 1216-1224. "*Complementary Reactivity of 1,6-Enynes with All-Metal Aromatic Trinuclear Complexes and Carboxylic Acids*".
10. G. Cera, M. Lanzi, F. Bigi, R. Maggi, M. Malacria, G. Maestri, *Chem. Commun.* **2018**, 54, 14021-14024. "*Bi-directional alkyne tandem isomerization via Pd(0)/carboxylic acid joint catalysis: expedient access to 1,3-dienes*".

11. G. Cera, M. Lanzi, D. Balestri, N. Della Ca', R. Maggi, F. Bigi, M. Malacria, G. Maestri, *Org. Lett.* **2018**, *20*, 3220-3224. *"Synthesis of Carbolines via Palladium/Carboxylic Acid Joint Catalysis".*
12. W. Liu, G. Cera, J. C. A. Olivera, Z. Shen, L. Ackermann, *Chem. Eur. J.* **2017***, 23*, 11524-11528. *MnCl2-Catalyzed C–H Alkylations with Alkyl Halides.*
13. Z. Shen, G. Cera, T. Haven, L. Ackermann, *Org. Lett.* **2017***, 19,* 3795-3798. *Tri-Substituted Triazole-Enabled C–H Activation of Benzyl and Aryl Amines by Iron Catalysis.*
14. G. Cera, T. Haven, L. Ackermann, *Chem. Commun.* **2017**, *53*, 6460-6463. *Iron-catalyzed C–H/N–H activation by triazole guidance: versatile alkyne annulation.*
15. G. Cera, T. Haven, L. Ackermann, *Chem. Eur. J.* **2017**, 23, 3577-3582. *Iron catalyzed C–H alkynylation: Expedient access to bioactive heterocycles.*
16. M. Bandini, G. Cera, GP Miscione, *Chem. Cat. Chem.* **2016**, *9*, 316-321. *Unveiling the reaction machinery of the [Au(I)]-catalyzed synthesis of substituted acenes via [1,5]-H shift cascade reaction*.
17. G. Cera, L. Ackermann, *Top. Curr. Chem.* **2016**, *374*, 191-224. *Iron-Catalyzed C–H Functionalization Processes.*
18. G. Cera, L. Ackermann, *Chem. Eur. J.* **2016**, 22, 8475-8478. *Weak O-Assistance Outcompeting Strong N,N-Bidentate Directing Groups in Copper-Catalyzed C–H Chalcogenation.*
19. G. Cera, T. Haven, L. Ackermann, *Angew. Chem. Int. Ed.* **2016**, *55*, 1484-1488. *Expedient Iron catalyzed C–H allylation/alkylation under triazole assistance with ample scope*.
20. P. Giacinto, G. Cera, A. Bottoni, M. Bandini, G. P. Miscione, *Chem. Cat. Chem. **2015**, 7, 2480-2484. A DFT mechanistic investigation of the gold(I) catalyzed synthesis of azepino[1,2-a]-indoles.*
21. M. Jia, G. Cera, D. Perrotta, M. Bandini, *Chem. Eur. J.* **2014**, *20*, 9875-9878. *Taming [Au(I)]-counterion interplay in the de-aromatization of indoles with allenamides.*
22. G. Cera, M. Bandini, *Isr. J. Chem*. **2013**, *53,* 848-855. *Enantioselective Gold(I) Catalysis with Chiral Monodentate Ligands.*
23. M. Chiarucci, R. Mocci, L.-D. Syntrivanis, G. Cera, A. Mazzanti, M. Bandini, *Angew. Chem. Int. Ed*. **2013**, *52*, 10850-10853. *Merging Synthesis and Enantioselective Functionalization of Indoles via Gold-catalyzed Asymmetric Cascade Reactions.*
24. G. Cera, M. Chiarucci, F. Dosi, M. Bandini, *Adv. Synt. Cat*. **2013**, *355,* 2227–2231. *Gold(I) Catalyzed functionalization of benzydryl C(sp^3)–H bonds.*
25. M. Chiarucci, E. Matteucci, G. Cera, G. Fabrizi, M. Bandini**,** *Chem. Asian J.* **2013**, *8*, 1776-1779. *New Entry to Polycyclic Fused Indoles via Gold(I)-catalyzed Cascade Reaction.*
26. M. Bandini, A. Bottoni, M. Chiarucci, G. Cera, G. Miscione, *J. Am. Chem. Soc.* **2012**, *134*, 20690-20700. *Mechanistic Insights into Enantioselective Gold-Catalyzed Allylation of Indoles with Alcohols: the Counterion Effect*.
27. G. Cera, S. Piscitelli, M. Chiarucci, G. Fabrizi, M. Bandini, *Angew. Chem. Int. Ed*. **2012**, *50*, 9891-9893. *De Novo Gold-Catalyzed one-pot Synthesis of Azepino[1,2-a] indoles* (Selected as a "HOT PAPER" by the Editor).
28. G. Cera, M. Chiarucci, M. Mancinelli, A. Mazzanti, M. Bandini, *Org. Lett.* **2012**, *14*,135-135. *Enantioselective Gold-Catalyzed Synthesis of Polycyclic Indolines.*
29. M. Chiarucci, M. di Lillo, A. Romaniello, P.G. Cozzi, G. Cera, M. Bandini, *Chem. Sci.* **2012***, 2*, 2859-2863. Highlighted in *Synfacts* **2012**, *8*, 1347. *Gold Meets Enamine Catalysis in the Enantioselective alpha-Allylic Alkylation of Aldehydes with Alcohols.*
30. M. Bandini, G. Cera, M. Chiarucci, *Synthesis,* **2012**, 504-512. *Catalytic Enantioselective Alkylations with Allylic Alcohols.*
31. M. Chiarucci, G. Cera, M. Bandini*, Pure & Appl. Chem.* **2012,** *84,* 1673-1684. *Accessing Chemical Diversity by Stereoselective Gold-catalyzed Manipulation of Allylic/Propargylic Alcohols.*
32. M. Chiarucci, M. Locritani, G. Cera, M. Bandini, *Beilstein J. Org. Chem*. **2011**, *7*, 1198-1204. *Gold(I)-catalyzed synthesis of γ-vinylbutyrolactones by intramolecular oxaallylic alkylation with alcohols.*
33. G. Cera, P. Crispino, M. Monari, M. Bandini, *Chem. Commun*. **2011**, *47*, 7803-7805. *Stereoselective synthesis of tetracyclic indolines via gold-catalyzed cascade cyclization reactions.*

Poster presentations

1) XXXVII Internation School of Organic Synthesis "A. Corbella" (Gargnano, Bs, 2011) on "*Stereoselective synthesis of tetracyclic indolines via gold-catalyzed cascade cyclization reactions"*

2) Ischia Advanced School of Organic Synthesis (IASOC 2012) on *Gold(I)-Catalyzed functionalization of benzydryl C(sp^3)—H bonds.*
3) Belgium Organic Synthesis Symposium BOSS XV (Antwerp, 2016) on *Expedient Iron catalyzed C-H allylation/alkylation under triazole assistance with ample scope*.
4) XXII International Conference on Organic Synthesis 22-ICOS (Florence, 2018) on *Synthesis of Carbolines via Pd/Carboxylic Acid Joint Catalysis*.

Oral communications

5) Co.Gi.C.O. X Congresso del Gruppo Interdivisionale di Chimica Organometallica, (Padova 2012) on *De Novo Gold-Catalyzed one-pot Synthesis of Azepino[1,2-a]-indoles.*

Invited Seminars

6) Dipartimento di Scienze Chimiche, Università degli Studi di Padova, Italy (Padova, 21-07-2017) *Building Molecular Complexity through metal-catalyzed C–H functionalization technologies: a" journey from gold to base-metal catalysis*.
7) Dipartimento di Chimica "G. Ciamician", Università di Bologna, Italy (Bologna, 10-10-2017*) Triazole-enabled Base Metals-Catalyzed C–H functionalizations.*
8) XXXVIII Congresso Nazionale della Divisione Chimica Organica (Milano, 2018) on *Late and Base-Transition Metals-Catalyzed C–H Functionalization with Alkynes* (Premio Junior SCI alla Ricerca 2018).

Prizes, Awards and Funding

1) SCI (Italian Chemical Society) Prize 2018 as Junior Researcher in Organic Chemistry and its Methodological Aspects
2) "Horizon 2020"-Seal of Excellence (2018)- for high quality project proposal in a highly competitive evaluation process "Stereoselective iron-catalyzed dearomatization of indoles"
3) Alexander Von Humboldt Fellowship (2015-2017)
4) Marco Polo Fellowship (2013)
5) Member of the Editorial Board of *Molecules* (2020)