

EUROPEAN  
CURRICULUM  
VITAE FORMAT



PERSONAL INFORMATION

Name Antonio Arcadi

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Nationality ITALIAN

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**PUBLICATIONS** Total number of publications in peer-review journals: 188  
Total number of citations: 8996 (Scopus)  
H index 49 (Scopus)

**FIELD OF INTEREST**

Synthesis of heterocyclic compounds of medicinal chemistry interest; domino reactions as useful tools of “ Green Chemistry”; coinage metals catalysis; product selectivity control in sequential one-pot reactions.

**WORK EXPERIENCE**

**1979-1983** Teaching Fellowship at the Institute of Chemistry of the University of L'Aquila Master of Biological Sciences: Organic Chemistry.

**1983-1985** Assistant Professor at the Institute of Chemistry of the University of L'Aquila.

**1985-1991** Assistant Professor at the Department of Chemistry, Chemical Engineering and Materials of the University of L'Aquila.

**1991-1992** Associate Professor of Organic Chemistry, University of Urbino (Italy), Master of Science Course: Organic Chemistry.

**1992-2002** Associate Professor of Organic Chemistry at the Department of Chemistry, Chemical Engineering and Materials of the University of L'Aquila, Master Science Courses: Organic Chemistry, Advanced Organic Chemistry, Chemistry of Heterocyclic Compounds, Medicinal Chemistry, Atmospheric Chemistry.

**Since 2002** Full Professor of Organic Chemistry at the University of L'Aquila.

**EDUCATION AND TRAINING**

**1973-1978** Studies in Medicinal Chemistry and Technology at the University “ La Sapienza” – Rome.

**1978** Laurea degree cum laude in Medicinal Chemistry and Technology at the University “ La Sapienza” – Rome.

**PERSONAL SKILLS AND COPETENCES**

MOTHER TONGUE ITALIAN

OTHER LAGUAGES ENGLISH

## SCIENTIFIC SKILLS AND COMPETENCES

Expertise in a) the synthesis, identification and purification of organic compounds; b) chromatographic methods: GC, GC-MS, HPLC c) NMR analysis.

## RELEVANT ROLES AND COMPETENCES

*Coordination and administration of people, projects and budgets.*

**2008-2012** Chairman of the Department of Chemistry, Chemical Engineering and Materials of the University of L'Aquila.

**2013-2018** Member of the Academic Senate of the University of L'Aquila.

**2000-ongoing** Member of the Italian Chemical Society, the International Society of Heterocyclic Chemistry and the American Chemical Society.

Reviewer for ANR (French National Research Agency) and NFS (National Science Foundation).

Contact Person for Erasmus Mobility toward "UNIVERSITE COTE D'AZUR NICE" and "ECOLE NATIONALE SUPERIEURE DE CHIMIE PARIS TECH".

## RECENT PUBLICATIONS

Acidic DESs as Active Media for a Sustainable Synthesis of Biindoles Starting from 2,2'-Diaminotolanes and Aldehydes. Elisa Brambilla, Alessandra Griitti, Valentina Pirovano, Antonio Arcadi, Raimondo Germani, Matteo Tiecco, and Giorgio Abbiati, *Eur. J. Org. Chem.* **2023**, e202300204. <https://doi.org/10.1002/ejoc.202300204>.

Synthesis of 3-substituted 2,3-dihydropyrazino[1,2-a]indol-4(1H)-ones by sequential reactions of 2-indolylmethyl acetates with  $\alpha$ -amino acids.

Antonella Goggiamani, Antonio Arcadi, Alessia Ciogli, Martina De Angelis, Stefano Dessalvi, Giancarlo Fabrizi, Federica Iavarone, Antonia Iazzetti, Alessio Sferrazza and Roberta Zoppoli, *RSC Adv.*, **2023**, *13*, 10090-10096. DOI: 10.1039/d3ra01335a.

Gold-Catalyzed Regioselective Oxyfluorination/Oxydifluorination vs. Diketoneization of Phthalimido-Protected Propargylamines with Selectfluor.

Vincenzo Marsicano, Antonio Arcadi, and Véronique Michelet, *Eur. J. Org. Chem.* **2022**, e202101524.

One-pot synthesis of dihydroquinolones by sequential reactions of o-aminobenzyl alcohol derivatives with Meldrum's acids.

Antonio Arcadi, Andrea Calcaterra, Giancarlo Fabrizi, Andrea Fochetti, Antonella Goggiamani, Antonia Iazzetti, Federico Marrone, Giulia Mazzocanti and Andrea Serraiocco, *Org. Biomol. Chem.* **2022**, *20*, 3160-3173. DOI: 10.1039/d2ob00289b

Reactivity of Indolylmethylacetates with N, O, and S Soft Nucleophiles: Evidence of 2-Alkylideneindolenines and 3-Alkylideneindoleninium Generation by ESI-MS and IRMPD Spectroscopy.

Antonio Arcadi, Giel Berden, Alessia Ciogli, Davide Corinti, Maria Elisa Crestoni, Martina De Angelis, Giancarlo Fabrizi, Antonella Goggiamani, Antonia Iazzetti, Federico Marrone, Vincenzo Marsicano, Jos Oomens, and Andrea Serraiocco, *Eur. J. Org. Chem.* **2022**, e202201166. doi.org/10.1002/ejoc.202201166.

Electrochemical-Induced Cascade Reaction of 2-Formyl Benzonitrile with Anilines: Synthesis of N-Aryl Isoindolinones. Valerio Morlacci, Tonino Caruso, Marco Chiarini, Antonio Arcadi, Massimiliano Aschi and Laura Palombi, *Molecules* **2022**, *27*, 8199. <https://doi.org/10.3390/molecules27238199>.

Synthesis of Polysubstituted 1,2-dihydro-3H-pyrrolo[1,2-a]indol-3-ones through Domino Palladium-Catalyzed Reactions of Indol-2-ylmethyl Acetates with 1,3-Dicarbonyl Derivatives.

Antonia Iazzetti, Antonio Arcadi, Stefano Dessalvi, Giancarlo Fabrizi, Antonella Goggiamani, Federico Marrone, Andrea Serraiocco, Alessio Sferrazza, and Karim Ullah, *Catalysts* **2022**, *12*, 1516. <https://doi.org/10.3390/catal12121516>.

Divergent Sequential Reactions of  $\beta$ -(2-Aminophenyl)- $\alpha,\beta$ -ynones with Malonyl Chloride. Vincenzo Marsicano, Gianpaolo Marraffa, Marco Chiarini, Laura Palombi, and Antonio Arcadi, *Eur. J. Org. Chem.* **2022**, e202201187. doi.org/10.1002/ejoc.202201187.

Synthesis of Indole/Benzofuran-Containing Diarylmethanes through Palladium-Catalyzed Reaction of Indolylmethyl or Benzofuranylmethyl Acetates with Boronic Acids. Antonio Arcadi, Andrea Calcaterra, Marco Chiarini, Giancarlo Fabrizi, Andrea Fochetti, Antonella Goggiamani, Antonia Iazzetti, Federico Marrone, Vincenzo Marsicano, Andrea

Serraiocco, *Synthesis* **2022**, *54*, 741-753.

Design, synthesis and biological evaluation of new thiazole scaffolds as potential TRPM8 antagonists. Vincenzo Marsicano, Antonio Arcadi, Gianluca Bianchini, Mara Tomassetti, Andrea Aramini *Bioorg. Med. Chem. Lett.* **2021**, *52*, 128392.

Sequential condensation/biannulation reactions of  $\beta$ -(2-aminophenyl)- $\alpha,\beta$ -ynones with 1,3-dicarbonyls. Vincenzo Marsicano, Antonio Arcadi, Marco Chiarini, Giancarlo Fabrizi, Antonella Goggiamani and Antonia Iazzetti. *Org. Biomol. Chem.* **2021**, *19*, 5177-5190.

Synthesis of Polycyclic Chromene Cores through Gold (I)-Catalyzed Intramolecular Hydroarylation Reaction (IMHA). Antonio Arcadi, Giancarlo Fabrizi, Andrea Fochetti, Roberta Franzini, Francesca Ghirga, Antonella Goggiamani, Antonia Iazzetti, Federico Marrone, and Andrea Serraiocco, *Eur. J. Org. Chem.* **2021**, 1676-1687.

Synthesis of functionalised 2,3-dihydroquinolin-4(1H)-ones vs. quinoline or N-alkenylindole derivatives through sequential reactions of 2-alkynylanilines with ketones. Vincenzo Marsicano, Antonio Arcadi, Marco Chiarini, Giancarlo Fabrizi, Antonella Goggiamani, and Antonia Iazzetti, *Org. Biomol. Chem.* **2021**, *19*, 421- 438.

Experimental and computational evidence on gold-catalyzed regioselective hydration of phthalimido-protected propargylamines: an entry to  $\beta$ -amino ketones. Vincenzo Marsicano, Antonio Arcadi, Massimiliano Aschi and Véronique Michelet, *Org. Biomol. Chem.* **2020**, *18*, 9438-9447.

Synthesis of Pyrano[2,3-*f*]chromen-2-ones vs. Pyrano[3,2-*g*]chromen-2-ones through Site Controlled Gold-Catalyzed Annulations. A. Arcadi, A. Ciogli, G. Fabrizi, A. Fochetti, R. Franzini, F. Ghirga, A. Goggiamani, A. Iazzetti, *Org. Biomol. Chem.* **2019**, *17*, 10065-10072.

Synthesis of Polycyclic Quinolines by Means of Brønsted Acid Mediated Reaction of  $\beta$ -(2-Aminophenyl)- $\alpha,\beta$ -Ynones with Ketones. V. Marsicano, M. Chiarini, F. Marinelli, A. Arcadi, *Adv. Synth. Catal.* **2019**, *361*, 2365-2370.

Sequential Gold-Catalyzed Carbene Transfer/Ring Closure: Oxidative Cyclization of  $\beta$ -(2-Alkynylphenyl)- $\alpha,\beta$ -ynones to Indenofuranones N. Rode, F. Marinelli, A. Arcadi, T. Adak, M. Rudolph, F. Rominger, A. S. K. Hashmi, *Adv. Synth. Catal.* **2018**, *360*, 4790-4794.

Reaction of  $\beta$ -(2-aminophenyl)- $\alpha,\beta$ -Ynones with Tosyl Isocyanate: Experimental and Computational Investigations. N. D. Rode, M. Aschi, M. Chiarini, L. Del Vecchio, F. Marinelli, A. Arcadi, *Adv. Synth. Catal.* **2018**, *360*, 3672-3676.

Gold-Catalyzed Cascade Reaction of  $\beta$ -(2-Aminophenyl)- $\alpha,\beta$ -ynones with Ynamides: A Sequential Route to Polysubstituted 2-Aminoquinolines. N. D. Rode, A. Arcadi, A. Di Nicola, F. Marinelli, V. Michelet, *Org. Lett.* **2018**, *20*, 5103-5106.

Synthesis of 2-Acylindoles via Ag- and Cu-Catalyzed anti-Michael Hydroamination of  $\beta$ -(2-Aminophenyl)- $\alpha,\beta$ -ynones: Experimental Results and DFT Calculations. N. D. Rode, I. Abdalghani, A. Arcadi, M. Aschi, M. Chiarini, F. Marinelli, *J. Org. Chem.* **2018**, *83*, 6354-6362.

## RELEVANT GRANTS

Coordinator of the research activities of the Project "DEVELOPMENT OF SUSTAINABLE APPROACHES OF NITROGEN CONTAINING HETEROCYCLIC DERIVATIVES" (Galileo Program G15-69/2015) supported by the Università Italo Francese and the Ministère des affaires étrangères et du développement international.

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Local unit coordinator of the Programme FIRB: RBAU01FEPP\_002 (MIUR).

**According to law 679/2016 of the Regulation of the European Parliament of 27th April 2016, I hereby express my consent to process and use my data provided in this CV.**

L'Aquila 31-05-2023

